

Meeting Date
October 10, 2017



AGENDA	
Section	Public Hearing
Item No.	TV.6.

**AGENDA REPORT**  
 BREVARD COUNTY BOARD OF COUNTY COMMISSIONERS

SUBJECT:	PUBLIC HEARING RE: NOTICE OF PROPOSED CHANGE TO THE VIERA DEVELOPMENT OF REGIONAL IMPACT. (DISTRICT 4)
DEPT/OFFICE:	PLANNING & DEVELOPMENT DEPARTMENT/LAND DEVELOPMENT

**Requested Action:**  
 It is requested that the Board consider approval of the Notice of Proposed Change to the Viera Development of Regional Impact. If approved, it is requested that the Chairman be authorized to execute the Amended and Restated Development Order for the Viera Development of Regional Impact.

**Summary Explanation & Background:**

The Local Planning Agency unanimously approved this application on September 25, 2017.  
 The Notice of Proposed Change application requests the following changes:

1. Authority to consolidate the four sub-phases (4a through 4d) into a single phase along with permission to commence and complete the remaining increment of development as Phase 4;
2. Identify and accept the mitigation offered by the applicant to accommodate the anticipated offsite traffic impacts;
3. Increase Office development by 334,506 square feet, increase Industrial development by 219,982 square feet and reduce the number of Hotel or Motel rooms by 258;
4. Add post-secondary educational facilities with a maximum enrollment of 4,500 full time equivalent students and 200,000 square feet of facility space through the utilization of the Transportation Equivalency Matrix;
5. Update commencement, phase, build out and termination dates to reflect tolling and other extensions awarded to developments of regional impact by the State of Florida;
6. Update the conditions of approval contained in the Amended and Restated Development Order to address references, nomenclature and other proposed changes to the regulation of development within the Viera project.

**Fiscal Impact:** FY17/18 – The additional development resulting from approval of Phase 4 will significantly increase the County’s tax base and will generate millions of dollars in Transportation Impact Fees that can be used to fund off-site roadway improvements.

**Staff Contact:** Stephen M. Swanke  
 (321) 633-2069, extension 52739

Clerk to the Board instruction: Execute 5 copies (to be provided) of the Amended and Restated Development Order. Retain 1 copy for the Official Minutes and return 4 copies to Planning & Development.

Exhibits Attached: Cover memo dated 9/26/2017; Technical Comments by Atkins Global; Transmittal Letter from Grimes Goebel; Notice of Proposed Change application with Amended and Restated Development Order; Sufficiency Response and Exhibits; Agency Comments to Sufficiency Response

<b>Contract /Agreement (If attached):</b>		Reviewed by County Attorney	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	PR	<input type="checkbox"/>
County Manager	Assistant County Manager	Department Director / Extension						
Frank Abbate	John Denninghoff	Tad Calkins						
	Interim Assistant County Manager	Planning & Development Department Ext. 5-2069						
	Jim Liesenfelt							



**Planning & Development Department**

2725 Judge Fran Jamieson Way

Building A, Room 114

Viera, Florida 32940

**BOARD OF COUNTY COMMISSIONERS**

TO: Board of County Commissioners

THROUGH: Tad Calkins, Director   
Planning & Development Department

FROM: Stephen M. Swanke, Program Manager   
Planning & Development Department

DATE: September 26, 2017

SUBJECT: Notice of Proposed Change to the Viera Development of Regional Impact

The Viera Company has applied for a Notice of Proposed Change to the Viera Development of Regional Impact and is requesting your favorable consideration of this application and the proposed amendments to Resolution 17-\_\_\_, the Amended and Restated Development Order for the Viera Development of Regional Impact. The Local Planning Agency unanimously approved this application on September 25, 2017.

The Notice of Proposed Change application requests the following changes:

1. Authority to consolidate the four sub-phases (4a through 4d) into a single phase along with permission to commence and complete the remaining increment of development as Phase 4;
2. Identify and accept the mitigation offered by the applicant to accommodate the anticipated offsite traffic impacts;
3. Increase Office development by 334,506 square feet, increase Industrial development by 219,982 square feet and reduce the number of Hotel or Motel rooms by 258;
4. Add post-secondary educational facilities with a maximum enrollment of 4,500 full time equivalent students and 200,000 square feet of facility space through the utilization of the Transportation Equivalency Matrix;
5. Update commencement, phase, build out and termination dates to reflect tolling and other extensions awarded to developments of regional impact by the State of Florida;
6. Update the conditions of approval contained in the Amended and Restated Development Order to address references, nomenclature and other proposed changes to the regulation of development within the Viera project.



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The applicant has previously applied for and received authority to commence and complete the first three phases of the Viera project by identifying and constructing or otherwise funding transportation improvements needed to mitigate for the offsite traffic impacts. To put the magnitude of Phase 4 in perspective, the major residential and non-residential land uses for the first three phases and the final phase is shown below.

	<u>Phases 1 – 3</u>	<u>Phase 4</u>	<u>Total</u>
Residential (units)	14,350	17,269	31,619
Office (square feet)	1,772,409	1,732,058	3,504,467
Industrial (square feet)	195,018	327,482	522,500
Hospital (beds)	322	0	322
Retail (square feet)	2,256,030	1,182,097	3,438,127

The figures above suggest that the fourth and final phase of development in Viera will contain approximately half of the total development.

In support of the Notice of Proposed Change application, the applicant submitted a traffic study prepared jointly by the Lassiter Transportation Group, Inc. and NUE Urban Concepts. To assist staff, Brevard County retained Atkins Global to review the applicant's study. The study itself was not included in your package due to its technical nature but all review comments and the applicant's responses are included. The study was reviewed by Brevard County, Atkins Global, the East Central Florida Regional Planning Council, the Florida Department of Transportation, the Department of Economic Opportunity, the City of Melbourne and the City of Rockledge.

The traffic study prepared by the applicant calculated the proportionate fair share contribution as \$360,283.47. The applicant has committed to construct at its own expense (see condition 92B), the Spyglass Overpass with an estimated cost of \$14.1 million and a financial contribution to the Florida Department of Transportation to fund the cost (not to exceed \$1.5 million) of an Interchange Modification Report for the I-95/Fiske Boulevard Interchange. The applicant has further committed to provide 75,000 square feet of non-residential development for each 1000 residential units to ensure that the balance between employment opportunities and residential uses is maintained during Phase 4.



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The applicant also proposes to increase Office development by 334,506 square feet, increase Industrial development by 219,982 square feet, and reduce the Hotel or Motel land use by 258 rooms in Phase 4. It is important to note that on July 21, 2015 the Board of County Commissioners approved a development order amendment that reduced Office development in Phase 3 by 399,741 square feet in exchange for an increase of 1,674 residential units and 8 Hotel or Motel rooms.

The application includes a request to introduce post-secondary educational facilities as a permitted land use through a land use exchange using the Transportation Equivalency Matrix. To introduce these facilities a reduction in other approved land uses would be necessary. The magnitude of the reduction would be based on the trips generated by the land use(s) being reduced and must balance the trips generated by the size of the post-secondary educational facilities.

The proposed Amended and Restated Development Order updates the commencement, phase, build out and termination dates for the Viera Development of Regional Impact. These extensions are based on a uniform set of extensions awarded to all developments of regional impact by the State of Florida through declarations of a state of emergency. They are not considered to be initiated by the applicant and are not used in calculating when a time extension is considered to be a substantial deviation requiring additional development of regional impact review by Chapter 380.06, Florida Statutes.

The Amended and Restated Development Order proposes to amend several of the conditions of approval contained within it. The following is a summary of those changes. You are directed to the underline/strikethrough version of the Amended and Restated Development Order attached to the Notice of Proposed Change application for the specific text of the proposed changes.

Condition 4: This condition regulates the use of the Transportation Equivalency Matrix contained in Exhibit 5. The proposed changes include additional reporting requirements and the ability to increase in an employment based industrial land uses by more than five percent by reducing office development by an equivalent amount of trips.

Conditions 47, 61, 62 and 64: These conditions regulate the use of reclaimed water from the County's wastewater treatment plant located on the west side of the Viera project. The proposed changes address the recent shortages in reclaimed water experienced by Viera residents.



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Condition 83: This condition contained a table identifying the trip generation of each phase and sub-phase of development. The information it contained is out of date and it was removed at the request of Brevard County.

Condition 84: This condition regulates the traffic monitoring and modeling required prior to initiation of the sub-phases of Phase 4. The effect of the proposed changes to this condition is to consolidate the four sub-phases into a single phase containing the final increment of development. The proposed changes also remove future monitoring and modeling requirements for Phase 4 and bases required mitigation on the traffic forecasts prepared by the traffic study submitted in conjunction with the Notice of Proposed Change application.

Condition 85: This condition regulates the commencement of Phase 4 development by requiring mitigation for off-site traffic impacts. The proposed changes represent minor clarifications associated with the interpretation of the Transportation Impact Study prepared and submitted in conjunction with the Notice of Proposed Change.

Condition 89: This condition regulates the reporting of traffic impacts in the required Biennial Report. The proposed changes eliminate most reporting requirements previously contained in the Biennial Report but include a commitment from the applicant to provide 75,000 square feet of non-residential development for each 1000 residential units. If sufficient non-residential development is not anticipated in the following biennial reporting period, then the applicant must demonstrate that external pm peak hour trips have not exceeded the amount for which mitigation has been committed.

Condition 92B: This is new condition that identifies the mitigation that the applicant has committed to provide for Phase 4 off-site traffic impacts.

Condition 104: This condition identifies the commencement and completion dates of the each of the four phases.

Exhibit 3 – Map H: This exhibit is a map of development locations within the Viera Development of Regional Impact. It has been revised to reflect the changes previously identified.

Exhibit 4 – Master Development Program: This exhibit identifies the maximum amount of development that may occur by phase and by land use. It has been updated to reflect the changes to the phase end dates and the development totals for office, industrial and hotel or motel land uses.



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Exhibit 5 – Transportation Equivalency Matrix: This exhibit regulates the exchange of land uses based on equivalent peak hour directional trip ends. It has been revised to reflect data from the 9<sup>th</sup> Edition of the Trip Generation Manual published by the Institute of Transportation Engineers. This revision was based on a request from Brevard County.

I hope this memorandum has assisted you in your review of this application. If you have any questions, please contact me at (321) 633-2069 extension 52739 or by e-mail at [steve.swanke@brevardfl.gov](mailto:steve.swanke@brevardfl.gov).

**Attachments**

1. Technical Review Comments from Atkins Global
2. Transmittal Letter dated September 5, 2017 from Grimes Goebel
3. Notice of Proposed Change application with Amended and Restated Development Order in underline/strikethrough format.
4. Notice of Extension Letter to Brevard County for Wildfires
5. Sufficiency Response #1 dated August 11, 2017 from Grimes Goebel
6. Agency Comments to Sufficiency Response, Annotated



Tammy Rowe, Clerk to the Board, 400 South Street • P.O. Box 999, Titusville, Florida 32781-0999

Telephone: (321) 637-2001  
Fax: (321) 264-6972  
Tammy.Rowe@brevardclerk.us

October 11, 2017

**M E M O R A N D U M**

**TO:** Tad Calkins, Planning and Development Director Attn: Steve Swanke

**RE:** Item IV.B., Resolution for Notice of Proposed Change to the Viera Development of Regional Impact

The Board of County Commissioners, in regular session on October 10, 2017, adopted Resolution No. 17- 205; approved the Notice of proposed changes to the Viera Development of Regional Impact; and authorized the Chairman to execute the amended and restated Development Order for the Viera Development of Regional Impact. Enclosed are four fully executed Resolutions.

Your continued cooperation is always appreciated.

Sincerely,

BOARD OF COUNTY COMMISSIONERS  
SCOTT ELLIS, CLERK

*Tammy Rowe*

Tammy Rowe, Deputy Clerk

/kp

Encls. (4)

cc: Assistant County Manager Denninghoff  
Finance  
Budget

**RESOLUTION NO. 17- 205**

**\_\_\_\_\_ , 2017**

**AMENDING RESOLUTION 16-126  
A FULLY AMENDED AND RESTATED  
DEVELOPMENT ORDER FOR  
VIERA DEVELOPMENT OF REGIONAL IMPACT**

**WHEREAS**, the Viera Development of Regional Impact (the “DRI”) is a mixed-use development on approximately 20,646 acres located east and west of Interstate 95 in central Brevard County approved pursuant to the original Application for Development Approval and the Application for Development Approval for Substantial Deviations #1 and #2 on property described in **EXHIBIT 1**, attached and incorporated by reference; and

**WHEREAS**, Brevard County adopted Resolution 09-272 on December 15, 2009 which created the Amended and Restated Development Order for the Viera DRI (the “Amended and Restated Development Order”) which incorporated all previous changes and amendments to the Viera DRI into a single Development Order that controls the development of the property (the “Development Order”); and

**WHEREAS**, Brevard County adopted Resolution 10-105 on May 27, 2010 which is an Amendment to the Amended and Restated Development Order for the DRI (the “First Amendment”) to include provisions to settle an administrative appeal; and

**WHEREAS**, Brevard County adopted Resolution 14-120 on July 22, 2014 which is an Amendment to the Amended and Restated Development Order for the DRI (the “Second Amendment”) to extend the time for buildout of phases, the DRI expiration date and the DRI termination date as well as the date by which transportation mitigation must be complete and to clarify the Wickham Road and Murrell Road mitigation timing and process. Together, the

Amended and Restated DRI, the First Amendment, the Second Amendment and the Third Amendment comprise the current Viera DRI Development Order; and

**WHEREAS**, Brevard County adopted Resolution 15-110 the Third Amendment to the Amended and Restated Development Order (the “Third Amendment”), as amended which specifically modified only those portions of Resolutions 09-272, as amended by Resolution 10-105 and Resolution 14-120 that are reflected in the amendment; and

**WHEREAS**, Brevard County adopted Resolution 16-126 on August 23, 2016 as a fully Amended and Restated Development Order. This Development Order supersedes and replaces all prior Development Orders.

**I. FINDINGS OF FACT AND CONCLUSIONS OF LAW**

1. The Developer filed a Notice of Proposed Change to amend the Development Order pursuant to Section 380.06(19), Florida Statutes.

2. The DRI (as described in this Amended and Restated Development Order) is consistent with the State Comprehensive Plan.

3. The DRI is consistent with the Brevard County Comprehensive Plan, as amended, and local land development regulations.

4. The requested changes do not create a Substantial Deviation as the changes are either 1.) a change in the mitigation plan from 73C-40.045(7)(a)4., F.A.C. to 73C-40.045(7)(a)3., F.A.C. which does not create new regional impacts and is not a substantial deviation pursuant to Section 380.06(19)(e)6.; or 2) an increase in only one land use that is contained in Section 380.0651, F.S. and is not a substantial deviation pursuant to F.S. 380.06(19)(e)1 as the increase is less than the threshold of 15%; or 3.) the introduction of a land use to the land use equivalency

matrix which is governed by Section 380.06 (19)(e)2.k, F.S.; or 4.) updates to reflect previously granted legislative extensions or updates to the status of various agreements which are governed by Section 380.06 (19)(e)2.k, F.S.

## II. DEFINITIONS

For purposes of the Amended and Restated Development Order (hereinafter referred to as the “Development Order”), the terms listed below shall be defined as follows.

1. Accessory Dwelling Unit: A residential structure that has separate kitchen, sleeping, and bathroom facilities, detached from, or attached to, the primary residence. An Accessory Dwelling Unit may be used for housing members of the family occupying the primary residence, or their temporary guests, or may be rented as a separate dwelling, if such Accessory Dwelling Unit and/or leasing of same is approved as part of the West Viera PUD process.

2. Agricultural Use: Any use of land for bona fide agricultural purposes as described in Section 193.461(3)(b), Florida Statutes, or for activities of a farm operation as described in Section 823.14(3), Florida Statutes or for agriculture as defined in Section 570.02(1), Florida Statutes; including, but not limited to, temporary housing for agricultural workers not to exceed a total of 50 units.

3. Developer: The Viera Company, a Florida corporation, or its successor or assigns which specifically assumes the obligations hereunder.

4. Original DRI: DRI land approved prior to the Viera Substantial Deviation #2. The Original DRI Area encompasses 9,079 acres and includes lands both east and west of I-95.

5. Habitat Management Plan (“HMP”): Guidelines and practices for maintaining, enhancing and managing listed species habitat and conducting Agricultural Use within the Rural

District and the Conservation District which is attached as Exhibit 8 to this DRI Development Order.

6. Master Drainage System: Shall mean and refer to that portion of the Master Stormwater and Excavation Plan (as defined below) for that portion of the Existing DRI west of I-95 and outside the boundaries of the Viera Stewardship District (as defined below).

7. Master Stormwater and Excavation Plan: Shall mean and refer to all land, easements, structures and other facilities and appurtenances to be designed and constructed on an incremental basis which together constitute and comprise the master surface water management and drainage system for all portions of the DRI west of I-95.

8. Substantial Deviation #2: the name of the development order modification approved on December 10, 2009, which added the 11,567 acre West Viera Expansion Area to the DRI and which authorized an additional development program within the DRI as described in the DRI Master Development Program attached hereto as Exhibit 4.

9. Town Center: A mixed use District within the Existing DRI generally depicted on the Map H. Master Development Plan attached as Exhibit 3.

10. Transportation Impact Study: The analysis submitted as a part of the NOPC application dated April, 2017 and revised August, 2017.

11. Viera Stewardship District: An independent special district established pursuant to and governed by Chapter 2006-360, Laws of Florida and Chapter 189, Florida Statutes, as a local unit of special purpose government having jurisdiction within those lands specifically described in the Notice of Creation and Establishment of the Viera Stewardship District dated August 8, 2006 and recorded in Official Records Book 5683, at page 2029, as modified by the Amended Notice of Creation and Establishment of the Viera Stewardship District date December 14, 2009

and recorded in Official Records Book 6081, at page 1354, all in the Public Records of Brevard County, Florida, and as from time to time further modified in accordance with Chapter 189, Florida Statutes; including, but not limited to, the West Viera Expansion Area. The Viera Stewardship District has specific powers, responsibilities and duties with respect to providing community infrastructure and ensuring the long-term stewardship of environmental and conservation resources within the District's boundaries as more particularly described in Chapter 2006-360, Laws of Florida, this Development Order and the VWP Habitat Management Plan.

12. Viera Wilderness Park ("VWP"): Lands located within the West Viera Expansion Area designated as "Conservation District" or "Rural District" portions of which provide wetland and listed species mitigation in conjunction with continuing agricultural activities. The VWP is administered by the Viera Stewardship District and the lands and activities therein are managed in accordance with the VWP Habitat Management Plan and applicable environmental permits from time to time issues by regulatory agencies having jurisdiction.

13. Village: A land use area which offers a diverse mix of housing types and centralized commercial/civic nodes, located within the Village District area generally depicted on Map H, the Master Development Plan attached as Exhibit 3.

14. Village Center: A centrally located and required mixed-use component of a Village designed to provide a sufficient mixture of non-residential uses so as to provide for the daily commercial needs of Village residents and residential uses of various densities, intensities, and types. This development form promotes walking between uses and a variety of transportation modes such as bicycles, transit, and automobiles. Allowed uses include residential, retail, office, and civic uses including a park and/or school.

15. Village Sketch Plan: An illustration that demonstrates the specific requirements for development of a Village that further support and implement the baseline standards established as part of the West Viera PUD.

16. West Viera Expansion Area ("WVEA"): The 11,567-acre tract owned by A. Duda and Sons, Inc., The Viera Company or others as same may be transferred in the ordinary course of business, located south and west, immediately adjacent to the Original DRI. The incorporation of these lands and corresponding program into the existing DRI was one of the purposes of Substantial Deviation #2.

### **III. CONDITIONS**

1. The Development Order shall govern the development of lands totaling approximately 20,646 gross acres in Brevard County, as described in Exhibit 1 and Exhibit 2 of the Development Order. Nothing herein is intended to relieve the Developer of any concurrency requirements as set forth in Florida Statutes, Florida Administrative Code or Brevard County Ordinance.

2. The DRI shall be developed in accordance with the information, data, plans and commitments contained in the Viera Development of Regional Impact Application for Development Approval unless otherwise directed by the conditions enumerated below. For purposes of this condition, the Application for Development Approval shall consist of the following items:

(a) Application for Development Approval of Substantial Deviation #2, dated April 2006.

(b) Response to First Request for Additional Information for Substantial Deviation #2, dated September 2006.

(c) Response to Second Request for Additional Information for Substantial Deviation #2, dated April 2007.

(d) NOPC application dated April, 2017 and revised August, 2017.

3. The WVEA is designed to connect with the Original DRI. The mix and design of land uses is intended to encourage walking, bicycling and to allow residents to meet many of their daily needs on-site without traveling outside of Viera. Four villages, each with a neighborhood mixed-use center and neighborhood parks will provide a variety of housing types. The West Viera PUD may provide gross densities in the Villages ranging from 2 to 30 dwelling units per acre with a 3.47 unit per acre average. The Rural Development District will provide lower density housing in a conservation subdivision or rural estate setting with a gross density for the overall Rural Development District of 1 dwelling unit per 2.5 acres per the Comprehensive Plan. In accordance with the Staging Plan approved in conjunction with this Development Order, 5,258 acres will transition into the Viera Wilderness Park. The VWP will be adjacent to the 44,000 acre River Lakes Conservation Area and will be managed in accordance with the Habitat Management Plan approved in conjunction with this Development Order. The DRI will consist of the uses shown on Exhibit 4.

The DRI is to be developed as a four phase project as described in Condition 104 herein and Exhibit 4 attached hereto.

4. Notwithstanding the Master Development Program described above and in Exhibit 4, the Developer is allowed to convert one land use for another so long as (1) each such conversion is in accordance with the Transportation Equivalency Matrix, which is based on equivalent peak hour directional trip ends and attached hereto as Exhibit 5, (2) the Developer provides notice to

Brevard County, the East Central Florida Regional Planning Council, the City of Rockledge, the School Board of Brevard County, the Florida Department of Transportation and the Department of Economic Opportunity of updated development totals following a conversion and (3) the conversion increases or decreases the total amount of each land use by no more than five percent, unless this Development Order is amended.

However, conversions exceeding five percent may be permitted without an amendment to the Development Order under the following conditions: (1) the conversion is in accordance with the Transportation Equivalency Matrix, which is based on equivalent peak hour directional trip ends and attached hereto as Exhibit 5, (2) the Developer demonstrates to Brevard County that the conversion will not increase peak hour directional trip ends, and (3) the conversion involves an increase in an employment based industrial land use (subject to approval by Brevard County) and a decrease in office and does not involve any residential or retail uses and (4) the Developer notifies Brevard County, the East Central Florida Regional Planning Council, the City of Rockledge, the School Board of Brevard County, the Florida Department of Transportation and the Department of Economic Opportunity of updated development totals following a conversion. Conversion from one land use to another utilizing the Transportation Equivalency Matrix will be reported on an individual and cumulative basis in the Biennial Report. Any future updates to this resolution shall incorporate any changes due to the use of the matrix.

5. The Applicant may continue to conduct all Agricultural Uses as an interim use as follows:

(a) For those portions of the Property designated as “Community,” “Village,” “Town Center,” “Regional Commerce,” “Rural Development” and “Interchange” on Exhibit 3, the Applicant may

continue to conduct all Agricultural Uses, including, but not limited to, not more than 50 units of temporary housing for agricultural workers. Upon the recording of a subdivision plat, the Applicant shall not be entitled to claim an agricultural tax exemption for that portion of the Property legally described on the plat unless such claim is consistent with general law.

(b) For those portions of the Property designated as “Rural Area,” the Applicant may continue to conduct all Agricultural Uses, including, but not limited to, not more than 50 units of temporary housing for agricultural workers. At such time as a portion of the Rural “Area” is re-designated as Rural “District” in accordance with the provisions of Condition 22, below, the Applicant may continue to conduct all Agricultural Use activities upon such portion consistent with the provisions of the VWP Habitat Management Plan as described in Section II, Paragraph 5, above.

(c) For those portions of the Property designated as “Conservation Area,” the Applicant may continue to conduct all Agricultural Uses, except and excluding the installation or construction of temporary housing for agricultural workers. At such time as a portion of the Conservation “Area” is re-designated as Conservation “District” in accordance with the provisions of Condition 22, below, the Applicant shall cease all Agricultural Uses upon such portion, except those allowed within the

Conservation District consistent with the provisions of the VWP Habitat Management Plan as described in Section II, Paragraph 5, above.

6. Upon final payment of all proportionate share contributions for local and regionally significant impacts as provided in this Development Order, the Applicant shall have satisfied the concurrency requirements of the Brevard County Comprehensive Plan and Concurrency Management System (Chapter 62, Article IV, Sections 62-601 through 62-606, Brevard County Land Regulations) in accordance with the provisions of Chapter 380, Florida Statutes and Chapter 163, Florida Statutes and development through buildout of the DRI shall be vested for concurrency.

7. The portion of the DRI within the City of Rockledge is subject to a separate Development Order recorded at OR Book 3525, page 0978, Brevard County Public Records, and is not subject to the terms and conditions of this Amended and Restated Development Order. **[This portion of the DRI has been built-out]**

#### **PROJECT DESIGN GUIDELINES**

8. The DRI shall adhere to and further the design characteristics outlined below:

The DRI shall incorporate elements of “smart growth,” transit oriented design (“TOD”) and new urbanism, including walkability, compact development patterns, quality architecture and urban design and will contain a hierarchy of street systems to discourage urban sprawl, foster connectivity, provide for pedestrian mobility and transit internally and externally to the DRI.

- (a) The DRI shall promote diversity and choice through a mixture of housing types and price points, including affordable/work force housing as hereinafter set forth.
- (b) The DRI shall utilize a number of sustainable development techniques and promote the reduction of greenhouse gases.
- (c) The Developer shall cooperate with the governmental units to encourage the siting of public buildings in prominent places within the Village Centers to reinforce the active mixed use nature of these places.
- (d) The DRI shall promote the efficient and effective use of infrastructure. The DRI shall include the development of four distinct Villages.
- (e) Villages shall be designated as a collection of Neighborhoods where a majority of the housing units are within a half mile walking distance to a Village or Neighborhood Center. Villages shall be supported by internally designated, mixed-use Village Centers (designed specifically to serve the daily needs of Village residents).
- (f) Villages shall include a mix of uses, including residential, commercial, office, public/civic, schools and recreational space that serve the daily needs of residents. A Village shall not be required to include all of the noted land uses and Village or Neighborhood Centers may be tailored to meet the specific needs of the residents based upon the type of development which is planned in the Village.
- (g) Villages shall include a Village Center with sufficient non-residential uses to provide for the daily needs of Village residents, by phase of

development, in a form that can be conveniently served by regional bus service.

- (h) Villages shall include a range of housing types that support a broad range of family sizes and incomes.
- (i) Villages shall be based on interconnected streets that are designed to balance the needs of all users, including pedestrians, bicyclists and motor vehicles, and which are built with design speeds that are appropriate. Villages shall include alternatives for pedestrians and bicyclists through the provision of sidewalks, street trees and on-street parking which provide distinct separation between pedestrians and traffic; and provide adequate lighting that is designed for safe walking and signage which has a pedestrian orientation. Within Village Centers, spatially define primary streets and sidewalks by arranging commercial and multi-family buildings in a regular pattern that are unbroken by parking lots.
- (j) Villages shall provide recreational spaces that meet the recreational needs of the community, reinforce the design of the development by providing a variety of recreational space amenities that serve a range of interests and distribute recreational space amenities throughout the DRI.
- (k) Each Village shall have a system of connected open space which includes elements of public edge throughout the neighborhoods that connect each Village.

## FLOODPLAINS

9. Undeveloped portions of the Master Stormwater and Excavation Plan will be designed and constructed based on pre-development and post-development evaluations of FEMA's and SJRWMD's 100-year floodplains such that any modifications to the floodplains are within the limits established by the SJRWMD to insure that there are no adverse impacts to offsite lands or parcels resulting from the design storm event. Brevard County staff shall review and approve the design of such additional portions of the Master Stormwater and Excavation Plan to insure that there shall be no adverse impacts to the upstream and downstream drainage basins under the jurisdiction of Brevard County or municipalities within County. The design of the underdeveloped portions of the Master Stormwater and Excavation Plan will include the evaluation of recent flood stage data as may be available from the SJRWMD and USGS data. Impacts to any riverine or isolated floodplain shall provide compensatory storage in accordance with Chapter 62, Article X, Division 5, Brevard County Code of Ordinances.

10. Additional portions of the Master Stormwater and Excavation Plan will be designed to attenuate post-development peak discharge at or below the pre-development peak rates for the design storm event as required by the applicable SJRWMD and Brevard County criteria such that no adverse impacts to off-site floodplains occur. Impacts to any riverine or isolated floodplain shall provide compensatory storage in accordance with Chapter 62, Article X, Division 5, Brevard County Code of Ordinances. A control regime shall be established to insure that any impoundment for stormwater treatment and/or improved wetland hydroperiod will not be discharged in a non-permitted manner that adversely impacts the downstream watersheds from a water quantity and water quality standpoint. The control regime shall also insure acceptance of current and master-planned upstream flows without adverse impacts. The applicant shall demonstrate the

effectiveness of the impoundment to Brevard County by documenting compliance with applicable portions of the County Land Development Code.

11. Proposed impoundments to be developed within the Viera DRI boundaries will detain flood waters on the property such that pre-development rates of discharge are not exceeded in accordance with State and County regulations.

12. For any habitable structure located within a Special Flood Hazard area as identified by FEMA, base flood elevations in the post-developed condition will be established by an additional LOMR (Letter of Map Revision), CLOMR (Conditional Letter of Map Revision), or other floodplain studies as may be required by FEMA at the time of development. All habitable structures shall have their finished floor elevation set at minimum of one foot above the established applicable base flood elevation.

#### **NATURAL AND HISTORICAL RESOURCES**

13. Where planted littoral shelves are required by the SJRWMD to be incorporated into the design of the on-site retention/detention areas, these planted littoral shelves shall be inspected at least annually for the establishment of any Category I Invasive Plant Species, as defined by the Florida Exotic Pest Plant Council (FLEPPC). Any planted littoral shelf areas shall be maintained so as to limit the extent of invasive species in accordance with applicable SJRWMD permits.

14. The Brevard County Natural Resources Management Office shall be provided with copies of all permits received by the Developer from federal and state agencies concerning wildlife issues. Brevard County shall provide similar documents it receives to the Developer.

At the time a Sketch Plan for a Village or a preliminary plat for development within the Rural Development or Interchange District is submitted to Brevard County for review and approval, the applicable portion of the WVEA shall be surveyed for listed species using

methodologies approved by the FFWCC and USFWS and all necessary permits and approvals obtained from the FFWCC and USFWS, prior to final development approval of each such parcel.

15. RESERVED.

16. A total of 222.3 acres in the VWP have been placed under conservation easement (OR Book 7519 Page 316) consistent with the HMP as a burrowing owl preserve to compensate for and mitigate for all other impacts to burrowing owls throughout the DRI caused by development consistent with this Development Order. Relying on the establishment of the burrowing owl preserve described above as a conservation measure, the FFWCC has issued a Migratory Bird Nest Removal Permit (LSNR-15-00132) authorizing the removal of inactive Florida burrowing owl nest burrows located in the original DRI and the WVEA. Development shall proceed in accordance with the conditions and provisions of such FFWCC permit. .

17. Buffer zones to protect caracara nests during construction within the development districts (Rural Development, Village, Community, and Interchange) and specific management actions to enhance caracara habitat within the VWP have been defined and approved by the USFWS in the Biological Opinion (FWS Log No. 4190-2006-F-0749), Programmatic Biological Opinion (FWS Log No. 04EF1000-2012-F-0099), and subsequent Technical Assistance letter (FWS Log No. 04EF1000-2015-TA-0430). A caracara nest survey and monitoring protocol has been established and approved by the USFWS for construction activities within the Viera DRI that are within 1000 feet (305 meters) of a caracara nest. The survey and monitoring protocol will produce data on nest location, nest status, fate of the nest, and the number of young produced.

18. RESERVED.

19. RESERVED.

20. The Developer must create provisions for wildlife connectivity across or under roadways that traverse preserved wetland systems and associated upland buffers within the Community, Village and Interchange Districts. This may include eco-passages that address movement of likely-occurring wildlife, reduced speed limits, signage illustrating the presence of wildlife, and consideration of reduced lighting.

Road and pedestrian crossings of wetlands within the Rural Development District shall be minimized to the maximum extent possible and be designed to allow for passage of wildlife. Crossings shall be located at the narrowest crossing point (unless this creates a safety hazard as determined by the County engineer) or along existing field roads and shall require appropriately sized culverts. Plans for all roadway crossings shall demonstrate that adequate measures have been taken to allow movement of wildlife through the wetland corridors during seasonal high water events. Plans for wildlife crossings within the Rural Development Districts shall be submitted to SJRWMD for review and approval if appropriate during the final permitting of each phase of the DRI. Upon approval of such Plans, the wildlife crossings shall be incorporated into the final design for review and approval by Brevard County.

21. Owners of land within the DRI conducting development construction activities on such properties, shall notify construction personnel, through posted advisories or other methods, of the potential for artifact discoveries on the site and to report suspected findings to the property owner. The land owner shall notify Brevard County, the Division of Historic Resources (“DHR”) of the Florida Department of State and the Developer in the event of discovery of artifacts of historical or archaeological significance during such construction activities. From the date of notification, construction shall be suspended within a 100 foot radius of the site of discovery for a

period of up to 120 days to allow evaluation of the site. The land owner shall provide proper protection of the discovery, to the satisfaction of the DHR.

22. The VWP is intended to provide a regionally significant environmental resource and shall consist of lands designated as "Conservation District" or "Rural District" from within the areas shown as "Conservation Area" and "Rural Area," respectively, on Map H, attached hereto as Exhibit 3. Lands within the Conservation Area shall be subject to designation as Conservation District as hereafter provided and, in such event, shall become a part of the VWP as conservation and/or preserved lands mitigating impacts to wetlands and/or listed species habitat occurring in connection with development of the corresponding Village as shown in Exhibit 7 attached hereto. Lands within the Rural Area shall be subject to designation as Rural District as hereafter provided and, in such event, shall become part of the VWP as environmental lands managed to maintain and enhance listed species habitat mitigating impacts to habitat occurring in connection with development of the corresponding Village as shown in Exhibit 7. Agricultural Use shall be permitted on the lands, and any part thereof, within the Conservation and Rural Areas shown on attached Exhibit 6; provided, however, that upon the designation of any portion of such lands as Conservation District or Rural District, then Agricultural Use shall only be permitted on such designated portion to the extent it is consistent with the Habitat Management Plan, applicable environmental permits and the conservation easements, if any, encumbering such portion. A portion of the Conservation Area and/or Rural Area shall be designated as Conservation District and/or Rural District respectively and shall constitute the VWP upon Brevard County approval of the Village Sketch Plan for Village 1 and additional portions of the Conservation and Rural Areas shall be designated as part of the Conservation and Rural Districts and added to the VWP at such times hereafter as Brevard County approves the Village Sketch Plan for Village 2, Village 3 and

Village 4 in accordance with the VWP Staging Plan attached hereto as Exhibit 7. That portion of the Rural Area and/or Conservation Area initially designated in connection with Village 1 as Conservation District and/or Rural District for purposes of mitigating the impacts to wetlands and/or listed species habitat attributable to Village 1 is referred to and shown as the “Stage 1 Mitigation Area” on attached Exhibit 7. Such portion shall represent the initial boundary of the Rural District and/or Conservation District and constitute the VWP. That portion of the Conservation and Rural Areas described on attached Exhibit 7 as the “Stage 2 Mitigation Area” shall be designated Conservation District or Rural District, as applicable, and added to the Viera Wilderness Park at such time as Brevard County approves the Village Sketch Plan for Village 2; that portion of the Conservation and Rural Areas described on attached Exhibit 7 as the “Stage 3 Mitigation Area” shall be designated Conservation District or Rural District as applicable, and added to the VWP as such time as Brevard County approves the Village Sketch Plan for Village 3; and that portion of the Conservation and Rural Areas described on attached Exhibit 7 as the “Stage 4 Mitigation Area” shall be designated Conservation District or Rural District, as applicable, and added to the VWP at such time as Brevard County approves the Village Sketch Plan for Village 4. Each addition to the Conservation District, the Rural District and the VWP in accordance with the VWP Staging Plan shall mitigate the impacts to wetlands and/or listed species habitat attributable to the applicable Village.

23. Upon the issuance of the initial regulatory permit for development within the WVEA which requires the establishment of a conservation easement for the protection and preservation of any wetland area and associated upland buffer within in the VWP, an exhibit will be prepared and included with the HMP that identifies all areas within the VWP encumbered by such conservation easement pursuant to such permit. Such exhibit will be thereafter updated and

revised to reflect each conservation easement thereafter established in connection with the issuance of subsequent permits. Such conservation easements will be conveyed to the grantee designated in the applicable permit. If the applicable permit does not designate a grantee, the applicable conservation easement shall be conveyed to an appropriate grantee approved by the permitting agency. The Grantee may include the VSD, a property owners association formed under Chapter 720, Florida Statutes or other entity with the capacity and capability of conserving the lands and resources contained within a prospective conservation easement.

24. All regulatory permits which affect lands within or the management of the VWP shall be attached to the HMP, and reported in the Biennial DRI report. All revised HMP conditions and copies of the corresponding permits giving rise to the revisions shall be provided to the Natural Resources Management Office (NRMO) of the County within sixty (60) days of the issuance of said permit(s). To the extent a regulatory agency permit contains terms and conditions that conflict with provisions of the HMP, the terms and conditions of the regulatory permit are controlling and the HMP shall be deemed to be amended so as to conform to the terms and conditions of the permits. NRMO may require additional modification to the HMP in connection with or as a result of the issuance of such permits so long as (i) the additional modifications do not conflict with the terms and conditions of such permits relate directly to the modified operational practices/requirements arising from the applicable permits, (ii) NRMO consults with the VSD in determining what additional modifications may be necessary, if any, and whether the proposed additional modifications comply with the goals and principles of the HMP. In the event NRMO determines that additional modifications are necessary due to the issuance of permits affecting the VWP or its management, the VSD and the Developer shall each have standing to object to such additional modifications in whole or in part. If such objections cannot be resolved through

consultation with NRMO within thirty (30) days after a written request by the VSD or the Developer for a consultation, then the party or parties requesting such consultation may appeal NRMO's imposition of such additional modifications to the Board of County Commissioners following the established appeal procedures under the Brevard County Code of Ordinances (Sec. 62-506, Appeals general or Sec. 62-507, Appeal Procedure).

25. The foregoing process providing for the automatic modification of the HMP in accordance with the terms and conditions of regulatory permits as such permits are periodically issued shall not require the change, modification or amendment of this Development Order. Additionally, modifications of the HMP by the VSD in the ordinary Course of administering and managing the VWP shall not require the modification, change or amendment of this Development Order through the NOPC process or otherwise, so long as (i) such modifications are consistent with the terms and conditions of all applicable regulatory permits and the goals and objectives of the HMP, (ii) such modifications are made with prior notice to, and in consultation with NRMO. All such modifications to the HMP from time to time made by the VSD shall be reported in the Biennial Report.

26. The isolated Conservation District located just west of I-95 is composed of 85 acres of forested wetlands and 45 acres of upland buffer containing significant specimen trees and habitat for wildlife and protected species. Developer shall locate a passive park adjacent to a portion of the upland buffer.

27. The 823-acres classified as Rural Development District ("RDD") shall have an overall gross residential density of 1 unit per 2.5 acres. The RDDs shall include development that incorporates the principles of Conservation Subdivision Design and Low-Impact Development

strategies (see Randall Arendt's "Conservation Design for Subdivisions" as a guide) and shall preserve the rural character of the areas.

28. The southern portion of the area currently classified as Community District (located at the northernmost part of the WVEA) is a large naturally vegetated area containing forested wetlands and uplands. The wetland system supports a bald eagle nest and the uplands support a population of gopher tortoises. This area shall be developed in a manner that will protect the large wetland and associated upland buffers and the protection zone of the bald eagle nest, with the exception of incidental impacts permitted by the appropriate regulatory agencies.[**Completed**]

### **ENERGY**

29. The Developer shall encourage the implementation of "green" building practices and standards within the WVEA which comply with the United States Green Building Council's Leadership in Energy and Environmental Design (LEED) program, the Florida Green Building Coalition (FGBC) program, the Green Building Initiative's Green Globes (GBIGG) program, The U.S. DOE/EPA Energy Star ("Energy Star") program or other nationally recognized green building program that is approved by the Department of Management Services (DMS).

As a minimum energy conservation standard, however, the CCR's for all single-family residential development within the WVEA shall require that single-family residences constructed in a manner which does not meet requirements of the LEED, FGBC, GBIGG, Energy Star or other program approved by the DMS, shall meet or exceed the requirements for certification under the Florida Power & Light Company Residential New Construction BuildSmart Program, based on the requirements of such program in effect as of the date of this Development Order.

The Developer shall establish a program in conjunction with its community governance and sales and marketing activities to promote and encourage sustainable development

and “green” building practices within the DRI. Such program by the Developer will encourage sustainable development and “green” building practices and standards through education and promotion. The Developer’s program shall include the following:

- (a) Distribution of a “green” building handbook to all homebuilders operating within the DRI,
- (b) DRI Sales Center display promoting sustainable practices and “green” building standards,
- (c) Sustainable and “green” building content as part of the Developer’s web site for the DRI, and
- (d) Cost benefit analysis information distributed to homebuilders, and prospective consumers within the DRI.

The Developer shall include a summary of its sustainability and “green” building programs in each Biennial Report.

### **PUBLIC FACILITIES**

30. Septic Tanks shall be prohibited within the Village, Community and Interchange Districts. Septic Tanks, or other alternative on-site treatment methods as may be approved by FDEP, may be utilized within the Rural Development District and for remote facilities (such as public restrooms, golf course comfort stations, etc.). Septic tanks may also be utilized for ongoing agricultural operations, including agricultural employee housing.

### **HOUSING**

31. The Affordable Housing Analysis prepared for the Viera DRI Substantial Deviation #2 ADA using the approved ECFRPC methodology concluded that affordable housing may be required in future phases of the Viera DRI development. The Developer will target not less than

ten percent (10%) of the residential development within Phase 3 to be constructed as either for sale or rental housing product that is attainable by those persons whose incomes fall between eighty percent (80%) and one hundred forty percent (140%) of Brevard County's Average Median Income. Since this commitment exceeds current Brevard County requirements, it will satisfy the requirements for affordable housing through Phase 3. Brevard County's Land Development Code will apply to Phase 4. The Developer will establish and maintain housing data to evaluate implementation of this commitment in the Central Viera and West Viera PUDs in Phases 3 and 4 of the DRI and report same in the Biennial Reports. Notwithstanding the foregoing, the Developer shall consider, when appropriate, implementing one or more of the following programs recommended by the Brevard County Housing and Human Services Department:

- (a) Developing a minimum of 5% of the total developed housing inventory as attainable housing, consistent with the definition of affordable housing in the Brevard County Affordable Housing Ordinance.
- (b) Developing a minimum of 10% of the total developed housing inventory as attainable housing, consistent with the workforce and moderate affordable housing definitions in the Brevard County Affordable Housing Ordinance.
- (c) Proposing additional incentive based development strategies to reduce the cost of attainable housing constructed and maintained at affordable and workforce levels.
- (d) Assisting in short term and long term physical and operational improvements to transit, bicycle and pedestrian transportation systems,

within the DRI, to help safely reduce daily travel costs to existing and future residents employed or attending school within the DRI.

32. Accessory Dwelling Units (“ADUs”) are permitted in the DRI, subject to the development standards of the applicable PUD zoning, and may be used as guest quarters or may be leased as dwelling units independent of the single-family dwelling unit to which it is a part if leasing ADUs is approved as part of the West Viera PUD process. ADUs less than 650 square feet within the Rural Development District will not be counted as part of the density calculation for the DRI. ADUs of 650 square feet and under will be counted towards the attainable housing target set forth in this condition and may or may not have separate utility infrastructure and metering. ADUs shall not comprise more than two percent of the total residential units approved for the DRI.

### **STORMWATER MANAGEMENT**

33. Stormwater Management

(a) The Developer shall ensure that the entity or entities proposed to assume responsibility for the DRI’s surface water management system be created with or have defined duties and responsibilities regarding the operation and maintenance of the surface water management system, and sufficient legal authority and power to establish the mandatory collection of fees and/or assessments from all landowners and/or tenants for use in financing the operation, replacement and maintenance of all components of the Project’s surface water management system. A special district created pursuant to Chapter 189 or 190, F.S., or a

property owners association created pursuant to Chapter 720, F.S., meets these criteria.

- (b) Recreational lakes and stormwater improvements, including, but not limited to, ponds, control structures and underground piping shall be constructed in accordance with the Master Stormwater and Excavation Plan which shall be developed on an incremental basis subject to review and approval by Brevard County as part of the West Viera PUD. The Master Stormwater and Excavation Plan shall include mapping and supporting hydrologic/hydraulic modeling to delineate all proposed modifications to existing surface water management systems. The Developer has previously designed and substantially developed the Master Drainage System. The improvements previously constructed or to be constructed in accordance with the approved permits for the Master Drainage System shall be deemed to constitute the Master Stormwater and Excavation Plan for the lands subject to the Master Drainage System. The improvements set out in the approved Master Stormwater and Excavation Plan may be constructed in increments, provided that each approved increment of the Master Stormwater and Excavation Plan is self-sufficient and capable of stand-alone operation. All proposed modifications to the approved Master Stormwater and Excavation Plan shall be submitted with adequate data for evaluation and approval by Brevard County.

(c) In conjunction with the implementation of the Master Stormwater and Excavation Plan, applicable portions of the existing stormwater drainage canal system located in the DRI shall be incorporated into and become a part of the approved stormwater improvements for the DRI.

34. (RESERVED)

35. (RESERVED)

36. The Developer shall develop an integrated pesticide/herbicide management plan as a component of any golf course design process, with submittal to Brevard County and the St. Johns River Water Management District for review. The management plan shall sufficiently address the following items:

(a) Pesticide/herbicide/insecticide

(i) storage and handling

(ii) application

(iii) container cleaning

(iv) rinse water, cleaning materials, wastes, unused quantities and container disposal-methods and procedures;

(b) Golf course runoff treatment prior to discharge into off-site components of the DRI's master stormwater treatment system; and

(c) Quality control and assurance procedures.

37. The Developer and all other developers doing work within the WVEA shall comply with FDEP requirements including but not limited to NPDES requirements.

38. The Developer will integrate both source control and treatment train approaches to protecting wetlands and water quality through (1) source control measures, and (2) where hydrologically feasible and consistent with SJRWMD criteria integration of a series of

ecologically enhanced stormwater basin style wetlands approved by the SJRWMD into the stormwater management plan.

**SJRWMD CONDITIONS**

39. RESERVED.

40. RESERVED.

41. RESERVED.

42. Funding shall be provided by the VSD consistent with its Charter to provide for long-term habitat management of the mitigation areas within the VWP.

43. A mitigation plan shall be provided that includes a management plan for the areas proposed for mitigation to offset wetland impacts. The mitigation plan shall include a methodology for retaining the areas in a permitted condition, controlling exotic and nuisance vegetation, and prescribed burning to manage for habitat value.

44. Any surface water management system to be constructed altered, operated maintained, abandoned, or removed within the mitigation area must meet the conditions of issuance of Chapters 40C-4, 40C-40, 40C-41, and 40C-42, *Florida Administrative Code* (F.A.C.), or the terms conditions, requirements, limitations, and restrictions of Chapter 40C-400, F.A.C.

45. The requirements and details for the concurrent submittal of environmental resource permit and consumptive use permit applications shall be addressed as part of the initial Conceptual ERP application and any subsequent Master Drainage Basin ERP applications submitted concurrently to the District for review.

46. By incorporating appropriate language into the CCRs for residential property within the WVEA, the Developer shall notify any future owners and residents within the WVEA of their proximity to the District's River Lakes Conservation Area and that this area is managed

with natural resource land management practices, including prescribed fire. In addition, such CCRs shall contain a provision that notifies property owners that nearby or adjacent public land and the VWP will be managed by natural resource management practices, including prescribed fire and other techniques.

47. If feasible, reclaimed water shall be utilized as a non-potable water source for irrigation, based upon availability and in consultation with Brevard County. Stormwater, surface water and other non-potable water sources shall be utilized for irrigation if use of reclaimed water is determined not to be feasible.

48. A distribution system for nonpotable water (i.e. stormwater, surface water, and reclaimed water) shall be installed and maintained throughout the Village and Interchange Districts concurrent with development for all land uses within the applicable portion of the DRI (residential and nonresidential). Irrigation systems installed in the Village and Interchange Districts shall be designed to accept non-potable water.

49. Any wells no longer in use shall be properly plugged and abandoned in accordance with District rules and regulations. Any existing, active wells may continue to be used only in accordance with the respective District-issued consumptive use permit. Existing wells being used for agricultural purposes are not currently permitted by the District for landscape irrigation, but may be converted subject to the approval of an appropriate consumptive use permit.

50. The developer shall insure that all CCR's for residential property within the WVEA provide that property owners follow best management practices cited by the University of Florida in the Institute of Food and Agricultural Sciences' A Guide to Florida-Friendly Landscaping for landscape installation, irrigation and fertilizer and pesticide applications, specifically addressing:

- (i) Landscape design that minimizes the impacts of fertilizer applications

- (ii) Preferred plant materials
- (iii) Appropriate type of fertilizer to avoid the release of excess nutrients
- (iv) Rate and frequency of fertilizer and pesticide applications
- (v) Watering schedules
- (vi) Design and maintenance of drainage control systems

51. Unless prohibited by the City of Cocoa, multifamily residential units shall use submeters for potable water; all other uses shall be individually metered except ADUs.

52. Builders within the WVEA shall be responsible for installing only water-conserving devices, fixtures, and appliances in all residential and nonresidential buildings and structures.

53. A waterwise approach shall be used throughout the landscaped areas of the WVEA, and it shall include a goal of at least 50% of landscaped vegetation excluding turf areas as drought-tolerant or native drought-tolerant vegetation varieties. Landscaped area is defined as any pervious area within the proposed development that will be altered due to the development, exclusive of pervious area with wetlands, wetland buffers, vegetative buffers between land uses, stormwater systems, and required preservation areas. Native or drought-tolerant plants include those in the Florida Native Plant Society's list of native landscape plants for Brevard County, which is available at [http://www.fnps.org/pages/plants/landscape\\_plants.php](http://www.fnps.org/pages/plants/landscape_plants.php); A Gardner's Guide to Florida's Native Plants (Osorio 2001); the District's Waterwise Florida Landscapes, available at <http://www.sjrwm.com/waterwiselandscapes>; the University of Florida's Florida Friendly Plant List or other comparable guides.

54. Separate irrigation zones shall be required for all land uses (residential and nonresidential) to avoid irrigation of native or drought –tolerant vegetation when irrigating the turf zone(s).

55. The Developer shall display Florida-friendly waterwise guides and *A Guide to Florida-Friendly Landscaping* in prominent locations in the project's sales offices.

### WETLANDS

56. Losses of wetlands as defined by the SJRWMD and the ACOE, shall be mitigated through restoration, enhancement, creation or preservation of wetlands and uplands in accordance with adopted rules and regulations of the SJRWMD and ACOE. The mitigation criteria of the SJRWMD and ACOE, as modified from time to time and as reflected in the SJRWMD and ACOE permits to be obtained shall be used in implementing such mitigation requirements, together with any additional restrictions, conditions and limitations contained in the construction permit(s) issued by the SJRWMD thereafter. On-site wetland mitigation approved by the SJRWMD and the ACOE shall be maintained in accordance with applicable permits. The Viera Stewardship District is an appropriate grantee under any conservation easement required to be granted under a permit issued by SJRWMD or the ACOE.

57. The on-site wetlands systems, uplands buffers, and other areas designated for conservation/preservation as identified in the SJRWMD and ACOE permits to be obtained shall be regarded as preservation areas and, to the extent located in development areas, identified as separate tracts in accordance with the requirements of SJRWMD, the ACOE and the standards for platting as applied by Brevard County. Developmental uses of these areas shall be restricted by Conservation Easements conveyed to the grantees designated under the applicable permits or otherwise approved by the permitting agency. Use of these areas shall be limited to recreational

amenities as permitted by the SJRWMD, the ACOE and Brevard County. Maintenance of these areas will be as set forth in the permits authorizing their construction. Nothing in the language of the Conservation Easement shall preclude the Developer or other entity designated by the Developer from performing maintenance or management of these lands as long as these activities are consistent with the protocols set forth in the permits issued by the SJRWMD and the ACOE.

58. Within development Districts, all preservation areas, upland buffers and mitigation areas shall be platted as tracts and/or easements with development rights eliminated except as noted above. All such areas will be administered and managed by the Developer, VSD, or property owner's association established under Chapter 720, Florida Statutes, consistent with the requirements of the permits issued by the SJRWMD and the ACOE.

59. Wetlands within the Conservation District adjacent to the River Lakes Conservation Area shall include an upland buffer of an average of 300 feet and shall be placed in conservation easements consistent with permit requirements.

60. RESERVED.

### WATER

61. The Developer shall include covenant deed restrictions for all residential landowners that prohibit private irrigation wells within single family lots throughout the Village and Interchange Districts within the DRI, unless approved by Brevard County.

62. Non-potable water use shall use the following sources, in order of priority, for surface irrigation of common and private areas, to include parks, commercial, institutional and residential areas, unless prohibited by the FDEP, SJRWMD, or other regulatory agency.

Treated wastewater, surface water stored on-site in surface water storage ponds, groundwater withdrawals to a common/community operated master irrigation system, private irrigation wells;

or potable water may be used on residential lots if no lesser quality source is available, but shall be converted to a lesser quality source when it becomes available.

63. All water used for new landscape irrigation, whether reclaimed, surface water, groundwater or potable, will require as a condition of use that rain sensors, soil moisture sensors, or other smart irrigation technology be employed so as to manage flows and distribution of water. The methodology to be employed shall be reported in the first Biennial Report required herein.

64. At the time of initial infrastructure installation for each portion of the development, the Developer shall provide for the installation of irrigation infrastructure that is necessary to serve that portion of the DRI currently under development. The method of irrigation, and the planned infrastructure, shall be based upon the order of priority as listed in Condition 62.

65. A program that is consistent with the University of Florida's Florida Yards and Neighborhoods ("FYN") Recognition Checklist (January 2007 version) or to a comparable landscape standard determined in cooperation with PREC or another comparable, credible agency shall be encouraged for the Village and Rural Development District. The program shall be referenced, in the appropriate CCR's.

66. The CCR's will include a requirement for ongoing education within the WVEA to include as an example (1) a requirement that all homebuyers and subsequent purchasers be given copies of the landscaping standards in an appropriate form such as an Operations and Maintenance Manual, and (2) provision for a website with current environmental education content for the WVEA.

## **LANDSCAPE, LAND CLEARING & TREE PROTECTION**

67. In order to facilitate development consistent with the objectives, principles and standards of the community green space and cluster development, the DRI will follow alternative standards for landscape land clearing and tree protection as set forth in the PUDs for the DRI.

68. The CCR's for all Villages within the WVEA shall require that, concurrently with the issuance of a Certificate of Occupancy for each single-family detached home, such single-family home shall on such date meet either the water conservation provisions of the "Green Home Certification" requirements of the Florida Green Building Coalition or meet the following specific standards contained within the Florida Water Star certification program:

- No invasive exotic plant species on-site.
- For in-ground irrigation system, turf grass and landscaped bed areas shall be distinctly separate.
- Root balls shall be a least 2.5 feet on center from the foundation of structure.
- Plant selections shall be compatible with site-specific conditions such as sunlight, soil types and salinity.
- Plants shall be grouped with similar moisture and maintenance requirements.
- Innovative landscape water conservation techniques shall be encouraged.
- Irrigation areas less than 4 feet wide shall be irrigated with correctly designed and installed micro-irrigation.
- Sprinklers and emitters shall be located at a minimum of 2 feet from structures.
- Irrigation system shall be free from leaks.
- Head spacing shall not exceed 50% of the nozzle throw diameter.
- Application shall occur in proper spray patterns, minimizing overspray on impervious surfaces.

- A controller with rain shut-off capabilities shall be installed and functioning.
- Homeowners shall be provided with controller handbook/operating instructions.
- Irrigation shall not exceed 21 gallons (34 inches) per ft<sup>2</sup> annually and the controller shall be set in compliance with water restrictions.
- A non-potable water source shall be used for irrigation.

69. Organic mulch shall be used and applied to a depth of 2 to 4 inches, leaving a 2-inch space around base of plant.

70. To the extent feasible, conditions conducive to low maintenance landscapes with minimal need for fertilizer, pesticides and irrigation will be maintained and enhanced through landscaping standards that encourage minimizing soil compaction during construction to the minimum levels required by County regulation and, where feasible, protecting and conserving existing soils and vegetation or amending and aerating soils as needed before landscape installation.

71. To ensure homeowners are in compliance with the requirements for minimal to no added inputs of water and synthetic fertilizers and pesticides, the Developer, VSD or property owners association formed pursuant to Chapter 720, Florida Statutes shall provide additional community education.

72. RESERVED.

73. The Developer may utilize ornamental or decorative plants that are not classified as drought tolerant, however, in all events, the landscaping of the DRI will be primarily selected from the plant material lists noted in Condition 53 herein. The Developer will develop for the WVEA, a planting palette as a part of the Design Guidelines and within the Design Guidelines

specify the nature and extent of both the drought tolerant and non-drought tolerant plant materials to be used in landscaping.

74. Builders within the WVEA shall provide to the purchasers of single family homes a copy of the Florida-Friendly Landscaping program booklet titled “Fertilize Appropriately”.

75. Plant listed on the most current edition of Florida Exotic Pest Plant Council’s List of Invasive Plant Species are prohibited for use as a part of the landscape palette and cannot be used as a part of the landscape material to be installed.

76. RESERVED.

77. Integrated Pest Management (“IPM”) may be utilized to augment other commercially-accepted pest control methods. IPM may involve the monitoring of sites for pest related problems, determining when a problem needs attention and taking appropriate action with the least amount of environmental impact. IPM will maximize the use of biological controls, organic pest control methods, insecticidal soaps, and fish oils beneficial for lowering the environmental impact of pest control. This development condition shall be implemented on an incremental basis and shall only be applicable to those portions of the WVEA submitted to a recorded plat. Pest controls methods within the VWP shall be subject to and consistent with the approved HMP.

### **SCHOOLS**

78. The Developer and the School Board of Brevard County have entered into the “Consolidated Mitigation and Concurrency Agreement Regarding School Facilities for the Viera Development of Regional Impact” dated September 22, 2015, to address public school facilities concurrency for 29,945 residential units in the Viera DRI (the “School Agreement”). As evidenced by the issuance of the School Capacity Availability Determination Letter (“SCADL”) dated

December 7, 2015, the Developer has fully satisfied the concurrency requirements of the School Board, the Brevard County Concurrency Management System and applicable law for 29,945 residential units. Should the Developer pursue a conversion of land uses resulting in an increase of residential units and desires to obtain concurrency for any residential units in excess of 29,945, the Developer shall coordinate with the School Board and Brevard County for any necessary modification of the School Agreement and/or the SCADL.

79. RESERVED.

80. RESERVED.

81. RESERVED.

#### **TRANSPORTATION**

82. The DRI is to be developed in a transit-supportive manner as a “new town” as defined in section 163.3164 of the Florida Statutes, consisting of a compact mixed-use that is intended to lower levels of automobile use per capita and give rise to shorter trips when the automobile is used. The combined effect of compact transit-supportive development and the presence of a significant alternative mode of transportation in the form of bicycling, use of golf carts or other low speed vehicles and walking is expected to lower Vehicle Miles Traveled (“VMT”) per capita. The development form for the remainder of the DRI clusters development in villages and protects regionally significant environmental areas. Within villages, the proposed density, street network, development and mix of uses will be supportive of future transit service.

83. RESERVED.

## TRANSPORTATION IMPACT STUDY

84. Prior to the initiation of phase 4, the Developer shall conduct a Transportation Impact Study. **(completed)** This Transportation Impact Study shall ascertain the Level of Service (“LOS”) on facilities where the Viera DRI is estimated to contribute an amount of traffic greater than or equal to five percent (5%) of the adopted LOS service volume. The methodology of the Transportation Impact Study shall be agreed upon by Brevard County and the Developer. **(completed)** In the event that the Developer submits a future Transportation Impact Study, the methodology for such study shall be reviewed and approved by Brevard County and the Florida Department of Transportation. The depth of the Transportation Impact Study shall be similar to that required within an ADA (to include all phases for projected roadway adversity testing) but shall be consistent with the requirements of the Brevard County Concurrency Management Systems as it relates to facilities within that jurisdiction. Empirical data will be required to be collected for the Transportation Impact Study on facilities where it is estimated that the project contributes an amount of traffic greater than or equal to five percent (5%) of the adopted LOS maximum service volume. **(completed)** The Transportation Impact Study shall include a trip generation and internal capture study shall be performed to verify trip generation, internal capture, community capture and pass-by assumptions for the development. **(completed)** The facilities to be studied for Phase 4 shall include, but shall not be limited to, these segments of the regional roadways listed below and one segment beyond where the Viera DRI is estimated to contribute a cumulative amount of traffic greater than or equal to five percent (5%) or more of the adopted p.m. peak hour two-way service capacity. **(completed)** The analyzed facilities will include all the intersections from the previous phase 1-3 analysis (Substantial Deviation #2), as well as the major

intersections along significantly impacted roadways, and link analyses of collector and higher classified roadways and interchange ramps. **(completed)**

Candidate Roadways for Transportation Impact Study

## **Roadway Link**

### **AURORA ROAD**

From Wickham Rd. to U.S. 1

### **SPYGLASS HILL ROAD**

From Lake Andrew Dr. to Murrell Rd.

### **PINEHURST AVENUE**

From Spyglass Hill Rd. to Wickham Rd.

### **INTERSTATE 95**

From S.R. 528 to S.R. 524

From S.R. 524 to S.R. 520

From S.R. 520 to Fiske Blvd.

From Fiske Blvd. to Viera Blvd.

From Viera Blvd. to Wickham Rd.

From Wickham Rd. to Pineda Causeway

From Pineda Causeway to Eau Gallie Blvd.

From Eau Gallie Blvd. to U.S. 192

From U.S. 192 to Palm Bay Rd.

### **U.S.1**

From Forrest Ave. to S.R. 520

From S.R. 520 to Barton Blvd.

From Barton Blvd. to Eyster Blvd.

From Eyster Blvd. to Gus Hipp Blvd.

From Gus Hipp Blvd. to Barnes Blvd.

From Barnes Blvd. to Viera Blvd.

From Viera Blvd. to Sun Tree Blvd.

From Sun Tree Blvd. to Pineda Causeway

From Pineda Causeway to Post Rd.

From Post Rd. to Lake Washington Blvd.

From Lake Washington Blvd. to Aurora Rd.

From Aurora Rd. to Eau Gallie Blvd.

From Eau Gallie Blvd. to Sarno Rd.

From Sarno Rd. to Babcock St.

**PINEDA CAUSEWAY**

From Lake Andrew Dr. to I-95  
From I-95 to Wickham Rd.  
From Wickham Rd. to U.S. 1  
From U.S. 1 to S. Tropical Trail  
From S. Tropical Trail to S.R. A1A

**WICKHAM ROAD**

From Lake Andrew Dr. to I-95  
From I-95 to Murrell Rd.  
From Murrell Rd. to N. Pinehurst Ave.  
From N. Pinehurst Ave. to Suntree Blvd.  
From Suntree Blvd. to St. Andrew Blvd.  
From St. Andrew Blvd. to S. Pinehurst Ave.  
From S. Pinehurst Ave. to Pineda Causeway  
From Pineda Causeway to Post Rd.  
From Post Rd. to Parkway Dr.  
From Parkway Dr. to Lake Washington Blvd.  
From Lake Washington Blvd. to Aurora Rd.  
From Aurora Rd. to Eau Gallie Blvd.  
From Eau Gallie Blvd. to Sarno Rd.  
From Sarno Rd. to Nasa Blvd.

**FISKE BOULEVARD**

From Peachtree St. to S.R. 520  
From S.R. 520 to Barton Blvd.  
From Barton Blvd. to Eyster Blvd.  
From Eyster Blvd. to Barnes Blvd.

**LAKE ANDREW DRIVE**

From I-95 to Viera Blvd.  
From Viera Blvd. to Spyglass Hill Rd.  
From Spyglass Hill Rd. to Wickham Rd.  
From Wickham Rd. to Pineda Causeway

**MURRELL ROAD**

From Barton Blvd. to Eyster Blvd.  
From Eyster Blvd. to Gus Hipp Blvd.  
From Gus Hipp Blvd. to Barnes Blvd.  
From Barnes Blvd. to Viera Blvd.  
From Viera Blvd. to Spyglass Hill Rd.  
From Spyglass Hill Rd. to Wickham Rd.

**BARNES BOULEVARD**

From Fiske Blvd. to Murrell Rd.  
From Murrell Rd. to U.S. 1

**POST ROAD**

From Wickham Rd. to U.S. 1

**LAKE WASHINGTON BOULEVARD**

From Wickham Rd. to U.S. 1

**SARNO ROAD**

From Eau Gallie Blvd. to Wickham Rd.

From Wickham Rd. to U.S. 1

**SUNTREE BOULEVARD**

From Wickham Rd. to U.S. 1

**VIERA BOULEVARD**

From Stadium Parkway to Murrell Rd.

From Murrell Rd. to U.S. 1

**S.R. 520**

From S.R. 524 to I-95

From I-95 to Fiske Blvd.

From Fiske Blvd. to U.S. 1

From U.S. 1 to Tropical Tr.

**S.R. A1A**

One-way Pair Split to Pineda Causeway

Pineda Causeway to DeSoto Parkway

**EAU GALLIE BOULEVARD**

From I-95 to Wickham Rd.

From Wickham Rd. to U. S. 1

From U.S. 1 to C.R. 3

**U.S. 192**

From Brandywine Lon to I-95

From I-95 to Wickham Rd.

From Wickham Rd. to U.S. 1

From U.S. 1 to Riverside Dr.

Several government offices and public schools are located within the Existing DRI Area. Phases 1 and 2A absorbed the impacts of these facilities without distinguishing the difference between the impacts of these public facilities and the impacts from private development, which impacts have been cumulatively and fully mitigated. The development program for Phase 3 includes two high schools, a middle school, an elementary school and 186,140 square feet of additional government office development which include the Heidar G. Heshmati, M.D. Building (Brevard County Health Department), the Florida Department of Health – Children’s Medical Services and an expansion of the Harry T. & Harriette V. Moore Justice Center. Upon implementing the Phase 3 Transportation Mitigation Program described in Condition 92 herein, the transportation impact of the public and government office development proposed in the development program for Phase 3 shall be fully mitigated.

#### **TRANSPORTATION MITIGATION**

85. The DRI shall not commence beyond Phase 3 into Phase 4 when service levels are below the minimum service level adopted in the applicable local government’s comprehensive plan during the peak hour and the project contributes, or is projected to contribute with the next phase of traffic, five percent (5%) or more of the adopted p.m. peak hour two-way service capacity of the roadway or intersection as determined by the Transportation Impact Study required in the preceding condition, unless mitigation measures and/or improvements are secured and committed for construction during the phase in which the impacts occur. The Development Order shall be amended to incorporate the required improvements and the commensurate trip level by which the improvement is needed to support such development. **(completed)** No additional payments, contributions or improvements for transportation mitigation beyond the transportation mitigation which Developer is obligated to provide under Condition 92 herein shall be required or requested

for Phase 3 of the DRI, provided all required transportation mitigation payments have been made or secured by December 22, 2023. In the event the date for completion of Phase 3 is extended and a transportation mitigation payment for a particular improvement has not been made or secured, the amount of the proportionate share contribution for such improvement, which is identified in Condition 92 herein, shall be recalculated to determine the Developer's proportionate fair share for the improvement at the time of Developer's payment for the improvement.

86. For the purposes of this Development Order, adequate "secured and committed" transportation improvements shall include one or more of the following:

- a. A clearly identified, executed and recorded local government development agreement, consistent with Sections 163.3220 through 163.3243, F.S., that is attached as an exhibit to the development order, and which ensures, at a minimum, that all needed roadway improvements will be available concurrent with the impacts of development, consistent with Section 163.3180(2), F.S.;
- b. A binding and enforceable commitment in the development order by the local government to provide all needed roadway improvements concurrently with the development schedule approved in the development order;
- c. A local government commitment in the current year of their local government comprehensive plan Capital Improvement Element (CIE) to provide all needed roadway improvements, or a local government commitment in the current three years of their CIE to provide all needed roadway improvements when the local government has specifically adopted an in-compliance concurrency management system in their plan; or

- d. A Florida Department of Transportation commitment in the current five years of the Adopted Work Program for Florida Intrastate Highway System (FIHS) facilities or in the first three years of the Adopted Work Program for all other facilities to provide all needed roadway improvements;
- e. A binding and enforceable commitment in the development order by the developer to provide all needed roadway improvements concurrently with the development schedule approved in the development order; or
- f. Any combination of guarantees (a.) thru (f.) above that ensures that all needed roadway improvements will be provided concurrently with the development schedule approved in the development order.

**[The provisions of this Condition 86 have been satisfied by the commitments set forth in Condition 92.]**

87. The mitigation measures shall be completed or transportation improvements secured and committed or shall otherwise be satisfied by the provisions required under F.S. 163.3180(5)(h) prior to the end of the phase or subphase in order for the project to proceed through the balance of the applicable phase or subphase. If the Developer can demonstrate that a portion of a phase or subphase does not adversely affect the regional roadway network as determined by the monitoring and modeling tests discussed above, then the Developer may proceed with that portion of the phase or subphase (and only that portion). **[The provisions of this Condition 87 have been satisfied by the commitments set forth in Condition 92.]**

88. In the event that a roadway widening is identified which is not compatible with adopted policy of the FDOT or local government (e.g., constrained), the Developer, Brevard County, or the party having either maintenance or jurisdictional responsibility for the facility, shall

determine alternate mitigation solutions to provide for the movement of people. **[The provisions of this Condition 88 have been satisfied by the commitments set forth in Condition 92.]**

89. The biennial report shall include an assessment of the development status by providing development totals by land use, as defined by Exhibit 4, Master Development Program. In order to assure Brevard County that the projected pm peak hour external trip generation identified in the Transportation Impact Study will be maintained, within Phase 4 (as identified in the development program in Exhibit 4 of this Development Order) there shall be a minimum of 75,000 square feet of non-residential development (including office, retail and light industrial) to each 1,000 residential dwelling units. At the time of report presentation, should there be less than the minimum of the non-residential development completed, the Developer shall report any pending non-residential opportunities for construction in the upcoming reporting years and shall be permitted to proceed with development. If the Developer will not construct additional non-residential development in the upcoming reporting years to meet the minimum stated above, the Developer shall demonstrate to Brevard County that the pm peak hour external trips from the project have not exceeded those for which mitigation has been committed in this Development Order. This assessment will demonstrate to Brevard County that the compact mixed use land pattern will continue to develop in a manner consistent with the goals stated in Condition 82.

90. The Developer will complete a Level of Service analysis of the operating conditions along I-95 from the Pineda Interchange to the Fiske Boulevard interchange and document the results in the biennial report submitted during Phase 3 of development. It is expected that the classification for interstate 95 will be changed to Urban as a result of the 2010 Census. It was evaluated by the Department and determined that if the classification is changed from transitioning to Urban, I-95 within the segment identified above would operate at acceptable level of service

during Phase 3 of the development. Therefore, if I-95 is re-classified to Urban, this monitoring condition would be deemed satisfied for Phase 3 and no longer be required to be submitted in the biennial report during Phase 3. However, if I-95 is not re-classified to Urban as a result of the 2010 Census and the Developer is unable to establish that I-95 is operating at an acceptable level of service, the Developer will work with the FDOT to identify alternative mitigation options as outlined by Florida Statutes. The Developer would be required to coordinate with the FDOT to ameliorate the DRI impacts to I-95, prior to the end of Phase 3. **(This condition 90 has been satisfied by the re-classification of I-95 to urban by the FDOT)**

91. To the extent reasonably necessary to facilitate the objectives in these conditions, an agreement(s) among Brevard County, the City of Rockledge, the City of Melbourne, the FDOT and the Developer may be entered into within twelve (12) months of the issuance of a development order for this project by Brevard County. Said agreement(s) shall address and clarify such issues related to equity in the application of collected fees for transportation improvements. Application of fees shall be on a fair share basis with respect to the improvements to be provided and not solely on the basis of impact fees. However, such an agreement would not alter or waive the provisions and requirements of the other conditions of the Development Order as a mitigative measure for the transportation impacts for the Viera DRI. In the event that one of the designated parties to the agreement (other than the Developer) fails to execute said interlocal agreement(s) within the specified time, then the Developer may proceed with the project based upon the monitoring/modeling schedule and all other recommendations specified herein as it affects the non-participating party. Separate agreements may be entered into with one or more parties and the Developer. **(To facilitate the objectives in these conditions, the Viera DRI Transportation**

**Proportionate Share Agreement was entered into by and between the Developer and FDOT on or about March 16, 2010 and was subsequently amended on or about October 31, 2014.)**

92. The following Improvements shall be the Mitigation for Phase 3 and the Developer is authorized to commence Phase 3 provided the Developer complies with the conditions hereto. Alternative improvements may also be presented based on future study results. Developer shall be eligible for impact fee credits for all improvements as provided by state law and Brevard County Ordinance.

ROADWAY	LIMITS	IMPROVEMENT	ESTIMATED COST (IN MILLIONS)
Viera Blvd./I-95 <sup>1</sup>	Interchange	Construct interchange ramps	\$8.76
Viera Blvd <sup>2</sup>	DRI boundary to US 1	Widen to 4 lanes	\$4.01
Wickham Road <sup>3</sup>	Lake Andrew Dr. to Lake Washington Rd., including intersections	Roadway and intersection Improvements	\$16.43
Brevard County Intersection Improvements <sup>3</sup>	Murrell/Eyster and Murrell/Barnes	Intersection Improvements	\$0.86
FDOT Intersection Improvements <sup>4</sup>	1 <sup>st</sup> priority: I-95/Fiske Blvd. 2 <sup>nd</sup> priority: US1/Viera Blvd. 3 <sup>rd</sup> priority: US1/Barnes	Add NB left turn lane along Fiske Blvd Add NB left turn lane along US1 Add NB left turn lane along US1	\$2.223
Wickham Road <sup>5</sup>	Murrell Road to Lake Andrew Drive	Widen to six lanes	\$9.4
<b>Total Estimated Cost</b>			<b>\$41.683</b>

**DETAILED MITIGATION PROJECT REQUIREMENTS FOR ROADWAY SEGMENTS AND INTERSECTIONS DESCRIBED ABOVE:**

<sup>1</sup>Assumes Developer will provide right of way required to support interchange. If IJR is not approved, Developer will conduct an additional assessment to identify an appropriate plan to mitigate Fiske Boulevard within six months of the IJR decision. Within 30 days after conclusion of the appeal period or the conclusion of all appeals of this Development Order, but in no event earlier than July 15, 2010, Developer will pay FDOT \$500,000 for preparation of the IJR and PD&E. (Required payment has been made) Within 30 days after the later of approval of both the IJR and PD&E or July 16, 2013 Developer will pay FDOT \$870,000 for design and permitting of the Interchange. (this required payment has been made). Construction shall commence no later than 12/29/2018. Additionally, Developer shall pay \$380,000.00 for Construction Management and Inspection services and Post Design Services simultaneously with commencement of construction if funding is not included in Five-Year Work Program.

<sup>2</sup>This improvement and the Viera Blvd./I95 Interchange are alternative mitigation for cumulative Phase 3 impacts on Fiske Blvd. between the DRI boundary and Barnes Boulevard, including intersections. Construction shall begin the later of December 29, 2018 or 180 days after completion of the Viera Interchange.

<sup>3</sup>Funds for mitigation of traffic impacts paid by Developer to Brevard County are to be pipelined for improvements to Washingtonia Boulevard from the southern boundary of the DRI to Ellis Road in the amount of \$5,000,000. The funds shall be used to reimburse Brevard County for acquisition of the road right of way as well as planning and engineering design of the roadway. The funds for Washingtonia Boulevard shall be paid to Brevard County prior to December 22, 2023. In addition, Developer shall mitigate impacts to Wickham Road and Murrell Road intersections by paying Brevard County a total of \$12,290,000 to reimburse Brevard County for the cost of widening Barnes Boulevard from two lanes to four lanes from Fiske Road to Murrell Road intersection and intersection improvements. Developer shall begin reimbursing the County for these

costs on September 1, 2015, a date previously extended from September 1, 2011 by the Statutory Notices (Developer has initiated these payments). On September 1, 2015, Developer shall provide payment to reimburse to the County for all expenditures made as of that date on a pro-rated basis as described below. Developer shall also provide a letter of credit in favor of Brevard County which can be presented for payment in the State of Florida in the amount of the remaining amount of funds due from Developer to County after the payment/reimbursement for Barnes Boulevard described above for construction costs already incurred (**Completed**). Thereafter, Developer shall make monthly reimbursement payments to County based on its pro-rated share of the expenditures by the County for the Barnes Boulevard widening project each month until the project is completed. The pro-rated share of the Developer's payment shall be based on the ratio of the total payment of \$12,290,000 to the contract price for Barnes Boulevard, less the amounts paid by the County for alteration to the potable water lines (currently estimated at \$1,876,998.75) and force main and reuse lines (currently estimated at \$666,784.55) as part of the Barnes Boulevard widening project. Reimbursement funds paid to the County by Developer may be spent on any type of transportation project which could have been eligible to use 2007 Local Option Gas Tax (LOGT) bond proceeds. In the event funds other than LOGT bond proceeds are used to pay for the widening of Barnes Boulevard, the reimbursement funds shall be used for any transportation purpose for which the funds used by Brevard County to pay for the Barnes Boulevard Widening Project may have been used. The mitigation above satisfies the cumulative Phase 3 impacts to Wickham Road and the Murrell Road intersection improvements.

On March 5, 2009, Brevard County adopted an emergency ordinance imposing a 2 year moratorium on the collection of transportation impact fees, which moratorium was subsequently extended and expired on December 31, 2016. To assist the Developer in obtaining alternative and innovative means of financing for Developer's payment of \$12,290,000.00 described above, Brevard County (as the constructing authority) shall cooperate with the Developer's efforts to obtain a loan or other financial assistance from the State-funded State Infrastructure Bank ("SIB") pursuant to Section 339.55, Florida Statutes; provided, however, that (i) Brevard County shall not incur any direct cost or expense in connection with such cooperation, (ii) Brevard County shall not be a funding source to repay the SIB loan or liable in any other manner under the SIB loan, and (iii) the Developer shall remain responsible for the timely payment of all funds due hereunder notwithstanding the Developer's failure to obtain such loan. Such cooperation shall include sponsoring the Developer's SIB loan application so long as such sponsorship imposes no liability on Brevard County and providing project-related information for the SIB loan application (e.g. verification of all necessary right-of-way acquisition and consistency with local comprehensive and transportation plans, project cost estimates, project funding, construction drawings, engineering reports, and environmental impact studies).

<sup>4</sup>The improvements shown address the cumulative Phase 3 impacts to intersections along US1 from Dixon Blvd. to Sarno Road and Interstate 95 interchange intersections at SR 406, SR 50, SR 520, Eau Gallie Blvd., and Palm Bay Rd. This mitigation reflects the pipelining of proportionate share contributions to these intersections. Developer will pay FDOT for these intersection improvements \$323,000 by December 15, 2009 (required payment has been made), \$950,000 by June 29, 2016 (required payment has been made) and \$950,000 by December 29, 2019.

<sup>5</sup>Developer shall pay for design, acquisition of right of way and construction pursuant to the Joint Facilitation of Public Infrastructure Agreement between Developer and Brevard County dated September 1, 2009.

<sup>6</sup>Commencement and completion dates in footnotes have been extended pursuant to the various applicable Statutory Notices.

92.A. Developer has entered into a proportionate share agreement with the FDOT for local and regional significant traffic impacts pursuant to section 163.3180, Florida Statutes, to satisfy the concurrency requirements of the Brevard County comprehensive plan, the Brevard County concurrency management systems, and section 380.06, Florida Statutes. Future amendments to the agreement with FDOT shall serve as an amendment to the required mitigation plan for roadways under the FDOT's jurisdiction outlined in Condition 92 without the need for an amendment to this Development Order.

92.B. The following improvements shall be the mitigation for Phase 4 and the Developer is authorized to commence Phase 4 provided the Developer\* complies with the conditions hereto. Alternative improvements may also be presented based on future study results. Developer shall be eligible for impact fee credits for all improvements, including but not limited to the improvements noted below, as provided by state law and Brevard County Ordinance. Brevard County is under no obligation to construct or oversee the construction of improvements.

IMPROVEMENT OR CONTRIBUTION	LIMITS OR DETAILS	TIMING OF CONSTRUCTION OR CONTRIBUTION	ESTIMATED COST IN MILLIONS
Spyglass Overpass	Construction of 4 lane bridge and roadway connecting Spyglass Hill Road to Napolo Drive from Lake Andrew Drive to Murrell Road.	The improvement shall be substantially complete and open for public use coincident with the completion (i.e. issuance of certificates of occupancy) of 50% of the development program identified as Phase 4 (as noted on	\$14.1

		<p>Exhibit 4 to this Development Order) based upon Equivalent Residential Units. The Developer shall diligently pursue permits, design and construction of the improvement. Brevard County shall grant reasonable extensions for events beyond the control of the Developer.</p>	
I-95 at Fiske Boulevard/Barnes Boulevard Interchange	Contribution to pay for cost of Interchange Modification Report	Within 180 days of receipt of notice by the Developer from FDOT that the process is ready to proceed.	Actual cost up to a maximum of \$1.5

\*Developer shall complete or cause to be completed

93. Transit operation or alternate parallel facility improvements shall be considered prior to the commencement of future subphase. **(completed)**

94. If the study results as set forth hereinabove show that improvements must be made to roadway facilities, and if mitigation is not provided as set forth in these conditions or as otherwise required pursuant to Rule 73C-40.045), then prior to any construction of future subphases and subject to the provisions of Chapter 380.06(15)(e), Florida Statutes, the Developer, Brevard County and the entity with jurisdiction over the roadway facility may enter into an agreement which ensures that:

- (a) a proportionate share payment is made by the Developer to the appropriate entity(ies) to mitigate project impacts;
- (b) said proportionate share payment shall be used by the appropriate entity only for the design, engineering, right-of-way purchase, permitting and/or construction of improvement to the segments/intersections for which the payment is made; and
- (c) said proportionate share payment by the Developer constitutes adequate provision for the public facilities needed with respect to the road segments to accommodate the impacts of the project through the phase for which the proportionate share was calculated, as required by Chapter 380.06(15)(e)(2), Florida Statutes. All such proportionate share agreements shall be included in this Development Order by amendment pursuant to Chapter 380.06(19), Florida Statutes. The formula to be used (unless revised by statutes) to determine proportionate share contribution is as follows:

$$\frac{\text{(DRI Trips)}}{\text{SV Increase}} \times \text{Cost} = \text{Proportionate Share}$$

(d) For this formula, DRI Trips is the cumulative number of trips from the development expected to reach the roadway during the peak hour from the phase under development. Service Volume (“SV”) increase is the change in peak hour maximum service volume of the roadway resulting from construction of the improvement necessary to maintain the desired level of service; and Cost of Improvement is the cost (at the time of Developer payment) of constructing an improvement necessary to maintain the desired level of service, including all improvement associated costs (engineering design, right-of-way acquisition, planning, engineering, inspection, and other associated physical development costs directly required and associated with the construction of the improvement) as determined by the governmental agency having maintenance obligations over the roadway. Proportionate share mitigation for roadway impacts may also be direct to transit service and facilities or pipelined to specific transportation improvements in accordance with applicable law.

(e) Notwithstanding any provision contained herein to the contrary, except as specifically agreed in writing, Brevard County and the entity with jurisdiction over the roadway facility shall have no financial responsibility to contribute to or participate in the funding

of the design, engineering, permitting, and/or construction of roadway improvements.

- (f) The monitoring and modeling required prior to each phase or subphase shall be used to verify impacts from previous phases and to more accurately estimate probable impacts from later phases. Any impacts from prior phase which have been mitigated in accordance with any of the methods set forth in this Development Order shall not be included in any subsequent proportionate share calculations. If it is verified that the roadway improvements mentioned above are still needed, then the DRI shall not proceed into later phases until either a proportionate share agreement payment is fully executed or the needed improvements are scheduled for construction in the applicable entities' work program within the first three (3) years from the date when impacts are estimated to be significant and adverse.
- (g) If the parties cannot reach agreement independently prior to the date when impacts are estimated to be significant and adverse, or if so desired by the parties at any time, then the issues in dispute may be submitted to the ECFRPC for either voluntary mediation pursuant to its adopted dispute resolution process or to binding arbitration pursuant to the rules and procedures of the American Arbitration Association ("AAA") unless otherwise agreed by the parties in dispute.

**[The provisions of this Condition 94 (a)-(g), inclusive, have been complied with pursuant to completion of the Transportation Impact Study through buildout and the mitigation provisions of Condition 92.B.]**

(h) Within areas of the WVEA designated as Village, Interchange, or Community Districts, the development plan will include multiple roadways through the DRI in order to provide adequate capacity, to provide alternative routes and to lessen the impacts to community cohesiveness.

#### **ALTERNATIVE TRANSPORTATION STRATEGIES**

95. The Developer or the Viera Transportation Management Association, Inc. (“TMA”) shall promote and encourage on-site employers to offer variable work hours and flextime schedules for their employees as one means of reducing peak hour travel demand. Acceptable methods for “promoting and encouraging” may include, but are not limited to; provisions in land sale contracts and/or Covenants, Conditions and Restrictions encouraging retail, office and institutional uses to offer variable work hour and flextime schedules to employees; participation in the TMA whose purposes include promoting and encouraging travel demand management. The Developer shall select the method or methods for compliance with this requirement prior to the sale of any land for retail, office or institutional use, and will notify the County in writing of its selection and means of implementing the selection and shall be included in Biennial Report.

96. The Developer or the TMA shall promote the use of transit, and ridesharing programs by tenants, residents and employees. Promotion of the use of such programs may be

accomplished through: the display of service schedules in prominent public gathering areas and near service stops; preferential parking for vans and cars that are part of the ridesharing program; publication of newsletters delivered to tenants, residents and employees that provides ridesharing information.

97. The Applicant shall consult with Space Coast Area Transit to provide adequate amenities that promote transit. At a minimum, the following actions are required, as agreed to by Space Coast Area Transit:

- (a) In cooperation with the TMA, the Developer shall consider the need for and, if appropriate, location of appropriate bus transfer stations in proximity to the park and ride areas within the nonresidential portion of the DRI. The locations shall be determined in coordination with the Space Coast Area Transit Authority and the county. It shall include a maximum of four (4) bus bays with covered waiting areas with seating and a bicycle rack. This will provide for a hub for the transit system and the ability to park and ride for individuals within or outside of the DRI.
- (b) The Developer shall construct transit pull off areas, including covered transit shelters with seating and bicycle parking. Locations shall be coordinated with the Space Coast Area Transit Authority and the county and any affected property owners.
- (c) Bicycle lockers or bicycle racks, transit passenger shelters and transit parking bays shall be constructed where necessary to augment and facilitate the operations of transit service to the site.

- (d) Pedestrian routes to transit shall be shaded or otherwise covered to the maximum extent feasible to protect users from the elements.

98. Developer, in cooperation with the Brevard County and Space Coast Area Transit (SCAT), shall develop a plan to maximize the viability and use of public transit services as an alternative mode of travel inside, to and from the DRI. The Developer will continue to include the following strategies:

- (a) Implementation of PUD design standards that address transit-supportive site and building design standards;
- (b) Implementation of PUD design standards that address pedestrian activity, safety, and circulation as an alternative travel mode and to support transit use;
- (c) Designation of Village Center and Town Center areas that contain densities, mix of land uses, and development patterns that are supportive of transit use;
- (d) Identification of corridor(s) that can accommodate a transit circulator system and/or future fixed transit technologies serving the Village Centers and employment areas, the Town Center and potential regional connections consistent with any programmed system by SCAT;
- (e) Exploration of feasible transit improvements for regional corridors where roadway capacity needs are projected to be eight (8) lanes or more, or exceed local or state transportation policies; and
- (f) Coordination between SCAT, Brevard County, the Developer and the TMA to develop a long-term transit plan for the DRI and surrounding

planning area as designated by Brevard County, including potential routes and ridership determination, off-site regional connections by public transportation, park and ride facilities and interfaces and an implementation and funding schedule.

99. In the interest of safety, and to promote alternative forms of transportation, the Developer shall provide the following bicycle and pedestrian systems:

- (a) The on-site bicycle systems shall be planned to be connected into any adjacent external bicycle facilities existing at the time of construction. The on-site bicycle system includes a combination of multi-use sidewalks, off-road trails, on-street bicycle lanes, paved shoulders, and low-speed neighborhood streets that support safe bicycle travel but do not have marked bicycle lanes.
- (b) For Village Center and Town Center areas, the Developer shall meet site and building design requirements that address pedestrian safety and comfort through elements such as covered walkways designed into the front of non-residential structures through applicable PUD zoning.
- (c) In all areas of the DRI, where cycling will be accomplished on both sidewalk/bikeways and streets, appropriate signage identifying bike routes shall be installed subject to approval by Brevard County.
- (d) Special consideration shall be given to bikeways connecting neighboring residential areas to employment and commercial areas.
- (e) Bicycle support facilities, such as covered parking and lockers, shall be encourage at commercial areas and work areas.

(f) Improvements to area roadways should be encourage to incorporate bicycle and pedestrian facilities that are internal to the DRI.

100. The Developer shall coordinate with Brevard County and the TMA to ensure the provision of park and ride spaces within the DRI. Currently, the Developer has constructed one (1) park and ride facility within the DRI providing 56 unassigned vehicle parking spaces, which park and ride facility shall be managed and maintained by or through the TMA. Upon buildout of the DRI, the Developer shall have provided not less than a total of three hundred (300) unassigned vehicle parking spaces within the DRI for use in connection with facilitating transit, ridesharing car and van pooling and other demand management programs to reduce automobile usage. Such unassigned parking spaces may be shared with parking for commercial land uses. The park and ride spaces shall be proximate to public transit.

#### **FIRE, SHERIFF**

101. Police, fire and EMS service will be provided by Brevard County. The Developer has built, equipped and provided to the County two fire stations within the Project and known as Station 47 and Station 48 and has received or is receiving reimbursement and impact fee credits for each pursuant to agreements with the County. The Developer shall build and equip a third fire station on a 2 acre site to be conceptually located at the time of Sketch Plan Approval for Village 2. This finalized site location shall be determined in consultation between Brevard County and the Developer. This finalized site shall be conveyed to Brevard County at completion of construction and issuance of Certificate of Occupancy. For this site dedicated as provided above, the Developer shall be entitled to Impact Fee Credits for all development served by the facilities, even if the areas served are located outside of the DRI. Credit shall be given to the extent of the fair market value of any land contributed, as determined by an MAI appraiser acceptable to the

Developer and Brevard County, and for all equipment provided or funded by the Developer. Such credits shall be reimbursed in the same manner and under substantially similar terms and conditions as set forth in the Donation and Capital Contribution Front-Ending Reimbursement Agreement dated June 9, 1999 between Developer and Brevard County for Fire Station 47. The final fire station shall be located within Village 2 at a location mutually agreeable to the County and the Developer and constructed and equipped in a manner mutually agreeable to the County and the Developer consistent with Fire Station 48. The Developer shall pay for two “mini-pumper” fire trucks up to \$200,000 each.[completed as to one] Payment for the second truck shall be made at the time of issuance of the first building permit for an alley unit in Village 2. The Developer shall be entitled to impact fee credits for the payments.

102. Upon the request of the Brevard County Sheriff’s Department, the Developer shall designate one site for lease by the Brevard County Sheriff’s Department within the Town Center and Village 2. The Town Center site shall be located at the time of approval of the final Site Plan for the Town Center. A second site shall be conceptually located at the time of Sketch Plan Approval for Village 2 and the finalized site shall be specifically located at the time of final Site Plan Approval for Village 2. Each site shall be available for lease, at market rates, at time of the issuance of a Certificate of Occupancy from Brevard County.

### **RECREATION**

103. In addition to the Viera Wilderness Park, the Developer shall provide no less than 370 acres of parks within the DRI west of Interstate 95. To date, the Developer has provided 161.7 acres of parks west of Interstate 95. The Developer shall provide sites at locations mutually agreeable to the County and Developer. Impact fee credits shall be governed by applicable state law and Brevard County Ordinance.

## **DEVELOPMENT PHASING**

104. The Developer shall adhere to the Master Development Program set forth in Exhibit 4 in four phases: “Phase 1” (1990 to December 22, 2023 ), “Phase 2A” (December 29, 2005 to December 22, 2023), “Phase 3” (December 29, 2010 to December 22, 2023), and “Phase 4” (December 29, 2017 to December 21, 2033). Because the traffic impacts for Phase 1 and Phase 2A development have been cumulatively assessed and cumulative mitigation provided for them through the end of Phase 3 of this Development Order, any portion of Phase 1 and Phase 2A development that has not been completed by December 22, 2023 may continue through the buildout date of Phase 3.

### **IV. PERIOD OF EFFECTIVENESS**

This Development Order shall take effect upon transmittal by certified U. S. Mail, return receipt requested, to the East Central Florida Regional Planning Council and the Florida Department of Economic Opportunity, and shall remain in effect until its expiration on December 21, 2033. The termination date is also December 21, 2033. The effectiveness of this Development Order, including without limitation all development phases of the DRI may be extended by operation of law or by the Brevard County Board of County Commissioners in a public hearing upon a showing by the Developer that the completed portions of the DRI comply with the conditions of this Development Order and the provisions of Chapter 380.06, Florida Statutes.

### **V. BIENNIAL REPORTING REQUIREMENTS**

In accordance with Chapter 380.06(18), Florida Statutes, the Developer, its successors or assigns, shall submit a biennial report on or before July 1, 2012 and in every other or second year thereafter during the buildout of the DRI (the “Biennial Report”). The Biennial Report shall be

submitted to the County, the City of Rockledge, the ECFRPC, the DEO, the FDOT, the SJRWMD and all other affected planning and permitting agencies formally requesting copies of the same in writing to the Developer. The contents of the Biennial Report shall comply with the relevant conditions of approval that require reporting actions within this Development Order, within Chapter 380.06(18), Florida Statutes, Rule 73C-40.025 F.A.C., as well as any and all other and further information required under applicable law. The Biennial Report shall include a statement that all persons/agencies listed above have been sent copies and the failure to timely submit the Biennial Report may subject the Developer and the DRI to the temporary suspension of this Development Order in accordance with Chapter 380.06(18), Florida Statutes.

**VI. MONITORING MECHANISM**

The County Manager, or another authorized Brevard County designee, shall be the local official responsible for monitoring compliance by the Developer with this Development Order. The County shall not issue any permits or approvals or provide any extension of services if the Developer fails to act in substantial compliance with this Development Order. Violations of this Development Order may be subject to correction through consent agreement penalty or suspension of this Development Order. Consent agreements shall be prepared by the County Manager or authorized Brevard County designee. Final approval or denial of the consent agreement shall be determined by the Brevard County Board of County Commissioners. Consent agreements shall be subject to review by the Florida Department of Economic Opportunity. A consent agreement may require a reasonable bond or financial security from the Developer. Consent agreements shall provide no less than an equivalent degree of protection for the lands, surface waters or ground waters of Brevard County, and shall at least meet the level of protection and/or remedy afforded by Brevard County Ordinances and the provisions of this Development Order. The ability to enter

into a consent agreement shall in no way prevent Brevard County from pursuing enforcement actions as permitted by Chapter 380, F.S.

**VII. RESTRICTIONS ON DOWN-ZONING**

The Viera Development of Regional Impact as described within this Development Order shall not be subject to down-zoning, unit density reduction or intensity reduction until December 21, 2033, unless extended by law or by the provisions of Paragraph IV herein, unless it is demonstrated and affirmatively found by the Brevard County Board of County Commissioners at a public hearing that substantial changes in the conditions underlying the approval of this Development Order have occurred, or that this Development Order was based on substantially inaccurate information provided by the Developer, or that the change is clearly established by Brevard County to be essential to the public health or safety.

**VIII. RECORDATION**

Notice of the adoption of this Development Order or any subsequent modification of this Development Order shall be recorded by the Developer in accordance with Section 28.222, Florida Statutes, with the Clerk of the Circuit Court for Brevard County, Florida, at the Developer's expense within 30 days of the effective date of this Development Order or any subsequent modification of this Development Order in compliance with Section 380.06(15)(f), Florida Statutes. The recording of this notice shall not constitute a lien, cloud or encumbrance on the DRI, or actual or constructive notice of any such lien, cloud or encumbrance. The conditions of this Development Order shall run with the Property described in Exhibits 1 and 2 and shall bind the Developer's successors and assigns.

**IX. CREDITS AGAINST LOCAL IMPACT FEES**

In compliance with Sections 380.06(15) and(16), Florida Statutes, and Article V of the Brevard County Code of Ordinances, Brevard County shall credit the Developer with any Developer Order exaction or fee required by this Development Order as allowed by the mechanisms set forth in the then applicable Brevard County Impact Fee Ordinance for the contribution of lands or funds for land acquisition, construction or expansion of a public facility, or a portion thereof, toward any impact fee or exaction imposed by local ordinances for the same need. This subsection does not apply to internal, onsite facilities required by local regulations or to any offsite facilities to the extent such facilities are necessary to provide safe and adequate services to the development.

Regardless of whether Brevard County in the future repeals or suspends impact fees imposed for any purpose, the Developer shall remain responsible for all mitigation requirements imposed under this Development Order, and the Developer shall receive credits for any improvements or donations for which credit would have been granted prior to the effective date of Brevard County's repealing, or suspending, action which may be utilized if Brevard County subsequently reinstates impact fees.

**X. RENDITION**

Within ten days of the date of adoption of this Development Order, Brevard County shall transmit a copy of this Development Order certified as complete and accurate with all pertinent attachments by certified mail, return receipt requested, to the Florida Department of Economic Opportunity the East Central Florida Regional Planning Council, and the Developer.

## **XI. VIERA STEWARDSHIP DISTRICT, DEVELOPMENT DISTRICTS**

The Florida Legislature enacted Chapter 2006-360, Laws of Florida creating and establishing the Viera Stewardship District (the "Viera Stewardship District Act"). The lands currently encompassed within the Viera Stewardship District ("VSD") are shown on Exhibit 9 attached hereto which lands include the West Viera Expansion Area and the Viera Wilderness Park. Among the powers of the VSD are general and special powers to (i) plan, finance, provide and maintain community infrastructure and services, (ii) provide an efficient and effective method of ensuring the long-term stewardship of environmental and conservation resources within the District, including, but not limited to, implementing, administering and funding the Habitat Management Plan ("HMP"); and (iii) obtain loans, issue bond anticipation notes, issue and sell general obligation, special assessment and revenue bonds, levy benefit special assessments, maintenance special assessments and no-ad valorem maintenance taxes to finance and/or fund community infrastructure, habitat protection and management, and maintenance activities within the District. Notwithstanding the foregoing, the Developer or other property owner within the DRI may, at its option, petition to create one or more Community Development Districts pursuant to Chapter 190, Florida Statutes, encompassing portions of the DRI. The VSD or any Community Development District hereafter encompassing a portion of the DRI, or any combination thereof, may construct or fund any infrastructure or community improvement required under this Development Order. Such projects included, but are not limited to, road and transportation facilities, surface water management facilities, potable water, reclaimed water, sewer and wastewater facilities, environmental mitigation, flood control improvements, bridge facilities and structures, parks, recreational and cultural facilities, school facilities and structures, fire prevention and control improvements, mosquito control improvements, and waste collection and disposal

systems and facilities. Without limiting the foregoing, any infrastructure or other capital improvements required by this Development Order, as from time to time hereafter amended or modified, as a condition of developing the DRI or any part thereof, may be designed, permitted, funded and/or constructed by the VSD or any Community Development District encompassing a portion of the DRI; provided, however, that the Viera Wilderness Park shall be administered, managed and maintained by the VSD and such administration, management and maintenance shall be funded and/or financed by the through the VSD.

The Viera Stewardship District Act also grants the VSD the general power to contract for the services of consultants to perform professional services in connection with the administration and management of the VSD. The VSD shall retain and fund an independent professional biologist or ecologist (the “Environmental Professional”) as a member of the VSD’s staff to provide independent scientific advice and recommendations regarding scientific issues that relate to the implementation of the HMP and the achievement of the goals and objectives of the HMP within the VWP. Prior to the election of the majority of members of VSD’s Governing Board by the qualified electors residing within the District (as defined herein), the VSD shall enter into an Interlocal Agreement with Brevard County to address the Environmental Professional and other administration, management, maintenance, and funding obligations of the VSD necessary to satisfy the conditions of this Development Order pertaining to the VWP.

The VSD’s Environmental Professional shall foster a scientific approach to ecosystem restoration and wildlife habitat management by the use of sound scientific methods in order to achieve the goals and objectives set forth in the HMP; and address scientific and technical issues relating to the HMP. The VSD’s Environmental Professional’s responsibilities shall include, but not be limited to, the following:

- (a) Evaluate the HMP's scientific principles to ensure they are consistent with the best available science.
- (b) Review the scientific and technical issues associated with the implementation of the land management activities proposed in the HMP.
- (c) Review and provide advice on priorities for land management actions, including research, monitoring, and evaluation and data management.
- (d) Prepare reports (one every 2 years as part of the Biennial Report) that would be submitted to Brevard County Natural Resources Management Offices, and other interest environmental groups, regarding the Environmental Professionals' assessment of the success of the VSD as it relates to the implementation of the HMP and the management of the VWP.

The Environmental Professional shall review the VSD's policies, practices and effectiveness with respect to the VSD's management of the VWP and the achievement of the HMP's goals and objectives every 2 years as part of the Biennial Report and the findings and recommendations of such biologist or ecologist shall be set forth in a written report. Said report shall highlight whether the Goals and Objectives are being satisfactorily met. If the Goals and Objectives are not being met, the report shall identify actions necessary to meet the Goals and Objectives and contain a plan for meeting them. Such written report shall be provided to the VSD, Brevard County, the ECFRPC, regulatory agencies having jurisdiction and interested environmental groups and be included in the biennial report.

The Viera Stewardship District Act requires that three governing board members of the VSD shall be persons elected by the qualified electors residing within the district as such time as the district is populated by 60% of the project total number of qualified electors for the district. The Viera Stewardship District Act defines “projected total qualified electors” to mean and refer to the product of: (the total number of single-family and multi-family residential units approved within the district by a development order issued by Brevard County and in effect in the tenth year following creation of the VSD) X (the average number of persons residing within a household located in Brevard County based on the 2010 U.S. Census) X (the percentage of Brevard County’s general population registered to vote as reported by the Brevard County Supervisor of Elections as of the general election occurring in November 2014). Solely for purposes of the preceding calculation, this Development Order approves 18,023 residential units within the geographical boundaries of the district, consisting of both single-family and multi-family units. The preceding sentence shall not be deemed or construed in any manner to vest such residential units for development within the district or relieve the Developer of any applicable concurrency requirements with respect to such units.

## **XII. MODIFICATIONS TO THIS DEVELOPMENT ORDER**

The Developer shall submit simultaneously to Brevard County, and to the East Central Florida Regional Planning Council, and the Florida Department of Economic Opportunity as applicable under the law, any request for approval of a proposed change to the Viera Development of Regional Impact and shall comply with Section 380.06(19), Florida Statutes, concerning substantial deviations in compliance with the law at the time of application. Submissions shall be in a format established by the Florida Department of Economic Opportunity and shall include at a minimum the precise language which is proposed for deletion or addition to this Development

Order and a statement summarizing all previous changes that have been made to this Development Order.

**NOW THEREFORE, BE IT ORDAINED AND RESOLVED** by the Board of County Commissioners of Brevard County, Florida that this Amended and Restated Development Order for the Viera Development of Regional Impact (No. 17~~2~~05 ) is APPROVED pursuant to Chapter 380.06, F.S. subject to the terms and conditions of this Resolution.

ATTEST:

  
\_\_\_\_\_  
Scott Ellis, Clerk

BOARD OF COUNTY COMMISSIONERS  
BREVARD COUNTY, FLORIDA

  
\_\_\_\_\_  
Curt Smith, Chairman

As approved by Board 10/10/17

ACCEPTANCE BY THE DEVELOPER:  
THE VIERA COMPANY, INC. HEREBY ACCEPTS AND CONSENTS TO THE FOREGOING  
DEVELOPMENT ORDER FOR THE VIERA DEVELOPMENT OF REGIONAL IMPACT.

  
\_\_\_\_\_  
STEPHEN L. JOHNSON, PRESIDENT

DATE: 9/26/17

ACCEPTANCE BY THE CO-APPLICANT:

A. DUDA & SONS, INC., HEREBY ACCEPTS AND CONSENTS TO THE FOREGOING DEVELOPMENT ORDER FOR THE VIERA DEVELOPMENT OF REGIONAL IMPACT

  
\_\_\_\_\_  
TRACY DUDA CHAPMAN,  
SENIOR VICE PRESIDENT, CHIEF LEGAL  
AND ADMINISTRATIVE OFFICER

9/28/17  
\_\_\_\_\_  
DATE

## Exhibit 1 and 2

A parcel of land lying in Sections 28, 29, 32 and 33, Township 25 South, Range 36 East, and Sections 4, 5, 8, 9, 10, 10, 15, 16, 17, 20, 21, 22, 28 and 29, Township 26 South, Range 36 East, Brevard County, Florida, being more particularly described as follows:

Begin at the Northeast corner of Section 29, Township 25 South, Range 36 East; thence  $N89^{\circ}37'03''E$ , along the North line of Section 28, Township 25 South, Range 36 East, a distance of 236.93 feet, to a point on the West right of way line of Interstate 95 (a 300.00 foot wide Limited Access Right of Way as described in Circuit Court Minute Book 53, Pages 359 through 363 of the Public Records of Brevard County, Florida) and a point of intersection with a non-tangent curve, concave Southwesterly, having a radius of 5,579.65 feet and a central angle of  $26^{\circ}53'09''$ ; thence the following 3 courses along said West right of way line of Interstate 95: (1) Southeasterly, along the arc of said curve to the right, a distance of 2,618.22 feet (said arc subtended by a chord bearing  $S27^{\circ}57'34''E$ , a distance of 2,594.27 feet), to a point of tangency; (2)  $S14^{\circ}30'59''E$ , a distance of 18,066.03 feet; (3)  $S04^{\circ}15'31''E$ , a distance of 437.30 feet, to a point on the North line of lands described in Official Records Book 2355, Pages 1570 and 1571 of the Public Records of Brevard County, Florida; thence  $S75^{\circ}28'38''W$ , along the North line of said lands, a distance of 839.48 feet, to the Northwest corner of said lands; thence  $S14^{\circ}31'21''E$ , along the West line of said lands, a distance of 531.92 feet, to the Southwest corner of said lands; thence  $N89^{\circ}33'38''E$ , along the South line of said lands, a distance of 21.66 feet; thence  $N00^{\circ}26'21''W$ , along the South line of said lands, a distance of 50.00 feet; thence  $N89^{\circ}33'38''E$ , along the South line of said lands, a distance of 291.22 feet, to a point on the West right of way line of said Interstate 95; thence the following 5 courses along said West right of way line of Interstate 95: (1)  $S00^{\circ}26'21''E$ , a distance of 230.00 feet; (2)  $N89^{\circ}33'39''E$ , a distance of 100.00 feet; (3)  $S64^{\circ}31'58''E$ , a distance of 389.10 feet; (4)  $S25^{\circ}00'16''E$ , a distance of 1,441.86 feet; (5)  $S14^{\circ}30'59''E$ , a distance of 4,249.29 feet, to a point 351.49 feet South of, by perpendicular measurement, the North line of said Section 22, Township 26 South, Range 36 East; thence  $S87^{\circ}31'12''W$ , parallel with and 351.49 feet South of the North line of said Section 22, a distance of 2,383.56 feet, to a point on the East line of Section 21, Township 26 South, Range 36 East; thence  $S00^{\circ}52'01''E$ , along the East line of said Section 21, a distance of 4,941.06 feet, to the Northeast corner of Section 28, Township 26 South, Range 36 East; thence  $S00^{\circ}22'01''E$ , along the East line of said Section 28, a distance of 2,641.30 feet, to the East one-quarter corner of said Section 28; thence  $S89^{\circ}09'50''W$ , along the South line of the North one-half of said Section 28, a distance of 5,316.03 feet, to the West one-quarter corner of said Section 28; thence  $S89^{\circ}24'21''W$ , along the South line of the Northeast one-quarter of Section 29, Township 26 South, Range 36 East, a distance of 1,321.53 feet, to the Southwest corner of the East one-half of the Northeast one-quarter of said Section 29; thence  $N00^{\circ}42'48''W$ , along the West line of the East one-half of the Northeast one-quarter of said Section 29, a distance of 2,644.74 feet, to a point on the South line of Section 20, Township 26 South, Range 36 East; thence  $N00^{\circ}25'43''W$ , along the West line of the East one-quarter of said Section 20, a distance of 5,296.74 feet, to a point on the South line of Section 17, Township 26 South, Range 36 East; thence  $N00^{\circ}35'21''E$ , along the West line of the East one-quarter of said Section 17, a distance of 5,204.77 feet, to a

point 67.27 feet South of, by perpendicular measurement, the South line of Section 8, Township 26 South, Range 36 East; thence S89°08'33"W, a distance of 3,998.76 feet, to a point on the West line of said Section 17; thence N00°35'19"W, along the West line of said Section 17, a distance of 75.00 feet, to the Southwest corner of said Section 8; thence N00°35'22"W, along the West line of said Section 8, a distance of 5,302.92 feet, to the Southwest corner of Section 5, Township 26 South, Range 36 East; thence N00°33'35"W, along the West line of said Section 5, a distance of 5,290.28 feet, to the Southwest corner of Section 32, Township 25 South, Range 36 East; thence N00°31'18"E, along the West line of said Section 32, a distance of 4,667.92 feet; thence N66°33'30"E, a distance of 1,990.78 feet, to the point of curvature of a curve, concave Northwesterly, having a radius of 2,988.25 feet and a central angle of 28°53'46"; thence Northeasterly, along the arc of said curve to the left, a distance of 1,507.07 feet, to a point of intersection with a non-tangent line; thence N26°25'15"W, a distance of 1,508.04 feet; thence N00°33'05"W, a distance of 470.00 feet; thence N45°39'16"W, a distance of 1,200.05 feet; thence S89°26'55"W, a distance of 150.00 feet; thence N45°51'06"W, a distance of 274.34 feet; thence N00°33'05"W, a distance of 1,456.42 feet, to a point on the North line of Section 29, Township 25 South, Range 36 East; thence N89°20'44"E, along the North line of said Section 29, a distance of 4,125.06 feet, to the POINT OF BEGINNING; Containing 6,249.54 acres, more or less.

LESS AND EXCEPT:

A portion of Section 29, Township 25 South, Range 36 East, Brevard County, Florida, being more particularly described as follows:

Commence at the Northeast corner of Section 29, Township 25 South, Range 36 East; thence S89°20'44"W, along the North line of said Section 29, a distance of 818.56 feet; thence S00°27'28"E, a distance of 60.00 feet, to the Northeast corner of that tract of land described as Parcel #1 in Official Records Book 2885, Page 0986, of the Public Records of Brevard County, Florida, and the POINT OF BEGINNING of the herein described parcel; thence continue, S00°27'28"E, along the East line of said Parcel #1, a distance of 127.53 feet, to the Southeast corner of said Parcel #1; thence S89°20'44"W, along the South line of said Parcel #1, a distance of 466.24 feet, to the Northeast corner of that tract of land described as Parcel #2 in said Official Records Book 2885, Page 0986; thence S00°27'28"E, along the East line of said Parcel #2, a distance of 50.00 feet, to the Southeast corner of said Parcel #2; thence S89°20'44"W, along the South line of said Parcel #2, a distance of 185.00 feet, to the Southwest corner of said Parcel #2; thence N00°27'28"W, along the West line of said Parcel #2, a distance of 50.00 feet, to the Northwest corner of said Parcel #2; thence N89°20'44"E, along the North line of said Parcel #2, a distance of 150.00 feet, to the Southwest corner of aforesaid Parcel #1; thence N00°27'28"W, along the West line of said Parcel #1, a distance of 50.00 feet; thence N89°20'44"E, a distance of 50.00 feet; thence N00°27'28"W, a distance of 77.53 feet, to the Northwest corner of said Parcel #1, and a point 60.00 feet South of, by perpendicular measurement, the North line of said Section 29; thence N89°20'44"E, along the North line of said Parcel #1, parallel with and 60.00 feet South of the North line of said Section 29, a distance of 451.24 feet, to the POINT OF BEGINNING; Containing 1.59 acres, more or less.

