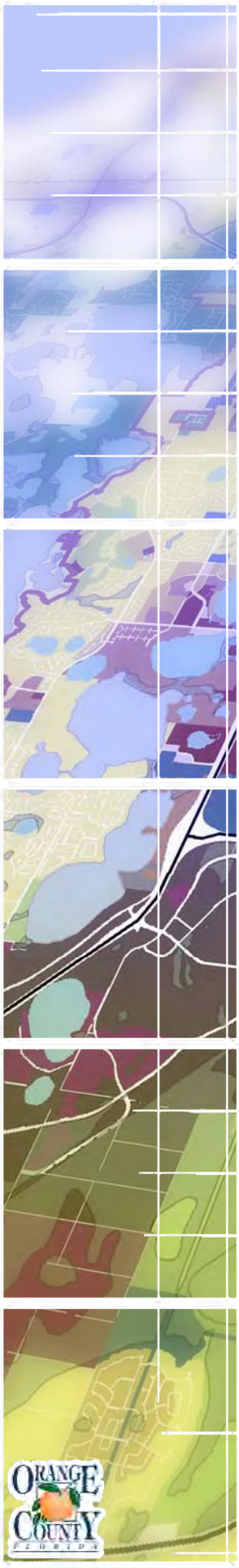

ORANGE COUNTY

PLANNING DIVISION

2017-1 REGULAR CYCLE AMENDMENTS

2010 - 2030 COMPREHENSIVE PLAN

BOARD OF COUNTY COMMISSIONERS

JANUARY 24, 2017
TRANSMITTAL PUBLIC HEARING

PREPARED BY:
ORANGE COUNTY COMMUNITY, ENVIRONMENTAL AND DEVELOPMENT SERVICES

PLANNING DIVISION
COMPREHENSIVE PLANNING SECTION

ORANGE COUNTY GOVERNMENT
FLORIDA

DATE: January 24, 2017

TO: Mayor Teresa Jacobs
-AND-
Board of County Commissioners (BCC)

FROM: Alberto A. Vargas, MArch., Manager, Planning Division

THROUGH: Jon V. Weiss, P.E., Director
Community, Environmental, and Development Services Department

SUBJECT: 2017-1 Regular Cycle Comprehensive Plan Amendments
Board of County Commissioners (BCC) Transmittal Public Hearing

Please find attached a binder containing the staff reports and associated back-up materials for the 2017-1 Regular Cycle Comprehensive Plan Amendments. These amendments were heard by the Local Planning Agency (LPA) at a transmittal public hearing held on December 15, 2016. The amendments are scheduled for a BCC transmittal public hearing on January 24, 2017.

The Regular Cycle includes four privately-initiated amendments (located in Districts 3, 4, 5, and 6) and eight staff-initiated map and text amendments. Each of the privately-initiated map amendments involve a change to the Future Land Use Map (FLUM) for property over 10 acres. The staff-initiated amendments include map changes and/or changes to the Goals, Objectives, or Policies of the Comprehensive Plan.

Following the BCC transmittal public hearing, the proposed amendments will be transmitted to the Florida Department of Economic Opportunity (DEO) and other State agencies for review and comment. Staff expects to receive comments from DEO and/or the other State agencies in March 2017. Pursuant to 163.3184, Florida Statutes, the proposed amendments must be adopted within 180 days of receipt of the comment letter. The adoption hearings are tentatively scheduled for the LPA on April 20, 2017 and the BCC on June 6, 2017.

Any questions concerning this document should be directed to Alberto A. Vargas, MArch., Manager, Planning Division at (407) 836-5354 or Alberto.Vargas@ocfl.net; or Gregory Golgowski, AICP, Chief Planner, Comprehensive Planning Section, Planning Division, at (407) 836-5624 or Gregory.Golgowski@ocfl.net.

AAV/sgw

Enc: 2017-1 Regular Cycle BCC Transmittal Binder

c: Christopher R. Testerman, AICP, Assistant County Administrator
Jon V. Weiss, P.E., Director, Community, Environmental, and Development Services Department
John Smogor, Planning Administrator, Planning Division
Gregory Golgowski, Chief Planner, Planning Division

PLANNING DIVISION
ALBERTO A. VARGAS, *Planning Manager*
201 South Rosalind Avenue, 2nd Floor ■ Reply To: Post Office Box 1393 ■ Orlando FL 32802-1393
Telephone 407-836-5600 ■ FAX 407-836-5862 ■ orangecountyfl.net

Joel Prinsell, Deputy County Attorney
Roberta Alfonso, Assistant County Attorney
Whitney Evers, Assistant County Attorney
John Smogor, Planning Administrator, Planning Division
Gregory Golgowski, Chief Planner, Planning Division
Olan D. Hill, AICP, Chief Planner, Planning Division
Read file

2017 FIRST REGULAR CYCLE

AMENDMENTS TO THE 2010-2030 COMPREHENSIVE PLAN TRANSMITTAL PUBLIC HEARING

INTRODUCTION

This is the Board of County Commissioners (BCC) transmittal public hearing book for the First Regular Cycle Amendments (2017-1) to the Future Land Use Map (FLUM) and Comprehensive Plan (CP). These amendments were heard by the Local Planning Agency (LPA) during a transmittal public hearing held on December 15, 2016 and will go to the Board of County Commissioners (BCC) for a transmittal public hearing on January 24, 2017.

The 2017-1 Regular Cycle includes four privately-initiated map amendments (located in Districts 3, 4, 5, and 6) and eight staff-initiated map and text amendments. Since this is the transmittal stage for these amendments, there will be a second round of public hearings for adoption after the Florida Department of Economic Opportunity (DEO) and other State agencies complete their review of the proposed amendments and provide comments, which are expected in March 2017. Adoption public hearings are tentatively scheduled for the LPA on April 20, 2017 and the BCC on June 6, 2017.

Once the Regular Cycle amendments have been adopted by the BCC, the amendments will become effective 31 days after DEO notifies the County that the plan amendment package is complete. These amendments are expected to become effective in July 2017, so long as no challenges are brought forth for any of the amendments.

Any questions concerning this document should be directed to Alberto A. Vargas, MArch., Manager, Planning Division, at (407) 836-5802 or Alberto.Vargas@ocfl.net, or Gregory Golgowski, AICP, Chief Planner, Comprehensive Planning Section, at (407) 836-5624 or Gregory.Golgowski@ocfl.net.

2017-1 Regular Cycle State Expedited Review Comprehensive Plan Amendments

Privately Initiated Future Land Use Map and Text Amendments

Amendment Number	Concurrent Rezoning or Substantial Change	Owner	Agent	Tax ID Number(s)	General Location / Comments	Future Land Use Map Designation FROM:	Future Land Use Map Designation TO:	Zoning Map Designation FROM:	Zoning Map Designation TO:	Acreage	Project Planner	Staff Rec	LPA Rec
District 1													
2017-1-A-1-1 Hannah Smith		Daryl M. Carter (As Trustee)	Jim Hall, VHB, Inc.	11-24-28-0000-00-020; 14-24-28-1242-66-000; portions of 14-24-28-1242-66-001 and 14-24-28-1242-60-000	Generally located west of I-4, east of Desforges Ave., south of Smith Bennett Rd., and north of Daryl Carter Pkwy.	Activity Center Mixed-Use (ACMU)	Planned Development-Medium Density Residential/Commercial (PD-MDR/C)			63.00 gross ac.	Amy Bradbury		
District 3													
2017-1-A-3-1 (Oasis at Crosstown)	Yes (PD Rezoning Submittal Pending)	Abdul Musa Ali, Yusef Musa Cortes, and Samuel Musa Cortes	Stephen Novacki, Picerne Development Corporation of Florida	26-22-30-8418-00-010/020	200 S. Goldenrod Rd. and 7302 Yucatan Dr.; Generally described as located west of N. Goldenrod Rd. and south of Yucatan Dr., north of SR 408 and east of Tuscany Pointe Ave.	Commercial (C)	Medium Density Residential (MDR)	C-1 (Retail Commercial District)	PD (Planned Development District)	17.20 gross/net developable acres	Jenny DuBois	Transmit	Transmit (7-0)
District 4													
2017-1-A-4-1 Moss Park North		Gary T. Randall (As Trustee)	Stephen Novacki	09-24-31-0000-00-003/011	11001 Moss Park Rd.; Generally located north of Moss Park Rd., east of SR 417, and south of Dowden Rd.	Rural (R)	Planned Development-Medium Density Residential/Office/Conservation (PD-MDR/O/CONS) and Urban Service Area (USA) Expansion			108.30 gross ac.	Amy Bradbury	Transmit	Transmit (7-0)
District 5													
2017-1-A-5-1 (15169 E. Colonial)	Yes, PD Submittal Pending	151 Col, Inc.	Thomas Sullivan, Gray Robinson P.A	19-22-32-7976-00-020	15169 E. Colonial Dr.; Generally located north of E. Colonial Dr., west of Townsend Oaks Cr., and east of Sandy Creek Ln.	Rural (R)	Planned Development-Low-Medium Density Residential/Commercial/ Conservation (PD-LMDR/C/CONS) and Urban Service Area (USA) Expansion)	R-T (Mobile Home Park District)	PD (Planned Development)	12.10 gross ac.	Nik Thalmueller	Transmit	Transmit (6-0)
District 6													
2017-1-A-6-1 (The Seasons)	PD rezoning submittal pending	Texas Avenue Development, LLC	Jim Hall, VHB, Inc.	21-23-29-5361-00-170	5736 S. Texas Ave.; Generally located on the west side of S. Texas Ave., south of Wakulla Wy., east of S. John Young Pkwy., and north of W. Oak Ridge Rd.	Low-Medium Density Residential (LMDR)	Medium Density Residential (MDR)			19.40 gross ac./ 17.70 net developable ac.	Sue Watson	Transmit	Transmit (7-0)

ABBREVIATIONS INDEX:

ABBREVIATIONS INDEX: IND-Industrial; C-Commercial; O-Office; LDR-Low Density Residential; LMDR-Low-Medium Density Residential; MDR-Medium Density Residential; HDR-High Density Residential; PD-Planned Development; CONS-Wetland/Conservation; PR/OS-Parks/Recreation/Open Space; OS-Open Space; R-Rural / Agricultural; RS-Rural Settlement; GC-Growth Center; USA-Urban Service Area; WB-Water Body; ACMU-Activity Center Mixed Use; CP-Comprehensive Plan; CIE-Capital Improvements Element; CIP-Capital Improvements Program; FLUM-Future Land Use Map; FLUE-Future Land Use Element; TRAN-Transportation Element; WSFWP-Water Supply Facilities Work Plan; GOPS-Goals, Objectives, and Policies; OBJ-Objective; SR-State Road; AC-Acres

2017-1 Regular Cycle Comprehensive Plan Amendments

Staff Initiated Comprehensive Plan Map and Text Amendments

Amendment Number	Sponsor	Description of Proposed Changes to the 2010-2030 Comprehensive Plan (CP)	Project Planner	Staff Rec	LPA Rec
2017-1-B-FLUE-1	Planning Division	Text amendments to the Future Land Use Element Policy FLU8.1.4 establishing the maximum densities and intensities for proposed Planned Developments within Orange County	Amy Bradbury	Transmit	Transmit (7-0)
2017-1-B-FLUE-2	Planning Division	Text amendment to Future Land Use Element Policy FLU1.2.4 regarding allocation of additional lands to the Urban Service Area (USA)	Amy Bradbury	Transmit	Transmit (7-0)
2017-1-B-FLUM-1	Planning Division	Map amendment removing Future Land Use Map designations for parcels previously annexed by incorporated jurisdictions within Orange County	Amy Bradbury	Transmit	Transmit (7-0)
2017-1-B-CP-1	Planning Division	Proposed amendments to the text, and Goals, Objectives, and Policies (GOPS) of the Future Land Use Element due to changes in State Statutes as required in the Evaluation and Appraisal Report (EAR) update	Nik Thalmueller	Transmit	Transmit (7-0)
2017-1-B-CP-2	Transportation Planning Division	Text amendments to the Transportation Element and Capital Improvements Element to update the Long-Term Transportation Concurrency Management System (LTTCMS) and constrained facilities	Elwyn Gonzalez	Transmit	Transmit (7-0)
2017-1-B-WSFWP-1	Utilities Division	Water Supply Facilities Work Plan Update	Nik Thalmueller	Transmit	Transmit (7-0)
2017-1-B-TRAN-1	Transportation Planning Division	Text amendments to Transportation Element policies under Objective T3.2 related to connectivity	Gregory Scott	Transmit	Transmit (7-0)
2017-1-B-TRAN-2	Transportation Planning Division	Map amendment to the Transportation Element to update the Long Range Transportation Plan	Elwyn Gonzalez	Transmit	Transmit (7-0)

ABBREVIATIONS INDEX:

ABBREVIATIONS INDEX: IND-Industrial; C-Commercial; O-Office; LDR-Low Density Residential; LMDR-Low-Medium Density Residential; MDR-Medium Density Residential; HDR-High Density Residential; PD-Planned Development; CONS-Wetland/Conservation; PR/OS-Parks/Recreation/Open Space; OS-Open Space; R-Rural / Agricultural; RS-Rural Settlement; GC-Growth Center; USA-Urban Service Area; WB-Water Body; ACMU-Activity Center Mixed Use; CP-Comprehensive Plan; CIE-Capital Improvements Element; CIP-Capital Improvements Program; FLUM-Future Land Use Map; FLUE-Future Land Use Element; TRAN-Transportation Element; GOPS-Goals, Objectives, and Policies; OBJ - Objective; WSFWP-Water Supply Facilities Work Plan Update; SR-State Road; AC-Acres

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8.	2017-1-B-CP-1 EAR Statutory Updates	Proposed amendments to the text, and Goals, Objectives, and Policies (GOPS) of the Future Land Use Element due to changes in State Statutes as required in the Evaluation and Appraisal Report (EAR) update	65
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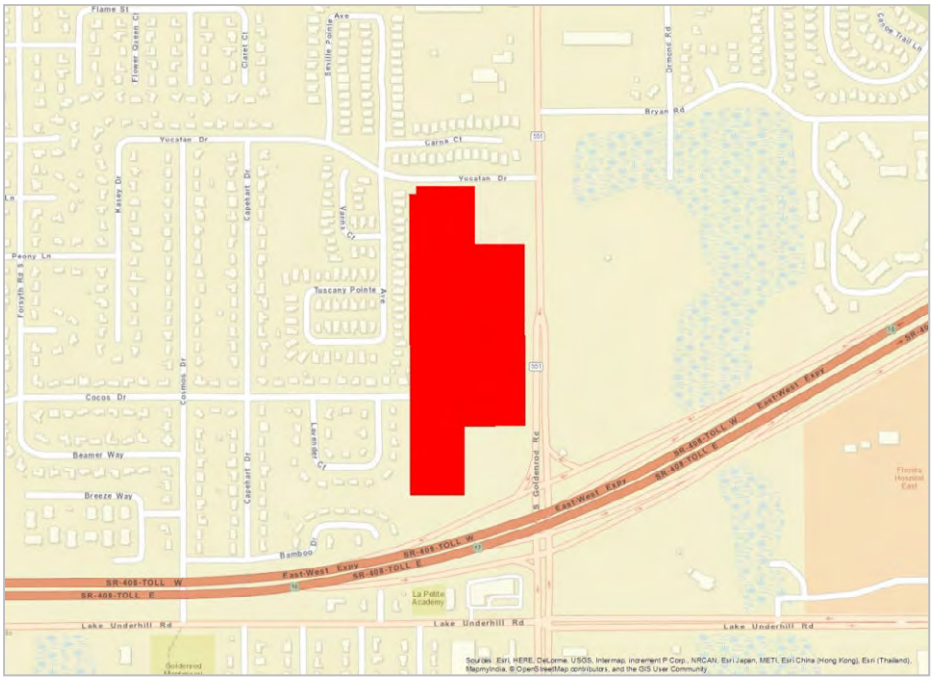


Applicant/Owner: Stephen Novacki, Picerne Development Corporation of Florida / Abdul Musa Ali, Yusef Musa Cortes, and Samuel Musa Cortes

Location: 200 S. Goldenrod Road and 7302 Yucatan Drive; Generally described as located west of N. Goldenrod Road and south of Yucatan Drive, north of SR 408 and east of Tuscany Pointe Avenue.

Existing Use: Undeveloped land

Parcel ID Numbers: 26-22-30-8418-00-010/020

Tract Size: 17.20 gross/net developable acres

The following meetings and hearings have been held for this proposal:

	Report/Public Hearing	Outcome
✓	Community meeting held November 16, 2016, with eight members of the public in attendance.	**Mixed:** Participants voiced concerns about traffic and congestion on area roadways, access management, safety, and crime in the area.
✓	Staff Report	Recommend Transmittal
✓	LPA Transmittal December 15, 2016	Recommend Transmittal (7-0)
	BCC Transmittal	January 24, 2017
	State Agency Comments	March 2017
	LPA Adoption	April 20, 2017
	BCC Adoption	June 6, 2017

Project Information

Request: Commercial (C) **to** Medium Density Residential (MDR)

Proposed Development Program: Up to 343 multi-family dwelling units

Public Facilities and Services: Please see the Public Facilities & Services Appendix for specific analyses of each public facility.

Environmental: The property is located within the boundary of the Orlando Range and Chemical Yard. The U.S. Army Corps of Engineers confirmed that their Remedial Investigation/Feasibility Study revealed no impediment to future development and that no further action was necessary to protect public health, welfare, or the environment. Disclosure of the property's status as a Formerly Used Defense Site, though, will still be required.

Transportation: The subject property is located within the County's Alternative Mobility Area (AMA). The project is, therefore, exempt from meeting transporation concurrency requirements.

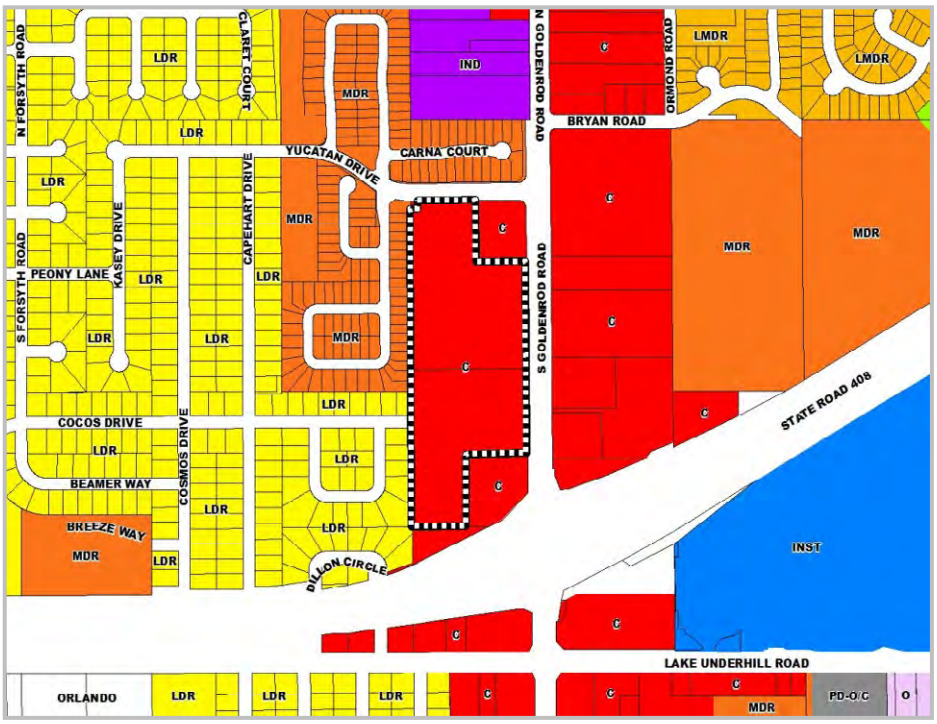
Schools: Capacity is presently available at the elementary, middle, and high schools that would serve the project. Therefore, a Capacity Enhancement Agreement (CEA) will not be required.

Concurrent Rezoning:

The submittal of a PD (Planned Development District) rezoning application is pending. Staff anticipates that if this proposed amendment is transmitted to the Florida Department of Economic Opportunity, it will return for concurrent consideration with the PD rezoning request during the adoption public hearing stage.

STATE ROAD 408
LAKE UNDERHILL ROAD
ORMOND ROAD
BRYAN ROAD
N GOLDENROD ROAD
S GOLDENROD ROAD
CARNA COURT
YUCATAN DRIVE
DILLON CIRCLE
CLARET COURT
CAPEHART DRIVE
COCOS DRIVE
COSMOS DRIVE
KASEY DRIVE
PEONY LANE
BEAMER WAY
BREEZE WAY
N FORSYTH ROAD
S FORSYTH ROAD
AERIAL PHOTO

FUTURE LAND USE - CURRENT



Current Future Land Use:
Commercial (C)

Special Area Information

Formerly Used Defense Site: The site is located within the Orlando Range and Chemical Yard boundary.

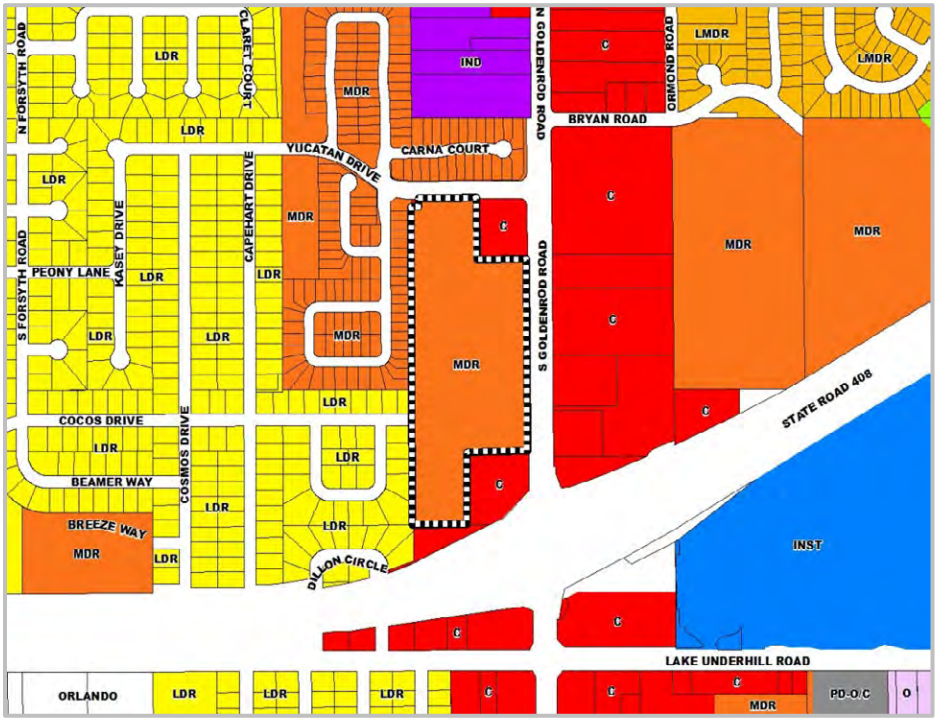
Airport Noise Zone: The site is located in Airport Noise Zone E.

Overlay District: N/A

JPA: N/A

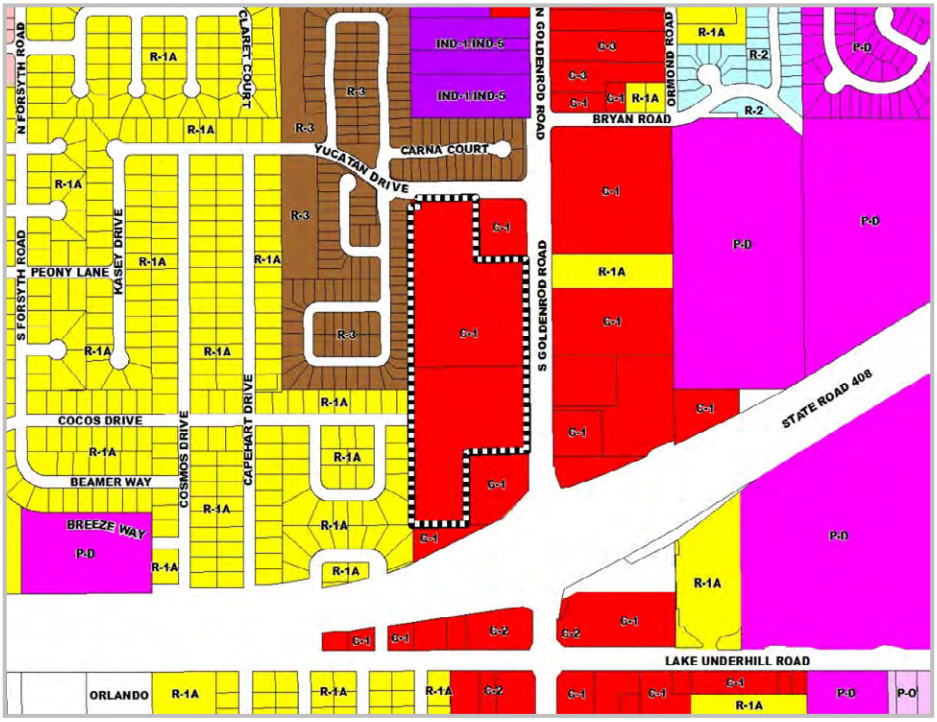
Rural Settlement: N/A

FUTURE LAND USE – PROPOSED



Proposed Future Land Use:
Medium Density Residential (MDR)

ZONING - CURRENT



Zoning: C-1 (Retail Commercial District)

Existing Uses:

N: Speedway (gas station/convenience store) and Tuscany Pointe (single-family residential subdivision)

S: Value Place (extended stay hotel)

E: Public Storage, Old Cuban Café Express, and undeveloped land

W: Tuscany Pointe and Azalea Homes Unit 2 (single-family residential subdivisions)

Staff Recommendation

Make a finding of **consistency** with the Comprehensive Plan (see Future Land Use Element Goal FLU2, Objectives FLU2.1, FLU2.2, and FLU8.2, and Policies FLU1.1.1, FLU1.1.5, FLU8.2.1, and FLU8.2.2; and Housing Element Goal H1 and Objective H1.1), determine that the amendment is in compliance, and recommend **TRANSMITTAL** of Amendment 2017-1-A-3-1, Commercial (C) to Medium Density Residential (MDR).

Analysis

1. Background and Development Program

The applicant, Stephen Novacki, is seeking to change the Future Land Use Map (FLUM) designation of the 17.20-acre subject property from Commercial (C) to Medium Density Residential (MDR) to allow for the development of a multi-family community featuring up to 343 dwelling units. The site is presently undeveloped and consists entirely of upland acreage.

The subject parcel is situated at the intersection of N. Goldenrod Road, a major collector roadway, and Yucatan Drive, a local street. As depicted in the aerial photograph, the property is located immediately north of Goldenrod Road's interchange with State Road 408, in an area characterized by a mix of single- and multi-family residential development, commercial activity, and industrial uses. The site is bounded to the south by a Value Place extended stay hotel and to the north by a Speedway gas station/convenience store, both possessing the Commercial future land use designation and a corresponding C-1 (Retail Commercial District) zoning classification. As shown on the aerial photograph, access to both establishments is achieved via the subject property. A single-family residential subdivision, Tuscany Pointe, with the same MDR future land use designation as that requested by the applicant and a zoning classification of R-3 (Multiple-Family Dweliing District), borders the subject property to the north and west. A second single-family subdivision, Azalea Homes Unit 2, designated Low Density Residential (LDR) on the Future Land Use Map and zoned R-1A (Single-Family Dwelling District) also adjoins the site to the west.

At the November 16, 2016, community meeting held for this request, the applicant stated that the multi-family project is expected to consist of eight buildings with a combination of one-, two-, and three-bedroom units. Primary access to the site would be achieved via a new entrance on N. Goldenrod Road, with a secondary connection provided to Yucatan Drive through the point of ingress and egress shared with the Speedway. Guests and employees of the hotel would continue to access that establishment through the subject property. If this proposed amendment is transmitted to the Florida Department of Economic Opportunity (DEO), the applicant intends to subsequently apply for a rezoning of the subject parcel to PD (Planned Development District), as discussed in the application package. Staff anticipates that this rezoning application will be considered in conjunction with the Future Land Use Map Amendment during the adoption public hearing stage. If approved, the PD rezoning would establish the conditions of approval and design and development standards for the site, including those pertaining to maximum building height, access management, landscaping and buffering, lighting, and parking design.

Staff notes that the subject property is located within a noise control zone for the Orlando Executive Airport (OEA). The site lies within Noise Zone E and is, therefore, subject to the development standards established in Chapter 9, Article XV, Airport Noise Impact Areas, of the Orange County Code. Pursuant to Section 9-604, a waiver of claim is required prior to the issuance of any building

permits. Coordination with the Greater Orlando Aviation Authority (GOAA) and adherence to the applicable standards of the Code shall be necessary.

Staff further notes that the subject parcel lies within the boundary of a Formerly Used Defense Site, the Orlando Range and Chemical Yard. The site, known as the Goldenrod Road Field Munitions Response Site (MRS), was the subject of a Remedial Investigation/Feasilbilty Study conducted by the U.S. Army Corps of Engineers (USACE) and completed in 2014. No munitions or explosives were found on the site, and there was no evidence that the property was used for military maneuvers or training. Following extensive soil and water sampling, the USACE found that an explosive safety hazard is not anticipated at the Goldenrod Road Field MRS and that the risk assessment identified no unacceptable risks to human health or the environment, as stated in the Final Decision Document issued July 22, 2014. In this document, the USACE determined that no action was necessary to protect public health, welfare, or the environment, establishing that the No Further Action (NFA) Alternative is the appropriate selected remedy for the Goldenrod Road Field MRS. The Florida Department of Environmental Protection (FDEP) concurred with this selected remedy. In a December 7, 2016, telephone discussion with the USACE, staff verified that no impediment to the future development of the site was identified, thus allowing this application to move forward. The Orange County Environmental Protection Division (EPD) has noted, though, that the developer shall still use caution in the event any chemical residue or munitions are discovered during subsequent site studies, surveying, or clearing and that disclosure of the property's status as a Formerly Used Defense Site to future residents in the community's Codes, Covenants, and Restrictions (CC&Rs) will be required.

2. Project Analysis

Consistency

The requested FLUM amendment appears to be **consistent** with the applicable Goals, Objectives, and Policies of the Comprehensive Plan.

The subject property is located in an urbanized area characterized by a mix of single-family residential subdivisions, multi-family communities, commercial establishments, and industrial activity. The site lies in close proximity to several major employers, including Florida Hospital East, Lockheed Martin, and the Valencia College East Campus. In addition, it is situated immediately north of the State Road 408 interchange, providing for easy access to downtown Orlando and Interstate-4 to the west and State Road 417 to the east. As discussed above, the applicant is seeking the MDR FLUM designation to allow for the development of the 343-unit multi-family project on a vacant infill site within the County's Urban Service Area (USA) boundary. Staff finds this proposal consistent with **Future Land Use Element Goal FLU2,** which states that Orange County will encourage urban strategies such as infill development, coordinated land use and transportation planning, and mixed-use development, which promote efficient use of infrastructure, compact development, and an urban experience with a range of choices and living options. In the same vein, the request is consistent with **Future Land Use Element Objective FLU2.1**, which establishes that Orange County shall promote and encourage infill development through incentives identified in the Land Development Code for relatively small vacant and underutilized parcels within the County's established core areas in the Urban Service Area.

Staff further finds this request consistent with **Future Land Use Element Objective OBJ FLU2.2,** which states that Orange County shall develop, adopt, and implement mixed-use strategies and incentives as part of its comprehensive planning and land development code efforts, including standards for determining consistency with the Future Land Use Map. Other objectives of mixed-

use development include reducing trip lengths, providing for diverse housing types, using infrastructure efficiently, and promoting a sense of community. Likewise, this proposal is in harmony with **Future Land Use Element Policy FLU1.1.5,** which encourages mixed-use development, infill development, and transit-oriented development to promote compact urban form and efficiently use land and infrastructure in the Urban Service Area. Staff notes that if approved, the residential project will use infrastructure that is already in place. Per Orange County Utilities (OCU), potable water and central sewer service will be provided by OCU, with no facility improvements necessary to maintain level of service standards. Moreover, the project would use the existing transportation network, which serves pedestrians and transit riders, as well as automobile drivers. Sidewalks are in place along both sides of N. Goldenrod Road and along neighboring streets to help provide for the safety of pedestrians. Although LYNX bus service is presently unavailable along the section of N. Goldenrod Road in question, transit stops are located on the north and south sides of Lake Underhill Road, within a quarter-mile walking distance of the subject parcel. Some improvements to the area's current alternative transportation infrastructure appear to be necessary, though. Due to the property's location within the Alternative Mobility Area (AMA), a Transportation Context Study was conducted by the Transportation Planning Division to determine the availability and level of connectivity among the various modes of alternative transportation in the area, including sidewalks, bicycle facilities, and transit service. The Transportation Planning Division noted that there are no dedicated bicycle lanes on nearby roadways to accommodate cyclists. If this proposed amendment is adopted and the intended PD rezoning approved, the applicant will be required to include site-level mobility enhancements during the subsequent Development Plan stage of the project.

As noted previously, the subject property is situated in an area characterized by single-family detached homes and apartment communities. The requested FLUM Amendment and associated residential development program are consistent with Orange County's commitment to ensuring that sufficient land is available to meet the identified housing needs of its present and future residents. The prospective developer's intent to construct up to 343 multi-family units is consistent with **Housing Element GOAL H1** and **Objective H1.1,** which state that the County will promote and assist in the provision of an ample housing supply, within a broad range of types and price levels, and will support private sector housing production capacity sufficient to meet current and anticipated housing needs. Similarly, **Future Land Use Element Policy FLU8.2.2** directs that continuous stretches of similar housing types and density of units shall be avoided. It is staff's belief that the proposed multi-family community will contribute to the mix of available housing options in an area of the County deemed appropriate for urban uses, as set forth in **Future Land Use Element Policy FLU1.1.1**.

Compatibility

The requested FLUM amendment appears to be **compatible** with the development trend of the surrounding area. **Future Land Use Element Objective FLU8.2** states that compatibility will continue to be the fundamental consideration in all land use and zoning decisions, while **Policy FLU8.2.1** requires land use changes to be compatible with the existing development pattern and trend of the area. As discussed earlier, the subject property is located in an urbanized area characterized by a mix of single-family residential subdivisions, multi-family communities, commercial establishments, and industrial activity. In addition, it is situated in close proximity to several major employers and regional transportation corridors, adding to its suitability for residential development. It is staff's belief that the proposed multi-family project would contribute to the County's larger goals of promoting infill and compact urban form within the Urban Service Area, providing for a range of

living options, efficiently using existing infrastructure, and reducing trip lengths. Staff, therefore, recommends transmittal of this requested amendment.

Public Facilities and Services

Environmental. The Environmental Protection Division (EPD) has noted that the subject parcel abuts existing residential neighborhoods. Therefore, dust control during site preparation and construction will be necessary. Fugitive dust emissions shall not be allowed from any activity, including vehicular movement, transportation of materials, construction, alteration, loading, unloading, storing, or handling without taking reasonable precautions to prevent such emissions. Reasonable precautions include application of water, dust suppressants, and other measures defined in Orange County Code Chapter 15, Environmental Control, Article III, Air Quality Control.

In addition, noise limiting efforts during all site preparation and construction will be necessary due to the property's adjacency to residential development. Construction noise is limited by Orange County Code Chapter 15, Environmental Control, Article V, Noise Pollution Control. Section 15-185, Exemptions, allows for construction or demolition activities between 7:00 a.m. and 10:00 p.m. Any construction after 10:00 p.m. and prior to 7:00 a.m. shall comply with the Code requirements. Furthermore, dewatering pumps shall be shielded from exposure to the adjacent residential units and located as far away as possible to minimize adverse noise level impacts.

As discussed previously, the subject parcel lies within the boundary of the Orlando Range and Chemical Yard, formerly known as the Orlando Army Airfield (OAA) Toxic Gas & Decontamination Yard. The applicant should use caution in the event any unexploded device or chemical residue is discovered during site studies, surveying, or clearing. As a general safety precaution, all site workers should be trained if any suspicious items are located. Should anyone encounter or suspect they have encountered munitions, it is vitally important that they follow the U.S. Army Corps of Engineers' recommended "3 Rs": Recognize the item may be dangerous, Retreat and do not touch it, and Report the location to the local Sheriff's office immediately. For further information, please visit www.saj.usace.army.mil, click on Formerly Used Defense Sites (FUDS), and then click on the Orlando Range and Chemical Yard link or call 1-800-291-9413. Items of concern were located on this site, and Orange County understands that they were disposed of properly.

Transportation. The subject property is located in the Alternative Mobility Area (AMA). Per Transportation Element Objective T2.3.2, the proposed development is exempt from meeting transportation concurrency requirements. In accordance with Policy T2.3.7 of the Comprehensive Plan, a Transportation Context Study was conducted to determine the availability of alternative modes of transportation in the area and the level of connectivity among the various modes, including sidewalks, bicycle facilities, and transit service. This information will be used to help identify system-level and site-level strategies, per Policy T2.3.6, that would enhance mobility and accessibility within a quarter-mile radius of the project site.

Based on trip generation estimates from the 9th Edition of the Institute of Transportation Engineers *Trip Generation Handbook*, it was determined that development under the current Commercial future land use designation would generate approximately 628 new p.m. peak hour trips, while the development of 343 multi-family units under the requested Medium Density Residential future land use designation would generate 206 new p.m. peak hour trips, resulting in a net decrease of 422 trips in the p.m. peak period.

The Transportation Planning Division has informed staff that there is a planned roadway improvement to widen Valencia College Lane to four lanes from Goldenrod Road to William C. Coleman Drive. However, the construction schedule has not been determined to date.

The dedication of right-of-way is not required at this time, and there are no road agreements on file associated with the subject property.

Based on LYNX's current bus schedule, transit service is available along Lake Underhill Road, within a walking distance of approximately a quarter mile from the proposed project site.

The area surrounding the subject property is well-served by a network of public sidewalks, to which the requested multi-family development will connect. However, there are no designated bicycle lanes or routes in the vicinity to accommodate cyclists.

Final permitting of any development on this site will be subject to further review and approval by Transportation Planning, and the applicant may be required to include site-level mobility enhancements on the Development Plan for this project.

Utilities. The subject property is located in Orange County Utilities' (OCU's) potable water, wastewater, and reclaimed water service areas, and OCU presently has sufficient plant capacity to serve the project. Per OCU, there are 12-inch and 16-inch potable water mains on Goldenrod Road. With respect to wastewater service, there is an 8-inch main at Goldenrod Road and Yucatan Drive and a 16-inch main on Lake Underhill Road. Reclaimed water, however, is currently unavailable in the vicinity of the site.

Schools. Per Orange County Public Schools (OCPS), capacity is presently available at the three public schools that would serve the project: Azalea Park Elementary, Jackson Middle, and Colonial High. Therefore, the applicant shall not be required to enter into a Capacity Enhancement Agreement (CEA) with OCPS.

3. Policy References

Goal FLU2 – URBAN STRATEGIES. Orange County will encourage urban strategies such as infill development, coordinated land use and transportation planning, and mixed-use development, which promote efficient use of infrastructure, compact development and an urban experience with a range of choices and living options.

OBJ FLU2.1 INFILL. Orange County shall promote and encourage infill development through incentives identified in the Land Development Code for relatively small vacant and underutilized parcels within the County's established core areas in the Urban Service Area.

OBJ FLU2.2 – Orange County shall develop, adopt, and implement mixed-use strategies and incentives as part of its comprehensive plan and land development code efforts, including standards for determining consistency with the Future Land Use Map. Other objectives of mixed-use development include reducing trip lengths, providing for diverse housing types, using infrastructure efficiently and promoting a sense of community.

OBJ FLU8.2 – Compatibility will continue to be the fundamental consideration in all land use and zoning decisions. For purposes of this objective, the following policies shall guide regulatory decisions that involve differing land uses.

FLU1.1.1 – Urban uses shall be concentrated within the Urban Service Area, except as specified for the Horizon West Village and Innovation Way Overlay (Scenario 5), Growth Centers, and to a limited extent, Rural Settlements.

FLU1.1.5 – Orange County shall encourage mixed-use development, infill development and transit-oriented development to promote compact urban form and efficiently use land and infrastructure in the Urban Service Area. The County may require minimum FARs and densities in its Land

Development Code to achieve the County's desired urban framework. Infill is defined as development consistent with the *Infill Master Plan* (2008).

FLU8.2.1 – Land use changes shall be required to be compatible with the existing development and development trend in the area. Performance restrictions and/or conditions may be placed on property through the appropriate development order to ensure compatibility. No restrictions or conditions shall be placed on a Future Land Use Map change.

FLU8.2.2– Continuous stretches of similar housing types and density of units shall be avoided. A diverse mix of uses and housing types shall be promoted.

GOAL H1 – Orange County's goal is to promote and assist in the provision of an ample housing supply, within a broad range of types and price levels, to meet current and anticipated housing needs so that all our residents have the opportunity to purchase or rent standard housing.

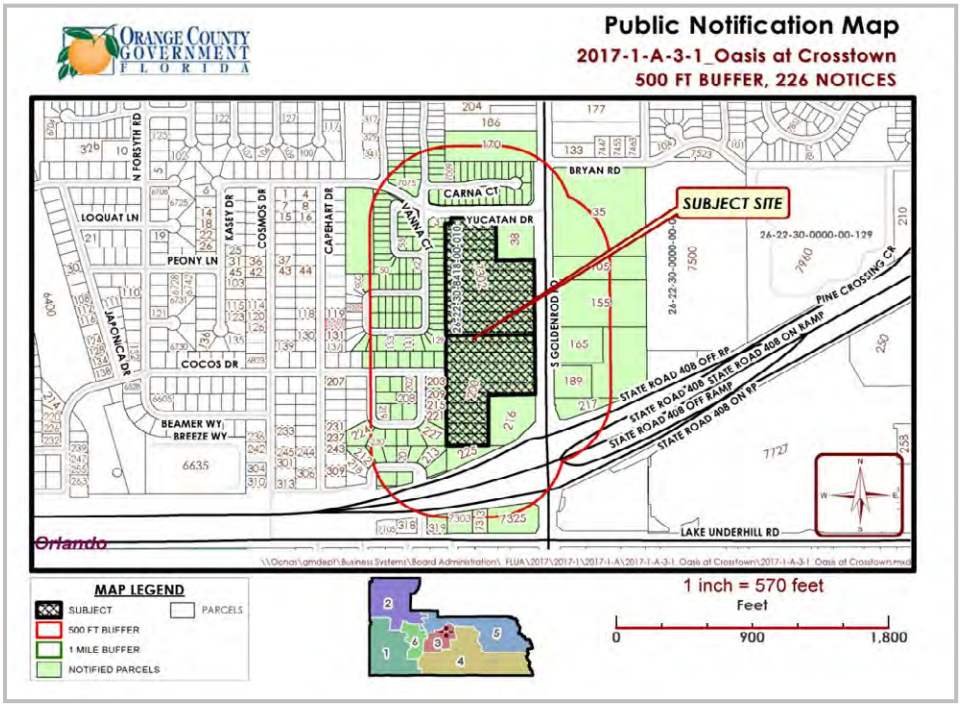
OBJ H1.1 – The County will continue to support private sector housing production capacity sufficient to meet the housing needs of existing and future residents.

Site Visit Photos

Subject Site

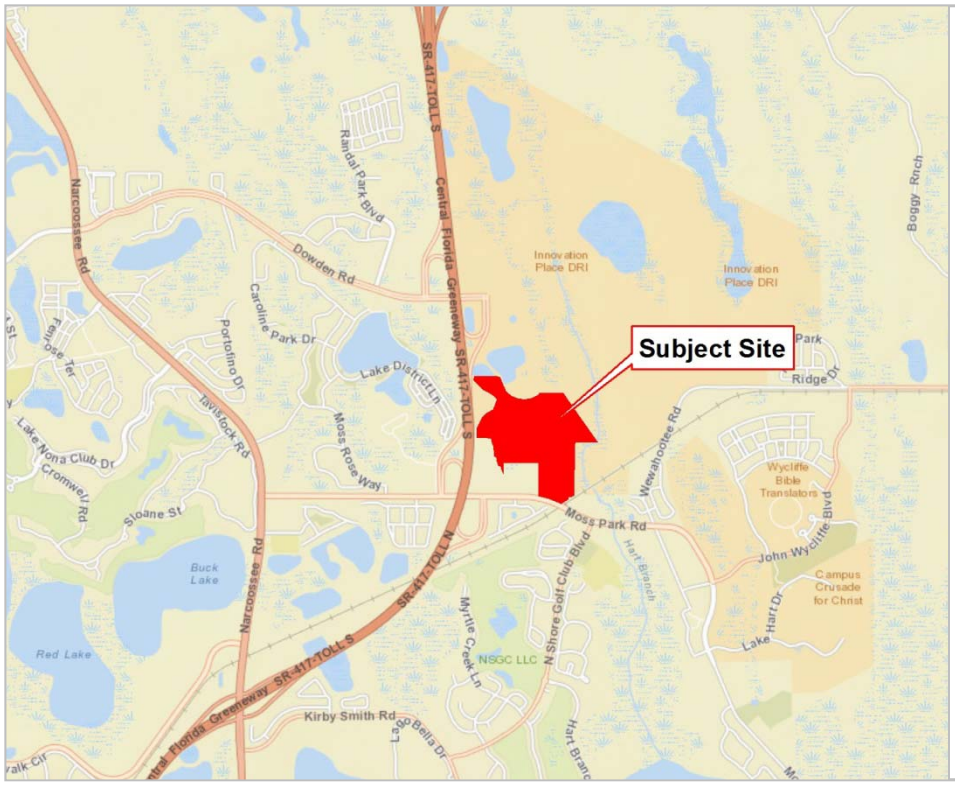
North of Subject Site	South of Subject Site
West of Subject Site	**East of Subject Site**

PUBLIC NOTIFICATION



Notification Area: 500 feet plus neighborhood and homeowners' associations within a one-mile radius of the subject site

226 notices sent



Applicant/Owner: Stephen Novacki, Picerne Development Corporation of Florida for Gary T. Randall (as Trustee)

Location: 11001 Moss Park Rd.; Generally located north of Moss Park Rd., east of SR 417, and south of Dowden Rd.

Existing Use: Undeveloped

Parcel ID Numbers: 09-24-31-0000-00-003/011

Tract Size: 108.30 gross acres / 61.77 net developable acres

The following meetings and hearings have been held for this proposal:		
Report/Public Hearing		**Outcome**
✓	Community Meeting held November 10, 2016; 4 attendees. See public notification map for notice area	Neutral
✓	Staff Report	Recommend Transmittal
✓	LPA Transmittal December 15, 2016	Recommend Transmittal (7-0)
	BCC Transmittal	January 24, 2017
	Agency Comments	March 2017
	LPA Adoption	April 20, 2017
	BCC Adoption	June 6, 2017

Project Information

Request: Rural (R) to Planned Development-Medium Density Residential/Office/Conservation (PD-MDR/O/CONS) and Urban Service Area (USA) expansion

Concurrent Rezoning: PD rezoning pending

Proposed Development Program: Up to 650 residential dwelling units (multi-family and single-family) and 50,000 square feet of office/daycare/private school uses.

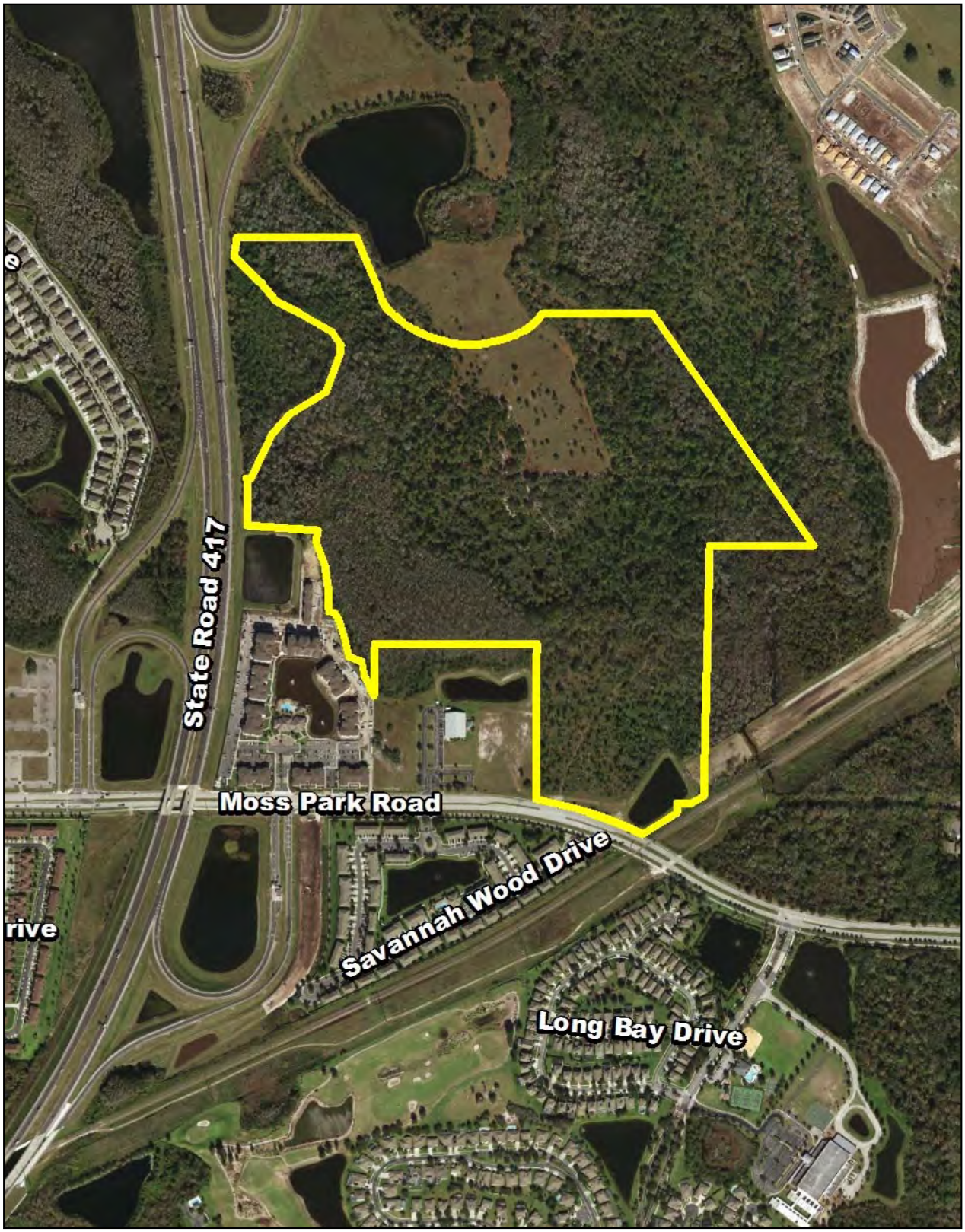
Public Facilities and Services: Please the see Public Facilities Analysis Appendix for specific analysis on each public facility.

Environmental: A Conservation Area Determination (CAD) is required prior to PSP or DP. The project must comply with the Environmental Land Stewardship Program (ELSP) Ordinance Section 15-820.

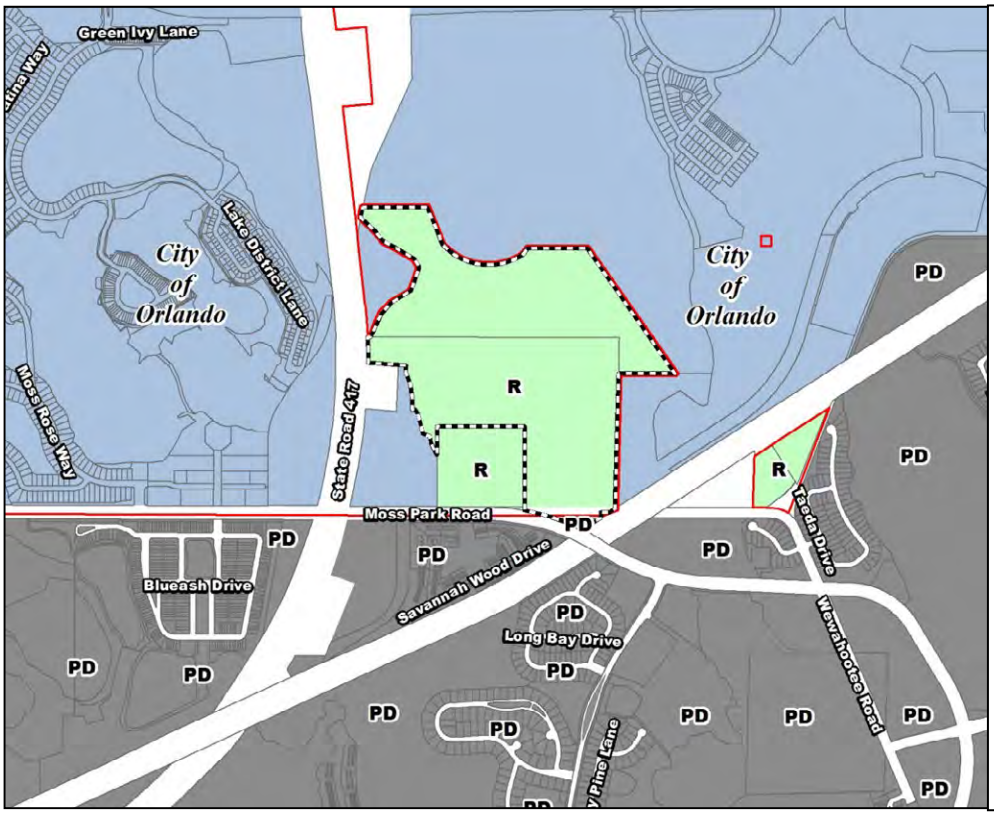
Transportation: The proposed use will generate 527 new pm peak hour trips. There are no failing roadway segments within a two and a half mile radius of the project.

Schools: There is sufficient school capacity at affected schools to support the proposed development and a Capacity Enhancement Agreement (CEA) is not required. The applicant is required to submit for concurrency review.

AERIAL


State Road 417
Moss Park Road
Savannah Wood Drive
Long Bay Drive

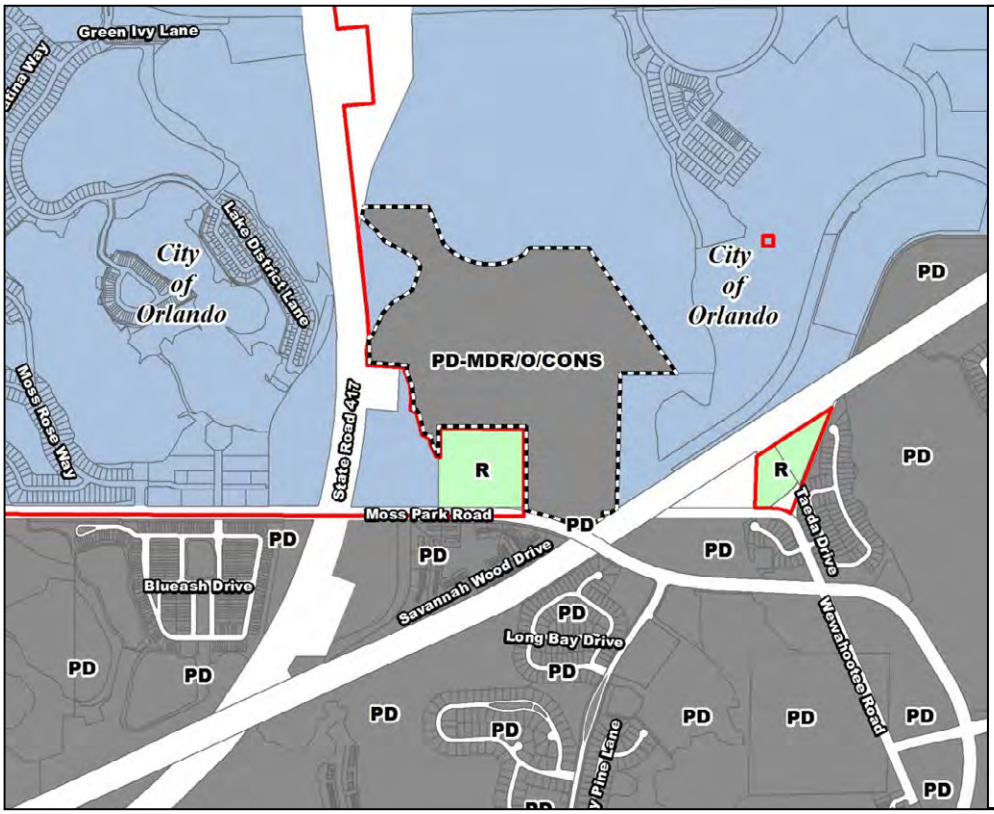
FUTURE LAND USE - CURRENT



Current Future Land Use Designation:

Rural (R)

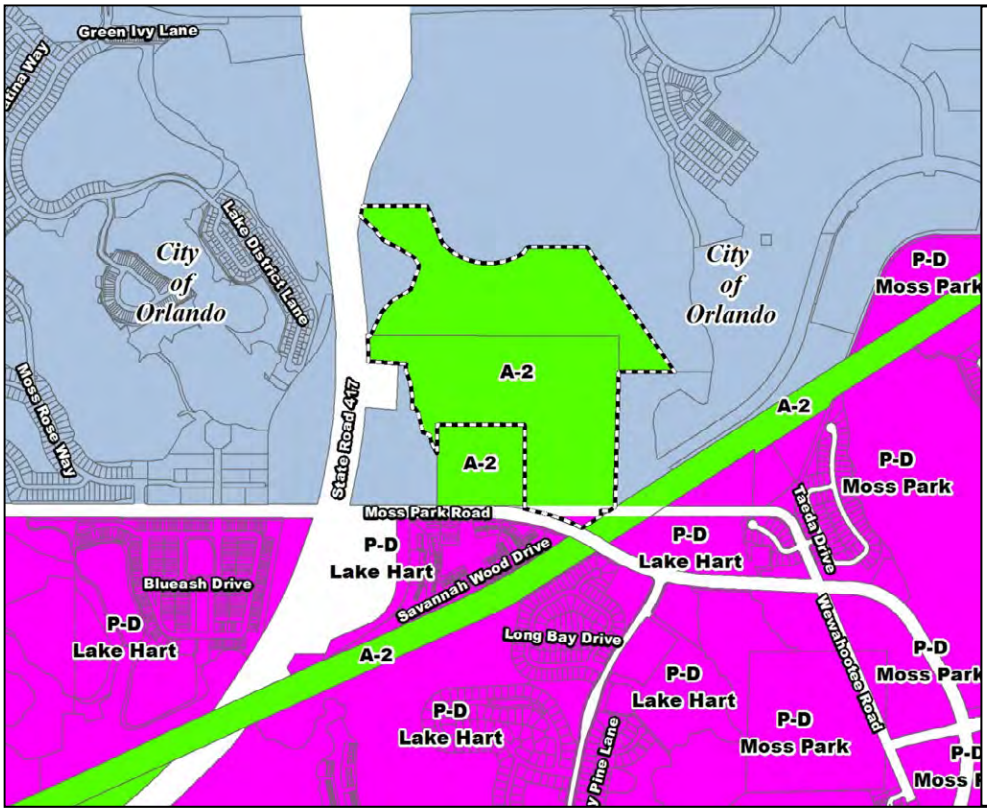
FUTURE LAND USE - AS PROPOSED



Proposed Future Land Use Designation:

Planned Development-Medium Density Residential/Office/Conservation (PD-MDR/O/CONS) and Urban Service Area (USA) expansion

ZONING - CURRENT



Current Zoning District:
A-2 (Farmland Rural District)

Existing Uses

N: Undeveloped residential and office (City of Orlando)

S: Savannah Pines Condominiums, Spring of Life United Methodist Church

E: Undeveloped single-family residential (City of Orlando)

W: SR 417, Oasis at Moss Park Apartments

Staff Recommendation

Make a finding of **consistency** with the Comprehensive Plan (see Future Land Use Element Objective FLU2.2 and Policies FLU1.1.5, FLU1.3.2, FLU1.4.1, FLU2.2.15, and FLU8.2.1), determine that the amendment is in compliance, and **TRANSMIT** Amendment 2017-1-A-4-1, Rural (R) to Planned Development-Medium Density Residential/Office/Conservation (PD-MDR/O/CONS) and Urban Service Area (USA) expansion.

Analysis

1. Background of Development Program

The applicant has requested to change the Future Land Use Map (FLUM) designation on the 108.30 gross-acre site from Rural (R) to Planned Development-Medium Density Residential/Office/Conservation (PD-MDR/O/CONS) and to expand the Urban Service Area (USA) by 108.30 acres. The proposed development program is for up to 650 residential dwelling units (both multi-family and single-family) and 50,000 square feet of office/daycare/private school uses. The undeveloped site is currently zoned A-2 (Farmland Rural District); a Planned Development rezoning application is anticipated if the proposed amendment is transmitted to the Department of Economic Opportunity.

The site is located on the north side of Moss Park Road, approximately 0.38 miles east of S.R. 417, with approximately 402 feet of frontage along Moss Park Road. Notably, four miles southwest of the project site is Lake Nona Medical City, which features major employers such as Nemours Children's Hospital, the Sanford-Burnham Medical Research Institute, a VA Medical Center and just west of Medical City is the Orlando International Airport.

Development in the area is suburban in character. Abutting the site directly to the south is the Spring of Life United Methodist Church and the southwest is phase one of the Oasis at Moss Park apartments. The multi-family portion of the proposed project will be phase two of the Oasis at Moss Park apartments. Abutting undeveloped properties to the north and east are within the City of Orlando and entitled for for residential and office development. Further south of the project site, across Moss Park Road, is the Savannah Pines Condominiums and to the west of the site is S.R. 417.

2. Project Analysis

Consistency

The requested FLUM Amendment appears to be consistent with the applicable Comprehensive Plan goals, objectives, and policies.

As defined within the 2008 *Infill Master Plan*, "infill" is the development of vacant or underutilized land within the Orange County USA. The subject site is currently vacant and the Rural (R) future land use is the not an appropriate designation, given the site is situated in a suburban area surrounded by existing development or property entitled for development. The proposed FLUM Amendment would allow for the efficient use of land and infrastructure, consistent with **Policy FLU1.1.5**, which encourages the promotion of compact urban form within the USA.

The proposal is for a mixed-use project that incorporates two housing types as well as neighborhood serving non-residential, which is supported by the Comprehensive Plan. According to **Objective FLU2.2,** the objectives of mixed-use development include reducing trip lengths, providing for diverse housing types, and using infrastructure efficiently, the proposed project furthers these objectives.

The subject site is located in the Innovation Way Study Area, which was identified as an area of the County appropriate for urban growth due to its location between Medical City and the Orlando International Airport to the west and the University of Central Florida and Research Park to the northeast. The residential components of the proposed project are consistent with **Policy FLU2.2.15**, which supports the location of greater residential densities near employment centers to improve the jobs/housing balance in the County.

Policy FLU1.4.1 states the County shall promote a range of living environments and **Policy FLU8.2.2** discourages continuous stretches of similar housing types and density of units. The proposed project includes the second phase of an established development, The Oasis at Moss Park, which are luxury apartment units. It also includes attached and detached single-family housing products. The project itself offers a diversity of housing, but it is also located in an area of mixed housing types, which will be further discussed as a strong component of compatibility below.

Associated with the proposed FLUM Amendment is a request to expand the Urban Service Area (USA) by 108.30 acres. The subject site is within the Innovation Way Study Area and was within the original Innovation Way Overlay (Scenario 5). **Policy FLU1.3.2** outlines the criteria for approval of an application to expand the Urban Service Area and exempts areas planned for Horizon West and the Innovation Way Overlay (Scenario 5) from meeting these specifications. Therefore, the proposed expansion to accommodate this amendment is found to be consistent with the Comprehensive Plan.

Policy FLU8.1.4 lists the development program for Planned Development (PD) FLUM designations adopted since January 1, 2007. The development program for this requested amendment is proposed for incorporation into **Policy FLU8.1.4** via the corresponding staff-initiated text amendment (Amendment 2017-1-B-FLUE-1). The maximum development program for Amendment 2017-1-A-4-1, if adopted, would be as follows:

Amendment Number	**Adopted FLUM Designation**	**Maximum Density/ Intensity**	**Ordinance Number**
2017-1-A-4-1 Moss Park North	Planned Development-Medium Density Residential/Office/Conservation (PD-MDR/O/CONS)	Up to 650 residential dwelling units and 50,000 square feet of office/daycare/private school uses	2017-

In summation, the project is consistent with the Comprehensive Plan because it is mixed-use development that provides a range of living environments proximate to employment centers and efficiently uses infrastructure within the Urban Service Area (USA).

Compatibility

According to **Policy FLU8.2.1**, land use changes shall be compatible with existing development and the development trend in the area.

Existing development in the area is predominately residential, with a few small-scale commercial projects, an elementary school, and a church in the immediate vicinity. The residential development in the area is a mix of multi-family and single-family, similar in character to the proposed project. Therefore, the proposal is compatible with the existing development because it is a similar product

as what is surrounding the site. The undeveloped land to the north and east of the project site is entitled for future residential and office development according to the City of Orlando Future Land Use Map. This development will also be similar to the product proposed. Therefore, the proposed project is compatible with the development trend of the area.

3. Public Facilities and Services Analysis

Environmental Protection Division

An Orange County Conservation Area Determination (CAD) must be completed before subdivision (PSP) or development plan (DP) submittal as directed in Orange County Code Chapter 34 Subdivision Regulations Article IV Specifications for Plans and Plats, Section 34-131(d)(2). Refer to Chapter 15, Article X Wetland Conservation Areas for specific information.

Until wetland permitting is complete (actual acreages to be determined in that process) the net developable acreage is only an approximation. The developable acreage is the gross acreage less the wetlands and surface waters. The buildable area is the gross acreage less the wetlands and protective buffer areas if required to prevent secondary wetland impacts and surface waters. The applicant is advised not to make financial decisions based upon development within the wetland or the upland protective buffer areas. Any plan showing development in a wetland or protective upland buffer area without Orange County and other jurisdictional governmental agency wetland permits is speculative and may not be approved. This land use map amendment does not guarantee density based upon assumed surface water or conservation area impact approvals.

If any impacts to the wetlands or wetland protective buffer areas are needed for roads, outfall pipes, or other design features of the development then submit an application for a Conservation Area Impact (CAI) Permit to the Orange County Environmental Protection Division as outlined in Orange County Code Chapter 15, Article X Wetland Conservation Areas. Early submittal will avoid delays later in the process for mitigation arrangements and conservation easement recording (if necessary).

The plan has to comply with the Orange County Code Chapter 15 Environmental Control, Article XVIII Environmental Land Stewardship known as the Environmental Land Stewardship Program (ELSP) Ordinance Section 15-820. Mr. Neal Thomas, EPD Permitting, 407-836-1451 will provide direction. Some of these requirements need to begin as soon as possible.

The developer must create provisions for wildlife connectivity across or under roadways that traverse wetland systems and associated buffers. Road and pedestrian crossings of the wetland and environmentally sensitive corridors shall be minimized over wetlands and floodplains and be designed to allow for unimpeded passage of wildlife.

Discharged stormwater runoff shall not degrade receiving surface water bodies below the minimum conditions established by state water quality standards. Florida Administrative Code (FAC) 62-302) per Orange County Code Chapter 30 Planning and Development, Article XII Concurrency Management, Division 2 Level of Service Standards, Section 30-520 Performance Standards, Stormwater 30-520(5)e. All development is required to pretreat runoff for pollution abatement purposes. Discharge that flows directly into wetlands or surface waters without pretreatment is prohibited. Orange County Code Chapter 34 Subdivision Regulations, Article VII Stormwater Management, Division 1 General Requirements, 34-227 Disposition of Runoff.

Any development on this site will have to comply with the requirements of the National Pollutant Discharge Elimination System (NPDES) for off-site sediment and erosion control including a

Stormwater Pollution Prevention Plan (SWPPP). Construction will require Best Management Practices (BMPs) for erosion control.

Prior to mass grading, clearing, grubbing or construction, the applicant is hereby noticed that this site must comply with habitat protection regulations of the U.S. Fish and Wildlife Service (USFWS) and the Florida Fish & Wildlife Conservation Commission (FWC).

Transportation Planning Division

The allowable development based on the approved future land use will generate 13 pm peak hour trips and proposed use will generate 540 pm peak hour trips, resulting in an increase of 527 pm peak hour trips.

Based on the County's Concurrency Management System database dated 12/02/2016, there are currently no failing roadway segments within the project impact area and capacity is available to be encumbered, however this information is dated and subject to change. Final permitting of any development on this site will be subject to review and approval under capacity constraints of the county's Transportation Concurrency Management System. Such approval will not exclude the possibility of a proportionate share payment in order to mitigate any transportation deficiencies. Finally, to ensure that there are no revisions to the proposed development beyond the analyzed use, the land use will be noted on the County's Future Land Use Map or as a text amendment to the Comprehensive Policy Plan.

Right of Way requirements - There is a roadway right of way agreement on file between Gary T. Randall, Trustee and the Board of County Commissioners regarding the right of way required for the design, mitigation, permitting and construction of the Randall IWSS Improvements as defined in Subsection 7(a) of the executed agreement.

Road Agreements - Innovation Way (Gary Randall-Amended & Restated Right-of-Way Agreement): The Amended and Restated Innovation Way South Right-of-Way Agreement (Gary T. Randall, Trustee) approved on 10/14/2014 and recorded at 10822/4560 will replace the Innovation Way South Right-of-Way Agreement (Gary T. Randall, Trustee) originally approved by the Board of County Commissioners on October 16, 2012 and recorded at OR Book/Page 10461/0059. Under the terms of the Amended and Restated Agreement, Lennar assumes responsibility for design, mitigation, permitting and construction of the Randall IWSS Improvements as defined in Subsection 7(a) along with the necessary intersection improvements. The City of Orlando has agreed to maintain the intersection improvements (including signalization) adjacent to the Randall property. Randall agrees to convey the right-of-way and a temporary construction easement needed for the road improvements to be completed by Lennar. Should any additional right-of-way be required, Lennar will fund County's projected costs for acquisition plus a 20% contingency. A Temporary Stormwater Drainage Easement exists over a retention pond located on the Randall property. Lennar, as part of the road construction, shall relocate the retention pond off of the Randall property to a different location on the Moss Park property. Moss Park shall execute and deliver to County a Permanent Drainage Easement for the relocated pond area once constructed. Lennar shall receive road impact fee credits for the actual cost of construction of the Randall IWSS road improvements as defined in Subsection 7(a) up to a cap of $2,300,000. Randall has provided a First Amendment to Temporary Utility Easement to be approved contemporaneously with this agreement which reflects the revised typical cross-section shown on Exhibit C.

Orange County Public Schools

The Department of Facilities Planning of Orange County Public Schools approved capacity determination application OC-16-019 based on sufficient school capacity at the affected schools to support the proposed residential development program.

The determination expires on August 1, 2017 and in the event the project does not obtain a land use or zoning approval by the expiration date, the applicant must resubmit the application and application fee to be reevaluated by OCPS. Additionally, if the scope of the project should change, a new determination will be required.

The applicant is required to submit for concurrency review and, if necessary, enter into a Concurrency Mitigation Agreement.

The following conditions apply to the approval of the application:

1. The Applicant is seeking the ability to convert single-family to townhome or apartment, and vice versa, depending on market conditions. With this in mind, the Applicant agrees to limit their development program to a number of new units, of any particular type, that will not exceed 161 school-aged children.
2. The conversation rates to be used will be based on the student generation rates in the School Impact Ordinance in effect at the time of the request for a conversion.
3. If there is a change to the development program which causes the new units to exceed 161 school-aged children, the project will be subject to revised Capacity Enhancement review.

Orange County Utilities

The subject property is within the Orange County Utilities (OCU) service area for potable water, wastewater, and reclaimed water. Per OCU, no improvements to County facilities to maintain current level of service (LOS) standards are needed at this time.

4. Policy References

FLU1.1.5 Orange County shall encourage mixed-use development, infill development and transit-oriented development to promote compact urban form and efficiently use land and infrastructure in the Urban Service Area. The County may require minimum FARs and densities in its Land Development Code to achieve the County's desired urban framework. Infill is defined as development consistent with the Infill Master Plan (2008).

FLU1.3.2 An application to expand the Urban Service Area shall be approved only when the application is found to be consistent with the Comprehensive Plan and complies with the following procedural steps and additional criteria, with the exception of those planned for Horizon West and the Innovation Way Overlay (Scenario 5).

FLU1.4.1 Orange County shall promote a range of living environments and employment opportunities in order to achieve a stable and diversified population and community.

OBJ FLU2.2 MIXED-USE. Orange County shall develop, adopt and implement mixed-use strategies and incentives as part of its comprehensive plan and land development code efforts, including standards for determining consistency with the Future Land Use Map. Other objectives of mixed-use development include reducing trip lengths, providing for

diverse housing types, using infrastructure efficiently and promoting a sense of community.

FLU2.2.15 Orange County shall support the location of greater residential densities near employment centers to improve the jobs/housing balance in the County.

FLU8.2.1 Land use changes shall be required to be compatible with the existing development and development trend in the area. Performance restrictions and/or conditions may be placed on property through the appropriate development order to ensure compatibility. No restrictions or conditions shall be placed on a Future Land Use Map change.

Site Visit Photos

Subject Site - Undeveloped

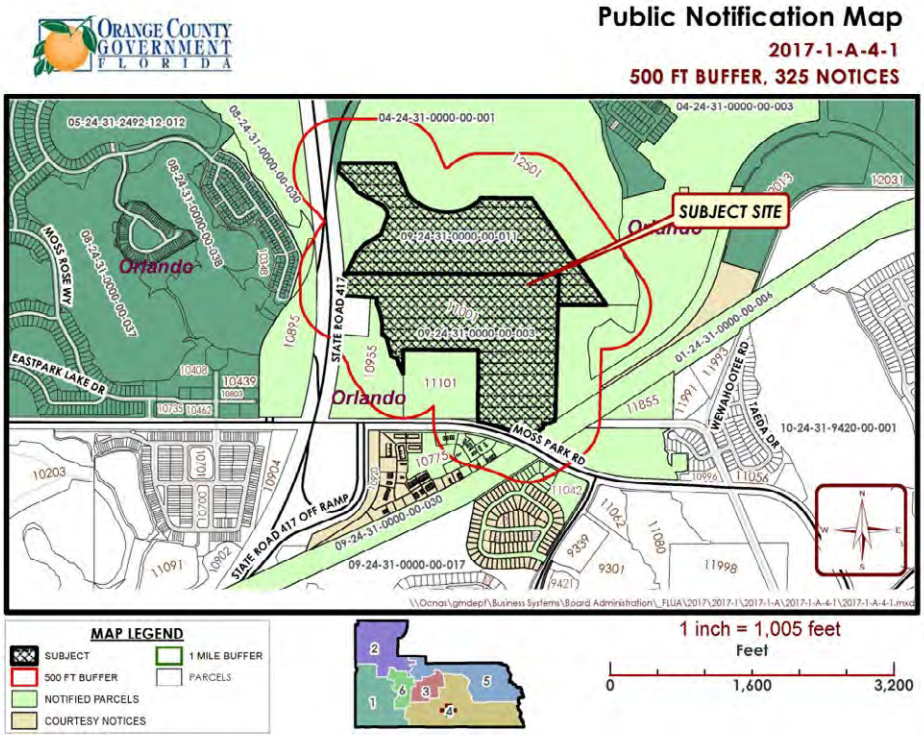
North – Undeveloped Residential

South – Spring of Life United Methodist Church

East – Undeveloped residential

West – S.R. 417

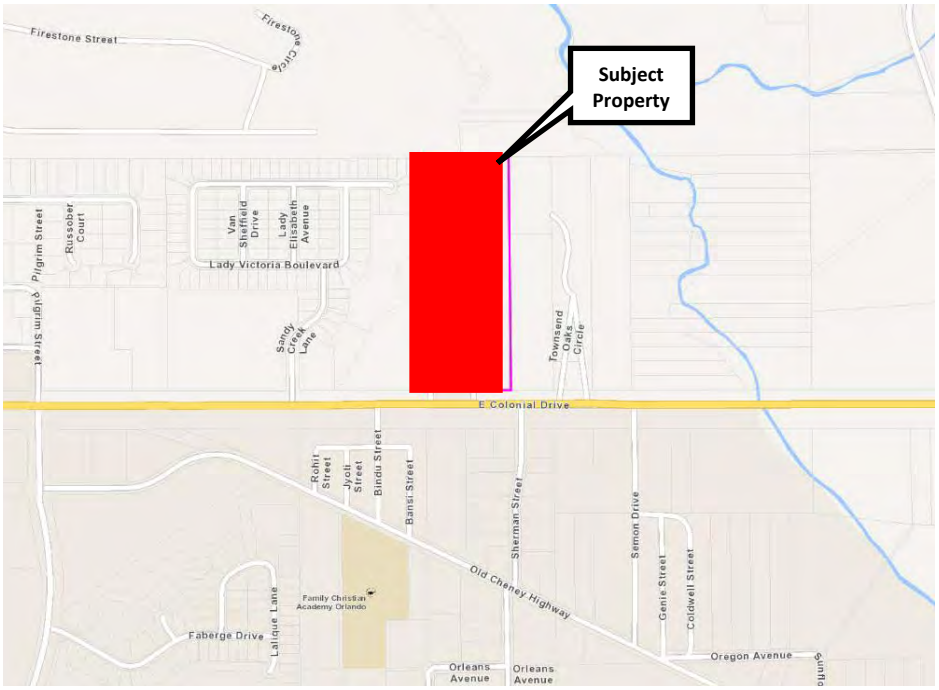
PUBLIC NOTIFICATION MAP



Notification Area

500 ft. plus homeowner associations within a one (1) mile radius of the subject site

325 notices sent



Applicant/Owner: Thomas Sullivan, Gray Robinson P.A/151 Col, Inc.

Location: 15169 E. Colonial Dr. Generally located north of E. Colonial Dr., west of Townsend Oaks Cir., and east of Sandy Creek Ln.

Existing Use: Mobile home park

Parcel ID Number: 19-22-32-7976-00-020

Tract Size: 12.10 gross acres

The following meetings and hearings have been held for this proposal:

	Report/Public Hearing	Outcome
✓	Community Meeting held November 29, 2016 with four (4) members of the public in attendance. See public notification map for notice area.	Positive
✓	Staff Report	Recommend Transmittal
✓	LPA Transmittal December 15, 2016	Recommend Transmittal (7-0)
	BCC Transmittal	January 24, 2017
	Agency Comments	March 2017
	LPA Adoption	April 20, 2017
	BCC Adoption	June 6, 2017

Project Information

Request: Rural (R) to Planned Development-Low-Medium Density Residential/Commercial/ Conservation (PD-LMDR/C/CONS) and Urban Service Area (USA) expansion

Concurrent Rezoning: PD rezoning request pending

Proposed Development Program: Up to 15,000 SF of C-1 uses and up to 80 residential units.

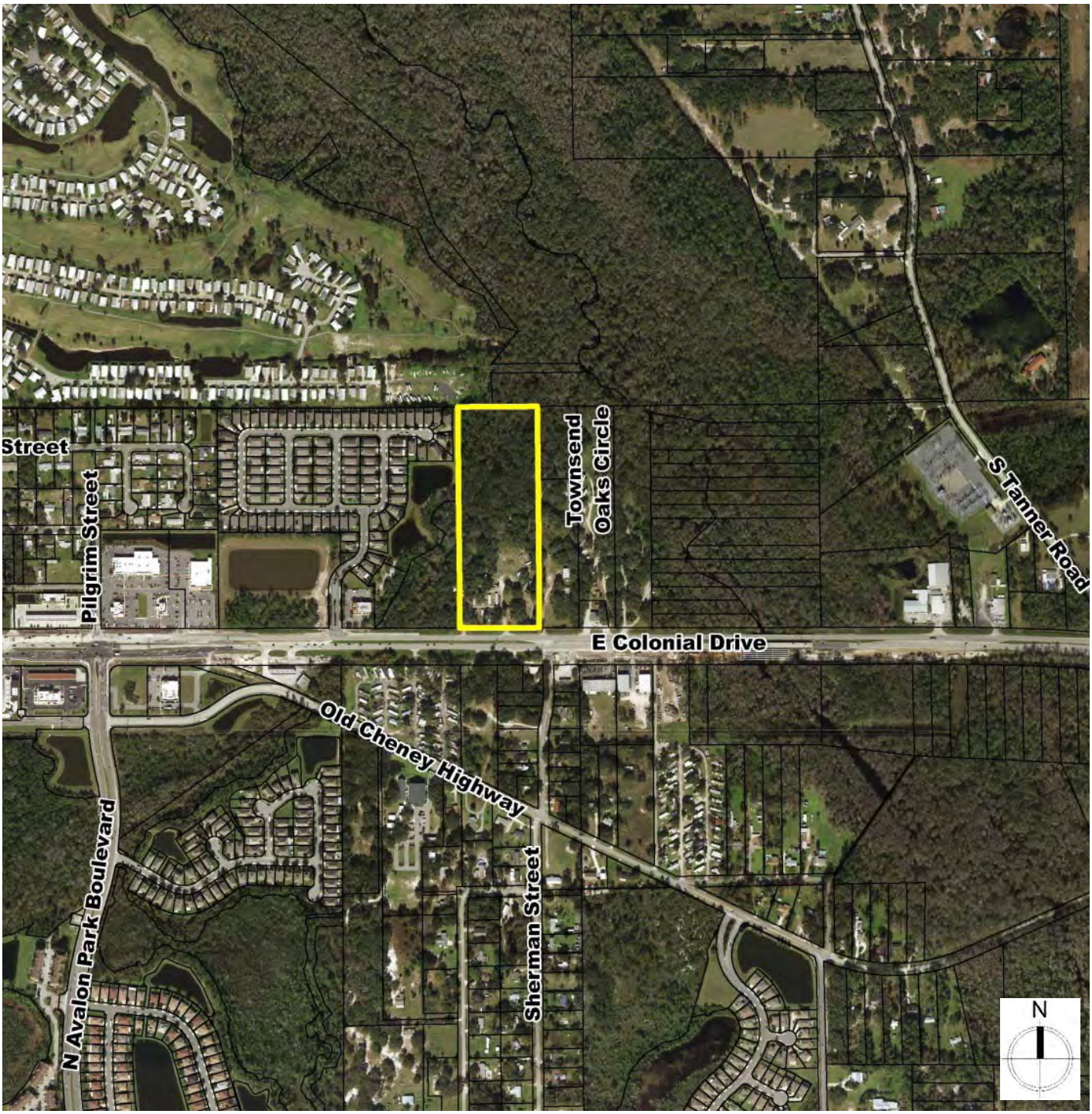
Public Facilities and Services: Please see Public Facilities Analysis Appendix for specific analysis on each public facility.

Environmental: This site is located within the geographical limits of the Econlockhatchee River Protection ordinance area. Basin-wide regulations apply. An Orange County Conservation Area Determination (CAD) must be completed before subdivision or development plan submittal. Until wetland permitting is complete (actual acreages to be determined in that process) the net developable acreage is only an approximation.

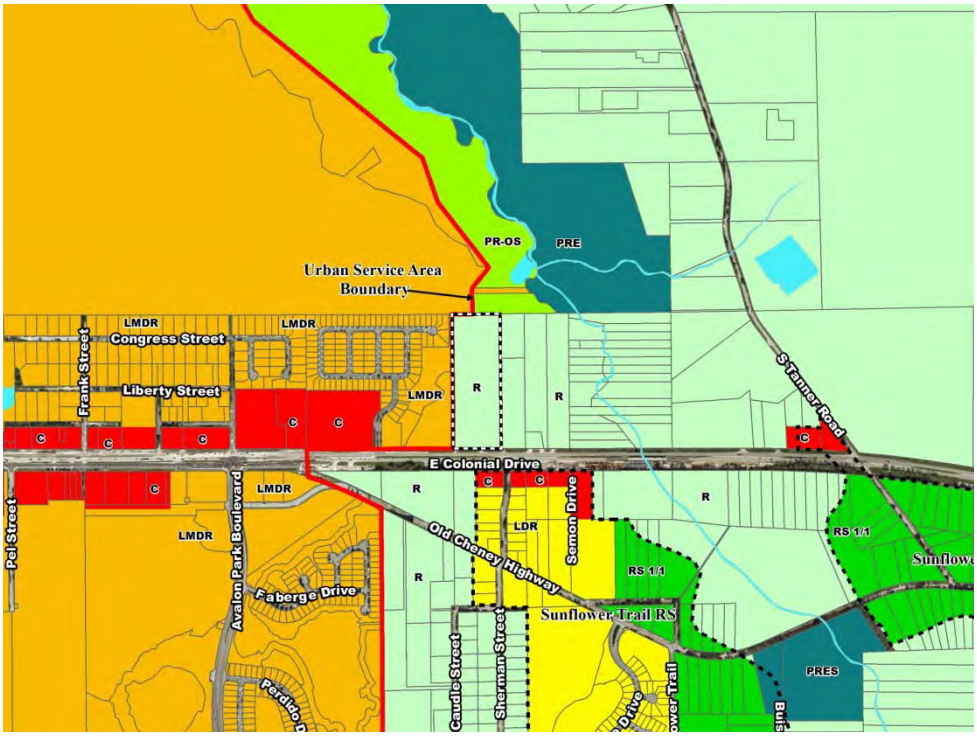
Transportation: The subject property is not located within the County's Alternative Mobility Area or along a backlogged/constrained facility or multimodal corridor. A revised traffic study is required in order to properly determine the impacts of the proposed amendment.

Schools: Applicant needs to submit an application for a Capacity Enhancement Agreement (CEA) to OCPS.

AERIAL


Street
Pilgrim Street
Townsend
Oaks Circle
S Tanner Road
E Colonial Drive
Old Cheney Highway
N Avalon Park Boulevard
Sherman Street
N

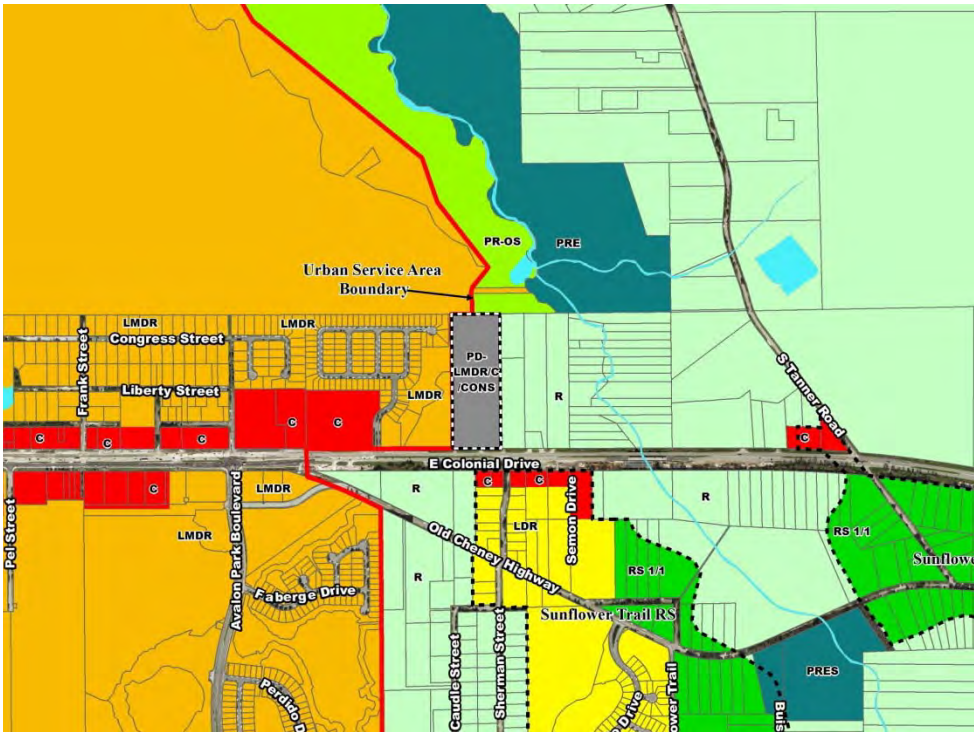
FUTURE LAND USE – CURRENT



Current Future Land Use Designation:

Rural (R)

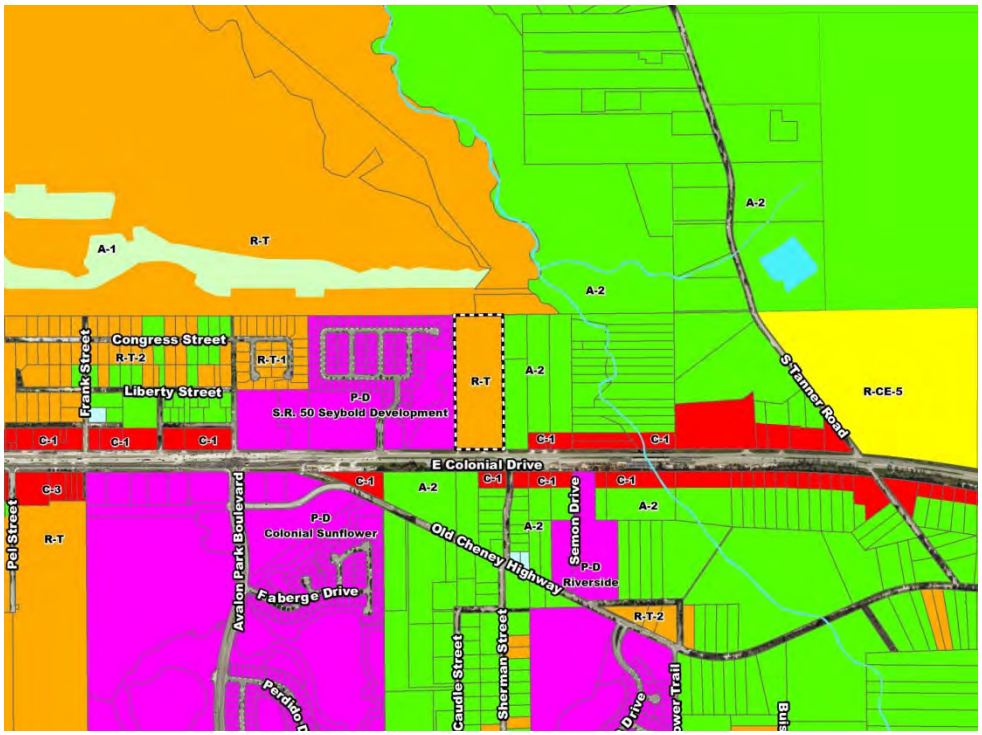
FUTURE LAND USE – PROPOSED



Proposed Future Land Use Designation:

Planned Development-Low-Medium Density Residential/ Commercial/Conservation (PD-LMDR/C/CONS)

ZONING – CURRENT



Current Zoning District: R-T (Mobile Home Park District)

Existing Uses

N: Senior mobile home park

S: Mobil home park / Commercial

E: Single family residential

W: Single family residential

Staff Recommendation

Make a finding of **consistency** with the Comprehensive Plan (see Future Land Use Element Objectives and Policies **FLU1.1.1**, **OBJ FLU1.2, FLU1.2.1, OBJ FLU1.3, FLU1.3.1, FLU1.3.1(A), FLU1.3.1(C), FLU1.4.1, FLU1.4.2, FLU1.4.4, FLU8.2.1, FLU8.2.10, FLU8.2.11**, and Neighborhood Element Objective N.1.1), determine that the amendment is in compliance, and recommend **TRANSMITTAL** of Amendment 2017-1-A-5-1, Rural (R) to Planned Development-Low-Medium Density Residential/Commercial/Conservation (PD-LMDR/C/CONS).

Analysis

1. Background of Development Program

The applicant, Thomas Sullivan, has requested to change the Future Land Use Map (FLUM) designation of the subject property from Rural (R) to Planned Development-Low-Medium Density Residential/Commercial/Conservation (PD-LMDR/C/CONS) and to expand the Urban Service Area (USA) by 12.1 acres.

The requested Planned Development-Low-Medium Density/Commercial /Conservation designation would allow for consideration of up to 15,000 square feet of C-1 (Retail Commercial District) uses and up to 80 residential units. At the time of submittal of this FLUM Amendment, the applicant and property owner have not submitted a PD (Planned Development) Rezoning application nor do they have a specific end user in mind for the subject property. Nonetheless, they have indicated their intent to develop one or two commercial outparcels along E. Colonial and develop townhome units on the remainder of the upland portion of the subject property. The current zoning of the site it R-T (Mobile Home Park District) and a PD rezoning is expected before development approval.

Located north of E. Colonial Drive, west of Townsend Oaks Circle, and east of Sandy Creek Lane, the subject property consists of one parcel totaling 12.1 acres, of which approximately four (4) acres are wetland. Currently utilized as the Orlando East Mobile Home Park comprised of fifteen (15) mobile home units, the subject property is bordered to the east by the Shady Oaks Mobile Home Park, to the north by the Fairway Village Mobile Home Park, to the west by the Sandy Creek single family subdivision, and by a mix of small scale commercial uses and the Big Oaks Mobile Home Park across E. Colonial Drive to the south.

A community meeting was held on Tuesday, November 29, 2016, at Camelot Elementary School, at which four (4) residents were in attendance. At the community meeting, the applicants restated their intent to develop one or two small commercial outparcels along E. Colonial Drive and to develop residential units on the remainder of the developable upland portion of the subject property. The applicant went on to clarify that although they didn't currently have a specific end user in mind, they do intend to submit a Planned Development Rezoning applicant to run concurrent with the requested Future Land Use Amendment and Urban Service Area expansion. Four local residents were in attendance at the meeting. Two of the attendees were adjacent property owners, both of which expressed support for the proposed amendment. The only questions raised were

related to the availability of water and wastewater infrastructure and the potential layout of the future S.R 408 expansion.

2. Project Analysis

Consistency

The requested FLUM amendment appears to be consistent with the applicable Goals, Objectives, and Policies of the Comprehensive Plan.

As previously stated, the applicant and property owner have indicated that their intent is to develop one or two small commercial outparcels along E. Colonial and construct up to 80 townhome units on the remainder of the upland portion of the property. The subject parcel is located in an area characterized by a trend of small scale retail commercial uses along E. Colonial Drive and residential uses set back from E. Colonial, behind the commercial properties. The requested FLUM change is consistent with **Future Land Use Element Policy FLU1.4.4**, which states that the disruption of residential areas by poorly located and designed commercial activities shall be avoided. It is staff's position that approval of the proposed Future Land Use amdnement would be consistent with the land use and development trend of the area. There are existing Low-Medium Density Residential (LMDR) uses to the west and southwest, and there are several small commercially zoned properties along E. Colonial in the surrounding area. The location of the subject site is appropriate for a mix of commercial and Low-Medium Density Residential development, and the existing character of the area will be maintained by the proposed changes.

Further, **Future Land Use Element Policy FLU1.4.1** calls for Orange County to promote a range of living environments and employment opportunities in order to achieve a stable and diversified population and community. As previously stated, the area surrounding the subject property is dominated by single family detached residential units and mobile homes. The applicant has indicated that the intended residential product on the subject property will be townhomes, which will add to the variety of housing options in the area.

Finally, it is staff's position that per **Future Land Use Element Policy FLU1.4.2 and Neighborhood Element Objective N.1.1**, approval of the commercial element of the request request will allow for commercial uses that would provide a useful non-residential element to the area, and would thus be compatible with and serve existing neighborhoods.

Urban Service Area Expansion

The Urban Service Area (USA) expansion request for Parcel 19-22-32-7976-00-020 appears to be consistent with the applicable Goals, Objectives, and Policies of the Comprehensive Plan.

Expansions to the USA boundary require an evaluation for consistency with **Future Land Use Element Objectives OBJ FLU1.2 and OBJ FLU1.3**. **Future Land Use Element Objective OBJ FLU1.2** establishes the purpose and function of the Urban Service Area, and **Future Land Use Element Policy FLU1.2.1** states that the USA boundary shall be based on the need to accommodate population and employment forecasts respecting the County's desired development program and

the County's ability to provide urban services and facilities. **Future Land Use Element Objective OBJ FLU1.3** and its associated policies outline the process by which proposed expansions of the Urban Service Area shall be evaluated. Consistent with **Future Land Use Element Policy FLU1.1.1**, these objectives recognize that the overarching goal of the Comprehensive Plan is to concentrate development within the Urban Service Area.

Future Land Use Element Policy FLU1.3.1 ensures the efficient provision of infrastructure, protection of the environment, and land use compatibility with adjacent land development. The subject property abuts the Urban Service Area boundary, and water and wastewater mains are located in the vicinity of the site, which will allow for the efficient provision of water and wastewater infrastructure. Additionally, it is staff's position that the proposed Urban Service Area Expansion does not encourage the proliferation of urban sprawl as defined by the indicators in **Future Land Use Element Policy FLU1.3.1(A).**

The sprawl indicators outlined in **Future Land Use Element Policy FLU1.3.1(A)** include whether the proposed plan amendment promotes single-use development, urban development in rural areas at substantial distances from existing urban development, and promotes, allows, or designates urban development in radial, strip, or ribbon patterns. The sprawl indicators also consider the efficient use, availability, and cost of providing infrastructure and services. Consistent with the concept that an urban form that allows for a mix of uses and connectivity is more likely to counter the effects of urban sprawl, the indicators include whether or not the proposed amendment includes a functional mix of uses and discourages or inhibits infill and redevelopment. Moreover, the indicators address whether the proposal fails to adequately protect and conserve natural resources.

It is staff's position that the proposed FLUM amendment and USA expansion do not promote single-use development. As noted, the development program includes a mix of residential and non-residential uses. Additionally, although the current Future Land Use designation of the subject property is Rural (R), and the property is located within the Rural Service Area, it is located in an area characterized by commercial uses along E. Colonial Drive surrounded by single family development and manufactured home communities. As such, the property does not appear to indicate the characteristic of sprawl defined by this specific indicator. Further, the subject property is located adjacent to the existing USA boundary, and thus the location and proposed intensity of development coincide with the availability of infrastructure and services and do not constitute an inefficient extension. Finally, the proposed development program for the FLUM amendment includes Conservation (CONS) in order to protect the northern wetland portion of the property. Therefore, the proposed amendment sufficiently acts to conserve and protect natural resources, including wetlands, native vegetation, environmentally sensitive areas, and other significant natural systems.

In addition, **Future Land Use Element Policy FLU1.3.1(C)** requires the County to consider additional factors when evaluating development proposals for inclusion within the Urban Service Area. Consistent with the components of this policy, staff has previously discussed how the proposed development program would contribute to the urban goals and strategies of the Comprehensive Plan. Also previously noted is how the proposed development program would be consistent with the

urban densities and intensities provided for in **Future Land Use Element Policy FLU1.1.4,** as demonstrated by the proposed balanced mix of residential and non-residential uses on the subject property.

Policy FLU8.1.4 lists the development program for Planned Development (PD) FLUM designations adopted since January 1, 2007. The development program for this requested amendment is proposed for incorporation into **Policy FLU8.1.4** via a staff-initiated text amendment (Amendment 2017-1-B-FLUE-1). The maximum development program for Amendment 2017-1-A-5-1, if adopted, would be as follows: up to 15,000 square feet of C-1 uses and up to 80 residential units.

Amendment Number	**Adopted FLUM Designation**	**Maximum Density/ Intensity**	**Ordinance Number**
2017-1-A-5-1	PD-LMDR/C/CONS	Up to 15,000 square feet of C-1 uses and up to 80 residential units.	2017-

Compatibility

Per **Future Land Use Element Policy FLU8.2.1** the proposed Planned Development – Low-Medium Density Residential/Commercial/Conservation (PD-LMDR/C/CONS) land use designation and Urban Service Area (USA) Expansion would allow land uses that are compatible with the existing development and trends in the area. To be clear, as established in **Future Land Use Element Policy FLU8.2.11**, compatibility may not necessarily be determined to be a land use that is identical to those uses that surround it. Other factors may be considered, including physical integration of a project and its function in the broader community, as well its contribution toward Comprehensive Plan goals and objectives. It is staff's belief that the development of small scale commercial uses along E. Colonial and low-medium density residential development on the remainder of the property will blend into the surrounding area and further the goals and objectives of the Comprehensive Plan by promoting the integration of and diverse mix of land uses, as well as serving the needs of existing and future residents.

Additionally, to ensure the anticipated commercial development on the subject property site does not disrupt the existing residential neighborhoods, new development will be subject to the design standards outlined within **Future Land Use Element Policy FLU8.2.10,** which requires proposed commercial and office uses within residential areas to be subject to performance standards including, but not limited to, building height restrictions, compatible architectural design, floor area ratio limitations, lighting and location requirements, landscaping and buffering requirements, and parking design. The applicant plans to proceed through the PD rezoning and DP review processes, during which such site design and development standards will be established to protect neighboring residents and businesses.

Public Facilities and Services

Environmental: An Orange County Conservation Area Determination (CAD) must be completed before subdivision or development plan submittal, as directed in Orange County Code Chapter 34 Subdivision Regulations Article IV Specifications for Plans and Plats, Section 34-131(d)(2). Until wetland permitting is complete (actual acreages to be determined in that process), the net developable acreage is only an approximation. The developable acreage is the gross acreage less the wetlands and surface waters. The buildable area is the gross acreage less the wetlands and protective buffer areas if required to prevent secondary wetland impacts and surface waters.

This site is located within the geographical limits of the Econlockhatchee River Protection ordinance area. Basin-wide regulations apply. Reference the Econlockhatchee River Protection ordinance in Chapter 15 Article XI. All future plans submitted must acknowledge this with a note on the plan and must comply with all protection ordinance codes.

Project plans should indicate the Econlockhatchee River corridor protection zone located on this development site at the 1,100 foot distance landward from the stream's edge (i.e. waterward extent of the forested wetlands) of the Econ main channel (per OCC 15-443), and at least 550 feet landward as measured from the stream's edge of the major tributaries, and 50 feet of uplands landward of the landward edge of the wetlands abutting the main river channel and the named tributaries.

Discharged stormwater runoff shall not degrade receiving surface water bodies below the minimum conditions established by state water quality standards. All development is required to pretreat runoff for pollution abatement purposes. Discharge that flows directly into wetlands or surface waters without pretreatment is prohibited. Any development on this site will have to comply with the requirements of the National Pollutant Discharge Elimination System (NPDES) for off-site sediment and erosion control including a Stormwater Pollution Prevention Plan (SWPPP). Construction will require Best Management Practices (BMPs) for erosion control.

The developer must create provisions for wildlife connectivity across or under roadways that traverse wetland systems and associated buffers. Road and pedestrian crossings of the wetland and environmentally sensitive corridors shall be minimized over wetlands and floodplains and be designed to allow for unimpeded passage of wildlife. Prior to mass grading, clearing, grubbing or construction, the applicant is hereby noticed that this site must comply with habitat protection regulations of the U.S. Fish and Wildlife Service (USFWS) and the Florida Fish & Wildlife Conservation Commission (FWC).

Transportation: The subject property is not located within the County's Alternative Mobility Area or along a backlogged/constrained facility or multimodal corridor. However, staff has reviewed the traffic analysis submitted by the applicant and has identified a number of issues that need to be addressed. First, the traffic study is based on a development program that has since been revised. Therefore, a revised traffic study is required in order to properly determine the impacts of the

proposed amendment.The full list of transportations issues that must be addressed by the applicant are attached to this report.

Schools: The applicant must obtain an executed Concurrency Enhancement Agreement (CEA) prior to the final approval of the proposed amendment.

Utilities: As of today OCU has sufficient plant capacity to serve the subject amendment. This capacity is available to projects within OCU's service area and will be reserved upon payment of capital charges in accordance with county resolutions and ordinances. The subject site associated with this amendment is outside the Urban Service Area, but abuts the Urban Service Area boundaries~~, and~~. Additionally, water and wastewater mains are located in the vicinity of the site. If the Urban Service Area boundary is expanded to encompass this site, or if the extension of water and wastewater mains outside the Urban Service Area to serve this site are already compatible with Policies PW1.4.2, PW1.5.2, and the equivalent wastewater policies, then water and wastewater demands, as well as connection points to existing OCU transmission systems will be addressed as the project proceeds through the DRC and construction permitting process.

3. Policy References

FLU1.1.1 Urban uses shall be concentrated within the Urban Service Area, except as specified for the Horizon West Village and Innovation Way Overlay (Scenario 5), Growth Centers, and to a limited extent, Rural Settlements.

OBJ FLU1.2 URBAN SERVICE AREA (USA) CONCEPT; USA SIZE AND MONITORING. Orange County shall use the Urban Service Area concept as an effective fiscal and land use technique for managing growth. The Urban Service Area shall be used to identify the area where Orange County has the primary responsibility for providing infrastructure and services to support urban development.

OBJ FLU1.3 APPLICATION FOR URBAN SERVICE AREA EXPANSION. No new expansions to the Urban Service Area boundary, except for those planned for Horizon West and the Innovation Way Overlay (Scenario 5), shall be permitted unless supported by data and analysis demonstrating consistency with Objectives FLU1.2 and FLU1.3 and associated policies. Orange County shall use the following process to evaluate Urban Service Area expansions, and as a means for achieving its goals with respect to accommodating growth within the USA and implementing the Comprehensive Plan.

FLU1.3.1 All amendments to the Urban Service Area shall include a comprehensive review to ensure the efficient provision of infrastructure, protection of the environment, and land use compatibility with adjacent development.

FLU1.3.1(A) Per Section 163.3177(6)(a)(9)(a), Florida Statutes, amendments to the Comprehensive Plan, including Urban Service Area expansion requests, shall discourage urban sprawl. The primary indicators used to evaluate whether a plan or plan amendment encourages the proliferation of urban sprawl are listed below.

1. Promotes, allows, or designates substantial areas of the jurisdiction to develop as low-intensity, low-density, or single-use development or uses in excess of demonstrated need;

2. Promotes, allows, or designates significant amounts of urban development to occur in rural areas at substantial distances from existing urban areas while not using undeveloped lands that are available and suitable for development;

3. Promotes, allows, or designates urban development in radial, strip, isolated or ribbon patterns generally emanating from existing urban developments;

4. Fails to adequately protect and conserve natural resources, such as wetlands, floodplains, native vegetation, environmentally sensitive areas, natural groundwater aquifer recharge areas, lakes, rivers, shorelines, beaches, bays, estuarine systems, and other significant natural systems;

5. Fails to adequately protect adjacent agricultural areas and activities, including active agricultural and silvicultural activities, passive agricultural activities, and dormant, unique, and prime farmlands and soils;

6. Fails to maximize use of existing public facilities and services;

7. Fails to maximize use of future public facilities and services;

8. Allows for land use patterns or timing that disproportionately increase the cost in time, money, and energy of providing and maintaining facilities and services, including roads, potable water, sanitary sewer, stormwater management, law enforcement, education, health care, fire and emergency response, and general government;

9. Fails to provide a clear separation between rural and urban uses;

10. Discourages or inhibits infill development or the redevelopment of existing neighborhoods and communities;

11. Fails to encourage a functional mix of uses;

12. Results in poor accessibility among linked or related land uses;

13. Results in the loss of significant amounts of functional open space.

FLU1.2.1 The Urban Service Area boundary, and its acreage allocation, shall be based on the supply of usable land needed to accommodate the County's population and employment forecasts by Year 2030 with respect to the County's desired development pattern, the County's ability to provide urban services and facilities, and the County's urban strategies to achieve its desired development pattern.

FLU1.3.1(C) In addition to the sprawl criteria outlined in FLU1.3.1A and FLU1.3.1B, the County shall consider the following factors when evaluating development proposals for inclusion within the Urban Service Area:

1. The extent to which the proposed development contributes to the urban strategies and urban form identified in the CP;

2. Whether the proposal will consist of a Traditional Neighborhood Development (TND), sector plan, or mixed use planned development that uses traditional neighborhood development, including minimum residential densities, school-centered design, diversity of housing types, and price ranges that reduce vehicle dependency, protect natural environmental features, and create a sense of community and place through urban design principles and the arrangement of land uses;

3. The supply of vacant land within the Urban Service Area, the rate of building permit approvals as compared to the absorption of committed and pending land use inventory supply, and the timing and need for development with respect to the current building inventory and supply approved to date;

4. Whether the project demonstrates the ability to meet Orange County's adopted Level of Service (LOS) standards as required by the Concurrency Management provisions of Article XII, Sec. 30-500 of the Orange County Code. Adequate public facilities and services to support the development shall include, but not be limited to, roads, water and sewer facilities, solid waste, recreational lands, stormwater, and schools;

5. Whether the proposal can be deemed to have a prevailing public benefit such as:

   a. establishment of a new major employer or relocation or expansion of an existing major employer, where such establishment, relocation or expansion is endorsed and/or sponsored by the State of Florida, or

   b. Consistent with Activity Center provisions as identified in the Future Land Use, Urban Design, or Economic elements;

   6. The extent to which the proposal furthers workforce housing and the transit readiness of the County;

   7. Compatibility with the targeted urban densities/intensities provided for in FLU1.1.4 and provision of the following:

   a. a sustainable development program allowing for a balanced mix of residential/non-residential uses;

   b. appropriate timing of development complementing and coinciding with surrounding developments allowing for adequate provision of infrastructure and services;

   c. jobs to housing balance; and,

   d. adequate assessment of the environmental impacts of the project as well as how the site integrates with the surrounding built environment at the time of the application.

FLU1.4.1 Orange County shall promote a range of living environments and employment opportunities in order to achieve a stable and diversified population and community.

FLU1.4.2 Orange County shall ensure that land use changes are compatible with and serve existing neighborhoods.

FLU1.4.4 The disruption of residential areas by poorly located and designed commercial activities shall be avoided. Primary access to single-family residential development through a multi-family development shall be avoided.

FLU8.2.1 Land use changes shall be required to be compatible with the existing development and development trend in the area. Performance restrictions and/or conditions may be placed on property through the appropriate development order to ensure compatibility. No restrictions or conditions shall be placed on a Future Land Use Map change.

FLU8.2.10 To ensure land use compatibility with nearby residential zoned areas and protection of the residential character of those areas, office and commercial uses within residential neighborhoods shall be subject to strict performance standards, including but not limited to the following:

A. Building height restrictions;

B. Requirements for architectural design compatible with the residential units nearby;

C. Floor area ratio (FAR) limitations;

D. Lighting type and location requirements;

E. Tree protection and landscaping requirements including those for infill development; and

F. Parking design.

FLU8.2.11 Compatibility may not necessarily be determined to be a land use that is identical to those uses that surround it. Other factors may be considered, such as the design attributes of the project, its urban form, the physical integration of a project and its function in the broader community, as well its contribution toward the Goals and Objectives in the CP. The CP shall specifically allow for such a balance of considerations to occur.

OBJN.1.1 Orange County shall ensure that future land use changes are compatible with or do not adversely impact existing or proposed neighborhoods.

Site Visit Photos

Subject Site

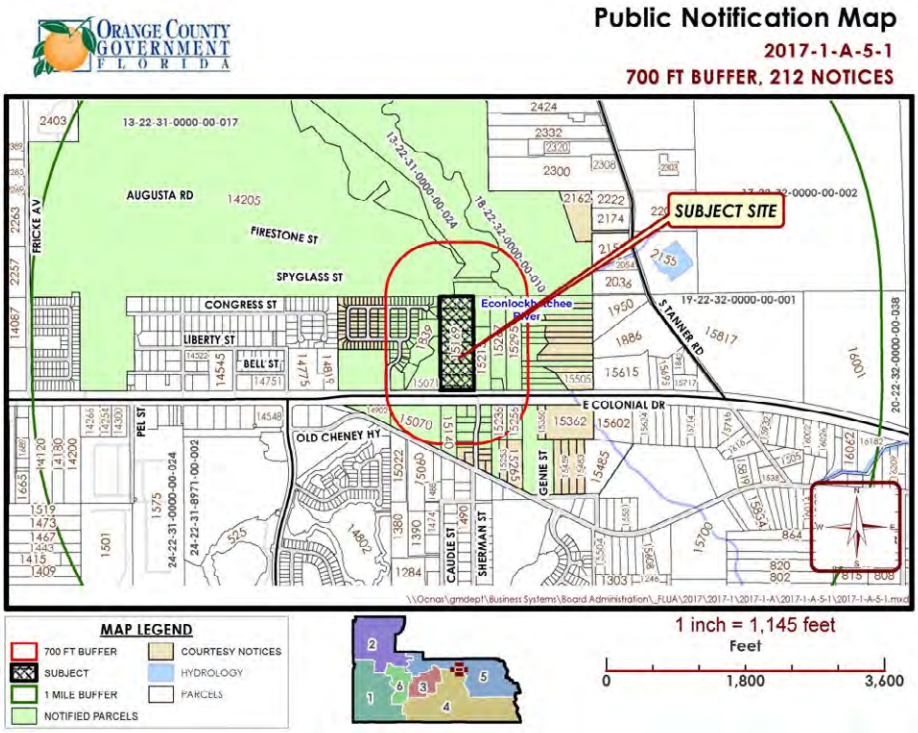
North

South

East

West

PUBLIC NOTIFICATION MAP



Notification Area

700 Foot Buffer

212 Notices Sent

Applicant/Owner: Jim Hall, VHB, Inc., for Texas Avenue Development, LLC

Location: 5736 S. Texas Ave.; Generally located on the west side of S. Texas Ave., south of Wakulla Wy., east of S. John Young Pkwy., and north of W. Oak Ridge Rd.

Existing Use: Multi-family dwelling units

Parcel ID Numbers:
21-23-29-5361-00-170

Tract Size: 19.40 gross acres

The following meetings and hearings have been held for this proposal:		
Report/Public Hearing		**Outcome**
✓	Community Meeting (316 notices sent; 6 people in attendance)	Positive
✓	Staff Report	Recommend Transmittal
✓	LPA Transmittal December 15, 2016	Recommend Transmittal (7-0)
	BCC Transmittal	January 24, 2017
	Agency Comments	March 2017
	LPA Adoption	April 20, 2017
	PZC Rezoning	April 20, 2017
	BCC Adoption	June 6, 2017
	BCC Rezoning Hearing	June 6, 2017

Project Information

Request: Low-Medium Density Residential (LMDR) to Medium Density Residential (MDR)

Concurrent Rezoning: If this proposed amendment is transmitted, staff anticipates that the applicant will submit a rezoning application for concurrent consideration during the adoption public hearing stage.

Proposed Development Program: Up to 388 multi-family dwelling units

Public Facilities and Services: Please the see Public Facilities Analysis Appendix for specific analysis on each public facility.

Transportation: Per the Transportation Facilities Analysis, there are no failing roadway segments within the project's impact area, and trips are available to be encumbered. The proposed use will generate 231 pm peak hour trips, resulting in a net increase of 107 pm peak hour trips.

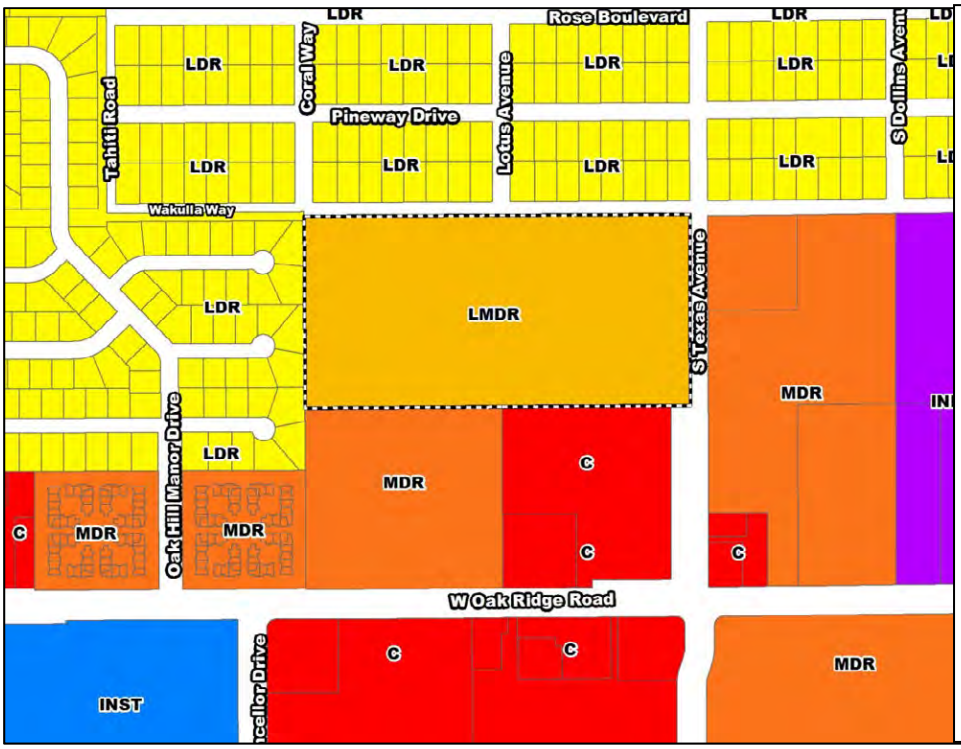
Schools: The developer will be required to enter into a Capacity Enhancement Agreement (CEA) with Orange County Public Schools (OCPS). CEA application #OC-16-035 has been submitted.

Environmental: Per the Orange County Environmental Protection Division (EPD), a Conservation Area Determination (CAD) must be completed before subdivision or development plan submittal.

AERIAL

Rose Boulevard
Coral Way
Pineway Drive
Lotus Avenue
Wakulla Way
S Texas Avenue
Oak Hill Manor Drive
W Oak Ridge Road
Chancellor Drive
N

FUTURE LAND USE - CURRENT



Current Future Land Use Designation:

Low-Medium Density Residential (LMDR)

Special Area Information:

JPA: N/A

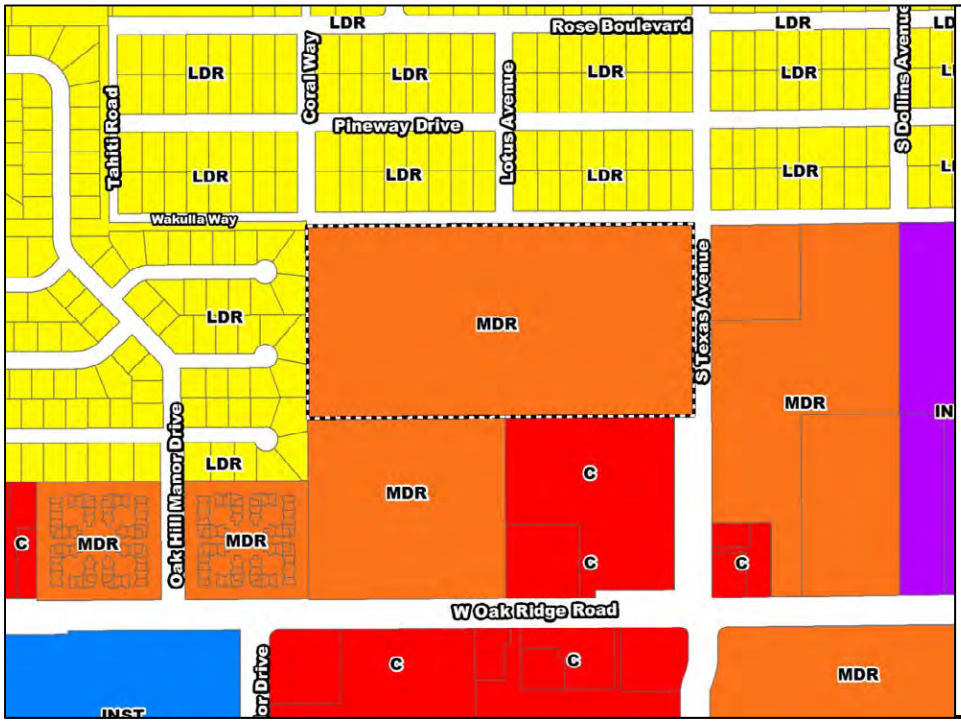
Rural Settlement: N/A

Overlay District: N/A

AMA District: Alternative Mobility Area

Airport Noise Zone: N/A

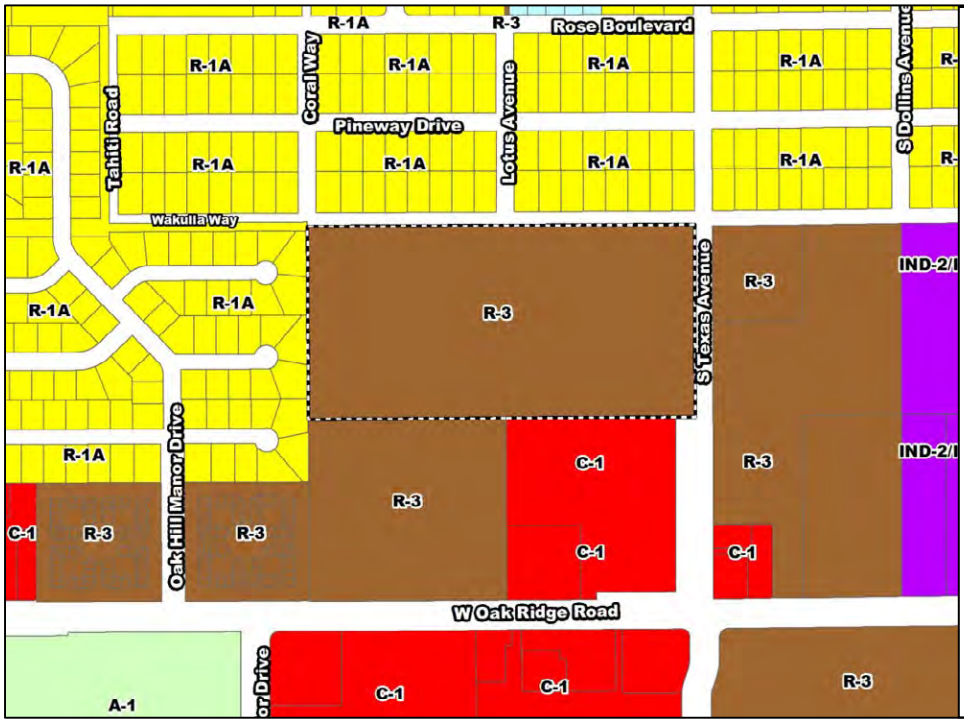
FUTURE LAND USE - AS PROPOSED



Proposed Future Land Use Designation:

Medium Density Residential (MDR)

ZONING - CURRENT



Current Zoning District:

Multiple-Family Dwelling District (R-3)

Existing Uses

N: Single-family dwellings

S: Undeveloped C-1-zoned land and Royal Palm Apartments-West

E: Casienna Apartments and Seventh Day Adventist Church

W: Single-family dwellings

Staff Recommendation

Make a finding of **consistency** with the Comprehensive Plan (see Housing Element Goal H1, Housing Element Objective H1.1, Future Land Use Element Goal FLU2, Future Land Use Element Objectives FLU2.1 and FLU8.2, and Policies FLU1.1.1, FLU1.1.5, FLU1.4.1, and FLU8.2.1), determine that the amendment is in compliance, and recommend **TRANSMITTAL** of Amendment 2017-1-A-6-1, Low-Medium Density Residential (LMDR) to Medium Density Residential (MDR).

Analysis

3. Background of Development Program

The applicant, Jim Hall, has requested to change the Future Land Use Map (FLUM) designation of the 19.40-acre site from Low-Medium Density Residential (LMDR) to Medium Density Residential (MDR). The subject site was rezoned from R-1A (Single-Family Dwelling District) to R-3 (Multiple-Family Dwelling District) on June 24, 1980 and received approval for the development of 248 condominium units in 1982. On March 24, 1998, the property owner received approval from the Florida Department of Business & Professional Regulation (DBPR) to operate a timeshare development, The Seasons, on the property. Between 1983 and 1990, twenty-two (22) timeshare units were constructed on approximately five (5) acres of the subject site. On January 1, 2016, the timeshare development's license expired, and the partially-developed site is currently being used for multi-family use. At the November 10, 2016, community meeting, the applicant stated that The Seasons timeshare resort was not successful because of its location. Therefore, the property owner, Westgate, is seeking to redevelop the subject property to allow for up to 388 multi-family units that will be market rate three-story garden-style apartments. The MDR Future Land Use Map designation allows for a maximum density of twenty dwelling units per acre.

The subject property is located at the southwest corner of S. Texas Avenue and Wakulla Way, approximately 650 feet north of W. Oak Ridge Road, an urban collector roadway, with approximately 650 feet of frontage on S. Texas Avenue. S. Texas Avenue is also an urban collector roadway. The subject site is situated in a densely developed area characterized by a mix of industrial, commercial, institutional, and residential uses and a variety of housing types, including single-family detached homes, condominiums, and apartments. Single-family residences, located north and west of the site, are zoned R-1A and possess Low Density Residential (LDR) Future Land Use Map designations. Two parcels to the south, one undeveloped and one developed (Apache Plaza) are zoned C-1 (Retail Commercial District) and have corresponding Commercial Future Land Use Map designations. Royal Palm Apartments-West, a 192-unit apartment complex is also located immediately to the south and possesses a MDR Future Land Use Map designation and corresponding R-3 zoning classification. Another 160-unit apartment complex, Casienna Apartments, is located across the street on S. Texas Avenue, east of the subject property. The Florida Conference Association of Seventh Day Adventist Church is also located across the street on S. Texas Avenue, east of the subject site. Both properties possess MDR Future Land Use Map designations and are zoned R-3. Two more apartment developments, Royal Palm Apartments-East, a 96-unit apartment complex, and Landmark at Lake Ellenor Apartments, a 296-unit apartment complex, are located southeasterly of the site on W. Oak Ridge Road. Both properties have MDR Future Land Use Map designations and are zoned R-3. Chateau De Ville, consisting of two residential condominium developments containing 56 units each, is located southwesterly of the site on W. Oak Ridge Road. Each of these developments has a MDR Future Land Use Map designation and is zoned R-3. Orlando

Central Park, an industrial park that encompasses a variety of uses—including warehousing, manufacturing, and offices—is located approximately 700 feet south of the subject property.

4. Project Analysis

Consistency

The requested FLUM amendment appears to be consistent with the applicable Goals, Objectives, and Policies of the Comprehensive Plan. The subject property is located within the County's Urban Service Area (USA) Boundary and is situated in an urbanized area characterized by a mix of industrial, commercial, institutional, and residential uses. As mentioned above, the applicant is seeking the MDR Future Land Use Map designation to allow for the redevelopment of the 19.40-acre infill site to construct up to 388 multi-family units. It should be noted that regulated wetlands are believed to be present on the site and may reduce the amount of developable acreage and the proposed unit count.

Staff finds this proposal consistent with Future Land Use Element **Goal FLU2**, which states that Orange County will encourage urban strategies such as infill development, coordinated land use and transportation planning, and mixed-use development, which promote efficient use of infrastructure, compact development, and an urban experience with a range of choices and living options. Also, the request is consistent with Future Land Use Element **Objective FLU2.1**, which establishes that Orange County shall promote and encourage infill development through incentives identified in the Land Development Code for relatively small vacant and underutilized parcels within the County's established core areas in the Urban Service Area. The requested amendment is consistent with Future Land Use Element **Policy FLU1.1.5**, which encourages mixed-use development, infill development, and transit-oriented development to promote compact urban form and efficiently use land and infrastructure in the Urban Service Area. As noted previously, The Seasons is surrounded by residential, industrial, commercial, and institutional activity and is considered to be an infill development. The proposed Future Land Use Map Amendment and associated residential development program are further consistent with Orange County's commitment to ensuring that sufficient land is available to meet the identified housing needs of its present and future residents. The applicant's intent to develop up to 388 multi-family dwelling units is consistent with **Housing Element Goal H1** and **Objective H1.1**, which state that the County will promote and assist in the provision of an ample housing supply, within a broad range of types and price levels, and will support private sector housing production capacity sufficient to meet current and anticipated housing needs. It is staff's belief that the proposed project will contribute to the mix of available housing options in an area of the County deemed appropriate for urban uses, as set forth in **Policy FLU1.1.1**. Further, Future Land Use Element **Policy FLU1.4.1** states that Orange County shall promote a range of living environments and employment opportunities in order to achieve a stable and diversified population and community.

Compatibility

The proposed FLUM amendment appears to be compatible with the existing development and development trend of the surrounding area. Future Land Use Element **Objective FLU8.2** states that compatibility will continue to be the fundamental consideration in all land use and zoning decisions, while Policy **FLU8.2.1** requires land use changes to be compatible with the existing development pattern and development trends in the area. As stated above, the subject property is located in an urbanized area characterized by a mix of residential, industrial, commercial, and institutional uses. It is staff's belief that the proposed project is compatible with the existing mix of single-family

residences and multi-family dwelling units. The requested amendment and the applicant's intent to subsequently develop up to 388 multi-family dwelling units are compatible with this development pattern. There are several existing apartment complexes located east and south of the subject property that already possess the MDR Future Land Use Map designation.

If the requested FLUM amendment is adopted, provisions must be taken to ensure that any future development of the subject site for multi-family residential use will not adversely impact the existing single-family residential communities in the surrounding area. Although no restrictions or conditions may be imposed during the FLUM amendment stage, performance restrictions and/or conditions may be placed on the property through the appropriate subsequent development order to ensure compatibility, as established in **Policy FLU8.2.1**. At the November 10, 2016, community meeting, the residents in attendance had concerns that access to the proposed development would be achievable via Wakulla Way and that the drainage ditch located alongside Wakulla Way would be filled in. They requested that a six-foot high masonry wall and a landscape buffer be placed along the north and west property lines of the subject site where it abuts single-family residences, and they asked that no access be granted onto Wakulla Way. Mr. Hall stated he will be submitting a rezoning application to run concurrently with the FLUM Amendment request so that he can address the residents' concerns. Mr. Hall agreed to their requests, including the construction of the masonry wall along the north and west property lines, the provision of a landscape buffer, and the retention of an existing natural treed buffer. He also stated there will be no access onto Wakulla Way; rather, access will be provided on S. Texas Avenue. Additionally, he told the residents that the developer will not be filling in the drainage ditch along Wakulla Way. Approval of the FLUM Amendment request from LMDR to MDR would be compatible with the existing development pattern and uses in the area.

5. Policy References

GOAL H1 – Orange County's goal is to promote and assist in the provision of an ample housing supply, within a broad range of types and price levels, to meet current and anticipated housing needs so that all our residents have the opportunity to purchase or rent standard housing.

OBJ H1.1 – The County will continue to support private sector housing production capacity sufficient to meet the housing needs of existing and future residents.

Goal FLU2 - URBAN STRATEGIES. Orange County will encourage urban strategies such as infill development, coordinated land use and transportation planning, and mixed-use development, which promote efficient use of infrastructure, compact development and an urban experience with a range of choices and living options.

OBJ FLU2.1 - INFILL. Orange County shall promote and encourage infill development through incentives identified in the Land Development Code for relatively small vacant and underutilized parcels within the County's established core areas in the Urban Service Area.

OBJ FLU8.2 – COMPATIBILITY. Compatibility will continue to be the fundamental consideration in all land use and zoning decisions. For purposes of this objective, the following polices shall guide regulatory decisions that involve differing land uses.

FLU1.1.1 – Urban uses shall be concentrated within the Urban Service Area, except as specified for the Horizon West Village and Innovation Way Overlay (Scenario 5), Growth Centers, and to a limited extent, Rural Settlements.

FLU1.1.5 – Orange County shall encourage mixed-use development, infill development and transit-oriented development to promote compact urban form and efficiently use land and infrastructure in

the Urban Service Area. The County may require minimum FARs and densities in its Land Development Code to achieve the County's desired urban framework. Infill is defined as development consistent with the Infill Master Plan (2008).

FLU1.4.1. – Orange County shall promote a range of living environments and employment opportunities in order to achieve a stable and diversified population and community.

FLU8.2.1 – Land use changes shall be required to be compatible with the existing development and development trend in the area. Performance restrictions and/or conditions may be placed on property through the appropriate development order to ensure compatibility. No restrictions or conditions shall be placed on a Future Land Use Map change.

5. Public Facilities and Services

Environmental. All acreages regarding conservation areas, including wetlands and buffers, are considered approximate until finalized by Conservation Area Determinations and Conservation Area Impact Permits. The net developable acreage will be the gross acreage less any surface water and wetlands.

An Orange County Conservation Area Determination (CAD) must be completed before subdivision or development plan submittal, as directed in Orange County Code Chapter 34, Subdivision Regulations, Article IV, Specifications for Plans and Plats, Section 34-131(d)(2). Refer to Chapter 15, Article X, Wetland Conservation Areas for specific information.

If a Conservation Area Determination and/or a Conservation Area Impact Permit have previously been completed for Orange County, then submit a copy to the Orange County EPD for verification. Note that wetland permitting by state or federal agencies does not satisfy the County requirements.

Until wetland permitting is complete (actual acreages to be determined in that process), the net developable acreage is only an approximation. The developable acreage is the gross acreage less the wetlands and surface waters. The buildable area is the gross acreage less the wetlands and less protective buffer areas, if required, to prevent secondary wetland impacts and surface waters. The applicant is advised not to make financial decisions based upon development within the wetland or the upland protective buffer areas. Any plan showing development in a wetland or protective upland buffer area without Orange County and other jurisdictional governmental agency wetland permits is speculative and may not be approved. This Future Land Use Map amendment does not guarantee density based upon assumed surface water or conservation area impact approvals.

If any impacts to the wetlands or wetland protective buffer areas are needed for roads, outfall pipes, or other design features of the development, then submit an application for a Conservation Area Impact (CAI) Permit to the Orange County Environmental Protection Division as outlined in Orange County Code Chapter 15, Article X, Wetland Conservation Areas. Early submittal will avoid delays later in the process for mitigation arrangements and conservation easement recording (if necessary).

This site is adjacent to existing residential neighborhoods; therefore dust control during all site preparation and construction will be necessary. Fugitive dust emissions shall not be allowed from any activity, including vehicular movement, transportation of materials, construction, alteration, loading, unloading, storing, or handling without taking reasonable precautions to prevent such emissions. Reasonable precautions include the application of water, dust suppressants, and other measures as defined in Orange County Code Chapter 15, Environmental Control, Article III, Air Quality Control, Division 2 Rules, Section 15-89.1, Air Pollution prohibited, and defined in the Florida

Department of Environmental Protection 62-296.320(4)(c) adopted by Orange County Code Section 15-90, Adoption of state and federal rules by reference.

This site is adjacent to existing residential neighborhoods; therefore noise control during all site preparation and construction will be necessary. Construction Noise is limited by Orange County Code Chapter 15, Environmental Control, Article V Noise Pollution Control, Section 15-185, Exemptions that allows for construction or demolition activities between 7:00 a.m. and 10:00 p.m. Any construction after 10:00 p.m. and prior to 7:00 a.m. needs to comply with the requirements of the ordinance. In addition, dewatering pumps shall be shielded from exposure to the adjacent residential units and located as far away as possible to minimize adverse noise level impacts.

Any miscellaneous garbage, construction debris, demolition debris, or waste material found on site during clearing and grading shall be properly disposed of off-site according to the solid waste and hazardous waste regulations. Use caution if any hazardous waste is present. Call the Orange County Solid Waste Hotline at 407-836-6601 for information.

Any development on this site shall comply with the requirements of the National Pollutant Discharge Elimination System (NPDES) for off-site sediment and erosion control, including a Stormwater Pollution Prevention Plan (SWPPP). Construction will require Best Management Practices (BMPs) for erosion control.

Transportation. Using the trip generation calculations from the 9th Edition of ITE's *Trip Generation Handbook*, the Orange County Transportation Planning Division has determined that the currently-approved LMDR Future Land Use Map designation would allow a maximum of 177 multi-family dwelling units andl generate 124 new p.m. peak hour trips, while the proposed MDR Future Land Use Map designation would allow up to 388 multi-family dwelling units and generate 231 new p.m. peak hour trips – resulting in a net increase of 107 new p.m. peak hour trips.

Planned and Programmed Roadway Improvements:

• Texas Avenue – programmed roadway improvement to widen to four (4) lanes from Americana Boulevard to Holden Avenue. Construction is scheduled to begin June 2018.

Right-of-Way Requirements: The applicant will be required to coordinate with the County's Road Agreement Committee on a specific Road Right-of-Way Agreement for the widening of Texas Avenue.

Road Agreements: There are no agreements on file associated with this parcel.

Summary of Transportation Impacts:
This parcel is located in the Alternative Mobility Area (AMA). Per Objective T.2.3.2 of the County's Comprehensive Plan, the proposed development is exempt from meeting transportation concurrency requirements.

• In accordance with Policy 2.3.7 of the Comprehensive Plan, a Transportation Context Study was conducted to determine the availability of alternative modes of transportation in the area and the level of connectivity among the various modes, including sidewalks, bicycle facilities, and transit service. This information will be used to help identify system-level and site-level strategies that would enhance mobility and accessibility within a quarter-mile radius of the project site.

• The requested amendment will result in an increase in p.m. peak hour trips by 107 trips.

- Based on the Concurrency Management System database dated December 2, 2016, there are no failing roadway segments within the project's impact area. This information is dated and is subject to change.

- In the short term (Year 2020), all roadways are projected to operate at acceptable levels of service. However, by the long term or plan horizon year (2040), John Young Parkway from Oak Ridge Road to Americana Boulevard is projected to be capacity-deficient.

- Based on LYNX's current bus schedule, transit service is available within a quarter-mile walking distance of the project, and there are seven (7) transit routes serving the area. Bus stops are equipped with benches and shelters.

- The area is well-served by an interconnected network of public sidewalks, and the proposed development will connect to the existing sidewalk network.

- There is no signed bicycle route/lane along Texas Avenue. However, dedicated bike lanes are available within the project's impact area along John Young Parkway.

Final permitting of any development on this site will be subject to further review and approval by Transportation Planning, and the applicant may be required to include site-level mobility enhancements on the development plan for this project.

Utilities. The subject property lies within the Orlando Utilities Commission's potable water service area. Per Orange County Utilities (OCU), County wastewater service is available, as a 12-inch force main is in place on W. Oak Ridge Road, and a 20-inch force main is in place on John Young Parkway. Currently, no reclaimed water mains are in place in the vicinity of the site. Per OCU, no improvements to County facilities to maintain current level of service (LOS) standards are needed at this time.

Orange County Public Schools. The project must have an executed Capacity Enhancement Agreement (CEA) prior to Board of County Commissioners approval. CEA OC-16-035 applies to this project.

Site Visit Photos

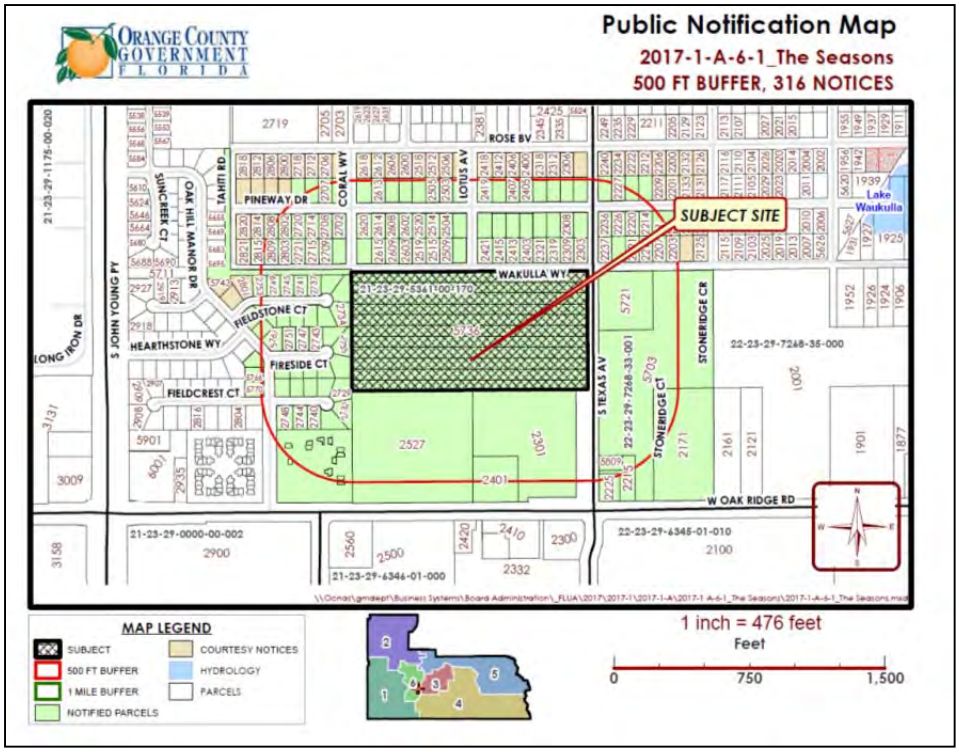
Subject Site – The Seasons

North – Single-Family Residential

South – Undeveloped

East – Single-Family Residential

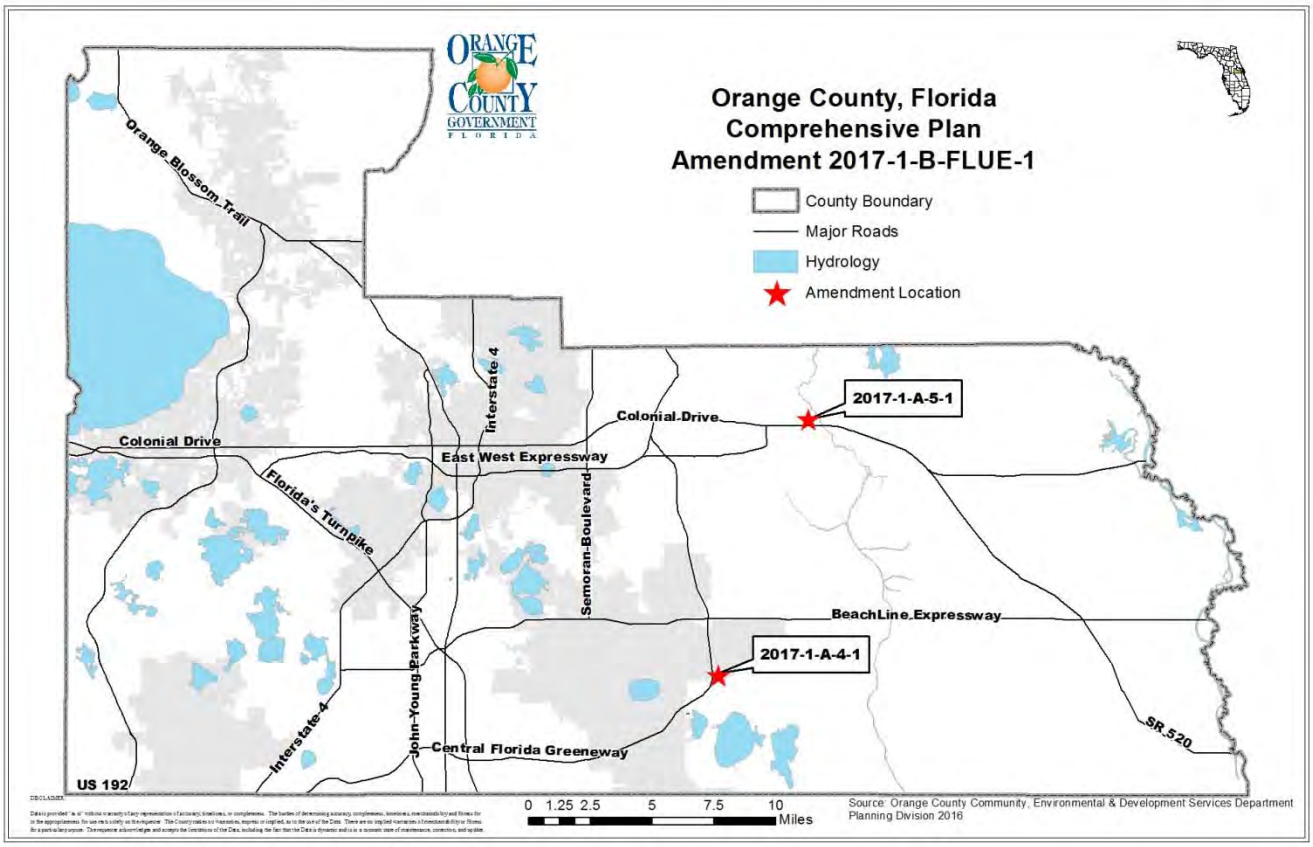
West – Casienna Apartments



Notification Area

500 ft. plus homeowner associations within a 1 mile radius of the subject site

316 notices sent



The following meetings and hearings have been held for this proposal:		
Report/Public Hearing		**Outcome**
✓	Staff Report	Recommend Transmittal
✓	LPA Transmittal December 15, 2016	Recommend Transmittal (7-0)
	BCC Transmittal	January 24, 2017
	Agency Comments	March 2017
	LPA Adoption	April 20, 2017
	BCC Adoption	June 6, 2017

Project/Legal Notice Information
Title: Amendment 2017-1-B-FLUE-1
Division: Planning
Request: Amendments to Future Land Use Element Policy FLU8.1.4 establishing the maximum densities and intensities for proposed Planned Developments within Orange County
Revision: FLU8.1.4

Staff Recommendation

Make a finding of consistency with the Comprehensive Plan, determine that the plan amendment is in compliance, and **TRANSMIT** Amendment 2017-1-B-FLUE-1 to include the development programs for Amendments 2017-1-A-4-1 and 2017-1-A-5-1 in Future Land Use Element Policy FLU8.1.4.

A. Background

The Orange County Comprehensive Plan (CP) allows for a Future Land Use designation of Planned Development. While other Future Land Use designations define the maximum dwelling units per acre for residential land uses or the maximum floor area ratio (FAR) for non-residential land uses, this is not the case for the Planned Development (PD) designation. Policy FLU8.1.3 establishes the basis for PD designations such that "specific land use designations…may be approved on a site-specific basis". Furthermore, "such specific land use designation shall be established by a comprehensive plan amendment that identifies the specific land use type and density/intensity." Each comprehensive plan amendment involving a PD Future Land Use designation involves two amendments, the first to the Future Land Use Map and the second to Policy FLU8.1.4. The latter serves to record the amendment and the associated density/intensity established on a site-specific basis. Any change to the uses and/or density and intensity of approved uses for a PD Future Land Use designation requires an amendment of FLU8.1.4.

Staff is recommending the Board make a finding of consistency with the Comprehensive Plan and approval of Amendments 2017-1-A-4-1 and 2017-1-A-5-1; therefore, the development program for these amendments would be added to Policy FLU8.1.4. For specific references of consistency with the Comprehensive Plan, please refer to the staff report for the amendment.

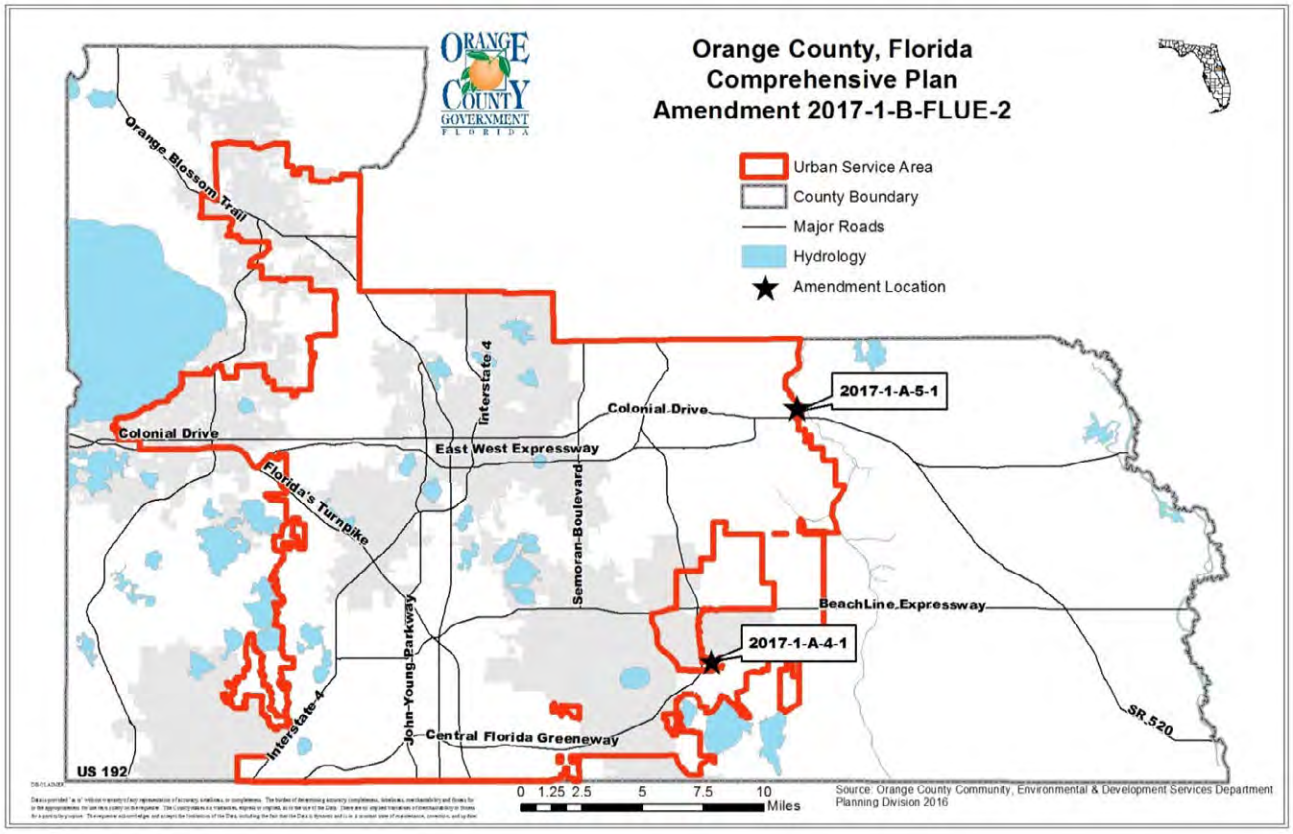
B. Policy Amendments

Following are the policy changes proposed by this amendment. The proposed changes are shown in ***underline***/~~***strikethrough***~~ format. Staff recommends transmittal of the amendment.

FLU8.1.4 The following table details the maximum densities and intensities for the Planned Development (PD) Future Land Use designations that have been adopted subsequent to January 1, 2007.

Amendment Number	**Adopted FLUM Designation**	**Maximum Density/ Intensity**	**Ordinance Number**
2017-1-A-4-1 Moss Park North	Planned Development-Medium Density Residential/Office/Conservation (PD-MDR/O/CONS)	Up to 650 residential dwelling units and 50,000 square feet of office/daycare/private school uses	2017-
2017-1-A-5-1 15169 E. Colonial Dr.	Planned Development-Low-Medium Density Residential/Commercial/Conservation (PD-LMDR/C/CONS)	Up to 15,000 square feet of C-1 uses and up to 80 residential units	2017-

***



The following meetings and hearings have been held for this proposal:		
Report/Public Hearing		**Outcome**
✓	Staff Report	Recommend Transmittal
✓	LPA Transmittal December 15, 2016	Recommend Transmittal (7-0)
	BCC Transmittal	January 24, 2017
	Agency Comments	March 2017
	LPA Adoption	October 28, 2016
	BCC Adoption	November 15, 2016

Project/Legal Notice Information
Title: Amendment 2017-1-B-FLUE-2
Division: Planning
Request: Text amendment to Future Land Use Element Policy FLU1.2.4 regarding allocation of additional lands to the Urban Service Area (USA)
Revision: FLU1.2.4

Staff Recommendation

Make a finding of consistency with the Comprehensive Plan, determine that the plan amendment is in compliance, and **TRANSMIT** Amendment 2017-1-B-FLUE-2 which would amend Future Land Use Element Policy FLU1.2.4 to include in the Urban Service Area (USA) Amendments 2017-1-A-4-1 and 2017-1-A-5-1, expanding the USA boundary by 120.40 acres.

A. Explanation

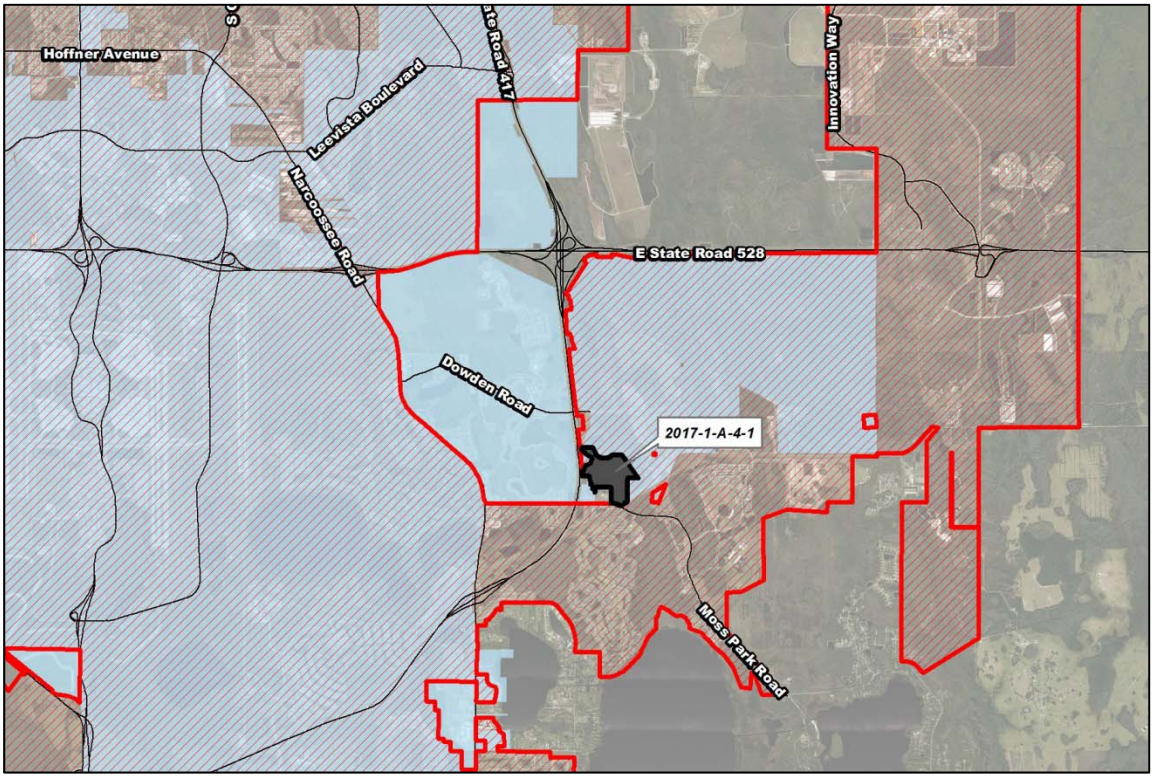
The proposed amendments would increase the Urban Service Area's size by 120.40 acres. Staff is recommending that the Board make a finding of consistency with the Comprehensive Plan and transmit Amendment 2017-1-B-FLUE-2.

Applications to expand the Urban Service Area (USA) as specified in Policy FLU1.2.4 may be considered by the Board of County Commissioners (BCC) through amendments to the Comprehensive Plan, when supported by population and employment data, and provided that applicants demonstrate that the request is consistent with Orange County's goals for future development. The request to expand the USA has demonstrated consistency with the County's goals for managing development over the next planning period.

Amendment 2017-1-A-4-1 (Moss Park North)

The property subject to Amendment 2017-1-A-4-1 is within the Innovation Way Study Area and was within the original Innovation Way Overlay (Scenario 5). Policy FLU1.3.2 outlines the criteria for approval of an application to expand the Urban Service Area and exempts areas planned for Horizon West and the Innovation Way Overlay (Scenario 5) from meeting these specifications. Therefore, the proposed expansion to accommodate this amendment is found to be consistent with the Comprehensive Plan. Please refer to the staff report for Amendment 2017-1-A-4-1 for specific policy consistency references. The subject site is shown in Figure 1, with the Urban Service Area represented by the red crosshatched area and the City of Orlando limits represented in blue.

Figure 1. Amendment 2017-1-A-4-1 Urban Service Area Expansion

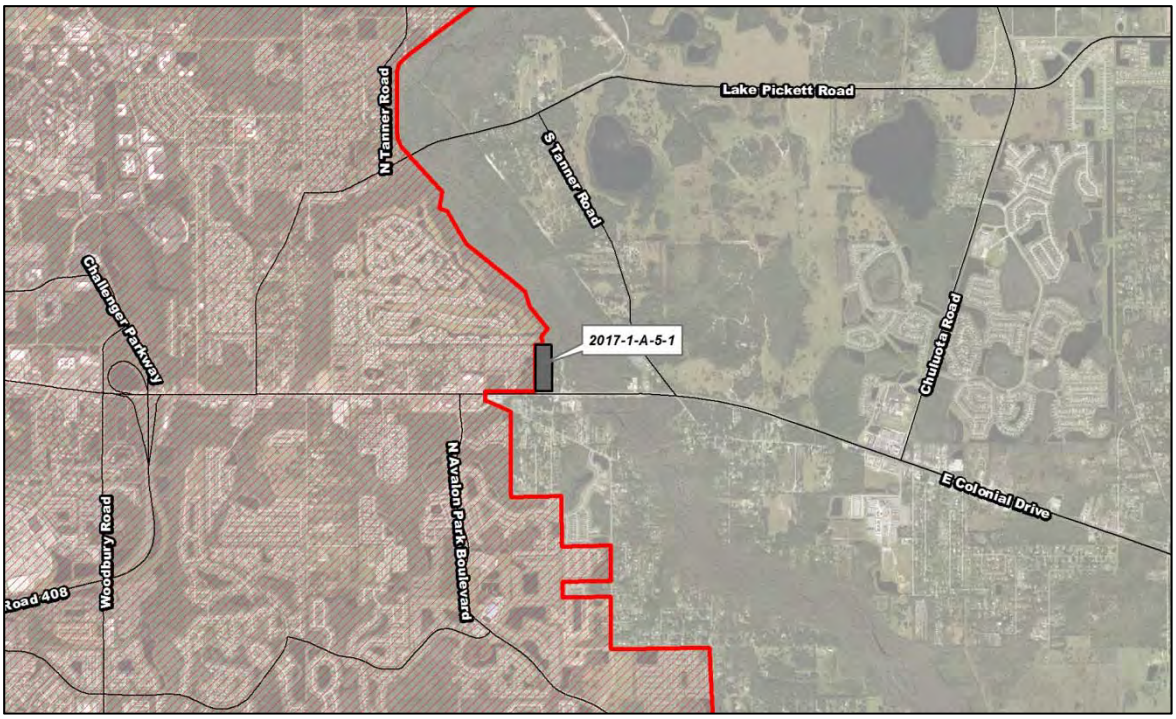


Amendment 2017-1-A-5-1 (15169 E. Colonial Dr.)

The subject property associated with Amendment 2017-1-A-5-1 that is being included in the USA is located north of E. Colonial Drive, west of Townsend Oaks Circle, and east of Sandy Creek Lane, and consists of one parcel totaling 12.1 acres.

The proposed Planned Development – Low-Medium Density Residential/Commercial/ Conservation (PD-LMDR/C/CONS) Future Land Use designation and Urban Service Area (USA) Expansion would allow land uses that are compatible with the existing development or trends in the area. Please refer to the staff report for Amendment 2017-1-A-5-1 for specific policy consistency references. The subject site is shown in Figure 2, with the Urban Service Area represented by the red crosshatched area.

Figure 2. Amendment 2017-1-A-5-1 Urban Service Area Expansion



B. Policy Amendments

Following are the policy changes proposed by this amendment. The proposed amendments are shown in ***underlined/strikethrough***. Staff recommends transmittal of the amendments.

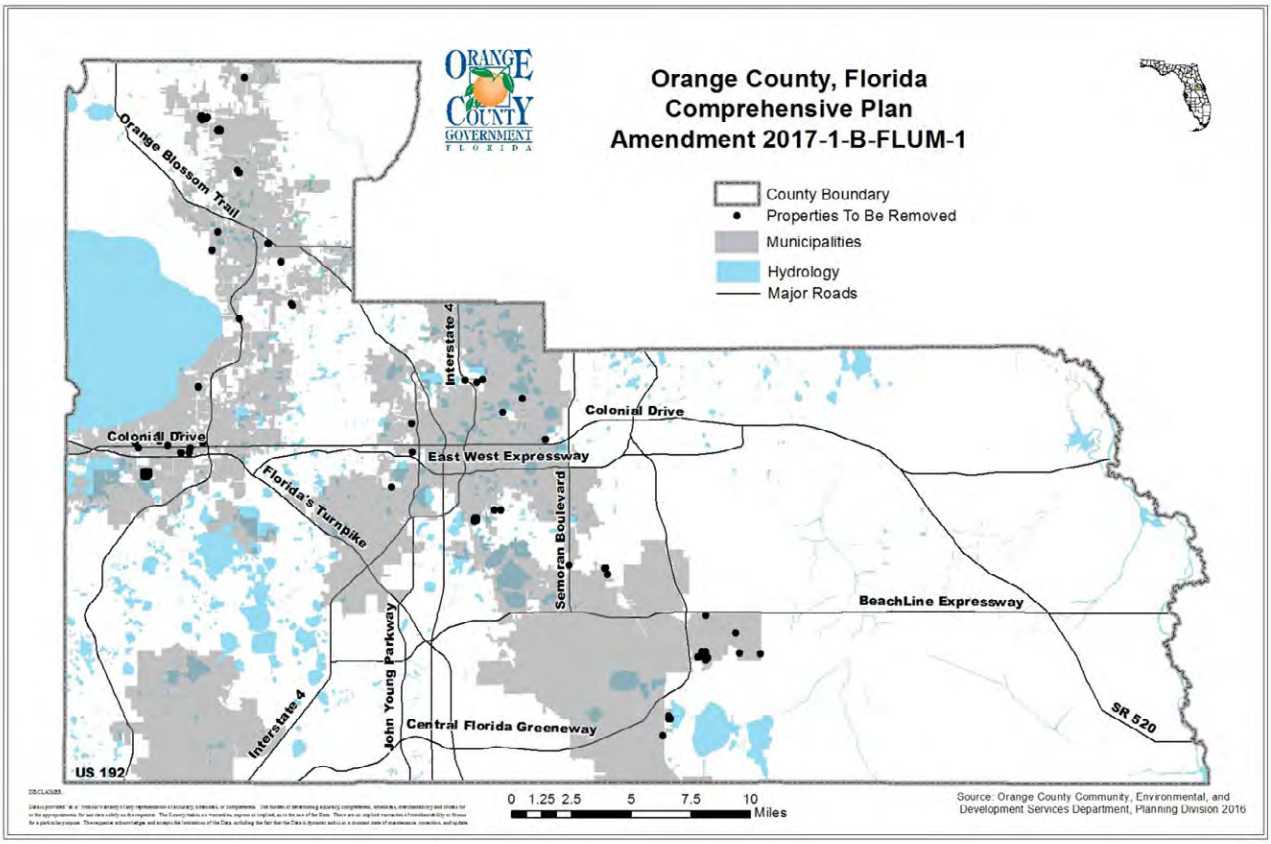
Future Land Use Element Policies

FLU1.2.4 The County will continue to monitor the Urban Service Area allocation. Through this process, the following applicants have satisfied these requirements and are recognized as expansions to the Urban Service Area.

* * *

Amendment Number	Name	Acreage	Ordinance
2017-1-A-4-1	**Moss Park North**	**108.30**	**2017-**

Amendment Number	Name	Acreage	Ordinance
2017-1-A-5-1	**15169 E. Colonial Dr.**	**12.10**	**2017-**



The following meetings and hearings have been held for this proposal:		
Report/Public Hearing		**Outcome**
✓	Staff Report	Recommend Transmittal
✓	LPA Transmittal December 15, 2016	Recommend Transmittal (7-0)
	BCC Transmittal	January 24, 2017
	Agency Comments	March 2017
	LPA Adoption	April 20, 2017
	BCC Adoption	June 6, 2017

Project/Legal Notice Information
Title: Amendment 2017-1-B-FLUM-1
Division: Planning
Request: Map amendment removing Future Land Use Map designations for parcels previously annexed by incorporated jurisdictions within Orange County

Staff Recommendation

Make a finding of consistency with the Comprehensive Plan, determine that the amendment is in compliance, and **TRANSMIT** Amendment 2017-1-B-FLUM-1 removing 301 parcels from the County's Future Land Use Map that were annexed by an incorporated jurisdiction and that have been assigned a future land use designation by that jurisdiction.

Background

Once property has been annexed by an incorporated jurisdiction within the County, it is removed from the County jurisdiction layer. However, the property cannot be removed from the County's Future Land Use Map until the jurisdiction adopts a future land use designation for the property, or it is part of their Joint Planning Land Use Map as identified in their Joint Planning Agreement (JPA) with the County.

Staff has identified 473 parcels with an Orange County Future Land Use designation that have been annexed into an incorporated jurisdiction. Of those 473 parcels, only 301 have been assigned a future land use designation by the jurisdiction that annexed them allowing them to be removed from the County's Future Land Use Map.

In order to verify that a Future Land Use designation had been adopted for the parcels in question, staff contacted each incorporated jurisdiction. Staff has determined that the following 301 parcels can be removed from Orange County's Future Land Use Map:

Apopka (36) of 93

29-20-28-0000-00-026	13-20-27-0000-00-041	13-20-27-0000-00-043	13-20-27-0000-00-031
09-21-28-0868-01-260	09-21-28-1675-00-001	18-20-28-6100-02-230	13-20-27-0000-00-010
18-20-28-6100-02-140	18-20-28-6100-02-220	07-21-28-0000-00-064	13-20-27-0000-00-049
05-20-28-0000-00-040	06-21-28-7172-14-071	13-20-27-0000-00-042	18-20-28-6100-00-006
13-20-27-0000-00-039	13-20-27-0000-00-040	28-21-28-0000-00-034	18-20-28-6100-01-630
18-20-28-6100-01-620	27-21-28-6024-00-006	18-20-28-6100-01-610	09-21-28-0197-10-211
07-21-28-0000-00-032	18-20-28-6100-02-210	29-20-28-0000-00-004	18-20-28-6100-01-590
13-20-27-0000-00-044	18-20-28-6100-01-580	18-20-28-6100-01-600	18-20-28-6100-02-240
18-20-28-6100-02-130	27-21-28-6024-00-005	27-21-28-6024-00-007	09-21-28-0197-10-213

Acreage: 106.83 gross acres

Orlando (141) of 147

12-22-29-6172-04-040	04-24-31-8980-00-630	21-22-29-5844-00-090	04-24-31-8980-00-160
12-23-29-1096-00-023	04-24-31-8980-00-020	04-24-31-8980-00-040	04-24-31-8980-00-008
12-23-29-1096-00-029	04-24-31-8980-12-000	04-24-31-8980-00-840	12-23-29-1096-00-028
21-23-30-0000-00-053	04-24-31-0000-00-080	04-24-31-8980-00-390	04-24-31-8980-00-520

02-24-31-0000-00-004	04-24-31-8980-00-760	04-24-31-8980-00-001	04-24-31-8980-00-650
14-23-30-5240-19-057	04-24-31-8980-00-280	04-24-31-8980-00-580	12-23-29-1096-00-024
32-23-31-0000-00-007	12-23-29-1096-00-031	04-24-31-8980-00-006	04-24-318980-00-470
20-24-31-0000-00-075	04-24-31-8980-00-330	32-23-31-0000-00-002	04-24-31-8980-00-130
04-24-31-8980-00-530	04-24-31-8980-00-780	04-24-31-8980-00-220	04-24-31-8980-00-120
04-24-31-8980-00-620	04-24-31-8980-00-570	04-24-31-8980-00-370	32-22-29-4604-00-390
04-24-31-8980-11-000	02-24-31-0000-00-003	04-24-31-8980-00-850	04-24-31-8980-00-430
04-24-31-8980-00-400	20-24-31-2900-01-000	04-24-31-8980-00-500	04-24-31-8980-00-690
04-24-31-8980-00-010	12-23-29-8184-00-120	04-24-31-8980-00-680	04-24-31-8980-00-090
04-24-31-8980-00-770	27-22-30-0000-00-073	04-24-31-8980-00-600	04-24-31-8980-00-700
04-24-31-8980-00-660	04-24-31-8980-00-440	04-24-31-0000-00-001	04-24-31-8980-00-710
04-24-31-8980-00-310	04-24-31-8980-00-050	04-24-31-8980-00-004	04-24-31-8980-00-410
04-24-31-8980-00-800	04-24-31-8980-00-870	14-23-30-5240-26-051	04-24-31-8980-00-060
04-24-318980-00-860	04-24-31-8980-00-450	12-23-29-1096-00-027	12-23-29-8184-00-080
04-24-31-8980-00-730	04-24-31-8980-00-820	28-22-29-6292-02-021	06-23-30-1852-03-020
04-24-31-8980-00-002	21-22-30-3932-13-131	04-24-31-8980-00-550	04-24-31-8980-00-750
04-24-31-8980-00-590	04-24-31-8980-00-380	04-24-31-8980-00-320	04-24-31-8980-00-900
04-24-31-8980-00-180	04-24-31-8980-00-110	04-24-31-8980-14-000	04-24-31-8980-00-210
04-24-31-8980-00-250	04-24-31-8980-00-790	04-24-31-8980-00-270	01-23-29-5631-00-480
04-24-31-8980-00-890	04-24-31-8980-00-240	14-23-30-5240-19-052	04-24-31-8980-00-009
04-24-31-8980-00-830	04-24-31-8980-00-610	04-24-31-8980-00-720	04-24-31-8980-00-290
04-24-31-8980-00-007	04-24-31-8980-00-260	04-24-31-8980-00-640	04-24-31-8980-00-540
04-24-31-8980-10-000	04-24-31-8980-00-460	04-24-31-8980-00-420	04-24-31-8980-00-490
04-24-31-8980-00-080	04-24-31-8980-13-000	04-24-31-8980-00-300	12-23-29-8184-00-050

04-24-31-8980-00-510	04-24-31-8980-00-560	04-24-31-8980-00-190	04-24-31-8980-00-030
12-23-29-8184-00-021	12-23-29-8184-00-070	04-24-31-8980-00-340	04-24-31-8980-00-200
12-23-29-8184-00-110	12-23-29-1096-00-021	12-23-29-1096-00-020	04-24-31-8980-00-480
04-24-31-8980-00-100	04-24-31-8980-00-670	04-24-31-8980-00-230	04-24-31-8980-00-360
04-24-31-8980-00-070	04-24-31-8980-00-150	04-24-31-0000-00-002	04-24-31-8980-00-810
04-24-31-8980-00-740	12-23-29-8184-00-060	04-24-31-8980-00-880	12-23-29-8184-00-090
04-24-31-8980-00-170	20-22-30-6812-00-010	04-24-31-8980-00-140	04-24-31-8980-00-350
04-24-31-8980-00-003			

Acreage: 2,857.10 gross acres

Winter Park (3) of 3

12-22-29-5000-01-020	11-22-29-2248-01-060	17-22-3824-00-191	

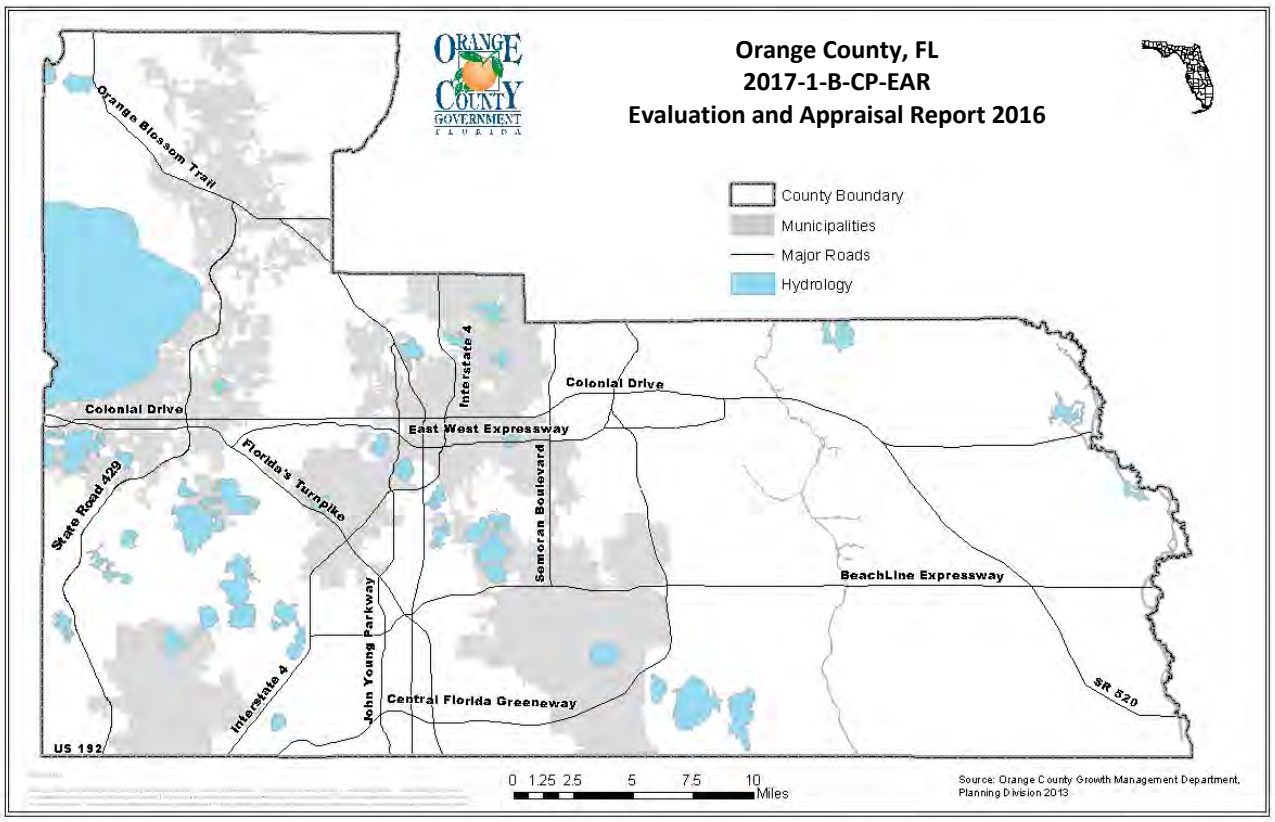
Acreage: 0.87 gross acres

Winter Garden (121) of 121

27-22-27-0000-00-096	34-22-27-0738-00-470	34-22-27-0738-00-450	34-22-27-0738-00-580
26-22-27-8110-02-080	34-22-27-0738-00-690	34-22-27-0738-00-890	34-22-27-0738-00-870
26-22-27-8110-02-079	34-22-27-0738-00-030	34-22-27-0738-00-150	34-22-27-0738-00-520
25-22-27-9384-08-070	34-22-27-0738-00-640	34-22-27-0738-00-860	34-22-27-0738-00-610
25-22-27-9384-08-060	34-22-27-0738-00-530	34-22-27-0738-00-190	34-22-27-0738-00-230
25-22-27-9384-09-010	34-22-27-0738-00-390	34-22-27-0738-00-009	34-22-27-0738-04-001
25-22-27-9384-05-080	34-22-27-0738-00-250	34-22-27-0738-00-004	34-22-27-0738-00-006
23-22-27-8140-00-020	34-22-27-0738-00-280	34-22-27-0738-00-070	34-22-27-0738-00-490
23-22-27-8199-00-150	34-22-27-0738-00-060	34-22-27-0738-03-001	34-22-27-0738-15-000
22-22-27-1084-02-040	34-22-27-0738-00-510	34-22-27-0738-00-550	34-22-27-0738-00-300
21-22-27-0000-00-104	34-22-27-0738-00-440	34-22-27-0738-00-160	34-22-27-0738-00-790
24-22-27-0000-00-025	34-22-27-0738-00-650	34-22-27-0738-00-330	34-22-27-0738-00-005

22-22-27-1084-02-200	34-22-27-0738-00-660	34-22-27-0738-00-110	34-22-27-0738-00-620
25-22-27-9384-09-030	34-22-27-0738-13-000	34-22-27-0738-00-420	34-22-27-0738-10-000
12-22-27-1840-24-011	34-22-27-0738-00-120	34-22-27-0738-00-340	34-22-27-0738-00-820
21-22-27-0000-00-103	34-22-27-0738-00-180	34-22-27-0738-00-380	34-22-27-0738-00-430
34-22-27-0738-00-850	34-22-27-0738-00-130	34-22-27-0738-00-100	34-22-27-0738-12-000
34-22-27-0738-00-240	34-22-27-0738-00-780	34-22-27-0738-14-000	34-22-27-0738-00-007
34-22-27-0738-00-140	34-22-27-0738-00-002	34-22-27-0738-00-760	34-22-27-0738-00-008
34-22-27-0738-00-830	34-22-27-0738-00-210	34-22-27-0738-00-750	34-22-27-0738-00-680
34-22-27-0738-00-200	34-22-27-0738-00-710	34-22-27-0738-00-700	34-22-27-0738-00-630
34-22-27-0738-00-500	34-22-27-0738-00-260	34-22-27-0738-00-540	34-22-27-0738-00-370
34-22-27-0738-00-360	34-22-27-0738-00-800	34-22-27-0738-00-590	34-22-27-0738-00-600
34-22-27-0738-03-002	34-22-27-0738-00-003	34-22-27-0738-00-040	34-22-27-0738-00-730
34-22-27-0738-00-740	34-22-27-0738-00-290	34-22-27-0738-00-010	34-22-27-0738-00-350
34-22-27-0738-00-080	34-22-27-0738-00-320	34-22-27-0738-00-840	34-22-27-0738-00-770
34-22-27-0738-00-670	34-22-27-0738-00-880	34-22-27-0738-00-410	34-22-27-0738-00-720
34-22-27-0738-00-170	34-22-27-0738-00-310	34-22-27-0738-00-090	34-22-27-0738-00-810
34-22-27-0738-00-910	34-22-27-0738-11-000	34-22-27-0738-00-570	34-22-27-0738-00-270
34-22-27-0738-00-020	34-22-27-0738-00-050	34-22-27-0738-00-460	34-22-27-0738-00-900
34-22-27-0738-00-400			

Acreage: 37.76 gross acres



The following meetings and hearings have been held for this proposal:		
Report/Public Hearing		**Outcome**
✓	LPA Work Session	
✓	BCC Work Session	
✓	Staff Report	
✓	LPA Transmittal	December 15, 2016 Recommend Transmittal (7-0)
	BCC Transmittal	January 24, 2017
	Agency Comments	March 2017
	LPA Adoption	April 20, 2017
	BCC Adoption	June 06, 2017

Project/Legal Notice Information
Title: Evaluation and Appraisal Report (EAR)-based amendments to the Comprehensive Plan (CP) including the following elements: Future Land Use; Transportation; Potable Water/Wastewater; Solid Waste; Stormwater; Conservation; Housing; Economic; Neighborhoods; Intergovernmental Coordination; Recreation; Open Space; Aquifer Recharge; and Fire Rescue including all associated maps and the Future Land Use Map for the period of 2010-2030.
Divisions: Planning
Request: N/A
Revision: FLU1.2.3, FLU6.1.10, OBJ FLU8.4, OBJ ID5.1, T1.3.1, H1.8.3, C1.4.0, OS1.1.1, OS1.1.3, SM1.4.5, PS5.2.6, PS6.3.7, CIE 1.1.6, CIE1.1.16, ICE1.1.4, ICE1.9.