Together with:

All of Section 27 and portions of Sections 22, 28, 33, 34 and 35, Township 25 South, Range 36 East and portions of Sections 2, 3, 4, 10 and 11, Township 26 South, Range 36 East, all in Brevard County, Florida, more particularly described as follows:

Commence at the Southeast corner of said Section 10; thence  $N00^{\circ}56'27''W$ , along the east line of said Section 10, a distance of 50.01 feet, to a point on the North right of way line of Wickham Road (a 100.00 foot right of way) said point also being the POINT OF BEGINNING of the herein described parcel; thence  $S88^{\circ}04'16''W$ , along the North right of way line of said Wickham Road, a distance of 1.46 feet; thence  $S86^{\circ}42'08''W$ , along the North right of way line of said Wickham Road, a distance of 1791.20 feet; thence  $S89^{\circ}33'39''W$ , along said North right of way line of Wickham Road, a distance of 1230.64 feet, to a point on the East line of lands described in Official Records Book 876 Page 569 of the Public Records of Brevard County, Florida; thence  $N14^{\circ}30'59''W$ , along the East line of said lands, a distance of 767.04 feet, to the Northeast corner of lands described in Official Records Book 876 Page 569; thence  $S75^{\circ}29'01''W$ , along the North line of said lands, a distance of 768.60 feet, to the Easterly right of way line of Interstate 95 (a 300.00 foot Limited Access right of way) as described in Circuit Court Book 53 Pages 359-363 of said Public Records of Brevard County, Florida, thence  $N25^{\circ}59'45''W$ , along said Easterly right of way line, a distance of 745.37 feet; thence  $N14^{\circ}30'59''W$ , along said Easterly right of way line, a distance of 2308.05 feet, to a point on the Westerly extension of the North line of Tract "A" CRANE CREEK UNIT ONE according to the plat thereof as recorded in Plat Book 35 pages 98 and 99 of said Public Records; thence along the North line of said Tract "A" the following courses:  $N60^{\circ}50'37''E$ , a distance of 345.53 feet; thence  $N37^{\circ}55'22''E$ , a distance of 170.97 feet; thence  $N52^{\circ}14'42''E$ , a distance of 84.63 feet; thence  $N75^{\circ}32'52''E$ , a distance of 550.00 feet; thence  $N77^{\circ}53'10''E$ , a distance of 75.00 feet; thence  $S84^{\circ}57'29''E$ , a distance of 75.00 feet; thence  $S82^{\circ}54'27''E$ , a distance of 410.74 feet; thence  $N07^{\circ}05'33''E$ , a distance of 104.22 feet, to a point of intersection with a non-tangent curve, concave Northerly, having a radius of 813.27 feet and a central angle of  $23^{\circ}09'47''$ ; thence Easterly, along the arc of said curve to the left, a distance of 328.78 feet, (said arc subtended by a chord which bears  $N79^{\circ}40'16''E$ , for 326.55 feet) to a point of tangency; thence  $N68^{\circ}05'23''E$ , a distance of 243.76 feet, to a point lying 30.00 feet West of, by perpendicular measurement, the West right of way line of Murrell Road (a proposed 120.00 foot right of way) as described in Official Records Book 2953 Page 2101 of said Public Records; thence Northerly and 30.00 West of, by perpendicular measurement, said West right of way line of Murrell Road the following courses:  $N21^{\circ}58'12''W$ , a distance of 742.63 feet, to a point of curvature with a curve, concave Easterly having a radius of 1235.92 feet and a central angle of  $27^{\circ}00'44''$ ;

thence Northerly, along the arc of said curve to the right, a distance of 582.68 feet, (said arc subtended by a chord which bears  $N08^{\circ}27'42''W$ , for 577.30 feet) to a point of tangency; thence  $N05^{\circ}02'40''E$ , a distance of 468.35 feet; to the point of curvature of a curve, concave Westerly, having a radius of 1055.92 feet and a central angle of  $26^{\circ}59'03''$ ; thence Northerly, along the arc of said curve to the left, a distance of 497.30 feet, to a point of tangency; thence  $N21^{\circ}56'23''W$ , a distance of 1400.38 feet; to the point of curvature of a curve, concave Easterly, having a radius of 1235.92 feet and a central angle of  $27^{\circ}28'01''$ ; thence Northerly, along the arc of said curve to the right, a distance of 592.49 feet, to a point of tangency; thence  $N05^{\circ}31'38''E$ , a distance of 1379.39 feet; thence  $N84^{\circ}28'22''W$ , a distance of 600.00 feet; thence  $N05^{\circ}31'38''E$ , a distance of 436.54 feet; to the point of curvature of a curve, concave Westerly having a radius of 947.02 feet

and a central angle of  $29^{\circ}17'27''$ ; thence Northerly, and Northwesterly, along the arc of said curve to the left, a distance of 484.14 feet, to a point of tangency; thence  $N23^{\circ}45'49''W$ , a distance of 80.18 feet; thence  $S75^{\circ}26'47''W$ , a distance of 2378.80 feet, to the Easterly right of way line of aforesaid Interstate 95; thence along said Easterly right of way line,  $N14^{\circ}30'59''W$ , a distance of 8447.89 feet, to a point on the South line of North  $\frac{1}{2}$  of Section 28, Township 25 South, Range 36 East, of Brevard County, Florida; thence  $N89^{\circ}33'30''E$ , along said South line of the North  $\frac{1}{2}$  of Section 28, a distance of 472.99 feet, to a point of intersection with a non-tangent curve, concave Easterly, having a radius of 305.96 feet and a central angle of  $29^{\circ}59'46''$ ; thence Southerly, along the arc of said curve to the left, a distance of 160.18 feet (said arc subtended by a chord which bears  $S01^{\circ}19'19''W$ , a distance of 158.36 feet) to a point of tangency; thence  $S13^{\circ}40'34''E$ , a distance of 303.04 feet, to the point of curvature of a curve, concave Northeasterly, having a radius of 458.10 feet and a central angle of  $56^{\circ}01'11''$ ; thence Southeasterly, along the arc of said curve to the left, a distance of 447.90 feet, to a point of tangency; thence  $S69^{\circ}41'45''E$ , a distance of 425.30 feet, to the point of curvature of a curve, concave Northerly, having a radius of 50.00 feet and a central angle of  $63^{\circ}22'16''$ ; thence Easterly, along the arc of said curve to the left, a distance of 55.30 feet, to a point of tangency; thence  $N46^{\circ}55'59''E$ , a distance of 360.24 feet, to the point of curvature of a curve, concave Westerly, having a radius of 50.00 feet and a central angle of  $65^{\circ}10'20''$ ; thence Northerly, along the arc of said curve to the left, a distance of 56.87 feet, to a point of tangency; thence  $N18^{\circ}14'21''W$ , a distance of 634.87 feet, to the point of curvature of a curve, concave Westerly, having a radius of 335.00 feet and a central angle of  $03^{\circ}04'30''$ ; thence Northerly, along the arc of said curve to the left, a distance of 17.98 feet, to a point on the South line of the North one-half of said Section 28, and a point of intersection with a non-tangent line; thence  $N89^{\circ}33'30''E$ , along said South line, a distance of 372.80 feet, to a point of intersection with a non-tangent curve, concave Northerly, having a radius of 407.17 feet and a central angle of  $39^{\circ}26'11''$ ; thence Easterly, along the arc of said curve to the left, a distance of 280.25 feet (said arc subtended by a chord which bears  $S71^{\circ}26'34''E$ , a distance of 274.75 feet), to a point of tangency; thence  $N88^{\circ}50'21''E$ , a distance of 296.03 feet; thence  $N01^{\circ}09'39''W$ , a distance of 85.74 feet; to a point on the South line of the North one-half of said Section 28: thence  $N89^{\circ}33'30''E$ , along said South line, a distance of 373.86 feet; thence  $N61^{\circ}33'05''E$ , a distance of 211.23 feet, to a point of intersection with a non-tangent curve, concave Northeasterly, having a radius of 75.06 feet and a central angle of  $71^{\circ}38'52''$ ; thence Southeasterly, along the arc of said curve to the left, a distance of 93.87 feet (said arc subtended by a chord which bears  $S64^{\circ}16'20''E$ , a distance of 87.87 feet), to a point of tangency; thence  $N79^{\circ}54'14''E$ , a distance of 143.40 feet; thence  $S01^{\circ}14'17''E$ , a distance of 84.49 feet, to a point on the South line of the North one-half of said Section 28; thence  $N89^{\circ}33'30''E$ , along said South line, a distance of 406.31 feet, to the East  $\frac{1}{4}$  corner of said Section 28; thence  $N00^{\circ}52'33''W$ , along the East line of said Section 28, a distance of 2689.25 feet, to the Northwest corner of Section 27, Township 25 South, Range 36 East, of said Brevard County, Florida; thence  $N89^{\circ}44'56''E$ , along the North line of said Section 27, a distance of 4533.52 feet, to a point on the West line of lands described in Official Records Book 2237, Page 2896 of said Public Records; thence  $N00^{\circ}14'41''W$ , along said West line of said lands, a distance of 1969.91 feet, to a point on the South right of way line of Barnes Boulevard (a 100.00 foot right of way); thence  $S89^{\circ}47'34''E$ , along the South right of way line of said Barnes Boulevard, a distance of 800.02 feet, to a point on the East line of lands described in said Official Records Book 2237, Page 2896; thence  $S00^{\circ}14'41''E$ , along the East line of said lands, a

distance of 1963.51 feet, to the Northeast corner of aforesaid Section 27; thence S00°21'25"E, along the East line of said Section 27, a distance of 2660.01 feet; thence S00°41'06"W, along the East line of said Section 27, a distance of 2181.04 feet; thence S38°50'01"E, a distance of 1283.83 feet; thence S00°00'17"W, a distance of 1950.00 feet; thence S40°13'54"E, a distance of 170.29 feet; thence S00°00'17"W, a distance of 575.80 feet; thence S00°47'41"W, a distance of 160.33 feet; thence S00°02'33"W, a distance of 285.27 feet; thence S40°33'32"E, a distance of 322.68 feet; thence S39°45'09"W, a distance of 309.83 feet; thence S39°45'09"W, a distance of 73.64 feet; thence S01°44'51"E, a distance of 160.08 feet; thence S56°16'03"E, a distance of 396.61 feet; thence S60°35'59"E, a distance of 91.79 feet; thence S03°13'41"E, a distance of 350.57 feet; thence S40°30'27"W, a distance of 467.42 feet, to a point on the South line of Section 35, Township 25 South, Range 36 East of said Brevard County, Florida; thence S88°58'58"W, along the South line of said Section 35, a distance of 1034.88 feet, to the Northeast corner of Section 3, Township 26 South, Range 36 East of Brevard County, Florida; thence S01°18'21"W, along the East line of said Section 3, Township 26 South, Range 36 East of Brevard County, Florida; thence S01°18'21"W, along the East line of said Section 3, a distance of 1245.65 feet, to the Northeast corner of INDIAN RIVER COLONY CLUB, P.U.D., PHASE 2, UNIT 1, according to the plat thereof as recorded in Plat Book 34, Page 92 of said Public Records; thence S88°36'35" W, along the North line of said INDIAN RIVER COLONY CLUB, P.U.D., PHASE 2, UNIT 1, and the North line of INDIAN RIVER COLONY CLUB, P.U.D., PHASE 1, UNIT 2, according to the plat thereof as recorded in Plat Book 34 Page 36 of said Public Records, a distance of 2634.53 feet; thence S88°29'51"W, along the North line of said INDIAN RIVER COLONY CLUB, P.U.D., PHASE 1, UNIT 2, and the North line of INDIAN RIVER COLONY CLUB, P.U.D., PHASE 1, UNIT 1, according to the plat thereof as recorded in Plat Book 34 Pages 31 and 32 of said Public Records, and the North line of INDIAN RIVER COLONY CLUB, P.U.D., PHASE 1, UNIT 3, according to the plat thereof as recorded in Plat Book 35 Page 91 of said Public Records, a distance of 883.37 feet, to the East right of way line of aforesaid Murrell Road; thence Southerly along the East right of way of said Murrell Road the following courses: S05°31'38"W, a distance of 785.27 feet; to the point of curvature of a curve, concave Easterly, having a radius of 1085.92 feet and a central angle of 27°28'01"; thence Southerly, along the arc of said curve to the left, a distance of 520.58 feet, to a point of tangency; thence S21°56'23"E, a distance of 1400.38 feet; to the point of curvature of a curve, concave Westerly, having a radius of 1205.92 feet and a central angle of 26°59'03"; thence Southerly, along the arc of said curve to the right, a distance of 567.94 feet, to a point of tangency; thence S05°02'40"W, a distance of 468.35 feet; to the point of curvature of a curve, concave Easterly, having a radius of 1085.92 feet and a central angle of 27°00'44"; thence Southerly, along the arc of said curve to the left, a distance of 511.96 feet, to a point of tangency; thence S21°58'05"E, a distance of 592.75 feet; to the point of curvature of a curve, concave Northeasterly, having a radius of 50.00 feet and a central angle of 90°00'00"; thence along the South line of lands described in Official Records Book 2952 Page 1046, of said Public Records the following courses: Southeasterly along the arc of aforesaid curve to the left, and a distance of 78.54 feet, to a point of tangency; thence N68°01'55"E, a distance of 423.19 feet; to the point of curvature of a curve, concave Southerly, having a radius of 960.00 feet and a central angle of 19°01'19"; thence Easterly, along the arc of said curve to the right, a distance of 318.72 feet, to a point of tangency; thence N87°03'14"E, a distance of 221.13 feet; thence N02°52'32"W, along the East line of said Official Records Book 2952, Page 1046, a distance of 693.18 feet, to a point on the South line of

INDIAN RIVER COLONY CLUB, P.U.D., PHASE 2, UNIT 4, according to the plat thereof as recorded in Plat Book 35 Pages 65, 66 and 67 of said Public Records; thence N86°32'28" E, along the South line of said INDIAN RIVER COLONY CLUB, P.U.D., PHASE 2, UNIT 4, a distance of 1619.95 feet, to the Southeast corner of the aforesaid Section 3; thence N01°19'53"E, along the East line of said Section 3, and the East line of INDIAN RIVER COLONY CLUB, P.U.D., PHASE 2, UNIT 4, and the East line of INDIAN RIVER COLONY CLUB, P.U.D., PHASE 2, UNIT 2, according to the plat thereof as recorded in Plat Book 34 Pages 99 and 100, and the East line of the aforesaid INDIAN RIVER COLONY CLUB, P.U.D., PHASE 2, UNIT 1, a distance of 2506.80 feet, to a point on the North line of the West ½, of the Southwest ¼ of Section 2, Township 26 South, Range 36 East of said Brevard County, Florida; thence N87°30'13"E, along said North line, a distance of 1347.63 feet, to a point on the East line of the West ½ of the Southwest ¼ of said Section 2; thence S00°58'04"W, along said East line, a distance of 2563.79 feet, to the Southeast corner of the West ½ of the Southwest ¼ of said Section 2; thence S00°29'09"E, along the East line of the Northwest ¼ of the Northwest ¼ of Section 11, Township 26 South, Range 36 East of said Brevard County, Florida, a distance of 1335.62 feet, to a point on the South line of said Northwest ¼ of the Northwest ¼ of Section 11; thence N89°30'57"W, along said South line, a distance of 1350.86 feet, to a point on the East line of Section 10, Township 26 South, Range 36 East; thence S00°56'39"E, along the East line of said Section 10, a distance of 1322.93 feet; thence S00°56'27"E, along the East line of said Section 10, a distance of 541.54 feet, to the Northeast corner of lands described in Official Records Book 2812, Page 2063 of said Public Records; thence along the North boundary of said Official Records Book 2812 Page 2063, the following courses: S87°58'09"W, a distance of 649.89 feet; thence S00°56'33"E, a distance of 288.93 feet; thence S59°06'00"W, a distance of 245.74 feet; thence N88°22'27"W, a distance of 502.08 feet; thence S59°06'25"W, a distance of 503.21 feet; thence S00°56'41"E, a distance of 575.05 feet; thence S44°01'53"W, a distance of 158.94 feet; thence S87°56'38"W, a distance of 359.28 feet, to the East right of way line of aforesaid Murrell Road; thence S12°26'11"E, along the East right of way line of said Murrell Road, a distance of 152.27 feet, to a point on the South line of lands described in said Official Records Book 2812 Page 2063; thence N87°58'46"E, along the South line of said lands, a distance of 2241.81 feet, to a point on the East line of aforesaid Section 10; thence S00°56'27"E, along the East line of said Section 10, a distance of 600.02 feet, to the POINT OF BEGINNING.

Together with:

A portion of Section 28, Township 25 South, Range 36 East, Brevard County, Florida, lying East of Interstate 95, being more particularly described as follows:

Commence at the Northwest corner of said Section 28; thence N89°37'03"E, along the North line of the Northwest one-quarter of said Section 28, a distance of 627.16 feet, to a point on the East right of way line of Interstate 95 (a 300.00 foot wide right of way) and the POINT OF BEGINNING of the herein described parcel; thence continue, N89°37'03"E, along said North line, a distance of 2,011.74 feet, to the North ¼ corner of said Section 28; thence N89°37'23"E, along the North line of the Northeast one-quarter of said Section 28, a distance of 2,649.15 feet, to the Northeast corner of said Section 28; thence S00°52'33"E, along the East line of said Section 28; a distance of 2,689.25 feet, to the East ¼ corner of said Section 28; thence S89°33'30"W, along the South line of the North one-half of said Section 28, a distance of 406.31

feet; thence N01°14'17"W, a distance of 84.49 feet; thence S79°54'14"W, a distance of 143.40 feet, to the point of curvature of a curve, concave Northeasterly, having a radius of 75.06 feet and a central angle of 71°38'52"; thence Northwesterly, along the arc of said curve to the right, a distance of 93.87 feet, to a point of intersection with a non-tangent line; thence S61°33'05"W, a distance of 211.23 feet, to a point on the South line of the North one-half of said Section 28; thence S89°33'30"W, along said South line, a distance of 373.86 feet; thence S01°09'39"E, a distance of 85.74 feet; thence S88°50'21"W, a distance of 296.03 feet, to the point of curvature of a curve, concave Northerly, having a radius of 407.17 feet and a central angle of 39°26'11"; thence Westerly, along the arc of said curve to the right, a distance of 280.25 feet, to a point on the South line of the North one-half of said Section 28, and a point of intersection with a non-tangent line; thence S89°33'30"W, along said South line; a distance of 372.80 feet, to a point of intersection with a non-tangent curve, concave Westerly, having a radius of 335.00 feet and a central angle of 03°04'30"; thence Southerly, along the arc of said curve to the right, a distance of 17.98 feet (said arc subtended by a chord which bears S19°46'36" E, a distance of 17.98 feet, to a point of tangency; thence S18°14'21"E, a distance of 634.87 feet, to the point of curvature of a curve, concave Westerly, having a radius of 50.00 feet and a central angle of 65°10'20"; thence Southerly, along the arc of said curve to the right, a distance of 56.87 feet, to a point of tangency; thence S46°55'59"W, a distance of 360.24 feet, to the point of curvature of a curve, concave Northerly, having a radius of 50.00 feet and a central angle of 63°22'16"; thence Westerly, along the arc of said curve to the right, a distance of 55.30 feet, to a point of tangency; thence N69°41'45"W, a distance of 425.30 feet, to the point of curvature of a curve, concave Northeasterly, having a radius of 458.10 feet and a central angle of 56°01'11"; thence Northwesterly, along the arc of said curve to the right, a distance of 447.90 feet, to a point of tangency; thence N13°40'34"W, a distance of 303.04 feet, to the point of curvature of a curve, concave Easterly, having a radius of 305.96 feet and a central angle of 29°59'46"; thence Northerly, along the arc of said curve to the right, a distance of 160.18 feet, to a point on the South line of the North one-half of said Section 28, and a point of intersection with a non-tangent line; thence S89°33'30"W, along said South line, a distance of 472.99 feet, to a point on the East right of way line of said interstate 95; thence N14°30'59"W, along said East right of way line, a distance of 481.28 feet, to the point of curvature of a curve, concave Southwesterly, having a radius of 5,879.65 feet and a central angle of 24°23'21"; thence Northwesterly, along said East right of way line, and along the arc of said curve to the left, a distance of 2,502.80 feet, to the POINT OF BEGINNING; containing 260.84 acres, more or less.

**TOGETHER WITH:**

Begin at a 4" X 4" concrete monument at the Northwest corner of said Section 30, Township 25 South, Range 36 East; thence N89°21'55"E, along the North line of said Section 30, a distance of 2,545.93 feet, to an iron rod; thence S08°24'33"E, a distance of 748.62 feet, to an iron rod; thence S08°55'25"E, a distance of 405.40 feet, to an iron rod; thence S07°53'09"E, a distance of 404.42 feet, to an iron rod; thence S07°41'38"E, a distance of 556.16 feet, to an iron rod; thence S08°07'57"E, a distance of 556.72 feet, to an iron rod; thence S07°54'48"E, a distance of 556.44 feet, to an iron rod; thence S08°10'16"E, a distance of 880.33 feet, to an iron rod; thence S07°57'39"E, a distance of 482.44 feet, to an iron rod; thence S79°41'18"W, a distance of 8.69 feet, to an iron rod; thence S07°38'31"E, a distance of 396.84 feet, to an iron rod; thence S13°30'01"W, a distance of 6.84 feet, to an iron rod; thence S68°53'11"W, a distance of 456.26 feet, to an iron rod; thence S75°44'29"W, a distance of 86.29 feet, to an iron rod; thence S64°14'40"W, a distance of 129.79 feet, to an iron rod; thence S68°29'29"W, a distance of 703.75 feet, to an iron rod; thence S03°43'55"E, a distance of 774.28 feet, to an iron rod; thence S03°43'05"E, a distance of 420.39 feet, to an iron rod; thence S17°31'55"W, a distance of 31.51 feet, to an iron rod; thence S02°10'23"W, a distance of 15.32 feet, to an iron rod; thence S84°49'06"W, a distance of 1,260.85 feet, to an iron rod; thence S65°26'07"W, a distance of 553.39 feet, to an iron rod; thence S65°16'09"W, a distance of 553.65 feet, to an iron rod; thence S65°26'06"W, a distance of 552.21 feet, to an iron rod; thence S65°42'09"W, a distance of 553.14 feet, to an iron rod; thence S86°33'52"W, a distance of 560.20 feet, to an iron rod; thence S86°36'43"W, a distance of 1,119.98 feet, to an iron rod; thence N15°49'12"W, a distance of 53.08 feet, to an iron rod; thence S88°41'21"W, a distance of 144.31 feet, to an iron rod; thence S86°14'12"W, a distance of 360.22 feet, to an iron rod; thence S44°22'00"W, a distance of 2,194.87 feet, to an iron rod; thence S02°24'20"E, a distance of 99.12 feet, to an iron rod; thence S46°55'21"W, a distance of 146.56 feet, to an iron rod; thence S65°38'19"W, a distance of 194.77 feet, to an iron rod; thence S63°42'25"W, a distance of 577.43 feet, to an iron rod; thence S69°45'01"W, a distance of 412.41 feet, to an iron rod; thence N89°15'09", a distance of 79.29 feet, to an iron rod; thence S73°35'49"W, a distance of 521.37 feet, to an iron rod; thence S87°25'48"W, a distance of 483.14 feet, to an iron rod; thence S87°26'32"W, a distance of 966.55 feet, to an iron rod; thence S87°21'06"W, a distance of 485.66 feet, to an iron rod; thence S62°14'38"W, a distance of 444.40 feet, to an iron rod; thence S62°17'07"W, a distance of 446.88 feet, to an iron rod; thence S62°19'23"W, a distance of 358.90 feet, to an iron rod; thence S62°27'13"W, a distance of 370.19 feet, to an iron rod; thence S77°23'47"W, a distance of 411.83 feet, to an iron rod; thence S00°53'45"W, a distance of 125.73 feet, to an iron rod; thence S00°13'05"W, a distance of 658.60 feet, to an iron rod; thence S00°02'40"E, a distance of 1,583.00 feet, to an iron rod; thence S00°01'31"E, a distance of 543.46 feet, to an iron rod; thence S06°38'41"E, a distance of 236.05 feet, to an iron rod; thence S00°05'15"W, a distance of 1,609.02 feet, to an iron rod; thence N89°56'44"E, a distance of 1,150.63 feet, to an iron rod; thence N89°41'56"E, a distance of 575.37 feet, to an iron rod; thence S89°48'28"E, a distance of 575.27 feet, to an iron rod; thence S05°17'41"E, a distance of 5,150.06 feet, to an iron rod; thence S88°28'59"W, a distance of 892.20 feet, to an iron rod; thence S89°18'35"W, a distance of 1,352.16 feet, to an iron rod; thence N88°11'42"W, a distance of 478.57 feet, to an iron rod;

thence S04°20'09"W, a distance of 165.35 feet, to an iron rod; thence S44°31'42"E, a distance of 1,884.04 feet, to an iron rod; thence S44°35'30"E, a distance of 3,917.97 feet, to an iron rod; thence S62°09'21"E, a distance of 2,317.97 feet, to an iron rod; thence S61°05'48"E, a distance of 649.92 feet, to an iron rod; thence N47°16'55", a distance of 35.75 feet, to an iron rod; thence S61°57'44"E, a distance of 923.38 feet, to an iron rod; thence S41°26'58"E, a distance of 273.10 feet, to an iron rod; thence S30°04'29"E, a distance of 310.25 feet, to an iron rod; thence S34°43'38"E, a distance of 598.07 feet, to an iron rod; thence S26°25'22"E, a distance of 301.86 feet, to an iron rod; thence S04°19'41"E, a distance of 773.92 feet, to an iron rod; thence S03°54'52"E, a distance of 1,444.29 feet, to an iron rod; thence S88°57'24"E, a distance of 504.03 feet, to an iron rod; thence S13°21'03"W, a distance of 118.12 feet, to an iron rod; thence S34°02'56"W, a distance of 1,348.21 feet, to an iron rod; thence S45°13'06"W, a distance of 1,297.85 feet, to an iron rod; thence S63°01'28"W, a distance of 72.85 feet, to an iron rod; thence S35°48'10"E, a distance of 45.45 feet, to an iron rod; thence S36°43'44"E, a distance of 81.14 feet, to an iron rod; thence S43°22'10"E, a distance of 2,416.90 feet, to an iron rod; thence S54°43'27"E, a distance of 118.25 feet, to an iron rod; thence S76°01'08"E, a distance of 114.63 feet, to an iron rod; thence S89°15'48"E, a distance of 397.01 feet, to an iron rod; thence S67°53'23"E, a distance of 92.26 feet, to a iron rod; thence S27°40'02"E, a distance of 156.14 feet, to an iron rod; thence S64°16'29"E, a distance of 37.61 feet, to an iron rod; thence S89°15'14"E, a distance of 352.87 feet, to an iron rod; thence S85°51'17"E, a distance of 307.67 feet, to an iron rod; thence N86°54'20"E, a distance of 151.74 feet, to an iron rod; thence N76°30'06"E, a distance of 261.56 feet, to an iron rod; thence N87°06'14"E, a distance of 251.77 feet, to an iron rod; thence N88°53'08"E, a distance of 158.24 feet, to an iron rod; thence N85°02'05"E, a distance of 159.48 feet, to an iron rod; thence S87°50'11"E, a distance of 174.88 feet, to an iron rod; thence S83°44'02"E, a distance of 176.43 feet, to an iron rod; thence S86°24'25"E, a distance of 258.17 feet, to an iron rod; thence S81°07'19"E, a distance of 151.23 feet, to an iron rod; thence N73°40'28"E, a distance of 247.99 feet, to an iron rod; thence N84°35'54"E, a distance of 81.80 feet, to an iron rod; thence S79°39'38"E, a distance of 98.82 feet, to an iron rod; thence S67°29'44"E, a distance of 168.94 feet, to an iron rod; thence S56°25'12"E, a distance of 206.81 feet, to an iron rod; thence S70°16'15"E, a distance of 241.47 feet, to an iron rod; thence S71°16'02"E, a distance of 271.51 feet, to an iron rod; thence S76°57'22"E, a distance of 144.38 feet, to an iron rod; thence S83°43'51"E, a distance of 362.54 feet, to an iron rod; thence S82°09'02"E, a distance of 428.93 feet, to an iron rod; thence S76°54'20"E, a distance of 74.04 feet, to an iron rod; thence S69°05'45"E, a distance of 73.41 feet, to an iron rod; thence S54°06'44"E, a distance of 97.18 feet, to an iron rod; thence S37°26'00"E, a distance of 287.82 feet, to an iron rod; thence S54°56'39"E, a distance of 72.06 feet, to an iron rod; thence S73°11'26"E, a distance of 65.07 feet, to an iron rod; thence S79°38'52"E, a distance of 374.93 feet, to an iron rod; thence S74°51'17"E, a distance of 156.56 feet, to an iron rod; thence S60°41'38"E, a distance of 171.07 feet, to an iron rod; thence S75°22'42"E, a distance of 109.56 feet, to an iron rod; thence S52°26'28"E, a distance of 84.10 feet, to an iron rod; thence S41°24'22"E, a distance of 210.47 feet, to an iron rod; thence S38°52'45"E, a distance of 174.40 feet, to an iron rod; thence S33°54'38"E, a distance of 212.94 feet, to an iron rod; thence S37°40'21"E, a distance of 119.90 feet, to an iron rod; thence S63°38'27"E, a distance of 397.23 feet, to an iron rod; thence S54°42'23"E, a distance of 137.02 feet, to an iron rod; thence S66°28'00"E, a distance of 72.13 feet, to an iron rod; thence S74°03'50"E, a distance of 526.89 feet, to an iron rod; thence S65°07'14"E, a distance of 169.50

feet, to an iron rod; thence S56°11'35"E, a distance of 261.82 feet, to an iron rod; thence S62°05'45"E, a distance of 141.63 feet, to an iron rod; thence S82°38'30"E, a distance of 227.95 feet, to an iron rod; thence S64°34'06"E, a distance of 134.09 feet, to an iron rod; thence S44°50'15"E, a distance of 117.21 feet, to an iron rod; thence S36°18'31"E, a distance of 242.72 feet, to an iron rod; thence S49°43'39"E, a distance of 178.02 feet, to an iron rod; thence S45°48'41"E, a distance of 179.26 feet, to an iron rod; thence S49°49'20"E, a distance of 214.19 feet, to an iron rod; thence S41°48'48"E, a distance of 222.20 feet, to an iron rod; thence S48°35'30"E, a distance of 200.25 feet, to an iron rod; thence S61°25'40"E, a distance of 428.09 feet, to an iron rod; thence S63°06'44"E, a distance of 644.39 feet, to an iron rod; thence S62°46'04"E, a distance of 678.14 feet, to an iron rod; thence S62°43'50"E, a distance of 652.63 feet, to an iron rod; thence S53°36'34"E, a distance of 218.94 feet, to an iron rod; thence S64°10'09"E, a distance of 726.09 feet, to an iron rod; thence S64°07'34"E, a distance of 634.55 feet, to an iron rod; thence S62°56'15"E, a distance of 752.40 feet, to an iron rod; thence S65°29'06"E, a distance of 118.42 feet, to an iron rod; thence S59°29'15"E, a distance of 116.71 feet, to an iron rod; thence S41°56'01"E, a distance of 88.47 feet, to an iron rod; thence S39°21'46"E, a distance of 287.92 feet, to an iron rod; thence S39°13'55"E, a distance of 321.23 feet, to an iron rod; thence S39°37'39"E, a distance of 318.13 feet, to an iron rod; thence S51°26'09"E, a distance of 73.03 feet, to an iron rod; thence S75°43'21"E, a distance of 132.64 feet, to an iron rod; thence S81°00'26"E, a distance of 449.69 feet, to an iron rod; thence S61°25'12"E, a distance of 181.24 feet, to an iron rod; thence S76°11'38"E, a distance of 79.34 feet, to an iron rod; thence N83°23'17"E, a distance of 57.02 feet, to an iron rod; thence N57°28'51"E, a distance of 65.75 feet, to an iron rod; thence N48°12'37"E, a distance of 218.65 feet, to an iron rod; thence S71°43'37"E, a distance of 109.38 feet, to an iron rod; thence S55°14'02"E, a distance of 91.32 feet, to an iron rod; thence S38°01'21"E, a distance of 56.46 feet, to an iron rod; thence S03°46'11"E, a distance of 62.49 feet, to an iron rod; thence S00°46'56"W, a distance of 262.22 feet, to an iron rod; thence S13°01'47"E, a distance of 243.27 feet, to an iron rod; thence S16°57'33"E, a distance of 140.72 feet, to an iron rod on the South line of the Southeast one-quarter of Section 33, Township 26 South, Range 36 East; thence N88°28'46"E along the South line of said Section 33, 1212.95 feet to Southwest Corner of Section 34, Township 26 South, Range 36 East; thence N89°06'05"E along the South line of said Section 34, 4798.14 feet; to a point on the West Right-of-Way line of Interstate 95 (Circuit Court Book 53, Pages 359-363, Public Records of Brevard County Florida), thence N00°03'59"W, along said Right-of-Way 2480.30 feet; thence N00°28'45"W, 328.41 feet, to a point on the South Boundary line of Nail Farms (Deed Book 63, Page 155, Public Records of Brevard County, Florida); thence S78°21'10"W along said South Line, 303.63 feet; thence N00°38'50"W, 554.40 feet; thence N89°21'11"E, 290.53 feet, to a point on the said West Right-of-Way line of Interstate 95 and a non-tangent intersection with a curve to the left; Thence along said Right-of-Way and the arc of said curve, (said curve being concave to the West and having a radius of 22800.32 feet; a radial bearing of S87°51'38"W, a delta angle of 12°22'37", a chord distance of 4915.73 feet; and a chord bearing of N08°19'41"W) a distance of 4925.30 feet; to the end of said curve; thence N14°30'59"W, 4457.16 feet; thence S75°29'01"W, 200.00 feet; thence N14°30'59"W, 950.00 feet; thence N75°29'01"E, 200.00 feet; thence N14°30'59"W, 2229.09 feet, to a point on the East line of the Viera Development of Regional Impact (DRI) (as described in Official Records Book 4459, Page 3677, Public Records of Brevard County, Florida); thence along said DRI Line the following 24 courses and distances:

1. S87°31'12"W, 2376.76 feet, to a point on the East line of Section 21, Township 26, Range 36 East;
2. S00°52'01"E, along said East line of Section 21, 2322.94 feet to the Southeast Corner of the Northeast Quarter of said Section 21;
3. S00°52'01"E along said East Line of Section 21, 2646.34 feet, to the Northeast Corner of Section 28, Township 26, Range 36 East;
4. S00°22'01"E along said East line of Section 28, 2641.30 feet, to the Southeast Corner of the Northeast Quarter of said Section 28;
5. S89°09'50"W, 5316.03 feet to the Southwest Corner of the Northwest Quarter of said Section 28;
6. S89°24'21"W, 1321.53 feet;
7. N00°42'48"W, 2644.74 feet to a point on the South line of Section 20, Township 26, Range 36 East;
8. N00°25'43"W, 5296.74 feet to a point on the North line of said section 20;
9. N00°35'21"E, 5204.79 feet;
10. S89°08'33"W, 3998.77 feet to a point on the West Line of Section 17, Township 26 South, Range 36 East;
11. N00°35'19"W along the West line of said Section 17, 74.98 feet to the Southwest corner of Section 8; Township 26 South, Range 36 East;
12. N00°35'22"W along the West line of said Section 8, 5302.92 feet to the Southwest Corner of Section 5, Township 26 South, Range 36 East;
13. N00°33'35"W along the West line of said Section 5, 5290.28 feet; to the Southwest corner of Section 32, Township 25 South, Range 36 East;
14. N00°31'18"E along the West line of said Section 32, 4667.92 feet;
15. N66°33'30"E, 1990.78 feet; to the beginning of a curve to the left;
16. along the arc of said curve, (said curve being curved concave to the Northwest and having a radius of 2988.25 feet; a delta angle of 28°53'46", a chord distance of 1491.15 feet; , and a chord bearing of N52°06'37"E) a distance of 1507.07 feet; to the end of said curve;
17. N26°25'15"W, 1508.04 feet;
18. N00°33'05"W, 470.00 feet;

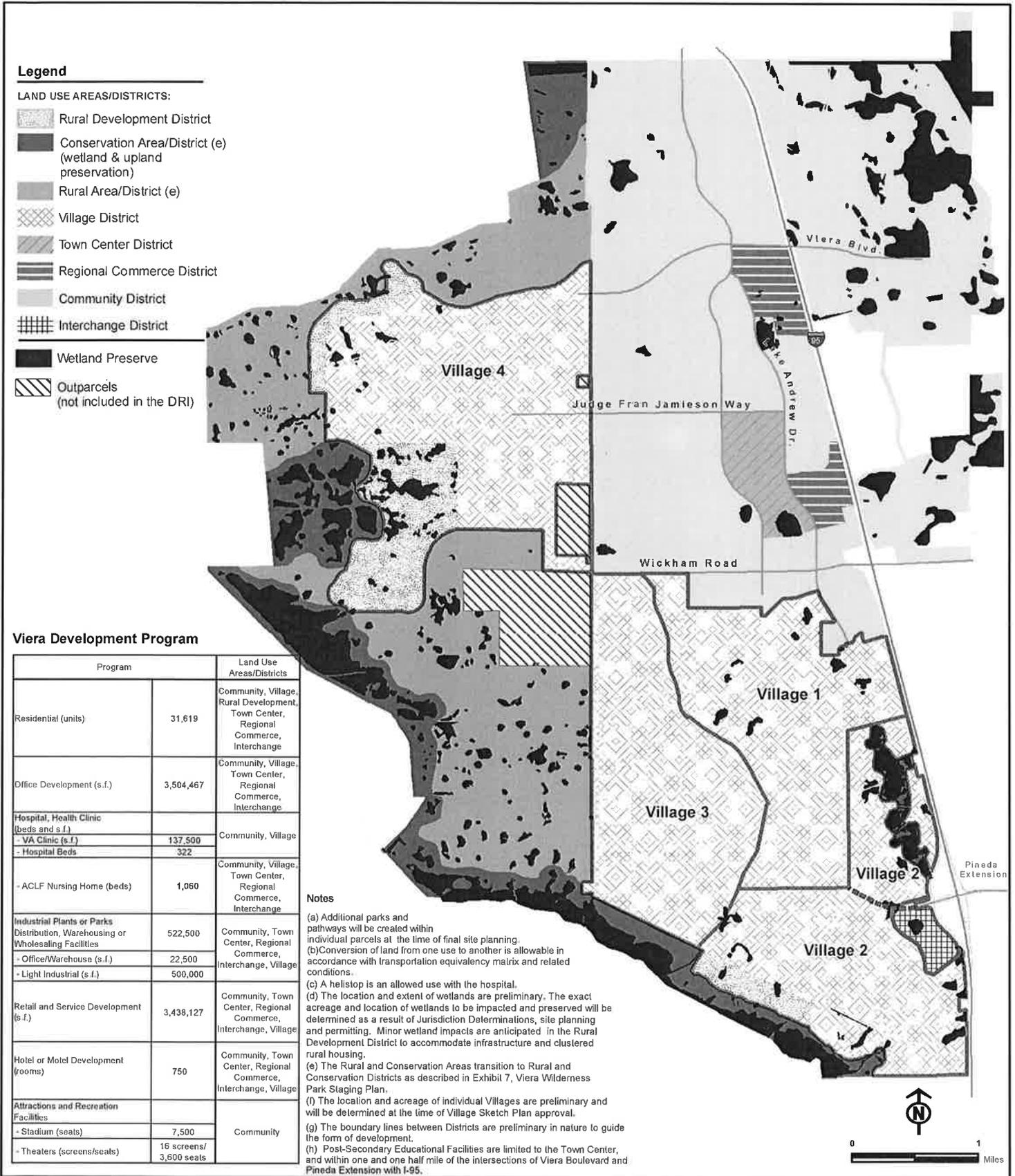
19. N45°39'16"W, 1200.05 feet;
20. S89°26'55"W, 150.00 feet;
21. N45°51'06"W, 274.34 feet;
22. N00°33'05"W, 1456.41 feet to a point on the North line of Section 29, Township 25 South, Range 36 East;
23. S89°20'44"W along the North line of said Section 29, 1153.36 feet to the Northeast corner of Section 30, Township 25 South, Range 36 East;
24. S89°23'19"W along the North line of said Section 30 2789.62 feet to the POINT OF BEGINNING.

Subject to Easements, Restrictions, Reservations and Rights-of-way of record.

**LESS AND EXCEPT** those certain parcels of land described in Official Records Book 2951, Page 1574; Official Records Book 3412, Page 4823; Official Records Book 4203, Page 2463; Official Records Book 5262, Page 3838; **AND LESS AND EXCEPT** that certain parcel of land described in Civil Action Documents 96-16731-CA-F; all being recorded in the Public Records of Brevard County, Florida.

**TOGETHER WITH** that certain parcel described in Official Records Book 5262, Page 3836, Public Records of Brevard County, Florida

## Exhibit 3 Map H - Master Development Plan



**EXHIBIT 4**

**DRI Master Development Program**

<b>Land Use (See Notes)</b>	<b>Phase 1 Through 12/22/2023</b>	<b>Phase 2A Through 12/22/2023</b>	<b>Phase 3 Through 12/22/2023</b>	<b>Cumulative Through Phase 3</b>	<b>Phase 4 Through 12/21/2033</b>	<b>Totals</b>
Residential (units)	6,126	3,550	4,674	14,350	17,269	31,619
Office Development (s.f.)	1,355,342	230,927	186,140	1,772,409	1,732,058	3,504,467
-General Office (s.f.)	1,355,342	230,927		1,586,269	1,732,058	3,318,327
-Government Office (s.f.)	*	*	186,140	186,140*	-----	186,140*
Hospital Health Clinic (beds and s.f.)						
-VA Clinics (s.f.)	107,500		30,000	137,500		137,500
-Hospital Beds		150	172	322		322
-ACLF Nursing Home (beds)	580	92	284	956	104	1,060
Industrial Plants or Parks Distribution, Warehousing or Wholesaling Facilities	85,518		109,500	195,018	327,482	522,500
-Office/Warehouse (s.f.)	22,500			22,500		22,500
-Light Industrial (s.f.)	63,018		109,500	172,518	107,500	280,018
Retail and Service Development (s/f/)	1,641,168	355,000	259,862	2,256,030	1,182,097	3,438,127
Hotel or Motel Development		128		128	622	750

(rooms)						
Attractions and Recreation						
-Stadium (seats)	7,500			7,500		7,500
-Theaters (screens/seats)	16 Screens/ 3,600 Seats			16 Screens/ 3,600 Seats		16 Screens/ 3,600 Seats
-Golf Course	18 Holes	18 Holes	18 Holes	54 Holes	18 Holes	72 Holes

\* Government Office for Phases 1 and 2A is included in the General Office

**NOTES:**

- Office use includes medical office uses. Medical offices may include physician offices, medical clinics, labs, and diagnostic centers, ambulatory facilities, surgery centers, urgent care centers, rehabilitation centers, medical equipment sales and service, hospice, home health, pharmacies, cancer centers, hospitals or other similar medical office or specialty medical services or uses.
- Medical uses may include but are not limited to physician offices, medical clinics, labs, diagnostic centers, ambulatory facilities, surgery centers, urgent care centers, rehabilitation centers, medical equipment sales and service, pharmacies, cancer centers, hospitals, health fitness, hospice or home health care or other similar medical or health care uses, so long as (1) such similar use has a trip generation rate (based on Institute of Transportation Engineers (ITE) rates or other professionally acceptable standard rates) comparable to or less than the rate for the previously authorized use being replaced; or (2) the total average daily trips (ADTs) generated by such particular similar use are equivalent to or less than the total ADTs generated by the previously authorized use.
- Retail service use includes fitness center/health club uses.
- Residential use includes independent living uses.
- Land uses such as elementary, secondary schools (public and private), churches, libraries, post offices, fire or police stations, golf courses and other public/civic uses are allowable in any development district, in addition to other designated uses shown on Map H.
- Post-Secondary Educational Facilities, with a maximum enrollment of 4,500 full time equivalent students and 200,000 square feet, will be permitted with approval of an exchange by Brevard County pursuant to Condition 4 of the Development Order in those certain locations as noted on Map H.

EXHIBIT 5

Transportation Equivalency Matrix

Land Use	From Land Use			To Land Use																
	ITE Land Use Code	Units	ITE Land Use Code	Single Family	Multi-Family	Town-house/Condominiums	Adult Housing, Detached	Adult Housing, Attached	Hotel	0-49 KSF	50-99 KSF	100-199 KSF	200-299 KSF	300-399 KSF	400-499 KSF	Fast Food (With Drive-Thru)	High Turnover	Quality	Bank with Drive-Thru	Convenience Store with Gas
Single Family	210	Dwelling Units	210	1.00	1.61	1.92	3.70	4.00	1.43	0.10	0.15	0.19	0.23	0.25	0.27	0.03	0.10	0.13	0.04	0.07
Multi-Family	220	Dwelling Units	220	0.62	1.00	1.19	2.30	2.48	0.89	0.07	0.09	0.12	0.14	0.16	0.17	0.02	0.06	0.08	0.03	0.05
Townhouse/Condominiums	230	Dwelling Units	230	0.52	0.84	1.00	1.93	2.08	0.74	0.05	0.08	0.10	0.12	0.13	0.14	0.02	0.05	0.07	0.02	0.04
Adult Housing, Detached	251	Dwelling Units	251	0.27	0.44	0.52	1.00	1.08	0.39	0.03	0.04	0.05	0.06	0.07	0.07	0.01	0.03	0.04	0.01	0.02
Adult Housing, Attached	252	Dwelling Units	252	0.25	0.40	0.48	0.93	1.00	0.36	0.03	0.04	0.05	0.06	0.06	0.07	0.01	0.03	0.04	0.01	0.02
Hotel	310	Rooms	310	0.70	1.13	1.35	2.59	2.80	1.00	0.07	0.11	0.13	0.16	0.18	0.19	0.02	0.07	0.09	0.03	0.05
Retail	820	KSF	820	9.53	15.37	18.33	35.30	38.12	13.61	1.00	1.44	1.82	2.15	2.41	2.61	0.28	0.97	1.27	0.39	0.71
0-49 KSF	820	KSF	820	6.60	10.65	12.69	24.44	26.40	9.43	0.69	1.00	1.26	1.49	1.67	1.81	0.20	0.67	0.88	0.27	0.49
100-199 KSF	820	KSF	820	5.25	8.47	10.10	19.44	21.00	7.50	0.55	0.80	1.00	1.18	1.33	1.44	0.16	0.53	0.70	0.22	0.39
200-299 KSF	820	KSF	820	4.44	7.16	8.54	16.44	17.76	6.34	0.47	0.67	0.85	1.00	1.12	1.22	0.13	0.45	0.59	0.18	0.33
300-399 KSF	820	KSF	820	3.96	6.39	7.62	14.67	15.84	5.66	0.42	0.60	0.75	0.89	1.00	1.08	0.12	0.40	0.53	0.16	0.29
400-499 KSF	820	KSF	820	3.65	5.89	7.02	13.52	14.60	5.21	0.38	0.55	0.70	0.82	0.92	1.00	0.11	0.37	0.49	0.15	0.27
Restaurant	934	KSF	934	33.65	54.27	64.71	124.63	134.60	48.07	3.53	5.10	6.41	7.58	8.50	9.22	1.00	3.42	4.49	1.38	2.49
Fast Food (With Drive-Thru)	932	KSF	932	9.85	15.89	18.94	36.48	39.40	14.07	1.03	1.49	1.88	2.22	2.49	2.70	0.29	1.00	1.32	0.41	0.73
High Turnover	931	KSF	931	7.49	12.08	14.40	27.74	29.96	10.70	0.79	1.13	1.43	1.69	1.89	2.05	0.22	0.76	1.00	0.31	0.55
Quality	912	KSF	912	24.30	39.19	46.73	90.00	97.20	34.71	2.55	3.68	4.63	5.47	6.14	6.66	0.72	2.47	3.24	1.00	1.80
Bank with Drive-Thru	945	Fueling Positions	945	13.51	21.79	25.98	50.04	54.04	19.30	1.42	2.05	2.57	3.04	3.41	3.70	0.40	1.37	1.80	0.56	1.00
Convenience Store with Gas	445	Seats	445	0.08	0.13	0.15	0.30	0.32	0.11	0.01	0.01	0.02	0.02	0.02	0.02	0.00	0.01	0.01	0.00	0.01
Multiplex Movie Theater	720	Seats	720	3.57	5.76	6.87	13.22	14.28	5.10	0.37	0.54	0.68	0.80	0.90	0.98	0.11	0.36	0.48	0.15	0.26
Medical Office	630	KSF	630	5.18	8.35	9.96	19.19	20.72	7.40	0.54	0.78	0.99	1.17	1.31	1.42	0.15	0.53	0.69	0.21	0.38
Clinic	610	Seats	610	1.42	2.29	2.73	5.26	5.68	2.03	0.15	0.21	0.27	0.32	0.36	0.39	0.04	0.14	0.19	0.06	0.11
Hospital	255	Seats	255	0.29	0.47	0.56	1.07	1.16	0.41	0.03	0.04	0.06	0.07	0.07	0.08	0.01	0.03	0.04	0.01	0.02
Assisted Living	710	Seats	710	4.32	6.97	8.31	16.00	17.28	6.17	0.45	0.65	0.82	0.97	1.09	1.18	0.13	0.44	0.58	0.18	0.37
Office	540	KSF	540	2.54	4.10	4.88	9.41	10.16	3.63	0.27	0.38	0.48	0.57	0.64	0.70	0.08	0.26	0.34	0.10	0.19
0-49 KSF	710	KSF	710	2.17	3.50	4.17	8.04	8.68	3.10	0.23	0.33	0.41	0.49	0.55	0.59	0.06	0.22	0.29	0.09	0.16
50-99 KSF	710	KSF	710	1.64	2.65	3.15	6.07	6.56	2.34	0.17	0.25	0.31	0.37	0.41	0.45	0.05	0.17	0.22	0.07	0.12
100-199 KSF	710	KSF	710	1.43	2.31	2.75	5.30	5.72	2.04	0.15	0.22	0.27	0.32	0.36	0.39	0.04	0.15	0.19	0.06	0.11
200-299 KSF	710	KSF	710	1.34	2.16	2.58	4.96	5.36	1.91	0.14	0.20	0.26	0.30	0.34	0.37	0.04	0.14	0.18	0.06	0.10
300-399 KSF	710	KSF	710	1.29	2.08	2.48	4.78	5.16	1.84	0.14	0.20	0.25	0.29	0.33	0.35	0.04	0.13	0.17	0.05	0.10
400-499 KSF	110	KSF	110	0.88	1.42	1.69	3.26	3.52	1.26	0.09	0.13	0.17	0.20	0.22	0.24	0.03	0.09	0.12	0.04	0.07
Light Industrial	540	KSF	540	2.54	4.10	4.88	9.41	10.16	3.63	0.27	0.38	0.48	0.57	0.64	0.70	0.08	0.26	0.34	0.10	0.19
Junior/Community College																				

Source:  
 LTG Inc.  
 ITE Trip Generation Manual, 9th Edition

EXHIBIT 5 (cont'd)

Transportation Equivalency Matrix

Land Use	From Land Use		To Land Use												
	ITE Land Use Code	Units	Multiplex Movie Theater	Medical Office	Clinic	Hospital	Assisted Living	0-49 KSF	50-99 KSF	100-199 KSF	200-299 KSF	300-399 KSF	400-499 KSF	Light Industrial	Junior/Community College
Single Family	210	Dwelling Units	12.50	0.28	0.19	0.70	3.45	0.23	0.46	0.61	0.70	0.75	0.78	1.14	0.39
Multi-Family	220	Dwelling Units	7.75	0.17	0.12	0.44	2.14	0.14	0.29	0.38	0.43	0.46	0.48	0.70	0.24
Townhouse/Condominiums	230	Dwelling Units	6.50	0.15	0.10	0.37	1.79	0.12	0.24	0.32	0.36	0.39	0.40	0.59	0.20
Adult Housing, Detached	251	Dwelling Units	3.38	0.08	0.05	0.19	0.93	0.06	0.12	0.16	0.19	0.20	0.21	0.31	0.11
Adult Housing, Attached	252	Dwelling Units	3.13	0.07	0.05	0.18	0.86	0.06	0.12	0.15	0.17	0.19	0.19	0.28	0.10
Hotel	310	Rooms	8.75	0.20	0.14	0.49	2.41	0.16	0.32	0.43	0.49	0.52	0.54	0.80	0.28
Retail	820	KSF	119.13	2.67	1.84	6.71	32.86	2.21	4.39	5.81	6.66	7.11	7.39	10.83	3.75
0-49 KSF	820	KSF	82.50	1.85	1.27	4.65	22.76	1.53	3.04	4.02	4.62	4.93	5.12	7.50	2.60
50-99 KSF	820	KSF	65.63	1.47	1.01	3.70	18.10	1.22	2.42	3.20	3.67	3.92	4.07	5.97	2.07
100-199 KSF	820	KSF	55.50	1.24	0.86	3.13	15.31	1.03	2.05	2.71	3.10	3.31	3.44	5.05	1.75
200-299 KSF	820	KSF	49.50	1.11	0.76	2.79	13.66	0.92	1.82	2.41	2.77	2.96	3.07	4.50	1.56
300-399 KSF	820	KSF	45.63	1.02	0.70	2.57	12.59	0.84	1.68	2.23	2.55	2.72	2.83	4.15	1.44
400-499 KSF	820	KSF	420.63	9.43	6.50	23.70	116.03	7.79	15.51	20.52	23.53	25.11	26.09	38.24	13.25
Fast Food (With Drive-Thru)	934	KSF	123.13	2.76	1.90	6.94	33.97	2.28	4.54	6.01	6.89	7.35	7.64	11.19	3.88
High Turnover	932	KSF	93.63	2.10	1.45	5.27	25.83	1.73	3.45	4.57	5.24	5.59	5.81	8.51	2.95
Quality	931	KSF	303.75	6.81	4.69	17.11	83.79	5.63	11.20	14.82	16.99	18.13	18.84	27.61	9.57
Bank with Drive-Thru	912	KSF	168.88	3.78	2.61	9.51	46.59	3.13	6.23	8.24	9.45	10.08	10.47	15.35	5.32
Convenience Store with Gas	945	Fueling Positions	1.00	0.02	0.02	0.06	0.28	0.02	0.04	0.05	0.06	0.06	0.06	0.09	0.03
Multiplex Movie Theater	445	Seats	44.63	1.00	0.69	2.51	12.31	0.83	1.65	2.18	2.50	2.66	2.77	4.06	1.41
Medical Office	720	KSF	64.75	1.45	1.00	3.65	17.86	1.20	2.39	3.16	3.62	3.87	4.02	5.89	2.04
Clinic	630	KSF	17.75	0.40	0.27	1.00	4.90	0.33	0.65	0.87	0.99	1.06	1.10	1.61	0.56
Hospital	610	Beds	3.63	0.08	0.06	0.20	1.00	0.07	0.13	0.18	0.20	0.22	0.22	0.33	0.11
Assisted Living	255	Beds	54.00	1.21	0.83	3.04	14.90	1.00	1.99	2.63	3.02	3.22	3.35	4.91	1.70
Office	710	KSF	27.13	0.61	0.42	1.53	7.48	0.50	1.00	1.32	1.52	1.62	1.68	2.47	0.85
0-49 KSF	710	KSF	20.50	0.46	0.32	1.15	5.66	0.38	0.76	1.00	1.15	1.22	1.27	1.86	0.65
50-99 KSF	710	KSF	17.88	0.40	0.28	1.01	4.93	0.33	0.66	0.87	1.00	1.07	1.11	1.63	0.56
100-199 KSF	710	KSF	16.75	0.38	0.26	0.94	4.62	0.31	0.62	0.82	0.94	1.00	1.04	1.52	0.53
200-299 KSF	710	KSF	16.13	0.36	0.25	0.91	4.45	0.30	0.59	0.79	0.90	0.96	1.00	1.47	0.51
300-399 KSF	710	KSF	11.00	0.25	0.17	0.62	3.03	0.20	0.41	0.54	0.62	0.66	0.68	1.00	0.35
400-499 KSF	540	KSF	31.75	0.71	0.49	1.79	8.76	0.59	1.17	1.55	1.78	1.90	1.97	2.89	1.00
Junior/Community College															

Source:  
LTC Inc.  
ITE Trip Generation Manual, 9th Edition

Transportation Equivalency MatrixTrip Generation Rates

From Land Use			
Land Use	ITE Land Use Code	Units	PM Peak-Hour Rates
Single Family	210	Dwelling Units	1.00
Multi-Family	220	Dwelling Units	0.62
Townhouse/Condominiums	230	Dwelling Units	0.52
Adult Housing, Detached	251	Dwelling Units	0.27
Adult Housing, Attached	252	Dwelling Units	0.25
Hotel	310	Rooms	0.70
Retail	820	KSF	
0-49 KSF	820	KSF	9.53
50-99 KSF	820	KSF	6.60
100-199 KSF	820	KSF	5.25
200-299 KSF	820	KSF	4.44
300-399 KSF	820	KSF	3.96
400-499 KSF	820	KSF	3.65
Restaurant		KSF	
Fast Food (With Drive-Thru)	934	KSF	33.65
High Turnover	932	KSF	9.85
Quality	931	KSF	7.49
Bank with Drive-Thru	912	KSF	24.30
Convenience Store with Gas	945	Fueling Positions	13.51
Multiplex Movie Theater	445	Seats	0.08
Medical Office	720	KSF	3.57
Clinic	630	KSF	5.18
Hospital	610	Beds	1.42
Assisted Living	255	Beds	0.29
Office	710	KSF	
0-49 KSF	710	KSF	4.32
50-99 KSF	710	KSF	2.17
100-199 KSF	710	KSF	1.64
200-299 KSF	710	KSF	1.43
300-399 KSF	710	KSF	1.34
400-499 KSF	710	KSF	1.29
Light Industrial	110	KSF	0.88
Junior/Community College	540	KSF	2.54

Source:

LTG Inc.

ITE Trip Generation Manual, 9th Edition

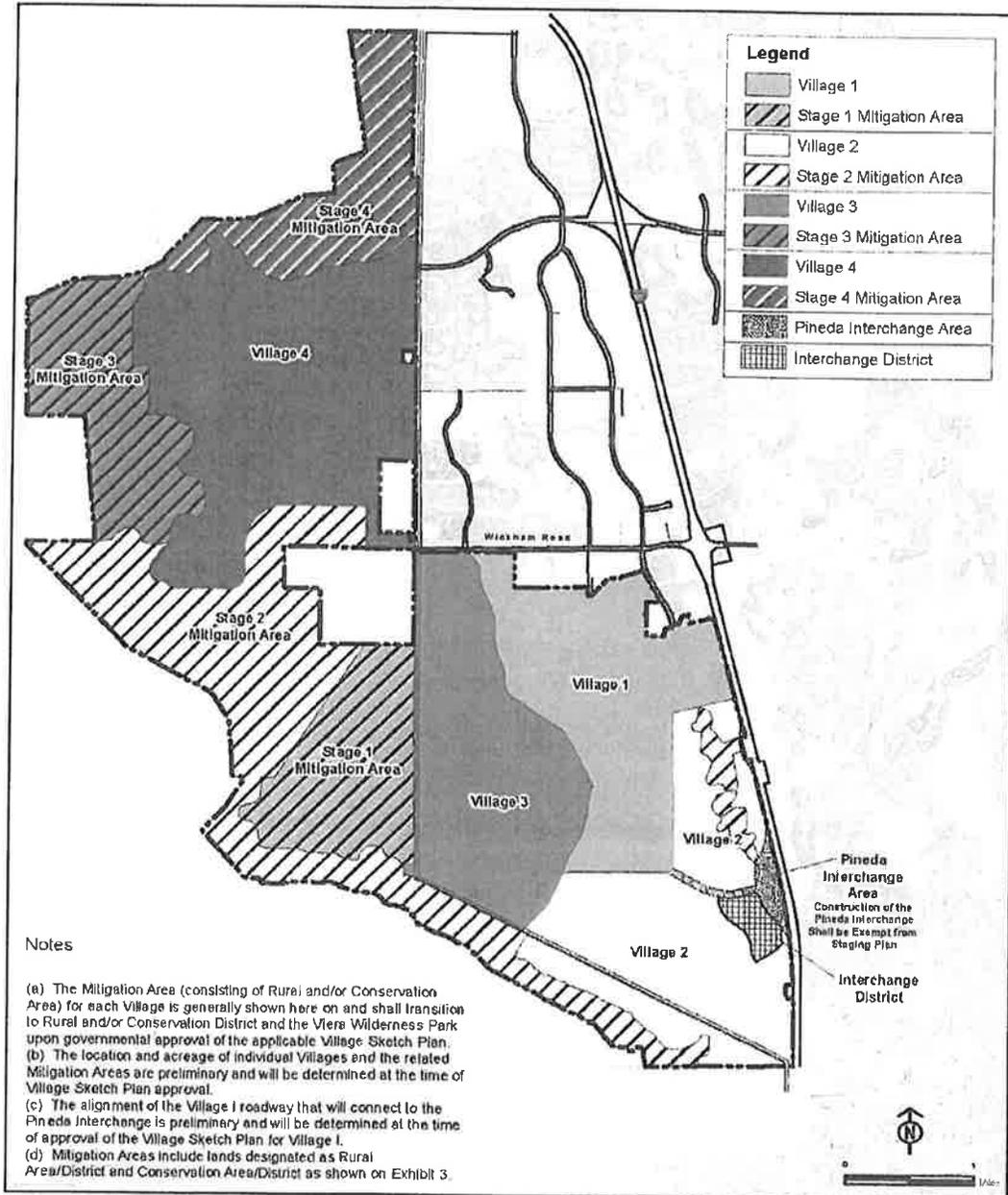
**EXHIBIT 6**

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# EXHIBIT 7

## Viera Wilderness Park Staging Plan

### Exhibit 7 Viera Wilderness Park Staging Plan



GLATTING JACKSON KERCHER ANGLIN  
INCORPORATED

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Viera - Development Order

Date: December 10, 2009

**EXHIBIT 8**

**Viera Wilderness Park Habitat Management Plan**

[Attached]

**Habitat Management Plan for  
The Viera Wilderness Park  
Brevard County, Florida**

**Submitted to:**

Brevard County  
Florida Fish and Wildlife Conservation Commission  
St. Johns River Water Management District  
U.S. Army Corps of Engineers  
U.S. Fish and Wildlife Service

**On Behalf of:**

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GJ Project No. 18749  
Revised December 10, 2009

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## EXECUTIVE SUMMARY

This Habitat Management Plan (HMP) has been produced in accordance with the Development Order (DO) for the Viera Development of Regional Impact, Substantial Deviation No. 2(SD #2), submitted by A. Duda and Sons (ADS) and The Viera Company (Viera). The SD #2 includes the addition of the 11,567 acre, the West Viera Expansion Area (WVEA) to the Viera DRI. The WVEA occurs in central Brevard County on land owned by ADS known as the "Cocoa Ranch" and is used for cattle grazing, sod production, and other agricultural activities. Although dominated by improved pasture, the WVEA includes considerable historical natural communities such as pine flatwoods, hydric pine flatwoods, live oak and cabbage palm hammocks, and wet prairie. These natural communities, as well as the improved pasture, provide habitat for state- and federally-protected species of wildlife, including bald eagle (*Haliaeetus leucocephalus*), Florida sandhill crane (*Grus canadensis pratensis*), gopher tortoise (*Gopherus polyphemus*), burrowing owl (*Athene cunicularia*), and Audubon's crested caracara (*Caracara cheriway*), among others.

The comprehensive community design of the area within SD#2 began with environmental principles that guided the development plan in order to assure the long-term protection of natural resources. The cornerstone of the conservation strategy lies with the creation of the Viera Wilderness Park (VWP). The VWP combines preservation, and agricultural lands, that together comprises 5257.8 acres, or 44% of the proposed WVEA. The VWP will provide regionally significant conservation lands that buffer adjacent state-owned conservation lands from proposed development, protect the St. Johns River floodplain, preserve and enhance high quality upland/wetland systems, provide large open space areas for passive recreation, provide a significant amount of floodwater retention and may serve to decrease storm peaks and downstream flooding, and most importantly, provide a large contiguous protection area that can be managed for wetland resources and listed species habitat.

The intent of this HMP is to provide overarching guidance which directs the intent of land uses and habitat management practices within the VWP. The goals of the HMP are to assure that: listed species habitat is preserved, enhanced and managed such that listed species utilization within the VWP increases; and wetland resources are preserved and enhanced within the VWP. The HMP establishes long-term objectives for the implementation and management of the ecosystems within the VWP. Long-term management objectives include: 1) resource protection and conservation; 2) prescribed fire; 3) vegetation management; 4) hydrological enhancement; 5) cattle grazing and other agricultural practices; 6) monitoring; 7) operations; 8) funding; and 9) community outreach and collaboration through education. Each objective will be accomplished by specific actions, as described herein, which will become more specific with each issued permit. These goals, objectives, and actions will be administered by the Viera Stewardship District (VSD), which is an independent special district formed as a local unit of special purpose government pursuant to Chapter 189, Florida Statutes. The VSD has been granted specific powers by the Florida Legislature with respect to providing community infrastructure and ensuring long-term management of environmental and conservation resources.

The HMP is a guiding instrument for VWP conservation strategies as management is transferred from ADS to the VSD which will intensify as development within the WVEA progresses. The HMP will adapt to new science and changing environmental conditions over time and will maintain the unique ecological assets of the VWP, creating a regional conservation and recreational asset that will be protected and managed for generations to come.

## 1.0 INTRODUCTION

This Habitat Management Plan (HMP) has been produced and approved in accordance with the conditions set forth in the Development Order (DO) for the Viera Development of Regional Impact (DRI), Substantial Deviation No. 2 (SD#2). SD #2 includes the addition of the West Viera Expansion Area (WVEA) to the DRI. Totalling 11,567 acres, the WVEA occurs in central Brevard County between Interstate 95 and the St. Johns River on land known as the "Cocoa Ranch" used by A. Duda and Sons (ADS) for cattle grazing, sod farming, and other agricultural activities. (Figure 1)

At the beginning of the design process for the development of the WVEA, environmental principles were created to guide the development plan and assure the long-term protection of the project's natural resources. These principles are:

1. Provide long-term protection of the St. Johns River corridor, floodplain, and adjacent natural lands;
2. Protect larger, more ecologically viable, high-quality wetland/upland systems throughout the project;
3. Protect listed species through a comprehensive conservation strategy that considers habitat conditions over time;
4. Provide enhanced, protected, and long-term managed habitat and mitigation for potential wetland and listed species impacts that may occur within the development;
5. Sustain or enhance biological diversity;
6. Provide large, contiguous, open space for passive recreation and educational programming; and
7. Provide long-term management through the formation of an entity capable of assuring the protection and management of preserved lands.

These principles served as a touchstone during the Application for Development Approval (ADA) and development design process, and will continue to guide the project through its construction, the creation and management of the conservation and agricultural lands, and ultimately the implementation of the VWP.

The VWP is the conservation centerpiece of the WVEA and the embodiment of the principles above. The VWP is a combination of large-scale conservation and managed agricultural lands will be set aside and managed for listed species and wetland resources. The VWP, in sum, creates a unique regional conservation and recreational asset that will be protected and managed

for generations to come. This HMP will act as a guide for all managed lands within the Viera Wilderness Park (VWP) (Figure 2).

#### *Habitat Management Plan Purpose*

This HMP will serve as a guiding document to implement the conservation strategies of the VWP. It provides overarching guidance which directs the intent of land uses and habitat management practices within the VWP. The goals of the HMP are to assure that: habitat for listed species is preserved, enhanced and managed such that listed species utilization increases; and wetland resources are preserved and enhanced within the VWP. The resource management objectives establish targeted direction for the management actions that will be performed to achieve the goals of the HMP. Each objective will be accomplished by specific management actions, as described herein. The actions within each objective will become more specific as each Stage of the VWP is implemented and each permit is activated. The HMP will adapt to new science and changing environmental conditions over time, and it will be updated periodically. The long-term management actions and monitoring of the VWP will be overseen by an environmental professional to ensure that these goals and objectives are achieved.

Inventories were conducted throughout the WVEA for land use and vegetative communities, fauna, and flora, in association with the SD#2. These inventories will serve as benchmarks to help evaluate the effects of surrounding development, and the management objectives included in the HMP. The HMP establishes long-term objectives for management of natural ecosystems and listed species habitat (Section 4.0, Resource Management Objectives). Combined with surveys and long-term monitoring, this will help evaluate the temporal and spatial success of management actions. Finally, the HMP attempts to balance the restoration of historical natural communities and local hydrology, and maintain or create habitat to meet the needs of listed species.

## **2.0 ENVIRONMENTAL SETTING**

The proposed VWP is generally located in central Brevard County between the St. Johns River and Interstate 95 (Figure 1). The VWP will be bounded to the west by the River Lakes Conservation Area (RLCA), land owned and managed by the St. Johns River Water Management District (SJRWMD) and to the east by the DRI development. Ultimately comprising 5257.8 acres, the VWP will be approximately twelve miles long and ranges from 500 feet to a mile and a half wide as depicted on Figure 2.

### **2.1 Topography**

The VWP occurs within four United States Geological Survey (USGS) 7.5 minute quad sheets, including Lake Poinsett, Cocoa, Deer Park NE, and Eau Gallie (Figure 3). Elevations range from 25 to 12 feet NGVD (National Geodetic Vertical Datum) within VWP. A small amount of VWP in the north has elevations near 12 feet.

## **2.2 Hydrology**

The most significant hydrological feature near VWP is the St. Johns River. The St. Johns River originates in marshes and wetlands near Fellsmere in Indian River County, meandering and flowing northward approximately forty miles before reaching the land near VWP. The St. Johns River continues west/northwest, flowing into Lake Winder approximately two miles west of VWP, then narrows and flows to the northeast into Lake Poinsett, approximately 2.5 miles northwest of VWP. Together, the lakes and the St. Johns River form a semi-circle along the southern, western, and northern portions of VWP, and create a broad peninsula that juts westward into the Eastern Valley from the Atlantic Coastal Ridge. The VWP lies in this peninsula (**Figure 4**). All of this occurs within the broader context of the Lake Poinsett Unit of the Upper St. Johns River basin.

Historically, the WVEA was likely dominated by wet and mesic flatwoods communities and a diverse mosaic of wet and dry prairie (**Figure 5**). The majority of the wetlands on the site were isolated from larger, connected wetland systems that occur to the north, west, and south along the RLCA. As water levels increased during periods of high rainfall, water would likely sheetflow slowly across the flatwoods and prairie communities, gradually receding into isolated depressions, freshwater marshes, and the floodplain.

Although many of the historical wetlands remain, their extent and function has been reduced or altered by extensive agricultural activities, such as sod farming and cattle grazing. To foster and expand these operations, ranchers gradually dug a complex drainage network of canals, ditches, and swales throughout the Cocoa Ranch over the past half-century. Many of the on-site wetlands were connected to the drainage network. As a result, many of the wetlands that were isolated historically are now connected to the canal/ditch/swale network and are hydrologically manipulated. The principal canals run east-west and are named based on their distance from the project's southern boundary, i.e. the two mile, four mile, six mile, seven mile, and eight mile canals. They all carry flow west to the St. Johns River from the WVEA, and other communities east of Interstate 95.

Another potential hydrological influence on-site is the South Central Regional Wastewater Treatment Facility, a wastewater treatment facility and constructed wetlands operated by Brevard County (**Figure 4**). The created wetlands, totaling 163 acres, consist of four peripheral cells and an internal lake. Based on a Department of Environmental Protection Domestic Wastewater Facility permit, the plant is allowed to discharge up to 2.5 MGD annual average daily flow from the created wetland. Most of this volume is held in the cells for an extended period, and allowed to percolate into the groundwater. The remaining volume is used for water reuse or discharged westward into the Four-Mile Canal (one of the area's major canals) and ultimately into the St. Johns River. The detention time through the created wetland system is approximately 53 days.

## **2.3 Regional Context/Public Lands**

The VWP is adjacent to a long strand of publicly owned land along the St. Johns River in Brevard County (**Figure 4**). From the Three Forks Marsh Conservation Area in the south to the

Seminole Ranch Conservation Area in the north, the SJRWMD owns approximately 137,000 acres. With other publicly owned lands, a nearly complete corridor of protected and managed land stretches from the southern boundary of Brevard County to State Road 46 in the north. Adjacent to the VWP is the RLCA, a +/-44,000 acre conservation area owned by the SRJWMD that generally follows the course of the St. Johns River, wrapping around VWP's southern, western, and northern boundaries. In 1999 ADS sold +/-14,000 acres to SJRWMD to become part of the RLCA.

#### ***2.4 Ranch History***

Established by A. Duda and his sons in the 1940's, the Cocoa Ranch was initially 38,000 acres of pasture and woodland habitats used for cattle grazing. With the construction of I-95 and the subsequent influx of people into central Florida in the early 1970s, the Cocoa Ranch began turf grass sod operations to provide landscaping cover for the many new homes, shopping centers, and other developments.

The constant growth in central Florida increased property values of the Cocoa Ranch, and in the mid-1980's a master plan was developed for the property so that growth could be planned. The first phase of development was Viera East, a 3,000-acre DRI approved in 1990. Today the Cocoa Ranch is still in operation, continuing its tradition of sod farming and cattle grazing.

The ongoing agricultural operations of ADS have created exceptional habitat conditions and food sources for a variety of listed species, as described below. ADS created, and the USFWS approved, the **Cocoa Ranch Caracara Procedure (Appendix C)** that establishes management practices to protect caracara on the Cocoa Ranch.

#### ***2.5 Soils***

According to the U.S. Department of Agriculture (USDA) Soil Conservation Service Soil Survey of Brevard County (1974), the following twenty-four (24) soils occur on the project site (**Figure 6**):

- Anclote sand (2)
- Basinger sand (7)
- Chobee sandy loam (13)
- Copeland complex (16)
- EauGallie sand (17)
- Rivera sand (19)
- Floridana sand depressional (22)
- Floridana sand (23)
- Immokalee sand (28)
- Malabar sand high (29)
- Malabar sand (30)
- Malabar (31)
- Micco peat (33)

- Myakka sand (36)
- Oldsmar sand (40)
- Pineda sand (47)
- Pomello sand (49)
- Pompano sand (51)
- Samsula muck, depressional (62)
- Tomoka muck (67)
- Valkaria sand (70)
- Wabasso sand (71)
- Winder loamy sand (73)
- Water (99)

The most extensive soil type is Felda Sand. It occurs primarily in association with improved pasture throughout VWP. Other predominant soil types include Winder loamy sand, Wabasso sand, Valkaria sand, Tomoka muck, and Samsula muck, depressional. All of the soil types are nearly level. Most of the soil types have a water table within ten (10) inches of the soil surface several months of the year. A brief description of each soil type occurring within VWP according to the USDA soil surveys of Brevard County and the Hydric Soils of Florida Handbook (1974) are included in **Table 1**.

### 2.6 Natural Communities

The vegetative communities within the VWP were characterized using Florida Land Use, Cover, and Forms Classification System (FLUCFCS) (FDOT 1999) designations. **Figures 7A and 7B** depict the extent and type of these vegetation types. Existing land use and vegetative community types in VWP and acreages are listed below. Detailed descriptions are provided in **Appendix A**.

#### Natural Community Types/Acreage

Community Type	Number	Acreage
Residential - Low Density	110	15.9
Improved Pasture	211	1824.9
Sod Farm	242	274.3
Other Open Land	260	2.1
Palmetto Prairie	321	45.1
Pine Flatwoods	411	1232.1
Live Oak Hammock	427	102.7
Cabbage Palm Hammock	428	213.2
Hardwood-Conifer Mixed	434	222.2
Mixed Hardwoods	438	5.1
Canals and Ditches	511	91.1
Reservoirs, less than 10 acres	534	1.7
Mixed Wetland Hardwoods	617	4.9
Willow and Elderberry Wetland	618	12.2

Exotic Wetland Hardwoods	619	31.4
Hydric Pine Flatwoods	625	552.7
Hydric Pine Savannah	626	15.2
Wetland Forested Mixed	630	72.7
Cabbage Palm Wetland	632	47.0
Cabbage Palm-Hardwood Mixed	633	47.0
Freshwater Marsh	641	84.9
Wet Prairie	643	241.5
Hydric Pasture	647	47.1
Roads	814	67.7
Electric Power Transmission Lines	832	3.7
<b>Total</b>		<b>5257.8</b>

### 3.0 LISTED SPECIES

#### 3.1 Listed Animals

Much of the VWP has been identified by FFWCC as a “Biodiversity Hotspot,” an area having a high degree of overlap for rare or declining species of wildlife and natural communities (Figure 8). The WVEA and the VWP have been extensively evaluated for the occurrence or potential occurrence of threatened and endangered (T&E) wildlife and plant species from fall 2004 to spring 2009, including extensive vehicular or pedestrian surveys through all habitat types in the project during all seasons of the year. Table 2 includes a list of T&E species and Species of Special Concern (SSC) that potentially occur in Brevard County, typical habitats occupied by each species, and the probability of occurrence of each species within the WVEA. Survey methodologies for the following specific species were based primarily on methodologies sanctioned by the Florida Fish and Wildlife Conservation Commission and the U.S. Fish and Wildlife Service. These methodologies were reviewed by the appropriate regulatory agencies, resulting in surveys and data collection for the following listed species:

- Audubon’s crested caracara,
- Bald eagle,
- Burrowing owl,
- Florida sandhill crane,
- Gopher tortoise, and
- Southeastern American kestrel (*Falco sparverius paulus*) (not observed).

Observations of the following listed wildlife species were recorded during the species-specific surveys and many site evaluations for other purposes including land use mapping, wetland flagging and functional assessments, agency inspections, and other field work:

- American alligator (*Alligator mississippiensis*),

- limpkin (*Aramus guarauna*),
- little blue heron (*Egretta caerulea*),
- roseate spoonbill (*Platalea ajaja*),
- snowy egret (*E. thula*),
- tricolored heron (*E. tricolor*),
- white ibis (*Eudocimus albus*), and
- Wood stork (*Mycteria americana*).

Results of these surveys were included in the SD#2 ADA, subsequent Sufficiency Responses, and correspondence associated with finalizing SD#2. The location of the nests and burrows of the listed species that have been observed within the VWP are depicted in **Figure 9**. Additional wildlife surveys are anticipated to be required as future permits are obtained for impacts and mitigation within the WVEA. The results of these surveys will be used to supplement the map of listed species, nest and burrow locations, within the VWP. Life histories for each listed species above are provided in **Appendix B**.

The Eastern indigo snake (*Drymarchon corais couperi*) is assumed to occur on site, although it has not been observed during thousands of hours of wildlife surveys and other field services. While not specifically addressed in the HMP, it is understood that the conservation measures and management actions contained herein will foster suitable habitat for the Eastern indigo snake and other listed and non-listed species.

### **3.2 Listed Plant Species**

Surveys for listed plant species were conducted in during one event in the spring of 2006 and during all of the other wildlife surveys and site evaluations. The survey for listed plants was reconnaissance level and was not intended to be comprehensive. A total of four (4) listed plant species, including blue butterwort (*Pinguicula caerulea*), yellow butterwort (*P. caerulea*), cinnamon fern (*Osmunda cinnamomea*), and royal fern (*O. regalis*) have been observed within the WVEA. Cinnamon fern and royal fern are generally found in shallowly inundated wetland areas, and occur in varying densities in many wetlands. The butterworts are generally found in wet/mesic flatwoods and wet prairies within the project.

### **3.3 Potentially Occurring Listed Plant Species**

Given the history of cattle grazing and alteration of upland habitats throughout the site, the potential to support many listed plant species is limited. However, the pine flatwoods, oak hammocks, and wetland systems on the western and southern edges of the site are generally intact and may support a variety of listed species. The majority of the species, including grass pink (*Calopogon multiflorus*), yellow-fringed orchid (*Platanthera ciliaris*), crested fringed orchid (*P. cristata*), and snowy orchid (*P. nivea*), are typically found in regularly burned, mesic to hydric flatwoods like those found along the northern, western, and southern portions of the site. The three remaining listed plant species, including butterfly orchid (*Encyclia tampensis*), green-fly orchid (*Epidendron conopseum*), and giant wild pine (*Tillandsia utriculata*), are epiphytes that typically grow in live oak hammocks and/or forested wetland systems. The

forested wetland systems and live oak hammocks in the project likely provide habitat for these species. **Table 2** lists other potentially occurring plant species in VWP.

#### **4.0 RESOURCE MANAGEMENT OBJECTIVES**

##### ***4.1 Resource Protection and Conservation***

**Objective 1) Resource Protection and Conservation** will occur through the legal protection of the Conservation and Rural Districts of the VWP (described below) and through ongoing protection of listed species and natural ecosystems.

##### ***4.1a Conservation Planning***

The outcome of the conservation and development design process for the WVEA was the creation of the VWP. The VWP will be constituted by the Conservation and Rural Districts that will progressively expand to provide wetland and listed species habitat (**Figure 10**).

The Conservation District will be characterized by largely intact natural systems that buffer adjacent state owned lands. The Conservation District will provide wetland resource and tree protection and enhancement, and open space for recreational use, where appropriate. The intended land uses within the Conservation District may include passive recreational uses such as hiking, mountain bicycle and horseback riding, primitive camping and educational kiosks.

The Rural District will be characterized by some intact natural areas but is intended to be dominated by improved bahia grass pasture. The Rural District will be protected and managed predominately to provide habitat for caracara and other listed species. Because of the caracara's expansive habitat requirements, it is considered an umbrella species for the VWP. Land management activities that provide optimal nesting and foraging habitat for caracara will also provide and maintain foraging and nesting habitat for sandhill cranes, burrowing owls, wood storks, bald eagles, other listed wading birds, and Southeastern American kestrels (although none were observed on-site). The habitat requirement of all of these species combined is far overshadowed by the habitat that will be included in the VWP for caracara.

It is anticipated that portions of the VWP will provide for the mitigation requirements associated with impacts to caracara nesting and foraging habitat associated with the development of the WVEA. It is also likely that in order to provide sufficient mitigation, the USFWS may require the creation of additional pasture and/or prairie habitats within the VWP. In this event, the creation of pasture/prairie should occur in ruderal, early successional, or previously timbered or cleared habitat. As part of the Village Sketch Plan application process, Figure 7A and 7B will be updated for the Stage of the VWP that will provide mitigation and tree protection for that Village. Vegetative communities that shall not be converted to pasture or prairie include: Live Oak (427), Hardwood - Conifer Mixed (434), Mixed Hardwoods (438), Mixed Wetland Hardwoods (617), Wetland Forested Mixed (630), Cabbage Palm - Hardwood Mixed (633), and portions of Pine Flatwoods (411) and Hydric Pine Flatwoods (625). These Vegetative communities (cover types) are referenced in the Landscape Section of the PUD. The cover types

designated as Preferred Cover Types in the Alternative Design Standards for the West Viera PUD will be defined on an amended Figure 7C and will be managed to maintain the viability of the natural vegetative community. If caracara mitigation requirements cannot be met adhering to the guidelines above, then alternative mitigation will be used to satisfy the permitting requirements.

Since the Rural District will be managed with active agricultural operations, it will not be open to the public the majority of the time. There may be selective public access points and passive recreation, as described above for the Conservation District or limited public access when the pastures are out of rotation, but this will be at the discretion of the VSD.

The conservation planning objective is to ensure that habitat management occurs in a balanced manner for both listed species, and wetland resources. Neither wetland enhancement or restoration nor habitat conversion or management for crested caracara will be pursued to the exclusion of the other.

#### *4.1b Conservation Protection*

The HMP establishes a conceptual framework for the creation and expansion of the Conservation and Rural Districts in accordance with the Staging Plan attached in the D.O. (Exhibit 7). Specifically, portions of the Rural and Conservation Areas shall transition to Rural and Conservation Districts and constitute the VWP, as described in the Staging Plan. The conceptual framework is temporal and driven by permitting events and subsequent development in the WVEA. The Staging Plan depicts the general progression of protection of the VWP which will be driven by the planning and permitting of each of the 4 Villages proposed under the DO. Each Village will be reviewed and permitted by the appropriate regulatory agencies and the corresponding portion (Stage) of the VWP will be protected using the Staging Plan as a guideline. All lands within the VWP will be protected through various legal instruments, such as conservation easements, and fee simple ownership by the VSD, which will exercise authority and management over the VWP. The timing of management actions (discussed below) is meant to be a guide and not a stringent point in time at which certain actions will begin or end. This should give regulatory authorities, as well as the VSD, a point of reference to evaluate decades of management timing and progress.

#### *4.1c Management Timing*

ADS will continue to own and operate the Cocoa Ranch, after the SD #2 D.O. approval. As such, ADS will manage all existing operations within the Conservation and Rural Areas, according to all appropriate laws and the Cocoa Ranch Caracara Procedure, as approved by the USFWS, until such Areas transition to Conservation and Rural Districts, as described below. Upon such transition, the applicable land shall be managed in accordance with this HMP.

As each Stage of the VWP occurs, agricultural activities will continue, within the appropriate permitted portions of the VWP, in order to maintain suitable listed species habitat. Accordingly, some management actions described in this HMP will continue to be fulfilled by ADS or the VSD in the ordinary course of agricultural operations. To the extent required, management

actions that are not performed by ADS in connection with its agricultural operations within the VWP, such actions will be undertaken and performed by the VSD. It is further anticipated that management actions required under this HMP will gradually increase from the date of each Stage approval, ultimately peak when habitat enhancement and restoration efforts are at their maximum, and then stabilize representing the level of management necessary to “maintain” protected natural systems and managed areas. Accordingly, management actions pursuant to this HMP will be provided in three distinct time periods as more particularly described in the following paragraphs.

The conceptual timing framework consists of three periods of resource management activity.

Management Period I is conceived as a transitional period in which land will be constrained with appropriate legal instruments as required by individual permits associated with each Village according to the Staging Plan. Also, less intensive management actions will begin, most likely in conjunction with normal ranch management. These management actions will include all requirements detailed in individual permits associated with applicable DRI development. Normal ranch operations will be the primary means of managing the VWP, beyond specific permit-related requirements. It is likely that some level of wetland mitigation/enhancement, as well as related wetland monitoring and exotic plant control, will also occur as required by the permits. Management Period I will continue until a permit requires implementation of Period II activities within the VWP.

Management Period II will begin concurrent with the first Stage approval and permits, and continue up to ten years, or more, after its issuance. This period is conceived as a conversion phase, i.e. a period in which intensive resource management actions begin in earnest. These actions will be driven by individual environmental permits, but may include wetland enhancement, filling ditches, canopy thinning or planting, exotic species removal, and limited pasture creation. As market demand and development activities increase, management actions as described in **Table 3** will be expanded as required by individual permits related to WVEA.

Management Period III is conceived as an evaluation and on-going maintenance period. This period will likely begin sometime within ten to twenty years post-approval of the applicable Stage. As the more intensive management activities decrease, management costs will also decrease. Nearly all of the resource management actions detailed herein will be either well underway or near completion. During this Management Period there should be substantial data to evaluate the success of the VSD’s management and make appropriate changes in the HMP, if necessary. Management Period III will consist of long term, low intensity management and monitoring of the established conditions. By this time, the VWP will likely have expanded to its final boundary, be fully protected, and long term management will continue as directed by regulatory permits.

During all periods, listed species mitigation will occur in the form of habitat enhancement and/or protection in the VWP prior to or concurrent with the impact as required by the applicable

development permit. These protection measures, including the actions listed below each management objective, will be implemented as impacts occur in accordance with the Staging Plan depicted in the DO and individual permits. This should allow time for the target species to relocate to new foraging and nesting habitat, while providing time to monitor listed species behavior as habitat is modified in accordance with applicable permits. Some management actions will be eliminated when management objectives are met and sustained by natural forces, as conceptually depicted in **Table 3**.

#### *4.1d Management Units*

To facilitate land management, the VWP will be divided into management units delineated along major field roads, utility corridors, natural/physical features, inside the Rural or Conservation Districts. These pasture and forested areas have letter-number designations (J4E, L1, etc.) historically established by ADS as agricultural management units (**Figure 11**). These designations will assist with resource management activities and can be modified further as needs arise.

#### *4.2 Prescribed Fire*

**Objective 2) Prescribed Fire** will be an integral management tool in the VWP and will occur at regular intervals.

Prescribed fire will occur in all management units of VWP. Along with hydrological enhancement, it will be an integral component in maintaining and enhancing fire-dependent ecosystems in VWP. Fire regimes will mimic historical frequencies for fire-dependent community types as listed in **Table 4**. With an average rotation of three years and given VWP's size (5257.8 acres), an annual goal for prescribed fire should be approximately 1000 acres. Once fuel loads are reduced, the VSD will abide by accepted practices to mimic natural conditions and effects, including varying fire intensity, frequency, firing technique, and timing. To monitor this, the VSD will maintain a prescribed fire log in accordance with applicable fire burning permits. The VSD fire plan for each burn unit will supplement this data. The fire data will be maintained by the VSD for inspection by the public.

The VSD should avoid conducting prescribed fires in management units that contain a caracara nest, during the peak nesting season (**Table 5**). Prescribed fire conducted within management units that contain a caracara nest will be given additional consideration as described in section 5.1.

Many of Florida's residents are from parts of the country where prescribed fire is not a regular occurrence in the natural environment. The VSD recognizes its role and responsibility in explaining the value and benefits of prescribed fire and will use a variety of communication channels to inform local residents. This action will be developed immediately following the initiation of the first permitted stage of mitigation to lay the groundwork for public support and to help allay concerns.

### ***4.3 Vegetation Management***

***Objective 3) Vegetation Management***, including exotic plant control, mechanical techniques (mowing, roller-chopping and aeration), and selective timbering, will be an important management tool in VWP.

Vegetation management will continue to be an integral part of VWP's long-term management, including: a) exotic plant control, b) timber management, c) mechanical management, and d) monitoring.

#### ***4.3a Invasive Exotic Plant Control***

Relative to its size, WVEA and VWP currently have localized invasive exotic plant infestations. The Florida Exotic Pest Plant Council (FLEPPC) defines an invasive exotic plant as a "naturalized exotic plant that is expanding its range into natural areas and disrupting naturally occurring native plant communities". FLEPPC groups invasive exotics into two categories – Category I and Category II. Category I species alter and displace native plants and communities, by reducing habitat and biodiversity, and inhibiting flood control and marine navigation. Category II species may become Category I species but have not yet shown the same capability for environmental degradation. Several Category I species occur within VWP as listed in **Table 6**.

Exotic control will occur on a phased basis (see **Conservation Protection, Planning, and Management Phasing, Section 4.1a**) and will occur on a limited basis in VWP as directed by specific conditions of each construction permit. In accordance with specific permits, the VSD will survey for and control all Category I exotic plant species in the VWP through herbicide treatments, mechanical control, or biological methods.

#### ***4.3b Timber Management***

Cabbage palm and timber harvesting will be a significant management tool in restoring historical prairie communities of the VWP. Because this activity will require a substantial financial commitment, this will be initiated in accordance with the Staging Plan for the VWP, and will likely occur during multiple seasons to conform to environmental constraints and best management practices.

Some amount of selected pine canopy cover in the forested cover types in the Conservation and Rural Districts may be harvested, to enhance and create more habitat for rangeland species in the VWP such as caracara, sandhill cranes, and potentially, burrowing owls. The specific location and amount of canopy cover reduction for each management unit in the VWP will be determined in the field, during permitting and refined in each Village Sketch approval process, to meet the overall goals of the HMP. Harvests will be designed to replicate the extent of historical canopy cover for wet and dry prairie, hydric pine flatwoods and savannah. Contrary to typical timber harvests, the trees left over should include the largest and healthiest trees so that they may provide eagle and potential red cockaded woodpecker nest trees in the future. In addition, the trees left over should include a variety of age classes, to replace the eventual death of large pine

trees. For aesthetic purposes, adequate clumps of mature pines and forested buffers may be kept between the Rural Development Districts and areas of the VWP identified for prairie restoration.

Cabbage palm is extremely prolific within the VWP and must be managed and controlled in order to maintain functional pasture, flatwoods, prairies, and wetlands. Currently this is accomplished by selective harvesting of particular age/size classes. This practice will continue in the VWP in order to control cabbage palm, but will be conducted in a balanced manner to maintain the function of listed species habitat and wetland resources.

Best management practices will be implemented for timber and cabbage palm harvesting within the VWP. This includes minimizing road creation and impacts to wetlands and other sensitive natural resources during the wet season, and avoiding listed species nest locations and harvesting during the nesting season.

This management activity will be initiated for each specific parcel in the Conservation or Rural Districts as that parcel is subjected to protective measure, pursuant to individual permits. Frequent prescribed fire and natural hydrology should maintain the historical vegetative composition of the prairie communities after restoration. Timber/cabbage palm harvests will be conducted in accordance with the approved **Cocoa Ranch Caracara Procedure (Appendix C)** until canopy cover objectives, which are specified in the appropriate permits, are met and maintained. Qualitative monitoring will occur annually also until canopy cover objectives are met and maintained.

The vegetative communities (cover types) referenced as Preferred Cover Types in the Landscaping, Tree Protection, and Land Clearing Standards in the PUD within the tree protection areas as defined in the PUD shall not be cleared or converted to pasture or prairie but shall be protected to provide forested and native habitat. These cover types include: Live Oak (427), Hardwood - Conifer Mixed (434), Mixed Hardwoods (438), Mixed Wetland Hardwoods (617), Wetland Forested Mixed (630), Cabbage Palm – Hardwood Mixed (633), and portions of Pine Flatwoods (411) and Hydric Pine Flatwoods (625). The Preferred Cover Types located within Tree Protection Areas will be managed to maintain the viability of the natural vegetative community. These vegetative communities within the VWP, as a whole, shall be managed with the intent of protecting trees but may still be carefully managed with tools such as fire and cabbage palm harvesting which will enhance the vegetative community, but may harm limited individual trees. The intent is not to preserve every single tree in these vegetative communities but to maintain a minimum 50% canopy coverage and preserve healthy natural forested systems within the Tree Protection Areas.

#### *4.3c Mechanical Management*

Mechanical vegetation control may be utilized to manage pine flatwoods and improved pasture. Drum aerators are used to aerate pastures, prepare for seeding, and prepare pine flatwoods for pasture conversion or any community for prescribed fire. Roller chopping is another common method of enhancing natural communities, often as a precursor to prescribed fire. Both devices

can be adjusted to control their impact on the target vegetation and soil. Other mechanical methods include mowing/bushhogging, grinding (Gyro-Trac, Hyro Ax), and hand removal (i.e. chainsaw).

Mechanical vegetation management techniques may be applied within management units of the Conservation and Rural Districts of VWP to prepare for prescribed fire, and habitat and natural community enhancement. Some units may require multiple applications, depending on environmental goals and variables - fire regime, fuel loads/types, and hydrology. Management units within the Conservation District of VWP will be managed according to applicable scientific literature, photo-interpretation of historical aerials, and management objectives. Mechanical techniques such as roller chopping or aerating, within known gopher tortoise sites (relocation areas) will be minimized and supervised by appropriately trained personnel. Mechanical methods may also be used more intensively in areas immediately adjacent to the Village District and the Rural Development District to address urban interface constraints for prescribed fire.

#### ***4.4 Hydrological Enhancement***

***Objective 4) Hydrological Enhancement*** will occur in the Conservation District as authorized by individual permits, as well as in portions of the Rural District (also described below).

The hydrology of VWP is controlled after decades of alterations, primarily through ditches, canals, structures, dry-season irrigation, and roads. Restoring hydrology in the Conservation District, and to some extent in the Rural District, in a balanced manner, is an essential restoration strategy for VWP.

To allow restoration efforts to address ecological alterations, the majority of the Conservation District will be allowed to fluctuate naturally with the surrounding floodplain of the St. Johns River. This will be accomplished in each management unit through enhancement activities to be detailed during construction level permitting and wetland mitigation.

The installation of ditch plugs, water control structures, culverts, at-grade crossings, or the removal of selected roads to enhance hydrology will be conducted on a phased basis within the VWP after consultation with the project engineer in accordance with applicable permits (also see **Section 4.7a, Infrastructure Maintenance/Repairs**). The VSD may consult with the SRJWMD to consider joint hydrological enhancement initiatives on lands connected hydrologically but separately managed by each entity.

#### ***4.5 Cattle Grazing and other Agricultural Practices***

***Objective 5) Cattle Grazing and other Agricultural Practices*** will continue in order to perpetuate and foster habitat for on-site listed species, especially Audubon's crested caracara.

##### ***4.5a Cattle Grazing and Management***

Currently, about 3300 head of cattle graze on approximately on 10,000 acres within WVEA and lease-backs on SJRWMD-owned land. The number of animal units (AU) (cow/calf pair) per

acre ranges between one (1) AU per three (3) acres for improved pasture, to one AU per nine to ten acres for unimproved or wooded pastures. ADS rotates cattle based on several factors - available forage, growing season variables, etc.

Several grazing practices and actions seem to enhance foraging habitat for crested caracara and other listed species (sandhill crane, burrowing owl). They include bovine biological cycles (cattle birth/death), pasture ditch maintenance, mowing, prescribed fire, cabbage palm harvesting, timber harvesting, and sod harvesting. These practices and their respective benefits to crested caracara are described as follows:

- Cattle birth/death – as carrion eaters, caracara capitalize on the life cycle of cattle: ranch personnel and Glatting Jackson Ecologists have observed caracara feeding on the post-calving afterbirth, a source of food not concentrated in the food web of natural systems. Cattle mortality also provides an enormous amount of food that caracara regularly feed on. According to the ADS personnel, with 3300 head of cattle in the Cocoa Ranch, each weighing approximately 1000 pounds, and at an annual loss of three (3) percent, about 99,000 pounds (approximately 50 tons) of cattle carcasses are annually, added to the local food web;
- Pasture swale maintenance/irrigation – hydrological conveyances in WVEA can be classified into three groups, from large to small: canals, ditches, and swales. All three groups are periodically cleaned. The ADS periodically cleans the pasture swales every two to three years throughout the Cocoa Ranch, usually using a grader to re-sculpt the swales and remove vegetation and accumulated soil. The pasture swales mimic natural hydrologic fluctuations through periodic irrigation and drainage. As the swales are artificially drained for agricultural purposes, the biomass collects in increasingly smaller and smaller pools of water, concentrating food for many species, including crested caracara and wood storks. Caracara also benefit from ditch maintenance for, as the ditches are cleaned/re-graded with equipment, fauna are captured and are deposited on the ditch bank. Ecologists from Glatting Jackson and ADS personnel have confirmed this behavior;
- Prescribed fire – to recycle nutrients and reduce thatch in the pastures, ADS conducts regular prescribed fire, a practice which benefits caracara by creating open, prairie-like conditions that caracara, burrowing owls and sandhill cranes prefer, and, to some extent, providing carrion caused by fire mortality;
- Cabbage palm/timber harvesting – this practice maintains the prairie conditions favored by caracara, leaving cabbage palm densities favorable to caracara (see **Timber Management 4.3b**);
- Mowing – mowing maintains herbaceous cover at low levels, simulating historical prairie habitat somewhat and creating more suitable burrowing owl, sandhill crane, and caracara

foraging habitat; caracara follow the ADS ranch mowers in the summer, seizing the opportunity for a ready meal;

- Sod harvesting – this practice also creates foraging for caracara, either through inadvertent fauna mortality caused by the machinery, or by making food easier to see and catch. This practice also perpetuates the open herbaceous cover that caracara and sandhill crane prefer.

All of the land management practices above have created optimal habitat for a variety of listed species such as the caracara, sandhill crane, burrowing owl, wood stork, and a variety of other listed wading birds. Cattle will continue to be grazed within the VWP with herds being adjusted as available pasture decreases from WVEA development and as market conditions change. All grazing practices described above will continue as part of the long-term grazing operation within VWP. Permit conditions may provide more specificity to some of these management actions as each Stage is authorized. It is anticipated that normal “cow/calf” operations at reasonable cattle densities will continue within the VWP over the long term. Extremely high cattle densities, as found in cattle feedlots for slaughter operations, are not consistent with this HMP.

Should grazing in VWP become unfeasible, a prescribed fire program, hydrological enhancements, or other suitable management practices will be commenced to either maintain the improved pastures or to create more natural systems that are suitable for utilization by caracaras, sandhill cranes, burrowing owls, wood storks and/or other listed wading birds. Large scale, high intensity plasticultural farming practices are not envisioned to be consistent with the goals and objectives this HMP.

#### *4.5b Swale Maintenance*

As discussed above, the pasture swales are periodically cleaned to maintain drainage and irrigation. The activity is normally conducted during the dry season (November-April), partially coinciding with burrowing owl nesting season.

Most burrowing owls within the Cocoa Ranch have constructed their burrows on the spoil adjacent to the pasture swales. As the swales are cleaned, the freshly graded soil is deposited on top of the old spoil, potentially covering or collapsing owl burrows on the spoil mound. The peak nesting season for burrowing owls occurs from February through May, but can extend from October through July. To avoid possible entombment of burrowing owls from swale maintenance, pastures, within the VWP, will be surveyed shortly before maintenance occurs. Additionally, equipment operators will receive training to identify and look for burrowing owl during this activity, further ensuring their protection during the nesting season. This activity will occur as long as ditch and swale maintenance is necessary within VWP.

#### *4.5c Sod Farming*

ADS began sod farming at the Cocoa Ranch around 1973. ADS currently produce several varieties of sod including bahiagrass and St. Augustine (see **Appendix A**). Several listed species appear to be attracted to many of the sod farming practices on Cocoa Ranch. Caracaras have been observed foraging around sod harvesting operations. Harvesting or mowing sod exposes

grubs and other insects which are in abundant supply for many of the listed species at Cocoa Ranch. Sandhill cranes, wood storks, and a multitude of wading birds also appear to take advantage of the supply of fish and arthropods found in the sod fields and drainage ditches.

Of the many sod varieties produced at Cocoa Ranch, bahiagrass is the most abundant. Coupled with long-term cattle grazing, bahiagrass pastures in VWP will provide suitable foraging and nesting habitat for listed species, especially crested caracara, burrowing owl, and sandhill crane. Grazing (discussed above) seems to have the greatest influence on the management of this cover type, but the practice of farming bahia grass likely contributes to pasture grass maintenance as well.

The main elements of bahia grass farming are prescribed burning, harvesting, fertilizing, and of course, cattle grazing. Prescribed burning usually occurs during the winter as needed to reduce thatch build up. Bahiagrass sod harvesting is contingent upon soil type, rainfall, and other environmental variables and usually occurs every two to five years, sometimes longer. Sod is cut in strips, leaving narrow bands of bahia between each cut to seed new grass. Pastures are usually fertilized in the spring after harvest, typically with an NPK (nitrogen, phosphorus, potassium) fertilizer, or chicken manure. The biggest influence on pastures is cattle. Cattle are grazed and rotated through pastures based on several criteria, such as pasture condition (i.e. available forage), length of growing season, environmental conditions, etc. Collectively, grazing and range management practices are consistent with habitat management for crested caracara and other listed species within VWP (see **Cattle Grazing/Practices** above, and **Listed Species Life Histories, Appendix B**). Protection zones established in the approved USFWS **Cocoa Ranch Caracara Procedure (Appendix C)** will be observed in connection with all agricultural operations within the VWP unless permits require a modified procedure.

#### **4.6 Monitoring**

**Objective 6) Monitoring** will be conducted to evaluate listed species behavior and productivity, enhancement, and ongoing land management activities. Collected data will be shared with the appropriate state and federal agencies.

The VSD will conduct various monitoring as required by regulatory authorities, including vegetative, wetland, and listed species monitoring. The details for monitoring will be defined in specific permits as the WVEA is developed and as portions of the Conservation and Rural Districts are added to the VWP.

##### **4.6a Prescribed Fire Monitoring**

Prescribed fire monitoring will include basic annual photo-monitoring points, including two permanent points per burn unit with photos taken in the cardinal directions to evaluate vegetative changes. The VSD will establish the points in different community types.

#### *4.6b Hydrologic and Vegetative Monitoring*

The VSD will implement baseline and long-term monitoring methods to evaluate the success of hydrological enhancements, including at a minimum annual photo-monitoring and qualitative vegetative monitoring, as required by applicable permits. It is likely that some of these photopoints will be used in conjunction with prescribed fire/vegetation monitoring.

#### *4.6c Crested Caracara Monitoring*

The VSD will collect data and monitor how caracara responds to development. A qualified professional will study the caracara and be engaged to assess caracara ecology. The specific methods and goals of the monitoring will be developed during permitting with the USFWS, but may include: habitat use, home range size and configuration (nesting and non-nesting seasons), hatching success, brood number, fledgling success, foraging behavior, interaction/conflict with other nesting caracaras, new territory selection, response to habitat alterations, or human disturbance, etc. This research will be provided to the USFWS to contribute to the overall science and understanding of the species.

Radio transmitters and color bands may be installed on all adults associated with all nests within the VWP. All subsequent offspring produced by these nests also may be color banded for a minimum of six years or as long as permit conditions require. The banding and installation of transmitters will be coordinated and supervised by a qualified professional. All surveys will allow time sufficient to survey each nest, existing and new, and gather data from transmitters, as well as field observations and data collection necessary to determine how displaced caracara are responding to the staging and management of the VWP. The specific monitoring methodology and reporting criteria will be developed during permitting with the USFWS.

If development is significantly postponed due to market conditions and the extent of habitat alterations near existing nests is postponed, the VSD will coordinate with the USFWS to reduce the level of monitoring until development resumes.

#### *4.6d Other Listed Species Monitoring*

Annual monitoring (unless noted otherwise) will be conducted for gopher tortoise, sandhill crane, and burrowing owl, the details of which are as follows:

- Gopher tortoise - Monitoring for gopher tortoise will be conducted in accordance with future FFWCC relocation permit conditions. Gopher tortoise burrow surveys will be conducted using FFWCC-approved methodology.
- Florida sandhill crane - the habitat within the VWP may be surveyed during each nesting season to determine the approximate number of sandhill crane nests utilizing, and to evaluate the quality of habitat within the VWP, and to provide guidance for any management activities that could alter the success of any active nests. The sandhill crane survey methodology, duration, and reporting requirements will be determined during permitting with the FFWCC.

- Burrowing owl – At such time as burrowing owl burrows, within the VWP, could be affected by land management activities, described in section 4.5b, surveys for owl burrows will be conducted during the peak nesting season. Other burrowing owl monitoring will be conducted as determined during permitting with the FFWCC.

#### *4.7 Operations*

*Objective 7) Operations*, including the regular maintenance of infrastructure, providing adequate personnel, and providing wildlife management, will be conducted to ensure the long-term success of natural resource management in VWP.

##### *4.7a Maintenance, Repair and Improvement of Agricultural/Community Facilities*

Much of VWP's infrastructure, or roads, are essential for cattle grazing, ditch/canal maintenance, access to off-site properties, and land management. In many instances, roads also act as convenient fire breaks for prescribed fire. Essential roads will be maintained to facilitate operations but, hydrology impaired by various roads may be enhanced, as determined appropriate by project engineers and the management personnel (see also **Hydrological Enhancement, Section 4.4**). The agricultural facilities and structures are also essential for normal agricultural operations and land management.

Notwithstanding any contrary provision of this HMP, the following activities and work in connection therewith are allowed in the VWP and shall not be prohibited by this HMP: (i) the installation, repair, maintenance and improvement of facilities and structures directly relating to permissible agricultural uses within the VWP, including but not limited to barns, sheds, corrals, feeders, wells, fences, crossings and gates; and (ii) the lawful repair, maintenance, re-location and improvement of existing or future canals, ditches and swales, or portions thereof, located within the VWP.

##### *4.7b Administration*

Sufficient personnel will be provided to accomplish land management objectives within VWP, and may be supplemented through volunteers, student interns, graduate students, etc.

Management plan updates will occur at 2-year intervals following the approval of the DO as part of the Biennial report. These HMP updates will be prepared by the VSD's Environmental Professional, as defined in the Viera DO, and will include an evaluation of the progress in achieving the long term goals and objectives of the HMP. In addition, each update will include a summary of land management conditions and monitoring actions modified as a result of permit requirements.

##### *4.7c Wildlife Management*

Various forms of game management have historically been conducted within WVEA and will be continued to control nuisance animals and manage game populations. Hunting will be managed in the VWP in accordance with applicable laws and ordinances.

#### **4.8 Funding**

**Objective 8)** Long-term maintenance, management, and operation of the VWP in accordance with the HMP shall be funded by the VSD.

To carry out its prescribed functions, the Florida Legislature has granted the VSD the legal authority to fund and finance the facilities and services necessary to perform the management functions required by this HMP, including, but not limited to, the specific power and authority to issue bonds, impose benefit and/or maintenance assessments and levy fees and user charges in accordance with its charter.

#### **4.9 Community Outreach and Collaboration**

**Objective 9)** *Community Outreach and Collaboration*, including education, volunteerism, and sharing of research, will be fostered in the VWP.

The VWP will face increasing pressure for public access and use as the development of WVEA progresses. Because of its size, several access points will be designated in VWP to serve different communities and offer varying recreational experiences.

##### *4.9a Interpretive Education*

During Management Phase III of the VWP implementation plan, the VSD will encourage environmental stewardship through education. It may be directed toward adults and children to explain VWP's importance and to instill an appreciation of its natural resources. Interpretive programming can be conducted on-site (through VWP staff, volunteers, local school teachers, and universities, etc.). Off-site environmental education, with VWP as the centerpiece, can be offered at local schools. The VSD will avail itself of basic research and land management services: species inventories, wildlife surveys, exotic plant control, etc. through programs that build relationships with area universities, schools, SJRWMD, and its communities. The VSD will begin this relationship early in the development of WVEA to prepare for local stewardship of VWP in the coming decades.

Additionally, the VSD will promote environmental education through the following:

- Disseminate findings on research to governmental agencies - the VSD will share data and findings it has collected for crested caracara, burrowing owls, its agricultural management techniques, and long-term plans for crested caracara protection within VWP.
- Encourage public outreach/education for listed species - as in the education campaign for prescribed fire, the VSD will endeavor to inform its residents about listed species in the VWP and adjacent areas. The goal is to heighten awareness and appreciation of listed species, their habitat needs, and the ongoing efforts to enhance habitat within VWP.

## 5.0 INDIVIDUAL LISTED SPECIES CONSIDERATIONS

### 5.1 Crested Caracara

Management for crested caracara will occur generally through the resource management actions listed above in **Section 4.0, Resource Management Objectives**. The species will also benefit from additional scientific research, monitoring, and education. These management activities will foster an environment in which the species will persist and from which the broader scientific community will learn. The VWP will provide foraging and nesting habitat: large expanses of uninterrupted, pasture or prairie-like conditions (i.e. natural communities or improved pasture), cabbage palm trees/clusters, and an abundant food supply in a managed setting.

The Rural District of the VWP will be set aside and managed to attract crested caracara and other listed species from the WVEA.

The Rural District will be subject to the following land management protocol:

- Major tree alterations (harvesting or planting) shall not occur without prior approval of the VSD;
- No use of chemical insecticides shall be allowed without the prior approval of the VSD;
- Parcels adjacent to the VWP shall be notified of prescribed burning conducted within the VWP, implemented in accordance with the HMP;
- Agricultural uses within the VWP that are compatible with, or facilitate the environmental goals and objectives of the HMP, shall be encouraged by the VSD.
- Management units that contain a caracara nest tree will be evaluated for pre-fledged juveniles that may be present on the ground, prior to a prescribed burn.

### 5.2 Bald Eagle

There are two eagle nests (BE039 and BE003) in the VWP (**Figure 9**). Existing habitat within VWP, as well as off-site resources, will provide substantial nesting and foraging habitat. Also, the pine flatwoods in the western portion of VWP, as well as various pastures, provide a number of large pines that could be suitable for future bald eagle nest trees. These areas are close to the RLCA, Lakes Washington, Winder, and Poinsett, the St. Johns River, and other natural foraging resources.

In accordance with the USFWS guidelines, natural habitat may be converted to improved pasture or timbered during the non-nesting season. Healthy, mature super-canopy trees within VWP will be identified before logging occurs and left standing as potential future nest trees.

The VSD will annually request nest status and productivity from FFWCC for all on-site nests to monitor nesting success and productivity during the implementation of the HMP. If the FFWCC stops collecting data on bald eagle nest locations, surveys to locate nests will be conducted prior to the initiation of any management action, within the VWP, that may affect bald eagle nesting activities. Additionally, the VWP will be casually monitored for new nests throughout each year as part of routine agricultural activities or land management.

### ***5.3 Florida Sandhill Crane***

Pairs of mature Florida sandhill cranes were observed foraging on the property, in improved pastures, wet pastures, and sod fields. One nest was observed in the VWP in 2005; and one in 2006 (**Figure 9** depicts nest locations by year). Scattered freshwater marshes and wet prairies within VWP provide suitable habitat for nesting, and improved pastures on the site currently provide ample forage areas for sandhill cranes.

It is anticipated that portions of the VWP will compensate for all impacts to Florida sandhill crane nests and foraging habitat associated with the WVEA. Overall, the VWP will provide substantial suitable habitat in the form of improved pasture and enhanced herbaceous wetlands. The VSD will conduct resource management activities throughout sandhill crane foraging and nesting habitat. All prescribed fires during the peak nesting season in or near herbaceous wetlands will be preceded by a burn unit nest survey to avoid accidental harm to pre-fledgling chicks.

### ***5.4 Gopher Tortoise***

It is anticipated that portions of the VWP will be proposed and eligible for use as a long-term protected recipient site (as defined by the FWC) for gopher tortoises that will be impacted development of the WVEA. Management of these areas will be conducted as specified in the applicable permits.

Existing gopher tortoise colonies in the VWP will be preserved or managed through resource management activities in accordance with applicable permits. On-site preservation and management will also provide habitat for gopher tortoise commensal species, including indigo snake, Florida mouse, and gopher frog (*Rana capito*). Burrow surveys, within the VWP, will be conducted pursuant to future FFWCC tortoise relocation permits for the WVEA, to monitor the status of the species. The data will be included in the five-year HMP update.