Staff Recommendation

Make a finding of consistency with the Comprehensive Plan, determine that the Evaluation and Appraisal Report (EAR)-based amendments to the Comprehensive Plan are in compliance, and recommend **TRANSMITTAL** of **2017-1-B-CP-EAR**.

A. Background

In 2011 the Florida Statutes and Florida Administrative Code were amended to give local governments more discretion in determining whether they need to update their comprehensive plans. However, the same amendments require that, per Section 163.3191, F.S. and Rule Chapter 73C-49, Florida Administrative Code, every seven years and in accordance with Florida Statutes and the Florida Administrative Code, local governments are required to evaluate their Comprehensive Plans to determine if plan amendments are necessary to reflect changes in state statutory requirements in Chapter 163, Part II, F.S., since the last Evaluation and Appraisal Report. If plan amendments are necessary to reflect changes in requirements of state law, the schedule adopted in the Rules for Orange County requires that it must notify the state land planning agency (Florida Department of Economic Opportunity) by May 1, 2016 as to its determination. The County will then have a year from the notification letter's date to develop its necessary updates and transmit them to DEO as comprehensive plan amendments.

On April 26, 2016 the aforementioned letter along with a matrix was presented to the Board of County Commissioners (BCC) for approval. Following the BCC approval on April 29, 2016, Orange County sent the letter and matrix identifying proposed policy amendments to DEO notifying it that it had been determined that plan amendments are necessary for the purpose of updating the Orange County Comprehensive Plan and ensuring it complies with current statutory requirements. The EAR policy change matrix can be found at the end of this report. On May 9, 2016 the Orange County Planning Division received a response from DEO acknowledging receipt of Orange County's Evaluation and Appraisal Notification Letter. The response from DEO identified that the proposed policy amendments should be transmitted to the Department by May 3, 2017.

B. Policy Amendments

Following are the policy changes proposed by this amendment. The proposed revisions are shown in *~~strikethrough~~*/*underline* format. Staff recommends transmittal of this amendment.

FLU1.2.3 The amount of usable land and the need for land to accommodate the projected population within the Urban Service Area shall be monitored and updated ~~on a regular basis as part~~ to reflect changes in local conditions, consistent with the objectives of the Evaluation and Appraisal Report process. As part of this effort, the County will assess its progress toward implementing the urban strategies contained herein in order to achieve its planned development pattern. ~~report the findings as part of the Evaluation and Appraisal Report~~ (Added 12/00, Ord. 00-25, Policy 1.1.2-r; Amended 5/13, Ord. 2013-11)

FLU6.1.10 Orange County shall support the goals of the Rural Land Stewardship program as presented in Chapter 163.3248, F.S.,~~encouraged by the Department of Community Affairs~~ and

consider cooperative implementation of this program where there are interested property owners or adjoining entities willing to participate in this effort.

OBJ FLU8.4 PUBLIC PARTICIPATION. Orange County shall provide for and encourage public participation in the comprehensive planning process, including consideration of proposed amendments to the CP ~~and Evaluation and Appraisal Reports~~. This includes the use of community meetings, forums and visioning techniques, as needed. (Added 6/98, Ord. 98-13, Goal 7-r)

OBJ ID5.1 In order to minimize adverse development impacts, the County will pursue adoption of land development regulations to ensure land use compatibility and environmental protection within and adjacent to the Activity Center. ~~Until such time, the County will ensure that development within the Activity Center is consistent with Rules 9J-5.006(3)(c)2 and 9J-5.013(2)(c), Florida Administrative Code (FAC) regarding land use compatibility and environmental resource protection.~~ (Added 12/00, Ord. 00-25)

T1.3.1 Orange County shall continue to use an annually-updated, ~~financially feasible~~ and phased Five-Year Capital Improvement Program to implement the identified transportation improvements required to maintain the designated level of service and quality of service. (Added 05/04, Ord. 04-06, Policy 4.1.1-r; Amended 11/12, Ord. 2012-20)

~~**H1.8.3** The number and type of approved units shall be periodically monitored in the Evaluation and Appraisal Report.~~

C1.4.0 For the purposes of this Comprehensive Plan, Environmentally Sensitive Lands, ~~per 9J-5, Florida Administrative Code and Chapter 163, Florida Statutes, for the purposes of this Comprehensive Plan~~ shall mean at a minimum Class I conservation areas as defined in Conservation Policy C1.4.1, and their adjacent uplands, rare upland habitat including but not limited to sandhill and scrub, and those wetland and upland systems that support any Threatened, Endangered Species, or Species of Special Concern. (Added 8/92, Ord. 92-24)

OS1.1.1 Open space shall be clearly defined and be internally consistent in the Land Development Code. ~~However, in cases where environmentally sensitive land acreage is attributed to maintaining the resource based recreation level of service, the functionality of open space shall be consistent with Rule 9J-5.003(88), Florida Administrative Code~~. (Added 12/00, Ord. 00-25, Policy 1.1.2)

OS1.1.3 ~~As it pertains to protection of vegetative communities and existing natural reservations specified in this element and the Recreation Element, tree protection shall be consistent with Rule 9J-5.013(2)(c)(3) and (7), F.A.C~~. Tree removal shall be authorized consistent with provisions of the Orange County Land Development Code, Chapter 15, Article VIII, or any subsequent revisions. (Added 12/00, Ord. 00-25, Policy 1.1.4.1; Amended 6/10, Ord. 10-07)

SM1.4.5 Orange County shall update all of the stormwater master plans on an as-needed basis, as identified in Stormwater Management Policy SM1.4.1. ~~These master stormwater plans shall include, at a minimum, all data and analysis requirements of Chapter 9J-5.011(1)(a) through (f), Florida Administrative Code~~. To make these planning efforts more efficient, the level of detail for a specific basin can be targeted toward the prioritized needs referenced in Stormwater Management Policy SM1.4.7. (Added 12/00, Ord. 00-25)

PS5.2.6 Orange County shall protect existing schools from the intrusion of incompatible land uses through the development review process. [~~163.3177(12)(g)4, FS~~] and [~~9J-5.025(3)(b)5, FAC~~]. (Added 6/08, Ord. 08-11)

PS6.3.7 Consistent with Section 16.2 of the Interlocal Agreement, the following residential uses shall be exempt from the requirements of school concurrency:

***

c. Any building or structure that has received a building permit as of the effective date of the Interlocal Agreement, or is described in section 163.3167~~(8)~~ (5) , Florida Statutes.

CIE 1.1.6 The County annually shall update the Capital Improvements Element in order to maintain a ~~financially feasible~~ 5-year schedule of capital improvements. The Capital Improvements Budget will be based on the multi-year Capital Improvements Program. Future capital improvements expenditures necessitated by changes in population, changes in real estate development, or changes in economic base will be calculated and included in capital improvements budget projections.

CIE1.1.16 Consistent with s.163.3177(3)(b)~~1~~, FS, the following changes may be adopted by local ordinance provided they are consistent with the Comprehensive Policy Plan:

- Corrections and modifications of the cost of a project already included in the Capital Improvements Program
- Corrections and modifications to revenue sources identified in the Capital Improvements Program
- The acceptance of facilities pursuant to dedications

ICE1.1.4 Orange County shall voluntarily enter into a dispute resolution process to resolve intergovernmental coordination disputes with other municipalities and jurisdictions on a case-by-case basis, using the procedures below:

A. The County shall seek dispute resolution assistance and guidance from the East Central Florida Regional Planning Council or other mediation group.
B. The resolution process will be developed consistent with Chapter 185.509, F.S. ~~and Rule 9J-5.015, FAC.~~
C. Unless requested by the disputing parties, the process shall not be used to address environmental permitting or other regulatory issues. (Added 12/00, Ord. 00-25)

ICE1.9.8 ~~In accordance with Florida Statute Chapter 240.155,~~ Orange County shall review and coordinate land use planning and development ~~of the University of Central Florida (UCF) as specified in the UCF Campus Master Plan (1995) and as amended~~ of Campus Master Plans prepared or amended pursuant to Chapter 1013.30, F.S. Subsequent development agreements shall be established and periodically amended in conjunction with or based on campus development, which singularly or cumulatively result in:

A. A 10 percent increase in campus land use intensities or densities;

B. A 10 percent decrease in campus natural areas, open space or buffers;

C. A 10 percent increase of development impacts on roads or another public facility or service provided or maintained by the state, County or any affected local government. (Added 12/00, Ord. 00-25)

ORANGE COUNTY GOVERNMENT
FLORIDA

April 29, 2016

Mr. Ray Eubanks, Plan Review Administrator
Florida Department of Economic Opportunity
Division of Community Development
107 East Madison Street, MSC-160
Tallahassee, Florida 32399-4120

SUBJECT: 2016 Orange County Evaluation and Appraisal Notification Letter

Dear Mr. Eubanks:

In conformity with the requirements in Section 163.3191(1), F.S., this letter is provided to notify DEO that Orange County has completed an evaluation of its Comprehensive Plan to determine if plan amendments are necessary to reflect changes in state statutory requirements in Chapter 163, Part II, F.S., since the last Evaluation and Appraisal Report in 2008.

Orange County has determined that plan amendments are necessary for the purpose of updating our plan and ensuring it complies with current statutory requirements. Accompanying this document is the completed legislative change matrix which describes the recent changes in statutory requirements and any associated required changes in the County's Comprehensive Plan.

In accordance with the Evaluation and Appraisal Notification Schedule provided by the Department of Economic Opportunity, Orange County anticipates transmittal of the EAR based amendments within the statutorily mandated one year time frame. Consistent with the encouragement of Section 163.3191 (3) FS, we also anticipate evaluating the plan over the coming months for other amendments that may be needed.

For additional information or clarification regarding this Evaluation and Appraisal letter please contact:

Greg Golgowski, Chief Planner, Comprehensive Planning Section
Orange County Planning Division
Tel: 407-836-5624 Fax: 407-836-5862
Email: Gregory.Golgowski@OCFL.net

Sincerely,

Alberto Vargas, MArch.
Planning Division Manager

PLANNING DIVISION
ALBERTO A. VARGAS, *Planning Manager*
201 South Rosalind Avenue, 2nd Floor ■ Reply To: Post Office Box 1393 ■ Orlando FL 32802-1393
Telephone 407-836-5600 ■ FAX 407-836-5862 ■ orangecountyfl.net

Description of changes to Chapter 163, Part II, F.S.,	F.S Citation	Addressed Where in Comprehensive Plan	Amendment Needed to Comprehensive Plan
2008 [CH.2008-191]			
Adds requirement that the Future Land Use Plan be based on the discouragement of urban sprawl and the encouragement of energy efficient land use patterns	**163.3177 (6)(a)**	**FLU1.3.1**	None
2009 [CH.2009-85 & CH.2009-96]			
Requires Future Land Use element to include criteria that will be used to achieve compatibility of lands near public use airports	**163.3177(6)(a)**	**T3.5.2.4**	None
Requires Intergovernmental Coordination Element to include mandatory rather than voluntary dispute resolution process and requires use of the process prescribed in 186.509 F.S	**163.3177(6)(h)1.b**	**ICE1.1.4.**	Clarify commitment to process in 186.509. Replace reference to Chapter 185.509 with 186.509 F.S. Remove reference to Rule 9J-5.015, FAC.
2011 [CH. 2011-139]			
Changes definition of "optional sector plan" to "sector plan" and clarifies the purpose of a sector plan.	**163.3164(42)**	**N/A**	None
Prohibits all initiatives or referendums on a development order or comprehensive plan amendment, not just those affecting 5 or fewer parcels.	**163.3167(8)**	**N/A**	Procedural change, No change to Comp Plan needed.
Section 163.3167(8) was changed to 163.3167(5)	**163.3167(8) (Old)**	**PS6.3.7(C)**	Change reference in PS6.3.7(C) from 163.3167(8)to 163.3167(5)
Modifies provisions for preparing the capital improvements element to require the schedule to cover a 5 year period and identify whether projects are either funded or unfunded and given a level of priority funding. Deletes requirement for financial feasibility for capital improvements funded by the developer.	**163.3177(3)(a)4**	**CIE1.1.6**	None, change has already been made.
Modifies requirements for local government annual review of capital improvements element to no longer require transmittal of the adopted amendment to the state land planning agency. Deletes provisions relates to sanctions by the administration commission, adoption of long term concurrency management systems and financial feasibility.	**163.3177(3)(b)**	**CIE 1.1.6, CIE1.1.16**	Change reference 163.3177(3)(b)1 to 163.3177(3)(b) in CIE 1.1.16. Remove financial feasibility requirement in CIE 1.1.6, T1.3.1
2011 [CH. 2011-139]			
Modified to include portions of repealed Rules 9J-5.001 and 9J-5.005, Florida Administrative Code, with respect to the principles, guidelines, standards and strategies to be set forth in required and optional elements of the comprehensive plan and requirements for basing these elements on relevant, appropriate and professionally accepted data.	**163.3177(1)**	**N/A**	Procedural changes/No change to Comp Plan needed. Transportation Element data and analysis are not adopted.
Modifies requirements for the transportation element to include significant portions of repealed Rule 9J-5.019, Florida Administrative code, Addressing circulation of recreational traffic, including bicycle facilities, and airport master plans.	**163.3177(6)(b)**	**T2.2.4, OBJ T3.2, T3.2.2, T3.4.8, OBJ T3.5, T3.5.4, T3.5.5**	Additional policy requirements other than those listed are adopted for multimodal corridors (T2.2.9) Alternative Mobility Area, Horizon West, and Innovation Way. No change to Comp Plan needed.
Deletes requirement for intergovernmental coordination element to provide for recognition of campus master plans and airport master plans.	**163.3177(6)(h)1**	**ICE1.9.8, ICE1.4.18**	Delete statutory references
Modifies requirements for the intergovernmental coordination element to include portions of repealed Rule 9J-5.015, Florida Administrative Code, including coordinating and addressing impacts on adjacent municipalities and coordinating the establishment of level of service standards.	**163.3177(6)(h) 3.b**	**ICE1.2.2, T2.2.7, T2.2.8, T2.2.8.1,T2.3.10, T2.5.5**	No change to Comp Plan needed.

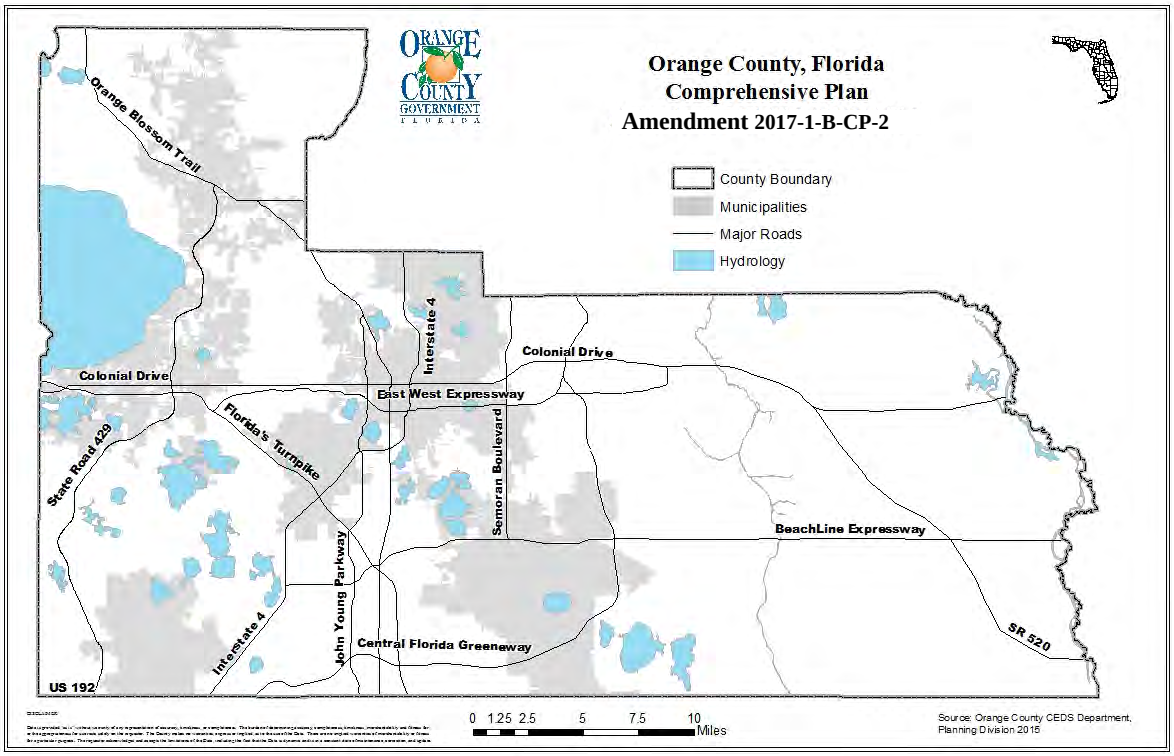
Description of changes to Chapter 163, Part II, F.S.,	F.S Citation	Addressed Where in Comprehensive Plan	Amendment Needed to Comprehensive Plan
2011 [CH. 2011-139]			
This section was rescinded. (Required the public school facilities element to implement a school concurrency program)	**163.3177(12)**	**PS5.2.6**	Remove reference to 163.3177(12)(g)4.
Removed parks and recreation, schools and transportation from the list of public facilities and services subject to the concurrency requirement on a statewide basis. Now Optional. To rescind any existing concurrency provisions on these now optional concurrency facilities requires a comprehensive plan amendment which is not subject to state review.	**163.3180(1)**	**N/A**	None
Modifies concurrency requirements to include portions of repealed Rule 9J-5.0055, Florida Administrative Code, which relate to achieving and maintaining adopted levels of service for a 5-year period, and providing for rescission of any optional concurrency provisions by plan amendment, which is not subject to state review.	**163.3180(1)(a)**	**OBJ T2.1, T2.1.1, OBJ T2.2 and corresponding policies**	Per BCC direction, Orange County continues to maintain a concurrency management system for roadways. No change to Comp Plan needed.
Deletes requirement that professionally accepted techniques be used for measuring levels of service for automobiles, bicycles, pedestrians, transit and trucks.	**163.3180(1)(b)**	**N/A**	None
Establishes concurrency provisions for transportation facilities, which include portions of repealed Rule 9J-5.0055, Florida Administrative Code. Sets forth requirements with respect to adopted level of service standards, including use of professionally accepted studies to evaluate levels of service, achieving and maintaining adopted levels of service standards, and including the projects need to accomplish this in 5-year schedule of capital improvements. Requires coordination with adjacent local governments and setting forth the method to be used in calculating proportionate-share contribution. Defines the term "transportation deficiency."	**163.3180(5)(a-h)**	**OBJ T2.2 and corresponding policies, OBJ T2.4 and corresponding policies**	Per BCC direction, Orange County continues to maintain a concurrency management system for roadways. No change to Comp Plan needed.
Deleted requirement that local government adopt long term transportation and school concurrency management systems. Process now optional.	**163.3180(9)(a)**	**CIE1.3.17**	Remove statutory references.
Sets forth process for adopting and processing plan amendments according to the "expedited" and "coordinated" review process, the scope of comments to be provided by reviewing agencies, responsibilities of the state land planning agency.	**163.3184(3)**	**N/A**	Procedural change has already been made. No change to Comp Plan needed.
Modifies provision to address the process for adoption of small-scale comprehensive plan amendments, deleting several exceptions. Also Plan Amendments are no longer limited to two times per calendar year and text changes that relate directly to and are adopted simultaneously with small scale FLUM Amendments are now permissible.	**163.3187(1)(a-d)**	**FLU8.8.1**	Procedural change. No change to Comp Plan needed.
Creates new provisions for evaluation and appraisal of comprehensive plan which shift the process from a formal mandated audit report to a less formal review every 7 years of whether changes are needed to meet changes ins tate requirements and notify the state land planning agency of its determination. If the determination is that plan amendments are necessary the local government must prepare and transmit the needed plan amendments for review, pursuant to section 183.3184, within one year.	**163.3191(1-4)**	**FLU1.2.3, FLU1.2.8, T2.3.14, H1.8.3, OBJ FLU8.4**	These policies directed analyses related to deleted EAR requirements and may no longer be needed. / Update the Comprehensive Plan;s overview of GOPs
This section of the Florida Administrative Code prescribing the content of Comprehensive Plans was repealed.	**9J-5.025 FAC**	**PS5.2.6, PS6.1.7, ICE1.1.4, OJB 5.1, OBJ T2.1, OBJ T2.3, C1.4.0, OS1.1.1, OS1.1.3, SM1.4.5**	Remove References to Rule 9J-5, FAC

Description of changes to Chapter 163, Part II, F.S.,	F.S Citation	Addressed Where in Comprehensive Plan	Amendment Needed to Comprehensive Plan
2012 [CH.2012-82, 2012-99, 2012-75]			
Requires the comprehensive plan to be based upon population projections published by either the Office of Economic and Demographic Research or generated by the Local Government. (Removed UFs BEBR)	**163.3177 (1)(f)3**	**N/A**	Procedural change. No change to Comp Plan needed.
Adds developments proposed under 380.06(24) to the list of amendments that must follow the state coordinated review process. Includes: Hospital, electrical transmission line or electrical power plant, addition to an existing sports facility complex	**163.3184 (2)(C)**	**N/A**	Procedural change. No change to Comp Plan needed.
2013 [CH.2013-239, 2013-115, 2013-224]			
Clarifies that an initiative or referendum process in regard to any local comprehensive plan amendment or map amendment is prohibited. However, an initiative or referendum process in regard to any local comprehensive plan amendment or map amendment that affects more than five parcels of land is allowed if it is expressly authorized by specific language in a local government charter that was lawful and in effect on June 1, 2011; a general local government charter provision for an initiative or referendum process is not sufficient.	**163.3167(8)(b)**	**N/A**	Procedural change. No change to Comp Plan needed.
States the intent of the Legislature that initiatives and referendums be prohibited in regard to any local comprehensive plan or map amendment, except as specifically and narrowly permitted in paragraph (b) with regard to local comprehensive plan or map amendments that affect more than five parcels of land.	**163.3167(8)(c)**	**N/A**	Procedural change. No change to Comp Plan needed.
Revises and adds requirements for local governments that continue to implement a transportation concurrency system, whether in the form adopted into the comprehensive plan before the effective date of the Community Planning Act, Chapter 2011-139, Laws of Florida, or as subsequently modified.	**163.3180(5)(h)1**	**OBJ T2.2 and corresponding policies, T2.3.10, OBJ T2.4 and corresponding policies, T2.5.5**	No change to Comp Plan needed.
Adds "development agreement" in the listed land use development permits for which an applicant may satisfy transportation concurrency requirements of the local comprehensive plan, the local government's concurrency management system and section 380.606 when applicable, if conditions in subsequent sections are met.	**163.3180(5)(h)1.c**	**T2.2.1, T2.2.4, T2.2.5**	Procedural changes/No change to Comp Plan needed. Concurrency management ordinance currently being updated.
Adds language allowing a local government to accept contributions from multiple applicants for a planned improvement if it maintains contributions in a separate account designated for that purpose.	**163.3180(5)(h)1.c.II**	**N/A**	Procedural changes/No change to Comp Plan needed. Concurrency management ordinance currently being updated.
Modifies language to require local governments that continue to implement a transportation concurrency system to "provide the basis upon which the landowners will be assessed a proportionate share of the cost addressing the transportation impacts resulting from a proposed development."	**163.3180(5)(h)1.d**	**T2.2.4, T2.2.5, T2.4.2**	Concurrency management ordinance currently being updated. Ordinance contains proportionate share formula specified in s.163.3180(5)(h)(2)(a), F.S.
Sets provisions for a local manufacturing development program; master development approval for manufacturers. Allows a local government to adopt an ordinance establishing a local manufacturing development program through which the local government may grant master development approval for the development or expansion of sites that are, or are proposed to be, operated by manufacturers at specified locations within the local government's geographic boundaries.	**163.3252**	**N/A**	N/A

Description of changes to Chapter 163, Part II, F.S.,	F.S Citation	Addressed Where in Comprehensive Plan	Amendment Needed to Comprehensive Plan
2014 [CH.2014-093, 2014-178, 2014-218]			
Provides that after July 1, 2014, a local government may not amend its comprehensive plan, land use map, zoning districts, or land use regulations to conflict with a fuel terminal's classification as a permitted and allowable use, including an amendment that causes a fuel terminal to be a nonconforming use, structure, or development.	**163.3206(3)**	**N/A**	Being addressed by amendment in 2016-1 cycle.
2015 [CH.2015-30]			
Requires amendments to an adopted sector plan and developments that qualify as developments of regional impact to follow the state coordinated review process in s.163.3184 (4)	**163.3184(2)(C)**	**N/A**	Procedural change. No change to Comp Plan needed.
2016 [HB 1361]			
Decreases the minimum required acreage of sector plans from 15,000 acres to 5,000 acres	**163.3245(1)**	**N/A**	Procedural change. No change to Comp Plan needed.
Provides that a proposed DRI that is consistent with the applicable comprehensive plan is not required to undergo review pursuant to s.163.3184 (4) or s 380.06(30), F.S. This does not apply to amendments to a development order governing an existing DRI.	**163.3184 (2)(C)**	**N/A**	Procedural change. No change to Comp Plan needed.

Evaluation and Appraisal Report 2016 Policy Change Matrix			
Description of changes to Chapter 163, Part II, F.S.,	**F.S Citation**	**Addressed Where in Comprehensive Plan**	**Amendment Needed to Comprehensive Plan**
2008 [CH.2008-191]			
Adds requirement that the Future Land Use Plan be based on the discouragement of urban sprawl and the encouragement of energy efficient land use patterns	**163.3177 (6)(a)**	**FLU1.3.1**	None
2009 [CH.2009-85 & CH.2009-96]			
Requires Future Land Use element to include criteria that will be used to achieve compatibility of lands near public use airports	**163.3177(6)(a)**	**T3.5.2.4**	None
Requires Intergovernmental Coordination Element to include mandatory rather than voluntary dispute resolution process and requires use of the process prescribed in 186.509 F.S	**163.3177(6)(h)1.b**	**ICE1.1.4.**	Clarify commitment to process in 186.509. Replace reference to Chapter 185.509 with 186.509 F.S. Remove reference to Rule 9J-5.015, FAC.
2011 [CH. 2011-139]			
Changes definition of “optional sector plan” to “sector plan” and clarifies the purpose of a sector plan.	**163.3164(42)**	**N/A**	None
Prohibits all initiatives or referendums on a development order or comprehensive plan amendment, not just those affecting 5 or fewer parcels.	**163.3167(8)**	**N/A**	Procedural change, No change to Comp Plan needed.
Section 163.3167(8) was changed to 163.3167(5)	**163.3167(8) (Old)**	**PS6.3.7(C)**	Change reference in PS6.3.7(C) from 163.3167(8)to 163.3167(5)
Modifies provisions for preparing the capital improvements element to require the schedule to cover a 5 year period and identify whether projects are either funded or unfunded and given a level of priority funding. Deletes requirement for financial feasibility for capital improvements funded by the developer.	**163.3177(3)(a)4**	**CIE1.1.6**	None, change has already been made.
Modifies requirements for local government annual review of capital improvements element to no longer require transmittal of the adopted amendment to the state land planning agency. Deletes provisions relates to sanctions by the administration commission, adoption of long term concurrency management systems and financial feasibility.	**163.3177(3)(b)**	**CIE 1.1.6, CIE1.1.16**	Change reference 163.3177(3)(b)1 to 163.3177(3)(b) in CIE 1.1.16. Remove financial feasibility requirement in CIE 1.1.6, T1.3.1
2011 [CH. 2011-139]			
Modified to include portions of repealed Rules 9J-5.001 and 9J-5.005, Florida Administrative Code, with respect to the principles, guidelines, standards and strategies to be set forth in required and optional elements of the comprehensive plan and requirements for basing these elements on relevant, appropriate and professionally accepted data.	**163.3177(1)**	**N/A**	Procedural changes/No change to Comp Plan needed. Transportation Element data and analysis are not adopted.
Modifies requirements for the transportation element to include significant portions of repealed Rule 9J-5.019, Florida Administrative code, Addressing circulation of recreational traffic, including bicycle facilities, and airport master plans.	**163.3177(6)(b)**	**T2.2.4, OBJ T3.2, T3.2.2, T3.4.8, OBJ T3.5, T3.5.4, T3.5.5**	Additional policy requirements other than those listed are adopted for multimodal corridors (T2.2.9) Alternative Mobility Area, Horizon West, and Innovation Way. No change to Comp Plan needed.
Deletes requirement for intergovernmental coordination element to provide for recognition of campus master plans and airport master plans.	**163.3177(6)(h)1**	**ICE1.9.8, ICE1.4.18**	Delete statutory references
Modifies requirements for the intergovernmental coordination element to include portions of repealed Rule 9J-5.015, Florida Administrative Code, including coordinating and addressing impacts on adjacent municipalities and coordinating the establishment of level of service standards.	**163.3177(6)(h) 3.b**	**ICE1.2.2, T2.2.7, T2.2.8, T2.2.8.1,T2.3.10, T2.5.5**	No change to Comp Plan needed.
Description of changes to Chapter 163, Part II, F.S.,	**F.S Citation**	**Addressed Where in Comprehensive Plan**	**Amendment Needed to Comprehensive Plan**
2011 [CH. 2011-139]			
This section was rescinded. (Required the public school facilities element to implement a school concurrency program)	**163.3177(12)**	**PS5.2.6**	Remove reference to 163.3177(12)(g)4.
Removed parks and recreation, schools and transportation from the list of public facilities and services subject to the concurrency requirement on a statewide basis. Now Optional. To rescind any existing concurrency provisions on these now optional concurrency facilities requires a comprehensive plan amendment which is not subject to state review.	**163.3180(1)**	**N/A**	None
Modifies concurrency requirements to include portions of repealed Rule 9J-5.0055, Florida Administrative Code, which relate to achieving and maintaining adopted levels of service for a 5-year period, and providing for rescission of any optional concurrency provisions by plan amendment, which is not subject to state review.	**163.3180(1)(a)**	**OBJ T2.1, T2.1.1, OBJ T2.2 and corresponding policies**	Per BCC direction, Orange County continues to maintain a concurrency management system for roadways. No change to Comp Plan needed.
Deletes requirement that professionally accepted techniques be used for measuring levels of service for automobiles, bicycles, pedestrians, transit and trucks.	**163.3180(1)(b)**	**N/A**	None
Establishes concurrency provisions for transportation facilities, which include portions of repealed Rule 9J-5.0055, Florida Administrative Code. Sets forth requirements with respect to adopted level of service standards, including use of professionally accepted studies to evaluate levels of service, achieving and maintaining adopted levels of service standards, and including the projects need to accomplish this in 5-year schedule of capital improvements. Requires coordination with adjacent local governments and setting forth the method to be used in calculating proportionate-share contribution. Defines the term “transportation deficiency.”	**163.3180(5)(a-h)**	**OBJ T2.2 and corresponding policies, OBJ T2.4 and corresponding policies**	Per BCC direction, Orange County continues to maintain a concurrency management system for roadways. No change to Comp Plan needed.
Deleted requirement that local government adopt long term transportation and school concurrency management systems. Process now optional.	**163.3180(9)(a)**	**CIE1.3.17**	Remove statutory references.
Sets forth process for adopting and processing plan amendments according to the "expedited" and "coordinated" review process, the scope of comments to be provided by reviewing agencies, responsibilities of the state land planning agency.	**163.3184(3)**	**N/A**	Procedural change has already been made. No change to Comp Plan needed.
Modifies provision to address the process for adoption of small-scale comprehensive plan amendments, deleting several exceptions. Also Plan Amendments are no longer limited to two times per calendar year and text changes that relate directly to and are adopted simultaneously with small scale FLUM Amendments are now permissible.	**163.3187(1)(a-d)**	**FLU8.8.1**	Procedural change. No change to Comp Plan needed.
Creates new provisions for evaluation and appraisal of comprehensive plan which shift the process from a formal mandated audit report to a less formal review every 7 years of whether changes are needed to meet changes ins tate requirements and notify the state land planning agency of its determination. If the determination is that plan amendments are necessary the local government must prepare and transmit the needed plan amendments for review, pursuant to section 183.3184, within one year.	**163.3191(1-4)**	**FLU1.2.3, FLU1.2.8, T2.3.14, H1.8.3, OBJ FLU8.4**	These policies directed analyses related to deleted EAR requirements and may no longer be needed. / Update the Comprehensive Plan;s overview of GOPs
This section of the Florida Administrative Code prescribing the content of Comprehensive Plans was repealed.	**9J-5.025 FAC**	**PS5.2.6, PS6.1.7, ICE1.1.4, OJB 5.1, OBJ T2.1, OBJ T2.3, C1.4.0, OS1.1.1, OS1.1.3, SM1.4.5**	Remove References to Rule 9J-5, FAC
Description of changes to Chapter 163, Part II, F.S.,	**F.S Citation**	**Addressed Where in Comprehensive Plan**	**Amendment Needed to Comprehensive Plan**

2012 [CH.2012-82, 2012-99, 2012-75]			
Requires the comprehensive plan to be based upon population projections published by either the Office of Economic and Demographic Research or generated by the Local Government. (Removed UFs BEBR)	**163.3177 (1)(f)3**	**N/A**	Procedural change. No change to Comp Plan needed.
Adds developments proposed under 380.06(24) to the list of amendments that must follow the state coordinated review process. Includes: Hospital, electrical transmission line or electrical power plant, addition to an existing sports facility complex	**163.3184 (2)(C)**	**N/A**	Procedural change. No change to Comp Plan needed.
2013 [CH.2013-239, 2013-115, 2013-224]			
Clarifies that an initiative or referendum process in regard to any local comprehensive plan amendment or map amendment is prohibited. However, an initiative or referendum process in regard to any local comprehensive plan amendment or map amendment that affects more than five parcels of land is allowed if it is expressly authorized by specific language in a local government charter that was lawful and in effect on June 1, 2011; a general local government charter provision for an initiative or referendum process is not sufficient.	**163.3167(8)(b)**	**N/A**	Procedural change. No change to Comp Plan needed.
States the intent of the Legislature that initiatives and referendums be prohibited in regard to any local comprehensive plan or map amendment, except as specifically and narrowly permitted in paragraph (b) with regard to local comprehensive plan or map amendments that affect more than five parcels of land.	**163.3167(8)(c)**	**N/A**	Procedural change. No change to Comp Plan needed.
Revises and adds requirements for local governments that continue to implement a transportation concurrency system, whether in the form adopted into the comprehensive plan before the effective date of the Community Planning Act, Chapter 2011-139, Laws of Florida, or as subsequently modified.	**163.3180(5)(h)1**	**OBJ T2.2 and corresponding policies, T2.3.10, OBJ T2.4 and corresponding policies, T2.5.5**	No change to Comp Plan needed.
Adds “development agreement” in the listed land use development permits for which an applicant may satisfy transportation concurrency requirements of the local comprehensive plan, the local government’s concurrency management system and section 380.606 when applicable, if conditions in subsequent sections are met.	**163.3180(5)(h)1.c**	**T2.2.1, T2.2.4, T2.2.5**	Procedural changes/No change to Comp Plan needed. Concurrency management ordinance currently being updated.
Adds language allowing a local government to accept contributions from multiple applicants for a planned improvement if it maintains contributions in a separate account designated for that purpose.	**163.3180(5)(h)1.c.II**	**N/A**	Procedural changes/No change to Comp Plan needed. Concurrency management ordinance currently being updated.
Modifies language to require local governments that continue to implement a transportation concurrency system to “provide the basis upon which the landowners will be assessed a proportionate share of the cost addressing the transportation impacts resulting from a proposed development."	**163.3180(5)(h)1.d**	**T2.2.4, T2.2.5, T2.4.2**	Concurrency management ordinance currently being updated. Ordinance contains proportionate share formula specified in s.163.3180(5)(h)(2)(a), F.S.
Sets provisions for a local manufacturing development program; master development approval for manufacturers. Allows a local government to adopt an ordinance establishing a local manufacturing development program through which the local government may grant master development approval for the development or expansion of sites that are, or are proposed to be, operated by manufacturers at specified locations within the local government’s geographic boundaries.	**163.3252**	**N/A**	N/A
Description of changes to Chapter 163, Part II, F.S.,	**F.S Citation**	**Addressed Where in Comprehensive Plan**	**Amendment Needed to Comprehensive Plan**
2014 [CH.2014-093, 2014-178, 2014-218]			
Provides that after July 1, 2014, a local government may not amend its comprehensive plan, land use map, zoning districts, or land use regulations to conflict with a fuel terminal’s classification as a permitted and allowable use, including an amendment that causes a fuel terminal to be a nonconforming use, structure, or development.	**163.3206(3)**	**N/A**	Being addressed by amendment in 2016-1 cycle.
2015 [CH.2015-30]			
Requires amendments to an adopted sector plan and developments that qualify as developments of regional impact to follow the state coordinated review process in s.163.3184 (4)	**163.3184(2)(C)**	**N/A**	Procedural change. No change to Comp Plan needed.
2016 [HB 1361]			
Decreases the minimum required acreage of sector plans from 15,000 acres to 5,000 acres	**163.3245(1)**	**N/A**	Procedural change. No change to Comp Plan needed.
Provides that a proposed DRI that is consistent with the applicable comprehensive plan is not required to undergo review pursuant to s.163.3184 (4) or s 380.06(30), F.S. This does not apply to amendments to a development order governing an existing DRI.	**163.3184 (2)(C)**	**N/A**	Procedural change. No change to Comp Plan needed.



The following meetings and hearings have been held for this proposal:		
Report/Public Hearing		**Outcome**
✓	Staff Report	Recommend transmittal
✓	LPA Transmittal	December 15, 2016 Recommend Transmittal (7-0)
	BCC Transmittal	January 24, 2017
	Agency Comments	March 2017
	LPA Adoption	April 20, 2017
	BCC Adoption	June 6, 2017

Project/Legal Notice Information
Title: Amendment 2017-1-B-CP-2
Division: Transportation Planning
Request: Text amendments to the Transportation Element and Capital Improvements Element to update Long-Term Transportation Concurrency Management System (LTTCMS) and constrained facilities
Revision: CIE1.8.2; CIE1.8.4; T2.2.3.1

Staff Recommendation

Make a finding of consistency with the Comprehensive Plan, determine that the amendment is in compliance, and recommend the ***TRANSMITTAL*** of Amendment 2017-1-B-CP-2 revising the Capital Improvements Element policy regarding the Long-Term Transportation Concurrency Management System (LTTCMS) and Capital Improvements Element and Transportation Element policies regarding the constrained roadway list.

A. Background

The Orange County Comprehensive Plan includes several means of addressing roadway capacity deficiencies as part of the County's overall framework for long-term planning of the roadway network. Capacity-deficient roadways are classified by the Transportation Element as constrained or backlogged (per Policy T2.2.3) or as part of the Long Term Transportation Concurrency Management System (LTTCMS), as defined in Policies T2.4.1 and CIE1.8.2. A constrained facility cannot be widened, due to location within the boundary of a municipal jurisdiction, existing development and right-of-way limitations, policy barriers, and/or hydrological features. A backlogged facility is not constrained, and improvements are not programmed for construction.

First, the proposed text amendment would update the Capital Improvement Element's identified LTTCMS roadways to remove facilities that no longer have traffic volumes that exceed roadway capacity. This amendment includes removal of several existing roadway segments currently listed within Policy CIE1.8.2, as they now have available capacity due to area transportation network improvements and other factors. These roadways are no longer listed as deficient in the County's Concurrency Management System (CMS), based on recent volume/capacity analysis, and this amendment reflects their current status.

Additionally, this proposed text amendment updates the roadway segmentation in the LTTCMS to match current segmentation in the County's CMS, without changing the overall segment extents now included in the LTTCMS. Other LTTCMS updates would reflect the renaming of corridors in Horizon West, as the roadway network has developed over time. For example, due to the renaming of corridors within the Village of Bridgewater, Lake Hancock Road is now referred to as Summerlake Park Boulevard within the updated LTTCMS table below.

A roadway facility in the LTTCMS reflects Orange County's commitment that level of service (LOS) will be met by the end of Fiscal Year 2022 (Policy CIE1.8.2). This may be achieved by roadway widening projects or operational improvements, such as intersection improvements or turn lanes, as noted in Policy T2.4.4. The County continues to monitor available capacity and planned and programmed improvements to these facilities, including the INVEST in Our Home for Life funding for widening of several LTTCMS facilities.

Finally, the proposed amendment updates the constrained roadway list to update facilities within municipal boundaries and to add Orange Avenue. The segment of Orange Avenue currently is the subject of a corridor study by MetroPlan Orlando and the City of Edgewood, and all segments listed are unlikely to be widened.

B. Policy Amendments

Following are the policy changes proposed by this amendment. The proposed policy changes are shown in ***underline***/~~***strikethrough***~~ format. Staff recommends transmittal of the amendment.

CIE1.8.2 A long-term (10 year) schedule of capital improvements for the following transportation facilities is hereby established for the long-term concurrency management system and is

reflected in the Capital Improvements Element. The adopted level of service will be achieved on these facilities by the end of FY 2022.

Lake Underhill Road	Anderson Street to Conway Road* Conway Road to Semoran Boulevard* Semoran Boulevard to Oxalis Avenue* Oxalis Avenue to Goldenrod Road* ~~Madeira Avenue~~ Goldenrod Road to Madeira Avenue Madeira Avenue to Dean Road ~~Woodbury Road~~ Dean Road to Rouse Road Alafaya Trail to Woodbury Road
Winter Garden-Vineland Road/ Kissimmee Vineland/ SR 535	Osceola County Line to SR 536 / World Center Parkway
Sand Lake Road	Kirkman Road to John Young Parkway* Orange Blossom Trail to Winegard Road Dr. Phillips Boulevard to Turkey Lake Road
Boggy Creek Road	Tradeport Drive to Wetherbee Road* ~~Osceola County Line~~ Wetherbee Road to S. Access Road* S. Access Road to Central Florida Greeneway* Central Florida Greeneway to Osceola County Line
Kennedy Boulevard/ Lake Avenue	Forest City Road to Wymore Road*
Reams Road	~~Lake Hancock Road~~ Summerlake Park Boulevard to Silverlake Park Drive
6th Street (Windermere)	Park Ridge-Gotha Road to ~~Hemple~~ Hempel Avenue*
Alafaya Trail	Lake Underhill Road to Curry Ford Road
Apopka-Vineland Road	Conroy-Windermere Road to Windy Ridge Road
Chase Road	Winter Garden-Vineland Road to Jack Nicklaus Parkway
Chuluota Road	Colonial Drive to Lake Pickett Road ~~Seminole County Line~~ Lake Pickett Road to Seminole County Line
Dean Road	Curry Ford Road to Lake Underhill Road ~~University Boulevard to Seminole County Line~~
Econlockhatchee Trail	Lee Vista Boulevard to Curry Ford Road*

Edgewater Drive	Clarcona Ocoee Road to Beggs Road
Ficquette Road	~~Lake Hancock Road~~ Summerlake Park Boulevard/Reams Road to Winter Garden-Vineland Road
Good Homes Road	White Road to Colonial Drive*
Lake Pickett Road	Colonial Drive to Percival Road ~~Chuluota Road~~ Percival Road to Tanner Road Tanner Road to Chuluota Road
Narcoossee Road	Lake Nona Drive to Beachline Expressway*
S Access Road	Boggy Creek Road to Airport Boulevard*
Taft Vineland Road	Orange Blossom Trail to General Boulevard ~~Orange Avenue~~ General Boulevard to Orange Avenue
Valencia College Lane	Central Florida Greeneway to Goldenrod Road
Vineland Avenue	Winter Garden-Vineland Road to Little Lake Bryan Parkway
Wallace Road	Dr. Phillips Boulevard to Turkey Lake Road*
Welch Road	Rock Springs Road to Thompson Road* ~~Wekiwa Springs Road~~ Thompson Road to Wekiwa Springs Road*
Woodbury Road	Lake Underhill Road to Waterford Lakes Parkway ~~Colonial Drive~~ Waterford Lakes Parkway to Colonial Drive

*Roadway segment located partially or entirely within a municipal jurisdiction. The County will coordinate with the respective municipality to achieve the adopted level of service by 2022.

CIE1.8.4 Constrained and backlogged facilities which do not meet minimum level of service shall be addressed in annual updates to the Capital Improvements Element and the Concurrency Management System, based on available funding. The following roadway facilities are considered constrained:

6th Street (Windermere)	Park Ridge-Gotha Road to Hempel Avenue*
Aloma Avenue	Brewer Avenue to Lakemont Avenue* Semoran Boulevard to Seminole County Line
Hoffner Avenue	Orange Avenue to Conway Road*
Conroy-Windermere Road	Apopka-Vineland Road to Dr. Phillips Boulevard

	Kirkman Road to Millenia Boulevard*
Consulate Drive	Beachline Expressway to Orange Blossom Trail
Curry Ford Road	Econlockhatchee Trail to Central Florida Greeneway
Michigan Avenue	Bumby Avenue to Crystal Lake Drive*
Orange Avenue	Hansel Avenue North to Hansel Avenue South*
Turkey Lake Road	Vineland Road to Conroy-Windermere Road* Central Florida Parkway to Sand Lake Road
University Boulevard	Dean Road to Alafaya Trail
John Young Parkway	Colonial Drive to Princeton Street* Town Center Boulevard to Beachline Expressway
Clay Street	Par Avenue to Fairbanks Avenue*
Forsyth Road	Colonial Drive to University Boulevard
N. Tanner Road	Lake Pickett Road to Seminole County Line
Winter Garden-Vineland Road	Interstate 4 to Apopka-Vineland Road* Buena Vista Drive to Perrihouse Acres Lane*

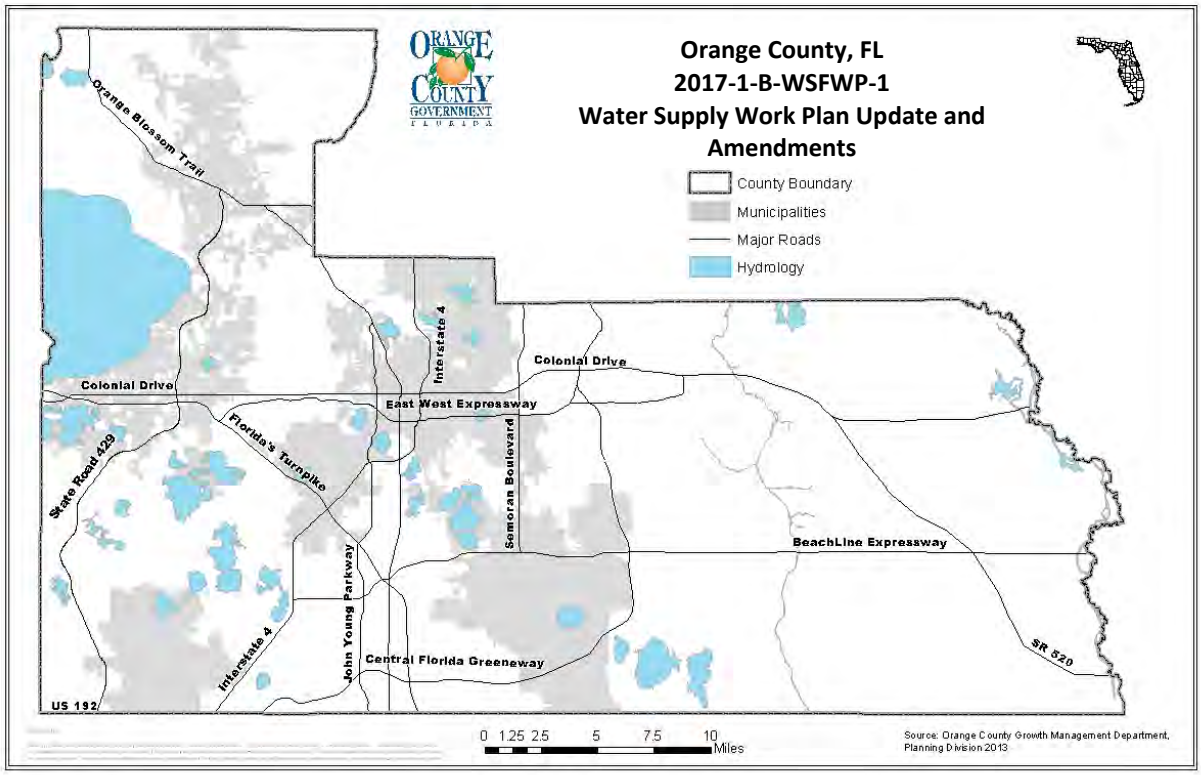
*Roadway segments that are under state or municipal jurisdiction or located within a municipal jurisdiction as described in Transportation Policy T2.2.3. The County will coordinate with the respective agencies regarding projects to improve levels of service on these facilities.

T2.2.3.1 Constrained and backlogged facilities shall be included in annual updates to the Capital Improvements Element and the Concurrency Management System. The following roadway facilities are considered constrained:

6th Street (Windermere)	Park Ridge-Gotha Road to Hempel Avenue*

Aloma Avenue	Brewer Avenue to Lakemont Avenue* Semoran Boulevard to Seminole County Line
Hoffner Avenue	Orange Avenue to Conway Road*
Conroy-Windermere Road	Apopka-Vineland Road to Dr. Phillips Boulevard Kirkman Road to Millenia Boulevard*
Consulate Drive	Beachline Expressway to Orange Blossom Trail
Curry Ford Road	Econlockhatchee Trail to Central Florida Greeneway
Michigan Avenue	Bumby Avenue to Crystal Lake Drive*
Orange Avenue	Hansel Avenue North to Hansel Avenue South*
Turkey Lake Road	Vineland Road to Conroy-Windermere Road* Central Florida Parkway to Sand Lake Road
University Boulevard	Dean Road to Alafaya Trail
John Young Parkway	Colonial Drive to Princeton Street* Town Center Boulevard to Beachline Expressway
Clay Street	Par Avenue to Fairbanks Avenue*
Forsyth Road	Colonial Drive to University Boulevard
N. Tanner Road	Lake Pickett Road to Seminole County Line
Winter Garden-Vineland Road	Interstate 4 to Apopka-Vineland Road* Buena Vista Drive to Perrihouse Acres Lane*

*Roadway segments that are under state or municipal jurisdiction or located within a municipal jurisdiction as described in Transportation Policy T2.2.3. The County will coordinate with the respective agencies regarding projects to improve levels of service on these facilities.



The following meetings and hearings have been held for this proposal:		
Report/Public Hearing		**Outcome**
✓	Staff Report	Recommend Transmittal
✓	LPA Transmittal	December 15, 2016 Recommend Transmittal (7-0)
	BCC Transmittal	January 24, 2017
	Agency Comments	April 2017
	LPA Adoption	April 20, 2017
	BCC Adoption	May, 201

Project/Legal Notice Information
Title: Update to the 10-Year Water Supply Facilities Work Plan, a document incorporated into the Potable Water, Wastewater and Reclaimed Water Element of the Comprehensive Plan that identifies alternative and traditional water supply development projects and conservation and reuse activities needed to meet the projected future water demands.
Divisions: Planning, Utilities
Request: N/A
Revision: C1.11.11, PW1.1.1, PW1.2.5, PW1.2.11, OBJ PW3.1, PW3.1.1, PW3.1.6, PW3.1.7, PW3.1.8

Staff Recommendation

Make a finding of consistency with the Comprehensive Plan, determine that the Orange County Water Supply Facilities Work Plan Fiscal Year 2017/2018 to 2027/2028 and related text amendments are in compliance, and recommend **TRANSMITTAL** of **2017-1-B-WSFWP-1.**

A. Background

The 2002 Florida State Legislature expanded the local government comprehensive plan requirements to strengthen coordination of regional water supply planning and local land use planning. The 2004 and 2005 Legislatures modified and further strengthened the requirements. One of the most significant requirements of this legislation is that each local government must adopt long-range Water Supply Facilities Work Plan (Work Plan) identifying needed water supply facilities for at least a 10-year planning period. The Work Plan ensures Orange County's ability to provide potable water to meet the needs of the existing and future population of the service area during the planning period. The legislation also requires that the Work Plan be directly linked with the appropriate Water Management Districts' Regional Water Supply Plans. In order to accommodate this Work Plan, several elements of the Comprehensive Policy Plan require amending. The elements affected are the Future Land Use, Potable Water, Wastewater, Aquifer Recharge, Conservation, Intergovernmental Coordination, and Capital Improvements.

The current 10-Year Water Supply Facilities Work Plan was last adopted by the Board of County Commissioners and covers the FY 2008 - FY 2018 period. Per section 163.3177(6)(c)3, F.S., each local government's 10-Year Water Supply Facilities Work Plan must be updated within 18 months after the governing board of a water management district approved an updated regional water supply plan. The 10-Year Water Supply Facilities Work Plan must identify alternative and traditional water supply development projects, and conservation and reuse activities needed to meet the projected future water demands. As of November 2015, the governing boards of the St. Johns River Water Management District, South Florida Water management District, and Southwest Florida Water Management District all formally adopted a new Central Florida Water Initiative Regional Water Supply Plan (CFWI RWSP) that includes the Orange County area. Therefore, Orange County must update the 10-Year Water Supply Facilities Work Plan. The CFWI RWSP contains an assessment of projected water demands and potential sources of water to meet these demands through 2035. It is intended to address the water supply related issues of the region and provide a framework to meet the water needs of the CFWI RWSP Area through 2035.

This amendment includes various text revisions to the Future Land Use, Potable Water, Wastewater, Conservation, Aquifer Recharge, Capital Improvements, and Intergovernmental Coordination elements' Goals, Objectives and Policies (GOPs) in support of the Work Plan.

B. Policy Amendments

Following are the policy changes proposed by this amendment. The proposed revisions are shown in *~~strikethrough~~/underline* format. Staff recommends adoption of this amendment.

C1.11.11 Orange County will continue to implement the water conservation efforts identified in the Work Plan. These efforts include:

- Continued staffing of the County's water conservation program and extensive public education program;

- Continued enforcement of ordinances and policies that limit irrigation days and hours, encourage Florida Friendly landscaping, require the use of ultra-low volume fixtures, and require rain sensor devices;

- Continued water conservation practices, such as participation in Florida Friendly Landscape workshops, water use audits, toilet retrofit program, showerhead exchange program, efficient irrigation nozzle replacement program, distribution system leak program, presentation and events, and participation in public awareness campaigns;

- Continued use of a tiered inclined block water conservation rate structure, including rate increases;

- Further assessment of existing water conservation program effectiveness and development of new program initiatives; and,

- Periodic review and update of existing water conservation and landscaping ordinances to promote additional improvements in water conservation.

PW1.1.1 Orange County shall review the Master Plan every five years and shall review and update the Water Supply Facilities Work Plan (Work Plan) within 18 months of the update to the Regional Water Supply Plans, which are required to be updated at least every five years, to identify system deficiencies and, if necessary, implement a plan for correction. The Work Plan (~~Orange County Water Supply Facilities Work Plan, 2008~~ Orange County Water Supply Facilities Work Plan, Fiscal Year 2017/2018 to 2027/2028) is herein adopted, by reference, as data, analysis and supporting documentation for the element.

PW1.2.5 When central water service from Orange County Utilities is required for development, the level of service standard shall be 275 gallons per day (average daily flow) per Equivalent Residential Unit. Flow demands for commercial, industrial or other special developments differing from the flow values established by the serving utility shall be established from existing records or by estimated projections, using the best available data. These levels of service shall also be applied for planning purposes only to review Developments of Regional Impact (DRI) and Comprehensive Plan Future Land Use Map Amendments.

~~A. Timing of Future Treatment Facility Expansion. Orange County Utilities shall ensure that sufficient water treatment facility capacity is maintained. Once the maximum daily flow (MDF) equals or exceeds 75% of a system's permitted capacity or once the sum of current MDF plus future commercial MDF equals or exceeds 90% of permitted capacity, a report shall be presented to the Florida Department of Environmental Protection (FDEP) on the need to increase capacity and, if capacity needs to be increased, the method of increase, estimated cost and timing. The capacity report shall identify recommended improvements, improvement costs and the timing of such improvements. Facilities scheduled for design and construction, as identified by the capacity report, shall be considered for inclusion into Orange County's Five Year and Ten Year Capital Improvement Program. Facilities approaching build out shall be exempt from this requirement. Facilities approaching build out are defined to be built to the ultimate capacity required to accommodate all projected growth within the system's service area. (Added 12/00, Ord. 00-25, Policy 1.2.5-r)~~

A. The LOS standard OCU has adopted for planning and engineering of its water supply facilities is based on the Florida Department of Environmental Protection's (FDEP's) capacity analysis standards. OCU evaluates the need for water supply facility expansion over a ten year planning horizon if observed maximum day water demands are equal to or greater than 75% of the total permitted maximum day operating capacity of the water supply facilities. If the observed maximum day demand exceeds 75% of the total permitted maximum day operating capacity of the water supply facility, then OCU will be required to submit a Capacity Analysis Report to the FDEP in accordance with the requirements of Section 62-555.348 of the Florida Administrative Code (FAC).

   In addition, OCU has developed WSF and Water Reclamation Facility (WRF) treatment capacity percentage based expansion criteria and schedule to address the requirements of Sections 62-555.348 and 62-600.405(8) of the FAC. The expansion criteria and schedule are as follows:

- WSF: When the MDD equals or exceeds 75% of maximum day treatment capacity, submit capacity analysis report.
- WRF: When the maximum 3-month ADF exceeds 50% of the permitted treatment, submit capacity analysis report.
- WSF/WRF: When the MDD / maximum 3-month ADF meets or exceeds 80% of the permitted treatment capacity, start request for proposals for consultant services for preliminary and final design.
- WSF/WRF: When the MDD / maximum 3-month ADF meets or exceeds 85% of the permitted treatment capacity, begin final design.
- WSF/WRF: When the MDD / maximum 3-month ADF meets or exceeds 90% of the permitted treatment capacity, the expansion needs to be in construction.

PW1.2.11 When central water service from private utilities or municipalities is required for development in unincorporated Orange County, the level of service standard shall be as listed below. (Added 12/00, Ord. 00-25)

~~**UTILITY NAME**~~	~~**LOS**~~
~~City of Apopka~~	
~~Residential~~ ~~Nonresidential~~	~~227 gallons per day (gpd)/capita~~ ~~200 per 1,000 square feet~~
~~City of Casselberry~~	~~140 gpd/capita~~
~~City of Eatonville~~	~~63 gpd/capita~~
~~City of Kissimmee~~	~~114.4 gpd/capita~~
~~City of Maitland~~	~~350 gpd/equivalent residential connection (erc)~~
~~City of Mount Dora~~	~~135 gpd/capita~~
~~Town of Oakland~~	~~300 gpd/equivalent residential unit (eru)~~
~~City of Ocoee~~	~~300 gpd/ERC~~
~~Winter Pak Utilities~~	~~215 gpd/capita~~

~~City of Winter Garden~~	~~350 gpd/eru~~	
~~Orlando Utilities Commission~~		
~~Land Use~~	~~Unit~~	~~Gallons/Day~~
~~Single Family Residential~~	~~Dwelling~~	~~360~~
~~Multifamily Residential~~	~~Dwelling~~	~~259~~
~~Office~~	~~Square Foot~~	~~0.15~~
~~Commercial~~	~~Square Foot~~	~~0.13~~
~~Hotel~~	~~Rooms~~	~~187~~
~~Industrial~~	~~Square Foot~~	~~0.22~~
~~Government~~	~~Square Foot~~	~~0.15~~
~~Hospital~~	~~Square Foot~~	~~0.22~~
~~Reedy Creek Utilities~~		
~~Land Use~~	~~Unit~~	~~Gallons/Day~~
~~Residential~~	~~dwelling~~	~~350~~
~~**UTILITY NAME**~~	~~**LOS**~~	
~~Hotel (general)~~	~~rooms~~	~~200~~
~~Luxury/Deluxe~~	~~rooms~~	~~250~~
~~First Class~~	~~rooms~~	~~200~~
~~Moderate/Economy~~	~~rooms~~	~~150~~
~~Other Resort~~	~~Unit~~	~~300~~
~~Support/Office~~	~~square foot~~	~~0.25~~

~~Retail/Commercial~~	~~square foot~~	~~0.3~~
~~Restaurant~~	~~seat~~	~~25~~
~~Theme Parks (general)~~	~~guest~~	~~80~~
~~Theme Parks (water)~~	~~guest~~	~~170~~
~~Central Florida Research Park~~	~~Not available~~	
~~East Central Florida Services Inc.1~~	~~Not available~~	
~~Florida Water Service~~	~~Not available~~	
~~Lake Ola Homeowners~~	~~Not available~~	
~~Park Manor Utilities~~	~~300 gpd/eru~~	
~~Southern States Utilities~~	~~200 gpd/eru~~	
~~Taft Water Association~~	~~140 gpd/capita~~	
~~Utilities Inc. of Florida (Wedgefield Utilities Inc.)~~	~~615 gpd/eru~~	
~~Zellwood Water Users~~	~~Not available~~	

UTILITY NAME	**LOS**
City of Apopka	177 gallons per day (gpd)/capita
City of Casselberry	100 gpd/capita
City of Eatonville	100 GPD/ capita
City of Kissimmee	96 gpd/capita residential
	96 gpd/capita residential
	120 gpd per room hotel/motel
	0.1 gpd per gross square foot of floor area

	commercial
	10 gpd per student public or private schools
UTILITY NAME	**LOS**
City of Maitland	350 gpd/equivalent residential connection (erc)
City of Mount Dora	135 gpd/capita
Town of Oakland	119 gpd/capita
City of Ocoee	300 gpd/ERC
Winter Pak Utilities	150 gpd/capita average usage
City of Winter Garden	Not Available
Orlando Utilities Commission	325 g/dwelling unit/day without reclaimed or 160 g/du/d with reclaimed
Land Use	
Single Family Residential	325 g/du/day without reclaimed or 160 g/du/d with
Multifamily Residential	200 g/du/d
Office	0.15 g/sqft/d
Commercial	0.13 g/sqft/d
Hotel	187 g/rm/d
Industrial	0.22 g/sqft/d
Government	0.15 g/sqft/d
Hospital	0.22 g/sqft/d
Reedy Creek Utilities	Not Available
Central Florida Research Park	Not Available
East Central Florida Services Inc.	Not Available
Florida Water Service	Not Available
Lake Ola Homeowners	Not Available
Park Manor Utilities	Not Available
Southern States Utilities	Not Available
Taft Water Association	0.44 MGD
Wedgefield Utilities Inc.	356 gpd/capita
Zellwood Water Users	Not Available

OBJ PW3.1 Orange County shall develop and maintain a Water Supply Facilities Work Plan (Work Plan) for at least a 10-year planning period addressing traditional and alternative water

supply sources, facilities, and issues necessary to serve existing and future development within the jurisdiction of Orange County.

The Work Plan is developed based on a long term strategy that incorporates the following components:

- Continue to implement and expand effective water conservation measures
- Increase rates for potable and non-potable water used for irrigation to encourage greater conservation
- Optimize the efficient use of fresh groundwater from the Floridian aquifer
- Interconnect systems to create regional flexibilities and efficiencies
- Maximize the beneficial use of reclaimed water
- Continue aquifer recharge projects in areas of greatest benefit
- Expand reuse distribution facilities for irrigation and other beneficial uses
- Continue to develop additional alternative water supply sources such as surface water for potable supply and non-potable augmentation
- Investigate additional management and supply options such as ~~aquifer storage and recovery,~~ reservoir storage, and stormwater reuse
- Utilize aquifer storage and recovery for supply management

PW3.1.1 The Work Plan shall be consistent with the potable water level-of-service (LOS) standards established in Policies PW1.2.5, ~~PW1.2.5.1~~ and PW1.2.11.

PW3.1.6 Orange County's capacity related strategy and capital improvement projects for traditional water supply facilities are summarized below consistent with the Work Plan. These projects and project components, including estimated costs and funding sources, are adopted in the Capital Improvements Element as part of the 5-year schedule of capital improvements. Project numbers are listed as appropriate for cross reference to Index by Financial Unit in the capital improvements schedule.

- ~~Western Regional WSF/Wellfield Phase III (treatment plant expansion and new Lower Floridan aquifer wells) (CIS 1532).~~
- ~~Horizon West WSF/Wellfield (new treatment plant and wells) (CIS 1506).~~
- ~~Malcolm Road WSF/Wellfield (new treatment plant and wells) (CIS 1506).~~
- ~~Southern Regional WSF/Wellfield, Phase I (new plant and wells) (CIS 1498).~~

~~• Eastern Regional WSF, Phases IIB and III (plant and wellfield expansions) (CIS 1497).~~

~~• East Service Area Potable Water Storage and Repump Facility (CIS 1498).~~

~~• East Service Area-South Service Area Water Transmission Main Interconnection (CIS 1450 and 1508).~~

- Oak Meadows Wellfield Expansion (Permitted Well OM-5), currently in the bidding phase, will include one new Lower Floridan aquifer well at the facility with a capacity of 1.8 mgd, AADF. This well is planned for completion by 2017. (West Service Area, CIS 1532-14)
- Western Regional WSF/Wellfield Phase IIIB Expansion, currently in design and planned for completion by 2023, may increase treatment capacity by another 7.0 mgd, AADF and involves one new Lower Floridan aquifer well (well WR-11, already permitted) with a capacity of 2.2 mgd, AADF, to be completed by 2018. (West Service Area, CIS 1532)
- Malcolm Road WSF/Wellfield, currently in design (treatment facility) and construction (wells), includes a new treatment plant and Floridan aquifer wellfield, each with capacity of 4.0 mgd, AADF. Wells are planned for completion by 2017, and treatment plant by 2019. (Southwest Service Area, CIS 1557)
- Eastern Regional WSF Phase IIIB Expansion, with final design and construction planned for completion in February 2017 and July 2019, respectively, increases treatment capacity from 50 mgd to 62.4 mgd AADF. (East Service Area, CIS 1554-02)
- East Service Area-South Service Area Water Transmission Main Interconnection, planned to be constructed by 2019, will increase system flexibility and reliability. (CIS 1450 and 1508)
- I-Drive Booster Pump Station, currently in the bidding phase and planned for completion in 2018, will eventually transmit water from the Cypress Lake brackish groundwater AWS project. (CIS 1498-10).

PW3.1.7 Development of Orange County's reclaimed water system is a critical component of the County's water supply strategy. Orange County's capacity-related strategy and capital improvements projects for water reclamation and reuse facilities are summarized below consistent with the Work Plan. These projects and project components, including estimated costs and funding sources, are adopted in the County's Capital Improvements Element as part

of the 5-year schedule of capital improvements. Project numbers are listed as appropriate for cross reference to Index by Financial Unit in the capital improvements schedule.

~~• Northwest WRF Phase III Expansion (treatment capacity increase) (CIS 1435).~~

~~• Northwest WRF RIB System Expansion (CIS 1496).~~

~~• Northwest WRF Reclaimed Water Project (reclaimed water storage, pumping, distribution and capacity for reuse) (CIS 1496).~~

~~• Southwest WRF, Phases I and II (new treatment plant, outside 5-year schedule) (CIS 1507)~~

~~• Southwest Service Area Reclaimed Water Reuse System (reuse distribution system) (CIS 1542).~~

~~• South WRF, Phase V Expansion (treatment capacity expansion) (CIS 1555).~~

~~• South Service Area Reclaimed Water and Reuse System Expansion (CIS 1411).~~

~~• Eastern WRF, Phases IVC, V, and Re-Rating (treatment capacity expansions) (CIS 1538).~~

~~• Eastern Regional Reclaimed Water Distribution System (joint project with the City of Orlando).~~

~~• East Service Area (a.k.a. Southeastern, Eastern WRF) Reclaimed Water Reuse System (expansion of reclaimed water pumping, storage, and distribution system facilities) (CIS 1483).~~

- Northwest WRF Phase IIIB Expansion, planned to be constructed by 2025, will increase the capacity of the chlorine contact chamber, increasing the overall treatment capacity of the facility by 1.0 mgd, AADF. (West Service Area, CIS 1435)
- Northwest WRF Reclaimed Main Extension to Apopka, planned to be constructed by 2017, and expected to add 2.5 mgd to 3.0 mgd, AADF to the existing capacity of the reuse system in the West Service Area,. (West Service Area, CIS 1435)
- Southwest WRF Phase I, planned to be constructed by 2025, for a total treatment capacity of 5.0 mgd, AADF. Further phases are planned to provide additional capacity and to receive flow diversion from the South Service Area. (Southwest Service Area, CIS 1507)
- South WRF Phase V Expansion, planned completion of March 2019, will increase treatment capacity by 13 mgd from 43.0 to 56.0 mgd, AADF. (South Service Area, CIS 1555-01)

- Eastern WRF Phase V Improvements, planned for completion by May 2018, will increase treatment capacity from 19.0 to 24.0 mgd, AADF. (East Service Area, CIS 1538)
- Eastern WRF Phase VI Expansion, planned to be completed by 2027, will increase treatment capacity from 24.0 to 29.0 mgd, AADF. (East Service Area, CIS 1538)
- Southeast Reclaimed Water System Expansion Project, will be constructed throughout the planning horizon to distribute reclaimed water to meet reuse irrigation demands in the East Service Area, estimated to be as much as 9 mgd, AADF by 2020. (CIS 1483, CUP #3317 Condition 26)

PW3.1.8 Development of alternative water supply projects is a critical component of the County's water supply strategy and necessary to meet future water demands. Orange County's alternative water supply projects including surface water capital improvement projects are summarized below consistent with the Work Plan. These projects and project components, including estimated costs and funding sources are adopted in the County's Capital Improvements Element as part of the 5-year schedule of capital improvements. Project numbers are listed as appropriate for cross reference to Index by Financial Unit in the capital improvements schedule.

~~• St. Johns River/Taylor Creek Reservoir Water Supply Project (new regional, cooperative surface water supply) (CIS 1550). Funding for this alternative water supply project will be shared by Orange County, the other five project utility partners, the SJRWMD, and the SFWMD.~~

~~• Kissimmee River Basin Lake Tohopekaliga Potable Water Supply Project (new regional, cooperative surface water supply at the conceptual phase; outside 5 year schedule of capital improvements). Funding for this alternative water supply project will be shared with other central Florida potable water utility partners, with additional cooperative funding from the state (CIS 1550).~~

~~• St. Johns River at SR 46 Water Supply Project (conceptual surface water supply project, outside Work Plan planning horizon).~~

~~• Aquifer Storage and Recovery (ASR) Pilot Well Project, a cooperative study with the SJRWMD (CIS 1550).~~

- Cypress Lake Wellfield, a collaborative AWS STOPR project, will provide OCU with a 9 mgd, AADF finished water potable supply capacity increase. Construction of this project is currently projected to be completed by approximately 2023. (CIS 1550-08, CFWI RWSP Projects 3, 4 and 5).

- St. Johns River/Taylor Creek Reservoir Water Supply Project, an estimated 50 mgd, AADF surface water potable supply project in 2030 (CIS 1550; CUP #3317 Condition 23; WUP # 48-00134-W Condition 25; CFWI RWSP Project 126), peak production of 54 mgd finished water. OCU is participating collaboratively in this regional water supply development project with five other central Florida potable water suppliers: OUC, East Central Florida Services, and Tohopekaliga Water Authority (who all provide some water in unincorporated Orange County); and the City of Cocoa and City of Titusville. The exact supply volume distribution among suppliers is yet to be finalized, but it is anticipated that OCU's share would be at least 10 mgd, AADF.

ORANGE COUNTY
WATER SUPPLY FACILITIES WORK PLAN
FISCAL YEAR 2017/2018 TO 2027/2028

Prepared for:

Florida Department of Economic Opportunity

Prepared by:

Orange County Growth Management Department
Planning Division
201 South Rosalind Avenue, 2nd Floor
Orlando, Florida 32802

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ORANGE COUNTY
WATER SUPPLY FACILITIES WORK PLAN
Fiscal Year 2017/2018 to 2027/2028

1 INTRODUCTION

1.1 Background

In 1997, the State Legislature amended the Florida Water Resources Act (Chapter 373, Florida Statutes [F.S.]) to require the five water management districts to initiate regional water supply planning. Regional plans were required in all areas of the state where reasonably anticipated sources of water were deemed inadequate to meet 20-year demands. In November of 2015, the St. Johns River Water Management District (SJRWMD), South Florida Water Management District (SFWMD) and Southwest Florida Water Management District each adopted the Central Florida Water Initiative (CFWI) Regional Water Supply Plan (RWSP), 2015. The CFWI RWSP 2015 was a collaborative effort between the water management districts and stakeholders to meet the existing and future water supply needs and potential sources of Central Florida through 2035, while focusing on sustainability through effective planning, development, and management of water as a precious resource.

Historically, water supply and land use planning in Florida were handled mostly as separate issues. As potential limitations on the continued use of traditional water supplies became increasingly apparent, the Legislature enacted bills in 2002, 2004, and 2005 to more effectively address the state's water supply needs by improving the coordination between local land use planning and water supply planning. Significant changes were made to Chapters 163 and 373, F.S., to strengthen the statutory linkage between the regional water supply plans prepared by the water management districts and the comprehensive plans prepared by the local governments.

A major component of these statutory revisions was the requirement for local governments subject to a regional water supply plan to prepare a 10-year water supply facilities work plan and to incorporate the work plan into the local comprehensive plan. Orange County falls within both the SJRWMD and the SFWMD and therefore must adopt its water supply facilities work plan within 18 months after the latter of the two water management districts approves its regional water supply plan. The work plan must address building of public, private, and regional water supply facilities, including the development of alternative water supplies, identified as necessary to serve existing and projected development, for at least a 10-year planning period, within Orange County's jurisdiction (i.e., unincorporated Orange County). Amendment of the County's comprehensive plan must also:

- Identify and incorporate the alternative water supply project(s) selected by the local government from projects identified in the updated regional water supply plan(s), or the alternative project(s) proposed by the local government [s. 163.3177(6)(c), F.S.]
- Identify the traditional and alternative water supply development projects and the conservation and reuse programs necessary to meet current and future water use demands within the local government's jurisdiction [s. 163.3177(6)(c), F.S.]

1.2 Purpose

This document represents the water supply facilities work plan (Work Plan) for Orange County (the County), as required by Chapter 163, F.S. This Work Plan includes a water supply summary and subsequent capital improvement plan to ensure that adequate water supplies and public facilities are available to serve the water supply demands of the County's growing population. An amendment to the County's Comprehensive Policy Plan (CPP) will incorporate this Work Plan as part of the Potable Water element, and additional revisions to other related CPP elements (e.g., Capital Improvement, Wastewater, Conservation, Aquifer Recharge, and Intergovernmental Coordination) will be recommended for consistency with the Work Plan. Policies regarding the specific Work Plan components can be found in PW3.1.1 through PW3.2.4 within the CPP. The Work Plan is intended to be a dynamic document, updated by the County every 5 years, within 18 months after the water management district governing boards approve updated regional water supply plans [s. 163.3177(6)(c), F.S.].

The data and analysis section of the Work Plan includes:

- An inventory of potable and reclaimed water service providers within the jurisdiction of Orange County
- The potable and reclaimed water service areas associated with the above providers
- A summary of existing facilities, design capacities, and permit allocations
- A summary of existing demands and a 10-year projection of anticipated total water demands for the major potable water providers
- A summary of existing flows and a 10-year projection of anticipated reclaimed water supply from each major reclaimed water provider
- An assessment of future needs within the planning horizon, via a facility capacity analysis noting capacity surpluses and deficits
- Development of a future water supply strategy to reconcile needs with available resources, including identification of planned traditional and alternative sources of water
- Identification of current and planned conservation and reuse practices and regulations

Based on the capacity analysis and assessment of future needs, the capital improvement projects identified to implement the timely construction of public, private, and regional water supply facilities should overcome projected deficits within the planning horizon. These key capital improvement projects are updated by Orange County on an annual basis as part of the 5-year schedule of capital improvements included in the Capital Improvement Element of the County's CPP.

2 WATER SUPPLY SUMMARY

2.1 Orange County Political Jurisdictions

Orange County covers an area of approximately 1,000 square miles in east-central Florida and is home to an estimated 1.24 million residents. It is comprised of the unincorporated portion of the County which is under the jurisdiction of Orange County government, and the following 13 municipalities (**Figure 1**):

- City of Apopka
- City of Bay Lake
- City of Belle Isle
- Town of Eatonville
- City of Edgewood
- City of Lake Buena Vista
- City of Maitland
- Town of Oakland
- City of Ocoee
- City of Orlando
- Town of Windermere
- City of Winter Garden
- City of Winter Park

In addition to the above-listed municipalities, a special taxing district within Orange County, the Reedy Creek Improvement District (RCID), also has independent governmental jurisdiction. Established in 1967, RCID is the regulating authority for the *Walt Disney World* Resort and surrounding areas. RCID's jurisdictional boundary (**Figure 1**) covers approximately 18,900 acres in southwest Orange County, including the cities of Lake Buena Vista and Bay Lake and some additional areas of Orange County, plus 6,100 acres in Osceola County. The enabling legislation for the RCID provided it with many of the responsibilities of a city or county, including providing utilities, drainage, flood control, waste collection, roads and bridges, fire protection, land use planning, and enforcement of building codes.

2.2 Potable Water Service Providers in Unincorporated Orange County

Potable water service in unincorporated Orange County is currently provided by the following significant public and private water supply utilities:

- Orange County Utilities
- Orlando Utilities Commission
- Apopka (City of)
- East Central Florida Services
- FL Gov. Utility Authority
- Mount Dora (City of)
- Orange County Research and
- Development Authority
- (Central Florida Research Park)
- Reedy Creek Improvement District
- Taft Water Association
- Tohopekaliga Water Authority
- University of Central Florida
- Wedgefield Utilities, Inc.
- Winter Garden (City of)
- Winter Park (City of)
- Zellwood Water Users

The potable water service areas within the County associated with the above-listed utility providers are depicted in attached **Figure 2**. While Orlando Utilities Commission (OUC) has a greater permitted capacity to supply potable water to residents within Orange County's county line, mainly within the City of Orlando, Orange County Utilities (OCU), a department of the Orange County government, is the largest potable water service provider to unincorporated

Orange County. Together, OCU and OUC account for the majority of the potable water provided to customers in unincorporated Orange County.

Five other significant utilities not on the above list—the City of Casselberry, the City of Maitland, the Town of Oakland, Utilities Inc. (Town of Windermere), and the Town of Eatonville—provide potable water service within Orange County; however, their water service areas remain within their jurisdictional boundaries and do not contribute to the supply within unincorporated Orange County. For this reason, it is not necessary to address these providers as part of Orange County's Work Plan.

There are other utilities that provide limited potable water service within unincorporated Orange County. These providers, however, have no potential for growth within their service areas or provide small quantities relative to the other suppliers and are therefore not addressed explicitly in this Work Plan. Reedy Creek Energy Services (the utility provider for RCID) is a significant water supplier, but provides less than 0.2 million gallons per day (mgd) of potable water to two small developments in unincorporated Orange County.

The 16 potable water service providers for unincorporated Orange County, as listed above, operate numerous water supply facilities, which are described in detail in attached **Appendix A**. While alternative water supply sources are currently being explored, these potable water providers currently use Floridan aquifer groundwater as their primary source of water supply. As summarized in **Appendix A**, Orange County maintains territorial/joint planning area agreements with the other public and private water providers within the County to define service area boundaries and avoid duplication of service. When a proposed development in unincorporated Orange County requests potable water service, the Orange County Planning Division coordinates extensively with the appropriate provider(s) to ensure that sources and facilities will be available concurrent with the development.

Attached **Table 1** summarizes the existing capacities of the water supply facilities—both source facilities (e.g., wells) and finished water facilities (i.e., treatment plants)—operated by the two main potable water suppliers in unincorporated Orange County. Source and treatment facility capacity information for the other (minor) water suppliers was not readily available and therefore not included explicitly in **Table 1**. Similar supplier-specific information can instead be found in **Appendix A** and **Appendix B**. In addition, **Table 2** presents a summary of existing consumptive or water use permit allocations associated with each of the 16 potable water providers in Orange County.

2.3 Reclaimed Water Service Providers in Unincorporated Orange County

Twelve utilities that provide potable water also provide wastewater treatment services within parts of unincorporated Orange County. However, these service boundaries are not entirely congruent, nor do all of them provide reclaimed water to customers within unincorporated Orange County. For the purposes of this report, only those utilities providing reclaimed water will be of interest. Reclaimed water (reuse distribution) services in unincorporated Orange County are currently provided by the following significant public and private wastewater utilities:

- Orange County Utilities
- Orlando (City of)
- Apopka (City of)
- Mount Dora (City of)
- Ocoee (City of)
- Wedgefield Utilities, Inc.
- Winter Garden (City of)

The reclaimed water service areas within the County associated with the above-listed utility providers are depicted in attached **Figure 3**. OCU is the largest provider of reclaimed water service within unincorporated Orange County. The City of Orlando also provides a significant amount of reclaimed water service within the unincorporated area. OCU and the City of Orlando jointly represent the majority of wastewater/reclaimed water service in unincorporated Orange County.

One other large utility, Reedy Creek Energy Services (RCES), provides reclaimed water service within Orange County; however, the RCES reclaimed water service area remains within the RCID jurisdictional boundary and contributes a small amount to the reuse supply within unincorporated Orange County. For this reason, this reuse provider is not addressed as part of Orange County's Work Plan.

The seven significant reclaimed water service providers in unincorporated Orange County listed above operate numerous water reclamation facilities, which are described in detail in attached **Appendix B**. As summarized in the appendix, Orange County maintains territorial agreements with the other public and private wastewater/reclaimed water providers within the County to define service area boundaries and avoid duplication of service. When a proposed unincorporated Orange County development requests wastewater or reclaimed water service, the Orange County Planning Division coordinates with the appropriate provider(s) to ensure that sources and facilities will be available concurrent with the development.

Attached **Table 3** summarizes the existing capacities—both treatment capacity and reuse system capacity—and projected flows of the water reclamation facilities operated by OCU and the City of Orlando, the two main reclaimed water service providers in unincorporated Orange County.

2.4 Demand Projections

The population of Orange County is anticipated to increase by roughly 30 percent between 2015 and 2030 (CFWI RWSP 2015). Due to the amount of developable land, the largest portion of this increase is expected to occur within the unincorporated portion of the County. Information on the County's population projections—both for the entire County and for only the unincorporated areas—is included in the data and analysis provided in the Future Land Use Element.

The existing and projected future population within unincorporated Orange County has an associated total water demand; however, this demand is met by a complex combination of supply from numerous public suppliers, along with a significant volume of self-supply (e.g., domestic wells, pond withdrawals, etc.). Thus, for the purposes of this report, public supply will be the focus, including potable and reclaimed water, as previously mentioned. A large percentage of the data compiled in this report, such as demand projections, has been adapted from the recently implemented CFWI RWSP 2015. The Bureau of Economic and Business Research (BEBR)

medium population projection values were taken from the CFWI RWSP 2015 and used for this report, as these are moderate estimates. The full list of public supply (potable) and reuse (reclaimed) projections can be found in Table A-1 and Table E-1, respectively, of the CFWI RWSP 2015 Volume 1 Appendix.

Each utility provider has its own territorial service area, which most often includes areas within both unincorporated Orange County and within municipal jurisdictional areas. The providers in Orange County each develop demand forecasts for their individual service areas and obtain consumptive use permits from the water management districts to address those demands. Although each provider is required to use a demand projection methodology acceptable to the water management districts, these methods often vary from utility to utility. For these reasons, estimation of total water demand projections directly associated with the population of unincorporated Orange County is difficult, particularly if compatibility is required with the individual forecasts made by utilities as part of their permitting efforts.

For this work plan, the CFWI RWSP 2015 demand values were used. Orange County coordinated with the two major potable water providers (OCU and OUC) to compile data summarizing historical actual and future estimated potable water demand within unincorporated Orange County. Demand met with water from these two providers represents the large majority of the water demand in the unincorporated areas of the County. Development of viable water supply plans and identification of required capital improvement work plan projects for these two main providers will effectively address the water supply source and facility concurrency issues associated with nearly all the projected future growth within unincorporated Orange County.

For the two main water suppliers (OCU and OUC), their potable water demand within unincorporated Orange County represents only a portion of the total potable water service area demand for which they are responsible. That is, these providers have additional demands in their service areas that occur within municipality boundaries or other areas not in unincorporated Orange County. **Table 4** presents the total potable water demands in Orange County for each of these two potable water providers, separated by water management district. The water demand projections shown assume average year rainfall conditions (5-in-10). Demands are typically higher during drought conditions (1-in-10) and lower during extreme wet years.

2.5 Existing Capacity Analysis

Through comparison of existing potable water supply facility capacities with projected potable water demands, an assessment of future needs within the 10-year planning horizon can be completed for the two primary utility providers serving unincorporated Orange County. For these two potable water service providers (OCU and OUC), for which unincorporated Orange County only represents a portion of their responsible service area (e.g., OUC facilities provide water in the County and within the City of Orlando), it is not practical or feasible to determine exactly a subdivided portion of the capacity of their existing water supply facilities or permits that are specifically applicable to unincorporated Orange County. For this reason, the existing capacity analysis for OCU and OUC shown at the bottom of **Table 5** is addressed for their entire service areas.

Table 5 summarizes and compares, for the two primary potable water service providers serving unincorporated Orange County, projected potable public supply water demands with potable water supply capacities (both source and treatment facilities) and permit allocations. The table indicates that the combined current permitted groundwater allocation for OCU and OUC will be just barely sufficient to meet projected demands through 2030; therefore, alternative sources of water (such as reclaimed water and future surface water) are suggested and planned. As noted in the table, the combined potable water demand within unincorporated Orange County met by the two major suppliers is predicted to increase from 108.7 mgd in 2015 to 139.3 mgd in 2030, an estimated increase of 28 percent.

Table 5 indicates that OCU's existing water supply source facilities (i.e., wells) will have sufficient annual average capacity to meet the projected total water demand through 2030, yet OCU's current average day treatment capacity will need to be augmented during the 10-year planning horizon (by 2020). While the table indicates that OUC will have sufficient water treatment capacity through 2030, the combined existing infrastructure treatment capacity of OCU and OUC is not quite sufficient in 2030 to meet the entire County-wide demand. This deficit must be overcome through the planning, development, and permitting of additional facilities. As noted in the table, capital improvement projects are forecasted to offset this deficit that would otherwise occur. The planned water resource management and capital improvement strategy for Orange County water supply is presented in the following section, and specific OCU and OUC projects are listed in the capital improvement work plan section below.

2.6 Future Water Supply Strategy

The potable water suppliers in unincorporated Orange County historically have used potable groundwater from the Floridan aquifer as the primary source for public supply. Fresh groundwater is considered a traditional water source. However, the initial phase of the CFWI technical process concluded with a determination that the amount of traditional groundwater currently permitted in the five-county CFWI area, which includes Orange County, exceeded sustainable supply quantities. The CFWI process then provided guidance for a combination of water sources and water supply project options that could meet the needs of the region.

The CFWI RWSP 2015 indicates that water sources available to the region include groundwater (potable and brackish), reclaimed water, surface water, and stormwater, and concludes that the future water demands of the CFWI Planning Area can be met "…with appropriate management, continued diversification of water supply sources, conservation, and implementation of the water supply and water resources development projects identified in this plan."

Dozens of specific, named alternative water supply (AWS) projects at various stages of development have been identified in the CFWI RWSP 2015 documents for potential implementation by water supply providers. Appropriate water resource development strategies, management techniques, and AWS projects delineated in the CFWI RWSP 2015 have been incorporated into the development of this Work Plan.

Orange County has identified that its most effective course of action within the planning horizon is to:

- Optimize the use of groundwater from the Floridan aquifer
- Maximize the use of reclaimed water
    - Continue aquifer recharge projects in areas of greatest benefit
    - Expand reuse distribution facilities for irrigation and other beneficial use
- Continue to implement effective water conservation measures
- Develop additional AWS sources such as brackish groundwater and surface water for potable supply and non-potable system augmentation
- Investigate additional options such as aquifer storage and recovery, reservoir storage, and stormwater reuse for future implementation as feasible

OCU's operations within the planning horizon will be based on this water supply strategy. In addition, Orange County government will coordinate with, support, and encourage the other water supply providers within its jurisdiction to follow a similar plan. The development of AWS sources in Orange County are occurring in coordination with both water management districts and other utilities in the region so that they will be available when additional groundwater is not available. The individual components of Orange County's water supply plan are described below in greater detail.

2.6.1 Efficient Use of Groundwater

For the 10-year planning horizon considered in this Work Plan, fresh groundwater will remain the primary source of water to meet potable water demands in unincorporated Orange County. Orange County has invested in the development and application of extensive groundwater flow models, which serve as tools to better understand the natural system and optimize wellfield and beneficial recharge operations. The groundwater withdrawals of the numerous Orange County providers are widely distributed to minimize localized environmental effects.

In addition, a significant percentage of the potable water distribution system pipelines in Orange County are interconnected. For example, the OUC potable water distribution system is fully interconnected. OCU's West, Southwest, and South Service Area water distribution systems also are interconnected, and, within the next few years, OCU is in the process of interconnecting the East Service Area to its South Service Area, effectively linking the entire OCU system. These two largest potable water distribution systems in Orange County also have emergency interconnections between their two systems at several locations.