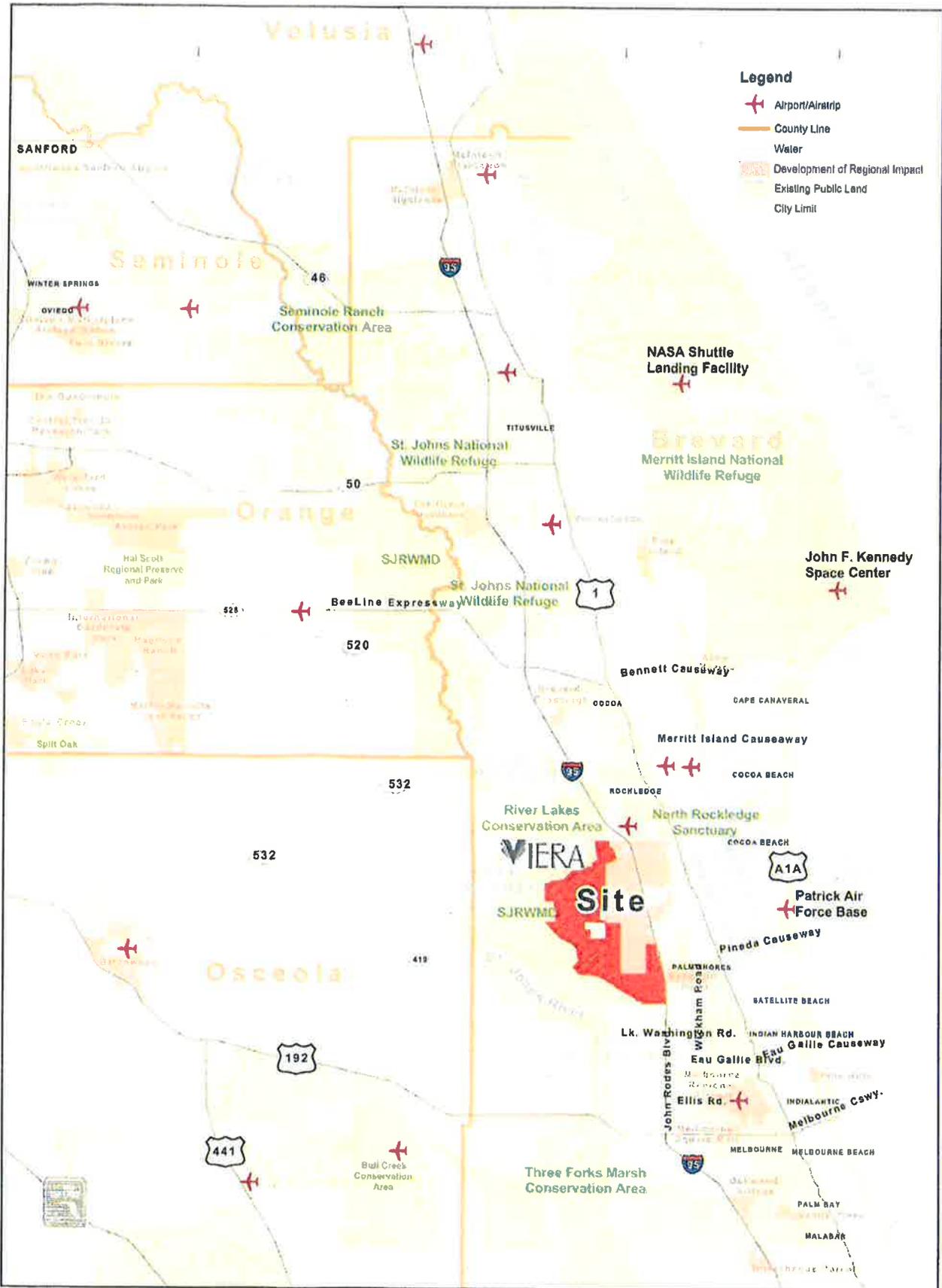
### ***5.5 Burrowing Owl***

It is anticipated that a portion of the preserved and managed lands in VWP will provide adequate habitat for burrowing owls affected by the WVEA. Three (3) burrowing owl relocation recipient areas have been identified within the VWP based on soils and hydrology. These proposed locations exist within the VWP and are generally shown on **Figure 9**. Additionally, artificial cavities, similar to the depiction in **Figure 12**, will be constructed in accordance with applicable permits. Annual monitoring of the relocation areas will be conducted in accordance with applicable permits.

- The three (3) specific locations currently anticipated as burrowing owl recipient sites total 222.3 acres. Area 1 (75.7 acres) and Area 2 (51.0 acres) are in the northwest corner of the VWP, while Area 3 (95.6 acres) is in central portion of the VWP southeast of the Viera Wetlands Park (**Figure 9**). Each of these areas appears to have a lowered ground water table, suitable soils, and vegetative conditions consistent with appropriate habitats for this species. All of the existing burrowing owl burrows currently occur within the following soils: Pineda sand, Myakka sand, and EauGallie sand. All three of these soils are described in the Soil Survey of Brevard County (USDA SCS, 1974) as poorly drained, with the Pineda sand historically occurring under hammocks and low sloughs; Myakka sand occurring in flatwoods and between ridges and sloughs; and the EauGallie sand occurring beneath low ridges in flatwoods. The soils underlying burrowing owl recipient sites 1 and 2, consists of EauGallie sand. The soil beneath burrowing owl recipient site 3 consists of Myakka, Malabar, and Felda sands. All three recipient sites have significant drainage features in the vicinity, and each exhibit low ground water table. Low ground water table in these areas results in low frequency of flooding and suitable conditions for burrowing owl relocation.

#### **5.6 Wood Stork**

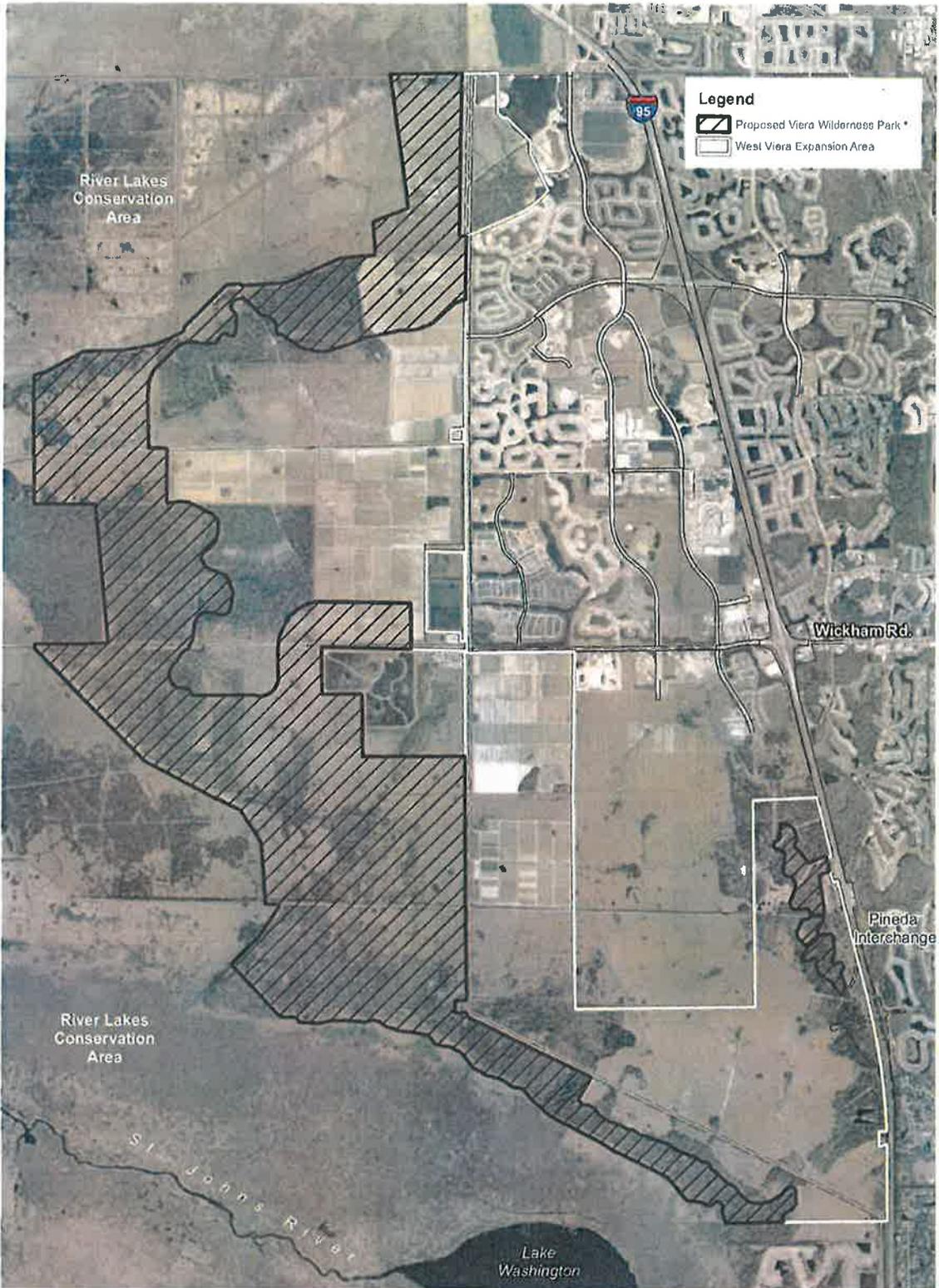
No wood stork nesting sites are known to occur within the DRI, although this species has been observed foraging on-site, as shown on **Figure 9**. It is anticipated that wood stork foraging habitat loss resulting from on-site impacts will be sufficiently offset through on-site mitigation activities including hydrologic enhancement of wetlands previously altered through agricultural activity.



**Viera Habitat Management Plan**

Figure 1  
Location Map





\\04\GIS\Projects\21\Aerials\1\CA\2023\Aerial\_Pix\_100pp.tif

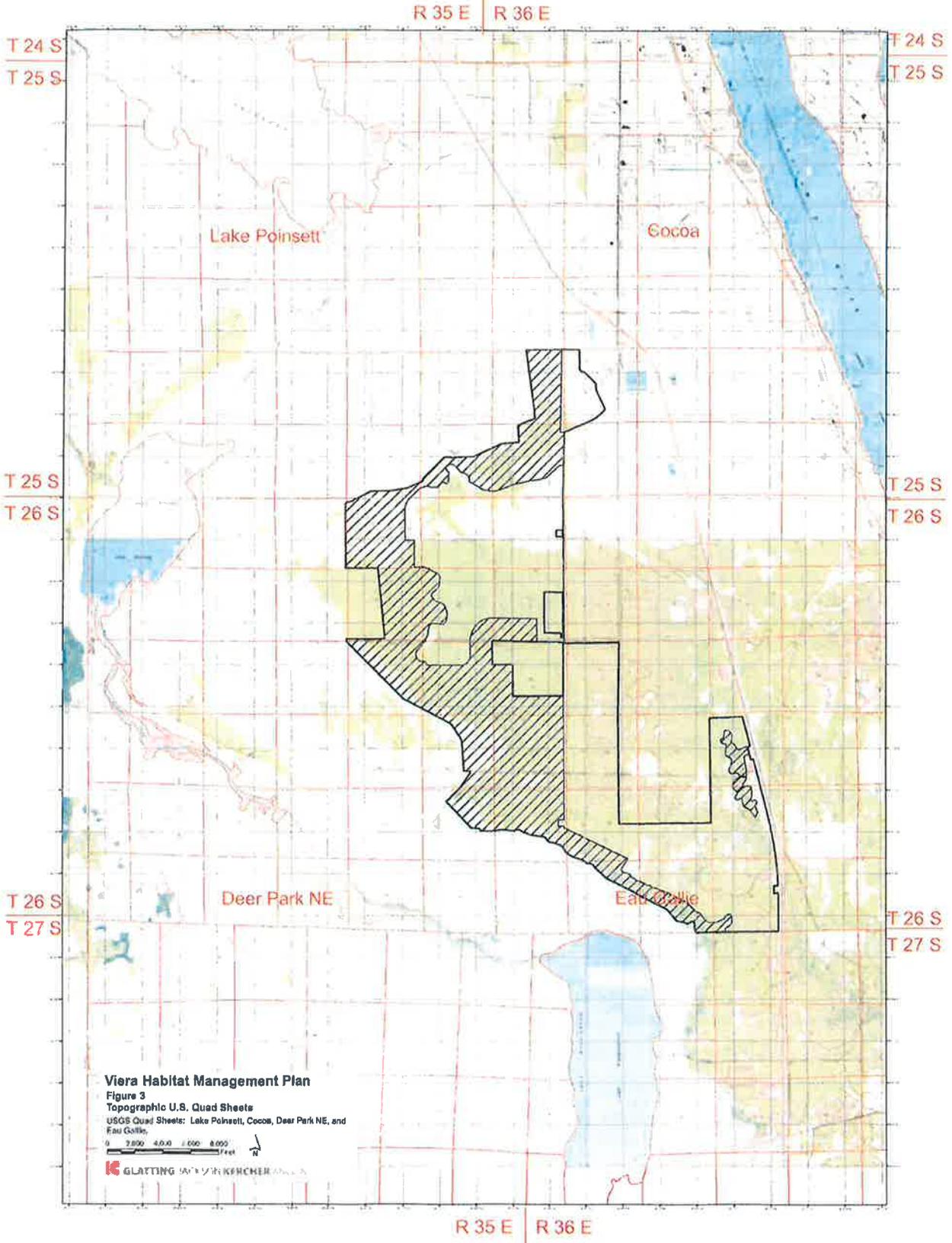
**Viera Habitat Management Plan**

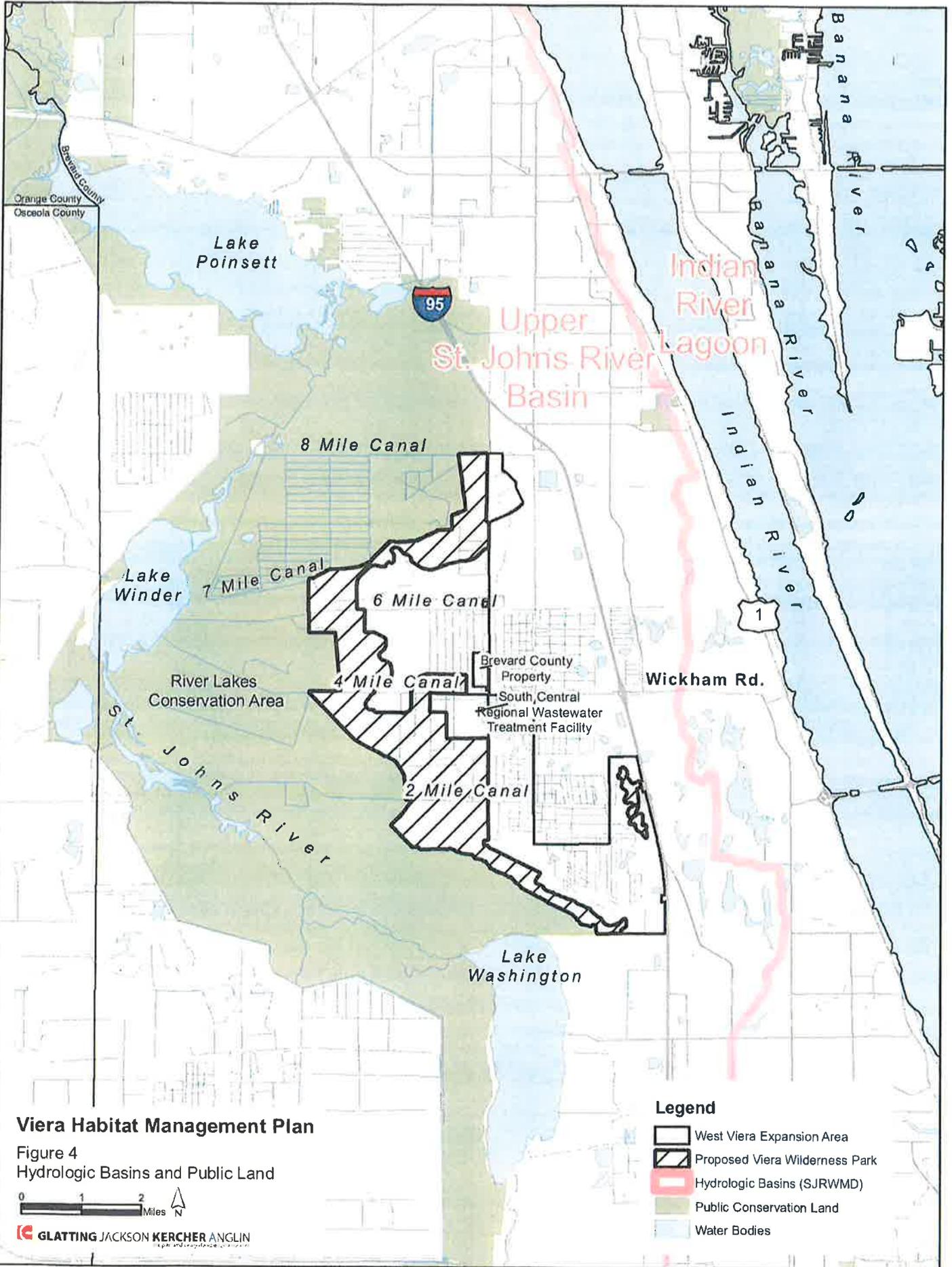
Figure 2  
Proposed Viera Wilderness Park

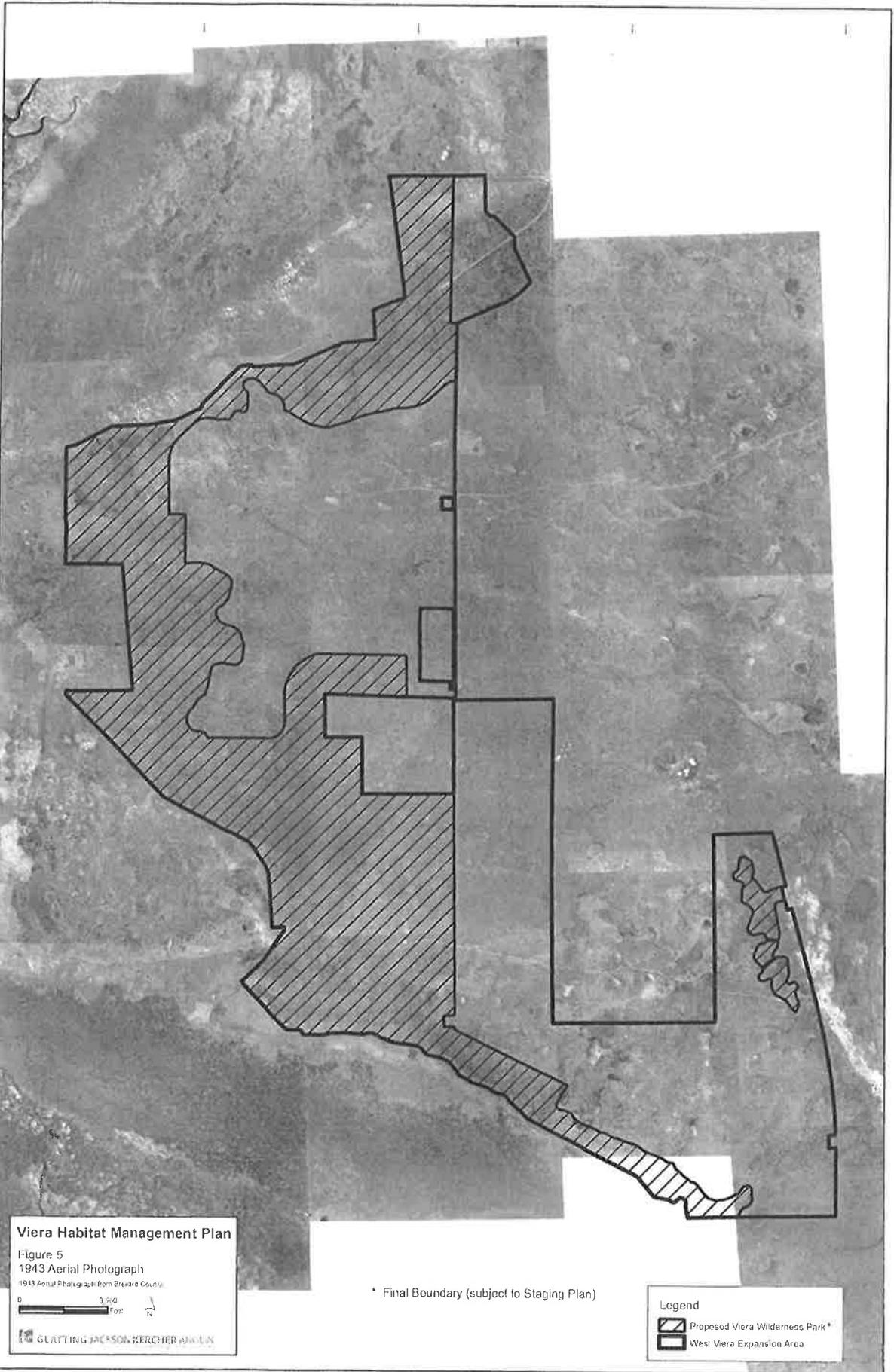
\* Final Boundary (subject to Staging Plan)



GLATTING JOHNSON KERCHER ARCHITECTS







**Viera Habitat Management Plan**

Figure 5  
1943 Aerial Photograph  
1943 Aerial Photograph from Brevard County

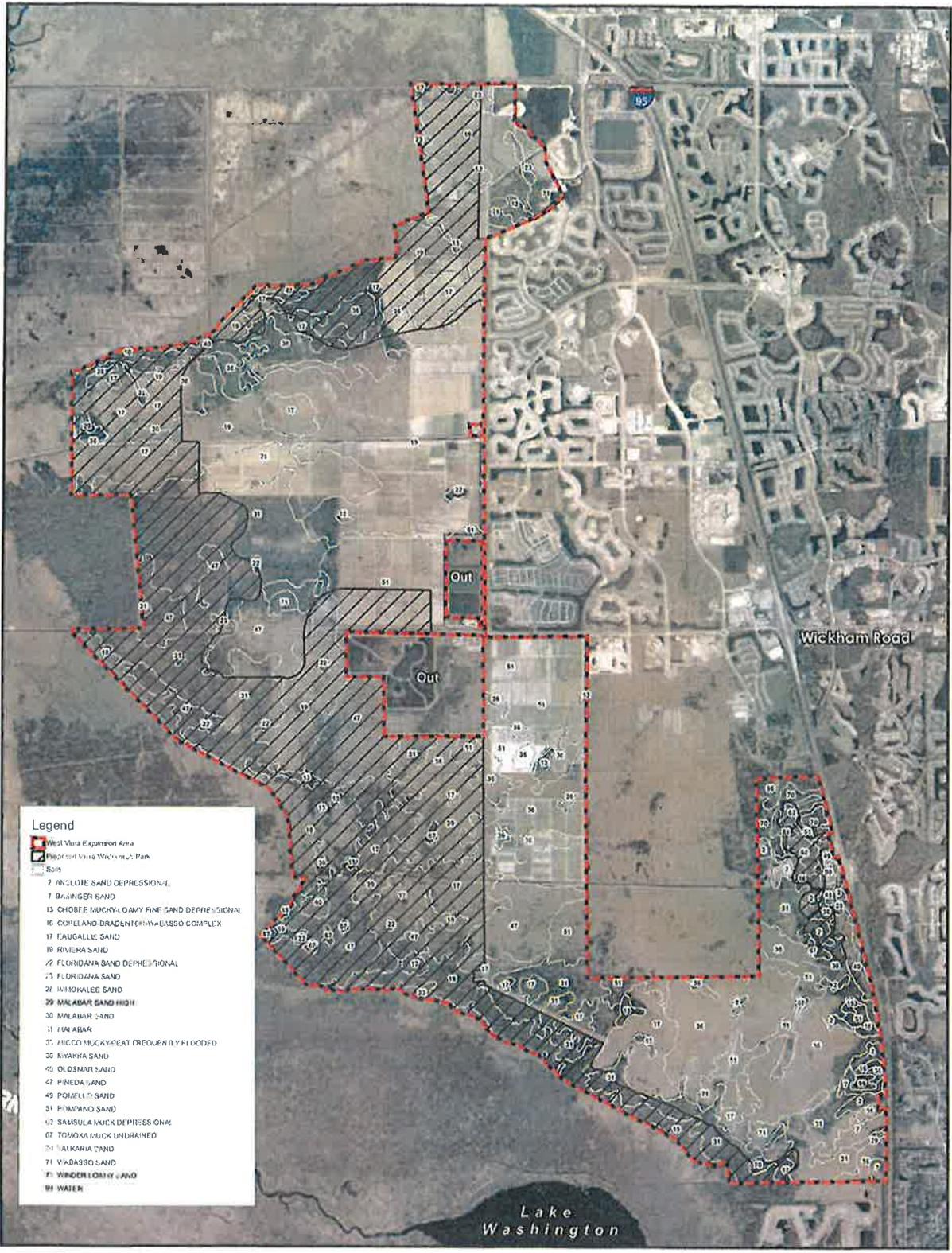


GLUTTING JACKSON REICHER AND ASSOCIATES

\* Final Boundary (subject to Staging Plan)

**Legend**

-  Proposed Viera Wilderness Park\*
-  West Viera Expansion Area



**Viera Habitat Management Plan**  
**Figure 6**  
**Soils**  
 U.S. Department of Agriculture Database of Soils (SURGO-1930)

0 3500 Feet

GLATFING JENSEN KERCHER PLLC

Aerial Cartographics of America (ACA) 2008 Aerial Photograph





R 35 E | R 36 E

T 24 S  
T 25 S

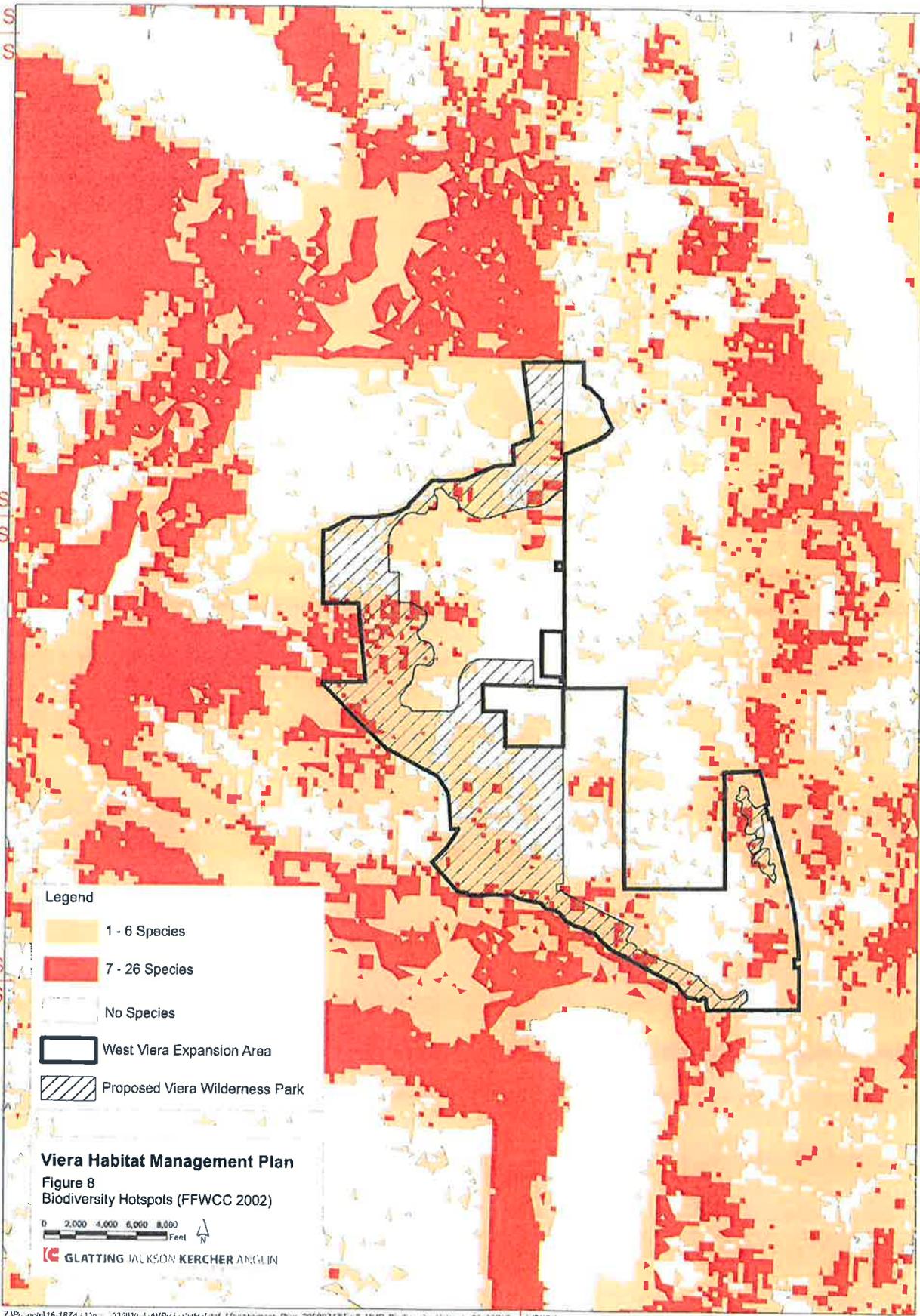
T 24 S  
T 25 S

T 25 S  
T 26 S

T 25 S  
T 26 S

T 26 S  
T 27 S

T 26 S  
T 27 S



**Legend**

- 1 - 6 Species
- 7 - 26 Species
- No Species
- West Viera Expansion Area
- Proposed Viera Wilderness Park

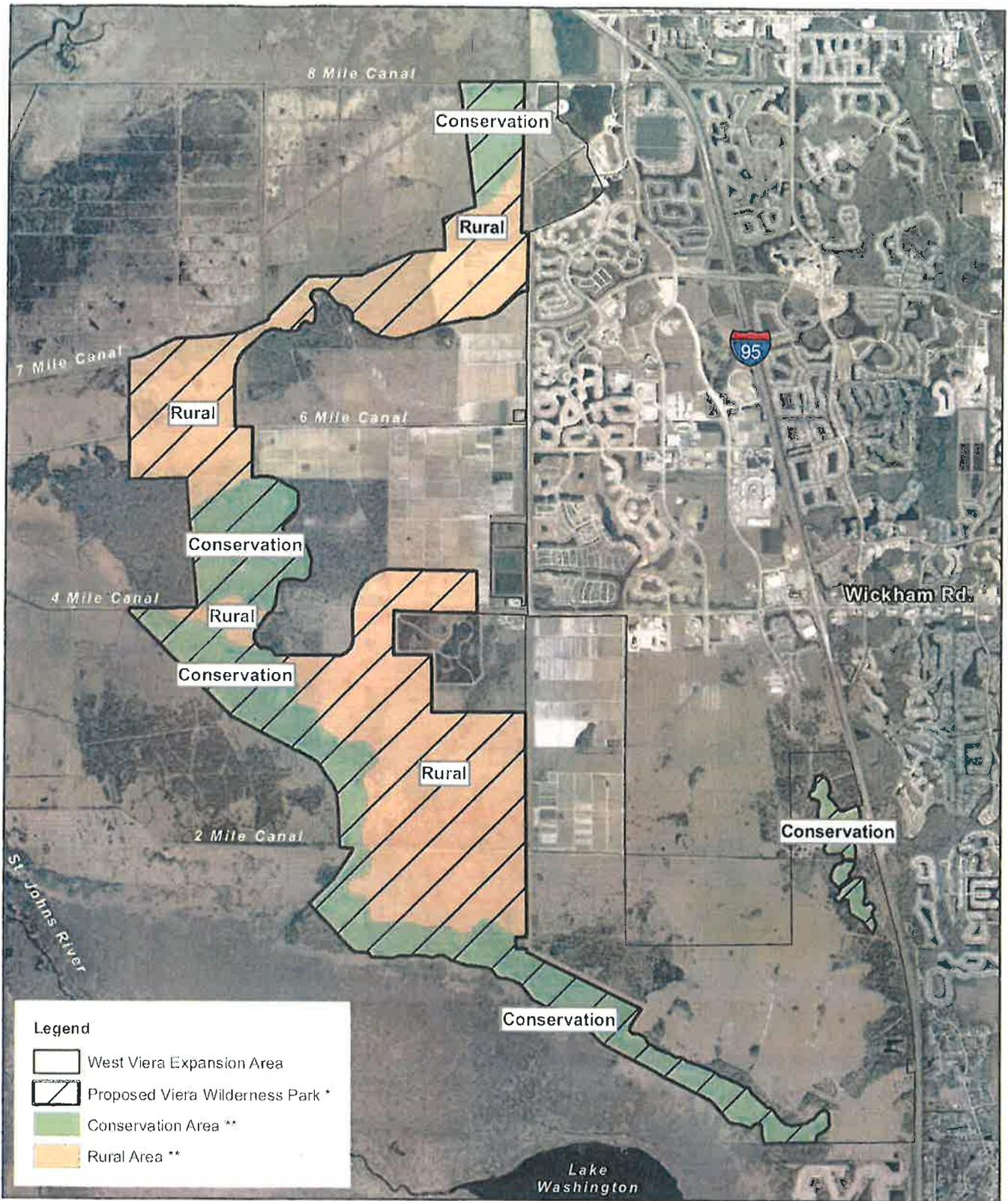
**Viera Habitat Management Plan**  
**Figure 8**  
 Biodiversity Hotspots (FFWCC 2002)



**GLATTING JACKSON KERCHER ANGLIN**

R 35 E | R 36 E





Aerial Cartographics of America (IACA) 2008 Aerial Photograph

### Viera Habitat Management Plan

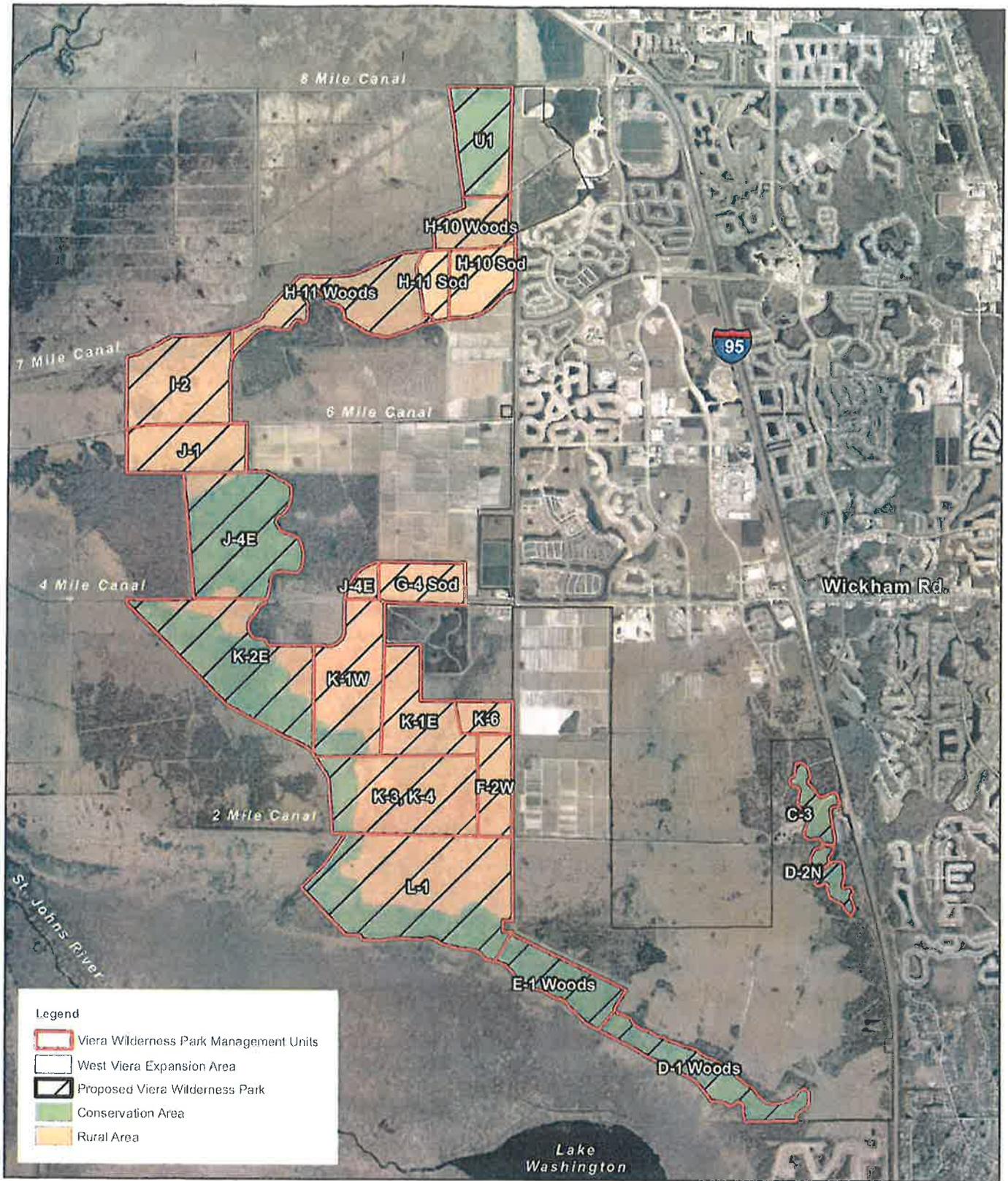
Figure 10  
Viera Wilderness Park  
Rural and Conservation Areas



**GLATTING JACKSON KERCHER ANGLIN**  
INCORPORATED

\* Final Boundary (Subject to Staging Plan)

\*\* Portions of the Rural Area and Conservation Area will transition to Rural District and Conservation District pursuant to the DRI Staging Plan set forth in the Development Order in accordance with applicable environmental regulatory permits.



Aerial Cartographics of America (ACA) 2008 Aerial Photograph

### Viera Habitat Management Plan

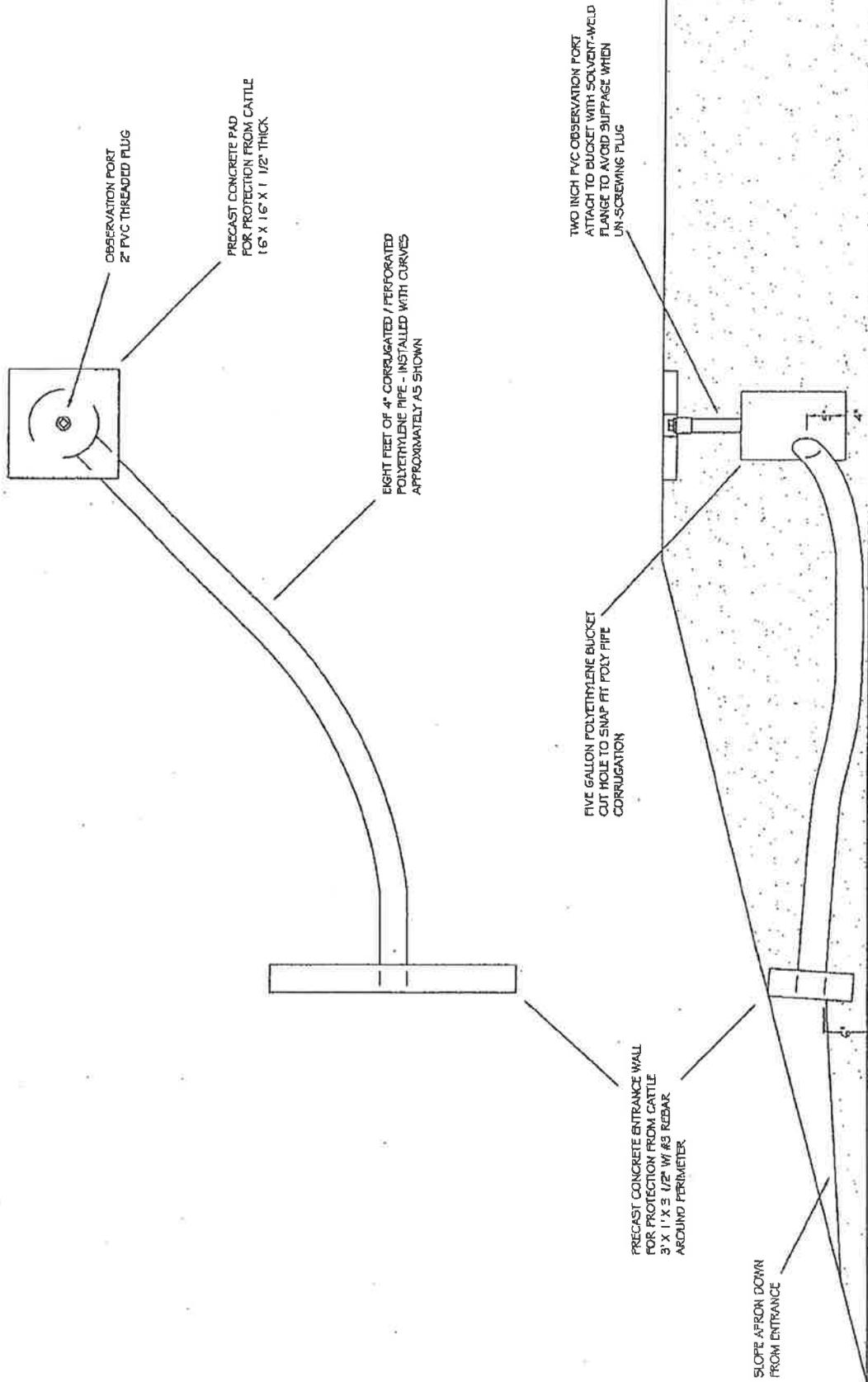
Figure 11  
Viera Wilderness Park Management Units

The management units represent Duda's pasture boundaries and labels.



**GLATTING JACKSON KERCHER ANGLIN**

PLAN VIEW (MOUND NOT SHOWN FOR CLARITY)



**DUDA**  
 A. Duda & Sons, Inc.  
 P.O. BOX 257  
 OYUNGO, FLORIDA 32785

TITLE: **FIGURE 9  
 ARTIFICIAL BURROW  
 CONSTRUCTION DETAIL**

DATE: \_\_\_\_\_ SCALE: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 DRAWN BY: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_

**Viera Habitat Management Plan**  
 Figure 12  
 Artificial Burrow Construction Detail  
 (Source: DUDA)

CROSS-SECTION VIEW

**Table 1 - Soil Descriptions and Characteristics for the West Viera Expansion Area Project Site, Brevard County, Florida**

Soil Name and Map Symbol	Brief Soil Description	Seasonal High Water Table		Permeability Rate (in/hour)	Hydric Status
		Depth (in)	Duration (mo)		
Anclote sand (An)	Nearly level; very poorly drained	0-10	>6	6-20 to a depth of 19 in. 6-20 to a depth of 72 in.	100% hydric component
Basinger sand (Ba)	Nearly level; poorly drained	0-10 10-40	2-6 >6	>20 to a depth of 80 in.	90% hydric component
Chobee sandy loam (Ch)	Nearly level; very poorly drained	flooded 0-10 10-40	1-6 6-9 3-6	2-6 to a depth of 14 in.; 0.6-2 from 14 to 38; 0.6-2 from 38 to 63	100% hydric component
Copeland complex (Cp)	Nearly level; very poorly drained	0-10	>6	>20 to a depth of 15 in.; 0.6-2 from 15 to 22 in	85% hydric component
Eau Gallie sand (Eg)	Nearly level; poorly drained	0-10 10-40	1-4 >6	6-20 to a depth of 22 in.; 0.6-6 from 22 to 35; 6-20 from 35 to 55	20% hydric inclusion
Felda sand (Fa)	Nearly level; poorly drained	0-10 10-40	2-6 >6	6-20 to a depth of 30 in. 0.6-6 to a depth of 49 in. 0.6-6 to a depth of 62 in.	80% hydric component
Floridana sand (Fn)	Nearly level; very poorly drained	0-10 10-30	6-9 3-6	2-6 to a depth of 12 in.; 6-20 from 12 to 29; 0.6-2 from 29 to 62	95% hydric component
Immokalee sand (Im)	Nearly level; poorly drained	0-10 10-40	1-2 >6	6-20 to a depth of 33 in.; 0.6-6 from 33 to 65 in.; 6-20 from 65 to 80 in.	30% hydric inclusion
Malabar sand (Ma)	Nearly level; poorly drained	0-10 10-40	1-2 >6	6-20 to a depth of 45 in.; 0.6-6 from 45 to 61 in.	20% hydric component
Micco peat (Mc)	Nearly level; very poorly drained	flooded 0-10	>6 9-12	6-20 to a depth of 30 in.; 6-20 from 30 to 38 in.; 0.6-6 from 38 to 55 in	100% hydric component
Myakka sand (Mk)	Nearly level; poorly drained	0-10 10-40	1-4 >6	6-20 to a depth of 22 in.; 0.6-2 from 22 to 35 in.; 0.6-2 from 35 to 46 in.	30% hydric inclusion
Oldsmar sand (Od)	Nearly level; poorly drained	0-10 10-40	1-3 >6	6.3-20 to a depth of 36 in.; 2-6 from 36 to 51 in.; 2-6 from 51 to 55 in.	20% hydric inclusion
Pineda sand (Pn)	Nearly level; poorly drained	0-10 40-60	1-2 >6	6-20 to a depth of 38 in.; 2-6 from 38 to 60 in.; 6-20 from 60 to 64 in.	20% hydric inclusion
Pomello sand (Ps)	Nearly level; moderately well drained	30-40 10-40	2-4 >6	>20 to a depth of 80 in.	Not hydric
Pompano sand (Pw)	Nearly level; poorly drained	0-10 10-40	2-6 >6	>20 to a depth of 90 in.	80% hydric component; 10% hydric inclusion
Samsula muck, depressional (62)	Nearly level; very poorly drained	flooded	>6 9-12	6-20 to a depth of 22 in.; 6-20 to a depth of 65 in.	100% hydric component
Tomoka muck (Tw)	Nearly level; very poorly drained	flooded 0-10	>6 9-12	6-20 to a depth of 35 in.; 0.6-6 from 35 to 55 in.	100% hydric component
Valkaria sand (Va)	Nearly level; poorly drained	0-10	2-6	>20 to a depth of 80 in.	85% hydric component
Wabasso sand (Wa)	Nearly level; poorly drained	0-10 10-30	1-2 >6	6-20 to a depth of 28 in.; 0.6-2 from 28 to 62 in.	40% hydric inclusion
Winder loamy sand (Wn)	Nearly level; poorly drained	0-10 10-30	2-6 >6	6-20 to a depth of 12 in.; 0.6-2 from 65 in.	80% hydric component

Table 2. WILDLIFE AND PLANT SPECIES LISTED AS THREATENED, ENDANGERED, AND/OR SPECIES OF SPECIAL CONCERN THAT POTENTIALLY OCCUR ON THE WEST VIERA EXPANSION AREA

Viera DRI, Substantial Deviation #2

Scientific Name	Common Name	State	USFWS	Habitat Type	Probability of Occurrence
<i>Plants</i>					
<i>Andropogon arctatus</i>	pinewood bluestem	T		1,3,4	Medium
<i>Asclepias curtissii</i>	Curtis' milkweed	E		1,3,4,5	Low
<i>Calamovilfa curtissii</i>	Curtis' sandgrass	T		4	High
<i>Calopogon multiflorus</i>	many-flowered grass-pink	E		4	High
<i>Centrosema arenicola</i>	sand butterfly pea	E		2	Low
<i>Cereus eriophorus</i>	fragrant prickly-apple	E	E	5,18	Low
<i>Cereus gracilis</i>	west coast prickly-apple	E		5,18	Low
<i>Chamaesyce cumulicola</i>	sand dune spurge	E		1,13	Very Low
<i>Chrysophyllum oliviforme</i>	satin leaf	T		3,5	Low
<i>Coelorachis tuberculosa</i>	flord	T		9,11	Medium
<i>Conradina grandiflora</i>	large-flowered rosemary	E		1	Very Low
<i>Drypetes lateriflora</i>	Guiana plum	T		5	Medium
<i>Encyclia tampensis</i>	Florida butterfly orchid	C		5,10,14	High
<i>Epidendrum conopseum</i>	green-fly orchid	C		5,10,14	High
<i>Garberia heterophylla</i>	garberia	T		1,2	Low
<i>Hexalectris spicata</i>	crested coralroot	E		5	Medium
<i>Lantana depressa</i>	pineland lantana	E		6,13	Very Low
<i>Lechea cernua</i>	scrub pinweed	T		1	Very Low
<i>Lechea divaricata</i>	spreading pinweed	E		3,4	High
<i>Lilium catesbaei</i>	pine lily	T		4,9	High
<i>Lindera subcoriacea</i>	bog spicebush	E		5	Low
<i>Lycopodium cernuum</i>	nodding club-moss	C		4,9,10	High
<i>Matelea gonocarpos</i>	angle-pod	T		5	Medium
<i>Monotropis reynoldsiae</i>	pygmy-pipes	E		5	Medium
<i>Myrcianthes fragrans</i>	Simpson's stopper	T		5	Medium
<i>Nemastylis floridana</i>	celestial lily	E		4,9,10	High
<i>Nolina atopocarpa</i>	Florida beargrass	T		4	Medium
<i>Ophioglossum palmatum</i>	hand fern	E		5,14	Medium
<i>Opuntia stricta</i>	shell mound prickly-pear	T		5,13,18	Low
<i>Osmunda cinnamomea</i>	cinnamon fern	C		9,10	Present
<i>Osmunda regalis</i>	royal fern	C		9,10	Present
<i>Pecluma dispersa</i>	widespread polypody	E		5,14	Medium
<i>Pecluma plumula</i>	plume polypody	E		5,8,14	Medium
<i>Pecluma ptilodon</i>	swamp plume polypody	E		5,8,10	Medium
<i>Peperomia humilis</i>	Reddish Peperomia	E		5	Medium
<i>Peperomia obtusifolia</i>	Florida Peperomia	E		5,14	Medium
<i>Pinguicula caerulea</i>	blue butterwort	T		4	Present
<i>Pinguicula lutea</i>	yellow butterwort	T		4,7,10	Present
<i>Platanthera blephariglottis</i>	white-fringed orchid	T		4,7,9	High
<i>Platanthera ciliaris</i>	yellow-fringed orchid	T		4,7,8,9,10	High
<i>Platanthera nivea</i>	snowy orchid	T		4,7	High
<i>Pteroglossaspis ecristata</i>	noncrested eulophia	T		1,2	Medium
<i>Rhapidophyllum hystrix</i>	needle palm	C		8,10	Medium
<i>Scaevola plumieri</i>	inkberry	T		10	High
<i>Schwalbea americana</i>	chaff-seed	E	E	3,4,5	Low
<i>Tephrosia angustissima</i>	hoary pea	E		5	Low
<i>Tillandsia utriculata</i>	giant wild-pine	E		3,4,5,10,14	High
<i>Tournefortia gnaphalodes</i>	bay lavender	E		13	Very Low
<i>Verbena maritima</i>	coastal vervain	E		3,13	Low
<i>Verbena tampensis</i>	Tampa vervain	E		5	Medium
<i>Warea carteri</i>	Carter's mustard	E	E	1,2	Very Low
<i>Zamia pumila</i>	coontie	C		1,2,3,5	High
<i>Zephyranthes simpsonii</i>	Simpson's zephyr-lily	T		4	High

Scientific Name	Common Name	State	USFWS	Habitat Type	Probability of Occurrence
<i>Amphibians</i>					
<i>Rana capito</i>	gopher frog	SSC		4,6,9	Medium
<i>Birds</i>					
<i>Ajaia ajaja</i>	roseate spoonbill	SSC		7,9	Present
<i>Aphelocoma coerulescens</i>	Florida scrub-jay	T	T	1	Low
<i>Aramus guarana</i>	limpkin	SSC		7,9,10,11	Medium
<i>Charadrius melodus</i>	piping plover	T	T	16	Low
<i>Dendroica kirtlandii</i>	Kirtland's warbler	E	E	1,5	Medium
<i>Egretta caerulea</i>	little blue heron	SSC		7,9,10,11	Present
<i>Egretta rufescens</i>	reddish egret	SSC		16,17	Medium
<i>Egretta thula</i>	snowy egret	SSC		7,9,10,11	Present
<i>Egretta tricolor</i>	tricolored heron	SSC		7,9,10,11	Present
<i>Eudocimus albus</i>	white ibis	SSC		7,9,10,11,12	Present
<i>Falco peregrinus ssp.</i>	peregrine falcon	E	E	6,7,8,9,10,11,12	Medium
<i>Falco sparverius paulus</i>	southeastern American kestrel	T		2,3,4,6,7,12	High
<i>Grus canadensis pratensis</i>	Florida sandhill crane	T		6,7,9,12	Present
<i>Haematopus palliatus</i>	American oystercatcher	SSC		16	Low
<i>Haliaeetus leucocephalus</i>	bald eagle	*	*	2,3,4,8,9,10,11	Present
<i>Mycteria americana</i>	wood stork	E	E	4,9,10,12	Present
<i>Pelecanus occidentalis</i>	brown pelican	SSC		17	Low
<i>Picoides borealis</i>	red-cockaded woodpecker	T	E	2,3,4	Low
<i>Polyborus plancus audubonii</i>	Audubon's crested caracara	T	T	4,5,6,7,9	Present
<i>Rynchops niger</i>	black skimmer	SSC		7,9,10	Low
<i>Speotyto cunicularia</i>	burrowing owl	SSC		2,6,12	Present
<i>Sterna antillarum</i>	least tern	T		9,11,12	Low
<i>Vermivora bachmanii</i>	Bachman's warbler	E	E	8,10	Medium
<i>Mammals</i>					
<i>Blarina carolinensis</i>	Sherman's short-tailed shrew	SSC		4,5,7	Medium
<i>Peromyscus polionotus niveiventris</i>	southeastern beach mouse	T	T	1,13	Low
<i>Podomys floridanus</i>	Florida mouse	SSC		1,2,3	Low
<i>Trichechus manatus</i>	Florida manatee	E	E	15	Absent
<i>Ursus americanus floridanus</i>	Florida black bear	T	CA	1,2,3,4,5,8,10	Medium
<i>Reptiles</i>					
<i>Alligator mississippiensis</i>	American alligator	SSC	T(S/A)	8,9,10,11	Present
<i>Caretta caretta</i>	Atlantic loggerhead turtle	T	T	15,16	Absent
<i>Chelonia mydas mydas</i>	Atlantic green turtle	E	E	15,16	Absent
<i>Dermochelys coriacea</i>	leatherback turtle	E	E	15,16	Absent
<i>Drymarchon corais couperi</i>	eastern indigo snake	T	T	1,2,3,5,6,12,17	High
<i>Gopherus polyphemus</i>	gopher tortoise	T		1,2,3,4,5,12	Present
<i>Lepidochelys kempii</i>	Atlantic ridley turtle	E	E	15,16	Absent
<i>Nerodia fasciata taeniata</i>	Atlantic salt marsh snake	T	T	9,15,16	Low
<i>Pituophis melanoleucus mugitus</i>	Florida pine snake	SSC		2,3,5,12	Medium

SSC - Species of Special Concern (FGFWFC)

C - Commercially Exploited

T - Threatened

T(S/A) - Similarity of Appearance (USFWS)

CA - Candidate for Listing

E - Endangered

Habitat Types

1 - Scrub

2 - Sandhills

3 - Scrubby Flatwoods

4 - Wet/Mesic Flatwoods

5 - Hammock

6 - Dry Prairie

7 - Wet Prairie

8 - Bottomland Hardwood

9 - Marsh/Bog

10 - Swamp/Dome

11 - Ponds/Lakes

12 - Disturbed/Cultivated

13 - Sand Dunes

14 - Epiphyte

15 - Marine

16 - Beaches

17 - Mangroves

18 - Shell middens

\* NOTE FOR EAGLES

Source: Wunderlin, R. 1998. Guide to the Vascular Plants of Florida. Univ. P of Florida

Various authors. Endangered Biota of Florida series. 1992-1996

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**Table 3. Conceptual Timing Periods of VWP Management Activities**

<b>Section No.</b>	<b>Conservation/Management Action</b>	<b>Periods</b>
<b>3.1</b>	Resource Protection and Conservation	I-III
<b>3.2</b>	Prescribed Fire	II-III*
<b>3.3a</b>	Invasive Exotic Plant Control	II-III*
<b>3.3b</b>	Timber Management	I-III
<b>3.3c</b>	Mechanical Management	II-III*
<b>3.4</b>	Hydrological Enhancement	II-III*
<b>3.5a</b>	Swale Maintenance	I-III
<b>3.5b</b>	Graze Cattle	I-III
<b>3.5c</b>	Turf Grass/Pasture Grass Sod Production	I-III
<b>3.6</b>	Monitoring	I-III
<b>3.7</b>	Operations	I-III
<b>3.8</b>	Funding	I-III
<b>3.9</b>	Community Outreach and Collaboration	II-III
<b>4.0</b>	Individual Listed Species Consideration	I-III

\*A limited amount of these activities may occur in Period I but will largely occur in Period II.

**Table 4 Prescribed Fire Regimes**

Natural Communities	FLUCFCS Type	FNAI Type*	Frequency (years)*
Improved Pasture	211	NA	As Needed
Palmetto Prairie	321	Mesic flatwoods	1 – 8
Pine Flatwoods	411	Mesic flatwoods	1 – 8
Live Oak Hammock	427	Mesic hammock	-
Cabbage Palm Hammock	428	Prairie hammock	1 – 8
Hardwood-conifer Mixed	434	Upland mixed forest	5 – 30
Mixed Hardwood	438	Upland mixed forest	5 – 30
Bay Swamp	611	Basin swamp	5 – 150
Mixed Wetland Hardwoods	617	Depression marsh	5 – 30
Willow/Elderberry Wetland	618	Depression marsh	1 – 8
Exotic Wetland Hardwoods	619	Depression marsh	1 – 8
Hydric Pine Flatwoods	625	Wet flatwoods	3 – 10
Hydric Pine Savannah	626	Wet flatwoods	3 – 10
Wetland Forested Mixed	630	Hydric hammock	5 – 30
Cabbage Palm Wetland	632	Hydric hammock	1 – 8
Cabbage Palm-Hardwood Mixed	633	Hydric hammock	5 – 30
Freshwater Marsh	641	Floodplain marsh	1 – 5
Wet Prairie	643	Wet prairie	2 – 4
Hydric Pasture	647	NA	As Needed

\*Note: Burn regimes are approximations based on Florida Natural Areas Inventory (FNAI) community type. See Guide to the Natural Communities of Florida, 1990, for community descriptions.

Table 5.  
Listed Species Nesting Season

Common Name	Scientific Name	Status State/Fed	Nesting season												Source		
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
Bald eagle	<i>Haliaeetus leucocephalus</i>	*															Wood
Crested caracara	<i>Polyborus plancus audubonii</i>	T / T															Wood; USFWS
Florida sandhill crane	<i>Grus canadensis pratensis</i>	T / -															Wood
Burrowing owl	<i>Athene cucularia floridana</i>	SSC / -															Wood
Southeastern American kestrel	<i>Falco sparverius paulus</i>	T / -															Wood
Gopher tortoise	<i>Gopherus polyphemus</i>	T / -															Wood

█ peak nesting season

\* Bald eagles are no longer protected under the Endangered Species Act. The bald eagle will continue to be federally protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. In Florida, the bald eagle is no longer a listed species, though it continues to be protected under the state's newly enacted bald eagle rule, F.A.C. 68A-16.002 Bald Eagle (*Haliaeetus leucocephalus*).

**Table 6 Category I Exotic Plants in the VWP**

<b>Common Name</b>	<b>Scientific Name</b>	<b>Primary Location / MU* *Management Unit</b>	<b>FLEPPC Category</b>
Brazilian pepper	<i>Schinus terebinthifolius</i>	Throughout VWP, primarily along/in ditches, wetlands, hammocks	I
Camphor tree	<i>Cinnamomum camphora</i>	Flatwoods, hammocks	I
Cogon grass	<i>Imperata cylindrica</i>	Flatwoods, along ditches	I
Old World climbing fern	<i>Lygodium microphyllum</i>	Roads/ditches of J4	I
Paragrass	<i>Urochloa mutica</i>	Ditches, wetlands	I
Torpedo grass	<i>Panicum repens</i>	Ditches, wetlands	I
Tropical soda apple	<i>Solanum viarum</i>	Pastures	I
Water hyacinth	<i>Eichhornia crassipes</i>	Ditches, marshes	I
Wild taro	<i>Colocasia esculenta</i>	Ditches, marshes	I
Chinese Tallow Tree	<i>Sapium Sebiferum</i>	Flatwoods, ditches, pastures	I

## APPENDIX A

### Vegetative Community Descriptions

#### *Residential - Low Density (110) 15.9 acres*

This land use occurs in the northern portion of the Viera Wilderness Park (VWP) and includes small, single-family residences or mobile homes for agricultural personnel. It also includes other support facilities used for agricultural operations, principally for cattle grazing and sod farming.

#### *Improved Pasture (211) 1824.85 acres*

Improved pasture is the most extensive cover type. It occurs throughout much of the VWP and has been planted for cattle grazing and bahiagrass sod production. The plant species composition in this cover type is highly variable and ranges from areas dominated by bahiagrass to areas with more herbaceous diversity. Canopy species such as longleaf pine (*Pinus palustris*), slash pine (*P. elliotti*), cabbage palm, and live oak are scattered in varying densities, although they do not exceed 10 percent areal coverage. Groundcover species include bahiagrass, bermudagrass (*Cynodon dactylon*), turkey tangle fogfruit (*Phyla nodiflora*), chalky bluestem (*Andropogon virginicus*), bushy bluestem (*Andropogon glomeratus*), coreopsis (*Coreopsis* spp.), fine-leaved white-top sedge (*Dichromena colorata*), Mexican clover (*Richardia scabra*), caesar weed (*Urena lobata*), and scattered soft rush (*Juncus effusus*). Other ground cover species found within this cover type include flatsedges (*Cyperus* spp.), beakrushes (*Rhynchospora* spp.), dogfennel (*Eupatorium capillifolium*), carpetgrass (*Axonopus* sp.), sand cordgrass (*Spartina bakeri*), blackberry (*Rubus* sp.), goldenrod (*Solidago* sp.), poor man's pepper (*Lepidium virginicum*), spadeleaf (*Centella asiatica*), and marsh pennywort (*Hydrocotyle umbellata*), false goldenrod (*Euthamia minor*), toadflax (*Linaria canadensis*), thistle (*Cirsium horridulum*), sedges (*Carex* spp.), sand vetch (*Vicia* sp.), smutgrass (*Sporobolus indicus*), and occasional tropical soda apple (*Solanum viarum*).

Some pastures are intentionally and frequently flooded as agricultural practices require and are dominated by bahiagrass with fairly dense zones of soft rush, fine-leaved white-top sedge, beakrushes, marsh pennywort, spadeleaf, scattered sand cordgrass, umbrella-sedge (*Fuirena* sp.), bishop weed (*Ptilimnium* sp.), purslane (*Portulaca* sp.), stinking camphorweed (*Pluchea foetida*), crabgrass (*Digitaria* sp.), torpedograss (*Panicum repens*), hairsedge (*Fimbristylis* spp.), and scattered wax myrtle (*Myrica cerifera*).

Within this cover type is an extensive network of canals, ditches, and swales used for drainage or irrigation, depending on rainfall throughout the year. During dry seasons, water levels are managed by allowing artesian wells to flow in concert with the placement or removal of plugs in the ditches or swales. During wet seasons the ditches and swales are opened to avoid long-term inundation or flooding. Because of the VWP's

relatively flat topography, this means of controlling water levels is generally effective for irrigating the sod and pasture fields, and providing drinking water for cattle.

*Sod Farm (242) 274.29 acres*

This small land use is intensively managed, and represents about two percent of the VWP's total area. It includes intensive turf grass sod farming operations. Activities within these sod fields are focused on maintaining a monoculture of turf grasses, including Floratam, Zoysia, Bermuda, Raleigh, Seville, and Bitter Blue. Like the improved pasture cover type, it is interlaced by a network of canals, ditches, and swales that are used for drainage and irrigation.

*Other Open Land (260) 2.08 acres*

This category includes those agricultural lands whose intended usage cannot be determined.

*Palmetto Prairie (321) 45.11 acres*

This vegetation type occurs in locations that likely were pine flatwoods or dry prairie (see FNAI) historically but have been recently timbered. The canopy and sub canopy are conspicuously lacking and consist of occasional cabbage palm or live oak. The shrub layer consists of winged sumac (*Rhus copallina*) and American beautyberry (*Callicarpa americana*). The ground cover consists of dense saw palmetto (*Serenoa repens*), wiregrass (*Aristida stricta*), bracken fern (*Pteridium aquilinum*), rusty lyonia (*Lyonia ferruginea*), bahiagrass, goldenrod, milkpea (*Galactia regularis*), paw paw (*Asimina reticulata*), gallberry (*Ilex glabra*), occasional blackberry, false goldenrod, dogfennel, and caesarweed. Typically these palmetto prairies are relatively dry.

*Pine Flatwoods (411) 1232.13 acres*

This is VWP's second largest community type. The canopy within this vegetative community consists of sparse slash pine and longleaf pine, with a shrub layer of scattered live oak, wax myrtle, Brazilian pepper (*Schinus terebinthifolius*), cabbage palm, occasional swamp bay (*Persea palustris*), saltbush (*Baccharis halimifolia*), and laurel oak (*Q. laurifolia*). Ground cover species include dense saw palmetto, caesarweed, blackberry, dogfennel, scattered bahiagrass, American beautyberry, coreopsis, bushy bluestem, chalky bluestem, blue maidencane (*Amphicarpum muehlenbergianum*), shiny blueberry (*Vaccinium myrsinites*), runner oak (*Q. pumila*), hairy indigo (*Indigofera hirsuta*), gallberry, wiregrass, false goldenrod, blackroot (*Pterocaulon virgatum*), stinking camphorweed, St. Peter's wort (*Hypericum tetrapetalum*), carpetgrass, yellow milkwort (*Polygala lutea*), paw paw, bantam button (*Syngonanthus flavidulus*), goldenrod, Virginia buttonweed (*Diodia virginiana*), greenbrier (*Smilax laurifolia*), bracken fern, and gallberry. Many of the pine flatwoods have been timbered recently and, in some areas, are more dominated by cabbage palm and wax myrtle.

*Live Oak Hammock (427) 102.69 acres*

Dominated by live oak trees, this vegetation type occurs in varying densities throughout the VWP. Other canopy species within this cover type include scattered cabbage palm, and laurel oak. The shrub and groundcover layers are sparse and open, and consist of scattered wax myrtle, saw palmetto, bahiagrass, witchgrass (*Dicanthilium* sp.), blackroot, milkpea, goldenrod, American beautyberry, caesarweed, wildgrape (*Muscadine rotundifolia*), and live oak. Resurrection fern (*Pleopeltis polypodioides*) covers live oak branches in many places.

*Cabbage Palm Hammock (428) 213.19 acres*

The canopy within this vegetative community type is sparse and open, and consists predominately of cabbage palm with scattered slash pine, laurel oak, and live oak. The shrub layer is fairly open and consists of cabbage palm, occasional wax myrtle, Brazilian pepper, laurel oak, live oak, slash pine, and Hercules club (*Zanthoxylum clava-herculis*). The ground cover consists of scattered clumps of saw palmetto interspersed with various grasses such as bermudagrass, blue maidencane, broomsedge, bushy bluestem, dogfennel, bahiagrass, spikerush (*Eleocharis* spp.), false goldenrod, torpedograss, wiregrass, and scattered blue toadflax, St. John's Wort, blackroot, sabatia (*Sabatia* sp.), marsh fleabane (*Pluchea* spp.), carpetgrass, Mexican clover, clover (*Dalea* spp.), meadowbeauty (*Rhexia* spp.), American beautyberry, goldenrod, blackberry, caesarweed, sand cordgrass, marsh pennywort, yellow milkwort (*Polygala lutea*), spadeleaf, bracken fern, hairy indigo, elephant's-foot (*Elephantopus* sp.), tropical soda-apple, and fogfruit.

*Hardwood-Conifer Mixed (434) 222.23 acres*

This habitat type likely was mesic or hydric pine flatwoods historically, and is vegetatively similar in nature, without the pine canopy. This community type appears to have been timbered in the past 60 years as evidenced by sporadic pine stumps. Comprised of a mixture of canopy species such as slash pine, longleaf pine, laurel oak, live oak, water oak (*Q. nigra*), and occasional cabbage palm, this community type occurs throughout VWP. It generally contains a sub canopy of the above-listed species and a fairly open shrub layer of cabbage palm, and scattered Brazilian pepper. The shrub and ground cover consists of cabbage palm, saw palmetto, wax myrtle, live and laurel oak saplings, blue maidencane, caesarweed, wiregrass, bracken fern, boston fern (*Nephrolepsis* sp.), witchgrass, heart-leaved St. Peter's wort, American beautyberry, chalky bluestem, bushy bluestem, paw paw, fine-leaved white-top sedge, dogfennel, false goldenrod, bahiagrass, shiny blueberry, milkpea, and fireweed (*Erechtites hieracifolia*).

*Mixed Hardwoods (438) 5.10 acres*

This is a hardwood community in which no single species or species group appears to achieve a 66 percent dominance of the canopy. This class of hardwoods includes any combination of large and small hardwood tree species none of which can be identified as dominating the canopy.

*Canals and Ditches (511) 91.08 acres*

As mentioned previously, canals and ditches occur throughout the VWP primarily to provide drainage and irrigation for agriculture. The canals are often closely associated with major roads in VPW and drain the extensive network of ditches. The principal canals run east-west and are named based as discussed above. They all carry flow west to the St. Johns River from the DRI and other communities east of Interstate 95.

*Reservoirs, less than 10 acres (534) 1.66 acres*

These small reservoirs are scattered throughout VWP and are usually associated with artesian wells or cattle operations.

*Mixed Wetland Hardwoods (617) 4.87 acres*

This category is reserved for those wetland hardwood communities which are composed of a large variety of hardwood species tolerant of hydric conditions yet exhibit an ill defined mixture of species.

*Willow and Elderberry Wetland (618) 12.17 acres*

The shrub and groundcover in this habitat is similar to the Bay Swamp cover type. Also occurring in small amounts, these wetlands are dominated by shrub species such as Carolina willow (*Salix caroliniana*), elderberry, scattered Brazillian pepper and wax myrtle. These wetlands may be former wet prairie systems that have experienced an unnatural fire regime, thus allowing the shrubs to dominate. The understory consists of swamp fern (*Blechnum serrulatum*), Virginia chain fern, blue maidencane, sand cordgrass, pickerelweed (*Pontederia cordata*), and marsh pennywort.

*Exotic Wetland Hardwoods (619) 31.42 acres*

This wetland cover type occurs in varying amounts throughout VWP. Brazilian pepper dominates the canopy and sub canopy layers, and the groundcover is often sparse from the dense shade of this exotic species, but includes generally the same species as the willow and elderberry wetland.

*Hydric Pine Flatwoods (625) 552.69 acres*

Dominated by a canopy of slash pine, this wet flatwoods community has a diverse groundcover of herbaceous wetland plants. One of the larger community types, it occurs primarily in the western and southern parts of the VWP. Scattered cabbage palm also occurs in the canopy, while the groundcover is dominated by species including saw palmetto, coreopsis, pink sundew (*Drosera capillaris*), pockets of sand cordgrass, yellow milkwort, pipewort (*Eriocaulon* spp.), wiregrass, wide-spread blue maidencane, occasional St. John's wort, occasional blackberry, cabbage palm, scattered wax myrtle, sandweed (*Hypericum fasciculatum*), butterwort (*Pinguicula* sp.), occasional sawgrass (*Cladium jamaicense*), hatpins (*Eriocaulon decangulare*), bog buttons, beakrush, ladies' tresses (*Spiranthes* spp.), fine-leaved white-top sedge, and yellow-eyed grass (*Xyris* spp.).

*Hydric Pine Savannah (626) 15.24 acres*

Like the hydric pine flatwoods community, this wetland habitat type is also comprised of a diverse mix of herbaceous wetland species, but has a sparser canopy of slash pine, occasional laurel oak, and cabbage palm.

These wetlands were probably more herbaceous historically but now have scattered canopy and sub-canopy species, probably from an altered fire regime or hydrology, or both. These areas appear to inundate typically less than six inches for long periods of time or stay saturated at the surface.

The shrub layer is sparse and contains scattered cabbage palm, wax myrtle, and slash pine. The groundcover is dominated by blue maidencane, sand cordgrass, wiregrass, scattered saw palmetto, false goldenrod, eastern blue-eyed grass (*Sisyrinchium atlanticum*), elephant's foot, spadeleaf (*Centella asiatica*), swamp fern, wax myrtle, marsh bristlegrass (*Setaria parviflora*), scattered blackberry, pink sundew, meadowbeauty (*Rhexia* spp.), fine-leaved white-top sedge, coreopsis, stinking camphorweed, marsh pennywort, red ludwigia (*Ludwigia repens*), dogfennel, fogfruit, beaksedge, shortleaf yellow-eyed grass (*Xyris brevifolia*), caesarweed, bushy bluestem, nutsedge, snakeroot (*Eryngium yuccifolium*), taperleaf waterhorehound (*Lycopus rubellus*), occasional spring lily (*crinum ampricanum*), St. John's wort, and mermaid-weed (*Proserpinaca pectinata*).

*Wetland Forested Mixed (630) 72.67 acres*

These wetlands contain a mixture of pines and hardwoods, neither of which is dominant. Canopy species include cabbage palm, Florida elm (*Ulmus americana* var. *floridana*), and slash pine. The shrub layer consists of Brazilian pepper, Chinese tallow (*Sapium sebiferum*), and red maple. Groundcover consists of fireweed, dayflower, greenbrier (*Smilax* sp.), dotted smartweed (*Polygonum punctatum*), sand cordgrass, and scattered marsh pennywort.

*Cabbage Palm Wetland (632) 46.98 acres*

Occurring as small hammocks throughout the VWP, this vegetation type is dominated by cabbage palm. The shrub and groundcover is often quite open and lacking, probably due to heavy grazing by cattle and consists of swamp fern, Virginia chain fern, dotted smartweed, marsh pennywort, dollar weed, sand cordgrass, poison ivy, Brazilian pepper, Chinese tallow, and scattered soft rush.

*Cabbage Palm-Hardwood Mixed (633) 46.59 acres*

Consisting of a canopy of various hardwoods, such as red maple, blackgum (*Nyssa sylvatica* var. *biflora*) and Florida elm, this cover type also includes cabbage palm, and slash pine. The shrub and groundcover of this wetland community are generally very open due to cattle grazing. Many of these wetlands have been drained by either perimeter ditches or ditches cut through their centers. The soils in the deepest portions of these

wetlands are deep mucks, surrounded by a perimeter of stained sand. Groundcover species include a variety of nuisance and exotic species including marsh pennywort, dayflower, Brazilian pepper, dogfennel, tropical soda apple, pokeweed (*Phytolacca americana*), and fireweed. Other species consist of poison ivy, swamp fern, American beautyberry, scattered soft rush, butterweed (*Packera glabella*), and infrequent pickerelweed.

*Freshwater Marsh (641) 84.81 acres*

This wetland community is scattered throughout the VWP, mostly as small, isolated systems. Many have ditches cut through them, yet they continue to exhibit characteristic wetland functions, because they generally occur within the deeper pockets of the landscape. Most marshes exhibit a diverse array of herbaceous cover consisting of lance-leaved arrowhead (*Sagittaria lancifolia*), pickerelweed, dotted smartweed, giant bulrush (*Scirpus* sp.), soft rush, lemon bacopa (*Bacopa caroliniana*), alligator flag (*Thalia geniculata*), marsh pennywort, sand cordgrass, sawgrass, with wildhemp (*Mikania scandens*), giant plume grass (*Erianthus giganteus*), swamp fern, saltbush, swamp hibiscus (*Hibiscus grandiflorus*), duck potato (*Sagittaria latifolia*), red ludwigia (*Ludwigia repens*), red maple, Carolina willow, string lily (*Crinum americanum*), and garden club (*Orontium aquaticum*). Cattails (*Typha latifolia*), marsh fleabane, lanceleaf fogfruit (*Phyla lanceolata*), and Brazilian pepper also occur with varying frequency. Virginia iris (*Iris virginica*) and canna (*Canna* sp.) also occur occasionally.

*Wet Prairie (643) 241.53 acres*

Like the freshwater marshes, wet prairies occur throughout the VWP and vary in quality based on their degree of hydrologic alteration. Many occur in close association with freshwater marshes and wet areas within the improved pasture cover type. Vegetation typically includes sand cordgrass and blue maidencane, and a diverse combination of herbaceous and occasional woody species. These plants include stinking camphorweed, eastern blue-eyed grass, torpedograss, blackberry, dogfennel, thistle, caesarweed, scattered cabbage palm, wax myrtle, Brazilian pepper, saltbush, spadeleaf, pink sundew, wiregrass, coreopsis, meadowbeauty, tropical soda apple, marsh pennywort, Baldwin's spikerush (*Eleocharis baldwinii*), Virginia chainfern, and false goldenrod.

*Hydric Pasture (647) 47.08 acres*

Hydric pasture occurs in small quantities throughout the VWP in direct association with the improved pasture (211) cover type. Many of these areas were historical wetlands and persist as wetlands despite intensive agricultural practices. However, some have elevated groundwater levels which are driven by artesian irrigation for cattle and pastures. This practice has artificially created fairly dense zones of wetland vegetation where upland communities likely existed historically. Nevertheless, the wetland characteristics are often marginal and seasonally variable and, because of their complexity, will require careful review before determining the exact extent of wetland jurisdiction.

Plant species composition in the hydric pastures includes many of the same species in the 211 cover type, particularly bahiagrass, but with greater densities of wetland species such as, soft rush, fine-leaved white-top sedge, beakrushes, marsh pennywort, spadeleaf, umbrella-sedge (*Fuirena* sp.), fringe-rush (*Fimbristylis* sp.), sand cordgrass, bishopweed, Florida purslane, stinking camphorweed, crabgrass, torpedograss, and scattered wax myrtle.

*Roads (814) 67.73 acres*

There are several miles of large, regularly maintained sand roads throughout VWP that are usually associated with the major canals and that also provide access to St. Johns River Water Management District lands. These roads support the cattle and sod operations. In addition, a number of smaller field roads occur within the site, and provide access to the outlying areas.

*Electric Power Transmission Lines (832) 3.68 acres*

Several high-tension power lines occur within a utility easement, traversing the site from the northern to the southeastern VWP boundaries.

## **APPENDIX B - Life Histories for Listed Species**

### **American alligator** (*Alligator mississippiensis*) (*State-listed Species of Special Concern and Federally-listed Threatened*)

American alligators have been observed in the larger drainage canals and surface waters within the Viera Wilderness Park (VWP). American alligators also use the large drainage canals, as well as conservation lands associated with the St. Johns River off-site.

Based on Ashton and Ashton, 1991, the American alligator is a large (>12 feet in length), carnivorous reptile that can inhabit virtually any body of water in Florida. Alligators typically eat fish and birds, but are opportunistic predators and will eat virtually any animal inhabiting, or venturing near the water. While mainly aquatic or semi-aquatic, male alligators will travel overland in search of mates, and migrate when water resources are low. Female alligators provide parental care for offspring, beginning with building a nest, usually on the fringes of wetlands, in which they lay 30 – 50 eggs (Ashton and Ashton, 1991). Once the eggs hatch (~70 days after oviposition) the mother carries the hatchlings into the water, and they may stay near the mother, who provides protection from predation for up to two (2) years.

The American alligator was previously federally-listed as endangered by the U.S. Fish and Wildlife Service, but was removed from the list and pronounced fully recovered in 1987. The basis for listing American alligators was reduced population sizes due to over hunting in the early portion of the twentieth century. However, since regulations were put into place banning the hunting of alligators, populations have exploded, successfully returning to levels nearing historical numbers. Currently, the American alligator is listed by the State of Florida as a Species of Special Concern, and regulated as such by the Florida Fish and Wildlife Conservation Commission (FFWCC).

In addition, the steadily increasing encroachment of humans into wetland areas, combined with the rapid population increases of alligators, have made human-alligator conflicts more common. Because alligators can persist in most water bodies, and because they are common in many wetlands in Florida, mitigation for this species is not usually necessary. Additionally, few impacts to large water systems (e.g., lakes, large streams, canals, etc.) generally occur due to wetland regulations prohibiting large-scale wetland disturbances; so alligators generally have sufficient habitat after development occurs.

### **Bald eagle** (*Haliaeetus leucocephalus*) (*State- and Federally-listed Threatened*)

Several bald eagle nests occur within the VWP. According to Curnutt (1996), the bald eagle is the largest raptor breeding in Florida, reaching up to 3 feet in height and a wingspan of 9 feet

(Curnutt, 1996). Juveniles are uniform brown, but molt into the conspicuous adult coloration, consisting of a white head and tail and brown body after their first year. Bald eagles migrate, returning to previously occupied territories and nest sites during the winter nesting season (Curnutt, 1996). Eagles form lifelong monogamous pair bonds, and will re-use the same nest in subsequent years, often repairing damage and adding onto the nest at the start of a new nesting season (Curnutt, 1996). Besides fish, eagles often eat carrion (e.g., roadkill), wading birds, reptiles, or may steal prey from seagulls or osprey (Curnutt, 1996). Eagles usually mature at 5 years of age and females generally produce 2-3 eggs annually, which take 35 days to hatch (Curnutt, 1996). Once hatched, young will fledge after 77 days.

Bald eagles declined dramatically following the widespread use of DDT. Following the ban of DDT, bald eagle populations began to recover. Current threats mainly include activities associated with loss and degradation of habitat due to development (Curnutt, 1996). This species has been de-listed from the Endangered Species Act.

**Burrowing owl (*Speotyto cunicularia*)**  
(State-listed Species of Special Concern)

Burrowing owls are propose to be relocated into the VWP. The Florida burrowing owl is a small (8 inches tall; wingspan of 20 inches) avian predator occurring throughout peninsular Florida (Millsap, 1996; Wood, 2001). Burrowing owls prefer open fields and prairies that are well-drained and allow construction of the burrows in which they nest. At present, artificial habitats such as lawns, sod fields, golf courses, and schoolyards contain the largest numbers and densities of burrowing owls in the state (Millsap, 1996). Owls often excavate their own burrows, which can be 10 feet long with an enlarged nest chamber at the end. The entrance is narrow (~ 5 x 3.5 in.) and most often excavated in patches of open sand (Wood, 2001). This species is monogamous and territorial, defending and using individual burrows or multiple burrows in successive years. Pairs generally begin to breed at 1 year of age, and decorate the entrance of the burrow with grass, feces, and shiny objects just prior to oviposition. Clutch size averages three eggs, and the female incubates and brood the young (Millsap, 1996; Wood, 2001). Fledging occurs 40 days after hatching, and juvenile females disperse farther (~580 yards) than males (88 yards) (Millsap and Bear, 1988; Wood, 2001). Densities in Cape Coral, Florida ranged from 1 – 10 pairs per km<sup>2</sup>, with higher densities occurring on lands with 50 – 75% development (Millsap and Bear, 1988).

Previous conservation efforts have consisted of monitoring populations in areas undergoing development (e.g., Millsap and Bear, 1988) or establishing protected areas designated as burrowing owl preserves (Erwin, 2001; Beasley, 2002). Although burrowing owls seem to favor moderate development in some instances (Millsap and Bear, 1988), even protected pastures managed for burrowing owls (e.g., vegetation kept short, etc.) have had little success sustaining or increasing populations (Erwin, 2001).

**Audubon's crested caracara** (*Polyborus plancus audubonii*)  
(State- and Federally-Threatened)

Audubon's crested caracara is a large raptor (length = 22 in, wingspan = 48 in) with a distinctive black crest on the back of the head (Layne, 1996). Sexual maturity is reached after 3-4 years, and females produce 2-3 eggs annually, usually November through April (Morrison, 2001; Wood, 2001). Incubation takes approximately 32 days, and young fledge at 7-8 weeks (Morrison, 2001). Fledglings are dependent upon adults for food for 8 more weeks (Layne, 1996). Breeding pairs are monogamous and defend territories year-round, which average 3,000 acres in size and may occur in a radius of 1.2-1.9 miles from the nest (Layne, 1996; Morrison, 2001).

Caracaras can fly between 20 – 40 mph, seldom soaring, but rather flying in straight lines or foraging by dipping, turning, and zigzagging (Wood, 2001). The diet consists largely of carrion, either scavenged from road kill or taken from other birds (e.g., crows or vultures), or live prey they capture themselves (Morrison, 2001). Caracaras have extremely long legs for their size, which makes them able walkers and aids in hunting in open pasture areas. Prey is carried in the beak, rather than in the talons like most raptors (Layne, 1996). Prey items are incredibly diverse and include insects, amphibians, fish, reptiles, mammals, and avian (Layne, 1996; Morrison, 2001).

Caracara prefer habitats including dry prairies, pastures, or grasslands with short groundcover and a mixture of herbaceous wetlands, hammocks, dead snags, and cabbage palms (Layne, 1996; Morrison, 2001). Nests are usually built in cabbage palm stands of 2-3 trees, and the nest is usually located in the upper branches facing south-east (Morrison, 2001). Nests are made of stalks and fibers from cabbage palms. Private cattle ranches are currently the stronghold for caracara, as the management practices of farmers (mowing, grazing, and burning) maintain habitat similar to historic prairie systems (Morrison, 2001).

The greatest threat to caracara is the large-scale degradation and development of prairie-like habitat (Morrison, 2001). Because they walk around looking for prey, overgrown habitats are unsuitable as foraging areas (Morrison, 2001). However, caracaras seem to be able to adapt to some level of human disturbance, and readily forage along roads and in cattle pens when present (Layne, 1996; Morrison, 2001). Since carrion makes up a large part of the caracara diet, large numbers of them are susceptible to vehicular mortality, especially juveniles (~50%), which have relatively less experience with traffic (Layne, 1996).

Several caracara nests have been documented in and around the VWP. They are closely associated with the South Central Regional Wastewater Treatment Facility (owned by Brevard County) and the improved pastures to the north, east, and south of the VWP.

**Florida sandhill crane** (*Grus canadensis pratensis*)  
(State-listed Threatened)

Several Florida sandhill crane nests have been observed within and adjacent to the VWP over the years. The non-migratory Florida sandhill crane is large (4 ft tall, 6.5 ft wingspan) and omnivorous, living in Florida year-round (Stys, 1997). Sandhill cranes prefer open habitats, such as prairies, and typically nest and roost in shallow, herbaceous wetlands (Nesbitt, 1996; Stys, 1997). Nesting usually occurs between January and August, and pairs will re-nest after the loss of eggs or chicks. Nests are often laid in shallow water above herbaceous marshes or at the marsh/upland interface. Several pairs may nest within the same wetland, although nests are usually separated by several hundred yards (Nesbitt, 1997). Disturbance to the nest during incubation may lead to nest abandonment and subsequent re-nesting in another location (Nesbitt, 1996). Sexual maturity is reached at 3 years of age, and nesting pairs typically lay 2 eggs, which take 30 days to hatch (Stys, 1997). Crane chicks are precocial, following the adults away from the nest as little as 1 day after hatching, and staying with the adults until about 10 months of age (Nesbitt, 1996). Foraging occurs in open fields or grassy areas (e.g., pastures, prairies, or emergent palustrine wetlands), and chicks will follow adults during foraging bouts (Nesbitt, 1996; Stys, 1997). Although home ranges are large, extensive overlap often occurs and several pairs or groups of sub-adults may use the same foraging or nesting habitats (Stys, 1997).

Sandhill cranes can live over 20 years, and most recorded mortality is due to predation (e.g., by bobcats) or anthropogenic causes, such as vehicle collisions or flying into power lines or fences (Nesbitt, 1996; Stys, 1997). To assure a mosaic of suitable habitat for all aspects of sandhill crane's life history, nearby upland areas should be maintained (e.g., through fire, mowing, etc.) to keep the herbaceous vegetation around 20 inches in height, which will allow adequate forage areas near potential nesting and roosting sites (Nesbitt, 1996; Stys, 1997). Management activities should not take place during the nesting season, as chicks and adults are relatively immobile during this time (Stys, 1997).

**Gopher Tortoise** (*Gopherus polyphemus*)  
(State-listed Species of Special Concern)

Gopher tortoises and their burrows have been observed within the VWP. Gopher tortoises are large herbivores that can reach over 12 inches in straight-line shell length, and weigh over 14 pounds. Sexual maturity is reached between 12 – 15 years of age, and females may produce 3 – 12 eggs annually or bi-annually (Mushinsky et al., 1994). Both males and females may mate with multiple individuals, and there can be more than one male responsible for fertilizing a single clutch of eggs (Moon et al., 2006). Eggs are often laid in shallow nests (<12 in deep) in open sandy areas (Pike, 2006). Incubation takes between 90 – 120 days, and hatchlings disperse from the nest site post-hatching (Epperson and Heise, 2003). Female tortoises are iteroparous, reproducing for the entirety of their adult lives. Tortoises, like all reptiles, continue to grow larger throughout their lives, and larger (e.g., older) tortoises tend to lay larger and more eggs.

Gopher tortoises can live several decades under natural conditions, and may reach at least 50 – 70 years old (Auffenberg and Franz, 1982).

Gopher tortoises are ecosystem engineers that construct large burrows (up to 20 feet long, 3 – 8 feet deep, and as wide as the inhabiting tortoise is long) to protect themselves from thermal extremes and predators (Auffenberg and Franz, 1982). Gopher tortoises use several burrows throughout their lives, and may use 1 – 12 burrows annually (Breininger et al., 1994). Therefore, not all burrows contain a resident tortoise. Historically, gopher tortoises ranged throughout much of Florida, being restricted only by xeric or mesic soils which allow burrows to remain dry during most of the year (Auffenberg and Franz, 1982). Their burrowing behavior near the burrow, combined with burrow placement, affect the micro-scale vegetative composition nearby (Boglioli et al., 2000). The burrow that gopher tortoises construct provides refugia for hundreds of cohabitating species, including avians, other reptiles, amphibians, mammals, and invertebrates (Auffenberg and Franz, 1982). More recently, the discussion of disease has become a focus of concern for gopher tortoises (Diemer Berish et al., 2000). An upper respiratory tract disease (URTD) has been blamed for large numbers of dead tortoises found in several populations across the state.

Conservation and mitigation efforts for gopher tortoises are coordinated by the FFWCC. After surveying for gopher tortoises on land planned for development, there are several options to mitigate for any potential impacts to tortoises, tortoise habitat, or commensal species (Cox et al., 1987).

#### Gopher Tortoise Commensals

Other federally-listed species such as the eastern indigo snake (*Drymarchon corais couperi*) and Florida mouse (*Podomys floridanus*) regularly use tortoise burrows for shelter (Layne, 1992; Moler, 1992). These species have not been observed within VWP. Indigo snakes are the longest North American snakes, reaching lengths of 8 feet. This is an extremely mobile species that uses extensive tracts of land that may exceed 250 acres in one active season (Moler, 1992). This snake uses many different habitats, ranging from xeric uplands and scrub to wet prairies and mangrove swamps. Because of extensive habitat use and long-distance movements, indigo snakes are particularly vulnerable to habitat fragmentation. Habitat fragmentation results in snakes having to frequently cross roads to access the habitat they require, and also encounter more humans and domestic animals (e.g., dogs) that can result in harm to the snakes (Moler, 1992). Large tracts of contiguous habitat are most likely to sustain viable indigo populations, and small, isolated tracts are unlikely to sustain populations (Moler, 1992). In fact, Moler (1992) recommends that large tracts of land (at least 2500 ac.) should be protected to benefit this species.

The Florida mouse is adapted to fire-maintained xeric habitats in Florida, such as scrub and sandhill communities (Layne, 1992). However, once vegetation begins to encroach due to fire suppression, Florida mice are less likely to inhabit these areas, and are likely to be locally

extirpated (Layne, 1992). Ensuring that habitat management occurs in contiguous tracts of land with sufficient refugia (e.g., tortoise burrows, stump holes, etc.) is the best way to ensure protection of this species (Layne, 1992).

The Florida gopher frog (*Rana capito aesopus*) is also a gopher tortoise burrow commensal species that utilizes pine flatwoods and sandhill areas in which temporarily inundated, isolated wetlands occur. While the isolated wetlands and pine flatwoods within the VWP could provide habitat for Florida mice and gopher frogs, it is unlikely that they occur in substantial numbers.

Impacts to tortoise burrow commensals, including indigo snakes, Florida mice, and gopher frogs, are typically permitted through the FFWCC as part of standard gopher tortoise permitting procedures. Gopher tortoises, and their burrows, were observed in upland habitats of the site (see **Map G-3**, as depicted in the ADA Sufficiency Response), excluding improved pastures and the intensively managed turf grass sod fields.

**Southeastern American kestrel** (*Falco sparverius paulus*)  
(State-listed Threatened)

Southeastern American Kestrels typically breed April – September in Florida (Stys, 1993). Generally, southeastern American kestrels use cavities excavated by other birds in longleaf pine snags and/or other pine snags as nesting areas. The southeastern American kestrel has not been recorded as breeding within south Brevard County (Stys, 1993; Collopy, 1996). No southeastern American kestrels were observed in VWP. Still, the proposed Rural and Conservation Areas may provide adequate nesting habitat for the kestrel. Although this HMP does not specifically address the biology or management needs of this species, management practices detailed in the HMP will likely perpetuate the open habitat that the species prefers for foraging.

**Wood Stork** (*Mycteria americana*)  
(State- and Federally-listed Endangered)

Wood storks have been observed foraging within the VWP. Wood storks are large birds (reaching 3 feet tall, with a 5 foot wingspan) that forage and nest near shallow wetland systems (Ogden, 1996). The bill is used to feel for small fishes in muddy wetland areas, which are often concentrated with fishes during dry periods (Ogden, 1996). The large aggregations of wetland animals found in drying pools, provides them with the up to 240 pounds of fish that a pair of birds needs to ingest during the nesting season (Ogden, 1996). Nesting is colonial, and several nests may be within the same tree, and several dozen pairs may nest within the same colony (Ogden, 1996). Nesting usually occurs in January – March, and clutch size averages 3 eggs (range of 1 – 6). Reproduction typically takes place at 4 years of age. While nesting, adult storks may fly as far as 130 km to forage when closer wetlands are too dry to provide sufficient food sources (Ogden, 1996).

The seasonal flooding of wetlands allows prey to increase, and drying periods concentrate the large amount of prey needed by this species (Ogden, 1996). If these cycles do not occur, wood storks may starve. Additionally, nesting occurs in tall cypress trees, and the alteration of wetlands and logging during the past century have decreased the availability of these resources (Ogden, 1996). However, wood storks will readily forage and use human-created or managed wetland systems, especially water impoundments (Ogden, 1996).

### **Wading Birds**

Wading birds, including little blue heron, snowy egret, tricolored heron, white ibis, roseate spoonbill, and limpkin have been observed foraging along the margins of drainage ditches, borrow ponds, and forested and herbaceous wetlands within the VWP. State and federal regulations protecting these species are focused on roosting and nesting (rookery) locations. The closest known rookery occurs along the northern shore of Lake Washington, approximately 0.5 mile south of the southern VWP boundary. No known roosting areas or rookeries occur within the VWP.

APPENDIX C



United States Department of the Interior

RECEIVED  
7/2/06

FISH AND WILDLIFE SERVICE

6620 Southpoint Drive, South  
Suite 310  
Jacksonville, Florida 32216-0912

IN REPLY REFER TO:

FWS Log No. 41910-2006-TA-0522

July 7, 2006

Mr. Jay Decator  
The Viera Company  
7380 Murrell Road, Suite 01  
Viera, Florida 32940

RE: Cocoa Ranch Caracara Procedure

Dear Mr. Decator:

On April 26, 2006, Annie Dziergowski and Rob Bittner of this office visited with you, ranch staff, Bill Lites of Glattig Jackson, and Alan Alshouse of EMS to see the A. Duda & Sons, Inc. (Company) agricultural operations on the Cocoa Ranch in Viera, Florida. The draft version of a ranch management plan prepared by the Company for Audubon's crested caracara, entitled *Cocoa Ranch Caracara Procedure*, was discussed throughout the day relevant to the effects of ranch operations on caracaras occupying portions of the ranch, as well as some of our concerns about implementation of the draft management plan. A summary of the information gleaned from the visit is provided below.

**Historical use of the Cocoa Ranch by caracaras** – Agricultural operations on the ranch have been conducted since the 1940's, and sod and cattle farming and selective harvesting of cabbage palms for landscape use have been ongoing for number of years. In the 1980's, caracara use of the 24,000-acre ranch was first noted. Numbers of nesting caracaras have increased since that time to the present where surveys have detected a minimum of five (5) nests on the undeveloped portion of the ranch. It is apparent that the intensive management of the ranch for sod and cattle, in combination with selective thinning of cabbage palm trees, has provided ideal habitat for the caracara, and as a consequence, a conservation benefit. Suitable nesting sites are abundant and the short grass habitat in grazed pastures and sod fields is optimum for foraging by the bird. Based on three percent (3%) mortality in the cattle herd annually, it is estimated that approximately 90,000 pounds (45 tons) of carrion is provided to caracaras, eagles, vultures, and other carrion-eaters each year, which is an important food item for the caracara.

**Cabbage palm harvesting** – The selective thinning of cabbage palms at first glance does not seem to conform with the general guidance provided by the caracara management guidelines detailed in Florida Fish and Wildlife Conservation Commission's

(FWC) Technical Report No. 18. Our conversations and site visit confirmed that the larger trees caracaras prefer for nesting and perching will be left, with harvesting excluded during the nesting season in the Nest Protection Zone. No more than forty percent (40%) of the trees would be removed from the Nest Protection Zone and the Foraging Protection Zone, and most of the hammock areas on the ranch would remain untouched.

**Prescribed burning** – Prescribed burning of pasture areas is employed every 2-3 years to promote Bahia grass forage for cattle. It also benefits the caracara by keeping vegetation low for foraging and facilitating movement of the bird on the ground. Burning would occur in the Foraging Protection Zone during the nesting season only when wind conditions are present to carry smoke away from the nest tree. During the non-nesting season, burning may be conducted within the Nest Protection Zone to promote pasture grass growth and simulate natural fire processes.

**Hunting** – The ranch has leased areas for hunting for a number of years and no disturbances to caracaras have been noted during that time. Large game animals are harvested by archery only, and the single unit where shotguns are used for waterfowl is located well north of the area inhabited by caracaras. Hunting would be permitted within the Foraging Nesting Zone, but not in the Nest Protection Zone.

**Adaptive Management** – One of the key points of discussion dealt with incorporating flexibility into the management plan so that changes could be made in procedures to avoid adverse effects on the caracara. The Company retains environmental consulting firms with qualified biologists and ecologists to assist with land management activities. These individuals, in combination with observations from ranch land managers, would monitor the caracara protection zones established in the management plan to ensure that activities conducted on the ranch do not adversely affect this species. The intent is to amend procedures, zones and/or activities at a particular location or in the management plan before such actions cause harm or significant disruptions in caracara behavior patterns that would affect breeding, feeding, or sheltering.

**Abandoned Nest** – In instances where caracaras have abandoned a nest, the abandoned nest tree and adjacent trees would remain intact until the Service provides confirmation of abandonment after three (3) years. Caracaras have been known to establish nests in one location, leave them for an alternate nest, and then return to the original nest in subsequent years to successfully rear young.

**Injured, Sick, or Dead Caracara** – Employees should leave injured, sick, or dead caracaras alone until the Service has been contacted for direction. In the event immediate contact cannot be made with the Service when an injured or sick bird is observed, the Company should contact their biologist/ecologist for guidance. It is not uncommon for fledglings to fall or jump out of nests, especially when they are trying their wings in preparation for flight. The adults will care for the young when they are on the ground, and this would be the time to stay away from the nest site and monitor conditions from afar. Adults and fledglings should not be disturbed unless there is very

**obvious sign of injury**, which would necessitate contacting a local wildlife rehabilitation center. Pertinent contact information is as follows:

U.S. Fish and Wildlife Service  
Jacksonville ES Field Office  
6620 Southpoint Drive South, Suite 310  
Jacksonville, Florida 32216  
Phone: 904-232-2580  
Contact: Annie Dziergowski, ext. 116

U.S. Fish and Wildlife Service  
South Florida ES Field Office  
1339 20<sup>th</sup> Street  
Vero Beach, Florida 32960  
Phone: 772-562-3909  
Contact: Tylan Dean, ext. 284

Wildlife Rehabilitators in Area:

Florida Wildlife Hospital  
4560 North US 1  
Melbourne, Florida 32935  
321-254-8843  
Contact: Sue Small, Director

Audubon Center for Birds of Prey  
1101 Audubon Way  
Maitland, FL 32751  
407-644-0190  
Contact: Lynda White, Director

On May 2, 2006, you provided the Service via email a revised copy of the draft *Cocoa Ranch Caracara Procedure* describing the operational guidelines and practices on the ranch for caracaras, which included revisions from the discussions at the April 26 site visit. We have reviewed the plan and it contains appropriate modifications pursuant to discussion with staff of this office. The Service concurs with the procedures contained in the *Cocoa Ranch Caracara Procedure*. The plan promotes actions and activities that have occurred on the ranch to date that have resulted in increased caracara usage of ranch lands, it provides protective measures for caracara pairs and offspring during the nesting season, and it affords flexibility for altering procedures, where needed, to avoid disruption or annoyance of caracaras to the point where "take" may occur.

Thank you for your cooperation in this matter. Should you have any questions, please contact Rob Bittner of this office at 904-232-2580, ext. 120.

Sincerely,



*for* David L. Hankla  
Field Supervisor

cc: Tylan Dean, South Florida ES Office

## COCOA RANCH CARACARA PROCEDURE

Subject: Procedure; Operational Guidelines and Practices for  
Audubon's Crested Caracara

Procedure No. \_\_\_\_\_  
Date: As of July 7, 2006  
Page 1 of 11

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- SCOPE:** This Procedure affects all Company employees at the Cocoa Ranch.
- GENERAL:** Pursuant to the Company's Legal Policy No. 401, it is and has been the Company's policy to fully comply with all laws applicable to its operations, including without limitation, the federal Endangered Species Act (the "ESA"). The ESA, together with other state and local laws and regulations, prohibit harassing, harming, disturbing, molesting or pursuing any species protected under the ESA or destroying the nests of a protected species. Acts deemed to harass, disturb, harm, molest or pursue a protected species are increasingly being broadly defined by governmental agencies and the courts to include conduct which may not directly appear to affect a species.
- The consequences of an environmental law violation by any employee can seriously damage the Company and the employee. In particular, violations of the federal ESA and related laws can result in civil or criminal penalties for both the guilty employee and the Company with individual fines up to \$50,000 and/or imprisonment of individuals from 6 months to 2 years.
- In 1987, Audubon's Crested Caracara (the "Caracara") was listed as a "threatened" species under the ESA and is also listed as "threatened" under Florida law. Historically, Caracaras inhabited native prairie in Florida's central region. However, the Company's agricultural operations within the Cocoa Ranch over the last fifty years have created foraging and nesting habitat to which the Caracara have successfully adapted. In response to the identification of Caracara nests within and near the Cocoa Ranch and the increasing breadth of regulations and their application by enforcement agencies with respect to the Caracara, it is necessary to adopt a specific Procedure, together with guidelines and practices, for the Cocoa Ranch pertaining to the Caracara.

## COCOA RANCH CARACARA PROCEDURE

Subject: Procedure; Operational Guidelines and Practices for  
Audubon's Crested Caracara

Procedure No. \_\_\_\_\_  
Date: As of July 7, 2006  
Page 2 of 11

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### SECTION 1 - PROCEDURE: STATEMENT OF CARACARA PROCEDURE

Management adopts the following Procedure at the Cocoa Ranch:

- A. To require the Company's employees to comply with all laws, ordinances and regulations applicable to its agricultural operations with respect to the Caracara;
- B. To avoid conduct and activities which result (or can be construed as resulting) in the "take" of a Caracara, with "take" meaning to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect a Caracara, or to attempt to engage in any such conduct.
- C. To require the Company's employees to take the measures necessary to maintain compliance with environmental laws applicable within their respective areas of responsibility.

To ensure compliance with this Procedure, it is the responsibility of each employee to acquire a working knowledge of the following Guidelines and Practices adopted as part of this Procedure. By doing so, each employee will be able to recognize problem areas in his or her daily activities and seek advice from his or her supervisor and, if necessary, from the Company's General Counsel. Management shall periodically educate the location's employees as to this Procedure and the Guidelines and Practices adopted hereunder.

### SECTION 2 - GUIDELINES: CARACARA GUIDELINES

Management adopts the following Guidelines at the Cocoa Ranch:

- A. Summary of Caracara Environmental Laws. Current laws and regulations protecting the Caracara prohibit activity which results in the "take" of a Caracara, which includes conduct which is deemed to harm, harass, pursue, hunt,

## COCOA RANCH CARACARA PROCEDURE

Subject: Procedure; Operational Guidelines and Practices for  
Audubon's Crested Caracara

Procedure No. \_\_\_\_\_  
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shoot, wound, kill, trap, capture or collect, or the attempt to engage in any such conduct. "Harm" includes habitat modification or degradation to the extent it significantly disrupts a bird's behavior patterns affecting its breeding, feeding or sheltering. "Harass" includes intentional or negligent actions or omissions that cause annoyance to the extent it significantly disrupts a bird's behavior patterns affecting its breeding, feeding or sheltering.

B. Prohibited Conduct.

i. Direct Acts/Conduct Violating Caracara Laws:

Certain conduct clearly violates laws protecting the Caracara. The following listed acts are clear violations and are prohibited under this Procedure:

- Aggressive Acts. Any action directly harming or harassing a Caracara is prohibited, including pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting a Caracara or attempting to engage in any such conduct.
- Passive Handling. Handling a Caracara nestling, juvenile or adult or attempting to engage in any such conduct, including handling injured, sick or dead birds (see Section 3(H) pertaining to injured, sick or dead Caracara).
- Harming Eggs or Nests. Any action which results in collecting, possessing or destroying any egg or nest of a Caracara is prohibited, including attempting to engage in any such conduct.

## COCOA RANCH CARACARA PROCEDURE

Subject: Procedure; Operational Guidelines and Practices for  
Audubon's Crested Caracara

Procedure No. \_\_\_\_\_  
Date: As of July 7, 2006  
Page 4 of 11

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Possession, Sale or Transport. Any action related or connected to taking, possessing, transporting, selling, purchasing, bartering, or offering for sale, purchase or barter, any Caracara, or the parts, nests, or eggs of a Caracara.

ii. Indirect Acts/Conduct Violating Caracara Laws: Certain activities may also violate laws protecting the Caracara, notwithstanding that there is no direct intention to do so or any apparent direct harm or harassment to a Caracara from a particular activity. Specifically, nesting Caracaras are susceptible to disturbances that alter the usual patterns of activity which the birds have become accustomed to. Primary Caracara breeding activity occurs from November 1 through April 30 (the "**Primary Nesting Season**").

C. Establishing Protection Zones. Upon confirmation that a Caracara nest exists within the Cocoa Ranch, management shall establish the following protection zones, subject to modification as provided in the following sentence: (1) a nest protection zone having a radius of 500' extending outward from the nest tree (the "**Nest Protection Zone**"), and (2) a foraging protection zone having a radius of 1,000' extending outward from the nest tree (the "**Foraging Protection Zone**"). However, Management may decrease, increase or otherwise modify such zones based on local features which naturally serve to protect or isolate the nest (such as forested areas), or as reasonably necessary to conform a zone to existing geographic, topographic or natural features (such as canals, ditches, pasture areas or wetlands), and/or man-made elements (such as roadways, fence-lines, gates, canals and ditches); so long as such modification is in consultation with an experienced biologist or ecologist whose opinion is that such

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modification will not adversely affect the subject nest. Once established by Management, all activities and conduct within such zones shall be strictly managed in accordance with the following Guidelines.

- Nest Protection Zone. Activities and conduct shall be managed year-round within each Nest Protection Zone in accordance with the following restrictions:
  - No removal of pasture, sod fields, wetlands, ditches or ponds (or wetlands, ditches or ponds within pasture or sod fields); provided, however, that pasture may be converted to sod fields except during the Primary Nesting Season;
  - No removal of nest trees or oaks;
  - No removal of cabbage palms, except on a selective basis in accordance with Section 3(F) below;
  - No hunting of any type;
  - No construction of any buildings, roads or canals; and
  - No use of herbicides, pesticides or other chemicals in a manner harmful to wildlife.

In addition, during the Primary Nesting Season, Management shall prohibit all unauthorized human entry and activity in each Nest Protection Zone. "Unauthorized human entry and activity" shall mean entry by anyone for any purpose other than persons conducting typical ranching and agricultural operations consistent with the pattern of activity which normally occurred in the area prior to its designation as a Nest Protection Zone – except and excluding (1)

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activity prohibited on a year-round basis within the Nest Protection Zone pursuant to these Guidelines, (2) tree harvesting in any manner, (3) conversion of pasture to sod fields, and (4) prescribed burning.

- Foraging Protection Zone. Activities and conduct shall be managed year-round within the Foraging Protection Zone in accordance with the following restrictions:
  - Activities, other than normal ranching and agricultural operations, are prohibited. Normal operations shall mean agricultural and related activities routinely conducted by the Company within the Cocoa Ranch, including, but not limited to, pasture cultivation, cattle grazing, sod farming and related activities, prescribed burning (except as specifically limited below), lawful hunting, and silviculture (excluding the harvesting of cabbage palms, except on a selective basis in accordance with Section 3(F) below).
  - No use of herbicides, pesticides or other chemicals in a manner harmful to wildlife.
  - During the Primary Nesting Season, prescribed burning shall occur only when wind conditions are present to carry smoke away from the nest tree.

- D. Relocated Nests; Abandoned Nests. These Guidelines shall apply to all confirmed Caracara nest trees, provided, however, that protection zones may be shifted from one tree to a nearby tree (to avoid implementing duplicative zones) when Management (in consultation with a qualified biologist or ecologist) determines that the nesting Caracara

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has selected such tree as an alternate nest tree for its current nesting effort. In such event, Management need not implement any protection zones for the former nest tree; provided, however, that the former nest tree and any adjacent tree in the same clump as the former nest tree, shall not be harvested under any circumstances unless and until (1) it is deemed "abandoned" as provided below; and (2) it is otherwise eligible for harvesting in accordance with applicable Guidelines and Practices adopted hereunder. A nest tree shall not be deemed "abandoned" unless and until the Company receives a letter from the U.S. Fish and Wildlife Service acknowledging that the nest tree is abandoned as confirmed by three consecutive breeding seasons of documented non-use.

### **SECTION 3 - PRACTICES: CARACARA PRACTICES**

Management shall implement the following practices:

- A. Presenting and Posting Technical Information.  
Management shall present this Procedure to employees at the Cocoa Ranch and provide bilingual technical and educational materials in English and Spanish regarding Caracara recognition, nest identification, nesting behavior and the Guidelines and Practices adopted in this Procedure. A copy of Technical Report No. 18 - Recommended Management Practices and Survey Protocols for Audubon's Crested Caracara in Florida (September 2001), published by the Florida Fish and Wildlife Conservation Commission, shall be posted in the work place where readily visible and accessible to employees.
- B. Identification and Confirmation of Nest Trees. Any employee sighting Caracara activity or a structure indicating the presence of a Caracara nest tree shall promptly report such sighting to his/her supervisor. Upon a

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report of any observation indicating a Caracara nest tree, Management shall investigate the sighting and, when warranted, confirm whether or not a Caracara nest tree exists as determined by a qualified biologist or ecologist.

- C. Implementing Caracara Protection Zones. Upon Management's confirmation that a Caracara nest tree has been located, Management shall advise all supervisors, employees, tenants, licensees, contract harvesters and laborers of the identified nest tree and implement a Nest Protection Zone and a Foraging Protection Zone around the nest tree. Each zone shall be identified in the field and its approximate boundaries marked by steel posts; posts indicating the Nest Protection Zone shall be painted red, posts indicating the Foraging Protection Zone shall be painted orange. All activities and conduct within such protection zones shall be managed in accordance with the Guidelines and Practices specifically adopted under this Procedure.
- D. Monitoring Caracara Protection Zones. Upon implementing protection zones around a Caracara nest tree, Management shall monitor the nest tree during the Primary Nesting Season on a periodic basis, which monitoring shall consist of observations of the Caracara's behavior by Cocoa Ranch personnel during the ordinary course of agricultural activities. Upon receipt of observations indicating that the Caracara has abandoned the nest tree or is acting inconsistent with prior observations, Management shall review such observational data with a qualified biologist or ecologist and modify the applicable protection zone if advised to do so by such biologist or ecologist to minimize adverse affects on the Caracara.
- E. Revising "Environmental Areas Map". Each confirmed Caracara nest tree shall be shown on the Cocoa Ranch's

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"Environmental Areas Map" together with a graphic depiction of the limits of the Nest Protection Zone and the Foraging Protection Zone specifically adopted for each nest. Management shall revise the Environmental Areas Map as needed to add newly confirmed nest trees and delete nest trees determined to be a "former nest tree" or "abandoned" pursuant to the Guidelines adopted under this Procedure.

- F. Selective Tree Harvesting Within Protection Zones. All tree harvesting within a Nest Protection Zone shall be prohibited by Management during the Primary Nesting Season. At times other than the Primary Nesting Season within the Nest Protection Zone and year-round within the Foraging Protection Zone, the harvest of cabbage palms shall only be permitted on a selective basis as follows: cabbage palms selected for harvesting shall not exceed more than 40% of the existing cabbage palms within the zone AND shall not include any palm exceeding 16' in height as measured from ground level to the top of the tree's bud. The harvest of trees other than cabbage palms in the Foraging Protection Zone shall be permitted without restriction.
- G. Compliance with all Subsequent Management Plans. Management shall revise the Guidelines and Practices adopted under this Procedure and adopt new guidelines and practices to the extent necessary to strictly comply with any habitat management plan or revised plan hereafter approved in connection with any development order for the Viera DRI or otherwise adopted in consultation with the U.S. Fish and Wildlife Service or any other governmental agency having jurisdiction with respect to any Caracara nest located within or near the Cocoa Ranch. Management shall communicate with the U.S. Fish and Wildlife Service as-needed to address and resolve issues and situations

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affecting the Caracara in a manner not considered in this Procedure or the Guidelines and Practices hereby adopted.

- H. Reporting Injured, Sick or Dead Caracara. Upon discovering or learning of an injured, sick or dead Caracara, an employee shall report same to his/her supervisor. Management shall promptly contact the U.S. Fish and Wildlife Service to report the injured, sick or dead Caracara. If immediate contact can not be made with the U.S. Fish and Wildlife Service, Management shall contact a qualified biologist or ecologist for guidance. Injured, sick or dead Caracara shall not be handled in any manner, except as specifically directed by the U.S. Fish and Wildlife Service. If there is a very obvious sign of injury, Management shall notify a local wildlife rehabilitation center identified below. Contact information is as follows:

U.S. Fish & Wildlife Service  
Jacksonville ES Field Office  
6620 Southpoint Dr. South, Ste. 310  
Jacksonville, Fl. 32216  
Phone: 904-232-2580  
Contact: Annie Dziergowski,  
Ext. 116

U.S. Fish & Wildlife Service  
South Florida ES Field Office  
1339 20<sup>th</sup> Street  
Vero Beach, Fl. 32960  
Phone: 772-562-3909  
Contact: Tylan Dean  
Ext. 284

### Wildlife Rehabilitators in Area:

Florida Wildlife Hospital  
4560 North U.S. 1  
Melbourne, Fl. 32935  
Phone: 321-254-8843  
Contact: Sue Small, Dir.

Audubon Center for Birds  
of Prey  
1101 Audubon Way  
Maitland, Fl. 32751  
Phone 407-644-0190  
Contact: Lynda White, Dir.