The interconnected nature of the OCU and OUC distribution networks, along with many of the other water providers, creates an efficient, reliable, and flexible system. In the event that one or more water supply facilities are out of service, other facilities can provide water to the areas affected by the service outage. In addition, groundwater withdrawals throughout Orange County can be optimized by redistributing pumpage to areas least likely to affect sensitive environmental features. For this reason, OCU operates multiple storage and repump facilities throughout the County.

2.6.2 Expansion of Reclaimed Water Reuse

Central Florida has long been a leader in the application of highly treated reclaimed water as a source to meet many non-potable needs, including irrigation, industrial uses, and as a means of

recharging the local aquifer system. In unincorporated Orange County, nearly 100 percent of wastewater collected is reused.

Reclaimed water is a major alternative water source to be used as part of the County's strategy to supplement groundwater use into the future. Currently, all reclaimed water from OCU's three water reclamation facilities is beneficially reused for irrigation, industrial use, aquifer recharge through rapid infiltration basins (RIBs), and wetland enhancement. Irrigation uses include residential, commercial, and agricultural public access reuse (PAR). The City of Orlando also reuses a significant percentage of reclaimed water produced at its three water reclamation facilities. The Water Conserv II reclaimed water distribution system in west Orange County uses reclaimed water from the County's South WRF and the City of Orlando's Water Conserv II WRF extensively for agricultural, residential, commercial, and golf course irrigation, and aquifer recharge via RIBs. Currently, the primary industrial use for reclaimed water in unincorporated Orange County is for cooling at the Curtis H. Stanton energy facility.

Orange County will continue to invest in the development of reclaimed water reuse facilities in all of the OCU service areas. Future, planned OCU projects include significant expansion of PAR irrigation systems. In addition, Orange County will coordinate with, encourage, and develop inter-utility agreements (wherever feasible) with other reclaimed water service providers in unincorporated Orange County, Orange County municipalities, and the surrounding region to maximize the beneficial use of reclaimed water to help offset the demand for potable water.

Until recently, consumptive or water use permit (CUP/WUP) conditions for many water suppliers mandated the use of minimum annual volumes of reclaimed water for non-potable uses including land application and PAR irrigation according to given timelines (see **Appendix A**). OCU's CUPs, issued while these requirements were in place, contain those use requirements. The reclaimed strategy for unincorporated Orange County includes achieving those permit-required reclaimed water use targets. In particular, OCU is fully committed to investigating and developing all feasible reuse opportunities in order to meet the requirements for minimum reclaimed water utilization volumes specified by Condition 26 of its SJRWMD CUP #3317 and by Condition 29 of its SFWMD WUP #48-00134-W (as detailed in **Appendix A**).

The County is actively expanding its reuse irrigation systems through the identification and planned development of supplemental supplies, where feasible and permissible. Sources of potential backup supply for the PAR systems include groundwater, surface water and stormwater. Many reclaimed water providers in unincorporated Orange County are investigating, permitting, and developing reuse system augmentation projects to facilitate the increased use of reclaimed water to reliably meet non-potable demands.

Additional activities being performed by Orange County and the various utilities that will expand the use of reclaimed water in the County and facilitate meeting previously-issued CUP/WUP requirements for reclaimed water utilization include:

- Interim septic tank systems approved following Wastewater Policy WW2.1.7 will be required to connect to central wastewater where such facilities are available (Orange County Wastewater Policy WW2.1.8)

- Where economically practical and feasible, the County will maintain existing and develop new wholesale potable water and reclaimed water service agreements
- Continue to encourage the selling of reclaimed water to other users, such as golf courses, for their use in meeting landscape irrigation needs that will offset their use of groundwater (Wastewater Policy WW2.3.2, Aquifer Recharge Policies AR1.1.12 and 1.1.13, Potable Water Policies PW2.2.8 and PW2.2.9)
- Continue to require by ordinance connection of all new developments to the reuse system, provided that service is available (Wastewater Policy WW2.3.3, Orange County Code Section 37-657)
- In creating County land development regulations to facilitate aquifer recharge and reduction of potable water demands (Conservation Policy C1.11.5), the County will investigate the feasibility of retrofitting existing residential and commercial development to use reclaimed water for landscape irrigation
- Continue to expand the existing system of reclaimed water metering, and continue to require individual metering of reclaimed water connections to single-family residential customers on public streets (Wastewater Policy WW1.3.5)
- The County will implement feasible options to use all available reclaimed water supplies for beneficial applications (Wastewater Policy WW2.3.1)
- Investigate the feasibility of using a water-conserving rate structure for reclaimed water customers (Wastewater Policy WW2.3.4)

2.6.3 Enhancement of Aquifer Recharge

Orange County has long been a leader in the development of aquifer recharge enhancement projects using reclaimed water. Orange County and the City of Orlando currently send a combined total of about 20 mgd of reclaimed water to rapid infiltration basins (RIBs) of the Water Conserv II system in western Orange County and eastern Lake County. Due to the hydrogeology of that region, these RIBs have been shown to be highly effective at recharging the Floridan aquifer. Several other reclaimed water providers in Orange County, including Apopka, Ocoee, and Winter Garden, also utilize RIBs to recharge the potable water aquifer in the high-recharge zones of western Orange County.

2.6.4 Continuation of Water Conservation Efforts

Orange County currently administers a significant water conservation program. The Water Conservation Team includes 5 full time employees and 2 part-time interns who develop and implement education, incentive and regulatory enforcement programs. Additionally, 7 contractual staff patrol our service area and administer the irrigation enforcement program. The County also maintains a comprehensive Water Conservation Plan document, submitted to the water management districts during recent permit modifications, which is consistent with the County's CPP and which includes Orange County's adoption of ordinances that:

- Limit lawn and ornamental irrigation hours (Potable Water Policy PW2.2.10)
- Encourage Florida Friendly landscape (Potable Water Policy PW2.2.11 and Conservation

Policies C1.11.3 and C1.11.4)
- Require ultra-low volume fixtures (Potable Water Policy PW2.2.13)
- Require rain sensor devices, mandatory for new construction and for extensive retrofits of existing sprinkler systems (Potable Water Policy PW2.2.11)
- Provide for a water conservation-based rate structure (Conservation Policy C1.11.11)

The County's water conservation practices can be simplified into three basic categories: education programs, economic incentives, and regulatory enforcement. Public education programs target student and adult populations. Economic incentives are also used to promote water-saving fixture/irrigation device replacements and new technology to better inform customers of water use patterns and correct wasteful behavior. Also, regulatory enforcements and changes to Orange County ordinances and codes have allowed for further conservation efforts to be made in regards to landscaping, water reclamation, and fixtures. Within these categories, Orange County operates the following conservation program:

- *Water Watch* water restriction program patrols handing out educational notices and enforcing codes
- *Distribution System Leak Detection* using sounding techniques while technicians perform maintenance on hydrants and valves; a system-wide audit was completed in 2014, concluding that OCU had an unaccounted-for water loss of approximately 5%
- *Toilet Replacement Voucher Incentive Program (VIP)* offers vouchers up to $100 per toilet to replace existing high-flow toilets with ultra-low-flow toilet models; installed 2,200 since original toilet retrofit program inception in 2003
- *Showerhead Exchange* program offers customers to bring in low-efficiency showerheads in exchange for high-efficiency Water Sense models
- *Efficient Nozzle Replacements* for irrigation systems to models that save up to 30% more water
- *Mobile Irrigation Lab (MIL) Audits* provide high water use customers with free, professional landscaping analysis and recommendations (Potable Water Policy PW1.7.2.1)
- *Presentations and Events* at the mall, home owners association meetings and community events: giving out of conservation materials, educating how to detect and repair leaks
- *School Events* for Elementary, Middle, and High School students *(*Blue Thumb Junior Detective Program, Touring the Water Facts, The Wonder of Water, The Water Color Project, Rain Barrel Painting Project, Waterwise, and the various other specific events)
- *Adult Education* programs teach residential and commercial customers the value of efficient landscaping (Florida Friendly Lanscaping, Irrigation Workshops, Landscape Design Workshops, Rain Barrel and Composting Classes)
- *Attendance at conferences* about water management and conservation, including AWWA, University of Central Florida, Florida Water Resource Conference, and the Florida Statewide Conservation Commission

In May 2008 Orange County adopted an updated, more stringent water conservation ordinance (Ordinance 2008-08 and 2010-02; Orange County Code Sections 37-601 through 37-611). Although the previous water conservation ordinance restricted landscape irrigation in Orange County to only two days per week with no irrigation allowed between 10 AM and 4 PM, the

revised ordinance defines the precise days of the week based on house address, providing for easier enforcement. The ordinance applies to all water users, even if they irrigate from a well or a pond. Certain uses, such as micro-spray irrigation, irrigation of new landscape, and reclaimed water uses are currently exempt from the rule. As the water management districts continue to reassess and update their watering restriction regulations in the future, Orange County likewise will review its water conservation ordinance and revise it when necessary to maintain consistency.

To reduce future demand for water, Orange County will continue to implement the extensive water conservation program components described above. Conservation Element Policy C1.11.11 provides enabling language in the County's CPP for implementation of these measures, and for periodic assessment of the water conservation program. All Orange County water conservation-related policies and ordinances apply to all areas of Orange County, including municipalities, unless those municipalities have their own water conservation ordinance(s), which will overrule. In general, all areas of Orange County follow water conservation rules that are generally consistent with the conservation requirements set forth by the water management districts, including constraints on day-of-week and time-of-day allowed for irrigation.

Orange County will continue to use a water conservation rate structure for OCU's customers (Potable Water Policies PW1.7.1 and PW1.7.2) and implement water conservation and shortage regulations including the specific restrictions of the SJRWMD and SFWMD during declared water shortages (Potable Water Policy PW2.2.12). The County maintains a five-tier inclined block rate structure that promotes water conservation. As of Fiscal Year 2015/2016, rates start out at $1.07 per thousand gallons for the 0-3,000 gallon block and climb to $11.69 per thousand gallons for any residential use above 30,000 gallons per month.

Orange County supports the use of innovative water conservation techniques and strategies as they become available. The County will strive to maximize the conservation of water resources through coordination with SJRWMD, SFWMD, and other CFWI stakeholders, and through implementation of County and other agency programs.

OUC's comprehensive water conservation program includes water conservation education using a comprehensive media campaign featuring various communication channels, community outreach, special programs and campaigns; education and enforcement of landscape irrigation guidelines; water distribution system improvements and leak detection including renewal and replacement of piping and meters; conservation promoting rate structures and rate increases; customer audits, both indoor and irrigation; conservation rebate programs for various conservation measures; combined electric and water conservation programs and campaigns; and reclaimed water use.

OUC is committed to water conservation and has achieved significant savings since its 20-year consumptive use permit (CUP) was issued in 2004. OUC's demands have decreased over 14 percent since 2004, far exceeding the City of Orlando's objective of reducing total per capita potable water demand by 7 percent between 2004 and 2015. At the same time, connections increased by nearly 10,500. OUC's gross per capita demand was reduced from 225 gallons per person per day in 2004 to 193 gallons per person per day in 2015. Since nearly half of OUC's

demand is from commercial services, gross per capita rather than residential per capita is the best metric to use in determining conservation savings.

2.6.5 Investigation of Aquifer Storage and Recovery

Aquifer storage and recovery (ASR) can facilitate the use of water supply sources, such as surface water or reclaimed water, which have significant seasonal variations in availability. In a cooperative project with the SJRWMD, Orange County completed a study of ASR feasibility assisted in the installation of an ASR well in the eastern part of the County (under capital improvement schedule [*CIS*] Project Number *1550*) (Potable Water Policy PW3.1.8). Following the pilot testing period, the County was granted an operational permit (May 2016) for the storage of approximately 2 mgd, AADF of potable water, up to approximately 800 million gallons of total storage.

2.6.6 Development of Alternative Water Supplies

As discussed, the CFWI RWSP 2015 determined that currently permitted allocations in the central Florida region exceed the sustainable supply available from traditional groundwater sources. To accommodate future growth and to supplement groundwater and reclaimed water supplies, utility providers are investigating and advancing plans to develop and construct small and regional-scale AWS projects. Due to economies of scale and the need to develop such sources at minimum capacities that often exceed the projected needs of a single utility, most of the proposed AWS projects require extensive coordination and cooperation amongst regional utility providers.

Orange County is participating in the advancement of additional alternative water sources as necessary to meet future demands. The County will focus on efficient, cost-effective, and technically feasible alternative sources that do not cause adverse impacts to water quality, wetlands, aquatic systems, springs, or other environmental systems. Per its current CUP #3317 permit conditions, OCU is required to identify and propose the preliminary design, budget, and schedule of two AWS projects by December 2018 to supplement its SJRWMD groundwater allocation and meet projected demands through the permit expiration (2026). To meet these permit requirements, OCU and OUC are currently in mediation with the City of Cocoa, Tohopekaliga Water Authority (TWA), East Central Florida Services, Inc., and SJRWMD to resolve competing CUP applications for withdrawals from the new St. Johns River/Taylor Creek Reservoir Water Supply Project. This source will provide up to an estimated 50 mgd of surface water for the populations served by the project partners, a majority of which will reside within Orange County. Funding for development of this surface water supply will be split among the project partners, with the potential for co-funding from the water management districts, state or federal government. OCU has committed to receive at least 10 mgd, and OUC has committed to receive at least 5 mgd, of new alternative water supply from this project. Many project delays have arisen, and the project is still in the planning stage. The permit will expire in 2027, and allocation will be contingent on renewal.

OCU is also partnering with the City of St. Cloud, the Tohopekaliga Water Authority, Polk County, and Reedy Creek Improvement District (collectively called the STOPR Group) in the development of the Cypress Lake brackish wellfield in Osceola County. As a requirement of WUP 48-000134-W, this project is permitted to provide a total of 30 mgd of finished water

supply to the STOPR Group, of which 9 mgd AADF is OCU's commited share. The preliminary design phase of the Cypress Lake water supply facility, wellfield and transmission project has been completed, and the STOPR Group is moving forward with final design. It is projected that finished water will be available from the Cypress Lake AWS facility within the 10-year planning horizon, or by approximately 2023.

Orange County is committed to implementing due diligence and performing everything within its control to advance these and other AWS projects; however, development of surface water supply projects will require more time than originally estimated by the water management districts. The specific surface water AWS projects included as potential components of Orange County's Work Plan are discussed further as part of the capital improvement work plan below.

2.6.7 Regional Cooperation and Interlocal Agreements

Orange County faces a certainty that future expansion of its water supplies will be increasingly challenging and expensive. A major challenge for Orange County has been the natural tendency of utilities to compete for the limited available supplies of groundwater and surface water. This type of win/lose competition for limited resources leads to protracted litigation and may prevent utilities from developing cost-efficient and synergistic solutions. Progress has been made by central Florida utilities by entering into formal agreements to cooperate and seek equitable regional water supply solutions that include interconnections between their systems, development of AWS sources, and sharing of costs between all parties.

It has become apparent that this type of regional cooperation can be critical to the success of a project. OCU's SFWMD WUP 48-00134-W renewal process resulted in the formation of the STOPR Group mentioned above, which collaborated to complete their WUP applications to the SFWMD. The STOPR Group has gone on to track legislative issues and perform compliance requirements together, and members of the STOPR Group, OUC, and Seminole County are working on on-going CFWI planning teams and efforts. The utilities have found that the voice of a unified Group is more effective than the sum of the voices of the individual utilities. Orange County has helped facilitate these cooperative efforts and will continue to be a leader in the facilitation of regional utility cooperation regarding water supply.

Furthermore, Orange County coordinates extensively and effectively with other local governments, regulatory agencies, and utility providers to achieve local and regional objectives regarding the cost-effective and reliable provision of utility service while protecting the natural environment. A detailed description of the County's coordination approach and a list of policies are provided in the Intergovernmental Coordination Element of the Orange County CPP. The Intergovernmental Coordination Element has been significantly expanded as part of the CPP amendment process resulting from the County's 2007 Evaluation and Appraisal Report.

With regard to potable water, wastewater, and reclaimed water service, Orange County maintains the following main types of agreements, and continually reviews/seeks opportunities to update or create new agreements:

- *Territorial agreements*, defining utility service areas (Potable Water Policy PW1.6.1; Intergovernmental Coordination Policies ICE1.3.7 and ICE1.5.4)
- *Wholesale service agreements*, providing for wholesale or emergency water supply,

wastewater, or reclaimed water service (in one or both directions) between OCU and other utility providers (Intergovernmental Coordination Policies ICE1.5.4 and ICE1.5.10)

- *Regional cooperative agreements*, for a variety of mutually beneficial endeavors, such as investigating alternatives, combining resources, or developing new or expanded regional sources and facilities (Potable Water Policies PW1.2.12 and PW3.2.3; Intergovernmental Coordination Policies ICE1.5.1 and ICE1.5.10)

Lists of the existing territorial and wholesale agreements between OCU and other utility service providers are provided in attached Appendix A and Appendix B. In addition, regional agreements are critical for the future cost-effective and environmentally responsible implementation of water resource management methods and development of traditional and alternative supplies in the fast-growing east-central Florida region. Orange County currently maintains the following key regional cooperative agreements:

- *Orange County/City of Orlando Southwest 201 Wastewater Facilities Interlocal Cooperative Agreement*, a cooperative agreement between Orange County and the City of Orlando, joint owners of this largest reuse project of its kind (agricultural irrigation) in the world. This agreement was executed in 1983, with no specified end date. (Supported by Potable Water Policy PW3.2.4 and Intergovernmental Coordination Policy ICE1.5.11)
- *Orange County/Orlando Utilities Commission Cooling Water Supply Agreement*, an agreement for OCU to provide a significant volume of reclaimed water to OUC for cooling at OUC's power generation facility in east Orange County, offsetting the need to use potable water for this purpose. This agreement was originally signed in 1984, and remains in effect. OCU and OUC continue to negotiate updates to this agreement (which is expected to remain in force for long duration).
- *Eastern Regional Reclaimed Water Distribution System Agreement*, an agreement for interconnected reclaimed water reuse distribution facilities at a large regional scale in east Orange County and Seminole County. Led by the City of Orlando, partners to the agreement include Orange County, Seminole County, the City of Oviedo, the University of Central Florida, and OUC. Orange County signed this agreement with the City of Orlando in 2008; it has a duration of 50 years, with automatic 10-year renewals unless either party chooses to end the agreement.
- *STOPR Cost Sharing and Compliance Coordination Memorandum of Agreement*, between the City of St. Cloud, Tohopekaliga Water Authority, Orange County, Polk County, and Reedy Creek Improvement District for collaboration in implementing water resource monitoring and compliance requirements of their jointly issued water use permits from the SFWMD. The agreement was signed in 2007 and has a duration of 20 years.

To ensure water supply source and facility concurrency, continued improvement of water resource management techniques, and the development of cost-effective and environmentally responsible water sources and facilities, Orange County will continue to implement the following policies regarding interlocal coordination and regional cooperation:

- Consult with all applicable water suppliers, including internal coordination among

Orange County Departments, to determine if adequate water supplies will be available to serve development in unincorporated Orange County (Future Land Use Policy FLU8.6.1; Potable Water Policy PW3.3.3)

- Coordinate with and seek to maintain, enhance or establish interlocal agreements with other municipalities that are provided potable water, wastewater, or reclaimed water service by OCU, and with other utilities that provide service to Orange County, in order to understand and address existing and future needs and confirm service provision commitments (Intergovernmental Coordination Policies ICE1.2.4, ICE1.3.7 and ICE1.5.4)
- Work closely with the water management districts to support their regional water supply planning and environmental stewardship goals (Potable Water Policies PW1.2.12, PW3.2.3, PW3.3.1, PW3.3.2, and multiple policies under Objective PW2.2; Wastewater Policies WW3.2.1, WW3.2.3 and WW3.3.1; numerous policies throughout the Intergovernmental Coordination Element)
- Coordinate with and continue to seek partnership/interlocal agreement opportunities with state agencies, local governments, and utilities to cooperatively study and develop feasible AWS projects (Potable Water Policies PW3.2.1 and PW3.2.3)

2.6.8 Summary of Projected Future Water Needs and Sources

Orange County plans to optimize and integrate the use of feasible water resource options to satisfy its projected water demands during the planning horizon. The County will coordinate with the water supply providers to maximize the efficient use of existing potable water and reclaimed water facilities via management techniques that can enhance the source of supply, sustain water resources and related natural systems, and optimize water supply yield. Available techniques include system interconnections, reclaimed water reuse, aquifer recharge, water conservation, and ASR. Through 2030, the County's planned sources primarily consist of increased use of reclaimed water for irrigation, additional efficient use of Floridan aquifer groundwater, along with start-up of the Cypress Lake brackish groundwater AWS project. Furthermore, the County will continue the diligent pursuit of the development of additional new surface water AWS supplies.

3 CAPITAL IMPROVEMENT WORK PLAN

3.1 Overview

Capital improvements to public, private and regional potable water and reclaimed water facilities operated by many of the providers serving unincorporated Orange County will be necessary during the planning period to accommodate future demands and to support and implement the water supply source strategy described above. Capital improvements to OCU-operated facilities, both those solely under the control of OCU and those regional cooperative AWS projects in which OCU is working collaboratively with other agencies, will play the most significant role in overcoming projected deficits within the growth areas of Orange County. In addition, several of the other providers within the County, most significantly OUC and the City of Orlando, will have to expand their independent or cooperative facilities.

OCU maintains a detailed, financially feasible capital improvement program for water, wastewater, reclaimed water, and solid waste facilities, which is updated on a continual basis. All key projects from OCU's program are included in Orange County's 5-year schedule of capital improvements, adopted as part of the Capital Improvement Element of the County's CPP. Detailed information on funding sources, financial feasibility, and annual budget allocations is provided in the Capital Improvement Element, and a summary list of OCU's relevant projects is included as **Appendix C** to this Work Plan. As required by legislation, Orange County's Capital Improvement Element and 5-year schedule of capital improvements will be amended on an annual basis and will maintain consistency with this Work Plan. Further detailed information can also be found in Orange County's most recent CIP Budget Book.

The results of Orange County's most recent revenue sufficiency analysis indicate that the funding of capital improvement projects over the planning period can be accomplished through rate revenue, connection fees, and debt funding, which will require implementation of the system's 3-percent automatic rate provision from time to time to meet debt service coverage requirements. In addition, some of the AWS projects included in this Work Plan will be partially funded through cooperative grants from the water management districts, other state agencies, or other utilities participating in regional efforts.

Listed by provider, the key planned capital improvement projects needed to provide adequate future water supply capacity within unincorporated Orange County are described below. The listed projects focus on development of new and expanded water sources (groundwater, reclaimed water, surface water) and their treatment facilities. The majority of projects intended to increase the capacity of water distribution and wastewater collection systems are not discussed in this section as they are too numerous to list; however, Orange County does include these capacity projects in its annual capital improvement program update to keep the systems in compliance with OCU hydraulic level of service standards.

3.2 Orange County Utilities

To meet projected demands within the 10-year planning horizon, OCU will:

- Expand and optimize its traditional groundwater supply facilities

- Continue to implement, and increase as feasible, its conservation initiatives listed above
- Expand its reclaimed water facilities to reduce demand for potable water
- Diligently pursue development of new AWS sources, alone and in conjunction with other providers
- Continue to investigate additional alternatives
- Promote regional cooperation and joint solutions

OCU will implement the traditional, reclaimed and alternative capital improvement projects described below during the planning period of this Work Plan. Attached **Table 7** summarizes the system capacity increases anticipated as a result of these capital projects. These projects will overcome projected supply deficits for demands within the entire OCU service area, most of which falls within unincorporated Orange County. Unit ("org") project numbers are listed as appropriate for direct cross-reference with information in the OCU capital improvement program and in the County's 5-year Capital Improvement Schedule (CIS) (see **Appendix C** and Orange County's Capital Improvement Element). In addition, cross-references are provided between these capital projects and those identified in the current SJRWMD and SFWMD regional water supply plans.

The current 5-year CIS includes detailed project funding data for the Fiscal Year (FY) 2017 through FY 2021 period. Beyond the 5-year planning horizon, OCU will need to develop additional AWS projects to accommodate future demands. Early implementation phases (e.g., preliminary design and permitting) and capital improvement funding for these projects have already begun so that actual construction and availability of water supply can occur as soon as feasible. **Appendix C** includes Orange County's most recent Adopted Budget (FY17) demonstrating planned project funding. The RWSP Volume II Appendix lists 150 additional proposed water supply project options (WSPOs) across the CFWI region. A few of these will be mentioned in this section. The County plans to allocate over $750 million toward relevant water-related utilities capital improvement projects over the next five years. Although not yet committed, funding for the following 5 years of the Work Plan planning period is included where it has been estimated as "requested future" dollars in the OCU CIP budget.

As an additional point of note in the County's capital improvement work plan, the sources of water for the AWS projects may be located in areas of the County (e.g., eastern Orange County, intake along the St. Johns River) that may be remote from the location of the demands to be met by these new supplies. To facilitate distribution of future supply throughout the OCU service areas, multiple additional projects (i.e. water, wastewater, or reclaimed water main installation, relocation, and extension; pump stations; storage facilities; and other water-related infrastructure improvements) are currently included in the OCU CIP budget for FY 2017 through FY 2021 (see **Appendix C**) to interconnect the OCU South and East Service Areas. As previously mentioned, because the OCU South, Southwest, and West Service Areas are already interconnected, construction of additional SSA-ESA water main extensions will effectively provide complete interconnection of the OCU water distribution facilities, as needed to incorporate the new AWS supplies.

3.2.1 Traditional Water Supply Projects

OCU will implement the following groundwater supply capital improvement projects, which will increase WSF treatment capacity by approximately 23.4 mgd, AADF and wellfield capacity by approximately 8.0 mgd, AADF during the planning horizon.

- *Oak Meadows Wellfield Expansion (Permitted Well OM-5)*, currently in the bidding phase, will include one new Lower Floridan aquifer well at the facility with a capacity of 1.8 mgd, AADF. This well is planned for completion by 2017. (West Service Area, *CIS 1532-14*)
- *Western Regional WSF/Wellfield Phase IIIB Expansion*, currently in design and planned for completion by 2023, may increase treatment capacity by another 7.0 mgd, AADF and involves one new Lower Floridan aquifer well (well WR-11, already permitted) with a capacity of 2.2 mgd, AADF, to be completed by 2018. (West Service Area, *CIS 1532*)
- *Malcolm Road WSF/Wellfield*, currently in design (treatment facility) and construction (wells), includes a new treatment plant and Floridan aquifer wellfield, each with capacity of 4.0 mgd, AADF. Wells are planned for completion by 2017, and treatment plant by 2019. (Southwest Service Area, *CIS 1557*)
- *Eastern Regional WSF Phase IIIB Expansion*, with final design and construction planned for completion in February 2017 and July 2019, respectively, increases treatment capacity from 50 mgd to 62.4 mgd AADF. (East Service Area, *CIS 1554-02)*
- *East Service Area-South Service Area Water Transmission Main Interconnection*, planned to be constructed by 2019, will increase system flexibility and reliability. (*CIS 1450* and *1508*)
- *I-Drive Booster Pump Station*, currently in the bidding phase and planned for completion in 2018, will eventually transmit water from the Cypress Lake brackish groundwater AWS project. *(CIS 1498-10).*
- Many other plant process improvements, including treatment, transmission, mechanical, electrical, and well upgrades, at various locations, not associated with capacity increases.

3.2.2 Reclaimed Water Supply Projects

As feasible, OCU will implement the following reclaimed water capital improvement projects, which will increase the reclaimed water supply available to meet non-potable demands during the planning horizon.

- *Northwest WRF Phase IIIB Expansion*, planned to be constructed by 2022, will increase the capacity of the chlorine contact chamber, increasing the overall treatment capacity of the facility by 1.0 mgd, AADF. (West Service Area, *CIS 1435*)
- *Northwest WRF Reclaimed Main Extension to Apopka*, planned to be constructed by 2017, and expected to add 2.5 mgd to 3.0 mgd, AADF to the existing capacity of the reuse system in the West Service Area,. (West Service Area, *CIS 1435*)
- *Southwest WRF Phase I*, planned to be constructed by 2025, for a total treatment capacity of 5.0 mgd, AADF. Further phases are planned to provide additional capacity and to receive flow diversion from the South Service Area. (Southwest Service Area, *CIS 1507*)

- *South WRF Phase V Expansion*, planned completion of March 2019, will increase treatment capacity by 13 mgd from 43.0 to 56.0 mgd, AADF. (South Service Area, *CIS 1555-01)*
- *Eastern WRF Phase V Improvements*, planned for completion by May 2018, will increase treatment capacity from 19.0 to 24.0 mgd, AADF. (East Service Area, *CIS 1538*)
- *Eastern WRF Phase VI Expansion*, planned to be completed by 2027, will increase treatment capacity from 24.0 to 29.0 mgd, AADF. (East Service Area, *CIS 1538*)
- *Southeast Reclaimed Water System Expansion Project*, will be constructed throughout the planning horizon to distribute reclaimed water to meet reuse irrigation demands in the East Service Area, estimated to be as much as 9 mgd, AADF by 2020. (CIS 1483, CUP #3317 Condition 26)

In addition, Orange County will continue to coordinate with the City of Orlando to evaluate and implement necessary improvements and expansion of the Water Conserv II reclaimed water system, which is jointly owned by the County and the City. Orange County will also work with the City of Orlando to increase the amount of reclaimed water it can put into the ERRWDS system.

3.2.3 Alternative Water Supply Projects

As feasible and permitted, OCU will implement the following surface water AWS capital improvement projects, which will increase potable water supply capacity.

- *Cypress Lake Wellfield*, a collaborative AWS STOPR project, will provide OCU with a 9 mgd, AADF finished water potable supply capacity increase. Construction of this project is currently projected to be completed by approximately 2023. *(CIS 1550-08, CFWI RWSP Projects 3, 4 and 5).*
- *St. Johns River/Taylor Creek Reservoir Water Supply Project*, an estimated 50 mgd, AADF surface water potable supply project (*CIS 1550; CUP #3317 Condition 23; WUP # 48-00134-W Condition 25; CFWI RWSP Project 126*), peak production of 54 mgd finished water. OCU is participating collaboratively in this regional water supply development project with five other central Florida potable water suppliers: OUC, East Central Florida Services, and Tohopekaliga Water Authority (who all provide some water in unincorporated Orange County); and the City of Cocoa and City of Titusville. The exact supply volume distribution among suppliers is yet to be finalized, but it is anticipated that OCU's share would be at least 10 mgd, AADF.

3.3 Orlando Utilities Commission

As **Table 5** and **Table 6** indicate, OUC has sufficient supply to meet demands through 2030. In order to plan for demands in 2035 and beyond, throughout its entire potable water service area, OUC will:

- Continue to utilize its traditional groundwater supply facilities
- Continue to implement conservation initiatives in the CUP conservation plan

- Continue to partner with the City of Orlando and Orange County Utilities to utilize reclaimed water to meet a portion of the non-potable demands in OUC's service area
- Continue to work with regional partners to develop the SJR/TCR Project

OUC will continue to partner following alternative water supply (including surface water development and reclaimed water system expansion) capital improvement projects to increase potable and non-potable water source and facility capacity during the planning horizon.

- *St. Johns River/Taylor Creek Reservoir Water Supply Project.* Currently, OCU and OUC are formally mediating with the City of Cocoa, Tohopekaliga Water Authority (TWA), East Central Florida Services, Inc., and SJRWMD to resolve competing CUP applications for withdrawals from the new St. Johns River/Taylor Creek Reservoir Water Supply Project. This source will provide up to an estimated 50 mgd of surface water for the populations served by the project partners, a majority of which will reside within Orange County. Funding for development of this surface water supply will be split among the project partners, with the potential for co-funding from the water management districts, state or federal government. OUC has committed to receive at least 5 mgd, of new alternative water supply from this project. OUC has $2 million budgeted in its 2017 5-year capital plan to pay for OUC's portion of permitting and initial design costs for the SJR/TCR Project.
- *Eastern Regional Reclaimed Water Distribution System*. The City of Orlando's Eastern Regional Reclaimed Water Distribution System (ERRWDS) was designed and constructed to supply approximately 33 mgd from the City's Iron Bridge Water Reclamation Facility to the OUC service area, Orange County, Seminole County, UCF, and Oviedo. The multi-phase project was constructed from 2006 through 2011. OUC partnered with the City in constructing the ERRWDS). And has paid the City over $16.9 million dollars to complete plant improvements, construct reuse mains, booster pump stations, and a supplemental well. The remaining portion of the project, the Lake Nona storage and repump station, has been put on hold until it is needed when reuse demands increase. OUC has $1.7 million budgeted in the 2017 5-year capital plan for its share of the costs to complete construction of the storage and repump station. ERRWDS transports reclaimed water from the Iron Bridge Regional Water Reclamation Facility to OUC's service area in Baldwin Park, the 436 corridor, and the southeast service area which includes the Orlando International Airport and Lake Nona. Completion of this system also allows Orange County to use the reclaimed water pipeline and supply more customers in the OUC service area with reclaimed water. The City will also provide the County with additional reclaimed water if they cannot meet all of their customer demands. Having more reclaimed water available to the OUC service area allows OUC to conserve potable groundwater to protect the environment and help meet future demands.
- *Project Renew.* As required by Condition #29 of the Consumptive Use Permit 3159 (CUP) issued by SJRWMD in 2014, OUC is required to implement a regional reuse program. The original project planned to provide 9.2 mgd of reclaimed water from the City of Orlando's Iron Bridge Water Reclamation Facility to Northwest Orange County to offset adverse impacts from OUC's pumping at the full CUP allocation of 109.2 mgd. Phase I of Project RENEW must provide at least 3 MGD of reclaimed water and must be

completed no later than October 8, 2020. Phase II of the project must provide the entire 9.2 MGD of reuse and must be completed no later than October 8, 2022. OUC has an agreement with the City of Orlando to provide reclaimed water for Project RENEW. OUC also has an agreement with the City of Apopka for accepting reclaimed water from Project RENEW.

The project will be re-evaluated in order to determine the best location(s) for reclaimed water in the region that is environmentally, technologically, and economically feasible. Project RENEW may also be used to meet an adopted MFL prevention and recovery strategy. Updated engineering studies, which identify the chosen alternative for Project RENEW, must be submitted within 2 years after adoption of the MFL Prevention/Recovery Strategy for South Lake, Orange and Seminole Counties by the SJRWMD Governing Board. OUC has $7.5 million budgeted in its 2017 5-year capital plan to complete the design and start construction of Project RENEW.

Other OUC potable water system capital improvement projects include:

- *Ozone Generator Replacement Program*, $17.5 million in five year capital plan (2017-2021)
- *Other Water Production Costs*, $15.7 million in five year capital plan (2017-2021)
- *Other Water Delivery Projects*, $32.9 million in five year capital plan ((2017-2021)

3.4 Other Providers in Unincorporated Orange County

Capital improvement work plan data for other utility providers serving unincorporated Orange County were not readily available. Such data however do not represent a critical component of Orange County's CPP as these providers serve only a very small percentage of the total water demand in the unincorporated areas. Orange County municipalities, within which many of these providers deliver most of their water, incorporate relevant data on water supply capital improvement projects in their water supply facility work plan amendments.

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FIGURES

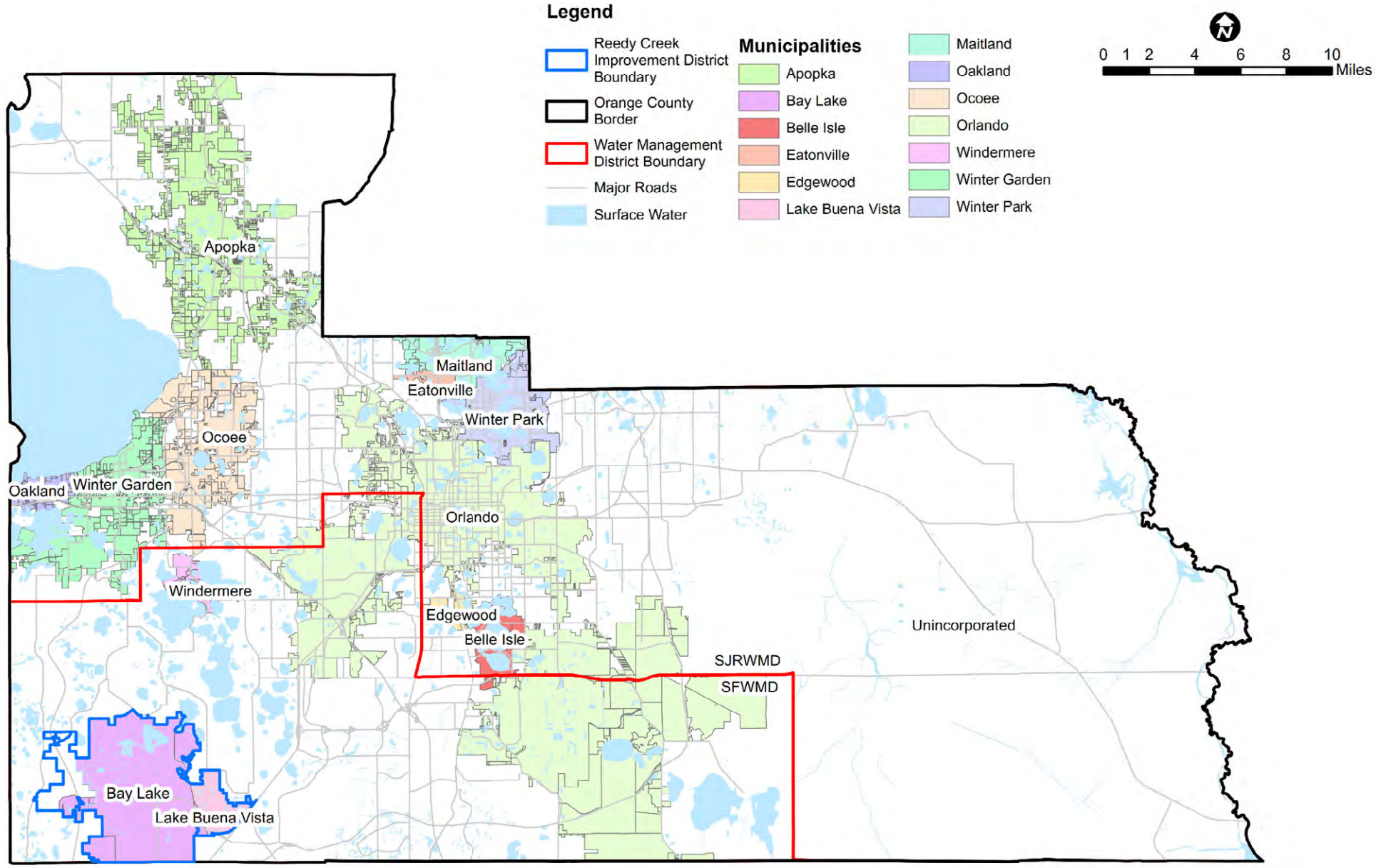


Figure 1: Orange County Municipalities and Water Management District Boundaries

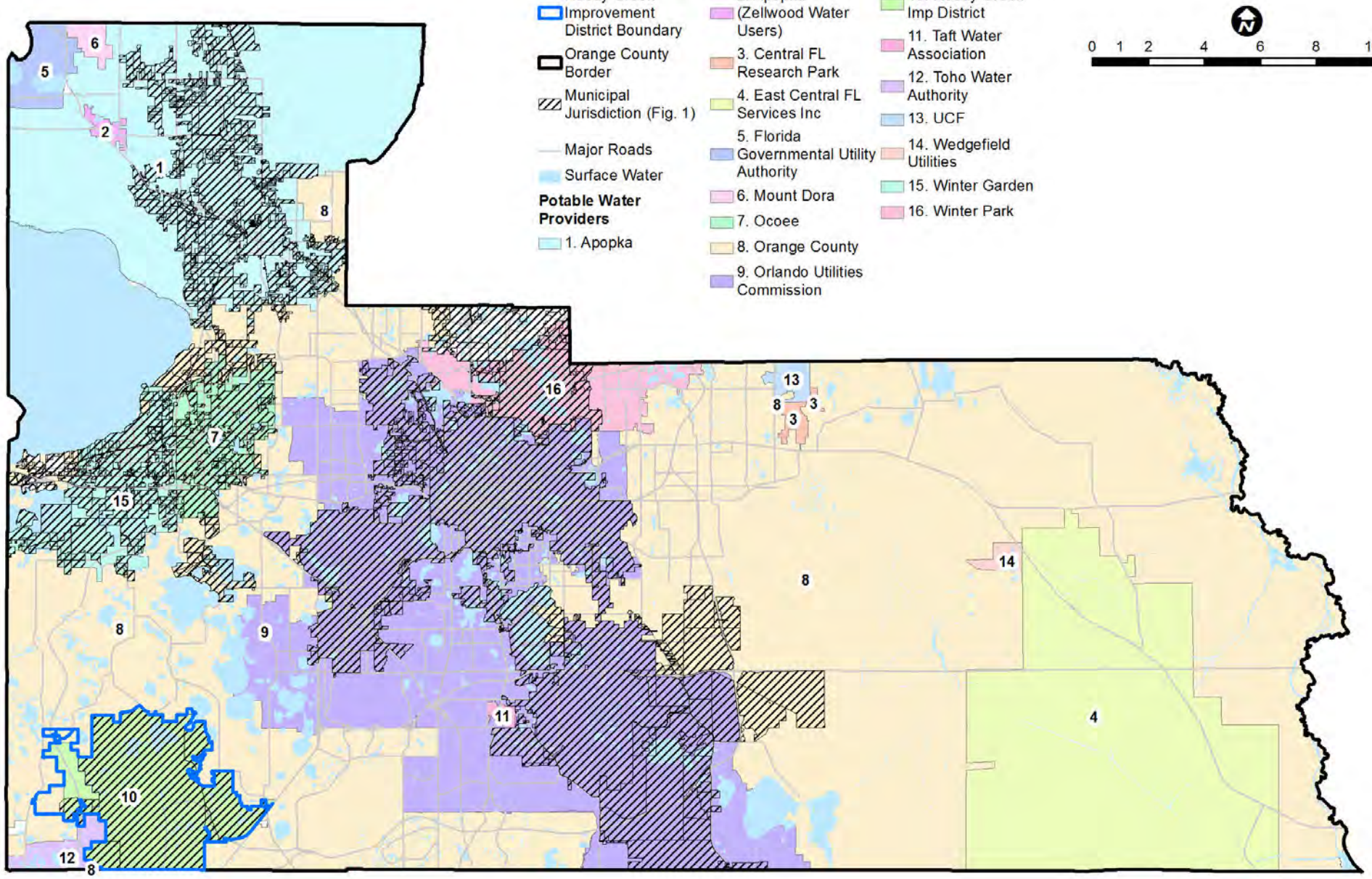


Figure 2: Potable Water Providers and Service Area Unincorporated Orange County

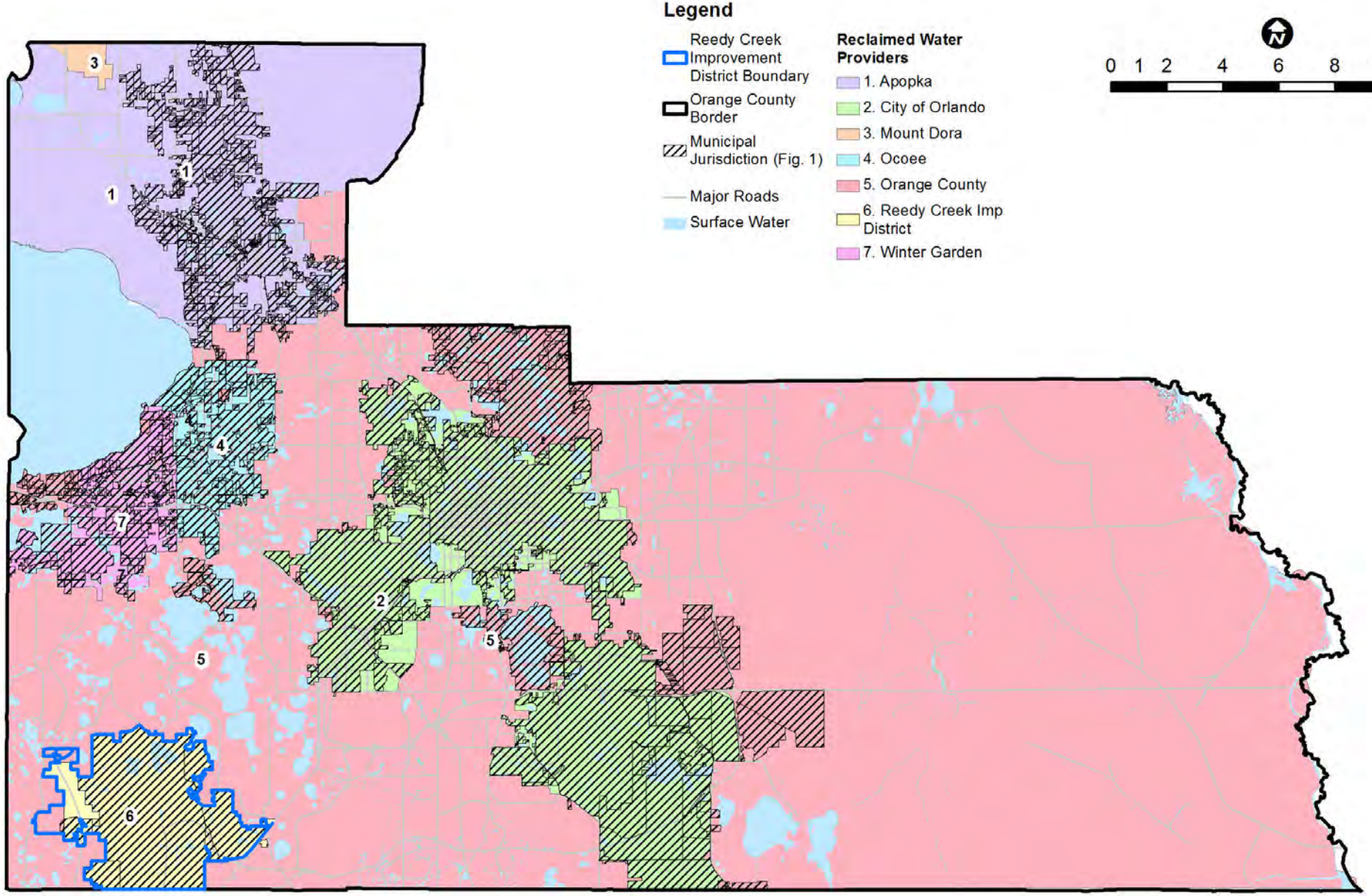


Figure 3: Reclaimed Water Service Providers and Service Areas in Unincorporated Orange County

TABLES

Table 1. Existing Water Supply Facilities for Two Main Potable Water Providers in Unincorporated Orange County

		Wellfield (Raw/Source Water)		Treatment (Finished Water)	
Supplier / Facility	**Raw Water Source**	**Current Maximum Capacity (mgd)**	**Current Average Day Capacity (mgd, AADF) (1)**	**Current Maximum Capacity (mgd)**	**Current Average Day Capacity (mgd, AADF) (1)**
ORANGE COUNTY UTILITIES (OCU)					
County Road 535	Upper Floridan	6.6	3.3	4.0	2.0
Hidden Springs WSF	Lower Floridan	8.6	4.3	8.6	4.5
Lake John Shores WSF	Upper Floridan	0.09	0.04	0.014	0.04
Oak Meadows WSF	Lower Floridan	5.3	2.9	7.7	3.9
Western Regional WSF	Lower Floridan	34.6	17.3	25.8	12.9
Total Existing Capacity - West/Southwest Service Area		***55.2***	***27.8***	***46.1***	***23.3***
Cypress Walk WSF	Upper Floridan	3.5	2.0	3.5	2.1
Hunters Creek WSF	Upper Floridan	10.1	5.9	6.4	3.8
Orangewood WSF	Upper Floridan	8.5	5.8	6.5	3.8
Southern Regional WSF	Lower Floridan	30.2	17.8	30.0	17.6
Southern Remote (2)	Upper Floridan	5.2	3.1	0.0	0.0
Vistana Water WSF	Upper Floridan	8.6	5.1	4.8	2.8
Total Existing Capacity - South Service Area		***66.1***	***38.9***	***51.2***	***30.1***
Eastern Regional WSF	Upper Floridan	60.5	35.6	50.0	29.4
Econ WSF (3)	Upper Floridan	10.1	8.5	0.0	0.0
Total Existing Capacity - East Service Area		***70.6***	***44.1***	***50.0***	***29.4***
Total Existing Capacity - OCU		**191.9**	**110.8**	**147.3**	**82.6**
ORLANDO UTILITIES COMMISSION (OUC)					
Pine Hills WSF	Lower Floridan	26.2	18.7	25.0	17.9
Kirkman WSF	Lower Floridan	17.3	12.4	15.0	10.7
Southwest WSF	Lower Floridan	45.5	32.5	40.0	28.6
Lake Highland WSF	Lower Floridan	28.1	20.1	30.4	21.7
Sky Lake WSF	Lower Floridan	22.5	16.1	22.5	16.1
Navy WSF	Lower Floridan	10.0	7.1	10.0	7.1
Conway WSF	Lower Floridan	31.0	22.1	26.8	19.1
Total Existing Capacity - OUC		**180.6**	**129.0**	**169.7**	**121.2**
OCU AND OUC COMBINED TOTAL CAPACITY		**372.5**	**239.8**	**316.9**	**203.8**

(1) Assumed an AADF:MDF ratio of 1:2 and 1:1.7 for OCU's West/Southwest and South/East service areas, respectively, and 1:1.4 for OUC.

(2) Wells at the formerly active Meadow Woods WSF are now known as the Southern Remote Wellfield, and are now used for supply to SRWSF.

(3) Econ WSF is no longer an active plant. Water from the Econ wellfield is pumped to ERWSF.

Table 2. Existing Permit Allocation Summary for Potable Water Providers in Unincorporated Orange County

Supplier	Water Management District	Permit Number	Permit Duration	Allocation (mgd, AADF) (1) 2020	2025	2030
Orange County Utilities	SJRWMD	3317	2006-2026	55.7	55.7	55.7
Orange County Utilities	SFWMD	48-00134-W	2007-2027	32.4	32.4	32.4
Orange County Utilities	SFWMD	48-00059-W	2002-2022	3.0	3.0	3.0
Orange County Utilities	SFWMD (2)	49-02051-W	2011-2041	11.3	11.3	11.3
Orlando Utilities Commission	SJRWMD (3)	3159	2004-2023	109.2	109.2	109.2
City of Apopka	SJRWMD	3217	2011-2031	16.0	16.0	16.0
FL Gov Utility Authority	SJRWMD	51073	2014-2034	0.13	0.13	0.13
East Central Florida Services	SJRWMD	3426	2014-2034	11.6	11.6	11.6
City of Mount Dora	SJRWMD	50147	2011-2031	5.9	5.9	5.9
City of Ocoee	SJRWMD	3216	2010-2026	4.88	4.88	4.88
Orange County Res & Dev Authority	SJRWMD	3300	2007-2027	1.32	1.32	1.32
Taft Water Association	SFWMD	48-00995-W	2008-2032	0.29	0.29	0.29
Tohopekaliga Water Authority	SFWMD	49-00103-W	2007-2027	42.8	42.8	42.8
University of Central Florida	SJRWMD	3202	2014-2034	0.82	0.82	0.82
Wedgefield Utilities Inc.	SJRWMD	3302	2013-2033	0.46	0.48	0.50
City of Winter Garden	SJRWMD	3368	2005-2025	6.3	6.3	6.3
City of Winter Park	SJRWMD	7624	2005-2025	12.4	12.7	12.7
Zellwood Water Users	SJRWMD	3301	2004-2023	0.12	0.12	0.12
Total All Current Permits				**314.6**	**314.9**	**314.9**

(1) The maximum allocation included in the current permit is assumed to be renewed for permits expiring prior to 2020, 2025, or 2030.

(2) This permit has been issued as a joint permit between OCU, RCID, and WCCF (STOPR entities). Orange County has a projected allocation of 11.25 mgd of 37.5 mgd permitted, for a 9 mgd finished water demand.

(3) SFWMD delegated authority to SJRWMD for OUC's permit.

(4) Although the portion of Southlake Utilities service area in Orange County is in the SFWMD, the withdrawal facilities are all located in Lake County and the allocation is permitted by the SJRWMD.

Table 3. Existing Water Reclamation Facilities for Two Main Wastewater/Reclaimed Water Providers in Unincorporated Orange County

Supplier / Facility	Current Permitted Treatment Capacity (mgd, AADF)	Current Permitted Reuse System Capacity (mgd, AADF)	2015 Average Daily Reclaimed Water Flow (mgd, AADF)[3]	2030 Projected Reclaimed Water Flow (mgd, AADF)[2]
ORANGE COUNTY UTILITIES (OCU)				
South WRF	43.0 [1]	70.8	35.8	39.3
Eastern WRF	19.0 [1]	33.5	18.6	27.6
Northwest WRF	10.3	12.5	5.8	6.2
Southwest WRF [5]	NA	NA	0.0	2.7
Total - OCU	**72.3**	**116.8**	**60.2**	**75.7**
CITY OF ORLANDO				
Iron Bridge and Water Conserv I WRFs	47.5	66.5	26.3	32.8
Water Conserv II WRF	21.0	61.5	14.2	16.3
Total - Orlando [4]	**68.5**	**128.0**	**40.5**	**49.1**
OCU AND ORLANDO COMBINED TOTAL CAPACITY	**140.8**	**244.8**	**100.7**	**124.8**

(1) Does not include each plant's Phase V improvements which are ongoing.

(2) Adapted from CFWI Table E-1, Volume I Appendix projections for 2015 and 2035

(3) Actual flow data

(4) In addition to serving OUC customers, the City of Orlando serves reclaimed water to areas outside the OUC service area in portions of Seminole County and Orange County.

(5) Future facility

Table 4. Potable Water Demand Projections in Unincorporated Orange County Associated with the Two Main Providers, by Water Management District

	Potable Water Demand Projections [1]			
Supplier	**2015**	**2020**	**2025**	**2030**
ORANGE COUNTY UTILITIES				
OCU - (CUP 3317) SJRWMD	56.6	64.0	70.2	70.6
OCU - SFWMD Portion	21.5	23.4	24.6	31.4
Total Demand - OCU	**78.1**	**87.4**	**94.9**	**101.9**
ORLANDO UTILITIES COMMISSION				
OUC - (CUP 3159) SJRWMD	16.9	19.4	21.0	22.3
OUC - SFWMD Portion	16.9	19.4	21.0	22.3
Total Demand - OUC	**33.8**	**38.8**	**42.0**	**44.5**
OCU and OUC Combined Totals	**111.87**	**126.2**	**136.9**	**146.4**

(1) Adapted from the CFWI RWSP 2015, Appendix IA, Table A-2.

Table 5. Current Potable Supply Capacity and Projected Demand Analysis for Two Main Potable Water Providers Serving Unincorporated Orange County

Supplier / Supply or Demand Component	Demand, Permit Allocation, or Capacity (mgd, AADF) 2015 Baseline	2020	2025	2030
ORANGE COUNTY UTILITIES (OCU)				
Potable Water Demand - in Unincorporated Orange County	72.5	81.0	87.5	93.7
Potable Water Demand - Total Service Area[1]	78.1	87.4	94.9	101.9
Current Permit Allocation[2]	102.4	102.4	102.4	102.4
Current Wellfield (Source) Capacity	110.8	110.8	110.8	110.8
Current Treatment Capacity	82.6	82.6	82.6	82.6
Additional Source Capacity (CIP Improvements)[3]	0.0	8.0	17.0	27.0
Additional Treatment Capacity (CIP Improvements)[3]	0.0	16.4	32.4	42.4
Permitted Surplus (Deficit)	-	15.0	7.5	0.5
Wellfield/Source Capacity Surplus (Deficit)	33.4	32.1	33.6	36.6
Treatment Capacity Surplus (Deficit)	4.7	11.8	20.3	23.3
ORLANDO UTILITIES COMMISSION (OUC)				
Potable Water Demand - Unincorporated Orange County[4]	33.8	38.8	42.0	44.5
Potable Water Demand - Total Service Area[1]	82.4	94.6	102.4	108.6
Current Permit Allocation[5]	105.0	109.2	109.2	109.2
Current Wellfield (Source) Capacity	129.0	129.0	129.0	129.0
Current Treatment Capacity	121.2	121.2	121.2	121.2
Additional Source Capacity (CIP Improvements)[6]	0.0	0.0	0.0	5.0
Additional Treatment Capacity (CIP Improvements)[6]	0.0	0.0	0.0	5.0
Permitted Surplus (Deficit)	-	14.6	6.8	0.6
Wellfield/Source Capacity Surplus (Deficit)	46.6	34.4	26.6	25.4
Treatment Capacity Surplus (Deficit)	38.8	26.6	18.8	17.6
OCU AND OUC COMBINED TOTAL POTABLE WATER SUPPLY CAPACITY ANALYSIS				
Potable Water Demand - in Unincorporated Orange County	108.7	119.8	129.5	138.2
Potable Water Demand - Total Service Area	166.4	182.0	197.3	210.5
Current Permit Allocation	207.4	211.6	211.6	211.6
Current Wellfield (Source) Capacity	239.8	239.8	239.8	239.8
Current Treatment Capacity	203.8	203.8	203.8	203.8
Additional Source Capacity (CIP Improvements)[6]	0.0	8.0	17.0	32.0
Additional Treatment Capacity (CIP Improvements)[6]	0.0	16.4	32.4	47.4
Permitted Surplus (Deficit)	-	29.6	14.3	1.1
Wellfield/Source Capacity Surplus (Deficit)	73.4	65.8	59.5	61.3
Treatment Capacity Surplus (Deficit)	37.4	38.2	38.9	40.7

(1) Projections taken from Table A-1 of 2015 Final CFWI RWSP, Volume IA. Based on BEBR medium scenario for 5-in-10 year rainfall. Projections based on a 1-in10 year rainfall, which increase demands by 6%, are also provided in the RWSP.

(2) OCU's CUP & WUP expire in 2026 & 2027, respectively. 2030 allocation is assumed to remain the same as end of permit allocations.

(3) Refer to Table 7 for breakdown of OCU traditional and AWS source and facility capacity analysis based on work plan improvements.

(4) Assumes 41% of OUC demand is in unincorporated Orange County based on the proportion of City population to total OUC population in 2015.

(5) OUC CUP expires in 2023. Allocation for 2025 and 2030 is assumed to remain the same as end of permit allocation.

(6) Includes OUC's planned 5.0 mgd, AADF share of St. Johns River/Taylor Creek Reservoir AWS Project.

Table 6. Current Reclaimed Supply Capacity and Projected Demand Analysis for Two Main Reclaimed Water Providers Serving Unincorporated Orange County

Supplier / Supply or Demand Component	Demand, Permit Allocation, or Capacity (mgd, AADF) 2015 Baseline	2020	2025	2030
ORANGE COUNTY UTILITIES (OCU)				
Public Access Reuse Demand [1]	38.6	44.1	48.5	52.8
Minimum Wetland Hydration and Required RIB Flow [1]	1.4	1.4	1.4	1.4
Reclaimed Water Demand - Total Service Area [1]	40.0	45.5	49.9	54.2
Current Permitted Treatment Capacity [2]	72.3	72.3	72.3	72.3
Current Permitted Reuse System Capacity [2]	116.8	116.8	116.8	116.8
Reclaimed Water Supply Available [3]	60.2	65.4	70.5	75.7
Additional Treatment Capacity (CIP Improvements)[4]	-	18.0	24.0	29.0
Additional Reuse System Capacity (CIP Improvements)[4]	-	11.5	11.5	11.5
Treatment Capacity Surplus (Deficit)	32.3	44.8	46.4	47.1
Reuse System Capacity Surplus (Deficit)	76.8	82.8	78.4	74.1
Available Recalimed Supply Surplus (Deficit)	20.2	19.9	20.6	21.5
CITY OF ORLANDO				
Public Access Reuse Demand [5]	16.2	19.5	22.3	22.5
Minimum Wetland and RIB Flow Targets [5]	16.0	16.0	16.0	16.0
Reclaimed Water Demand - Total Service Area [5]	32.2	35.5	38.3	38.5
Current Permitted Treatment Capacity [2]	68.5	68.5	68.5	68.5
Current Permitted Reuse System Capacity [2]	128.0	128.0	128.0	128.0
Reclaimed Water Supply Available [2]	40.5	43.4	46.2	49.1
Additional Treatment Capacity (CIP Improvements)	-	0.0	0.0	0.0
Additional Reuse System Capacity (CIP Improvements)	-	0.0	0.0	0.0
Treatment Capacity Surplus (Deficit)	36.3	33.0	30.2	30.0
Reuse System Capacity Surplus (Deficit)	95.8	92.5	89.7	89.5
Available Reclaimed Supply Surplus (Deficit)	8.3	7.9	7.9	10.6
OCU AND CITY OF ORLANDO COMBINED TOTAL RECLAIMED WATER CAPACITY ANALYSIS				
Reclaimed Water Demand - Total Service Area	72.2	81.0	88.2	92.7
Current Permitted Treatment Capacity	140.8	140.8	140.8	140.8
Current Permitted Reuse System Capacity	244.8	244.8	244.8	244.8
Reclaimed Water Supply Available	100.7	108.8	116.7	124.8
Additional Treatment Capacity (CIP Improvements)	0.0	18.0	24.0	29.0
Additional Reuse System Capacity (CIP Improvements)	0.0	11.5	11.5	11.5
Treatment Capacity Surplus (Deficit)	68.6	77.8	76.6	77.1
Reuse System Capacity Surplus (Deficit)	172.6	175.3	168.1	163.6
Available Recalimed Supply Surplus (Deficit)	28.5	27.8	28.5	32.1

(1) OCU projection estimates.

(2) Refer to Table 3.

(3) Adapted from CFWI Table E-1, Volume I Appendix projections for 2015 and 2035.

(4) Refer to Table 7.

(5) City of Orlando projection estimates. Does not include demands for Project RENEW.

Table 7. Orange County Utilities Capacity-Related Capital Improvement Work Plan Summary

OCU Capacity / Work Plan Project	Planned Available Supply, by Year (mgd, AADF)															
	2015 Baseline	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
TRADITIONAL WATER SUPPLY PROJECT CAPACITY																
Total Groundwater Permit Allocation [1]	102.4	102.4	102.4	102.4	102.4	102.4	102.4	102.4	102.4	102.4	102.4	102.4	102.4	102.4	102.4	102.4
Total Wellfield Capacity	110.8	110.8	112.6	114.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8
Existing Wellfields [2]	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8
Oak Meadows Well OM-5 (WSA) (*CIS 1532*)			1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Western Regional WSF Well WR-11, (WSA) (*CIS 1532*)				2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Malcolm Road Wellfield, Phase I (SWSA) (*CIS 1506*)					4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Total WSF Treatment Capacity	82.6	82.6	82.6	82.6	99.0	99.0	99.0	99.0	106.0	106.0	106.0	106.0	106.0	106.0	106.0	106.0
Existing Water Supply Facilities [2]	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6
Eastern Regional WSF, Phase IIIB (ESA) (*CIS 1554*)					12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4
Malcolm Road WSF, Phase I (SWSA) (*CIS 1506*)					4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Western Regional WSF, Phase IIIB (WSA) (*CIS 1532*)									7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
RECLAIMED WATER SUPPLY PROJECT CAPACITY																
Total WRF Treatment Capacity	72.3	72.3	72.3	77.3	90.3	90.3	90.3	91.3	91.3	91.3	96.3	96.3	101.3	101.3	101.3	101.3
Existing Water Reclamation Facilities [3]	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
Eastern WRF, Phase V (ESA) (*CIS 1538*)				5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
South WRF, Phase V (SSA) (*CIS 1555*)					13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
Northwest WRF, Phase IIIB (*CIS 1435*)								1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Southwest WRF, Phase I (SWSA) (*CIS 1507*)											5.0	5.0	5.0	5.0	5.0	5.0
Eastern WRF, Phase VI (ESA) (*CIS 1538*)													5.0	5.0	5.0	5.0
Total Reuse System Capacity	116.8	116.8	119.3	119.3	119.3	128.3	128.3	128.3	128.3	128.3	128.3	128.3	128.3	128.3	128.3	128.3
Existing Reuse Systems [3]	116.8	116.8	116.8	116.8	116.8	116.8	116.8	116.8	116.8	116.8	116.8	116.8	116.8	116.8	116.8	116.8
NWRF RWM Extension to Apopka (WSA) (*CIS 1435*) [4]			2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
East/SE RW Reuse System Expansion (ESA) (*CIS 1483*) [4]						9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
ALTERNATIVE WATER SUPPLY PROJECT CAPACITY																
Total AWS Source/Treatment Capacity	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	19.0
Cypress Lake Wellfield (STOPR) (*CIS 1550-08*) [5]									9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
SJR/TCR Surface Water Supply (ESA) (*CIS 1550*)																10.0

(1) Refer to Table 2.

(2) Refer to Table 1.

(3) Refer to Table 3.

(4) Until constructed and permitted, capacity values shown for reuse distribution system projects are best estimates.

(5) Orange County's allocation is approximately 9 mgd, AADF finished water, once completed and operational.

APPENDICES

APPENDIX A

Potable Water Supply Facilities
Serving Unincorporated Orange County

In support of this Work Plan, an inventory of potable water facilities was completed for those public and private utilities providing potable water service within unincorporated Orange County. This appendix presents additional information on the existing facilities and related consumptive and water use permits for these potable water service providers, which include the following significant utilities:

Orange County Utilities
Orlando Utilities Commission
Apopka (City of)
East Central Florida Services
FL Gov. Utility Authority
Mount Dora (City of)
Ocoee (City of)
Orange County Research and Development Authority (Central Florida Research Park)
Taft Water Association
Tohopekaliga Water Authority
University of Central Florida
Wedgefield Utilities, Inc.
Winter Garden (City of)
Winter Park (City of)
Zellwood Water Users

Summaries of the existing potable water supply permit allocations associated with the above-listed utilities are presented in the data and analysis section of the Orange County Work Plan (Table 2). In addition, detailed existing facility capacities are summarized in Work Plan Table 1 for Orange County Utilities and the Orlando Utilities Commission, which are the two largest providers and represent nearly all of the public supply in unincorporated Orange County).

Five other significant utilities not on the above list—the City of Casselberry, the City of Maitland, the Town of Oakland, Utilities Inc. (Town of Windermere), and the Town of Eatonville—provide potable water service within Orange County; however, their water service areas remain within their jurisdictional boundaries and do not contribute to the supply within unincorporated Orange County. For this reason, it is not necessary to address these providers as part of Orange County's Work Plan.

There are other utilities that provide limited potable water service within unincorporated Orange County. These providers, however, have no potential for growth within their service areas or provide small quantities relative to the other suppliers and are therefore not addressed explicitly in this Work Plan. Reedy Creek Energy Services (the utility provider for RCID) is a significant water supplier, but provides less than 0.2 mgd of potable water to two small developments in unincorporated Orange County.

The potable water suppliers operate numerous water supply facilities, which are described in more detail below. All of these potable water providers currently use the Floridan aquifer as their primary source of water supply.

ORANGE COUNTY UTILITIES (OCU)

Facilities

The Orange County Utilities (OCU) Department is the largest potable water provider in unincorporated Orange County. The Water Division provides the drinking water supply for much of unincorporated Orange County, as well as much of the Town of Windermere and portions of several other municipalities in Orange County, through the operation and maintenance of water treatment systems, transmission systems, and distribution systems.

OCU currently owns and operates 11 water treatment facilities, four of which are located in the SJRWMD and 7 in the SFWMD. Potable water is currently supplied to these treatment facilities by 49 active wells completed in both the upper and lower production zones of the Floridan aquifer. OCU's responsibility is divided across four potable water service areas (**Figure A.1**). The total average potable water produced by OCU in 2015 was approximately 58.4 million gallons per day (mgd) across over 141,000 accounts, serving the needs of nearly 575,000 residents plus a significant number of commercial businesses such as hotels.

OCU currently obtains its potable water supply from groundwater of the Floridan aquifer through wellfields associated with the following existing water supply facilities (WSFs):

SJRWMD Facilities	*SFWMD Facilities*
Eastern Regional WSF	Hidden Springs WSF
Western Regional WSF	Cypress Walk WSF
Oak Meadows WSF	Hunters Creek WSF
Lake John Shores WSF	Orangewood WSF
	Vistana WSF
	Southern Regional WSF
	CR 535 WSF

OCU's active production wells tap the Lower production zone of the Floridan aquifer at the Western Regional, Oak Meadows, and Hidden Springs WSF wellfields, while the remainder of the County's supply wells tap the Upper production zone of the Floridan aquifer. Wells and well pumps are used to withdraw water from the Floridan aquifer, as permitted by the SJRWMD and SFWMD.

Currently, the Southwest Service Area is served by the CR 535 WSF, interconnects to other OCU service areas, or by wholesale agreement with the Tohopekaliga Water Authority. The Malcolm Road wellfield and WSF (permitted by the SJRWMD) is also planned to serve this area.

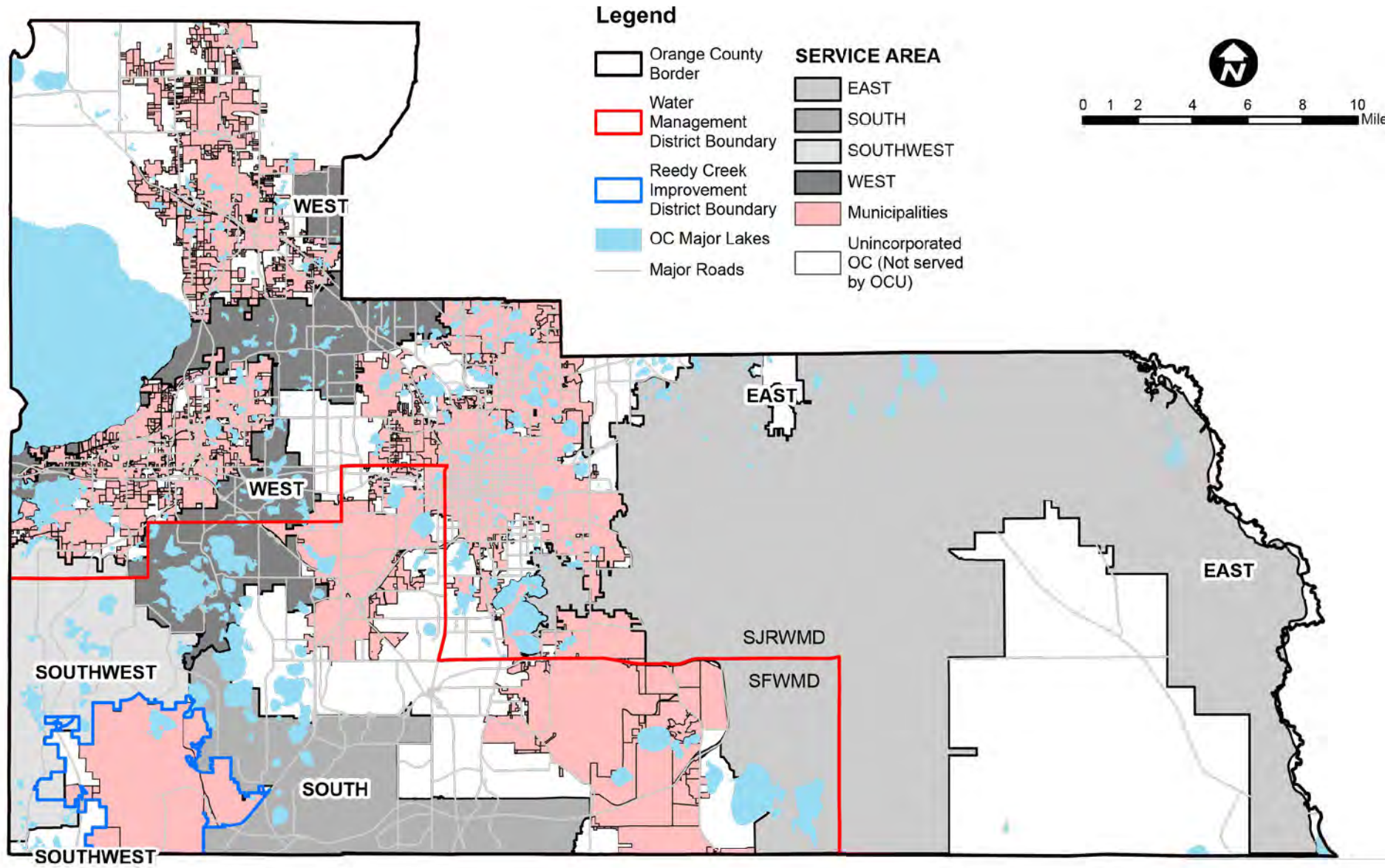


Figure A.1: Orange County Utilities Potable Water Service Area Map

Permits

OCU currently holds one primary SJRWMD consumptive use permit (CUP) and three SFWMD water use permits (WUPs) for potable water supply:

SJRWMD CUP#3317: Covers the East and West Service Areas and a portion of the Southwest Service Area (Malcolm Road WSF), 55.7 mgd annual average allocation, expires December 13, 2026

SFWMD WUP#48-00134-W: South Service Area and a portion of Southwest Service Area (CR535 [Horizon West] WSF), 32.4 mgd annual average allocation, 55.8 mgd maximum month allocation, expires June 14, 2027

SFWMD WUP#48-00059-W: Hidden Springs WSF Service Area (a sub-area of the West Service Area), 3.0 mgd annual average allocation, 7.1 mgd maximum day allocation, expires November 14, 2022

SFWMD WUP#49-02051-W (STOPR Joint Permit): Cypress Lake WSF, 11.25 mgd annual average and maximum month allocation, expires October 3, 2041

Table A.1 presents annual average allocation amounts by wellfield for the existing OCU permits.

Table A.1. Orange County Utilities Water Supply Permit Allocation Summary

WSF	Service Area	Groundwater Allocation (mgd, AADF through permit expiration)
SJRWMD CUP # 3317(2006-2026)		
Eastern Regional, Econ, and Bonneville [1]	East	35.2
Western Regional, Oak Meadows, Malcolm Rd [2]	West / Southwest	22.5
Lake John Shores	West	0.01
Subtotal CUP # 3317 (Maximum combined allocation) [3]		**55.7**
SFWMD WUP # 48-00134-W (2007-2027)		
Cypress Walk	South	1.80
Hunters Creek	South	5.04
Meadow Woods	South	2.28
Orangewood	South	2.88
Vistana	South	3.60
Southern Regional	South	13.70
CR535 (Horizon West)	Southwest	3.10
Subtotal WUP # 48-00134-W		**32.4**
SFWMD WUP # 49-02051-W (2011-2041)		
Cypress Lake [4]	STOPR	11.25
Subtotal WUP # 49-02051-W		**11.25**

WSF	Service Area	Groundwater Allocation (mgd, AADF through permit expiration)
SFWMD WUP # 48-00059-W (2002-2022)		
Hidden Springs	West	3.0
Subtotal WUP # 48-00059-W		**3.0**
Total All Permits		**102.35**

(1) Econ has been converted to a well pumping facility. Bonneville wellfield has been abandoned.
(2) Malcolm Road WSF is a future facility in the Southwest Service Area.
(3) CUP No. 3317 total allocation is less than the sum of the individual maximum annual allocations per service area.
(4) Future facility. This is a STOPR project, in which OCU is allowed to withdraw up to 11.25 mgd, AADF (upon future project construction)

In addition, the OCU permits include, as specific conditions, several requirements regarding the use of reclaimed water and development of alternative water supplies, as described below.

Under SJRWMD CUP #3317, OCU is required to:

Provide a minimum of 41.8 mgd, AADF by 2026 of reclaimed water across the OCU service areas to meet irrigation water demands, in accordance with the following reuse implementation schedule by source facility (*Condition 26*):

Provide 0.3 mgd, AADF of aquifer recharge from the Old Winter Garden Road RIB Project and 0.4 mgd, AADF of aquifer recharge from the Northwest WRF RIB Expansion Project (*Condition 28*)

Develop the St. Johns River/Taylor Creek Reservoir Project, or one or more other alternative water supply (AWS) projects to meet all or part of the permittee's public water supply not met by groundwater or reclaimed water allocations authorized by the permit. The County must submit a preliminary project design, funding plan, proposed schedule, and CUP application for the project(s) by December 31, 2018 (*Condition 23*)

Under SFWMD WUP #48-00134-W, OCU is required to:

Produce 40.9 mgd, AADF of non-potable water for land application (*Condition 29*)

Develop the St. Johns River/Taylor Creek Reservoir Project, or one or more other alternative water supply (AWS) projects to meet all or part of the permittee's public water supply not met by groundwater or reclaimed water allocations authorized by the permit. (*Condition 25*)
The County also has to submit documents similar to that of CUP #3317 Condition 23 (above) for one or more AWS projects by March 31, 2018 *(Condition 26)*

Agreements

OCU maintains the following three primary types of potable water-related agreements:

Territorial agreements, defining utility service areas
Wholesale service agreements, providing for wholesale or emergency water service (in one or both directions) between OCU and other utility providers

Regional cooperative agreements, for mutually beneficial initiatives, such as investigating alternatives, combining resources, or developing new or expanded regional sources and facilities

Orange County's policies and initiatives regarding territorial and joint planning area agreements are described in significant detail in the Intergovernmental Coordination Element of the County's Comprehensive Policy Plan. OCU maintains territorial agreements with all the other major potable water providers within Orange County, and some of those in neighboring counties that may have facilities or customers in Orange County, including the following:

- Orlando Utilities Commission (OUC)
- City of Apopka
- City of Cocoa
- Econ Utilities (Wedgefield Utilities / Utilities, Inc.)
- City of Maitland
- City of Mount Dora
- City of Ocoee
- Reedy Creek Improvement District
- Southlake Utilities
- Tohopekaliga Water Authority (City of Kissimmee)
- University of Central Florida
- City of Winter Garden
- City of Winter Park

OCU has a number of potable water service interconnects with other utility systems. While most of these interconnects are for emergency situations, a few potable water agreements are in place between Orange County and other entities allowing Orange County to purchase water if needed. **Table A.2** presents a summary of current wholesale and interim agreements. Historically, OCU has purchased minor volumes of wholesale water from these utilities in areas where OCU water distribution infrastructure was not yet in place.

Table A.2. Orange County Potable Water Service Agreements

Entity	Capacity / Conditions
Tohopekaliga Water Authority	Tohopekaliga Water Authority can provide interim or wholesale water service to OCU in portions of the Southwest Service Area
City of Winter Garden	Winter Garden can provide wholesale water service to the Magnolia Woods and Partlow Acres subdivisions in the West Service Area
Orlando Utilities Commission (OUC)	OUC can provide wholesale or interim water service to the Corrine Terrace, Daetwyler Shores (through 2019) and Lake Conway areas of the OCU East and South Service Areas, numerous special service connections to customers inside OCU's territorial boundary that are not supplied by OCU, and emergency interconnects
City of Winter Park	Winter Park can provide wholesale or interim water service to Bradford Cove, Hunters Ridge Apartments, Sutton Ridge, and University Forest in the OCU East Service Area, and emergency interconnects
City of Ocoee	Ocoee has an emergency interconnect agreement, and Ocoee Pines is served through a wholesale agreement with OCU.
Reedy Creek Energy Services	RCES can provide wholesale water service to Flamingo Crossings and Northeast Resort Parcel
Seminole County	Emergency potable water interconnect agreements for Maitland/Bear Lake
Utilities, Inc. of Florida	OCU can provide wholesale water service to David Shores

In addition to territorial and wholesale service agreements, regional cooperative agreements are critical for the future cost-effective and environmentally responsible implementation of water resource management methods and development of traditional and alternative potable water supplies in the fast-growing east-central Florida region. As described in Section 2.6.7 of the Work Plan, Orange County currently maintains the following key regional cooperative agreements related to potable water:

STOPR Cost Sharing and Compliance Coordination Memorandum of Agreement, executed in 2007 between the City of St. Cloud, Tohopekaliga Water Authority, Orange County, Polk County, and Reedy Creek Improvement District for collaboration in implementing water resource monitoring and compliance requirements of their jointly issued water use permits from the SFWMD

ORLANDO UTILITIES COMMISSION (OUC)

Facilities

Orlando Utilities Commission (OUC) is the municipal utility of the City of Orlando that provides water, electric and chilled water services. OUC's water service area (**Figure A.2**) measures approximately 200 square miles which includes the Cities of Orlando, Edgewood and Belle Isle plus large portions of unincorporated Orange County.

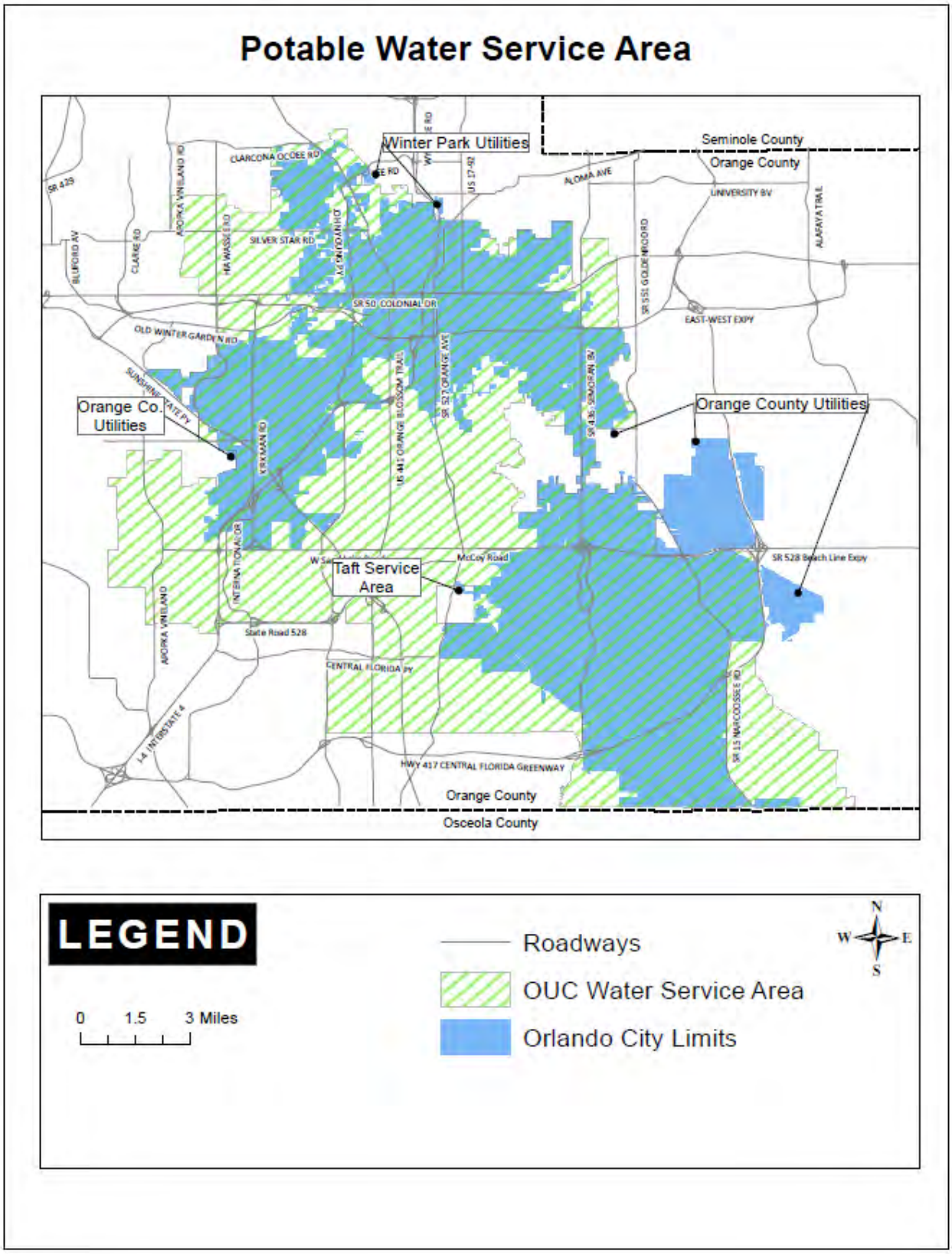


Figure A.2. Orlando Utilities Commission Potable Water Service Area

There are seven water supply/treatment facilities within the OUC water service area. Each facility includes wells, ozone generating equipment, ozone contact tanks, chemical feed equipment, ground storage reservoirs, high service pumps, control equipment, and emergency power facilities to run the plant in the event of an extended power outage. OUC's Southeast facility repumps water in the distribution system in order to maintain pressures in the extreme Southeast portions of the service area, including Lake Nona.

All OUC wells tap into the Lower Floridan aquifer. The only constituent in the raw water that requires treatment is hydrogen sulfide, a gas with an offensive odor that is easily removed by the ozone treatment equipment. OUC performs rigorous testing of the water it pumps from the aquifer to make sure that it is free from contaminants and suitable for treatment using the ozone treatment process.

OUC has three emergency interconnects with Orange County Utilities which provide emergency sources of water in the event one utility unexpectedly experiences extensive loss of supply sources or treatment facilities. The water can flow either way through an emergency interconnect, depending on which utility needs the water. They are intended to be used only in an emergency and require the cooperation of both utilities to activate them during an emergency.

There are approximately 1,800 miles of transmission/distribution pipes ranging in size from 2 inches to 48 inches. One of the functions of this network is to interconnect all the water supply/treatment facilities with each other. There are three elevated water storage tanks connected to the transmission/distribution system. These tanks help maintain minimum acceptable pressure in the pipe network and supply water into the pipe network during peak demand periods.

Permits

OUC entered into an interagency agreement with SJRWMD and SFWMD in May 2004 as part of its CUP renewal process. Under this agreement, SFWMD delegated to SJRWMD all of its authority to issue a single, consolidated CUP to OUC. SJRWMD issued CUP #3159 in May 2004. It is a 20 year duration permit, scheduled to expire in October 2023. In addition to authorizing a consolidated CUP, the interagency agreement allows SJRWMD to issue well construction and ERP permits to OUC, and to enforce OUC's CUP throughout the 20 year duration of the permit. OUC's permit allocates 109.2 mgd of groundwater from the Lower Floridan Aquifer in 2023. In addition to the 109.2 mgd system-wide limitation on groundwater withdrawals, the CUP limits withdrawals at each individual water supply/treatment facility.

Agreements

In addition to the permit conditions, OUC has legal obligations under two settlement agreements. These agreements concluded several months of litigation brought on by permit challenges filed by Orange County and Lake County in October 2003. One agreement was signed by OUC, Orange County, SJRWMD and SFWMD. It requires that OUC develop at least 5 MGD of water from an alternative supply source, such as Taylor Creek Reservoir, the St. Johns River, or other sources acceptable to the SJRWMD. The agreement anticipates that OUC will pursue alternative water supply development jointly with Orange County, which has a similar obligation under the

agreement. OUC also agreed that it would not challenge permits that Orange County has pending with both SJRWMD and SFWMD. The second agreement was signed by OUC and Lake County. Under this agreement, OUC agrees to give Lake County an option to participate in any alternative water supply development project it pursues. This will assure Lake County a place "at the table" as alternative water supply development is discussed in Central Florida in the future.

The service area boundary was established by OUC and Orange County in May 1994 in the "Amended and Restated Orlando Utilities Commission/Orange County Water Service Territorial Agreement". This 25 year agreement is intended to avoid duplication of facilities that would cause needless and wasteful expenditures, and avoid unpredictability and continual changes in utility service areas which hinder the ability to make prudent capital investment or plan for efficient system expansion. The agreement allows for changes to the territorial boundary and the provision of wholesale water by one party to the other. As shown in **Figure A.2**, OUC is surrounded on all sides by the Orange County Utilities water system service area, except for a portion of the northern boundary where OUC interfaces with the City of Winter Park water utility.

CITY OF APOPKA

Facilities

The City of Apopka's service area for its water system has historically coincided with the City's urban service area. The boundary for the service area contains approximately 68 square miles and was expanded with the acquisition of facilities from Orange County. The service area includes most of the area within the City limits, plus a large area within unincorporated Orange County. This area of unincorporated Orange County, however, is not densely populated and has only a minor amount of growth projected within the planning horizon.

The City owns five Water Treatment Plants (WTPs) including two WTPs that were purchased from Orange County. An additional water treatment plant (Southwest) is planned for the future. The wells associated with these treatment plants are located in northwest Orange County. The drinking water source taps the Lower Floridan Aquifer.

The current water distribution system, not including on-site piping at the treatment plants, consists of pipes ranging in diameter from 3 to 36-inches, fire hydrants, and isolation valves. There are currently no elevated storage facilities serving the distribution system. There are a total of six ground storage tanks within the City serving the distribution system.

Permits

The City has a single Consumptive Use permit from the SJRWMD for its potable water supply system. CUP #3217 is dated September 13, 2011 with a maximum ADF of 16.0 mgd in 2011. The maximum Annual Use is 5840.0 million gallons in Year 2011 and the permit expires September 12, 2031.

Agreements

The City of Apopka has a service area agreement with Orange County for water and sewer service. The agreement provides that the City of Apopka will be the primary provider for potable water service, reclaimed water and wastewater services within the City and within unincorporated Orange County that lies within the City's service area.

EAST CENTRAL FLORIDA SERVICES

Detailed facility information was not provided for this entity. Therefore, certain assumptions of existing facilities were made based on the previous Work Plan and other publically available data.

Facilities

This private water provider serves the water needs of a large cattle ranch (Deseret Ranches of Florida) in Brevard, Orange and Osceola Counties approximately 218,144 acres in size. The ranch has existed for a number of decades and much of the property is located south of the Beachline Expressway (SR 528) and north of SR 192, a small portion is located north of the Beachline Expressway. The eastern boundary extends west and parallel of the St. Johns River and the western boundary extends into Osceola and Orange County and almost to SR 441.

The provider uses groundwater to irrigate improved pasture, water livestock and provide potable water supply to year round and seasonal residents. The provider also uses surface water to irrigate and freeze-protect citrus and uses groundwater to facilitate operations at two borrow pits on site.

In terms of household use the provider uses groundwater to supply 235 year round residents, 30 employees at the ranch headquarters, and 278,250 seasonal days at campgrounds and hunting camps located on the ranch. In addition, the provider will provide water to a church camp being constructed. The resident and seasonal population is expected to remain steady throughout the next 10 years (permit duration).

There are currently 224 existing wells throughout the property and two additional wells were constructed at the church camp. The majority of the wells taps the Upper Floridan aquifer, with wells into the Surficial aquifer for household use.

Permits

CUP # 3426 issued on February 12, 2014; Maximum annual groundwater withdrawal of 8,140 mgy(22.32 mgd) for irrigation of pasture, 33.48 mgy (.09 mgd) for watering 7,647 livestock, 279.19 mgy (0.765 mgd) for dewatering at two borrow pits (through February 14, 2017), 140.84 mgy (0.39 mgd) surface water withdrawal from L-73 canal for citrus irrigation and freeze protection; Average daily 16.41 mgy (0.04 mgd) for household use; Permit expires May 9, 2032.

Agreements

The private water provider is regulated by the Public Service Commission which establishes its service area. There are no agreements with Orange County. Deseret Ranches has a well water supply agreement with the City of Cocoa.

FLORIDA GOVERNMENTAL UTILITY AUTHORITY

Facilities

Florida Governmental Utility Authority (FGUA), a private utility, owns and operates the Tangerine WTP – a category V, class C treatment facility in northwest Orange County. FGUA provides service to approximately 320 customer accounts (840 users). The Tangerine Water System includes 2 supply wells and a .02 million gallon hydropneumatic tank. The wells have a total design capacity of .85 mgd. Water is pumped from the wells, treated by hypochlorination, and stored in the tank for use.

Permits

CUP # 51073 dated 2014, maximum annual withdrawals for all uses within the site Tangerine Park must not exceed 46.36 million gallons (0.127 mgd). Permit expires February 25, 2034.

Agreements

The private utility is regulated by the Public Service Commission which establishes its service area. There are no agreements with Orange County.

CITY OF MOUNT DORA

Facilities

The City of Mount Dora is located in north-central Lake County, approximately 8 miles north-northeast of Lake Apopka. The City owns and operates a water supply and distribution system that provides service to most areas of the City and some unincorporated areas of Lake County. The City also has an agreement with Orange County to provide service to an area of unincorporated Orange County. Much of the projected population growth in the City's service area is expected to occur outside the city limits, particularly within the Orange County portion of the service area where the 20-year projection calls for approximately 10,300 units to be completed.

The City owns two active water treatment plants that provide service to most developed areas of the City and some developed areas of unincorporated Lake and Orange Counties. The service area consists of approximately 19,000 acres. At present, the City of Mount Dora owns and operates five upper Floridan aquifer public supply wells – three wells at the City's WTP#1 and two wells at the newly completed WTP#2. Both are located in Lake County. The two wells at the Dora Pines water treatment plant were plugged and abandoned per the new consumptive use permit. The Dora Pines plant is no longer an active water treatment plant. The lower Floridan

well in Orange County was cancelled as part of the consumptive use permit negotiations and two new wells were drilled in Lake County at WTP#2.

The 2015 population of the service area was estimated at 21,611, and the 2030 projection is estimated at 31,909. Currently, water is primarily used for household and commercial type uses. The service area is predominately residential and approximately 71 percent of the current potable water use is under the residential use classification (single-family and multifamily). Approximately 12 percent of the water use is by commercial use consisting primarily of potable water supply for small businesses, professional offices, churches, and restaurants, 12 percent of the water use is for urban landscape irrigation (City parks, schools, City Hall and median irrigation) and 5 percent is utility uses and unaccounted for losses.

Permits

CUP # 50147: Permit issued on August 9, 2011; average daily 5.9 mgd; maximum annual 2,146.93 million gallons for an estimated population of 31,909 in 2030; expires on August 9, 2031.

Agreements

The City of Mount Dora has several interlocal agreements with Orange County. A joint planning agreement provides for the joint review of land use and zoning and development issues. The joint planning agreement requires the County to enforce the city's design and density standards within the area. With respect to utilities, the City agreed to provide water and sewer service to the unincorporated areas within the joint planning area for a 50-year term. At the end of the 50 years, the County agreed to provide services and the City will retain the customers served by the City. A water and sewer agreement provides for water and sewer service to unincorporated areas within Orange County that are also within the joint planning area.

CITY OF OCOEE

Detailed facility information was not provided for this City. Therefore, certain assumptions of existing facilities were made based on the previous Work Plan and other publically available data.

Facilities

The City of Ocoee has established a potable water utility service boundary that includes lands within the City and in unincorporated Orange County that are also within the Joint Planning Area and within the water and sewer service boundary. The City is currently developing utility infrastructure to serve Northwest Ocoee. This area falls within unincorporated Orange County of the City's Joint Planning Area. However, only part of the northwest sector falls within the City's utility service boundary area.

The City of Ocoee currently provides potable water service from two existing water treatment plants 1) Forest Oaks Plant and 2) the South Plant. The water source for the existing treatment plants is groundwater from the Floridan Aquifer.

The Forest Oaks Plant has 4 existing wells for public supply: three from the Lower Floridan and one from the Upper Floridan. The plant contains 2 storage tanks with a combined capacity of 1.07 MGD.

The South Plant in the southern portion of the service area has two existing wells for public supply, both from the Lower Floridan. It is also proposing an additional Lower Floridan well to meet future demands. The South Plant contains 2 storage tanks with a combined capacity of 1.34 MGD.

Water is pumped from the aquifer system, aerated, fluoridated, chlorinated, and then stored and distributed. The plants can process up to 9.5 mgd of water during peak months, if necessary.

Permits

The City of Ocoee CUP # 3216 is dated November 17, 2010. The maximum ground water withdrawals shall not exceed 4.88 mgd AADF (1,781.2 mgy) from the present time through permit expiration, for a projected population of 36,580 in 2026. The permit expires on November 15, 2026.

The City of Ocoee is in the process of renewing its Consumptive Use Permit (new CUP # 3216). The application was submitted to the SJRWMD on December 6, 2006 and request for additional information issued by the district on January 3, 2007.

Agreements

The potable water utility service boundary was established pursuant to the Orange County/City of Ocoee Water Service Territorial Agreement dated November 14, 1988 as amended February 11, 1994. The provision of sewer service was established pursuant to the Orange County/City of Ocoee Sewer Service Territorial Agreement dated June 8, 1987, as amended February 11, 1994.

The agreements provide water and sewer service within the corporate limits of the City. The City's policy is also to provide water and sewer service to the following areas: i) within unincorporated Orange County, ii) within the Joint Planning Area, and iii) within the City sewer and water service territories per the agreement with Orange County. A petition for voluntary annexation is a condition precedent to the receipt of water and sewer service from the City.

For lands located in unincorporated Orange County outside the Joint Planning Area but inside the sewer and water service territories, landowners are not required to petition for annexation as a condition of receipt of water and sewer service. The City is not required to provide service in this area.

ORANGE COUNTY RESEARCH AND DEVELOPMENT AUTHORITY (CENTRAL FLORIDA RESEARCH PARK)

Facilities

The Central Florida Research Park (CFRP) is located approximately 10 miles east of downtown Orlando and south from the adjacent University of Central Florida (UCF) in Orange County. The CFRP is a relatively large high-technology center occupied by industrial complexes, research facilities, commercial businesses, a 199-room hotel and a 24-unit condominium. The total property area (service area) consists of 744 acres. As of August 2016, there were 59 buildings constructed within the park which provide approximately 3.9 million square feet of total building area.

The Orange County Research and Development Authority owns a 1.34-acre water treatment plant located within the property boundaries of the CFRP. The water treatment plant supplies water for the park and for emergency backup to the UCF.

Water for household, landscape irrigation, water utility and essential is supplied using an existing 12-inch casing diameter well, (Well 1 GRS ID 12223) and 14-inch casing diameter well (Well 2 GRS ID 12224), which were both completed at a depth of 440 feet into the Floridan Aquifer. Well 1 was cased to a depth of 207 feet and Well 2 was cased to a depth of 210 feet. The maximum rated pumping capacity for Wells 1 and 2 is 1,550 gallons per minute (gpm), and the combined maximum rated pumping capacity is 3,100 gpm. Water usage is monitored for each well using totalizing in-line flow meters. The two wells are spaced approximately 250 to 300 feet apart near the western property limit, and are approximately centered between the north and south park limits.

Permits

CUP # 3300: Permit issued on August 7, 2007, 479.98 million gallons per year (1.315 mgd, AADF) of groundwater to supply a 744 acre research park with an estimated population of 31,588, 69.72 mgy (0.191 mgd AADF) of surface water and/or reclaimed water for landscape irrigation and 128 mgy (0.351 mgd) of groundwater as emergency back-up for UCF; Permit expires on August 7, 2027.

Agreements

The Orange County Research and Development Authority and UCF operate independent and separate potable water supply systems under normal circumstances. However, the water supply systems are connected with a valve that is closed under normal circumstances. The Emergency Use of Connected Water Systems agreement in the Third Addendum to the Utilities Service Contract executed October 9, 1991 between the Orange County Research and Development Authority and UCF provides that either party may open the valve and draw upon the other party's potable water sources in order to meet an emergency situation. The use is metered and the District granted an annual allocation of 128 million gallons per year (mgy) (0.351 mgd, AADF) for emergency backup use in the current permit.

TAFT WATER ASSOCIATION

Facilities

Taft Water Association is a private utility that provides water to approximately 2,600 residents in a 640 acre service area located in Orange County. The source of water is groundwater from the Upper Floridan Aquifer. The CFWI estimates that by 2025, the demand population will increase to 3,000 and water demand will slightly increase from 0.29 mgd to 0.31 mgd. The permit estimates the 2032 population at 5,159. The utility has two existing wells used to provide potable water. Well #1 is the primary and Well #2 is the secondary. Taft Water Association does not operate a wastewater treatment facility.

Permits

CUP # 48-00995-W issued by SFWMD; Annual allocation 107 MG (0.29 mgd); Maximum daily allocation 0.44 MG; Permit issued on February 27, 2012; Permit expires on February 27, 2032.

Agreements

This is a private utility not regulated by the Florida Public Service Commission.

TOHOPEKALIGA WATER AUTHORITY (TWA)

Facilities

Established in October 2003 by a special act of the Florida legislature, the Tohopekaliga Water Authority (TWA) is the largest provider of water, wastewater and reclaimed water services in Osceola County. TWA currently serves 93,000 water, 87,000 wastewater and 14,000 reclaimed water customers in Kissimmee, Poinciana, Polk County and unincorporated areas of Osceola and Orange County. In April 2007, TWA acquired Poinciana Utilities expanding the customer base by 30 percent.

TWA owns and operates 15 water plants and 8 wastewater plants while maintaining 1,304 miles of water mains, 1199 miles of wastewater mains, 326 miles of reclaimed water mains, and 394 wastewater pump stations. TWA treats and distributes approximately 34 million gallons of potable water and reclaims 23 million gallons of wastewater each day.

Under the special act, the service area of the TWA includes the City of Kissimmee and unincorporated areas of Osceola County, with the exception of Reedy Creek Improvement District and the City of St. Cloud.

TWA water facilities include 15 water treatment plants consisting of wells, ground storage tanks, high service pumps and the water distribution system. TWA water facilities currently rely exclusively on groundwater from the Upper Floridan Aquifer. Water is distributed through 1,304 miles of water mains. Raw water supply wells currently pump an average of 34 million gallons per day to the 15 water treatment plants located throughout the service area.

The utility is projected in the RWSP to serve approximately 211,671 persons in the year 2020 across its service area. With the 2007 renewal modification of its SFWMD permit, TWA will continue potable water withdrawals from the Upper Floridan Aquifer via 37 existing withdrawal facilities and six additional withdrawal facilities. The December 2013 modified permit, combining the Poinciana WUP, lists 72 existing wells and 17 proposed wells.

Recognizing the need to develop alternative water supplies, TWA initiated the development of a brackish water supply near Lake Cypress. Along with OCU and other partners, TWA continues to seek the development of the St. Johns River/Taylor Creek water supply project.

Permits

In 2007, TWA obtained renewal of its Water Use Permit. The permit renewal was processed and negotiated concurrently with permit renewals with four other utilities: St. Cloud, Orange County, Polk County and Reedy Creek Improvement District (known as STOPR Utilities). A 20 year permit was issued which restrict groundwater withdrawals after 2013 to the projected demands for that year. Water for additional demand after 2013 must be provided by alternative water supplies. The permit conditions established the requirement for the development of an extensive monitoring network and program that covers the service area of the STOPR Utilities. The STOPR group negotiated an interlocal agreement to establish this relationship.

TWA modified and renewed Water Use Permit 49-00103-W for public water supply for their service area. In addition, this permit canceled and superseded previous Water Use Permit 49-00002-W (Buenaventura Lakes service area) and 49-0069-W (Poinciana Water System). These Water Use Permits are combined under Water Use Permit 49-00103-W issued by SFWMD in June 2007, which allocates 35.6 mgd (annual average) of groundwater to TWA. As mentioned in the prior section, the permit was renewed in 2013, with a new total allocation of 42.8 mgd. The permit expires in June 2027. As a condition of the current WUP, TWA is required to:

Describe an alternative water supply (AWS) project that provides water by March 31, 2018. This commitment must be met by developing alterative supplies from the Cypress Lake Brackish Groundwater Wellfield and/or the Kissimmee River Chain of Lakes Surface Water Project and/or other AWS projects.
In addition, as a condition of its permit, TWA must develop an additional AWS project(s) to meet projected demands within its service area through 2027 not met by the groundwater allocation and the above mentioned AWS project requirement.

Agreements

The STOPR Utilities [the City of St. Cloud, TWA, Orange County Utilities, Polk County Utilities (PCU), and Reedy Creek Improvement District (RCID)] with permit applications pending before SFWMD proposing groundwater withdrawals from the Upper Floridan Aquifer were notified by letter dated November 3, 2006 that a preliminary determination that their applications were considered competing.

Recognizing their shared interests, in December 2006, the STOPR Utilities executed an Interlocal Agreement Relating to Participation in Regional Cooperation to Pursue Water Use Permits in the SFWMD. In the STOPR Utilities' Agreement, the five utilities recognized the benefits of regional cooperation, defined a framework for such cooperation, including intent to jointly pursue their respective, competing consumptive use permit applications to meet 2013 water supply demands. One of the critical provisions of the STOPR Utilities' Agreement was the commitment to provide the SFWMD, in satisfaction of requests for additional information, with a regional transient groundwater model for cumulative impact assessment of the proposed STOPR Utilities' withdrawals.

UNIVERSITY OF CENTRAL FLORIDA (UCF)

Detailed facility information was not provided for this entity. Therefore, certain assumptions of existing facilities were made based on the previous Work Plan and other publically available data.

Facilities

The University of Central Florida (UCF) is located in northeastern Orange County, approximately 13 miles east of downtown Orlando. UCF has a student population of more than 63,000 and faculty of 11,000.

Four production wells supply the potable water demands of the University. The four wells provide all the potable water needs to the campus, with the exception of UCF Academic Villages and Wellness Center, a relatively small area that receives water from Orange County’s main water line. There is also an emergency backup main valve to the adjoining research park that remains in the closed position. In addition, there are seven active irrigation wells, an additional well for aquaculture, two wells for heating/cooling, and one inactive well.

Permits

UCF holds CUP # 3202 This permit was issued on May 15, 2014 for an average of 0.82 million gallons per day or maximum 256.5 million gallons per year for commercial/industrial/ institutional use, 23.8 mgy for back-up irrigation, and 20.0 mgy for aquaculture. The permit expires on May 13, 2034.

Agreements

In 1998, UCF entered into a Wastewater and Reclaimed Water Service Agreement with Seminole County and Orange County. At that time, UCF provided wastewater and reclaimed water to its property and to property within the Central Florida Research Park. The agreement allows Seminole County to provide UCF with bulk wastewater service and reclaimed water services within the UCF Service Area. In 1999, the agreement was amended to enter into an agreement with the City of Orlando to have the Iron Bridge Wastewater Treatment Facility provide reclaimed water to UCF for irrigation.

WEDGEFIELD UTILITIES (PLURIS WEDGEFIELD)

Facilities

Wedgefield Utilities, Inc. provides potable and wastewater services for the Wedgefield development service area that encompasses approximately 735 acres including a 120-acre golf course in eastern Orange County.

Currently, the water supply system consists of one water supply/wastewater treatment plant and three Floridan aquifer wells. The wells include one 8–inch well (Well 2) and one 10-inch well (Well 3). A 12-inch well (Well 4) was drilled and completed in 1975 on property currently owned by Wedgefield and has not been in use. At the time the well was completed, Wedgefield was not the owner of the well/property. Wedgefield is now investigating the use of this well and if potential pumping quantities and water quality are suitable for potable use.

Permits

The City has a single Consumptive Use permit from the SJRWMD for its potable water supply system. CUP # 3302 is dated July 10, 2013 with an allocation of average 0.42 million gallons per day, maximum 153.67 million gallons per year in 2013, increasing annually to 0.50 million gallons per day, or 185.42 million gallons in 2033. The permit expires on July 9, 2033.

Agreements

This is a private utility regulated by the Florida Public Service Commission. Orange County has a potable water service territorial agreement with Econ Utilities Corporation (now Wedgefield Utilities, Inc) that recognized the service territory established by the Florida Public Service Commission.

CITY OF WINTER GARDEN

Facilities

The City of Winter Garden is located in western Orange County, approximately 12 miles west of the City of Orlando on State Road 50. The City of Winter Garden occupies approximately ten (10) square miles with direct access to Lake Apopka. The Florida Turnpike and State Road 50

both run through the City's limits. The existing water and wastewater service areas encompass the entire incorporated limits of the City and several properties outside the City limits – approximately 18 square miles.

Winter Garden's water system was purchased by the City in 1946. The system has been improved and/or extended on several occasions since its purchase in the mid-1940s. There are three water treatment plants that provide potable water to the distribution system. Historically, the land in the City and surrounding areas was utilized mostly for citrus and farming. However, land use trends in the past ten to twenty years have shifted toward residential and commercial development.

In July 1996, the City submitted an application to renew its existing Consumptive Use Permit (CUP) with a request to increase their allocations from 981.8 million gallons per year (mgy) in 1996 to 1,314.00 mgy in 2006 to serve a growing population. In 2004, the City revised their application requesting 3,752.21 mgy to serve a population of 41,849 people in 2025.

The City currently operates three potable water treatment plants (WTP) - the Palmetto Street WTP constructed in 2002, the Fuller's Cross Road WTP constructed in 1992 and renovated in 2002, and the Stoneybrook WTP constructed in 2004. The water system did include an additional WTP on Boyd Street, but this plant was decommissioned. Water pumped from the Boyd Street well is now piped to the Palmetto Street WTP. The Palmetto Street and Fuller's Cross Road WTPs obtain water from wells (Wells No. 1 through 4) completed in the Upper Floridan aquifer. The Stoneybrooke WTP obtains water from a well (Well No. 5and Well No. 6) completed in the Lower Floridan aquifer. Well No. 6 was installed for redundancy and does not run in tandem with Well No. 5. The treatment plants, which provide treatment through aeration and chlorine disinfection, have a combined permitted capacity of 13,020 mgd. The finished water is pumped into storage facilities located at each of the treatment plants and then into the distribution system.

All residential and commercial/industrial service connections in this service area are metered. There are separate irrigation meters on some residential accounts and most commercial accounts. City owned urban landscape irrigation is separately metered, but the use is included in the commercial/industrial classification.

The City of Winter Garden has almost doubled in size since 1996 with a current population of 40,814 people in 2016. Historically, the majority of residential development has occurred north of S.R. 50 and the Turnpike. The City has been experiencing a high rate of growth in its southern Service Area over the past decade as the result of development expansion into the area from the Orlando Metropolitan Area, better transportation access from the Western Beltway, and the desirable small town lifestyle.

Permits

The City has holds one Consumptive Use Permit from SJRWMD. CUP #3368 was issued on August 12, 2015 and allocates a maximum 2,310.45 million gallons per year (6.33 mgd). This permit expires on June 7, 2025.

Agreements

The City of Winter Garden had an agreement for the purchase of wholesale potable water from the County for a portion of the City's southeast service area. The agreement also allowed the City to provide potable water service to the County's Magnolia Woods service area.

In 2007, The City of Winter Garden and Orange County entered into a Water, Wastewater and Reclaimed Water Territorial Agreement. The parties agreed to a "City Utility Service Area" and an "Adjacent Territorial Area." The Adjacent Territorial Area includes the County's service area and service areas of other municipalities and those territories of private utilities certified by the Florida Public Service Commission. The agreement generally allocates to the City all lands in the City's Utility Service Area and to the County all lands outside the City's Utility Service Area. The agreement allows the parties to retain existing customers. The agreement also allows the City to provide utility service to some portions of the Town of Oakland. The agreement also addresses system interconnections and transfer of customers and distribution service facilities.

CITY OF WINTER PARK

Detailed facility information was not provided for this City. Therefore, certain assumptions of existing facilities were made based on the previous Work Plan and other publically available data.

Facilities

The City of Winter Park's Water Treatment Division owns and operates four interconnected water treatment facilities to provide potable water to its approximately 24,000 connections. Their 22-square mile service area encompasses the entire city limits, as well as some adjacent parts of unincorporated Orange County. The projected growth for the service area is primarily due to infill and redevelopment.

Potable water for the City of Winter Park's service area is currently provided by four water treatment plants: Swoope, Wymore, Magnolia, and Aloma. The four existing water plants combined withdraw groundwater from eight production wells. The two Wymore Plant wells, D and E have been converted for use as back-up only. Water supply for the system is provided by a total of six wells with two as back-up. All of the current and future active wells will obtain water from the Lower Floridan Aquifer.

The projected 2023 population of the service area is estimated at 73,766. The service area is predominately residential and approximately 70 percent of the current potable water use is under the residential use classification (single-family and multifamily). Approximately 22 percent of the water use is by commercial use classification consisting primarily of potable water supply for small businesses, professional offices, churches, and restaurants, 2 percent of the water use is classified as urban landscape use, which includes City parks, schools, City Hall and median irrigation and 6 percent is utility uses and unaccounted for losses.

Permits

CUP # 7624: Permit issued on October 11, 2005, Average 12.7 million gallons per day (mgd), Maximum annual 4635.5 million gallons for an estimated population of 73,949 in 2025, Permit expires on October 12, 2025.

Agreements

The City of Winter Park has two agreements with Orange County. The Water and Wastewater Territorial Agreement establishes the service territory for the City which includes the incorporated area as well as certain unincorporated areas of Orange County.

In addition, Orange County entered into an agreement with the City for Emergency Potable Water Supply Interconnection which includes a letter agreement for the Wymore Road interconnection. The requested interconnection provides for an emergency source of water in the event that an unforeseen problem with the other water treatment facilities affects the City's ability to provide adequate service to customers on the western fringe of its service area.

ZELLWOOD WATER USERS

Facilities

This small utility provides potable water to the unincorporated town of Zellwood, in northwestern Orange County. The unincorporated community of Zellwood is in northwest Orange County, Florida, on U.S. Highway 441 between the Cities of Apopka and Mount Dora. This community is approximately 3.6 miles north of Lake Apopka.

The water supply system consists of Wells 1 (Jones Well) and 2 (King well), raw water mains, water treatment facilities, storage facilities, and pumps and piping for distributing treated potable water. In the past, per capita usage in this service area was higher than normally allocated for similar communities. Through improved water conservation practices, such as repair and placement of leaking water mains, institution of conservation encouraging water rate structure, and performance of individual water audits, as well as better record keeping, the per capita water use has been much lower in recent years.

Reclaimed water is not available at this time and is not projected to become available in the Zellwood Water Users service area since all houses and businesses in the area use septic systems for wastewater treatment and disposal.

Permits

CUP# 3301: Permit issued on March 2, 2004, Average 0.243 mgd, Maximum annual 88.8 million gallons for an estimated population of 1,826 in 2024, Permit expires on March 2, 2024. CUP# 3301 10 Year Compliance Report: February 27, 2014 changed Maximum annual to 45.25 million gallons. Permit will expire on December 12, 2023.

Agreements

This private utility is regulated by the St. Johns River Water Management District, which establishes its territorial boundary. There are no agreements between this utility and Orange County.

APPENDIX B

Reclaimed Water Provider Facilities Serving Unincorporated Orange County

An inventory of available water reclamation and reuse facilities was completed for those public and private utilities providing wastewater treatment and reclaimed water reuse service within unincorporated Orange County. This appendix presents additional information on the existing facilities and related capacities for these wastewater and reclaimed water service providers, which include the following significant utilities:

- Orange County Utilities
- Orlando (City of)
- Apopka (City of)
- Mount Dora (City of)
- Ocoee (City of)
- Wedgefield Utilities, Inc.
- Winter Garden (City of)

Orange County Utilities and the City of Orlando are the largest reclaimed water service providers within unincorporated Orange County. Summaries of the existing water reclamation facility and reuse capacities associated with the other utilities listed above were not always available. Therefore, the data and analysis section of the Orange County Work Plan, including **Table 3**, focuses only on Orange County Utilities and the City of Orlando.

The suppliers operate numerous water reclamation facilities, which are described in more detail below. This appendix was prepared in August 2016 and reflects status as of this date in time.

ORANGE COUNTY UTILITIES (OCU)

Treatment Facilities

Orange County Utilities (OCU) is the largest wastewater utility and reclaimed water provider in unincorporated Orange County. The Water Reclamation Division of OCU provides wastewater collection and treatment service to over 140,000 connections in unincorporated Orange County and portions of several municipalities through the operation and maintenance of wastewater collection systems, water reclamation facilities, and reuse distribution systems.

OCU owns and operates three active regional water reclamation facilities (WRFs): the Northwest WRF, the South WRF, and the Eastern WRF. The Southwest Water Reclamation Facility is currently under development and will accommodate future growth in the County's Southwest service area. This plant is still in the pre-design phase with an expected completion date of 2025.

The OCU service area surrounding these facilities includes approximately 1,600 miles of sewer mains, 300 miles of reclaimed water lines, 680 OCU-maintained pump stations, and 3 reclaimed water pump stations. The total annual average wastewater volume treated at OCU facilities in

2015 was estimated at 60 mgd. Following treatment, all 60 mgd of the reclaimed water produced in 2015 was used for beneficial reuse. The existing County wastewater/reclaimed water service areas are depicted in **Figure B.1**.

Reuse Facilities

OCU beneficially reuses 100 percent of its reclaimed water from the Eastern, South, and Northwest WRFs. OCU reuses reclaimed water for aquifer recharge through RIBs, public access irrigation, and lake augmentation; for industrial uses such as cooling water; and for wetlands enhancement. These and other reclaimed water reuse systems are permitted as part of the wastewater operational facility permits issued by the Florida Department of Environmental Protection (FDEP). For each water reclamation facility, the County documents the planned end use of the reclaimed water produced. Each issued permit lists both treatment capacity and reclaimed water management system (reuse) capacity, as summarized in **Table B.1** below.

In 2015, OCU used 8,259 MG of reclaimed water to irrigate golf courses, residences, citrus groves, and commercial businesses. The County recharged approximately 47 mgd into the aquifer through wetlands, RIBs, and augmentation of lakes; and provides up to 14.7 mgd of cooling water to the Curtis H. Stanton energy facility. The distribution of Orange County reclaimed water reuse flows in 2015, summarized by type of use, is depicted in **Figure B.2** below.

Table B.1. Orange County Utilities Reclaimed Water Permitted Capacity and Flows

Water Reclamation Facility	Current Permitted Treatment Capacity (mgd, AADF)	Permitted Reuse Capacity (mgd, AADF)	2015 Average Daily Reclaimed Water Flow (mgd, AADF)	Projected 2030 Average Daily Reclaimed Water Flow (mgd, AADF)
South	56.0 (2)	70.8	35.8	44.6
Eastern	24.0 (2)	33.5	18.6	31.3
Northwest	10.3	12.5	5.8	7.0
Southwest (1)	NA	NA	0.0	3.1
Totals	**90.3**	**116.8**	**60.2**	**86.0**

(1) The Southwest WRF is a planned future facility, with an anticipated Phase I capacity of 5 mgd, and an additional 5 mgd following in Phase II.
(2) Capacity following Phase V improvements in 2018.
NA = Not applicable.

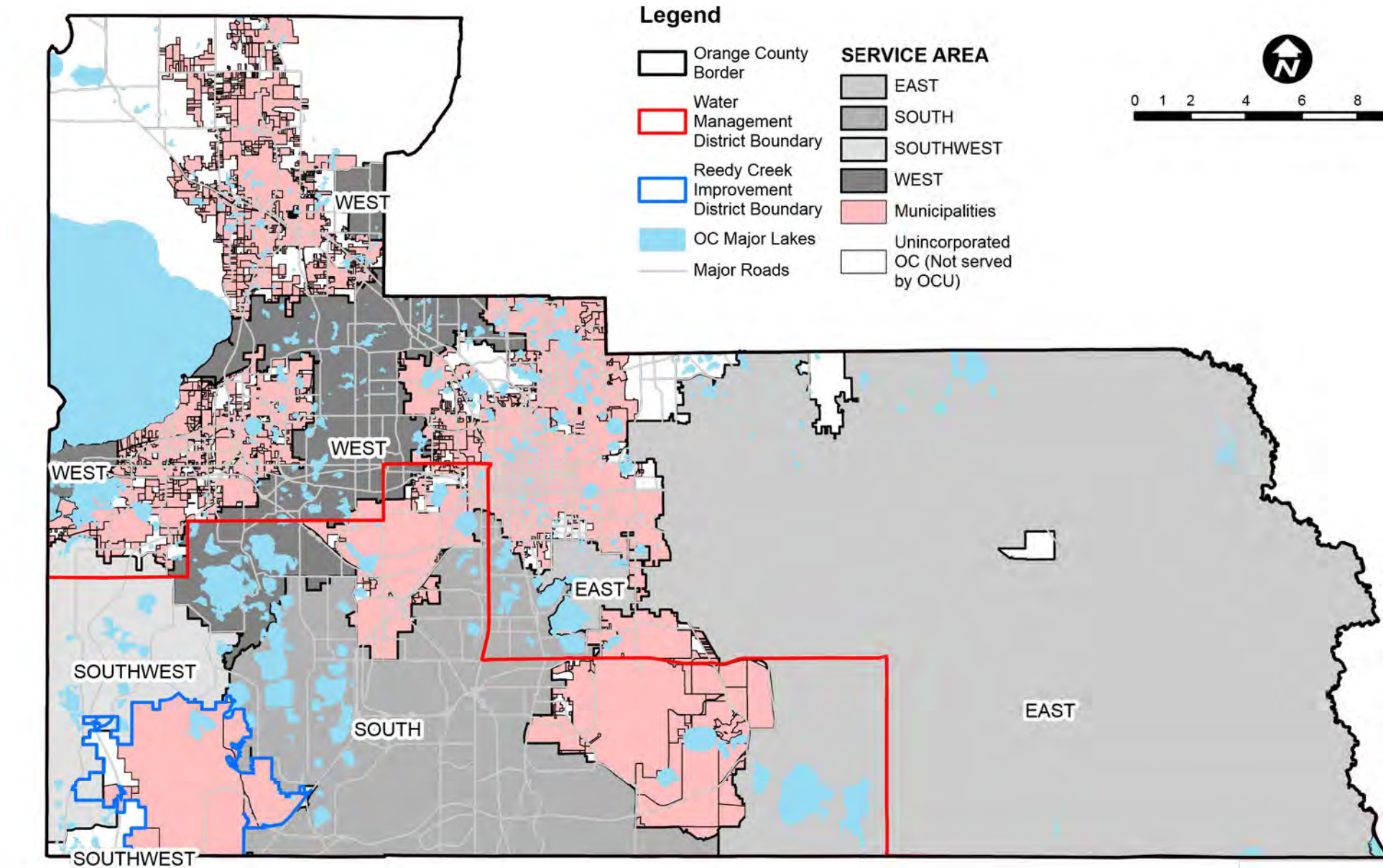


Figure B.1: Orange County Utilities Wastewater Service Area Map

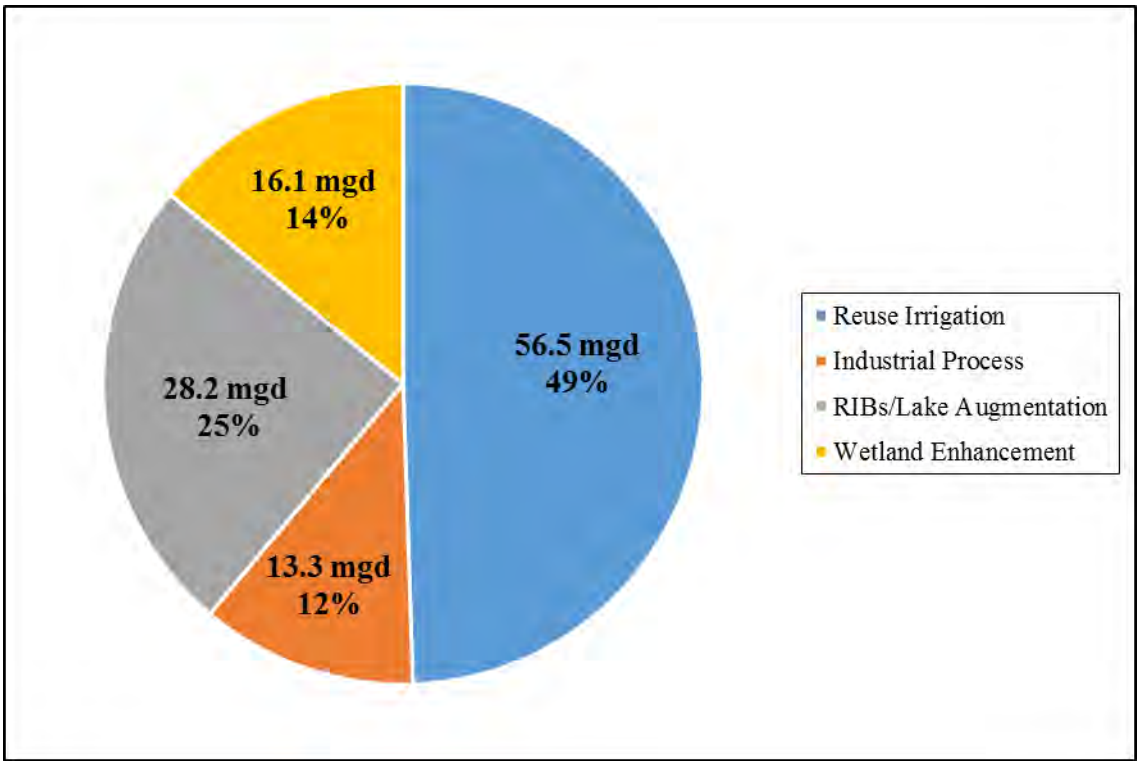


Figure B.2A. Orange County Utilities Reclaimed Permitted Allocation Summary

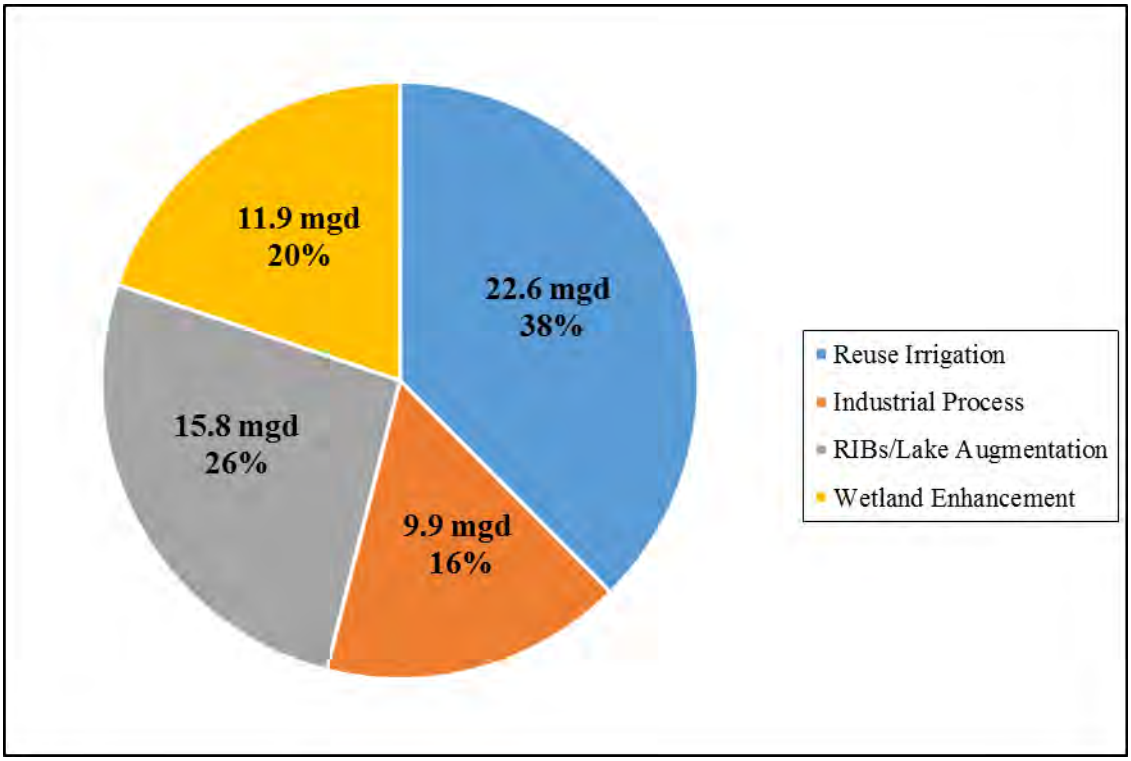


Figure B.2B. Orange County Utilities Reclaimed Water Reuse Distribution Summary, 2015

Wastewater and Reclaimed Water Agreements

OCU maintains the following three primary types of wastewater/reclaimed water agreements:
Territorial agreements, defining utility service areas
Wholesale service agreements, providing for wholesale or emergency wastewater or reclaimed water service between OCU and other utility providers
Regional cooperative agreements, for mutually beneficial reuse initiatives, such as regional interconnection of facilities

Orange County's policies and initiatives regarding wastewater and reclaimed water territorial agreements are described in detail in the Intergovernmental Coordination Element. OCU maintains territorial agreements with all the other major wastewater/reclaimed water providers within Orange County, and some of those in neighboring counties.

As with the potable water supply system, OCU also has a number of service interconnects with other utility wastewater and reclaimed water systems. A number of wholesale wastewater and reclaimed water agreements are in place between the County and other entities (**Table B.2**). Furthermore, the County is continually seeking opportunities for collaboration and is currently negotiating with multiple utilities regarding potential future reclaimed water service agreements.

Table B.2. Orange County Wholesale Wastewater and Reclaimed Water Service Agreements

Entity	Capacity / Conditions
Tohopekaliga Water Authority	OCU has multiple wholesale agreements that allow for up to 1.25 mgd, AADF to be treated at Tohopekaliga Water Authority facilities, and two possible working agreements for another 0.3 mgd of reclaimed water provided by TWA
Reedy Creek Energy Services	OCU has a wholesale agreement that allows them to purchase unrestricted quantities of reclaimed water for the Southwest Service from the Reedy Creek Improvement District (RCID) facility
City of Ocoee	OCU (through the Water Conserv II project) has a wholesale agreement to provide reclaimed water from the South Service Area to the City of Ocoee. OCU also has a wholesale agreement to provide reclaimed water to the North Wholesale Area.
City of Apopka	OCU has an agreement to provide Apopka (part of OCU's former North Service Area) with 2.5 mgd to 3.0 mgd of reclaimed water
City of Winter Garden	OCU as part of Conserv II with the City of Orlando, has an agreement to provide up to 2.038 mgd reclaimed water to Winter Garden
City of Winter Park	OCU has multiple agreements to accept wastewater flows in a specified amount from certain residential areas in Winter Park
City of Orlando	OCU has an agreement with the City to treat a portion of OCU's wastewater at Iron Bridge Regional WRF, and provide reclaimed to Horizon West Villages from Water Conserv II, and a wholesale agreement to provide the City with reclaimed water
Orlando Utilities Commission	OCU is required to provide up to 14.7 mgd to CSEC (13 mgd from EWRF, 1.7 mgd landfill stormwater)
Seminole County	OCU has two agreements to accept wastewater from Seminole County residential areas

In addition to the territorial and wholesale service agreements discussed above, Orange County currently maintains the following key regional cooperative agreements related to reclaimed water:

- *Water Conserv II Regional Reuse System Agreement*, a cooperative agreement between Orange County and the City of Orlando, joint owners of this largest reuse project of its kind (agricultural irrigation) in the world, in place since 1984.
- *Curtis H. Stanton Energy Center Reclaimed Water Service Agreement*, for OCU to provide up to 13 mgd reclaimed water to OUC for cooling at OUC's power generation facility in east Orange County, offsetting the need to use potable water for this purpose
- *Eastern Regional Reclaimed Water Distribution System Agreement*, an agreement for interconnected reclaimed water reuse distribution facilities at a large regional scale in east Orange County and Seminole County. Led by the City of Orlando, partners to the agreement include Orange County, Seminole County, the City of Oviedo, the University of Central Florida, and OUC. Orange County signed this agreement with the City of Orlando in 2008; it has a duration of 50 years, with automatic 10-year renewals unless either party chooses to end the agreement.

CITY OF ORLANDO

Treatment Facilities

The City of Orlando currently operates three water reclamation facilities (Iron Bridge, Water Conserv I, and Water Conserv II WRFs) that treat wastewater to meet public access reclaimed water standards. The water from all three facilities is suitable for residential and commercial landscape irrigation and for other uses to offset groundwater withdrawals.

The City provides reclaimed water to several County areas in the Water Conserv I service area, especially along Narcoossee Road and Weatherbee Road. The water is supplied to the County for their utilities to distribute to their users. The County handles the billing for their customers.

Reuse Facilities

In partnership with OUC, the City of Orlando is working to provide reclaimed water for Project RENEW. As required by Condition #29 of the Consumptive Use Permit 3159 (CUP) issued by SJRWMD in 2014, OUC is required to implement a regional reuse program. The original project planned to provide 9.2 mgd of reclaimed water from the City of Orlando's Iron Bridge Water Reclamation Facility to Northwest Orange County to offset adverse impacts from OUC's pumping at the full CUP allocation of 109.2 mgd. Phase I of Project RENEW must provide at least 3 MGD of reclaimed water and must be completed no later than October 8, 2020. Phase II of the project must provide the entire 9.2 MGD of reuse and must be completed no later than October 8, 2022. OUC has an agreement with the City of Orlando to provide reclaimed water for Project RENEW. OUC also has an agreement with the City of Apopka for accepting reclaimed water from Project RENEW.

The project will be re-evaluated in order to determine the best location(s) for reclaimed water in the region that is environmentally, technologically, and economically feasible. Project RENEW may also be used to meet an adopted MFL prevention and recovery strategy. Updated engineering studies, which identify the chosen alternative for Project RENEW, must be submitted within 2 years after adoption of the MFL Prevention/Recovery Strategy for South Lake, Orange and Seminole Counties by the SJRWMD Governing Board. OUC has $7.5 million budgeted in its 2017 5-year capital plan to complete the design and start construction of Project RENEW.

The Eastern Regional Reclaimed Water Distribution System provides up to 19 mgd of reclaimed water to golf courses and residential area. The system was placed into operation in 2010 and transports reclaimed water from the Iron Bridge Water Reclamation Facility and Orange County's EWRF to the southeastern area around Lake Nona.

CITY OF APOPKA

Treatment Facilities

The Apopka Water Reclamation Facility is the City's primary regional plant, which provides advanced secondary treatment along with high level disinfection to produce reclaimed water that is suitable for use on public access areas like golf courses and home lawns. The Apopka WRF is permitted for a capacity of 4.5 mgd and the City has applied for a permit modification to expand the capacity to 8 mgd. The WRF has three wells that the City uses to supplement the supply of reclaimed water. The WRF has 6 million gallons of covered storage tank capacity and 25 million gallons of storage pond capacity.

The City has other storage facilities including the Rock Springs Ridge Golf Course with 20 million gallons of storage pond capacity and has constructed a storage pond with 120 million gallons of capacity at its Northwest Recreation Center. A second storage pond has been constructed at its Northwest Recreation Center with 22.8 million gallons of storage capacity and a third pond is currently under construction, which will add another 68 million gallons of storage capacity, bringing the total storage pond capacity at the Northwest Recreation Center to 210.8 million gallons. These storage ponds will receive a combination of reclaimed water and storm water runoff.

Reuse Facilities

The City of Apopka furnishes reclaimed water to users through its Project ARROW (Apopka Regional Reuse Of Water). The Apopka WRF is currently the only source of reclaimed water for the City's system. The City has a reclaimed water pump station at the Apopka WRF and a re-pump station in the northern part of its service area.

The North Shore Reclaimed Water Facility is located in the southwestern part of the City's service area. Originally conceived as a pump station, the City assessed the feasibility of using Lake Apopka as a supplemental water source for reclaimed water. The City is permitted to withdraw up to 5 MGD from the lake. The surface water treatment plant and the reclaimed water pump station has been constructed on the same site.

Project A-First is a cooperative project between the Cities of Altamonte Springs and Apopka to enhance their reclaimed water systems. One key aspect of this system consists of a reclaimed line linking the Altamonte Springs Project A-First reclaimed water system and the reclaimed water system of Apopka (ARROW).

Also, OCU will be connecting to the Marden Rd. reclaimed water main and providing 1 mgd the first year, 2 mgd the second year, and 3 mgd the following years. The OCU reclaimed water is expected to start in January 2017.

CITY OF MOUNT DORA

Treatment Facilities

There are two wastewater treatment plants (WWTP), identified as WWTP #1 and #2. The newest wastewater treatment plant, plant #2, is also known as the James P. Snell plant, is currently on-line and is receiving and treating wastewater from approximately 2,200 homes. The plant has been designed as a 100% reuse facility with a capacity of 1.25 million gallons per day and is intended to treat wastewater flows from the east and southeast portions of the service area, including the planned developments in the Orange County portion of the service area.

Reuse Facilities

The City currently operates a reclaimed system delivering an estimated 1.648 mgd to various locations that include mostly residential connections. The City currently sends approximately 0.162 mgd of wastewater effluent to a sprayfield. The wastewater plants use 0.135 mgd for irrigation demand.

The City is continuing to meet the customer's irrigation needs with the help of a supplemental fresh groundwater well. The well is permitted at 1 million gallons per day through 2016, 0.66 mgd from 2017 to 2021, and 0.205 mgd from 2022 to 2031. Currently the well is supplementing the reclaimed system with 0.33 mgd.

The maximum reuse capacity of the two plants without the supplemental reuse well is 2.75 mgd. Currently, in Orange County, the Stoneybrooke subdivision has approximately 621 homes connected to the reclaimed system, with a maximum build out of 999 homes. The City does require dual piped distribution systems for all new subdivisions and requires that reclaimed water be used when available.

The City has a prospective alternate water project to build additional storage at the Thrill Hill site. The site, formerly a sand mine, would store roughly 120 million gallons of reclaimed water. Surplus water from the reclaim system would be sent to the site, which would comprise of various storage pond cells, along with future storm water from the Wekiva Parkway. Construction of the project is expected to lessen the dependency on the supplemental reuse well to keep the system stable. The project is currently in the permitting stage, and the City plans to have at least one cell online within the next few years.

CITY OF OCOEE

Detailed facility information was not provided for this City. Therefore, certain assumptions of existing facilities were made based on the previous Work Plan and other publically available data.

Treatment Facilities

The City of Ocoee operates one wastewater treatment plant. The plant is designed to treat 3.0 mgd and had a 2015 average effluent of 1.56 mgd.

Reuse Facilities

In an effort to off-set potable water needs and aquifer withdrawals, the City of Ocoee utilizes reclaimed water for irrigation purposes. Reclaimed water is currently available to the City from four different sources: 1) City of Ocoee's Wastewater Treatment Facility (WWTF); 2) Conserv II 3) the City of Winter Garden, and 4) Orange County's NWRF.

The City of Ocoee is permitted reuse from their WWTF for irrigation of Forest Lakes Golf Course. The City of Winter Garden also diverts reclaimed water to the Forest Lakes Golf Course. In addition the City has an agreement with Orange County's Conserv II to provide wholesale reclaimed supply for irrigation to all incorporated areas of the City. The agreement sates that after 2007, and average of 2.118 mgd of reclaimed water will be available to the City. The combined reclaimed water available from all three sources is approximately 3.87 mgd.

The City has one development project the Ocoee Reuse System Expansion Project that will provide an additional 0.35 mgd of reuse from the City WWTP. The project was anticipated to be complete in 2007.

TOHOPEKALIGA WATER AUTHORITY (TWA)

Treatment Facilities

Established in October 2003 by a special act of the Florida legislature, the Tohopekaliga Water Authority (TWA) is the largest provider of water, wastewater and reclaimed water services in Osceola County. TWA currently serves 93,000 water, 87,000 wastewater and 14,000 reclaimed water customers in Kissimmee, Poinciana, Polk County and unincorporated areas of Osceola and Orange County.

TWA owns and operates 15 water plants and 8 wastewater plants while maintaining 1,304 miles of water mains, 1199 miles of wastewater mains, 326 miles of reclaimed water mains and 394 wastewater pump stations. TWA treats and distributes approximately 34 million gallons of potable water and reclaims 23 million gallons of wastewater each day.

Reuse Facilities

TWA wastewater facilities include 8 water reclamation plants, sewage collection facilities and wastewater effluent disposal facilities. TWA Water Reclamation Facilities (WRF) each operate independently for set geographic areas throughout the service area. Wastewater is delivered to the WRF through a network of 1199 miles of collection and transmission pipes with 394 wastewater pump stations and 326 miles of reclaimed water distribution mains. The treated reclaimed water produced by the WRF is used for irrigation and the remainder routed to the system rapid infiltration basins to recharge the groundwater. The waste solids (bio-solids) are processed to kill pathogens and then spread over agricultural lands as fertilizers.

TWA has committed to development of alternative water supply (AWS) projects, in addition to continued use of reclaimed water, to supplement current and future groundwater withdrawals authorized in this permit. These alternative water supply projects are important because of the identified limitation on groundwater availability beyond present day demands and the fact that the TWA reclaimed water supplies are not adequate to meet all of their projected water demands.

WEDGEFIELD UTILITIES (PLURIS WEDGEFIELD)

Wedgefield Utilities owns and operates a wastewater treatment plant that is currently generating a daily average 0.235 million gallons per day of reclaimed water. All of the reclaimed water produced is currently used to irrigate approximately 120 acres of golf course turf. As a condition of SJRWMD permit, the utility is required to submit a yearly reuse report, which describes the activities that have occurred during the previous year to further implement the reuse of reclaimed water as the wastewater flow increases.

CITY OF WINTER GARDEN

Treatment Facilities

The City of Winter Garden owns and operates one wastewater treatment facility – Crest Avenue WWTP, which has a current permitted capacity of 4.0 mgd. The plant has completed the addition an Equalization basin to increase the plant capacity to 4.75 mgd, but the permitted capacity according to current permit is 4.0 mgd. The facility disposal percolation pond site is limited to an annual average of 1.75 mgd. The WWTP has existing tertiary filters and the ability to provide high-level disinfection. The effluent consistently meets or exceeds “Public Access” reuse water quality. In 2015, the average influent daily flow at the WWTP was 2.87 mgd and the reclaimed water flow was 1.54 mgd. The facility employs a method of effluent disposal which discharges treated wastewater to five (5) percolation ponds equipped with an underdrain system. The effluent collected in the underdrain flows by gravity through approximately one mile of wetlands before final discharge into Lake Apopka.

Reuse Facilities

The City of Winter Garden owns and operates 2 reuse facilities located on Fullers Cross Road which feeds part of the North East service area of the City and on Daniels Road which feeds part of the Southern Service area of the City. The City also purchases reuse from Conserve II to feed part of the Southern service area.

Under an agreement with the City of Ocoee, the City of Winter Garden now sends up to 1.0 mgd of reclaimed water for use at the Forest Lake Golf Course.

The City of Winter Garden has also entered into an agreement with the City of Orlando and Orange County Utilities to obtain reuse water from Water Conserv II to be used for residential and commercial landscape irrigation in the western portion of the service area.

APPENDIX C

Orange County Utilities
Water/Wastewater Schedule of Capital Improvements

In support of this Work Plan, an inventory of potable water, wastewater, and reclaimed water capital improvement projects is listed below. This is an excerpt from the Utilities portion of Orange County's most recent Adopted Budget (FY17). This is an extensive list of projects planned and implemented, budgeted over the next 5 years. As this Appendix serves as a reference, not all of the projects in this excerpt have been listed elsewhere in the document.

Division: Water Reclamation

Expenditures by Category	FY 2014-15 Actual	FY 2015-16 Budget as of 3/31/16	FY 2016-17 Proposed Budget	Percent Change
Personal Services	$ 7,887,822	$ 8,515,315	$ 8,689,005	2.0 %
Operating Expenditures	21,270,126	22,682,998	22,121,217	(2.5)%
Capital Outlay	222,873	731,455	782,816	7.0 %
Total Operating	**$ 29,380,820**	**$ 31,929,768**	**$ 31,593,038**	**(1.1)%**
Total	**$ 29,380,820**	**$ 31,929,768**	**$ 31,593,038**	**(1.1)%**
Authorized Positions	**113**	**114**	**117**	**2.6 %**

Division: Water Utilities

Expenditures by Category	FY 2014-15 Actual	FY 2015-16 Budget as of 3/31/16	FY 2016-17 Proposed Budget	Percent Change
Personal Services	$ 6,042,596	$ 8,596,304	$ 8,987,348	4.5 %
Operating Expenditures	14,058,677	16,658,411	15,409,152	(7.5)%
Capital Outlay	650,304	797,818	732,161	(8.2)%
Total Operating	**$ 20,751,576**	**$ 26,052,533**	**$ 25,128,661**	**(3.5)%**
Grant	$ 15,000	$ 15,000	$ 0	(100.0)%
Total Non-Operating	**$ 15,000**	**$ 15,000**	**$ 0**	**(100.0)%**
Total	**$ 20,766,576**	**$ 26,067,533**	**$ 25,128,661**	**(3.6)%**
Authorized Positions	**115**	**118**	**120**	**1.7 %**

PROPOSED CIP - BY DEPARTMENT / DIVISION

FY 2016/17 - FY 2020/21 BUDGET

APPROVED ORG	FUND	PROJECT NAME	PRIOR EXPENDITURES	BUDGET FY 15-16	BUD	PROPOSED BUDGET FY 17-19	PROPOSED BUDGET FY 18-19	PROPOSED BUDGET FY 19-20	PROPOSED BUDGET FY 20-21	PROPOSED BUDGET FUTURE	TOTAL PROJECT COST
Utilities											
Other											
1409											
	4420	Customer Info & Billing System	42,523,848	4,376,658	2,652,788	1,721,321	1,721,321	4,226,037	1,721,321	0	58,943,294
		Org Subtotal	**42,523,848**	**4,376,658**	**2,652,788**	**1,721,321**	**1,721,321**	**4,226,037**	**1,721,321**	**0**	**58,943,294**
1410											
	4420	Presidents Drive Ops Center	19,350,758	2,358,940	800,000	0	0	0	0	0	22,509,698
		Org Subtotal	**19,350,758**	**2,358,940**	**800,000**	**0**	**0**	**0**	**0**	**0**	**22,509,698**
1499											
	4420	MIS Network/Work Order Sys	24,835,089	2,270,072	2,325,000	3,473,000	2,473,000	2,477,036	1,462,381	0	39,315,578
		Org Subtotal	**24,835,089**	**2,270,072**	**2,325,000**	**3,473,000**	**2,473,000**	**2,477,036**	**1,462,381**	**0**	**39,315,578**
1535											
	4420	GIS Migration	17,841,600	974,929	177,938	151,238	68,438	68,625	10,500	0	19,293,268
		Org Subtotal	**17,841,600**	**974,929**	**177,938**	**151,238**	**68,438**	**68,625**	**10,500**	**0**	**19,293,268**
1549											
	4420	Developer Projects	954,015	20,000	20,000	5,000	0	0	0	0	999,015
		Org Subtotal	**954,015**	**20,000**	**20,000**	**5,000**	**0**	**0**	**0**	**0**	**999,015**
1551											
	4420	Developer Built Projects	852,046	100,000	70,000	20,000	0	0	0	0	1,042,046
		Org Subtotal	**852,046**	**100,000**	**70,000**	**20,000**	**0**	**0**	**0**	**0**	**1,042,046**
1552											
	4420	Developer Built Projects	773,457	270,000	70,000	20,000	0	0	0	0	1,133,457
		Org Subtotal	**773,457**	**270,000**	**70,000**	**20,000**	**0**	**0**	**0**	**0**	**1,133,457**
1556											
	4420	Utilities Security Imp	174,885	525,411	325,000	300,000	300,000	300,411	150,000	0	2,075,707
		Org Subtotal	**174,885**	**525,411**	**325,000**	**300,000**	**300,000**	**300,411**	**150,000**	**0**	**2,075,707**
1560											
	4420	Developer Built Projects	347,399	250,000	150,000	100,000	50,000	25,000	0	0	922,399
		Org Subtotal	**347,399**	**250,000**	**150,000**	**100,000**	**50,000**	**25,000**	**0**	**0**	**922,399**

PROPOSED CIP - BY DEPARTMENT / DIVISION

FY 2016/17 - FY 2020/21 BUDGET

APPROVED ORG	FUND	PROJECT NAME	PRIOR EXPENDITURES	BUDGET FY 15-16	BUDGET	PROPOSED BUDGET FY 17-19	PROPOSED BUDGET FY 18-20	PROPOSED BUDGET FY 19-21	PROPOSED BUDGET FY 20-	PROPOSED BUDGET FUTURE	TOTAL PROJECT COST
1561											
	4420	Developer Built Projects	20,080	350,000	400,000	400,000	400,000	400,000	400,000	2,000,000	4,370,080
		Org Subtotal	**20,080**	**350,000**	**400,000**	**400,000**	**400,000**	**400,000**	**400,000**	**2,000,000**	**4,370,080**
		DIVISION SUBTOTAL	**107,673,177**	**11,496,010**	**6,990,726**	**6,190,559**	**5,012,759**	**7,497,109**	**3,744,202**	**2,000,000**	**150,604,542**
Solid	Waste										
1061											
	4410	Porter Modifications	1,114,939	657,003	1,129,664	4,013,333	2,220,000	0	0	0	9,134,939
		Org Subtotal	**1,114,939**	**657,003**	**1,129,664**	**4,013,333**	**2,220,000**	**0**	**0**	**0**	**9,134,939**
1065											
	4410	McLeod Rd TS Improvements	3,066,697	1,203,723	5,917,808	10,000,000	4,082,192	0	0	0	24,270,420
		Org Subtotal	**3,066,697**	**1,203,723**	**5,917,808**	**10,000,000**	**4,082,192**	**0**	**0**	**0**	**24,270,420**
1069											
	4410	Ldfill-Admin Bldg	1,366,683	241,036	309,524	190,476	0	0	0	0	2,107,719
		Org Subtotal	**1,366,683**	**241,036**	**309,524**	**190,476**	**0**	**0**	**0**	**0**	**2,107,719**
1081											
	4410	Cell AK Long-Term Care	0	150,411	150,000	150,000	149,589	0	0	0	600,000
		Org Subtotal	**0**	**150,411**	**150,000**	**150,000**	**149,589**	**0**	**0**	**0**	**600,000**
1083											
	4410	NW Transfer Station	2,536,456	80,440	397,643	5,488,584	7,097,222	1,536,111	0	0	17,136,456
		Org Subtotal	**2,536,456**	**80,440**	**397,643**	**5,488,584**	**7,097,222**	**1,536,111**	**0**	**0**	**17,136,456**
1086											
	4410	Cell 7B/8 Closure & LT Care	22,705,505	445,896	805,000	305,000	305,000	305,836	305,000	0	25,177,237
		Org Subtotal	**22,705,505**	**445,896**	**805,000**	**305,000**	**305,000**	**305,836**	**305,000**	**0**	**25,177,237**
1099											
	4410	Closure & LT Care Class III #1	15,663,816	180,493	180,000	180,000	180,000	180,493	180,000	0	16,744,802
		Org Subtotal	**15,663,816**	**180,493**	**180,000**	**180,000**	**180,000**	**180,493**	**180,000**	**0**	**16,744,802**
1103											
	4410	Landfill Cell 10	30,658,992	225,000	0	0	0	0	0	0	30,883,992
		Org Subtotal	**30,658,992**	**225,000**	**0**	**0**	**0**	**0**	**0**	**0**	**30,883,992**

PROPOSED CIP - BY DEPARTMENT / DIVISION
FY 2016/17 - FY 2020/21 BUDGET

ORG	*FUND*	*PROJECT NAME*	*PRIOR EXPENDITURES*	*APPROVED BUDGET FY 15-16*		*PROPOSED BUDGET FY 17-18*	*PROPOSED BUDGET FY 18-19*	*PROPOSED BUDGET FY 19-20*	*PROPOSED BUDGET FY 20-21*	*PROPOSED BUDGET FUTURE*	*TOTAL PROJECT COST*
1106											
	4410	Class 3 Waste Disposal Cell 2	3,545,866	299,183	765,000	299,795	299,795	300,616	299,795	0	5,810,050
		Org Subtotal	**3,545,866**	**299,183**	**765,000**	**299,795**	**299,795**	**300,616**	**299,795**	**0**	**5,810,050**
1107											
	4410	Landfill Cell 11	300,000	579,200	1,000,000	1,000,000	2,036,800	7,433,920	13,782,400	16,727,680	42,860,000
		Org Subtotal	**300,000**	**579,200**	**1,000,000**	**1,000,000**	**2,036,800**	**7,433,920**	**13,782,400**	**16,727,680**	**42,860,000**
1109											
	4410	Closure & LT Care Landfill Cells 9-12	6,363,117	11,255,629	1,761,125	791,644	1,215,833	5,487,272	3,903,991	0	30,778,611
		Org Subtotal	**6,363,117**	**11,255,629**	**1,761,125**	**791,644**	**1,215,833**	**5,487,272**	**3,903,991**	**0**	**30,778,611**
		DIVISION SUBTOTAL	**87,322,070**	**15,318,014**	**12,415,764**	**22,418,832**	**17,586,431**	**15,244,248**	**18,471,186**	**16,727,680**	**205,504,225**
Water											
1448											
	4420	Wtr Dist Mods CW	15,235,654	1,272,111	1,339,797	238,631	0	0	0	0	18,086,193
		Org Subtotal	**15,235,654**	**1,272,111**	**1,339,797**	**238,631**	**0**	**0**	**0**	**0**	**18,086,193**
1450											
	4420	Eastern Water Trans Imp	18,311,806	5,355,233	4,674,540	338,511	0	0	0	0	28,680,090
		Org Subtotal	**18,311,806**	**5,355,233**	**4,674,540**	**338,511**	**0**	**0**	**0**	**0**	**28,680,090**
1453											
	4420	Transp Reloc Wtr CW	24,284,529	2,646,285	0	0	0	0	0	0	26,930,814
		Org Subtotal	**24,284,529**	**2,646,285**	**0**	**0**	**0**	**0**	**0**	**0**	**26,930,814**
1463											
	4420	Western Water Trans Imp	7,879,247	115,000	0	0	0	8,138	11,862	252,000	8,266,247
		Org Subtotal	**7,879,247**	**115,000**	**0**	**0**	**0**	**8,138**	**11,862**	**252,000**	**8,266,247**
1474											
	4420	New Meter Installation	20,678,559	2,193,806	2,187,812	2,187,812	2,187,812	2,193,806	2,187,812	0	33,817,419
		Org Subtotal	**20,678,559**	**2,193,806**	**2,187,812**	**2,187,812**	**2,187,812**	**2,193,806**	**2,187,812**	**0**	**33,817,419**
1482											
	4420	Transportation Related Water	22,966,344	4,840,067	3,193,224	1,445,820	2,928,302	2,494,224	1,187,463	835,010	39,890,454
		Org Subtotal	**22,966,344**	**4,840,067**	**3,193,224**	**1,445,820**	**2,928,302**	**2,494,224**	**1,187,463**	**835,010**	**39,890,454**

PROPOSED CIP - BY DEPARTMENT / DIVISION
FY 2016/17 - FY 2020/21 BUDGET

APPROVED ORG	FUND	PROJECT NAME	PRIOR EXPENDITURES	BUDGET FY 15-16	BUD	PROPOSED BUDGET FY 17-19	PROPOSED BUDGET FY 18-20	PROPOSED BUDGET FY 19-21	PROPOSED BUDGET FY 20-	PROPOSED BUDGET FUTURE	TOTAL PROJECT COST
1498											
	4420	Southern Reg Wellfield & Wtr Pl	60,146,588	3,124,971	4,130,546	286,806	955,556	3,622,500	6,387,500	2,590,000	81,244,467
		Org Subtotal	**60,146,588**	**3,124,971**	**4,130,546**	**286,806**	**955,556**	**3,622,500**	**6,387,500**	**2,590,000**	**81,244,467**
1506											
	4420	Horizons West Transmission Sys	14,843,777	1,004,060	1,058,317	502,325	770,833	0	0	0	18,179,312
		Org Subtotal	**14,843,777**	**1,004,060**	**1,058,317**	**502,325**	**770,833**	**0**	**0**	**0**	**18,179,312**
1508											
	4420	South Water Transmission Imp	21,508,538	3,516,828	1,026,177	5,841,244	5,761,084	4,812,313	4,799,164	2,498,195	49,763,543
	5847	South Water Transmission Imp	8,375,317	1,493,694	0	0	0	0	0	0	9,869,011
		Org Subtotal	**29,883,855**	**5,010,522**	**1,026,177**	**5,841,244**	**5,761,084**	**4,812,313**	**4,799,164**	**2,498,195**	**59,632,554**
1532											
	4420	W Reg Water Treat Fac Ph III	13,577,449	2,595,637	3,454,028	1,086,806	29,167	0	5,000	1,745,000	22,493,087
	5846	W Reg Water Treat Fac Ph III	3,700,681	67,720	0	0	0	0	0	0	3,768,401
		Org Subtotal	**17,278,130**	**2,663,357**	**3,454,028**	**1,086,806**	**29,167**	**0**	**5,000**	**1,745,000**	**26,261,488**
1533											
	4420	Water Renewal & Replacements	1,797,332	1,009,436	2,711,345	200,549	200,549	201,099	200,549	0	6,320,859
		Org Subtotal	**1,797,332**	**1,009,436**	**2,711,345**	**200,549**	**200,549**	**201,099**	**200,549**	**0**	**6,320,859**
1540											
	4420	Park Manor Water Systems Imp	3,664,689	5,000	0	0	0	0	0	0	3,669,689
		Org Subtotal	**3,664,689**	**5,000**	**0**	**0**	**0**	**0**	**0**	**0**	**3,669,689**
1544											
	4420	Water SCADA & Secuirty Imp	5,042,191	87,840	87,600	87,600	87,600	87,840	87,600	0	5,568,271
		Org Subtotal	**5,042,191**	**87,840**	**87,600**	**87,600**	**87,600**	**87,840**	**87,600**	**0**	**5,568,271**
1545											
	4420	Private Well Retrofit Program	143,648	5,011	0	0	0	0	0	0	148,659
		Org Subtotal	**143,648**	**5,011**	**0**	**0**	**0**	**0**	**0**	**0**	**148,659**
1550											
	4420	Alternate Regional Water Supply	4,935,581	182,553	280,925	309,518	309,518	298,109	114,388	14,000,000	20,430,592
		Org Subtotal	**4,935,581**	**182,553**	**280,925**	**309,518**	**309,518**	**298,109**	**114,388**	**14,000,000**	**20,430,592**

PROPOSED CIP - BY DEPARTMENT / DIVISION

FY 2016/17 - FY 2020/21 BUDGET

ORG	FUND	PROJECT NAME	PRIOR EXPENDITURES	APPROVED BUDGET FY 15-16	BUDGET FY 16-17	PROPOSED BUDGET FY 17-18	PROPOSED BUDGET FY 18-19	PROPOSED BUDGET FY 19-20	PROPOSED BUDGET FY 20-21	PROPOSED BUDGET FUTURE	TOTAL PROJECT COST
1553											
	4420	Water Distribution Mods 2	5,260,491	2,097,860	2,996,221	3,029,167	1,825,000	690,000	0	0	15,898,739
		Org Subtotal	**5,260,491**	**2,097,860**	**2,996,221**	**3,029,167**	**1,825,000**	**690,000**	**0**	**0**	**15,898,739**
1554											
	4420	Eastern Regional Wsf Phase 3	18,310,448	4,330,244	3,439,473	4,775,417	4,775,417	2,865,250	0	0	38,496,249
		Org Subtotal	**18,310,448**	**4,330,244**	**3,439,473**	**4,775,417**	**4,775,417**	**2,865,250**	**0**	**0**	**38,496,249**
1557											
	4420	Southwest Water Supply Facility	2,576,026	2,224,592		5,020,000	7,300,000	7,320,000	360,000	0	26,711,155
		Org Subtotal	**2,576,026**	**2,224,592**		**5,020,000**	**7,300,000**	**7,320,000**	**360,000**	**0**	**26,711,155**
1558											
	4420	Eastern Operations Building	124,631	915,570		2,617,385	4,464,231	4,476,462	4,341,923	0	19,007,894
		Org Subtotal	**124,631**	**915,570**		**2,617,385**	**4,464,231**	**4,476,462**	**4,341,923**	**0**	**19,007,894**
		DIVISION SUBTOTAL	**273,363,527**	**39,083,518**		**27,967,591**	**31,595,069**	**29,069,741**	**19,683,261**	**21,920,205**	**477,241,146**
Water Reclamation											
1411											
	4420	South Svc Area Effluent Reuse	46,600,476	1,381,246	2,299,357	2,834,045	2,934,817	3,143,437	1,295,274	431,722	60,920,374
	5844	South Svc Area Effluent Reuse	2,235,319	2,254,211	0	0	0	0	0	0	4,489,530
	8199	South Svc Area Effluent Reuse	2,508,604	159,387	0	0	0	0	0	0	2,667,991
		Org Subtotal	**51,344,399**	**3,794,844**	**2,299,357**	**2,834,045**	**2,934,817**	**3,143,437**	**1,295,274**	**431,722**	**68,077,895**
1416											
	4420	Pump Station Monitors CW	4,180,350	2,045,731	6,339,739	6,062,895	5,517,800	35,101	34,883	0	24,216,499
		Org Subtotal	**4,180,350**	**2,045,731**	**6,339,739**	**6,062,895**	**5,517,800**	**35,101**	**34,883**	**0**	**24,216,499**
1427											
	4420	Collect Rehab CW	20,144,900	2,980,938	2,423,628	2,091,993	1,241,000	469,200	0	0	29,351,659
		Org Subtotal	**20,144,900**	**2,980,938**	**2,423,628**	**2,091,993**	**1,241,000**	**469,200**	**0**	**0**	**29,351,659**
1428											
	4420	Pumping Rehab/Replace	30,012,414	160,614	0	0	0	0	0	0	30,173,028
	5843	Pumping Rehab/Replace	3,616,040	226,537	0	0	0	0	0	0	3,842,577
		Org Subtotal	**33,628,454**	**387,151**	**0**	**0**	**0**	**0**	**0**	**0**	**34,015,605**

PROPOSED CIP - BY DEPARTMENT / DIVISION
FY 2016/17 - FY 2020/21 BUDGET

ORG	FUND	PROJECT NAME	PRIOR EXPENDITURES	APPROVED BUDGET FY 15-16		PROPOSED BUDGET FY 17-18	PROPOSED BUDGET FY 18-19	PROPOSED BUDGET FY 19-20	PROPOSED BUDGET FY 20-21	PROPOSED BUDGET FUTURE	TOTAL PROJECT COST
1432											
	4420	Transp Reloc WW CW	17,421,784	2,022,749	303,018	396,421	71,682	0	0	0	20,215,654
		Org Subtotal	**17,421,784**	**2,022,749**	**303,018**	**396,421**	**71,682**	**0**	**0**	**0**	**20,215,654**
1435											
	4420	NW Subreg PH III	39,505,032	2,671,350	5,394,457	5,038,992	2,522,565	23,611	75,000	0	55,231,007
	8187	NW Subreg PH III	0	700,000	0	0	0	0	0	0	700,000
		Org Subtotal	**39,505,032**	**3,371,350**	**5,394,457**	**5,038,992**	**2,522,565**	**23,611**	**75,000**	**0**	**55,931,007**
1445											
	4420	SW Orange Effluent Disposal	18,946,454	1,018,561	6,143,524	6,293,198	5,996,531	4,409,325	23,804	0	42,831,397
		Org Subtotal	**18,946,454**	**1,018,561**	**6,143,524**	**6,293,198**	**5,996,531**	**4,409,325**	**23,804**	**0**	**42,831,397**
1469											
	4420	Iron Bridge Interlocal Agreement	10,424,244	168,343	444,314	380,188	380,188	381,230	121,858	0	12,300,365
		Org Subtotal	**10,424,244**	**168,343**	**444,314**	**380,188**	**380,188**	**381,230**	**121,858**	**0**	**12,300,365**
1483											
	4420	Eastern Wastewater Reuse	29,817,743	5,153,524	2,990,279	4,034,076	6,420,269	4,368,734	3,589,584	1,868,551	58,242,760
		Org Subtotal	**29,817,743**	**5,153,524**	**2,990,279**	**4,034,076**	**6,420,269**	**4,368,734**	**3,589,584**	**1,868,551**	**58,242,760**
1496											
	4420	Northwest Svc Area Reuse	24,438,075	290,000	0	0	0	0	0	0	24,728,075
		Org Subtotal	**24,438,075**	**290,000**	**0**	**0**	**0**	**0**	**0**	**0**	**24,728,075**
1500											
	4420	Collections Rehab	4,983,731	7,153,392	5,583,734	7,478,072	5,592,681	16,358,751	13,969,071	3,807,680	64,927,112
		Org Subtotal	**4,983,731**	**7,153,392**	**5,583,734**	**7,478,072**	**5,592,681**	**16,358,751**	**13,969,071**	**3,807,680**	**64,927,112**
1502											
	4420	Pumping Rehab II	37,209,367	1,133,540	816,004	809,136	557,662	518,338	489,360	402,056	41,935,463
	5843	Pumping Rehab II	2,499,945	31,057	0	0	0	0	0	0	2,531,002
		Org Subtotal	**39,709,312**	**1,164,597**	**816,004**	**809,136**	**557,662**	**518,338**	**489,360**	**402,056**	**44,466,465**
1503											
	4420	Pumping Rehab III	9,264,701	6,336,886	5,612,920	6,109,297	3,732,645	3,561,414	5,673,379	3,810,627	44,101,869
		Org Subtotal	**9,264,701**	**6,336,886**	**5,612,920**	**6,109,297**	**3,732,645**	**3,561,414**	**5,673,379**	**3,810,627**	**44,101,869**

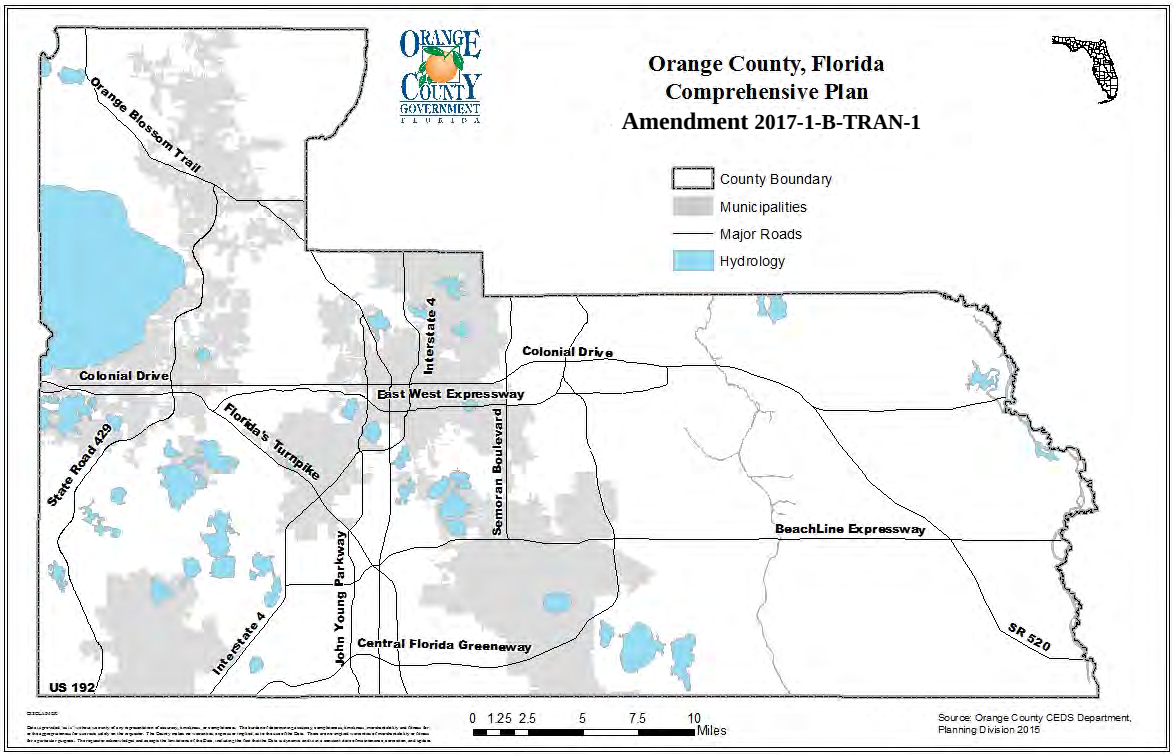
PROPOSED CIP - BY DEPARTMENT / DIVISION
FY 2016/17 - FY 2020/21 BUDGET

APPROVED ORG	FUND	PROJECT NAME	PRIOR EXPENDITURES	BUDGET FY 15-16	BUDGET FY 16-17	PROPOSED BUDGET FY 17-18	PROPOSED BUDGET FY 18-19	PROPOSED BUDGET FY 19-20	PROPOSED BUDGET FY 20-21	PROPOSED BUDGET FUTURE	TOTAL PROJECT COST
1504											
	4420	Trans Related Wastewater	20,501,626	4,441,939	6,604,698	910,324	1,149,161	1,592,071	791,120	1,583,547	37,574,486
		Org Subtotal	**20,501,626**	**4,441,939**	**6,604,698**	**910,324**	**1,149,161**	**1,592,071**	**791,120**	**1,583,547**	**37,574,486**
1505											
	4420	Septic Tank Retrofit	14,784,572	59,898	564,923	758,077	758,077	618,923	0	0	17,544,470
	8153	Septic Tank Retrofit	25,559	324,442	0	0	0	0	0	0	350,001
		Org Subtotal	**14,810,131**	**384,340**	**564,923**	**758,077**	**758,077**	**618,923**	**0**	**0**	**17,894,471**
1507											
	4420	Horizons West Wastewater Sys	8,190,335	2,962,007	3,439,411	2,728,512	2,062,383	12,619,174	22,543,473	45,252,308	99,797,603
		Org Subtotal	**8,190,335**	**2,962,007**	**3,439,411**	**2,728,512**	**2,062,383**	**12,619,174**	**22,543,473**	**45,252,308**	**99,797,603**
1509											
	4420	Southern Wastewater Collect	17,176,991	475,756	568,171	538,333	167,187	472,115	807,176	785,584	20,991,313
		Org Subtotal	**17,176,991**	**475,756**	**568,171**	**538,333**	**167,187**	**472,115**	**807,176**	**785,584**	**20,991,313**
1510											
	4420	Eastern Wastewater Collect	16,612,000	2,796,244	1,346,543	342,176	0	1,500,000	0	123,543	22,720,506
		Org Subtotal	**16,612,000**	**2,796,244**	**1,346,543**	**342,176**	**0**	**1,500,000**	**0**	**123,543**	**22,720,506**
1511											
	4420	Northwest Wastewater Collect	4,784,803	530,663	1,480,694	873,506	0	40,692	59,308	1,108,000	8,877,666
		Org Subtotal	**4,784,803**	**530,663**	**1,480,694**	**873,506**	**0**	**40,692**	**59,308**	**1,108,000**	**8,877,666**
1536											
	4420	Capital Reuse Meter Install	3,314,664	605,254	603,600	603,600	603,600	602,056	19,890	0	6,352,664
		Org Subtotal	**3,314,664**	**605,254**	**603,600**	**603,600**	**603,600**	**602,056**	**19,890**	**0**	**6,352,664**
1538											
	4420	Easter Wtr Reclamation Exp	47,499,596	4,299,586	4,599,474	4,162,504	2,607,722	3,777,240	13,345,727	23,823,055	104,114,904
	5848	Easter Wtr Reclamation Exp	2,413,154	62,265,796	0	0	0	0	0	0	64,678,950
		Org Subtotal	**49,912,750**	**66,565,382**	**4,599,474**	**4,162,504**	**2,607,722**	**3,777,240**	**13,345,727**	**23,823,055**	**168,793,854**
1539											
	4420	Force Main Rehab	11,673,760	2,079,355	2,676,698	8,707,842	9,182,222	7,015,974	6,996,805	0	48,332,656
	8199	Force Main Rehab	3,728,744	285,394	0	0	0	0	0	0	4,014,138
		Org Subtotal	**15,402,504**	**2,364,749**	**2,676,698**	**8,707,842**	**9,182,222**	**7,015,974**	**6,996,805**	**0**	**52,346,794**

PROPOSED CIP - BY DEPARTMENT / DIVISION
FY 2016/17 - FY 2020/21 BUDGET

ORG	FUND	PROJECT NAME	PRIOR EXPENDITURES	APPROVED BUDGET FY 15-16		PROPOSED BUDGET FY 17-18	PROPOSED BUDGET FY 18-19	PROPOSED BUDGET FY 19-20	PROPOSED BUDGET FY 20-21	PROPOSED BUDGET FUTURE	TOTAL PROJECT COST
1541											
	4420	Park Manor Wastewater Sys	3,820,560	5,000	0	0	0	0	0	0	3,825,560
		Org Subtotal	**3,820,560**	**5,000**	**0**	**0**	**0**	**0**	**0**	**0**	**3,825,560**
1542											
	4420	Southwest Svc Area Reuse	4,521,769	1,329,535	1,000,419	224,019	371,701	35,069	0	0	7,482,512
		Org Subtotal	**4,521,769**	**1,329,535**	**1,000,419**	**224,019**	**371,701**	**35,069**	**0**	**0**	**7,482,512**
1555											
	4420	South WRF Ph V	16,509,681	20,888,154	31,624,899	27,579,857	15,021,562	4,575,000	15,602,500	38,322,500	170,124,153
		Org Subtotal	**16,509,681**	**20,888,154**	**31,624,899**	**27,579,857**	**15,021,562**	**4,575,000**	**15,602,500**	**38,322,500**	**170,124,153**
1559											
	4420	Pumping Rehab IV	882,333	3,113,107	4,645,571	9,056,771	13,746,934	12,014,608	13,513,597	8,404,133	65,377,054
		Org Subtotal	**882,333**	**3,113,107**	**4,645,571**	**9,056,771**	**13,746,934**	**12,014,608**	**13,513,597**	**8,404,133**	**65,377,054**
1570											
	4420	WW Pumping Rehab Phase V	0	100	0	0	0	0	0	0	100
		Org Subtotal	**0**	**100**	**0**	**0**	**0**	**0**	**0**	**0**	**100**
1571											
	4420	Gravity Main Improvements	0	1,760,000	608,333	608,333	608,333	588,333	0	0	4,173,332
		Org Subtotal	**0**	**1,760,000**	**608,333**	**608,333**	**608,333**	**588,333**	**0**	**0**	**4,173,332**
1572											
	4420	Pump Station Improvements	0	2,080,851	1,565,137	1,804,945	1,804,945	1,790,110	0	0	9,045,988
		Org Subtotal	**0**	**2,080,851**	**1,565,137**	**1,804,945**	**1,804,945**	**1,790,110**	**0**	**0**	**9,045,988**
1573											
	4420	Reclaimed Main Improvements	0	586,667	608,333	608,333	608,333	588,333	0	0	2,999,999
		Org Subtotal	**0**	**586,667**	**608,333**	**608,333**	**608,333**	**588,333**	**0**	**0**	**2,999,999**
1574											
	4420	Force Main Improvements	0	1,124,444	1,165,972	1,165,972	1,165,972	1,127,639	0	0	5,749,999
		Org Subtotal	**0**	**1,124,444**	**1,165,972**	**1,165,972**	**1,165,972**	**1,127,639**	**0**	**0**	**5,749,999**
1575											
	4420	Water Main Improvements	0	586,667	608,333	608,333	608,333	588,333	0	0	2,999,999
		Org Subtotal	**0**	**586,667**	**608,333**	**608,333**	**608,333**	**588,333**	**0**	**0**	**2,999,999**

ORG	FUND	PROJECT NAME	PRIOR EXPENDITURES	APPROVED BUDGET FY 15-16	PROPOSED BUDGET FY 16-17	PROPOSED BUDGET FY 17-18	PROPOSED BUDGET FY 18-19	PROPOSED BUDGET FY 19-20	PROPOSED BUDGET FY 20-21	PROPOSED BUDGET FUTURE	TOTAL PROJECT COST
	DIVISION SUBTOTAL		480,249,325	148,488,925	102,062,183	85,434,305	82,814,811	98,951,809	129,723,306	1,230,534,414	
	DEPARTMENT TOTAL		948,608,099	214,386,467	156,026,907	139,628,564	134,625,909	140,850,458	170,371,191	2,063,884,327	
GRAND TOTAL			948,608,099	214,386,467	156,026,907	139,628,564	134,625,909	140,850,458	170,371,191	2,063,884,327	



The following meetings and hearings have been held for this proposal:		
Report/Public Hearing		**Outcome**
✓	Staff Report	Recommend transmittal
✓	LPA Transmittal	December 15, 2016 Recommend Transmittal (7-0)
	BCC Transmittal	January 24, 2017
	Agency Comments	March 2017
	LPA Adoption	April 20, 2017
	BCC Adoption	June 6, 2017

Project/Legal Notice Information
Title: Amendment 2017-1-B-TRAN-1
Division: Transportation Planning
Request: Text amendments to Transportation Element Objective T3.2 and related policies related to connectivity
Revision: OBJ T3.2; T3.2.1; T3.2.2; T3.3.3

Staff Recommendation

Make a finding of consistency with the Comprehensive Plan, determine that the proposed amendment is in compliance, and recommend the **TRANSMITTAL** of Amendment 2017-1-B-TRAN-1 revising Transportation Element Objective T3.2 and related policies regarding community connectivity.

A. Background

A primary focus of Orange County's Transportation Element and related policies in other Elements is the provision of a multimodal transportation system that provides mobility for all users (Transportation Goal T3). Streets that intersect frequently with other streets to form alternative paths, in all directions, are said to have good connectivity and promote multimodal travel. Good connectivity benefits transportation systems locally and regionally through shorter vehicle trips, more cohesive neighborhoods, safer and easier bike and pedestrian travel, better access to transit, less congestion, and quicker emergency response.

Better connectivity also has the potential to reduce traffic congestion, as approximately forty percent of all vehicle trips are two miles or less and could be made by walking, biking, and transit. Connectivity, to be truly effective, cannot be solely within each development, but also must be between developments to improve connectivity both locally and regionally.

In November 2015, Transportation Policy T3.2.3 was amended to specifically state connectivity would be required to accommodate both local and regional transportation and make other changes reflecting the principles of the East Central Florida Corridor Task Force. Proposed amendments to Transportation Objective T3.2 and Transportation Policies T3.2.1 through T3.2.3 would add clarifications to specify the extent to which connectivity is required, the types of exceptions that can be made, and measures to discourage neighborhood speeding and maintain accessibility.

Policy Amendments

Following are the policy changes proposed by this amendment. The proposed policy changes are shown in ***underline***/~~***strikethrough***~~ format. Staff recommends transmittal of the amendment.