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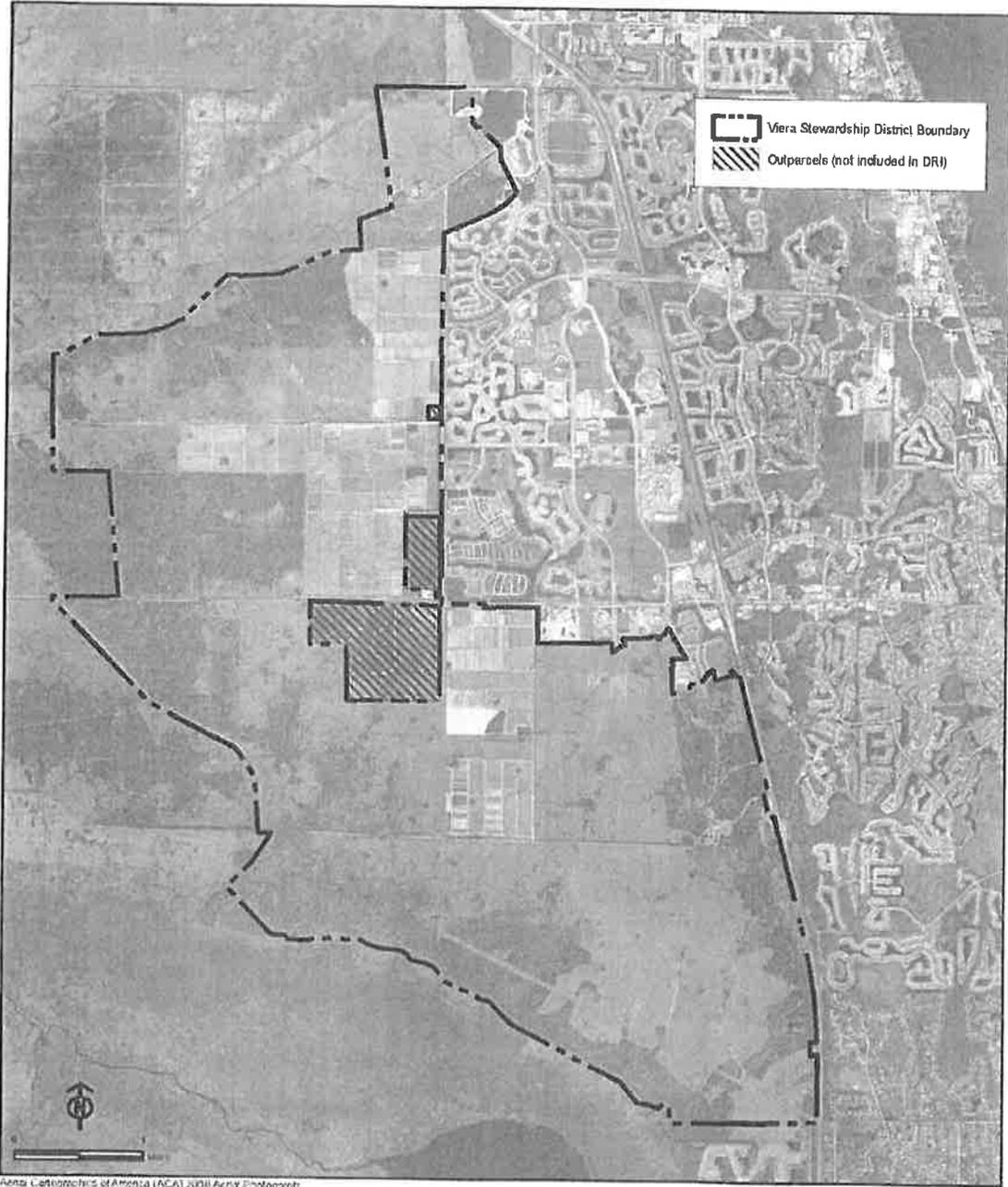
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- I. Reporting Non-Compliance. If there is a question in any employee's mind regarding compliance with this Procedure and the Guidelines and Practices hereby adopted, he/she will **immediately** notify his/her supervisor and resolve the matter. If the matter cannot be resolved at the location, then either the employee, the supervisor or Management shall notify the Company's General Counsel or any Assistant Counsel.
- J. Management shall implement these Practices effective as of July 7, 2006.

**EXHIBIT 9**

**Viera Stewardship District Boundary**

**Exhibit 9  
Viera Stewardship District Boundary**



**GLATTING JACKSON KERCHER ANGLIN**  
INCORPORATED

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**Viera - Development Order**

Date: October 30, 2009

# Technical Review Comments

<b>To:</b>	Fred Milch, AICP East Central Florida Regional Planning Council		
<b>From:</b>	Wiatt Bowers, AICP	<b>Email:</b>	wiatt.bowers@atkinglobal.com
<b>Phone:</b>	904-363-8488	<b>Date:</b>	August 25, 2017
<b>Ref:</b>	Viera DRI Phase 4	<b>cc:</b>	Andrew Holmes, Stephen Swanke, Erin Sterk
<b>Subject:</b>	Review of Viera DRI NOPC Application and Sufficiency Response #1		

Atkins has completed its review of the April 11, 2017 Notification of Proposed Change application for the Viera ADA/DRI. Many of the previous comments were addressed in the Sufficiency Response #1 submittal, the details of which are outlined in the sections below. Outstanding issues with the current submittal include: the lack of analysis for the additional impacts resulting from the revised increase in trip generation submitted by the applicant, and the lack of information for some roadways, such as Wickham Road and Viera Boulevard west of Murrell. Although the applicant made some requested changes to the response exhibits, the changes were not carried through the entire analysis within the revised application. As such, traffic impacts could not be completely verified due to an omission of network performance documentation and analysis.

Specifically, the applicant submitted revised trip generation and internal capture rates as requested in the first submittal. Additionally, the applicant provided documentation that these trip generation and internal capture rates revisions would result in an increase in net external trips. However, an analysis of the impacts of how the increase in trips affected roadway segment and intersection performance (Delay and LOS) was not included in the revised NOPC application. To address this issue, the "Background PM Peak-Hour Two Way Roadway Segment Conditions" table in the Response Exhibits file should be revised to include the impacts to roadway and intersection performance based on the revised trip generation and internal capture rates in addition to the editorial revisions in the application on the increase of trip generation. Finally, the applicant should include the traffic analysis for all significantly impacted roadways in the area.

Follow-up responses to previously submitted comments are below:

1. General Comment – Development Land Use: Are there land use maps to provide greater detail of planned development space?

**RESPONSE: Currently, the only associated map is Map H. The approved West Viera PUD requires submittal of Sketch Plans to Brevard County for each Village which provide additional detail. Development within Village 1 is under current development and the Village 2 plan has not yet been submitted.**

Follow Up Response: No further comments.

2. Page 17 – Adopted Level of Service: Question 21A requires the applicant to identify the adopted LOS standards of the FDOT, appropriate regional planning council, and local government for roadways within the identified study area. The applications states: "The LOS designations, capacities, facility types, and number of lanes are based on the comprehensive plan and concurrency databases for Brevard County." Has the FDOT's Level of Service Standards (effective October 9, 2015 and reviewed January 19, 2017) been considered in addition to the comprehensive plan LOS standards? In the Brevard County Comprehensive Plan Transportation Element Policy 1.3-A.1 the LOS standard for Brevard County arterials and collectors within the urban area boundary is a LOS E. The FDOT policy mentioned above states that state arterials is LOS D in urbanized areas.

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**RESPONSE:** See response to ECFRPC Comment No. C.o. Note that capacities are based on values obtained from the Space Coast Transportation Planning Organization. LOS "D" was used on State Roads/Interstates.

Follow Up Response: No further comments.

3. Page 22, Map 21.A.1 – Turning Movement Counts: There are small differences between the Map's turning movement counts when compared to raw turning movement counts in Appendix 21.A.3. Where there are any adjustments including season factors or volume balancing between these two stages of the project?

**RESPONSE:** Seasonal factors were applied.

Follow Up Response: No further comments. Consider stating this in the NOPC for clarity.

4. Page 34, Table 21.B.7 – Trip Generation: The Land Use 720, VA Clinic calculated generated trips do not match ITE rates or equations for the given development size of 137,500 sq. ft. Please provide the methodology used calculate this trip generation.

**RESPONSE:** The data for the VA clinic was originally obtained from the prior DRI analysis based upon a previously conducted analysis. The trip generation data for the VA has now been updated per ITE for medical uses. The Community Capture and build-out analysis have been updated. The net result was an increase in 230 entering and exiting PM Peak Hour Trips. Please refer to Exhibit "Atkins -4-Viera\_Central-West\_Existing\_Trip\_Gen\_Equation\_Rates\_VA\_Update"

Follow Up Response: We concur with Exhibit 5 of the Response exhibited. However, this update has not been reflected in the revised NOPC Application Table 21.B.7. Additionally, none of the corridor or intersection analysis for the build-out condition reflect any changes that would be caused by an increase in Trip Generation.

5. Page 34, Table 21.B.7 – Trip Generation: Trip Generation section of the Letter of Methodology document states that documentation will be provided for all Trip Generation Rates and Equations to demonstrate consistency with the ITE Trip Generation Manual. Application identifies whether the equation or rates are used but does not identify the rate or equation that was used.

**RESPONSE:** The Trip Generation software from Trafficware uses a "true" or "false" variable to indicate whether the equation was or was not used. This may not be easily apparent at 1<sup>st</sup> review based upon the software output report. The detailed land use trip generation reports indicate the equations used for each land use where the equation versus the rate was used. An asterisk was provided in each table indicated where the equation was used. Review of the detailed sheets should indicate a "true" value to illustrate the equation used. Please refer to Exhibit "Atkins-5-Viera\_Central-West\_Existing\_Trip\_Gen\_Equation\_Rates\_DetailedReport\_VA\_Update".

Follow Up Response: No further comments.

6. Page 37, Paragraph 2 – Clarification: Application text reads: "While residential uses in the SW quadrant have a direct access connection across Viera Blvd to the retail uses in the NE quadrant, given the relatively small size of the existing and approved retail uses in the NE quadrant, no internal capture analysis was conducted for residential uses from the SW to the NW quadrant." Does the writer mean NW instead of NE where used?

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**RESPONSE:** Correct. The text has been corrected to read NW instead of NE. Please refer to Page 37, Revised NOPC Application.

Follow Up Response: No further comments.

7. Page 37-38 - Internal Capture: Several of the quadrants contain multiple residential components. The internal trips were calculated for each individual land use then summed afterwards. This method will cause internal trips calculations from retail-to-residential and office-to-residential land use to be duplicated and sometimes tripled. The ITE Trip Generation Handbook explains in section 7.5, "If the site has multiple residential components (single-family, apartment, etc.), compute the trip generation for each residential type separately, but record as only a single land use on the [internal capture] worksheet." For Example, the NW corner of Viera East has both Apartments and Condos eligible for internal capture analysis. The user created two internal capture worksheets, one for Apartments and one for Condos, then adds up internal trips after calculations. The ITE prescribed method is to add the generated trips of the Apartments and Condos first, then input those gross trips generated into ONE internal capture analysis worksheet.

**RESPONSE:** The Internal Capture Analysis has been recalculated for Viera East based upon comments received from both the FDOT and Brevard County. Please refer to the following Exhibits: FDOT Comment Brevard Co.

- Atkins -7a-VieraEast\_Daily\_InternalCapture\_Buildout
- Atkins -7b-VieraEast\_Daily\_InternalCapture\_Phase1\_3
- Atkins-7c-VieraEast\_PMPeak\_InternalCapture\_Buildout
- Atkins-7d-VieraEast\_PMPeak\_InternalCapture\_Phase1\_3

Follow Up Response: The internal capture is still incorrect. The revised worksheets combined all 4 quadrants into one internal capture worksheet. The Internal capture worksheets should still be split into quadrants, but each worksheet should include the entire quadrant's land uses. Additionally, no changes have been made to Table 21.C.1 and Table 21.C.2 showing this change in internal capture. Finally, the roadway segment and intersection analyses for the build-out condition do not reflect any changes that would be caused by a lower internal capture.

8. Page 37-38 - Internal Capture: When internal capture is discussed for the Viera East it's suggested that internal capture can be applied when trips cross either Viera Blvd or Murrell Road, but do not actually use these facilities. This is appropriate for segment impacts but would ignore the impacts of these trips on the intersection/signal operations. Suggest adding internal capture trips back into the intersection analysis or provide documentation of how these reduced trips will not have an impact to the intersection service metrics.

**RESPONSE:** This was discussed in detail during methodology meetings. Originally a greater level of internal capture was requested that would essentially have allowed Viera East to assume Murrell Road and Viera Boulevard were internal roads and internal capture calculated between all residential and retail in Viera East, except those trips using Wickham Road and then capturing those trips on the network and in intersections. However, it was agreed to that no internal capture analysis would be used, except there would be allowance where trips crossed Viera or Murrell, but did not use Viera or Murrell. There are internal roads that connect the uses in each quadrant and median opening and driveways that directly align with the adjacent quadrant that would not result in the trips utilizing the intersection. The Internal Capture Analysis has been updated. Please refer to the following Exhibits:

- Atkins -7a-VieraEast\_Daily\_InternalCapture\_Buildout
- Atkins -7b-VieraEast\_Daily\_InternalCapture\_Phase1\_3
- Atkins-7c-VieraEast\_PMPeak\_InternalCapture\_Buildout
- Atkins-7d-VieraEast\_PMPeak\_InternalCapture\_Phase1\_3

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Follow Up Response: We concur that some internal capture trips will travel amongst quadrants without using Murrell Road or Viera Boulevard. However, assuming all internal trips will follow this pattern is not reasonable, especially trips from diagonal quadrants, example NE to SW. It does not appear the "crossover" intersections were included in the analysis. Further, the changes to internal capture are not reflected in the revised NOPC Table 21.C.1 and Table 21.C.2

9. Page 42, Paragraph 3 - Clarification: Application text reads: *"The trip generation for shopping centers within Phase 1, 2 and 3 is per Table 4. The internal capture of retail trips for shopping centers within Phase 1, 2 and 3 is per Table 5."* Table 4 and Table 5 cannot be found in the report, where is this referred to?

**RESPONSE: Table 4 should have read Table 21.B.4 and Table 5 should have read Table 21.B.5. The text has been revised. Please refer to Page 42, Revised NOPC Application.**

Follow Up Response: No further comments.

10. Page 42, Paragraph 3 - Clarification: Application text reads: *"There are more than 50,000 daily trips and 3,850 PM Peak Hour Trips on Wickham Road, Viera Blvd and Murrell Road within the limits of Viera East, thus the proposed pass-by rates do not exceed 10% of adjacent street traffic."* There needs to be greater clarification of how the 50,000 daily and 3,850 PM peak hour trips were estimated.

**RESPONSE: A pass-by analysis has been conducted to demonstrate that pass-by does not exceed 10% of adjacent street traffic for Viera East. Please refer to Exhibit "ECFRPC-C.f.-Viera\_East\_Passby\_Confirm".**

Follow Up Response: This table makes pass-by analysis clearer. However, it would be more appropriate to use the adjusted pass-by values in Table 21.C.4, which reflects the effect of internal capture first. This may change pending changes to internal capture, as noted above in Comment #7.

11. Page 43, Clarification - Clarification: Application text reads: *"The internal capture of retail trips for shopping centers for the build-out of Viera East is per Table 7."* Table 7 cannot be found in the report, where is this referred to?

**RESPONSE: The reference to Table 7 should have read Table 21.B.7. The text has been revised. Please refer to Page 43, Revised NOPC Application.**

Follow Up Response: No further comments.

12. Page 47, Paragraph 1: Application text reads: *"For comparative purposes, the trip generation analysis in Table 13 has been conducted based upon trip rates only (Appendix 21.C.5)."* Table 13 cannot be found in the report, where is this referred to?

**RESPONSE: The reference to Table 13 should have read Table 21.C.6. The text has been revised. Please refer to Page 47, Revised NOPC Application.**

Follow Up Response: No further comments.

13. Page 48, Table 21.C.6 and 21.C.7 – Community Capture: How was the 95% Occupancy determined and verified for Community Capture calculations. Were developments reviewed to ensure they were open for business and generating trips?

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**RESPONSE:** The data was obtained from Certificates of Occupancy issued and internally tracked by The Viera Company.

Follow Up Response: No further comments.

14. Page 53, Table 21.C.10 – Community Capture: Based on the Methodology Letter it was expected that traffic volume counts would be conducted for the same 3 days at the 3 locations listed. In the analysis volumes were counted on 3 separate days. Please provide comment or support for how this impacts or will not impact the analysis.

**RESPONSE:** Counts have been retaken for the same three day period. Please refer to Exhibit “ECFRPC-C.d.-Community Capture Traffic Counts\_Viera Central\_West”. The updated counts also resulted in an update of existing development consisting of an increase in 282 apartments, 69 townhomes and 7,000 sq ft of retail. Please refer to Exhibit “Brevard\_4\_Viera\_CentralWest\_TripGen\_Update”. While the PM peak hour was originally based upon just Wickham Road, per comments from the FDOT reviewer, the PM Peak Hour has been determined based upon the average from all three count locations. Depending on whether or not a seasonal adjustment factor is used for the counts, the resulting PM Peak Hour Community Capture rate is 39% when counts are not adjusted and 41% when counts are adjusted. Please refer to Exhibit “Atkins-14-Net\_Viera\_External\_Trips\_wo\_SAF\_w\_SAF”

Follow Up Response: No further comments.

15. Page 55, Table 21.C.12 – Community Capture: This Table shows 402,924 trips generated for Viera Central/West at Build-out if the ITE rates were used only, not including the several land uses that utilized the ITE equations. Table 21.B.7 utilizes rates and equations, with a total Central/West trip generation of 272,446 trips. The community capture percentage was calculated using the calculated daily trips and pm peak trips using both ITE rates and equations. This table should be consistent with how the community capture rates were derived.

**RESPONSE:** For purposes of this analysis, two separate tables were necessary. One table with trip generation based on ITE rates only and one table with trip generation based on ITE rates and equations. The reason is that Community Capture to analyze external trips is based on ITE rates and equations while the review of internal trips was based on ITE rates only as a very, very conservative approach.

Follow Up Response: No further comments. This is a more conservative approach. If the rates-only trip generation was used, the community capture percentage would be higher.

16. Page 57, Paragraph 4 - Mode Share Reduction: Application text reads: “To project a worst-case scenario for the build-out of Viera Central/West the only trip reduction proposed to the internal trip generation based on trip generation rates only is the application of a 5% mode share reduction.” How was the 5% mode share reduction determined? Was there a prior agreement?

**RESPONSE:** Ideally, the ITE rates and equations would have been utilized as a starting point for evaluating internal roads. This would have led to a more than 30% reduction in daily trips from the start, thus negating the need to make any adjustments. Based on Viera’s significant expenditure of more than \$15 million for multi-modal improvements, a 5% reduction was taken to unadjusted ITE rates in an overly conservative evaluation of internal roads. The empirical data shows that ITE rates overestimate external trips by more than 50%. The 5% adjustment for multi-modal was a conservative reduction to illustrate a worst case scenario for internal roads. It should be noted, that prior DO’s did not evaluate internal roads at all. Viera has been responsible for internal road improvements and made the internal decision to widen Stadium Parkway and Wickham Road internal to the site. These were not

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**DO required improvements. There was no agreement prior to the Brevard County approved methodology statement.**

Follow Up Response: No further comments.

17. Page 58, Table 21.C.13 – Community Capture: This table utilizes trip numbers that were calculated using ITE rates and equations. The community capture rates were calculated using trip generation using both ITE rates and equations where applicable. Should this table follow the same use of rates and equations?

**RESPONSE: It would have been our preference to utilize the rates and equations as the starting point for all analysis. This was extensively discussed with Brevard County staff prior to the technical review provided by Atkins. Brevard County was strong in its preference for use of rates only it was agreed that the ITE Rates only would be used for internal roads and adjusted for mode share.**

Follow Up Response: No further comments.

18. Page 70, Table 21.E.1 – Missing Information: Table 21.E.1 Build-Out P.M. Peak-Hour Two-Way Roadway Segment Conditions table no included in the application. Please provide documentation of project trip distribution of traffic.

**RESPONSE: Table 21.E.1 was inadvertently omitted in the original application materials and was subsequently delivered electronically. An additional copy is attached and labeled as Exhibit “FDOT-1-1 Table 21.E.1.”.**

Follow Up Response: The revised NOPC application does not include this table in the text. It was located in the Table of Exhibits. If additional concerns are identified they will be conveyed to all reviewers by (add date certain).

19. Page 172, Exhibit 4, Amended Development Order Comment – Development Lane Use: Light Industrial is listed as a total of 500 KSF at build-out stage. Trip Generation analysis for Viera Central/West evaluated the land use for only 365 KSF.

**RESPONSE: Please refer to the breakout within Table 21.B.1 for Land Use Codes 110, 150 and 151 which when added together equal 522,500 square feet which matches Exhibit 4 to the Development Order.**

Follow Up Response: No further comments.

20. (Part A) Page 172, Exhibit 4, Amended Development Order Comment – Development Lane Use: How was the 7,500-seat stadium accounted for in the trip generation analysis?

**RESPONSE: The treatment of the Stadium, for transportation purposes, is governed by separate agreement.**

Follow Up Response: No further comments.

20. (Part B) Page 172, Exhibit 4, Amended Development Order Comment – Trip Generation: Where is the preferred location of the post-secondary education listed in Development Order (Exhibit 4, note 5)?

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There does not appear to be a map with this location shown. This land use will have a significant impact on the adjacent road/bike/ped/transit network.

**RESPONSE: The application has been revised to limit the development of a post-secondary educational facility to the following locations: (1) within 1 mile of the interchange of Viera Boulevard and I- 95 (2) within 1 mile of the interchange of Pineda Extension and I-95 and (3) within the Town Center.**

Follow Up Response: No further comments.

21. Page 174, Exhibit 5, Transportation Equivalency Matrix – No minimums and maximums are provided with the equivalency matrix. As such, it is difficult to ensure that future development will contain a sufficient mix of uses, consistent with the community capture calculations. It is recommended that some assurances be provided in the Development Order.

**RESPONSE: As discussed with Brevard County, additional methods of evaluation have been added to Condition 89 and Condition 4. These methods include the ability of Brevard County to review the development mix and percentage of land devoted to each land use during each Biennial Report as well as including a requirement for additional analysis and confirmation of assumed Community Capture percentage with a request to increase residential development by more than 10%, cumulatively. Please refer to Pages 95, 96 and 134, Revised Development Order.**

Follow Up Response: See response to Brevard County Comment #12

22. Page 174, Exhibit 5, Transportation Equivalency Matrix – It should be noted that trip generation calculations in the matrix are not consistent with those used in the impact analysis. While it is understood why average rates are used in developing a matrix, there is no assurance that trips generated through use of the matrix will be like those estimated. For example, the trip generation for 100,000ksf of retail is far higher using trip rate equations than using the average rate. What assurances can be provided if total trips will not exceed those approved for Phase 4?

**RESPONSE: The Transportation Equivalency Matrix is a historically accepted tool for the conversion of land uses within the Viera DRI. See also response to Brevard County DO Comment No. 2.**

Follow Up Response: See response to Brevard County Comment #27.

23. Page 174, Exhibit 5, Transportation Equivalency Matrix – Similarly, no guidance is provided on how and when the equivalency matrix can be used. If land uses brought in had much different trip distribution characteristics from ones being taken out, there could be an effect on the transportation system, which could be complicated by the use of trip generation equations in lieu of the ITE Rates reflected in the current Transportation Equivalency Matrix. In the past, this potential impact could be addressed through the modelling & monitoring requirements for future phases. The applicant is now proposing to include all future development in one final phase, with no monitoring requirements. Consideration should be given to monitoring, with potential “stoppers” included in the Development Order.

**RESPONSE: As explained and discussed from the beginning of this application process, The Viera Company cannot proceed with monitoring that includes “stoppers” due to the level of proposed mitigation and investment as well as financing of those improvements with third party institutions. The entire purpose of the cumulative analysis was to determine impacts at buildout and determine identifiable mitigation measures to address the impacts. An**

# Technical Review Comments

Equivalency Matrix is designed to have reasonable exchanges from one use to another in a way to limit any change in transportation impacts. It is impossible (and unnecessary) to try to quantify every minor change. For example we make assumptions on “retail” ITE rates knowing full well that different retail uses may have minor differences in rates and trip distribution characteristics. In this application, we have been conservative in our analysis to assure over-mitigation. It should be noted that the Developer’s calculated proportionate fair share is \$360,283.47 and the Developer’s proposed Development Order indicates a mitigation program for Phase 4 in excess of \$15 Million Dollars.

Follow Up Response: No further comment. Brevard County is working with the applicant to resolve this issue.

24. Page 180, Exhibit 5, Transportation Equivalency Matrix – The footnote applied to the Junior/Community College trip rate needs to be explained further.

**RESPONSE:** The footnote was added in recognition of the evolution of community colleges. The applicant wanted to be clear that four year programs or private institutions, which would function similar to a junior/community college, would still be allowed. Further, it was important to note that no campus housing could be included as the characteristics of such a school would be different.

Follow Up Response: No further comment.

25. Appendix 21.C.2, Internal Capture Worksheet: Daily Analysis for NE corner of Viera Blvd & Murrell Rd: The Office (710) land use says 97,361 SQ FT and should be 52,505 SQ FT

**RESPONSE:** The sheet reference was updated accordingly.

Follow Up Response: No further comments.

26. Appendix 21.C.2, Internal Capture Worksheet: PM Peak Analysis for NE corner of Viera Blvd & Murrell Rd: The Retail total trips is higher than calculated.

**RESPONSE:** The sheet was updated accordingly.

Follow Up Response: No further comments.

27. Appendix 21.A.2, HCS Intersection Analysis: The HCS output sheets included do not provide inputs used in HCS analysis. Please provide the full HCS input and output summary sheets.

**RESPONSE:** The requested files, including HCS data files, are provided on the attached flash drive.

Follow Up Response: How was RTOR calculated for HCS analysis? It did not appear RTOR was listed on data collection worksheets. If additional concerns are identified they will be conveyed to all reviewers by (add date certain).

28. Appendix 21.A.2, HCS Intersection Analysis: Were the intersection peak hour factors from Appendix 21.A.3 adjusted before inputted into the HCS software? Many of the intersection peak hour factors do not match between the two source.

# Technical Review Comments

**RESPONSE:** Yes, the peak-hour factors were applied in running the HCS analyses. It is understood that high peak-hour factors indicate a flatter peak in traffic and significantly low peak-hour factors represent larger peaks. To simulate increased flow rates during the peak 15-minute period (for a slightly more conservative analysis) the PHF range/limits used in HCS software was 0.75 - 0.95. Additionally, due to emphasis on capacity improvements, the defined range insured that a reasonable peak in traffic was analyzed for all scenarios. In all other cases, the PHF obtained from the TMCs were rounded to the nearest hundredth.

Follow Up Response: No further comments.

Finally, the lack of any information provided in relation to proportionate share calculations makes it very difficult to assess whether the project's proposed mitigation is sufficient. Furthermore, the applicant is proposing to pipeline all mitigation to construction of the Spyglass overpass and a PD&E/IMR study of the I-95 / Fiske Blvd. Interchange. No information has been provided regarding what these improvements might consist of, nor of their effect on local and regional traffic patterns.

**RESPONSE:** Please refer to Exhibit "FDOT-1-2 PFS". It should be noted that the Developer's calculated proportionate fair share is \$360,283.47 and the Developer's proposed Development Order indicates a mitigation program for Phase 4 in excess of \$15 Million Dollars.

Follow Up Response: No further comment.

Finally, while the full impacts of the NOPC cannot be determined at this time, it is likely that the Developer's proposed \$15 million mitigation will offset their impacts. As long as Brevard County and other review agencies find the Spyglass overpass as an acceptable pipeline project, it could serve as sufficient mitigation for the impacts of Viera Phase 4. We look forward to working with the applicant, Brevard County, and other review agencies as this project moved forward. In the meantime, please contact Wiatt Bowers if you have any questions regarding our comments.



**Notice of Proposed Change  
April, 2017  
Revised August, 2017**

Prepared by:

**GRIMES GOEBEL**  
Grimes Hawkins Gladfelter & Galvano, P.L.  
Attorneys at Law Est. 1922

**NUE URBAN CONCEPTS**  
  
Creatively Integrating Mobility & Land Use

**Lassiter Transportation Group, Inc.**  
*Engineering and Planning*

**GRIMES GOEBEL**  
**Grimes Hawkins Gladfelter & Galvano, P.L.**

Attorneys at Law Est. 1922

Caleb J. Grimes  
John D. Hawkins  
Leslie Horton Gladfelter  
Bill Galvano  
Derin Parks  
Sacha Ross

---

**Reply to: Bradenton**

September 5, 2017

Mr. Stephen M. Swanke, Program Manager  
Brevard County Planning and Development  
Department  
2725 Judge Fran Jamieson Way  
Building A, Room 114  
Viera, Florida 32940

RE: Viera Notice of Proposed Change

Dear Mr. Swanke:

In preparation for the upcoming LPA and Board of County Commissioners hearings for the above noted application, I have enclosed the following items for the members to review:

- NOPC Application as revised on August 31, 2017. This document contains the Application form, Revised Development Order, Revised Exhibit 3 (Map H), Revised Exhibit 4 (Master Development Program), Revised Exhibit 5 (Transportation Equivalency Matrix) and Notice of Extension Letter to Brevard County in support of extended dates.
- August 11, 2017 Sufficiency Response and Exhibits
- Agency Comments to Sufficiency Response, annotated

We appreciated your efforts on this project, please let us know should you require anything else.

Sincerely,



Darena D. Marvin, AICP  
Senior Planner

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### **TAB 3**

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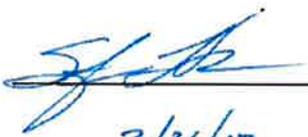
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STATE OF FLORIDA  
DEPARTMENT OF ECONOMIC OPPORTUNITY  
DIVISION OF COMMUNITY PLANNING & DEVELOPMENT  
The Caldwell Building, MSC 160  
107 East Madison Street  
Tallahassee, Florida 32399

NOTIFICATION OF A PROPOSED CHANGE TO A PREVIOUSLY APPROVED  
DEVELOPMENT OF REGIONAL IMPACT (DRI)  
SUBSECTION 380.06(19), FLORIDA STATUTES

Subsection 380.06(19), Florida Statutes, requires that submittal of a proposed change to a previously approved DRI be made to the local government, the regional planning agency, and the state land planning agency according to this form.

1. I, Stephen L. Johnson, the undersigned owner/authorized representative of A. Duda and Sons, Inc., hereby give notice of a proposed change to a previously approved Development of Regional Impact in accordance with Subsection 380.06(19), Florida Statutes. In support thereof, I submit the following information concerning the Viera DRI development, which information is true and correct to the best of my knowledge. I have submitted today, under separate cover, copies of this completed notification to Brevard County, to the East Central Florida Regional Planning Council, and to the Bureau of Community Planning, Department of Economic Opportunity.

Signature: 

Date: 3/31/17

1. I, Todd J. Pokrywa, the undersigned owner/authorized representative of The Viera Company, hereby give notice of a proposed change to a previously approved Development of Regional Impact in accordance with Subsection 380.06(19), Florida Statutes. In support thereof, I submit the following information concerning the Viera DRI development, which information is true and correct to the best of my knowledge. I have submitted today, under separate cover, copies of this completed notification to Brevard County, to the East Central Florida Regional Planning Council, and to the Bureau of Community Planning, Department of Economic Opportunity.

The Viera Company  
Signature:   
Date: 3/31/17  
By: Todd J. Pokrywa, Sr. V.P. Land Use Planning & Development

**2. Applicant (name, address, phone).**

The Viera Company  
7380 Murrell Road, Suite 201  
Viera, Florida 32940  
321-242-1200

A. Duda & Sons, Inc.  
1200 Duda Trail  
Oviedo, Florida, 32765

**3. Authorized Agents (name, address, phone).**

Todd J. Pokrywa, Senior Vice President  
The Viera Company  
7380 Murrell Road, Suite 201  
Viera, Florida 32940  
321-242-1200

Darenda D. Marvin, AICP  
Grimes Goebel Grimes Hawkins Gladfelter and Galvano, PL  
1023 Manatee Avenue West  
Bradenton, Florida 34205  
941-748-0151

**4. Location (City, County, Township/Range/Section) of approved DRI and proposed change.**

The Viera DRI development is located in Central Brevard County, Florida, both east and west of Interstate 95.

**5. Provide a complete description of the proposed change. Include any proposed changes to the plan of development, phasing, additional lands, commencement date, build-out date, development order conditions and requirements, or to the representations contained in either the development order or the Application for Development Approval.**

**Indicate such changes on the project master site plan, supplementing with other detailed maps, as appropriate. Additional information may be requested by the Department or**

**any reviewing agency to clarify the nature of the change or the resulting impacts.**

The Application seeks to amend the conditions in the Viera DRI Development Order (DO) to:

- (1) Modify the mitigation plan for Phase 4 to provide for proportionate share payments (i.e. the same method used in Phases 1-3) consistent with Chapter 73C-40.045, F.A.C. and to implement the project's proportionate share mitigation for the project through buildout; and
- (2) Modify development totals as follows: increase Office square footage by 334,506, increase Industrial square footage by 219,982 and decrease the number of hotel rooms by 258; and
- (3) Add post-secondary educational facilities, with a maximum enrollment of 4,500 full time equivalent students, and a maximum of 200,000 square feet, as a potential use through the modification of the Transportation Equivalency Matrix; and
- (4) Update commencement, phase, build-out, and termination dates to reflect previously approved legislative extensions; and
- (5) Update conditions of approval to address references, nomenclature, and current practices.

**6. Complete the attached Substantial Deviation Determination Chart for all land use types approved in the development. If no change is proposed or has occurred, indicate no change.**

Please see the attached completed chart attached as Attachment 1.

**7. List all the dates and resolution numbers (or other appropriate identification numbers) of all modifications or amendments to the originally approved DRI development order that have been adopted by the local government, and provide a brief description of the previous changes (i.e., any information not already addressed in the Substantial Deviation Determination Chart). Has there been a change in local government jurisdiction for any portion of the development since the last approval or development order was issued? If so, has the annexing local**

**government adopted a new DRI development order for the project?**

	<b>Date</b>	<b>Resolution #</b>	<b>Jurisdiction</b>
Amendment #1	November 16, 1992	92-401	Brevard County
Amendment #2	September 7, 1993	93-330	Brevard County
Amendment #3	November 22, 1993	93-448	Brevard County
Amendment #4	July 25, 1994	94-197	Brevard County
Substantial Deviation #1 Amendment #5	April 27, 1995	95-106	Brevard County
Amendment #6	November 14, 1995	95-355	City of Rockledge
Amendment #7	September 15, 1998 September 9, 1998	98-222 98	Brevard County City of Rockledge
Amendment #8	November 9, 1999	99-288	Brevard County
Amendment #9	December 12, 2000	01-014	Brevard County
Amendment #10	September 27, 2001	01-309	Brevard County
Amendment #11	November 11, 2001	01-391	Brevard County
Amendment #12	December 5, 2002	02-314	Brevard County
Amendment #13	October 21, 2003	03-280	Brevard County
Amendment #14	June 1, 2004	04-115	Brevard County
Amendment #15	August 24, 2004	04-200	Brevard County
Amendment #16	August 28, 2008	08-188	Brevard County
Substantial Deviation #2 Amendment #17	December 10, 2009	09-279	Brevard County
Amendment #18	May 27, 2010	10-105	Brevard County
Amendment #19	July 22, 2014	14-120	Brevard County
Amendment #20	July 21, 2015	15-110	Brevard County
Amendment #21	August 23, 2016	16-126	Brevard County

- 8. Describe any lands purchased or optioned within ¼ mile of the original DRI site subsequent to the original approval or issuance of the DRI development order. Identify such land, its size, intended use, and adjacent non-project land uses within ½ mile on a project master site plan or other map.**

No lands have been purchased since the issuance of the DRI development order.

**9. Indicate if the proposed change is less than 40% (cumulatively with other previous changes) of any of the criteria listed in Paragraph 380.06(19)(b), Florida Statutes.**

The proposed change is less than 40% of any of the criteria (cumulatively with other previous changes) listed in Paragraph 380.06 (19)(b). There have been no previous changes since the issuance of the Development Order in 2010, the subject of Substantial Deviation #2. The applicable criteria is found in 380.06(19)(b).3. The increase in office square footage from 3,169,961 to 3,504,467 represents an increase of 10.5 percent, less than the 15 percent threshold contained in 380.06(19)(b).3. There are no applicable criteria for the proposed changes to industrial and hotel development totals.

**Do you believe this notification of change proposes a change which meets the criteria of Subparagraph 380.06(19)(e)2., F.S. : N/A**

**YES \_\_\_\_\_ NO \_\_\_\_\_ X \_\_\_\_\_**

**10. Does the proposed change result in a change to the buildout date or any phasing date of the project? If so, indicate the proposed new buildout or phasing dates.**

No change in the buildout or phasing dates is proposed. However, the changes reflect the previously approved legislative extensions.

**11. Will the proposed change require an amendment to the local government comprehensive plan?**

The proposed change does not require an amendment to the Comprehensive Plan.

**12. An updated master site plan or other map of the development portraying and distinguishing the proposed changes to the previously approved DRI or development order conditions.**

An updated Map H is attached to reflect the revised Development Program.

**13. Pursuant to Subsection 380.06(19)(f), F.S., include the precise language that is being proposed to be deleted or added as an**

**amendment to the development order. This language should address and quantify:**

- a. All proposed specific changes to the nature, phasing, and build-out date of the development; to development order conditions and requirements; to commitments and representations in the Application for Development Approval; to the acreage attributable to each described proposed change of land use, open space, areas for preservation, green belts; to structures or to other improvements including locations, square footage, number of units; and other major characteristics or components of the proposed change;**

See attached draft Development Order prepared in a strike through underline format to demonstrate the amendatory language.

- b. An updated legal description of the property, if any project acreage is/has been added or deleted to the previously approved plan of development;**

Not applicable, as no project acreage has been added or deleted.

- c. A proposed amended development order deadline for commencing physical development of the proposed changes, if applicable;**

No change is proposed; the Development Order does not contain a requirement for commencing physical development as the development commenced several decades ago.

- d. A proposed amended development order termination date that reasonably reflects the time required to complete the development;**

No change is proposed, however, the development order has been updated to reflect the previously approved legislative extensions.

- e. A proposed amended development order date until which the local government agrees that the changes to the DRI shall not be subject to down-zoning, unit density reduction, or intensity reduction, if applicable; and**

No change is proposed, however, the development order has been updated to reflect the previously approved legislative extensions.

- f. Proposed amended development order specifications for the annual report, including the date of submission, contents, and parties to whom the report is submitted as specified in Subsection 73C-40.025 (7), F.A.C.**

No change is proposed; however, please note that the development order provides for Biennial Monitoring.

**ATTACHMENT 1**  
**SUBSTANTIAL DEVIATION DETERMINATION CHART**

TYPE OF LAND USE	CHANGE CATEGORY	PROPOSED PLAN	ORIGINAL PLAN	PREVIOUS D.O. CHANGE & DATE OF CHANGE
Attraction/Recreation	# Parking Spaces			<b>NO CHANGE PROPOSED</b>
	# Spectators			
	# Seats			
	Site locational changes			
	Acreage, including drainage, ROW, easements, etc.			
	External Vehicle Trips			
	D.O. Conditions			
	ADA Representations			
Airports	Runway (length)			<b>NOT APPLICABLE</b>
	Runway (strength)			
	Terminal (gross square feet)			
	# Parking Spaces			
	# Gates			
	Apron Area (gross square feet)			
	Site locational changes			
	Airport Acreage, including drainage, ROW, easements, etc.			
	# External Vehicle Trips			

TYPE OF LAND USE	CHANGE CATEGORY	PROPOSED PLAN	ORIGINAL PLAN	PREVIOUS D.O. CHANGE & DATE OF CHANGE
	D.O. Conditions			
	ADA representations			
Hospitals	# Beds			<b>NO CHANGE PROPOSED</b>
	# Parking Spaces			
	Building (gross square feet)			
	Site locational changes			
	Acreage, including drainage, ROW, easements, etc.			
	External Vehicle Trips			
	D.O. conditions			
	ADA representations			
Industrial	Acreage, including drainage, ROW, easements, etc.			
	# Parking spaces			
	Building (gross square feet)	522,500	302,518	
	# Employees			
	chemical storage (barrels and pounds)			
	Site locational changes			
	# External vehicle trips			
	D.O. Conditions			
	ADA representations			

TYPE OF LAND USE	CHANGE CATEGORY	PROPOSED PLAN	ORIGINAL PLAN	PREVIOUS D.O. CHANGE & DATE OF CHANGE
Mining Operations	Acreage mined (year)			<b>NOT APPLICABLE</b>
	Water withdrawal (gal/day)			
	Size of mine (acres), including drainage, ROW, easements, etc.			
	Site locational changes			
	# External vehicle trips			
	D.O. Conditions			
	ADA representations			
Office	Acreage, including drainage, ROW, easements, etc.			On July 21, 2015, Brevard County granted approval of an amended development order pursuant to an approved land use exchange. This amendment reduced office square footage by 399,741 from an original total of 3,569,702 square feet.
	Building (gross square feet)	3,504,467 (an increase of 10.5%)	3,169,961*	
	# Parking Spaces			
	# Employees			
	Site locational changes			
	# External vehicle trips			
	D.O. Conditions			
	ADA representations			
Petroleum/Chemical Storage	Storage Capacity (barrels and/or pounds)			<b>NOT APPLICABLE</b>

TYPE OF LAND USE	CHANGE CATEGORY	PROPOSED PLAN	ORIGINAL PLAN	PREVIOUS D.O. CHANGE & DATE OF CHANGE
	Distance to Navigable Waters (feet)			
	Site locations changes			
	Facility Acreage, including drainage, ROW, easements, etc.			
	# External vehicle trips			
	D.O. Conditions			
	ADA representations			
Ports (Marinas)	# Boats, wet storage			<b>NOT APPLICABLE</b>
	# Boats, dry storage			
	Dredge and fill (cu. yds.)			
	Petroleum storage (gals.)			
	Site locational changes			
	Port Acreage, including drainage, ROW, easements, etc.			
	# External vehicle trips			
	D.O. Conditions			
	ADA representations			
Residential	# Dwelling units			<b>NO CHANGE PROPOSED*</b>
	Type of dwelling units			
	# of lots			

TYPE OF LAND USE	CHANGE CATEGORY	PROPOSED PLAN	ORIGINAL PLAN	PREVIOUS D.O. CHANGE & DATE OF CHANGE
	Acreage, including drainage, ROW, easements, etc.			* On July 21, 2015, Brevard County granted approval of an amended development order pursuant to an approved land use exchange. The total number of residential dwelling units was increased by 1,674 for the current approved total of 31,619.
	Site locational changes			
	# External vehicle trips			
	D.O. Conditions			
Wholesale, Retail, Service	Acreage, including drainage, ROW, easements, etc.			<b>NO CHANGE PROPOSED</b>
	Floor Space (gross square feet)			
	# Parking Spaces			
	# Employees			
	Site locational changes			
	# External vehicle trips			
	D.O. Conditions			
	ADA representations			
Hotel/Motel	# Rental Units	750	1,008	On July 21, 2015, Brevard County granted approval of an
	Floor space (gross square feet)			

TYPE OF LAND USE	CHANGE CATEGORY	PROPOSED PLAN	ORIGINAL PLAN	PREVIOUS D.O. CHANGE & DATE OF CHANGE
	# Parking Places			amended development order pursuant to an approved land use exchange. That amendment increased the total number of hotel rooms from 1,000 to the current total of 1,008.
	# Employees			
	Site locational changes			
	Acreage, including drainage, ROW, easements, etc.			
	# External vehicle trips			
	D.O. Conditions			
	ADA representations			
R.V. Park	Acreage, including drainage, ROW, easements, etc.			<b>NOT APPLICABLE</b>
	# Parking Spaces			
	Buildings (gross square feet)			
	# Employees			
	Site locational changes			
	# External vehicle trips			
	D.O. conditions			
	ADA representations			
Open Space (All natural and vegetated non-impervious surfaces)	Acreage			<b>NO CHANGE PROPOSED</b>
	Site locational changes			
	Type of open space			
	D.O. Conditions			
	ADA representations			
	Acreage			

TYPE OF LAND USE	CHANGE CATEGORY	PROPOSED PLAN	ORIGINAL PLAN	PREVIOUS D.O. CHANGE & DATE OF CHANGE
Preservation, Buffer or Special Protection Areas Preservation (cont.)	Site locational changes			<b>NO CHANGE PROPOSED</b>
	Development of site proposed			
	D.O. Conditions			
	ADA representations			

**QUESTION 21 - TRANSPORTATION**

<p><b>See State Comprehensive Plan (Chapter 187, F.S.)</b></p> <p><b>GOAL (11); POLICY (2)</b> <b>GOAL (12); POLICIES (3),(4)</b> <b>GOAL (16); POLICIES (1)</b> <b>GOAL (18); POLICIES (1),(3)(4),(6)</b> <b>GOAL(20);POLICIES(2),(3),(8),(9),(10), (12),(13),(15)</b> <b>GOAL (25); POLICY ( 5)</b></p>
<p><b>ROAD LINK/INTERSECTION:</b></p> <p><b>EXISTING LEVEL OF SERVICE:</b></p> <p><b>ADOPTED LEVEL OF SERVICE STANDARD:</b></p> <p><b>LEVEL OF SERVICE AFTER PROJECT BUILDOUT:</b></p>

**A. Using Map J or a table as a base, indicate existing conditions on the highway network within the study area (as previously defined on Map J), including AADT, peak-hour trips directional, traffic split, levels of service and maximum service volumes for the adopted level of service (LOS). Identify the assumptions used in this analysis, including "K" factor, directional "D" factor, facility type, number of lanes and existing signal locations. (If levels of service are based on some methodology other than the most recent procedures of the Transportation Research Board and FDOT, this should be agreed upon at the pre-application conference stage.) Identify the adopted LOS standards of the FDOT, appropriate regional planning council, and local government for roadways within the identified study area. Identify what improvements or new facilities within this study area are planned, programmed, or committed for improvement. Attach appropriate excerpts from published capital improvements plans, budgets and programs showing schedules and types of work and letters from the appropriate agencies stating the current status of the planned, programmed and committed improvements.**

RESPONSE:

The approved methodology is presented in Appendix 21.A.1 and includes the assumptions used in the analysis. The LOS designations, capacities, facility types, and number of lanes are based on the comprehensive plan and concurrency databases for Brevard County. The planning "K" factor was obtained from FDOT's Quality Level of Service Handbook. Per the approved methodology, segments are analyzed based on two-way volumes, therefore no "D" factor was applied.

Table 21.A.1 presents the existing roadway segment conditions on the highway network, while Table 21.A.2 presents the existing intersection capacity analysis LOS. The Highway Capacity Software (HCS) analysis printouts are presented in Appendix 21.A.2. Maps 21.A.1 (1-6) present, in graphic form, the existing p.m. peak-hour turning movement count data. Raw intersection turning movement counts and existing traffic signal timing data are presented in Appendices 21.A.3, and 21.A.4, respectively.

Planned and programmed road improvements assumed in the existing conditions analysis are listed in Appendix 21.A.5.

Table 21.A.1  
Existing P.M. Peak-Hour Two-Way Roadway Segment Conditions

Roadway	Limits		Number of Lanes	Functional Classification	P.M. Peak-Hour Two Way Capacity at Adopted LOS	AADT	AADT Year	K Factor	Existing P.M. Peak-Hour Two-Way Volume	Adverse?
	From	To								
I-95	Malabar Road	Palm Bay Road	6D	Freeway	10,060	59,500	2015	0.09	5,355	No
I-95	Palm Bay Road	US 192	6D	Freeway	10,060	72,000	2015	0.09	6,480	No
I-95	US 192	Eau Gallie Blvd	6D	Freeway	10,060	43,500	2015	0.09	3,915	No
I-95	Eau Gallie Blvd	Wickham Road	6D	Freeway	10,060	81,000	2015	0.09	7,290	No
I-95	Wickham Road	Fiske Boulevard	6D	Freeway	10,060	60,500	2015	0.09	5,445	No
I-95	Fiske Boulevard	SR 520	6D	Freeway	10,060	77,120	2015	0.09	6,941	No
I-95	SR 520	SR524	6D	Freeway	10,060	40,000	2015	0.09	3,600	No
I-95	SR 524	SR 528	6D	Freeway	10,060	57,000	2015	0.09	5,130	No
I-95	SR 528	Port St John Pkwy	6D	Freeway	10,060	24,500	2015	0.09	2,205	No
I-95	Port St John Pkwy	SR 407	6D	Freeway	10,060	42,000	2015	0.09	3,780	No
I-95	SR 407	SR 50	6D	Freeway	10,080	25,700	2015	0.09	2,313	No
US 1	Nasa Boulevard	Babcock Street	6D	U Principal Arterial	5,390	33,880	2015	0.09	3,049	No
US 1	Babcock Street	Sarno Road	6D	U Principal Arterial	5,390	47,000	2015	0.09	4,230	No
US 1	Sarno Road	Eau Gallie Boulevard	6D	U Principal Arterial	5,390	52,460	2015	0.09	4,721	No
US 1	Eau Gallie Boulevard	Aurora Road	6D	U Principal Arterial	5,390	40,440	2015	0.09	3,640	No
US 1	Aurora Road	Lake Washington Boulevard	6D	U Principal Arterial	5,390	38,610	2015	0.09	3,475	No
US 1	Lake Washington Boulevard	Parkway Drive	6D	U Principal Arterial	5,390	37,300	2015	0.09	3,357	No
US 1	Parkway Drive	Post Road	6D	U Principal Arterial	5,390	37,880	2015	0.09	3,409	No
US 1	Pineda Causeway	Sun Tree Boulevard	4D	U Principal Arterial	3,580	39,320	2016	0.09	3,539	No
US 1	Sun Tree Boulevard	Viera Boulevard	4D	U Principal Arterial	3,580	31,990	2016	0.09	2,879	No
US 1	Eyster Boulevard	Barton Boulevard	6D	U Principal Arterial	5,390	33,830	2016	0.09	3,045	No
US 1	Barton Boulevard	Florida Avenue	6D	U Principal Arterial	5,390	41,050	2016	0.09	3,695	No
US 1	Florida Avenue	Rosa Jones Boulevard	6D	U Principal Arterial	5,390	32,720	2016	0.09	2,945	No
US 1	Rosa Jones Boulevard	SR 520	6D	U Principal Arterial	5,390	30,890	2016	0.09	2,780	No
US 1	SR 520	Peachtree Street	6D	U Principal Arterial	5,390	17,860	2014	0.09	1,607	No
US 1	Dixon Boulevard	Michigan Boulevard	6D	U Principal Arterial	5,390	28,510	2013	0.09	2,566	No
Pineda Causeway	I-95	Wickham Road	4D	U Minor Arterial	3,580	25,360	2015	0.09	2,282	No
Pineda Causeway	Wickham Road	US 1	4D	U Principal Arterial	3,580	30,440	2015	0.09	2,740	No
Pineda Causeway	US 1	S. Tropical Trail	4D	U Principal Arterial	5,900	43,920	2016	0.09	3,953	No
Pineda Causeway	S. Tropical Trail	SR A1A	4D	U Principal Arterial	5,900	36,520	2016	0.09	3,287	No
Wickham Road	Murrell Road	Baytree Drive	4D	U Principal Arterial	3,580	29,600	2015	0.09	2,664	No
Wickham Road	Baytree Drive	Interlachen Road	4D	U Principal Arterial	3,580	30,220	2015	0.09	2,720	No
Wickham Road	Interlachen Road	N. Pinehurst Avenue	4D	U Principal Arterial	3,580	28,360	2015	0.09	2,552	No
Wickham Road	N. Pinehurst Avenue	Suntree Boulevard	4D	U Principal Arterial	3,580	30,300	2015	0.09	2,727	No
Wickham Road	Suntree Boulevard	St. Andrews Boulevard	4D	U Principal Arterial	3,580	23,940	2015	0.09	2,155	No
Wickham Road	St. Andrews Boulevard	Jordan Blass Drive	4D	U Principal Arterial	3,580	20,720	2015	0.09	1,865	No
Wickham Road	Jordan Blass Drive	Pineda Causeway	4D	U Principal Arterial	3,580	26,540	2015	0.09	2,389	No
Wickham Road	Pineda Causeway	Business Center Boulevard	4D	U Principal Arterial	3,580	36,620	2015	0.09	3,296	No
Wickham Road	Business Center Boulevard	Mariah Drive	4D	U Principal Arterial	3,580	35,170	2015	0.09	3,165	No
Wickham Road	Mariah Drive	Kensington Drive	4D	U Principal Arterial	3,580	34,880	2015	0.09	3,139	No
Wickham Road	Kensington Drive	Post Road	4D	U Principal Arterial	3,580	36,000	2015	0.09	3,240	No
Wickham Road	Post Road	Parkway Drive	4D	U Principal Arterial	3,580	32,140	2015	0.09	2,893	No
Wickham Road	Parkway Drive	Lake Washington Boulevard	4D	U Principal Arterial	3,580	30,720	2015	0.09	2,765	No
Fiske Boulevard	Barnes Boulevard	Eyster Boulevard	4D	U Principal Arterial	3,580	25,850	2016	0.09	2,327	No
Fiske Boulevard	Eyster Boulevard	Barton Boulevard	4D	U Principal Arterial	3,580	22,200	2016	0.09	1,998	No
Fiske Boulevard	Barton Boulevard	St. Andrews Drive	4D	U Principal Arterial	3,580	24,930	2016	0.09	2,244	No
Fiske Boulevard	St. Andrews Drive	Pluckebaum Road	4D	U Principal Arterial	3,580	24,210	2016	0.09	2,179	No
Fiske Boulevard	Pluckebaum Road	Rosa Jones Boulevard	4D	U Principal Arterial	3,580	18,610	2016	0.09	1,675	No
Fiske Boulevard	Rosa Jones Boulevard	SR 520	4D	U Principal Arterial	3,580	14,270	2016	0.09	1,284	No
Fiske Boulevard	SR 520	Gus Hipp Boulevard	2	U Minor Arterial	1,410	8,260	2016	0.09	743	No
Murrell Road	Barnes Boulevard	Gus Hipp Boulevard	4D	U Minor Arterial	3,222	17,220	2015	0.09	1,550	No
Murrell Road	Gus Hipp Boulevard	Eyster Boulevard	4D	U Minor Arterial	3,222	17,220	2015	0.09	1,550	No
Murrell Road	Eyster Boulevard	Barton Boulevard	4D	U Minor Arterial	3,222	5,590	2015	0.09	503	No
Barnes Boulevard	Fiske Boulevard	Three Meadows Drive	4D*	U Principal Arterial	3,222	15,940	2015	0.09	1,435	No
Barnes Boulevard	Three Meadows Drive	Murrell Road	4D*	U Principal Arterial	3,222	15,850	2015	0.09	1,427	No
Post Road	Wickham Road	US 1	4D	U Major Collector	2,736	11,400	2015	0.09	1,026	No
Suntree Boulevard	Wickham Road	US 1	2D	U Minor Collector	1,410	18,040	2015	0.09	1,624	Yes
Viera Boulevard	Murrell Road	Independence Avenue	4D*	U Minor Collector	3,580	16,190	2016	0.09	1,457	No
Viera Boulevard	Independence Avenue	Holiday Springs Road	4D*	U Minor Collector	3,580	16,190	2016	0.09	1,457	No
Viera Boulevard	Holiday Springs Road	US 1	4D*	U Minor Collector	3,580	14,000	2016	0.09	1,260	No
SR 520	Clear Lake Road	Lake Drive	4D	U Principal Arterial	3,580	23,570	2016	0.09	2,121	No
SR 520	Lake Drive	Fiske Boulevard	4D	U Principal Arterial	3,580	26,420	2016	0.09	2,378	No
SR 520	Fiske Boulevard	Blake Avenue	4D	U Principal Arterial	3,580	29,290	2016	0.09	2,636	No
SR 520	Blake Avenue	US 1	4D	U Principal Arterial	3,580	28,920	2016	0.09	2,603	No
SR 520	US 1	S. Tropical Trail	6D	U Principal Arterial	5,390	43,519	2015	0.09	3,917	No
SR 520	S. Tropical Trail	N Courtney Parkway	6D	U Principal Arterial	5,390	37,410	2016	0.09	3,367	No
SR 520	N Courtney Parkway	N Sykes Creek Parkway	6D	U Principal Arterial	5,390	30,250	2016	0.09	2,723	No
SR 520	N Sykes Creek Parkway	Newfound Harbor Dr	6D	U Principal Arterial	5,390	35,360	2016	0.09	3,182	No
SR A1A	Patrick AFB Main Gate	Pineda Causeway	4D	U Principal Arterial	3,580	20,870	2016	0.09	1,878	No
SR A1A	Pineda Causeway	Ocean Boulevard	4D	U Principal Arterial	3,580	20,510	2016	0.09	1,846	No
SR A1A	Ocean Boulevard	Berkely Street	4D	U Principal Arterial	3,580	20,160	2014	0.09	1,814	No
SR A1A	Berkely Street	Jackson Street	4D	U Principal Arterial	3,580	23,670	2016	0.09	2,130	No
SR A1A	Jackson Street	Cassia Boulevard	4D	U Principal Arterial	3,580	24,020	2016	0.09	2,162	No

**Table 21.A.1  
Existing P.M. Peak-Hour Two-Way Roadway Segment Conditions  
Vlera DRI**

Spyglass Hill Road	Murrell Road	Pinehurst Avenue	2	U Minor Collector	1,410	4,300	2016	0.09	387	No
Pinehurst Avenue	Wickham Road	Spyglass Hill Road	2D	U Minor Collector	1,410	7,200	2016	0.09	648	No
Barton Boulevard	Fiske Boulevard	Murrell Road	4D	U Minor Collector	2,736	17,900	2015	0.09	1,611	No
Barton Boulevard	Murrell Road	US 1	4D	U Minor Collector	2,736	14,700	2015	0.09	1,323	No
Eyster Boulevard	Fiske Boulevard	Murrell Road	2	U Minor Collector	1,269	6,400	2015	0.09	576	No
Eyster Boulevard	Murrell Road	US 1	4D	U Minor Collector	2,736	6,400	2015	0.09	576	No

**Table 21.A.2**  
Existing P.M. Peak-Hour Intersection LOS

Signalized Intersections					
No.	Intersection	Adopted LOS	P.M. Peak-Hour		
			Delay (sec.)	LOS	V/C > 1.0
1	US 1 at Michigan Ave	D	18.4	B	No
2	US 1 at Dixon Blvd	D	21.7	C	No
3	US 1 at Forrest Ave	D	17.0	B	No
4	US 1 at Peachtree St	D	16.1	B	No
5	US 1 at SR 520	D	88.9	F	Yes
6	US 1 at Rosa L Jones	D	15.1	B	No
7	US 1 at Barton Blvd	D	26.9	C	No
8	US 1 at Eyster Blvd	D	35.9	D	No
10	US 1 at Barnes Blvd	D	27.8	C	No
11	US 1 at Viera Blvd	D	64.3	E	Yes
12	US 1 at Suntree Blvd	D	100.6	F	Yes
15	US 1 at Post Rd	D	59.9	E	Yes
16	US 1 at Parkway Rd	D	30.2	C	No
17	US 1 at Lake Washington Rd	D	31.6	C	No
18	US 1 at Aurora Rd	D	36.6	D	No
19	US 1 at Eau Gallie Blvd.	D	110.5	F	Yes
20	US 1 at Sarno Rd	D	49.0	D	No
21	US 1 at NASA Blvd.	D	31.5	C	No
22	US 1 at US 192	D	80.4	F	Yes
23	Fiske Blvd at SR 520	D	66.2	E	Yes
24	Fiske Blvd at Rosa L Jones	D	8.4	A	No
25	Fiske Blvd at Pluckebaum Rd	D	17.2	B	No
26	Fiske Blvd at St. Andrews Dr.	D	7.5	A	No
27	Fiske Blvd at Barton Blvd	D	36.6	D	No
28	Fiske Blvd at Eyster Blvd	D	21.6	C	No
29	Fiske Blvd at Barnes Blvd	D	148.1	F	Yes
30	Fiske Blvd at I-95 SB Ramps	D	159.8	F	Yes
31	Murrell Rd at Barton Blvd	E	22.0	C	No
32	Murrell Rd at Eyster Blvd	E	27.3	C	No
33	Murrell Rd at Gus Hipp Blvd	E	11.3	B	No
34	Murrell Rd at Barnes Blvd	E	27.0	C	No
35	Murrell Rd at Viera Blvd	E	26.5	C	No
36	Murrell Rd at Spyglass Hill Rd	E	15.4	B	No
37	Murrell Rd at Wickham Rd	E	62.9	E	Yes
38	Wickham Rd at Lake Andrew Dr	E	13.6	B	No
39	I-95 NB Ramps at Wickham Rd	D	44.8	D	Yes
40	I-95 SB Ramps at Wickham Rd	D	30.1	C	No
41	Wickham Rd at Baytree Blvd	E	25.2	C	No
42	Wickham Rd at Interlachen Rd	E	26.6	C	No
43	Wickham Rd at Pinehurst Ave	E	26.2	C	No
44	Wickham Rd at Suntree Blvd	E	58.0	E	Yes
45	Wickham Rd at St. Andrews Blvd	E	13.0	B	No
46	Wickham Rd at Jordan Blass Dr	E	15.8	B	No
47	Wickham Rd at Pineda Causeway	E	347.2	F	Yes
48	Wickham Rd at Post Rd	E	134.2	F	Yes
49	Wickham Rd at Parkway Dr	E	35.9	D	No
50	Wickham Rd at Lake Washington Rd	E	37.5	D	No
51	Wickham Rd at Aurora Rd	E	64.1	E	Yes
52	Wickham Rd at Eau Gallie Blvd	E	86.0	F	Yes
53	Lake Andrew at Napolo	E	7.8	A	No
54	Lake Andrew at Colonnade	E	13.5	B	No
55	Lake Andrew Dr at Town Center Ave	E	45.1	D	Yes
56	Lake Andrew at Judge Fran Jamieson Way	E	44.9	D	No
58	Stadium Pkwy at Judge Fran Jamieson Way	E	92.4	F	Yes
59	Stadium Pkwy at Viera Blvd	E	45.2	D	No
60	Stadium Pkwy at Rosemount Dr	E	11.5	B	No
63	Wickham Rd at Shoppes Dr/Target Entrance	E	40.3	D	No

Unsignalized Intersections					
No.	Intersection	Adopted LOS	P.M. Peak-Hour		
			Delay (sec.)	LOS	Critical Approach
9	US 1 at Gus Hipp Blvd	D	68.7	F	WB
13	US 1 at Pineda Causeway WB Ramps	D	199.9	F	NB
14	US 1 at Pineda Causeway EB Ramps	D	273.8	F	EB
57	Stadium Pkwy at Wickham Rd	E	14.6	B	SB
61	Stadium Pkwy at Tavistock Dr	E	62.6	F	WB
62	Viera Blvd at Tavistock Dr	E	10.9	B	WB

<p>①</p> <p>Michigan Blvd (E/W) at US 1 (N/S)</p>	<p>②</p> <p>Dixon Blvd (E/W) at US 1 (N/S)</p>	<p>③</p> <p>Forrest Ave (E/W) at US 1 (N/S)</p>	<p>④</p> <p>Peachtree St (E/W) at US 1 (N/S)</p>
<p>⑤</p> <p>SR 520 (E/W) at US 1 (N/S)</p>	<p>⑥</p> <p>Rosa L Jones Blvd (E/W) at US 1 (N/S)</p>	<p>⑦</p> <p>Barton Blvd (E/W) at US 1 (N/S)</p>	<p>⑧</p> <p>Eyler Blvd (E/W) at US 1 (N/S)</p>
<p>⑨</p> <p>Gus Hipp Blvd (E/W) at US 1 (N/S)</p>	<p>⑩</p> <p>Barnes Blvd (E/W) at US 1 (N/S)</p>	<p>⑪</p> <p>Viera Blvd (E/W) at US 1 (N/S)</p>	<p>⑫</p> <p>Siskree Blvd (E/W) at US 1 (N/S)</p>
<p>Viera DRI</p>	<p>N NTS</p>	<p><b>Lassiter Transportation Group, Inc.</b> Engineering and Planning</p> <p>1450 W. Granada Blvd, Suite 2 – Ormond Beach, Florida 32174 Telephone: 386.257.2571 Fax: 386.257.6996 EB#0009227</p>	<p><b>Existing P.M. Peak-Hour Turning Movement Counts</b></p> <p>Project Number: 4081.03      Map 21.A.1 (1 of 6) Page 21-4</p>

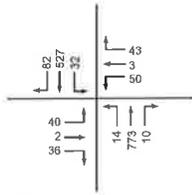
<p>13</p> <p>Pineda Causeway (W) at US 1 (N/S)</p>	<p>14</p> <p>Pineda Causeway (E) at US 1 (N/S)</p>	<p>15</p> <p>Post Rd (E/W) at US 1 (N/S)</p>	<p>16</p> <p>Parkway Rd (E/W) at US 1 (N/S)</p>	
<p>17</p> <p>Lake Washington Rd (E/W) at US 1 (N/S)</p>	<p>18</p> <p>Aurora Rd (E/W) at US 1 (N/S)</p>	<p>19</p> <p>Eau Gallie Blvd (E/W) at US 1 (N/S)</p>	<p>20</p> <p>Sarma Rd (E/W) at US 1 (N/S)</p>	
<p>21</p> <p>NASA Blvd (E/W) at US 1 (N/S)</p>	<p>22</p> <p>US 192 (E/W) at US 1 (N/S)</p>	<p>23</p> <p>SR 520 (E/W) at Fiske Blvd (N/S)</p>	<p>24</p> <p>Rosa L. Jones Blvd (E/W) at Fiske Blvd (N/S)</p>	
<p>Viera DRI</p>		<p style="text-align: center;"> <b>Lassiter Transportation Group, Inc.</b>  <b>Engineering and Planning</b>          1450 W. Granada Blvd, Suite 2 – Ormond Beach, Florida 32174          Telephone: 386.257.0271 Fax: 386.257.6996 EB#0009227       </p>	<p style="text-align: center;"><b>Existing P.M. Peak-Hour Turning Movement Counts</b></p> <p>Project Number: 4081.03 <span style="float: right;">Map 21.A.1 (2 of 8) Page 21-5</span></p>	

<p>25</p> <p>Pluckebaum Rd. (E/W) at Fiske Blvd. (N/S)</p>	<p>26</p> <p>St. Andrews Dr. (E/W) at Fiske Blvd. (N/S)</p>	<p>27</p> <p>Barton Blvd. (E/W) at Fiske Blvd. (N/S)</p>	<p>28</p> <p>Eyster Blvd. (E/W) at Fiske Blvd. (N/S)</p>
<p>29</p> <p>Barnes Blvd. (E/W) at Fiske Blvd. (N/S)</p>	<p>30</p> <p>I-95 SB Ramps (E/W) at Fiske Blvd. (N/S)</p>	<p>31</p> <p>Barnes Blvd. (E/W) at Murrell Rd. (N/S)</p>	<p>32</p> <p>Eyster Blvd. (E/W) at Murrell Rd. (N/S)</p>
<p>33</p> <p>Gus Hipp Blvd. (E/W) at Murrell Rd. (N/S)</p>	<p>34</p> <p>Barnes Blvd. (E/W) at Murrell Rd. (N/S)</p>	<p>35</p> <p>Viera Blvd. (E/W) at Murrell Rd. (N/S)</p>	<p>36</p> <p>Spylasse Hill Rd. (E/W) at Murrell Rd. (N/S)</p>
<p>Viera DRI</p>		<p><b>Lassiter Transportation Group, Inc.</b> Engineering and Planning 1450 W. Granada Blvd, Suite 2 – Ormond Beach, Florida 32174 Telephone: 386.257.2371 Fax: 386.257.6996 EB#0009227</p>	<p><b>Existing P.M. Peak-Hour Turning Movement Counts</b></p> <p>Project Number: 4081.03      Map 21.A.1 (3 of 6) Page 21-6</p>

<p>37</p> <p>Wickham Rd. (E/W) at Murrell Rd. (N/S)</p>	<p>38</p> <p>Wickham Rd. (E/W) at Lake Andrew Dr. (N/S)</p>	<p>39</p> <p>Wickham Rd. (E/W) at I-95 NB Ramps (N/S)</p>	<p>40</p> <p>Wickham Rd. (E/W) at I-95 SB Ramps (N/S)</p>	
<p>41</p> <p>Wickham Rd. (E/W) at Baytree Dr. (N/S)</p>	<p>42</p> <p>Wickham Rd. (E/W) at Inlettschen Rd. (N/S)</p>	<p>43</p> <p>Wickham Rd. (E/W) at Pinehurst Ave. (N/S)</p>	<p>44</p> <p>Suntree Blvd. (E/W) at Wickham Rd. (N/S)</p>	
<p>45</p> <p>St. Andrews Blvd. (E/W) at Wickham Rd. (N/S)</p>	<p>46</p> <p>Jeanan Bliss Dr. (E/W) at Wickham Rd. (N/S)</p>	<p>47</p> <p>Pineda Causeway (E/W) at Wickham Rd. (N/S)</p>	<p>48</p> <p>Post Rd. (E/W) at Wickham Rd. (N/S)</p>	
<p>Viera DRI</p>	<p>N</p> <p>NTS</p>	<p><b>Lassiter Transportation Group, Inc.</b> <i>Engineering and Planning</i></p> <p>1450 W. Granada Blvd, Suite 2 – Ormond Beach, Florida 32174 Telephone: 386.257.2571 Fax: 386.257.6996 EB#0009227</p>	<p><b>Existing P.M. Peak-Hour Turning Movement Counts</b></p> <p>Project Number: 4081.03</p> <p>Map 21.A.1 (4 of 6) Page 21-7</p>	

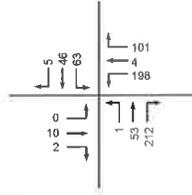
<p>49</p> <p>103 1,536 213 122 133 79 105 1,272 120 48 146 128</p> <p>Parkway Dr. (E/W) at Wickham Rd. (N/S)</p>	<p>50</p> <p>116 1,246 136 130 194 112 218 969 127 202 201 201</p> <p>Lake Washington Rd. (E/W) at Wickham Rd. (N/S)</p>	<p>51</p> <p>76 1,159 189 67 167 170 172 206 208 198 1,253 147</p> <p>Aurora Rd. (E/W) at Wickham Rd. (N/S)</p>	<p>52</p> <p>176 1,041 184 290 612 91 185 472 336 121 1,297 480</p> <p>Eau Gallie Blvd (E/W) at Wickham Rd. (N/S)</p>
<p>53</p> <p>2 729 57 3 1 6 83 1 19 758 6</p> <p>Naples Dr. (E/W) at Lake Andrew Dr. (N/S)</p>	<p>54</p> <p>663 62 24 178 661 227</p> <p>Colonnade Ave. (E/W) at Lake Andrew Dr. (N/S)</p>	<p>55</p> <p>422 426 310 302 500 222</p> <p>Town Center Ave. (E/W) at Lake Andrew Dr. (N/S)</p>	<p>56</p> <p>9 58 59 3 2 4 165 828 692 121</p> <p>Judge Fran Jamieson Way (E/W) at Lake Andrew Dr. (N/S)</p>
<p>57</p> <p>49 81 259 75 128 6 139 162 23 10 111 17</p> <p>Wickham Rd. (E/W) at Stadium Pkwy. (N/S)</p>	<p>58</p> <p>45 223 344 85 214 61 684 92 9 83 295 47</p> <p>Judge Fran Jamieson Way (E/W) at Stadium Pkwy. (N/S)</p>	<p>59</p> <p>116 235 232 130 312 32 154 363 175 166 524 185</p> <p>Viera Blvd. (E/W) at Stadium Pkwy. (N/S)</p>	<p>60</p> <p>61 58 27 15 39 86 15 41 43 716 54</p> <p>Rosemount Dr. (E/W) at Stadium Pkwy. (N/S)</p>
<p>Viera DRI</p>	<p>N NTS</p>	<p><b>Lassiter Transportation Group, Inc.</b> Engineering and Planning 1450 W. Granada Blvd, Suite 2 – Ormond Beach, Florida 32174 Telephone: 386.257.2571 Fax: 386.257.6996 EB#0009227</p>	<p><b>Existing P.M. Peak-Hour Turning Movement Counts</b></p> <p>Project Number: 4081.03 Map 21.A.1 (5 of 6) Page 21-8</p>

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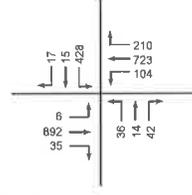
Tavistock Dr. (E/W)  
at Stadium Pkwy. (N/S)

62



Viera Blvd. (E/W)  
at Tavistock Dr. (N/S)

63



Wickham Rd. (E/W)  
at Shoppes Dr./Target Entrance (N/S)

Viera DRI



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Existing P.M. Peak-Hour  
Turning Movement Counts

Project Number: 4081.03

Map 21.A.1 (6 of 8)  
Page 21-8

**B. Provide a projection of vehicle trips expected to be generated by this development. State all standards and assumptions used, including trip end generation rates by land use types, sources of data, modal split, persons per vehicle, etc., as appropriate. The acceptable methodology to be used for projecting trip generation (including the Florida Standard Urban Model Structure or the Institute of Transportation Engineers trip generation rates) shall be determined at the pre-application conference stage.**

RESPONSE:

**I. PROPOSED DEVELOPMENT**

The Viera DRI has development entitlements for Phases 1, 2, 3 and 4. The development approval requires additional transportation analysis for Phase 4 to determine the mitigation program. Table 21.B.1 includes the approved development in Phases 1, 2 and 3, the proposed development within Phase 4 and the cumulative development (Build-Out) for the Viera DRI.

**Table 21.B.1  
Phases 1-4 Development**

<b>ITE Code</b>	<b>Land Use Category</b>	<b>Phase 1 to 3 Development</b>	<b>Phase 4 Development</b>	<b>Build-out</b>	<b>Unit of Measure</b>
110	Light Industry	37,112	327,482	364,594	Sq. Ft
150	Office / Warehouse	22,418	-	22,418	Sq. Ft
151	Mini-warehouse	135,488	-	135,488	Sq. Ft
210	Single Family Residential	9,240	12,781	22,021	Dwelling Unit
220	Apartments	752	2,918	3,670	Dwelling Unit
230	Townhome / Condo	778	150	928	Dwelling Unit
251	Senior Housing Detached	2,386	1,207	3,593	Dwelling Unit
252	Senior Housing Attached	900	213	1,113	Dwelling Unit
253	Senior Housing Multifamily	294	-	294	Dwelling Unit
254	Assisted Living Facility	956	104	1,060	Beds
310	Hotel	128	622	750	Rooms
430	Golf Course	54	18	72	Golf Holes
445	Theatre	16	-	16	Screens
610	Hospital	322	-	322	Beds
710	General Office	1,772,409	1,732,058	3,504,467	Sq. Ft
720	VA Clinic	137,500	-	137,500	Sq. Ft
820	Shopping Center	2,256,030	1,182,097	3,438,127	Sq. Ft

II. CURRENT DRI PROJECTED EXTERNAL TRIPS:

The current Development Order includes a table of trips that illustrates trip generation data for the existing conditions (Phase 1 and 2), Phase 3 and Phase 4 that was projected to occur over four subphases. The trip generation analysis in the current Development Order was based upon the Institute of Transportation Engineers (ITE) Trip Generation Manual, 7th Edition.

The current Development Order established gross daily trips for Phases 1 and 2, shown as Existing in Table 21.B.2, of 197,428, with 36,046 internal capture of trips, for net external daily trips of 161,382. A total of 68,005 gross daily trips were projected for Phase 3, with 32,518 internal capture of trips, leaving cumulative external daily trips of 196,869. The current Development Order recognized an increase in daily internal capture rate from 18% in phase 1 and 2 to an internal capture rate of 26% for the cumulative impact of Phases 1, 2 and 3.

**Table 21.B.2  
Summary of Adjusted Daily Project Trip Generation**

<b>Phase &amp; Year</b>	<b>Daily Trips</b>	<b>Daily Trips Cumulative</b>	<b>Internal Daily Trips</b>	<b>External Daily Trips</b>	<b>External Daily Trips Cumulative</b>	<b>Daily Internal Capture %</b>
Existing	197,428	197,428	36,046	161,382	161,382	18%
Phase 3 (2015)	68,005	265,487	32,518	35,487	196,869	26%
Phase 4A	52,105	317,592	28,712	23,393	220,262	31%
Phase 4B	52,105	369,697	28,712	23,393	243,655	34%
Phase 4C	52,105	421,802	28,712	23,393	267,048	37%
Phase 4D (2025)	52,105	473,910	28,713	23,392	290,440	39%
Source: Viera DRI Development Order. ITE 7th Edition						
External daily trips reflect anticipated internalization reductions but not passer-by reductions						

The current Development Order did not provide PM Peak Hour Trips for Phases 1 and 2. The cumulative existing gross PM Peak Hour trips for Phases 1, 2 and 3 was listed at 29,477. The cumulative net external PM Peak Hour Trips per for which the Viera DRI mitigated its impact for Phases 1, 2 and 3 is 19,541 as identified in Table 21.B.3.

**Table 21.B.3  
Summary of Adjusted PM Peak Hour Trip Generation**

<b>Phase &amp; Year</b>	<b>PM Peak Hour Trips</b>	<b>PM Peak Hour Trips Cumulative</b>	<b>Internal PM Peak Hour Trips</b>	<b>External PM Peak Hour Trips</b>	<b>External PM Peak Hour Trips Cumulative</b>	<b>PM Peak Hour Internal Capture %</b>
Existing	--	--	--	--	--	--
Phase 3 (2015)	--	29,477	9,936	--	19,541	34%
Phase 4A	3,923	33,400	1,829	2,094	21,635	35%
Phase 4B	3,923	37,323	1,828	2,095	23,730	36%
Phase 4C	3,923	41,246	1,829	2,094	25,824	37%
Phase 4D (2025)	3,924	45,170	1,829	2,095	27,919	38%
Source: Viera DRI Development Order. ITE 7th Edition						
External daily trips reflect anticipated internalization reductions but not passer-by reductions						

### III. TRIP GENERATION

The trip generation analysis for the Viera DRI traffic impact analysis integrates Phase 4 with the approved and mitigated development for Phases 1, 2 and 3 on a cumulative basis. To address the cumulative impact of Viera, two separate trip generation analyses have been conducted. The 1st analysis cumulatively evaluated the build-out of all development located east of Interstate 95 in the Viera East PUD; hereinafter referred to as "Viera East". The 2nd analysis cumulatively evaluated the build-out of all development located west of Interstate 95 in the Viera Central PUD and Viera West PUD; hereinafter referred to as "Viera Central/West". The two-separate analyses are needed because the current Development Order does not distinguish between Viera East and Viera Central/West.

Separate trip generation analyses for Viera East and Viera Central/West resulted in a difference in the calculated trip generation rates for development east and west of Interstate 95. The net result is that since Viera East has fewer residential units and non-residential uses than Viera Central/West, the overall trip generation totals per land use in Viera East are somewhat higher per unit of measure.

The latest edition of the Institute of Transportation Engineers (ITE) Trip Generation Manual (ITE Trip Generation 9th Edition, ITE Trip Generation Handbook, 3rd Edition) was used to conduct the trip generation analyses utilizing the appropriate ITE Land Uses. The trip generation analyses utilize the ITE Trip Generation Rates, and where appropriate, the ITE Trip

Generation Equations. Documentation is provided for all Trip Generation Rates and Equations to demonstrate consistency with the ITE Trip Generation Manual.

## VIERA EAST

Viera East includes all development within Viera, east of Interstate 95. Viera East is largely built out with most development occurring along Murrell Road between Wickham Road and Barnes Boulevard. To determine the net increase in trips for Viera East, a comparison between the cumulative trip generation for Phases 1-3 and the cumulative trip generation for the build-out of Viera East was conducted. The ITE Trip Generation Equation was utilized where there is an asterisk beside the unit of measure. Where there is no asterisk, the ITE Trip Generation Rates was utilized.

There are 4,208 residential units, 653,298 square feet of office, 313,593 square feet of retail, 107,658 square feet of office/warehouse and mini-warehouse, 314 Assisted Living Facility beds and an 18-hole golf course that are either built or approved in Phases 1, 2 and 3. The gross trip generation, as illustrated in Table 21.B.4, for Viera East Phases 1-3 is 52,005 daily trips and 5,059 PM Peak Hour Trips. Trip generation details for each land use, including the trip generation equation used for single family, apartments, townhomes, office and shopping center are included in Appendix 21.B.1.

**Table 21.B.4  
Viera East (Phase 1-3) Trip Generation**

ITE Code	Land Use Category	Phase 1 to 3	Unit of Measure	Daily			PM Peak Hour		
				Enter	Exit	Total	Enter	Exit	Total
150	Office / Warehouse	22,418	Sq. Ft.	40	40	80	2	5	7
151	Mini-Warehouse	85,238	Sq. Ft.	107	106	213	11	11	22
210	Single Family*	3,104	DU	12,383	12,383	24,766	1,457	856	2,313
220	Apartments*	360	DU	1,153	1,152	2,305	140	76	216
230	Condos / Townhomes*	408	DU	1,093	1,093	2,186	127	63	190
251	Senior Housing	336	DU	618	618	1,236	56	35	91
254	Assisted Living Facility	314	Beds	418	417	835	30	39	69
430	Golf Course	18	Holes	322	321	643	27	26	53
710	General Office*	653,298	Sq. Ft.	2,733	2,733	5,466	138	672	810
820	Shopping Center*	313,593	Sq. Ft.	7,138	7,137	14,275	618	670	1,288
<b>Gross Total</b>		--	--	<b>26,005</b>	<b>26,000</b>	<b>52,005</b>	<b>2,606</b>	<b>2,453</b>	<b>5,059</b>

\*Indicates the ITE Trip Generation Equation was used to determine trip generation  
Notes: Sq. Ft. = Square Feet, DU = Dwelling Units, Shopping Center also referenced as retail

The only development proposed within Phase 4 of Viera within Viera East is an additional 190,000 square feet of retail development along the south side of Viera Boulevard and west of Murrell Road. The addition of 190,000 square feet of retail (ITE Land Use Code 820) results in gross additional trips of 5,147 daily trips and 482 PM Peak Hour Trips. The cumulative gross trip generation for the build-out of Viera East (Phases 1-4) is 57,152 daily trips and 5,541 PM Peak Hour Trips, as illustrated in Table 21.B.5. Trip generation details for each land use, including the trip generation equation used for single family, apartments, townhomes, office and shopping center are included in Appendix 21.B.2.

**Table 21.B.5  
Viera East (Build-out) Trip Generation**

ITE Code	Land Use Category	Build-out	Unit of Measure	Daily			PM Peak Hour		
				Enter	Exit	Total	Enter	Exit	Total
150	Office / Warehouse	22,418	Sq. Ft.	40	40	80	2	5	7
151	Mini-Warehouse	85,238	Sq. Ft.	107	106	213	11	11	22
210	Single Family*	3,104	DU	12,383	12,383	24,766	1,457	856	2,313
220	Apartments*	360	DU	1,153	1,152	2,305	140	76	216
230	Condos / Townhomes*	408	DU	1,093	1,093	2,186	127	63	190
251	Senior Housing	336	DU	618	618	1,236	56	35	91
254	Assisted Living Facility	314	Beds	418	417	835	30	39	69
430	Golf Course	18	Holes	322	321	643	27	26	53
710	General Office*	653,298	Sq. Ft.	2,733	2,733	5,466	138	672	810
820	Shopping Center*	503,593	Sq. Ft.	9,711	9,711	19,422	850	920	1,770
<b>Gross Total</b>		--	--	<b>28,578</b>	<b>28,574</b>	<b>57,152</b>	<b>2,838</b>	<b>2,703</b>	<b>5,541</b>
<small>*Indicates the ITE Trip Generation Equation was used to determine trips generated  Notes: Sq. Ft. = Square Feet, DU = Dwelling Units, Shopping Center also referenced as retail</small>									

### VIERA CENTRAL / WEST

Viera Central/West includes all development within Viera, west of Interstate 95. Viera Central / West contains an extensive internal roadway network and a mixture of residential, office, governmental, retail, educational and entertainment uses. The total build-out of Viera Central West to be evaluated consists of 22,747 residential units (single family residential, apartments, condos and townhomes). There is also an active adult component (senior housing) consisting of 4,664 units and 746 Assisted Living Facility beds. There will be an entertainment and hospitality component consisting of 750 hotel rooms, 54 holes of golf (36 exist) and an existing 16 screen movie theater. Medical, office and retail uses consist of 322 hospital beds, an existing 137,500 square foot VA Clinic, 2,851,169

square feet of office and 2,934,534 square feet of retail. Table 21.B.6 includes the ITE land use code, development totals and unit of measure to be used to calculate the trip generation. The ITE Trip Generation Equation is utilized where there is an asterisk beside the unit of measure. Where there is no asterisk, the ITE Trip Generation Rates were utilized.

**Table 21.B.6  
Viera Central/West Development Program**

ITE Code	Land Use Category	Phase 1 to 3 Development	Phase 4 Development	Build-out	Unit of Measure
110	Light Industry	37,112	327,482	364,594	Sq. Ft*
151	Mini-Warehouse	50,250	-	50,250	Sq. Ft
210	Single Family Residential	6,136	12,781	18,917	Dwelling Unit*
220	Apartments	392	2,918	3,310	Dwelling Unit*
230	Condos / Townhomes	370	150	520	Dwelling Unit*
251	Senior Housing Detached	2,050	1,207	3,257	Dwelling Unit
252	Senior Housing Attached	900	213	1,113	Dwelling Unit
253	Senior Housing Multifamily	294	-	294	Dwelling Unit
254	Assisted Living Facility	642	104	746	Beds
310	Hotel	128	622	750	Rooms
430	Golf Course	36	18	54	Golf Holes
445	Theatre	16	-	16	Screens
610	Hospital	322	-	322	Beds
710	General Office	1,119,111	1,732,058	2,851,169	Sq. Ft*
720	VA Clinic	137,500	-	137,500	Sq. Ft
820	Shopping Center	1,942,437	992,097	2,934,534	Sq. Ft*
* Indicates that the ITE Trip Generation Equation was utilized to determine trip generation					

The cumulative build-out trip generation analysis for Viera Central/West based on the ITE Trip Generation Manual 9<sup>th</sup> edition results in gross Daily trips of 272,446 and PM Peak Hour trips of 26,166 (Table 21.B.7). Trip generation details for each land use, including the trip generation equation used for single family, apartments, townhomes, office and shopping center are included in Appendix 21.B.3.

**Table 21.B.7  
Viera Central / West Trip Generation**

ITE Code	Land Use Category	Build-out	Daily			PM Peak Hour		
			Enter	Exit	Total	Enter	Exit	Total
110	Light Industry*	364,594	1,311	1,311	2,622	44	320	364
151	Mini-Warehouse	50,250	63	63	126	7	6	13
210	Single Family Residential*	18,917	65,307	65,306	130,613	7,413	4,354	11,767
220	Apartments*	3,310	10,091	10,091	20,182	1,195	643	1,838
230	Condos / Townhomes*	520	1,350	1,350	2,700	155	77	232
251	Senior Housing Detached	3,257	5,993	5,993	11,986	536	343	879
252	Senior Housing Attached	1,113	1,915	1,914	3,829	150	128	278
253	Senior Housing Multifamily	294	297	297	594	28	22	50
254	Assisted Living Facility	746	992	992	1,984	72	92	164
310	Hotel	750	3,064	3,064	6,128	230	220	450
430	Golf Course	54	965	965	1,930	81	77	158
445	Theatre	16	2,340	2,340	4,680	98	120	218
610	Hospital	322	2,084	2,083	4,167	151	306	457
710	General Office*	2,851,169	8,375	8,375	16,750	556	2,716	3,272
720	VA Clinic	137,500	1,542	1,542	3,084	73	188	261
820	Shopping Center*	2,934,534	30,536	30,535	61,071	2,767	2,998	5,765
<b>Gross Total</b>		--	<b>136,225</b>	<b>136,221</b>	<b>272,446</b>	<b>13,556</b>	<b>12,610</b>	<b>26,166</b>
*Indicates the ITE Trip Generation Equation was used to determine trips generated Notes: Sq. Ft. = Square Feet, DU = Dwelling Units, Shopping Center also referenced as retail								

**C. Estimate the internal/external split for the generated trips at the end of each phase of development as identified in (B) above. Use the format below and include a discussion of what aspects of the development (i.e., provision of on-site shopping and recreation facilities, on-site employment opportunities, etc.) will account for this internal/external split. Provide supporting documentation showing how splits were estimated, such as the results of the Florida Standard Urban Transportation Model Structure (FSUTMS) model application. Describe the extent to which the proposed design and land use mix will foster a more cohesive, internally supported project.**

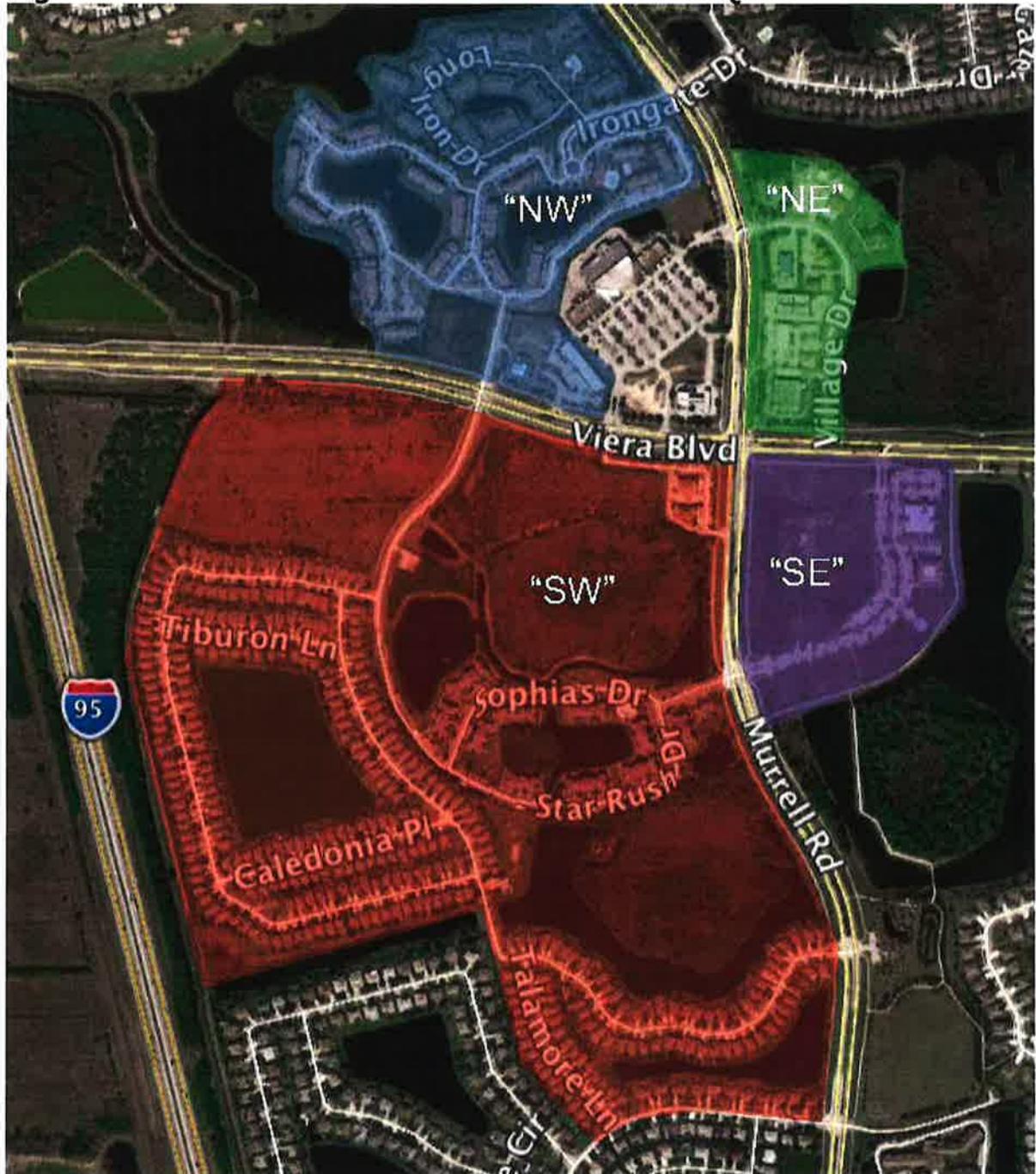
RESPONSE:

#### VIERA EAST INTERNAL CAPTURE

The ITE Trip Generation Handbook contains a methodology for calculating internal capture of trips for mixed use development, which was utilized for this portion of the project. The internal capture of trips results in an overall reduction in external trips onto the transportation network by recognizing the interaction of trips that occurs when a mixture of interconnected land uses is present. The ITE methodology evaluates the interaction between residential, office and retail uses within mixed-use developments.

An internal capture analysis was conducted for both Viera East Phases 1, 2 and 3 and for the build-out of Viera East. The internal capture analysis was conducted for the northwest (NW), northeast (NE), southeast (SE) and southwest (SW) quadrants of the intersection of Viera Blvd and Murrell Road, and are illustrated in Figure 21.C.1. All other land uses within Viera East were single land uses where the internal capture of trips would have required development to utilize Viera Blvd, Murrell Road, Spyglass Road or Wickham Road to access other components of the development.

**Figure 21.C.1- VIERA EAST INTERNAL CAPTURE QUADRANTS**



The internal capture analysis for Phases 1, 2 and 3 and the build-out analysis treated retail and office uses that are currently approved, but not yet built, as developed for trip generation and internal capture purposes. The primary difference between the internal capture analysis conducted for Phases 1, 2 and 3 and the build-out of Viera East is the 190,000 square feet of retail proposed within Phase 4. Of the 190,000 square feet for which approval is sought, 180,000 square feet is located within the SW quadrant and 10,000 square feet is in the SE quadrant.

The internal capture for the NW quadrant is based on 43,709 square feet of built or approved retail, the 360 apartments in Mission Bay and the 208 condos in The Greens at Viera. While residential uses in the SW quadrant have a direct access connection across Viera Blvd to the retail uses in the NW quadrant, given the relatively small size of the existing and approved retail uses in the NW quadrant, no internal capture analysis was conducted for residential uses from the SW to the NW quadrant. At the northwest corner of Viera Blvd and Murrell Road, there are 122,905 square feet of built or approved retail uses. However, there is no internal roadway connection to the Mission Bay Apartments and The Greens at Viera Condos, thus no internal capture was assumed between those uses because it would require a person to drive on Viera Blvd or Murrell Road to access the retail. While there are over 1,000 single family, multi-family and active adult units less than ½ mile from the 122,905 square feet of built or approved retail uses at the northwest corner of Viera Blvd and Murrell Road, no internal capture was calculated between those residences and the retail since the trips would be required to use Viera Blvd or Murrell Road to access the retail.

The internal capture for the NE quadrant is based on 28,163 square feet of retail and 52,505 square feet of office that is either built or approved retail. Less than a ¼ mile north of the NE quadrant there are 188 single family units in Osprey Ridge, 100 units in Osprey Landing, 360 apartments in Mission Bay and 208 condos at The Greens at Viera. However, since those residential units would have to access Murrell Road to access the retail and office in the NE quadrant, no internal capture was assumed between those uses.

The internal capture for the SE quadrant is based on 50,000 square feet of retail and 97,361 square feet of office that are either built or approved retail and the 200 existing condo units in the Lakes at Viera East. The Lakes at Viera East has a driveway that directly aligns with the driveway on Murrell Road for the land uses within the SE quadrant. These trips only cross Murrell Road, they do not directly utilize the road to travel between quadrants. While the 330-single family residential uses from Bayhill could access the

retail and office uses in the SE quadrant driving through the Lakes at Viera, the route would be circuitous; thus, no internal capture was assumed. There are 336 active-adult (senior detached) units in Grand Isle with a connection less than a ¼ mile to the retail and office in the SE quadrant. However, since those residential units would have to access Murrell Road, no internal capture was assumed between those uses.

The internal capture for the SW quadrant is based on 44,225 square feet of approved retail and 13,721 square feet of office that are either built or approved, the 330 single family units in Bayhill and the 200 condos in the Lakes at Viera East. The internal capture also includes the 360 apartments in Mission Bay and the 208 condos in The Greens at Viera located within the NW quadrant as they can access the SW quadrant via Star Rush Drive and only have to cross Viera Blvd to access the SW quadrant retail. The internal capture between Mission Bay and the Greens is relatively minor based on existing and approved development. There is a greater level of internal capture with the 180,000 square feet proposed within Phase 4. With Star Rush Drive providing connectivity between uses, the internal capture of trips is higher in the SW corner of the Viera Blvd and Murrell Road intersection. Had greater internal connections been provided within the NW quadrant, the internal capture between uses would have been higher than the analysis results.

To conduct the internal capture analysis, the gross trip generation for Phases 1, 2 and 3 identified in Table 21.B.4 had to be converted into trip rates that could be assigned to each development component within each of the four quadrants. To derive entering, exiting and total trip rates, the Daily and PM Peak Hour trip generation from Table 21.B.4 was divided by the pertinent unit of measure. For office and retail, the approved square footage was divided by 1,000 as the trip generation is provided per 1,000 square feet for office and retail uses. For example, there are 5,466 total daily trips for office, to derive a corresponding trip rate the following calculation was used:  $5,466$  (total Viera East daily office trips) divided by  $653,298$  (total office sq. ft.) /  $1,000$  square foot equals a daily trip rate of  $8.37$ . The calculated trip generation was then multiplied by the square footage and number of units for each land use within each of the four quadrants. For example, the daily total trips for the  $52,505$  square feet of office built and approved in the NE quadrant was calculated by dividing  $52,505$  by  $1,000$  ( $52.505$ ) and multiplied by  $8.37$  for total daily trips of  $439$  (rounded to nearest  $10^{\text{th}}$ ). The calculated trip rates based on the cumulative trip generation in Table 21.B.4 for Viera East and the trip generation used in the internal capture analysis for Phase 1, 2 and 3 of Viera East is included in Appendix 21.C.1.

The internal capture analysis utilized the process established in the latest edition of the ITE Trip Generation Handbook for Phases 1, 2 and 3 (Appendix 21.C.2). The internal capture analysis was conducted for the Daily and PM Peak Hour Periods. The total calculated internal capture of trips for Phases 1, 2 and 3 of Viera East is 3,309 Daily trips and 314 PM Peak Hour trips (Table 21.C.1). To conduct the subsequent pass-by analysis, the internal capture of trips for retail uses only was also determined, resulting in 1,638 of the 3,309-internal capture of Daily trips attributable to retail and 156 of the 314-internal capture of PM Peak Hour trips attributable to retail.

**Table 21.C.1  
Viera East Phase 1-3 (Internal Capture Trips)**

ITE Code	Land Use Category	Phase 1 to 3	Unit of Measure	Daily Internal Trips			PM Peak Hour Internal Trips		
				Enter	Exit	Total	Enter	Exit	Total
<b>NW Corner of Viera Blvd &amp; Murrell Road</b>									
820	Retail	43,709	Sq. Ft.	180	218	398	16	22	38
220	Apartments (Mission Bay)	360	DU	109	90	199	11	8	19
230	Condos (The Greens)	208	DU	109	90	199	11	8	19
Total Internal Capture Trips (NW)				398	398	796	38	38	76
<b>NE Corner of Viera Blvd &amp; Murrell Road</b>									
820	Retail	28,163	Sq. Ft.	26	19	45	1	2	3
710	General Office	52,505	Sq. Ft.	19	26	45	2	1	3
Total Internal Capture Trips (NE)				45	45	90	3	3	6
<b>SE Corner of Viera Blvd &amp; Murrell Road</b>									
820	Retail	50,000	Sq. Ft.	148	159	307	11	16	27
710	General Office	97,361	Sq. Ft.	42	46	88	4	2	6
230	Condos (Lakes at Viera)	200	DU	125	111	236	13	10	23
Total Internal Capture Trips (SE)				315	316	631	28	28	56
<b>SW Corner of Viera Blvd &amp; Murrell Road</b>									
820	Retail	44,225	Sq. Ft.	412	476	888	40	48	88
710	General Office	13,721	Sq. Ft.	40	52	92	4	8	12
230	Single Family (Bayhill)	330	DU	111	92	203	11	8	19
230	Condos (Lakes at Viera)	200	DU	111	92	203	11	8	19
220	Apartments (Mission Bay)	360	DU	111	92	203	11	8	19
230	Condos (The Greens)	208	DU	111	92	203	11	8	19
Total Internal Capture Trips (SW)				896	896	1,792	88	88	176
<b>Total Internal Capture Trips</b>				<b>1,654</b>	<b>1,655</b>	<b>3,309</b>	<b>157</b>	<b>157</b>	<b>314</b>
<b>Total Retail Internal Capture Trips</b>				<b>766</b>	<b>872</b>	<b>1,638</b>	<b>68</b>	<b>88</b>	<b>156</b>

To conduct the internal capture analysis, the gross trip generation for the build-out of Viera East in Table 5 had to be converted into trip rates that could be assigned to each development component within each of the four quadrants. The method for deriving the trip rates was the same as was conducted for Phases 1, 2 and 3. The calculated trip rates based on the cumulative trip generation in Table 5 for Viera East and the trip generation used in the internal capture analysis for the build-out of Viera East is in Appendix 21.C.3.

The internal capture analysis utilized the process established in the latest edition of the ITE Trip Generation Handbook for the build-out of Viera East (Appendix 21.C.4). The internal capture analysis was conducted for the Daily and PM Peak Hour Periods. The total calculated internal capture of trips for the build-out of Viera East is 6,310 Daily trips and 628 PM Peak Hour trips (Table 21.C.2). To conduct the subsequent pass-by analysis, the internal capture of trips for retail uses only was also determined, resulting in 3,141 of the 3,309-internal capture of Daily trips attributable to retail and 313 of the 628-internal capture of PM Peak Hour trips attributable to retail.

**Table 21.C.2  
Viera East Build-Out (Internal Capture Trips)**

ITE	Land Use Category	Build-out	Unit of Measure	Daily Internal Trips			PM Peak Hour Internal Trips		
				Enter	Exit	Total	Enter	Exit	Total
<b>NW Corner of Viera Blvd &amp; Murrell Road</b>									
820	Retail	43,709	Sq. Ft	152	186	338	14	20	34
220	Apartments (Mission Bay)	360	DU	93	76	169	10	7	17
230	Condos (The Greens)	208	DU	93	76	169	10	7	17
<b>Total Internal Capture Trips (NW)</b>				<b>338</b>	<b>338</b>	<b>676</b>	<b>34</b>	<b>34</b>	<b>68</b>
<b>NE Corner of Viera Blvd &amp; Murrell Road</b>									
820	Retail	28,163	Sq. Ft	22	16	38	1	2	3
710	General Office	52,505	Sq. Ft	16	22	38	2	1	3
<b>Total Internal Capture Trips (NW)</b>				<b>38</b>	<b>38</b>	<b>76</b>	<b>3</b>	<b>3</b>	<b>6</b>
<b>SE Corner of Viera Blvd &amp; Murrell Road</b>									
820	Retail	60,000	Sq. Ft	150	162	312	11	17	28
710	General Office	97,361	Sq. Ft	43	46	89	5	2	7
230	Condos (Lakes at Viera)	200	DU	127	112	239	13	10	23
<b>Total Internal Capture Trips (NW)</b>				<b>320</b>	<b>320</b>	<b>640</b>	<b>29</b>	<b>29</b>	<b>58</b>
<b>SW Corner of Viera Blvd &amp; Murrell Road</b>									
820	Retail	224,225	Sq. Ft	1,244	1,209	2,453	114	134	248
710	General Office	13,721	Sq. Ft	40	52	92	4	12	16
230	Single Family (Bayhill)	330	DU	434	390	824	48	34	82
230	Condos (Lakes at Viera)	200	DU	177	205	382	19	17	36
220	Apartments (Mission Bay)	360	DU	380	390	770	43	34	77
230	Condos (The Greens)	208	DU	184	213	397	20	17	37
<b>Total Internal Capture Trips (NW)</b>				<b>2,459</b>	<b>2,459</b>	<b>4,918</b>	<b>248</b>	<b>248</b>	<b>496</b>
<b>Total Internal Capture Trips</b>				<b>3,155</b>	<b>3,155</b>	<b>6,310</b>	<b>314</b>	<b>314</b>	<b>628</b>
<b>Total Retail Internal Capture Trips</b>				<b>1,568</b>	<b>1,573</b>	<b>3,141</b>	<b>140</b>	<b>173</b>	<b>313</b>

The benefit of connectivity, consistent with the Brevard County Comprehensive Plan and the Viera DRI Development Order is that there is a greater internal capture of trips. There is a difference in internal capture between the NW quadrant without connectivity between all retail and residential uses and the SW quadrant which has Star Rush Drive connecting retail and residential uses. The additional 190,000 square feet of retail within the SE and SW quadrants provided for the opportunity to increase the internal capture to trips, resulting in an increase from 314 PM Peak Hour trips in Phases 1, 2 and 3 to 628 PM Peak Hour trips in the build-out analysis of Viera East.

#### VIERA EAST PASS-BY TRIPS

The evaluation of pass-by trips will only be conducted for the Viera East trip generation analysis. The percentage of pass-by trips is based on the shopping center (ITE 820 land use) rate provided in ITE's Trip Generation Handbook. While the ITE's Trip Generation Handbook does not recognize pass-by rates for uses other than retail, pass-by rates could be utilized on several non-retail uses such as offices in recognition that not all trips to these types of uses are new trips. However, only the ITE 820 pass-by rate for shopping centers (retail) will be used. The pass-by rate for shopping center (retail) used is 34% per the ITE Trip Generation Handbook. The pass-by rate does not exceed 10% of the adjacent street traffic on Wickham Road, Viera Blvd and Murrell Road.

The trip generation for shopping centers within Phase 1, 2 and 3 is per Table 21.B.4. The internal capture of retail trips for shopping centers within Phase 1, 2 and 3 is per Table 21.B.5. The pass-by trips were calculated by subtracting the internal capture of retail trips by the gross trips for retail uses and multiplying that difference by 34% (Table 21.C.3). There are more than 50,000 daily trips and 3,850 PM Peak Hour Trips on Wickham Road, Viera Blvd and Murrell Road within the limits of Viera East, thus the proposed pass-by rates do not exceed 10% of adjacent street traffic.

**Table 21.C.3  
Viera East (Phase 1 - 3) Pass-By Rates**

ITE Code	Land Use Category	Phase 1 to 3	Unit of Measure	Daily			PM Peak Hour		
				Enter	Exit	Total	Enter	Exit	Total
820	Shopping Center*	313,593	Sq. Ft	7,138	7,137	14,275	618	670	1,288
	Internal Capture	--	--	766	872	1,638	68	88	156
	<b>Pass-By (34%)</b>	--	--	<b>2,166</b>	<b>2,130</b>	<b>4,297</b>	<b>187</b>	<b>198</b>	<b>385</b>
	Net Total Retail Trips	--	--	4,206	4,135	8,340	363	384	747

\*Indicates the ITE Trip Generation Equation was used to determine trips generated

The trip generation for shopping centers for the build-out of Viera East is per Table 21.C.3. The internal capture of retail trips for shopping centers for the build-out of Viera East is per Table 21.B.7. The pass-by trips were calculated by subtracting the internal capture of retail trips by the gross trips for retail uses and multiplying that difference by 34% (Table 21.C.4). There are more than 56,000 daily trips and 5,000 PM Peak Hour Trips on Wickham Road, Viera Blvd and Murrell Road within the limits of Viera East, thus the proposed pass-by rates do not exceed 10% of adjacent street traffic.

**Table 21.C.4  
Viera East (Build-out) Pass-By**

ITE Code	Land Use Category	Build-out	Unit of Measure	Daily			PM Peak Hour		
				Enter	Exit	Total	Enter	Exit	Total
820	Shopping Center*	503,593	Sq. Ft.	9,711	9,711	19,422	850	920	1,770
	Internal Capture	--	--	1,568	1,573	3,141	140	173	313
	<b>Pass-By (34%)</b>	--	--	<b>2,769</b>	<b>2,767</b>	<b>5,536</b>	<b>241</b>	<b>254</b>	<b>495</b>
	Net Total Retail Trips	--	--	5,374	5,371	10,745	469	493	962

\*Indicates the ITE Trip Generation Equation was used to determine trips generated

**VIERA EAST BUILD-OUT (NET INCREASE IN TRIPS)**

The build-out of Viera DRI will result in an additional 190,000 square feet of retail approved for Viera East. The trip generation analysis demonstrates that the build-out of Viera East will result in an increase in gross Daily trips

of 5,147 and gross PM Peak Hour trips of 482. The internal capture analysis demonstrates that the build-out of Viera East will result in an increase in the internal capture of Daily trips of 3,001 and gross PM Peak Hour trips of 314. The pass-by analysis demonstrates that the build-out of Viera East will result in an increase in pass-by Daily trips of 1,239 and gross PM Peak Hour trips of 110.

The cumulative net trip generation for Viera East Phases 1, 2 and 3 after adjusting for internal capture and pass-by trips results in 44,339 Daily trips and 4,360 PM Peak Hour Trips. The cumulative net trip generation for the build-out of Viera East after adjusting for internal capture and pass-by trips results in 45,306 Daily trips and 4,418 PM Peak Hour Trips. The net cumulative increase in trips due to the approval of 190,000 square feet of retail will result in an increase of 907 Daily trips and 58 PM Peak Hour trips (Table 21.C.5).

**Table 21.C.5  
Viera East Net Increase in External Trips**

	Daily			PM Peak Hour		
	Enter	Exit	Total	Enter	Exit	Total
<b>GROSS TRIPS</b>						
PHASE 1-3	26,005	26,000	52,005	2,606	2,453	5,059
BUILD-OUT	28,578	28,574	57,152	2,838	2,703	5,541
DIFFERENCE	2,573	2,574	5,147	232	250	482
<b>INTERNAL CAPTURE TRIPS</b>						
PHASE 1-3	1,654	1,655	3,309	157	157	314
BUILD-OUT	3,155	3,155	6,310	314	314	628
DIFFERENCE	1,501	1,500	3,001	157	157	314
<b>PASS-BY TRIPS</b>						
PHASE 1-3	2,166	2,130	4,297	187	198	385
BUILD-OUT	2,769	2,767	5,536	241	254	495
DIFFERENCE	602	637	1,239	54	56	110
<b>NET TRIPS</b>						
PHASE 1-3	22,185	22,215	44,399	2,262	2,098	4,360
BUILD-OUT	22,654	22,652	45,306	2,283	2,135	4,418
DIFFERENCE	470	437	907	21	37	58

## VIERA CENTRAL/WEST COMMUNITY CAPTURE

To better account for the community capture of trips from large scale mixed-use Developments of Regional Impact, the Legislature and FDOT have introduced the concept of Community Capture for developments which are essentially "new towns". Community Capture is a concept that evaluates the impact of DRIs as if they are self-contained communities with a mixture of retail, office, recreational, civic, governmental, educational and residential uses within a Master Planned Community. Florida Statutes defines a "new town" as an urban activity center and community designated on the future land use map of sufficient size, population, and land use composition to support a variety of economic and social activities consistent with an urban area designation. New towns shall include basic economic activities, all major land use categories, except for agricultural and industrial, and a centrally provided full-range of public facilities and services that demonstrate internal trip capture. Community capture looks at the DRI scale projects as a cohesive, overall master planned development.

The Florida Department of Transportation and the Department of Economic Opportunity (DEO) have not established a unified methodology for evaluating Community Capture. The FDOT Site Impact Handbook and Florida Statutes largely recognize and acknowledge that these types of developments exist and that they are different than smaller scale mixed-use developments and they do tend to have greater community capture of trips and less impact to external roadway networks.

As large scale, mixed-use developments have become more common, the Florida Department of Transportation and other governments outside of Florida have begun to evaluate the reduced trip impact of these developments. These studies, referenced in both the Institute of Transportation Engineers (ITE) Handbook and the National Cooperative Highway Research Program (NCHRP) Report 684, have shown high rates of internal and community capture for mixed-use developments that range from 30% upwards to 80%. The results of these community capture studies have been shared with Brevard County Staff.

Viera Central/West is an excellent example of a "new town" with its mixture of retail, office, residential, civic, entertainment, educational, government and recreational uses and is the type of development envisioned by the Legislature and FDOT that would utilize Community Capture. The Community Capture analysis undertaken for Viera Central/West is based upon existing development west of Interstate 95 with a Certificate of Occupancy issued as of January 31<sup>st</sup>, 2016. The trip generation analysis conducted for existing

development is based upon the 9<sup>th</sup> edition of the ITE Trip Generation Manual. For comparative purposes, the trip generation analysis in Table 21.C.6 has been conducted based upon trip rates only (Appendix 21.C.5).

**Table 21.C.6  
Viera Central/West Trip Generation Rates  
(Only Development west of Interstate 95  
with a Certificate of Occupancy as of Jan 31st, 2016)**

ITE Code	Land Use Category	Developed	Unit of Measure	Daily			PM Peak Hour		
				Enter	Exit	Total	Enter	Exit	Total
110	Light Industry	--	Sq. Ft.	--	--	--	--	--	--
151	Mini-Warehouse	--	Sq. Ft.	--	--	--	--	--	--
210	Single Family Residential	3,714	DU	17,679	17,678	35,357	2,340	1,374	3,714
220	Apartments	240	DU	798	798	1,596	97	52	149
230	Condos / Townhomes	250	DU	727	726	1,453	87	43	130
251	Senior Housing Detached	1,143	DU	2,103	2,103	4,206	188	121	309
252	Senior Housing Attached	602	DU	1,036	1,035	2,071	82	69	151
253	Senior Housing Multifamily	174	DU	176	175	351	17	13	30
254	Assisted Living Facility	210	Beds	280	279	559	20	26	46
310	Hotel	106	Rooms	433	433	866	33	31	64
430	Golf Course	18	Holes	322	321	643	27	26	53
445	Theatre	16	Screens	2,340	2,340	4,680	98	120	218
520	Elementary School	1,561	Students	1,007	1,007	2,014	115	119	234
530	High School	1,976	Students	1,690	1,689	3,379	121	136	257
610	Hospital	100	Beds	647	647	1,294	47	95	142
710	General Office	849,801	Sq. Ft.	4,687	4,686	9,373	215	1,051	1,266
720	VA Clinic	137,500	Sq. Ft.	1,542	1,542	3,084	73	188	261
820	Shopping Center	1,511,540	Sq. Ft.	32,272	32,271	64,543	2,692	2,916	5,608
<b>Total</b>				<b>67,739</b>	<b>67,730</b>	<b>135,469</b>	<b>6,252</b>	<b>6,380</b>	<b>12,632</b>

The trip generation analysis utilized in the Community Capture evaluation illustrated in Table 21.C.7 uses both ITE Trip Generation Rates, and where appropriate, Trip Generation Equations. Trip generation details for each land use is included in Appendix 21.C.6.