OBJ T3.2 ***Orange County shall build and require ~~the local~~ to be built street, pedestrian, and bicycle networks ~~to be designed to promote~~ that provide regional, community, and neighborhood interconnectivity and ~~to allow~~ provide direct***

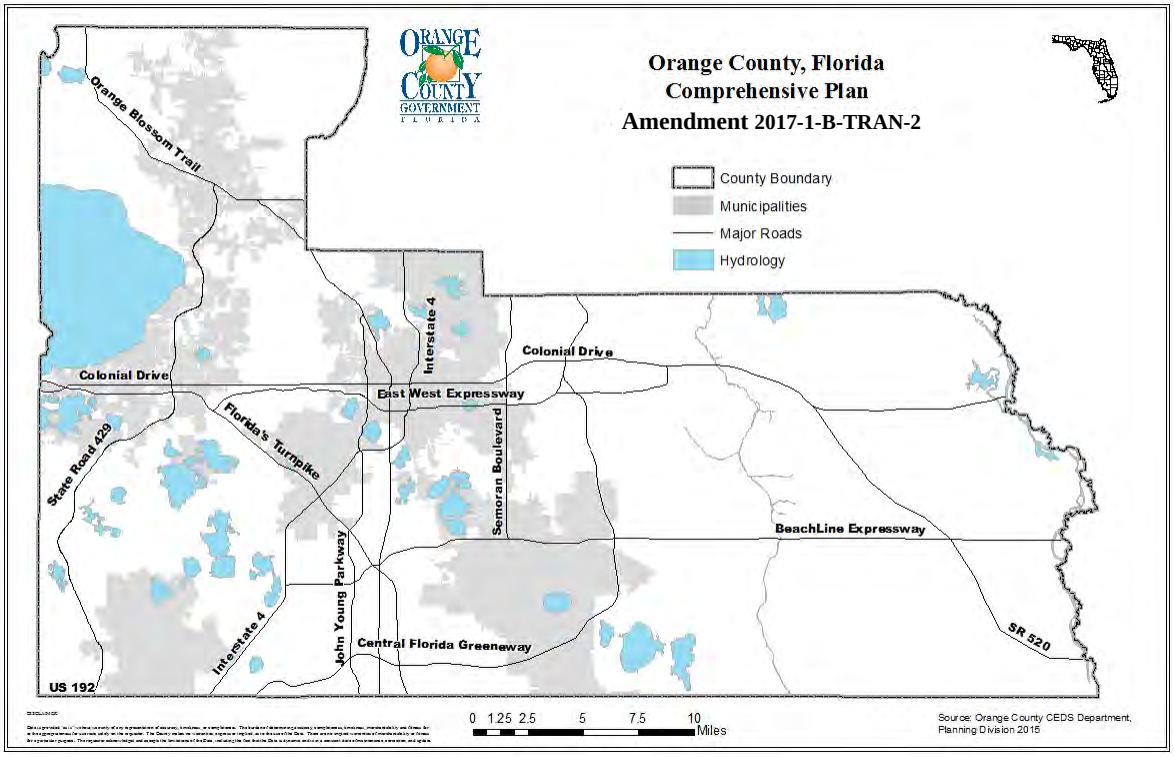
access to ~~surrounding single-family residential~~ existing and planned multi-~~family residential, non-residential and mixed land use~~ modal transportation facilities, activity centers, community services, and amenities.

POLICIES

T3.2.1 The County shall require developments to provide interconnected transportation street, pedestrian, and bicycle networks through measures including, but not limited to, cross-access easements ~~or~~, public rights-of-way, and/or transportation facility stubouts to adjacent parcels. ~~when such connections will improve connectivity and enhance access to surrounding land use. Provisions for future~~ These connections shall be provided in all directions, except where abutting land is undevelopable, including across existing and proposed streets, at intervals that support direct pedestrian and bicycle travel within and beyond the borders of the proposed development and that avoid cul-de-sacs or other closed-end street designs.

T3.2.2 The County shall ensure that existing and new developments are connected by pedestrian, bikeways and roadway~~s~~ systems ~~to encourage travel between adjoining properties and minimize trips on major roadways.~~ unless prevented by physical or environmental barriers , including, but not limited to, limited access roadways, railroads, and environmental features. Where full street connections are not possible, bicycle and pedestrian connections may be required by the County.

T3.2.3 Orange County shall require an interconnected transportation network to develop and maintain transportation networks that accommodate local and regional travel demand and to allow access between neighborhoods. ~~Internal~~ Residential streets ~~which connect residential subdivisions shall~~ should be designed to ~~discourage through movements that should be accommodated by major thoroughfares, including measures to prevent cut through traffic at~~ limit excessive speeds on neighborhood streets, including traffic calming measures where appropriate.



The following meetings and hearings have been held for this proposal:		
Report/Public Hearing		**Outcome**
✓	Staff Report	Recommend transmittal
✓	LPA Transmittal	December 15, 2016 Recommend Transmittal (7-0)
	BCC Transmittal	January 24, 2017
	Agency Comments	March 2017
	LPA Adoption	April 20, 2017
	BCC Adoption	June 6, 2017

Project/Legal Notice Information
Title: Amendment 2017-1-B-TRAN-2
Division: Transportation Planning
Request: Map amendments to the Transportation Element to update the Long Range Transportation Plan (LRTP)
Revision: Transportation Element Map 1: Long Range Transportation Plan (LRTP)

Staff Recommendation

Make a finding of consistency with the Comprehensive Plan, determine that the amendment is in compliance, recommend the ***TRANSMITTAL*** of Amendment 2017-1-B-TRAN-2 updating Map 1: Long Range Transportation Plan (LRTP) of the Transportation Element.

A. Background

The Orange County Comprehensive Plan's Transportation Element contains an adopted Long Range Transportation Plan (LRTP) for the County's transportation network, as required by Transportation Objective T1.1, to promote coordinated planning of transportation and land use, recognize public-private partnerships, and meet existing and future needs of population and employment. The Orange County LRTP, adopted as Map 1 of the Transportation Element, is consistent with the requirements of Section 163.3177(6)(b)1., Florida Statutes, which requires that the Comprehensive Plan include a map of the existing and proposed transportation system that is coordinated with the Plan's 2010-2030 Future Land Use Map.

Orange County updates the LRTP in response to completed construction projects, anticipated new County projects, public-private partnership projects, changes to future roadway alignments, roadway name changes, and other factors. The LRTP identifies various types of projects, depending on the timing and responsible agency or entity. Programmed County Roadways are included in the five-year Capital Improvements Program, and Planned County Roadways are included in the 10-year Capital Improvements Schedule. State roadway and transit projects are included within the FDOT Five-Year Work Program or have Alternative Analyses underway or completed.

This Comprehensive Plan amendment comprises an update of the LRTP to reflect state roadway projects that would include limited-access toll lanes within state roadway facilities that are not tolled at this time. To address this trend, the proposed amendment would create a new facility designation on the LRTP, Limited Access Collocated Toll Facilities, to distinguish these facilities from the State Roadway Projects designation already established on the LRTP. The proposed amendment also would depict two roadway facilities that had projects previously added to the LRTP with this new designation.

The first facility is the SR 408 Extension from Challenger Parkway to SR 520. The BCC approved Amendment 2015-2-B-TRAN-2 in 2015 to add the SR 408 Extension to the LRTP, but an alignment was not depicted on the LRTP at that time, based on the project's status. Florida's Turnpike Enterprise has assumed responsibility from the Central Florida Expressway Authority for the SR 408 Extension in order to use rights-of-way associated with the SR 50 corridor, which has a widening project currently identified as a State Roadway Project on the LRTP. The proposed amendment would apply the new Limited Access Collocated Toll Facility designation to the previously-approved SR 408 Extension project.

The other facility is the Interstate 4 Ultimate (Orange County portion from Seminole County Line to Kirkman Road) and Beyond the Ultimate (Orange County portion from Kirkman Road to Osceola County Line) projects. The BCC approved Amendment 2015-1-B-TRAN-1 in 2015 to add

the I-4 Ultimate and I-4 Beyond the Ultimate projects to the LRTP, and the proposed amendment would apply the new Limited Access Collocated Toll Facility designation to the full extent of Interstate 4 within Orange County.

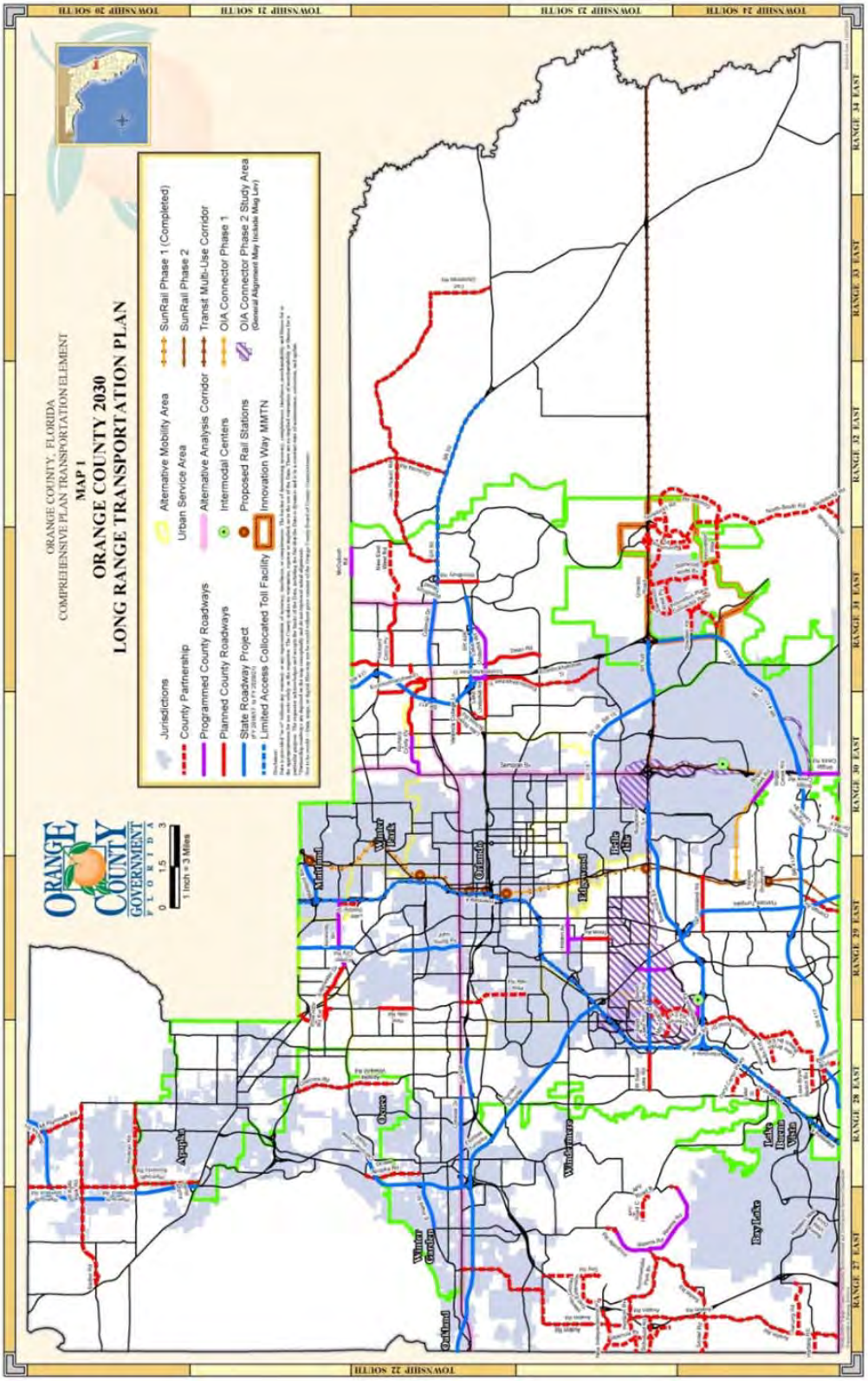
Long Range Transportation Plan

If approved, the proposed amendment would make the following changes to the 2030 LRTP Map:

REVISION TO LRTP

- Revised symbology to create new Limited Access Collocated Toll Facility designation to distinguish from State Roadway Projects.
- Designation of the SR 408 Extension project from existing terminus of SR 408 at Challenger Parkway to SR 520 as a Limited Access Collocated Toll Facility (BCC approved Amendment 2015-2-B-TRAN-2 in 2015 to add SR 408 Extension project to the LRTP).
- Designation of the I-4 Ultimate and I-4 Beyond the Ultimate projects as Limited Access Collocated Toll Facility (BCC approved Amendment 2015-1-B-TRAN-1 in 2015 to add I-4 Ultimate/Beyond the Ultimate projects to the LRTP).

Map 1: 2030 Long Range Transportation Plan



Community Meeting Memorandum

DATE: December 7, 2016

TO: Alberto A. Vargas, MArch., Planning Manager

FROM: Jennifer DuBois, Senior Planner

SUBJECT: Amendment 2017-1-A-3-1 (Stephen Novacki, Picerne Development Corporation of Florida, for Abdul Musa Ali, Yusef Musa Cortes, and Samuel Musa Cortes) – Community Meeting Synopsis

C: Project File

Location of Project: 200 S. Goldenrod Road and 7302 Yucatan Drive; Generally described as located west of N. Goldenrod Road and south of Yucatan Drive, north of SR 408 and east of Tuscany Pointe Avenue.

Meeting Date and Location: Wednesday, November 16, 2016, at 6:30 PM at Little River Elementary School, 100 Caswell Drive, Orlando, FL 32825

Attendance:

Commissioner	District 3 Commissioner Pete Clarke
Commissioner's Aide	District 3 Commissioner's Aides Mercedes Fonseca and Marya Labrador
Orange County Staff	Jennifer DuBois, Planning Division; Pedro Medina and Carol Merkel, Development Engineering Division
Applicant Team	Stephen Novacki and Bill Shallcross, Picerne Development Corporation of Florida, and Jim McNeil, Akerman, LLP
Residents	226 notices sent; 8 residents in attendance

Overview of Project: The applicant, Stephen Novacki, is seeking to change the Future Land Use Map (FLUM) designation of the 17.20-acre subject property from Commercial (C) to Medium Density Residential (MDR) to allow for the development of a multi-family community featuring up to 343 dwelling units. The site is presently undeveloped and consists entirely of upland acreage.

If this proposed amendment is transmitted to the Florida Department of Economic Opportunity (DEO), the applicant intends to subsequently apply for a rezoning of the subject parcel to PD (Planned Development District), as discussed in the application package. Staff anticipates that this rezoning application will be considered in conjunction with the Future Land Use Map Amendment during the adoption public hearing stage. If approved, the PD rezoning would establish the conditions of approval and design and development standards for the site,

including those pertaining to maximum building height, access management, landscaping and buffering, lighting, and parking design.

Meeting Summary: Senior Planner Jennifer DuBois opened the meeting at 6:30 p.m. and provided an overview of the proposed Future Land Use Map Amendment and the public hearing process. She informed the meeting attendees of the upcoming December 15, 2016, Local Planning Agency (LPA) and January 24, 2017, Board of County Commissioners (BCC) transmittal public hearing dates. Ms. DuBois explained that if this requested amendment is transmitted to the Florida Department of Economic Opportunity (DEO), it will return for adoption public hearings before the LPA and BCC on April 20, 2017, and June 6, 2017, respectively. She added that if the BCC votes to transmit this amendment application to the DEO, staff anticipates that the applicant will file a PD (Planned Development District) rezoning application that will return for concurrent consideration with the amendment during the adoption hearing stage. Ms. DuBois asked the citizens if they had any questions. As none were raised, she turned the meeting over to the applicant, Stephen Novacki of Picerne Development Corporation of Florida.

Mr. Novacki also presented an overview of the proposed project, noting that he is requesting the same Medium Density Residential (MDR) future land use designation as the abutting Tuscany Pointe subdivision to the west. He acknowledged that traffic is a concern in the area in question but noted that the development of a 343-unit multi-family community on the subject site would generate approximately 3,600 fewer average daily trips than the 195,000 square feet of retail space approved for the site under its present Commercial future land use designation, as determined by his traffic study.

Mr. Novacki displayed a conceptual rendering of the proposed multi-family community. In answer to a meeting attendee, he stated that the project is expected to consist of eight buildings featuring a mix of one-, two-, and three-bedroom units, with rent averaging $1,500 per month. Each building would be comprised of 38 to 46 units per building, with 1.7 parking spaces per unit provided. To ensure the provision of privacy for residents of the neighboring single-family subdivisions to the west, the buildings will be angled and landscaping and buffering will be provided along the western property boundary. In response to the meeting participants, Mr. Novacki stated that access to the site via Cocos Drive (within the abutting Azalea Homes Unit 2 subdivision), will be prohibited.

Meeting participants voiced conern about traffic and congestion in the area, as well as safety. Several attendees stated that there have been numerous accidents near the intersection of Goldenrod Road and Yucatan Drive. Bill Shallcross, also of Picerne Development Corporation of Florida, noted that the N. Goldenrod Road corridor, from State Road 408 to State Road 50, is presently the subject of a Florida Department of Transportation (FDOT) study. FDOT has proposed the installation of a traffic light and intersection improvements at the junction of Goldenrod and Yucatan, for which a partnership with Orange County shall be necessary. One attendee stated that the traffic lights in the area are not synchronized and that congestion is a serious problem. Mr. Shallcross encouraged the meeting attendees to write to their elected officials and express their concerns about the traffic and safety issues.

Access management was also a significant concern of area residents. Mr. Novacki explaned that

primary access to the multi-family community would be achieved via a new entrance on N. Goldenrod Road, with a secondary connection provided to Yucatan Drive through the point of ingress and egress shared with the Speedway gas station/convenience store to the north. Guests and employees of the Value Place extended stay hotel to the south will continue to access that establishment by means of the driveway that extends through subject property. In response to an area resident, Mr. Novacki stated that the primary entrance may be gated.

Several meeting participants expressed skepticism that a "luxury" rental community would be successful in the area in question. They voiced their worry that if sold a a future date, the quality of the maintenance would decline over time, and the complex would be allowed to deteriorate. Residents in attendance stated that crime, particularly drug activity, has been a problem in the neighborhood and may be a deterrant to prospective tenants. Mr. Novacki informed the meeting attendees that background checks will be conducted for all potential residents, that the community will have an onsite management team, and a courtesy officer will be on the premises each night.

The applicant's attorney, Jim McNeil, stated that development of the subject parcel for single-family housing is unlikely, due to its location on Goldenrod Road. He reiterated that the site is already approved for a shopping center, and that the use of the property for a multi-family community would be significantly less intense.

Commissioner Clarke thanked the meeting attendees for their participation and encouraged them to contact his office with any questions or concerns.

The meeting concluded at 7:30 p.m. The tone of the meeting was **MIXED**.

Community Meeting Memorandum

DATE: November 30, 2016
TO: Gregory Golgowski, Chief Planner, Comprehensive Planning
FROM: Amy Bradbury, Planner
SUBJECT: Amendment 2017-1-A-4-1 Community Meeting Synopsis
C: Project File

Location of Project: 11001 Moss Park Rd.; Generally located north of Moss Park Rd., east of SR 417, and south of Dowden Rd.
Parcel ID: 09-24-31-0000-00-003/011
Meeting Date and Location: November 10, 2016, Moss Park Elementary School
Attendance:

Orange County Staff	Amy Bradbury, Planning Division
	Francisco Villar, Development Engineering
District 4 Commissioner	Jennifer Thompson, Commissioner
	Susan Makowski, Aide
Applicant Team	Jamie Poulos, Chris Roper, Stephen Novacki, Arthur Baker, Bill Shallcross
Residents	325notices sent; 4 attendees

Overview of Project:

The applicant, Stephen Novacki, has requested to change the Future Land Use Map (FLUM) designation for a 108 gross-acre site from **Rural (R)** to **Planned Development-Medium Density Residential/Office/Conservation (PD-MDR/O/CONS)** and expand the Urban Service Area (USA). If approved, the proposed project is for up to 650 residential dwelling units (multi-family and single-family) and 50,000 square feet of office/daycare/private school uses. The property is undeveloped and zoned A-2 (Farmland Rural District)

Meeting Summary:

Amy Bradbury opened the meeting at 6:05pm, introducing Orange County staff, the applicant team, and District 4 County Commissioner Thompson. Ms. Bradbury summarized the Future Land Use Map Amendment process – noting the upcoming Local Planning Agency (LPA) and Board of County Commissioners (BCC) public hearing dates as additional opportunities for public input on the request. Following an overview of the property's history and the proposed land use change, the meeting was turned over to Mr. Novacki to provide more detailed information about the proposal.

Mr. Novacki presented a draft site layout of the proposed project, which depicted how multi-family units would be situated proximate to the existing Oasis apartments and the single-family residential would be located on the northern end of the site. The proposed non-residential uses would be located at the south entrance of the site, proximate to Moss Park Road. It was also emphasized the 40 acres of open space for the project would feature active recreation.

The floor was then opened for comments and questions.

The two primary issues raised by attendees were traffic and new development in the area. First, there were a few questions raised about how the new construction would increase traffic. Mr. Novacki responded that such traffic impacts are temporary and not considered as a long-term impact to area roadways. This was followed by inquiries about how the new roads will be aligned through the project site and connects to Weewahootee Road. Mr. Novacki stated the project is providing right of way for the extension of Weewathootee to Moss Park Road and there will be a street running through the project site from Moss Park Road to Dowden Road.

Generally, attendees expressed discontent for the rate of growth within the area. Commissioner Thompson explained this area of the County has been intended for development as the Innovation Way Study Area and offered to have more detailed conversations with the residents about what is planned for the area.

The meeting adjourned at 6:40 pm and the overall tone was **NEUTRAL**.

Community Meeting Memorandum

DATE: November 30, 2016

TO: Gregory Golgowski, Chief Planner, Comprehensive Planning

FROM: Nicolas Thalmueller, Planner

SUBJECT: Amendment 2017-1-A-5-1 Community Meeting Synopsis

C: Project File

Location of Project: 15169 E. Colonial Dr.; Generally located north of E. Colonial Dr., west of Townsend Oaks Cr., and east of Sandy Creek Ln.

Property Identification: 19-22-32-7976-00-020

Meeting Date and Location: November 29th, 2016 at Camelot Elementary School (Camelot Elementary School Cafeteria 14501 Waterford Chase Pkwy, Orlando, FL 32828)

Attendance:

District Commissioner:	Emily Bonilla, District 5 Commissioner
Planning Division staff:	Nicolas Thalmueller, Planning Division
	Steven Thorp, Planning Division
Other County Staff:	Diana Almodovar, Development Engineering
Applicant:	Thomas Sillivan, Jay Jackson
Residents:	4 resident in attendance;
	212 notices sent

Overview of Project:

The applicant, Thomas Sullivan, has requested to change the Future Land Use Map (FLUM) designation of the subject property from Rural (R) to Planned Development-Low-Medium Density Residential/Commercial/Conservation (PD-LMDR/C/CONS) and to expand the Urban Service Area (USA) by 12.1 acres. The subject property consists of one parcel totaling 12.1 acres, of which approximately four (4) acres are wetland. The requested Planned Development-Low-Medium Density/Commercial /Conservation designation would allow for consideration of up to 15,000 square feet of C-1 (Retail Commercial District) uses and up to 80 residential units. The current zoning of the site it R-T (Mobile Home Park District) and a PD rezoning is expected before development approval.

Meeting Summary:

Nicolas Thalmueller opened the meeting at 6:05 P.M. and introduced Orange County Staff and the applicant. Mr. Thalmueller explained the concept of zoning and future land use classifications and summarized the Future Land Use Map Amendment process – noting the upcoming Local Planning Agency (LPA) and Board of County Commissioners (BCC) public hearing dates as additional opportunities for public input on the request. After a brief overview of the proposed land use change, the meeting was turned over to the applicant team to provide more detailed information about the proposal.

The applicant, Thomas Sullivan, explained that it is the property owner's intent to develop one or two small commercial outparcels along E. Colonial Drive and to develop residential units on the remainder of the developable upland portion of the subject property. The applicant went on to clarify that although they didn't currently have a specific end user in mind, they do intend to submit a Planned Development Rezoning application to run concurrent with the requested Future Land Use Amendment and Urban Service Area expansion.

Four area residents were in attendance at the meeting. Two of the attendees were adjacent property owners, both of which expressed support for the proposed amendment. There were two questions were asked by residents during the meeting. The first was whether there was available water and wastewater infrastructure to serve the development, to which Mr. Sullivan responded that there water and wastewater mains are located in the vicinity of the site and that the proposed Urban Service Area expansion would allow them to connect to that infrastructure. The other question was whether the future extension of S.R 408 would impact the subject property. The applicant and Orange County staff that was present at the meeting responded that they were unsure if the final route for the S.R 408 extension had been determined.

The meeting adjourned at 6:35 P.M and the overall tone was **POSITIVE**.

Community Meeting Memorandum

DATE: November 21, 2016

TO: Alberto A. Vargas, MArch., Planning Manager

FROM: Sue Watson, Planner

SUBJECT: Amendment 2017-1-A-6-1 (The Seasons) Community Meeting Synopsis

C: Project File

Location of Project: Generally described as located on the west side of S. Texas Avenue, south of Wakulla Way, east of S. John Young Parkway, and north of W. Oak Ridge Road

Meeting Date and Location: Thursday, November 10, 2016 at 6:00 PM at Westridge Middle School, 3800 W. Oak Ridge Road, Orlando, FL 32809

Attendance:

District Commissioner	District 6 Commissioner Victoria Siplin
Orange County Staff	Sue Watson and Jennifer DuBois, Planning Division Pedro Medina, Chief Engineer, Development Engineering Division
Applicant	Jim Hall and Erika Hughes, VHB, Inc.
Residents	316 notices sent; 6 residents in attendance

Overview of Project: The applicant, Jim Hall, is requesting to change the Future Land Use Map (FLUM) designation of the 19.40-acre subject property from Low-Medium Density Residential to Medium Density Residential (MDR). The applicant proposes a development program of up to 388 multi-family dwelling units. The subject site has twenty-two (22) existing multi-family units.

Meeting Summary: Planner Sue Watson opened the meeting at 6:11 PM and introduced District 6 Commissioner Victoria Siplin, Jennifer DuBois, Senior Planner, Orange County Planning Division, Pedro Medina, Chief Engineer, Orange County Development Engineering Division, and the applicant's team. Ms. Watson provided an overview of the project and informed those in attendance that the applicant is seeking to change the future land use designation of the subject site from Low-Medium Density Residential to Medium Density Residential (MDR). Staff summarized the Future Land Use Map Amendment process and the schedule for the LPA and BCC public hearings. Ms. Watson asked the citizens if they had any questions and there was one question about how long is the Comprehensive Plan process and staff answered the question. Staff turned the meeting over to the applicant, Jim Hall.

Mr. Hall provided an overview of the Future Land Use Map Amendment (FLUMA) process and an

overview of his proposal. He informed the citizens that the existing site was formerly a timeshare resort that was not successful and his proposal is to construct up to 388 multi-family apartment units. Mr. Hall stated he would like to change the Future Land Use Map (FLUM) designation of the property from LMDR to MDR. Mr. Hall also stated he would like to change the R-3 zoning of the property as well and he would like to do the rezoning concurrently with the FLUMA request. He stated to the residents that if they had any questions, worries, concerns, or issues they can be worked out at the same time because the two requests will run concurrently. He informed the residents that there are compatibility issues with the single-family residences along the north and west property lines of the subject site and that is why he is doing the concurrent rezoning to work out those issues. He would like to have dialogue with the residents so he can work out the issues before the public hearings. He informed the residents that the project will not have any access onto Wakulla Way; the access will be on Texas Avenue. Staff and the applicant then responded to the residents' questions.

Questions and Comments from area residents:

Question: What are the future plans for Wakulla Way?

Answer: Commissioner Siplin will check on the widening and inform the residents.

Question: How many units are being proposed?

Answer: Mr. Hall informed the residents he is proposing up to 388 units.

Question: What is the maximum number of units the builder can reduce?

Answer: Mr. Hall stated he doesn't know yet because they have not gotten to that level of the project yet.

Question: How high will the apartment buildings be?

Answer: Mr. Hall stated that the apartment buildings will be three-story garden apartments.

Question: Will the apartments be gated?

Answer: Commissioner Siplin stated it will help the residents if they are gated because it may deter crime or help to control crime.

Question: Will the apartments be market rate?

Answer: Yes, whatever the market rate is for apartments.

Question: Has anyone shown what they are going to do to Texas Avenue?

Answer: Mr. Hall stated that Orange County will request that the property owner to donate 40' to 50' of land for Texas Avenue road widening and he will work with Orange County to provide the right-of-way. Mr. Hall also stated that he would have to pay a proportionate fair share for Texas Avenue for his proposed project. Commissioner Siplin informed the residents that she will work with them through the process.

Question: When will your project start?

Answer: Construction will probably be sometime in 2018.

Question: Can you clear the property?

Answer: Maybe sometime in October 2017.

Question: Which way will the buildings face?

Answer: Don't know yet.

Question: When will you know what the apartments will look like?

Answer: By transmittal.

Question: How are the schools affected?

Answer: Florida has the most progressive program to pay for schools than anybody else. School impact fees need to be pre-paid before construction.

Question: Is there a plan for green space?

Answer: No. Mr. Hall stated he will save the vegetation along Wakulla Way (north side) and along the west side of the subject property.

Comment: The citizens along Wakulla Way want a wall and vegetation along Wakulla Way.

Answer: Mr. Hall stated the existing vegetation is good, but they can have a 7'-10' wide landscape buffer and he can also put a 6' high masonry wall on the other side of it. Mr. Hall stated the 6' high wall will be along the north and west property lines of the subject site.

Comment: Some of the residents were concerned that the ditch along Wakulla Way was going to be filled in and that there would be access onto Wakulla Way. Mr. Hall informed them that there would not be any access onto Wakulla Way and they are not going to fill in the ditch along Wakulla Way.

Comment: The residents stated there was crime activity on the subject property.

The meeting was turned back over to staff and Commissioner Siplin thanked everyone in attendance for coming. The meeting adjourned at approximately 6:50 PM. The overall tone of the meeting was **POSITIVE**.

ORANGE COUNTY GOVERNMENT FLORIDA

Interoffice Memorandum

Date: November 17, 2016

To: Alberto A. Vargas, MArch, Manager
Orange County Planning Division

From: J. Andres Salcedo, P.E., Assistant Director
Utilities Engineering Division

J. Andres Salcedo 11/17/16

Subject: Facilities Analysis and Capacity Report
2017-1 Regular Cycle Comprehensive Plan Amendments

Orange County Utilities (OCU) staff reviewed the proposed development programs as submitted by the Planning Division and have concluded improvements to the County's water and wastewater treatment plants are not required to provide an adequate level of service consistent with the Comprehensive Plan's Potable Water, Wastewater and Reclaimed Water Element for those properties within OCU's service area. The Comprehensive Plan includes a 10-Year Water Supply Facilities Work Plan addressing the needs of our service area. Supporting documentation is provided in the attached Potable Water and Wastewater Facilities Analysis table.

As of today OCU has sufficient plant capacity to serve the subject amendments. This capacity is available to projects within OCU's service area and will be reserved upon payment of capital charges in accordance with County resolutions and ordinances. Transmission system capacity will be evaluated at the time of Master Utility Plan review and permitting, or at the request of the applicant.

OCU's groundwater allocation is regulated by its consumptive use permits (CUP). OCU is working toward alternative water supply (AWS) sources and agreements with third party water providers to meet the future water demands within our service area. While OCU cannot guarantee capacity to any project beyond its permitted capacity, we will continue to pursue the extension of the CUP and the incorporation of AWS and other water resources sufficient to provide service capacity to projects within the service area.

If you need additional information, please contact me or Lindy Wolfe at 407 254-9918.

cc: Raymond E. Hanson, P.E., Director, Utilities Department
Teresa Remudo-Fries, P.E., Deputy Director, Utilities Department
Lindy Wolfe, P.E., Chief Engineer, Utilities Engineering Division LW 11/17/16
Laura Tatro, P.E., Engineer III, Utilities Engineering Division LT 11/17/16
Gregory Golgowski, Chief Planner, Planning Division
Nicolas Thalmueller, Planner, Planning Division
File: 37586; 2017-1 Regular Cycle

Potable Water and Wastewater Facilities Analysis for 2017-1 Regular Cycle Comprehensive Policy Plan Amendments

Amendment Number	Parcel ID	Service Type and Provider	Main Size and General Location	Proposed Land Use	Maximum Density, Dwelling Units	Maximum Density, Hotel Rooms	Maximum Density Non-residential SF	PW Demand (MGD)	WW Demand (MGD)	Available PW Capacity (MGD)	Available WW Capacity (MGD)	Reclaimed Water Required for Irrigation	OCU Service Area
2017-1-A-1-1 Hannah Smith	14-24-28-0000-00-020; 14-24-28-1242-66-000; portions of 14-24-28-1242-66-001 and 14-24-28-1242-60-000	PW: Orange County Utilities WW: Orange County Utilities RW: Orange County Utilities	PW: 24 inch main on Palm Parkway WW: 20 inch main on Palm Parkway RW: 12 inch main on Palm Parkway	Single Family and Commercial	300	739	579,900	0.238	0.194	0.238	0.194	Yes	South
2017-1-A-3-1 (Oasis at Crosstown)	26-22-30-8418-00-010/020	PW: Orange County Utilities WW: Orange County Utilities RW: Orange County Utilities	PW: 12 and 16 inch mains on Goldenrod WW: 8 inch main at Goldenrod and Yucatan and 16 inch main on Lake Underhill RW: Not Available	Multi-family	343	0	0	0.094	0.077	0.094	0.077	No	East
2017-1-A-4-1 Moss Park North	09-24-31-0000-00-003/011	PW: Orange County Utilities WW: Orange County Utilities RW: Orange County Utilities	PW: 12 inch main on Moss Park Road WW: 16 inch main on Moss Park Road RW: 16 inch main on Moss Park Road	Single Family , Multi-family, and Commercial	650	0	50,000	0.183	0.150	0.183	0.150	Yes	East
2016-1-A-5-1 (15169 E. Colonial)	19-22-32-7976-00-020	PW: Orange County Utilities WW: Orange County Utilities RW: Orange County Utilities	PW: 12 inch main on E. Colonial Dr.* WW: 6 inch main on E. Colonial Dr.* RW: Not Available	Residential and Commercial	80	0	500,000	0.068	0.056	0.068	0.056	No	East
2017-1-A-6-1 (The Seasons)	21-23-29-5361-00-170	PW: Orlando Utilities Commission WW: Orange County Utilities RW: Orange County Utilities	PW: Contact Orlando Utilities Commission WW: 12 inch main on W. Oak Ridge Road and 20 inch main on John Young Parkway RW: Not Available	Multi-family	388	0	0	0.107	0.087	0.107	0.087	No	South

NOTES:

No plant improvements are needed to maintain LOS standards. This evaluation pertains solely to water and wastewater treatment plants. Connection points and transmission system capacity will be evaluated at the time of Master Utility Plan review and permitting, or at the request of the applicant.

*The site is outside the Urban Service Area, but abuts the Urban Service Area boundaries, and water and wastewater mains are located in the vicinity of the site. If the Urban Service Area boundary is expanded to encompass this site, or if the extension of water and wastewater mains outside the Urban Service Area to serve this site is already compatible with Policies PW1.4.2, PW1.5.2, and the equivalent wastewater policies, water and wastewater demands and connection points to existing OCU transmission systems will be addressed as the project proceeds through the DRC and construction permitting process.

Abbreviations: PW - Potable Water; WW - Wastewater; RW - Reclaimed Water; WM - Water Main; FM - Force Main; GM - Gravity Main; MUP - Master Utility Plan; TBD - To be determined as the project progresses through Development Review Committee, MUP and permitting reviews; TWA - Toho Water Authority; RCID - Reedy Creek Improvement District

Orange County Public Schools
School Capacity Report

DATE	November 18, 2016
JURISDICTION	Orange County
CASE	2017-1-A-3-1
PROPERTY ID	26-22-30-8418-00-010; 020
ACREAGE	+/-17.20
LAND USE CHANGE	Commercial (C) to Medium Density Residential (MDR)
PROPOSED USE	343 Multi-family dwelling units

CONDITIONS AT AFFECTED SCHOOLS (AS OF OCTOBER 15, 2016)

School Level	Azalea Park ES	Jackson MS	Colonial HS
School Capacity (2014-15)	1,163	1,087	2,318
Enrollment (2014-15)	956	1,219	2,955
Utilization (2014-15)	82.0%	112.0%	127.0%
LOS Standard	110%	100%	100%
Students Generated	58	24	27

COMMENTS/CONDITION(S) OF APPROVAL:

- Applicant received a recommendation of approval from OCPS (OC-16-020).

For more information on this analysis, please contact Julie Salvo at (407) 317-3700 x2022139, or at julie.salvo@ocps.net.

Orange County Public Schools
School Capacity Report

DATE	November 18, 2016
JURISDICTION	Orange County
CASE	2017-1-A-4-1
PROPERTY ID	09-24-31-0000-00-003; -011
ACREAGE	+/-108.30
LAND USE CHANGE	Rural (R) to Planned Development-Medium Density Residential/Office/Conservation (PD-MDR/O/CONS)
PROPOSED USE	Up to 650 residential dwelling units (MF, SF)

CONDITIONS AT AFFECTED SCHOOLS (AS OF OCTOBER 15, 2016)

School Level	Moss Park ES	Lake Nona MS	Lake Nona HS
School Capacity (2014-15)	842	1,235	2,807
Enrollment (2014-15)	843	2,063	2,744
Utilization (2014-15)	100.0%	167.0%	98.0%
LOS Standard	110%	100%	100%
Students Generated	124	62	85

COMMENTS/CONDITION(S) OF APPROVAL:

- Applicant received a recommendation of approval from OCPS (OC-16-019).

For more information on this analysis, please contact Julie Salvo at (407) 317-3700 x2022139, or at julie.salvo@ocps.net.

Orange County Public Schools
School Capacity Report

DATE	November 18, 2016
JURISDICTION	Orange County
CASE	2017-1-A-5-1
PROPERTY ID	19-22-32-7976-00-020
ACREAGE	+/-12.10
LAND USE CHANGE	Planned Development-Low-Medium Density Residential/Commercial/Office/Conservation (PD-LMDR/C/)/CONS)
PROPOSED USE	80 townhome units

CONDITIONS AT AFFECTED SCHOOLS (AS OF OCTOBER 15, 2016)

School Level	Bonneville ES	Corner Lake MS	East River HS
School Capacity (2014-15)	850	1,156	3,002
Enrollment (2014-15)	607	999	2,031
Utilization (2014-15)	71.0%	86.0%	68.0%
LOS Standard	110%	100%	100%
Students Generated	13	6	7

COMMENTS/CONDITION(S) OF APPROVAL:

- Applicant needs to submit an application for a Capacity Enhancement Agreement (CEA) to OCPS.

For more information on this analysis, please contact Julie Salvo at (407) 317-3700 x2022139, or at julie.salvo@ocps.net.

Orange County Public Schools
School Capacity Report

DATE	November 18, 2016
JURISDICTION	Orange County
CASE	2017-1-A-6-1
PROPERTY ID	21-23-29-5361-00-170
ACREAGE	+/-17.7 net developable (19.40 gross)
LAND USE CHANGE	Low-Medium Density Residential (LMDR) to Medium Density Residential (MDR)
PROPOSED USE	388 Multi-family dwelling units

CONDITIONS AT AFFECTED SCHOOLS (AS OF OCTOBER 15, 2016)

School Level	Palmetto ES	Westridge MS	Oak Ridge HS
School Capacity (2014-15)	1,163	1,087	2,318
Enrollment (2014-15)	956	1,219	2,955
Utilization (2014-15)	82.0%	112.0%	127.0%
LOS Standard	110%	100%	100%
Students Generated	58	24	27

COMMENTS/CONDITION(S) OF APPROVAL:

- Project must have an executed Capacity Enhancement Agreement (CEA) prior to Board of County Commission approval. Applicant has applied for a CEA (OCPS #OC-16-035).

For more information on this analysis, please contact Julie Salvo at (407) 317-3700 x2022139, or at julie.salvo@ocps.net.

ORANGE COUNTY FIRE RESCUE DEPARTMENT
Barrie McMillen, GIS Specialist, Planning and Technical Services Division
6590 Amory Court
Winter Park, FL 32792
(407) 836-9027 Fax (407) 836-9106
Barrie.mcmillen@ocfl.net

Date: October 25, 2016

To: Nicolas Thalmueller, Planner
Orange County Planning Division

From: Barrie McMillen, GIS Specialist
Planning & Technical Services—Orange County Fire Rescue Department

Subject: Facilities Analysis and Capacity Report 2017-1 Regular Cycle Amendments
Comprehensive Plan Amendments – Fire Rescue Summary

Amendment #	OC Fire Station First Due	Distance from Fire Station	Emergency Response Time
2017-1-A-1-1	36	2.3 miles	6 min
2017-1-A-3-1	63	2.6 miles	5 min
2017-1-A-4-1	77	1.8 miles	3 min
2017-1-A-5-1	80	2.2 miles	5 min
2017-1-A-6-1	51	0.7 miles	3 min

Please contact our office if you have any questions or need additional information.

BKM

PARKS AND RECREATION DIVISION
MATT SUEDMEYER, MANAGER
4801 W Colonial Drive, Orlando. FL 32808
407-836.6200 • FAX 407-836.6210 • http://www.orangecountyparks.net

November 9, 2016

TO: Alberto Vargas, Manager, Planning

FROM: Bill Thomas, Planner III, Parks and Recreation

SUBJECT: Facilities Analysis and Capacity Report
2017-1 Regular Cycle Comprehensive Policy Plan Amendments

The Parks and Recreation Division have reviewed the 2017-1 Regular Cycle Comprehensive Policy Plan Amendments. Based on the information provided the development impacts do not exceed our countywide available parkland capacity (see attached chart), however, the projects still need to meet applicable development requirements for parks and recreation.

The Future Land Use Amendment maps have been compared to our existing and proposed park and trail facilities and there are no direct impacts.

BT:bt

c: Matt Suedmeyer, Manager, Parks and Recreation
Bob Goff, Project Manager, Parks and Recreation
Cedric Moffett, Planner III, Parks and Recreation
File: Comp Plan Amendments

Facilities Analysis and Capacity Report

2017-1 Regular Cycle Comprehensive Policy Plan Amendments

(Amendments with Parks Level-of-Service Impacts)

Amendment Number	Proposed Future Land Use	Residential Dwelling Units	Population (2.56/unit)	Active Recreation Acreage Required (1.5 ac/1,000 pop)	Resource Recreation Acreage Required (6.0 ac/1,000 pop)
2017-1-A-1-1 Hannah Smith	Planned Developmemt -Low-Medium Density Residential/Medium Density Residential/Commercial (PD-LMDR/MDR/C)	1,380	3,533	5.3	21.2
2017-1-A-3-1 Oasis at Crosstown	Medium Density Residential (MDR)	343	878	1.3	2.1
2017-1-A-4-1 Moss Park North	Planned Development - Medium Density Residential /Office/Conservation (PD-MDR/O/CONS) and Urban Service Area (USA) expansion	650	1,664	2.5	10.0
2017-1-A-5-1 15169 E. Colonial	Planned Development-Low-Medium Density Residential/Commercial/ Office/Conservation (PD-LMDR/C/O/CONS)	80	205	0.3	1.2
2017-1-A-6-1 The Seasons	Medium Density Residential (MDR)	388	993	1.5	6.0
		Total Required Acres		10.9	40.5
		Available Capacity (as of July 2016)		360.3	8,081.3

Sheriff Jerry L. Demings

ORANGE COUNTY SHERIFF'S OFFICE

INTEROFFICE MEMORANDUM

November 17, 2016

TO: Nicholas M. Thalmueller
Orange County Planning Division

FROM: Daniel Divine, Manager
Research & Development

SUBJECT: 2017-1 Regular Cycle Comprehensive Policy Plan Amendments (CPPA)

As requested, we have reviewed the impact of the existing and proposed development scenarios related to the 2017-1 Regular Cycle Comprehensive Policy Plan Amendments (CPPA). Based on the existing and proposed development scenarios, the Sheriff's Office staffing needs for existing are 2.45 deputies and 1.20 support personnel and proposed are 6.56 deputies and 3.20 support personnel to provide the standard level of service (LOS) to these developments.

Comprehensive Policy Plan Amendment #2017-1-A-3-1 comprises proposed multi-family residential units, **#2017-1-A-4-1** and **#2017-1-A-5-1** are proposed mix use developments. These developments are located in Sector Two. Sector Two is located in the eastern portion of Orange County and is approximately 404.632 square miles, our largest sector geographically. In 2015 Sector Two had 286,477 calls for service. In 2015 the average response times to these calls were 00:21:21 minutes Code 1; 00:32:58 minutes Code 2; and 00:07:12 minutes Code 3.

Comprehensive Policy Plan Amendment #2017-1-A-6-1 comprises proposed multi-family dwelling use developments. These developments are located in Sector Four. Sector Four is centrally located and is approximately 70.605 square miles. In 2015 Sector Four had 293,627 calls for service. In 2015 the average response times to these calls were 00:18:41 minutes for Code 1; 00:26:55 minutes Code 2; and 00:05:38 for minutes Code 3.

Comprehensive Policy Plan Amendment #2017-1-A-1-1 is a proposed mixed use development in Sector Five. Sector Five is located in the southwestern portion of Orange County and is approximately 22.664 square miles. In 2015 Sector Five had 108,030 calls for service. In 2015 the average response times to these calls were 00:10:13 minutes for Code 1; 00:13:48 minutes Code 2; and 00:04:20 minutes Code 3.

The Orange County Sheriff's Office measures service requirements based on the number of calls for service generated and the number of staff needed to respond to those calls. All development generates impact, but at varying levels. In the 2013 update to the Law Enforcement Impact Fee Ordinance, the Sheriff's Office Level of Service was 745.28 calls for service per sworn officer per year. Support personnel are calculated by applying 48.8% to the sworn officer requirement. The

'formula' is *land use x unit of development x calls per unit divided by 745.28 = number of deputies required for that development. The 'formula' for the number of support personnel required is the number of deputies * 48.8 percent*. These calculations are obtained from Orange County's Law Enforcement Impact Fee Study and Ordinance.

We have attached reports based on the existing and proposed development scenarios which show staffing needs and the salary for a newly hired deputy with associated equipment and supply costs and the civilian dollar amount for an entry level position with salary and benefits. Impact fees address capital cost only. All other costs must be requested from the Board of County Commissioners including salaries and benefits.

As stated before, all new development creates new calls for service, which in turn creates a need for new additional manpower and equipment. If calls for service increase without a comparable increase in manpower our response times are likely to increase.

If you wish to discuss this information, please contact me or Belinda Atkins at 407 254-7470.

D.P.D.

DPD/bga

Attachments

c: Undersheriff Rey Rivero, Chief Deputy Larry Zwieg, Major Jeff Stonebreaker, Captain Joseph Carter, CALEA 15.1.3

Amendment 2017-1-A-3-1

Parcel ID: 26-22-30-8418-00-010/020

Location: In the Alternative Mobility Area. West of N. Goldenrod Road, south of Yucatan Drive, north of SR408 and east of Tuscany Point Avenue

Acreage: 17.20 gross acres

The applicant is requesting a change 17.20 gross acres from Commercial to Medium Density Residential (MDR) and approval to develop up to 343 multi family dwelling units. The subject property is located within the County's Alternative Mobility Area, and as such, development activity on the subject may be subject to the requirements of Transportation Element Objective 2.3, particularly Policies T2.3.5 and T2.3.7.

Trip Generation (ITE 9th Edition)

Land Use	PM. Pk. Hr. Trips	% New Trips	New PM Pk . Hr. Trips
Maximum use of current FLUM: 195,500 SF commercial use	938	67%	628
Proposed Development: 343 multi family dwelling units	206	100%	206
Net New Trips (Proposed Development - Maximum use of current FLUM) : 628-206 = 422			

Existing Level of Service Conditions

Roadway Segments Within a One Mile Radius	# of lanes	Avail Cap.	LOS
Chicksaw Trail			
• El Prado Drive to Lake Underhill Road	2	224	C
• Lake Underhill Road to Valencia College Lane	2	73	C
• Valencia College Lane to Colonial Drive	2	92	C
Goldenrod Road			
• Curry Ford Road to Lake Underhill Road	4	213	C
• Lake Underhill Road to Valencia College Lane	4	244	C
• Valencia College Lane to Colonial Drive	4	338	C
Lake Underhill Road			
• Semoran Blvd. to Oxalis Avenue	2	0	F
• Oxalis Avenue to Goldenrod Road	2	0	F
• Goldenrod Road to Madeira Avenue	2	0	F
Valencia College Lane			
• Central Florida Greeneway to Goldenrod Road	2	309	C

Planned and Programmed Roadway Improvements

- Valencia College Lane – programmed roadway improvement to widen to 4 lanes from Goldenrod Road to William C. Coleman Drive. Construction to be determined.

Right of Way Requirements – none

Road Agreements - There are no agreements on file associated with this parcel.

Summary of Transportation Impacts

This parcel in located in the Alternative Mobility Area (AMA). Per Objective T.2.3.2 of the County's comprehensive Plan, the proposed development is exempt from meeting transportation concurrency requirements.

- In accordance with Policy 2.3.7 of the Comprehensive Plan, a Transportation Context Study was conducted to determine the availability of alternative modes of transportation in the area, the level of connectivity among the various modes including sidewalks, bicycle facilities and transit service This information will be used to help identify system level and site level strategies that would enhance mobility and accessibility within a quarter mile radius of the project site.
- The requested amendment will result in a decrease in pm peak hour trips by 422 trips.
- Based on the Concurrency Management System database dated 12/02/12, there are multiple failing roadway segments along Lake Underhill Road within the project area. This information is dated and is subject to change.
- In the short term, year 2020 and long term or plan horizon year (2030) both Lake Underhill Road and Valencia College Lane are project to be capacity deficient.
- Based on LYNX's current bus schedule, transit service is available along Curry Ford Road which is approximately a half mile walk distance of the project site.
- The area is well served by an interconnected network of public sidewalks and the proposed development will connect to the existing sidewalk network.
- There is no signed bicycle route/lane within the project impact area.

Final permitting of any development on this site will be subject to further review and approval by Transportation Planning, and the applicant may be required to include site level mobility enhancements on the development plan for this project.

Amendment 2017-1-A-4-1

Parcel ID: 09-24-31-0000-00-003/011

Location: North of Moss Park Road, east of SR 417 and south of Dowden Road

Acreage: 108.30 gross acres

The applicant is requesting to change 69.00 gross acres from Rural to Planned development-Medium Density Residential/Office /Conservation, expansion of the Urban Service Area and approval to develop 100 single family dwelling units, 300 multifamily dwelling units, 250 townhomes and 50,000 square feet of commercial office use. The subject property is not located within the County's Alternative Mobility Area or along a backlogged/constrained facility or multimodal corridor.

Existing Development: Vacant

Allowable Development: 10 Single Family dwelling units.

Proposed Development: 100 SF dwelling units, 300 apartments, 250 townhomes and 50,000 square feet of office development.

Trip Generation (ITE 9th Edition)

Land Use	PM. Pk. Hr. Trips	% New Trips	New PM Pk. Hr. Trips
Maximum use of current FLUM: 10 SF Dwelling units	13	100%	13
Existing Development: Vacant	-	-	-
Proposed Development:			
100 SF Dwelling units	105	100%	105
300 Apartments	183	100%	183
250 townhomes	128	100%	128
50,000SF Office	135	92%	124
Total Trips	551		540
Net New Trips (Proposed Development - Maximum use of current FLUM) : 540-13 = 527			

Existing Level of Service Conditions

Roadway Segments Within a 2.5 Mile Radius	# of lanes	Avail. Cap.	LOS
Innovation Way/Dowden Road			
• Central Florida Greeneway to Narcoossee Road	4	1,325	C
Moss Park Road			
• Narcossee Road to Weewahotee Road	4	367	C
• Wewahootee Road to Lake Mary Jane Road	4	2,787	B
Narcoossee Road			
• SR417 to Lake Nona Club Drive	4	317	C

Planned and Programmed Roadway Improvements

- Innovation Way South – A new 4 lane roadway from Moss Park Road to Sunbridge Boulevard. This project is included the County's Long Range Plan.
- Dowden Road – A new 4 lane roadway from SR 417 to Sunbridge Road. This project is included the County's. This project is included the County's Long Range Plan.
- Sunbridge Boulevard – A new 4 lane roadway from SR528 to Innovation Way South. This project is included the County's Long Range Plan.

Right of Way requirements –There is a roadway right of way agreement on file between Gary T. Randall, Trustee nad the Board of County Commissioners regarding the right of way required for the design, mitigation, permitting and construction of the Randall IWSS Improvements as defined in Subsection 7(a) of the executed agreement.

Road Agreements - Innovation Way (Gary Randall-Amended & Restated Right-of-Way Agreement): The Amended and Restated Innovation Way South Right-of-Way Agreement (Gary T. Randall, Trustee) approved on 10/14/2014 and recorded at 10822/4560 will replace the Innovation Way South Right-of-Way Agreement (Gary T. Randall, Trustee) originally approved by the Board of County Commissioners on October 16, 2012 and recorded at OR Book/Page 10461/0059. Under the terms of the Amended and Restated Agreement, Lennar assumes responsibility for design, mitigation, permitting and construction of the Randall IWSS Improvements as defined in Subsection 7(a) along with the necessary intersection improvements. The City of Orlando has agreed to maintain the intersection improvements (including signalization) adjacent to the Randall property. Randall agrees to convey the right-of-way and a temporary construction easement needed for the road improvements to be completed by Lennar. Should any additional right-of-way be required, Lennar will fund County's projected costs for acquisition plus a 20% contingency. A Temporary Stormwater Drainage Easement exists over a retention pond located on the Randall property. Lennar, as part of the road construction, shall relocate the retention pond off of the Randall property to a different location on the Moss Park property. Moss Park shall execute and deliver to County a Permanent Drainage Easement for the relocated pond area once constructed. Lennar shall receive road impact fee credits for the actual cost of construction of the Randall IWSS road improvements as defined in Subsection 7(a) up to a cap of $2,300,000. Randall has provided a First Amendment to Temporary Utility Easement to be approved contemporaneously with this agreement which reflects the revised typical cross-section shown on Exhibit C.

Summary of Transportation Impacts

- Based on the approved future land use for these parcels, approximately 10 single family dwelling units can be developed on the property.
- The proposed development program will generate 540 pm peak hour trips resulting in a net increase of 527 pm peak hour trips.
- Based on the County's Concurrency Management System database dated 12/02/2016, there are currently no failing roadway segments within the project impact area and capacity is available to be encumbered however, this information is dated and subject to change.

- Analysis of short term or year 2020 conditions indicates that the roadways within the project impact area is projected to operate at acceptable levels of service and the proposed amendment will not adversely impact the area roadways.
- Analysis of the horizon year or year 2030 conditions indicates that the roadway network will continue to operate at acceptable level of service conditions and the proposed amendment will not result in any capacity deficiencies in the long term.

Final permitting of any development on this site will be subject to review and approval under capacity constraints of the county's Transportation Concurrency Management System. Such approval will not exclude the possibility of a proportionate share payment in order to mitigate any transportation deficiencies. Finally, to ensure that there are no revisions to the proposed development beyond the analyzed use, the land use will be noted on the County's Future Land Use Map or as a text amendment to the Comprehensive Policy Plan.

Amendment 2016-1-A-5-1

Parcel ID: 21-23-29-5361-00-170

Location: North of West Colonial Drive, west of Townsent Oaks Drive and east of Sandy Creek Lane

Acreage: 12.10 gross acres

The applicant is requesting to change 12.10 gross acres from Rural to Planned development-Medium Density Residential/Commercial/Conservation, approval to develop up to 15,000 square feet of commercial uses. The subject property is not located within the County's Alternative Mobility Area or along a backlogged/constrained facility or multimodal corridor.

Existing Development: 15 mobile home units

Proposed Development: 15,000 SF of commercial use and 80 SF residential units

Trip Generation (ITE 9th Edition)

Land Use	PM. Pk. Hr. Trips	% New Trips	New PM Pk . Hr. Trips
Maximum use of current FLUM: 1 SF Dwelling Units	2	100%	2
Existing Use: 15 mobile homes	9	100%	9
Proposed Development: 250, 000 SF commercial use	1,108	71%	787
Net New Trips (Proposed Development - Maximum use of current FLUM) : 787-2 = 782			

Existing Level of Service Conditions

Roadway Segments Within a One Mile Radius	# of lanes	Avail Cap.	LOS
Avalon Park Blvd.			
• Colonial Drive to Waterford Chase Pkwy	4	976	C
• Waterford Chase Pkwy to Timber Springs Blvd.	4	690	C
• Timber Springs Blvd. to Timber Creek HS	4	952	C
Challenger Parkway			
• Colonial Drive to Woodbury Road	4	1,185	C
• Ingenuity Drive to Alafaya Trail	4	1,152	C
Chuluota Road			
• Colonial drive to Lake Pickett Road	2	0	F
East Colonial Drive			
• Alafaya Trail to Woodbury Road	6	665	C
• Woodbury Road to Lake Pickett Road			F
• Lake Pickett Road to Avalon Park Blvd.	6	0	F

• Avalon Park Blvd. To S. Tanner Road • S. Tanner Road to Chuluota Road • Chuluota Road to SR520	6 4 4 4	199 0 0 877	C F F C
Lake Pickett Road • Colonial Drive to Percival Road • N. Tanner Road to Chuluota Road	 2 2	 0 288	 F D
N. Tanner Road • Lake Pickett Road to Seminole County Line	 2	 265	 C
Percival Road • N. Tanner Road to Lake Pickett Road	 2	 499	 C
Waterford Lakes Parkway • Alafaya Trail to Woodbury Road	 4	 1,082	 C
Woodbury Road Lake Underhill Road to Water Ford Lakes Pkwy Waterford Lakes Pkwy	 2 4	 0 924	 F D

Planned and Programmed Roadway Improvements

- Chuluota Road – Planned roadway improvement to widen to 4 lanes from East Colonial Drive to the Seminole County Line. This improvement is identified in the County's ten year roadway improvement program.
- Ft. Christmas Road – Planned roadway improvement to widen to 4 lanes from Lake Pickett Road to SR 50. This improvement is identified in the County's ten year roadway improvement program.
- Lake Pickett Road – Planned Roadway improvement to wide to 4 lanes, Lake Pickett Road from SR 50 to Chuluota Road. This improvement is identified in the County's ten year roadway improvement program.
- Rouse Road – Planned roadway improvement to widen to 4 lanes, from Lake Underhill Road to SR 50. Construction is to be determined.
- SR 408 – Planned roadway improvement to widen to 6 lanes from SR 417 to Alafaya Trail. This improvement is identified in the Central Florida Expressway Authority 2030 Plan. This project is in the design phase. Construction is to be determined.
- SR 408 – Planned roadway improvement to widen to 6 lanes from Alafaya Trail to SR 50. This improvement is identified in the Central Florida Expressway Authority 2030 Plan.
- SR 408 – Planned roadway improvement to extend SR 408 from Challenger Parkway to SR 520. This improvement s identified in the Central Florida Expressway Authority five year plan. The PD&E phase is funded and construction is to be determined.
- Woodbury Road – Planned roadway to construct a new 4 lane roadway Lake Underhill Road to SR 50 This improvement is identified in the County's ten year roadway improvement program.

Right of Way Requirements

- The applicant will be required to coordinate with the County's Road Agreement Committee on a specific Road Network Agreement and proportionate share contribution required to address road infrastructure needs. The Road Network Agreement will provide the means for ensuring that all new development in the Lake Pickett Area will equitably share in the cost of designing and constructing specific road improvements planned for this area.

Road Agreements - There are no agreements on file associated with this parcel.

Review Comments

1. The following comments need to be addressed in a revised traffic study for this amendment.
2. Based on the Concurrency Management System database dated 12/02/16 there are missing segments from the CMS in the analysis provided. Please revise and update to include segments.
3. The proposed development program should be analyzed based on the actual land uses: commercial, office & residential to determine the net external trips as well as the impacts on the study roadways. A land use conversion matrix is not applicable at this time for the amendment process.
4. Based on the latest ITE version, pass by is 30% not 34%. Please revise.
5. Please apply the growth rate directly to the peak hour volumes instead of using the AADT and k factor.
6. The growth rate of 5% is too high to be applied to all the roadway segments. Please provide a reasonable growth rate per year, per the comparison table in the appendix. A column should be added to indicate "Existing + Committed trips" from the CMS to the comparison table.
7. Tables 3-6 shows that the roadways are failing based on the background traffic due to the high growth rate used. Moreover, the majority of the failing roadway segments are significant (more than 3% of the MSV) which will require mitigation.

A revised study is required in order to properly determine the impacts of the proposed amendment.

Amendment 2017-1- A-6-1

Parcel ID:	21-23-29-5361-00-170
Location:	In the Alternative Mobility Area. West side of S. Texas Avenue, south of Wakulla Way, east of john Young Parkway and north of W. Oakridge Road
Acreage:	19.40 gross acres

The applicant is requesting a change 19.40 gross acres/ 17.70 net developable acres from Low Density Residential (LDR) to Medium Density Residential (MDR). The subject property is located within the County's Alternative Mobility Area, and as such, development activity on the subject may be subject to the requirements of Transportation Element Objective 2.3, particularly Policies T2.3.5 and T2.3.7.

Existing Development:	22 Multi Family dwelling units
Allowable Development:	177 Single or Multi Family dwelling units
Proposed Development:	388 Multi Family dwelling units

Trip Generation (ITE 9th Edition)

Land Use	PM. Pk. Hr. Trips	% New Trips	New PM Pk . Hr. Trips
Maximum use of current FLUM: 177 multi family dwelling units	124	100%	124
Existing Use: 22 multi family dwelling units	23		-
Proposed Development: 388 multi family dwelling units	231	100%	231
Net New Trips (Proposed Development – Max. use of current FLUM) : 231-124 = 107			

Existing Level of Service Conditions

Roadway Segments Within a One Mile Radius	# of lanes	Avail. Cap.	LOS
All American Blvd. • John Young Parkway to Orange Blossom Trail	4	716	D
Chancellor Drive • Sand Lake Road to Orlando Central Parkway • Orlando central Parkway to Oakridge Road	 2 2	 440 414	 C D
Conroy Windermere Road • Millenia Blvd. to John Young Parkway	4	179	D
John Young Parkway • Sand Lake Road to Presidents Drive • Presidents Drive to Oakridge Road • Oakridge Road to Americana Blvd. • Americana Blvd.to I4	 6 6 6 6	 999 552 391 768	 C C C C

Lake Ellenor Dr./S. Rio Grande Avenue • Orlando Central Parkway to Oakridge Road	4	1,149	C
Lancaster Road • Orange Blossom Trail to Winegard Road	4	1,159	C
Oakridge Road • Harcourt Avenue to John Young Parkway • John Young Parkway to Orange Blossom Trail • Orange Blossom Trail to Orange Avenue	 4 4 4	 453 389 254	 C C D
Orange Blossom Trail • Orlando Central Parkway to Oakridge Road • Oakridge Road to Americana Blvd. • Americana Blvd. To Holden Avenue	 6 6 6	 234 277 111	 C C C
Orlando Central Parkway • Lake Ellenor Dr. to Orange Blossom Trail	4	1,336	C
Premier Row • Chancellor Drive to Orange Blossom Trail	2	430	C
Rio Grande Avenue • Oakridge Road to Americana Blvd.	2	264	D
Texas Avenue • Chancellor Drive to Oakridge Road • Oakridge Road to Americana Blvd. • Americana Blvd. to Holden Avenue	 4 2 2	 1,405 207 214	 C D D

Planned and Programmed Roadway Improvements

- Texas Avenue – programmed roadway improvement to widen to 4 lanes from Americana Blvd. to Holden Avenue. Construction is scheduled to begin June 2018.

Right of Way Requirements – The applicant will be required to coordinate with the County's Road Agreement Committee on a specific Road Right Of Way Agreement for the widening of Texas Avenue.

Road Agreements - There are no agreements on file associated with this parcel.

Summary of Transportation Impacts

This parcel in located in the Alternative Mobility Area (AMA). Per Objective T.2.3.2 of the County's comprehensive Plan, the proposed development is exempt from meeting transportation concurrency requirements.

- In accordance with Policy 2.3.7 of the Comprehensive Plan, a Transportation Context Study was conducted to determine the availability of alternative modes of transportation in the area, the level of connectivity among the various modes including sidewalks, bicycle facilities and transit service This information will be used to help identify system level and site level strategies that would enhance mobility and accessibility within a quarter mile radius of the project site.

- The requested amendment will result in an increase in pm peak hour trips by 107 trips.
- Based on the Concurrency Management System database dated 12/02/12, there are no failing roadway segments within the project impact area and trips are available to be encumbered. This information is dated and is subject to change.
- In the short term, year 2020 all roadways are project to operate at acceptable levels of service however by the long term or plan horizon year (2040), John Young Parkway from Oakridge Road to Americana Blvd is projected to be capacity deficient.
- Based on LYNX's current bus schedule, transit service is available within a quarter mile walk distance of the project and there are 7 transit routes serving the area and bus stops are equipped with benches and shelters.
- The area is well served by an interconnected network of public sidewalks and the proposed development will connect to the existing sidewalk network.
- There is no signed bicycle route/lane along Texas Avenue however, dedicated bike lanes are available within the project impact area along John Young Parkway.

Final permitting of any development on this site will be subject to further review and approval by Transportation Planning, and the applicant may be required to include site level mobility enhancements on the development plan for this project.

OASIS AT CROSSTOWN

Project № 16-083
August 2016

TRANSPORTATION CONTEXT ANALYSIS
ALTERNATIVE MOBILITY AREA
ORANGE COUNTY, FL

Prepared by:

Traffic & Mobility Consultants
3101 Maguire Boulevard, Suite 265
Orlando, Florida 32803
www.trafficmobility.com
(407) 531-5332

Prepared for:

Picerne Development Corporation of Florida
247 N Westmonte Drive
Altamonte Springs, FL 32714

EXECUTIVE SUMMARY

This Transportation Mobility Analysis was conducted in support of a CPA application for the Oasis at Crosstown, located on the west side of Goldenrod Road at Yucatan Drive in Orange County, Florida. The site is located in an Alternative Mobility Area.

The mobility analysis assessed the transportation facilities available to the site, including roadways, pedestrian and bicycle facilities, transit services and other transportation options. The findings of the analysis are:

- The requested amendment will result in a decrease of 4,717 average daily trips and 413 P.M. peak hour trips.
- An analysis of existing conditions reveals that all roadway segments in the project's study area operate adequately and within their capacities, except Lake Underhill Road, which is currently backlogged.
- The roadway analysis for the interim year 2020 and horizon year 2030 indicate that Lake Underhill Road and Valencia College Lane will be deficient without improvements. The two roadways are planned to be improved in the County's Long Range Transportation Plan.
- The proposed amendment will reduce the traffic generation from the subject site and will not result in adverse impacts on the transportation network.
- The area is well served by an interconnected network of public sidewalks. The proposed development will connect to the existing network of public sidewalks.
- No dedicated bicycle facilities are available on the existing transportation network.
- No fixed route transit service operates adjacent to the site. The closest bus stops are located more than ¼ mile from the site on Lake Underhill Road.
- The development will undergo more specific mobility review through the permitting process, during which specific mobility goals and network connections will be evaluated and addressed.

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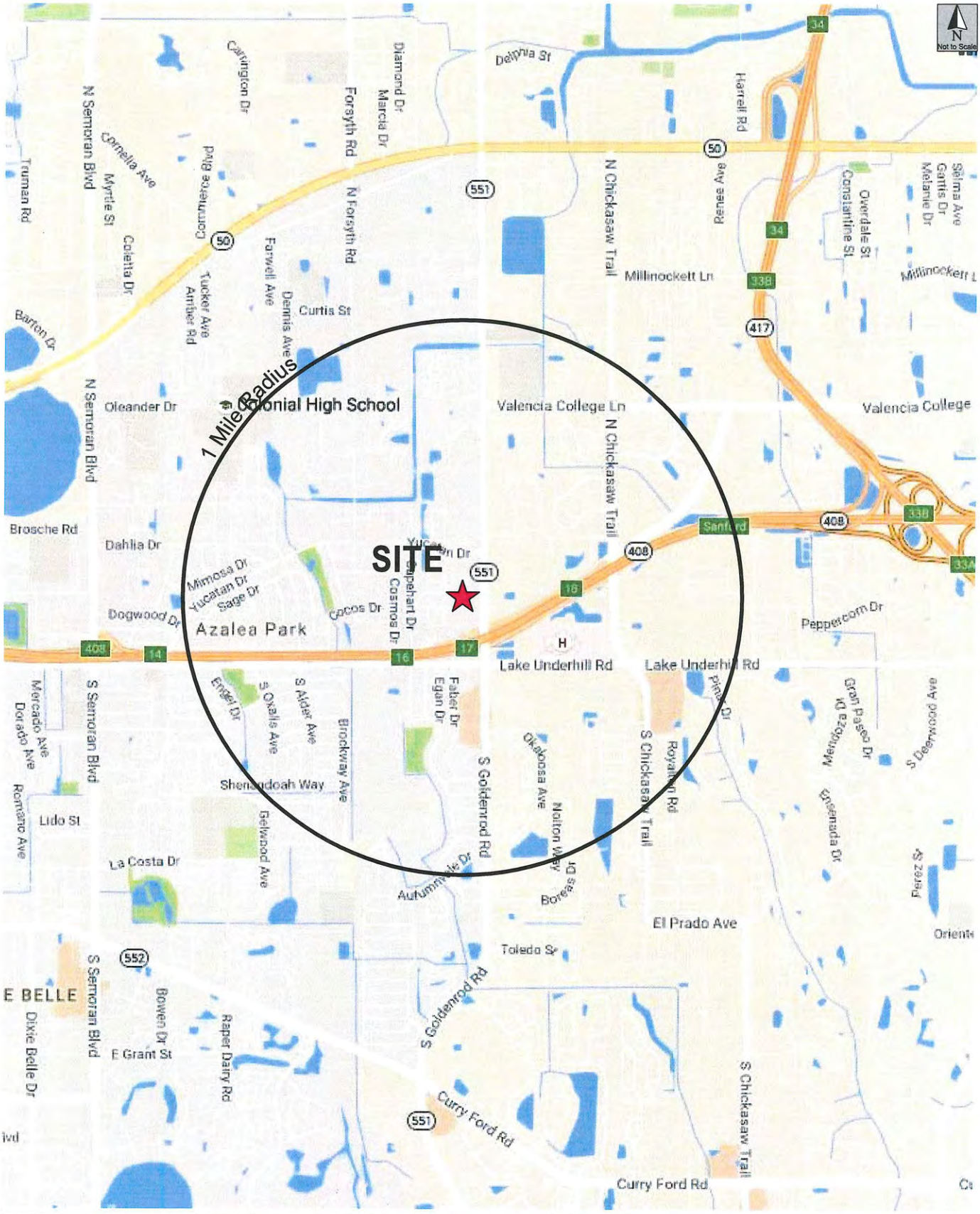
1.0 INTRODUCTION

This analysis was undertaken to support an application to amend the Orange County Comprehensive Plan's (CP) Future Land Use Map (FLUM). The application is for the Oasis at Crosstown, proposed on a ±17.2-acre property located on Goldenrod Road between at Yucatan Drive in Orange County, Florida. **Figure 1** depicts the location of the proposed development and the one (1) mile radius preliminary impact area. The property information is included in **Appendix A**.

The requested amendment is to change the FLUM designation of the site from Commercial (C), which would allow up to 2.25 million square feet of commercial development on the site in accordance with the approved density. For purposes of this analysis, the currently approved plan of 195,000 square feet of retail development was assumed as the existing condition. The proposed FLUM designation is Medium Density Residential (PD-MDR) which would allow up to 343 multifamily apartment units.

This Transportation Mobility Study was performed in accordance with a methodology agreed with Orange County Transportation Planning and is generally consistent with the requirements of the CP and the goals of the AMA.



Site Location Map

Oasis at Crosstown
16-083

1

2.0 PROJECT TRAFFIC

The requested amendment to the FLUM will change the designation from Commercial to MDR. A comparison of the net change in the number of trips generated by the site was calculated as described below.

The trip generation for the existing and proposed land use densities was calculated using trip generation information published by the Institute of Transportation Engineers (ITE) in the *Trip Generation Report, 9th Edition.* Trip generation rates and calculations are summarized in **Table 1**, which shows the daily and P.M. peak hour trips for the existing and proposed land use. Detailed information sheets are provided in **Appendix B**.

Table 1
Trip Generation Calculation

ITE Code	Land Use	Size	Daily Rate	Daily Trips	PM Peak Hour Rate	PM Peak Hour Total	PM Peak Hour Enter	PM Peak Hour Exit
Allowable Development								
820	Retail	195 KSF	53.76	10,483	4.81	938	610	328
			Pass-by Trips	3,564		319	207	112
			Net New Trips	6,919		619	403	216
Proposed Development								
220	Multi Family Residential	343 DU	6.42	2,202	0.60	206	134	72
	Net Change in Trips with Proposed Amendment			-4,717		-413	-269	-144

Trip generation analysis based on ITE Trip Generation Manual, 9th Edition.

From these calculations, the site's daily trip generation will decrease by 4,717 trips and the P.M. peak hour trip generation will decrease by 413 trips as a result of the proposed amendment.

3.0 ROADWAY NETWORK ANALYSIS

3.1 Existing Conditions

The existing traffic conditions were evaluated within the project's primary influence area. This included the area's major roadways which were analyzed for daily and P.M. peak hour conditions.

The existing conditions on the roadway network were analyzed by comparing the latest available traffic volumes on each of the roadway segments to the adopted capacity thresholds. The existing conditions analysis was based on information from the Orange County Concurrency Management System (CMS) database.

Table 2 summarizes the existing conditions capacity analysis in the area which reveals that currently all roadway segments operate at adequate Level of Service (LOS), except for the segments on Lake Underhill Road.

Table 2
Existing Conditions Analysis

ID	Roadway	Segment Limits	Func Class	A T	# Lns	Min Los	AADT	Peak Hour Directional Capacity	Volume	Dir	LOS	Meets Std ?
59	Chickasaw Tr	El Prado Dr to Lake Underhill Rd	Collector	U	2	E	11,507	880	624	SB	C	Y
60	Chickasaw Tr	Lake Underhill to Valencia College Lane	Collector	U	2	E	16,965	880	768	SB	C	Y
60.1	Chickasaw Tr	Valencia College Lane to Colonial Dr	Collector	U	2	E	13,608	880	718	SB	C	Y
163	Goldenrod Rd	Curry Ford to Lake Underhill Rd	Min Art	U	4	E	37,562	2,000	1,740	SB	C	Y
164	Goldenrod Rd	Lake Underhill to Valencia College Lane	Min Art	U	4	E	36,327	2,000	1,697	NB	C	Y
164.1	Goldenrod Rd	Valencia College Lane to Colonial Dr	Min Art	U	4	E	35,200	2,000	1,630	SB	C	Y
239	Lake Underhill Rd	Semoran Blvd to Oxalis Ave	Min Art	U	2	E	16,683	880	846	EB	F	N
239.1	Lake Underhill Rd	Oxalis Ave to Goldenrod Rd	Min Art	U	2	E	19,036	880	900	WB	F	N
240	Lake Underhill Rd	Goldenrod Rd to Madeira Ave	Min Art	U	2	E	22,401	880	1,097	EB	F	N
445.1	Valencia College Lane	Central Florida Greeneway to Goldenrod Rd	Collector	U	2	E	11,331	880	5,467	EB	C	Y

3.2 Background Traffic Volumes

Projected conditions were assessed to evaluate the impact of the proposed amendment on the roadway network. The projected conditions analysis was performed for the Interim Year (2020) and the Horizon Year (2030).

Projected traffic volumes for interim and horizon analysis years were developed using a 2% annual growth rate calculated from historical traffic trends on Goldenrod Road near the site. The growth trend analysis is included in **Appendix C**.

3.3 Interim Year 2020 Conditions

The interim year analysis was conducted for the base condition, which assumes that the FLUM is not amended. This analysis is based on the existing and committed roadway network geometry and projected 2020 traffic volumes. **Table 3** summarizes the analysis of the Interim Year 2020.

The analysis reveals that Lake Underhill Road will continue to be deficient without improvement and Valencia College Lane will also become deficient. As indicated in the County's Long Range Transportation Plan (**Appendix D**), these two roadways are planned to be improved to 4-lanes in the future. The proposed comprehensive plan amendment results in a reduction in traffic generation from the site and therefore will not adversely impact the deficient facilities.

3.4 Horizon Year 2030 Conditions

Year 2030 projected conditions were analyzed for the base condition, which assumes no change to the FLUM designation for the property. This analysis is based on the projected background traffic volumes for the horizon year and the planned cost feasible roadway network for the same year. **Table 4** summarizes the 2030 base conditions analysis.

Table 3
2020 Base Condition Analysis

ID	Roadway	Segment Limits	Func Class	A T	# Lns	Min LOS	Capacity	2020 Projected Volume	Dir	LOS	Meets Std ?
59.0	Chickasaw Tr	El Prado Dr to Lake Underhill Rd	Collector	U	2	E	880	687	SB	C	Y
60.0	Chickasaw Tr	Lake Underhill to Valencia College Lane	Collector	U	2	E	880	845	SB	D	Y
60.1	Chickasaw Tr	Valencia College Lane to Colonial Dr	Collector	U	2	E	880	789	SB	C	Y
163.0	Goldenrod Rd	Curry Ford to Lake Underhill Rd	Min Art	U	4	E	2,000	1,914	SB	D	Y
164.0	Goldenrod Rd	Lake Underhill to Valencia College Lane	Min Art	U	4	E	2,000	1,867	NB	C	Y
164.1	Goldenrod Rd	Valencia College Lane to Colonial Dr	Min Art	U	4	E	2,000	1,793	SB	C	Y
239.0	Lake Underhill Rd	Semoran Blvd to Oxalis Ave	Min Art	U	2	E	880	930	EB	F	N
239.1	Lake Underhill Rd	Oxalis Ave to Goldenrod Rd	Min Art	U	2	E	880	990	WB	F	N
240.0	Lake Underhill Rd	Goldenrod Rd to Madeira Ave	Min Art	U	2	E	880	1,207	EB	F	N
445.1	Valencia College Lane	Central Florida Greeneway to Goldenrod Rd	Collector	U	2	E	880	6,014	EB	F	N

Table 4
2030 Base Condition Analysis

ID	Roadway	Segment Limits	Func Class	A T	# Lns	Min LOS	Capacity	2030 Projected Volume	Dir	LOS	Meets Std ?
59.0	Chickasaw Tr	El Prado Dr to Lake Underhill Rd	Collector	U	2	E	880	736	SB	C	Y
60.0	Chickasaw Tr	Lake Underhill to Valencia College Lane	Collector	U	2	E	880	880	SB	D	Y
60.1	Chickasaw Tr	Valencia College Lane to Colonial Dr	Collector	U	2	E	880	846	SB	D	Y
163.0	Goldenrod Rd	Curry Ford to Lake Underhill Rd	Min Art	U	4	E	2,000	1,985	SB	D	Y
164.0	Goldenrod Rd	Lake Underhill to Valencia College Lane	Min Art	U	4	E	2,000	1,977	NB	D	Y
164.1	Goldenrod Rd	Valencia College Lane to Colonial Dr	Min Art	U	4	E	2,000	1,921	SB	D	Y
239.0	Lake Underhill Rd	Semoran Blvd to Oxalis Ave	Min Art	U	2	E	880	997	EB	F	N
239.1	Lake Underhill Rd	Oxalis Ave to Goldenrod Rd	Min Art	U	2	E	880	1,060	WB	F	N
240.0	Lake Underhill Rd	Goldenrod Rd to Madeira Ave	Min Art	U	2	E	880	1,293	EB	F	N
445.1	Valencia College Lane	Central Florida Greeneway to Goldenrod Rd	Collector	U	2	E	880	6,443	EB	F	N

4.0 ALTERNATIVE MOBILITY ANALYSIS

4.1 Sidewalks and Pedestrian Facilities

A survey of existing sidewalks and pedestrian facilities was conducted using aerial photography and from information gathered during a field survey of the study area within a ¼ mile walking distance of the site. **Figure 2** illustrates the existing public sidewalks within the study area. In addition to the facilities illustrated, the adjacent neighborhoods are fully improved with sidewalks along the local roads. The field survey indicates that all existing facilities are in moderately good and serviceable condition. Ramps were observed to exist at all crosswalks.

4.2 Bicycle Facilities

The study area was reviewed using recent aerial photography and during a field visits to identify and verify bicycle facilities in the area. The review revealed that there are no dedicated on-road, roadside, or dedicated trail facilities for bicycle use.

4.3 Transit Services

Lynx provides regional bus service throughout Central Florida with a variety of transit services including express buses, regional bus routes, local bus routes, local circulators, and specialized services for the disadvantaged. A review of the latest Lynx System Map reveals that there are no bus stops or fixed routes within a ¼-mile distance of the site. The nearest bus stops are located on Lake Underhill Road approximately 1,000 feet east and west of the intersection of Lake Underhill Road with Goldenrod Road.

TMC
Traffic & Mobility Consultants

Pedestrian Path

Oasis at Crosstown
16-083

5.0 STUDY FINDINGS

This Transportation Mobility Analysis was conducted in support of a CPA application for the Oasis at Crosstown, located on the west side of Goldenrod Road at Yucatan Drive in Orange County, Florida. The site is located in an Alternative Mobility Area. The mobility analysis assessed the transportation facilities available to the site, including roadways, pedestrian and bicycle facilities, transit services and other transportation options. The findings of the analysis are:

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APPENDICES

Appendix A
Property Information

Property Record - 26-22-30-8418-00-020

Orange County Property Appraiser • http://www.ocpafl.org

Property Summary

Property Name
200 S Goldenrod Rd

Names
Musa Ali Abdul
Musa Cortes Yusef
Musa Cortes Samuel

Municipality
ORG - Un-Incorporated

Property Use
1000 - Vacant Commercial

Mailing Address
15 Dorado Bch E
Dorado, PR 00646-2046

Physical Address
200 S Goldenrod Rd
Orlando, FL 32807

QR Code For Mobile Phone

Property Features

Property Description

SUNFOREST 28/48 LOT 2 (LESS COMM AT THE SW COR OF SAID LOT 2 TH N89-59-54E 276.81 FT TO POB TH N00-11-07E 352.40 FT N89-10-47E 309 FT S00-18-26E 190.30 FT S45-09-53W 189.37 FT S64-13-23W 75.89 FT S89-59-54W 108.50 FT TO POB)

Total Land Area

343,837 sqft (+/-) | 7.89 acres (+/-) GIS Calculated

Land (includes working values)

Land Use Code	Zoning	Land Units	Unit Price	Land Value	Class Unit Price	Class Value
1000 - Vacant	C-1	343837 SQUARE	$2.95	$1,014,319	$0.00	$1,014,319

Property Record - 26-22-30-8418-00-010

Orange County Property Appraiser • http://www.ocpafl.org

Property Summary

Property Name
7302 Yucatan Dr

Names
Musa Ali Abdul
Musa Cortes Yusef
Musa Cortes Samuel

Municipality
ORG - Un-Incorporated

Property Use
1000 - Vacant Commercial

Mailing Address
C/O W Charles Nix Esq
111 N Orange Ave Ste 900
Orlando, FL 32801-2307

Physical Address
7302 Yucatan Dr
Orlando, FL 32807

QR Code For Mobile Phone

Property Features

Property Description

SUNFOREST 28/48 LOT 1 (LESS BEG 295.11 FT E OF NW COR LOT 1 TH CONT E 210 FT SELY 62.83 FT S 260 FT W 250 FT N 300 FT TO POB)

Total Land Area

404,854 sqft (+/-) | 9.29 acres (+/-) GIS Calculated

Land (includes working values)

Land Use Code	Zoning	Land Units	Unit Price	Land Value	Class Unit Price	Class Value
1000 - Vacant Commercial	C-1	404855 SQUARE FEET	$2.95	$1,194,322	$0.00	$1,194,322

Appendix B
Trip Generation Sheets

Apartment
(220)

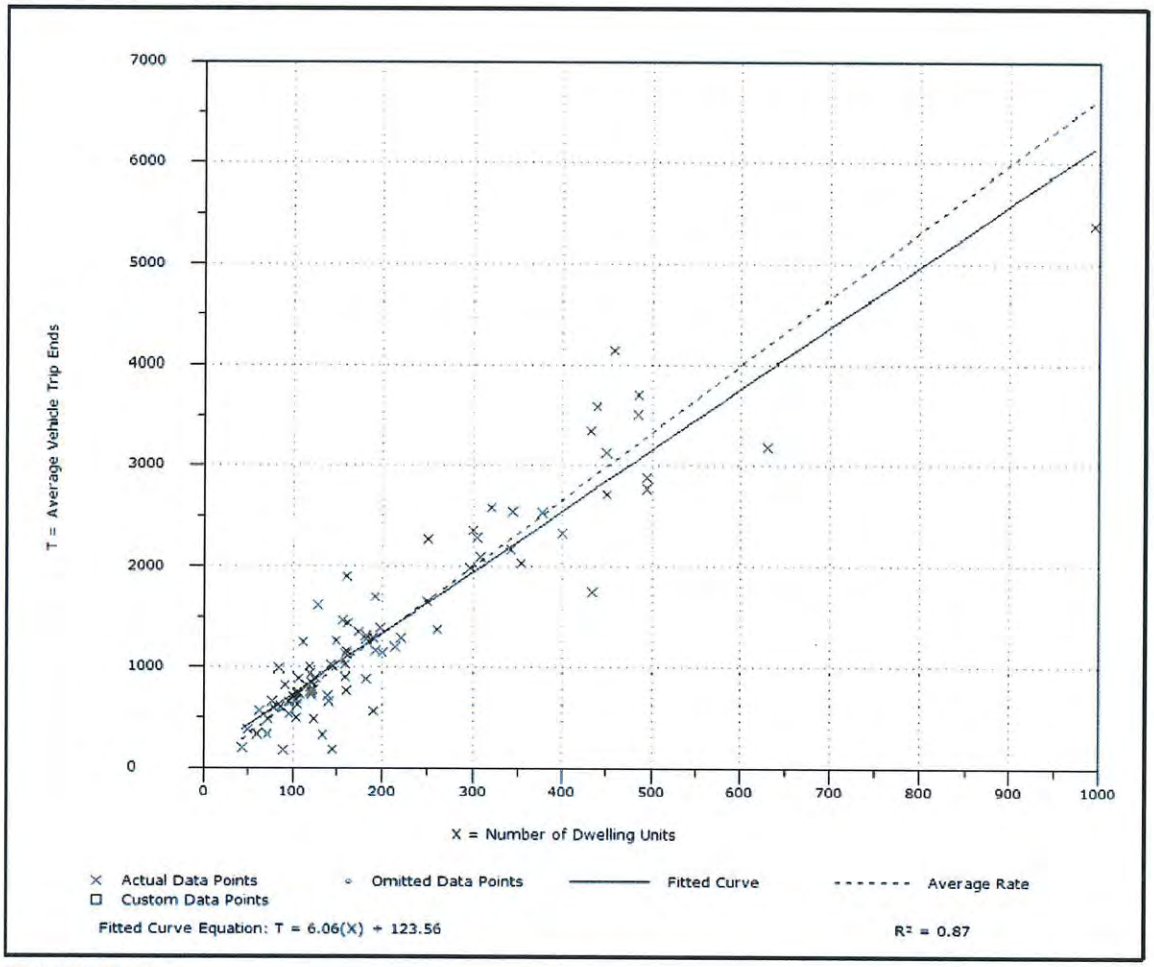
Average Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday**

Number of Studies: 88
Avg. Number of Dwelling Units: 210
Directional Distribution: 50% entering, 50% exiting

Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
6.65	1.27 - 12.50	3.07

Data Plot and Equation



Trip Generation, 9th Edition

Apartment
(220)

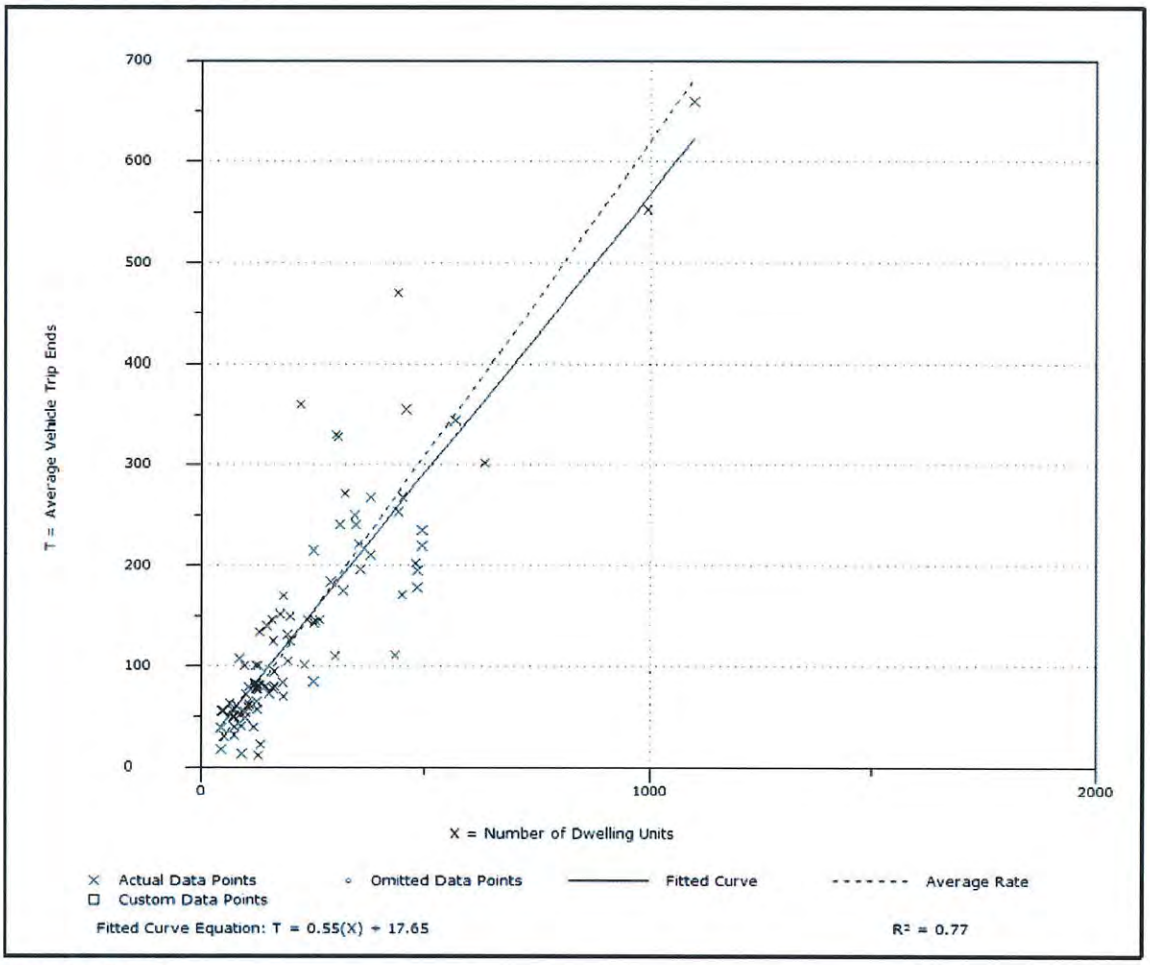
Average Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday**
Peak Hour of Adjacent Street Traffic
One Hour Between 4 and 6 p.m.