**Table 21.C.7**  
**Viera Central/West Trip Generation based on Rates & Equations**  
**(Only Development west of Interstate 95**  
**with a Certificate of Occupancy as of Jan 31st, 2016)**

ITE Code	Land Use Category	Developed	Unit of Measure	Daily			PM Peak Hour		
				Enter	Exit	Total	Enter	Exit	Total
110	Light Industry*	--	Sq. Ft.	--	--	--	--	--	--
151	Mini-Warehouse	--	Sq. Ft.	--	--	--	--	--	--
210	Single Family Residential*	3,714	DU	14,605	14,605	29,210	1,713	1,006	2,719
220	Apartments*	240	DU	789	789	1,578	98	52	150
230	Condos / Townhomes*	250	DU	714	713	1,427	85	42	127
251	Senior Housing Detached	1,143	DU	2,103	2,103	4,206	188	121	309
252	Senior Housing Attached	602	DU	1,036	1,035	2,071	82	69	151
253	Senior Housing Multifamily	174	DU	176	175	351	17	13	30
254	Assisted Living Facility	210	Beds	280	279	559	20	26	46
310	Hotel	106	Rooms	433	433	866	33	31	64
430	Golf Course	18	Holes	322	321	643	27	26	53
445	Theatre	16	Screens	2,340	2,340	4,680	98	120	218
520	Elementary School	1,561	Students	1,007	1,007	2,014	115	119	234
530	High School	1,976	Students	1,690	1,689	3,379	121	136	257
610	Hospital	100	Beds	647	647	1,294	47	95	142
710	General Office*	849,801	Sq. Ft.	3,338	3,338	6,676	175	855	1,030
720	VA Clinic	137,500	Sq. Ft.	1,542	1,542	3,084	73	188	261
820	Shopping Center*	1,511,540	Sq. Ft.	19,840	19,839	39,679	1,774	1,922	3,696
<b>Total</b>				<b>50,862</b>	<b>50,855</b>	<b>101,717</b>	<b>4,666</b>	<b>4,821</b>	<b>9,487</b>
<b>*ITE Trip Generation Equation Used in Trip Generation Analysis</b>									

The existing development trip generation analysis for Viera Central/West based on the ITE Trip Generation Manual 9<sup>th</sup> edition using the trip generation rates only results in gross Daily trips of 135,469 and PM Peak Hour trips of 12,632 (Table 21.C.6). The existing development trip generation analysis for Viera Central/West based on a combination of trip generation rates and equations results in gross Daily trips of 101,717 and PM Peak Hour trips of 9,487 (Table 21.C.7). Utilizing the trip generation rate only results in a 33% increase in Daily and PM Peak Hour trips versus the trip generation analysis that utilizes a combination of rates and equations.

The first component of the Community Capture analysis is conducting the trip generation analysis. The second component of the Community Capture analysis is collecting empirical data from traffic counts. The traffic counts were taken at the following three locations to capture all external trips that enter and exit Viera Central/West:

- 1) Wickham Road, west side of Interstate 95 collected on 04/26/16 to 04/28/16
- 2) Viera Boulevard east of Stadium Parkway, collected on 01/16/16 to 01/18/16
- 3) Stadium Parkway, north of Windsong Way collected on 02/16/16 to 02/18/16

The counts were taken over a three-day period (72-Hours) on a Tuesday, Wednesday and Thursday, while Brevard County schools were in session. The Daily as well as the PM Peak Hour counts were averaged over a three-day period (Table 21.C.8). The PM Peak Hour for analysis purposes is based upon the PM Peak Hour of Wickham Road. Wickham Road has the highest Daily and PM Peak Hour volumes of the three traffic count locations.

**Table 21.C.8  
Traffic Count Summary**

			PM PEAK			PM Peak
Roadway	Date	Daily	EB/NB	WB/SB	Total	PM Peak
Wickham Road	4/26/16	40,771	1,698	1,451	3,149	4 to 5
Wickham Road	4/27/16	39,750	1,660	1,419	3,079	4 to 5
Wickham Road	4/28/16	38,739	1,615	1,379	2,994	4 to 5
<b>Average</b>		<b>39,753</b>	<b>1,658</b>	<b>1,416</b>	<b>3,074</b>	
Roadway	Date	Daily	EB/NB	WB/SB	Total	
Viera Blvd	1/19/16	14,975	803	660	1,463	4 to 5
Viera Blvd	1/20/16	15,016	721	594	1,315	4 to 5
Viera Blvd	1/21/16	14,509	743	648	1,391	4 to 5
<b>Average</b>		<b>14,833</b>	<b>756</b>	<b>634</b>	<b>1,390</b>	
Roadway	Date	Daily	EB/NB	WB/SB	Total	
Stadium Parkway	2/16/16	15,966	793	621	1,414	4 to 5
Stadium Parkway	2/17/16	16,168	797	588	1,385	4 to 5
Stadium Parkway	2/18/16	14,648	837	552	1,389	4 to 5
<b>Average</b>		<b>15,594</b>	<b>809</b>	<b>587</b>	<b>1,396</b>	
Counts: Wickham Road (Appendix 21.C.7) Viera Blvd (Appendix 21.C.8) Stadium Parkway (Appendix 21.C.9)						

The three-day counts were adjusted using the FDOT Seasonal Adjustment Factors (Appendix 21.C.10). The average seasonally adjusted daily traffic counts resulted in Daily external trips of 68,996 and PM Peak Hour external trips of 5,759 (Table 21.C.9).

**Table 21.C.9  
Adjusted Traffic Count**

		Season Adjustment Factors (.99)		
Roadway	Daily	EB/NB	WB/SB	Total
Wickham Road	40,363	1,681	1,436	3,118
Wickham Road	39,353	1,643	1,405	3,048
Wickham Road	38,352	1,599	1,365	2,964
<b>Average:</b>	<b>39,356</b>	<b>1,641</b>	<b>1,402</b>	<b>3,043</b>
		Season Adjustment Factors (1.01)		
Roadway	Daily	EB/NB	WB/SB	Total
Viera Blvd	15,125	811	667	1,478
Viera Blvd	15,166	728	600	1,328
Viera Blvd	14,654	750	654	1,405
<b>Average:</b>	<b>14,982</b>	<b>763</b>	<b>640</b>	<b>1,404</b>
		Season Adjustment Factors (.94)		
Roadway	Daily	EB/NB	WB/SB	Total
Stadium Parkway	15,008	745	584	1,329
Stadium Parkway	15,198	749	553	1,302
Stadium Parkway	13,769	787	519	1,306
<b>Average:</b>	<b>14,658</b>	<b>760</b>	<b>552</b>	<b>1,312</b>
<b>Total</b>	<b>68,996</b>	<b>3,165</b>	<b>2,594</b>	<b>5,759</b>

The current counts provide a present-day accounting of the external traffic generated by the current mixture of land uses that exist west of Interstate 95 within Viera Central/West. The average Daily and PM Peak Hour counts are compared to the ITE Trip Generation analysis. To derive the Daily Community Capture rate, the following calculation is utilized: (Daily Trip Generation from Table 21.C.7 – Average Daily Traffic Count from Table 21.C.9) divided by the Daily Trip Generation from Table 21.C.7. The Daily Community Capture rate is 32% based upon the following calculation  $(101,717 - 68,996) / 101,717 = 32\%$ . To derive the PM Peak Hour Community Capture rate, the following calculation is utilized: (PM Peak Hour Trip Generation from Table 21.C.7 – PM Peak Hour Traffic Count from Table 21.C.9) divided by the PM Peak Hour Trip Generation from Table 21.C.7. The PM Peak Hour Capture rate is 39% based upon the following calculation

$(9,487 - 5,759) / 9487 = 39\%$ . The collected traffic counts further confirm that the straight use of ITE trip generation rates over projects external Daily trips by 49% and external PM Peak Hour trips by 54%.

The Community Capture Rate based on empirical data conditions was applied to the trips calculated in the trip generation analysis for Viera Central/West in Table 21.C.7 to derive the net external trips for the build-out of Viera Central/West. Applying a 32% reduction in the Daily trips from Table 21.C.5 results in total projected daily trips for the build-out of Viera Central/West of 185,263 ( $272,446 * (1-0.32) = 185,263$ ). Applying a 39% reduction in the PM Peak trips from Table 21.C.2 results in total projected daily trips for the build-out of Viera Central/West of 15,961 ( $26,166 * (1-0.39) = 15,961$ ). Table 21.C.10 summarizes the net increase in external trips for the build-out of Viera Central/West.

**Table 21.C.10  
Viera Central / West Net External Trips at Build-out (Phases 1-4)**

	Daily			PM Peak Hour		
	Enter	Exit	Total	Enter	Exit	Total
Gross Total	136,225	136,221	272,446	13,556	12,610	26,166
Community Capture	43,592	43,591	87,183	5,287	4,918	10,205
<b>Net Trip Generation</b>	<b>92,633</b>	<b>92,630</b>	<b>185,263</b>	<b>8,269</b>	<b>7,692</b>	<b>15,961</b>

## VIERA DRI NET EXTERNAL TRIPS

The trip generation analysis conducted for Viera East and Viera Central/West detailed how the net external trips for the build-out of Viera are derived. The net external trips from Viera East are 45,306 Daily trips and 4,418 PM Peak Hour trips. The net external trips from Viera Central/West are 185,263 Daily trips and 15,961 PM Peak Hour trips. The cumulative net external trips for the build-out of the Viera DRI are 230,569 Daily trips and 20,379 PM Peak Hour trips. The Viera DRI, per the current development order, has mitigated 196,869 Daily trips and 19,541 PM Peak Hour trips. The net external trip impact from the Viera DRI is 33,700 Daily trips and 838 PM Peak Hour trips.

**Table 21.C.11**  
**Viera DRI Net External Trips at Build-out (Phases 1-4)**

	Daily Trips	PM Peak Hour Trips
Viera East	45,306	4,418
Viera Central / West	185,263	15,961
Viera Build-out Total	230,569	20,379
Current DO Mitigation	196,869	19,541
<i>Net External Trips</i>	33,700	838

## VIERA CENTRAL/WEST INTERNAL ROADS

The trip generation analysis for the internal roadway network in Viera Central/West have been evaluated based on the trip generation rates in the 9<sup>th</sup> Edition of the ITE Trip Generation Manual. Table 21.C.2 includes the trip generation for the build-out of Viera Central/West utilizing both trip generation rates and where appropriate, trip generation equations. This data was utilized to determine external trip impacts under the allowances of Community Capture. The appropriate trip generation application to evaluate internal trips within Viera Central/West would be to utilize the trip generation data in Table 21.C.2. As the Community Capture analysis demonstrated, ITE trip generation rates over-projected trip generation for the development. In an overly conservative approach for evaluating internal trip generation, the trip generation rates will be used to evaluate internal roads.

The trip generation rates for the build-out of Viera Central/West project 402,924 Daily trips and 39,656 PM Peak Hour trips (Table 21.C.12). The trip generation using both the trip generation rates and equations for the build-out of Viera Central/West project 272,446 Daily trips and 26,166 PM Peak

Hour trips (Table 21.C.2). That represents an overestimation of Daily trips by 32% and PM Peak Hour trips by 34%. It is not surprising that the ITE trip generation rates overestimate impact as evidenced from both empirical data and the numerous studies discussed with Brevard County Staff regarding the tendency for using ITE trip generation impact. Detail on the trip generation rate for each land use identified in Table 21.C.12 are included in Appendix 21.C.11.

The Viera DRI has undertaken a significant effort to provide a network of multi-modal 8', 10' and 12' sidewalks and trails through-out Viera. Viera has also undertaken significant efforts to enable golf cart use throughout the development as an alternative to motor vehicles trips. These multi-modal facilities will encourage golf cart use, walking and biking and will reduce overall external trips at build-out by shifting trips from external trips to multi-modal trips. Once an individual enters a motor vehicle to make a trip, there is little impediment, other than time, to traveling outside of Viera Central/West and placing more traffic on external roads. By encouraging multi-modal travel by walking, biking and golf cart use, The Viera Company is making it more attractive to switch the trips that would have made internal and external vehicular trips, essentially induced demand, to a multi-modal trip that will stay within Viera. Encouraging multi-modal travel changes driving patterns and with the increase in residential dwellings, office and retail use through the build-out of Viera Central/West, more and more internal trips and multi-modal trips will be made within the development, thus reducing overall external trips.

**Table 21.C.12  
Viera Central / West Trip Generation**

			Daily			PM Peak Hour		
ITE Code	Land Use Category	Build-out	Enter	Exit	Total	Enter	Exit	Total
110	Light Industry	364,594	1,271	1,270	2,541	42	312	354
151	Mini-Warehouse	50,250	63	63	126	7	6	13
210	Single Family Residential	18,917	90,045	90,045	180,090	11,918	6,999	18,917
220	Apartments	3,310	11,006	11,006	22,012	1,334	718	2,052
230	Condos / Townhomes	520	1,511	1,510	3,021	181	89	270
251	Senior Housing Detached	3,257	5,993	5,993	11,986	536	343	879
252	Senior Housing Attached	1,113	1,915	1,914	3,829	150	128	278
253	Senior Housing Multifamily	294	297	297	594	28	22	50
254	Assisted Living Facility	746	992	992	1,984	72	92	164
310	Hotel	750	3,064	3,064	6,128	230	220	450
430	Golf Course	54	965	965	1,930	81	77	158
445	Theatre	16	2,340	2,340	4,680	98	120	218
610	Hospital	322	2,084	2,083	4,167	151	306	457
710	General Office	2,851,169	15,724	15,724	31,448	722	3,526	4,248
720	VA Clinic	137,500	1,542	1,542	3,084	73	188	261
820	Shopping Center	2,934,534	62,652	62,652	125,304	5,226	5,661	10,887
Gross Total		--	201,464	201,460	402,924	20,849	18,807	39,656

Analysis from the Villages, Peachtree City and the South Bay region have shown walking, bicycling, and golf cart mode shares could range between 20% and 30%. Each of these communities has an extensive network of multi-modal paths and trails (upwards of 100 miles) that interconnect retail, employment, recreation and residential uses throughout the development. Viera has just recently begun planning for greater levels of golf cart use and the mode share will likely increase over time. Viera has the land uses in place and has been providing, and will continue to provide, facilities on major roads resulting in an increasing use of golf carts.

The State of Florida allows local governments to permit the use of golf carts on roadways with posted speed limits of 35 mph or less. The Brevard County Commission passed Ordinance No. 2014-33 that permits golf carts on all roads/streets, multi-use sidewalks and paved trails permitting golf cart use as indicated by appropriate signage within the boundaries of the Viera DRI except in the drive lanes of major collector and arterial roads.

The Brevard Code allows golf carts on local streets, multi-use sidewalks of at least 8' in width and designated 10' wide trails within Viera. The Ordinance requires that signage and marking are provided at crossings and along designated corridors.

Most developments in Florida provide 5' sidewalks along roads. The Viera DRI has provided an extensive network of 8' multi-use sidewalks and 10' trails along collector and arterial roads. There are 22.7 miles of 8' multi-use sidewalks and 15.5 miles of 10' trails along collector and arterial roads that currently exist. There are another 7 miles of multi-use sidewalks and trails that interconnect residential neighborhoods. There are 45 miles of existing multi-modal facilities in Viera today, not including sidewalks on neighborhood streets and the multiple miles of golf cart paths through the golf courses that are not included in the mode share analysis. Based upon current construction cost, it costs \$275,000 per mile to design, construct and inspect 8' multi-use paths and \$325,000 per mile to design, construct and inspect 10' trails.

The Viera DRI, based upon current construction cost, has spent over \$6 million on multi-use sidewalks, over \$5 million on trails and \$1.9 million on neighborhood connections, for a total expenditure, not including sidewalks on local roads or within developments or within golf courses, over \$13 million on multi-modal facilities for which it has received zero credit and zero trip reduction recognition. Along the future extension of Lake Andrew north of Judge Fran Jamieson Way, Stadium Parkway and Lake Andrew south of Pineda Causeway, and Pineda Causeway, a minimum of 8' multi-use paths.

will be constructed along both sides of the roadway. This will add roughly 16.5 miles of 8' multi-use sidewalks within Viera at a cost of just under \$5 million.

At the build-out of Viera there will be 62 miles of multi-use sidewalks, trails and neighborhood trail connectors to accommodate golf cart use, pedestrians and sidewalks at a total cost of \$15.1 million. For that \$15.1 million expenditure, the Viera DRI currently receives zero credit for impact fees, zero credit for mode share and zero credit for increased capacity. A new four lane divided roadway, with a capacity of 37,000 cars a day costs roughly \$5 million a mile.

Viera will continue to incorporate walking, bicycling and multi-modal paths as it builds out its major roadways and explores opportunities for interconnecting various land uses. Viera has the land uses in place and has been providing, and will continue to provide, facilities on major roads resulting in an increase in walking, bicycling, use of golf carts, and access to transit.

To project a worst-case scenario for the build-out of Viera Central/West the only trip reduction proposed to the internal trip generation based on trip generation rates only is the application of a 5% mode share reduction. The significant investment in multi-modal infrastructure that Viera has made to date has been done with no trip reduction benefit. A mode share of 5% for internal roads within Viera Central-West is reasonable and would result in a reduction of 20,146 Daily trips and 1,983 PM Peak Hour Trips (Table 21.C.13). The 5% mode share reduction is significantly less than difference of 32% of Daily trips and 34% of PM Peak Hour trips between using the trip generation from Table 21.C.12 versus the trip generation from Table 21.C.2 that utilizes trip generation rates and equations.

**Table 21.C.13  
Viera Central/West Mode Share & Net Internal Trips Build-out (Phases 1-4)**

	Daily			PM Peak Hour		
	Enter	Exit	Total	Enter	Exit	Total
Gross Internal Trips	201,464	201,460	402,924	20,849	18,807	39,656
Mode Share (5%)	10,073	10,073	20,146	1,042	940	1,983
<b>Net Internal Trip Generation</b>	<b>191,391</b>	<b>191,387</b>	<b>382,778</b>	<b>19,807</b>	<b>17,867</b>	<b>37,673</b>

**TRIP GENERATION CONCLUSION**

The net trip generation impact on external roads for Viera East and Viera Central / West is based upon the approved methodology. The net increase in external trips over the existing DRI development order approved trips for the cumulative build-out of Viera will be distributed over the study area roadways and intersections. The PM Peak Hour analysis for internal roads was utilized in the intersection analysis.

**D. Provide a projection of total peak hour directional traffic, with the DRI, on the highway network within the study area at the end of each phase of development. If these projections are based on a validated FSUTMS, state the source, date and network of the model and of the TAZ projections. If no standard model is available or some other model or procedure is used, describe it in detail and include documentation showing its validity. Describe the procedure used to estimate and distribute traffic with full DRI development in subzones at buildout and at interim phase-end years. These assignments may reflect the effects of any new road or improvements which are programmed in adopted capital improvements programs and/or comprehensive plans to be constructed during DRI construction; however, the inclusion of such roads should be clearly identified. Show these link projections on maps or tables of the study area network, one map or table for each phase-end year. Describe how these conclusions were reached.**

RESPONSE:

Per the approved methodology, the Central Florida Regional Planning Model (CFRPM), Version 5.1, was used as a basis to determine the project trip distribution for the proposed development. The 2030 model network was edited to include the future roadway network of Viera as well as add traffic analysis zones (TAZs) that represent existing and future Phases 1-4 of the Viera DRI. The 2030 ZDATA1 and ZDATA2 files were modified to include the socio/economic data for the Viera DRI Phases 1-4 TAZs which were added to the model network. After these adjustments were made, the model was run and a select zone analysis was run for the cumulative development of the Viera DRI to determine project distribution. The trip distribution graphics are contained in Appendix 21.D.1.

Future phase background growth was derived by CFRPM projections. In all cases, an annual growth rate of no less than two (2) percent was used.

Growth rates for background traffic are presented in Appendix 21.D.2. These rates were used to project the p.m. peak-hour two-way background roadway segment volumes presented in Table 21.D.1, as well as background intersection volumes presented in Maps 21.D.1 (1-6). Table 21.D.2 presents the background intersection capacity LOS analysis. The Highway Capacity Software (HCS) analysis printouts are presented in Appendix 21.D.2-3. Please note, any improvements identified to mitigate for existing deficiencies were carried forward and assumed in the background conditions analysis.

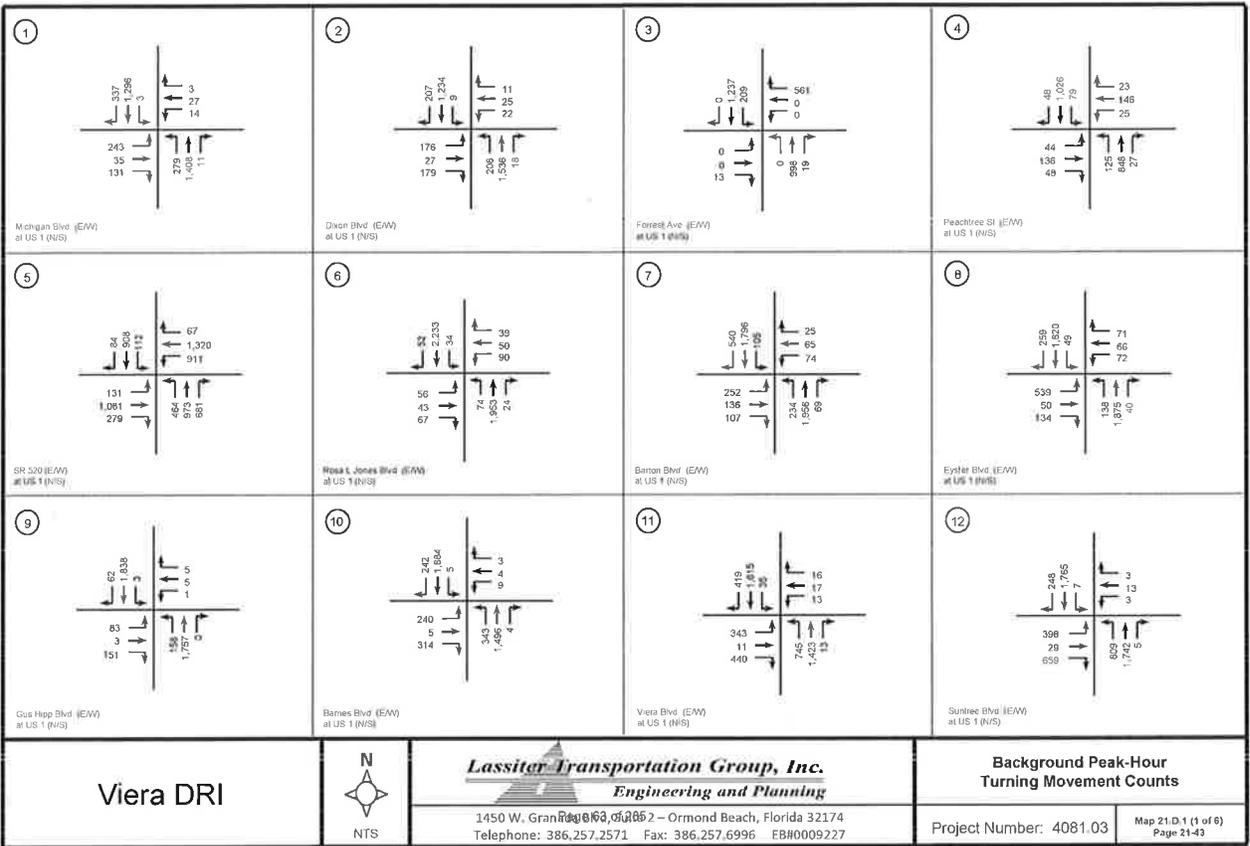
Table 21.D.1  
Background P.M. Peak-Hour Two-Way Roadway Segment Conditions

Roadway	Limits		Number of Lanes	Functional Classification	P.M. Peak-Hour Two-Way Capacity at Adopted LOS	AADT	AADT Year	K Factor	Existing P.M. Peak-Hour Two-Way Volume	Growth Rate	Growth Factor	Background Volume	Background Adverse?
	From	To											
I-95	Malabar Road	Palm Bay Road	6D	Freeway	10,060	59,500	2015	0.09	5,355	2.00%	1.28	6,854	No
I-95	Palm Bay Road	US 192	6D	Freeway	10,060	72,000	2015	0.09	6,480	2.00%	1.28	8,294	No
I-95	US 192	Eau Gallie Blvd	6D	Freeway	10,060	43,500	2015	0.09	3,915	2.00%	1.28	5,011	No
I-95	Eau Gallie Blvd	Wickham Road	6D	Freeway	10,060	81,000	2015	0.09	7,290	2.00%	1.28	9,331	No
I-95	Wickham Road	Fiske Boulevard	6D	Freeway	10,060	60,500	2015	0.09	5,445	2.00%	1.28	6,970	No
I-95	Fiske Boulevard	SR 520	6D	Freeway	10,060	77,120	2015	0.09	6,941	2.00%	1.28	8,884	No
I-95	SR 520	SR524	6D	Freeway	10,060	40,000	2015	0.09	3,600	2.00%	1.28	4,608	No
I-95	SR 524	SR 528	6D	Freeway	10,060	57,000	2015	0.09	5,130	2.00%	1.28	6,566	No
I-95	SR 528	Port St John Pkwy	6D	Freeway	10,060	24,500	2015	0.09	2,205	2.00%	1.28	2,822	No
I-95	Port St John Pkwy	SR 407	6D	Freeway	10,060	42,000	2015	0.09	3,780	2.00%	1.28	4,838	No
I-95	SR 407	SR 50	6D	Freeway	10,060	25,700	2015	0.09	2,313	2.00%	1.28	2,961	No
US 1	Nasa Boulevard	Babcock Street	6D	U Principal Arterial	5,390	33,880	2015	0.09	3,049	2.00%	1.28	3,903	No
US 1	Babcock Street	Sarno Road	6D	U Principal Arterial	5,390	47,000	2015	0.09	4,230	2.00%	1.28	5,414	Yes
US 1	Sarno Road	Eau Gallie Boulevard	6D	U Principal Arterial	5,390	52,460	2015	0.09	4,721	2.00%	1.28	6,043	Yes
US 1	Eau Gallie Boulevard	Aurora Road	6D	U Principal Arterial	5,390	40,440	2015	0.09	3,640	2.00%	1.28	4,659	No
US 1	Aurora Road	Lake Washington Boulevard	6D	U Principal Arterial	5,390	38,610	2015	0.09	3,475	2.00%	1.28	4,448	No
US 1	Lake Washington Boulevard	Parkway Drive	6D	U Principal Arterial	5,390	37,300	2015	0.09	3,357	2.00%	1.28	4,297	No
US 1	Parkway Drive	Post Road	6D	U Principal Arterial	5,390	37,880	2015	0.09	3,409	2.00%	1.28	4,364	No
US 1	Pineda Causeway	Sun Tree Boulevard	4D	U Principal Arterial	3,580	39,320	2016	0.09	3,539	2.00%	1.26	4,459	Yes
US 1	Sun Tree Boulevard	Viera Boulevard	4D	U Principal Arterial	3,580	31,990	2016	0.09	2,879	2.00%	1.26	3,628	Yes
US 1	Eyster Boulevard	Barton Boulevard	6D	U Principal Arterial	5,390	33,830	2016	0.09	3,045	2.00%	1.26	3,837	No
US 1	Barton Boulevard	Florida Avenue	6D	U Principal Arterial	5,390	41,050	2016	0.09	3,695	2.00%	1.26	4,656	No
US 1	Florida Avenue	Rosa Jones Boulevard	6D	U Principal Arterial	5,390	32,720	2016	0.09	2,945	2.88%	1.37	4,048	No
US 1	Rosa Jones Boulevard	SR 520	6D	U Principal Arterial	5,390	30,890	2016	0.09	2,780	2.76%	1.36	3,777	No
US 1	SR 520	Peachtree Street	6D	U Principal Arterial	5,390	17,860	2014	0.09	1,607	2.00%	1.30	2,089	No
US 1	Dixon Boulevard	Michigan Boulevard	6D	U Principal Arterial	5,390	28,510	2013	0.09	2,596	2.00%	1.32	3,387	No
Pineda Causeway	I-95	Wickham Road	4D	U Minor Arterial	3,580	25,360	2015	0.09	2,282	2.00%	1.28	2,921	No
Pineda Causeway	Wickham Road	US 1	4D	U Principal Arterial	3,580	30,440	2015	0.09	2,740	2.00%	1.28	3,507	No
Pineda Causeway	US 1	S. Tropical Trail	4D	U Principal Arterial	5,900	43,920	2016	0.09	3,953	2.00%	1.26	4,981	No
Pineda Causeway	S. Tropical Trail	SR A1A	4D	U Principal Arterial	5,900	36,520	2016	0.09	3,287	2.00%	1.28	4,142	No
Wickham Road	Murrell Road	Baytree Drive	4D	U Principal Arterial	3,580	29,600	2015	0.09	2,664	2.00%	1.28	3,410	No
Wickham Road	Baytree Drive	Interlachen Road	4D	U Principal Arterial	3,580	30,220	2015	0.09	2,720	2.00%	1.28	3,482	No
Wickham Road	Interlachen Road	N. Pinehurst Avenue	4D	U Principal Arterial	3,580	28,360	2015	0.09	2,552	2.00%	1.28	3,287	No
Wickham Road	N. Pinehurst Avenue	Suntree Boulevard	4D	U Principal Arterial	3,580	30,300	2015	0.09	2,727	2.00%	1.28	3,491	No
Wickham Road	Suntree Boulevard	St. Andrews Boulevard	4D	U Principal Arterial	3,580	23,940	2015	0.09	2,155	2.00%	1.28	2,758	No
Wickham Road	St. Andrews Boulevard	Jordan Blass Drive	4D	U Principal Arterial	3,580	20,720	2015	0.09	1,865	2.00%	1.28	2,387	No
Wickham Road	Jordan Blass Drive	Pineda Causeway	4D	U Principal Arterial	3,580	28,540	2015	0.09	2,389	2.00%	1.28	3,058	No
Wickham Road	Pineda Causeway	Business Center Boulevard	4D	U Principal Arterial	3,580	36,620	2015	0.09	3,296	2.00%	1.28	4,219	Yes
Wickham Road	Business Center Boulevard	Mariah Drive	4D	U Principal Arterial	3,580	35,170	2015	0.09	3,165	2.00%	1.28	4,051	Yes
Wickham Road	Mariah Drive	Kensington Drive	4D	U Principal Arterial	3,580	34,880	2015	0.09	3,139	2.00%	1.28	4,018	Yes
Wickham Road	Kensington Drive	Post Road	4D	U Principal Arterial	3,580	36,000	2015	0.09	3,240	2.00%	1.28	4,147	Yes
Wickham Road	Post Road	Parkway Drive	4D	U Principal Arterial	3,580	32,140	2015	0.09	2,893	2.00%	1.28	3,703	Yes
Wickham Road	Parkway Drive	Lake Washington Boulevard	4D	U Principal Arterial	3,580	30,720	2015	0.09	2,765	2.00%	1.28	3,539	No
Fiske Boulevard	Barnes Boulevard	Eyster Boulevard	4D	U Principal Arterial	3,580	26,650	2016	0.09	2,327	2.00%	1.26	2,932	No
Fiske Boulevard	Eyster Boulevard	Barton Boulevard	4D	U Principal Arterial	3,580	22,200	2016	0.09	1,998	2.00%	1.26	2,517	No
Fiske Boulevard	Barton Boulevard	St. Andrews Drive	4D	U Principal Arterial	3,580	24,930	2016	0.09	2,244	2.00%	1.26	2,827	No
Fiske Boulevard	St. Andrews Drive	Pluckebaum Road	4D	U Principal Arterial	3,580	24,210	2016	0.09	2,179	2.00%	1.26	2,746	No
Fiske Boulevard	Pluckebaum Road	Rosa Jones Boulevard	4D	U Principal Arterial	3,580	18,610	2016	0.09	1,675	2.00%	1.26	2,111	No
Fiske Boulevard	Rosa Jones Boulevard	SR 520	4D	U Principal Arterial	3,580	14,270	2016	0.09	1,284	2.00%	1.26	1,818	No
Fiske Boulevard	SR 520	Gus Hipp Boulevard	2	U Minor Arterial	1,410	8,260	2016	0.09	743	2.00%	1.26	936	No
Murrell Road	Barnes Boulevard	Gus Hipp Boulevard	4D	U Minor Arterial	3,222	17,220	2015	0.09	1,550	2.50%	1.35	2,093	No
Murrell Road	Gus Hipp Boulevard	Eyster Boulevard	4D	U Minor Arterial	3,222	17,220	2015	0.09	1,550	2.76%	1.39	2,149	No
Murrell Road	Eyster Boulevard	Barton Boulevard	4D	U Minor Arterial	3,222	5,590	2015	0.09	503	3.15%	1.44	725	No
Barnes Boulevard	Fiske Boulevard	Three Meadows Drive	4D*	U Principal Arterial	3,222	15,940	2015	0.09	1,435	2.00%	1.28	1,837	No
Barnes Boulevard	Three Meadows Drive	Murrell Road	4D*	U Principal Arterial	3,222	15,950	2015	0.09	1,427	2.00%	1.28	1,827	No
Post Road	Wickham Road	US 1	4D	U Major Collector	2,736	11,400	2015	0.09	1,026	2.00%	1.28	1,313	No
Suntree Boulevard	Wickham Road	US 1	4D**	U Minor Collector	3,040	18,040	2015	0.09	1,624	2.00%	1.28	2,079	No
Viera Boulevard	Murrell Road	Independence Avenue	4D*	U Minor Collector	3,580	16,190	2016	0.09	1,457	2.07%	1.27	1,849	No
Viera Boulevard	Independence Avenue	Holiday Springs Road	4D*	U Minor Collector	3,580	16,190	2016	0.09	1,457	2.00%	1.26	1,836	No
Viera Boulevard	Holiday Springs Road	US 1	4D*	U Minor Collector	3,580	14,000	2016	0.09	1,260	2.85%	1.37	1,727	No
SR 520	Clear Lake Road	Lake Drive	4D	U Principal Arterial	3,580	23,570	2016	0.09	2,121	2.00%	1.26	2,672	No
SR 520	Lake Drive	Fiske Boulevard	4D	U Principal Arterial	3,580	26,420	2016	0.09	2,378	2.00%	1.26	2,996	No
SR 520	Fiske Boulevard	Dike Avenue	4D	U Principal Arterial	3,580	29,290	2016	0.09	2,638	2.00%	1.26	3,321	No
SR 520	Blake Avenue	US 1	4D	U Principal Arterial	3,580	28,920	2016	0.09	2,603	2.00%	1.26	3,280	No
SR 520	US 1	S. Tropical Trail	6D	U Principal Arterial	5,390	43,519	2015	0.09	3,917	2.00%	1.28	5,014	No
SR 520	S. Tropical Trail	N Courtney Parkway	6D	U Principal Arterial	5,390	37,410	2016	0.09	3,367	2.00%	1.26	4,242	No
SR 520	N Courtney Parkway	N Sykes Creek Parkway	6D	U Principal Arterial	5,390	30,250	2016	0.09	2,723	2.00%	1.26	3,431	No
SR 520	N Sykes Creek Parkway	Newfound Harbor Dr	6D	U Principal Arterial	5,390	35,360	2016	0.09	3,182	2.00%	1.26	4,009	No
SR A1A	Patrick AFB Main Gate	Pineda Causeway	4D	U Principal Arterial	3,580	20,870	2016	0.09	1,878	2.00%	1.26	2,386	No
SR A1A	Pineda Causeway	Ocean Boulevard	4D	U Principal Arterial	3,580	20,510	2016	0.09	1,846	2.00%	1.28	2,326	No
SR A1A	Ocean Boulevard	Berkely Street	4D	U Principal Arterial	3,580	20,160	2014	0.09	1,814	2.00%	1.30	2,358	No
SR A1A	Berkely Street	Jackson Street	4D	U Principal Arterial	3,580	23,670	2016	0.09	2,130	2.00%	1.26	2,684	No
SR A1A	Jackson Street	Cassia Boulevard	4D	U Principal Arterial	3,580	24,020	2016	0.09	2,162	2.00%	1.26	2,724	No
Spyglass Hill Road	Murrell Road	Pinehurst Avenue	2	U Minor Collector	1,410	4,300	2016	0.09	387	2.00%	1.26	488	No
Pinehurst Avenue	Wickham Road	Spyglass Hill Road	2D	U Minor Collector	1,410	7,200	2016	0.09	648	2.00%	1.26	816	No
Barton Boulevard	Fiske Boulevard	Murrell Road	4D	U Minor Collector	2,736	17,900	2015	0.09	1,611	2.00%	1.28	2,062	No
Barton Boulevard	Murrell Road	UE 1	4D	U Minor Collector	2,736	14,700	2016	0.09	1,223	3.00%	1.26	1,693	No
Eyster Boulevard	Fiske Boulevard	Murrell Road	2	U Minor Collector	1,269	6,400	2015	0.09	576	2.00%	1.28	737	No
Eyster Boulevard	Murrell Road	US 1	4D	U Minor Collector	2,736	6,400	2015	0.09	576	2.00%	1.28	737	No

**Table 21.D.2  
Background P.M. Peak-Hour Intersection LOS**

Signalized Intersections - LOS					
No.	Intersection	Adopted LOS	P.M. Peak-Hour		
			Delay (sec.)	LOS	V/C > 1.0
1	US 1 at Michigan Ave	D	28.4	C	No
2	US 1 at Dixon Blvd	D	30.5	C	No
3	US 1 at Forrest Ave	D	19.8	B	No
4	US 1 at Peachtree St	D	17.6	B	No
5	US 1 at SR 520	D	108.5	F	Yes
6	US 1 at Rosa L Jones	D	23.6	C	No
7	US 1 at Barton Blvd	D	36.6	D	No
8	US 1 at Eyster Blvd	D	52.4	D	Yes
9	US 1 at Gus Hipp Blvd	D	16.3	B	No
10	US 1 at Barnes Blvd	D	75.7	E	Yes
11	US 1 at Viera Blvd	D	92.3	F	Yes
12	US 1 at Suntree Blvd	D	124.6	F	Yes
13	US 1 at Pineda Causeway WB Ramps	D	41.9	D	Yes
14	US 1 at Pineda Causeway EB Ramps	D	10.4	B	No
15	US 1 at Post Rd	D	60.6	E	Yes
16	US 1 at Parkway Rd	D	40.5	D	No
17	US 1 at Lake Washington Rd	D	39.3	D	No
18	US 1 at Aurora Rd	D	44.3	D	No
19	US 1 at Eau Gallie Blvd.	D	76.9	E	Yes
20	US 1 at Samo Rd	D	87.5	F	Yes
21	US 1 at NASA Blvd.	D	68.8	E	Yes
22	US 1 at US 192	D	108.7	F	Yes
23	Fiske Blvd at SR 520	D	88.3	F	Yes
24	Fiske Blvd at Rosa L Jones	D	12.5	B	No
25	Fiske Blvd at Pluckebaum Rd	D	18.2	B	No
26	Fiske Blvd at St. Andrews Dr.	D	8.2	A	No
27	Fiske Blvd at Barton Blvd	D	56.1	E	No
28	Fiske Blvd at Eyster Blvd	D	37.3	D	No
29	Fiske Blvd at Barnes Blvd	D	102.3	F	Yes
30	Fiske Blvd at I-95 SB Ramps	D	181.5	F	Yes
31	Murrell Rd at Barton Blvd	E	26.1	C	No
32	Murrell Rd at Eyster Blvd	E	37.5	D	No
33	Murrell Rd at Gus Hipp Blvd	E	13.6	B	No
34	Murrell Rd at Barnes Blvd	E	42.4	D	No
35	Murrell Rd at Viera Blvd	E	34.2	C	No
36	Murrell Rd at Spyglass Hill Rd	E	19.9	B	No
37	Murrell Rd at Wickham Rd	E	100.0	F	Yes
38	Wickham Rd at Lake Andrew Dr	E			
39	I-95 NB Ramps at Wickham Rd	D	132.0	F	Yes
40	I-95 SB Ramps at Wickham Rd	D	67.0	E	Yes
41	Wickham Rd at Baytree Blvd	E	43.7	D	No
42	Wickham Rd at Interlachen Rd	E	68.0	E	Yes
43	Wickham Rd at Pinehurst Ave	E	45.0	D	Yes
44	Wickham Rd at Suntree Blvd	E	118.2	F	Yes
45	Wickham Rd at St. Andrews Blvd	E	17.2	B	No
46	Wickham Rd at Jordan Blass Dr	E	35.1	D	Yes
47	Wickham Rd at Pineda Causeway	E	132.9	F	Yes
48	Wickham Rd at Post Rd	E	176.8	F	Yes
49	Wickham Rd at Parkway Dr	E	81.2	F	Yes
50	Wickham Rd at Lake Washington Rd	E	98.2	F	Yes
51	Wickham Rd at Aurora Rd	E	122.1	F	Yes
52	Wickham Rd at Eau Gallie Blvd	E	92.4	F	Yes
53	Lake Andrew at Napolo	E	9.3	A	No
54	Lake Andrew at Colonnade	E	16.2	B	No
55	Lake Andrew Dr at Town Center Ave	E	37.6	D	No
56	Lake Andrew at Judge Fran Jamieson Way	E	52.7	D	Yes
57	Stadium Pkwt at Wickham Rd	E	22.5	C	No
58	Stadium Pkwy at Judge Fran Jamieson Way	E	61.1	E	Yes
59	Stadium Pkwy at Viera Blvd	E	54.7	D	No
60	Stadium Pkwy at Rosemount Dr	E	12.8	B	No
61	Stadium Pkwy at Tavistock Dr	E	11.8	B	No
62	Viera Blvd at Tavistock Dr	E	35.9	E	SB
63	Wickham Rd at Shoppes Dr/Target Entrance	E	56.6	E	Yes

Unsignalized Intersections - LOS				
No.	Intersection	Adopted LOS	P.M. Peak-Hour	
			Delay (sec.)	Critical Approach
62	Viera Blvd at Tavistock Dr	E	13.4	B



Viera DRI



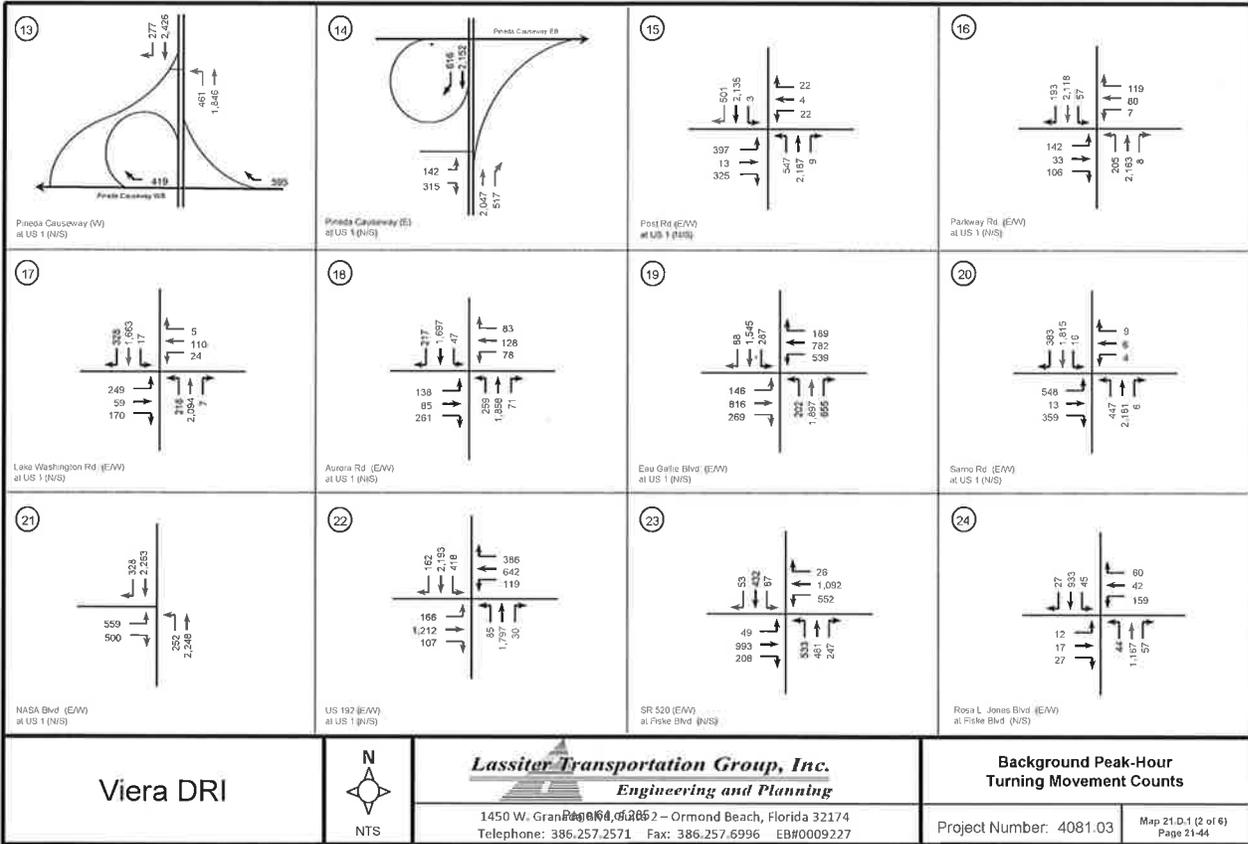
**Lassiter Transportation Group, Inc.**  
 Engineering and Planning

1450 W. Grand Ave. #202 - Ormond Beach, Florida 32174  
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Background Peak-Hour  
 Turning Movement Counts

Project Number: 4081.03

Map 21.D.1 (1 of 6)  
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Viera DRI



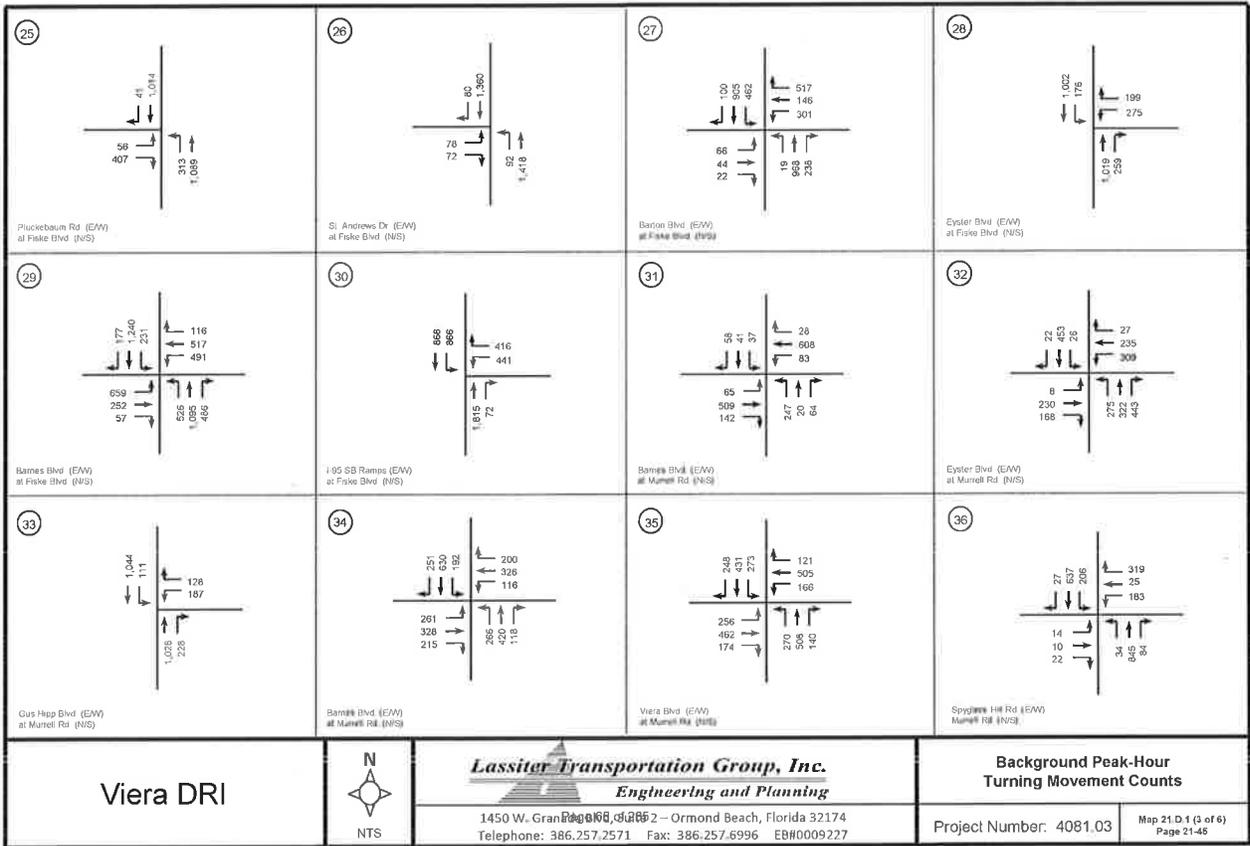
**Lassiter Transportation Group, Inc.**  
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**Background Peak-Hour  
Turning Movement Counts**

Project Number: 4081.03

Map 21-D.1 (2 of 6)  
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Viera DRI



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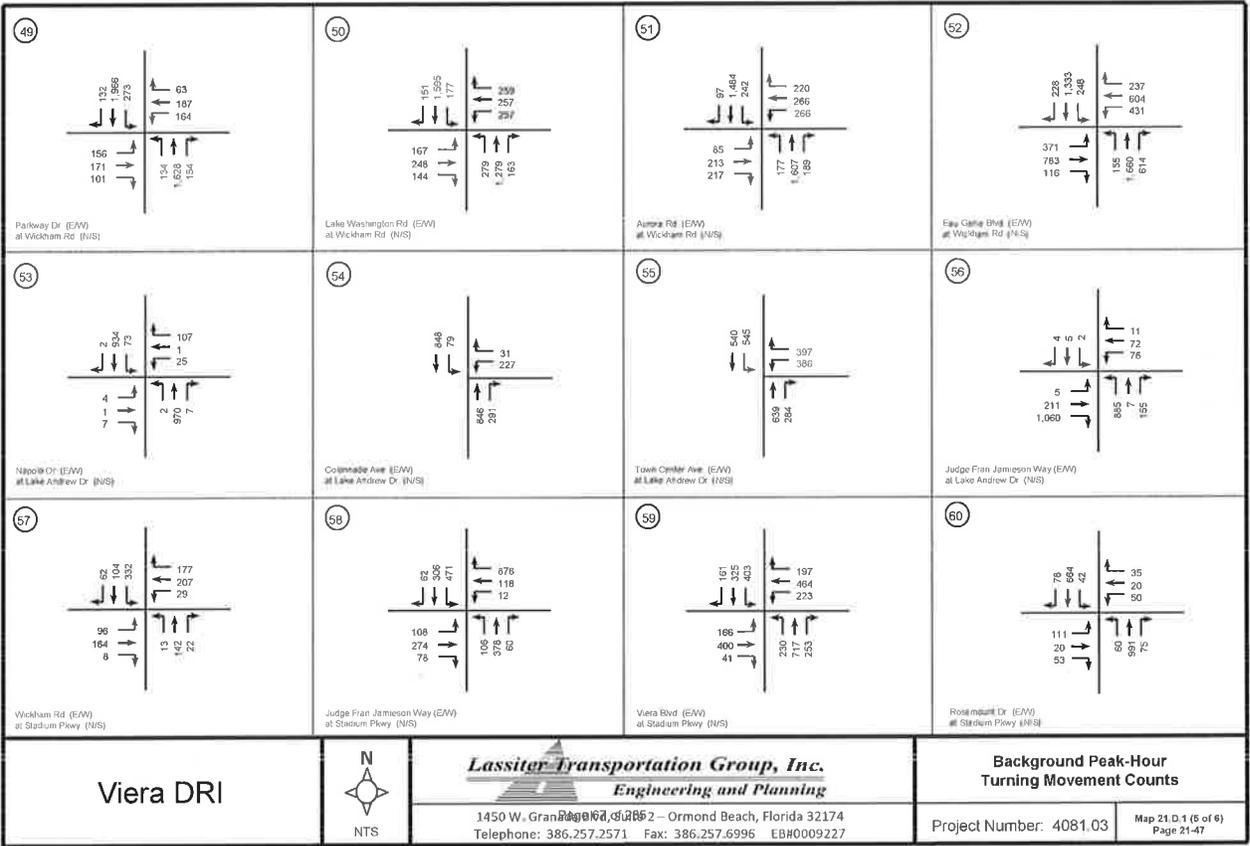
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**Background Peak-Hour  
Turning Movement Counts**

Project Number: 4081.03

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<p>37</p> <p>Wickham Rd (E/W) at Murrell Rd (N/S)</p>	<p>38</p> <p>Wickham Rd (E/W) at Lake Andrew Dr (N/S)</p>	<p>39</p> <p>Wickham Rd (E/W) at I-95 NB Ramps (N/S)</p>	<p>40</p> <p>Wickham Rd (E/W) at I-95 SB Ramps (N/S)</p>
<p>41</p> <p>Wickham Rd (E/W) at Baytree Dr (N/S)</p>	<p>42</p> <p>Wickham Rd (E/W) at Interlachen Rd (N/S)</p>	<p>43</p> <p>Wickham Rd (E/W) at Pinehurst Ave (N/S)</p>	<p>44</p> <p>Suntree Blvd (E/W) at Wickham Rd (N/S)</p>
<p>45</p> <p>St Andrews Blvd (E/W) at Wickham Rd (N/S)</p>	<p>46</p> <p>Jordan Blythe Dr (E/W) at Wickham Rd (N/S)</p>	<p>47</p> <p>Pineda Causeway (E/W) at Wickham Rd (N/S)</p>	<p>48</p> <p>Post Rd (E/W) at Wickham Rd (N/S)</p>
<p>Viera DRI</p>		<p><b>Lassiter Transportation Group, Inc.</b> Engineering and Planning</p> <p>1450 W. Grand Ave., Suite 202 — Ormond Beach, Florida 32174 Telephone: 386.257.2571 Fax: 386.257.6996 EB#0009227</p>	<p><b>Background Peak-Hour Turning Movement Counts</b></p> <p>Project Number: 4081.03      Map 21.D.1 (4 of 6) Page 21-46</p>



Viera DRI



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**Background Peak-Hour**  
**Turning Movement Counts**

Project Number: 4081.03

Map 21.D.1 (6 of 6)  
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<p>61</p> <p>Tavistock Dr (E/W) at Stadium Pkwy (N/S)</p>	<p>62</p> <p>Viera Blvd (E/W) at Tavistock Dr (N/S)</p>	<p>63</p> <p>Wickham Rd (E/W) at Shoppes Dr (Target Entrance) (N/S)</p>	<p>64</p> <p>Pineda Ext. (E/W) at Wickham Rd (N/S)</p>	
<p>65</p> <p>Pineda Ext. (E/W) at Stadium Pkwy (N/S)</p>	<p>66</p> <p>Pineda Ext. (E/W) at Lake Andrew Dr. (N/S)</p>	<p>67</p> <p>Lake Andrew Dr. (E/W) at Stadium Pkwy (N/S)</p>	<p>68</p> <p>Viera Blvd (E/W) at I-95 SB Ramps (N/S)</p>	
<p>69</p> <p>Viera Blvd (E/W) at I-95 NB Ramps (N/S)</p>				
<p>Viera DRI</p>		<p><b>Lassiter Transportation Group, Inc.</b> Engineering and Planning</p> <p>1450 W. Grand Ave., Suite 202 — Ormond Beach, Florida 32174 Telephone: 386.257.2571 Fax: 386.257.6996 EB#0009227</p>	<p><b>Background Peak-Hour Turning Movement Counts</b></p> <p>Project Number: 4081.03      Map 21.D.1 (6 of 6) Page 21-48</p>	

**E. Assign the trips generated by this development as shown in (B) and (C) above and show, on separate maps or tables for each phase end year, the DRI traffic on each link of the then existing network within the study area. Include peak-hour directional trips. If local data is available, compare average trip lengths by purpose for the project and local jurisdiction. For the year of buildout and at the end of each phase estimate the percent impact, in terms of peak hour directional DRI trips/ total peak hour directional trips and in terms of peak hour directional DRI trips/ existing peak hour service volume for desired LOS, on each regionally significant roadway in the study area. Identify facility type, number of lanes and projected signal locations for the regionally significant roads.**

RESPONSE:

The external trips associated with build-out of the Viera DRI were determined by applying the net external trips (see Section C above) and then assigning these trips according to the external trip distribution pattern determined by the CFRPM.

Table 21.E.1 presents the external build-out roadway segment conditions on the highway network while Table 21.E.2 presents the build-out intersection capacity analysis LOS. The Highway Capacity Software (HCS) analysis printouts are presented in Appendix 21.E.1. Maps 21.E.1 (1-6) present, in graphic form, the build-out p.m. peak-hour turning movement count data. Please note, any improvements identified to mitigate for existing deficiencies were carried forward and assumed in the background conditions analysis.

To determine the need for future internal roadway improvements, an internal distribution was conducted using the travel demand model (Appendix 21.E.2). Net cumulative Daily and PM Peak Hour trips were then assigned to each internal collector and arterial road based upon the model distribution. The latest version of the FDOT Generalized Tables was then used to establish a daily capacity for 2, 4, 6 and 8 lane roads, based on a LOS "D" standard for roads with a speed limit of 40 MPH or higher (Appendix 21.E.3). Each collector and arterial road was evaluated to determine the future number of lanes (Appendix 21.E.4). The PM Peak Hour trips were used in the evaluation of internal roadway intersections. The projected net cumulative trips utilized in the analysis do represent a conservative worst case scenario. The empirical data collected in the Community Capture analysis demonstrate that the ITE trip generation rates overstate traffic

impact. Table 21.E.3 indicates the future number of lanes for each collector and arterial road within Viera Central/West.

Table 21.E.1 – Build-Out P.M. Peak-Hour Two-Way Roadway Segment  
Conditions

Table 21.E.2  
Build-Out P.M. Peak-Hour Intersection LOS

Signalized Intersections					
No.	Intersection	Adopted LOS	P.M. Peak-Hour		
			Delay (sec.)	LOS	V/C > 1.0
1	US 1 at Michigan Ave	D	29.0	C	No
2	US 1 at Dixon Blvd	D	30.9	C	No
3	US 1 at Forrest Ave	D	19.8	B	No
4	US 1 at Peachtree St	D	17.6	B	No
5	US 1 at SR 520	D	50.4	D	No
6	US 1 at Rosa L Jones	D	24.6	C	No
7	US 1 at Barton Blvd	D	37.6	D	No
8	US 1 at Eyster Blvd	D	51.5	D	No
9	US 1 at Gus Hipp Blvd	D	12.2	B	No
10	US 1 at Barnes Blvd	D	50.5	D	No
11	US 1 at Viera Blvd	D	54.3	D	No
12	US 1 at Suntree Blvd	D	53.6	D	No
13	US 1 at Pineda Causeway WB Ramps	D	21.5	C	No
14	US 1 at Pineda Causeway EB Ramps	D	11	B	No
15	US 1 at Post Rd	D	52.2	D	No
16	US 1 at Parkway Rd	D	40.8	D	No
17	US 1 at Lake Washington Rd	D	39.5	D	No
18	US 1 at Aurora Rd	D	44.4	D	No
19	US 1 at Eau Gallie Blvd	D	54.9	D	No
20	US 1 at Sarno Rd	D	53.2	D	No
21	US 1 at NASA Blvd	D	39.9	D	No
22	US 1 at US 192	D	54.4	D	No
23	Fiske Blvd at SR 520	D	55.6	E	No
24	Fiske Blvd at Rosa L Jones	D	12.9	B	No
25	Fiske Blvd at Pluckebaum Rd	D	36.1	C	No
26	Fiske Blvd at St. Andrews Dr	D	8.4	A	No
27	Fiske Blvd at Barton Blvd	D	38.3	D	No
28	Fiske Blvd at Eyster Blvd	D	41.1	D	No
29	Fiske Blvd at Barnes Blvd	D	57.2	E	No
30	Fiske Blvd at I-95 SB Ramps	D	60.2	E	Yes
31	Murrell Rd at Barton Blvd	E	26.1	C	No
32	Murrell Rd at Eyster Blvd	E	38.1	D	No
33	Murrell Rd at Gus Hipp Blvd	E	13.7	B	No
34	Murrell Rd at Barnes Blvd	E	41.8	D	No
35	Murrell Rd at Viera Blvd	E	83.4	F	Yes
36	Murrell Rd at Spyglass Hill Rd	E	25.7	C	No
37	Murrell Rd at Wickham Rd	E	160.5	F	Yes
38	Wickham Rd at Lake Andrew Dr	E			
39	I-95 NB Ramps at Wickham Rd	D	82.3	F	Yes
40	I-95 SB Ramps at Wickham Rd	D	87.8	F	Yes
41	Wickham Rd at Baytree Blvd	E	51.8	D	Yes
42	Wickham Rd at Interlachen Rd	E	40.5	D	No
43	Wickham Rd at Pinehurst Ave	E	46.4	D	No
44	Wickham Rd at Suntree Blvd	E	51.0	D	No
45	Wickham Rd at St. Andrews Blvd	E	18.1	B	No
46	Wickham Rd at Jordan Blass Dr	E	33.3	C	No
47	Wickham Rd at Pineda Causeway	E	70.5	E	No
48	Wickham Rd at Post Rd	E	65.6	E	No
49	Wickham Rd at Parkway Dr	E	42.3	D	No
50	Wickham Rd at Lake Washington Rd	E	45.8	D	No
51	Wickham Rd at Aurora Rd	E	56.5	E	No
52	Wickham Rd at Eau Gallie Blvd	E	58.6	E	No
53	Lake Andrew at Napolo	E	14.7	B	No
54	Lake Andrew at Colonnade	E	33.8	C	No
55	Lake Andrew Dr at Town Center Ave	E	106.9	F	Yes
56	Lake Andrew at Judge Fran Jamieson Way	E	35.9	D	No
57	Stadium Pkwy at Wickham Rd	E	63.3	E	Yes
58	Stadium Pkwy at Judge Fran Jamieson Way	E	85.8	F	Yes
59	Stadium Pkwy at Viera Blvd	E	186.2	F	Yes
60	Stadium Pkwy at Rosemount Dr	E	15.3	B	No
61	Stadium Pkwy at Tavistock Dr	E	26.3	C	Yes
63	Wickham Rd at Shoppes Dr/Target Entrance	E	213.9	F	Yes

Unsignalized Intersections					
No.	Intersection	Adopted LOS	P.M. Peak-Hour		
			Delay (sec.)	LOS	Critical Approach
62	Viera Blvd at Tavistock Dr	E	81.5	F	NB

Future Intersections					
Unsignalized					
64	Pineda Ext at Wickham Rd	E	13.5	B	NB
65	Pineda Ext at Stadium Pkwy	E	19.8	C	SB
Signalized					
66	Pineda Ext at Lake Andrew Dr	E	21.7	C	No
67	Stadium Pkwy at Lake Andrew Dr	E	41.3	D	No

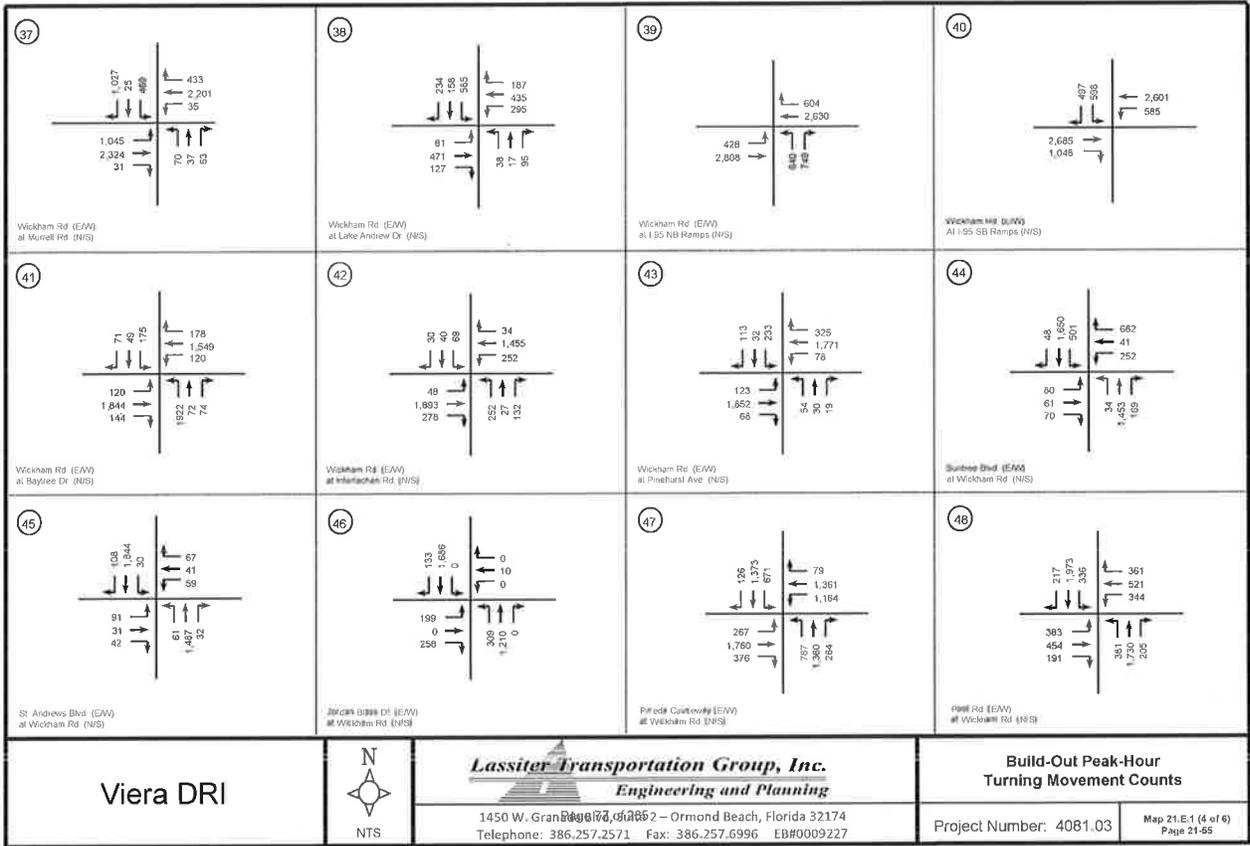
**Table 21.E.3  
Viera Central/West Internal Road Analysis**

Road	From	To	Future Lanes
Viera Blvd	I-95	Stadium Parkway	4
Viera Blvd	Stadium Parkway	Tavistock Drive	2
Viera Blvd	Tavistock Drive	Judge Fran Jamieson Way	4
Judge Fran Jamieson Way	Lake Andrew Drive	Stadium Parkway	4
Judge Fran Jamieson Way	Stadium Parkway	Tavistock Drive	4
Judge Fran Jamieson Way	Tavistock Drive	Legacy Blvd	4
Judge Fran Jamieson Way	Legacy Blvd	Viera Blvd	2
Pineda Causeway	I-95	Lake Andrew Drive	6
Pineda Causeway	Lake Andrew Drive	Stadium Parkway	2
Pineda Causeway	Stadium Parkway	Addisson Drive	2
Pineda Causeway	Addisson Drive	Wickham Road	4
Wickham Road	I-95	Lake Andrew Drive	8
Wickham Road	Lake Andrew Drive	Stadium Parkway	4
Wickham Road	Stadium Parkway	Wyndam Way	4
Wickham Road	Wyndam Way	Paragrass Ave	4
Wickham Road	Paragrass Ave	Pineda Causeway	4
Wickham Road	Pineda Causeway	Judge Fran Jamieson Way	2
Lake Andrew Drive	Stadium Parkway	Judge Fran Jamieson Way	2
Lake Andrew Drive	Judge Fran Jamieson Way	Town Center Drive	4
Lake Andrew Drive	Town Center Drive	Napolo Drive	4
Lake Andrew Drive	Napolo Drive	Wickham Road	4
Lake Andrew Drive	Wickham Road	Ivanhoe Drive	4
Lake Andrew Drive	Ivanhoe Drive	Trafford Drive	4
Lake Andrew Drive	Trafford Drive	Addison Drive	4
Lake Andrew Drive	Trafford Drive	Pineda Causeway	4
Lake Andrew Drive	Pineda Causeway	Southern Terminus	4
Lake Andrew Drive	Wickham Road	Pineda Causeway	4
Stadium Parkway	I-95 Ramps	Tavistock Drive	6
Stadium Parkway	Tavistock Drive	Viera Blvd	4
Stadium Parkway	Viera Blvd	Lake Andrew Drive	6
Stadium Parkway	Lake Andrew Drive	Judge Fran Jamieson Way	4
Stadium Parkway	Judge Fran Jamieson Way	Town Center Drive	4
Stadium Parkway	Town Center Drive	Wickham Road	4
Stadium Parkway	Wickham Road	Addison Drive	?
Stadium Parkway	Addison Drive	Pineda Causeway	2

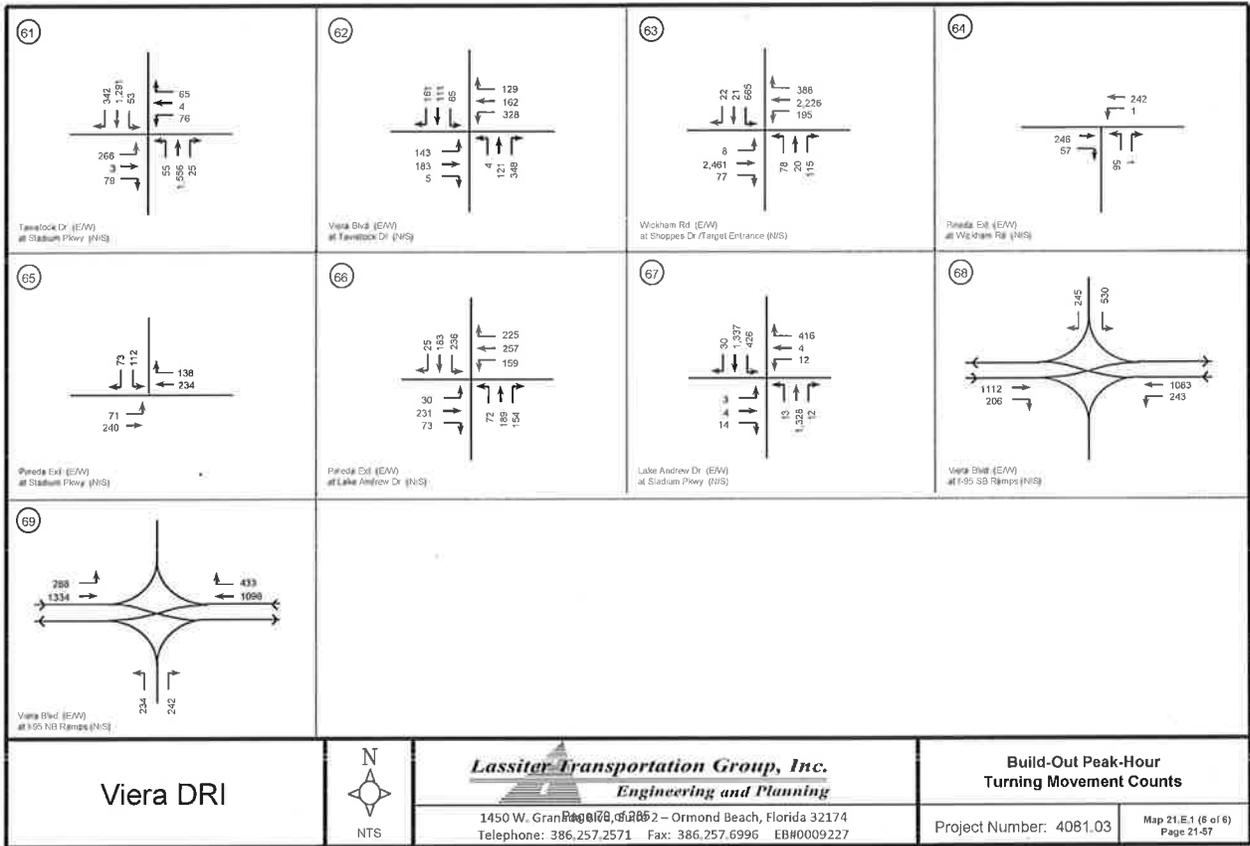
<p>①</p> <p>Michigan Blvd (E/W) at US 1 (N/S)</p>	<p>②</p> <p>Dixon Blvd (E/W) at US 1 (N/S)</p>	<p>③</p> <p>Forrest Ave (E/W) at US 1 (N/S)</p>	<p>④</p> <p>Peachtree St (E/W) at US 1 (N/S)</p>
<p>⑤</p> <p>SR 520 (E/W) at US 1 (N/S)</p>	<p>⑥</p> <p>Rosa L. Jones Blvd (E/W) at US 1 (N/S)</p>	<p>⑦</p> <p>Bartoo Blvd (E/W) at US 1 (N/S)</p>	<p>⑧</p> <p>Eysel Blvd (E/W) at US 1 (N/S)</p>
<p>⑨</p> <p>Gus Hipp Blvd (E/W) at US 1 (N/S)</p>	<p>⑩</p> <p>Barnes Blvd (E/W) at US 1 (N/S)</p>	<p>⑪</p> <p>Viera Blvd (E/W) at US 1 (N/S)</p>	<p>⑫</p> <p>Sunfree Blvd (E/W) at US 1 (N/S)</p>
<p>Viera DRI</p>	<p>N NTS</p>	<p><b>Lassiter Transportation Group, Inc.</b> Engineering and Planning 1450 W. Grand Blvd, Suite 202 - Ormond Beach, Florida 32174 Telephone: 386.257.2571 Fax: 386.257.6996 EB#0009227</p>	<p><b>Build-Out Peak-Hour Turning Movement Counts</b> Project Number: 4081.03 Map 21.E.1 (1 of 6) Page 21-42</p>

<p>13</p> <p>Pineda Causeway (W) at US 1 (N/S)</p>	<p>14</p> <p>Pineda Causeway (E) at US 1 (N/S)</p>	<p>15</p> <p>Post Rd (E/W) at US 1 (N/S)</p>	<p>16</p> <p>Pineda Cswy (E/W) at US 1 (N/S)</p>
<p>17</p> <p>Lake Washington Rd (E/W) at US 1 (N/S)</p>	<p>18</p> <p>Aurora Rd (E/W) at US 1 (N/S)</p>	<p>19</p> <p>Eau Galhe Blvd (E/W) at US 1 (N/S)</p>	<p>20</p> <p>Sarno Rd (E/W) at US 1 (N/S)</p>
<p>21</p> <p>NASA Blvd (E/W) at US 1 (N/S)</p>	<p>22</p> <p>US 192 (E/W) at US 1 (N/S)</p>	<p>23</p> <p>SR 520 (E/W) at Fiske Blvd (N/S)</p>	<p>24</p> <p>Ponce L. Jones Blvd (E/W) at Fiske Blvd (N/S)</p>
<p>Viera DRI</p>	<p style="text-align: center;">N NTS</p> <p style="text-align: center;"><b>Lassiter Transportation Group, Inc.</b> Engineering and Planning</p> <p style="text-align: center;">1450 W. Grand Ave., Suite 202 - Ormond Beach, Florida 32174 Telephone: 386.257.2571 Fax: 386.257.6996 EB#0009227</p>	<p style="text-align: center;"><b>Build-Out Peak-Hour Turning Movement Counts</b></p> <p>Project Number: 4081.03</p> <p style="text-align: right;">Map 21.E.1 (2 of 6) Page 21-63</p>	

<p>25</p> <p>Pluckebaum Rd (E/W) at Fiske Blvd (N/S)</p>	<p>26</p> <p>St. Andrews Dr (E/W) at Fiske Blvd (N/S)</p>	<p>27</p> <p>Barton Blvd (E/W) at Fiske Blvd (N/S)</p>	<p>28</p> <p>Eyster Blvd (E/W) at Fiske Blvd (N/S)</p>
<p>29</p> <p>Barnes Blvd (E/W) at Fiske Blvd (N/S)</p>	<p>30</p> <p>I-95 SB Ramps (E/W) at Fiske Blvd (N/S)</p>	<p>31</p> <p>Barnes Blvd (E/W) at Murrell Rd (N/S)</p>	<p>32</p> <p>Eyster Blvd (E/W) at Murrell Rd (N/S)</p>
<p>33</p> <p>Gus Hipp Blvd (E/W) at Murrell Rd (N/S)</p>	<p>34</p> <p>Barnes Blvd (E/W) at Murrell Rd (N/S)</p>	<p>35</p> <p>Viera Blvd (E/W) at Murrell Rd (N/S)</p>	<p>36</p> <p>Spyglass Hill Rd (E/W) at Murrell Rd (N/S)</p>
<p>Viera DRI</p>		<p><b>Lassiter Transportation Group, Inc.</b> Engineering and Planning 1450 W. Grand Blvd, Suite 202 – Ormond Beach, Florida 32174 Telephone: 386.257.2571 Fax: 386.257.6996 EBR0009227</p>	<p><b>Build-Out Peak-Hour Turning Movement Counts</b> Project Number: 4081.03 Map 21.E.1 (3 of 6) Page 21-64</p>



<p>49</p> <p>Parkway Dr (E/W) at Wickham Rd (N/S)</p>	<p>50</p> <p>Lake Washington Rd (E/W) at Wickham Rd (N/S)</p>	<p>51</p> <p>Aurora Rd (E/W) at Wickham Rd (N/S)</p>	<p>52</p> <p>Earl Gaffie Blvd (E/W) at Wickham Rd (N/S)</p>
<p>53</p> <p>Napolo Dr (E/W) at Lake Andrew Dr (N/S)</p>	<p>54</p> <p>Colorado Ave (E/W) at Lake Andrew Dr (N/S)</p>	<p>55</p> <p>Towell Cottrell Ave (E/W) at Lake Andrew Dr (N/S)</p>	<p>56</p> <p>Judge Fran Jamieson Way (E/W) at Lake Andrew Dr (N/S)</p>
<p>57</p> <p>Wickham Rd (E/W) at Stadium Pkwy (N/S)</p>	<p>58</p> <p>Judge Fran Jamieson Way (E/W) at Stadium Pkwy (N/S)</p>	<p>59</p> <p>Viera Blvd (E/W) at Stadium Pkwy (N/S)</p>	<p>60</p> <p>Renaissance Dr (E/W) at Stadium Pkwy (N/S)</p>
<p>Viera DRI</p>		<p><b>Lassiter Transportation Group, Inc.</b> Engineering and Planning</p> <p>1450 W. Grand Ave., Suite 202 - Ormond Beach, Florida 32174 Telephone: 386.257.2571 Fax: 386.257.6996 EB#0009227</p>	<p><b>Build-Out Peak-Hour Turning Movement Counts</b></p> <p>Project Number: 4081.03      Map 21.E.1 (6 of 6) Page 21-56</p>



**F. Based on the assignment of trips as shown in (D) and (E) above, what modifications in the highway network (including intersections) will be necessary at the end of each phase of development, to attain and maintain local and regional level of service standards? Identify which of the above improvements are required by traffic not associated with the DRI at the end of each phase. For those improvements which will be needed earlier as a result of the DRI, indicate how much earlier. Where applicable, identify Transportation System Management (TSM) alternatives (e.g., signalization, one-way pairs, ridesharing, etc.) that will be used and any other measures necessary to mitigate other impacts such as increased maintenance due to a large number of truck movements.**

RESPONSE:

Segment improvements associated with the existing conditions, background conditions and build-out conditions are presented in Tables 21.F.1, 21.F.2 and 21.F.3, respectively. Intersection improvements associated with the existing conditions, background conditions and build-out conditions are presented in Tables 21.F.4, 21.F.5 and 21.F.6, respectively. The HCS analysis printouts are presented in Appendices 21.F.1, 21.F.2, and 21.F.3 for existing, background, and build-out intersection improvements, respectively.

Table 21.F.1  
Existing Conditions Segment Improvements

Roadway	Limits		Existing Improvements
	From	To	
I-95	Malabar Road	Palm Bay Road	
I-95	Palm Bay Road	US 192	
I-95	US 192	Eau Gallie Blvd	
I-95	Eau Gallie Blvd	Wickham Road	
I-95	Wickham Road	Fiske Boulevard	
I-95	Fiske Boulevard	SR 520	
I-95	SR 520	SR524	
I-95	SR 524	SR 528	
I-95	SR 528	Port St John Pkwy	
I-95	Port St John Pkwy	SR 407	
I-95	SR 407	SR 50	
US 1	Nasa Boulevard	Babcock Street	
US 1	Babcock Street	Sarno Road	
US 1	Sarno Road	Eau Gallie Boulevard	
US 1	Eau Gallie Boulevard	Aurora Road	
US 1	Aurora Road	Lake Washington Boulevard	
US 1	Lake Washington Boulevard	Parkway Drive	
US 1	Parkway Drive	Post Road	
US 1	Pineda Causeway	Sun Tree Boulevard	
US 1	Sun Tree Boulevard	Viera Boulevard	
US 1	Eyster Boulevard	Barton Boulevard	
US 1	Barton Boulevard	Florida Avenue	
US 1	Florida Avenue	Rosa Jones Boulevard	
US 1	Rosa Jones Boulevard	SR 520	
US 1	SR 520	Peachtree Street	
US 1	Dixon Boulevard	Michigan Boulevard	
Pineda Causeway	I-95	Wickham Road	
Pineda Causeway	Wickham Road	US 1	
Pineda Causeway	US 1	S. Tropical Trail	
Pineda Causeway	S. Tropical Trail	SR A1A	
Wickham Road	Murrell Road	Baytree Drive	
Wickham Road	Baytree Drive	Interlachen Road	
Wickham Road	Interlachen Road	N. Pinehurst Avenue	
Wickham Road	N. Pinehurst Avenue	Suntree Boulevard	
Wickham Road	Suntree Boulevard	St. Andrews Boulevard	
Wickham Road	St. Andrews Boulevard	Jordan Blass Drive	
Wickham Road	Jordan Blass Drive	Pineda Causeway	
Wickham Road	Pineda Causeway	Business Center Boulevard	
Wickham Road	Business Center Boulevard	Mariah Drive	
Wickham Road	Mariah Drive	Kensington Drive	
Wickham Road	Kensington Drive	Post Road	
Wickham Road	Post Road	Parkway Drive	
Wickham Road	Parkway Drive	Lake Washington Boulevard	
Fiske Boulevard	Barnes Boulevard	Eyster Boulevard	
Fiske Boulevard	Eyster Boulevard	Barton Boulevard	
Fiske Boulevard	Barton Boulevard	St. Andrews Drive	
Fiske Boulevard	St. Andrews Drive	Pluckebaum Road	
Fiske Boulevard	Pluckebaum Road	Rosa Jones Boulevard	
Fiske Boulevard	Rosa Jones Boulevard	SR 520	
Fiske Boulevard	SR 520	Gus Hipp Boulevard	
Murrell Road	Barnes Boulevard	Gus Hipp Boulevard	
Murrell Road	Gus Hipp Boulevard	Eyster Boulevard	
Murrell Road	Eyster Boulevard	Barton Boulevard	
Barnes Boulevard	Fiske Boulevard	Three Meadows Drive	
Barnes Boulevard	Three Meadows Drive	Murrell Road	
Post Road	Wickham Road	US 1	
Suntree Boulevard	Wickham Road	US 1	Widen from 2-Lane Divided to 4-Lane Divided
Viera Boulevard	Murrell Road	Independence Avenue	
Viera Boulevard	Independence Avenue	Holiday Springs Road	
Viera Boulevard	Holiday Springs Road	US 1	
SR 520	Clear Lake Road	Lake Drive	
SR 520	Lake Drive	Fiske Boulevard	
SR 520	Fiske Boulevard	Blake Avenue	
SR 520	Blake Avenue	US 1	
SR 520	US 1	S. Tropical Trail	
SR 520	S. Tropical Trail	N Courtney Parkway	
SR 520	N Courtney Parkway	N Sykes Creek Parkway	
SR 520	N Sykes Creek Parkway	Newfound Harbor Dr	
SR A1A	Patrick AFB Main Gate	Pineda Causeway	
SR A1A	Pineda Causeway	Ocean Boulevard	
SR A1A	Ocean Boulevard	Berkely Street	
SR A1A	Berkely Street	Jackson Street	
SR A1A	Jackson Street	Cassia Boulevard	
SR A1A	Cassia Boulevard	DeSoto Parkway	
Spyglass Hill Road	Murrell Road	Pinehurst Avenue	
Pinehurst Avenue	Wickham Road	Spyglass Hill Road	
Barton Boulevard	Fiske Boulevard	Murrell Road	
Barton Boulevard	Murrell Road	US 1	
Eyster Boulevard	Fiske Boulevard	Murrell Road	
Eyster Boulevard	Murrell Road	US 1	

Table 21.F.2  
Background Conditions Segment Improvements

Roadway	Limits		Background Improvements
	From	To	
I-95	Malabar Road	Palm Bay Road	
I-95	Palm Bay Road	US 192	
I-95	US 192	Eau Gallie Blvd	
I-95	Eau Gallie Blvd	Wickham Road	
I-95	Wickham Road	Fiske Boulevard	
I-95	Fiske Boulevard	SR 520	
I-95	SR 520	SR524	
I-95	SR 524	SR 528	
I-95	SR 528	Port St John Pkwy	
I-95	Port St John Pkwy	SR 407	
I-95	SR 407	SR 50	
US 1	Nasa Boulevard	Babcock Street	
US 1	Babcock Street	Sarno Road	Widen from 6-Ln Divided to 8-Ln Divided
US 1	Sarno Road	Eau Gallie Boulevard	Widen from 6-Ln Divided to 8-Ln Divided
US 1	Eau Gallie Boulevard	Aurora Road	
US 1	Aurora Road	Lake Washington Boulevard	
US 1	Lake Washington Boulevard	Parkway Drive	
US 1	Parkway Drive	Post Road	
US 1	Pineda Causeway	Sun Tree Boulevard	Widen from 4-Ln Divided to 6-Ln Divided
US 1	Sun Tree Boulevard	Viera Boulevard	Widen from 4-Ln Divided to 6-Ln Divided
US 1	Eyster Boulevard	Barton Boulevard	
US 1	Barton Boulevard	Florida Avenue	
US 1	Florida Avenue	Rosa Jones Boulevard	
US 1	Rosa Jones Boulevard	SR 520	
US 1	SR 520	Peachtree Street	
US 1	Dixon Boulevard	Michigan Boulevard	
Pineda Causeway	I-95	Wickham Road	
Pineda Causeway	Wickham Road	US 1	
Pineda Causeway	US 1	S. Tropical Trail	
Pineda Causeway	S. Tropical Trail	SR A1A	
Wickham Road	Murrell Road	Baytree Drive	
Wickham Road	Baytree Drive	Interlachen Road	
Wickham Road	Interlachen Road	N. Pinehurst Avenue	
Wickham Road	N. Pinehurst Avenue	Suntree Boulevard	
Wickham Road	Suntree Boulevard	St. Andrews Boulevard	
Wickham Road	St. Andrews Boulevard	Jordan Blass Drive	
Wickham Road	Jordan Blass Drive	Pineda Causeway	
Wickham Road	Pineda Causeway	Business Center Boulevard	Widen from 4-Ln Divided to 6-Ln Divided
Wickham Road	Business Center Boulevard	Mariah Drive	Widen from 4-Ln Divided to 6-Ln Divided
Wickham Road	Mariah Drive	Kensington Drive	Widen from 4-Ln Divided to 6-Ln Divided
Wickham Road	Kensington Drive	Post Road	Widen from 4-Ln Divided to 6-Ln Divided
Wickham Road	Post Road	Parkway Drive	Widen from 4-Ln Divided to 6-Ln Divided
Wickham Road	Parkway Drive	Lake Washington Boulevard	
Fiske Boulevard	Barnes Boulevard	Eyster Boulevard	
Fiske Boulevard	Eyster Boulevard	Barton Boulevard	
Fiske Boulevard	Barton Boulevard	St. Andrews Drive	
Fiske Boulevard	St. Andrews Drive	Pluckebaum Road	
Fiske Boulevard	Pluckebaum Road	Rosa Jones Boulevard	
Fiske Boulevard	Rosa Jones Boulevard	SR 520	
Fiske Boulevard	SR 520	Gus Hipp Boulevard	
Murrell Road	Barnes Boulevard	Gus Hipp Boulevard	
Murrell Road	Gus Hipp Boulevard	Eyster Boulevard	
Murrell Road	Eyster Boulevard	Barton Boulevard	
Barnes Boulevard	Fiske Boulevard	Three Meadows Drive	
Barnes Boulevard	Three Meadows Drive	Murrell Road	
Post Road	Wickham Road	US 1	
Suntree Boulevard	Wickham Road	US 1	
Viera Boulevard	Murrell Road	Independence Avenue	
Viera Boulevard	Independence Avenue	Holiday Springs Road	
Viera Boulevard	Holiday Springs Road	US 1	
SR 520	Clear Lake Road	Lake Drive	
SR 520	Lake Drive	Fiske Boulevard	
SR 520	Fiske Boulevard	Blake Avenue	
SR 520	Blake Avenue	US 1	
SR 520	US 1	S. Tropical Trail	
SR 520	S. Tropical Trail	N Courtney Parkway	
SR 520	N Courtney Parkway	N Sykes Creek Parkway	
SR 520	N Sykes Creek Parkway	Newfound Harbor Dr	
SR A1A	Patrick AFB Main Gate	Pineda Causeway	
SR A1A	Pineda Causeway	Ocean Boulevard	
SR A1A	Ocean Boulevard	Berkely Street	
SR A1A	Berkely Street	Jackson Street	
SR A1A	Jackson Street	Cassia Boulevard	
SR A1A	Cassia Boulevard	DeSoto Parkway	
Spyglass Hill Road	Murrell Road	Pinehurst Avenue	
Pinehurst Avenue	Wickham Road	Spyglass Hill Road	
Barton Boulevard	Fiske Boulevard	Murrell Road	
Barton Boulevard	Murrell Road	US 1	
Eyster Boulevard	Fiske Boulevard	Murrell Road	
Eyster Boulevard	Murrell Road	US 1	

**Table 21.F.3  
Build-Out Conditions Segment Improvements**

Roadway	Limits		Build-Out Improvements
	From	To	
I-95	Malabar Road	Palm Bay Road	
I-95	Palm Bay Road	US 192	
I-95	US 192	Eau Gallie Blvd	
I-95	Eau Gallie Blvd	Wickham Road	
I-95	Wickham Road	Fiske Boulevard	
I-95	Fiske Boulevard	SR 520	
I-95	SR 520	SR524	
I-95	SR 524	SR 528	
I-95	SR 528	Port St John Pkwy	
I-95	Port St John Pkwy	SR 407	
I-95	SR 407	SR 50	
US 1	Nasa Boulevard	Babcock Street	
US 1	Babcock Street	Sarno Road	
US 1	Sarno Road	Eau Gallie Boulevard	
US 1	Eau Gallie Boulevard	Aurora Road	
US 1	Aurora Road	Lake Washington Boulevard	
US 1	Lake Washington Boulevard	Parkway Drive	
US 1	Parkway Drive	Post Road	
US 1	Pineda Causeway	Sun Tree Boulevard	
US 1	Sun Tree Boulevard	Viera Boulevard	
US 1	Eyster Boulevard	Barton Boulevard	
US 1	Barton Boulevard	Florida Avenue	
US 1	Florida Avenue	Rosa Jones Boulevard	
US 1	Rosa Jones Boulevard	SR 520	
US 1	SR 520	Peachtree Street	
US 1	Dixon Boulevard	Michigan Boulevard	
Pineda Causeway	I-95	Wickham Road	
Pineda Causeway	Wickham Road	US 1	
Pineda Causeway	US 1	S. Tropical Trail	
Pineda Causeway	S. Tropical Trail	SR A1A	
Wickham Road	Murrell Road	Baytree Drive	
Wickham Road	Baytree Drive	Interlachen Road	PM Peak-Hour Capacity Exceeded by 16
Wickham Road	Interlachen Road	N. Pinehurst Avenue	
Wickham Road	N. Pinehurst Avenue	Suntree Boulevard	PM Peak-Hour Capacity Exceeded by 5
Wickham Road	Suntree Boulevard	St. Andrews Boulevard	
Wickham Road	St. Andrews Boulevard	Jordan Blass Drive	
Wickham Road	Jordan Blass Drive	Pineda Causeway	
Wickham Road	Pineda Causeway	Business Center Boulevard	
Wickham Road	Business Center Boulevard	Mariah Drive	
Wickham Road	Mariah Drive	Kensington Drive	
Wickham Road	Kensington Drive	Post Road	
Wickham Road	Post Road	Parkway Drive	
Wickham Road	Parkway Drive	Lake Washington Boulevard	
Fiske Boulevard	Barnes Boulevard	Eyster Boulevard	
Fiske Boulevard	Eyster Boulevard	Barton Boulevard	
Fiske Boulevard	Barton Boulevard	St. Andrews Drive	
Fiske Boulevard	St. Andrews Drive	Pluckebaum Road	
Fiske Boulevard	Pluckebaum Road	Rosa Jones Boulevard	
Fiske Boulevard	Rosa Jones Boulevard	SR 520	
Fiske Boulevard	SR 520	Gus Hipp Boulevard	
Murrell Road	Barnes Boulevard	Gus Hipp Boulevard	
Murrell Road	Gus Hipp Boulevard	Eyster Boulevard	
Murrell Road	Eyster Boulevard	Barton Boulevard	
Barnes Boulevard	Fiske Boulevard	Three Meadows Drive	
Barnes Boulevard	Three Meadows Drive	Murrell Road	
Post Road	Wickham Road	US 1	
Suntree Boulevard	Wickham Road	US 1	
Viera Boulevard	Murrell Road	Independence Avenue	
Viera Boulevard	Independence Avenue	Holiday Springs Road	
Viera Boulevard	Holiday Springs Road	US 1	
SR 520	Clear Lake Road	Lake Drive	
SR 520	Lake Drive	Fiske Boulevard	
SR 520	Fiske Boulevard	Blake Avenue	
SR 520	Blake Avenue	US 1	
SR 520	US 1	S. Tropical Trail	
SR 520	S. Tropical Trail	N Courtney Parkway	
SR 520	N Courtney Parkway	N Sykes Creek Parkway	
SR 520	N Sykes Creek Parkway	Newfound Harbor Dr	
SR A1A	Patrick AFB Main Gate	Pineda Causeway	
SR A1A	Pineda Causeway	Ocean Boulevard	
SR A1A	Ocean Boulevard	Berkely Street	
SR A1A	Berkely Street	Jackson Street	
SR A1A	Jackson Street	Cassia Boulevard	
SR A1A	Cassia Boulevard	DeSoto Parkway	
Spyglass Hill Road	Murrell Road	Pinehurst Avenue	
Pinehurst Avenue	Wickham Road	Spyglass Hill Road	
Barton Boulevard	Fiske Boulevard	Murrell Road	
Barton Boulevard	Murrell Road	US 1	
Eyster Boulevard	Fiske Boulevard	Murrell Road	
Eyster Boulevard	Murrell Road	US 1	

**Table 21.F.4  
Intersection Improvements - Existing Conditions**

No.	Intersection	Proposed Improvement	Adopted LOS	P.M. Peak-Hour		
				Delay (sec.)	LOS	V/C > 1.0
5	US 1 at SR 520	Add NBL; Add SBL; Optimize signal timings	D	53.3	D	No
9	US 1 at Gus Hipp Blvd	Signalize	D	11.3	B	No
11	US 1 at Viera Blvd	Add a NBL; Optimize signal timings	D	36.1	D	No
12	US 1 at Suntree Blvd	Add a NBL; Optimize signal timings	D	52.8	D	No
13	US 1 at Pineda Causeway WB Ramps	Signalize	D	11.8	B	No
14	US 1 at Pineda Causeway EB Ramps	Signalize	D	6.7	A	No
15	US 1 at Post Rd	Optimize signal timings	D	45.5	D	No
19	US 1 at Eau Gallie Blvd.	Add EBT; Add WBT; Add WBL; Add SBL; Remove split phasing; Optimize signal	D	54.7	D	No
22	US 1 at US 192	Convert SBL to SBT; Optimize signal timings	D	54.6	D	No
23	Fiske Blvd at SR 520	Optimize signal timings	D	49.5	D	No
29	Fiske Blvd at Barnes Blvd	Add NBL; Add WBT; Add SBL; Add EBL	D	51.1	D	No
30	Fiske Blvd at I-95 SB Ramps	Add SBL; Optimize signal timings	D	49.6	D	No
37	Murrell Rd at Wickham Rd	Widen Wickham Rd to 6-Lanes (under construction)	E	49.2	D	No
39	I-95 NB Ramps at Wickham Rd	Optimize Signal Timings	D	47.3	D	No
44	Wickham Rd at Suntree Blvd	Signal Modification (Add WBR protected phase)	E	47.2	D	No
47	Wickham Rd at Pineda Causeway	Add NBT; Add SBT; Add EBT; Add NBL (dual lefts); Add WBL (triple lefts)	E	62.5	E	No
48	Wickham Rd at Post Rd	Add SBR; convert existing EBR into EBTR; add WBT; add NBL (dual lefts)	E	67.8	E	No
51	Wickham Rd at Aurora Rd	Optimize Signal Timings	E	56.0	E	No
52	Wickham Rd at Eau Gallie Blvd	Add exclusive NBR; Add exclusive EBR; Optimize signal timings	E	42.4	D	No
55	Lake Andrew Dr at Town Center Ave	Optimize Signal Timings	E	25.6	C	No
57	Stadium Pkwy at Wickham Rd	Signalize (Signalization Improvements already in progress)	E	20.3	C	No
58	Stadium Pkwy at Judge Fran Jamieson Wy	Signal Modification (Add WBR protected phase)	E	26.7	C	No
61	Stadium Pkwy at Tavistock Dr	Signalize (Signalization Improvements already in progress)	E	10.9	B	No

**Table 21.F.5  
Intersection Improvements - Background Conditions**

No.	Intersection	Proposed Improvement	Adopted LOS	P.M. Peak-Hour		
				Delay (sec.)	LOS	V/C > 1.0
5	US 1 at SR 520	Add NBT; Add SBT (8-Lane US 1); Add EBT; Add WBT (6-Lane SR 520); Add WBL (triple lefts); Optimize Signal Timings	D	49.9	D	No
8	US 1 at Eyster Blvd	Optimize Signal Timings	D	50.9	D	No
10	US 1 at Barnes Blvd	Optimize Signal Timings	D	49.7	D	No
11	US 1 at Viera Blvd	Add NBT; Add SBR (6-Lane US 1); Optimize Signal Timings	D	50.3	D	No
12	US 1 at Suntree Blvd	Add channelized EBR with SB receiving lane; Add EBL (dual lefts); Add SBT; Optimize Signal Timings (Split Phase)	D	51.2	D	No
13	US 1 at Pineda Causeway WB Ramps	Add NBL; Optimize signal timings	D	19.6	B	No
15	US 1 at Post Rd	Convert EBTL to EBL (dual lefts); Add EBT; Optimize Signal Timings	D	51.9	D	No
19	US 1 at Eau Gallie Blvd.	Add NBT; Add SBT (8-Lane US 1); Add WBL (triple lefts); Add NBL (dual lefts); Add NBR protected phase; Optimize Signal Timings	D	54.9	D	No
20	US 1 at Samo Rd	Add EBL (dual lefts); Convert EBTLR to EBTR; Add NBL;	D	53.0	D	No
21	US 1 at Nasa Blvd	Add EBL (dual lefts); Signal Modification (Add EBR protected phase)	D	39.8	D	No
22	US 1 at US 192	Add EBT; Add WBT; Add SBL	D	54.3	D	No
23	Fiske Blvd at SR 520	Convert EBTR to EBT; Add EBR; Add NBT; Optimize Signal Timings	D	54.8	D	No
27	Fiske Blvd at Barton Blvd	Convert WBTL to WBT; Remove split phasing	D	36.9	D	No
29	Fiske Blvd at Barnes Blvd	Add NBT; Add SBT; Add NBL (triple lefts); Optimize Signal Timings	D	54.9	D	No
30	Fiske Blvd at I-95 SB Ramps	Add SBL (triple lefts); Add NBT; Optimize Signal Timings	D	53.2	D	No
37	Murrell Rd at Wickham Rd	Convert SBTR to SBT; Add SBR (dual rights); Add SBR protected phase; Optimize Signal Timings	E	53.0	D	No
38	Wickham Rd at Lake Andrew Dr		E			
39	I-95 NB Ramps at Wickham Rd	Add EBT; Add WBT; Add NBL; Optimize Signal Timings	D	29.6	C	No
40	I-95 SB Ramps at Wickham Rd	Add EBT; Add WBT; Optimize Signal Timings	D	26.2	C	No
42	Wickham Rd at Interlachen Rd	Convert EBR to EBRT with Receiving Lane; Add WBT; Optimize Signal Timings	E	39.3	D	No
43	Wickham Rd at Pinehurst Ave	Add NBL; Signal Modification (protected phases)	E	41.9	D	No
44	Wickham Rd at Suntree Blvd	Add NBT; Add SBT	E	48.1	D	No
46	Wickham Rd at Jordan Blass Dr	Optimize signal timings	E	31.9	C	No
47	Wickham Rd at Pineda Causeway	Construct Interchange (Pineda Causeway fly-over); Includes Channelized Rights	E	68.7	E	No
48	Wickham Rd at Post Rd	Add NBT; Add SBT; Add WBL (dual lefts); Add SBL; Optimize Signal Timings	E	65.1	E	No
49	Wickham Rd at Parkway Dr	Add NBT; Add SBT; Optimize Signal timings	E	42.1	D	No
50	Wickham Rd at Lk Washington Rd	Add SBT; Add NBT	E	45.7	D	No
51	Wickham Rd at Aurora Rd	Convert EBTR to EBT; Add EBR; Convert WBTR to WBT; Add WBR; Convert NBTR to NBT; Add NBR; Optimize Signal Timings	E	56.1	E	No
52	Wickham Rd at Eau Gallie Blvd	Add NBT; Add SBT; Optimize Signal Timings	E	58.2	E	No
56	Lake Andrew Dr at Judge Fran Jamieson Way	Optimize Signal Timings	E	24.6	C	No
58	Stadium Pkwy at Judge Fran Jamieson Way	Add SBL; Optimize Signal Timings & Signal Modification (WBR protected phase)	E	44.2	D	No
63	Wickham Rd at Shoppes Dr/Target Entrance	Optimize Signal Timings	E	55.6	D	No

**Table 21.F.6  
Intersection Improvements - Build-Out Conditions**

External Intersections						
No.	Intersection	Proposed Improvement	Adopted LOS	P.M. Peak-Hour		
				Delay (sec.)	LOS	V/C > 1.0
23	Fiske Blvd at SR 520	Add NBL (triple lefts)	E	50.3	D	No
29	Fiske Blvd at Barnes Blvd	Add EBL (triple lefts)	E	49.8	D	No
30	Fiske Blvd at I-95 SB Ramps	Add WBL (dual lefts)	E	38.7	D	No
41	Wickham Rd at Baytree Blvd	Optimize signal timings (higher EBT split)	D	49.7	D	No

Internal Intersections						
No.	Intersection	Proposed Improvement	Adopted LOS	P.M. Peak-Hour		
				Delay (sec.)	LOS	V/C > 1.0
35	Murrell Rd at Viera Blvd	Add Exclusive WBR; Optimize Signal Timings	E	62.8	E	No
37	Murrell Rd at Wickham Rd	Add EBL (triple lefts); Add WBT (include receiving lanes)	E	53.7	D	No
39	I-95 NB Ramps at Wickham Rd	Add WBT (include receiving lane); Optimize Signal Timings	D	45.6	D	No
40	I-95 SB Ramps at Wickham Rd	Add SBL; Add EBT (include receiving lane)	D	37.6	D	No
55	Lake Andrew Dr at Town Center Ave	Convert NBR to NBTR (receiving lane); Add SBL (dual lefts)	E	60.9	E	No
57	Stadium Pkwy at Wickham Rd	Optimize Signal Timings	E	62.2	E	No
58	Stadium Pkwy at Judge Fran Jamieson Way	Add WBR (dual rights); Optimize Signal Timings	E	62.9	E	No
59	Stadium Pkwy at Viera Blvd	Add SBL (dual lefts); Add WBL (dual lefts); Add NBT*	E	59.2	E	No
61	Stadium Pkwy at Tavistock Dr	Optimize Signal Timings	E	25.5	C	No
62	Viera Blvd at Tavistock Dr (unsignalized)	Add exclusive EBL; Add exclusive NBR	E	48.0	E	N/A
63	Wickham Rd at Shoppes Dr/Target Entrance	Add EBT; Add WBT; Add SBL (triple lefts); Optimize Signal Timings	E	55.1	E	No

\*Improvement due to existing traffic patterns. The NBT & NBR distribution is anticipated to change upon completion of the Viera Interchange

**G. Identify the anticipated number and general location of access points for driveways, median openings and roadways necessary to accommodate the proposed development. Describe how the applicant's access plan will minimize the impacts of the proposed development and preserve or enhance traffic flow on the existing and proposed transportation system. This information will assist the applicant and governmental agencies in reaching conceptual agreement regarding the anticipated access points. While the ADA may constitute a conceptual review for access points, it is not a permit application and, therefore, the applicant is not required to include specific design requirements (geometry) until the time of permit application.**

RESPONSE:

Due to the large scale of this DRI, The Viera Company has developed many lane miles of two-lane, four-lane and even six-lane arterials and collectors over the past 25+ years that have been publicly dedicated to Brevard County as part of their road network. This process has involved close coordination with the County with respect to design guidelines, including access spacing, intersection spacing, median opening spacing by type, and traffic control ranging from STOP signs to traffic signals to roundabouts and interchanges. The Viera Company will continue to work closely with Brevard County, and with the Florida Department of Transportation for State Roads, in assuring that safe and adequate access will be developed as the project continues to develop.

**H. If applicable, describe how the project will complement the protection of existing, or development of proposed, transportation corridors designated by local governments in their comprehensive plans. In addition, identify what commitments will be made to protect the designated corridors such as interlocal agreements, right-of-way dedication, building set-backs, etc.**

RESPONSE:

The Viera Company continues to work closely with Brevard County in protecting both planned expansions to existing roadway corridors internal to the DRI and future potential transportation corridors that are external connections contained in the Space Coast Transportation Planning Organization's Long Range Transportation Plan. Examples of this commitment to corridor protection include:

- Lake Andrew Drive Extension – The Viera Company has agreed to reserve right-of-way sufficient to accommodate the planned two-mile extension of Lake Andrew Drive from the Pineda Causeway south to join the northern extent of Washingtonia Drive;
- Spyglass Road Overpass – The Viera Company has preserved the right-of-way for the potential future Spyglass Overpass that could connect the western limit of Napolo Drive west of I-95 to Spyglass Hill Road’s western limit east of I-95;
- Pineda Causeway Extension – The Viera Company acquired the corridor for the purpose of preserving the future right-of-way and interchange and continues to plan for the further extension of this corridor west of I-95;
- The I-95/Viera Boulevard Interchange – The Viera Company has preserved this interchange’s right-of-way envelope since the DRI began development, and its construction as a diverging diamond interchange is set to begin this year; and
- The planned extension and expansions of publicly dedicated arterials and collectors internal to the Viera DRI including, Wickham Road, Viera Boulevard, Judge Fran Jamieson Way, Lake Andrew Drive, Stadium Parkway

**I. What provisions, including but not limited to sidewalks, bicycle paths, internal shuttles, ridesharing and public transit, will be made for the movement of people by means other than private automobile? Refer to internal design, site planning, parking provisions, location, etc.**

RESPONSE:

The Viera Transportation Management Association’s (“TMA”) efforts to reduce automobile use include working with local employers, governments and the Space Coast Area Transit. The TMA also owns and operates the park and ride facility located at Stadium Parkway and Viera Boulevard near the planned interchange of I-95 and Viera Boulevard.

Additionally, please refer to Section C, above, for description of internal network of paths and sidewalks which result in mode share of non-auto trips of 5% within the Viera DRI.

# GRIMES GOEBEL

**Grimes Hawkins Gladfelter & Galvano, P.L.**

Attorneys at Law Est. 1922

Caleb J. Grimes  
John D. Hawkins  
Leslie Horton Gladfelter  
Bill Galvano  
Derin Parks  
Sacha Ross

August 31, 2017

Reply to: Bradenton

Stephen M. Swanke, AICP, Planning Manager  
Brevard County Planning and Zoning  
2725 Judge Fran Jamieson Way  
Building A, Room 114  
Viera, Florida 32940

RE: Viera DRI

Dear Steve:

Please consider this correspondence as our notification to Brevard County of our intent to exercise the tolling and extension of all applicable dates within the Development Order by 120 days plus 6 months pursuant to the provisions of Florida Statutes, Chapter 252, Section 363. On April 11, 2017, Governor Scott issued Executive Order 17-120 related to Wildfires. The State of Emergency was declared for the entire State of Florida, for a period of sixty days and was extended by Executive Order 17-174 (sixty days) and expired on August 9, 2017 with a total of 120 days.

For your convenience, below is a table of existing dates within the Development Order and their new, extended dates pursuant to this request. Please note that the tolling and extension of dates does not include or affect The Viera Company's payments relating to the Barnes Boulevard widening project now in progress reflected in footnote 3 of Condition 92.

The conditions below reflect language from Resolution 16-126, which may be proposed for amendment with the currently pending NOPC application.

**Condition 84.**

Prior to the initiation of each subphase (4a, 4b, 4c and 4d) as identified in the preceding paragraph, the Developer shall conduct a monitoring/modeling program. In any event, the M&M shall be provided no less than every five years regardless of the development schedule. Therefore, the first M&M shall be initiated prior to 3/05/2022. Brevard County will continue to accept complete building permit applications until 2/22/2023 during the pendency of the M&M. After 2/22/2023 the County has no obligation to accept complete Phase 3 building permit applications unless the development order is amended to extend the Phase 3 completion date

**Condition 84.**

Prior to the initiation of each subphase (4a, 4b, 4c and 4d) as identified in the preceding paragraph, the Developer shall conduct a monitoring/modeling program. In any event, the M&M shall be provided no less than every five years regardless of the development schedule. Therefore, the first M&M shall be initiated prior to ~~3/05/2022~~ 1/03/2023. Brevard County will continue to accept complete building permit applications until ~~2/22/2023~~ 12/22/2023 during the pendency of the M&M. After ~~2/22/2023~~ 12/22/2023 the County has no obligation to accept complete Phase 3 building permit applications unless the development order is amended to

<p>pursuant to Florida Statutes. <i>(remainder of condition omitted for brevity)</i></p>	<p>extend the Phase 3 completion date pursuant to Florida Statutes. <i>(remainder of condition omitted for brevity)</i></p>
<p><b><u>Condition 85.</u></b>  No additional payments, contributions or improvements for transportation mitigation beyond the transportation mitigation which Developer is obligated to provide under Condition 92 herein shall be required or requested for Phase 3 of the DRI, provided all required transportation mitigation payments have been made or secured by February 22, 2023 <i>(only pertinent paragraph including date included)</i></p>	<p><b><u>Condition 85.</u></b>  No additional payments, contributions or improvements for transportation mitigation beyond the transportation mitigation which Developer is obligated to provide under Condition 92 herein shall be required or requested for Phase 3 of the DRI, provided all required transportation mitigation payments have been made or secured by <del>February 22, 2023</del> <u>December 22, 2023</u>. <i>(only pertinent paragraph including date included)</i></p>
<p><b><u>Condition 92., Footnote 3</u></b>  <sup>3</sup>Funds for mitigation of traffic impacts paid by Developer to Brevard County are to be pipelined for improvements to Washingtonia Boulevard from the southern boundary of the DRI to Ellis Road in the amount of \$5,000,000. The funds shall be used to reimburse Brevard County for acquisition of the road right of way as well as planning and engineering design of the roadway. The funds for Washingtonia Boulevard shall be paid to Brevard County prior to February 22, 2023 <i>(only pertinent paragraph including date included)</i></p>	<p><b><u>Condition 92., Footnote 3</u></b>  <sup>3</sup>Funds for mitigation of traffic impacts paid by Developer to Brevard County are to be pipelined for improvements to Washingtonia Boulevard from the southern boundary of the DRI to Ellis Road in the amount of \$5,000,000. The funds shall be used to reimburse Brevard County for acquisition of the road right of way as well as planning and engineering design of the roadway. The funds for Washingtonia Boulevard shall be paid to Brevard County prior to <del>February 22, 2023</del> <u>December 22, 2023</u>. <i>(only pertinent paragraph including date included)</i></p>
<p><b><u>Condition 104.</u></b>  The Developer shall adhere to the Master Development Program set forth in Exhibit 4 in four phases: “Phase 1” (1990 to February 22, 2023), “Phase 2A” (December 29, 2005 to February 22, 2023), “Phase 3” (December 29, 2010 to February 22, 2023), and “Phase 4” (December 29, 2019 to February 21, 2033). Because the traffic impacts for Phase 1 and Phase 2A development have been cumulatively assessed and cumulative mitigation provided for them through the end of Phase 3 of this Development Order, any portion of Phase 1 and Phase 2A development that has not been completed February 22, 2023 may continue through the buildout date of Phase 3</p>	<p><b><u>Condition 104.</u></b>  The Developer shall adhere to the Master Development Program set forth in Exhibit 4 in four phases: “Phase 1” (1990 to <del>February 22, 2023</del> <u>December 22, 2023</u>), “Phase 2A” (December 29, 2005 to <del>February 22, 2023</del> <u>December 22, 2023</u>), “Phase 3” (December 29, 2010 to <del>February 22, 2023</del> <u>December 22, 2023</u>), and “Phase 4” (December 29, 2019 to <del>February 21, 2033</del> <u>December 21, 2033</u>). Because the traffic impacts for Phase 1 and Phase 2A development have been cumulatively assessed and cumulative mitigation provided for them through the end of Phase 3 of this Development Order, any portion of Phase 1 and Phase 2A development that has not been completed by <del>February 22, 2023</del> <u>December 22, 2023</u> may continue through the buildout date of Phase 3 <i>(these changes would also be made in Exhibit 4)</i></p>

<p><b><u>Period of Effectiveness.</u></b>  This Development Order shall take effect upon transmittal by certified U. S. Mail, return receipt requested, to the East Central Florida Regional Planning Council and the Florida Department of Community Affairs, and shall remain in effect until its expiration on February 21, 2033. The termination date is also February 21, 2033.</p>	<p><b><u>Period of Effectiveness.</u></b>  This Development Order shall take effect upon transmittal by certified U. S. Mail, return receipt requested, to the East Central Florida Regional Planning Council and the Florida Department of Community Affairs, and shall remain in effect until its expiration on <del>February 21, 2033</del> <u>December 21, 2033</u>. The termination date is also <del>February 21, 2033</del> <u>December 21, 2033</u>.</p>
<p><b><u>Restrictions on Down Zoning.</u></b>  The Viera Development of Regional Impact as described within this Development Order shall not be subject to down-zoning, unit density reduction or intensity reduction until February 21, 2033 unless extended by law or by the provisions of Paragraph IV herein, unless it is demonstrated and affirmatively found by the Brevard County Board of County Commissioners at a public hearing that substantial changes in the conditions underlying the approval of this Development Order have occurred, or that this Development Order was based on substantially inaccurate information provided by the Developer, or that the change is clearly established by Brevard County to be essential to the public health or safety.</p>	<p><b><u>Restrictions on Down Zoning.</u></b>  The Viera Development of Regional Impact as described within this Development Order shall not be subject to down-zoning, unit density reduction or intensity reduction until <del>February 21, 2033</del> <u>December 21, 2033</u>, unless extended by law or by the provisions of Paragraph IV herein, unless it is demonstrated and affirmatively found by the Brevard County Board of County Commissioners at a public hearing that substantial changes in the conditions underlying the approval of this Development Order have occurred, or that this Development Order was based on substantially inaccurate information provided by the Developer, or that the change is clearly established by Brevard County to be essential to the public health or safety.</p>

Please do not hesitate to contact me should you have any questions.

Sincerely,



Darena D. Marvin, AICP

# STATE OF FLORIDA

## OFFICE OF THE GOVERNOR

### EXECUTIVE ORDER NUMBER 17-120

(Emergency Management/Wildfires)

**WHEREAS**, much of Florida, including Central Florida and South Florida, is experiencing significant drought conditions; and

**WHEREAS**, the Keetch-Byram Drought Index (KBDI) average for the State is currently 338 (0 represents saturated soil and vegetation conditions; 800 represents extremely dry soil and vegetation conditions), with the highest values, over 600, concentrated in Central and South Florida; and

**WHEREAS**, according to the U.S. Drought Monitor, moderate to severe drought conditions are expanding across Central and South Florida and abnormally dry conditions exist across Northeast Florida and these conditions are likely to worsen over the next several weeks; and

**WHEREAS**, currently, the Florida Forest Service has advised there are currently 107 active wildfires burning across the state which are affecting 23,827 acres of wildlands; and

**WHEREAS**, there has been large fire activity in Polk County, County Road 630 wildfire, that has burned 5,500 acres and destroyed twelve homes and is still active; and

**WHEREAS**, a large wildfire has occurred in Collier County, Lee Williams Road wildfire, that has burned 7,230 acres and destroyed four homes; and

**WHEREAS**, a large wildfire has occurred in Marion County, NE 212 Road wildfire, that has burned 700 acres and destroyed one home; and

**WHEREAS**, a large wildfire has occurred in Nassau County, Garfield Road wildfire,

that has burned 705 acres and destroyed two homes; and

**WHEREAS**, a large wildfire has occurred in Broward County, Holey Land wildfire, that has burned 6,800 acres; and

**WHEREAS**, a large wildfire has occurred in Hernando County, Water Tower wildfire, that has burned 1,100 acres; and

**WHEREAS**, a large wildfire has occurred in Glades County, Ferguson wildfire, that has burned 465 acres; and

**WHEREAS**, the Governor finds that lives and property statewide are now threatened by the imminent danger of wildfires that may start up at once in many different locations; and

**WHEREAS**, precautions may be needed to protect the lives and property of the people in threatened communities, the natural environment, and the general welfare of the State of Florida;

**NOW, THEREFORE, I, RICK SCOTT**, as Governor of Florida, by virtue of the authority vested in me by Article IV, Section 1(a) of the Florida Constitution and by the Florida Emergency Management Act, as amended, and all other applicable laws, promulgate the following Executive Order, to take immediate effect:

**Section 1.** Because of the foregoing conditions, I declare that the ongoing danger of wildfires threatens the State of Florida with a major disaster, and that as a consequence of this danger a state of emergency exists in the State of Florida.

**Section 2.** I designate the Director of the Division of Emergency Management as the State Coordinating Officer for the duration of this emergency and direct him or her to activate the state's Comprehensive Emergency Management Plan and other response, recovery, and mitigation plans necessary to cope with the emergency. Pursuant to section 252.36(1)(a),

Florida Statutes, I delegate to the State Coordinating Officer the authority to exercise those powers delineated in sections 252.36(5)–(10), Florida Statutes, which he or she shall exercise as needed to meet this emergency, subject to the limitations of section 252.33, Florida Statutes. In exercising the powers delegated by this Order, the State Coordinating Office shall confer with the Governor and the Director of the Florida Forest Service to the fullest extent practicable. The State Coordinating Officer shall also have the authority to:

A. Invoke and administer the Emergency Management Assistance Compact (“EMAC”) (sections 252.921–933, Florida Statutes) and other compacts and agreements existing between the State of Florida and other states, and the further authority to coordinate the allocation of resources from such other states that are made available to Florida under such compacts and agreements so as best to meet this emergency.

B. Seek direct assistance and enter into agreements with any and all agencies of the United States Government as may be needed to meet the emergency.

C. Direct all state, regional and local governmental agencies, including law enforcement agencies, to identify personnel needed from those agencies to assist in meeting the needs created by this emergency, and to place all such personnel under the direct command and coordination of the State Coordinating Officer to meet this emergency;

D. Designate Deputy State Coordinating Officers.

The State Coordinating Officer shall have the authority to enter such orders as may be needed to implement any or all of the foregoing powers.

**Section 3.** I order the Adjutant General to activate the Florida National Guard, as needed, to deal with this emergency, for the duration of this emergency, and I place the National Guard under the coordination and direction of the State Coordinating Officer.

**Section 4.** I delegate the State Coordinating Office the authority to coordinate and direct such aviation and/drone and ground resources of any and all state, regional, and local governmental agencies, including law enforcement agencies, as the State Coordinating Officer may designate for firefighting activities under the State Coordinating Office while this Executive Order remains in effect.

**Section 5.** I find that the special duties and responsibilities resting upon some State, regional, and local agencies and other governmental bodies in responding to the emergency may require them to waive or deviate from the statutes, rules, ordinances, and orders they administer. Therefore, I issue the following authorizations:

A. Pursuant to section 252.36(1)(a), Florida Statutes, the Executive Office of the Governor may waive all statutes and rules affecting budgeting to the extent necessary to provide budget authority for state agencies to cope with this emergency. The requirements of sections 252.46 and 120.54(4), Florida Statutes, do not apply to any such waiver issued by the Executive Office of the Governor.

B. Each State agency may suspend the provisions of any regulatory statute prescribing the procedures for conduct of state business or the orders or rules of that agency, if strict compliance with the provisions of any such statute, order, or rule would in any way prevent, hinder, or delay necessary action in coping with the emergency. This includes, but is not limited to, the authority to suspend any and all statutes, rules, ordinances, or orders which affect leasing, printing, purchasing, travel, and the condition of employment and the compensation of employees. For the purposes of this Executive Order, “necessary action in coping with the emergency” means any emergency mitigation, response, or recovery action: (1) prescribed in the State Comprehensive Emergency Management Plan (“CEMP”); or, (2)

directed by the State Coordinating Officer. Any waiver of statutes, rules, ordinances, or orders shall be by emergency rule or order in accordance with sections 120.54(4) and 252.46, Florida Statutes, and shall expire thirty days from the date of this Executive Order, unless extended in increments of no more than thirty days by the agency, and in no event shall remain in effect beyond the earlier of the date of expiration of this Order, as extended, or ninety (90) days from the date of issuance of this Order.

C. In accordance with section 252.38, Florida Statutes, each political subdivision within the State of Florida may waive the procedures and formalities otherwise required of the political subdivision by law pertaining to:

- 1) Performance of public work and taking whatever prudent action is necessary to ensure the health, safety, and welfare of the community;
- 2) Entering into contracts;
- 3) Incurring obligations;
- 4) Employment of permanent and temporary workers;
- 5) Utilization of volunteer workers;
- 6) Rental of equipment;
- 7) Acquisition and distribution, with or without compensation, of supplies, materials, and facilities; and,
- 8) Appropriation and expenditure of public funds.

D. All agencies whose employees are certified by the American Red Cross as disaster service volunteers within the meaning of Section 110.120(3), Florida Statutes, may release any such employees for such service as requested by the Red Cross to meet this emergency.

E. The Secretary of the Florida Department of Transportation (DOT) may:

- 1) Waive the collection of tolls and other fees and charges for the use of the Turnpike and other public highways, to the extent such waiver may be needed to provide emergency assistance or facilitate the evacuation of the affected counties;
- 2) Reverse the flow of traffic or close any and all roads, highways, and portions of highways as may be needed for the safe and efficient transportation of evacuees to those counties that the State Coordinating Officer may designate as destination counties for evacuees in this emergency;
- 3) Suspend enforcement of the registration requirements pursuant to sections 316.545(4) and 320.0715, Florida Statutes, for commercial motor vehicles that enter Florida to provide emergency services or supplies, to transport emergency equipment, supplies or personnel, or to transport FEMA mobile homes or office style mobile homes into or from Florida;
- 4) Waive the hours of service requirements for such vehicles;
- 5) Waive by special permit the warning signal requirements in the Utility Accommodations Manual to accommodate public utility companies from other jurisdictions which render assistance in restoring vital services; and,
- 6) Waive the size and weight restrictions for divisible loads on any vehicles transporting emergency equipment, services, supplies, and agricultural commodities and citrus as recommended by the Commissioner of Agriculture, allowing the establishment of alternate size and weight restrictions for all such vehicles for the duration of the emergency. The DOT shall issue permits and such vehicles shall be subject to such special conditions as the DOT may endorse on any such permits.

Nothing in this Executive Order shall be construed to allow any vehicle to exceed weight limits posted for bridges and like structures, or relieve any vehicle or the carrier, owner, or driver of any vehicle from compliance with any restrictions other than those specified in this Executive Order, or from any statute, rule, order, or other legal requirement not specifically waived herein or by supplemental order by the State Coordinating Officer;

F. The Executive Director of the Department of Highway Safety and Motor Vehicles (DHSMV) may:

- 1) Suspend enforcement of the registration requirements pursuant to sections 316.545(4) and 320.0715, Florida Statutes, for commercial motor vehicles that enter Florida to provide emergency services or supplies, to transport emergency equipment, supplies or personnel, or to transport FEMA mobile homes or office style mobile homes into or from Florida;
- 2) Waive the hours of service requirements for such vehicles;
- 3) Suspend the enforcement of the licensing and registration requirements under the International Fuel Tax Agreement (IFTA) pursuant to Chapter 207 Florida Statutes, and the International Registration Plan (IRP) pursuant to section 320.0715, Florida Statutes, for motor carriers or drivers operating commercial motor vehicles that are properly registered in other jurisdictions and that are participating in emergency relief efforts through the transportation of equipment and supplies or providing other assistance in the form of emergency services;
- 4) Waive fees for duplicate or replacement vessel registration certificates, vessel title certificates, vehicle license plates, vehicle registration certificates, vehicle tag certificates, vehicle title certificates, handicapped parking permits, replacement drivers' licenses, and

replacement identification cards and to waive the additional fees for the late renewal of or application for such licenses, certificates, and documents due to the effects of adverse weather conditions; and,

5) Defer administrative actions and waive fees imposed by law for the late renewal or application for the above licenses, certificates, and documents, which were delayed due to the effects of adverse weather conditions, including in counties wherein the DHSMV has closed offices, or any office of the County Tax Collector that acts on behalf of the DHSMV to process renewals has closed offices due to adverse weather conditions.

Recordkeeping and other applicable requirements for existing IFTA and IRP licensees and registrants are not affected by this order. The DHSMV shall promptly notify the State Coordinating Officer when the waiver is no longer necessary.

G. In accordance with section 465.0275, Florida Statutes, pharmacists may dispense up to a 30-day emergency prescription refill of maintenance medication to persons who reside in an area or county covered under this Executive Order and to emergency personnel who have been activated by their state and local agency but who do not reside in an area or county covered by this Executive Order.

H. All State agencies responsible for the use of State buildings and facilities may close such buildings and facilities in those portions of the State affected by this emergency, to the extent to meet this emergency. I direct each State agency to report the closure of any State building or facility to the Secretary of the Department of Management Services. Under the authority contained in section 252.36, Florida Statutes, I direct each County to report the closure of any building or facility operated or maintained by the County or any political

subdivision therein to the Secretary of the Department of Management Services. Furthermore, I direct the Secretary of the Department of Management Services to:

- 1) Maintain an accurate and up-to-date list of all such closures; and,
- 2) Provide that list daily to the State Coordinating Officer.

I. All State agencies may abrogate the time requirements, notice requirements, and deadlines for final action on applications for permits, licenses, rates, and other approvals under any statutes or rules under which such application are deemed to be approved unless disapproved in writing by specified deadlines, and all such time requirements that have not yet expired as of the date of this Executive Order are suspended and tolled to the extent needed to meet this emergency.

**Section 6.** All public facilities, including elementary and secondary schools, community colleges, state universities, and other facilities owned or leased by the state, regional or local governments that are suitable for use as public shelters shall be made available at the request of the local emergency management agencies to ensure the proper reception and care of all evacuees. Under the authority contained in section 252.36, Florida Statutes, I direct the Superintendent of each public school district in the State of Florida to report the closure of any school within its district to the Commissioner of the Florida Department of Education. Furthermore, I direct the Commissioner of the Department of Education to:

- A. Maintain an accurate and up-to-date list of all such closures; and,
- B. Provide that list daily to the State Coordinating Officer.

**Section 7.** I find that the demands placed upon the funds appropriated to the agencies of the State of Florida and to local agencies are unreasonably great and may be inadequate to pay the costs of coping with this disaster. In accordance with section 252.37(2),

Florida Statutes, I direct that sufficient funds be made available, as needed, by transferring and expending moneys appropriated for other purposes, moneys from unappropriated surplus funds, or from the Budget Stabilization Fund.

**Section 8.** All State agencies entering emergency final orders or other final actions in response to this emergency shall advise the State Coordinating Officer contemporaneously or as soon as practicable.

**Section 9.** Medical professionals and workers, social workers, and counselors with good and valid professional licenses issued by states other than the State of Florida may render such services in Florida during this emergency for persons affected by this emergency with the condition that such services be rendered to such persons free of charge, and with the further condition that such services be rendered under the auspices of the American Red Cross or the Florida Department of Health.

**Section 10.** Pursuant to section 501.160, Florida Statutes, it is unlawful and a violation of section 501.204 for a person to rent or sell or offer to rent or sell at an unconscionable price within the area for which the state of emergency is declared, any essential commodity including, but not limited to, supplies, services, provisions, or equipment that is necessary for consumption or use as a direct result of the emergency.

**Section 11.** Under the authority contained in sections 252.36(5)(a), (g), and (m), Florida Statutes, I direct that, for the purposes of this emergency, the term “essentials”, as defined by section 252.359(2), Florida Statutes, shall be the same as and no more expansive than the term “commodity”, as defined by section 501.160(1)(a), Florida Statutes (hereinafter referred to collectively or alternatively as “essential commodities”). Accordingly, any person who delivers essential commodities to a location in the area(s) declared to be under a state of

emergency by this Executive Order, and when necessary to ensure that those commodities are made available to the public, may travel within evacuated areas and exceed curfews, provided the State Coordinating Officer determines, after consultation with the appropriate Emergency Support Function(s), that:

A. Law enforcement officials in the declared area(s) can provide adequate security to protect the essential commodities from theft;

B. The weight of a delivery vehicle will not jeopardize the structural integrity of any roadway or bridge located within the declared area;

C. Delivery vehicles will not negatively impact evacuation activities in the declared area(s); and,

D. Delivery vehicles will not negatively impact any response or recovery activities occurring within the declared area(s).

After consulting with the appropriate Emergency Support Function(s), and after consulting with local officials, the State Coordinating Officer may dictate the routes of ingress, egress, and movement within the declared area(s) that drivers must follow when delivering essential commodities.

Provided he or she is actually delivering medications, any person authorized to deliver medications under chapter 893, Florida Statutes, qualifies as a person delivering essential commodities.

In order to qualify as a person delivering essential commodities under this section, a person must be in the process of delivering essential commodities only. If an individual is transporting both essential and non-essential commodities, then this section shall not provide any authorization for that individual to enter into or move within the declared area(s).

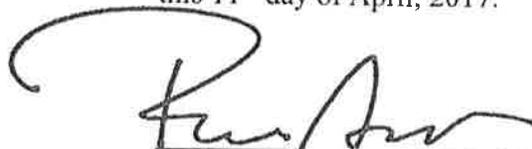
**Section 12.** Consistent with Executive Order 80-29, nothing in this Order shall prevent local jurisdictions in any area not declared to be under a state of emergency by this Executive Order from taking prompt and necessary action to save lives and protect the property of their citizens, including the authority to compel and direct timely evacuation when necessary.

**Section 13.** I authorize the Florida Housing Finance Corporation to distribute funds pursuant to section 420.9073, Florida Statutes, to any county, municipality, or other political subdivision located within the area(s) declared to be under a state of emergency by this executive order. The authority of the Florida Housing Finance Corporation to distribute funds under this state of emergency shall expire six months from the date of this Order.

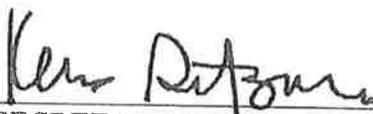
**Section 14.** All actions taken by the Director of the Division of Emergency Management with respect to this emergency before the issuance of this Executive Order are ratified. This Executive Order shall expire sixty days from this date unless extended.



IN TESTIMONY WHEREOF, I have hereunto set my hand and caused the Great Seal of the State of Florida to be affixed, at Tallahassee, this 11<sup>th</sup> day of April, 2017.

  
GOVERNOR

ATTEST:

  
SECRETARY OF STATE

2017 APR 11 AM 8:14  
DEPARTMENT OF STATE  
TALLAHASSEE, FLORIDA

FILED

# STATE OF FLORIDA

## OFFICE OF THE GOVERNOR

### EXECUTIVE ORDER NUMBER 17-174

(Emergency Management/Wildfires – Extension of Executive Order 17-120)

**WHEREAS**, much of Florida, including Central Florida and South Florida, is experiencing significant drought conditions; and

**WHEREAS**, large wildfires occurred in several Florida counties; and

**WHEREAS**, on April 11, 2017, I issued Executive Order 17-120, declaring a state of emergency in the State of Florida due to the danger of wildfires; and

**WHEREAS**, no state of emergency declared pursuant to the Florida Emergency Management Act may continue for more than 60 days unless renewed by the Governor; and

**WHEREAS**, based on information from state and local authorities, the ongoing danger of wildfires threatens the State of Florida;

**NOW, THEREFORE, I, RICK SCOTT**, as Governor of Florida, by virtue of the authority vested in me by Article IV, Section 1(a) of the Florida Constitution and by the Florida Emergency Management Act, as amended, and all other applicable laws, promulgate the following Executive Order, to take immediate effect:

**Section 1.** The state of emergency declared in Executive Order 17-120 is extended for an additional 60 days.

**Section 2.** All actions taken by the Director of the Division of Emergency Management as the State Coordinating Officer with respect to this emergency before the issuance of this Executive Order are ratified, and he is directed to continue to execute the State's Comprehensive Emergency Management Plan and other response, recovery, and mitigation plans necessary to cope with the emergency.

Section 3. Except as amended herein, Executive Order 17-120 is ratified and reaffirmed.

IN TESTIMONY WHEREOF, I have hereunto set my hand and caused the Great Seal of the State of Florida to be affixed, at Tallahassee, this 9th day of June 2017.



  
\_\_\_\_\_  
RICK SCOTT, GOVERNOR

ATTEST:

  
\_\_\_\_\_  
SECRETARY OF STATE

FILED  
2017 JUN -9 PM 12:12  
DEPARTMENT OF STATE  
TALLAHASSEE, FLORIDA

# The Florida Senate

## 2017 Florida Statutes

<u>Title XVII</u> MILITARY AFFAIRS AND RELATED MATTERS	<u>Chapter 252</u> EMERGENCY MANAGEMENT  <u>Entire Chapter</u>	<b>SECTION 363</b> <b>Tolling and extension of permits and other authorizations.</b>
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### **252.363 Tolling and extension of permits and other authorizations.—**

(1)(a) The declaration of a state of emergency by the Governor tolls the period remaining to exercise the rights under a permit or other authorization for the duration of the emergency declaration. Further, the emergency declaration extends the period remaining to exercise the rights under a permit or other authorization for 6 months in addition to the tolled period. This paragraph applies to the following:

1. The expiration of a development order issued by a local government.
2. The expiration of a building permit.
3. The expiration of a permit issued by the Department of Environmental Protection or a water management district pursuant to part IV of chapter 373.
4. The buildout date of a development of regional impact, including any extension of a buildout date that was previously granted pursuant to s. 380.06(19)(c).

(b) Within 90 days after the termination of the emergency declaration, the holder of the permit or other authorization shall notify the issuing authority of the intent to exercise the tolling and extension granted under paragraph (a). The notice must be in writing and identify the specific permit or other authorization qualifying for extension.

(c) If the permit or other authorization for a phased construction project is extended, the commencement and completion dates for any required mitigation are extended such that the mitigation activities occur in the same timeframe relative to the phase as originally permitted.

(d) This subsection does not apply to:

1. A permit or other authorization for a building, improvement, or development located outside the geographic area for which the declaration of a state of emergency applies.
2. A permit or other authorization under any programmatic or regional general permit issued by the Army Corps of Engineers.
3. The holder of a permit or other authorization who is determined by the authorizing agency to be in significant noncompliance with the conditions of the permit or other authorization through the issuance of a warning letter or notice of violation, the initiation of formal enforcement, or an equivalent action.
4. A permit or other authorization that is subject to a court order specifying an expiration date or buildout date that would be in conflict with the extensions granted in this section.

(2) A permit or other authorization that is extended shall be governed by the laws, administrative rules, and ordinances in effect when the permit was issued, unless any party or the issuing authority demonstrates that operating under those laws, administrative rules, or ordinances will create an immediate threat to the public health or safety.

(3) This section does not restrict a county or municipality from requiring property to be maintained and secured in a safe and sanitary condition in compliance with applicable laws, administrative rules, or ordinances.

**History.**—s. 494, ch. 2011-142.

Disclaimer: The information on this system is unverified. The journals or printed bills of the respective chambers should be consulted for official purposes.

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**Reply to: Bradenton**

August 11, 2017

**VIERA NOPC**  
**SUFFICIENCY RESPONSE #1**

This letter serves as the collective response from The Viera Company's team to all comments received relative to the NOPC submitted in April, 2017. The responses refer to certain exhibits and the exhibits are labeled as "Agency-comment number-document name". Some exhibits were prepared to address comments from more than one agency and they are labeled in the order they appear in the letter. In those instances, cross references have been made in the later reviewer's response. Additionally, where a change was made in the application or within the Development Order (including exhibits), it has been noted within this letter and we have provided the page number where the change can be found.

Our team worked extensively with all agencies in an effort to address all comments in a single Sufficiency Response. We appreciate that all agencies, and their consultants, made themselves available to us.

Below is a list of the substantive changes addressed in this Sufficiency Response:

- Removed post- secondary educational facilities from the list of exempt uses in Condition 4 (the exchange process) which will require any introduction of this land use to be accomplished through an amendment to the Development Order.
- Limited the location of post-secondary educational facilities to the Town Center and within one and one half (1 ½) miles of the interchanges of Viera Boulevard and Pineda Extension with I-95. This was accomplished with a note on Map H.
- Provided a maximum square footage for post-secondary educational facilities of 200,000 square feet to allow for ease in tracking development. This is an amount that roughly equates to 4,500 full time equivalent students. This was accomplished with a footnote to Exhibit. 4, Master Development Program.
- Included a limitation on any future increase in residential entitlements, through an exchange, to 10% cumulatively unless the request is accompanied by an updated traffic

study specifically comparing the community capture to that which has been projected in this application.

- Withdrew the request to increase the maximum number of ADU's from 2% to 5%.
- Removed the minimum acreage of 1,000 for Villages and added language related to Village Centers.
- Modified Re-use conditions as requested by the County.
- Modified the Mitigation Program to provide for the Spyglass overpass as a single phase improvement.
- Withdrew our request for the issuance of site plans and building permits following phase expiration if mitigation was complete. This was also a note that was removed from Exhibit 4.
- Updated all dates consistent with the most recently legislatively authorized extension (Hurricane Matthew).

**East Central Florida Regional Planning Council:**

1. Modify the mitigation plan for Phase 4 to provide for proportionate share payments (i.e. the same method used in Phases 1-3) consistent with Chapter 73C- 40.045, F.A.C. and to implement the project's proportionate share mitigation for the project through buildout.
2. Modify development totals as follows: increase office square footage by 334,506, increase industrial square footage by 219,982, and decrease the number of hotel rooms by 258.
3. Add post-secondary educational facilities, with a maximum enrollment of 4,500 full-time equivalent students, as a potential use through the modification of the land use equivalency matrix.
4. Update commencement, phase, build-out and termination dates to reflect previously approved legislative extensions.
5. Update conditions of approval to address references, nomenclature and current practices.
6. Revise Map H, the Master Development Site Plan, to reflect the proposed development program.
7. Provide changes to the Development Order that reflect the changes above and from the transportation analysis.

We offer the following comments regarding these changes:

- A. We have no objections or comments to items 2 through 6 above.
- B. The information provided did not contain page numbers for volumes 2, 3 and 4, so the table of contents that was provided after the submittal of this NOPC was of limited usage. Some of the answers to our questions may be contained in the 1,000 plus pages of computer printout and tables, but since it is difficult to find, your response may need to direct us to a place within each volume, which may still be

difficult without page numbering. Perhaps the next submittal can have pages added to facilitate future reviews.

C. Regarding item 1 above, we are not in agreement with the procedure that has been followed relating to the transportation analysis. Based on an opinion from the Department of Economic Opportunity, the applicant and the county are not authorized to process a transportation methodology for the purposes of modifying the DRI transportation requirements without agreement on the methodology by the reviewing agencies and potentially impacted parties. FDEO stated that they have verified their position "that S. 380.06(19)(e)6., F.S., pertains specifically to instances wherein the transportation methodology for the DRI DO is already based on proportionate share mitigation and that methodology is proposed to change (but continue to be based on proportionate share), as opposed to instances where the methodology is not based on proportionate share and the proposal is to amend the DO to use proportionate share." The FDEO went on to say that the developer's proposed change to the methodology is open to questions as it relates to potential comment/ appeal. With this in mind, we have the following questions and comments regarding the transportation analysis;

- a. Please provide a table depicting the amount of current development. It appears that none of phase 3 is built as of yet.

**RESPONSE: Development totals beyond those in Phases 1 and 2 have been built. The Viera Company provided a Biennial Report, as required, through June 20, 2016. A copy of the Development Summary is provided as Exhibit "ECFRPC-C.a.-2016 Biennial Report Development Summary".**

- b. What is the total external trip generation by phase, and how does this compare to the amount of external trip generation from the DO? Please address this for passer-by reductions as well.

**RESPONSE: An analysis was not conducted for each phase. The current DRI development order evaluated projected traffic for phases 1-3 of the development. Phase 4 has been added to the development and the net increase in external trips was evaluated, with the study area based on the 5% significance, for the entire development. Internal Capture and Pass-by trips were only used for Viera East. Community Capture was used for Viera Central / West.**

- c. What is the trip interaction between the east and west sides of the project?

**RESPONSE: While there is interaction along Viera Boulevard and along Wickham Road between development east and west of I-95, no internal capture was taken into account between the east and west. A separate and distinct trip generation analysis was conducted for Viera East and for Viera Central/West. Any trips that would interact between Viera East and Viera Central/West were treated as external trips to the applicable side.**

- d. Explain what empirical information was gathered regarding trip generation. It appears that most of the trip generation, particularly for the west side, is from the trip generation manual. Please verify or correct. If empirical data was not used for the analysis, this would mean that little monitoring has been accomplished.

**RESPONSE: That is correct. The ITE Trip generation data was used in the analysis. The empirical data (field collected data) that was collected was taken at the external limits of Viera**

Central / West development to capture all trips into and out of Viera Central / West at Stadium Parkway just south of the I-95 ramps, at Viera Blvd just east of Stadium Parkway and at Wickham Road just west of the I-95 ramps. All counts were taken beyond the last driveway connection in Viera Central / West, for each such roadway, to capture trips on the external road network. The counts have now been updated and taken over the same three day period and are attached as Exhibit "ECFRPC-C.d.-Community Capture Traffic Counts\_Viera Central\_West".

- e. Provide evidence that passer-by occurs for uses other than retail.

**RESPONSE: No pass-by rates were used for any land uses besides retail. Further, pass-by was only used for Viera East.**

- f. Provide the information regarding the amount of passer-by. How was this determined and how much passer-by was used for each retail parcel?

**RESPONSE: The Pass-by rate used for retail was 34% per the ITE Trip Generation Manual and was used for retail development within Viera East only. A pass-by validation is attached as "Exhibit ECFRPC-C.f.-Viera\_East\_Passby\_Confirm".**

- g. Please cite the statute regarding community capture.

**RESPONSE: Community capture arose out of changes to FS 380.06 and 163.3180 related to complete communities, otherwise known as "new towns" as defined in the statute. Viera Central/West meets all the statutory requirements of a "new town" and has all the land uses one would expect to find within a City. The Florida DOT Site Impact Handbook formally recognizes community capture and its application to traffic and site impact analyses.**

- h. Why has the FDOT and FDEO not established a unified methodology for evaluating community capture? Is it because no reliable methodology has been established elsewhere?

**RESPONSE: A number of studies have been conducted for large scale mixed-use developments. In several drafts of the methodology statement, the applicant provided detailed documentation for how community capture has been applied and calculated. This included example communities in Florida, as well as other states, which exhibited strong community capture. County Staff requested that this information be removed from the methodology. The methodology agreed to the current community capture methodology and process used in the analysis that demonstrated actual community capture for this project and is based on the empirical evidence provided by actual traffic counts.**

- i. Please provide a map of the study area roadways.

**RESPONSE: A map of the study area roadway is optional, per the guidelines. The applicant elected to provide the results in tabular form.**

- j. Viera contains many government related uses such as health, education, administration, etc, that are not found in many places within the county. Would this not require longer trips since most of these services cannot be found elsewhere in the county?

**RESPONSE:** Trip lengths are frequently used in impact fee and mobility fee analyses. They are not used in DRI traffic impact analyses. The Regional Travel Demand Model is used to distribute trips onto the network and those trips are then compared with the capacity of the individual roadway segments to determine significance.

- k. What is the average trip length for trips by land use in Viera and how does this compare to the county as a whole?

**RESPONSE:** Average trip lengths were not evaluated.

- l. The analysis should be conducted on a peak direction basis as stipulated in the DO, and not a two way peak hour basis.

**RESPONSE:** The analysis was initially conducted according to the approved methodology statement. In response to comments received from the FDOT, the analysis was revised on a directional basis when the volume to capacity ratio exceeded .9. The results were unchanged from the initial analysis. Please refer to Exhibits FDOT-2-5a and FDOT-2-5b.

- m. The overall transportation analysis and the intersection analyses should follow the methodology established through the ECFRPC, as directed in the DO.

**RESPONSE:** The Development Order addresses a methodology in the event the Developer chooses to perform a Monitoring and Modeling Study. The Developer has performed an updated Transportation Impact Study to cumulatively address the impacts of the project through buildout and not a Monitoring and Modeling Study. The applicant has presented a revised Development Order with this NOPC which modifies the conditions for consistency with the presented analysis.

- n. The analysis should include an origin destination survey as directed in the DO.

**RESPONSE:** The Development Order addresses the use of an origination destination survey in the event the Developer chooses to perform a Monitoring and Modeling Study. The Developer has performed an updated Transportation Impact Study to cumulatively address the impacts of the project through buildout and not a Monitoring and Modeling Study. The applicant has presented a revised Development Order with this NOPC which modifies the conditions for consistency with the presented analysis.

- o. What is the source of Table 21.A.1?

**RESPONSE:** The existing number of lanes, the functional class, adopted level of service, AADT and K-Factors were obtained from the Space Coast Transportation Planning Organization.

- p. What were the internal capture numbers from the transportation model? How does it compare to what was tried through this analysis?

**RESPONSE:** The model internal capture was not computed. Community capture was computed via analysis process described herein for Viera Central/West and an updated

**Internal Capture analysis per ITE has been conducted in response to FDOT and Brevard County comments for Viera East.**

- q. Has any analysis been conducted that verifies the 5% of trips on bicycle, walking or golf cart?

**RESPONSE: The 5% mode share reduction was only applied to internal roadways after utilization of straight ITE rates in a very conservative approach to evaluating internal roads. This 5% mode share reduction was not used to adjust external trips. The community capture analysis showed that ITE rates over projected impacts on external roads by more than 50%. Further, the use of ITE rates and equations shows a 30% reduction in trips versus straight use of the ITE Rates. The 5% mode share reduction for internal roads is a conservative adjustment in recognition of the expenditure of more than \$15 million dollars on multi-modal improvements and The Viera Company's commitment to continue providing multi-modal improvements. The ITE rates and equations should have been used to determine maximum internal trips which would have resulted in a 30% plus reduction in internal daily trips, versus the 5% mode share reduction used to determine the number of lanes for internal roads. However, the agreed to methodology indicated that the ITE rates would be used as the basis for evaluating internal roads. Based upon the results of empirical data, it is likely the internal traffic is over projected by more than 25%.**

- r. What year is Table 21.D.1?

**RESPONSE: The year is the build-out year of 2029.**

- D. Concerning the proposed changes to the Development Order, we have the following questions and comments

- a. Overall, the changes that are proposed assume that the transportation analysis was accomplished based on a methodology that was accepted by all reviewing parties cited in the DO. Since this is not the case, we are not in agreement with the changes to the transportation sections and the resulting mitigation.

**RESPONSE: The Development Order addresses a methodology in the event the Developer chooses to perform a Monitoring and Modeling Study. The Developer has performed an updated Transportation Impact Study to cumulatively address the impacts of the project through buildout and not a Monitoring and Modeling Study. There is no statutory requirement for inclusion of specific parties in the preparation of a methodology.**

**It should be noted that the Developer's calculated proportionate fair share is \$360,283.47 and the Developer's proposed Development Order indicates a mitigation program for Phase 4 in excess of \$15 Million Dollars.**

- b. It is still our position that the existing method for mitigation through monitoring and modeling is the most reliable method for assessing project impacts.

**RESPONSE: The empirical data collected indicates that based upon current development in Viera Central / West that ITE overestimated external impact by more than 30% during the PM Peak Hour using rates and equations and more than 50% using straight ITE rates. The**

**Developer has performed an updated Transportation Analysis to cumulatively address the impacts of the project through buildout and has identified a Mitigation Program in the Development Order.**

**It should be noted that the Developer's calculated proportionate fair share is \$360,283.47 and the Developer's proposed Development Order indicates a mitigation program for Phase 4 in excess of \$15 Million Dollars.**

- c. We have no issues with the changes to the equivalency matrix.

**RESPONSE: Acknowledged.**

**Todd Corwin, Planner- City of Melbourne:**

The Viera Development of Regional Impact (DRI) is a project that impacts adjacent jurisdictions, including the City of Melbourne. While the City is concerned about such matters as the provision of affordable housing and the creation of new employment centers within the DRI, transportation issues rise to the forefront. Traffic concerns, particularly for the Wickham Road and US 1 corridors, affect both the business community and the citizens who depend on these roadways for access. In short, the traffic generated from the Viera DRI has the potential to adversely affect the quality of life for residents and businesses located in Melbourne. Consequently, the City offers the following remarks:

The City of Melbourne should be included in discussions regarding traffic monitoring and modeling (Condition #84). As proposed, the monitoring and modeling process would be replaced by the implementation of a traffic impact study. The methodology for this study would only be reviewed by Brevard County.

The proposed changes to Condition #84 delete the requirement of an origin destination survey to verify trip lengths and trip distribution. This information is also not included in the traffic analysis. Such information will be crucial in determining the tangible roadway impacts to adjacent jurisdictions.

1. Much of the traffic to and from the Viera DRI occurs during the morning hours. The traffic analysis should examine whether the analysis of P.M. peak hour traffic adequately captures the busiest vehicular traveling volumes during a typical day.

**RESPONSE: The Viera DRI intersection analyses have always been conducted during the p.m. peak-hour, to the knowledge of the applicant. As noted in our response to FDOT Comment No. 7: "As with each of the prior analyses for Viera the analysis was conducted for the PM Peak Hour. A peak directional analysis was completed for road segments because the road segments traffic was generally balanced and where a lane was determined to be needed in the peak direction a balancing lane was provided in the other direction".**

2. The mitigation proposed for Phase 4 in Condition 92B of the DO includes future improvements to Spyglass Hill Road and the Fiske Boulevard/I-95 interchange. An analysis should be included that clarifies the need for these projects and explains why the Spyglass Hill Road mitigation is warranted versus network improvements such as the expansion of the Washington Extension.

**RESPONSE: Please refer to Exhibits FDOT-2-12a and FDOT-2-12b for the analysis with and without the proposed Spyglass Hill Road overpass. The expansion of the Washingtonia Extension would not improve the loading at the on ramps to I-95 at the Wickham Road interchange. The proposed improvement is parallel and immediately adjacent to the area of projected congestion.**

3. The Viera Company proposes to increase the amount of industrial and office development square footage within the DRI. This proposal will increase employment possibilities and augment internal trip capture within the DRI.

**RESPONSE: The applicant concurs.**

**Alix Bernard, Planning Coordinator- City of Rockledge:**

The City has received the referenced NOPC on April 12, 2017. It is our understanding that the following changes are proposed:

Modify the mitigation plan for Phase 4 to provide for proportionate share payments (i.e. the same method used in Phases 1-3) consistent with Chapter 73C-40.045, F. A.C. and to implement the project's proportionate share mitigation for the project through buildout.

Alter development totals as follows: increase office square footage by 334,506, increase industrial square footage by 219,982, and decrease the number of hotel rooms by 258.

Add post-secondary educational facilities, with a maximum enrollment of 4,500 full-time equivalent students, as a potential use through the modification of the land use equivalency matrix.

Update commencement, phase, build-out and termination dates to reflect previously approved legislative extensions.

Update conditions of approval to address references, nomenclature and current practices.

Revise Map H, the Master Development Site Plan, to reflect the proposed development program.

Provide changes to the Development Order that reflect the changes above and from the transportation analysis.

We would like to offer the following comments regarding these changes:

Transportation Impact Study -- The City of Rockledge would like the opportunity to agree upon the methodology of the study in addition to Brevard County and the Developer, as five of the Candidate Roadways for the Traffic Impact Study, including multiple roadway links, are within the City's jurisdictional limits.

**RESPONSE: The roadway network which was studied included not only those listed as “candidate roadways” but also any roadways or intersections which met the significance test. The analysis has been provided to all parties for review and we welcome your input on the**

analysis and the proposed mitigation program outlined in the Development Order. You will note that the Developer has proposed improvements to the regional transportation network.

**Brevard County Comments:**

**NOPC Summary**

1. **(Summary #5, pg. 5):**

*“Add post-secondary educational facilities... through the modification of the ~~Land Use Transportation~~ Equivalency Matrix.”*

**RESPONSE:** The requested change has been made in the application materials. Please refer to page 5, Revised NOPC Application.

2. **(Summary #6, pg. 5, Attachment 1, pgs. 10-16):**

Please revise Attachment 1 translate to include the Substantial Deviation thresholds to demonstrate they are not triggered.

**RESPONSE:** Additional notes have been added to Attachment 1. Please refer to 12, Revised NOPC Application. It should be noted that Hotel and Industrial are land uses which are no longer addressed in the Statute and therefore have no corresponding threshold. While office square footage is being increased with this application, it was previously reduced through a local Development Order amendment and the square footage proposed in this application remains less than the original.

3. **(Viera East, pg. 31):**

Trip generation equations being used for single family, apartments, townhomes, office, and shopping center and that the details are in Appendix 21.B.1, but details of the equations rates are not included in the Appendix.

The Methodology notes that “documentation will be provided for all Trip Gen Rates and Equations to demonstrate consistency with the ITE Trip Generation Manual”

**RESPONSE:** The ITE equation was used as indicated by an asterisk next to the land use in Tables 21.B.4, 21.B.5, 21.B.6 and 21.B.7. The detailed land use reports included in Appendix 21.B.1 include documentation that the equations were used. The reports include a statement of “true” indicating equations were used or “false” which indicates that the ITE rates were used. Please see Brevard\_3\_App\_21.B.1\_TripGeneration\_Viera\_East\_Detailed\_Reports as an example of the reports included in the traffic analysis.

4. **(Table 21.C.6, pg.47):**

Please source where the numbers for C/O's as of January 31<sup>st</sup>, 2016 came from.

**RESPONSE:** The Viera Company provided the data based upon their internal tracking of Certificates of Occupancy. This data has been updated to April 2017 and includes an increase in the number of apartments to 522 from 240 and increase in the number of townhomes by

67 units from 250 to 317. There was also a slight increase in retail by 7,000 square feet. Please see Brevard\_4\_Viera\_CentralWest\_TripGen\_Update. The update was conducted due to collecting new traffic counts on April 25<sup>th</sup> to the 27<sup>th</sup> in 2017. Please see ECFRPC-C.d.-CommunityCaptureTrafficCounts\_VieraCentral-West.pdf

### DRI Development Order Proposed Changes

1. (III. Conditions 4.(3), pg. 97):

Please revise references to Brevard County Planning and Development Department to reference just Brevard County.

**RESPONSE:** The requested change has been made in the revised Applicant's draft Development Order. Please refer to Page 96, Revised Development Order.

2. (III. Conditions 4.(3), pg. 97):

~~"Conversions to allow a post-secondary should in accordance with the Transportation Equivalency Matrix shall not be limited to the percentages noted above in item (3)."~~

What is the justification for excluding the post-secondary education from the conversion criteria that other land use exchanges are subject to?

Currently, the summary on pg. 5 of section 1 of the NOPC, references the maximum enrollment of 4,500 full time equivalent students – please incorporate this threshold within the DO itself, describe how full time equivalent students will be measured, and provide justification for how this number will be converted into KSF of building area, as denoted within the Transportation Equivalency Matrix. The intent of these comments is to provide staff with more complete information so that the actual impact of this land use can be properly evaluated.

**RESPONSE:** The applicant originally included the threshold number of 4,500 full time equivalent students for consistency with the measurement used in the Florida Statutes. We recognize, however, that tracking of the entitlements through development by square footage is far easier and more reliable. The applicant has revised the application materials to also provide a maximum square footage of 200,000. This square footage was based upon our Transportation consultant's review of the conversion factor between students and square footage. Please refer to page 174, Revised Exhibit 4, note 6.

As to the exchange utilizing the Transportation Equivalency Matrix, the applicant has removed this requested exemption language from the draft Development Order Condition #4. Please refer to Page 96, Revised Development Order.

3. (Housing #32, pg. 113):

~~"ADUs shall not comprise more than five percent of the total residential units approved for the DRI."~~

How are trips generated from an increase in ADUs proposed to be documented within the study? Consider incorporating a new rate within the Transportation Equivalency Matrix for this additional impact.

**RESPONSE: The applicant has removed this change from the application. Please refer to Page 112, Condition 32, Revised Development Order.**

4. **(Transportation #83, pgs. 125-126):**

Please clean up or remove this table entirely, as some lines which seem to be recommended for deletion remain and the data may be duplicated elsewhere within the DO.

**RESPONSE: The applicant has removed the table from draft Development Order. Please refer to Page 125, Revised Development Order.**

5. **(Transportation #84, pg. 126):**

*"Prior to the initiation of phase 4 as identified in the preceding paragraph..."*

Phase 4 is not identified in the preceding paragraph. Consider rewording changes to language or incorporating the reference in the preceding paragraph.

**RESPONSE: The applicant has removed the language from draft Development Order. Please refer to Page 125, Revised Development Order.**

6. **(Transportation #84, pg. 126):**

*"The methodology of the study..."*

Please define "the study" within section II. Definitions and consider a title for it, to be used consistently throughout the document, when the study is referenced.

**RESPONSE: A definition was added for Transportation Impact Study and that term has been used throughout (capitalized) the Development Order. Please refer to Page 91, Revised Development Order.**

7. **(Transportation #84, pg. 126):**

*"The methodology of the study shall be agreed upon by Brevard County..."*

This change proposes to omit the City of Rockledge, the ECFRPC, the City of Melbourne, the Florida Department of Transportation, and the Florida Department of Economic Opportunity. Please provide justification for this change.

**RESPONSE: The Development Order currently addresses a methodology in the event the Developer chooses to perform a Monitoring and Modeling Study. The Developer has performed an updated Transportation Impact Study to cumulatively address the impacts of the project through buildout and not a Monitoring and Modeling Study. There is no statutory requirement for inclusion of specific parties in the preparation of a methodology for the Transportation Impact Study.**

8. **(Transportation #84, pg. 127):**

*"A trip generation and internal capture study shall be performed to verify trip generation, ~~and~~ internal capture, community capture, and pass-by assumptions for the development"*

Change the reference to reflect the study name clarified within the Definitions section, as noted in Comment #7 and incorporate language as noted above to reflect components of the analysis as defined within the methodology.

**RESPONSE: The requested change has been made. Please refer to Page 126, Revised Development Order.**

9. **(Transportation #84, pg. 127):**

*"...cumulative amount of traffic greater than or equal to five percent (5%) ~~of the adopted LOS service volume or more of the adopted p.m. peak hour two-way capacity.~~*

Revise language to reflect X. Study Area section of methodology.

**RESPONSE: The requested change has been made. Please refer to Page 127, Revised Development Order.**

10. **(Transportation #84, pg. 127):**

*The analyzed facilities will include signalized intersections and link analyses of collector and higher classified roadways and interchange ramps.*

Reconcile the above statement from the DO with the following statement from the Methodology –  
"All the intersections from the previous Phase 1-3 analysis (Substantial Deviation#2) will also be included in the analysis, as well as the major intersections along significant intersections."

**RESPONSE: The proposed text change is as follows:** *The analyzed facilities will include ~~signalized intersections~~ all the intersections from the previous Phase 1-3 analysis (Substantial Deviation #2), as well as the major intersections along significantly impacted roadways, and link analyses of collector and higher classified roadways and interchange ramps. Please refer to Page 127, Revised Development Order.*

11. **(Transportation Mitigation #85, pg. 131):**

*"...five percent (5%) ~~of the adopted LOS service volume or more of the adopted p.m. peak hour two-way capacity~~ of the roadway or intersection as determined by the study..."*

Revise language to reflect X. Study Area section of methodology.

**RESPONSE: The requested change has been made. Please refer to Page 131, Revised Development Order.**

12. **(Transportation Mitigation #89, pg. 134):**

The proposed change to the Development Order would remove traffic modelling and monitoring requirements that are currently part of the DRI. It is necessary for the developer to incorporate some means of evaluating the veracity of the projections made in the traffic study as the

development progresses through Phase IV, and to provide opportunities for modification of the mitigation program if the actual development conditions and impacts do not reasonably correlate with the projections made in the traffic study.

**RESPONSE:** The applicant has included language within the draft Development Order to require additional transportation analysis and a review of the community capture projections if there is a request to utilize the Transportation Equivalency Matrix to increase residential development by more than 10%. This percentage shall be considered cumulatively from the adoption of this associated Development Order. The lack of construction of non-residential land uses may affect community capture, however, when combined with the lack of the associated trips the overall total external trips would still be lower. Please refer to Pages 96 and 134, Revised Development Order.

It should be noted that the Developer's calculated proportionate fair share is \$360,283.47 and the Developer's proposed Development Order indicates a mitigation program for Phase 4 in excess of \$15 Million Dollars.

13. **(Transportation Mitigation #92.B., pg. 138):**

*"Spyglass Overpass (Phase 1)... Commence prior to issuance of the first building permit for development within the last Village."*

*"Spyglass Overpass (Phase 2)... Commence prior to issuance of a building permit equating to 75% of the Equivalent Residential Units\*\* within Phase 4... \*\*Based upon trip generation in effect at the time of approval of the Development Order."*

Please revise this language to tie the start of construction of the Spyglass Overpass, Phases 1 and 2, to the Volume/Capacity ratio for Wickham Road between Murrell Road and the roundabout. Provide separate thresholds for both the Phase 1 and Phase 2 improvements and indicate an improvement construction timeframe, including completion, for each phase.

**RESPONSE:** See response to FDOT Comment No. 12. The language regarding this improvement has been modified and the improvement has been called out as a one phase project (i.e. a 4 lane improvement constructed at one time). Please refer to Page 138, Revised Development Order.

14. **(Transportation Mitigation #92.B., pg. 138):**

Please add language to the Spyglass Overpass improvements, Phases 1 and 2, to clarify that Brevard County is not obligated to construct or manage the improvements.

**RESPONSE:** The requested language has been included. Please refer to Page 138, Revised Development Order.

15. **(Transportation Mitigation #92.B., pg. 138):**

*"I-95 at Fiske Boulevard/Barnes Boulevard Interchange..."*

What is the definition of “contribution to pay for cost of Interchange Modification Report”? What defines when “the process is ready to proceed” and what notification would Brevard receive or how would Brevard participate in tracking of this improvement? What impact or calculation resulted in a “cost up to a maximum of \$1.5M” and where is this demonstrated? Has FDOT reviewed the impact, proposal, and cost and signed off on the contribution amount?

**RESPONSE: The intent is to contribute up to \$1.5M to the cost of conducting an interchange modification report at the time FDOT intends to undertake this study. The coordination of the timing of this contribution would be handled through the Space Coast Transportation Planning Organization. While the proposed contribution exceeds the calculated proportionate fair share due from the applicant, this contribution is intended to expedite the eventual design and construction of improvements to this interchange which will benefit all of Central Brevard County, including the Viera DRI.**

16. **(Transportation Mitigation #94.(d)., pg. 140):**

*“(DRI Trips) x Cost = Proportionate Share”*

*SV Increase*

*“For this formula, DRI Trips is the cumulative number of external trips from the development expected to reach the external roadway network during the peak hour from the phase under development.*

Please demonstrate how this formula was utilized to determine the mitigation on pgs. 137-138, specifically relating the impact to the improvements’ costs?

**RESPONSE: Please refer to Exhibit “FDOT-1-2 PFS”. It should be noted that the Developer’s calculated proportionate fair share is \$360,283.47 and the Developer’s proposed Development Order indicates a mitigation program for Phase 4 in excess of \$15 Million Dollars.**

17. **(Transportation Mitigation #94.(h)., pg. 142):**

*“Within the areas of the WVEA designated as Village, Interchange, or Community Districts, the development plan will include multiple roadways through the DRI in order to provide adequate capacity, to provide alternative routes, and to lessen the impacts to community cohesiveness.”*

WVEA is no longer an operational designation. Please consider revision to clarify what area this condition applies to.

**RESPONSE: The definition of the WVEA provides an important distinction between the original DRI lands and the lands brought into the DRI with the Substantial Deviation #2 from a geographic perspective. There are many conditions which are specifically applicable to the WVEA and for this reason it was decided to leave the term unchanged.**

18. **(Transportation Mitigation #94.(h)., pg. 142):**

*The Methodology notes, “The Viera DRI will be responsible for accommodating the DRI generated internal trips within the internal roadway network.”*

Please demonstrate a mechanism that will be utilized to determine whether the capacity, routes, or cohesiveness of the internal roadway network is sufficient as buildout proceeds through buildout.

**RESPONSE:** For Phases 1 through 3 and since the ADA/DRI original approval, the Viera DRI internal transportation improvements have continuously been completed by The Viera Company in a timely manner to best serve the transportation needs of the residents and business community of Viera as a community obligation without any required mechanism. The Viera Company is committed to continue the development of the transportation infrastructure, consistent with the development needs, and will coordinate these improvements with the County staff during the review of specific subdivision and site plan applications.

19. **(Transportation Mitigation #94.(h)., pg. 142):**

*"The provisions of this Condition 94 (a-g), inclusive, have been complied with pursuant to the completion of a cumulative transportation study through buildout and mitigation provisions of Condition 92.B."*

1. Please replace "cumulative transportation study" with the official "the study" title, as defined within the Definitions sections, as recommended in Comment #7.
2. This language comes after Condition 94(h), which has not yet been complied with. Consider moving this notation above 94(h) or documenting how the mitigation for the internal roadway network will be determined.

**RESPONSE:** The requested change has been made. Please refer to Pages 142-143, Revised Development Order.

20. **(Transportation Mitigation #97.(a-d)., pg. 143):**

*(a) "shall consider the need for..." (b) "shall construct..." (c) shall be constructed where necessary..." (d) "shall be shaded or otherwise covered..."*

As Phase 4 is now being combined into one final phase, please demonstrate how and when these transit improvements will be considered.

**RESPONSE:** The applicant has proposed no changes relative to transit and will continue to coordinate with the Space Coast Area Transit. It is important to note that the Applicant has taken no credit for the inclusion of transit in the project relative to trip generation. The adjustment for mode share only included bicycle, pedestrian and golf cart usage. The status of and ongoing compliance with the subject conditions will be provided by the Developer with each Biennial Report. Further, the Developer continues to be engaged with the Space Coast Area Transit through active participation in the TMA.

21. **(Transportation Mitigation #98.(c)., pg. 144):**

*"Designation of Village Center and Town Center areas that contain densities, mix of land uses, and development patterns that are supportive of transit use."*

Provide criteria that will be utilized to designate areas that are supportive of transit use.

**RESPONSE:** The applicant has proposed no changes relative to transit and will continue to coordinate with the Space Coast Area Transit. It is important to note that the Applicant has taken no credit for the inclusion of transit in the project relative to trip generation. The adjustment for mode share only included bicycle, pedestrian and golf cart usage. The status of and ongoing compliance with the subject conditions will be provided by the Developer with each Biennial Report. Further, the Developer continues to be engaged with the Space Coast Area Transit through active participation in the TMA.

22. **(Transportation Mitigation #98.(d-f), pgs. 144-145):**

Please describe how these transit implementation criteria will be met, reviewed, or enforced.

**RESPONSE:** The applicant has proposed no changes relative to transit and will continue to coordinate with the Space Coast Area Transit. It is important to note that the Applicant has taken no credit for the inclusion of transit in the project relative to trip generation. The adjustment for mode share only included bicycle, pedestrian and golf cart usage. The status of and ongoing compliance with the subject conditions will be provided by the Developer with each Biennial Report. Further, the Developer continues to be engaged with the Space Coast Area Transit through active participation in the TMA.

23. **(Development Phasing #104, pg. 148):**

*"...any portion of Phase 1 and Phase 2A and Phase 3 development that has not been completed by December 25, 2021 may continue through the buildout date of the DRI."*

*"The Developer shall adhere to the Master Development Program set forth in Exhibit 4 in four phases: "Phase 1" (1990 to December 25, 2021 ~~August 27, 2020~~), "Phase 2A" (December 29, 2005 to ~~August 27, 2020~~ December 25, 2021), "Phase 3" (December 29, 2010 to ~~August 27, 2020~~ December 25, 2021), and "Phase 4" (December 29, 2019 to ~~August 27, 2030~~ December 25, 2031). Because the traffic impacts for Phase 1, ~~and~~ Phase 2A and Phase 3 have been cumulatively assessed and cumulative mitigation provided for them through the end of Phase 3 of this Development Order, any portion of Phase 1 and Phase 2A and Phase 3 development that has not been completed by ~~August 27, 2020~~ December 25, 2021 may continue provided a new phase end date has been established pursuant to the requirements of Chapter 360.06(19)c., Florida Statutes through the buildout of Phase 3.*

Recommend this section be revised as noted.

**RESPONSE:** The applicant has withdrawn this requested change, however, the phase dates will be updated to reflect the most recently recognized legislative extensions. Please refer to Page 149, Revised Development Order.

24. **(Exhibit 4 Note 5, pg. 173):**

Please remove the addition of "post-secondary schools" from Note 5. The addition of post-secondary school land use must utilize the Transportation Equivalency Matrix.

**RESPONSE:** The applicant concurs that any proposed post-secondary school would be introduced into Exhibit 4 through the process outlined in Condition 4 utilizing the Transportation Equivalency Matrix. The purpose of footnote 5 was to indicate allowable geographic locations for such a use. The application has been revised to limit the development of a post-secondary educational facility to the following locations: (1) within 1 1/2 miles of the interchange of Viera Boulevard and I- 95 (2) within 1 1/2 miles of the interchange of Pineda Extension and I-95 and (3) within the Town Center. Please refer to Page 174, Revised Exhibit 4.

25. **(Exhibit 4 Note 6, pg. 173):**  
Brevard County shall continue to issue site development approvals and building permits for development using entitlements within Phases 1, 2A and 3 beyond the expiration date of the applicable phase provided that new phase end dates have been established and approved pursuant to the requirements of Chapter 380.06(19)c., Florida Statutes and such development otherwise complies with all County requirements for site plan approval and the issuance of building permits.

Recommend this section be revised as noted.

**RESPONSE:** The applicant has withdrawn the requested language. Please refer to Page 174, Revised Exhibit 4.

26. **(Exhibit 5 Transportation Equivalency Matrix, pgs. 174-180):**  
The junior/community college facility is noted as being limited to a maximum enrollment of 4,500 full time equivalent students on pg. 5 of section 1, but the trip rate on pgs. 174-180 within the Transportation Equivalency Matrix is measured by KSF (thousands of square feet). Please convert the student impact to KSF of development. Please include reference within the DO documenting how the junior/community college will be tracked/documentated as it proposed as a land use exchange or proceeds through the site planning review and development process.

**RESPONSE:** Please see the response to Brevard Co. DO Comment No. 2. The cumulative tracking of developed square feet will be reported in the Biennial Report.

27. **(Exhibit 5 Transportation Equivalency Matrix, pgs. 174-180):**  
The approved Viera Transportation Methodology notes that the ITE Trip Generation 9th Edition should be utilized to conduct the analysis. Please revise the Transportation Equivalency Matrix on pgs. 174-180 to reflect this most recent 9th edition of the ITE Trip Generation Manual.

**RESPONSE:** Changing the equivalency matrix conversion rates each time a new ITE Trip Generation Manual is printed results in invalidating prior conversions (and cumulative amounts). Therefore, this modification is inconsistent with the intent of tracking trips on a consistent basis.

28. **Water #62 and #64, pgs. 120-121:**  
Brevard County is currently experiencing reclaimed water shortages. The developer should incorporate provisions into the D.O. that will provide for coordination with the Brevard County Utilities Services Department regarding the construction of reclaimed water distribution systems

within the DRI and the provision of alternative sources of non-potable water for irrigation, where appropriate.

**RESPONSE: The applicant has proposed revisions to conditions 47, 61, 62 and 64. Please refer to Pages 116 and 120, Revised Development Order.**

**Atkins Technical Review Comments:**

Atkins staff has completed its review of the April 11, 2017 Notification of Proposed Change application for the Viera ADA/DRI and we have concluded that there is not enough information provided to adequately evaluate the project's impacts. Specifically, we offer the following comments:

1. General Comment – Development Land Use: Are there land use maps to provide greater detail of planned development space?

**RESPONSE: Currently, the only associated map is Map H. The approved West Viera PUD requires submittal of Sketch Plans to Brevard County for each Village which provide additional detail. Development within Village 1 is under current development and the Village 2 plan has not yet been submitted.**

2. Page 17 – Adopted Level of Service: Question 21A requires the applicant to identify the adopted LOS standards of the FDOT, appropriate regional planning council, and local government for roadways within the identified study area. The applications states: “The LOS designations, capacities, facility types, and number of lanes are based on the comprehensive plan and concurrency databases for Brevard County.” Has the FDOT’s Level of Service Standards (effective October 9, 2015 and reviewed January 19, 2017) been considered in addition to the comprehensive plan LOS standards? In the Brevard County Comprehensive Plan Transportation Element Policy 1.3-A.1 the LOS standard for Brevard County arterials and collectors within the urban area boundary is a LOS E. The FDOT policy mentioned above states that state arterials is LOS D in urbanized areas.

**RESPONSE: See response to ECFRPC Comment No. C.o. Note that capacities are based on values obtained from the Space Coast Transportation Planning Organization. LOS “D” was used on State Roads/Interstates.**

3. Page 22, Map 21.A.1 – Turning Movement Counts: There are small differences between the Map’s turning movement counts when compared to raw turning movement counts in Appendix 21.A.3. Were there any adjustments including season factors or volume balancing between these two stages of the project?

**RESPONSE: Seasonal factors were applied.**

4. Page 34, Table 21.B.7 – Trip Generation: The Land Use 720, VA Clinic calculated generated trips do not match ITE rates or equations for the given development size of 137,500 sq. ft. Please provide the methodology used calculate this trip generation.

**RESPONSE:** The data for the VA clinic was originally obtained from the prior DRI analysis based upon a previously conducted analysis. The trip generation data for the VA has now been updated per ITE for medical uses. The Community Capture and build-out analysis have been updated. The net result was an increase in 230 entering and exiting PM Peak Hour Trips. Please refer to Exhibit “Atkins -4-Viera\_Central-West\_Existing\_Trip\_Gen\_Equation\_Rates\_VA\_Update”

5. Page 34, Table 21.B.7 – Trip Generation: Trip Generation section of the Letter of Methodology document states that documentation will be provided for all Trip Generation Rates and Equations to demonstrate consistency with the ITE Trip Generation Manual. Application identifies whether the equation or rates are used but does not identify the rate or equation that was used.

**RESPONSE:** The Trip Generation software from Trafficware uses a “true” or “false” variable to indicate whether the equation was or was not used. This may not be easily apparent at 1<sup>st</sup> review based upon the software output report. The detailed land use trip generation reports indicate the equations used for each land use where the equation versus the rate was used. An asterisk was provided in each table indicated where the equation was used. Review of the detailed sheets should indicate a “true” value to illustrate the equation used. Please refer to Exhibit “Atkins-5-Viera\_Central-West\_Existing\_Trip\_Gen\_Equation\_Rates\_DetailedReport\_VA\_Update”.

6. Page 37, Paragraph 2 – Clarification: Application text reads: *“While residential uses in the SW quadrant have a direct access connection across Viera Blvd to the retail uses in the NE quadrant, given the relatively small size of the existing and approved retail uses in the NE quadrant, no internal capture analysis was conducted for residential uses from the SW to the NW quadrant.”* Does the writer mean NW instead of NE where used?

**RESPONSE:** Correct. The text has been corrected to read NW instead of NE. Please refer to Page 37, Revised NOPC Application.

7. Page 37-38 - Internal Capture: Several of the quadrants contain multiple residential components. The internal trips were calculated for each individual land use then summed afterwards. This method will cause internal trips calculations from retail-to-residential and office-to-residential land use to be duplicated and sometimes tripled. The ITE Trip Generation Handbook explains in section 7.5, “If the site has multiple residential components (single-family, apartment, etc.), compute the trip generation for each residential type separately, but record as only a single land use on the [internal capture] worksheet.” For Example, the NW corner of Viera East has both Apartments and Condos eligible for internal capture analysis. The user created two internal capture worksheets, one for Apartments and one for Condos, then adds up internal trips after calculations. The ITE prescribed method is to add the generated trips of the Apartments and Condos first, then input those gross trips generated into ONE internal capture analysis worksheet.

**RESPONSE:** The Internal Capture Analysis has been recalculated for Viera East based upon comments received from both the FDOT and Brevard County. Please refer to the following Exhibits:

**Atkins -7a-VieraEast\_Daily\_InternalCapture\_Buildout**

**Atkins -7b-VieraEast\_Daily\_InternalCapture\_Phase1\_3**

**Atkins-7c-VieraEast\_PMPeak\_InternalCapture\_Buildout**

**Atkins-7d-VieraEast\_PMPeak\_InternalCapture\_Phase1\_3**

8. Page 37-38 - Internal Capture: When internal capture is discussed for the Viera East it's suggested that internal capture can be applied when trips cross either Viera Blvd or Murrell Road, but do not actually use these facilities. This is appropriate for segment impacts but would ignore the impacts of these trips on the intersection/signal operations. Suggest adding internal capture trips back into the intersection analysis or provide documentation of how these reduced trips will not have an impact to the intersection service metrics.

**RESPONSE:** This was discussed in detail during methodology meetings. Originally a greater level of internal capture was requested that would essentially have allowed Viera East to assume Murrell Road and Viera Boulevard were internal roads and internal capture calculated between all residential and retail in Viera East, except those trips using Wickham Road and then capturing those trips on the network and in intersections. However, it was agreed to that no internal capture analysis would be used, except there would be allowance where trips crossed Viera or Murrell, but did not use Viera or Murrell. There are internal roads that connect the uses in each quadrant and median opening and driveways that directly align with the adjacent quadrant that would not result in the trips utilizing the intersection. The Internal Capture Analysis has been updated. Please refer to the following Exhibits:

**Atkins -7a-VieraEast\_Daily\_InternalCapture\_Buildout**

**Atkins -7b-VieraEast\_Daily\_InternalCapture\_Phase1\_3**

**Atkins-7c-VieraEast\_PMPeak\_InternalCapture\_Buildout**

**Atkins-7d-VieraEast\_PMPeak\_InternalCapture\_Phase1\_3**

9. Page 42, Paragraph 3 - Clarification: Application text reads: "*The trip generation for shopping centers within Phase 1, 2 and 3 is per Table 4. The internal capture of retail trips for shopping centers within Phase 1, 2 and 3 is per Table 5.*". Table 4 and Table 5 cannot be found in the report, where is this referred to?

**RESPONSE:** Table 4 should have read Table 21.B.4 and Table 5 should have read Table 21.B.5. The text has been revised. Please refer to Page 42, Revised NOPC Application.

10. Page 42, Paragraph 3 - Clarification: Application text reads: "*There are more than 50,000 daily trips and 3,850 PM Peak Hour Trips on Wickham Road, Viera Blvd and Murrell Road within the limits of Viera East, thus the proposed pass-by rates do not exceed 10% of adjacent street traffic.*" There needs to be greater clarification of how the 50,000 daily and 3,850 PM peak hour trips were estimated.

**RESPONSE: A pass-by analysis has been conducted to demonstrate that pass-by does not exceed 10% of adjacent street traffic for Viera East. Please refer to Exhibit "ECFRPC-C.f.-Viera\_East\_Passby\_Confirm".**

11. Page 43, Clarification - Clarification: Application text reads: "The internal capture of retail trips for shopping centers for the build-out of Viera East is per Table 7." Table 7 cannot be found in the report, where is this referred to?

**RESPONSE: The reference to Table 7 should have read Table 21.B.7. The text has been revised. Please refer to Page 43, Revised NOPC Application.**

12. Page 47, Paragraph 1: Application text reads: "For comparative purposes, the trip generation analysis in Table 13 has been conducted based upon trip rates only (Appendix 21.C.5)." Table 13 cannot be found in the report, where is this referred to?

**RESPONSE: The reference to Table 13 should have read Table 21.C.6. The text has been revised. Please refer to Page 47, Revised NOPC Application.**

13. Page 48, Table 21.C.6 and 21.C.7 – Community Capture: How was the 95% Occupancy determined and verified for Community Capture calculations. Were developments reviewed to ensure they were open for business and generating trips?

**RESPONSE: The data was obtained from Certificates of Occupancy issued and internally tracked by The Viera Company.**

14. Page 53, Table 21.C.10 – Community Capture: Based on the Methodology Letter it was expected that traffic volume counts would be conducted for the same 3 days at the 3 locations listed. In the analysis volumes were counted on 3 separate days. Please provide comment or support for how this impacts or will not impact the analysis.

**RESPONSE: Counts have been retaken for the same three day period. Please refer to Exhibit "ECFRPC-C.d.-Community Capture Traffic Counts\_Viera Central\_West". The updated counts also resulted in an update of existing development consisting of an increase in 282 apartments, 69 townhomes and 7,000 sq ft of retail. Please refer to Exhibit "Brevard\_4\_Viera\_CentralWest\_TripGen\_Update". While the PM peak hour was originally based upon just Wickham Road, per comments from the FDOT reviewer, the PM Peak Hour has been determined based upon the average from all three count locations. Depending on whether or not a seasonal adjustment factor is used for the counts, the resulting PM Peak Hour Community Capture rate is 39% when counts are not adjusted and 41% when counts are adjusted. Please refer to Exhibit "Atkins-14-Net\_Viera\_External\_Trips\_wo\_SAF\_w\_SAF"**

15. Page 55, Table 21.C.12 – Community Capture: This Table shows 402,924 trips generated for Viera Central/West at Build-out if the ITE rates were used only, not including the several land uses that utilized the ITE equations. Table 21.B.7 utilizes the rates and equations, with a total Central/West trip generation of 272,446 trips. The community capture percentage was calculated using the calculated daily trips and pm peak trips using both ITE rates and equations. This table should be consistent with how the community capture rates were derived.

**RESPONSE:** For purposes of this analysis, two separate tables were necessary. One table with trip generation based on ITE rates only and one table with trip generation based on ITE rates and equations. The reason is that Community Capture to analyze external trips is based on ITE rates and equations while the review of internal trips was based on ITE rates only as a very, very conservative approach.

16. Page 57, Paragraph 4 - Mode Share Reduction: Application text reads: *“To project a worst-case scenario for the build-out of Viera Central/West the only trip reduction proposed to the internal trip generation based on trip generation rates only is the application of a 5% mode share reduction.”* How was the 5% mode share reduction determined? Was there a prior agreement?

**RESPONSE:** Ideally, the ITE rates and equations would have been utilized as a starting point for evaluating internal roads. This would have led to a more than 30% reduction in daily trips from the start, thus negating the need to make any adjustments. Based on Viera’s significant expenditure of more than \$15 million for multi-modal improvements, a 5% reduction was taken to unadjusted ITE rates in an overly conservative evaluation of internal roads. The empirical data shows that ITE rates overestimate external trips by more than 50%. The 5% adjustment for multi-modal was a conservative reduction to illustrate a worst case scenario for internal roads. It should be noted, that prior DO’s did not evaluate internal roads at all. Viera has been responsible for internal road improvements and made the internal decision to widen Stadium Parkway and Wickham Road internal to the site. These were not DO required improvements. There was no agreement prior to the Brevard County approved methodology statement.

17. Page 58, Table 21.C.13 – Community Capture: This table utilizes the higher trip generation calculation method shown on Table 21.C.12 instead of the agreed-upon calculation methodology shown on Table 21.B.7. The community capture rates were calculated using trip generation using both ITE rates and equations where applicable. Should this table not follow the same use of rates and equations?

**RESPONSE:** It would have been our preference to utilize the rates and equations as the starting point for all analysis. This was extensively discussed with Brevard County staff prior to the technical review provided by Atkins. Brevard County was strong in its preference for use of rates only it was agreed that the ITE Rates only would be used for internal roads and adjusted for mode share.

18. Page 70, Table 21.E.1 – Missing Information: Table 21.E.1 Build-Out P.M. Peak-Hour Two-Way Roadway Segment Conditions table not included in the application. Please provide documentation of project trip distribution of traffic.

**RESPONSE:** Table 21.E.1 was inadvertently omitted in the original application materials and was subsequently delivered electronically. An additional copy is attached and labeled as Exhibit “FDOT-1-1 Table 21.E.1.”

19. Page 172, Exhibit 4, Amended Development Order Comment – Development Land Use: Light Industrial is listed as a total of 500 KSF at build-out stage. Trip Generation analysis for Viera Central/West evaluated the land use for only 365 KSF.

**RESPONSE: Please refer to the breakout within Table 21.B.1 for Land Use Codes 110, 150 and 151 which when added together equal 522,500 square feet which matches Exhibit 4 to the Development Order.**

20. Page 172, Exhibit 4, Amended Development Order Comment – Development Land Use: How was the 7,500-seat stadium accounted for in the trip generation analysis? If it is not included, please explain why.

**RESPONSE: The treatment of the Stadium, for transportation purposes, is governed by separate agreement.**

Page 172, Exhibit 4, Amended Development Order Comment – Trip Generation: Where is the preferred location of the post-secondary education listed in Development Order (Exhibit 4, note 5)? There does not appear to be a map with this location shown. This land use will have a significant impact on the adjacent road/bike/ped/transit network. Further, unlike the other uses outlined in Note 4, post-secondary schools have a likelihood for extensive external trips. As such, potential location(s) for these institutions should be limited.

**RESPONSE: The application has been revised to limit the development of a post-secondary educational facility to the following locations: (1) within 1 mile of the interchange of Viera Boulevard and I- 95 (2) within 1 mile of the interchange of Pineda Extension and I-95 and (3) within the Town Center.**

21. Page 174, Exhibit 5, Transportation Equivalency Matrix – No minimums and maximums are provided with the equivalency matrix. As such, it is difficult to ensure that future development will contain a sufficient mix of uses, consistent with the community capture calculations. It is recommended that some assurances be provided in the Development Order.

**RESPONSE: As discussed with Brevard County, additional methods of evaluation have been added to Condition 89 and Condition 4. These methods include the ability of Brevard County to review the development mix and percentage of land devoted to each land use during each Biennial Report as well as including a requirement for additional analysis and confirmation of assumed Community Capture percentage with a request to increase residential development by more than 10%, cumulatively. Please refer to Pages 95, 96 and 134, Revised Development Order.**

22. Page 174, Exhibit 5, Transportation Equivalency Matrix – It should be noted that trip generation calculations in the matrix are not consistent with those used in the impact analysis. While it is understood why average rates are used in developing a matrix, there is no assurance that trips generated through use of the matrix will be like those estimated. For example, the trip generation for 100,000ksf of retail is far higher using trip rate equations than using the average rate. What assurances can be provided if total trips will not exceed those approved for Phase 4?

**RESPONSE: The Transportation Equivalency Matrix is a historically accepted tool for the conversion of land uses within the Viera DRI. See also response to Brevard County DO Comment No. 2.**

23. Page 174, Exhibit 5, Transportation Equivalency Matrix – Similarly, no guidance is provided on how and when the equivalency matrix can be used. If land uses brought in had much different trip distribution characteristics from ones being taken out, there could be an effect on the transportation system, which could be complicated by the use of trip generation equations in lieu of the ITE Rates reflected in the current Transportation Equivalency Matrix. In the past, this potential impact could be addressed through the modelling & monitoring requirements for future phases. The applicant is now proposing to include all future development in one final phase, with no monitoring requirements. Consideration should be given to monitoring, with potential “stoppers” included in the Development Order.

**RESPONSE:** As explained and discussed from the beginning of this application process, The Viera Company cannot proceed with monitoring that includes “stoppers” due to the level of proposed mitigation and investment as well as financing of those improvements with third party institutions. The entire purpose of the cumulative analysis was to determine impacts at buildout and determine identifiable mitigation measures to address the impacts. An Equivalency Matrix is designed to have reasonable exchanges from one use to another in a way to limit any change in transportation impacts. It is impossible (and unnecessary) to try to quantify every minor change. For example we make assumptions on “retail” ITE rates knowing full well that different retail uses may have minor differences in rates and trip distribution characteristics. In this application, we have been conservative in our analysis to assure over-mitigation. It should be noted that the Developer’s calculated proportionate fair share is \$360,283.47 and the Developer’s proposed Development Order indicates a mitigation program for Phase 4 in excess of \$15 Million Dollars.

24. Page 180, Exhibit 5, Transportation Equivalency Matrix – The footnote applied to the Junior/Community College trip rate needs to be explained further.

**RESPONSE:** The footnote was added in recognition of the evolution of community colleges. The applicant wanted to be clear that four year programs or private institutions, which would function similar to a junior/community college, would still be allowed. Further, it was important to note that no campus housing could be included as the characteristics of such a school would be different.

25. Appendix 21.C.2, Internal Capture Worksheet: Daily Analysis for NE corner of Viera Blvd & Murrell Rd: The Office (710) land use says 97,361 SQ FT and should be 52,505 SQ FT

**RESPONSE:** The sheet reference was updated accordingly.

26. Appendix 21.C.2, Internal Capture Worksheet: PM Peak Analysis for NE corner of Viera Blvd & Murrell Rd: The Retail total trips is higher than calculated.

**RESPONSE:** The sheet was updated accordingly.

27. Appendix 21.A.2, HCS Intersection Analysis: The HCS output sheets included do not provide inputs used in HCS analysis. Please provide the full HCS input and output summary sheets.

**RESPONSE:** The requested files, including HCS data files, are provided on the attached flash drive.

28. Appendix 21.A.2, HCS Intersection Analysis: Were the intersection peak hour factors from Appendix 21.A.3 adjusted before inputted into the HCS software? Many of the intersection peak hour factors do not match between the two sources.

**RESPONSE:** Yes, the peak-hour factors were applied in running the HCS analyses. It is understood that high peak-hour factors indicate a flatter peak in traffic and significantly low peak-hour factors represent larger peaks. To simulate increased flow rates during the peak 15-minute period (for a slightly more conservative analysis) the PHF range/limits used in HCS software was 0.75 - 0.95. Additionally, due to emphasis on capacity improvements, the defined range insured that a reasonable peak in traffic was analyzed for all scenarios. In all other cases, the PHF obtained from the TMCs were rounded to the nearest hundredth.

Finally, the lack of any information provided in relation to proportionate share calculations makes it very difficult to assess whether the project's proposed mitigation is sufficient. Furthermore, the applicant is proposing to pipeline all mitigation to construction of the Spyglass overpass and a PD&E/IMR study of the I-95 / Fiske Blvd. Interchange. No information has been provided regarding what these improvements might consist of, nor of their effect on local and regional traffic patterns.

**RESPONSE:** Please refer to Exhibit "FDOT-1-2 PFS". It should be noted that the Developer's calculated proportionate fair share is \$360,283.47 and the Developer's proposed Development Order indicates a mitigation program for Phase 4 in excess of \$15 Million Dollars.

#### **FLORIDA DEPARTMENT OF TRANSPORTATION:**

##### **SET #1 of Comments Received:**

During the review of the Notice of Proposed Change (NOPC) application for the Viera Development of Regional Impact, the Department discovered several issues with the NOPC submittal package. The remainder of this letter details the findings of the preliminary review.

1. The transportation analysis provided with this NOPC application incorporates additional Office and Industrial square footage and a reduction in hotel rooms. The trip generation calculations were provided for the new buildout of the revised development program. The existing, background, and buildout roadway segment analysis and intersection analysis have been provided; however, Table 21.E.1 - Build-Out P.M Peak-Hour Two-Way Roadway Segment Conditions is missing from the application.

**RESPONSE:** Table 21.E.1 was inadvertently omitted in the original application materials and was subsequently delivered electronically. An additional copy is attached and labeled as Exhibit "FDOT-1-1"

2. The improvements to the roadways and intersections requiring implementation due to the buildout of the Viera development have been provided in the application, but the significance of the identified deficiencies, the improvement costs, and corresponding proportionate share calculations for these improvements have not been provided. Without the proportionate share calculations, it is unclear how the improvement costs for the Spyglass Overpass and the 1-95 at Fiske Boulevard/Barnes Boulevard Interchange were calculated, and how the proportionate share of the above mentioned improvements compare against the overpass cost. These improvements are included in the revised Development Order in Condition 92.B. Additionally, no transportation analysis incorporating the Spyglass Overpass was provided, which would indicate to what extent it will relieve Wickham Road.

**RESPONSE: The improvement costs calculation for the proportionate fair share mitigation is provided in Exhibit "FDOT-1-2 PFS". It should be noted that the Developer's calculated proportionate fair share is \$360,283.47 and the Developer's proposed Development Order indicates a mitigation program for Phase 4 of in excess of \$15 Million Dollars. A transportation analysis incorporating the Spyglass Overpass has been provided in response to the later FDOT Comment No. 12.**

3. The Department understands the objective of replacing Monitoring and Modelling with a Transportation Impact Study in Condition 84; however, it should be noted this development is still a Development of Regional Impact. The Department does not agree with the Developer only coordinating with Brevard County regarding the study methodology. In addition to Brevard County, this coordination needs to include City of Rockledge, East Central Florida Regional Planning Council, City of Melbourne, Florida Department of Transportation, and Florida Department of Economic Opportunity.

**RESPONSE: Subsequent to the issuance of these comments, the FDOT reviewed and provided comments on the Methodology. All comments were addressed by the Applicant and appear later in this letter.**

**SET #2 of Comments Received regarding Methodology:**

1. Trip Generation. The Methodology explains in detail how the trip generation, internal capture/community capture, and pass-by capture will be estimated for the portions of the development: (1) Viera East and (2) Viera Central/West. However, there is no explanation regarding how the interaction (i.e., internal capture) between the two components will be considered in the analysis. Please explain how this interaction will be considered in the trip generation estimate.

**RESPONSE: In performing the analysis, we did not take advantage of any interaction between Viera East and Viera Central/West to reduce the number of external trips. Therefore, the external trip generation is very conservative, in that the numbers are higher than they could have been. The result is that we show more external trips on the road than can be expected to actually occur. Internal segment assignments for both Viera East and Viera Central/West were isolated to their geographic area and there was no internal capture between them. The result is that all trips end up as external trips.**

FDOT Follow-up Comment: No further comment.

2. **Community Capture.** According to the Methodology, the community capture percentage for Viera West/Central will be calculated by dividing the cumulative Daily and PM Peak Hour traffic counts collected by the Daily and PM Peak Hour volumes projected for existing development using ITE Trip Generation Rates. While this will provide for an ITE vs. Viera West/Central trip generation including community capture ratio potentially used for this specific case, it should be noted this computation would not provide for a development total trip generation vs. project trip generation after community capture ratio. In order to obtain this, a Viera Central/West trip generation study would need to be performed and compared against the trip generation after community capture.

As noted above, the Department is in general agreement with the proposed methodology for this spacing analysis; however, a comparison to the community capture estimated by the travel demand model needs to be included in the analysis and, if significant differences are found, additional analysis/adjustments to the community capture ratio may become necessary.

**RESPONSE: Viera Central/West represents the vast majority of remaining entitlements, all except for 190,000 square feet of retail in Viera East. This analysis used field collected empirical data (i.e., actual counts) to determine the amount of community capture. A trip generation analysis was conducted for existing development in Viera Central/West and compared to the empirical data collected. Trip generation analyses were conducted using both ITE rates and equations, and ITE rates only, to demonstrate the level of community capture. The model is not calibrated to count for internal capture hence the reason we took the extra step to collect the data.**

**FDOT Follow-up Comment:** The trip generation for Viera Central/West was developed based on three three-day counts collected on Wickham Road, Viera Boulevard, and Stadium Parkway. While this is acceptable, the counts were collected on three different dates. If actual trip/traffic counts are used for the trip generation estimate, these counts need to be collected at the same time. Please revise as necessary.

In addition, please clarify what the development occupancy was at the time of collecting the counts. Also, please indicate if the counts were adjusted by applying Seasonal Factors lower than 1.00 (as it appears was done), in practice, the occupancy level of the development is being modified to a lower percentage. In order to maintain the development occupancy level, please do not adjust the traffic counts used for trip generation purposes using Seasonal Factors lower than 1.00.

Regarding the peak hour, it was identified based on the counts collected on Wickham Road only. The peak hour needs to be determined considering the total trip generation for the site (i.e., combining the three counts) and not just one road. In addition, the counts show that the peak hour for Wickham Road is from 3:30 pm to 4:30 pm; however, the analysis was done based on 4:00 to 5:00 pm. Please revise the peak hour and corresponding peak hour volume as necessary.

Finally, the applicant states that the model is not calibrated to account for internal capture, hence the reason they took the extra step to collect the data; however, no justification supporting this statement is provided. Please include a comparison between the community capture obtained by the applicant vs. the community capture estimated by the travel demand model.

**RESPONSE: The counts have been recollected for the same three day period. The PM Peak Hour has been adjusted based on the average of all three county locations. The methodology**

allows for a seasonal adjustment factor to be used. To address FDOT comments, no seasonal adjustment factor has been used for the collected counts. The result is a 39% PM Peak Hour community capture rate which is the same as was used in the original analysis. If the seasonal adjustment factor is applied to the collected counts, the PM Peak hour community capture rate increases to 41%. The net increase in external trips utilizes all of the requested changes from FDOT related to internal capture for Viera East, the update of Community Capture based on the highest peak hour for all three roads and not using the seasonal adjustment factor for the community capture analysis. Please refer to Exhibits: “ECFRPC-C.d, ECFRPC-C.f, Brevard\_4, Atkins\_7a-d, Atkins 14.”

3. Viera Central/West Internal Roads. The Methodology states ITE Trip Generation rates will be adjusted using collected empirical data, the travel demand model, and origin and destination adjustments. However, there is no description about the nature of these adjustments and how they will be performed. Please provide additional information/clarify the nature of these adjustments and how they will be performed.

**RESPONSE:** In the analysis, we made no adjustments to internal trips other than a 5% mode share. We utilized a worst-case scenario using straight ITE rates (which the community capture analysis indicates are more than 50% higher than collected empirical data). We originally proposed additional adjustments based on several studies, however, County staff asked that we remove all adjustments other than mode share. So, only mode share was used to adjust ITE trip generation rates on the internal roads.

FDOT Follow-up Comment: No further comment.

4. Viera Central/West Internal Roads. A mode share rate is proposed to be applied to internal roads; however, there is no reference regarding the percentage to be applied. While the use of a mode share rate is acceptable, the percentage to be applied needs to be appropriately documented including sources and supporting documentation.

**RESPONSE:** The analysis included a 5% mode share and documentation for this percentage is included in the analysis.

FDOT Follow-up Comment: No further comment.

5. Existing Traffic. Per the requirements of Question 21 – Transportation requirements, the segment analysis needs to be performed for peak hour, directional (both directions, not just peak direction) for all the scenarios being analyzed. Please revise the methodology and analysis as necessary.

**RESPONSE:** As with each of the prior analyses for Viera the analysis was conducted for the PM Peak Hour. A peak directional analysis was not conducted for road segments because the road segments traffic was generally balanced and where a lane was determined to be needed in the peak direction a balancing lane was provided in the other direction.

The intersection analyses did consider all directions of flow.

FDOT Follow-up Comment: The Department reiterates that, according to Question 21, a directional analysis needs to be provided. The two-way analysis shows that there are several roadway segments

that are either close to failure or marginally failing (under Existing, Background, and Future with Project conditions). In situations like these, the directional analysis may show different findings.

Please revise the segment analysis, for all scenarios, to include a directional analysis, at least for segments that are operating at volume-capacity ratios of 0.90 or higher (including failing segments).

**RESPONSE: Directional analyses for both 2029 background and build-out conditions were conducted and there were no changes in the findings. See Exhibits FDOT-2-5a and FDOT-2-5b.**

6. Project Trip Distribution. The Methodology proposed to use the Central Florida Regional Planning Model (CFRPM), Version 5.1. There are newer/updated versions of the model available (e.g., CFRPM v6.1). Please update the Methodology and analysis to use the latest version of the adopted travel demand model.

**RESPONSE: We began methodology discussions before the model was released and we had already begun portions of the analysis. The County agreed that it would be acceptable to utilize 5.1. The applicant cannot agree to this request as this would result in a complete revision of all work to date.**

FDOT Follow-up Comment: No further comment.

7. Analysis Procedure Segments. Please refer to comment #5 above.

**RESPONSE: As with each of the prior analyses for Viera the analysis was conducted for the PM Peak Hour. A peak directional analysis was completed for road segments because the road segments traffic was generally balanced and where a lane was determined to be needed in the peak direction a balancing lane was provided in the other direction.**

FDOT Follow-up Comment: Please refer to our follow-up comment #5.

**RESPONSE: See response under FDOT Comment No. 5.**

8. Analysis Procedure Intersections. Viera DRI currently includes a significant amount of residential development and the next phase will add more residential land uses. Therefore, in addition to the PM Peak Hour intersection analysis, an AM Peak Hour intersection analysis needs to be performed at (1) locations where 100 or more right turning vehicles per hour occur and (2) failing locations where intersection improvements are identified. Please revise the methodology and analysis to include intersection AM Peak Hour analysis as necessary.

**RESPONSE: The use of the PM Peak Hour is appropriate and an AM Peak Hour analysis has never been provided for this DRI and in our opinion is not necessary. The existing DRI development order does not include any reference to AM analysis or AM improvements. However, in the analysis the lane calls were always balanced, when needed, to account for the AM Peak Hour mitigation needs in conformance with the PM Peak Hour mitigation needs. For example, if the model showed 3 lanes in one direction and 2 in the other during the PM**

**Peak Hour, we showed that 3 were needed in both directions. It should be noted that there were minimal off-site mitigation needs due to the generation increase of Phase 4 relative to the number of trips mitigated through the end of Phase 3.**

FDOT Follow-up Comment: Identified improvements at intersections include additional through, right, and left turn lanes. In many cases, the additional lanes are just for one direction (e.g., eastbound through lane), coinciding with the PM Peak Hour direction. Additional improvements may be needed in the opposite direction during the AM Peak Hour, when the peak traffic travels in the opposite direction. Please, at a minimum, include intersection analyses for the AM Peak Hour at intersections where improvements are identified.

**RESPONSE: Opposite direction through lanes were recommended to balance roadway geometry. AM peak-hour analysis has not previously been required or provided for the Viera DRI, to the knowledge of the Applicant's traffic engineer.**

9. Growth Rates. The proposed methodology to calculate growth rates is to compare background traffic from the model against existing traffic counts. This methodology does not take into consideration how the model "validated" on each segment. The growth rates need to be analyzed on a segment-by-segment basis and the growth rate obtained directly from the model (base year model volume against future background model volume) needs to be computed and included in the analysis for consideration (along with historical trends). An explanation for each growth rate needs to be provided as part of the background volume projections for review.

**RESPONSE: We did not use the comparison between ground counts and model projections. This was originally done and the County wanted us to use a 2% minimum growth rate. In the appendices we show the growth by the model but applied a minimum of 2% if it was less than 2% and used what the model showed if it was more. This information is shown in 21.D.2. on page 61 of the original application materials. Further, we did not compare to trends because this area of the County is mostly built out with the exception of the DRI.**

FDOT Follow-up Comment: According to page 59 of the NOPC, growth rates for background traffic are presented in Appendix 21.D.2. However, this Appendix only documents the growth rates at intersections, without documenting roadway segment growth rate computations. Please note that roadway segment growth rates need to be obtained and these should be used for intersection approaches, rather than computing an overall intersection growth rate.

In addition, and as noted in the response above, there are several areas of the County that are mostly built-out; therefore, the use of a minimum 2 percent may be too high.

Please update the analysis to include segment growth rates obtained from the model and an explanation for each growth rate used in the analysis. In many cases, the use of a minimum 2 percent may not be appropriate. In addition, please revise the intersection volumes forecast as appropriate.

**RESPONSE: As requested, model growth rates were applied to the segments on a directional basis (see response to Comment No. 5, above). Where negative growth rates were calculated, no growth was assumed. The only exception was on Pineda Causeway between I-95 and US 1 as this segment did not exist in the base year model. A 1.5% growth rate per year was assumed on this segment.**

10. Programmed Roadway Improvements. The Methodology states "..., improvements that were previously identified as being mitigated for, by the Viera DRI will be considered for future conditions analysis." This statement needs to be clarified as it is not clear what "improvements that were...mitigated for" means and how these mitigation measures are going to be considered in the analysis. For example, a specific improvement may have been identified and proportionate share paid for it; however, the proportionate share computation would be based on the previous phases and not on the current phase being analyzed. Please clarify.

**RESPONSE:** We have taken a conservative approach in looking at all required improvements for buildout regardless of whether a "need" was previously mitigated, that is, we erred on the side of showing an improvement as needed. In reviewing needs with this study, if the existing plus background caused the failure, the failure was not considered to be a mitigation requirement of this Phase of Viera as set forth under Florida law. However, if new trips caused the required improvement, we are showing these as required improvements even if the need for such improvement may have been mitigated as part of the prior analysis conducted through the end of Phase 3. This was done, in part, because the current Development Order does not list individual failures and required improvements, but, rather a mitigation program in excess of that which was required of the Developer. We did consider pipelined improvements, which were made or are to be made, as committed improvements.

FDOT Follow-up Comment: No further comment.

11. Background Improvements. Improvements to be identified to mitigate background conditions need to follow a logical progression as part of the identification process. For example, before deciding to widen a roadway segment, other options need to be explored first (optimized signal timings, changes in signal phasing, additional turn lanes/intersection specific improvements, etc.).

**RESPONSE:** This was done and has been demonstrated in the analysis.

FDOT Follow-up Comment: Two different type of background improvements were identified in the NOPC:

- Intersection Improvements: While HCS output printouts were included in the NOPC, no input printouts or analysis files were provided. Therefore, it is not possible to perform a complete review of the intersection analyses to confirm the study findings. Please provide the analysis files in digital format so a complete review can be performed.
- Roadway Segments (i.e., road widenings): The need for widening was identified solely on the use of FDOT's Generalized Service Volume Tables. Intersection improvements can significantly impact the delay, and corresponding travel time, along a roadway segment, thus directly impacting the segment LOS. FDOT's Generalized Service Volume Tables provide for a good screening tool to identify if additional (i.e., more detailed) analysis is needed. Before identifying a segment is deficient, a detailed arterial analysis needs to be performed (using the latest version of ArtPlan, HCM 2010 methodology, etc.) that takes into consideration segment-specific characteristics and intersection geometries (including identified intersection improvements).

Please revise the analysis as necessary.

**RESPONSE:** Intersection HCS files for the original analyses were provided to FDOT in electronic format and have now been distributed to the reviewer.

A directional analysis was provided using D-factors and DRI peak-hour directional splits and no new segments were required due to DRI traffic (see response to FDOT Comment No. 5). Where volumes were less than or equal to 10% over capacity on arterial roads and collectors, the need for widening was eliminated as it was assumed that at least a 10% capacity increase could be obtained through traffic operational improvements.

12. Mitigation. The Methodology states the proportionate share sum shall be spread across one or more recommended improvements subject to Brevard County approval. In addition to Brevard County, the City of Rockledge, the City of Melbourne, and the East Central Florida Regional Planning Council, and the Florida Department of Transportation need to be included in the decision process to identify if/what projects will be pipelined.

**RESPONSE:** This is done as a part of the NOPC review and consideration of the proposed Development Order by all reviewing agencies. It is for this reason we did not include the proportionate share calculations as we felt we needed acceptance of the proposed pipelined improvements from all reviewing agencies first.

FDOT Follow-up Comment: The Department understands that the decision of pipelining an improvement and, if this is the case, what improvements are being pipelined as part of the NOPC; however, the Methodology only listed Brevard County as the one to approve this. The Department reiterates that, in addition to Brevard County, the City of Rockledge, the City of Melbourne, and the East Central Florida Regional Planning Council, the Florida Department of Transportation needs to be included in the decision process to identify if/what projects will be pipelined.

**RESPONSE:** As noted in the above prior response, the Applicant agrees that all parties should provide their comments on the application and the recommended pipelined improvements.

The application contains a recommended mitigation for the projected over-capacity condition on Wickham Road between Lake Andrew Drive and Murrell Road. This mitigation is the construction of the Spyglass Overpass between Lake Andrew Drive and Murrell Road. The right of way has been set aside and The Viera Company planned the area around the future roadway accordingly (i.e. no residential lots fronting the road). FDOT requested a model run to confirm that the proposed mitigation would alleviate this projected over-capacity condition as predicted by the Central Florida Regional Planning Model (CFRPM) used in the analysis. As requested, the Spyglass Overpass was modeled as a four-lane divided minor arterial and the model was re-run. The resultant diversion of traffic to the Spyglass Overpass was over 27,000 vehicles per day (see Exhibits FDOT-2-12a and FDOT-2-12b, attached). Most of the diverted trips originated from Wickham Road for which an estimated buildout traffic reduction of over 19% was observed west of I-95 while a reduction of 28% was observed east of I-95. The resultant reduced volume will not exceed the recently constructed six-lane daily capacity of Wickham Road of 59,900. A shape file with the model results for each model run is included on the accompanying flash drive.

Based on linear growth, using a 2016 daily count of 35,649 and a build-out volume (2029) of 80,001, the year that the six-lane capacity (59,900) is exceeded is 2023. This would suggest that the initial two-lane overpass would be needed then, and the four-lane overpass would be needed by 2026 (half-way in between 2023 and 2029). The applicant's draft Development Order proposes the improvement to be designed, constructed and completed based on traffic counts for Wickham Road maintained by the Space Coast Transportation Planning Organization. This will allow all parties to more accurately determine the appropriate time as the projected dates do not take into account changes in market conditions or potential economic downturns which directly relate to future traffic volume.

The applicant's draft Development Order also proposes a contribution to the FDOT's efforts relative to the I-95 and Fiske Boulevard improvements.

It should be noted that the Developer's calculated proportionate fair share is \$360,283.47 and the Developer's proposed Development Order indicates a mitigation program for Phase 4 in excess of \$15 Million Dollars.

13. Proportionate Share Analysis. The Methodology to compute the proportionate share contribution proposes to use available future roadway capacity from all significant roadways after all backlogged improvements have been identified. It should be noted pursuant to F.S. 163.3180(5)(h)2.a., the proportionate share shall be calculated based upon the number of trips from the proposed development expected to reach roadways during the peak hour from the stage or phase being approved. Therefore, the proportionate share shall be computed based on all the project trips on that facility and not just the ones that cause the facility to exceed its corresponding service capacity.

**RESPONSE:** Upon review of the statutes, the administrative rules and the approved methodology, we agree that the methodology did not accurately reflect the formula to be applied. We agree to this change and will prepare the calculations as noted above.

FDOT Follow-up Comment: No further comment.

**SET# 3 of Comments Received:**

14. Viera East Internal Capture. Several land uses (Mission Bay Apartments, Lakes at Viera, The Greens, etc.) were included in multiple residential-office and residential-retail internal capture computations. This could potentially result in double counting the internal capture for these land uses. While it is acceptable to include all the appropriate office or retail development in the Internal Capture computation, it needs to be considered all at once and then, the corresponding internal capture for each portion of the office or retail land use can be determined proportionally.

Please revise the Internal Capture computation so these duplicates are removed.

**RESPONSE:** The Internal Capture analysis has been updated. Please refer to the following Exhibits:

**Atkins -7a-VieraEast\_Daily\_InternalCapture\_Buildout**

**Atkins -7b-VieraEast\_Daily\_InternalCapture\_Phase1\_3**

**Atkins-7c-VieraEast\_PMPeak\_InternalCapture\_Buildout**

**Atkins-7d-VieraEast\_PMPeak\_InternalCapture\_Phase1\_3**

15. Viera DRI Net External Trips at Build-Out. The analysis was performed based on the Net External Trips. These trips were added to the roadway network and intersection. While these trips represent the difference in the number of trips between Viera DRI Build-Out Total and the Current DO Mitigation, there are trips corresponding to previously approved but not yet built portions of Viera DRI that were not accounted for in the analysis. Please revise the analysis to account for previously approved but not yet built portions of Viera DRI.

**RESPONSE** As requested by FDOT, the trips corresponding to previously approved but not yet built portions of the Viera DRI have now been separately added to the road network as background trip, in addition to background trips based on model growth rates. The revised analysis presented above in response to Comment No. 5 includes these trips.

16. Intersection Level of Service Standard. Please clarify how failure was defined when analyzing intersections. Was it by LOS, volume-to-capacity ratio, by movement, by approach, overall intersection, or something else?

**RESPONSE:** Failure was identified by overall LOS for intersections and by volumes exceeding Brevard County's Maximum Acceptable Volume (MAV) at the adopted road segment LOS.

17. Development Order. The Department has conducted a preliminary review of the Draft Development Order included in the NOPC and offer the comments below. Please note that these comments are preliminary comments and additional comments may arise after the analysis is completed and the Draft Development Order is updated.

- a. Page 137 – Condition 92.B: Spyglass Overpass and I-95 at Fiske Boulevard improvements are listed as pipeline improvements. Please refer to Comment #12 above.

**RESPONSE:** Please refer to the response to Comment #12.

- b. Page 174 – Exhibit 5 - Transportation Equivalency Matrix: The matrix does not include minimums and maximums. These need to be included so the Community Capture percentage used in the analysis reflects future development and corresponding capture of trips.

**RESPONSE:** As discussed with Brevard County, additional methods of evaluation have been added to Condition 89 and Condition 4. These methods include the ability of Brevard County to review the development mix and percentage of land devoted to each land use during each Biennial Report as well as including a requirement for additional analysis and confirmation of assumed Community Capture percentage with a request to increase residential

**development by more than 10%, cumulatively. Please refer to Pages 95, 96 and 134, Revised Development Order.**

18. General Comment. Please make sure that all analysis files are provided in digital format for review.

**RESPONSE: Acknowledged.**

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**ECFRPC-a-2016 Biennial Report**

**Development Summary**

Land Use	Development Summary (DU/Sq.ft.)			
	Approved in D.O. (Note 1)	C.O.s Years (Note 2)	Cumulative C.O.s (Note 3)	Coming Years (Note 4)
Residential (units)	31,619	1,385	9,965	800
Office Development (s.f.)	3,169,961	21,362	1,295,195	100,000
Hospital, Health Clinic (beds and s.f.)				
VA Clinic (s.f.)	137,500	0	137,500	0
Hospital Beds	322	0	100	0
ACLF Nursing Home (beds)	1,060	0	510(*)	202
Industrial Plants or Parks, Distribution, Warehousing or Wholesaling Facilities				
Office/Warehouse (s.f.)	302,518	0	107,656 (*)	0
Light Industrial (s.f.)	22,500	0	22,418	0
Light Industrial (s.f.)	280,018	0	85238 (*)	87,000
Retail and Service Development (s.f.)	3,438,127	37,112	1,639,644	100,000
Hotel or Motel Development (rooms)	1,008	0	0	116
Attractions and Recreation Facilities				
Stadium (seats)	7,500	0	7,500	0
Theaters (screens/seats)**	16 screens 3,600 seats	0	16 screens 3,600 seats	0
Golf Course	72 holes	0	36	0

(1) Approved land uses in terms of square footage, dwelling units, rooms or other appropriate measure.

(2) Certificates of Occupancy from July 1, 2014 to June 30, 2016.

(3) Certificates of Occupancy since original Development Order approval, including Column 2, in terms of square footage, etc.

(4) Development program anticipated from July 1, 2016 to June 30, 2018, in terms of square footage, etc.