Number of Studies: 90
Avg. Number of Dwelling Units: 233
Directional Distribution: 65% entering, 35% exiting

Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.62	0.10 - 1.64	0.82

Data Plot and Equation



Trip Generation, 9th Edition

Shopping Center
(820)

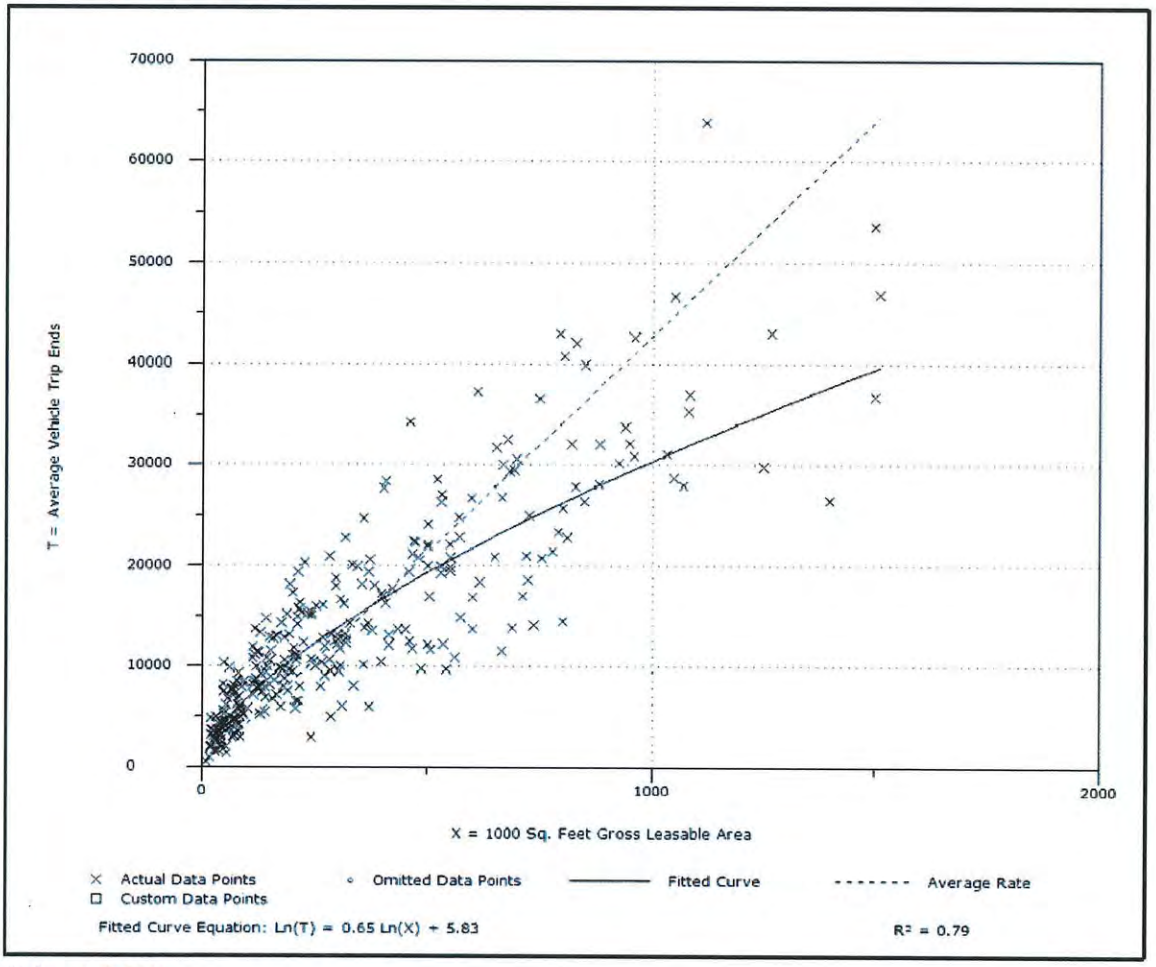
Average Vehicle Trip Ends vs: **1000 Sq. Feet Gross Leasable Area**
On a: **Weekday**

Number of Studies: 302
Average 1000 Sq. Feet GLA: 331
Directional Distribution: 50% entering, 50% exiting

Trip Generation per 1000 Sq. Feet Gross Leasable Area

Average Rate	Range of Rates	Standard Deviation
42 70	12 50 - 270 89	21 25

Data Plot and Equation



Shopping Center
(820)

Average Vehicle Trip Ends vs: **1000 Sq. Feet Gross Leasable Area**
On a: **Weekday**
Peak Hour of Adjacent Street Traffic
One Hour Between 4 and 6 p.m.

Number of Studies: 426
Average 1000 Sq. Feet GLA: 376
Directional Distribution: 48% entering, 52% exiting

Trip Generation per 1000 Sq. Feet Gross Leasable Area

Average Rate	Range of Rates	Standard Deviation
3.71	0.68 - 29.27	2.74

Data Plot and Equation

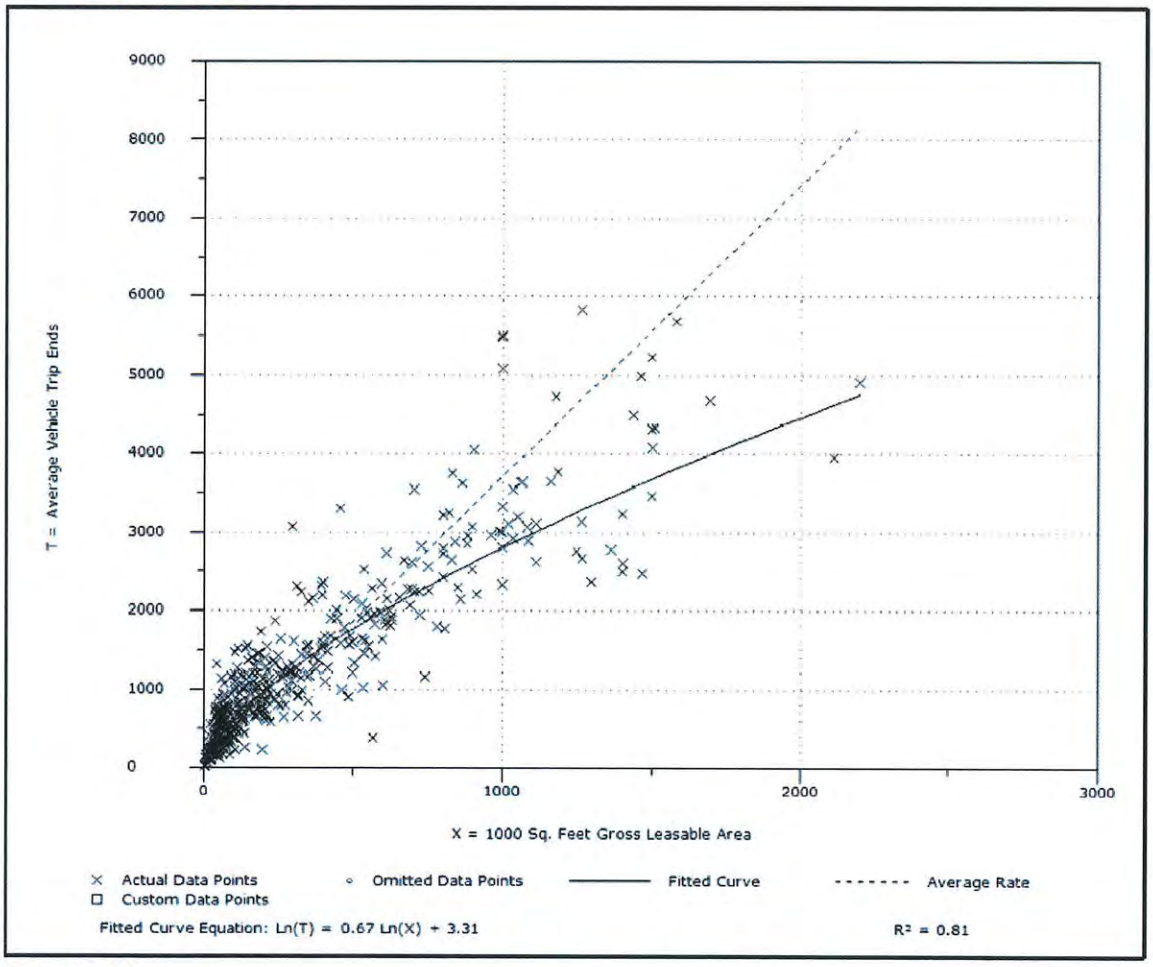


Table D-1 (continued)
Calculated Transportation Impact Fee Schedule

ITE LUC	Land Use	Unit	Trip Rate	Trip Rate Source	Assessable Trip Length	Total Trip Length	Trip Length Source	% New Trips	% New Trips Source	Net VMT[1]	Total Impact Cost	Annual Gas Tax	Gas Tax Credit	Net Impact Fee	Current Adopted IF Rate	% Change
	INSTITUTIONS:															
610	Hospital	bed	11.81	ITE 8th Edition	6.95	7.45	Same as LUC 210	77%	FL Schedules	22.50	$8,862	$126	$1,776	$7,086	$5,121	38%
620	Nursing Home	1,000 sf	2.48	Blend ITE 8th & FL Studies	2.72	3.22	FL Studies	89%	FL Studies	2.14	$842	$13	$183	$659	$1,778	-63%
640	Animal Hospital/Veterinary Clinic	1,000 sf	28.66	ITE 8th Edition (Adjusted)[4]	5.36	5.86	Same as LUC 630	93%	Same as LUC 630	50.86	$20,031	$291	$4,101	$15,930	n/a	n/a
n/a	School	1,000 sf	13.78	Previous TIF Study[3]	8.05	8.55	Previous TIF Study[3]	100%	Previous TIF Study[3]	39.49	$15,554	$220	$3,101	$12,453	$3,842	224%
n/a	Public Assembly	1,000 sf	9.11	Previous TIF Study[3]	8.05	8.55	Previous TIF Study[3]	100%	Previous TIF Study[3]	26.11	$10,283	$145	$2,044	$8,239	$2,542	224%
	OFFICE:															
710	General Office 50,000 sf or less[2]	1,000 sf	15.65	ITE 8th equation	6.18	6.68	FL Studies	92%	FL Studies	31.68	$12,476	$179	$2,523	$9,953	$5,242	90%
710	General Office 50,001-100,000 sf[2]	1,000 sf	13.34	ITE 8th equation	6.18	6.68	FL Studies	92%	FL Studies	27.00	$10,635	$153	$2,156	$8,479	$5,242	62%
710	General Office 100,001-200,000 sf[2]	1,000 sf	11.37	ITE 8th equation	6.18	6.68	FL Studies	92%	FL Studies	23.01	$9,064	$130	$1,832	$7,232	$4,071	78%
710	General Office greater than 200,000 sf[2]	1,000 sf	9.70	ITE 8th equation	6.18	6.68	FL Studies	92%	FL Studies	19.63	$7,733	$111	$1,564	$6,169	$3,623	70%
720	Medical Office	1,000 sf	34.72	Blend ITE 8th & FL Studies	6.66	7.16	FL Studies	89%	FL Studies	73.26	$28,856	$413	$5,821	$23,035	$12,098	90%
732	Post Office	1,000 sf	108.19	ITE 8th Edition	6.18	6.68	Same as LUC 710	49%	Previous TIF Study[3]	116.63	$45,937	$661	$9,316	$36,621	$15,570	135%
	RETAIL:															
814	Specialty Retail Center	1,000 sf	49.99	Blend ITE 8th & FL Studies	3.54	4.04	FL Studies	85%	FL Studies	53.55	$21,091	$320	$4,510	$16,581	n/a	n/a
815	Free-Standing Discount Store	1,000 sf	57.24	ITE 8th Edition	2.52	3.02	Same as LUC 820 (100-200K)	67%	Same as LUC 820 (100-200K)	34.41	$13,551	$216	$3,044	$10,507	n/a	n/a
816	Hardware/Paint Store	1,000 sf	51.29	ITE 8th Edition	1.96	2.46	Same as LUC 820 (25-50K)	56%	Same as LUC 820 (25-5050K)	20.04	$7,893	$132	$1,860	$6,033	n/a	n/a
820	Retail 50,000 sfgla or less[2]	1,000 sfgla	86.56	ITE 8th equation	1.96	2.46	FL Curve[6]	56%	FL Curve[6]	33.82	$13,321	$223	$3,143	$10,178	$10,366	-2%
820	Retail 50,001-100,000 sfgla[2]	1,000 sfgla	67.91	ITE 8th equation	2.40	2.90	FL Curve[6]	62%	FL Curve[6]	35.97	$14,169	$228	$3,213	$10,956	$10,585	4%
820	Retail 100,001-200,000 sfgla[2]	1,000 sfgla	53.28	ITE 8th equation	2.52	3.02	FL Curve[6]	67%	FL Curve[6]	32.03	$12,613	$201	$2,833	$9,780	$9,521	3%
820	Retail 200,001-300,000 sfgla[2]	1,000 sfgla	46.23	ITE 8th equation	2.65	3.15	FL Curve[6]	71%	FL Curve[6]	30.97	$12,196	$193	$2,720	$9,476	$8,685	9%
820	Retail 300,001-400,000 sfgla[2]	1,000 sfgla	41.80	ITE 8th equation	2.77	3.27	FL Curve[6]	73%	FL Curve[6]	30.09	$11,851	$186	$2,621	$9,230	$8,104	14%
820	Retail 400,001-500,000 sfgla[2]	1,000 sfgla	38.66	ITE 8th equation	2.89	3.39	FL Curve[6]	75%	FL Curve[6]	29.83	$11,749	$183	$2,579	$9,170	$7,658	20%

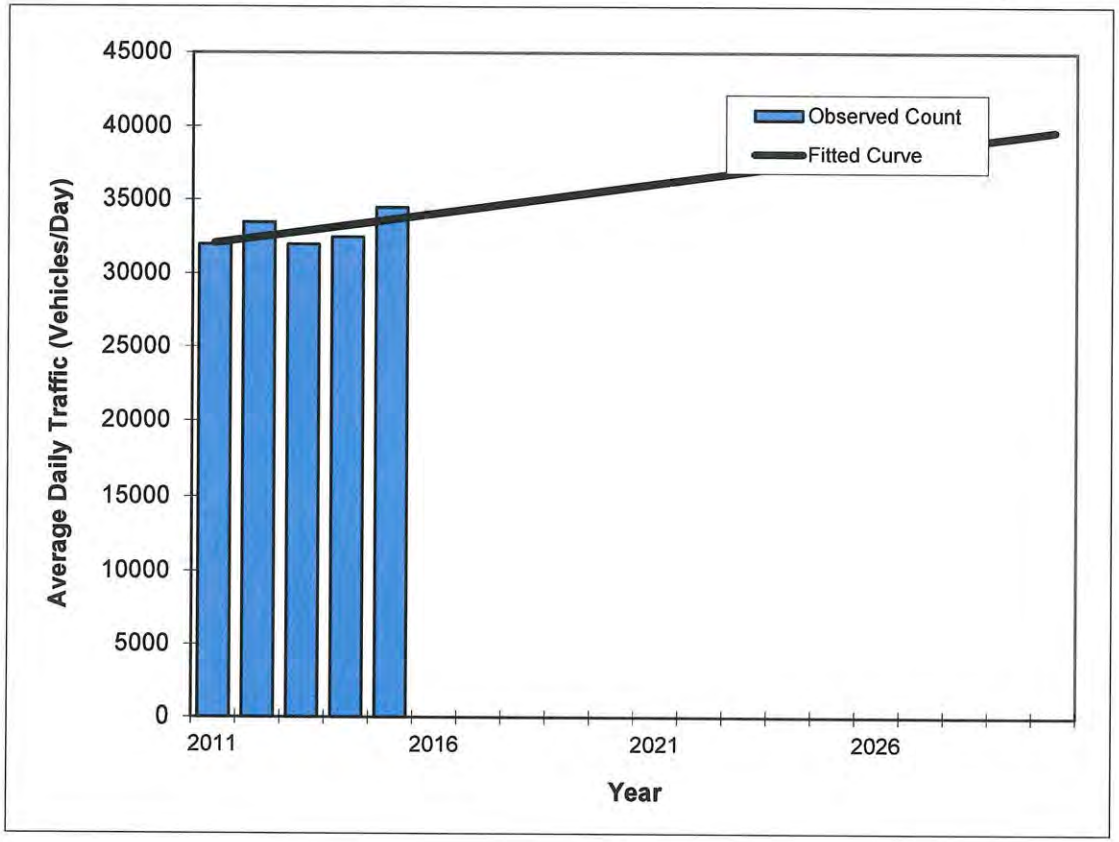
Appendix C
Growth Rate Calculation

Traffic Trends - V2.0

GOLDENROD RD --

PIN#	973215-1
Location	1

County:	Orange (75)
Station #:	0084
Highway:	GOLDENROD RD



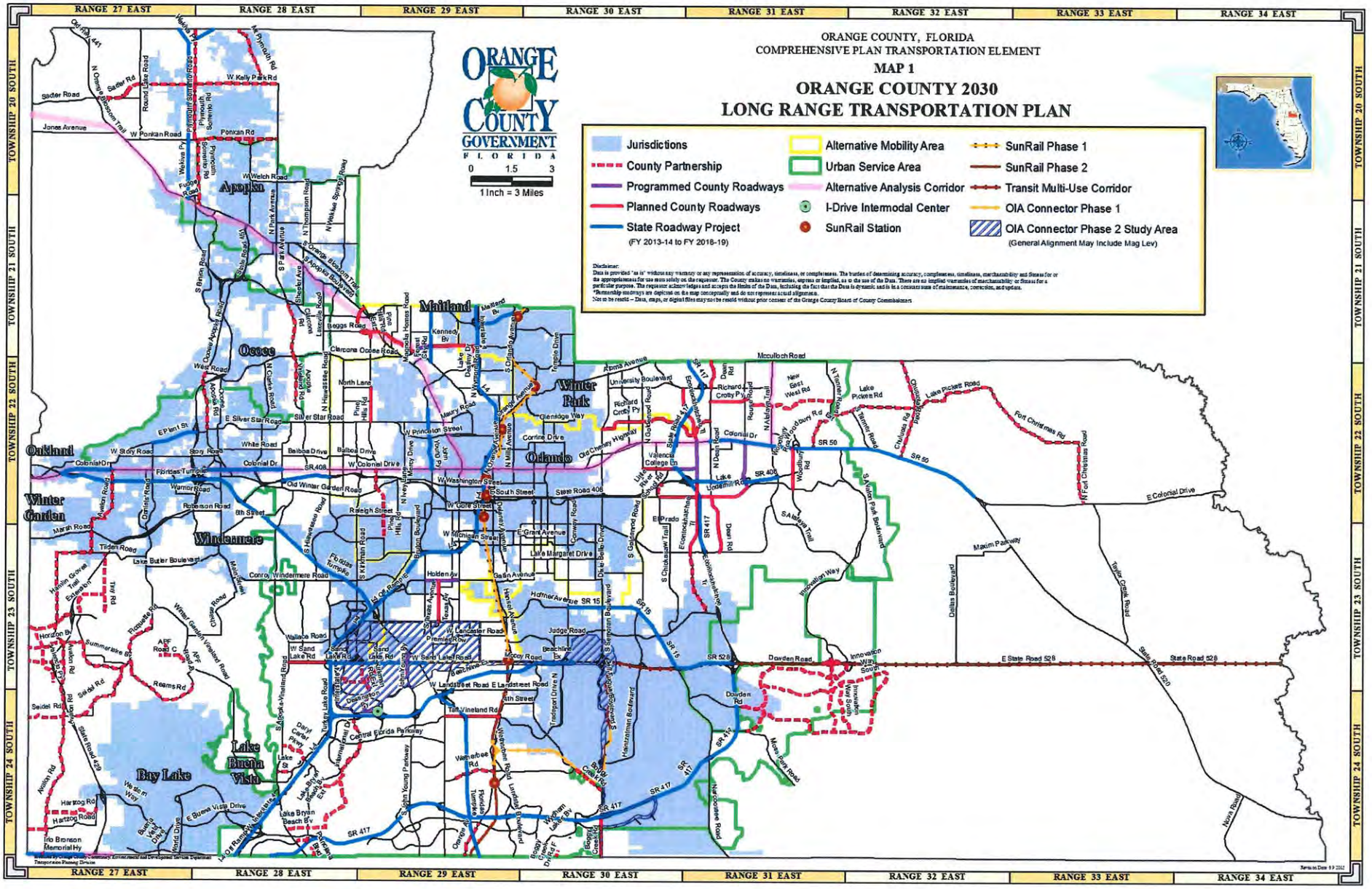
Year	Traffic (ADT/AADT) Count*	Trend**
2011	32000	32100
2012	33500	32500
2013	32000	32900
2014	32500	33300
2015	34500	33700
2020 Opening Year Trend		
2020	N/A	35700
2025 Mid-Year Trend		
2025	N/A	37700
2030 Design Year Trend		
2030	N/A	39700
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	400
Trend R-squared:	34.04%
Trend Annual Historic Growth Rate:	1.25%
Trend Growth Rate (2015 to Design Year):	1.19%
Printed:	25-Aug-16

Straight Line Growth Option

Appendix D
Long Range Transportation Plan


ORANGE COUNTY, FLORIDA
COMPREHENSIVE PLAN TRANSPORTATION ELEMENT
MAP 1
ORANGE COUNTY 2030
LONG RANGE TRANSPORTATION PLAN
ORANGE COUNTY GOVERNMENT FLORIDA
0 1.5 3
1 Inch = 3 Miles
Jurisdictions
County Partnership
Programmed County Roadways
Planned County Roadways
State Roadway Project
(FY 2013-14 to FY 2018-19)
Alternative Mobility Area
Urban Service Area
Alternative Analysis Corridor
I-Drive Intermodal Center
SunRail Station
SunRail Phase 1
SunRail Phase 2
Transit Multi-Use Corridor
OIA Connector Phase 1
OIA Connector Phase 2 Study Area
(General Alignment May Include Mag Lev)
RANGE 27 EAST
RANGE 28 EAST
RANGE 29 EAST
RANGE 30 EAST
RANGE 31 EAST
RANGE 32 EAST
RANGE 33 EAST
RANGE 34 EAST
TOWNSHIP 20 SOUTH
TOWNSHIP 21 SOUTH
TOWNSHIP 22 SOUTH
TOWNSHIP 23 SOUTH
TOWNSHIP 24 SOUTH
Apopka
Maitland
Orlando
Winter Park
Oakland
Winter Garden
Windermere
Ocoee
Lake Buena Vista
Bay Lake

OASIS AT MOSS PARK PHASE 2

Project № 16-007.3
August 2016

TRANSPORTATION FACILITIES ANALYSIS
ORANGE COUNTY
FLORIDA

Prepared by:

Traffic & Mobility Consultants

3101 Maguire Boulevard, Suite 265
Orlando, Florida 32803
www.trafficmobility.com
(407) 531-5332

Prepared for:

Picerne Development
247 N Westmont Drive
Altamonte Springs, Florida 32714

EXECUTIVE SUMMARY

This study was conducted in support of a proposed comprehensive plan amendment application for a 108.37-acre property located on Moss Park Road east of SR 417. The requested amendment is to change the FLU designation of the property from Rural to PD-LMDR/MDR/O. The proposed development is a mix of 650 residential units and 50,000 square feet of office use.

The findings of the analysis conducted in accordance with the County's methodology are as follows:

- The requested amendment will result in a net increase of 5,006 daily trips and 527 peak hour trips generated by the site.
- An analysis of existing conditions indicates that the roadway network within the primary 1-mile study area currently operates at satisfactory LOS.
- Analysis of Interim Year (2020) conditions indicates that the network is projected to operate at satisfactory LOS. The proposed amendment will not adversely impact projected operations in the Interim Year.
- Analysis of Horizon Year (2030) conditions indicates that the network is projected to continue to operate at satisfactory LOS. The proposed amendment will not adversely impact projected operations in the Interim Year.
- The proposed development of the site will undergo additional review through the development process, where traffic operations and transportation capacity demand by the physical development of the site will be further evaluated through the requirements of the Concurrency Management System.

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1.0 INTRODUCTION

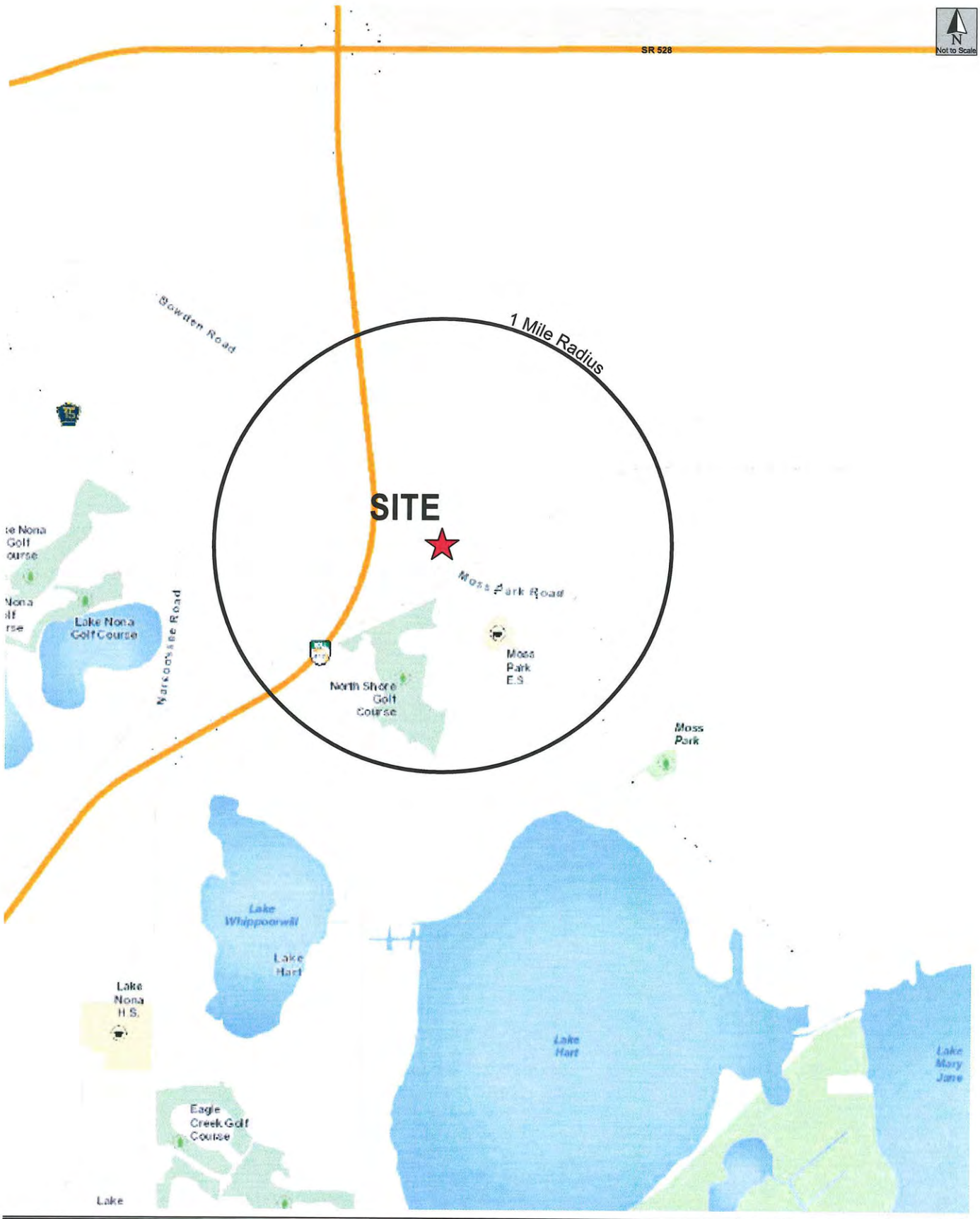
This analysis was undertaken to support an application to amend the Orange County Comprehensive Plan's (CP) Future Land Use Map (FLUM) designation for the 108.37-acre property located north of Moss Park Road and east of SR 417. The site location and surrounding area are illustrated in **Figure 1.** The property information is included in **Appendix A.**

The current land use is rural with an allowable density of 10 single family units. The proposed land use is Planned Development-Low Medium Density Residential/Medium Density Residential/Office (PD-LMDR/MDR/O). **Table 1** summarizes the existing and proposed development densities for the site.

Table 1
Development Density

Land Use	Units
Approved	
Rural Residential	10 Units
Proposed	
Single Family Residential	100 Units
Multifamily Residential	300 Units
Townhouse Residential	250 Units
Commercial Office	50 KSF

This study was performed in accordance with the Orange County methodology for a Comprehensive Plan Amendment Transportation Facilities Analysis.



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Site Location Map

Oasis at Moss Park Phase 2
16-007.3

1

2.0 EXISTING TRAFFIC CONDITIONS

The existing traffic conditions were evaluated within the project's primary influence area. This included the area's major roadways which were analyzed for P.M. peak hour conditions.

The existing conditions on the roadway network were analyzed by comparing the latest available traffic volumes on each of the roadway segments to the adopted capacity thresholds. The existing conditions analysis was based on information from the Orange County Concurrency Management System (CMS) database. The traffic concurrency link information for the study roadways for use in the analysis and is included in **Appendix B**.

Table 2 summarizes the existing conditions capacity analysis in the area. This analysis reveals that currently all roadway segments within the study area operate at adequate Level of Service (LOS).

Table 2
Existing Conditions Analysis

ID	Roadway	Segment Limits	Func Class	A T	# Lns	Min Los	AADT	Peak Hour Directional Capacity	Volume	Dir	LOS	Meets Std ?
5.8	Dowden Rd	SR 417 to Narcoossee Rd	Min Art	U	4	E	5,074	2,000	254	EB	C	Y
287.0	Moss Park Rd	Narcoossee Rd to Wewahootee Rd	Collector	U	4	E	14,108	2,000	696	WB	C	Y
288.0	Moss Park Rd	Wewahootee Rd to Lake Mary Jane Rd	Collector	U	4	E	10,269	3,590	613	NB	C	Y

3.0 PLANNED AND PROGRAMMED IMPROVEMENTS

The Orange County Capital Improvement Program (CIP), Capital Improvement Element (CIE), and the Long Range Transportation Plan (LRTP) were checked to identify any planned or programmed improvements to the transportation facilities in this area.

This review revealed that the following roadways within the project's influence area are planned improvement:

- SR 528 at International Corporate Park
  - New Interchange
- Innovation Way South
  - From Moss Park Road to Sunbridge Boulevard, New 4 Lanes Divided
- Dowden Road
  - From SR 417 to Sunbridge Boulevard, New 4 Lanes Divided
- Sunbridge Boulevard
  - From SR 528 to Innovation Way South, New 4 Lanes Divided

These improvements are planned but not funded or programmed at this time. Supporting information is included in **Appendix C**.

4.0 PROJECT TRAFFIC

4.1 Trip Generation

The trip generation for the existing and proposed land use densities was calculated using trip generation information published by the Institute of Transportation Engineers (ITE) in the *Trip Generation Report, 9th Edition*. Trip generation rates and calculations are summarized in **Table 3**, which shows the daily and P.M. peak hour trips for the existing and proposed land uses. Trip generation calculations and supporting information are included in **Appendix D**. The proposed amendment will result in 5,006 additional daily trips and 527 peak hour trips.

Table 3
Trip Generation Calculation

ITE Code	Land Use	Size	Daily Rate	Daily Trips	PM Peak Hour Rate	PM Peak Hour Total	PM Peak Hour Enter	PM Peak Hour Exit
Allowable Development - Existing FLUM (GC-PD-C/LDR)								
210	Single Family Units	10 DU	12.63	126	1.32	13	8	5
Proposed Development - Requested FLUM (PD-LMDR/MDR/O)								
210	Single Family	100 DU	10.50	1,050	1.05	105	66	39
220	Apartments	300 DU	6.47	1,941	0.61	183	119	64
230	Townhouses	250 DU	5.71	1,428	0.51	128	86	42
710	Office	50 KSF	15.50	775	2.69	135	23	112
			Office Pass by Trips	*62*		*11*	*2*	*9*
			Net Trip Generation	5,132		540	292	248
Net Change in Trips with Proposed Amendment				**5,006**		**527**	**284**	**243**

Trip generation calculations based on ITE Trip Generation, 9th Edition
Pass-By percentage from Table D-1 of the Orange County Transportation Impact Fee Study

4.2 Trip Distribution

A trip distribution pattern was developed based on existing traffic counts, knowledge of the study area and prevailing traffic flow patterns, and engineering judgment. Project trips were assigned to the adjacent roadway segments based on this distribution shown in **Figure 2**.

TMC Traffic & Mobility Consultants

Trip Distribution

Oasis at Moss Park Phase 2
16-007.3

4.3 Study Area

The roadway segments in the traffic analysis were identified in consultation with Orange County. The study roadway segments within the project's influence area are listed in **Table 4**. The project's impact on these roadways was checked against the 3% significance threshold. The impact area was not expanded beyond the preliminary analysis area since the project does not exceed the significance threshold on any roadway segment outside of the 1-mile influence area.

Table 4
Study Roadway Segments

Seg ID	Roadway	Segment Limits	# Lns	Project Distr	Project Trips	Capacity	Signif Level	Project Signif?
5.8	Dowden Rd	SR 417 to Narcoossee Rd	4	15%	43	2,000	2.2%	NO
287.0	Moss Park Rd	Narcoossee Rd to Wewahootee Rd	4	80%	227	2,000	11.4%	YES
288.0	Moss Park Rd	Wewahootee Rd to Lake Mary Jane Rd	4	20%	57	3,590	1.6%	NO
290.2	Narcoossee Rd	SR 417 to Lake Nona Club Dr	4	20%	57	2,000	2.9%	NO

5.0 PROJECTED CONDITIONS ANALYSIS

Projected conditions were assessed to evaluate the impact of the proposed amendment on the roadway network. The projected conditions analysis was performed for the Interim Year (2020) and the Horizon Year (2030). The analyses were conducted for the base condition (without the amendment) and for the proposed condition (with the amendment) as follows.

5.1 Background Traffic Volumes and Transportation Network

Projected traffic volumes for interim and horizon analysis years were developed using a 4% annual growth rate calculated from historical traffic trends on Moss Park Road near the site. The growth trend analysis is included in **Appendix E**. This annual growth rate reflects the continuing growth in the Innovation Way area as well as the continuing maturity of the network.

5.2 Interim Year 2020 Conditions

The 2020 Interim Year analysis was conducted comparing projected traffic volumes to the roadway network capacity and service volumes. This analysis is based on the existing and committed roadway network. **Table 5** summarizes the analysis, which reveals that the roadway network in the study area is projected to continue to operate at adequate LOS.

Table 6 is the analysis of the network with the additional traffic from the proposed amendment. The analysis reveals that the proposed amendment will not adversely impact conditions on the study roadway segments in the Interim Year 2020.

5.3 Horizon Year 2030 Conditions

The 2030 Horizon Year analysis was also conducted for projected traffic. This analysis is based on the planned roadway network, which includes all planned improvements. **Table 7** summarizes the 2030 Horizon Year analysis, which reveals that the roadway network in the study area is projected to continue to operate at adequate LOS.

Table 8 is the analysis of the network with the additional traffic from the proposed amendment. The analysis reveals that the proposed amendment will not cause deficiencies and will not adversely impact the transportation network in the Horizon Year 2030.

Table 5
Interim Year 2020 Base Conditions Analysis

ID	Roadway	Segment Limits	Func Class	A T	# Lns	Min LOS	Capacity	2020 Projected Volume	Dir	LOS	Meets Std ?
5.8	Dowden Rd	SR 417 to Narcoossee Rd	Min Art	U	4	E	2,000	305	EB	C	Y
287.0	Moss Park Rd	Narcoossee Rd to Wewahootee Rd	Collector	U	4	E	2,000	835	WB	C	Y
288.0	Moss Park Rd	Wewahootee Rd to Lake Mary Jane Rd	Collector	U	4	E	3,590	736	NB	B	Y

Table 6
Interim Year 2020 Conditions w/ Amendment

ID	Roadway	Segment Limits	# Lns	Min LOS	Capacity	2020 Backg'd Volume	Dir	Project Dist	Trips	Total Volume	LOS	Meets Std ?
5.8	Dowden Rd	SR 417 to Narcoossee Rd	4	E	2,000	305	EB	15%	43	348	C	Y
287.0	Moss Park Rd	Narcoossee Rd to Wewahootee Rd	4	E	2,000	835	WB	80%	194	1,029	C	Y
288.0	Moss Park Rd	Wewahootee Rd to Lake Mary Jane Rd	4	E	3,590	736	NB	20%	57	793	B	Y

Table 7
Horizon Year 2030 Base Conditions Analysis

ID	Roadway	Segment Limits	Func Class	A T	# Lns	Min LOS	Capacity	2030 Projected Volume	Dir	LOS	Meets Std ?
6	Dowden Rd	SR 417 to Narcoossee Rd	Min Art	U	4	E	2,000	406	EB	C	Y
287.0	Moss Park Rd	Narcoossee Rd to Wewahootee Rd	Collector	U	4	E	2,000	1,114	WB	C	Y
288.0	Moss Park Rd	Wewahootee Rd to Lake Mary Jane Rd	Collector	U	4	E	3,590	981	NB	B	Y

Table 8
Horizon Year 2030 Conditions w/ Amendment

ID	Roadway	Segment Limits	# Lns	Min LOS	Capacity	2020 Backg'd Volume	Dir	Project Dist	Trips	Total Volume	LOS	Meets Std ?
5.8	Dowden Rd	SR 417 to Narcoossee Rd	4	E	2,000	406	EB	15%	43	449	C	Y
287.0	Moss Park Rd	Narcoossee Rd to Wewahootee Rd	4	E	2,000	1,114	WB	80%	194	1,308	C	Y
288.0	Moss Park Rd	Wewahootee Rd to Lake Mary Jane Rd	4	E	3,590	981	NB	20%	57	1,038	B	Y

6.0 STUDY CONCLUSIONS

This study was conducted in support of a proposed comprehensive plan amendment application for a 108.37-acre property located on Moss Park Road east of SR 417. The requested amendment is to change the FLU designation of the property from Rural to PD-LMDR/MDR/O. The proposed development is a mix of 650 residential units and 50,000 square feet of office use. The findings of the analysis conducted in accordance with the County's methodology are as follows:

- The requested amendment will result in a net increase of 5,006 daily trips and 527 peak hour trips generated by the site.
- An analysis of existing conditions indicates that the roadway network within the primary 1-mile study area currently operates at satisfactory LOS.
- Analysis of Interim Year (2020) conditions indicates that the network is projected to operate at satisfactory LOS. The proposed amendment will not adversely impact projected operations in the Interim Year.
- Analysis of Horizon Year (2030) conditions indicates that the network is projected to continue to operate at satisfactory LOS. The proposed amendment will not adversely impact projected operations in the Interim Year.
- The proposed development of the site will undergo additional review through the development process, where traffic operations and transportation capacity demand by the physical development of the site will be further evaluated through the requirements of the Concurrency Management System.

15169 E. COLONIAL RETAIL

Future Land Use Amendment Transportation Analysis

SEPTEMBER 2016

Prepared By:

Kimley»Horn

FUTURE LAND USE AMENDMENT

TRANSPORTATION ANALYSIS

15169 E. Colonial Retail

Orange County, Florida

Prepared for:

151 Col., Inc.

Prepared by:

Kimley-Horn and Associates, Inc.

September 2016

James M. Taylor

PE #69979

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Appendix B: Trip Generation Comparison

Appendix C: OUATS Model Plots

Appendix D: Background Volume Worksheet

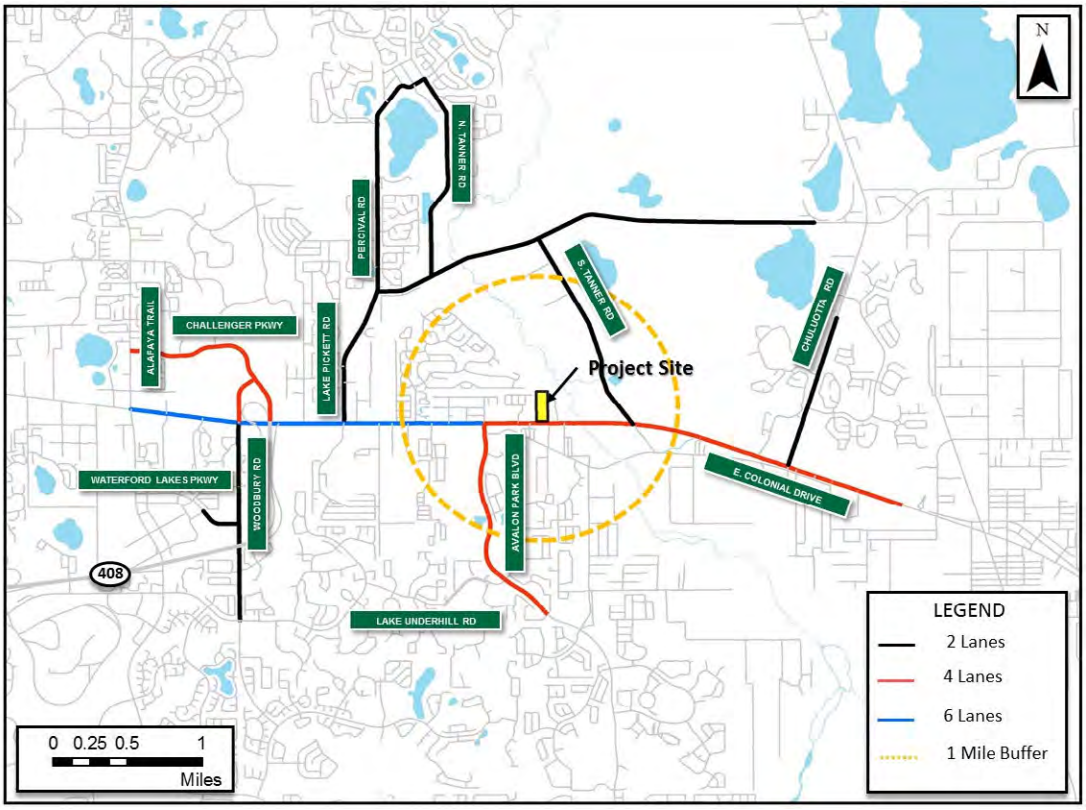
1.0 INTRODUCTION

Kimley-Horn and Associates, Inc. was retained by 151 Col., Inc. to analyze and document the transportation impacts associated with an Orange County Comprehensive Policy Plan (CPP) Future Land Use (FLU) amendment for a +/- 12.1 acre property located at 15169 East Colonial Drive in Orange County, Florida (the "subject property"). The subject property is located on the north side of East Colonial Drive (State Road 50) approximately mid-way between Avalon Park Boulevard and Tanner Road as shown in **Figure 1**.

The Applicant is requesting a FLU amendment for the subject property from the existing Rural / Agricultural ("R") designation which allows a maximum of 1 dwelling unit / 10 acres, to a Planned Development ("PD") designation which could include exclusive use or some combination of Commercial ("C"), Low-Medium Density Residential ("LMDR"), and Office ("O") uses up to the relative impact of 250,000 square feet of commercial use. This transportation analysis was conducted to assess the maximum feasible traffic impact associated with the proposed FLU amendment to the Planned Development ("PD") designation for the Short-Term (Year 2020) and Long-Term (Year 2030) horizons.

The transportation analysis was performed in accordance with the Orange County Comprehensive Policy Plan Amendment Methodology. The methodology requires the study area to include a minimum of one-mile radius around the site and include roadway segments where PM peak hour project trips are greater than or equal to 3% of the adopted maximum service volume (MSV). A visual representation of the minimum one-mile radius is provided in **Figure 1**.

Figure 1: Project Location



2.0 EXISTING CONDITION ANALYSIS

A Daily and PM peak hour capacity analysis was performed for roadway segments within the subject property study area for existing conditions. Average Annual Daily Traffic (AADT), PM peak hour directional (PHPD) counts, and adopted MSV were obtained from Orange County's Concurrency Management System (CMS) Database. The CMS report for roadway segments within the vicinity of the project was provided by Orange County staff on September 21, 2016 and is located in **Appendix A**. The existing Daily and PM peak hour capacity analysis is shown in **Table 1.**

As shown in **Table 1**, segments of State Road 50 from Woodbury Road to Lake Pickett Road and from Avalon Park Road to Chuluota Road are operating with Daily and/or PM peak hour volumes above adopted maximum service volumes (MSV). In addition, Lake Pickett Road from State Road 50 to Percival Road is operating with PM peak hour volumes above the adopted maximum service volume.

Table 1: Existing Daily and PM Peak Hour Capacity Analysis

OC CMS ID	Roadway	From	To	Lanes	Adopted LOS	Daily Existing			PM PHPD Existing		
						MSV	AADT	Deficiency?	MSV	PM PHPD	Deficiency?
24.1	Avalon Park Blvd	Colonial Dr	Waterford Chase Pkwy	4	E	39,800	18,086	No	2,000	848	No
24.2		Waterford Lks Pkwy	Timber Springs Blvd	4	E	39,800	25,872	No	2,000	1,248	No
24.3		Timber Springs Blvd	Timber Creek HS	4	E	39,800	21,436	No	2,000	1,016	No
54.4	Challenger Pkwy	Colonial Dr	Woodbury Rd	4	E	39,800	11,488	No	2,000	800	No
54.5		Ingenuity Drive	Alafaya Trail	4	E	39,800	8,796	No	1,700	534	No
61	Chuluota Rd	Colonial Dr	Lake Pickett Rd	2	D	14,200	12,747	No	740	711	No
135	SR 50 (Colonial Drive)	Alafaya Tr	Woodbury Rd	6	E	59,900	38,864	No	3,020	1,816	No
135.1		Woodbury Rd	Lake Pickett Rd	6	E	59,900	55,532	No	3,020	3,091	**Yes**
136		Lake Pickett Rd	Avalon Park Rd	6	E	59,900	46,175	No	3,020	2,472	No
136		Avalon Park Rd	S. Tanner Rd	4	D	30,400	33,498	**Yes**	1,580	1,747	**Yes**
136.1		S. Tanner Rd	Chuluota Rd	4	D	30,400	35,103	**Yes**	1,580	1,859	**Yes**
137		Chuluota Rd	SR 520	4	D	51,000	31,791	No	2,660	1,630	No
233	Lake Pickett Rd	Colonial Dr	Percival Rd	2	E	17,700	15,912	No	880	885	**Yes**
235		N. Tanner Rd	Chuluota Rd	2	D	16,330	8,979	No	850	487	No
427.8	N Tanner Rd	Lake Pickett Rd	Seminole County Line	2	E	17,700	11,008	No	880	615	No
349.7	Percival Rd	N. Tanner Rd	Lake Pickett Rd	2	E	15,600	5,823	No	800	296	No
449.6	Waterford Lakes Pkwy	Alafaya Tr	Woodbury Rd	4	E	33,800	13,170	No	1,700	617	No
467.2	Woodbury Rd	Lk Underhill Rd	Waterford Lks Pkwy	2	E	17,700	16,949	No	880	844	No
467.4		Colonial Dr	Challenger Pkwy	4	E	33,800	11,285	No	1,700	775	No

3.0 PROJECT TRAFFIC

3.1 TRIP GENERATION

Per the Orange County Comprehensive Policy Plan Amendment Methodology, trip generation impact for the proposed FLU zoning change was calculated using equations provided in the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 9th Edition*. The impact was determining by forecasting maximum project trips from the anticipated land use(s) associated with the proposed Planned Development ("PD") designation and subtracting the maximum trips allows under the existing Rural/Agricultural ("R") designations.

Under the existing FLU designation of Rural/Agriculture ("R"), the subject property (+/- 12.1 acres) allows a maximum of 1 dwelling unit / 10 acres, yielding one (1) single family unit.

Under the proposed FLU designation of Planned Development ("PD"), the subject property is requesting to be considered for exclusive use or some combination of Commercial ("C"), Low-Medium Density Residential ("LMDR"), and Office ("O") uses. Because internal capture reduces the external trips from a mixed-use development, a conservative case for the maximum trip generation was determined by comparing the impact of each of these uses independently. The Low-Medium Density Residential ("LMDR") designation would allow for a maximum density of 10 dwelling units / 1 acre, yielding a maximum of 121 units for the +/- 12.1 acre site. The Commercial ("C") and Office ("O") designations both allow for a maximum floor area ratio (FAR) of 3.0, independently yielding a maximum of 1,581,000 square feet for either of these uses. A comparison of the trip generation associated with the maximum development allowed under the three designations shows that stand-alone commercial use is the conservative case. The trip generation summary comparison is provided in **Appendix B**.

Due to the size and location of the subject property, and the limited developable area (there are +/- 4 acres of wetlands identified), the maximum FAR of 3.0 allowed for the proposed Commercial ("C") designation will not be realized. Instead, the applicant is proposing a Planned Development ("PD") FLU designation to cap the trip generation for the site at the relative impact of 250,000 square feet of independent commercial use. ITE Land Use Code (LUC) 820 Shopping Center equations were applied to the proposed gross square footage. A portion of the external retail trips will exist in the adjacent roadway background traffic. The quantity of these pass-by trips (34% of retail net external trips) was referenced from the ITE *Trip Generation Handbook*. Because these trips are already included in the background traffic, they were deducted from the net external trip totals to determine the amount of new external trips on study area roadways.

Table 2 provides the maximum trip generation summary for the proposed FLU amendment of Planned Development ("PD").

Table 2: Trip Generation Summary

Current FLU Zoning Allowance											
Daily							**Daily Trip Generation**				
	Land Use	**Acres**	**ITE LUC**	**Size**	**Units**	**ITE Trip Rate[1]**	**Total**	**In[1]**		**Out[1]**	
	Rural/Agri (1 DU/10 acres)	12.1	210	**1**	DU	15.18	15	50%	8	50%	7
	New External Trips						**15**		**8**		**7**
PM Peak							**PM Peak Hour Trip Generation**				
	Land Use	**Acres**	**ITE LUC**	**Size**	**Units**	**ITE Trip Rate[1]**	**Total**	**In[1]**		**Out[1]**	
	Rural/Agri (1 DU/10 acres)	12.1	210	**1**	DU	1.67	2	63%	1	37%	1
	New External Trips						**2**		**1**		**1**
Proposed FLU Zoning Allowance											
Daily							**Daily Trip Generation**				
	Land Use	**Acres**	**ITE LUC**	**Size**	**Units**	**ITE Trip Rate[1]**	**Total**	**In[1]**		**Out[1]**	
	Shopping Center	12.1	820	**250**	KSF	49.28	12,320	50%	6,160	50%	6,160
	Total Generated Trips						**12,320**		**6,160**		**6,160**
	Pass by Trips[2] =	34.0%	of external retail trips				4,189		2,094		2,095
	New External Trips						**8,131**		**4,066**		**4,065**
PM Peak							**PM Peak Hour Trip Generation**				
	Land Use	**Acres**	**ITE LUC**	**Size**	**Units**	**ITE Trip Rate[1]**	**Total**	**In[1]**		**Out[1]**	
	Shopping Center	12.1	820	**250**	KSF	4.43	1,108	48%	532	52%	576
	Total Generated Trips						**1,108**		**532**		**576**
	Pass by Trips[2] =	34.0%	of external retail trips				377		181		196
	New External Trips						**731**		**351**		**380**
Maximum Additional Trips											
	Daily New External Trips (Proposed - Existing)						**8,116**		**4,058**		**4,058**
	PM Peak New External Trips (Proposed - Existing)						**729**		**350**		**379**

Notes: [1]Vehicle trip rate (from fitted curve equations) and directional splits per ITE Trip Generation, 9th Edition

[2]Pass-by trip rate per ITE Trip Generation Handbook, 3rd Edition (2014) average rate for Shopping Center use for PM peak hour

3.2 TRIP DISTRIBUTION AND ASSIGNMENT

Distribution of project trips on study area roadways was determined using travel demand model forecasting based on Florida Standard Urban Transportation Model Structure (FSUTMS). The 2040 Orlando Urban Area Transportation Study (OUATS) model set was used to forecast the project trip distribution for the subject property trips for both the Short-Term (2020) and Long-Term (2030) horizons.

Land use data for the property was loaded into a new traffic analysis zone (TAZ) which was situated within the cost feasible roadway networks in a manner to appropriately represent the land use and access. The updated models were then run in order to distribute trips for all model trip purposes between allocated origins and destinations. The property's distribution percentages were extracted from the completed model runs, and the data was reviewed to ensure the results were reasonable. Plots of the model outputs showing project distribution are included in **Appendix C.** Project trips were assigned to study area roadway segments accordingly. **Figure 2** and **Figure 3** show the resulting project traffic distribution for the Short-Term (2020) and Long-Term (2030) horizons.

Figure 2: Short-Term (2020) Project Distribution

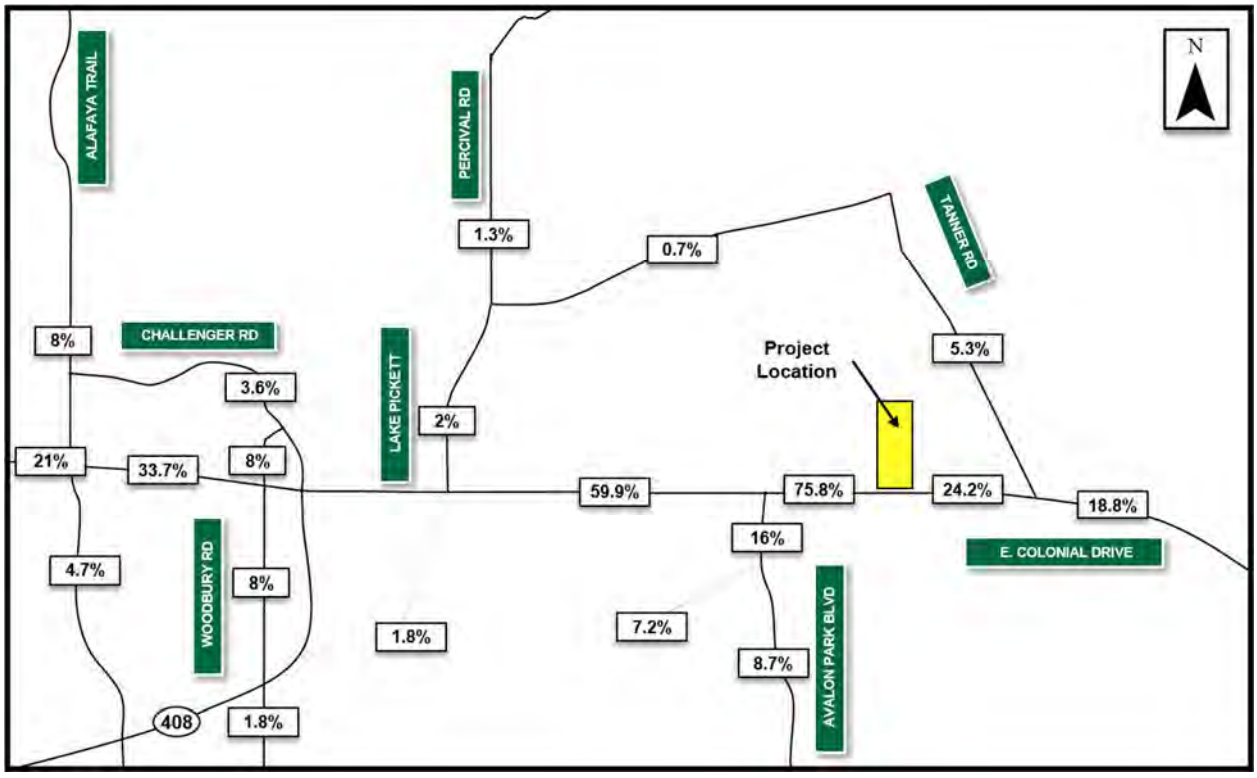
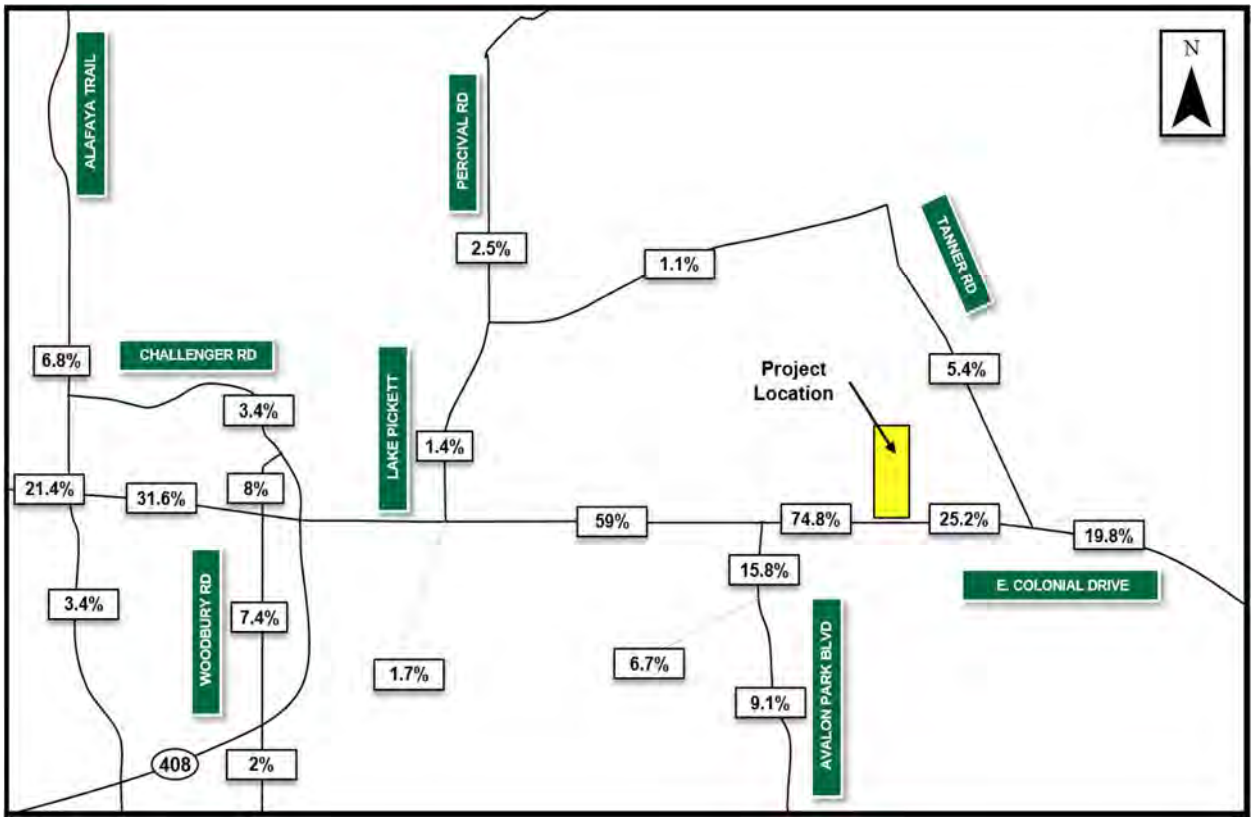


Figure 3: Long Term (2030) Project Distribution



4.0 SHORT-TERM (2020) ANALYSIS

Background Daily traffic for the Short-Term (2020) horizon was developed for each segment by reviewing the output from three growth methods and extracting the maximum volume within a 5% annual growth rate cap. The three methods included application of a 2% annual growth rate to the existing Orange County CMS AADT, straight-line forecasting from five years of historical traffic counts, and extraction of background model volumes from the 2020 OUATS run (model volumes were adjusted using a Model Output Conversion Factor in order to convert to AADT). Vested traffic from approved but unbuilt development is assumed to be included in the maximum volume from the three methods. Plots of the model outputs showing model background volumes are included in **Appendix C.** A worksheet showing the development of background AADT is provided in **Appendix D.** PM peak hour directional traffic was developed by applying the existing ratio of Daily to PM peak data from the County's CMS report to the background AADT.

Build-out Daily and PM peak hour directional volumes for the Short-Term (2020) horizon were developed by adding the project trip assignment to the background traffic. The Short-Term (2020) Daily and PM peak-hour capacity analysis is shown in **Table 3** and **Table 4**, respectively**.** As summarized in the tables, traffic volumes on segments of State Road 50 from Woodbury Road to Chuluota Road, Chuluota Road from State Road 50 to Lake Pickett Road, Lake Pickett Road from State Road 50 to Percival Road, and Woodbury Road from Lake Underhill Road to Waterford Lake Parkway, are anticipated to exceed adopted MSV in the Short-Term (2020) analysis. These deficiencies are identified in both the background and build-out scenarios and, therefore, they are not due to the addition of project traffic.

Table 3: Short-Term (2020) Daily Capacity Analysis

OC CMS ID	Roadway	From	To	Lanes	Daily Background (2020)			Daily Project Trips					Daily Build-out (2020)		
								IN =	4,058	OUT =	4,058				
					MSV	AADT	Deficient?	Trip Distrib	Project Peak	NB/EB	SB/WB	% MSV	MSV	AADT	Deficient?
24.1	Avalon Park Blvd	Colonial Dr	Waterford Chase Pkwy	4	39,800	21,703	No	16.0%	S	649	649	**3.3%**	39,800	23,002	No
24.2		Waterford Lks Pkwy	Timber Springs Blvd	4	39,800	30,514	No	8.7%	S	353	353	1.8%	39,800	31,220	No
24.3		Timber Springs Blvd	Timber Creek HS	4	39,800	25,723	No	8.7%	S	353	353	1.8%	39,800	26,429	No
54.4	Challenger Pkwy	Colonial Dr	Woodbury Rd	4	39,800	13,786	No	4.4%	W	179	179	0.9%	39,800	14,143	No
54.5		Ingenuity Drive	Alafaya Trail	4	39,800	9,500	No	0.0%	W	0	0	0.0%	39,800	9,500	No
61	Chuluota Rd	Colonial Dr	Lake Pickett Rd	2	14,200	15,296	**Yes**	6.0%	N	243	243	**3.4%**	14,200	15,783	**Yes**
135	SR 50 (Colonial Drive)	Alafaya Tr	Woodbury Rd	6	59,900	46,637	No	33.7%	W	1,368	1,368	**4.6%**	59,900	49,372	No
135.1		Woodbury Rd	Lake Pickett Rd	6	59,900	66,638	**Yes**	56.2%	W	2,281	2,281	**7.6%**	59,900	71,200	**Yes**
136		Lake Pickett Rd	Avalon Park Rd	6	59,900	57,257	No	59.9%	W	2,431	2,431	**8.1%**	59,900	62,118	**Yes**
136		Avalon Park Rd	S. Tanner Rd	4	30,400	40,198	**Yes**	75.8%	W	3,076	3,076	**20.2%**	30,400	46,350	**Yes**
136.1		S. Tanner Rd	Chuluota Rd	4	30,400	42,124	**Yes**	18.8%	E	763	763	**5.0%**	30,400	43,649	**Yes**
137		Chuluota Rd	SR 520	4	51,000	34,334	No	11.1%	E	450	450	1.8%	51,000	35,235	No
233	Lake Pickett Rd	Colonial Dr	Percival Rd	2	17,700	17,496	No	2.0%	N	81	81	0.9%	17,700	17,659	No
235		N. Tanner Rd	Chuluota Rd	2	16,330	10,775	No	0.0%	E	0	0	0.0%	16,330	10,775	No
427.8	N Tanner Rd	Lake Pickett Rd	Seminole County Line	2	17,700	13,210	No	1.7%	N	69	69	0.8%	17,700	13,348	No
349.7	Percival Rd	N. Tanner Rd	Lake Pickett Rd	2	15,600	6,988	No	2.6%	N	106	106	1.4%	15,600	7,199	No
449.6	Waterford Lakes Pkwy	Alafaya Tr	Woodbury Rd	4	33,800	15,804	No	6.1%	W	248	248	1.5%	33,800	16,299	No
467.2	Woodbury Rd	Lk Underhill Rd	Waterford Lks Pkwy	2	17,700	18,305	**Yes**	8.0%	S	325	325	**3.7%**	17,700	18,954	**Yes**
467.4		Colonial Dr	Challenger Pkwy	4	33,800	13,542	No	8.0%	N	325	325	1.9%	33,800	14,191	No

Table 4: Short-Term (2020) PM Peak Capacity Analysis

OC CMS ID	Roadway	From	To	Lanes	PM PHPD Background (2020			PM PHPD Project Trips					PM PHPD Build-out (2020)		
								IN =	350	OUT =	379				
					MSV	PM PHPD	Deficient?	Trip Distrib	Project Peak	NB/EB	SB/WB	% MSV	MSV	PM PHPD	Deficient?
24.1	Avalon Park Blvd	Colonial Dr	Waterford Chase Pkwy	4	2,000	1,018	No	16.0%	S	56	61	**3.0%**	2,000	1,074	No
24.2		Waterford Lks Pkwy	Timber Springs Blvd	4	2,000	1,472	No	8.7%	S	30	33	1.6%	2,000	1,502	No
24.3		Timber Springs Blvd	Timber Creek HS	4	2,000	1,219	No	8.7%	S	30	33	1.6%	2,000	1,252	No
54.4	Challenger Pkwy	Colonial Dr	Woodbury Rd	4	2,000	960	No	4.4%	W	15	17	0.8%	2,000	977	No
54.5		Ingenuity Drive	Alafaya Trail	4	1,700	577	No	0.0%	W	0	0	0.0%	1,700	577	No
61	Chuluota Rd	Colonial Dr	Lake Pickett Rd	2	740	853	**Yes**	6.0%	N	23	21	**3.1%**	740	876	**Yes**
135	SR 50 (Colonial Drive)	Alafaya Tr	Woodbury Rd	6	3,020	2,179	No	33.7%	W	118	128	**4.2%**	3,020	2,297	No
135.1		Woodbury Rd	Lake Pickett Rd	6	3,020	3,709	**Yes**	56.2%	W	197	213	**7.1%**	3,020	3,906	**Yes**
136		Lake Pickett Rd	Avalon Park Rd	6	3,020	3,065	**Yes**	59.9%	W	210	227	**7.5%**	3,020	3,275	**Yes**
136		Avalon Park Rd	S. Tanner Rd	4	1,580	2,096	**Yes**	75.8%	W	265	287	**18.2%**	1,580	2,361	**Yes**
136.1		S. Tanner Rd	Chuluota Rd	4	1,580	2,231	**Yes**	18.8%	E	71	66	**4.5%**	1,580	2,302	**Yes**
137		Chuluota Rd	SR 520	4	2,660	1,760	No	11.1%	E	42	39	1.6%	2,660	1,802	No
233	Lake Pickett Rd	Colonial Dr	Percival Rd	2	880	973	**Yes**	2.0%	N	8	7	0.9%	880	981	**Yes**
235		N. Tanner Rd	Chuluota Rd	2	850	584	No	0.0%	E	0	0	0.0%	850	584	No
427.8	N Tanner Rd	Lake Pickett Rd	Seminole County Line	2	880	738	No	1.7%	N	6	6	0.7%	880	744	No
349.7	Percival Rd	N. Tanner Rd	Lake Pickett Rd	2	800	355	No	2.6%	N	10	9	1.2%	800	364	No
449.6	Waterford Lakes Pkwy	Alafaya Tr	Woodbury Rd	4	1,700	740	No	6.1%	W	21	23	1.4%	1,700	761	No
467.2	Woodbury Rd	Lk Underhill Rd	Waterford Lks Pkwy	2	880	912	**Yes**	8.0%	S	28	30	**3.4%**	880	942	**Yes**
467.4		Colonial Dr	Challenger Pkwy	4	1,700	930	No	8.0%	N	30	28	1.8%	1,700	958	No

5.0 LONG-TERM (2030) ANALYSIS

As described in the Short-Term analysis, Background Daily traffic for the Long-Term (2030) horizon was developed for each segment by reviewing the output from three growth methods and extracting the maximum volume within a 5% annual growth rate cap. Vested traffic from approved but unbuilt development is assumed to be included in the maximum volume from the three methods. Plots of the model outputs showing model background volumes are included in **Appendix C.** A worksheet showing the development of background AADT is provided in **Appendix D.** PM peak hour directional traffic was developed by applying the existing ratio of Daily to PM peak data from the County's CMS report to the background AADT.

Build-out Daily and PM peak hour directional volumes for the Long-Term (2030) horizon were developed by adding the project trip assignment to the background traffic. The Long-Term (2030) Daily and PM peak-hour capacity analysis is shown in **Table 5** and **Table 6**, respectively**.** As summarized in the tables, traffic volumes on segments of State Road 50 from Woodbury Road to Chuluota Road, Chuluota Road from State Road 50 to Lake Pickett Road, Lake Pickett Road from State Road 50 to Chuluota Road, Tanner Road from Lake Pickett Road to Seminole County Line, and Woodbury Road from Lake Underhill Road to Waterford Lake Parkway, are anticipated to exceed adopted MSV in the Long-Term (2030) analysis. These deficiencies are identified in both the background and build-out scenarios and, therefore, they are not due to the addition of project traffic.

Table 5: Long-Term (2030) Daily Capacity Analysis

OC CMS ID	Roadway	From	To	Lanes	Daily Background (2030)			Daily Project Trips					Daily Build-out (2030)		
								IN =	4,058	OUT =	4,058				
					MSV	AADT	Deficient?	Trip Distrib	Project Peak	NB/EB	SB/WB	% MSV	MSV	AADT	Deficient?
24.1	Avalon Park Blvd	Colonial Dr	Waterford Chase Pkwy	4	39,800	30,746	No	15.8%	S	641	641	**3.2%**	39,800	32,029	No
24.2		Waterford Lks Pkwy	Timber Springs Blvd	4	39,800	35,450	No	9.1%	S	369	369	1.9%	39,800	36,188	No
24.3		Timber Springs Blvd	Timber Creek HS	4	39,800	39,926	**Yes**	9.1%	S	369	369	1.9%	39,800	40,665	**Yes**
54.4	Challenger Pkwy	Colonial Dr	Woodbury Rd	4	39,800	23,436	No	5.2%	W	211	211	1.1%	39,800	23,858	No
54.5		Ingenuity Drive	Alafaya Trail	4	39,800	11,259	No	0.0%	W	0	0	0.0%	39,800	11,259	No
61	Chuluota Rd	Colonial Dr	Lake Pickett Rd	2	14,200	19,592	**Yes**	5.4%	N	219	219	**3.1%**	14,200	20,031	**Yes**
135	SR 50 (Colonial Drive)	Alafaya Tr	Woodbury Rd	6	59,900	53,325	No	31.6%	W	1,282	1,282	**4.3%**	59,900	55,890	**No**
135.1		Woodbury Rd	Lake Pickett Rd	6	59,900	87,379	**Yes**	55.9%	W	2,268	2,268	**7.6%**	59,900	91,916	**Yes**
136		Lake Pickett Rd	Avalon Park Rd	6	59,900	74,484	**Yes**	59.0%	W	2,394	2,394	**8.0%**	59,900	79,272	**Yes**
136		Avalon Park Rd	S. Tanner Rd	**6**	**45,800**	54,117	**Yes**	74.8%	W	3,035	3,035	**13.3%**	**45,800**	60,188	**Yes**
136.1		S. Tanner Rd	Chuluota Rd	**6**	**45,800**	57,347	**Yes**	19.8%	E	803	803	**3.5%**	**45,800**	58,954	**Yes**
137		Chuluota Rd	SR 520	**6**	**76,700**	44,797	No	12.9%	E	523	523	1.4%	**76,700**	45,844	No
233	Lake Pickett Rd	Colonial Dr	Percival Rd	2	17,700	21,900	**Yes**	1.4%	N	57	57	0.6%	17,700	22,014	**Yes**
235		N. Tanner Rd	Chuluota Rd	2	16,330	18,317	**Yes**	2.8%	E	114	114	1.4%	16,330	18,544	**Yes**
427.8	N Tanner Rd	Lake Pickett Rd	Seminole County Line	2	17,700	18,532	**Yes**	1.7%	N	69	69	0.8%	17,700	18,670	**Yes**
349.7	Percival Rd	N. Tanner Rd	Lake Pickett Rd	2	15,600	11,438	No	2.5%	N	101	101	1.3%	15,600	11,641	No
449.6	Waterford Lakes Pkwy	Alafaya Tr	Woodbury Rd	4	33,800	23,636	No	5.4%	W	219	219	1.3%	33,800	24,074	No
467.2	Woodbury Rd	Lk Underhill Rd	Waterford Lks Pkwy	2	17,700	21,695	**Yes**	2.1%	S	85	85	1.0%	17,700	21,865	**Yes**
467.4		Colonial Dr	Challenger Pkwy	4	33,800	23,021	No	8.6%	N	349	349	2.1%	33,800	23,719	No

Table 6: Long-Term (2030) PM Peak Capacity Analysis

OC CMS ID	Roadway	From	To	Lanes	PM PHPD Background (2030			PM PHPD Project Trips					PM PHPD Build-out (2030)		
								IN =	350	OUT =	379				
					MSV	PM PHPD	Deficient?	Trip Distrib	Project Peak	NB/EB	SB/WB	% MSV	MSV	PM PHPD	Deficient?
24.1	Avalon Park Blvd	Colonial Dr	Waterford Chase Pkwy	4	2,000	1,442	No	15.8%	S	55	60	**3.0%**	2,000	1,497	No
24.2		Waterford Lks Pkwy	Timber Springs Blvd	4	2,000	1,710	No	9.1%	S	32	34	1.7%	2,000	1,742	No
24.3		Timber Springs Blvd	Timber Creek HS	4	2,000	1,892	No	9.1%	S	32	34	1.7%	2,000	1,926	No
54.4	Challenger Pkwy	Colonial Dr	Woodbury Rd	4	2,000	1,632	No	5.2%	W	18	20	1.0%	2,000	1,652	No
54.5		Ingenuity Drive	Alafaya Trail	4	1,700	684	No	0.0%	W	0	0	0.0%	1,700	684	No
61	Chuluota Rd	Colonial Dr	Lake Pickett Rd	2	740	1,093	**Yes**	5.4%	N	20	19	2.8%	740	1,113	**Yes**
135	SR 50 (Colonial Drive)	Alafaya Tr	Woodbury Rd	6	3,020	2,492	No	31.6%	W	111	120	**4.0%**	3,020	2,603	No
135.1		Woodbury Rd	Lake Pickett Rd	6	3,020	4,864	**Yes**	55.9%	W	196	212	**7.0%**	3,020	5,060	**Yes**
136		Lake Pickett Rd	Avalon Park Rd	6	3,020	3,988	**Yes**	59.0%	W	207	224	**7.4%**	3,020	4,195	**Yes**
136		Avalon Park Rd	S. Tanner Rd	**6**	**2,400**	2,822	**Yes**	74.8%	W	262	283	**11.8%**	**2,400**	3,084	**Yes**
136.1		S. Tanner Rd	Chuluota Rd	**6**	**2,400**	3,037	**Yes**	19.8%	E	75	69	**3.1%**	**2,400**	3,112	**Yes**
137		Chuluota Rd	SR 520	**6**	**4,000**	2,297	No	12.9%	E	49	45	1.2%	**4,000**	2,346	No
233	Lake Pickett Rd	Colonial Dr	Percival Rd	2	880	1,218	**Yes**	1.4%	N	5	5	0.6%	880	1,223	**Yes**
235		N. Tanner Rd	Chuluota Rd	2	850	993	**Yes**	2.8%	E	11	10	1.2%	850	1,003	**Yes**
427.8	N Tanner Rd	Lake Pickett Rd	Seminole County Line	2	880	1,035	**Yes**	1.7%	N	6	6	0.7%	880	1,041	**Yes**
349.7	Percival Rd	N. Tanner Rd	Lake Pickett Rd	2	800	581	No	2.5%	N	9	9	1.2%	800	590	No
449.6	Waterford Lakes Pkwy	Alafaya Tr	Woodbury Rd	4	1,700	1,107	No	5.4%	W	19	20	1.2%	1,700	1,126	No
467.2	Woodbury Rd	Lk Underhill Rd	Waterford Lks Pkwy	2	880	1,080	**Yes**	2.1%	S	7	8	0.9%	880	1,088	**Yes**
467.4		Colonial Dr	Challenger Pkwy	4	1,700	1,581	No	8.6%	N	33	30	1.9%	1,700	1,611	No

6.0 CONCLUSION

This transportation analysis for the proposed Future Land Use (FLU) amendment for a +/- 12.1 acre property located at 15169 East Colonial Drive was performed in accordance with Orange County's Comprehensive Policy Plan Amendment Methodology. The amendment would change the existing FLU designation for the subject property from Rural / Agricultural ("R") to a Planned Development ("PD") designation which would allow for a mix of retail, office and low-medium density residential use up to the relative impact of 250,000 square feet of commercial use.

This analysis identified roadway segment deficiencies for existing conditions, as well for background and build-out conditions associated with the Short-Term (2020) and Long-Term (2030) planning horizons. No additional deficiencies were identified as a result of the additional project trips associated with the requested amendment. It is therefore recommended that the amendment be approved for the subject property as proposed.

APPENDIX A
Orange County CMS Report

Orange County, Florida
Traffic Concurrency Management Program
Concurrency Link Information
Application Number:

ID	From	To	Lgth	Maint Agency	Capacity Group	Ln	Min LOS	Total Cap	AADT	PmPk	PkDir	Comm Trips	Avail Cap*	LOS
Avalon Park Blvd														
24.1	Colonial Dr	Waterford Chase Pkwy	1.25	Cnty	Urban - Class I	4	E	2000	18,086	848	SB	176	976	C
24.2	Waterford Chase Pkwy	Timber Springs Blvd	1.05	Cnty	Urban - Class I	4	E	2000	25,872	1,248	SB	62	690	C
24.3	Timber Springs Blvd	Timber Creek High/South Crown Hill Blvd	0.86	Cnty	Urban - Class I	4	E	2000	21,436	1,016	NB	32	952	C
Challenger Pkwy														
54.4	Colonial Dr (E)	Woodbury Rd	0.31	ST	Urban - Class I	4	E	2000	11,488	800	WB	15	1,185	C
54.5	Ingenuity Dr	Alafaya Tr	0.64	PR	Urban - Class II	4	E	1700	8,796	534	WB	14	1,152	C
Chuluota Rd														
61	Colonial Dr	Lake Pickett Rd	1.93	Cnty	Rural	2	D	740	12,747	711	SB	289	0	F
Colonial Dr (E)														
135	Alafaya Tr	Woodbury Rd	0.78	ST	Urban - Class I	6	E	3020	38,864	1,816	EB	539	665	C
135.1	Woodbury Rd	Lake Pickett Rd	0.76	ST	Urban - Class I	6	E	3020	55,532	3,091	EB	356	0	F
136	Lake Pickett Rd	Avalon Park Blvd	1.01	ST	Urban - Class I	6	E	3020	46,175	2,472	EB	349	199	C
136.02	Avalon Park Blvd	S. Tanner Rd	1.08	ST	Rural	4	D	1580	33,498	1,747	EB	279	0	F
136.1	S. Tanner Rd	Chuluota Rd	1.16	ST	Rural	4	D	1580	35,103	1,859	EB	241	0	F
137	Chuluota Rd	SR 520	3.22	ST	Rural Undev. Hwy	4	D	2660	31,791	1,630	EB	153	877	C
East-West Expy														
108.64	Alafaya Tr	Colonial Dr	1.64	ST	Urban Freeway	4	E	3940	63,948	3,857	WB	0	83	E
Lake Pickett Rd														
233	Colonial Dr	Percival Rd	1.06	Cnty	Urban - Class I	2	E	880	15,912	885	SB	209	0	F
235	N.Tanner Rd	Chuluota Rd	3.23	Cnty	Rural	2	D	850	8,979	487	EB	135	228	D

* It should be noted that the capacities indicated on this information sheet are a snapshot at this specific date and time. Available capacities are subject to change at any time.

ID	From	To	Lgth	Maint Agency	Capacity Group	Min Ln	LOS	Total Cap	AADT	PmPk	PkDir	Comm Trips	Avail Cap*	LOS
N Tanner Rd														
427.8	Lake Pickett Rd	Seminole County Line	2.21	Cnty	Urban - Class I	2	E	880	11,008	615	SB	0	265	C
Percival Rd / Lake Price Dr														
349.7	N. Tanner Rd	Lake Pickett Rd	1.8	Cnty	Urban - Class II	2	E	800	5,823	296	SB	5	499	C
Rosalind Ave														
254	Orange Ave (S)	Robinson St	0.79	ST	Urban - Class II (1-way)	3	E	3072	13,921	1,253	NB	0	1,819	C
Waterford Lakes Pkwy														
449.6	Alafaya Tr	Woodbury Rd	0.84	Cnty	Urban - Class II	4	E	1700	13,170	617	EB	1	1,082	C
Woodbury Rd														
467.2	Lake Underhill Rd	Waterford Lakes Pkwy	0.73	Cnty	Urban - Class I	2	E	880	16,949	844	SB	69	0	F
467.4	Colonial Dr	Challenger Pkwy	0.35	Cnty	Urban - Class II	4	E	1700	11,285	775	SB	1	924	D

* It should be noted that the capacities indicated on this information sheet are a snapshot at this specific date and time. Available capacities are subject to change at any time.