(\*) Figure updated to correct cumulative Certificates of Occupancy since the original approval of the Development Order

Reporting Period for purposes of this chart: July 1, 2014 to June 30, 2016

## Viera Central/West - Traffic Counts

### Day 1 - 4/25/17

Starting Time	Wickham Road	Viera Boulevard	Stadium Parkway	Total	Hourly Volume
3:30	737	373	340	1,450	5,960
3:45	687	455	356	1,498	5,926
4:00	715	408	346	1,469	6,022
4:15	731	420	392	1,543	6,051
4:30	677	370	369	1,416	6,065
4:45	740	430	424	1,594	6,110
5:00	728	406	364	1,498	5,900
5:15	724	424	409	1,557	5,791
5:30	670	432	359	1,461	
5:45	675	417	292	1,384	
6:00	690	391	308	1,389	
<b>Peak Hour Volume (from 4:45 pm to 5:45 pm):</b>					<b>6,110</b>

### Day 2 - 4/26/17

Starting Time	Wickham Road	Viera Boulevard	Stadium Parkway	Total	Hourly Volume
3:30	705	355	376	1,436	5,563
3:45	658	324	342	1,324	5,514
4:00	686	305	337	1,328	5,775
4:15	702	370	403	1,475	5,902
4:30	652	382	353	1,387	5,985
4:45	712	433	440	1,585	6,045
5:00	699	379	377	1,455	5,795
5:15	696	471	391	1,558	5,676
5:30	644	420	383	1,447	
5:45	646	387	302	1,335	
6:00	662	411	263	1,336	
<b>Peak Hour Volume (from 4:45 pm to 5:45 pm):</b>					<b>6,045</b>

**Day 3 - 4/27/17**

Starting Time	Wickham Road	Viera Boulevard	Stadium Parkway	Total	Hourly Volume
3:30	677	343	342	1,362	5,622
3:45	631	445	343	1,419	5,656
4:00	657	369	347	1,373	5,733
4:15	672	399	397	1,468	5,779
4:30	622	401	373	1,396	5,800
4:45	679	385	432	1,496	5,825
5:00	669	372	378	1,419	5,691
5:15	666	413	410	1,489	5,550
5:30	616	422	383	1,421	
5:45	621	423	318	1,362	
6:00	634	377	267	1,278	
<b>Peak Hour Volume (from 4:45 pm to 5:45 pm):</b>					<b>5,825</b>

DE TRAFFIC  
VOLUME SUMMARY  
Tue 4/25/2017

Machine #: Wickham  
Site ID: Wickham  
Description: Wickham Rd, west of I-95

File: 95.prn  
Street Name: Wickham Rd  
County: Brevard

TIME	1 EAST	2 WEST	Total
01:00	59	36	95
02:00	28	20	48
03:00	21	17	38
04:00	22	42	64
05:00	31	91	122
06:00	126	225	351
07:00	389	777	1166
08:00	876	1617	2493
09:00	849	1315	2164
10:00	924	1225	2149
11:00	992	1245	2237
12:00	1277	1411	2688
13:00	1313	1406	2719
14:00	1313	1451	2764
15:00	1471	1303	2774
16:00	1581	1254	2835
17:00	1551	1325	2876
18:00	1367	1392	2759
19:00	1189	1111	2300
20:00	982	726	1708
21:00	707	444	1151
22:00	494	269	763
23:00	284	193	477
24:00	228	131	359
DAY TOTAL	18074	19026	37100
PERCENTS	48.8%	51.2%	100%
AM Times	11:15	07:30	
AM Peaks	1277	1656	
PM Times	15:30	13:00	
PM Peaks	1608	1517	

DE TRAFFIC  
VOLUME SUMMARY  
Wed 4/26/2017

Machine #: Wickham  
Site ID: Wickham  
Description: Wickham Rd, west of I-95

File: 95.prn  
Street Name: Wickham Rd  
County: Brevard

TIME	1 EAST	2 WEST	Total
01:00	44	32	76
02:00	27	34	61
03:00	20	33	53
04:00	19	42	61
05:00	21	89	110
06:00	112	221	333
07:00	370	746	1116
08:00	840	1552	2392
09:00	813	1263	2076
10:00	884	1176	2060
11:00	954	1195	2149
12:00	1224	1352	2576
13:00	1262	1350	2612
14:00	1259	1392	2651
15:00	1412	1254	2666
16:00	1518	1202	2720
17:00	1491	1274	2765
18:00	1311	1337	2648
19:00	1137	1066	2203
20:00	943	697	1640
21:00	678	422	1100
22:00	470	257	727
23:00	272	181	453
24:00	217	121	338
DAY TOTAL	17298	18288	35586
PERCENTS	48.7%	51.3%	100%
AM Times	11:15	07:30	
AM Peaks	1224	1590	
PM Times	15:30	13:00	
PM Peaks	1543	1457	

DE TRAFFIC  
 VOLUME SUMMARY  
 Thu 4/27/2017

Machine #: Wickham  
 Site ID: Wickham  
 Description: Wickham Rd, west of I-95

File: 95.prn  
 Street Name: Wickham Rd  
 County: Brevard

TIME	1 EAST	2 WEST	Total
01:00	83	54	137
02:00	49	58	107
03:00	34	32	66
04:00	36	37	73
05:00	56	83	139
06:00	105	206	311
07:00	357	716	1073
08:00	806	1486	2292
09:00	779	1208	1987
10:00	847	1125	1972
11:00	911	1145	2056
12:00	1174	1297	2471
13:00	1207	1292	2499
14:00	1206	1334	2540
15:00	1353	1197	2550
16:00	1453	1152	2605
17:00	1426	1216	2642
18:00	1257	1280	2537
19:00	1091	1021	2112
20:00	900	667	1567
21:00	650	408	1058
22:00	455	247	702
23:00	262	176	438
24:00	208	119	327
DAY TOTAL	16705	17556	34261
PERCENTS	48.8%	51.2%	100%
AM Times	11:15	07:30	
AM Peaks	1174	1522	
PM Times	15:30	13:00	
PM Peaks	1479	1394	

DE TRAFFIC  
VOLUME SUMMARY  
Tue 4/25/2017

Machine #: Wickham  
Site ID: Wickham  
Description: Wickham Rd, west of I-95

File: 95.prn  
Street Name: Wickham Rd  
County: Brevard

TIME	1 EAST	2 WEST	Total
00:15	16	9	25
00:30	15	7	22
00:45	16	13	29
01:00	12	7	19
Hour Total	59	36	95
01:15	7	6	13
01:30	5	5	10
01:45	8	4	12
02:00	8	5	13
Hour Total	28	20	48
02:15	11	2	13
02:30	2	6	8
02:45	3	4	7
03:00	5	5	10
Hour Total	21	17	38
03:15	5	8	13
03:30	4	12	16
03:45	6	10	16
04:00	7	12	19
Hour Total	22	42	64
04:15	6	16	22
04:30	9	20	29
04:45	11	30	41
05:00	5	25	30
Hour Total	31	91	122
05:15	16	37	53
05:30	20	47	67
05:45	37	68	105
06:00	53	73	126
Hour Total	126	225	351
06:15	50	128	184
06:30	92	160	252
06:45	98	221	319
07:00	143	268	411
Hour Total	389	777	1166
07:15	180	374	554
07:30	231	398	629
07:45	242	456	698
08:00	223	389	612
Hour Total	876	1617	2493
08:15	223	413	636
08:30	209	330	539
08:45	230	321	551

DE TRAFFIC  
VOLUME SUMMARY  
Tue 4/25/2017

Machine #: Wickham  
Site ID: Wickham  
Description: Wickham Rd, west of I-95

File: 95.prn  
Street Name: Wickham Rd  
County: Brevard

TIME	1 EAST	2 WEST	Total
09:00	187	251	438
Hour Total	849	1315	2164
09:15	206	316	522
09:30	200	316	516
09:45	251	321	572
10:00	267	272	539
Hour Total	924	1225	2149
10:15	214	323	537
10:30	251	313	564
10:45	259	298	557
11:00	268	311	579
Hour Total	992	1245	2237
11:15	285	321	606
11:30	315	343	658
11:45	321	377	698
12:00	356	370	726
Hour Total	1277	1411	2688
12:15	360	395	755
12:30	343	312	655
12:45	336	312	648
13:00	274	387	661
Hour Total	1313	1406	2719
13:15	301	413	714
13:30	321	343	664
13:45	342	374	716
14:00	349	321	670
Hour Total	1313	1451	2764
14:15	351	348	699
14:30	379	312	691
14:45	380	332	712
15:00	361	311	672
Hour Total	1471	1303	2774
15:15	356	340	696
15:30	425	312	737
15:45	383	304	687
16:00	417	298	715
Hour Total	1581	1254	2835
16:15	383	348	731
16:30	366	311	677
16:45	389	351	740
17:00	413	315	728
Hour Total	1551	1325	2876

DE TRAFFIC  
VOLUME SUMMARY  
Tue 4/25/2017

Machine #: Wickham  
Site ID: Wickham  
Description: Wickham Rd, west of I-95

File: 95.prn  
Street Name: Wickham Rd  
County: Brevard

TIME	1 EAST	2 WEST	Total
17:15	413	311	724
17:30	340	330	670
17:45	298	377	675
18:00	316	374	690
Hour Total	1367	1392	2759
18:15	298	326	624
18:30	315	312	627
18:45	288	249	537
19:00	288	224	512
Hour Total	1189	1111	2300
19:15	251	229	480
19:30	257	174	431
19:45	244	164	408
20:00	230	159	389
Hour Total	982	726	1708
20:15	205	129	334
20:30	156	114	270
20:45	169	112	281
21:00	177	89	266
Hour Total	707	444	1151
21:15	159	76	235
21:30	119	76	195
21:45	112	68	180
22:00	104	49	153
Hour Total	494	269	763
22:15	76	48	124
22:30	85	56	141
22:45	56	49	105
23:00	67	40	107
Hour Total	284	193	477
23:15	76	51	127
23:30	67	38	105
23:45	44	22	66
24:00	41	20	61
Hour Total	228	131	359
DAY TOTAL	18074	19026	37100
PERCENTS	48.8%	51.2%	100%
AM Times	11:15	07:30	
AM Peaks	1277	1656	
PM Times	15:30	13:00	
PM Peaks	1608	1517	

DE TRAFFIC  
VOLUME SUMMARY  
Wed 4/26/2017

Machine #: Wickham  
Site ID: Wickham  
Description: Wickham Rd, west of I-95

File: 95.prn  
Street Name: Wickham Rd  
County: Brevard

TIME	1 EAST	2 WEST	Total
00:15	19	9	28
00:30	9	8	17
00:45	8	7	15
01:00	8	8	16
Hour Total	44	32	76
01:15	7	10	17
01:30	9	9	18
01:45	7	8	15
02:00	4	7	11
Hour Total	27	34	61
02:15	4	8	12
02:30	5	8	13
02:45	5	9	14
03:00	6	8	14
Hour Total	20	33	53
03:15	5	8	13
03:30	5	8	13
03:45	4	11	15
04:00	5	15	20
Hour Total	19	42	61
04:15	6	16	22
04:30	5	15	20
04:45	4	24	28
05:00	6	34	40
Hour Total	21	89	110
05:15	9	42	51
05:30	16	44	60
05:45	37	65	102
06:00	50	70	120
Hour Total	112	221	333
06:15	53	122	175
06:30	88	153	241
06:45	93	212	305
07:00	136	259	395
Hour Total	370	746	1116
07:15	173	359	532
07:30	222	381	603
07:45	232	438	670
08:00	213	374	587
Hour Total	840	1552	2392
08:15	213	397	610
08:30	200	318	518
08:45	221	307	528

DE TRAFFIC  
VOLUME SUMMARY  
Wed 4/26/2017

Machine #: Wickham  
Site ID: Wickham  
Description: Wickham Rd, west of I-95

File: 95.prn  
Street Name: Wickham Rd  
County: Brevard

TIME	1 EAST	2 WEST	Total
09:00	179	241	420
Hour Total	813	1263	2076
09:15	196	303	499
09:30	190	303	493
09:45	241	307	548
10:00	257	263	520
Hour Total	884	1176	2060
10:15	205	310	515
10:30	241	301	542
10:45	249	285	534
11:00	259	299	558
Hour Total	954	1195	2149
11:15	272	307	579
11:30	302	329	631
11:45	308	361	669
12:00	342	355	697
Hour Total	1224	1352	2576
12:15	347	378	725
12:30	329	300	629
12:45	322	300	622
13:00	264	372	636
Hour Total	1262	1350	2612
13:15	288	397	685
13:30	307	329	636
13:45	328	359	687
14:00	336	307	643
Hour Total	1259	1392	2651
14:15	338	335	673
14:30	363	300	663
14:45	364	320	684
15:00	347	299	646
Hour Total	1412	1254	2666
15:15	342	326	668
15:30	408	300	708
15:45	367	291	658
16:00	401	285	686
Hour Total	1518	1202	2720
16:15	367	335	702
16:30	353	299	652
16:45	374	338	712
17:00	397	302	699
Hour Total	1491	1274	2765

DE TRAFFIC  
VOLUME SUMMARY  
Wed 4/26/2017

Machine #: Wickham  
Site ID: Wickham  
Description: Wickham Rd, west of I-95

File: 95.prn  
Street Name: Wickham Rd  
County: Brevard

TIME	1 EAST	2 WEST	Total
17:15	397	299	696
17:30	326	318	644
17:45	285	361	646
18:00	303	359	662
Hour Total	1311	1337	2648
18:15	285	313	598
18:30	302	300	602
18:45	275	239	514
19:00	275	214	489
Hour Total	1137	1066	2203
19:15	241	219	460
19:30	247	168	415
19:45	234	158	392
20:00	221	152	373
Hour Total	943	697	1640
20:15	195	123	318
20:30	151	108	259
20:45	162	106	268
21:00	170	85	255
Hour Total	678	422	1100
21:15	152	73	225
21:30	113	73	186
21:45	106	65	171
22:00	99	46	145
Hour Total	470	257	727
22:15	73	45	118
22:30	81	53	134
22:45	54	46	100
23:00	64	37	101
Hour Total	272	181	453
23:15	74	48	122
23:30	64	35	99
23:45	41	20	61
24:00	38	18	56
Hour Total	217	121	338
DAY TOTAL	17298	18288	35586
PERCENTS	48.7%	51.3%	100%
AM Times	11:15	07:30	
AM Peaks	1224	1590	
PM Times	15:30	13:00	
PM Peaks	1543	1457	

DE TRAFFIC  
VOLUME SUMMARY  
Thu 4/27/2017

Machine #: Wickham  
Site ID: Wickham  
Description: Wickham Rd, west of I-95

File: 95.prn  
Street Name: Wickham Rd  
County: Brevard

TIME	1 EAST	2 WEST	Total
00:15	16	10	26
00:30	24	13	37
00:45	26	15	41
01:00	17	16	33
Hour Total	83	54	137
01:15	19	18	37
01:30	10	19	29
01:45	9	11	20
02:00	11	10	21
Hour Total	49	58	107
02:15	10	9	19
02:30	9	8	17
02:45	8	7	15
03:00	7	8	15
Hour Total	34	32	66
03:15	8	7	15
03:30	8	8	16
03:45	9	10	19
04:00	11	12	23
Hour Total	36	37	73
04:15	15	15	30
04:30	13	18	31
04:45	13	27	40
05:00	15	23	38
Hour Total	56	83	139
05:15	13	34	47
05:30	14	42	56
05:45	27	63	90
06:00	51	67	118
Hour Total	105	206	311
06:15	52	110	170
06:30	84	147	231
06:45	90	204	294
07:00	131	247	378
Hour Total	357	716	1073
07:15	166	344	510
07:30	212	366	578
07:45	223	419	642
08:00	205	357	562
Hour Total	806	1486	2292
08:15	205	380	585
08:30	192	303	495
08:45	211	295	506

DE TRAFFIC  
VOLUME SUMMARY  
Thu 4/27/2017

Machine #: Wickham  
Site ID: Wickham  
Description: Wickham Rd, west of I-95

File: 95.prn  
Street Name: Wickham Rd  
County: Brevard

TIME	1 EAST	2 WEST	Total
09:00	171	230	401
Hour Total	779	1208	1987
09:15	188	290	478
09:30	183	290	473
09:45	230	295	525
10:00	246	250	496
Hour Total	847	1125	1972
10:15	196	297	493
10:30	230	288	518
10:45	238	274	512
11:00	247	286	533
Hour Total	911	1145	2056
11:15	262	295	557
11:30	289	315	604
11:45	296	347	643
12:00	327	340	667
Hour Total	1174	1297	2471
12:15	331	363	694
12:30	315	287	602
12:45	309	287	596
13:00	252	355	607
Hour Total	1207	1292	2499
13:15	276	380	656
13:30	295	315	610
13:45	315	344	659
14:00	320	295	615
Hour Total	1206	1334	2540
14:15	322	319	641
14:30	349	287	636
14:45	350	305	655
15:00	332	286	618
Hour Total	1353	1197	2550
15:15	327	313	640
15:30	390	287	677
15:45	353	278	631
16:00	383	274	657
Hour Total	1453	1152	2605
16:15	353	319	672
16:30	336	286	622
16:45	357	322	679
17:00	380	289	669
Hour Total	1426	1216	2642

DE TRAFFIC  
VOLUME SUMMARY  
Thu 4/27/2017

Machine #: Wickham  
Site ID: Wickham  
Description: Wickham Rd, west of I-95

File: 95.prn  
Street Name: Wickham Rd  
County: Brevard

TIME	1 EAST	2 WEST	Total
17:15	380	286	666
17:30	313	303	616
17:45	274	347	621
18:00	290	344	634
Hour Total	1257	1280	2537
18:15	274	300	574
18:30	289	287	576
18:45	264	228	492
19:00	264	206	470
Hour Total	1091	1021	2112
19:15	230	210	440
19:30	236	160	396
19:45	223	151	374
20:00	211	146	357
Hour Total	900	667	1567
20:15	187	118	305
20:30	144	105	249
20:45	156	104	260
21:00	163	81	244
Hour Total	650	408	1058
21:15	146	70	216
21:30	110	70	180
21:45	104	63	167
22:00	95	44	139
Hour Total	455	247	702
22:15	70	43	113
22:30	78	52	130
22:45	52	44	96
23:00	62	37	99
Hour Total	262	176	438
23:15	70	46	116
23:30	62	35	97
23:45	39	20	59
24:00	37	18	55
Hour Total	208	119	327
DAY TOTAL	16705	17556	34261
PERCENTS	48.8%	51.2%	100%
AM Times	11:15	07:30	
AM Peaks	1174	1522	
PM Times	15:30	13:00	
PM Peaks	1479	1394	

DE TRAFFIC  
 VOLUME SUMMARY  
 Tue 4/25/2017

Machine #: Viera Blvd  
 Site ID: Viera Blvd  
 Description: Viera Blvd, between Stadium Park & I-95

File: Blvd.prn  
 Street Name: Viera Blvd, between  
 County: Brevard

TIME	1 EAST	2 WEST	Total
01:00	24	19	43
02:00	9	3	12
03:00	3	5	8
04:00	7	10	17
05:00	19	36	55
06:00	51	78	129
07:00	204	270	474
08:00	674	917	1591
09:00	680	732	1412
10:00	443	479	922
11:00	479	489	968
12:00	535	495	1030
13:00	561	575	1136
14:00	560	528	1088
15:00	672	601	1273
16:00	945	624	1569
17:00	851	775	1626
18:00	813	851	1664
19:00	596	549	1145
20:00	439	359	798
21:00	350	288	638
22:00	244	128	372
23:00	98	86	184
24:00	48	24	72
DAY TOTAL	9305	8921	18226
PERCENTS	51.1%	48.9%	100%
AM Times	08:00	07:30	
AM Peaks	780	956	
PM Times	15:30	17:00	
PM Peaks	988	857	

DE TRAFFIC  
VOLUME SUMMARY  
Wed 4/26/2017

Machine #: Viera Blvd  
Site ID: Viera Blvd  
Description: Viera Blvd, between Stadium Park & I-95

File: Blvd.prn  
Street Name: Viera Blvd, between  
County: Brevard

TIME	1 EAST	2 WEST	Total
01:00	24	14	38
02:00	9	8	17
03:00	5	10	15
04:00	7	12	19
05:00	24	31	55
06:00	37	86	123
07:00	201	243	444
08:00	641	939	1580
09:00	688	677	1365
10:00	430	495	925
11:00	433	463	896
12:00	591	522	1113
13:00	642	664	1306
14:00	650	615	1265
15:00	811	608	1419
16:00	745	611	1356
17:00	821	743	1564
18:00	783	906	1689
19:00	614	568	1182
20:00	511	407	918
21:00	436	264	700
22:00	204	139	343
23:00	91	74	165
24:00	50	30	80
DAY TOTAL	9448	9129	18577
PERCENTS	50.9%	49.1%	100%
AM Times	07:45	07:30	
AM Peaks	781	977	
PM Times	14:30	17:15	
PM Peaks	871	906	

DE TRAFFIC  
VOLUME SUMMARY  
Thu 4/27/2017

Machine #: Viera Blvd  
Site ID: Viera Blvd  
Description: Viera Blvd, between Stadium Park & I-95

File: Blvd.prn  
Street Name: Viera Blvd, between  
County: Brevard

TIME	1 EAST	2 WEST	Total
01:00	39	24	63
02:00	17	6	23
03:00	6	4	10
04:00	8	12	20
05:00	29	37	66
06:00	40	85	125
07:00	179	256	435
08:00	628	888	1516
09:00	678	762	1440
10:00	437	478	915
11:00	459	504	963
12:00	581	555	1136
13:00	587	570	1157
14:00	581	593	1174
15:00	725	576	1301
16:00	890	622	1512
17:00	863	694	1557
18:00	748	887	1635
19:00	576	606	1182
20:00	532	458	990
21:00	398	294	692
22:00	262	174	436
23:00	168	88	256
24:00	62	43	105
DAY TOTAL	9493	9216	18709
PERCENTS	50.8%	49.2%	100%
AM Times	08:00	07:45	
AM Peaks	765	1000	
PM Times	15:45	17:15	
PM Peaks	991	887	

DE TRAFFIC  
VOLUME SUMMARY  
Tue 4/25/2017

Machine #: Viera Blvd  
Site ID: Viera Blvd  
Description: Viera Blvd, between Stadium Park & I-95

File: Blvd.prn  
Street Name: Viera Blvd, between  
County: Brevard

TIME	1 EAST	2 WEST	Total
00:15	4	5	9
00:30	8	9	17
00:45	8	1	9
01:00	4	4	8
Hour Total	24	19	43
01:15	2	1	3
01:30	3	0	3
01:45	1	2	3
02:00	3	0	3
Hour Total	9	3	12
02:15	2	3	5
02:30	1	1	2
02:45	0	1	1
03:00	0	0	0
Hour Total	3	5	8
03:15	3	2	5
03:30	2	0	2
03:45	1	2	3
04:00	1	6	7
Hour Total	7	10	17
04:15	4	9	13
04:30	4	4	8
04:45	7	10	17
05:00	4	13	17
Hour Total	19	36	55
05:15	6	11	17
05:30	12	19	31
05:45	13	18	31
06:00	20	30	50
Hour Total	51	78	129
06:15	27	25	52
06:30	43	58	101
06:45	53	71	124
07:00	81	116	197
Hour Total	204	270	474
07:15	106	160	266
07:30	159	245	404
07:45	182	262	444
08:00	227	250	477
Hour Total	674	917	1591
08:15	188	199	387
08:30	172	230	402
08:45	193	163	356

DE TRAFFIC  
VOLUME SUMMARY  
Tue 4/25/2017

Machine #: Viera Blvd  
Site ID: Viera Blvd  
Description: Viera Blvd, between Stadium Park & I-95

File: Blvd.prn  
Street Name: Viera Blvd, between  
County: Brevard

TIME	1 EAST	2 WEST	Total
09:00	127	140	267
Hour Total	680	732	1412
09:15	119	120	239
09:30	103	132	235
09:45	110	123	233
10:00	111	104	215
Hour Total	443	479	922
10:15	115	131	246
10:30	125	123	248
10:45	122	122	244
11:00	117	113	230
Hour Total	479	489	968
11:15	105	119	224
11:30	140	124	264
11:45	139	127	266
12:00	151	125	276
Hour Total	535	495	1030
12:15	143	146	289
12:30	138	155	293
12:45	143	151	294
13:00	137	123	260
Hour Total	561	575	1136
13:15	136	117	253
13:30	126	125	251
13:45	158	149	307
14:00	140	137	277
Hour Total	560	528	1088
14:15	135	165	300
14:30	131	156	287
14:45	229	144	373
15:00	177	136	313
Hour Total	672	601	1273
15:15	185	148	333
15:30	203	170	373
15:45	317	138	455
16:00	240	168	408
Hour Total	945	624	1569
16:15	228	192	420
16:30	183	187	370
16:45	242	188	430
17:00	198	208	406
Hour Total	851	775	1626

DE TRAFFIC  
VOLUME SUMMARY  
Tue 4/25/2017

Machine #: Viera Blvd  
Site ID: Viera Blvd  
Description: Viera Blvd, between Stadium Park & I-95

File: Blvd.prn  
Street Name: Viera Blvd, between  
County: Brevard

TIME	1 EAST	2 WEST	Total
17:15	206	218	424
17:30	214	218	432
17:45	204	213	417
18:00	189	202	391
Hour Total	813	851	1664
18:15	171	159	330
18:30	158	144	302
18:45	139	121	260
19:00	128	125	253
Hour Total	596	549	1145
19:15	119	101	220
19:30	112	100	212
19:45	98	81	179
20:00	110	77	187
Hour Total	439	359	798
20:15	89	101	190
20:30	85	85	170
20:45	92	56	148
21:00	84	46	130
Hour Total	350	288	638
21:15	76	38	114
21:30	63	36	99
21:45	63	26	89
22:00	42	28	70
Hour Total	244	128	372
22:15	31	30	61
22:30	26	25	51
22:45	20	16	36
23:00	21	15	36
Hour Total	98	86	184
23:15	12	9	21
23:30	12	9	21
23:45	14	3	17
24:00	10	3	13
Hour Total	48	24	72
DAY TOTAL	9305	8921	18226
PERCENTS	51.1%	48.9%	100%
AM Times	08:00	07:30	
AM Peaks	780	956	
PM Times	15:30	17:00	
PM Peaks	988	857	

DE TRAFFIC  
VOLUME SUMMARY  
Wed 4/26/2017

Machine #: Viera Blvd  
Site ID: Viera Blvd  
Description: Viera Blvd, between Stadium Park & I-95

File: Blvd.prn  
Street Name: Viera Blvd, between  
County: Brevard

TIME	1 EAST	2 WEST	Total
00:15	4	5	9
00:30	9	4	13
00:45	3	1	4
01:00	8	4	12
Hour Total	24	14	38
01:15	4	2	6
01:30	3	3	6
01:45	2	0	2
02:00	0	3	3
Hour Total	9	8	17
02:15	3	2	5
02:30	0	3	3
02:45	2	0	2
03:00	0	5	5
Hour Total	5	10	15
03:15	2	0	2
03:30	2	5	7
03:45	3	3	6
04:00	0	4	4
Hour Total	7	12	19
04:15	2	8	10
04:30	5	2	7
04:45	11	9	20
05:00	6	12	18
Hour Total	24	31	55
05:15	10	13	23
05:30	7	23	30
05:45	7	20	27
06:00	13	30	43
Hour Total	37	86	123
06:15	27	28	55
06:30	39	50	89
06:45	68	74	142
07:00	67	91	158
Hour Total	201	243	444
07:15	75	170	245
07:30	142	216	358
07:45	196	301	497
08:00	228	252	480
Hour Total	641	939	1580
08:15	198	208	406
08:30	159	214	373
08:45	179	130	309

DE TRAFFIC  
VOLUME SUMMARY  
Wed 4/26/2017

Machine #: Viera Blvd  
Site ID: Viera Blvd  
Description: Viera Blvd, between Stadium Park & I-95

File: Blvd.prn  
Street Name: Viera Blvd, between  
County: Brevard

TIME	1 EAST	2 WEST	Total
09:00	152	125	277
Hour Total	688	677	1365
09:15	108	129	237
09:30	107	115	222
09:45	109	129	238
10:00	106	122	228
Hour Total	430	495	925
10:15	124	92	216
10:30	103	132	235
10:45	101	128	229
11:00	105	111	216
Hour Total	433	463	896
11:15	139	130	269
11:30	126	121	247
11:45	171	132	303
12:00	155	139	294
Hour Total	591	522	1113
12:15	182	165	347
12:30	132	166	298
12:45	173	160	333
13:00	155	173	328
Hour Total	642	664	1306
13:15	151	171	322
13:30	170	146	316
13:45	198	159	357
14:00	131	139	270
Hour Total	650	615	1265
14:15	156	147	303
14:30	273	161	434
14:45	215	151	366
15:00	167	149	316
Hour Total	811	608	1419
15:15	216	156	372
15:30	193	162	355
15:45	166	158	324
16:00	170	135	305
Hour Total	745	611	1356
16:15	207	163	370
16:30	212	170	382
16:45	229	204	433
17:00	173	206	379
Hour Total	821	743	1564

DE TRAFFIC  
VOLUME SUMMARY  
Wed 4/26/2017

Machine #: Viera Blvd  
Site ID: Viera Blvd  
Description: Viera Blvd, between Stadium Park & I-95

File: Blvd.prn  
Street Name: Viera Blvd, between  
County: Brevard

TIME	1 EAST	2 WEST	Total
17:15	227	244	471
17:30	203	217	420
17:45	170	217	387
18:00	183	228	411
Hour Total	783	906	1689
18:15	178	170	348
18:30	148	157	305
18:45	164	121	285
19:00	124	120	244
Hour Total	614	568	1182
19:15	137	112	249
19:30	115	103	218
19:45	140	87	227
20:00	119	105	224
Hour Total	511	407	918
20:15	131	83	214
20:30	118	71	189
20:45	103	63	166
21:00	84	47	131
Hour Total	436	264	700
21:15	68	42	110
21:30	50	39	89
21:45	35	31	66
22:00	51	27	78
Hour Total	204	139	343
22:15	34	26	60
22:30	20	20	40
22:45	21	13	34
23:00	16	15	31
Hour Total	91	74	165
23:15	14	15	29
23:30	8	4	12
23:45	17	8	25
24:00	11	3	14
Hour Total	50	30	80
DAY TOTAL	9448	9129	18577
PERCENTS	50.9%	49.1%	100%
AM Times	07:45	07:30	
AM Peaks	781	977	
PM Times	14:30	17:15	
PM Peaks	871	906	

DE TRAFFIC  
VOLUME SUMMARY  
Thu 4/27/2017

Machine #: Viera Blvd  
Site ID: Viera Blvd  
Description: Viera Blvd, between Stadium Park & I-95

File: Blvd.prn  
Street Name: Viera Blvd, between  
County: Brevard

TIME	1 EAST	2 WEST	Total
00:15	14	6	20
00:30	9	8	17
00:45	8	6	14
01:00	8	4	12
Hour Total	39	24	63
01:15	9	3	12
01:30	2	0	2
01:45	1	2	3
02:00	5	1	6
Hour Total	17	6	23
02:15	0	2	2
02:30	2	0	2
02:45	2	0	2
03:00	2	2	4
Hour Total	6	4	10
03:15	2	1	3
03:30	3	2	5
03:45	2	5	7
04:00	1	4	5
Hour Total	8	12	20
04:15	2	5	7
04:30	4	4	8
04:45	9	6	15
05:00	14	22	36
Hour Total	29	37	66
05:15	2	14	16
05:30	6	16	22
05:45	19	21	40
06:00	13	34	47
Hour Total	40	85	125
06:15	27	24	51
06:30	28	55	83
06:45	58	69	127
07:00	66	108	174
Hour Total	179	256	435
07:15	98	153	251
07:30	144	230	374
07:45	177	278	455
08:00	209	227	436
Hour Total	628	888	1516
08:15	197	219	416
08:30	157	276	433
08:45	202	136	338

DE TRAFFIC  
VOLUME SUMMARY  
Thu 4/27/2017

Machine #: Viera Blvd  
Site ID: Viera Blvd  
Description: Viera Blvd, between Stadium Park & I-95

File: Blvd.prn  
Street Name: Viera Blvd, between  
County: Brevard

TIME	1 EAST	2 WEST	Total
09:00	122	131	253
Hour Total	678	762	1440
09:15	113	119	232
09:30	101	142	243
09:45	101	111	212
10:00	122	106	228
Hour Total	437	478	915
10:15	113	120	233
10:30	115	126	241
10:45	112	141	253
11:00	119	117	236
Hour Total	459	504	963
11:15	115	148	263
11:30	127	124	251
11:45	165	144	309
12:00	174	139	313
Hour Total	581	555	1136
12:15	161	145	306
12:30	144	141	285
12:45	132	142	274
13:00	150	142	292
Hour Total	587	570	1157
13:15	149	151	300
13:30	120	151	271
13:45	157	138	295
14:00	155	153	308
Hour Total	581	593	1174
14:15	131	144	275
14:30	136	151	287
14:45	251	148	399
15:00	207	133	340
Hour Total	725	576	1301
15:15	182	173	355
15:30	182	161	343
15:45	307	138	445
16:00	219	150	369
Hour Total	890	622	1512
16:15	244	155	399
16:30	221	180	401
16:45	209	176	385
17:00	189	183	372
Hour Total	863	694	1557

DE TRAFFIC  
VOLUME SUMMARY  
Thu 4/27/2017

Machine #: Viera Blvd  
Site ID: Viera Blvd  
Description: Viera Blvd, between Stadium Park & I-95

File: Blvd.prn  
Street Name: Viera Blvd, between  
County: Brevard

TIME	1 EAST	2 WEST	Total
17:15	191	222	413
17:30	198	224	422
17:45	193	230	423
18:00	166	211	377
Hour Total	748	887	1635
18:15	153	177	330
18:30	130	162	292
18:45	161	133	294
19:00	132	134	266
Hour Total	576	606	1182
19:15	135	131	266
19:30	114	114	228
19:45	121	117	238
20:00	162	96	258
Hour Total	532	458	990
20:15	130	105	235
20:30	102	79	181
20:45	86	73	159
21:00	80	37	117
Hour Total	398	294	692
21:15	75	51	126
21:30	74	45	119
21:45	54	45	99
22:00	59	33	92
Hour Total	262	174	436
22:15	82	40	122
22:30	39	21	60
22:45	27	10	37
23:00	20	17	37
Hour Total	168	88	256
23:15	21	16	37
23:30	18	11	29
23:45	12	10	22
24:00	11	6	17
Hour Total	62	43	105
DAY TOTAL	9493	9216	18709
PERCENTS	50.8%	49.2%	100%
AM Times	08:00	07:45	
AM Peaks	765	1000	
PM Times	15:45	17:15	
PM Peaks	991	887	

DE TRAFFIC  
VOLUME SUMMARY  
Tue 4/25/2017

Machine #: Stadium Park  
Site ID: Stadium Park  
Description: Stadium Parkway, north of Windsong Way

File: Stadium.prn  
Street Name: Stadium Parkway  
County: Brevard

TIME	1 NORTH	2 SOUTH	Total
01:00	24	24	48
02:00	14	14	28
03:00	7	14	21
04:00	18	12	30
05:00	57	36	93
06:00	141	87	228
07:00	364	332	696
08:00	729	859	1588
09:00	600	646	1246
10:00	579	506	1085
11:00	577	531	1108
12:00	610	496	1106
13:00	675	511	1186
14:00	602	415	1017
15:00	675	581	1256
16:00	812	542	1354
17:00	910	639	1549
18:00	844	524	1368
19:00	567	454	1021
20:00	428	275	703
21:00	398	208	606
22:00	254	249	503
23:00	128	127	255
24:00	65	80	145
DAY TOTAL	10078	8162	18240
PERCENTS	55.3%	44.7%	100%
AM Times	07:15	07:30	
AM Peaks	729	897	
PM Times	16:45	16:30	
PM Peaks	925	645	

DE TRAFFIC  
VOLUME SUMMARY  
Wed 4/26/2017

Machine #: Stadium Park  
Site ID: Stadium Park  
Description: Stadium Parkway, north of Windsong Way

File: Stadium.prn  
Street Name: Stadium Parkway  
County: Brevard

TIME	1 NORTH	2 SOUTH	Total
01:00	31	34	65
02:00	15	29	44
03:00	15	32	47
04:00	22	30	52
05:00	43	56	99
06:00	139	152	291
07:00	364	360	724
08:00	706	902	1608
09:00	644	677	1321
10:00	536	531	1067
11:00	555	557	1112
12:00	605	520	1125
13:00	647	536	1183
14:00	684	435	1119
15:00	699	610	1309
16:00	841	570	1411
17:00	902	671	1573
18:00	790	549	1339
19:00	563	477	1040
20:00	460	348	808
21:00	408	270	678
22:00	240	311	551
23:00	121	185	306
24:00	60	119	179
DAY TOTAL	10090	8961	19051
PERCENTS	53.0%	47.0%	100%
AM Times	07:45	07:30	
AM Peaks	766	942	
PM Times	16:45	16:30	
PM Peaks	929	677	

DE TRAFFIC  
VOLUME SUMMARY  
Thu 4/27/2017

Machine #: Stadium Park  
Site ID: Stadium Park  
Description: Stadium Parkway, north of Windsong Way

File: Stadium.prn  
Street Name: Stadium Parkway  
County: Brevard

TIME	1 NORTH	2 SOUTH	Total
01:00	43	23	66
02:00	17	26	43
03:00	9	31	40
04:00	24	21	45
05:00	39	33	72
06:00	133	99	232
07:00	351	326	677
08:00	712	922	1634
09:00	595	692	1287
10:00	582	543	1125
11:00	506	569	1075
12:00	622	531	1153
13:00	630	548	1178
14:00	658	443	1101
15:00	680	622	1302
16:00	811	581	1392
17:00	895	685	1580
18:00	816	562	1378
19:00	496	487	983
20:00	473	344	817
21:00	420	308	728
22:00	294	281	575
23:00	179	152	331
24:00	83	103	186
DAY TOTAL	10068	8932	19000
PERCENTS	53.0%	47.0%	100%
AM Times	07:30	07:30	
AM Peaks	731	962	
PM Times	16:45	16:30	
PM Peaks	926	692	

DE TRAFFIC  
VOLUME SUMMARY  
Tue 4/25/2017

Machine #: Stadium Park  
Site ID: Stadium Park  
Description: Stadium Parkway, north of Windsong Way

File: Stadium.prn  
Street Name: Stadium Parkway  
County: Brevard

TIME	1 NORTH	2 SOUTH	Total
00:15	8	7	15
00:30	8	4	12
00:45	4	7	11
01:00	4	6	10
Hour Total	24	24	48
01:15	1	3	4
01:30	5	4	9
01:45	2	4	6
02:00	6	3	9
Hour Total	14	14	28
02:15	3	4	7
02:30	1	6	7
02:45	2	2	4
03:00	1	2	3
Hour Total	7	14	21
03:15	2	1	3
03:30	5	0	5
03:45	4	5	9
04:00	7	6	13
Hour Total	18	12	30
04:15	10	4	14
04:30	13	10	23
04:45	16	5	21
05:00	18	17	35
Hour Total	57	36	93
05:15	25	13	38
05:30	37	27	64
05:45	35	23	58
06:00	44	24	68
Hour Total	141	87	228
06:15	55	43	98
06:30	89	72	161
06:45	104	110	214
07:00	116	107	223
Hour Total	364	332	696
07:15	166	147	313
07:30	154	208	362
07:45	215	287	502
08:00	194	217	411
Hour Total	729	859	1588
08:15	164	185	349
08:30	149	166	315
08:45	137	167	304

DE TRAFFIC  
VOLUME SUMMARY  
Tue 4/25/2017

Machine #: Stadium Park  
Site ID: Stadium Park  
Description: Stadium Parkway, north of Windsong Way

File: Stadium.prn  
Street Name: Stadium Parkway  
County: Brevard

TIME	1 NORTH	2 SOUTH	Total
09:00	150	128	278
Hour Total	600	646	1246
09:15	161	122	283
09:30	138	129	267
09:45	148	135	283
10:00	132	120	252
Hour Total	579	506	1085
10:15	128	123	251
10:30	152	113	265
10:45	166	142	308
11:00	131	153	284
Hour Total	577	531	1108
11:15	147	113	260
11:30	158	124	282
11:45	155	117	272
12:00	150	142	292
Hour Total	610	496	1106
12:15	190	124	314
12:30	186	124	310
12:45	166	143	309
13:00	133	120	253
Hour Total	675	511	1186
13:15	150	100	250
13:30	146	103	249
13:45	164	106	270
14:00	142	106	248
Hour Total	602	415	1017
14:15	167	142	309
14:30	144	154	298
14:45	171	143	314
15:00	193	142	335
Hour Total	675	581	1256
15:15	189	123	312
15:30	188	152	340
15:45	242	114	356
16:00	193	153	346
Hour Total	812	542	1354
16:15	236	156	392
16:30	206	163	369
16:45	260	164	424
17:00	208	156	364
Hour Total	910	639	1549

DE TRAFFIC  
VOLUME SUMMARY  
Tue 4/25/2017

Machine #: Stadium Park  
Site ID: Stadium Park  
Description: Stadium Parkway, north of Windsong Way

File: Stadium.prn  
Street Name: Stadium Parkway  
County: Brevard

TIME	1 NORTH	2 SOUTH	Total
17:15	247	162	409
17:30	210	149	359
17:45	187	105	292
18:00	200	108	308
Hour Total	844	524	1368
18:15	163	134	297
18:30	133	121	254
18:45	134	101	235
19:00	137	98	235
Hour Total	567	454	1021
19:15	141	95	236
19:30	87	61	148
19:45	106	69	175
20:00	94	50	144
Hour Total	428	275	703
20:15	94	59	153
20:30	117	65	182
20:45	83	42	125
21:00	104	42	146
Hour Total	398	208	606
21:15	87	63	150
21:30	71	76	147
21:45	49	65	114
22:00	47	45	92
Hour Total	254	249	503
22:15	46	42	88
22:30	40	35	75
22:45	26	24	50
23:00	16	26	42
Hour Total	128	127	255
23:15	17	24	41
23:30	18	16	34
23:45	18	24	42
24:00	12	16	28
Hour Total	65	80	145
DAY TOTAL	10078	8162	18240
PERCENTS	55.3%	44.7%	100%
AM Times	07:15	07:30	
AM Peaks	729	897	
PM Times	16:45	16:30	
PM Peaks	925	645	

DE TRAFFIC  
VOLUME SUMMARY  
Wed 4/26/2017

Machine #: Stadium Park  
Site ID: Stadium Park  
Description: Stadium Parkway, north of Windsong Way

File: Stadium.prn  
Street Name: Stadium Parkway  
County: Brevard

TIME	1 NORTH	2 SOUTH	Total
00:15	13	7	20
00:30	6	9	15
00:45	4	8	12
01:00	8	10	18
Hour Total	31	34	65
01:15	5	9	14
01:30	3	4	7
01:45	3	8	11
02:00	4	8	12
Hour Total	15	29	44
02:15	3	7	10
02:30	5	8	13
02:45	2	9	11
03:00	5	8	13
Hour Total	15	32	47
03:15	1	8	9
03:30	5	7	12
03:45	7	8	15
04:00	9	7	16
Hour Total	22	30	52
04:15	6	15	21
04:30	13	13	26
04:45	12	11	23
05:00	12	17	29
Hour Total	43	56	99
05:15	29	24	53
05:30	31	35	66
05:45	34	41	75
06:00	45	52	97
Hour Total	139	152	291
06:15	66	46	112
06:30	81	87	168
06:45	102	115	217
07:00	115	112	227
Hour Total	364	360	724
07:15	131	154	285
07:30	171	218	389
07:45	198	302	500
08:00	206	228	434
Hour Total	706	902	1608
08:15	190	194	384
08:30	172	174	346
08:45	140	175	315

DE TRAFFIC  
VOLUME SUMMARY  
Wed 4/26/2017

Machine #: Stadium Park  
Site ID: Stadium Park  
Description: Stadium Parkway, north of Windsong Way

File: Stadium.prn  
Street Name: Stadium Parkway  
County: Brevard

TIME	1 NORTH	2 SOUTH	Total
09:00	142	134	276
Hour Total	644	677	1321
09:15	131	128	259
09:30	144	135	279
09:45	136	142	278
10:00	125	126	251
Hour Total	536	531	1067
10:15	123	129	252
10:30	155	118	273
10:45	129	149	278
11:00	148	161	309
Hour Total	555	557	1112
11:15	149	118	267
11:30	130	130	260
11:45	135	123	258
12:00	191	149	340
Hour Total	605	520	1125
12:15	155	130	285
12:30	157	130	287
12:45	174	150	324
13:00	161	126	287
Hour Total	647	536	1183
13:15	158	105	263
13:30	181	108	289
13:45	185	111	296
14:00	160	111	271
Hour Total	684	435	1119
14:15	159	149	308
14:30	160	162	322
14:45	194	150	344
15:00	186	149	335
Hour Total	699	610	1309
15:15	227	129	356
15:30	216	160	376
15:45	222	120	342
16:00	176	161	337
Hour Total	841	570	1411
16:15	239	164	403
16:30	182	171	353
16:45	268	172	440
17:00	213	164	377
Hour Total	902	671	1573

DE TRAFFIC  
VOLUME SUMMARY  
Wed 4/26/2017

Machine #: Stadium Park  
Site ID: Stadium Park  
Description: Stadium Parkway, north of Windsong Way

File: Stadium.prn  
Street Name: Stadium Parkway  
County: Brevard

TIME	1 NORTH	2 SOUTH	Total
17:15	221	170	391
17:30	227	156	383
17:45	192	110	302
18:00	150	113	263
Hour Total	790	549	1339
18:15	168	141	309
18:30	129	127	256
18:45	135	106	241
19:00	131	103	234
Hour Total	563	477	1040
19:15	128	100	228
19:30	107	98	205
19:45	111	83	194
20:00	114	67	181
Hour Total	460	348	808
20:15	124	84	208
20:30	104	79	183
20:45	100	53	153
21:00	80	54	134
Hour Total	408	270	678
21:15	99	76	175
21:30	52	84	136
21:45	42	76	118
22:00	47	75	122
Hour Total	240	311	551
22:15	43	56	99
22:30	31	63	94
22:45	27	24	51
23:00	20	42	62
Hour Total	121	185	306
23:15	16	35	51
23:30	15	24	39
23:45	17	34	51
24:00	12	26	38
Hour Total	60	119	179
DAY TOTAL	10090	8961	19051
PERCENTS	53.0%	47.0%	100%
AM Times	07:45	07:30	
AM Peaks	766	942	
PM Times	16:45	16:30	
PM Peaks	929	677	

DE TRAFFIC  
VOLUME SUMMARY  
Thu 4/27/2017

Machine #: Stadium Park  
Site ID: Stadium Park  
Description: Stadium Parkway, north of Windsong Way

File: Stadium.prn  
Street Name: Stadium Parkway  
County: Brevard

TIME	1 NORTH	2 SOUTH	Total
00:15	11	7	18
00:30	9	5	14
00:45	14	5	19
01:00	9	6	15
Hour Total	43	23	66
01:15	5	5	10
01:30	1	4	5
01:45	3	8	11
02:00	8	9	17
Hour Total	17	26	43
02:15	1	8	9
02:30	2	8	10
02:45	2	8	10
03:00	4	7	11
Hour Total	9	31	40
03:15	6	7	13
03:30	5	5	10
03:45	5	5	10
04:00	8	4	12
Hour Total	24	21	45
04:15	3	5	8
04:30	8	9	17
04:45	14	8	22
05:00	14	11	25
Hour Total	39	33	72
05:15	28	15	43
05:30	25	24	49
05:45	40	26	66
06:00	40	34	74
Hour Total	133	99	232
06:15	62	41	103
06:30	75	52	127
06:45	92	118	210
07:00	122	115	237
Hour Total	351	326	677
07:15	157	158	315
07:30	159	223	382
07:45	190	308	498
08:00	206	233	439
Hour Total	712	922	1634
08:15	176	198	374
08:30	132	178	310
08:45	163	179	342

DE TRAFFIC  
VOLUME SUMMARY  
Thu 4/27/2017

Machine #: Stadium Park  
Site ID: Stadium Park  
Description: Stadium Parkway, north of Windsong Way

File: Stadium.prn  
Street Name: Stadium Parkway  
County: Brevard

TIME	1 NORTH	2 SOUTH	Total
09:00	124	137	261
Hour Total	595	692	1287
09:15	145	131	276
09:30	136	138	274
09:45	161	145	306
10:00	140	129	269
Hour Total	582	543	1125
10:15	136	132	268
10:30	127	121	248
10:45	111	152	263
11:00	132	164	296
Hour Total	506	569	1075
11:15	167	121	288
11:30	148	133	281
11:45	147	125	272
12:00	160	152	312
Hour Total	622	531	1153
12:15	169	133	302
12:30	144	133	277
12:45	160	153	313
13:00	157	129	286
Hour Total	630	548	1178
13:15	148	107	255
13:30	169	110	279
13:45	167	113	280
14:00	174	113	287
Hour Total	658	443	1101
14:15	174	152	326
14:30	151	165	316
14:45	177	153	330
15:00	178	152	330
Hour Total	680	622	1302
15:15	228	132	360
15:30	179	163	342
15:45	221	122	343
16:00	183	164	347
Hour Total	811	581	1392
16:15	230	167	397
16:30	198	175	373
16:45	256	176	432
17:00	211	167	378
Hour Total	895	685	1580

DE TRAFFIC  
VOLUME SUMMARY  
Thu 4/27/2017

Machine #: Stadium Park  
Site ID: Stadium Park  
Description: Stadium Parkway, north of Windsong Way

File: Stadium.prn  
Street Name: Stadium Parkway  
County: Brevard

TIME	1 NORTH	2 SOUTH	Total
17:15	236	174	410
17:30	223	160	383
17:45	206	112	318
18:00	151	116	267
Hour Total	816	562	1378
18:15	134	144	278
18:30	134	130	264
18:45	129	108	237
19:00	99	105	204
Hour Total	496	487	983
19:15	126	102	228
19:30	106	65	171
19:45	86	79	165
20:00	155	98	253
Hour Total	473	344	817
20:15	127	89	216
20:30	117	78	195
20:45	92	65	157
21:00	84	76	160
Hour Total	420	308	728
21:15	90	78	168
21:30	66	97	163
21:45	62	53	115
22:00	76	53	129
Hour Total	294	281	575
22:15	63	52	115
22:30	46	42	88
22:45	39	34	73
23:00	31	24	55
Hour Total	179	152	331
23:15	21	34	55
23:30	16	26	42
23:45	27	24	51
24:00	19	19	38
Hour Total	83	103	186
DAY TOTAL	10068	8932	19000
PERCENTS	53.0%	47.0%	100%
AM Times	07:30	07:30	
AM Peaks	731	962	
PM Times	16:45	16:30	
PM Peaks	926	692	

ECFRPC-C.f.-Viera_East_Passby_Confirm					
Road	Location	Current		Build-out	
		Daily	PM Peak (.9)	Daily	PM Peak (.9)
Viera Blvd	East of I-95	17,450	1,571	22,131	1,992
Murrell	North of Wickham	17,710	1,594	22,461	2,021
Wickham	East of Murrell	30,730	2,766	38,973	3,508
Total		65,890	5,930	83,564	7,521
10% Threshold		6,589	593	8,356	752
Build-out Pass-by		6,050	561	6,050	561
Exceed 10% Threshold		No	No	No	No
For build-out used 2% growth rate for a 12 year period					

Daily Internal Capture Analysis for Viera Blvd & Murrell Road Quadrants - Viera East Phase 1-3

Phase 1-3 Analysis

Retail (820) 166,097 SQ FT			
	Total	Internal	External
Enter	3781	491	3290
Exit	3780	518	3262
<b>Total</b>	<b>7561</b>	<b>1009</b>	<b>6552</b>
%	100%	13.35%	86.65%

exit to external

enter from external

Exit Retail	0.03	↓	Enter Retail	0.04	↑
Enter Office	0.15	↓	Exit Office	0.22	↓
demand	113		demand	151	
balanced	103		balanced	150	
demand	103		demand	150	

Exit Retail	0.11	↓	Enter Retail	0.09	↑
Enter Residential	0.33	↓	Exit Residential	0.38	↓
demand	416		demand	340	
balanced	416		balanced	340	
demand	1175		demand	1354	

Office (710) 163,587			
	Total	Internal	External
Enter	684	116	568
Exit	684	150	534
<b>Total</b>	<b>1368</b>	<b>266</b>	<b>1102</b>
%	100%	19.44%	80.56%

Res (210,220,230) 1,098 UNITS			
	Total	Internal	External
Enter	3562	416	3146
Exit	3562	354	3208
<b>Total</b>	<b>7124</b>	<b>770</b>	<b>6354</b>
%	100%	10.81%	89.19%

Exit Office	0.02	↓	Enter Residential	0.03	↓
Enter Office	0	↓	Exit Residential	0	↓
demand	13.68		demand	107	
balanced	14		balanced	0	
demand	0		demand	0	

Internal Capture	Retail	Office	Residential	Total
Net Enter	3290	568	3146	7004
Net Exit	3262	534	3208	7003
Net Total	6552	1102	6354	14008
Gross Daily Trip Gen	7561	1368	7124	16053
Difference	1009	266	770	2045
				13%

PM Peak Internal Capture Analysis for Viera Blvd & Murrell Road Quadrants - Viera East Phases 1-3

Phase 1-3 Analysis

**Retail (820) 166,097 SQ FT**

	Total	Internal	External
Enter	327	36	291
Exit	355	53	302
<b>Total</b>	<b>682</b>	<b>89</b>	<b>593</b>
%	100%	13.08%	86.92%

exit to external

enter from external

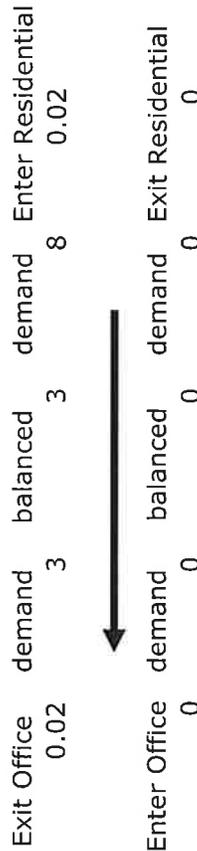


**Office (710) 163,587**

	Total	Internal	External
Enter	35	14	21
Exit	168	7	161
<b>Total</b>	<b>203</b>	<b>21</b>	<b>182</b>
%	100%	10.34%	89.66%

**Residential (210,220,230) 1,098 UNITS**

	Total	Internal	External
Enter	422	43	379
Exit	230	33	197
<b>Total</b>	<b>652</b>	<b>76</b>	<b>576</b>
%	100%	11.66%	88.34%



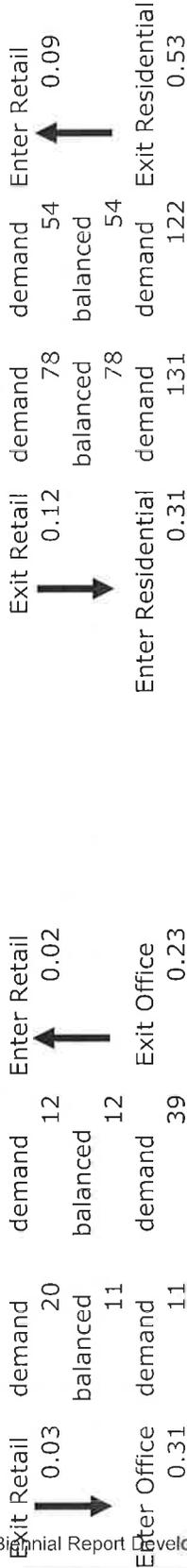
Internal Capture	Retail	Office	Residential	Total
Net Enter	291	21	379	691
Net Exit	302	161	197	660
Net Total	593	182	576	1351
Gross Daily Trip Gen	682	203	652	1537
Difference	89	21	76	186
				12%

**Build-out Analysis**

Retail (820) 356,097 SQ FT			
	Total	Internal	External
Enter	601	66	535
Exit	651	89	562
<b>Total</b>	<b>1252</b>	<b>155</b>	<b>1097</b>
%	100%	12.39%	87.61%

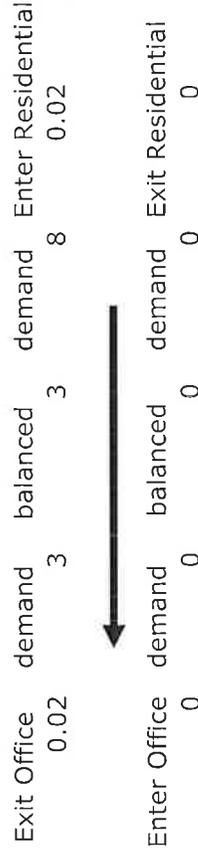
exit to external

enter from external



Office (710) 163,587			
	Total	Internal	External
Enter	35	14	21
Exit	168	12	156
<b>Total</b>	<b>203</b>	<b>26</b>	<b>177</b>
%	100%	12.92%	87.08%

Residential (210,220,230) 1,098 UNITS			
	Total	Internal	External
Enter	422	78	344
Exit	230	57	173
<b>Total</b>	<b>652</b>	<b>135</b>	<b>517</b>
%	100%	20.71%	79.29%



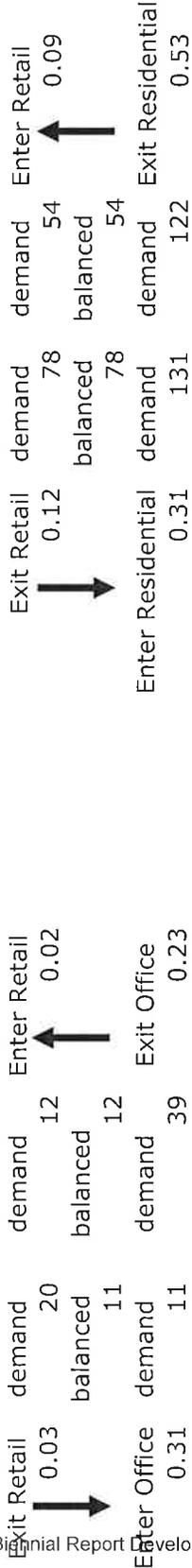
Internal Capture	Retail	Office	Residential	Total
Net Enter	535	21	344	900
Net Exit	562	156	173	891
Net Total	1097	177	517	1791
Gross Daily Trip Gen	1252	203	652	2107
Difference	155	26	135	316
			Internal Capture	15%

**Build-out Analysis**

<b>Retail (820) 356,097 SQ FT</b>			
	Total	Internal	External
Enter	601	66	535
Exit	651	89	562
<b>Total</b>	<b>1252</b>	<b>155</b>	<b>1097</b>
%	100%	12.39%	87.61%

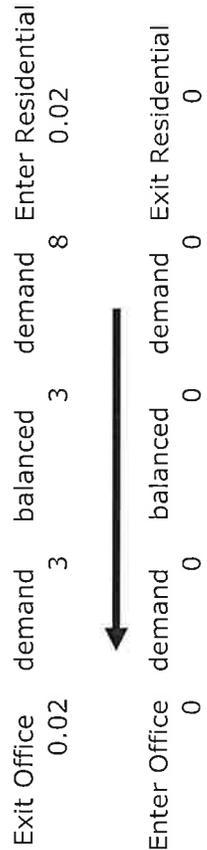
exit to external

enter from external



<b>Office (710) 163,587</b>			
	Total	Internal	External
Enter	35	14	21
Exit	168	12	156
<b>Total</b>	<b>203</b>	<b>26</b>	<b>177</b>
%	100%	12.92%	87.08%

<b>Residential (210,220,230) 1,098 UNITS</b>			
	Total	Internal	External
Enter	422	78	344
Exit	230	57	173
<b>Total</b>	<b>652</b>	<b>135</b>	<b>517</b>
%	100%	20.71%	79.29%



Internal Capture	Retail	Office	Residential	Total
Net Enter	535	21	344	900
Net Exit	562	156	173	891
Net Total	1097	177	517	1791
Gross Daily Trip Gen	1252	203	652	2107
Difference	155	26	135	316
				15%

## VIERA EAST PASS-BY TRIPS UPDATE

The evaluation of pass-by trips will only be conducted for the Viera East trip generation analysis. The percentage of pass-by trips is based on the shopping center (ITE 820 land use) rate provided in ITE's Trip Generation Handbook. While the ITE's Trip Generation Handbook does not recognize pass-by rates for uses other than retail, pass-by rates could be utilized on several non-retail uses such as offices in recognition that not all trips to these types of uses are new trips. However, only the ITE 820 pass-by rate for shopping centers (retail) will be used. The pass-by rate for shopping center (retail) used is 34% per the ITE Trip Generation Handbook. The pass-by rate does not exceed 10% of the adjacent street traffic on Wickham Road, Viera Blvd and Murrell Road.

The trip generation for shopping centers within Phase 1, 2 and 3 is per Table 21.B.4. The internal capture of retail trips for shopping centers within Phase 1, 2 and 3 is per the Internal Capture Worksheets in Appendix 21.C.2. Table 5. The pass-by trips were calculated by subtracting the internal capture of retail trips by the gross trips for retail uses and multiplying that difference by 34% (Table 21.C.3 8). There are more than 65,890 ~~50,000~~ daily trips and 5,930 ~~3,850~~ PM Peak Hour Trips on Wickham Road, Viera Blvd and Murrell Road within the limits of Viera East, thus the proposed pass-by rates do not exceed 10% of adjacent street traffic (Peak Hour derived using K factor of .9).

Table 21.C.3 8 - Viera East (Phase 1 - 3) Pass-By Rates				Daily			PM Peak Hour		
ITE Code	Land Use Category	Phase 1 to 3	Unit of Measure	Enter	Exit	Total	Enter	Exit	Total
820	Shopping Center*	313,593	Sq. Ft	7,138	7,137	14,275	618	670	1,288
	Internal Capture	--	--	<u>491</u> <u>766</u>	<u>518</u> <u>872</u>	<u>1,009</u> <u>1,638</u>	<u>36</u> <u>68</u>	<u>53</u> <u>88</u>	<u>89</u> <u>156</u>
	<b>Pass-By (34%)</b>	--	--	<b><u>2,260</u></b> <b><u>2,166</u></b>	<b><u>2,250</u></b> <b><u>2,130</u></b>	<b><u>4,510</u></b> <b><u>4,297</u></b>	<b><u>198</u></b> <b><u>187</u></b>	<b><u>210</u></b> <b><u>198</u></b>	<b><u>408</u></b> <b><u>385</u></b>
	Net Total Retail Trips	--	--	<u>4,387</u> <u>4,206</u>	<u>4,369</u> <u>4,135</u>	<u>8,756</u> <u>8,340</u>	<u>384</u> <u>363</u>	<u>407</u> <u>384</u>	<u>791</u> <u>747</u>
*Indicates the ITE Trip Generation Equation was used to determine trips generated									

The trip generation for shopping centers for the build-out of Viera East is per Table 21.B.5. The internal capture of retail trips for shopping centers for the build-out of Viera East is per the Internal Capture Worksheets in Appendix 21.C.4, Table 7. The pass-by trips were calculated by subtracting the internal capture of retail trips by the gross trips for retail uses and multiplying that difference by 34% (Table 21.C.4 9). Based upon a minimum growth rate of 2%, by 2029 there are projected to be 83,564 ~~more than 56,000~~ daily trips and 7,521 ~~5,000~~ PM Peak Hour Trips on Wickham Road, Viera Blvd and Murrell Road within the limits of Viera East, thus the proposed pass-by rates do not exceed 10% of adjacent street traffic (Peak Hour derived using K factor of .9).

Table 21.C.4 9 - Viera East (Build-out) Pass-By				Daily			PM Peak Hour		
ITE Code	Land Use Category	Build-out	Unit of Measure	Enter	Exit	Total	Enter	Exit	Total
820	Shopping Center*	503,593	Sq. Ft.	9,711	9,711	19,422	850	920	1,770
<b>Internal Capture</b>		--	--	<u>769</u> <del>1,568</del>	<u>858</u> <del>1,573</del>	<u>1,627</u> <del>3,141</del>	<u>66</u> <del>140</del>	<u>53</u> <del>473</del>	<u>119</u> <del>313</del>
<b>Pass-By (34%)</b>		--	--	<u>3,040</u> <del>2,769</del>	<u>3,010</u> <del>2,767</del>	<u>6,050</u> <del>5,536</del>	<u>267</u> <del>241</del>	<u>295</u> <del>254</del>	<u>561</u> <del>495</del>
<b>Net Total Retail Trips</b>		--	--	<u>5,902</u> <del>5,374</del>	<u>5,843</u> <del>5,374</del>	<u>11,745</u> <del>10,745</del>	<u>517</u> <del>469</del>	<u>572</u> <del>493</del>	<u>1,090</u> <del>962</del>
*Indicates the ITE Trip Generation Equation was used to determine trips generated									

## VIERA EAST NET INCREASE IN TRIPS

The cumulative net trip generation for Viera East Phase 1, 2 and 3 after adjusting for internal capture and pass-by trips results in 45,450 44,339 Daily trips and 4,465 4,360 PM Peak Hour Trips. The cumulative net trip generation for the build-out of Viera East after adjusting for internal capture and pass-by trips results in 47,822 45,306 Daily trips and 4,664 4,418 PM Peak Hour Trips. The net cumulative increase in trips due to the approval of 190,000 square feet of retail will result in an increase of 2,372 907 Daily trips and 199 58 PM Peak Hour trips (Table 21.C.5 40).

Table 21.C.5 40 - Viera East Net Increase in External Trips						
	Daily			PM Peak Hour		
	Enter	Exit	Total	Enter	Exit	Total
<b>GROSS TRIPS</b>						
PHASE 1-3	26,005	26,000	52,005	2,606	2,453	5,059
BUILD-OUT	28,578	28,574	57,152	2,838	2,703	5,541
DIFFERENCE	2,573	2,574	5,147	232	250	482
<b>INTERNAL CAPTURE TRIPS</b>						
PHASE 1-3	<u>1,023</u> 4,654	<u>1,022</u> 4,655	<u>2,045</u> 3,309	<u>93</u> 157	<u>93</u> 157	<u>186</u> 314
BUILD-OUT	<u>1,640</u> 3,155	<u>1,640</u> 3,155	<u>3,280</u> 6,310	<u>158</u> 314	<u>158</u> 314	<u>316</u> 628
DIFFERENCE	<u>617</u> 4,504	<u>618</u> 4,500	<u>1,235</u> 3,004	<u>65</u> 457	<u>65</u> 457	<u>130</u> 314
<b>PASS-BY TRIPS</b>						
PHASE 1-3	<u>2,260</u> 2,166	<u>2,250</u> 2,130	<u>4,510</u> 4,297	<u>198</u> 487	<u>210</u> 498	<u>408</u> 385
BUILD-OUT	<u>3,040</u> 2,769	<u>3,010</u> 2,767	<u>6,050</u> 5,536	<u>267</u> 241	<u>295</u> 254	<u>561</u> 495
DIFFERENCE	<u>780</u> 602	<u>760</u> 637	<u>1,540</u> 4,239	<u>69</u> 54	<u>85</u> 56	<u>153</u> 110
<b>NET TRIPS</b>						
PHASE 1-3	<u>22,722</u> 22,185	<u>22,728</u> 22,215	<u>45,450</u> 44,399	<u>2,315</u> 2,262	<u>2,150</u> 2,098	<u>4,465</u> 4,360
BUILD-OUT	<u>23,898</u> 22,654	<u>23,924</u> 22,652	<u>47,822</u> 45,306	<u>2,413</u> 2,283	<u>2,250</u> 2,135	<u>4,664</u> 4,418
DIFFERENCE	<u>1,176</u> 470	<u>1,196</u> 437	<u>2,372</u> 907	<u>98</u> 24	<u>100</u> 37	<u>199</u> 58

**Table 21.C.5 - Viera East Net Increase in External Trips**

	Daily			PM Peak Hour		
	Enter	Exit	Total	Enter	Exit	Total
<b>GROSS TRIPS</b>						
PHASE 1-3	26,005	26,000	52,005	2,606	2,453	5,059
BUILD-OUT	28,578	28,574	57,152	2,838	2,703	5,541
DIFFERENCE	2,573	2,574	5,147	232	250	482
<b>INTERNAL CAPTURE TRIPS</b>						
PHASE 1-3	1,023	1,022	2,045	93	93	186
BUILD-OUT	1,640	1,640	3,280	158	158	316
DIFFERENCE	617	618	1,235	65	65	130
<b>PASS-BY TRIPS</b>						
PHASE 1-3	2,260	2,250	4,510	198	210	408
BUILD-OUT	3,040	3,010	6,050	267	295	561
DIFFERENCE	780	760	1,540	69	85	153
<b>NET TRIPS</b>						
PHASE 1-3	22,722	22,728	45,450	2,315	2,150	4,465
BUILD-OUT	23,898	23,924	47,822	2,413	2,250	4,664
DIFFERENCE	1,176	1,196	2,372	98	100	199

### Trip Generation Summary - Phase 1 to 3

Project: Viera East Phase 1 to 3  
 Alternative: Phase 1 to 3

Open Date: 7/9/2016  
 Analysis Date: 3/25/2017

ITE	Land Use	Average Daily Trips			AM Peak Hour of Adjacent Street Traffic			PM Peak Hour of Adjacent Street Traffic		
		Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
150	Office/Warehouse 22.42 Gross Floor Area 1000 SF	40	40	80				2	5	7
151	Mini-Warehouse 85.24 Gross Floor Area 1000 SF	107	106	213				11	11	22
210	Single Family Residential 3104 Dwelling Units	12383	12383	24766				1457	856	2313
220	Apartments 360 Dwelling Units	1153	1152	2305				140	76	216
230	Condos/Townhomes 408 Dwelling Units	1093	1093	2186				127	63	190
251	Senior Housing Detached 336 Dwelling Units	618	618	1236				56	35	91
254	Assisted Living Facility 314 Beds	418	417	835				30	39	69
430	Golf Course 18 Golf Holes	322	321	643				27	26	53
710	General Office 653.3 Gross Floor Area 1000 SF	2733	2733	5466				138	672	810
820	Shopping Center 313.59 Gross Leasable Area 1000 SF	7138	7137	14275				618	670	1288
Volume Added to Adjacent Streets		26005	26000	52005	0	0	0	2606	2453	5059

Source: Institute of Transportation Engineers, Trip Generation Manual 9th Edition, 2012

**TRIP GENERATION 2014, TRAFFICWARE, LLC**

Detailed Land Use Data  
For 22.42 Gross Floor Area 1000 SF of Office/Warehouse  
( 150 ) Warehousing

Project: Viera East Phase 1 to 3  
Phase: Phase 1 to 3  
Description:

Open Date: 7/9/2016  
Analysis Date: 3/25/2017

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips	80	0	3.56	1.51	17	3.58	431	50	50	False	$\text{Ln}(T) = 0.86 \text{Ln}(X) + 2.24$	0.77
Weekday PM Peak Hour of Adjacent Street Traffic	7	0	0.32	0.09	1.66	0.67	572	25	75	False	$\text{Ln}(T) = 0.64 \text{Ln}(X) + 1.14$	0.64

Detailed Land Use Data  
 For 85.24 Gross Floor Area 1000 SF of Mini-Warehouse  
 ( 151 ) Mini-Warehouse

Project: Viera East Phase 1 to 3  
 Phase: Phase 1 to 3  
 Description:

Open Date: 7/9/2016  
 Analysis Date: 3/25/2017

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips	213	0	2.5	1.21	4.36	1.78	56	50	50	False		
Weekday PM Peak Hour of Adjacent Street Traffic	22	0	0.26	0.07	0.64	0.52	57	50	50	False		

Detailed Land Use Data  
 For 3104 Dwelling Units of Single Family Residential  
 ( 210 ) Single-Family Detached Housing

Project: Viera East Phase 1 to 3  
 Phase: Phase 1 to 3  
 Description:

Open Date: 7/9/2016  
 Analysis Date: 3/25/2017

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips	24766	0	9.52	4.31	21.85	3.7	198	50	50	True	$\ln(T) = 0.92 \ln(X) + 2.72$	0.95
Weekday PM Peak Hour of Adjacent Street Traffic	2313	0	1	0.42	2.98	1.05	207	63	37	True	$\ln(T) = 0.90 \ln(X) + 0.51$	0.91

Detailed Land Use Data  
For 360 Dwelling Units of Apartments  
( 220 ) Apartment

Project: Viera East Phase 1 to 3  
Phase: Phase 1 to 3  
Description:

Open Date: 7/9/2016  
Analysis Date: 3/25/2017

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips	2305	0	6.65	1.27	12.5	3.07	210	50	50	True	$T = 6.06(X) + 123.56$	0.87
Weekday PM Peak Hour of Adjacent Street Traffic	216	0	0.62	0.1	1.64	0.82	233	65	35	True	$T = 0.55(X) + 17.65$	0.77

Detailed Land Use Data  
 For 408 Dwelling Units of Condos/Townhomes  
 ( 230 ) Residential Condominium/Townhouse

Project: Viera East Phase 1 to 3  
 Phase: Phase 1 to 3  
 Description:

Open Date: 7/9/2016  
 Analysis Date: 3/25/2017

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips	2186	0	5.81	1.53	11.79	3.11	179	50	50	True	$\ln(T) = 0.87 \ln(x) + 2.46$	0.8
Weekday PM Peak Hour of Adjacent Street Traffic	190	0	0.52	0.18	1.24	0.75	205	67	33	True	$\ln(T) = 0.82 \ln(x) + 0.32$	0.8

Detailed Land Use Data  
 For 336 Dwelling Units of Senior Housing Detached  
 ( 251 ) Senior Adult Housing - Detached

Project: Viera East Phase 1 to 3  
 Phase: Phase 1 to 3  
 Description:

Open Date: 7/9/2016  
 Analysis Date: 3/25/2017

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips	1236	0	3.68	2.9	5.7	2.04	780	50	50	False	$\text{Ln}(T) = 0.89 \text{Ln}(X) + 2.06$	0.96
Weekday PM Peak Hour of Adjacent Street Traffic	91	0	0.27	0.17	0.95	0.53	605	61	39	False	$\text{Ln}(T) = 0.75 \text{Ln}(X) + 0.35$	0.89

Detailed Land Use Data  
For 314 Beds of Assisted Living Facility  
( 254 ) Assisted Living

Project: Viera East Phase 1 to 3  
Phase: Phase 1 to 3  
Description:

Open Date: 7/9/2016  
Analysis Date: 3/25/2017

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips	835	0	2.66	1.86	4.14	1.74	121	50	50	False	$\ln(T) = 0.56 \ln(x) + 3.07$	0.55
Weekday PM Peak Hour of Adjacent Street Traffic	69	0	0.22	0.11	0.3	0.47	121	44	56	False		

Detailed Land Use Data  
 For 18 Golf Holes of Golf Course  
 ( 430 ) Golf Course

Project: Viera East Phase 1 to 3  
 Phase: Phase 1 to 3  
 Description:

Open Date: 7/9/2016  
 Analysis Date: 3/25/2017

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips	643	0	35.74	14.5	54.44	12.12	20	50	50	False		
Weekday PM Peak Hour of Adjacent Street Traffic	53	0	2.92	1.67	4.56	1.86	20	51	49	False		

Detailed Land Use Data  
 For 653.3 Gross Floor Area 1000 SF of General Office  
 ( 710 ) General Office Building

Project: Viera East Phase 1 to 3  
 Phase: Phase 1 to 3  
 Description:

Open Date: 7/9/2016  
 Analysis Date: 3/25/2017

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips	5466	0	11.03	3.58	28.8	6.15	197	50	50	True	$\ln(T) = 0.76 \ln(X) + 3.68$	0.81
Weekday PM Peak Hour of Adjacent Street Traffic	810	0	1.49	0.49	6.39	1.37	215	17	83	True	$T = 1.12(X) + 78.45$	0.82

Detailed Land Use Data  
 For 313.59 Gross Leasable Area 1000 SF of Shopping Center  
 ( 820 ) Shopping Center

Project: Viera East Phase 1 to 3  
 Phase: Phase 1 to 3  
 Description:

Open Date: 7/9/2016  
 Analysis Date: 3/25/2017

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips	14275	0	42.7	12.5	270.89	21.25	331	50	50	True	$\ln(T) = 0.65 \ln(X) + 5.83$	0.79
Weekday PM Peak Hour of Adjacent Street Traffic	1288	438	3.71	0.68	29.27	2.74	376	48	52	True	$\ln(T) = 0.67 \ln(X) + 3.31$	0.81

## Trip Generation Summary

Alternative: Existing

Phase: Built Development (April 2017)

Project: Viera Central/West

Open Date: 7/9/2016

Analysis Date: 7/12/2017

ITE	Land Use	Weekday Average Daily Trips			Weekday PM Peak Hour of Adjacent Street Traffic		
		Enter	Exit	Total	Enter	Exit	Total
210	Single Family Residential 3714 Dwelling Units	14605	14605	29210	1713	1006	2719
220	Apartments 522 Dwelling Units	1644	1643	3287	198	107	305
230	Condos/Townhomes 317 Dwelling Units	878	877	1755	104	51	155
251	Senior Housing Detached 1143 Dwelling Units	2103	2103	4206	188	121	309
252	Senior Housing Attached 602 Dwelling Units	1036	1035	2071	82	69	151
253	Senior Housing Multifamil 174 Dwelling Units	176	175	351	17	13	30
254	Assisted Living Facility 210 Beds	280	279	559	20	26	46
310	Hotel 106 Rooms	433	433	866	33	31	64
430	Golf Course 18 Golf Holes	322	321	643	27	26	53
445	Theatre 16 Movie Screens	2340	2340	4680	98	120	218
520	Elementary School 1561 Students	1007	1007	2014	115	119	234
530	High School 1976 Students	1690	1689	3379	121	136	257
610	Hospital 100 Beds	647	647	1294	47	95	142
710	General Office 849.8 Gross Floor Area 1000 SF	3338	3338	6676	175	855	1030
720	VA Clinic 137.5 Gross Floor Area 1000 SF	2484	2484	4968	137	354	491
820	Shopping Center 1511.61 Gross Leasable Area 1000 SF	19840	19840	39680	1774	1922	3696

ITE	Land Use	Weekday Average Daily Trips			Weekday PM Peak Hour of Adjacent Street Traffic		
		Enter	Exit	Total	Enter	Exit	Total
Unadjusted Volume		52823	52816	105639	4849	5051	9900

Source: Institute of Transportation Engineers, Trip Generation Manual 9th Edition, 2012

**TRIP GENERATION 2014, TRAFFICWARE, LLC**

### Trip Generation Summary

Alternative: Rates & Equations

Phase: Build-out Analysis

Project: Viera Central/West

Open Date: 7/9/2016

Analysis Date: 7/27/2017

ITE	Land Use	Weekday Average Daily Trips			Weekday PM Peak Hour of Adjacent Street Traffic		
		Enter	Exit	Total	Enter	Exit	Total
110	Light Industry 364.5 Gross Floor Area 1000 SF	1311	1311	2622	44	320	364
151	Min-Warehouse 50.25 Gross Floor Area 1000 SF	63	63	126	7	6	13
210	Single Family Residential 18917 Dwelling Units	65307	65306	130613	7413	4354	11767
220	Apartments 3310 Dwelling Units	10091	10091	20182	1195	643	1838
230	Condos/Townhomes 520 Dwelling Units	1350	1350	2700	155	77	232
251	Senior Housing Detached 3257 Dwelling Units	5993	5993	11986	536	343	879
252	Senior Housing Attached 1113 Dwelling Units	1915	1914	3829	150	128	278
253	Senior Housing Multifamil 294 Dwelling Units	297	297	594	28	22	50
254	Assisted Living Facility 746 Beds	992	992	1984	72	92	164
310	Hotel 750 Rooms	3064	3064	6128	230	220	450
430	Golf Course 54 Golf Holes	965	965	1930	81	77	158
445	Theatre 16 Movie Screens	2340	2340	4680	98	120	218
610	Hospital 322 Beds	2084	2083	4167	151	306	457
710	General Office 2851.17 Gross Floor Area 1000 SF	8375	8375	16750	556	2716	3272
720	VA Clinic 137.5 Gross Floor Area 1000 SF	2484	2484	4968	137	354	491
820	Shopping Center 2934.53 Gross Leasable Area 1000 SF	30536	30535	61071	2767	2998	5765
		Weekday Average Daily Trips			Weekday PM Peak Hour of Adjacent Street Traffic		
ITE	Land Use	Enter	Exit	Total	Enter	Exit	Total
Unadjusted Volume		137167	137163	274330	13620	12776	26396

Source: Institute of Transportation Engineers, Trip Generation Manual 9th Edition, 2012

**TRIP GENERATION 2014, TRAFFICWARE, LLC**

**Detailed Land Use Data**

For 137.5 Gross Floor Area 1000 SF of VA Clinic  
( 720 ) Medical-Dental Office Building

Open Date: 7/9/2016  
Analysis Date: 7/27/2017

Project: Viera Central/West

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips	4968	0	36.13	23.16	50.51	10.18	45	50	50	False	$T = 40.89(X) - 214.97$	0.9
Source : Trip Generation Manual 9th Edition												
Weekday PM Peak Hour of Adjacent Street Traffic	491	0	3.57	0.97	8.86	2.47	31	28	72	False	$\ln(T) = 0.90 \ln(X) + 1.53$	0.77
Source : Trip Generation Manual 9th Edition												

## Trip Generation Summary

Alternative: Existing (Rates & Equations)  
 Phase: Built Development (April 2017)  
 Project: Viera Central/West

Open Date: 7/9/2016  
 Analysis Date: 7/12/2017

ITE	Land Use	Weekday Average Daily Trips			Weekday PM Peak Hour of Adjacent Street Traffic		
		Enter	Exit	Total	Enter	Exit	Total
210	Single Family Residential 3714 Dwelling Units	14605	14605	29210	1713	1006	2719
220	Apartments 522 Dwelling Units	1644	1643	3287	198	107	305
230	Condos/Townhomes 317 Dwelling Units	878	877	1755	104	51	155
251	Senior Housing Detached 1143 Dwelling Units	2103	2103	4206	188	121	309
252	Senior Housing Attached 602 Dwelling Units	1036	1035	2071	82	69	151
253	Senior Housing Multifamil 174 Dwelling Units	176	175	351	17	13	30
254	Assisted Living Facility 210 Beds	280	279	559	20	26	46
310	Hotel 106 Rooms	433	433	866	33	31	64
430	Golf Course 18 Golf Holes	322	321	643	27	26	53
445	Theatre 16 Movie Screens	2340	2340	4680	98	120	218
520	Elementary School 1561 Students	1007	1007	2014	115	119	234
530	High School 1976 Students	1690	1689	3379	121	136	257
610	Hospital 100 Beds	647	647	1294	47	95	142
710	General Office 849.8 Gross Floor Area 1000 SF	3338	3338	6676	175	855	1030
720	VA Clinic 137.5 Gross Floor Area 1000 SF	2484	2484	4968	137	354	491
820	Shopping Center 1511.61 Gross Leasable Area 1000 SF	19840	19840	39680	1774	1922	3696
		Weekday Average Daily Trips			Weekday PM Peak Hour of Adjacent Street Traffic		
ITE	Land Use	Enter	Exit	Total	Enter	Exit	Total
Unadjusted Volume		52823	52816	105639	4849	5051	9900

Source: Institute of Transportation Engineers, Trip Generation Manual 9th Edition, 2012

**TRIP GENERATION 2014, TRAFFICWARE, LLC**

**Detailed Land Use Data**  
**For 3714 Dwelling Units of Single Family Residential**  
**( 210 ) Single-Family Detached Housing**

Project: Viera Central/West

Open Date: 7/9/2016  
 Analysis Date: 7/12/2017

<u>Day / Period</u>	<u>Total Trips</u>	<u>Pass-By Trips</u>	<u>Avg Rate</u>	<u>Min Rate</u>	<u>Max Rate</u>	<u>Std Dev</u>	<u>Avg Size</u>	<u>% Enter</u>	<u>% Exit</u>	<u>Use Eq.</u>	<u>Equation</u>	<u>R2</u>
Weekday Average Daily Trips Source : Trip Generation Manual 9th Edition	29210	0	9.52	4.31	21.85	3.7	198	50	50	True	$\ln(T) = 0.92 \ln(X) + 2.72$	0.95
Weekday PM Peak Hour of Adjacent Street Traffic Source : Trip Generation Manual 9th Edition	2719	0	1	0.42	2.98	1.05	207	63	37	True	$\ln(T) = 0.90 \ln(X) + 0.51$	0.91

Source: Institute of Transportation Engineers, Trip Generation Manual 9th Edition, 2012

**TRIP GENERATION 2014, TRAFFICWARE, LLC**

**Detailed Land Use Data**  
 For 522 Dwelling Units of Apartments  
 ( 220 ) Apartment

Project: Viera Central/West

Open Date: 7/9/2016  
 Analysis Date: 7/12/2017

<u>Day / Period</u>	<u>Total Trips</u>	<u>Pass-By Trips</u>	<u>Avg Rate</u>	<u>Min Rate</u>	<u>Max Rate</u>	<u>Std Dev</u>	<u>Avg Size</u>	<u>% Enter</u>	<u>% Exit</u>	<u>Use Eq.</u>	<u>Equation</u>	<u>R2</u>
Weekday Average Daily Trips Source : Trip Generation Manual 9th Edition	3287	0	6.65	1.27	12.5	3.07	210	50	50	True	$T = 6,06(X) + 123,56$	0.87
Weekday PM Peak Hour of Adjacent Street Traffic Source : Trip Generation Manual 9th Edition	305	0	0.62	0.1	1.64	0.82	233	65	35	True	$T = 0,55(X) + 17,65$	0.77

Source: Institute of Transportation Engineers, Trip Generation Manual 9th Edition, 2012

**TRIP GENERATION 2014, TRAFFICWARE, LLC**

**Detailed Land Use Data**  
 For 317 Dwelling Units of Condos/Townhomes  
 ( 230 ) Residential Condominium/Townhouse

Project: Viera Central/West

Open Date: 7/9/2016  
 Analysis Date: 7/12/2017

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips Source : Trip Generation Manual 9th Edition	1755	0	5.81	1.53	11.79	3.11	179	50	50	True	$\ln(T) = 0.87 \ln(X) + 2.46$	0.8
Weekday PM Peak Hour of Adjacent Street Traffic Source : Trip Generation Manual 9th Edition	155	0	0.52	0.18	1.24	0.75	205	67	33	True	$\ln(T) = 0.82 \ln(X) + 0.32$	0.8

Source: Institute of Transportation Engineers, Trip Generation Manual 9th Edition, 2012

**TRIP GENERATION 2014, TRAFFICWARE, LLC**

**Detailed Land Use Data**  
 For 1143 Dwelling Units of Senior Housing Detached  
 ( 251 ) Senior Adult Housing - Detached

Project: Viera Central/West

Open Date: 7/9/2016  
 Analysis Date: 7/12/2017

<u>Day / Period</u>	<u>Total Trips</u>	<u>Pass-By Trips</u>	<u>Avg Rate</u>	<u>Min Rate</u>	<u>Max Rate</u>	<u>Std Dev</u>	<u>Avg Size</u>	<u>% Enter</u>	<u>% Exit</u>	<u>Use Eq.</u>	<u>Equation</u>	<u>R2</u>
Weekday Average Daily Trips Source : Trip Generation Manual 9th Edition	4206	0	3.68	2.9	5.7	2.04	780	50	50	False	$\ln(T) = 0.89 \ln(X) + 2.06$	0.96
Weekday PM Peak Hour of Adjacent Street Traffic Source : Trip Generation Manual 9th Edition	309	0	0.27	0.17	0.95	0.53	605	61	39	False	$\ln(T) = 0.75 \ln(X) + 0.35$	0.89

Source: Institute of Transportation Engineers, Trip Generation Manual 9th Edition, 2012

**TRIP GENERATION 2014, TRAFFICWARE, LLC**

**Detailed Land Use Data**  
 For 602 Dwelling Units of Senior Housing Attached  
 ( 252 ) Senior Adult Housing - Attached

Project: Viera Central/West

Open Date: 7/9/2016  
 Analysis Date: 7/12/2017

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips Source : Trip Generation Manual 9th Edition	2071	0	3.44	2.59	4.79	1.93	46	50	50	False	$T = 2.98(X) + 21.05$	0.81
Weekday PM Peak Hour of Adjacent Street Traffic Source : Trip Generation Manual 9th Edition	151	0	0.25	0.08	0.43	0.5	138	54	46	False	$T = 0.24(X) + 1.64$	0.96

Source: Institute of Transportation Engineers, Trip Generation Manual 9th Edition, 2012

**TRIP GENERATION 2014, TRAFFICWARE, LLC**

**Detailed Land Use Data**  
 For 174 Dwelling Units of Senior Housing Multifamil  
 ( 253 ) Congregate Care Facility

Project: Viera Central/West

Open Date: 7/9/2016  
 Analysis Date: 7/12/2017

<u>Day / Period</u>	<u>Total Trips</u>	<u>Pass-By Trips</u>	<u>Avg Rate</u>	<u>Min Rate</u>	<u>Max Rate</u>	<u>Std Dev</u>	<u>Avg Size</u>	<u>% Enter</u>	<u>% Exit</u>	<u>Use Eq.</u>	<u>Equation</u>	<u>R2</u>
Weekday Average Daily Trips Source : Trip Generation Manual 9th Edition	351	0	2.02	1.63	2.15		194	50	50	False		
Weekday PM Peak Hour of Adjacent Street Traffic Source : Trip Generation Manual 9th Edition	30	0	0.17	0.16	0.19	0.41	164	55	45	False		

Source: Institute of Transportation Engineers, Trip Generation Manual 9th Edition, 2012

**TRIP GENERATION 2014, TRAFFICWARE, LLC**

**Detailed Land Use Data**  
 For 210 Beds of Assisted Living Facility  
 ( 254 ) Assisted Living

Open Date: 7/9/2016  
 Analysis Date: 7/12/2017

Project: Viera Central/West

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips Source : Trip Generation Manual 9th Edition	559	0	2.66	1.86	4.14	1.74	121	50	50	False	$\ln(T) = 0.56 \ln(X) + 3.07$	0.55
Weekday PM Peak Hour of Adjacent Street Traffic Source : Trip Generation Manual 9th Edition	46	0	0.22	0.11	0.3	0.47	121	44	56	False		

Source: Institute of Transportation Engineers, Trip Generation Manual 9th Edition, 2012

**TRIP GENERATION 2014, TRAFFICWARE, LLC**

**Detailed Land Use Data**  
 For 18 Golf Holes of Golf Course  
 ( 430 ) Golf Course

Project: Viera Central/West

Open Date: 7/9/2016  
 Analysis Date: 7/12/2017

<u>Day / Period</u>	<u>Total Trips</u>	<u>Pass-By Trips</u>	<u>Avg Rate</u>	<u>Min Rate</u>	<u>Max Rate</u>	<u>Std Dev</u>	<u>Avg Size</u>	<u>% Enter</u>	<u>% Exit</u>	<u>Use Eq.</u>	<u>Equation</u>	<u>R2</u>
Weekday Average Daily Trips Source : Trip Generation Manual 9th Edition	643	0	35.74	14.5	54.44	12.12	20	50	50	False		
Weekday PM Peak Hour of Adjacent Street Traffic Source : Trip Generation Manual 9th Edition	53	0	2.92	1.67	4.56	1.86	20	51	49	False		

Source: Institute of Transportation Engineers, Trip Generation Manual 9th Edition, 2012

**TRIP GENERATION 2014, TRAFFICWARE, LLC**

**Detailed Land Use Data**  
 For 16 Movie Screens of Theatre  
 ( 445 ) Multiplex Movie Theater

Project: Viera Central/West

Open Date: 7/9/2016  
 Analysis Date: 7/12/2017

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips Source : Custom - Viera DRI	4680	0	292.5	289.94	294.21	0	20	50	50	False		0
Weekday PM Peak Hour of Adjacent Street Traffic Source : Trip Generation Manual 9th Edition	218	0	13.64	9.38	23.69	7	17	45	55	False		

Source: Institute of Transportation Engineers, Trip Generation Manual 9th Edition, 2012

**TRIP GENERATION 2014, TRAFFICWARE, LLC**

**Detailed Land Use Data**  
**For 100 Beds of Hospital**  
**( 610 ) Hospital**

Project: Viera Central/West

Open Date: 7/9/2016  
 Analysis Date: 7/12/2017

<u>Day / Period</u>	<u>Total Trips</u>	<u>Pass-By Trips</u>	<u>Avg Rate</u>	<u>Min Rate</u>	<u>Max Rate</u>	<u>Std Dev</u>	<u>Avg Size</u>	<u>% Enter</u>	<u>% Exit</u>	<u>Use Eq.</u>	<u>Equation</u>	<u>R2</u>
Weekday Average Daily Trips Source : Trip Generation Manual 9th Edition	1294	0	12.94	3	57.13	9.07	395	50	50	False	$T = 7,33(X) + 2213.85$	0.58
Weekday PM Peak Hour of Adjacent Street Traffic Source : Trip Generation Manual 9th Edition	142	0	1.42	0.4	5.22	1.44	430	33	67	False		

Source: Institute of Transportation Engineers, Trip Generation Manual 9th Edition, 2012

**TRIP GENERATION 2014, TRAFFICWARE, LLC**

**Detailed Land Use Data**  
 For 849.8 Gross Floor Area 1000 SF of General Office  
 ( 710 ) General Office Building

Project: Viera Central/West

Open Date: 7/9/2016  
 Analysis Date: 7/12/2017

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips Source : Trip Generation Manual 9th Edition	6676	0	11.03	3.58	28.8	6.15	197	50	50	True	$\ln(T) = 0.76 \ln(X) + 3.68$	0.81
Weekday PM Peak Hour of Adjacent Street Traffic Source : Trip Generation Manual 9th Edition	1030	0	1.49	0.49	6.39	1.37	215	17	83	True	$T = 1.12(X) + 78.45$	0.82

Source: Institute of Transportation Engineers, Trip Generation Manual 9th Edition, 2012

**TRIP GENERATION 2014, TRAFFICWARE, LLC**

**Detailed Land Use Data**  
 For 137.5 Gross Floor Area 1000 SF of VA Clinic  
 ( 720 ) Medical-Dental Office Building

Project: Viera Central/West

Open Date: 7/9/2016  
 Analysis Date: 7/12/2017

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips Source : Trip Generation Manual 9th Edition	4968	0	36.13	23.16	50.51	10.18	45	50	50	False	$T = 40.89(X) - 214.97$	0.9
Weekday PM Peak Hour of Adjacent Street Traffic Source : Trip Generation Manual 9th Edition	491	0	3.57	0.97	8.86	2.47	31	28	72	False	$\ln(T) = 0.90 \ln(X) + 1.53$	0.77

Source: Institute of Transportation Engineers, Trip Generation Manual 9th Edition, 2012

**TRIP GENERATION 2014, TRAFFICWARE, LLC**

**Detailed Land Use Data**  
 For 1511.61 Gross Leasable Area 1000 SF of Shopping Center  
 ( 820 ) Shopping Center

Open Date: 7/9/2016  
 Analysis Date: 7/12/2017

Project: Viera Central/West

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips Source : Trip Generation Manual 9th Edition	39680	0	42.7	12.5	270.89	21.25	331	50	50	True	$\ln(T) = 0.65 \ln(X) + 5.83$	0.79
Weekday PM Peak Hour of Adjacent Street Traffic Source : Trip Generation Manual 9th Edition	3696	1257	3.71	0.68	29.27	2.74	376	48	52	True	$\ln(T) = 0.67 \ln(X) + 3.31$	0.81

Source: Institute of Transportation Engineers, Trip Generation Manual 9th Edition, 2012

**TRIP GENERATION 2014, TRAFFICWARE, LLC**

**Detailed Land Use Data**  
 For 1561 Students of Elementary School  
 ( 520 ) Elementary School

Project: Viera Central/West

Open Date: 7/9/2016  
 Analysis Date: 7/12/2017

<u>Day / Period</u>	<u>Total Trips</u>	<u>Pass-By Trips</u>	<u>Avg Rate</u>	<u>Min Rate</u>	<u>Max Rate</u>	<u>Std Dev</u>	<u>Avg Size</u>	<u>% Enter</u>	<u>% Exit</u>	<u>Use Eq.</u>	<u>Equation</u>	<u>R2</u>
Weekday Average Daily Trips Source : Trip Generation Manual 9th Edition	2014	0	1.29	0.45	2.45	1.26	620	50	50	False		
Weekday PM Peak Hour of Adjacent Street Traffic Source : Trip Generation Manual 9th Edition	234	0	0.15	0.05	0.37	0.4	684	49	51	False		

Source: Institute of Transportation Engineers, Trip Generation Manual 9th Edition, 2012

**TRIP GENERATION 2014, TRAFFICWARE, LLC**

**Detailed Land Use Data**  
 For 1976 Students of High School  
 ( 530 ) High School

Open Date: 7/9/2016  
 Analysis Date: 7/12/2017

Project: Viera Central/West

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips Source : Trip Generation Manual 9th Edition	3379	0	1.71	0.71	3.96	1.49	1382	50	50	False	$\ln(T) = 0.81 \ln(X) + 1.86$	0.54
Weekday PM Peak Hour of Adjacent Street Traffic Source : Trip Generation Manual 9th Edition	257	0	0.13	0.03	0.38	0.37	1352	47	53	False		

Source: Institute of Transportation Engineers, Trip Generation Manual 9th Edition, 2012

**TRIP GENERATION 2014, TRAFFICWARE, LLC**

**Detailed Land Use Data**  
 For 106 Rooms of Hotel  
 ( 310 ) Hotel

Project: Viera Central/West

Open Date: 7/9/2016  
 Analysis Date: 7/12/2017

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips Source : Trip Generation Manual 9th Edition	866	0	8.17	3.47	9.58	3.38	476	50	50	False	$T = 8,95(X) - 373,16$	0.98
Weekday PM Peak Hour of Adjacent Street Traffic Source : Trip Generation Manual 9th Edition	64	0	0.6	0.21	1.06	0.81	200	51	49	False		

Source: Institute of Transportation Engineers, Trip Generation Manual 9th Edition, 2012

**TRIP GENERATION 2014, TRAFFICWARE, LLC**

**Detailed Land Use Data**  
 For 3714 Dwelling Units of Single Family Residential  
 ( 210 ) Single-Family Detached Housing

Project: Viera Central/West

Open Date: 7/9/2016  
 Analysis Date: 7/12/2017

<u>Day / Period</u>	<u>Total Trips</u>	<u>Pass-By Trips</u>	<u>Avg Rate</u>	<u>Min Rate</u>	<u>Max Rate</u>	<u>Std Dev</u>	<u>Avg Size</u>	<u>% Enter</u>	<u>% Exit</u>	<u>Use Eq.</u>	<u>Equation</u>	<u>R2</u>
Weekday Average Daily Trips Source : Trip Generation Manual 9th Edition	29210	0	9.52	4.31	21.85	3.7	198	50	50	True	$\ln(T) = 0.92 \ln(X) + 2.72$	0.95
Weekday PM Peak Hour of Adjacent Street Traffic Source : Trip Generation Manual 9th Edition	2719	0	1	0.42	2.98	1.05	207	63	37	True	$\ln(T) = 0.90 \ln(X) + 0.51$	0.91

Source: Institute of Transportation Engineers, Trip Generation Manual 9th Edition, 2012

**TRIP GENERATION 2014, TRAFFICWARE, LLC**

**Detailed Land Use Data**  
 For 522 Dwelling Units of Apartments  
 ( 220 ) Apartment

Open Date: 7/9/2016  
 Analysis Date: 7/12/2017

Project: Viera Central/West

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips Source : Trip Generation Manual 9th Edition	3287	0	6.65	1.27	12.5	3.07	210	50	50	True	$T = 6.06(X) + 123.56$	0.87
Weekday PM Peak Hour of Adjacent Street Traffic Source : Trip Generation Manual 9th Edition	305	0	0.62	0.1	1.64	0.82	233	65	35	True	$T = 0.55(X) + 17.65$	0.77

Source: Institute of Transportation Engineers, Trip Generation Manual 9th Edition, 2012

**TRIP GENERATION 2014, TRAFFICWARE, LLC**

**Detailed Land Use Data**  
 For 317 Dwelling Units of Condos/Townhomes  
 ( 230 ) Residential Condominium/Townhouse

Project: Viera Central/West

Open Date: 7/9/2016  
 Analysis Date: 7/12/2017

<u>Day / Period</u>	<u>Total Trips</u>	<u>Pass-By Trips</u>	<u>Avg Rate</u>	<u>Min Rate</u>	<u>Max Rate</u>	<u>Std Dev</u>	<u>Avg Size</u>	<u>% Enter</u>	<u>% Exit</u>	<u>Use Eq.</u>	<u>Equation</u>	<u>R2</u>
Weekday Average Daily Trips Source : Trip Generation Manual 9th Edition	1755	0	5.81	1.53	11.79	3.11	179	50	50	True	$\ln(T) = 0.87 \ln(X) + 2.46$	0.8
Weekday PM Peak Hour of Adjacent Street Traffic Source : Trip Generation Manual 9th Edition	155	0	0.52	0.18	1.24	0.75	205	67	33	True	$\ln(T) = 0.82 \ln(X) + 0.32$	0.8

Source: Institute of Transportation Engineers, Trip Generation Manual 9th Edition, 2012

**TRIP GENERATION 2014, TRAFFICWARE, LLC**

**Detailed Land Use Data**  
 For 1143 Dwelling Units of Senior Housing Detached  
 ( 251 ) Senior Adult Housing - Detached

Project: Viera Central/West

Open Date: 7/9/2016  
 Analysis Date: 7/12/2017

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips Source : Trip Generation Manual 9th Edition	4206	0	3.68	2.9	5.7	2.04	780	50	50	False	$\ln(T) = 0.89 \ln(X) + 2.06$	0.96
Weekday PM Peak Hour of Adjacent Street Traffic Source : Trip Generation Manual 9th Edition	309	0	0.27	0.17	0.95	0.53	605	61	39	False	$\ln(T) = 0.75 \ln(X) + 0.35$	0.89

Source: Institute of Transportation Engineers, Trip Generation Manual 9th Edition, 2012

**TRIP GENERATION 2014, TRAFFICWARE, LLC**

**Detailed Land Use Data**  
 For 602 Dwelling Units of Senior Housing Attached  
 ( 252 ) Senior Adult Housing - Attached

Project: Viera Central/West

Open Date: 7/9/2016  
 Analysis Date: 7/12/2017

<u>Day / Period</u>	<u>Total Trips</u>	<u>Pass-By Trips</u>	<u>Avg Rate</u>	<u>Min Rate</u>	<u>Max Rate</u>	<u>Std Dev</u>	<u>Avg Size</u>	<u>% Enter</u>	<u>% Exit</u>	<u>Use Eq.</u>	<u>Equation</u>	<u>R2</u>
Weekday Average Daily Trips Source : Trip Generation Manual 9th Edition	2071	0	3.44	2.59	4.79	1.93	46	50	50	False	$T = 2.98(X) + 21.05$	0.81
Weekday PM Peak Hour of Adjacent Street Traffic Source : Trip Generation Manual 9th Edition	151	0	0.25	0.08	0.43	0.5	138	54	46	False	$T = 0.24(X) + 1.64$	0.96

Source: Institute of Transportation Engineers, Trip Generation Manual 9th Edition, 2012

**TRIP GENERATION 2014, TRAFFICWARE, LLC**

**Detailed Land Use Data**  
 For 174 Dwelling Units of Senior Housing Multifamil  
 ( 253 ) Congregate Care Facility

Project: Viera Central/West

Open Date: 7/9/2016  
 Analysis Date: 7/12/2017

<u>Day / Period</u>	<u>Total Trips</u>	<u>Pass-By Trips</u>	<u>Avg Rate</u>	<u>Min Rate</u>	<u>Max Rate</u>	<u>Std Dev</u>	<u>Avg Size</u>	<u>% Enter</u>	<u>% Exit</u>	<u>Use Eq.</u>	<u>Equation</u>	<u>R2</u>
Weekday Average Daily Trips Source : Trip Generation Manual 9th Edition	351	0	2.02	1.63	2.15		194	50	50	False		
Weekday PM Peak Hour of Adjacent Street Traffic Source : Trip Generation Manual 9th Edition	30	0	0.17	0.16	0.19	0.41	164	55	45	False		

Source: Institute of Transportation Engineers, Trip Generation Manual 9th Edition, 2012

**TRIP GENERATION 2014, TRAFFICWARE, LLC**

**Detailed Land Use Data**  
 For 210 Beds of Assisted Living Facility  
 ( 254 ) Assisted Living

Project: Viera Central/West

Open Date: 7/9/2016  
 Analysis Date: 7/12/2017

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips Source : Trip Generation Manual 9th Edition	559	0	2.66	1.86	4.14	1.74	121	50	50	False	$\ln(T) = 0.56 \ln(X) + 3.07$	0.55
Weekday PM Peak Hour of Adjacent Street Traffic Source : Trip Generation Manual 9th Edition	46	0	0.22	0.11	0.3	0.47	121	44	56	False		

Source: Institute of Transportation Engineers, Trip Generation Manual 9th Edition, 2012

**TRIP GENERATION 2014, TRAFFICWARE, LLC**

**Detailed Land Use Data**  
 For 18 Golf Holes of Golf Course  
 ( 430 ) Golf Course

Open Date: 7/9/2016  
 Analysis Date: 7/12/2017

Project: Viera Central/West

<u>Day / Period</u>	<u>Total Trips</u>	<u>Pass-By Trips</u>	<u>Avg Rate</u>	<u>Min Rate</u>	<u>Max Rate</u>	<u>Std Dev</u>	<u>Avg Size</u>	<u>% Enter</u>	<u>% Exit</u>	<u>Use Eq.</u>	<u>Equation</u>	<u>R2</u>
Weekday Average Daily Trips Source : Trip Generation Manual 9th Edition	643	0	35.74	14.5	54.44	12.12	20	50	50	False		
Weekday PM Peak Hour of Adjacent Street Traffic Source : Trip Generation Manual 9th Edition	53	0	2.92	1.67	4.56	1.86	20	51	49	False		

Source: Institute of Transportation Engineers, Trip Generation Manual 9th Edition, 2012

**TRIP GENERATION 2014, TRAFFICWARE, LLC**

**Detailed Land Use Data**  
 For 16 Movie Screens of Theatre  
 ( 445 ) Multiplex Movie Theater

Project: Viera Central/West

Open Date: 7/9/2016  
 Analysis Date: 7/12/2017

<u>Day / Period</u>	<u>Total Trips</u>	<u>Pass-By Trips</u>	<u>Avg Rate</u>	<u>Min Rate</u>	<u>Max Rate</u>	<u>Std Dev</u>	<u>Avg Size</u>	<u>% Enter</u>	<u>% Exit</u>	<u>Use Eq.</u>	<u>Equation</u>	<u>R2</u>
Weekday Average Daily Trips Source : Custom - Viera DRI	4680	0	292.5	289.94	294.21	0	20	50	50	False		0
Weekday PM Peak Hour of Adjacent Street Traffic Source : Trip Generation Manual 9th Edition	218	0	13.64	9.38	23.69	7	17	45	55	False		

Source: Institute of Transportation Engineers, Trip Generation Manual 9th Edition, 2012

**TRIP GENERATION 2014, TRAFFICWARE, LLC**

**Detailed Land Use Data**  
 For 100 Beds of Hospital  
 ( 610 ) Hospital

Open Date: 7/9/2016  
 Analysis Date: 7/12/2017

Project: Viera Central/West

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips Source : Trip Generation Manual 9th Edition	1294	0	12.94	3	57.13	9.07	395	50	50	False	$T = 7.33(X) + 2213.85$	0.58
Weekday PM Peak Hour of Adjacent Street Traffic Source : Trip Generation Manual 9th Edition	142	0	1.42	0.4	5.22	1.44	430	33	67	False		

Source: Institute of Transportation Engineers, Trip Generation Manual 9th Edition, 2012

**TRIP GENERATION 2014, TRAFFICWARE, LLC**

**Detailed Land Use Data**

For 849.8 Gross Floor Area 1000 SF of General Office  
( 710 ) General Office Building

Project: Viera Central/West

Open Date: 7/9/2016  
Analysis Date: 7/12/2017

<u>Day / Period</u>	<u>Total Trips</u>	<u>Pass-By Trips</u>	<u>Avg Rate</u>	<u>Min Rate</u>	<u>Max Rate</u>	<u>Std Dev</u>	<u>Avg Size</u>	<u>% Enter</u>	<u>% Exit</u>	<u>Use Eq.</u>	<u>Equation</u>	<u>R2</u>
Weekday Average Daily Trips Source : Trip Generation Manual 9th Edition	6676	0	11.03	3.58	28.8	6.15	197	50	50	True	$\ln(T) = 0.76 \ln(X) + 3.68$	0.81
Weekday PM Peak Hour of Adjacent Street Traffic Source : Trip Generation Manual 9th Edition	1030	0	1.49	0.49	6.39	1.37	215	17	83	True	$T = 1.12(X) + 78.45$	0.82

Source: Institute of Transportation Engineers, Trip Generation Manual 9th Edition, 2012

**TRIP GENERATION 2014, TRAFFICWARE, LLC**

**Detailed Land Use Data**  
 For 137.5 Gross Floor Area 1000 SF of VA Clinic  
 ( 720 ) Medical-Dental Office Building

Open Date: 7/9/2016  
 Analysis Date: 7/12/2017

Project: Viera Central/West

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips Source : Trip Generation Manual 9th Edition	4968	0	36.13	23.16	50.51	10.18	45	50	50	False	$T = 40.89(X) - 214.97$	0.9
Weekday PM Peak Hour of Adjacent Street Traffic Source : Trip Generation Manual 9th Edition	491	0	3.57	0.97	8.86	2.47	31	28	72	False	$\ln(T) = 0.90 \ln(X) + 1.53$	0.77

Source: Institute of Transportation Engineers, Trip Generation Manual 9th Edition, 2012

**TRIP GENERATION 2014, TRAFFICWARE, LLC**

**Detailed Land Use Data**  
 For 1511.61 Gross Leasable Area 1000 SF of Shopping Center  
 ( 820 ) Shopping Center

Project: Viera Central/West

Open Date: 7/9/2016  
 Analysis Date: 7/12/2017

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips Source : Trip Generation Manual 9th Edition	39680	0	42.7	12.5	270.89	21.25	331	50	50	True	$\ln(T) = 0.65 \ln(X) + 5.83$	0.79
Weekday PM Peak Hour of Adjacent Street Traffic Source : Trip Generation Manual 9th Edition	3696	1257	3.71	0.68	29.27	2.74	376	48	52	True	$\ln(T) = 0.67 \ln(X) + 3.31$	0.81

Source: Institute of Transportation Engineers, Trip Generation Manual 9th Edition, 2012

**TRIP GENERATION 2014, TRAFFICWARE, LLC**

**Detailed Land Use Data**  
 For 1561 Students of Elementary School  
 ( 520 ) Elementary School

Open Date: 7/9/2016  
 Analysis Date: 7/12/2017

Project: Viera Central/West

<u>Day / Period</u>	<u>Total Trips</u>	<u>Pass-By Trips</u>	<u>Avg Rate</u>	<u>Min Rate</u>	<u>Max Rate</u>	<u>Std Dev</u>	<u>Avg Size</u>	<u>% Enter</u>	<u>% Exit</u>	<u>Use Eq.</u>	<u>Equation</u>	<u>R2</u>
Weekday Average Daily Trips Source : Trip Generation Manual 9th Edition	2014	0	1.29	0.45	2.45	1.26	620	50	50	False		
Weekday PM Peak Hour of Adjacent Street Traffic Source : Trip Generation Manual 9th Edition	234	0	0.15	0.05	0.37	0.4	684	49	51	False		

Source: Institute of Transportation Engineers, Trip Generation Manual 9th Edition, 2012

**TRIP GENERATION 2014, TRAFFICWARE, LLC**

**Detailed Land Use Data**  
 For 1976 Students of High School  
 ( 530 ) High School

Project: Viera Central/West

Open Date: 7/9/2016  
 Analysis Date: 7/12/2017

<u>Day / Period</u>	<u>Total Trips</u>	<u>Pass-By Trips</u>	<u>Avg Rate</u>	<u>Min Rate</u>	<u>Max Rate</u>	<u>Std Dev</u>	<u>Avg Size</u>	<u>% Enter</u>	<u>% Exit</u>	<u>Use Eq.</u>	<u>Equation</u>	<u>R2</u>
Weekday Average Daily Trips Source : Trip Generation Manual 9th Edition	3379	0	1.71	0.71	3.96	1.49	1382	50	50	False	$\ln(T) = 0.61 \ln(X) + 1.86$	0.54
Weekday PM Peak Hour of Adjacent Street Traffic Source : Trip Generation Manual 9th Edition	257	0	0.13	0.03	0.38	0.37	1352	47	53	False		

Source: Institute of Transportation Engineers, Trip Generation Manual 9th Edition, 2012

**TRIP GENERATION 2014, TRAFFICWARE, LLC**

**Detailed Land Use Data**  
**For 106 Rooms of Hotel**  
**( 310 ) Hotel**

Project: Viera Central/West

Open Date: 7/9/2016  
 Analysis Date: 7/12/2017

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips Source : Trip Generation Manual 9th Edition	866	0	8.17	3.47	9.58	3.38	476	50	50	False	$T = 8.95(X) - 373.16$	0.98
Weekday PM Peak Hour of Adjacent Street Traffic Source : Trip Generation Manual 9th Edition	64	0	0.6	0.21	1.06	0.81	200	51	49	False		

Source: Institute of Transportation Engineers, Trip Generation Manual 9th Edition, 2012

**TRIP GENERATION 2014, TRAFFICWARE, LLC**

PM Peak Internal Capture Analysis for Viera Blvd & Murrell Road Quadrants - Viera East Build-out

exit to external

enter from external

**Retail (820) 356,097 SQ FT**

	Total	Internal	External
Enter	601	66	535
Exit	651	89	562
<b>Total</b>	<b>1252</b>	<b>155</b>	<b>1097</b>
%	100%	12.39%	87.61%

**Build-out Analysis**

Exit Retail	demand	demand	Enter Retail
↓ 0.03	20	12	↑ 0.02
	balanced	balanced	
	11	12	
Enter Office	demand	demand	Exit Office
0.31	11	39	0.23

Exit Retail	demand	demand	Enter Retail
↓ 0.12	78	54	↑ 0.09
	balanced	balanced	
	78	54	
Enter Residential	demand	demand	Exit Residential
0.31	131	122	0.53

**Office (710) 163,587**

	Total	Internal	External
Enter	35	14	21
Exit	168	12	156
<b>Total</b>	<b>203</b>	<b>26</b>	<b>177</b>
%	100%	12.92%	87.08%

**Residential (210,220,230) 1,098 UNITS**

	Total	Internal	External
Enter	422	78	344
Exit	230	57	173
<b>Total</b>	<b>652</b>	<b>135</b>	<b>517</b>
%	100%	20.71%	79.29%

Exit Office	demand	balanced	demand	Enter Residential
0.02	3	3	8	0.02
←				
Enter Office	demand	balanced	demand	Exit Residential
0	0	0	0	0

Internal Capture	Retail	Office	Residential	Total	
Net Enter	535	21	344	900	
Net Exit	562	156	173	891	
Net Total	1097	177	517	1791	Internal Capture
Gross Daily Trip Gen	1252	203	652	2107	
Difference	155	26	135	316	15%

Daily Internal Capture Analysis for Viera Blvd & Murrell Road Quadrants - Viera East Phase 1-3

		Retail (820) 166,097 SQ FT			Phase 1-3 Analysis			
		Total	Internal	External				
exit to external		Enter	3781	491	3290			
		Exit	3780	518	3262			
		Total	7561	1009	6552			
enter from external		%	100%	13.35%	86.65%			

Exit Retail	demand	demand	Enter Retail	Exit Retail	demand	demand	Enter Retail
0.03	113	151	0.04	0.11	416	340	0.09
↓	balanced	balanced	↑	↓	balanced	balanced	↑
	103	150			416	340	
Enter Office	demand	demand	Exit Office	Enter Residential	demand	demand	Exit Residential
0.15	103	150	0.22	0.33	1175	1354	0.38

Office (710) 163,587				Res (210,220,230) 1,098 UNITS			
	Total	Internal	External		Total	Internal	External
Enter	684	116	568	Enter	3562	416	3146
Exit	684	150	534	Exit	3562	354	3208
Total	1368	266	1102	Total	7124	770	6354
%	100%	19.44%	80.56%	%	100%	10.81%	89.19%

Exit Office	demand	balanced	demand	Enter Residential
0.02	13.68	14	107	0.03
←				
Enter Office	demand	balanced	demand	Exit Residential
0	0	0	0	0

Internal Capture	Retail	Office	Residential	Total	
Net Enter	3290	568	3146	7004	
Net Exit	3262	534	3208	7003	
Net Total	6552	1102	6354	14008	Internal Capture
Gross Daily Trip Gen	7561	1368	7124	16053	13%
Difference	1009	266	770	2045	

**PM Peak Internal Capture Analysis for Viera Blvd & Murrell Road Quadrants - Viera East Build-out**

exit to external

**Retail (820) 356,097 SQ FT**

	Total	Internal	External
Enter	601	66	535
Exit	651	89	562
<b>Total</b>	<b>1252</b>	<b>155</b>	<b>1097</b>
%	100%	12.39%	87.61%

**Build-out Analysis**

enter from external

Exit Retail	demand	demand	Enter Retail
↓ 0.03	20	12	↑ 0.02
	balanced	balanced	
	11	12	
Enter Office	demand	demand	Exit Office
0.31	11	39	0.23

Exit Retail	demand	demand	Enter Retail
↓ 0.12	78	54	↑ 0.09
	balanced	balanced	
	78	54	
Enter Residential	demand	demand	Exit Residential
0.31	131	122	0.53

**Office (710) 163,587**

	Total	Internal	External
Enter	35	14	21
Exit	168	12	156
<b>Total</b>	<b>203</b>	<b>26</b>	<b>177</b>
%	100%	12.92%	87.08%

**Residential (210,220,230) 1,098 UNITS**

	Total	Internal	External
Enter	422	78	344
Exit	230	57	173
<b>Total</b>	<b>652</b>	<b>135</b>	<b>517</b>
%	100%	20.71%	79.29%

Exit Office	demand	balanced	demand	Enter Residential
0.02	3	3	8	0.02
←				
Enter Office	demand	balanced	demand	Exit Residential
0	0	0	0	0

Internal Capture	Retail	Office	Residential	Total	
Net Enter	535	21	344	900	
Net Exit	562	156	173	891	
Net Total	1097	177	517	1791	Internal Capture
Gross Daily Trip Gen	1252	203	652	2107	
Difference	155	26	135	316	15%

**PM Peak Internal Capture Analysis for Viera Blvd & Murrell Road Quadrants - Viera East Phases 1-3**

<b>Retail (820) 166,097 SQ FT</b>			
	Total	Internal	External
Enter	327	36	291
Exit	355	53	302
<b>Total</b>	<b>682</b>	<b>89</b>	<b>593</b>
%	100%	13.08%	86.92%

**Phase 1-3 Analysis**

exit to external  
 enter from external

Exit Retail demand demand Enter Retail  
 ↓ 0.03 11 7 ↑ 0.02  
 balanced balanced  
 11 7  
 Enter Office demand demand Exit Office  
 0.31 11 39 0.23

Exit Retail demand demand Enter Retail  
 ↓ 0.12 43 29 ↑ 0.09  
 balanced balanced  
 43 29  
 Enter Residential demand demand Exit Residential  
 0.31 131 122 0.53

<b>Office (710) 163,587</b>			
	Total	Internal	External
Enter	35	14	21
Exit	168	7	161
<b>Total</b>	<b>203</b>	<b>21</b>	<b>182</b>
%	100%	10.34%	89.66%

<b>Residential (210,220,230) 1,098 UNITS</b>			
	Total	Internal	External
Enter	422	43	379
Exit	230	33	197
<b>Total</b>	<b>652</b>	<b>76</b>	<b>576</b>
%	100%	11.66%	88.34%

Exit Office demand balanced demand Enter Residential  
 0.02 3 3 8 0.02

←

Enter Office demand balanced demand Exit Residential  
 0 0 0 0 0

Internal Capture	Retail	Office	Residential	Total	
Net Enter	291	21	379	691	
Net Exit	302	161	197	660	
Net Total	593	182	576	1351	Internal Capture
Gross Daily Trip Gen	682	203	652	1537	
Difference	89	21	76	186	12%

<b>PM Peak Hour Net External Trips (no Seasonal Adjustment)</b>	
Three-Day Average:	<b>5,993</b>
<b>Gross Trip Generation for West/Central:</b>	<b>9,900</b>
<b>Internal Trips/ITE Gross Trip Generation Estimate Ratio:</b>	<b>39.5%</b>
<b>Buildout Trip Generation Viera Central/West</b>	
Gross Total Viera Central/West:	26,396
Community Capture: (39.5%)	10,417
<b>Net Trip Generation:</b>	<b>15,979</b>
<b>Viera DRI Net External Trips at Build-Out</b>	
Viera East:	4,664
Viera Central/West:	15,979
Viera Build-out Total:	20,643
Current DO Mitigation:	19,541
<b>Net External Trips:</b>	<b>1,102</b>

<b>PM Peak Hour Net External Trips using Seasonal Adjustment Factor</b>	
Three-Day Average:	<b>5,993</b>
<b>Three-Day Average: (Apply .97 SAF)</b>	<b>5,813</b>
<b>Gross Trip Generation for West/Central:</b>	<b>9,900</b>
<b>Internal Trips/ITE Gross Trip Generation Estimate Ratio:</b>	<b>41.3%</b>
<b>Buildout Trip Generation Viera Central/West</b>	
Gross Total Viera Central/West:	26,396
Community Capture: (41.3%)	10,896
<b>Net Trip Generation:</b>	<b>15,500</b>
<b>Viera DRI Net External Trips at Build-Out</b>	
Viera East:	4,664
Viera Central/West:	15,500
Viera Build-out Total:	20,164
Current DO Mitigation:	19,541
<b>Net External Trips:</b>	<b>623</b>

2016 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL  
 CATEGORY: 7000 BREVARD COUNTYWIDE

MOCF: 0.94  
 PSCF

WEEK	DATES	SF	PSCF
1	01/01/2016 - 01/02/2016	1.00	1.06
2	01/03/2016 - 01/09/2016	1.01	1.07
3	01/10/2016 - 01/16/2016	1.02	1.09
4	01/17/2016 - 01/23/2016	1.01	1.07
5	01/24/2016 - 01/30/2016	0.99	1.05
* 6	01/31/2016 - 02/06/2016	0.97	1.03
* 7	02/07/2016 - 02/13/2016	0.96	1.02
* 8	02/14/2016 - 02/20/2016	0.94	1.00
* 9	02/21/2016 - 02/27/2016	0.93	0.99
*10	02/28/2016 - 03/05/2016	0.92	0.98
*11	03/06/2016 - 03/12/2016	0.91	0.97
*12	03/13/2016 - 03/19/2016	0.90	0.96
*13	03/20/2016 - 03/26/2016	0.91	0.97
*14	03/27/2016 - 04/02/2016	0.93	0.99
*15	04/03/2016 - 04/09/2016	0.94	1.00
*16	04/10/2016 - 04/16/2016	0.96	1.02
*17	04/17/2016 - 04/23/2016	0.96	1.02
*18	04/24/2016 - 04/30/2016	0.97	1.03
19	05/01/2016 - 05/07/2016	0.98	1.04
20	05/08/2016 - 05/14/2016	0.99	1.05
21	05/15/2016 - 05/21/2016	0.99	1.05
22	05/22/2016 - 05/28/2016	1.01	1.07
23	05/29/2016 - 06/04/2016	1.02	1.09
24	06/05/2016 - 06/11/2016	1.03	1.10
25	06/12/2016 - 06/18/2016	1.05	1.12
26	06/19/2016 - 06/25/2016	1.04	1.11
27	06/26/2016 - 07/02/2016	1.04	1.11
28	07/03/2016 - 07/09/2016	1.03	1.10
29	07/10/2016 - 07/16/2016	1.03	1.10
30	07/17/2016 - 07/23/2016	1.03	1.10
31	07/24/2016 - 07/30/2016	1.04	1.11
32	07/31/2016 - 08/06/2016	1.04	1.11
33	08/07/2016 - 08/13/2016	1.05	1.12
34	08/14/2016 - 08/20/2016	1.05	1.12
35	08/21/2016 - 08/27/2016	1.06	1.13
36	08/28/2016 - 09/03/2016	1.06	1.13
37	09/04/2016 - 09/10/2016	1.06	1.13
38	09/11/2016 - 09/17/2016	1.07	1.14
39	09/18/2016 - 09/24/2016	1.06	1.13
40	09/25/2016 - 10/01/2016	1.05	1.12
41	10/02/2016 - 10/08/2016	1.04	1.11
42	10/09/2016 - 10/15/2016	1.04	1.11
43	10/16/2016 - 10/22/2016	1.03	1.10
44	10/23/2016 - 10/29/2016	1.03	1.10
45	10/30/2016 - 11/05/2016	1.02	1.09
46	11/06/2016 - 11/12/2016	1.02	1.09
47	11/13/2016 - 11/19/2016	1.01	1.07
48	11/20/2016 - 11/26/2016	1.01	1.07
49	11/27/2016 - 12/03/2016	1.01	1.07
50	12/04/2016 - 12/10/2016	1.01	1.07
51	12/11/2016 - 12/17/2016	1.00	1.06
52	12/18/2016 - 12/24/2016	1.01	1.07
53	12/25/2016 - 12/31/2016	1.02	1.09

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Roadway	Limits		Number of Lanes	P.M. Peak-Hour Two Way Capacity at Adopted LOS	Existing P.M. Peak-Hour Two-Way Volume	Growth Rate	Growth Factor	Background Volume	Cumulative Project Distribution	Net Build-Out External Project Traffic	Total Build-Out Volume	Build-Out Adverse?
	From	To										
I-95	Malabar Road	Palm Bay Road	6D	10,060	5,355	2.00%	1.28	6,854	2.8%	23	6,878	No
I-95	Palm Bay Road	US 192	6D	10,060	6,480	2.00%	1.28	8,294	5.5%	46	8,340	No
I-95	US 192	Eau Gallie Blvd	6D	10,060	3,915	2.00%	1.28	5,011	13.8%	116	5,127	No
I-95	Eau Gallie Blvd	Pineda Causeway	6D	10,060	7,290	2.00%	1.28	9,331	19.9%	167	9,498	No
I-96	Pineda Causeway	Wickham Road	6D	10,061	7,290	2.00%	1.28	9,331	8.6%	72	9,403	No
I-97	Wickham Road	Viera Boulevard	6D	10,062	5,445	2.00%	1.28	6,970	6.6%	55	7,025	No
I-95	Viera Boulevard	Fiske Boulevard	6D	10,060	5,445	2.00%	1.28	6,970	6.1%	51	7,021	No
I-95	Fiske Boulevard	SR 520	6D	10,060	6,941	2.00%	1.28	8,884	12.3%	103	8,988	No
I-95	SR 520	SR524	6D	10,060	3,600	2.00%	1.28	4,608	8.2%	69	4,677	No
I-95	SR 524	SR 528	6D	10,060	5,130	2.00%	1.28	6,566	6.3%	53	6,619	No
I-95	SR 528	Port St John Pkwy	6D	10,060	2,205	2.00%	1.28	2,822	4.5%	38	2,860	No
I-95	Port St John Pkwy	SR 407	6D	10,060	3,780	2.00%	1.28	4,838	2.9%	24	4,863	No
I-95	SR 407	SR 50	6D	10,060	2,313	2.00%	1.28	2,961	2.5%	21	2,982	No
US 1	Nasa Boulevard	Babcock Street	6D	5,390	3,049	2.00%	1.28	3,903	1.5%	13	3,915	No
US 1	Babcock Street	Sarno Road	8D <sup>1</sup>	7,210	4,230	2.00%	1.28	5,414	2.2%	18	5,433	No
US 1	Sarno Road	Eau Gallie Boulevard	8D <sup>1</sup>	7,210	4,721	2.00%	1.28	6,043	3.3%	28	6,071	No
US 1	Eau Gallie Boulevard	Aurora Road	6D	5,390	3,640	2.00%	1.28	4,659	3.9%	33	4,692	No
US 1	Aurora Road	Lake Washington Boulevard	6D	5,390	3,475	2.00%	1.28	4,448	4.3%	36	4,484	No
US 1	Lake Washington Boulevard	Parkway Drive	6D	5,390	3,357	2.00%	1.28	4,297	4.8%	40	4,337	No
US 1	Parkway Drive	Post Road	6D	5,390	3,409	2.00%	1.28	4,364	6.4%	54	4,417	No
US 2	Post Road	Pineda Causeway	6D	5,390	3,409	2.00%	1.28	4,364	8.5%	71	4,435	No
US 1	Pineda Causeway	Sun Tree Boulevard	6D <sup>3</sup>	5,390	3,539	2.00%	1.26	4,459	10.6%	89	4,548	No
US 1	Sun Tree Boulevard	Viera Boulevard	6D <sup>3</sup>	5,390	2,879	2.00%	1.26	3,628	7.3%	61	3,689	No
US 1	Eysler Boulevard	Barton Boulevard	6D	5,390	3,045	2.00%	1.26	3,837	5.9%	49	3,886	No
US 1	Barton Boulevard	Florida Avenue	6D	5,390	3,695	2.00%	1.26	4,656	7.1%	59	4,715	No
US 1	Florida Avenue	Rosa Jones Boulevard	6D	5,390	2,945	2.88%	1.37	4,048	4.3%	36	4,084	No
US 1	Rosa Jones Boulevard	SR 520	6D	5,390	2,780	2.76%	1.36	3,777	3.1%	26	3,803	No
US 1	SR 520	Peachtree Street	6D	5,390	1,607	2.00%	1.30	2,089	1.4%	12	2,101	No
US 1	Dixon Boulevard	Michigan Boulevard	6D	5,390	2,566	2.00%	1.32	3,387	1.5%	13	3,400	No
Pineda Causeway	I-95	Wickham Road	4D	3,580	2,282	2.00%	1.28	2,921	8.9%	75	2,996	No
Pineda Causeway	Wickham Road	US 1	4D	3,580	2,740	2.00%	1.28	3,507	7.9%	66	3,573	No
Pineda Causeway	US 1	S. Tropical Trail	4D	5,900	3,953	2.00%	1.26	4,981	7.2%	60	5,041	No
Pineda Causeway	S. Tropical Trail	SR A1A	4D	5,900	3,287	2.00%	1.26	4,142	5.9%	49	4,191	No
Wickham Road	Murrell Road	Baytree Drive	4D	3,580	2,664	2.00%	1.28	3,410	14.8%	124	3,534	No
Wickham Road	Baytree Drive	Interlachen Road	4D	3,580	2,720	2.00%	1.28	3,482	13.7%	115	3,596	Yes
Wickham Road	Interlachen Road	N. Pinehurst Avenue	4D	3,580	2,552	2.00%	1.28	3,267	13.1%	110	3,376	No
Wickham Road	N. Pinehurst Avenue	Suntree Boulevard	4D	3,580	2,727	2.00%	1.28	3,491	11.3%	95	3,585	Yes
Wickham Road	Suntree Boulevard	St. Andrews Boulevard	4D	3,580	2,155	2.00%	1.28	2,758	7.2%	60	2,819	No
Wickham Road	St. Andrews Boulevard	Jordan Blass Drive	4D	3,580	1,865	2.00%	1.28	2,387	7.2%	60	2,448	No
Wickham Road	Jordan Blass Drive	Pineda Causeway	4D	3,580	2,389	2.00%	1.28	3,058	6.9%	58	3,116	No
Wickham Road	Pineda Causeway	Business Center Boulevard	6D <sup>3</sup>	5,390	3,296	2.00%	1.28	4,219	7.2%	60	4,279	No
Wickham Road	Business Center Boulevard	Mariah Drive	6D <sup>3</sup>	5,390	3,165	2.00%	1.28	4,051	5.7%	48	4,099	No
Wickham Road	Mariah Drive	Kensington Drive	6D <sup>3</sup>	5,390	3,139	2.00%	1.28	4,018	5.1%	43	4,061	No
Wickham Road	Kensington Drive	Post Road	6D <sup>3</sup>	5,390	3,240	2.00%	1.28	4,147	4.0%	34	4,181	No
Wickham Road	Post Road	Parkway Drive	6D <sup>3</sup>	5,390	2,893	2.00%	1.28	3,703	2.9%	24	3,727	No
Wickham Road	Parkway Drive	Lake Washington Boulevard	4D	3,580	2,765	2.00%	1.28	3,539	1.7%	14	3,553	No
Fiske Boulevard	Barnes Boulevard	Eysler Boulevard	4D	3,580	2,327	2.00%	1.26	2,932	13.6%	114	3,046	No
Fiske Boulevard	Eysler Boulevard	Barton Boulevard	4D	3,580	1,998	2.00%	1.26	2,517	10.0%	84	2,601	No
Fiske Boulevard	Barton Boulevard	St. Andrews Drive	4D	3,580	2,244	2.00%	1.26	2,827	8.3%	70	2,897	No
Fiske Boulevard	St. Andrews Drive	Pluckebaum Road	4D	3,580	2,179	2.00%	1.26	2,746	7.7%	65	2,810	No
Fiske Boulevard	Pluckebaum Road	Rosa Jones Boulevard	4D	3,580	1,675	2.00%	1.26	2,111	6.5%	54	2,165	No
Fiske Boulevard	Rosa Jones Boulevard	SR 520	4D	3,580	1,284	2.00%	1.26	1,618	6.3%	53	1,671	No
Fiske Boulevard	SR 520	Gus Hipp Boulevard	2U	1,410	743	2.00%	1.26	936	1.9%	16	952	No
Murrell Road	Barnes Boulevard	Gus Hipp Boulevard	4D	3,222	1,550	2.50%	1.35	2,093	8.8%	74	2,166	No
Murrell Road	Gus Hipp Boulevard	Eysler Boulevard	4D	3,222	1,550	2.76%	1.39	2,149	8.7%	73	2,222	No
Murrell Road	Eysler Boulevard	Barton Boulevard	4D	3,222	503	3.15%	1.44	725	1.8%	15	740	No
Barnes Boulevard	Fiske Boulevard	Three Meadows Drive	4D <sup>1</sup>	3,222	1,435	2.00%	1.28	1,837	5.9%	49	1,886	No
Barnes Boulevard	Three Meadows Drive	Murrell Road	4D <sup>1</sup>	3,222	1,427	2.00%	1.28	1,827	4.9%	41	1,868	No
Post Road	Wickham Road	US 1	4D	2,736	1,026	2.00%	1.28	1,313	1.3%	11	1,324	No
Suntree Boulevard	Wickham Road	US 1	4D <sup>2</sup>	3,040	1,624	2.00%	1.28	2,079	4.5%	38	2,116	No
Viera Boulevard	Murrell Road	Independence Avenue	4D	3,580	1,457	2.07%	1.27	1,849	11.2%	94	1,943	No
Viera Boulevard	Independence Avenue	Holiday Springs Road	4D <sup>1</sup>	3,580	1,457	2.00%	1.26	1,836	10.6%	89	1,925	No
Viera Boulevard	Holiday Springs Road	US 1	4D <sup>1</sup>	3,580	1,260	2.85%	1.37	1,727	10.1%	85	1,811	No
SR 520	Clear Lake Road	Lake Drive	4D	3,580	2,121	2.00%	1.26	2,672	1.0%	8	2,681	No
SR 520	Lake Drive	Fiske Boulevard	4D	3,580	2,378	2.00%	1.26	2,996	2.2%	18	3,015	No
SR 520	Fiske Boulevard	Blake Avenue	4D	3,580	2,636	2.00%	1.26	3,321	2.4%	20	3,341	No
SR 520	Blake Avenue	US 1	4D	3,580	2,603	2.00%	1.26	3,280	2.4%	20	3,300	No
SR 520	US 1	S. Tropical Trail	6D	5,390	3,917	2.00%	1.28	5,014	4.9%	41	5,055	No
SR 520	S. Tropical Trail	N Courtney Parkway	6D	5,390	3,367	2.00%	1.26	4,242	3.8%	32	4,274	No
SR 520	N Courtney Parkway	N Sykes Creek Parkway	6D	5,390	2,723	2.00%	1.26	3,431	1.6%	13	3,444	No
SR 520	N Sykes Creek Parkway	Newfound Harbor Dr	6D	5,390	3,182	2.00%	1.26	4,009	1.0%	8	4,018	No
SR A1A	Patrick AFB Main Gate	Pineda Causeway	4D	3,580	1,878	2.00%	1.26	2,366	2.4%	20	2,386	No
SR A1A	Pineda Causeway	Ocean Boulevard	4D	3,580	1,846	2.00%	1.26	2,326	1.4%	12	2,338	No
SR A1A	Ocean Boulevard	Berkely Street	4D	3,580	1,814	2.00%	1.30	2,358	1.4%	12	2,370	No
SR A1A	Berkely Street	Jackson Street	4D	3,580	2,130	2.00%	1.26	2,684	1.3%	11	2,695	No
SR A1A	Jackson Street	Cassia Boulevard	4D	3,580	2,162	2.00%	1.26	2,724	1.0%	8	2,733	No
Spyglass Hill Road	Murrell Road	Pinehurst Avenue	2U	1,410	387	2.00%	1.26	488	2.5%	21	509	No
Pinehurst Avenue	Wickham Road	Spyglass Hill Road	2D	1,410	648	2.00%	1.26	816	1.0%	8	825	No
Barton Boulevard	Fiske Boulevard	Murrell Road	4D	2,736	1,611	2.00%	1.28	2,062	2.3%	19	2,081	No
Barton Boulevard	Murrell Road	US 1	4D	2,736	1,323	2.00%	1.28	1,693	1.8%	15	1,709	No
Eysler Boulevard	Fiske Boulevard	Murrell Road	2U	1,269	576	2.00%	1.28	737	1.0%	8	746	No
Eysler Boulevard	Murrell Road	US 1	4D	2,736	576	2.00%	1.28	737	5.3%	44	782	No

<sup>1</sup> Phase 3 Improvement  
<sup>2</sup> Existing Conditions Improvement  
<sup>3</sup> Background Conditions Improvement

FDOT EXHIBIT 1-2- PFS

Viera - External Intersection Improvement Costs												
Location	FDOT Cost per Lane Mile (2007 for Turn Lanes)	Estimated lane length (feet)	Improvement	Cost	Cost + Preliminary Engineering & CEI <sup>1</sup>	Project Volume (a)	Unimproved Intersection Capacity (b)	Improved Intersection Capacity (c)	Project Share (d)=(aV/(c)-(b))	Proportionate Share	Comments	Pipe-Line Recommendation
Fiske Blvd at SR 520	\$1,845,004.82	300	Add NBL (triple left)	\$104,863.91	\$141,566.28					\$27,452.02		
	\$1,845,004.82	1320	Add Receiving Lane	\$461,401.21	\$622,691.63					\$190,788.87		
	\$75,000.00	N/A	Signal Modification	\$75,000.00	\$101,250.00	51	7005	7268	18.38%	\$19,634.03		
Fiske Blvd at Barnes Blvd	\$1,845,004.82	300	Add EBL (triple left)	\$104,863.91	\$141,566.28					\$74,375.12		
	\$75,000.00	N/A	Signal Modification	\$75,000.00	\$101,250.00	176	6472	6807	52.54%	\$53,194.01		
Fiske Blvd at I-95 SB Ramps	\$1,845,004.82	300	Add WBL (dual left)	\$104,863.91	\$141,566.28					\$34,654.25		
	\$75,000.00	N/A	Signal Modification	\$75,000.00	\$101,250.00	188	4818	5386	24.48%	\$24,785.16		
Wickham Rd at Blaytree Dr	\$4,000.00	N/A	Optimize signal timings (higher EDT split)	\$4,000.00	\$5,400.00	126	5867	5901	100.00%	\$5,800.00		
<b>\$1,358,740.40</b>										<b>\$360,283.47</b>		

<sup>1</sup>Cost per lane mile information obtained from FDOT Long Range Estimation System  
<sup>2</sup>Cost increased by 35 percent

Exhibit FDOT-2-5a  
Background P.M. Peak-Hour Two-Way Roadway Segment Conditions  
Viera DR

Roadway	Limits		Number of Lanes	Two-Way Analysis										Directional Analysis						
	From	To		P.M. Peak-Hour Two-Way Capacity a)	Existing P.M. Peak-Hour Volume	Model Growth Rate <sup>1</sup>	Model Growth Factor	Background Volume (Existing Trips x Model Growth Factor)	Cumulative Project Distribution	Already-Mitigated Trips Not Included in Existing Volumes (Dist. % x 15,641)	Total Background Volume	Background Adverse?	Improvement	Directional Analysis if Two-Way V/C's > 80	D Factor	Directional Volume	Directional Capacity	One-Way V/C	Improvement Needed?	Improvement
SR 52	Malabar Road	Palm Bay Road	60	10,000	5,355	2.77%	1.50	7,432	2.8%	547	7,979	No		0.793						
SR 52	Palm Bay Road	US 192	60	10,000	6,480	2.03%	1.28	8,322	5.5%	1,075	9,397	No		0.934	53.2%	4,999	5,500	1.099		
SR 52	US 192	Eau Gallie Blvd	60	10,000	3,915	2.04%	1.28	5,033	13.8%	2,897	7,730	No		0.768						
SR 52	Eau Gallie Blvd	Pineda Causeway	60	10,000	7,200	0.91%	1.13	8,214	19.9%	3,889	12,103	Yes	Widen 4L to 6L	1.203	53.2%	6,439	5,500	1.171	Yes	Widen 4L to 6L
SR 52	Pineda Causeway	Wickham Road	60	10,000	7,260	1.81%	1.25	9,137	8.6%	1,681	10,818	No - within 10%		1.075	53.2%	5,255	5,500	1.046	No - within 10%	
SR 52	Wickham Road	Viera Boulevard	60	10,000	5,445	1.78%	1.25	6,787	6.6%	1,390	8,077	No		0.803						
SR 52	Viera Boulevard	Fiske Boulevard	60	10,000	5,445	1.78%	1.25	6,787	6.1%	1,182	7,979	No		0.791						
SR 52	Fiske Boulevard	SR 520	60	10,000	8,841	1.91%	1.27	10,797	12.3%	2,404	13,201	Yes	Widen 4L to 6L	1.113	53.2%	3,959	5,500	1.083	No - within 10%	Widen 4L to 6L
SR 52	SR 520	SR 524	60	10,000	3,600	6.64%	1.93	6,947	8.2%	1,602	8,549	No		0.850						
SR 52	SR 524	SR 528	60	10,000	5,130	2.21%	1.31	6,717	6.3%	1,231	7,948	No		0.790						
SR 52	SR 528	Port St John Pkwy	60	10,000	2,205	2.35%	1.33	2,904	4.5%	879	3,813	No		0.739						
SR 52	Port St John Pkwy	SR 407	60	10,000	3,780	2.66%	1.37	5,185	2.9%	567	5,752	No		0.572						
SR 52	SR 407	SR 50	60	10,000	2,313	2.19%	1.31	3,022	2.5%	489	3,511	No		0.349						
US 1	Rosa Boulevard	Blackock Street	60	5,300	3,049	0.54%	1.08	3,280	1.5%	293	3,573	No		0.663						
US 1	Blackock Street	Isarno Road	60	5,300	4,230	0.34%	1.03	4,431	2.2%	430	4,861	No		0.903	53.4%	2,196	3,020	0.800		
US 1	Isarno Road	Eau Gallie Boulevard	60	5,300	4,721	0.00%	1.00	4,721	3.3%	645	5,366	No		0.996	53.4%	2,865	3,020	0.949		
US 1	Eau Gallie Boulevard	Aurora Road	60	5,300	3,840	0.00%	1.00	3,840	3.9%	782	4,622	No		0.817						
US 1	Aurora Road	Lake Washington Boulevard	60	5,300	3,475	0.21%	1.04	3,620	4.3%	840	4,460	No		0.829						
US 1	Lake Washington Boulevard	Parkway Drive	60	5,300	3,357	0.41%	1.06	3,500	4.8%	938	4,438	No		0.833						
US 1	Parkway Drive	Post Road	60	5,300	3,409	0.55%	1.08	3,671	6.4%	1,251	4,922	No		0.915	53.4%	2,678	3,020	0.871		
US 1	Post Road	Pineda Causeway	60	5,300	3,409	1.15%	1.16	3,958	8.5%	1,801	5,619	No - within 10%		1.042	53.4%	3,000	3,020	0.993		
US 1	Pineda Causeway	Sun Tree Boulevard	40	3,500	3,520	1.47%	1.19	4,215	10.6%	2,071	6,286	Yes	Widen 4L to 6L	1.756	53.4%	3,357	2,000	1.679	Yes	Widen 4L to 6L
US 1	Sun Tree Boulevard	Viera Boulevard	40	3,500	2,879	1.82%	1.24	3,560	7.3%	1,426	4,986	Yes	Widen 4L to 6L	1.393	53.4%	2,663	2,000	1.332	Yes	Widen 4L to 6L
US 1	Viera Boulevard	Barton Boulevard	60	5,300	3,045	1.92%	1.25	3,885	5.9%	1,153	4,958	No		0.920	53.4%	2,648	3,020	0.877		
US 1	Barton Boulevard	Florida Avenue	60	5,300	3,665	1.88%	1.24	4,588	7.1%	1,387	5,975	Yes	Widen 4L to 6L	1.109	53.4%	3,191	3,020	1.057	No - within 10%	
US 1	Florida Avenue	Rosa Jones Boulevard	60	5,300	2,945	2.88%	1.37	4,048	4.3%	840	4,888	No		0.907	53.4%	2,610	3,020	0.864		
US 1	Rosa Jones Boulevard	SR 520	60	5,300	2,760	2.76%	1.36	3,777	3.1%	600	4,383	No		0.813						
US 1	SR 520	Peachtree Street	60	5,300	1,687	1.65%	1.25	2,005	1.4%	274	2,279	No		0.423						
US 1	Peachtree Street	Morgan Boulevard	60	5,300	2,568	0.81%	1.10	2,816	1.5%	293	3,109	No		0.577						
SR 52	Wickham Road	Wickham Road	40	3,500	2,282	1.50%	1.21	2,761	8.0%	1,739	4,500	Yes	Widen 4L to 6L	1.297	53.4%	2,403	2,000	1.203	Yes	Widen 4L to 6L
SR 52	Wickham Road	US 1	40	3,500	2,740	1.50%	1.21	3,315	7.9%	1,544	4,859	Yes	Widen 4L to 6L	1.157	53.4%	2,395	2,000	1.288	Yes	Widen 4L to 6L
SR 52	US 1	S. Tropical Trail	40	3,900	3,950	1.07%	1.14	4,503	7.3%	1,407	5,910	No - within 10%		1.003	53.4%	3,156	3,240	0.974		
SR 52	S. Tropical Trail	SRA1A	40	5,900	3,267	1.05%	1.14	3,730	5.9%	1,153	4,883	No		0.828						
SR 52	Murrell Road	Baytree Drive	40	3,500	2,664	0.00%	1.00	2,664	14.8%	2,892	5,556	Yes	Widen 4L to 6L	1.552						
SR 52	Baytree Drive	Interlachen Road	40	3,500	2,720	0.00%	1.00	2,720	13.7%	2,677	5,397	Yes	Widen 4L to 6L	1.508						
SR 52	Interlachen Road	W. Pinehurst Avenue	40	3,500	2,552	0.00%	1.00	2,552	13.1%	2,560	5,112	Yes	Widen 4L to 6L	1.428						
SR 52	W. Pinehurst Avenue	Sandline Boulevard	40	3,500	2,227	0.00%	1.00	2,227	11.3%	2,558	4,985	Yes	Widen 4L to 6L	1.178						
SR 52	Sandline Boulevard	St. Andrews Boulevard	40	3,500	3,155	0.00%	1.00	3,155	7.3%	1,407	4,562	No		0.995						
SR 52	St. Andrews Boulevard	Jordan Blass Drive	40	3,500	1,865	0.00%	1.00	1,865	7.3%	1,407	3,272	No		0.914						
SR 52	Jordan Blass Drive	Pineda Causeway	40	3,500	2,389	0.00%	1.00	2,389	6.9%	1,348	3,737	No - within 10%		1.094						
SR 52	Pineda Causeway	Business Center Boulevard	40	3,500	3,298	0.00%	1.01	3,324	7.3%	1,407	4,731	Yes	Widen 4L to 6L	1.123						
SR 52	Business Center Boulevard	Mariah Drive	40	3,500	3,165	0.00%	1.01	3,192	5.7%	1,114	4,306	Yes	Widen 4L to 6L	1.203						
SR 52	Mariah Drive	Remington Drive	40	3,500	3,130	0.00%	1.01	3,165	5.1%	997	4,162	Yes	Widen 4L to 6L	1.163						
SR 52	Remington Drive	Post Road	40	3,500	3,240	0.00%	1.01	3,267	4.0%	782	4,049	Yes	Widen 4L to 6L	1.133						
SR 52	Post Road	Parkway Drive	40	3,500	2,893	0.51%	1.08	3,124	2.9%	567	3,691	No - within 10%		1.011						
SR 52	Parkway Drive	Lake Washington Boulevard	40	3,500	2,765	0.70%	1.10	3,036	1.7%	332	3,368	No		0.941						
SR 52	Lake Washington Boulevard	Eyster Boulevard	40	3,500	2,377	0.00%	1.00	2,377	13.6%	2,658	4,985	Yes	Widen 4L to 6L	1.192	53.4%	2,662	2,000	1.331	Yes	Widen 4L to 6L
SR 52	Eyster Boulevard	Barton Boulevard	40	3,500	1,998	0.00%	1.00	1,998	10.6%	1,954	3,952	Yes	Widen 4L to 6L	1.104	53.4%	2,110	2,000	1.055	No - within 10%	
SR 52	Barton Boulevard	St. Andrews Drive	40	3,500	2,244	0.00%	1.00	2,244	8.3%	1,622	3,866	No - within 10%		1.080	53.4%	2,064	2,000	1.032	No - within 10%	
SR 52	St. Andrews Drive	Plockelaven Road	40	3,500	2,179	0.00%	1.00	2,179	7.7%	1,505	3,684	No - within 10%		1.029	53.4%	1,967	2,000	0.984		
SR 52	Plockelaven Road	Rosa Jones Boulevard	40	3,500	1,675	0.00%	1.00	1,675	6.5%	1,270	2,945	No		0.823						
SR 52	Rosa Jones Boulevard	SR 520	40	3,500	1,384	0.00%	1.00	1,384	6.3%	1,231	2,615	No		0.703						
SR 52	SR 520	San Hege Boulevard	2	1,410	743	0.82%	1.11	822	1.9%	371	1,193	No		0.844						

Exhibit FDOT-2.5a  
Background P.M. Peak Hour Two-Way Roadway Segment Conditions  
Viera DRI

Roadway	Limits		Number of Lanes	P.M. Peak Hour Two-Way Capacity at Adopted LOS	Existing P.M. Peak Hour Two-Way Volume	Model Growth Rate <sup>1</sup>	Model Growth Factor	Background Volume (Excl. Dir. Trips x Model Growth Factor)	Cumulative Project Distribution	Already-Mitigated Trips Not Included in Existing Volumes (Dist. % x 19,641)	Total Background Volume	Background Adverse?	Improvement	Directional Analysis if Two-Way V/C > .90	D-Factor	Directional Volume	Directional Capacity	One-Way V/C	Improvement Needed?	Improvement	
	From	To																			
Murrell Road	Barnes Boulevard	Gus Hipp Boulevard	4D	3,222	1,550	2.90%	1.35	2,093	8.8%	1,720	3,813	Yes	Widened to 6L								1.381
Murrell Road	Gus Hipp Boulevard	Eggar Boulevard	4D	3,222	1,550	2.76%	1.39	2,149	8.7%	1,700	3,849	Yes	Widened to 6L								1.195
Murrell Road	Eggar Boulevard	Barton Boulevard	4D	3,222	903	3.15%	1.44	725	1.8%	352	1,077	No									0.334
Barnes Boulevard	Fiske Boulevard	Three Meadows Drive	4D*	3,222	1,435	0.00%	1.00	1,435	5.9%	1,153	2,588	No									0.601
Barnes Boulevard	Three Meadows Drive	Murrell Road	4D*	3,222	1,427	0.12%	1.02	1,451	4.9%	958	2,409	No									0.748
Peat Road	Wickham Road	US 1	4D	2,736	1,020	1.70%	1.24	1,270	1.3%	254	1,524	No									0.557
Sunrise Boulevard	Wickham Road	US 1	4D**	3,040	1,624	0.00%	1.00	1,624	4.5%	873	2,503	No									0.821
Viera Boulevard	Murrell Road	Independence Avenue	4D*	3,560	1,457	0.00%	1.00	1,457	11.7%	2,189	3,646	No - within LOS									1.018
Viera Boulevard	Independence Avenue	Holiday Springs Road	4D*	3,560	1,457	0.00%	1.00	1,457	10.6%	2,071	3,528	No									0.985
Viera Boulevard	Holiday Springs Road	US 1	4D*	3,560	1,280	2.06%	1.27	1,507	10.1%	1,974	3,571	No									0.998
SR 520	Clear Lake Road	Lake Drive	4D	3,560	2,121	0.68%	1.09	2,309	1.0%	195	2,503	No									0.699
SR 520	Lake Drive	Fiske Boulevard	4D	3,560	2,370	0.65%	1.08	2,578	2.2%	430	3,008	No									0.840
SR 520	Fiske Boulevard	Blake Avenue	4D	3,560	2,636	0.30%	1.04	2,730	2.4%	469	3,208	No									0.896
SR 520	Blake Avenue	US 1	4D	3,560	2,603	0.31%	1.04	2,709	2.4%	469	3,177	No									0.887
SR 520	US 1	S. Tropical Trail	6D	5,300	3,917	0.07%	1.01	3,955	4.9%	958	4,913	No		5.14%	2,624	3,020	0.889				0.912
SR 520	S. Tropical Trail	N Courtney Parkway	6D	5,300	3,387	0.09%	1.01	3,406	3.8%	743	4,149	No									0.770
SR 520	N Courtney Parkway	N Syles Creek Parkway	6D	5,300	2,723	0.13%	1.02	2,769	1.6%	313	3,082	No									0.572
SR 520	N Syles Creek Parkway	Newfound Harbor Dr	6D	5,300	3,182	0.01%	1.00	3,186	1.0%	195	3,381	No									0.627
SR A1A	Patrick AFB Main Gate	Pineda Causeway	4D	3,560	1,678	0.04%	1.01	1,888	2.4%	469	2,357	No									0.658
SR A1A	Pineda Causeway	Ocean Boulevard	4D	3,560	1,846	0.32%	1.04	1,923	1.4%	274	2,197	No									0.614
SR A1A	Ocean Boulevard	Berkely Street	4D	3,560	1,814	0.50%	1.08	1,950	1.4%	274	2,224	No									0.621
SR A1A	Berkely Street	Jackson Street	4D	3,560	2,130	0.24%	1.03	2,166	1.3%	254	2,450	No									0.684
SR A1A	Jackson Street	Cassia Boulevard	4D	3,560	2,162	0.19%	1.02	2,215	1.0%	195	2,410	No									0.671
Spyglass Hill Road	Murrell Road	Peabody Avenue	2	1,410	387	0.53%	1.07	414	2.5%	489	903	No									0.640
Peabody Avenue	Wickham Road	Spyglass Hill Road	2D	1,410	648	0.00%	1.00	648	1.0%	195	843	No									0.598
Barton Boulevard	Fiske Boulevard	Murrell Road	4D	2,736	1,611	1.49%	1.21	1,947	2.3%	449	2,396	No									0.876
Barton Boulevard	Murrell Road	US 1	4D	2,736	1,323	1.46%	1.20	1,593	1.8%	352	1,945	No									0.711
Eggar Boulevard	Fiske Boulevard	Murrell Road	2	1,269	576	1.01%	1.14	657	1.0%	195	852	No									0.672
Eggar Boulevard	Murrell Road	US 1	4D	2,736	576	1.31%	1.18	682	5.3%	1,036	1,718	No									0.628

<sup>1</sup>The growth rate of 1.5%/year was assumed for the Pineda Causeway since no model growth rate was available between 2005 and 2029 as this facility did not exist in 2005

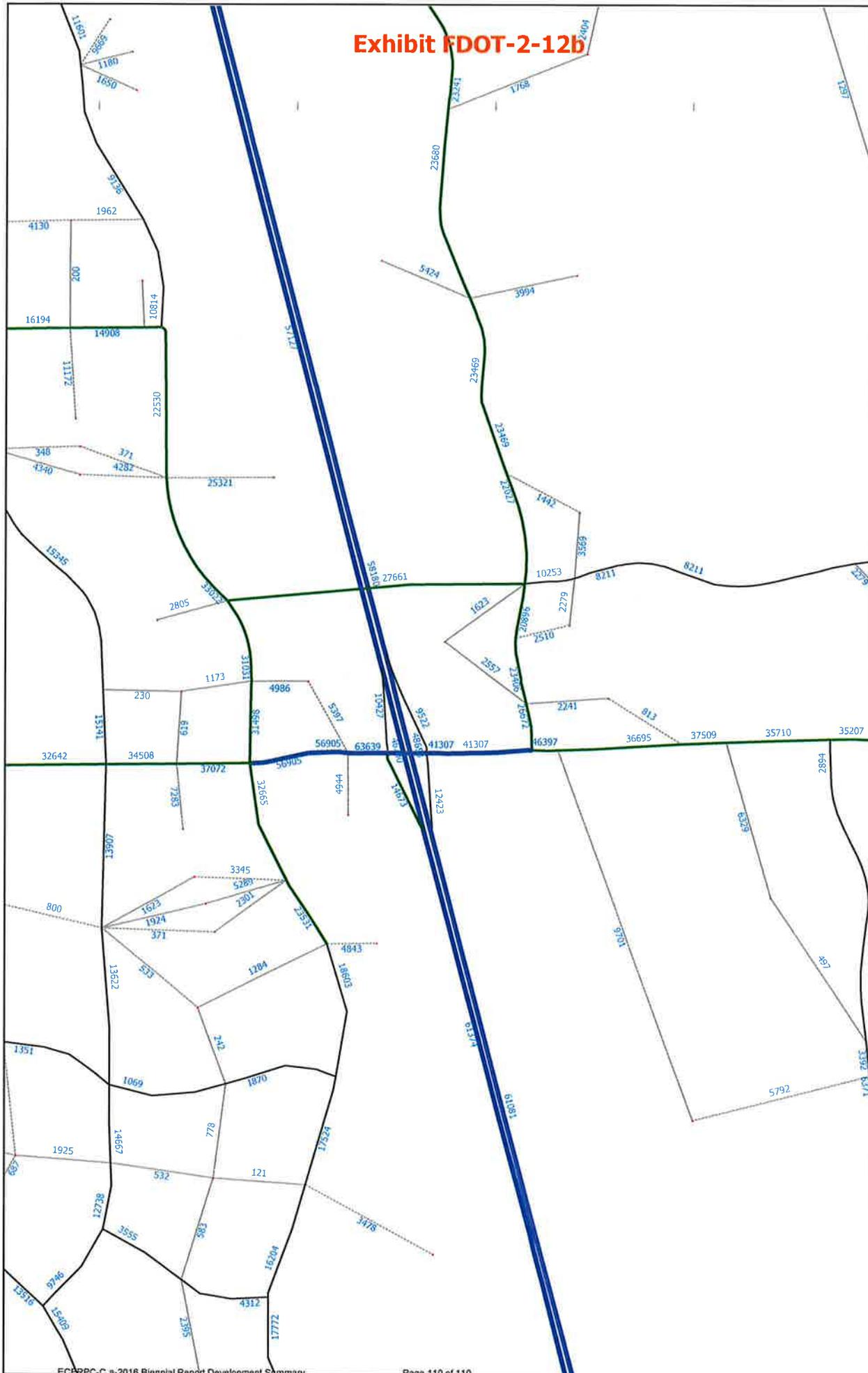
Exhibit FDOT-2-5b  
Build-Out P.M. Peak-Hour Two-Way Roadway Segment Conditions  
Viera ORI

Roadway	Limits		Two-Way Analysis													Directional Analysis					
	From	To	Number of Lanes	P.M. Peak Hour Two Way Capacity at Adopted LOS	Existing Hour Two Way Volume	Model Growth Rate <sup>1</sup>	Model Growth Factor	Background Volume (Existing Volume + Growth Factor)	Cumulative Project Distribution	Net Build-Out External Project Traffic (Dist. X 1,000)	Already-Mitigated Trips Not Included in Existing Volumes (Dist. X 19,244)	Total Build-Out Volume	Build-Out Adverse?	Realign/Improve?	Directional Analysis if Two-Way V/C < 80	D/Factor	Directional Volume	Directional Capacity	One-Way V/C	Improvement Req'd?	Improvement
US 1	Weslar Road	Palm Bay Road	60	10,000	5,305	2.17%	1.39	7,433	2.6%	31	547	8,010	No		0.80						
US 1	Palm Bay Road	US 102	60	10,000	6,480	2.03%	1.38	8,322	5.5%	61	1,015	9,457	No		0.94	53,711	5,011	3,500	0.915		
US 1	US 102	Earl Datta Blvd	60	10,000	3,915	2.04%	1.29	5,033	13.8%	562	2,697	7,882	No		0.78						
US 1	Earl Datta Blvd	Phoeda Causeway	60	13,300	2,290	0.91%	1.13	6,214	19.9%	218	3,689	12,322	No	Widen 6L to 8L	0.97	53.4%	6,555	7,320	0.895		
US 1	Phoeda Causeway	Wickham Road	60	13,300	7,299	1.61%	1.25	9,137	8.5%	95	1,681	10,813	No		0.87						
US 1	Wickham Road	Viera Boulevard	60	10,000	5,445	1.76%	1.25	6,167	8.6%	73	1,300	8,149	No		0.83						
US 1	Viera Boulevard	Fake Boulevard	60	10,000	5,445	1.76%	1.25	6,167	8.1%	67	1,107	8,046	No		0.80						
US 1	Fake Boulevard	SR 520	60 <sup>2</sup>	13,300	6,941	1.91%	1.27	8,197	17.3%	138	2,604	11,331	No	Widen 6L to 8L	0.85						
US 1	SR 520	SR 524	60	10,000	3,000	0.64%	1.03	6,047	8.2%	90	1,602	8,039	No		0.86						
US 1	SR 524	SR 528	60	10,000	5,130	2.21%	1.31	6,717	6.3%	69	1,231	8,018	No		0.80						
US 1	SR 528	Port St John Pkwy	60	10,000	2,229	2.86%	1.33	3,934	4.2%	49	879	3,887	No		0.88						
US 1	Port St John Pkwy	SR 407	60	10,000	3,180	2.66%	1.37	5,188	2.9%	32	567	5,787	No		0.58						
US 1	SR 407	SR 50	60	10,000	2,313	2.19%	1.31	3,002	2.5%	39	488	3,530	No		0.75						
US 1	SR 50	Brook Street	60	5,300	3,049	0.34%	1.08	3,380	1.5%	17	293	3,509	No		0.67						
US 1	Brook Street	Sarno Road	60 <sup>2</sup>	7,710	4,230	0.34%	1.05	4,431	2.2%	24	430	4,805	No		0.68						
US 1	Sarno Road	Earl Datta Boulevard	60 <sup>2</sup>	7,710	4,221	0.00%	1.00	4,221	3.3%	36	645	5,402	No		0.75						
US 1	Earl Datta Boulevard	Aurora Road	60	5,300	3,649	0.00%	1.00	3,649	2.9%	43	752	4,448	No		0.83						
US 1	Aurora Road	Lake Washington Boulevard	60	5,300	3,416	0.31%	1.04	3,628	8.3%	47	840	4,513	No		0.84						
US 1	Lake Washington Boulevard	Parkway Drive	60	5,300	3,397	0.41%	1.06	3,550	4.8%	53	308	4,541	No		0.84						
US 1	Parkway Drive	Post Road	60	5,300	3,400	0.55%	1.09	3,671	6.4%	71	1,151	4,993	No		0.93	53.4%	2,666	3,020	0.883		
US 1	Post Road	Phoeda Causeway	60	5,300	3,409	1.15%	1.16	3,956	8.5%	94	1,661	5,713	No - within 10%		1.06	53.4%	3,090	3,020	1.020	No - within 10%	
US 1	Phoeda Causeway	Sun Tree Boulevard	60 <sup>2</sup>	7,710	3,539	1.47%	1.19	4,215	10.6%	117	2,021	6,403	No		0.89						
US 1	Sun Tree Boulevard	Viera Boulevard	60 <sup>2</sup>	5,300	2,878	1.82%	1.24	3,560	7.3%	80	1,439	5,097	No	Widen 6L to 8L	0.94	53.4%	2,296	3,020	0.896		
US 1	Viera Boulevard	Baron Boulevard	60	5,300	3,045	1.81%	1.25	3,895	4.9%	65	1,153	5,023	No		0.91	53.4%	2,687	3,020	0.888		
US 1	Baron Boulevard	Florida Avenue	60	5,300	3,695	1.86%	1.24	4,588	7.1%	78	1,387	6,054	Yes	Widen 6L to 8L	1.12	53.4%	1,213	3,020	1.071	No - within 10%	
US 1	Florida Avenue	Rosa Jones Boulevard	60	5,300	2,945	2.88%	1.37	4,048	4.3%	47	640	4,936	No		0.92	53.4%	2,635	3,020	0.873		
US 1	Rosa Jones Boulevard	SR 520	60	5,300	2,780	2.78%	1.36	3,777	3.1%	34	606	4,418	No		0.83						
US 1	SR 520	Peacelane Street	60	5,300	1,607	1.85%	1.25	2,009	1.4%	15	274	2,294	No		0.43						
US 1	Peacelane Street	Michigan Boulevard	60	5,300	2,566	0.61%	1.10	2,816	1.5%	17	303	3,126	No		0.58						
US 1	Michigan Boulevard	Wickham Road	60	5,300	2,287	1.50%	1.21	2,781	8.9%	88	1,730	4,998	No	Widen 6L to 8L	0.85						
US 1	Wickham Road	US 1	60	5,300	2,740	1.50%	1.21	3,315	7.9%	87	1,544	4,946	No	Widen 6L to 8L	0.97	53.4%	2,643	3,020	0.875		
US 1	US 1	S. Tropical Trail	60	5,300	3,953	1.02%	1.18	4,503	7.2%	79	1,407	5,969	No - within 10%		1.07	53.4%	3,198	3,240	0.987		
US 1	S. Tropical Trail	SR 41A	60	5,300	3,287	1.60%	1.14	3,736	5.9%	65	1,153	4,954	No		0.84						
US 1	SR 41A	Wayne Drive	60	5,300	2,684	0.90%	1.00	2,684	14.8%	183	2,892	5,719	No - within 10%	Widen 6L to 8L	1.06						
US 1	Wayne Drive	Interlachen Road	60	5,300	2,720	0.00%	1.00	2,720	13.7%	151	2,871	5,548	No - within 10%	Widen 6L to 8L	1.03						
US 1	Interlachen Road	N. Pineland Avenue	60	5,300	2,553	0.00%	1.00	2,553	15.1%	144	2,600	5,256	No	Widen 6L to 8L	0.89						
US 1	N. Pineland Avenue	Sunrise Boulevard	60	5,300	2,727	0.00%	1.00	2,727	11.3%	125	2,208	5,000	No	Widen 6L to 8L	0.94						
US 1	Sunrise Boulevard	St. Andrews Boulevard	40	3,580	2,155	0.00%	1.00	2,155	7.2%	79	1,407	3,641	No - within 10%		1.07						
US 1	St. Andrews Boulevard	Jordan Bliss Drive	40	3,580	1,805	0.00%	1.00	1,805	7.2%	79	1,407	3,351	No		0.94						
US 1	Jordan Bliss Drive	Phoeda Causeway	40	3,580	2,289	0.00%	1.00	2,289	8.9%	76	1,348	3,613	No - within 10%	Widen 6L to 8L	1.07						
US 1	Phoeda Causeway	Business Center Boulevard	60 <sup>2</sup>	5,300	3,258	0.00%	1.01	3,324	7.2%	79	1,407	4,816	No	Widen 6L to 8L	0.89						
US 1	Business Center Boulevard	Marsh Drive	60 <sup>2</sup>	5,300	3,365	0.00%	1.01	3,192	5.7%	63	1,114	4,368	No	Widen 6L to 8L	0.81						
US 1	Marsh Drive	Ramsington Drive	60 <sup>2</sup>	5,300	3,139	0.66%	1.01	3,185	5.1%	58	993	4,219	No	Widen 6L to 8L	0.78						
US 1	Ramsington Drive	Post Road	60 <sup>2</sup>	5,300	3,340	0.00%	1.01	3,387	4.0%	44	782	4,099	No	Widen 6L to 8L	0.76						
US 1	Post Road	Parkway Drive	60 <sup>2</sup>	5,300	2,893	0.57%	1.08	3,124	2.9%	32	567	3,722	No	Widen 6L to 8L	0.69						
US 1	Parkway Drive	Lake Washington Boulevard	40	3,580	2,765	0.70%	1.10	3,038	1.7%	19	332	3,387	No		0.95						
US 1	Lake Washington Boulevard	Barna Boulevard	60	5,300	2,307	0.70%	1.00	2,327	13.6%	150	2,658	5,135	No	Widen 6L to 8L	0.95	53.4%	2,742	3,020	0.908		
US 1	Barna Boulevard	Baron Boulevard	40	3,580	1,998	0.00%	1.00	1,998	10.0%	110	1,954	4,062	Yes	Widen 6L to 8L	1.11	53.4%	2,169	2,000	1.085	No - within 10%	
US 1	Baron Boulevard	St. Andrews Drive	40	3,580	2,214	0.00%	1.00	2,214	8.7%	81	1,423	3,957	Yes	Widen 6L to 8L	1.11	53.4%	2,113	2,000	1.057	No - within 10%	
US 1	St. Andrews Drive	Puckebaum Road	40	3,580	2,170	0.00%	1.00	2,170	7.2%	85	1,505	3,765	No - within 10%	Widen 6L to 8L	1.05	53.4%	2,013	2,000	1.007	No - within 10%	
US 1	Puckebaum Road	Rosa Jones Boulevard	40	3,580	1,815	0.00%	1.00	1,815	6.5%	72	1,270	3,017	No		0.84						
US 1	Rosa Jones Boulevard	SR 520	40	3,580	1,284	0.00%	1.00	1,284	6.3%	69	1,231	2,564	Yes		0.72						
US 1	SR 520	Dus Hagg Boulevard	2U	1,410	743	0.82%	1.11	827	1.9%	21	371	1,214	No		0.86						
US 1	Dus Hagg Boulevard	Barna Boulevard	60	4,851	1,550	2.50%	1.26	2,003	8.8%	60	1,720	3,929	No	Widen 6L to 8L	0.83						
US 1	Barna Boulevard	Dus Hagg Boulevard	60	4,851	1,559	2.75%	1.29	2,149	8.7%	96	1,700	3,945	No	Widen 6L to 8L	0.81						
US 1	Dus Hagg Boulevard	Baron Boulevard	40	3,222	503	3.15%	1.44	725	7.8%	20	352	1,097	No		0.78						
US 1	Baron Boulevard	Fake Boulevard	40 <sup>2</sup>	3,222	1,435	0.00%	1.00	1,435	5.0%	55	1,153	2,693	No		0.82						
US 1	Fake Boulevard	Three Meadows Drive	40 <sup>2</sup>	3,222	1,427	0.13%	1.02	1,451	4.9%	56	1,153	2,653	No		0.76						





Exhibit FDOT-2-12b





Planning & Development Department  
2725 Judge Fran Jamieson Way  
Building A, Room 114  
Viera, Florida 32940

**BOARD OF COUNTY COMMISSIONERS**

August 25, 2017

Fred Milch, AICP  
Project Review Manager  
East Central Florida Regional Planning Council  
455 N. Garland Avenue, 4<sup>th</sup> Floor  
Orlando, FL 32801

Dear Fred:

Brevard County's responses to Sufficiency Response #1 dated August 11, 2017 are show below. Note that since the electronic submittal was not presented in an editable format, I have omitted the original comment and the applicant's response.

**NOPC Summary**

**Comment 1:** No further comment.

**Comment 2:** No further comment.

**Comment 3:** No further comment.

**Comment 4:** No further comment.

**DRI Development Order Proposed Changes**

**Comment 1:** No further comment.

**Comment 2:** No further comment.

**Comment 3:** No further comment.

**Comment 4:** No further comment.

**Comment 5:** No further comment.



**BOARD OF COUNTY COMMISSIONERS**

**Comment 6:** No further comment.

**Comment 7:** No further comment.

**Comment 8:** No further comment.

**Comment 9:** No further comment.

**Comment 10:** No further comment.

**Comment 11:** No further comment.

**Comment 12:** Achieving the community capture rates forecast by the Phase 4 traffic analysis is contingent on maintaining a balance between residential development and employment based non-residential development (i.e. office and industrial). If market conditions are not favorable for employment based non-residential development and an imbalance between the necessary mix of land uses develops, then any increase in residential development must be justified by a reanalysis of the future traffic impacts. The amendments proposed for Condition 89 of the Amended and Restated Development Order do not provide useful metrics for evaluating the relationship between residential development and employment based non-residential development that are necessary for determining if community capture rates are being realized. Comment addressed in Condition 89 of DO

**Comment 13:** Brevard County does not agree that the increase in traffic on Wickham Road between Murrell Road and Lake Andrew Drive is primarily the result of increases in background traffic. The proportionate share calculation omits the cost of improvements to this segment of Wickham Road (including the reconstruction of the Wickham Road/Interstate 95 Interchange) that would be necessary if the Spyglass Overpass is not constructed. The applicant should consider acknowledging this additional cost as a part of their proportionate share calculation. Without this acknowledgement, the Spyglass Overpass may be considered to be an internal road and transportation impact fee credits may not be available. Comment was discussed with staff and no changes were necessary

**Comment 14:** No further comment.

**Comment 15:** No further comment.



**Planning & Development Department**  
2725 Judge Fran Jamieson Way  
Building A, Room 114  
Viera, Florida 32940

**BOARD OF COUNTY COMMISSIONERS**

**Comment 16:** Refer to Comment 12 above.

**Comment 17:** No further comment.

**Comment 18:** No further comment.

**Comment 19:** No further comment.

**Comment 20:** No further comment.

**Comment 21:** No further comment.

**Comment 22:** No further comment.

**Comment 23:** No further comment.

**Comment 24:** No further comment.

**Comment 25:** No further comment.

**Comment 26:** No further comment.

**Comment 27:** Brevard County is not requesting that the transportation equivalency matrix contained in the Amended and Restated Development Order be changed each time there is an update to the ITE Manual, only that it be updated prior to the approval of Phase 4 to reflect the data contained in the 9<sup>th</sup> Edition. Brevard County does not agree that changing the transportation equivalency matrix conversion rates at this time would in any way invalidate any conversions that have been previously made using the conversion rates contained in the development order in effect when those conversions were made and sees no problem with tracking trips in the future if this change is made.

A revised Exhibit 5 was prepared for the Development Order

**Comment 28:** No further comment.



**Planning & Development Department**  
2725 Judge Fran Jamieson Way  
Building A, Room 114  
Viera, Florida 32940

**BOARD OF COUNTY COMMISSIONERS**

Thank you for coordinating the review of this project. If you have any questions, please contact me.

Sincerely,

A handwritten signature in black ink that reads 'Stephen M. Swanke'.

Stephen M. Swanke  
Program Manager

# Technical Review Comments

<b>To:</b>	Fred Milch, AICP East Central Florida Regional Planning Council		
<b>From:</b>	Wiatt Bowers, AICP	<b>Email:</b>	wiatt.bowers@atkinsglobal.com
<b>Phone:</b>	904-363-8488	<b>Date:</b>	August 25, 2017
<b>Ref:</b>	Viera DRI Phase 4	<b>cc:</b>	Andrew Holmes, Stephen Swanke, Erin Sterk
<b>Subject:</b>	Review of Viera DRI NOPC Application and Sufficiency Response #1		

Atkins has completed its review of the April 11, 2017 Notification of Proposed Change application for the Viera ADA/DRI. Many of the previous comments were addressed in the Sufficiency Response #1 submittal, the details of which are outlined in the sections below. Outstanding issues with the current submittal include: the lack of analysis for the additional impacts resulting from the revised increase in trip generation submitted by the applicant, and the lack of information for some roadways, such as Wickham Road and Viera Boulevard west of Murrell. Although the applicant made some requested changes to the response exhibits, the changes were not carried through the entire analysis within the revised application. As such, traffic impacts could not be completely verified due to an omission of network performance documentation and analysis.

Specifically, the applicant submitted revised trip generation and internal capture rates as requested in the first submittal. Additionally, the applicant provided documentation that these trip generation and internal capture rates revisions would result in an increase in net external trips. However, an analysis of the impacts of how the increase in trips affected roadway segment and intersection performance (Delay and LOS) was not included in the revised NOPC application. To address this issue, the "Background PM Peak-Hour Two Way Roadway Segment Conditions" table in the Response Exhibits file should be revised to include the impacts to roadway and intersection performance based on the revised trip generation and internal capture rates in addition to the editorial revisions in the application on the increase of trip generation. Finally, the applicant should include the traffic analysis for all significantly impacted roadways in the area.

Follow-up responses to previously submitted comments are below:

1. General Comment – Development Land Use: Are there land use maps to provide greater detail of planned development space?

**RESPONSE:** Currently, the only associated map is Map H. The approved West Viera PUD requires submittal of Sketch Plans to Brevard County for each Village which provide additional detail. Development within Village 1 is under current development and the Village 2 plan has not yet been submitted.

Follow Up Response: No further comments.

2. Page 17 – Adopted Level of Service: Question 21A requires the applicant to identify the adopted LOS standards of the FDOT, appropriate regional planning council, and local government for roadways within the identified study area. The applications states: "The LOS designations, capacities, facility types, and number of lanes are based on the comprehensive plan and concurrency databases for Brevard County." Has the FDOT's Level of Service Standards (effective October 9, 2015 and reviewed January 19, 2017) been considered in addition to the comprehensive plan LOS standards? In the Brevard County Comprehensive Plan Transportation Element Policy 1.3-A.1 the LOS standard for Brevard County arterials and collectors within the urban area boundary is a LOS E. The FDOT policy mentioned above states that state arterials is LOS D in urbanized areas.

# Technical Review Comments

**RESPONSE:** See response to ECFRPC Comment No. C.o. Note that capacities are based on values obtained from the Space Coast Transportation Planning Organization. LOS “D” was used on State Roads/Interstates.

Follow Up Response: No further comments.

3. Page 22, Map 21.A.1 – Turning Movement Counts: There are small differences between the Map's turning movement counts when compared to raw turning movement counts in Appendix 21.A.3. Where there any adjustments including season factors or volume balancing between these two stages of the project?

**RESPONSE:** Seasonal factors were applied.

Follow Up Response: No further comments. Consider stating this in the NOPC for clarity.

4. Page 34, Table 21.B.7 – Trip Generation: The Land Use 720, VA Clinic calculated generated trips do not match ITE rates or equations for the given development size of 137,500 sq. ft. Please provide the methodology used calculate this trip generation.

**RESPONSE:** The data for the VA clinic was originally obtained from the prior DRI analysis based upon a previously conducted analysis. The trip generation data for the VA has now been updated per ITE for medical uses. The Community Capture and build-out analysis have been updated. The net result was an increase in 230 entering and exiting PM Peak Hour Trips. Please refer to Exhibit “Atkins -4-Viera\_Central-West\_Existing\_Trip\_Gen\_Equation\_Rates\_VA\_Update”

Follow Up Response: We concur with Exhibit 5 of the Response exhibited. However, this update has not been reflected in the revised NOPC Application Table 21.B.7. Additionally, none of the corridor or intersection analysis for the build-out condition reflect any changes that would be caused by an increase in Trip Generation.

5. Page 34, Table 21.B.7 – Trip Generation: Trip Generation section of the Letter of Methodology document states that documentation will be provided for all Trip Generation Rates and Equations to demonstrate consistency with the ITE Trip Generation Manuel. Application identifies whether the equation or rates are used but does not identify the rate or equation that was used.

**RESPONSE:** The Trip Generation software from Trafficware uses a “true” or “false” variable to indicate whether the equation was or was not used. This may not be easily apparent at 1<sup>st</sup> review based upon the software output report. The detailed land use trip generation reports indicate the equations used for each land use where the equation versus the rate was used. An asterisk was provided in each table indicated where the equation was used. Review of the detailed sheets should indicate a “true” value to illustrate the equation used. Please refer to Exhibit “Atkins-5-Viera\_Central-West\_Existing\_Trip\_Gen\_Equation\_Rates\_DetailedReport\_VA\_Update”.

Follow Up Response: No further comments.

6. Page 37, Paragraph 2 – Clarification: Application text reads: “While residential uses in the SW quadrant have a direct access connection across Viera Blvd to the retail uses in the NE quadrant, given the relatively small size of the existing and approved retail uses in the NE quadrant, no internal capture analysis was conducted for residential uses from the SW to the NW quadrant.” Does the writer mean NW instead of NE where used?

# Technical Review Comments

**RESPONSE:** Correct. The text has been corrected to read NW instead of NE. Please refer to Page 37, Revised NOPC Application.

Follow Up Response: No further comments.

7. Page 37-38 - Internal Capture: Several of the quadrants contain multiple residential components. The internal trips were calculated for each individual land use then summed afterwards. This method will cause internal trips calculations from retail-to-residential and office-to-residential land use to be duplicated and sometimes tripled. The ITE Trip Generation Handbook explains in section 7.5, "If the site has multiple residential components (single-family, apartment, etc.), compute the trip generation for each residential type separately, but record as only a single land use on the [internal capture] worksheet." For Example, the NW corner of Viera East has both Apartments and Condos eligible for internal capture analysis. The user created two internal capture worksheets, one for Apartments and one for Condos, then adds up internal trips after calculations. The ITE prescribed method is to add the generated trips of the Apartments and Condos first, then input those gross trips generated into ONE internal capture analysis worksheet.

**RESPONSE:** The Internal Capture Analysis has been recalculated for Viera East based upon comments received from both the FDOT and Brevard County. Please refer to the following Exhibits: FDOT Comment Brevard Co.

- Atkins -7a-VieraEast\_Daily\_InternalCapture\_Buildout
- Atkins -7b-VieraEast\_Daily\_InternalCapture\_Phase1\_3
- Atkins-7c-VieraEast\_PMPeak\_InternalCapture\_Buildout
- Atkins-7d-VieraEast\_PMPeak\_InternalCapture\_Phase1\_3

Follow Up Response: The internal capture is still incorrect. The revised worksheets combined all 4 quadrants into one internal capture worksheet. The Internal capture worksheets should still be split into quadrants, but each worksheet should include the entire quadrant's land uses. Additionally, no changes have been made to Table 21.C.1 and Table 21.C.2 showing this change in internal capture. Finally, the roadway segment and intersection analyses for the build-out condition do not reflect any changes that would be caused by a lower internal capture.

8. Page 37-38 - Internal Capture: When internal capture is discussed for the Viera East it's suggested that internal capture can be applied when trips cross either Viera Blvd or Murrell Road, but do not actually use these facilities. This is appropriate for segment impacts but would ignore the impacts of these trips on the intersection/signal operations. Suggest adding internal capture trips back into the intersection analysis or provide documentation of how these reduced trips will not have an impact to the intersection service metrics.

**RESPONSE:** This was discussed in detail during methodology meetings. Originally a greater level of internal capture was requested that would essentially have allowed Viera East to assume Murrell Road and Viera Boulevard were internal roads and internal capture calculated between all residential and retail in Viera East, except those trips using Wickham Road and then capturing those trips on the network and in intersections. However, it was agreed to that no internal capture analysis would be used, except there would be allowance where trips crossed Viera or Murrell, but did not use Viera or Murrell. There are internal roads that connect the uses in each quadrant and median opening and driveways that directly align with the adjacent quadrant that would not result in the trips utilizing the intersection. The Internal Capture Analysis has been updated. Please refer to the following Exhibits:

- Atkins -7a-VieraEast\_Daily\_InternalCapture\_Buildout
- Atkins -7b-VieraEast\_Daily\_InternalCapture\_Phase1\_3
- Atkins-7c-VieraEast\_PMPeak\_InternalCapture\_Buildout
- Atkins-7d-VieraEast\_PMPeak\_InternalCapture\_Phase1\_3

# Technical Review Comments

Follow Up Response: We concur that some internal capture trips will travel amongst quadrants without using Murrell Road or Viera Boulevard. However, assuming all internal trips will follow this pattern is not reasonable, especially trips from diagonal quadrants, example NE to SW. It does not appear the "crossover" intersections were included in the analysis. Further, the changes to internal capture are not reflected in the revised NOPC Table 21.C.1 and Table 21.C.2

9. Page 42, Paragraph 3 - Clarification: Application text reads: *"The trip generation for shopping centers within Phase 1, 2 and 3 is per Table 4. The internal capture of retail trips for shopping centers within Phase 1, 2 and 3 is per Table 5."* Table 4 and Table 5 cannot be found in the report, where is this referred to?

**RESPONSE: Table 4 should have read Table 21.B.4 and Table 5 should have read Table 21.B.5. The text has been revised. Please refer to Page 42, Revised NOPC Application.**

Follow Up Response: No further comments.

10. Page 42, Paragraph 3 - Clarification: Application text reads: *"There are more than 50,000 daily trips and 3,850 PM Peak Hour Trips on Wickham Road, Viera Blvd and Murrell Road within the limits of Viera East, thus the proposed pass-by rates do not exceed 10% of adjacent street traffic."* There needs to be greater clarification of how the 50,000 daily and 3,850 PM peak hour trips were estimated.

**RESPONSE: A pass-by analysis has been conducted to demonstrate that pass-by does not exceed 10% of adjacent street traffic for Viera East. Please refer to Exhibit "ECFRPC-C.f.-Viera\_East\_Passby\_Confirm".**

Follow Up Response: This table makes pass-by analysis clearer. However, it would be more appropriate to use the adjusted pass-by values in Table 21.C.4, which reflects the effect of internal capture first. This may change pending changes to internal capture, as noted above in Comment #7.

11. Page 43, Clarification - Clarification: Application text reads: *"The internal capture of retail trips for shopping centers for the build-out of Viera East is per Table 7."* Table 7 cannot be found in the report, where is this referred to?

**RESPONSE: The reference to Table 7 should have read Table 21.B.7. The text has been revised. Please refer to Page 43, Revised NOPC Application.**

Follow Up Response: No further comments.

12. Page 47, Paragraph 1: Application text reads: *"For comparative purposes, the trip generation analysis in Table 13 has been conducted based upon trip rates only (Appendix 21.C.5)."* Table 13 cannot be found in the report, where is this referred to?

**RESPONSE: The reference to Table 13 should have read Table 21.C.6. The text has been revised. Please refer to Page 47, Revised NOPC Application.**

Follow Up Response: No further comments.

13. Page 48, Table 21.C.6 and 21.C.7 – Community Capture: How was the 95% Occupancy determined and verified for Community Capture calculations. Were developments reviewed to ensure they were open for business and generating trips?

# Technical Review Comments

**RESPONSE:** The data was obtained from Certificates of Occupancy issued and internally tracked by The Viera Company.

Follow Up Response: No further comments.

14. Page 53, Table 21.C.10 – Community Capture: Based on the Methodology Letter it was expected that traffic volume counts would be conducted for the same 3 days at the 3 locations listed. In the analysis volumes were counted on 3 separate days. Please provide comment or support for how this impacts or will not impact the analysis.

**RESPONSE:** Counts have been retaken for the same three day period. Please refer to Exhibit “ECFRPC-C.d.-Community Capture Traffic Counts\_Viera Central\_West”. The updated counts also resulted in an update of existing development consisting of an increase in 282 apartments, 69 townhomes and 7,000 sq ft of retail. Please refer to Exhibit “Brevard\_4\_Viera\_CentralWest\_TripGen\_Update”. While the PM peak hour was originally based upon just Wickham Road, per comments from the FDOT reviewer, the PM Peak Hour has been determined based upon the average from all three count locations. Depending on whether or not a seasonal adjustment factor is used for the counts, the resulting PM Peak Hour Community Capture rate is 39% when counts are not adjusted and 41% when counts are adjusted. Please refer to Exhibit “Atkins-14-Net\_Viera\_External\_Trips\_wo\_SAF\_w\_SAF”

Follow Up Response: No further comments.

15. Page 55, Table 21.C.12 – Community Capture: This Table shows 402,924 trips generated for Viera Central/West at Build-out if the ITE rates were used only, not including the several land uses that utilized the ITE equations. Table 21.B.7 utilizes rates and equations, with a total Central/West trip generation of 272,446 trips. The community capture percentage was calculated using the calculated daily trips and pm peak trips using both ITE rates and equations. This table should be consistent with how the community capture rates were derived.

**RESPONSE:** For purposes of this analysis, two separate tables were necessary. One table with trip generation based on ITE rates only and one table with trip generation based on ITE rates and equations. The reason is that Community Capture to analyze external trips is based on ITE rates and equations while the review of internal trips was based on ITE rates only as a very, very conservative approach.

Follow Up Response: No further comments. This is a more conservative approach. If the rates-only trip generation was used, the community capture percentage would be higher.

16. Page 57, Paragraph 4 - Mode Share Reduction: Application text reads: *“To project a worst-case scenario for the build-out of Viera Central/West the only trip reduction proposed to the internal trip generation based on trip generation rates only is the application of a 5% mode share reduction.”* How was the 5% mode share reduction determined? Was there a prior agreement?

**RESPONSE:** Ideally, the ITE rates and equations would have been utilized as a starting point for evaluating internal roads. This would have led to a more than 30% reduction in daily trips from the start, thus negating the need to make any adjustments. Based on Viera’s significant expenditure of more than \$15 million for multi-modal improvements, a 5% reduction was taken to unadjusted ITE rates in an overly conservative evaluation of internal roads. The empirical data shows that ITE rates overestimate external trips by more than 50%. The 5% adjustment for multi-modal was a conservative reduction to illustrate a worst case scenario for internal roads. It should be noted, that prior DO’s did not evaluate internal roads at all. Viera has been responsible for internal road improvements and made the internal decision to widen Stadium Parkway and Wickham Road internal to the site. These were not

# Technical Review Comments

**DO required improvements. There was no agreement prior to the Brevard County approved methodology statement.**

Follow Up Response: No further comments.

17. Page 58, Table 21.C.13 – Community Capture: This table utilizes trip numbers that were calculated using ITE rates and equations. The community capture rates were calculated using trip generation using both ITE rates and equations where applicable. Should this table follow the same use of rates and equations?

**RESPONSE: It would have been our preference to utilize the rates and equations as the starting point for all analysis. This was extensively discussed with Brevard County staff prior to the technical review provided by Atkins. Brevard County was strong in its preference for use of rates only it was agreed that the ITE Rates only would be used for internal roads and adjusted for mode share.**

Follow Up Response: No further comments.

18. Page 70, Table 21.E.1 – Missing Information: Table 21.E.1 Build-Out P.M. Peak-Hour Two-Way Roadway Segment Conditions table no included in the application. Please provide documentation of project trip distribution of traffic.

**RESPONSE: Table 21.E.1 was inadvertently omitted in the original application materials and was subsequently delivered electronically. An additional copy is attached and labeled as Exhibit “FDOT-1-1 Table 21.E.1.”**

Follow Up Response: The revised NOPC application does not include this table in the text. It was located in the Table of Exhibits. If additional concerns are identified they will be conveyed to all reviewers by (add date certain).

19. Page 172, Exhibit 4, Amended Development Order Comment – Development Lane Use: Light Industrial is listed as a total of 500 KSF at build-out stage. Trip Generation analysis for Viera Central/West evaluated the land use for only 365 KSF.

**RESPONSE: Please refer to the breakout within Table 21.B.1 for Land Use Codes 110, 150 and 151 which when added together equal 522,500 square feet which matches Exhibit 4 to the Development Order.**

Follow Up Response: No further comments.

20. (Part A) Page 172, Exhibit 4, Amended Development Order Comment – Development Lane Use: How was the 7,500-seat stadium accounted for in the trip generation analysis?

**RESPONSE: The treatment of the Stadium, for transportation purposes, is governed by separate agreement.**

Follow Up Response: No further comments.

20. (Part B) Page 172, Exhibit 4, Amended Development Order Comment – Trip Generation: Where is the preferred location of the post-secondary education listed in Development Order (Exhibit 4, note 5)?

# Technical Review Comments

There does not appear to be a map with this location shown. This land use will have a significant impact on the adjacent road/bike/ped/transit network.

**RESPONSE:** The application has been revised to limit the development of a post-secondary educational facility to the following locations: (1) within 1 mile of the interchange of Viera Boulevard and I- 95 (2) within 1 mile of the interchange of Pineda Extension and I-95 and (3) within the Town Center.

Follow Up Response: No further comments.

21. Page 174, Exhibit 5, Transportation Equivalency Matrix – No minimums and maximums are provided with the equivalency matrix. As such, it is difficult to ensure that future development will contain a sufficient mix of uses, consistent with the community capture calculations. It is recommended that some assurances be provided in the Development Order.

**RESPONSE:** As discussed with Brevard County, additional methods of evaluation have been added to Condition 89 and Condition 4. These methods include the ability of Brevard County to review the development mix and percentage of land devoted to each land use during each Biennial Report as well as including a requirement for additional analysis and confirmation of assumed Community Capture percentage with a request to increase residential development by more than 10%, cumulatively. Please refer to Pages 95, 96 and 134, Revised Development Order.

Follow Up Response: See response to Brevard County Comment #12

22. Page 174, Exhibit 5, Transportation Equivalency Matrix – It should be noted that trip generation calculations in the matrix are not consistent with those used in the impact analysis. While it is understood why average rates are used in developing a matrix, there is no assurance that trips generated through use of the matrix will be like those estimated. For example, the trip generation for 100,000ksf of retail is far higher using trip rate equations than using the average rate. What assurances can be provided if total trips will not exceed those approved for Phase 4?

**RESPONSE:** The Transportation Equivalency Matrix is a historically accepted tool for the conversion of land uses within the Viera DRI. See also response to Brevard County DO Comment No. 2.

Follow Up Response: See response to Brevard County Comment #27.

23. Page 174, Exhibit 5, Transportation Equivalency Matrix – Similarly, no guidance is provided on how and when the equivalency matrix can be used. If land uses brought in had much different trip distribution characteristics from ones being taken out, there could be an effect on the transportation system, which could be complicated by the use of trip generation equations in lieu of the ITE Rates reflected in the current Transportation Equivalency Matrix. In the past, this potential impact could be addressed through the modelling & monitoring requirements for future phases. The applicant is now proposing to include all future development in one final phase, with no monitoring requirements. Consideration should be given to monitoring, with potential “stoppers” included in the Development Order.

**RESPONSE:** As explained and discussed from the beginning of this application process, The Viera Company cannot proceed with monitoring that includes “stoppers” due to the level of proposed mitigation and investment as well as financing of those improvements with third party institutions. The entire purpose of the cumulative analysis was to determine impacts at buildout and determine identifiable mitigation measures to address the impacts. An

# Technical Review Comments

Equivalency Matrix is designed to have reasonable exchanges from one use to another in a way to limit any change in transportation impacts. It is impossible (and unnecessary) to try to quantify every minor change. For example we make assumptions on “retail” ITE rates knowing full well that different retail uses may have minor differences in rates and trip distribution characteristics. In this application, we have been conservative in our analysis to assure over-mitigation. It should be noted that the Developer’s calculated proportionate fair share is \$360,283.47 and the Developer’s proposed Development Order indicates a mitigation program for Phase 4 in excess of \$15 Million Dollars.

Follow Up Response: No further comment. Brevard County is working with the applicant to resolve this issue.

24. Page 180, Exhibit 5, Transportation Equivalency Matrix – The footnote applied to the Junior/Community College trip rate needs to be explained further.

**RESPONSE:** The footnote was added in recognition of the evolution of community colleges. The applicant wanted to be clear that four year programs or private institutions, which would function similar to a junior/community college, would still be allowed. Further, it was important to note that no campus housing could be included as the characteristics of such a school would be different.

Follow Up Response: No further comment.

25. Appendix 21.C.2, Internal Capture Worksheet: Daily Analysis for NE corner of Viera Blvd & Murrell Rd: The Office (710) land use says 97,361 SQ FT and should be 52,505 SQ FT

**RESPONSE:** The sheet reference was updated accordingly.

Follow Up Response: No further comments.

26. Appendix 21.C.2, Internal Capture Worksheet: PM Peak Analysis for NE corner of Viera Blvd & Murrell Rd: The Retail total trips is higher than calculated.

**RESPONSE:** The sheet was updated accordingly.

Follow Up Response: No further comments.

27. Appendix 21.A.2, HCS Intersection Analysis: The HCS output sheets included do not provide inputs used in HCS analysis. Please provide the full HCS input and output summary sheets.

**RESPONSE:** The requested files, including HCS data files, are provided on the attached flash drive.

Follow Up Response: How was RTOR calculated for HCS analysis? It did not appear RTOR was listed on data collection worksheets. If additional concerns are identified they will be conveyed to all reviewers by (add date certain).

28. Appendix 21.A.2, HCS Intersection Analysis: Were the intersection peak hour factors from Appendix 21.A.3 adjusted before inputted into the HCS software? Many of the intersection peak hour factors do not match between the two source.

# Technical Review Comments

**RESPONSE:** Yes, the peak-hour factors were applied in running the HCS analyses. It is understood that high peak-hour factors indicate a flatter peak in traffic and significantly low peak-hour factors represent larger peaks. To simulate increased flow rates during the peak 15-minute period (for a slightly more conservative analysis) the PHF range/limits used in HCS software was 0.75 - 0.95. Additionally, due to emphasis on capacity improvements, the defined range insured that a reasonable peak in traffic was analyzed for all scenarios. In all other cases, the PHF obtained from the TMCs were rounded to the nearest hundredth.

Follow Up Response: No further comments.

Finally, the lack of any information provided in relation to proportionate share calculations makes it very difficult to assess whether the project's proposed mitigation is sufficient. Furthermore, the applicant is proposing to pipeline all mitigation to construction of the Spyglass overpass and a PD&E/IMR study of the I-95 / Fiske Blvd. Interchange. No information has been provided regarding what these improvements might consist of, nor of their effect on local and regional traffic patterns.

**RESPONSE:** Please refer to Exhibit "FDOT-1-2 PFS". It should be noted that the Developer's calculated proportionate fair share is \$360,283.47 and the Developer's proposed Development Order indicates a mitigation program for Phase 4 in excess of \$15 Million Dollars.

Follow Up Response: No further comment.

Finally, while the full impacts of the NOPC cannot be determined at this time, it is likely that the Developer's proposed \$15 million mitigation will offset their impacts. As long as Brevard County and other review agencies find the Spyglass overpass as an acceptable pipeline project, it could serve as sufficient mitigation for the impacts of Viera Phase 4. We look forward to working with the applicant, Brevard County, and other review agencies as this project moved forward. In the meantime, please contact Wiatt Bowers if you have any questions regarding our comments.

During a conference call with Atkins and Brevard County staff it was determined that it was not necessary to individually address the technical comments based upon mitigation plan presented in Condition 92 B



*Florida Department of Transportation*

**RICK SCOTT**  
GOVERNOR

719 South Woodland Boulevard  
DeLand, Florida 32720

**MICHAEL J. DEW**  
SECRETARY

August 25, 2017

Fred Milch, AICP  
Project Review Manager  
East Central Florida Regional Planning Council  
455 N. Garland Avenue, 4<sup>th</sup> Floor  
Orlando, FL 32801

**SUBJECT: Viera DRI – Methodology Review**  
**REPORT NAME: Viera DRI NOPC**  
**REPORT DATE: April 2017 – Revised August 2017**  
**JURISDICTION: Brevard County**

Dear Mr. Milch,

The Department has performed a review of the Viera DRI Notice of Proposed Change (NOPC) Revised August 2017. The NOPC includes several items requiring further clarification and revision. Our technical assistance is enclosed for your consideration.

We appreciate the opportunity to participate in this review process. If you have any questions, please contact Jean Parlow at 386-943-5470 or by e-mail at [Jean.Parlow@dot.state.fl.us](mailto:Jean.Parlow@dot.state.fl.us).

Sincerely,

Jean Parlow  
Growth Management Coordinator

*Attachment*

C: Erin Sterk, Brevard County  
James Stansbury, DEO  
Adam Biblo, DEO  
D. Ray Eubanks, DEO

Dana Reiding, FDOT  
Jennifer Carver, FDOT  
Carmen Monroy, FDOT  
David J. Cooke, FDOT

**DEVELOPMENT OF REGIONAL IMPACT (DRI) REVIEW FORM**

**DEVELOPMENT NAME: VIERA DRI**  
**SUBJECT: NOTICE OF PROPOSED CHANGE – APRIL 2017 REVISED AUGUST 2017- RESPONSES**  
**TO AGENCY COMMENTS REVIEW**  
**LOCAL GOV'T./JURISDICTION: BREVARD COUNTY**  
**REVIEW COMMENTS DEADLINE: 08/25/2017**  
**TODAY'S DATE: 08/25/2017**

Comment Number	Page(s)	General Areas of Concern	Specific Review Comment(s)
1	3	Trip Generation	<p><b>FDOT Original Comment:</b> The Methodology explains in detail how the trip generation, internal capture/community capture, and pass-by capture will be estimated for the portions of the development: (1) Viera East and (2) Viera Central/West. However, there is no explanation regarding how the interaction (i.e., internal capture) between the two components will be considered in the analysis. Please explain how this interaction will be considered in the trip generation estimate.</p> <p><b>Response to Original Comment:</b> In performing the analysis, we did not take advantage of any interaction between Viera East and Viera Central/West to reduce the number of external trips. Therefore, the external trip generation is very conservative, in that the numbers are higher than they could have been. The result is that we show more external trips on the road than can be expected to actually occur. Internal segment assignments for both Viera East and Viera Central/West were isolated to their geographic area and there was no internal capture between them. The result is that all trips end up as external trips.</p> <p><b>FDOT Follow-up Comment:</b> No further comment.</p>

**DEVELOPMENT OF REGIONAL IMPACT (DRI) REVIEW FORM**

**DEVELOPMENT NAME: VIERA DRI**  
**SUBJECT: NOTICE OF PROPOSED CHANGE – APRIL 2017 REVISED AUGUST 2017- RESPONSES TO AGENCY COMMENTS REVIEW**  
**LOCAL GOV'T./JURISDICTION: BREVARD COUNTY**  
**REVIEW COMMENTS DEADLINE: 08/25/2017**  
**TODAY'S DATE: 08/25/2017**

2	6	Community Capture	<p><b>FDOT Original Comment:</b> According to the Methodology, the community capture percentage for Viera West/Central will be calculated by dividing the cumulative Daily and PM Peak Hour traffic counts collected by the Daily and PM Peak Hour volumes projected for existing development using ITE Trip Generation Rates. While this will provide for an ITE vs. Viera West/Central trip generation including community capture ratio that may be used for this specific case, it should be noted that this computation would not provide for a development total trip generation vs. project trip generation after community capture ratio. In order to obtain this, a Viera Central/West trip generation study would need to be performed and compared against the trip generation after community capture. As noted above, the Department is in general agreement with the proposed methodology for this spacing analysis; however, a comparison to the community capture estimated by the travel demand model needs to be included in the analysis and, if significant differences are found, additional analysis/adjustments to the community capture ratio may become necessary.</p> <p><b>Response to Original Comment:</b> Viera Central/West represents the vast majority of remaining entitlements, all except for 190,000 square feet of retail in Viera East. This analysis used field collected empirical data (i.e., actual counts) to determine the amount of community capture. A trip generation analysis was conducted for existing development in Viera Central/West and compared to the empirical data collected. Trip generation analyses were conducted using both ITE rates and equations, and ITE rates only, to demonstrate the level of community capture. The model is not calibrated to count for internal capture hence the reason we took the extra step to collect the data.</p> <p><b>FDOT Follow-up Comment:</b> The trip generation for Viera Central/West was developed based on three three-day counts collected on Wickham Road, Viera Boulevard, and Stadium Parkway. While this is acceptable, the counts were collected on three different dates. If actual trip/traffic counts are used for the trip generation estimate, these counts need to be collected at the same time. Please revise as necessary. In addition, please clarify what the development occupancy was at the time of collecting the counts. Also, please indicate if the counts were adjusted by applying Seasonal Factors lower than 1.00 (as it appears was done), in practice, the occupancy level of the development is being modified to a lower percentage. In order to maintain the development occupancy level, please do not adjust the traffic counts used for trip generation purposes using Seasonal Factors lower than 1.00. Regarding the peak hour, it was identified based on the counts collected on Wickham Road only. The peak hour needs to be determined considering the total trip generation for the site (i.e., combining the three</p>
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**DEVELOPMENT OF REGIONAL IMPACT (DRI) REVIEW FORM**

**DEVELOPMENT NAME: VIERA DRI**  
**SUBJECT: NOTICE OF PROPOSED CHANGE – APRIL 2017 REVISED AUGUST 2017- RESPONSES**  
**TO AGENCY COMMENTS REVIEW**  
**LOCAL GOV'T./JURISDICTION: BREVARD COUNTY**  
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			<p>counts) and not just one road. In addition, the counts show that the peak hour for Wickham Road is from 3:30 pm to 4:30 pm; however, the analysis was done based on 4:00 to 5:00 pm. Please revise the peak hour and corresponding peak hour volume as necessary.</p> <p>Finally, the applicant states that the model is not calibrated to account for internal capture, hence the reason they took the extra step to collect the data; however, no justification supporting this statement is provided. Please include a comparison between the community capture obtained by the applicant vs. the community capture estimated by the travel demand model.</p> <p><b>Response to Follow-up Comment:</b> The counts have been recollected for the same three day period. The PM Peak Hour has been adjusted based on the average of all three county locations. The methodology allows for a seasonal adjustment factor to be used. To address FDOT comments, no seasonal adjustment factor has been used for the collected counts. The result is a 39% PM Peak Hour community capture rate which is the same as was used in the original analysis. If the seasonal adjustment factor is applied to the collected counts, the PM Peak hour community capture rate increases to 41%. The net increase in external trips utilizes all of the requested changes from FDOT related to internal capture for Viera East, the update of Community Capture based on the highest peak hour for all three roads and not using the seasonal adjustment factor for the community capture analysis. Please refer to Exhibits: "ECFRPC-C.d, ECFRPC-C.f, Brevard_4, Atkins_7a-d, Atkins 14."</p> <p><b>FDOT Second Follow-up Comment:</b> No further comment.</p>

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3	7	Viera Central/West Internal Roads	<p><b>FDOT Original Comment:</b> The Methodology states that ITE Trip Generation rates will be adjusted using collected empirical data, the travel demand model, and origin and destination adjustments. However, there is no description about the nature of these adjustments and how they will be performed. Please provide additional information/clarify the nature of these adjustments and how they will be performed.</p> <p><b>Response to Original Comment:</b> In the analysis, we made no adjustments to internal trips other than a 5% mode share. We utilized a worst-case scenario using straight ITE rates (which the community capture analysis indicates are more than 50% higher than collected empirical data). We originally proposed additional adjustments based on several studies, however, County staff asked that we remove all adjustments other than mode share. So, only mode share was used to adjust ITE trip generation rates on the internal roads.</p> <p><b>FDOT Follow-up Comment:</b> No further comment.</p>
4	8	Viera Central/West Internal Roads	<p><b>FDOT Original Comment:</b> A mode share rate is proposed to be applied to internal roads; however, there is no reference regarding the percentage to be applied. While the use of a mode share rate is acceptable, the percentage to be applied needs to be appropriately documented including sources and supporting documentation.</p> <p><b>Response to Original Comment:</b> The analysis included a 5% mode share and documentation for this percentage is included in the analysis.</p> <p><b>FDOT Follow-up Comment:</b> No further comment.</p>

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5	8	Existing Traffic	<p><b>FDOT Original Comment:</b> Per the requirements of Question 21 – Transportation requirements, the segment analysis needs to be performed for peak hour, directional (both directions, not just peak direction) for all the scenarios being analyzed. Please revise the methodology and analysis as necessary.</p> <p><b>Response to Original Comment:</b> As with each of the prior analyses for Viera the analysis was conducted for the PM Peak Hour. A peak directional analysis was completed for road segments because the road segments traffic was generally balanced and where a lane was determined to be needed in the peak direction a balancing lane was provided in the other direction.</p> <p>The intersection analyses did consider all directions of flow.</p> <p><b>FDOT Follow-up Comment:</b> The Department reiterates that, according to Question 21, a directional analysis needs to be provided. The two-way analysis shows that there are several roadway segments that are either close to failure or marginally failing (under Existing, Background, and Future with Project conditions). In situations like these, the directional analysis may show different findings.</p> <p>Please revise the segment analysis, for all scenarios, to include a directional analysis, at least for segments that are operating at volume-capacity ratios of 0.90 or higher (including failing segments).</p> <p><b>Response to Follow-up Comment:</b> Directional analyses for both 2029 background and build-out conditions were conducted and there were no changes in the findings. See Exhibits FDOT-2-5a and FDOT- 2-5b.</p> <p><b>FDOT Second Follow-up Comment:</b> No further comment.</p>
6	8	Project Trip Distribution	<p><b>FDOT Original Comment:</b> The Methodology proposed to use the Central Florida Regional Planning Model (CFRPM), Version 5.1. There are newer/updated versions of the model available (e.g., CFRPM v6.1). Please update the Methodology and analysis to use the latest version of the adopted travel demand model.</p> <p><b>Response to Original Comment:</b> We began methodology discussions before the model was released and we had already begun portions of the analysis. The County agreed that it would be acceptable to utilize 5.1. The applicant cannot agree to this request as this would result in a complete revision of all work to date.</p> <p><b>FDOT Follow-up Comment:</b> No further comment.</p>

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7	11	Analysis Procedure - Segments	<p><b>FDOT Original Comment:</b> Please refer to comment #5 above.</p> <p><b>Response to Original Comment:</b> As with each of the prior analyses for Viera the analysis was conducted for the PM Peak Hour. A peak directional analysis was completed for road segments because the road segments traffic was generally balanced and where a lane was determined to be needed in the peak direction a balancing lane was provided in the other direction.</p> <p><b>FDOT Follow-up Comment:</b> Please refer to our follow-up comment #5.</p> <p><b>Response to Follow-up Comment:</b> See response under FDOT Comment No. 5.</p> <p><b>FDOT Second Follow-up Comment:</b> No further comment.</p>

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8	11	Analysis Procedure - Intersections	<p><b>FDOT Original Comment:</b> Viera DRI currently includes a significant amount of residential development and the next phase will add more residential land uses. Therefore, in addition to the PM Peak Hour intersection analysis, an AM Peak Hour intersection analysis needs to be performed at (1) locations where 100 or more right turning vehicles per hour occur and (2) failing locations where intersection improvements are identified. Please revise the methodology and analysis to include intersection AM Peak Hour analysis as necessary.</p> <p><b>Response to Original Comment:</b> The use of the PM Peak Hour is appropriate and an AM Peak Hour analysis has never been provided for this DRI and in our opinion is not necessary. The existing DRI development order does not include any reference to AM analysis or AM improvements. However, in the analysis the lane calls were always balanced, when needed, to account for the AM Peak Hour mitigation needs in conformance with the PM Peak Hour mitigation needs. For example, if the model showed 3 lanes in one direction and 2 in the other during the PM Peak Hour, we showed that 3 were needed in both directions. It should be noted that there were minimal off-site mitigation needs due to the generation increase of Phase IV relative to the number of trips mitigated through the end of Phase III.</p> <p><b>FDOT Follow-up Comment:</b> Identified improvements at intersections include additional through, right, and left turn lanes. In many cases, the additional lanes are just for one direction (e.g., eastbound through lane), coinciding with the PM Peak Hour direction. Additional improvements may be needed in the opposite direction during the AM Peak Hour, when the peak traffic travels in the opposite direction. Please, at a minimum, include intersection analyses for the AM Peak Hour at intersections where improvements are identified.</p> <p><b>Response to Follow-up Comment:</b> Opposite direction through lanes were recommended to balance roadway geometry. AM peak-hour analysis has not previously been required or provided for the Viera DRI, to the knowledge of the Applicant's traffic engineer.</p> <p><b>FDOT Second Follow-up Comment:</b> No further comment.</p>

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9	11	Growth Rates	<p><b>FDOT Original Comment:</b> The proposed methodology to calculate growth rates is to compare background traffic from the model against existing traffic counts. This methodology does not take into consideration how the model "validated" on each segment. The growth rates need to be analyzed on a segment-by-segment basis and the growth rate obtained directly from the model (base year model volume against future background model volume) needs to be computed and included in the analysis for consideration (along with historical trends). An explanation for each growth rate needs to be provided as part of the background volume projections for review.</p> <p><b>Response to Original Comment:</b> We did not use the comparison between ground counts and model projections. This was originally done and the County wanted us to use a 2% minimum growth rate. In the appendices we show the growth by the model but applied a minimum of 2% if it was less than 2% and used what the model showed if it was more. This information is shown in 21.D.2. Further, we did not compare to trends because this area of the County is mostly built out with the exception of the DRI.</p> <p><b>FDOT Follow-up Comment:</b> According to page 59 of the NOPC, growth rates for background traffic are presented in Appendix 21.D.2. However, this Appendix only documents the growth rates at intersections, without documenting roadway segment growth rate computations. Please note that roadway segment growth rates need to be obtained and these should be used for intersection approaches, rather than computing an overall intersection growth rate.</p> <p>In addition, and as noted in the response above, there are several areas of the County that are mostly built-out; therefore, the use of a minimum 2 percent may be too high.</p> <p>Please update the analysis to include segment growth rates obtained from the model and an explanation for each growth rate used in the analysis. In many cases, the use of a minimum 2 percent may not be appropriate. In addition, please revise the intersection volumes forecast as appropriate.</p> <p><b>Response to Follow-up Comment:</b> As requested, model growth rates were applied to the segments on a directional basis (see response to Comment No. 5, above). Where negative growth rates were calculated, no growth was assumed. The only exception was on Pineda Causeway between I-95 and US 1 as this segment did not exist in the base year model. A 1.5% growth rate per year was assumed on this segment.</p> <p><b>FDOT Second Follow-up Comment:</b> No further comment.</p>

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10	11	Programmed Roadway Improvements	<p><b>FDOT Original Comment:</b> The Methodology states "... improvements that were previously identified as being mitigated for, by the Viera DRI will be considered for future conditions analysis." This statement needs to be clarified as it is not clear what "improvements that were... mitigated for" means and how these mitigation measures are going to be considered in the analysis. For example, a specific improvement may have been identified and proportionate share paid for it; however, the proportionate share computation would be based on the previous phases and not on the current phase being analyzed. Please clarify.</p> <p><b>Response to Original Comment:</b> We have taken a conservative approach in looking at all required improvements for buildout regardless of whether a "need" was previously mitigated, that is, we erred on the side of showing an improvement as needed. In reviewing needs with this study if the existing plus background caused the failure, the failure was not considered to be a mitigation requirement of this Phase of Viera as set forth under Florida law. However, if new trips caused the required improvement we are showing these as required improvements even if the need for such improvement may have been mitigated as part of the prior analysis conducted through the end of Phase III. This was done, in part, because we were not able to determine the prior list of individual projects from the Phase III analysis that went into the previously pipe-lined improvements. We did consider pipe-lined improvements, which were made or are to be made, as committed improvements.</p> <p><b>FDOT Follow-up Comment:</b> No further comment.</p>

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11	11	Background Improvements	<p><b>FDOT Original Comment:</b> Improvements to be identified to mitigate background conditions need to follow a logical progression as part of the identification process. For example, before deciding to widen a roadway segment, other options need to be explored first (optimized signal timings, changes in signal phasing, additional turn lanes/intersection specific improvements, etc.).</p> <p><b>Response to Original Comment:</b> This was done and has been demonstrated in the analysis.</p> <p><b>FDOT Follow-up Comment:</b> Two different type of background improvements were identified in the NOPC:</p> <ul style="list-style-type: none"> <li>• Intersection Improvements: While HCS output printouts were included in the NOPC, no input printouts or analysis files were provided. Therefore, it is not possible to perform a complete review of the intersection analyses to confirm the study findings. Please provide the analysis files in digital format so a complete review can be performed.</li> <li>• Roadway Segments (i.e., road widenings): The need for widening was identified solely on the use of FDOT's Generalized Service Volume Tables. Intersection improvements can significantly impact the delay, and corresponding travel time, along a roadway segment, thus directly impacting the segment LOS. FDOT's Generalized Service Volume Tables provide for a good screening tool to identify if additional (i.e., more detailed) analysis is needed. Before identifying a segment is deficient, a detailed arterial analysis needs to be performed (using the latest version of ArtPlan, HCM 2010 methodology, etc.) that takes into consideration segment-specific characteristics and intersection geometries (including identified intersection improvements). Please revise the analysis as necessary.</li> </ul> <p><b>Response to Follow-up Comment:</b> Intersection HCS files for the original analyses were provided to FDOT in electronic format and have now been distributed to the reviewer.</p> <p>A directional analysis was provided using D-factors and DRI peak-hour directional splits and no new segments were required due to DRI traffic (see response to FDOT Comment No. 5). Where volumes were less than or equal to 10% over capacity on arterial roads and collectors, the need for widening was eliminated as it was assumed that at least a 10% capacity increase could be obtained through traffic operational improvements.</p> <p><b>FDOT Second Follow-up Comment:</b> No further comment.</p>

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12	12	Mitigation	<p><b>FDOT Original Comment:</b> The Methodology states that the proportionate share sum shall be spread across one or more recommended improvements subject to Brevard County approval. In addition to Brevard County, the City of Rockledge, the City of Melbourne, and the East Central Florida Regional Planning Council, and the Florida Department of Transportation need to be included in the decision process to identify if/what projects will be pipelined.</p> <p><b>Response to Original Comment:</b> This is done as a part of the NOPC review and consideration of the proposed Development Order by all reviewing agencies. It is for this reason we did not include the proportionate share calculations as we felt we needed acceptance of the proposed pipelined improvements from all reviewing agencies first.</p> <p><b>FDOT Follow-up Comment:</b> The Department understands that the decision of pipelining an improvement and, if this is the case, what improvements are being pipelined as part of the NOPC; however, the Methodology only listed Brevard County as the one to approve this. The Department reiterates that, in addition to Brevard County, the City of Rockledge, the City of Melbourne, and the East Central Florida Regional Planning Council, the Florida Department of Transportation needs to be included in the decision process to identify if/what projects will be pipelined.</p> <p><b>Response to Follow-up Comment:</b> As noted in the above prior response, the Applicant agrees that all parties should provide their comments on the application and the recommended pipelined improvements.</p> <p>The application contains a recommended mitigation for the projected over-capacity condition on Wickham Road between Lake Andrew Drive and Murrell Road. This mitigation is the construction of the Spyglass Overpass between Lake Andrew Drive and Murrell Road. The right of way has been set aside and The Viera Company planned the area around the future roadway accordingly (i.e. no residential lots fronting the road). FDOT requested a model run to confirm that the proposed mitigation would alleviate this projected over-capacity condition as predicted by the Central Florida Regional Planning Model (CFRPM) used in the analysis. As requested, the Spyglass Overpass was modeled as a four-lane divided minor arterial and the model was re-run. The resultant diversion of traffic to the Spyglass Overpass was over 27,000 vehicles per day (see Exhibits FDOT-2-12a and FDOT-2-12b, attached). Most of the diverted trips originated from Wickham Road for which an estimated buildout traffic reduction of over 19% was observed west of I-95 while a reduction of 28% was observed east of I-95. The resultant reduced volume will not exceed the recently constructed six-lane daily capacity of Wickham Road of</p>
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		<p>59,900. A shape file with the model results for each model run is included on the accompanying flash drive.</p> <p>Based on linear growth, using a 2016 daily count of 35,649 and a build-out volume (2029) of 80,001, the year that the six-lane capacity (59,900) is exceeded is 2023. This would suggest that the initial two-lane overpass would be needed then, and the four-lane overpass would be needed by 2026 (half-way in between 2023 and 2029). The applicant's draft Development Order proposes the improvement to be designed, constructed and completed based on traffic counts for Wickham Road maintained by the Space Coast Transportation Planning Organization. This will allow all parties to more accurately determine the appropriate time as the projected dates do not take into account changes in market conditions or potential economic downturns which directly relate to future traffic volume.</p> <p>The applicant's draft Development Order also proposes a contribution to the FDOT's efforts relative to the I-95 and Fiske Boulevard improvements. It should be noted that the Developer's calculated proportionate fair share is \$360,283.47 and the Developer's proposed Development Order indicates a mitigation program for Phase 4 in excess of \$15 Million Dollars.</p> <p><b>FDOT Second Follow-up Comment:</b> The proposed Development Order language regarding the Spyglass Overpass (Condition 92b) states that design will begin when traffic counts (maintained by the Space Coast TPO) for the segment of Wickham Road from Lake Andrew Drive to Murrell Road reach 95 percent of the adopted level of service capacity. Design and construction of this improvement will take a significant amount of time (several years); therefore, if design starts when the segment reaches 95 percent of capacity, the facility will experience over capacity conditions for several years. In addition, the proposed condition is silent regarding when the improvement is required to be in place and operational. Based on the Applicant's Traffic Engineer, it appears that the segment of Wickham Road is anticipated to operate over capacity by the year 2023 (approximately 50 percent of Phase 4). Based on this, Condition 92b needs to be revised to specify that Viera DRI cannot develop beyond 50 percent of Phase 4 until the Spyglass Overpass is constructed, operational, and open to the general traffic.</p> <p>In addition, it is not clear whether the improvement will be constructed in one or two phases as the package provided by the Applicant includes some contradictory language to this effect.</p> <p>Finally, no documentation supporting the costs used in the proportionate share computation was provided. Based on the Department's review, these costs appear to be significantly lower than costs for similar improvements. However, since the proposed mitigation's cost is</p>
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The comment was addressed with changes to Condition 92 B which were accepted by the FDOT			significantly higher than the proportionate share, no revisions are necessary. It should be noted that, if at any point in time, the Applicant decides to mitigate the proportionate share method, the proportionate share computation will need to revised/updated.
13	12	Proportionate Share Analysis	<p><b>FDOT Original Comment:</b> The Methodology to compute the proportionate share contribution proposes to use available future roadway capacity from all significant roadways after all backlogged improvements have been identified. It should be noted that pursuant to F.S. 163.3180(5)(h)2.a., the proportionate share shall be calculated based upon the number of trips from the proposed development expected to reach roadways during the peak hour from the stage or phase being approved. Therefore, the proportionate share shall be computed based on <u>all</u> the project trips on that facility and not just the ones that cause the facility to exceed its corresponding service capacity.</p> <p><b>Response to Original Comment:</b> Upon review of the statutes, the administrative rules and the approved methodology, we agree that the methodology did not accurately reflect the formula to be applied. We agree to this change and will prepare the calculations as noted above.</p> <p><b>FDOT Follow-up Comment:</b> No further comment.</p>

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14	40	Viera East Internal Capture	<p><b>FDOT Original Comment:</b> Several land uses (Mission Bay Apartments, Lakes at Viera, The Greens, etc.) were included in multiple residential-office and residential-retail internal capture computations. This could potentially result in double counting the internal capture for these land uses. While it is acceptable to include all the appropriate office or retail development in the Internal Capture computation, it needs to be considered all at once and then, the corresponding internal capture for each portion of the office or retail land use can be determined proportionally.                      Please revise the Internal Capture computation so these duplicates are removed.</p> <p><b>Response to Comment:</b> The Internal Capture analysis has been updated. Please refer to the following Exhibits:</p> <ul style="list-style-type: none"> <li>• Atkins -7a-VieraEast_Daily_InternalCapture_Buildout</li> <li>• Atkins -7b-VieraEast_Daily_InternalCapture_Phase1_3</li> <li>• Atkins-7c-VieraEast_PMPeak_InternalCapture_Buildout</li> <li>• Atkins-7d-VieraEast_PMPeak_InternalCapture_Phase1_3</li> </ul> <p><b>FDOT Follow-up Comment:</b> No further comment.</p>
15	53	Viera DRI Net External Trips at Build-Out	<p><b>FDOT Original Comment:</b> The analysis was performed based on the Net External Trips. These trips were added to the roadway network and intersection. While these trips represent the difference in the number of trips between Viera DRI Build-Out Total and the Current DO Mitigation, there are trips corresponding to previously approved but not yet built portions of Viera DRI that were not accounted for in the analysis. Please revise the analysis to account for previously approved but not yet built portions of Viera DRI.</p> <p><b>Response to Comment:</b> As requested by FDOT, the trips corresponding to previously approved but not yet built portions of the Viera DRI have now been separately added to the road network as background trip, in addition to background trips based on model growth rates. The revised analysis presented above in response to Comment No. 5 includes these trips.</p> <p><b>FDOT Follow-up Comment:</b> No further comment.</p>

**DEVELOPMENT OF REGIONAL IMPACT (DRI) REVIEW FORM**

**DEVELOPMENT NAME: VIERA DRI**  
**SUBJECT: NOTICE OF PROPOSED CHANGE – APRIL 2017 REVISED AUGUST 2017- RESPONSES**  
**TO AGENCY COMMENTS REVIEW**  
**LOCAL GOV'T./JURISDICTION: BREVARD COUNTY**  
**REVIEW COMMENTS DEADLINE: 08/25/2017**  
**TODAY'S DATE: 08/25/2017**

Comment Number	Page(s)	General Areas of Concern	Specific Review Comment(s)
16	N/A	Intersection Level of Service Standard	Please clarify how failure was defined when analyzing intersections. Was it by LOS, volume-to-capacity ratio, by movement, by approach, overall intersection, or something else? <b>Response to Follow-up Comment:</b> Failure was identified by overall LOS for intersections and by volumes exceeding Brevard County's Maximum Acceptable Volume (MAV) at the adopted road segment LOS. <b>FDOT Second Follow-up Comment:</b> No further comment.
17	89	Development Order	The Department has conducted a preliminary review of the Draft Development Order included in the NOPC and offer the comments below. Please note that these comments are preliminary comments and additional comments may arise after the analysis is completed and the Draft Development Order is updated. a. Page 137 – Condition 92.B: Spyglass Overpass and I-95 at Fiske Boulevard improvements are listed as pipeline improvements. Please refer to Comment #12 above. b. Page 174 – Exhibit 5 - Transportation Equivalency Matrix: The matrix does not include minimums and maximums. These need to be included so the Community Capture percentage used in the analysis reflects future development and corresponding capture of trips. <b>Response to Follow-up Comment:</b> a. Please refer to the response to Comment #12. b. As discussed with Brevard County, additional methods of evaluation have been added to Condition 89 and Condition 4. These methods include the ability of Brevard County to review the development mix and percentage of land devoted to each land use during each Biennial Report as well as including a requirement for additional analysis and confirmation of assumed Community Capture percentage with a request to increase residential development by more than 10%, cumulatively. Please refer to Pages 95, 96 and 134, Revised Development Order. <b>FDOT Second Follow-up Comment:</b> No further comment.
18	N/A	General Comment	Please make sure that all analysis files are provided in digital format for review. <b>Response to Follow-up Comment:</b> Acknowledged. <b>FDOT Second Follow-up Comment:</b> If additional analyses are performed, please continue to provide the corresponding files in digital format for review.

**DEVELOPMENT OF REGIONAL IMPACT (DRI) REVIEW FORM**

**DEVELOPMENT NAME: VIERA DRI**  
**SUBJECT: NOTICE OF PROPOSED CHANGE – APRIL 2017 REVISED AUGUST 2017- RESPONSES**  
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**TODAY'S DATE: 08/25/2017**

Comment Number	Page(s)	General Areas of Concern	Specific Review Comment(s)
19	General Comment	Development Order	<b>FDOT Comment:</b> Please add the word "service" before the word "capacity." The comment was addressed in Conditions 84 and 85
20	95	Development Order – Condition 4	<b>FDOT Comment:</b> Please add FDOT to the list of agencies to be provided notice if land use conversions are performed. In addition, in the event that an increase of residential by more than 10 percent is requested, FDOT needs to be included in the list of agencies that reviews the community capture projections and receives a copy of the transportation analysis. The comment was addressed in Condition 4
21	125	Development Order – Condition 84	<b>FDOT Comment:</b> The Applicant has stated that <i>"The Development Order currently addresses a methodology in the event the Developer chooses to perform a Monitoring and Modeling Study. The Developer has performed an updated Transportation Impact Study to cumulatively address the impacts of the project through buildout and not a Monitoring and Modeling Study. There is no statutory requirement for inclusion of specific parties in the preparation of a methodology for the Transportation Impact Study"</i> . While it is correct that there is no statutory requirement for the inclusion of specific parties in the preparation of a methodology for the Transportation Impact Study, the Development Order currently includes specific language regarding the methodology to be followed in the mitigation of future phases (e.g., monitoring and modeling) to be agreed upon by Brevard County, FDOT, City of Rockledge, ECFRPC, City of Melbourne, and DEO. The Development Order requires agencies other than Brevard County to agree on the monitoring and modeling methodology because this was the mitigation method. It is logical to infer that, if the monitoring and modeling mitigation method is to be replaced by a different one (e.g., proportionate share), the same agencies would have to agree to this. While FDOT understands that a Transportation Impact Study in support of Phase 4 has already been performed, a condition needs to be added to the Development Order stating that, in the event that future traffic studies are performed (e.g., the study referred to in Condition 92B), the study methodology needs to be agreed to by the Department. In summary, the Development Order already acknowledges the potential need for future traffic studies; therefore, the methodologies to be followed by these studies need to be agreed upon by FDOT.

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 Fax: 386-943-5713  
 E-mail: Jean.Parlow@dot.state.fl.us

Reviewed By: Fabricio Ponce, P.E.  
 Company: Vanasse Hangen Brustlin, Inc.  
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# East Central Florida Regional Planning Council

455 N. Garland Avenue, Orlando, FL 32801  
Phone 407.245.0300 • Fax 407.245.0285 • www.ecfrpc.org

Hugh W. Harling, Jr. P.E.  
Executive Director

August 30, 2017

Mr. Steve Swanke, Program Manager  
Brevard County Planning & Development  
2725 Judge Fran Jamieson Way, Suite A114  
Viera, FL 32940

RE: Viera Development of Regional Impact (DRI) Notification of a Proposed  
Change (NOPC), ECFRPC Element # 140128

Dear Mr. Swanke:

We have received responses to the questions and comments relating to the referenced NOPC on August 14, 2017. The following issues have not been resolved:

1. A primary issue is that the methodology was not agreed upon by all relevant parties. As already related in our last letter, the FDEO had opined that the applicant and the county are not authorized to process a transportation methodology for the purposes of modifying the DRI transportation requirements without agreement on the methodology by the reviewing agencies and potentially impacted parties. FDEO stated that they have verified their position "that S. 380.06(19)(e)6., F.S., pertains specifically to instances wherein the transportation methodology for the DRI DO (Development Order) is already based on proportionate share mitigation and that methodology is proposed to change (but continue to be based on proportionate share), as opposed to instances where the methodology is not based on proportionate share and the proposal is to amend the DO to use proportionate share." The FDEO went on to say that the developer's proposed change to the methodology is open to potential comment/appeal of the DO.

The applicant has not addressed this issue except to say that they have chosen not to perform a Monitoring and Modeling Study and opted to perform an updated Transportation Impact Study for buildout. Again, this must be conducted after agreement by all parties on the methodology, which has not been accomplished. We specifically do not agree with the methodology utilized.

2. The response to question C.a. regarding how much development has occurred to date is revealing. Little of Phase 3 is built and the overall project is less than half way constructed. About 10,500 of the approved 31,619 residential units are built. About 1,740,000 square feet of the approved 3,438,127 square feet of the retail uses have been built. Only 1,400,000 of the approved 3,169,961 approved office development is constructed.

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This is important because this NOPC request will eliminate any future verification of impacts. Monitoring and Modeling of traffic impacts are being deleted from the Development Order. No intersection analyses will be conducted, and it is often the intersections that control the flow on roadways. The analysis that was conducted collected limited empirical data to verify the assumptions used in the study. This is significant since the results of this analysis assert that the project will generate considerably fewer trips and that the traffic impacts are much less than envisioned in the original study. Many assumptions go into every analysis, and it is highly unusual to adopt this study without empirical data collected as a part of this study and do not require Monitoring and Modeling in the future to verify forecasted traffic impacts.

3. The latest responses from the applicant did not answer several queries posed by the ECFRPC:
  - a. The question regarding the interaction between the east and west project development was not answered. The amount of interaction should be verified because the computer modelling could have assigned an inordinately high number of relatively short trips between the east and west development portions of Viera.
  - b. Maps of the network and project were requested. The response is that the “guidelines” do not require maps. Which guidelines the applicant is referring to were not explained. If the respondent is referring to the Development of Regional Impact Application for Development Approval, those guidelines are totally inappropriate for this study. Furthermore, virtually all such applications provide extensive maps to help communicate the results of the analysis. Maps should always be provided.
  - c. The current DO stipulates that the Monitoring and Modeling include a trip length analysis and an origin destination study. The reason is because transportation professionals acknowledge that modeling needs to be validated and recalibrated, if necessary, if the data on the ground is different than what is shown in models. This is a basic step for modeling. It is why the reviewers, particularly the FDOT, insisted that the language be included in the DO. This information was not provided in this study and will not be provided in the future with these proposed changes to the DO.
  - d. A trip length comparison between this project and trips for the county as a whole was not provided, as requested. This should be relatively easy to get from the computer programs used for this analysis.
  - e. The internal capture from the computer model was not divulged. This internal capture is useful to compare with the capture used in the analysis to see if they are in the same ballpark. If they are significantly different, then it indicates that more explanation may be necessary.
4. The Florida Department of Economic Opportunity has been involved with this review. Despite their initial assertion that the methodology for this analysis should have been agreed upon by the FDOT, ECFRPC and adjacent local governments, they are not willing to appeal the development order based on that criteria.

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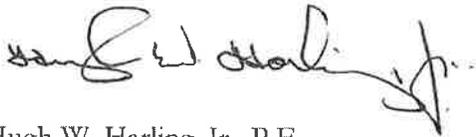
Furthermore, the FDOT and Brevard County are working with the applicant and DEO to ensure that their issues from the analysis, as conducted, will be addressed to their satisfaction. It should be stated that the ECFRPC still is not in agreement with the outcome due to the lack of verification of impacts and that this proposal will eliminate future monitoring of impacts, which is important for this enormous project that is less than half complete. However, because the FDEO is not going to get involved to ensure agreement with the methodology, we have no reason to further our technical engagement at this point. We will stay involved to monitor the final outcome and assist the county as requested.

5. We have received letters from the Florida Department of Transportation, the City of Melbourne, Brevard County and Atkins, their consultant. They are attached for your use.

In conclusion, it is our opinion that these proposed changes may result in additional regional impacts pursuant to the criteria of section 380.06(19), Florida Statutes. It is evident, however, that the FDEO believes otherwise. We are confident that Brevard County and FDOT can adequately address the concerns relating to the study as presented by the applicant; however, future impacts to the Cities of Melbourne, Rockledge and Brevard County will not be adequately measured nor addressed.

We appreciate the opportunity to participate in this review. If you have any questions or if we can be of further assistance, please give Fred Milch or me a call at (407) 245-0300.

Sincerely,



Hugh W. Harling, Jr., P.E.  
Executive Director, ECFRPC

- cc: James Stansbury, FDEO (via e-mail)  
Adam Biblo, FDEO (via e-mail)  
David Cooke, FDOT (via e-mail)  
Jean Parlow, FDOT (via e-mail)  
Todd Davis, FDOT  
Erin Sterk, Brevard County Planning Department  
Steve Swanke, Brevard County Planning Department (via e-mail)  
Bob Kamm, Brevard County MPO (via e-mail)  
Steve Johnson, The Viera Company (via e-mail)  
Darenda Marvin, Grimes Goebel Grimes Hawkins Glatfelter and Galvano  
Todd J. Prorywa, Viera  
Alix Bernard, City of Rockledge  
Todd Corwin, City of Melbourne  
Tad Calkins, Brevard County

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# City of Melbourne



Community Development

900 E. Strawbridge Avenue • Melbourne, FL 32901 • (321) 608-7500 • Fax (321) 608-7519

August 24, 2017

Fred Milch  
Project Review Manager  
East Central Florida Regional Planning Council  
455 N. Garland Avenue, 4<sup>th</sup> Floor  
Orlando FL 32801

Dear Mr. Milch,

The Viera Development of Regional Impact (DRI) is a project that impacts adjacent jurisdictions, including the City of Melbourne. Issues such as transportation impacts, the provision of affordable housing, and employment generation, are all concerns that cross jurisdictional boundaries. Traffic concerns, particularly for the Wickham Road and US 1 corridors, are vital matters for the local community. How the DRI affects the transportation network is an important issue for southern Brevard County.

On May 15, 2017 the City submitted several comments regarding the most recent Notice of Proposed Change for the Viera DRI. In response to the answers provided by the Viera Company, the City offers the following remarks:

*Original Comment: The City of Melbourne should be included in discussions regarding traffic monitoring and modeling (Condition #84). As proposed, the monitoring and modeling process would be replaced by the implementation of a traffic impact study. The methodology for this study would only be reviewed by Brevard County.*

The Viera Company states in its response to the East Central Florida Regional Planning Council that the Developer has chosen to undertake an updated Traffic Impact Study (TIS) instead of a Monitoring and Modeling Study (M&M). The M&M methodology would include those entities that are most impacted by traffic generated by the DRI. The Viera Company should explain why the TIS approach (which does not include review by affected entities) is more appropriate than the M&M methodology which is currently contained in the approved Development Order (DO).

*Original comment: The proposed changes to Condition #84 delete the requirement of an origin destination survey to verify trip lengths and trip distribution. This information is also not included in the traffic analysis. Such information will be crucial in determining the tangible roadway impacts to adjacent jurisdictions.*

In its response to the East Central Florida Regional Planning Council, the Viera Company states that the origin – destination survey is not necessary since the Developer has chosen to undertake an updated Traffic Impact Study (TIS) instead of a Monitoring and Modeling

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Study (M&M). The Viera Company should explain why the origin-destination survey is not needed to address trip lengths and trip distribution since such a study would help quantify traffic impacts to roadways in adjacent jurisdictions.

*Original Comment: Much of the traffic to and from the Viera DRI occurs during the morning hours. The traffic analysis should examine whether the analysis of P.M. peak hour traffic adequately captures the busiest vehicular traveling volumes during a typical day.*

The Viera Company responded that DRI intersection analyses have always been conducted during the P.M. peak hour. The updated trip count data provided by the applicant indicates that high volumes of traffic travel into the DRI during the A.M. peak hour. The same counts also show high volumes of traffic leaving the DRI in the P.M. peak hour. These traffic patterns indicate that many persons are traveling to the DRI for employment and/or educational purposes. An origin-destination survey could quantify the degree to which County and City roads are impacted by development within the Viera DRI.

*Original Comment: The mitigation proposed for Phase 4 in Condition 92B of the DO includes future improvements to Spyglass Hill Road and the Fiske Boulevard/I-95 interchange. An analysis should be included that clarifies the need for these projects and explains why the Spyglass Hill Road mitigation is warranted versus network improvements such as the expansion of the Washingtonia Extension.*

While the Viera Company has completed an analysis showing the Spyglass Hill Road overpass will relieve congestion on Wickham Road, it has not demonstrated that this improvement is the most needed project within the local transportation network. A M&M study could clarify this matter.

Thank you for giving the City the opportunity to comment on these important issues.

If you have any questions, please contact me at (321) 608-7500.

Sincerely,



Todd Corwin, AICP  
Planner

cc: Shannon Lewis, Deputy City Manager  
Cindy Dittmer, AICP, Director  
Jenni Lamb, City Engineer