APPENDIX B
Trip Generation Comparison

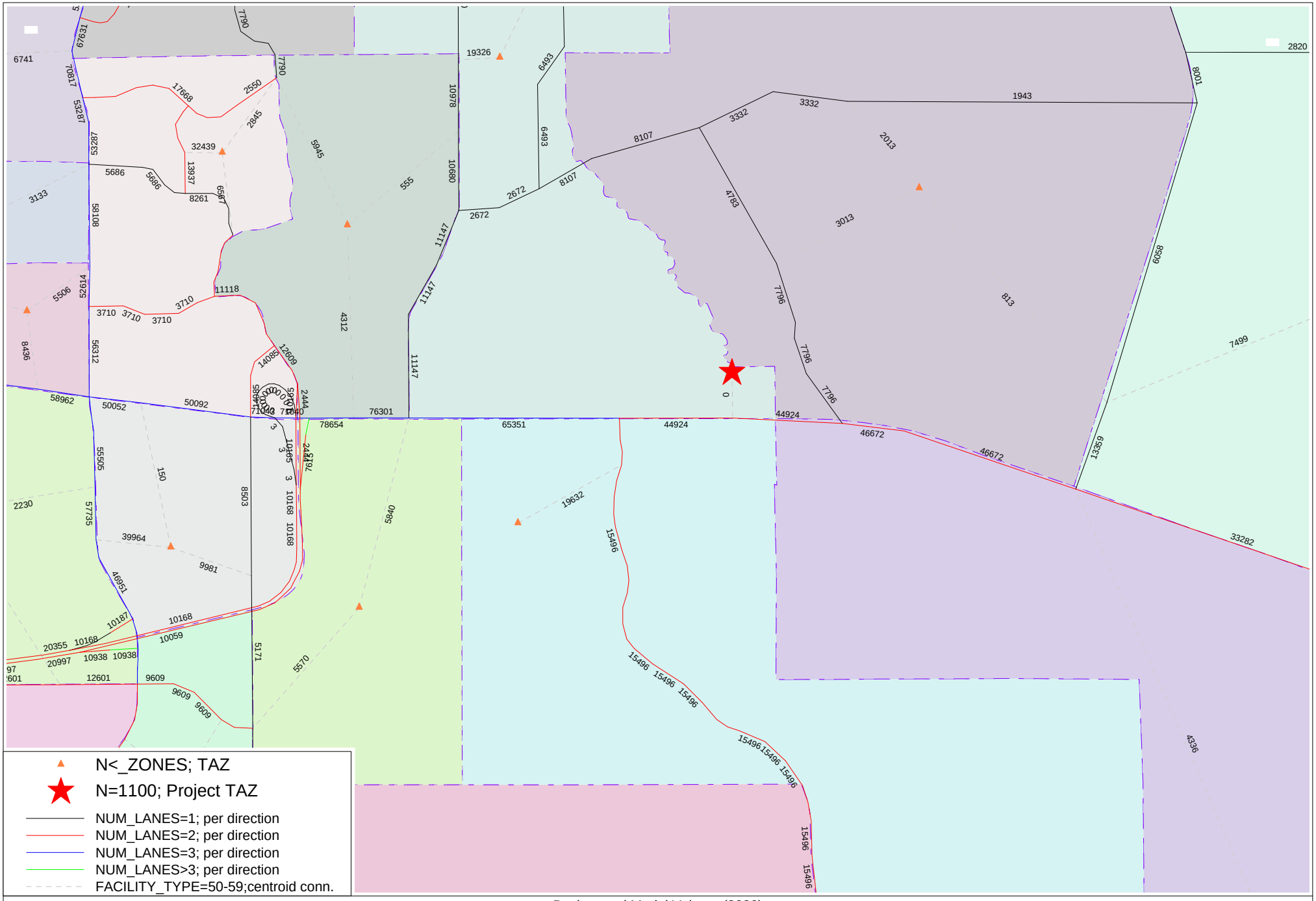
Comparison of Exclusive Use Trip Generation Scenarios

Daily	Land Use	Acres	ITE LUC	Size	Units	ITE Trip Rate[1]	Daily Trip Generation				
							Total	In[1]		Out[1]	
	Commercial (FAR = 3.0)	12.1	820	**1,581**	KSF	25.84	**40,859**	50%	**20,430**	50%	**20,429**
	Office (FAR = 3.0)	12.1	710	**1,581**	KSF	8.20	**12,966**	50%	**6,483**	50%	**6,483**
	LMD Residential (10 du/acre)	12.1	220	**121**	DU	6.62	**801**	50%	**401**	50%	**400**

PM Peak	Land Use	Acres	ITE LUC	Size	Units	ITE Trip Rate[1]	PM Peak Hour Trip Generation				
							Total	In[1]		Out[1]	
	Commercial (FAR = 3.0)	12.1	820	**1,581**	KSF	2.41	**3,811**	48%	**1,829**	52%	**1,982**
	Office (FAR = 3.0)	12.1	710	**1,581**	KSF	1.23	**1,945**	17%	**331**	83%	**1,614**
	LMD Residential (10 du/acre)	12.1	220	**121**	DU	0.63	**76**	65%	**49**	35%	**27**

Notes: [1]Vehicle trip rate (from fitted curve equations) and directional splits per ITE Trip Generation, 9th Edition

APPENDIX C
OUATS Model Plots



Background Model Volume (2020)
15169 E. Colonial Drive Retail
OUATS 2040 LRTP Model - Year 2020 Cost Feasible Network and SE Data
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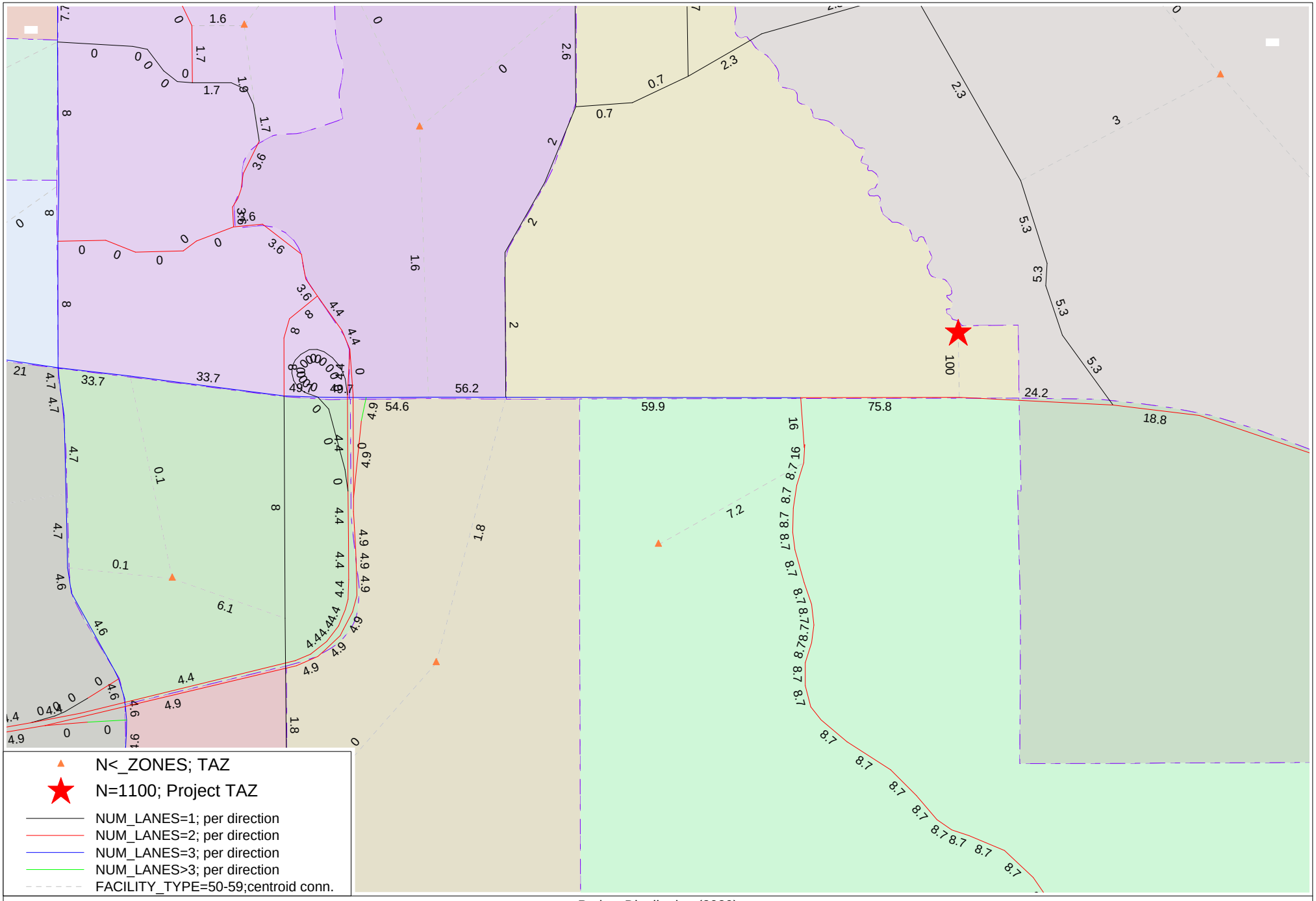

Project Distribution (2020)
15169 E. Colonial Drive Retail
OUATS 2040 LRTP Model - Year 2020 Cost Feasible Network and SE Data
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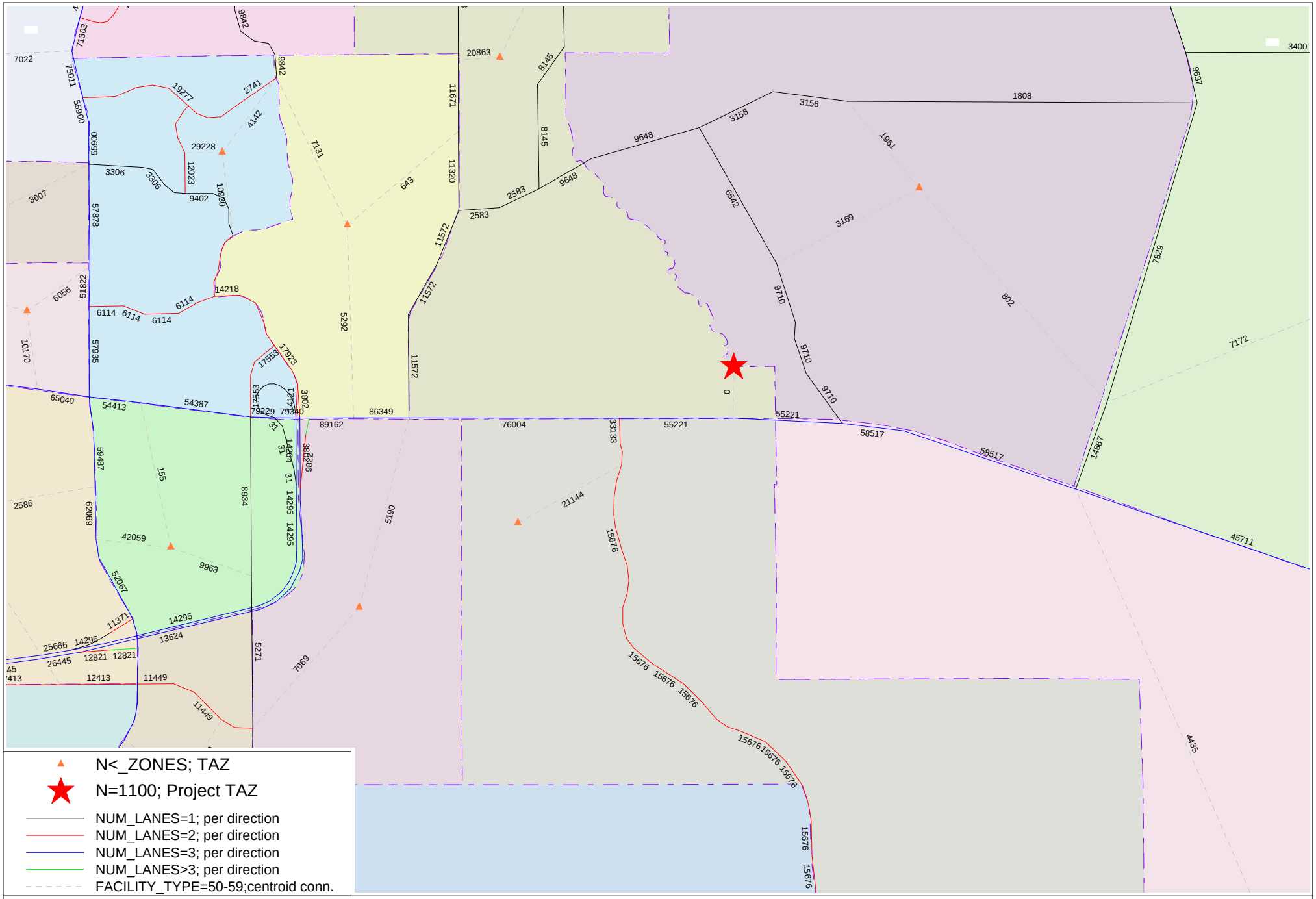

Background Model Volume (2030)
15169 E. Colonial Drive Retail
OUATS 2040 LRTP Model - Year 2030 Cost Feasible Network and SE Data
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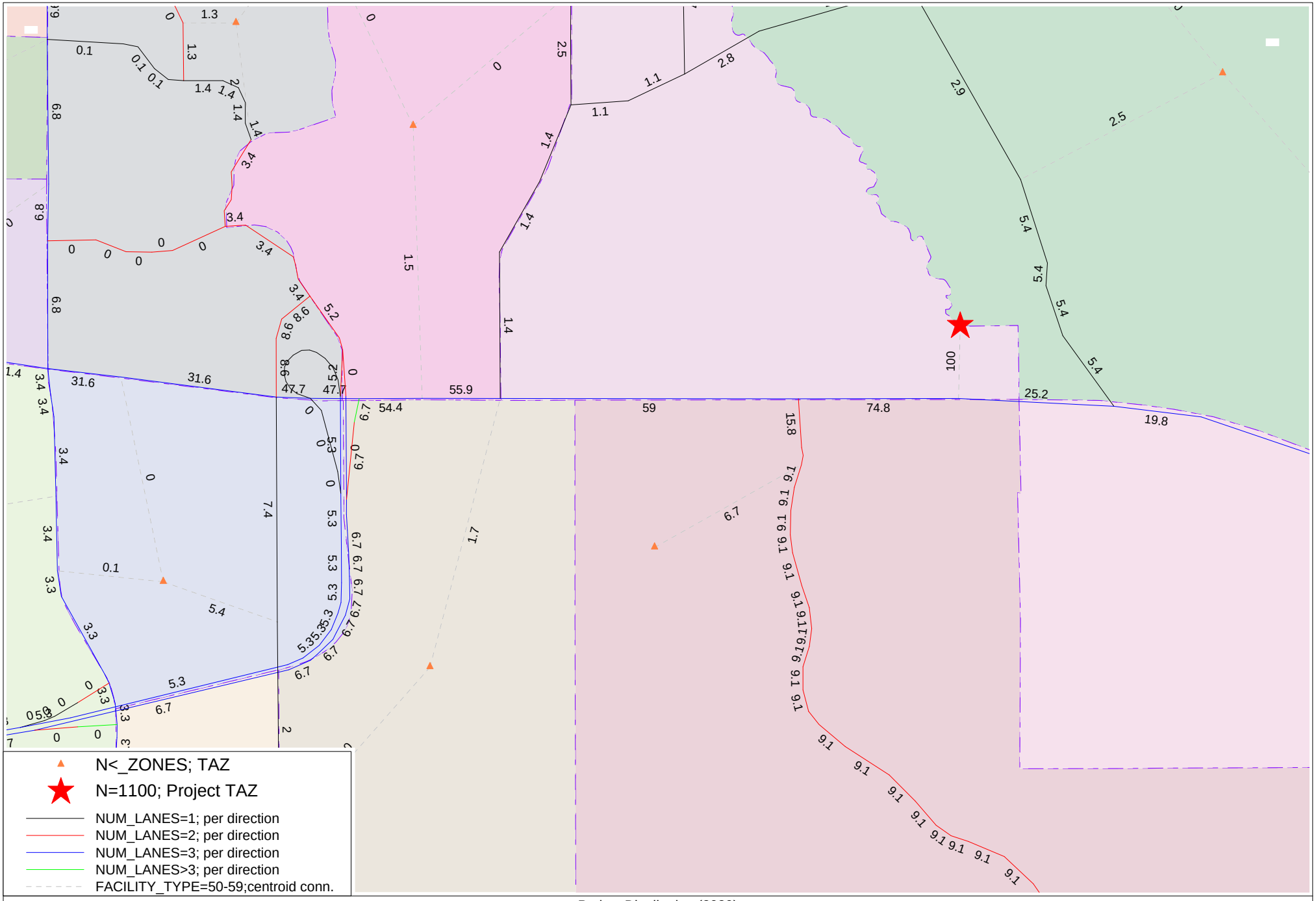

Project Distribution (2030)
15169 E. Colonial Drive Retail
OUATS 2040 LRTP Model - Year 2030 Cost Feasible Network and SE Data
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APPENDIX D
Background Volume Worksheet

Development of Background Daily Traffic

From	To	From	Historical AADT					AADT (CMS)	AADT Background 2020							AADT Background 2030						
									2% Annual Growth	5-Year Historical Forecast	Raw Model Volume	MOCF	Model AADT	5% Annual Growth Cap	Max AADT w/ cap	2% Annual Growth	5-Year Historical Forecast	Raw Model Volume	MOCF	Model AADT	5% Annual Growth Cap	Max AADT w/ cap
			2011	2012	2013	2014	2015	2016	2020	2020	2020	2020	2020	2020	2020	2030	2030	2030	2030	2030	2030	2030
Avalon Park Blvd	Colonial Dr	Waterford Chase Pkwy	21,702	22,025	22,656	18,086	20,052	**18,086**	19,533	15,837	*31,905*	*0.98*	31,267	21,703	**21,703**	23,150	8,598	*33,133*	*0.98*	32,470	30,746	**30,746**
	Waterford Lks Pkwy	Timber Springs Blvd	26,185	26,344	28,003	25,872	28,889	**25,872**	27,942	30,514	*15,496*	*0.98*	15,186	31,046	**30,514**	33,116	35,450	*15,676*	*0.98*	15,362	51,873	**35,450**
Avalon Park Blvd	Timber Springs Blvd	Timber Creek HS	18,061	18,647	20,124	21,436	22,483	**21,436**	23,151	28,293	*15,496*	*0.98*	15,186	25,723	**25,723**	27,438	39,926	*15,676*	*0.98*	15,362	43,729	**39,926**
Challenger Pkwy	Colonial Dr	Woodbury Rd	18,167	9,906	9,173	11,488	24,494	**11,488**	12,407	24,611	*12,609*	*0.98*	12,357	13,786	**13,786**	14,705	38,847	*17,923*	*0.98*	17,565	23,436	**23,436**
	Ingenuity Drive	Alafaya Trail	8,660	9,228	8,896	8,972	8,655	**8,796**	9,500	8,696	*3,710*	*0.98*	3,636	10,555	**9,500**	11,259	8,430	*6,114*	*0.98*	5,992	16,149	**11,259**
Chuluota Rd	Colonial Dr	Lake Pickett Rd	11,668	11,607	12,970	12,747	13,202	**12,747**	13,767	15,384	*13,359*	*0.98*	13,092	15,296	**15,296**	16,316	19,592	*14,867*	*0.98*	14,570	26,004	**19,592**
Colonial Drive	Alafaya Tr	Woodbury Rd			42,510	38,109		**38,864**	41,973	11,703	*50,092*	*0.98*	49,090	46,637	**46,637**	49,746	0	*54,413*	*0.98*	53,325	79,283	**53,325**
	Woodbury Rd	Lake Pickett Rd	60,788	58,686	60,257	54,993		**55,532**	59,975	46,821	*78,654*	*0.98*	77,081	66,638	**66,638**	71,081	31,007	*89,162*	*0.98*	87,379	113,285	**87,379**
	Lake Pickett Rd	Avalon Park Rd	46,368	48,469	50,229	48,973		**46,175**	49,869	55,691	*65,351*	*0.98*	64,044	57,257	**57,257**	59,104	65,266	*76,004*	*0.98*	74,484	97,337	**74,484**
	Avalon Park Rd	S. Tanner Rd			37,113	34,513		**33,498**	36,178	18,913	*44,924*	*0.98*	44,026	40,198	**40,198**	42,877	0	*55,221*	*0.98*	54,117	68,336	**54,117**
	S. Tanner Rd	Chuluota Rd			36,296	35,103		**35,103**	37,911	27,945	*46,672*	*0.98*	45,739	42,124	**42,124**	44,932	16,015	*58,517*	*0.98*	57,347	71,610	**57,347**
	Chuluota Rd	SR 520			32,755	32,433		**31,791**	34,334	30,501	*33,282*	*0.98*	32,616	38,149	**34,334**	40,692	27,281	*45,711*	*0.98*	44,797	58,368	**44,797**
Lake Pickett Rd	Colonial Dr	Percival Rd	13,801	13,570	13,953	15,912	14,832	**15,912**	17,185	17,496	*11,147*	*0.98*	10,924	19,094	**17,496**	20,367	21,900	*11,572*	*0.98*	11,341	29,744	**21,900**
	N. Tanner Rd	Chuluota Rd	6373	6808	7744	8801	9005	**8979**	9,697	12,826	*8,107*	*0.98*	7,945	10,775	**10,775**	11,493	20,083	*9,648*	*0.98*	9,455	18,317	**18,317**
N Tanner Rd	Lake Pickett Rd	Seminole County Line		10528	10852	11008	11979	**11008**	11,889	14,023	*6,493*	*0.98*	6,363	13,210	**13,210**	14,090	18,532	*8,145*	*0.98*	7,982	22,456	**18,532**
Percival Rd	N. Tanner Rd	Lake Pickett Rd	6593	6285	6157	5941	6112	**5823**	6,289	5,303	*10,978*	*0.98*	10,758	6,988	**6,988**	7,453	3,997	*11,671*	*0.98*	11,438	11,879	**11,438**
Waterford Lakes Pkwy	Alafaya Tr	Woodbury Rd			12212	12783	13560	**13170**	14,224	16,896	*10,173*	*0.98*	9,970	15,804	**15,804**	16,858	23,636	*12,527*	*0.98*	12,276	26,867	**23,636**
Woodbury Rd	Lk Underhill Rd	Waterford Lks Pkwy	17612	17069	18832	17288	13940	**16949**	18,305	11,961	*10,015*	*0.98*	9,815	20,339	**18,305**	21,695	4,836	*10,166*	*0.98*	9,963	31,118	**21,695**
	Colonial Dr	Challenger Pkwy		8960	11170	11285	13930	**11285**	12,188	21,103	*14,461*	*0.98*	14,172	13,542	**13,542**	14,445	36,128	*17,553*	*0.98*	17,202	23,021	**23,021**

Appendix A

The Seasons PD

CPA Traffic Study

August 2016

1

Introduction

This traffic study is for the Comprehensive Plan Amendment associated with The Seasons property located in unincorporated Orange County, Florida (21-23-29-5361-00-170). The site is located in the Alternative Mobility Area (AMA). The currently approved Future Land Use designation for the property is Low Medium Density Residential, which allows up 10 dwelling units per acre. The proposed Future Land Use designation is Medium Density Residential, which allows up to 20 dwelling units per acre. The subject parcel is located south of Wakulla Way, west of S Texas Avenue, north of Oak Ridge Road, and east of South John Young Parkway. **Figure 1** shows the project location. Texas Avenue will provide access to the parcel.

Study Area of Influence

Consistent with Orange County's methodology for transportation analysis for Comprehensive Policy Plan Amendments, the primary study area for this traffic assessment includes the directly impacted collectors or arterials, which, at a minimum, includes a one mile radius around the project site. In addition, the area includes each roadway where the daily project trips on the roadway segments are greater or equal to 3% of the minimum service volume at the adopted level of service. Based on this review, roadway segments that are within the traffic impact assessment area include the following:

- Americana Boulevard from John Young Parkway to Orange Blossom Trail
- Chancellor Drive from Sand Lake Road to Orlando Central Parkway
- Chancellor Drive from Orlando Central Parkway to Oak Ridge Road
- Conroy Road from Millenia Boulevard to John Young Parkway
- John Young Parkway from Sand Lake Road to President's Drive
- John Young Parkway from President's Drive to Oak Ridge Road
- John Young Parkway from Oak Ridge Road to Americana Boulevard
- John Young Parkway from Americana Boulevard to Interstate 4
- Lake Ellenor Drive/S Rio Grande Avenue from Orlando Central Parkway to Oak Ridge Road
- Oak Ridge Road from Harcourt Avenue to John Young Parkway
- Oak Ridge Road from John Young Parkway to Orange Blossom Trail
- Oak Ridge Road from Orange Blossom Trail to Orange Avenue

- Orlando Central Parkway from Lake Ellenor Drive to Orange Blossom Trail
- Rio Grande Avenue from Oak Ridge Road to Americana Boulevard
- Texas Avenue from Chancellor Drive to Oak Ridge Road
- Texas Avenue from Oak Ridge Road to Americana Boulevard
- Texas Avenue from Americana Boulevard to Holden Avenue

Analysis Results

Per Orange County requirements, a transportation analysis was completed for existing conditions, five-year conditions (Year 2021), and Year 2040 conditions. The analysis also assessed pedestrian and bicycle facilities, transit services and other transportation options. The conclusions of this analysis are as follows:

- The proposed land use change will result in a net increase of 1,176 daily trips and an increase of 107 PM peak hour trips in comparison to the currently approved land use.
- The existing conditions analysis shows that all of the roadways within the study area of influence operate within the acceptable Level of Service capacity standards and have excess capacity in both the daily condition and the PM peak hour condition.
- The five-year analysis shows that all of the roadways within the study area of influence are projected to operate within the acceptable Level of Service capacity standards in both the daily and PM peak hour conditions.
- The Year 2040 analysis shows that John Young Parkway between Oak Ridge Road and Americana Boulevard is projected to exceed the Level of Service capacity standards in the daily condition. This deficiency occurs before the project traffic is added; therefore, this is a background deficiency that will be present with or without the proposed land use change. All other roadways within the study area are projected to operate within the acceptable Level of Service capacity standards in both the daily and PM peak hour conditions.
- The area is well served by public sidewalks. The proposed development will connect to the existing sidewalks along Texas Avenue.
- There are dedicated bike lanes available along John Young Parkway and Conroy Road.
- There are seven fixed routes serving the project area. The bus stops along Oak Ridge Road closest to the project site are equipped with concrete landing pads, benches and/or shelters.

The analysis assumptions and results are discussed in the remainder of this report.

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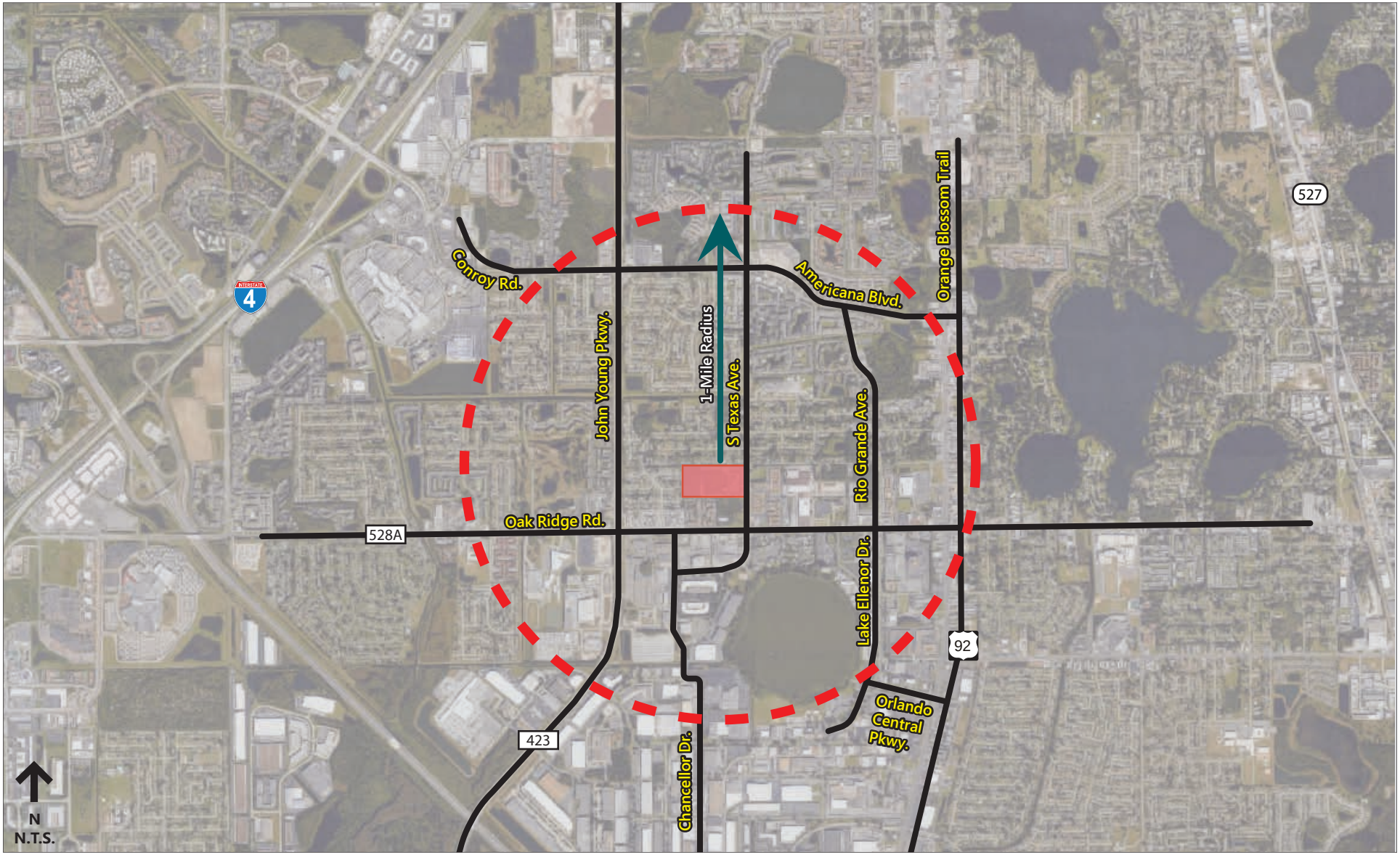

Project Location Radius

Project Area

Figure 1

Project Location Map

2

Trip Generation

The currently approved Future Land Use designation for the property is Low Medium Density Residential, which allows up to 10 dwelling units per acre. The proposed Future Land Use designation for the subject parcel is Medium Density Residential, with a development program of 388 multi-family units. Currently, the project site is partially developed with 22 multi-family units.

Table 1 shows the trip generation comparison between existing and approved Future Land Use designations. Based on this comparison, the land use change is expected to result in a net increase of 1,176 daily trips and an increase of 107 PM peak hour trips in comparison to the currently approved land use.

Table 1 Trip Generation Comparison

Current FLUM

Land Use District	Quantity	ITE Code	Daily Trips	PM Peak Trips		
				Total	In	Out
Low Medium Density Residential	194 **d.u.**	220	1,299	124	81	43
Total Existing FLUM			**1,299**	**124**	**81**	**43**

Proposed FLUM

Land Use District	Units	ITE Code	Daily Trips	PM Peak Trips		
				Total	In	Out
Medium Density Residential	388 **d.u.**	220	2,475	231	150	81
Total Proposed FLUM			**2,475**	**231**	**150**	**81**

Net Change

Land Use District	Daily Trips	PM Peak Trips		
		Total	In	Out
Current	1,299	124	81	43
Proposed	2,475	231	150	81
TOTALS	**1,176**	**107**	**69**	**38**

Source: Institute of Transportation Engineers, Trip Generation, 9th Edition

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Project Significance and Analysis Area

Per Orange County requirements, the analysis area for the project is defined as all arterial and collector roadway segments within a minimum one mile radius, out to 3 percent significance. **Table 2** shows the significance calculation based on the net increase in trip generation presented in the previous section. An analysis of the following segments that fall within the one-mile radius and 3 percent significance area has been performed:

- Americana Boulevard from John Young Parkway to Orange Blossom Trail
- Chancellor Drive from Sand Lake Road to Orlando Central Parkway
- Chancellor Drive from Orlando Central Parkway to Oak Ridge Road
- Conroy Road from Millenia Boulevard to John Young Parkway
- John Young Parkway from Sand Lake Road to President's Drive
- John Young Parkway from President's Drive to Oak Ridge Road
- John Young Parkway from Oak Ridge Road to Americana Boulevard
- John Young Parkway from Americana Boulevard to Interstate 4
- Lake Ellenor Drive/S Rio Grande Avenue from Orlando Central Parkway to Oak Ridge Road
- Oak Ridge Road from Harcourt Avenue to John Young Parkway
- Oak Ridge Road from John Young Parkway to Orange Blossom Trail
- Oak Ridge Road from Orange Blossom Trail to Orange Avenue
- Orlando Central Parkway from Lake Ellenor Drive to Orange Blossom Trail
- Rio Grande Avenue from Oak Ridge Road to Americana Boulevard
- Texas Avenue from Chancellor Drive to Oak Ridge Road
- Texas Avenue from Oak Ridge Road to Americana Boulevard
- Texas Avenue from Americana Boulevard to Holden Avenue

Table 2 Project Traffic Significance Calculation

Roadway	Segment	Yr. 2040 No. of Lanes	LOS Standard	Yr. 2040 Adopted Capacity	Distribution	In or Out?	Peak Hour, Peak Direction Net Increase in Trips	% of Adopted Capacity	>3% Significance?	Within 1-mile?
Americana Boulevard	John Young Parkway to Orange Blossom Trail	4	E	1,700	4.55%	Out	2	0.1%	NO	YES
Chancellor Drive	Sand Lake Road to Orlando Central Parkway	2	E	800	3.17%	Out	1	0.1%	NO	YES
Chancellor Drive	Orlando Central Parkway to Oak Ridge Road	2	E	800	4.44%	In	3	0.4%	NO	YES
Conroy Road	Millenia Boulevard to John Young Parkway	4	E	1,700	4.28%	In	3	0.2%	NO	YES
John Young Parkway	Sand Lake Road to President's Drive	6	E	3,020	8.66%	In	6	0.2%	NO	YES
John Young Parkway	President's Drive to Oak Ridge Road	6	E	3,020	8.78%	In	6	0.2%	NO	YES
John Young Parkway	Oak Ridge Road to Americana Boulevard	6	E	3,020	3.01%	Out	1	0.0%	NO	YES
John Young Parkway	Americana Boulevard to Interstate 4	6	E	3,020	6.89%	Out	3	0.1%	NO	YES
Lake Ellenor Dr/S Rio Grande Ave	Orlando Central Parkway to Oak Ridge Road	4	E	1,700	13.04%	In	9	0.5%	NO	YES
Oak Ridge Road	Harcourt Ave to John Young Parkway	4	E	2,000	11.00%	Out	4	0.2%	NO	YES
Oak Ridge Road	John Young Parkway to Orange Blossom Trail	4	E	2,000	22.80%	In	16	0.8%	NO	YES
Oak Ridge Road	Orange Blossom Trail to Orange Ave	4	E	1,700	6.02%	Out	2	0.1%	NO	YES
Orlando Central Parkway	Lake Ellenor Drive to Orange Blossom Trail	4	E	1,700	10.59%	Out	4	0.2%	NO	YES
Rio Grande Ave	Oak Ridge Road to Americana Boulevard	2	E	800	0.15%	Out	0	0.0%	NO	YES
S Texas Ave	Chancellor Drive to Oak Ridge Road	4	E	1,700	14.44%	In	10	0.6%	NO	YES
S Texas Ave	Oak Ridge Road to Americana Boulevard	2	E	800	59.39%	In	41	5.1%	YES	YES
S Texas Ave	Americana Boulevard to Holden Avenue	4	E	1,700	27.70%	Out	11	0.6%	NO	YES

The adopted capacity is for PM peak hour, peak direction conditions.

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Existing Conditions Roadway Analysis

Table 3 presents the existing conditions analysis for daily conditions and **Table 4** shows the existing conditions analysis for the PM peak time period. The traffic counts were obtained from the most recent (year 2015) traffic count data published by Orange County. This analysis shows that all of these roadway segments currently meet Orange County's adopted Level of Service standards and have excess capacity in the daily and PM peak conditions.

Table 3 Daily Existing Conditions Analysis, Year 2015

Roadway	Segment	No. of Lanes	LOS Standard	Daily Capacity	2015 AADT	LOS	Meets Standard?
Americana Boulevard	John Young Parkway to Orange Blossom Trail	4	E	33,800	19,174	D	Yes
Chancellor Drive	Sand Lake Road to Orlando Central Parkway	2	E	15,600	7,123	C	Yes
Chancellor Drive	Orlando Central Parkway to Oak Ridge Road	2	E	15,600	5,870	C	Yes
Conroy Road	Millenia Boulevard to John Young Parkway	4	E	33,800	29,814	D	Yes
John Young Parkway	Sand Lake Road to President's Drive	6	E	59,900	45,030	C	Yes
John Young Parkway	President's Drive to Oak Ridge Road	6	E	59,900	50,758	C	Yes
John Young Parkway	Oak Ridge Road to Americana Boulevard	6	E	59,900	54,124	C	Yes
John Young Parkway	Americana Boulevard to Interstate 4	6	E	59,900	47,807	C	Yes
Lake Ellenor Dr/S Rio Grande Ave	Orlando Central Parkway to Oak Ridge Road	4	E	33,800	11,169	C	Yes
Oak Ridge Road	Harcourt Ave to John Young Parkway	4	E	39,800	33,185	C	Yes
Oak Ridge Road	John Young Parkway to Orange Blossom Trail	4	E	39,800	31,324	C	Yes
Oak Ridge Road	Orange Blossom Trail to Orange Ave	4	E	33,800	27,397	D	Yes
Orlando Central Parkway	Lake Ellenor Drive to Orange Blossom Trail	4	E	33,800	5,850	C	Yes
Rio Grande Ave	Oak Ridge Road to Americana Boulevard	2	E	15,600	8,946	D	Yes
S Texas Ave	Chancellor Drive to Oak Ridge Road	4	E	33,800	4,776	C	Yes
S Texas Ave	Oak Ridge Road to Americana Boulevard	2	E	15,600	10,530	D	Yes
S Texas Ave	Americana Boulevard to Holden Avenue	2	E	15,600	12,238	D	Yes

Table 4 PM Peak Existing Conditions Analysis, Year 2015

Roadway	Segment	No. of Lanes	LOS Standard	PHPD Capacity	2015 PHPD Volume	LOS	Meets Standard?
Americana Boulevard	John Young Parkway to Orange Blossom Trail	4	E	1,700	816	D	Yes
Chancellor Drive	Sand Lake Road to Orlando Central Parkway	2	E	800	327	C	Yes
Chancellor Drive	Orlando Central Parkway to Oak Ridge Road	2	E	800	523	D	Yes
Conroy Road	Millenia Boulevard to John Young Parkway	4	E	1,700	1,271	D	Yes
John Young Parkway	Sand Lake Road to President's Drive	6	E	3,020	1,780	C	Yes
John Young Parkway	President's Drive to Oak Ridge Road	6	E	3,020	2,029	C	Yes
John Young Parkway	Oak Ridge Road to Americana Boulevard	6	E	3,020	2,237	C	Yes
John Young Parkway	Americana Boulevard to Interstate 4	6	E	3,020	2,119	C	Yes
Lake Ellenor Dr/S Rio Grande Ave	Orlando Central Parkway to Oak Ridge Road	4	E	1,700	582	C	Yes
Oak Ridge Road	Harcourt Ave to John Young Parkway	4	E	2,000	1,379	C	Yes
Oak Ridge Road	John Young Parkway to Orange Blossom Trail	4	E	2,000	1,491	C	Yes
Oak Ridge Road	Orange Blossom Trail to Orange Ave	4	E	1,700	1,311	D	Yes
Orlando Central Parkway	Lake Ellenor Drive to Orange Blossom Trail	4	E	1,700	341	C	Yes
Rio Grande Ave	Oak Ridge Road to Americana Boulevard	2	E	800	549	D	Yes
S Texas Ave	Chancellor Drive to Oak Ridge Road	4	E	1,700	487	C	Yes
S Texas Ave	Oak Ridge Road to Americana Boulevard	2	E	800	583	D	Yes
S Texas Ave	Americana Boulevard to Holden Avenue	2	E	800	564	D	Yes

Sources:
Orange County Traffic Count Program (2015)
FDOT Quality/ Level of Service Handbook

5

Planned and Programmed Improvements

Programmed improvements are those with funding commitments within the next five years. According to the MetroPlan Orlando Transportation Improvement Program (TIP), the segment of Texas Avenue from Americana Boulevard to Holden Avenue is scheduled to be widened from two lanes to four lanes in 2018. The TIP is provided in Exhibit A.

Planned improvements are those that fall outside the five-year window but are identified in the MetroPlan Orlando Long Range Transportation Plan (LRTP). There are no roadway improvements identified for the segments within the analysis area.

6

Five Year Analysis

To estimate Year 2021 background roadway volumes for the analysis area, historical trends were developed based on historical data and used to project Year 2021 volumes. The growth rate calculations are shown in Exhibit B. The historical data was obtained from the Orange County traffic count database. The latest available volumes are from 2015. As can be seen in Exhibit B, many of the segments show negative annual growth rates. To provide for a conservative analysis, a minimum annual growth rate of 1.0% was used to forecast 2021 volumes.

The trips associated with the buildout of the project were added to the background volumes for each segment. The MetroPlan Orlando travel demand model was used to determine the project traffic distribution including the proposed development program. The project trips for each segment were calculated based on the model distributions. **Figure 2** shows the distribution of the project trips along the segments within the analysis area. The raw trip distribution can be found in Exhibit C.

Table 5 and **Table 6** summarize the roadway analysis completed for the five-year conditions for the daily and PM peak time periods, respectively. The five-year analysis shows that all of the roadways within the study area of influence are projected to operate within the acceptable Level of Service capacity standards in both the daily and PM peak hour conditions.

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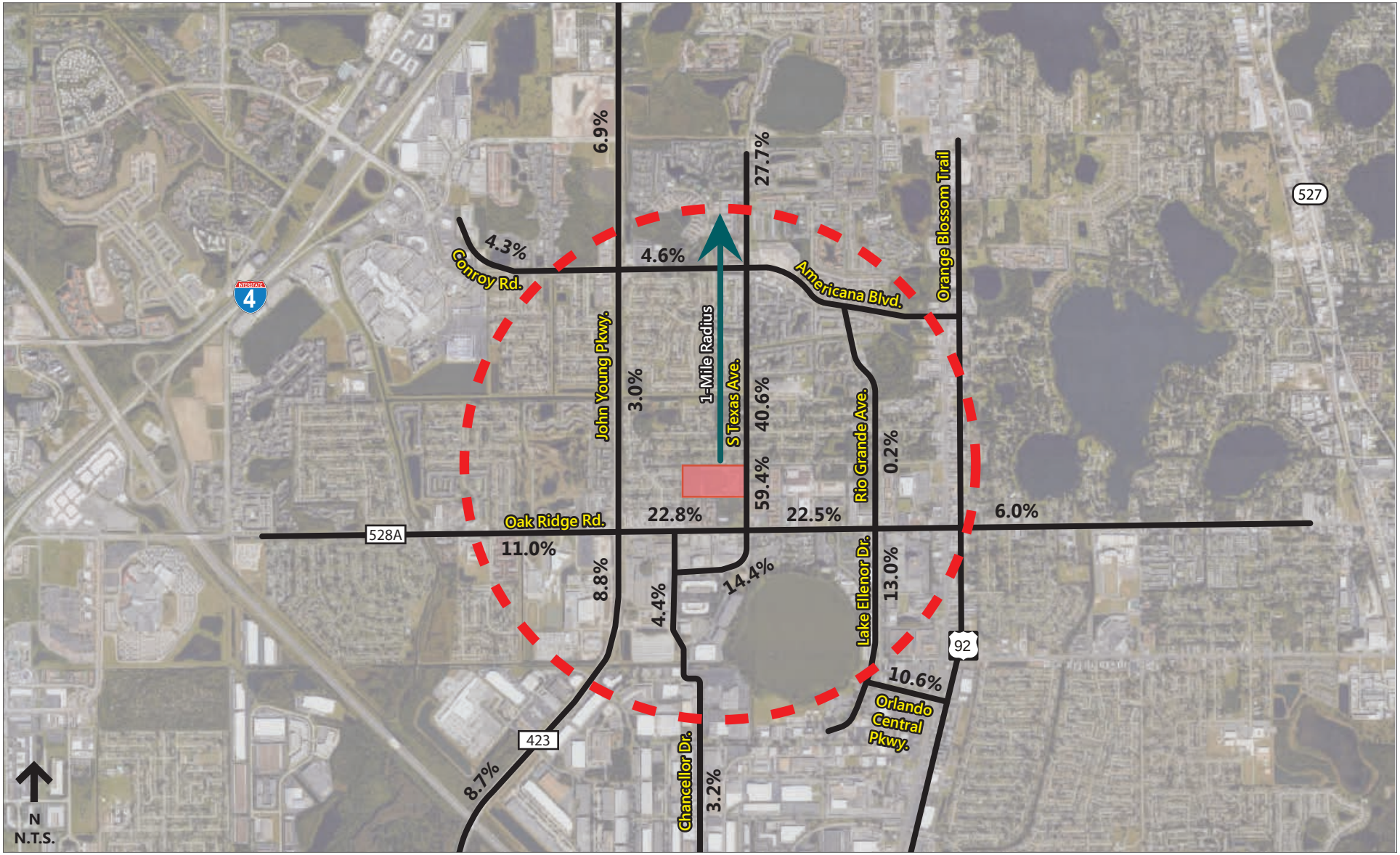

Project Location Radius

Project Area

Figure 2

Project Distribution Map

Table 5 Daily Five Year Conditions Analysis, Year 2021

Roadway	Segment	No. of Lanes	LOS Standard	Daily Capacity	2015 AADT	Background Growth Rate	2021 Background AADT	LOS without proj	Meets Standard without proj?	Distribution	2021 Daily Project Traffic	2021 Total AADT	LOS	Meets Standard?
Americana Boulevard	John Young Parkway to Orange Blossom Trail	4	E	33,800	19,174	1.00%	17,858	D	Yes	4.55%	54	17,912	D	Yes
Chancellor Drive	Sand Lake Road to Orlando Central Parkway	2	E	15,600	7,123	1.00%	6,705	C	Yes	3.17%	37	6,742	C	Yes
Chancellor Drive	Orlando Central Parkway to Oak Ridge Road	2	E	15,600	5,870	1.00%	4,593	C	Yes	4.44%	52	4,645	C	Yes
Conroy Road	Millenia Boulevard to John Young Parkway	4	E	33,800	29,814	1.00%	32,189	D	Yes	4.28%	50	32,239	D	Yes
John Young Parkway	Sand Lake Road to President's Drive	6	E	59,900	45,030	1.00%	44,010	C	Yes	8.66%	102	44,112	C	Yes
John Young Parkway	President's Drive to Oak Ridge Road	6	E	59,900	50,758	1.00%	51,622	C	Yes	8.78%	103	51,725	C	Yes
John Young Parkway	Oak Ridge Road to Americana Boulevard	6	E	59,900	54,124	1.00%	54,443	C	Yes	3.01%	35	54,478	C	Yes
John Young Parkway	Americana Boulevard to Interstate 4	6	E	59,900	47,807	1.10%	49,258	C	Yes	6.89%	81	49,339	C	Yes
Lake Ellenor Dr/S Rio Grande Ave	Orlando Central Parkway to Oak Ridge Road	4	E	33,800	11,169	1.00%	9,719	C	Yes	13.04%	153	9,872	C	Yes
Oak Ridge Road	Harcourt Ave to John Young Parkway	4	E	39,800	33,185	1.00%	31,602	C	Yes	11.00%	129	31,731	C	Yes
Oak Ridge Road	John Young Parkway to Orange Blossom Trail	4	E	39,800	31,324	1.00%	30,295	C	Yes	22.80%	268	30,563	C	Yes
Oak Ridge Road	Orange Blossom Trail to Orange Ave	4	E	33,800	27,397	1.00%	27,609	D	Yes	6.02%	71	27,680	D	Yes
Orlando Central Parkway	Lake Ellenor Drive to Orange Blossom Trail	4	E	33,800	5,850	2.49%	6,028	C	Yes	10.59%	125	6,153	C	Yes
Rio Grande Ave	Oak Ridge Road to Americana Boulevard	2	E	15,600	8,946	1.09%	7,915	D	Yes	0.15%	2	7,917	D	Yes
S Texas Ave	Chancellor Drive to Oak Ridge Road	4	E	33,800	4,776	1.00%	3,143	C	Yes	14.44%	170	3,313	C	Yes
S Texas Ave	Oak Ridge Road to Americana Boulevard	2	E	15,600	10,530	1.00%	9,783	D	Yes	59.39%	698	10,481	D	Yes
S Texas Ave	Americana Boulevard to Holden Avenue	4	E	33,800	12,238	1.00%	10,977	C	Yes	27.70%	326	11,303	C	Yes

Table 6 PM Peak Five Year Conditions Analysis, Year 2021

Roadway	Segment	No. of Lanes	LOS Standard	PHPD Capacity	2015 PHPD Volumes	Background Growth Rate	2021 PHPD Volume	LOS without proj	Meets Standard without proj?	Distribution	2021 PHPD Project Traffic	2021 Total PHPD Traffic	LOS	Meets Standard?
Americana Boulevard	John Young Parkway to Orange Blossom Trail	4	E	1,700	816	1.00%	865	D	Yes	4.55%	2	867	D	Yes
Chancellor Drive	Sand Lake Road to Orlando Central Parkway	2	E	800	327	1.00%	347	C	Yes	3.17%	1	348	C	Yes
Chancellor Drive	Orlando Central Parkway to Oak Ridge Road	2	E	800	523	1.00%	554	D	Yes	4.44%	3	557	D	Yes
Conroy Road	Millenia Boulevard to John Young Parkway	4	E	1,700	1,271	1.00%	1,347	D	Yes	4.28%	3	1,350	D	Yes
John Young Parkway	Sand Lake Road to President's Drive	6	E	3,020	1,780	1.00%	1,887	C	Yes	8.66%	6	1,893	C	Yes
John Young Parkway	President's Drive to Oak Ridge Road	6	E	3,020	2,029	1.00%	2,151	C	Yes	8.78%	6	2,157	C	Yes
John Young Parkway	Oak Ridge Road to Americana Boulevard	6	E	3,020	2,237	1.00%	2,371	C	Yes	3.01%	1	2,372	C	Yes
John Young Parkway	Americana Boulevard to Interstate 4	6	E	3,020	2,119	1.10%	2,259	C	Yes	6.89%	3	2,262	C	Yes
Lake Ellenor Dr/S Rio Grande Ave	Orlando Central Parkway to Oak Ridge Road	4	E	1,700	582	1.00%	617	C	Yes	13.04%	9	626	C	Yes
Oak Ridge Road	Harcourt Ave to John Young Parkway	4	E	2,000	1,379	1.00%	1,462	C	Yes	11.00%	4	1,466	C	Yes
Oak Ridge Road	John Young Parkway to Orange Blossom Trail	4	E	2,000	1,491	1.00%	1,580	C	Yes	22.80%	16	1,596	C	Yes
Oak Ridge Road	Orange Blossom Trail to Orange Ave	4	E	1,700	1,311	1.00%	1,390	D	Yes	6.02%	2	1,392	D	Yes
Orlando Central Parkway	Lake Ellenor Drive to Orange Blossom Trail	4	E	1,700	341	2.49%	392	C	Yes	10.59%	4	396	C	Yes
Rio Grande Ave	Oak Ridge Road to Americana Boulevard	2	E	800	549	1.09%	585	D	Yes	0.15%	0	585	D	Yes
S Texas Ave	Chancellor Drive to Oak Ridge Road	4	E	1,700	487	1.00%	516	C	Yes	14.44%	10	526	C	Yes
S Texas Ave	Oak Ridge Road to Americana Boulevard	2	E	800	583	1.00%	618	D	Yes	59.39%	41	659	D	Yes
S Texas Ave	Americana Boulevard to Holden Avenue	4	E	1,700	564	1.00%	598	C	Yes	27.70%	11	609	C	Yes

Sources:
Orange County Traffic Count Program (2015)
FDOT Quality/ Level of Service Handbook
MetroPlan Orlando TIP (2016-2021)

7

Year 2040 Analysis

Table 7 summarizes the roadway analysis completed for long-term (Year 2040) conditions assuming the proposed land use change for the daily condition. Year 2040 background volumes for the roadways within the study area of influence were obtained using the MetroPlan Orlando travel demand model and are provided in Exhibit D.

As shown in **Table 7**, the 2040 modeled volumes for the segments of Americana Boulevard, Conroy Road, and Oak Ridge Road between Harcourt Avenue and Orange Blossom Trail are lower than the forecasted 2021 volumes. It should also be noted that volumes along John Young Parkway are extremely high, not only for the year 2040, but also for the base year (2009) . This anomaly warranted a more detailed look at the model volumes for roadway segments in this study area. As a result, five methods were considered to calculate the 2040 AADTs:

- Method A uses the model output conversion factor (MOCF) for Orange County (0.98) to adjust the 2040 raw model volumes.
- Method B utilizes the "difference method," which adds the difference between the 2040 and 2009 raw model volumes times the MOCF to the 2009 observed AADTs (model base year). Exhibit D provides the raw model volumes and the resulting volumes using the difference method.
- Method C utilizes the "ratio method," which multiplies the ratio of the 2040 and 2009 raw model volumes by the 2009 observed volumes.
- Method D calculates the average of Methods B and C.
- Method E applies the historical growth rate used to calculate the 2021 volumes to project the 2040 volumes.

Table 7 shows which method was used for each segment to calculate the 2040 AADTs. The method chosen was selected in order to provide both a conservative and reasonable estimate. The total 2040 volumes are a combination of the background volumes and the project trips. The analysis shows that the following segment will exceed the acceptable Level of Service capacity standard in the daily condition:

- John Young Parkway from Oak Ridge Road to Americana Boulevard

It should be noted that this segment will experience a deficiency before the project traffic is added to the background volumes; therefore, this segment is anticipated to show operational deficiencies with or without the proposed land use change.

Table 8 summarizes the roadway analysis completed for the Year 2040 PM peak hour condition. The PM peak hour volumes were calculated by applying K- and D-factors to the 2040 AADT found in the daily condition analysis. A K-factor of 0.09 and a D-factor of 0.55 were assumed for all segments. The analysis shows that all of the roadway segments will operate within the acceptable Level of Service capacity standards in the PM peak hour condition.

Table 7 Daily Long-Term Conditions Analysis, Year 2040

Roadway	Segment	No. of Lanes	LOS Standard	Daily Capacity	2015 AADT	Background Growth Rate	2021 Background AADT	2040 RMV	Method					Method Used	2040 AADT	LOS without proj	Meets Standard without proj?	Distribution	2040 Daily Project Traffic	2040 Total AADT	LOS	Meets Standard?
									A RMV x MOCF	B Difference	C Ratio	D Average	E Growth Rate									
Americana Boulevard	John Young Parkway to Orange Blossom Trail	4	E	33,800	19,174	1.0%	17,858	15,746	15,431	20,239	20,607	20,423	21,090	D	20,423	D	Yes	5.73%	67	20,490	D	Yes
Chancellor Drive	Sand Lake Road to Orlando Central Parkway	2	E	15,600	7,123	1.0%	6,705	14,005	13,725	7,554	6,984	7,269	7,919	D	7,269	C	Yes	3.17%	37	7,306	D	Yes
Chancellor Drive	Orlando Central Parkway to Oak Ridge Road	2	E	15,600	5,870	1.0%	4,593	11,933	11,694	5,254	5,205	5,230	5,424	D	5,230	C	Yes	4.44%	52	5,282	C	Yes
Conroy Road	Millenia Boulevard to John Young Parkway	4	E	33,800	29,814	1.0%	32,189	32,434	31,785	32,296	32,396	32,346	38,013	D	32,346	D	Yes	5.14%	60	32,406	E	Yes
John Young Parkway	Sand Lake Road to President's Drive	6	E	59,900	45,030	1.0%	44,010	60,923	59,705	60,856	61,227	61,042	51,973	A	59,705	D	Yes	8.53%	100	59,805	D	Yes
John Young Parkway	President's Drive to Oak Ridge Road	6	E	59,900	50,758	1.0%	51,622	58,821	57,645	56,966	56,794	56,880	60,963	A	57,645	C	Yes	8.60%	101	57,746	C	Yes
John Young Parkway	Oak Ridge Road to Americana Boulevard	6	E	59,900	54,124	1.0%	54,443	61,770	60,535	58,895	58,586	58,741	64,294	A	60,535	F	No	2.20%	26	60,561	F	No
John Young Parkway	Americana Boulevard to Interstate 4	6	E	59,900	47,807	1.1%	49,258	60,189	58,985	43,449	42,698	43,074	59,028	A	58,985	D	Yes	0.77%	9	58,994	D	Yes
Lake Ellenor Dr/S Rio Grande Ave	Orlando Central Parkway to Oak Ridge Road	4	E	33,800	11,169	1.0%	9,719	15,330	15,023	10,939	10,416	10,678	11,477	A	15,023	D	Yes	13.20%	155	15,178	D	Yes
Oak Ridge Road	Harcourt Ave to John Young Parkway	4	E	39,800	33,185	1.0%	31,602	28,171	27,608	31,300	31,399	31,350	37,320	E	37,320	C	Yes	11.57%	136	37,456	C	Yes
Oak Ridge Road	John Young Parkway to Orange Blossom Trail	4	E	39,800	31,324	1.0%	30,295	25,696	25,182	31,456	31,999	31,728	35,776	E	35,776	C	Yes	22.37%	263	36,039	C	Yes
Oak Ridge Road	Orange Blossom Trail to Orange Ave	4	E	33,800	27,397	1.0%	27,609	28,822	28,246	34,820	37,506	36,163	32,605	E	32,605	E	Yes	6.46%	76	32,681	E	Yes
Orlando Central Parkway	Lake Ellenor Drive to Orange Blossom Trail	4	E	33,800	5,850	2.5%	6,028	12,192	11,948	4,102	3,642	3,872	8,563	A	11,948	C	Yes	10.35%	122	12,070	C	Yes
Rio Grande Ave	Oak Ridge Road to Americana Boulevard	2	E	15,600	8,946	1.1%	7,915	11,301	11,075	8,334	7,632	7,983	9,473	A	11,075	D	Yes	0.25%	3	11,078	D	Yes
S Texas Ave	Chancellor Drive to Oak Ridge Road	4	E	33,800	4,776	1.0%	3,143	7,933	7,774	4,883	4,389	4,636	3,711	A	7,774	C	Yes	13.86%	163	7,937	C	Yes
S Texas Ave	Oak Ridge Road to Americana Boulevard	2	E	15,600	10,530	1.0%	9,783	11,448	11,219	15,887	21,094	18,491	11,553	A	11,219	D	Yes	58.30%	686	11,905	D	Yes
S Texas Ave	Americana Boulevard to Holden Avenue	4	E	33,800	12,238	1.0%	10,977	16,522	16,192	16,739	17,068	16,904	12,963	A	16,192	D	Yes	26.59%	313	16,505	D	Yes

Table 8 PM Peak Long-Term Conditions Analysis, Year 2040

Roadway	Segment	No. of Lanes	LOS Standard	PHPD Capacity	2015 PHPD Volumes	2040 AADT Used	Assumed K-Factor	Assumed D-Factor	2040 PHPD Volume	LOS without proj	Meets Standard without proj?	Distribution	2040 PHPD Traffic	2040 Total PHPD Traffic	LOS	Meets Standard?
Americana Boulevard	John Young Parkway to Orange Blossom Trail	4	E	1,700	816	20,423	0.09	0.55	1,011	D	Yes	5.73%	2	1,013	D	Yes
Chancellor Drive	Sand Lake Road to Orlando Central Parkway	2	E	800	327	7,269	0.09	0.55	360	C	Yes	3.17%	1	361	C	Yes
Chancellor Drive	Orlando Central Parkway to Oak Ridge Road	2	E	800	523	5,230	0.09	0.55	259	C	Yes	4.44%	3	262	C	Yes
Conroy Road	Millenia Boulevard to John Young Parkway	4	E	1,700	1,271	32,346	0.09	0.55	1,601	D	Yes	5.14%	3	1,604	D	Yes
John Young Parkway	Sand Lake Road to President's Drive	6	E	3,020	1,780	59,705	0.09	0.55	2,955	D	Yes	8.53%	6	2,961	D	Yes
John Young Parkway	President's Drive to Oak Ridge Road	6	E	3,020	2,029	57,645	0.09	0.55	2,853	C	Yes	8.60%	6	2,859	C	Yes
John Young Parkway	Oak Ridge Road to Americana Boulevard	6	E	3,020	2,237	60,535	0.09	0.55	2,996	D	Yes	2.20%	1	2,997	D	Yes
John Young Parkway	Americana Boulevard to Interstate 4	6	E	3,020	2,119	58,985	0.09	0.55	2,920	C	Yes	0.77%	3	2,923	C	Yes
Lake Ellenor Dr/S Rio Grande Ave	Orlando Central Parkway to Oak Ridge Road	4	E	1,700	582	15,023	0.09	0.55	744	D	Yes	13.20%	9	753	D	Yes
Oak Ridge Road	Harcourt Ave to John Young Parkway	4	E	2,000	1,379	37,320	0.09	0.55	1,847	C	Yes	11.57%	4	1,851	C	Yes
Oak Ridge Road	John Young Parkway to Orange Blossom Trail	4	E	2,000	1,491	35,776	0.09	0.55	1,771	C	Yes	22.37%	16	1,787	C	Yes
Oak Ridge Road	Orange Blossom Trail to Orange Ave	4	E	1,700	1,311	32,605	0.09	0.55	1,614	D	Yes	6.46%	2	1,616	D	Yes
Orlando Central Parkway	Lake Ellenor Drive to Orange Blossom Trail	4	E	1,700	341	11,948	0.09	0.55	591	C	Yes	10.35%	4	595	C	Yes
Rio Grande Ave	Oak Ridge Road to Americana Boulevard	2	E	800	549	11,075	0.09	0.55	548	D	Yes	0.25%	0	548	D	Yes
S Texas Ave	Chancellor Drive to Oak Ridge Road	4	E	1,700	487	7,774	0.09	0.55	385	C	Yes	13.86%	10	395	C	Yes
S Texas Ave	Oak Ridge Road to Americana Boulevard	2	E	800	583	11,219	0.09	0.55	555	D	Yes	58.30%	41	596	D	Yes
S Texas Ave	Americana Boulevard to Holden Avenue	4	E	1,700	564	16,192	0.09	0.55	801	D	Yes	26.59%	11	812	D	Yes

Sources:
OUATS Model
FDOT Quality/ Level of Service Handbook
MetroPlan Orlando 2040 LRTP

8

Alternative Mobility Analysis

Sidewalks and Pedestrian Facilities

The site is located in a relatively mixed-use area. The northern half of the area (bounded on the south by Oak Ridge Road) is largely residential with a mix of single and multi-family development. There is some retail located along Conroy Road/Americana Boulevard. South of Oak Ridge Road is largely industrial with some retail located along Oak Ridge Road and Orange Blossom Trail.

A survey of the pedestrian facilities within a quarter-mile radius was conducted using aerial photography to assess the infrastructure available to pedestrians. Texas Avenue and Oak Ridge Road have sidewalks on both sides of the road and the local streets within the area, with the exception of Wakulla Way, have sidewalks on at least one side of the roadway. Both Texas Avenue and Oak Ridge Road have sidewalks and marked crosswalks at major intersections. Additional mid-block crossings are provided along Oak Ridge Road near Chancellor Drive and Oak Hill Manor Drive. **Figure 3** illustrates the pedestrian facilities within the quarter-mile pedestrian study area.

Bicycle Facilities

A survey of the bicycle facilities within a one-mile radius of the project site was conducted Despite the prevalence of sidewalks throughout the study area, the bicycle facilities are sparse. Conroy Road and John Young Parkway have bike lanes and the travel speed of motorized vehicles along John Young Parkway could act as a deterrent to inexperienced cyclists. A review of the MetroPlan Orlando TIP shows no planned bicycle improvements for the study area. **Figure 4** shows the location of bicycle facilities within the study area.

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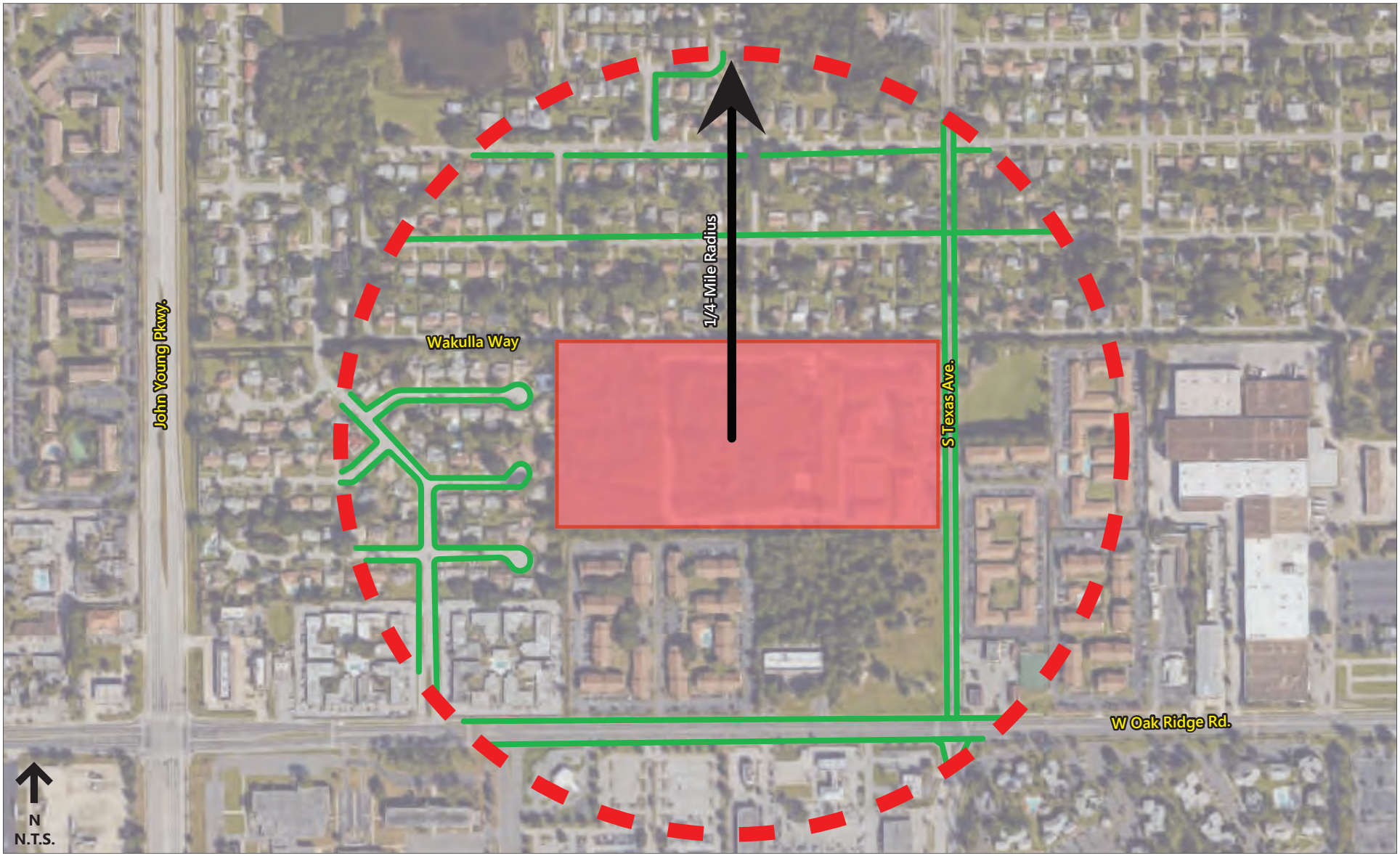

Project Location Radius

Project Area

Pedestrian Facilities

Figure 3

Pedestrian Facilities

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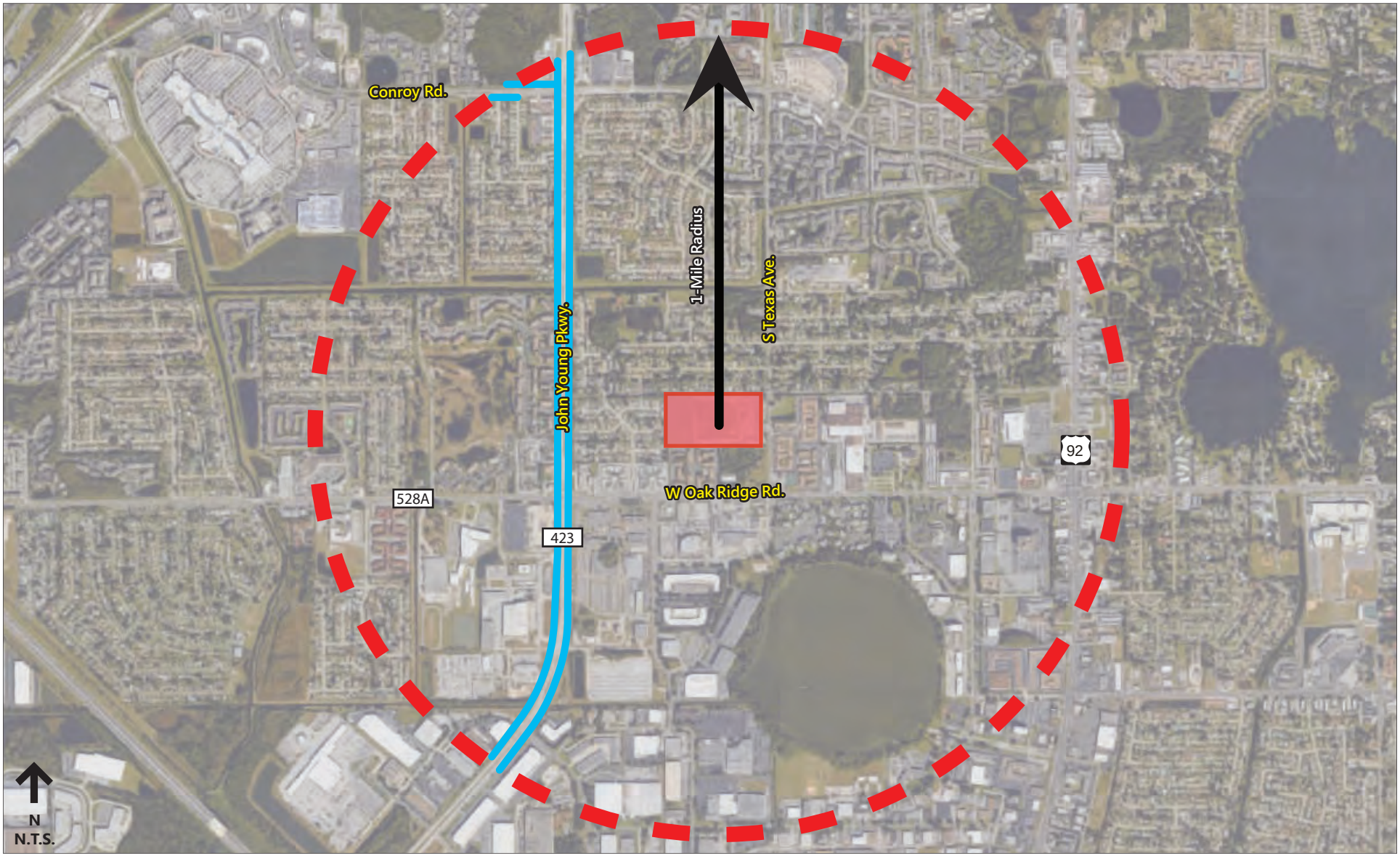

Project Location Radius

Project Area

Bicycle Facilities

Figure 4

Bicycle Facilities

Transit Facilities

LYNX provides regional bus services throughout Central Florida including express buses, regional buses, local circulators, and other specialized services. The fixed routes and facilities serving the project area were inventoried and a review of the LYNX System Map shows seven routes serving the area. **Table 9** shows a summary of these routes and the service frequency and span of service for each route.

The nearest bus stop serving the project site is along Oak Ridge Road, east of Texas Avenue. The eastbound stop is equipped with a concreate landing pad, a pole sign and a bench. The westbound stop is equipped with a shelter and bench. Along Oak Ridge Road west of Texas Avenue, both the eastbound and westbound stops have benches and small shelter coverings. **Figure 5** shows the bus stops located within one mile of the project site.

Table 9 Study Area LYNX Route Summary

Route	Route Description	Service Frequency	Span of Service
8	W Oak Ridge/I-Drive	Weekday Peak: 15 Min Weekend/Weekday Off-Peak: 30 Min Late Night: 60 Min	Weekdays: 5:01a - 2:43a Weekends: 5:21a - 12:50a Sunday/Holiday: 5:20a - 9:31p
40	Americana Blvd./ Universal Orlando	60 Min	Weekdays: 4:34a - 12:46a Saturdays: 4:21a - 1:10a Sunday/Holiday: 5:14a - 8:09p
42	I-Drive/ Orlando Int'l Airport	Weekday/Saturday: 30 Min Sunday/Holiday: 60 Min	Weekdays: 5:01a - 12:01a Saturdays: 5:02a - 11:52p Sunday/Holiday: 5:34a - 10:27p
57	John Young Parkway	Weekday/Saturday: 60 Min	Weekdays: 5:40a - 8:40p Saturdays: 5:30a - 8:30p
107	Florida Mall/ Downtown Orlando	Weekday Peak: 15 Min Weekend/Weekday Off-Peak: 30 Min Late Night: 60 Min	Weekdays: 4:27a - 1:56a Weekends: 4:55a - 10:56p Sunday/Holiday: 4:55a - 9:56p
304	Rio Grand/ Vistana Resort	Limited Service Express Route: 1 SB + 2 NB Buses Daily	6:16a, 2:25p, & 6:08p
305	Kirkman Rd/ Disney Springs Direct	Limited Service Express Route: 1 SB + 2 NB Buses Daily	6:16a, 2:25p, & 6:08p

Source: LYNX Posted Timetables

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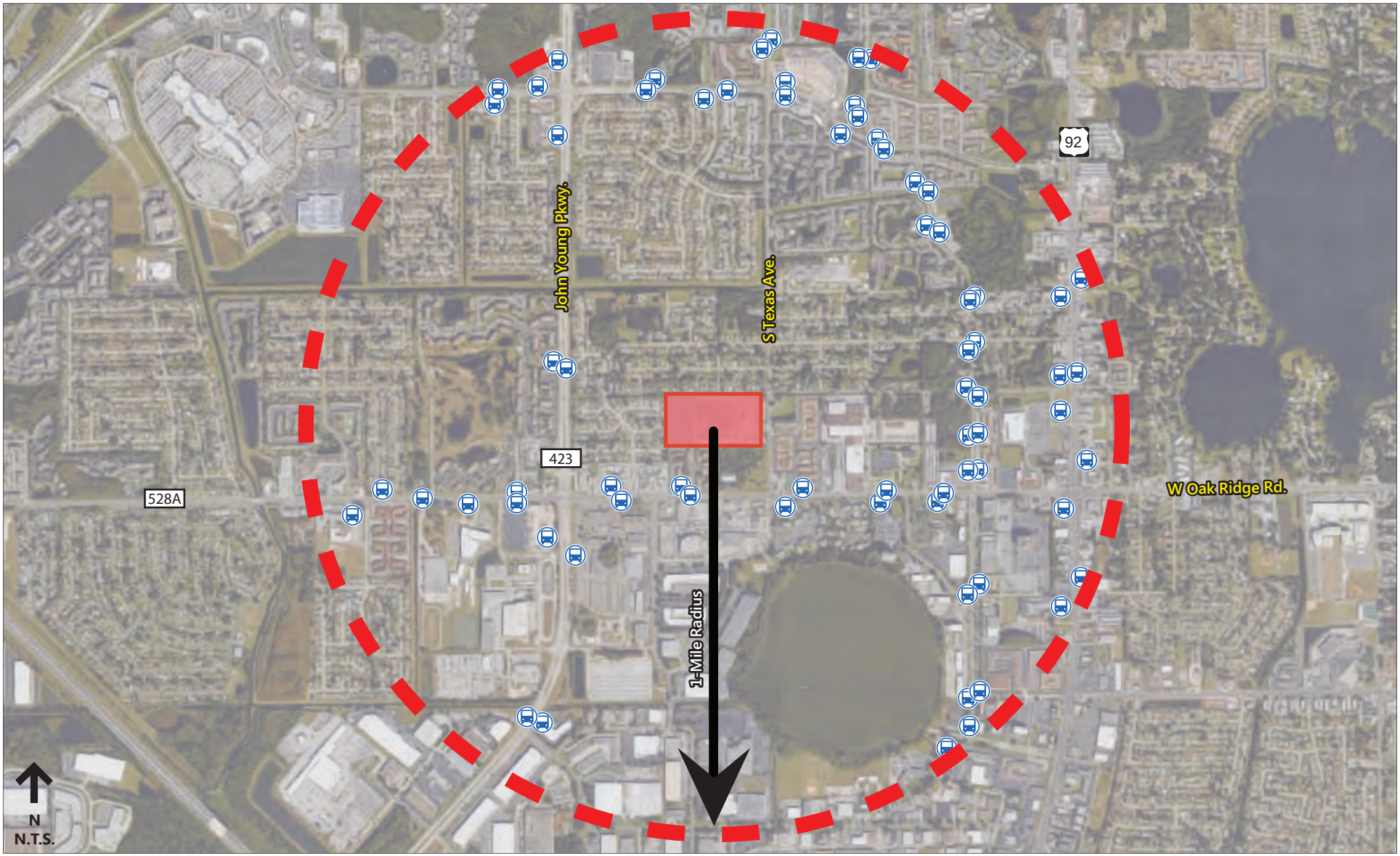


Project Location Radius

Project Area

Transit Facilities

Figure 5

Transit Facilities

9

Conclusions and Recommendations

A transportation analysis was completed for existing conditions, five-year conditions (Year 2021), and Year 2040 conditions. The analysis also assessed pedestrian and bicycle facilities, transit services and other transportation options. The conclusions of this analysis are as follows:

- The proposed land use change will result in a net increase of 1,176 daily trips and an increase of 107 PM peak hour trips in comparison to the currently approved land use.
- The existing conditions analysis shows that all of the roadways within the study area of influence operate within the acceptable Level of Service capacity standards and have excess capacity in both the daily condition and the PM peak hour condition.
- The five-year analysis shows that all of the roadways within the study area of influence are projected to operate within the acceptable Level of Service capacity standards in both the daily and PM peak hour conditions.
- The Year 2040 analysis shows that John Young Parkway between Oak Ridge Road and Americana Boulevard is projected to exceed the Level of Service capacity standards in the daily condition. This deficiency occurs before the project traffic is added; therefore, this is a background deficiency that will be present with or without the proposed land use change. All other roadways within the study area are projected to operate within the acceptable Level of Service capacity standards in both the daily and PM peak hour conditions.
- The area is well served by public sidewalks. The proposed development will connect to the existing sidewalks along Texas Avenue.
- There are dedicated bike lanes available along John Young Parkway and Conroy Road.
- There are seven fixed routes serving the project area. The bus stops along Oak Ridge Road closest to the project site are equipped with concrete landing pads, benches and/or shelters.

Technical Exhibits

A.MetroPlan Orlando Transportation Improvement Program (TIP)

FY 2016/17 - 2020/21

Orlando Urban Area

Transportation Improvement Program

metroplan orlando

A REGIONAL TRANSPORTATION PARTNERSHIP

Adopted July 13, 2016

MetroPlan Orlando
Transportation Improvement Program
Locally Funded Highway Projects
Orange County

Project Number	Project Name or Designation	Project Description: From	To	Length (Miles)	Work Description	2040 LRTP Reference	Historic Cost Prior to 2016/17 ($000's)	2015/16-2019/20 Project Status and Cost ($000's): 2016/17	2017/18	2018/19	2019/20	2020/21	Funding Sources	Project Phases	Estimated Future Cost After 2020/21 ($000's)	Total Project Cost ($000's)	Responsible Agency
75090	Lake Underhill Rd.	Econlockhatchee Trail	Rouse Rd.	1.50	Widen to 4 Lanes	Tech. Rep. 3 page 31		1,140	4,400	0	0	0	Invest	ROW			Orange Co.
								0	0	8,760	4,380	8,000	Invest	CST			
							0	**1,140**	**4,400**	**8,760**	**4,380**	**8,000**	**Total**		**0**	**26,680**	
75091	Reams Rd.	Summerlake Park Blvd.	Taborfield Ave.	3.10	Widen to 4 Lanes	Tech. Rep. 3 page 32		1,500	1,500	0	0	0	Invest	PE			Orange Co.
								0	0	2,290	8,550	3,550	Invest	ROW			
							0	**1,500**	**1,500**	**2,290**	**8,850**	**3,550**	**Total**		**0**	**17,690**	
75092	Reams Rd.	Delmar Ave.	Taborfield Ave.		Widen to 4 Lanes	Tech. Rep. 3 page 32		2,150	400	100	0	0	Paygo	CST			Orange Co.
							715	**2,150**	**400**	**100**	**0**	0	**Total**		**0**	**3,365**	
75071	Richard T. Crotty Pkwy. (formerly East-West Rd.)	SR 436	Dean Rd.	5.07	New 4-Lane Road	Tech. Rep. 3 page 34		3,261	500	0	0	0	TIF	ROW			Orange Co.
								1,864	4,300	7,181	300	6,000	TIF	CST			
							11,984	**5,125**	**4,800**	**2,500**	**300**	**6,000**	**Total**		**44,320**	**75,029**	
75024	Taft-Vineland Rd.	Orange Blossom Tr.	Orange Ave.	2.00	Widen to 4 Lanes	Tech. Rep. 3 page 32		3,100	5,643	2,600	0	0	TIF	PE/ROW			Orange Co.
								0	300	800	2,600	2,353	TIF	CST			
							1,276	**3,100**	**5,943**	**2,600**	**2,600**	**2,353**	**Total**		**27,600**	**45,472**	
75093	Texas Ave.	Americana Blvd.	Holden Ave.	0.50	Widen to 4 Lanes	Tech. Rep. 3 page 34		710	3,347	0	0	0	Invest	ROW			Orange Co.
								0	0	4,093	2,047	3,000	TIF	CST			
							0	**710**	**3,347**	**4,093**	**2,047**	**3,000**	**Total**		**0**	**13,197**	
75074	Caneel Bay Blvd.	Crosston Cr.	Orange/Osceola Co. Line	0.27	New 2-Lane Road	Tech. Rep. 3 page 6		①	①	①	①	①	DRI	CST			Orange Co.
							①	①	①	①	①	①	**Total**		①	①	

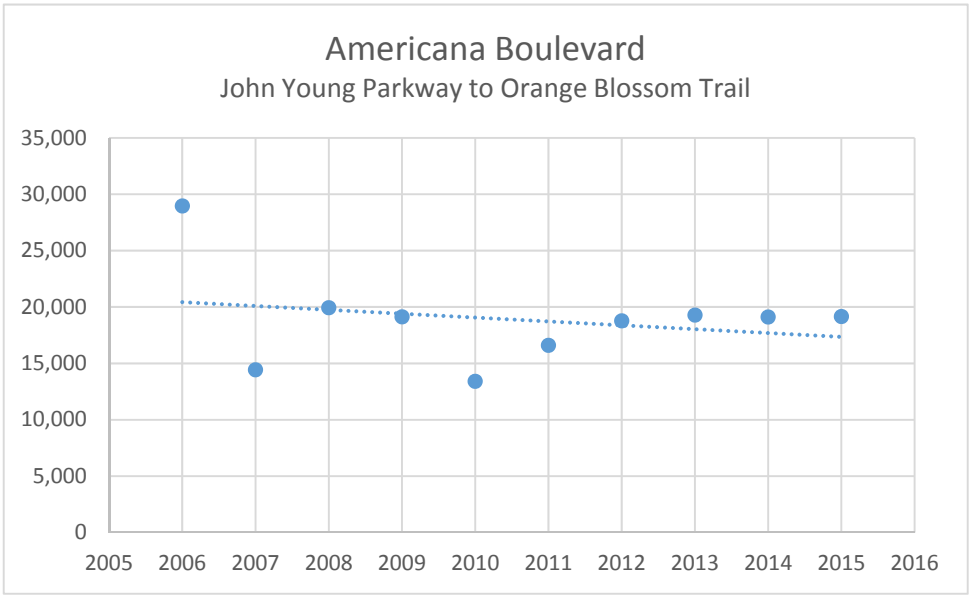
① The Caneel Bay Blvd. project is being funded by a developer under a Development of Regional Impact (DRI). The funding amounts are not included in Orange County's Capital Improvement Program.

A - 2

B. Historical Growth Rate Calculations

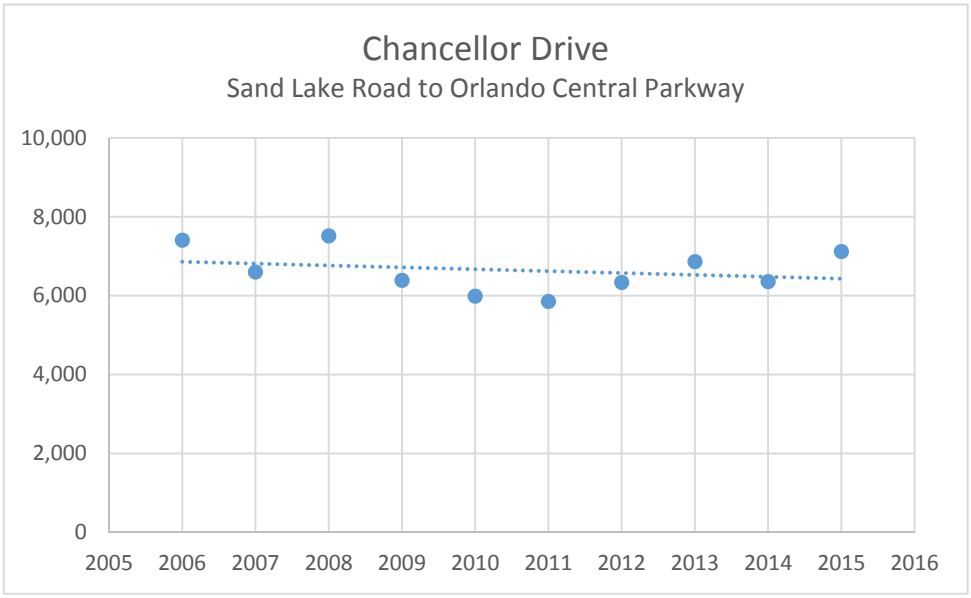
Roadway: Americana Boulevard
Segment: John Young Parkway to Orange Blossom Trail

Year	AADT	Annual Percentage Change	Regression Equation Prediction
2006	28,983		
2007	14,442	-50.17%	
2008	19,944	38.10%	
2009	19,139	-4.04%	
2010	13,417	-29.90%	
2011	16,614	23.83%	
2012	18,784	13.06%	
2013	19,298	2.74%	
2014	19,134	-0.85%	
2015	19,174	0.21%	
2016			17,008
2021			15,295
Observed Average Annual Growth Rate:			-2.01%
Growth Rate Used in Study:			1.00%



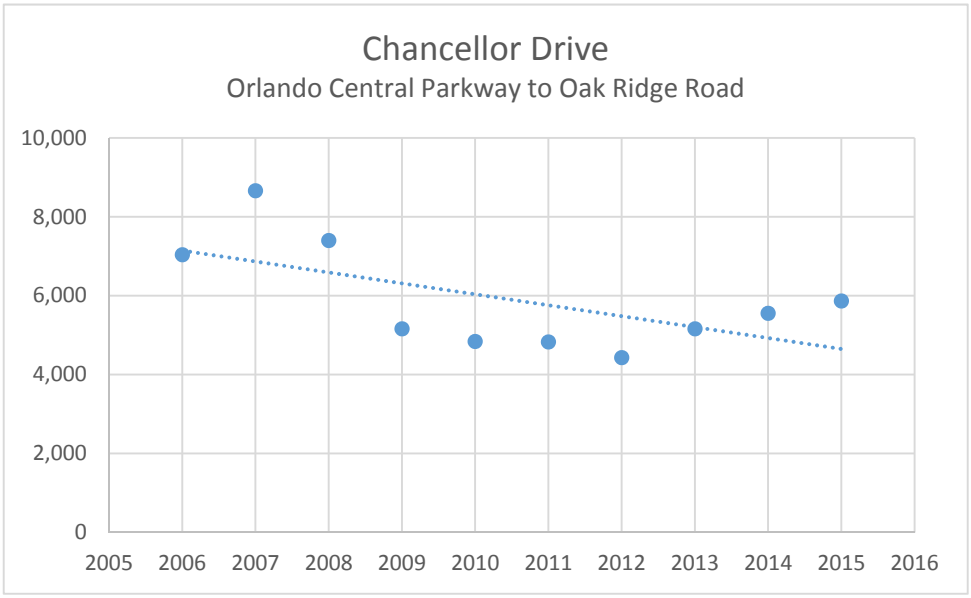
Roadway: Chancellor Drive
Segment: Sand Lake Road to Orlando Central Parkway

Year	AADT	Annual Percentage Change	Regression Equation Prediction
2006	7,412		
2007	6,605	-10.89%	
2008	7,521	13.87%	
2009	6,394	-14.98%	
2010	5,994	-6.26%	
2011	5,857	-2.29%	
2012	6,341	8.26%	
2013	6,869	8.33%	
2014	6,361	-7.40%	
2015	7,123	11.98%	
2016			6,386
2021			6,147
Observed Average Annual Growth Rate:			-0.75%
Growth Rate Used in Study:			1.00%



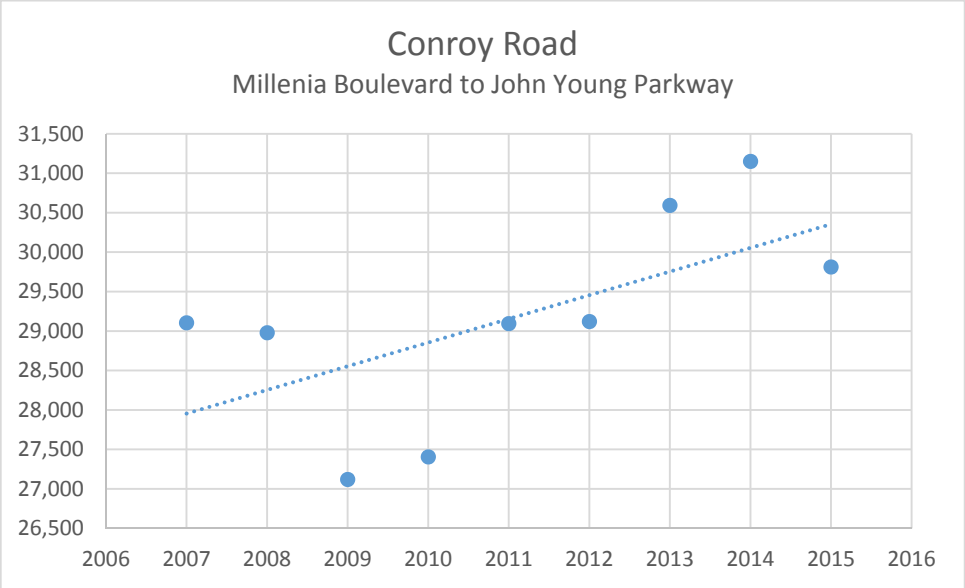
Roadway: Chancellor Drive
Segment: Orlando Central Parkway to Oak Ridge Road

Year	AADT	Annual Percentage Change	Regression Equation Prediction
2006	7,044		
2007	8,666	23.03%	
2008	7,404	-14.56%	
2009	5,165	-30.24%	
2010	4,843	-6.23%	
2011	4,833	-0.21%	
2012	4,433	-8.28%	
2013	5,166	16.54%	
2014	5,558	7.59%	
2015	5,870	5.61%	
2016			4,374
2021			2,989
Observed Average Annual Growth Rate:			-6.33%
Growth Rate Used in Study:			1.00%



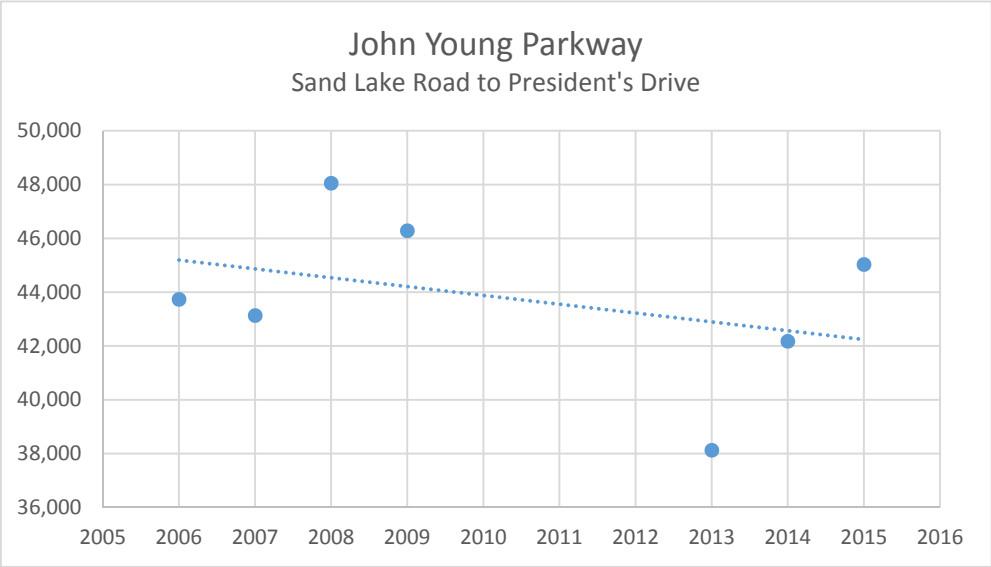
Roadway: Conroy Road
Segment: Millenia Boulevard to John Young Parkway

Year	AADT	Annual Percentage Change	Regression Equation Prediction
2007	29,106		
2008	28,982	-0.43%	
2009	27,121	-6.42%	
2010	27,408	1.06%	
2011	29,097	6.16%	
2012	29,122	0.09%	
2013	30,595	5.06%	
2014	31,152	1.82%	
2015	29,814	-4.30%	
2016			30,656
2021			32,156
Observed Average Annual Growth Rate:			0.98%
Growth Rate Used in Study:			1.00%



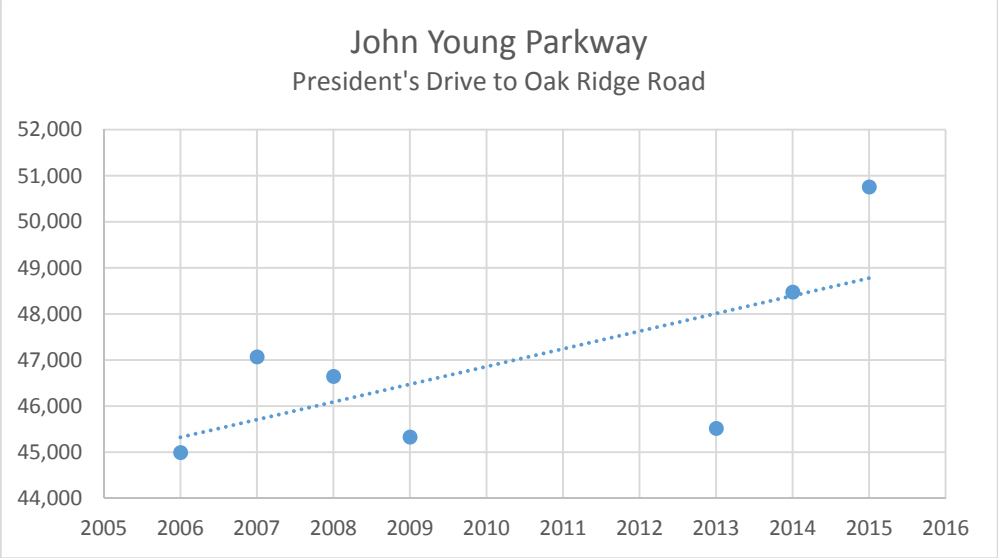
Roadway: John Young Parkway
Segment: Sand Lake Road to President's Drive

Year	AADT	Annual Percentage Change	Regression Equation Prediction
2006	43,731		
2007	43,131	-1.37%	
2008	48,052	11.41%	
2009	46,283	-3.68%	
2013	38,124	-17.63%	
2014	42,173	10.62%	
2015	45,030	6.77%	
2016			41,914
2021			40,273
Observed Average Annual Growth Rate:			-0.78%
Growth Rate Used in Study:			1.00%



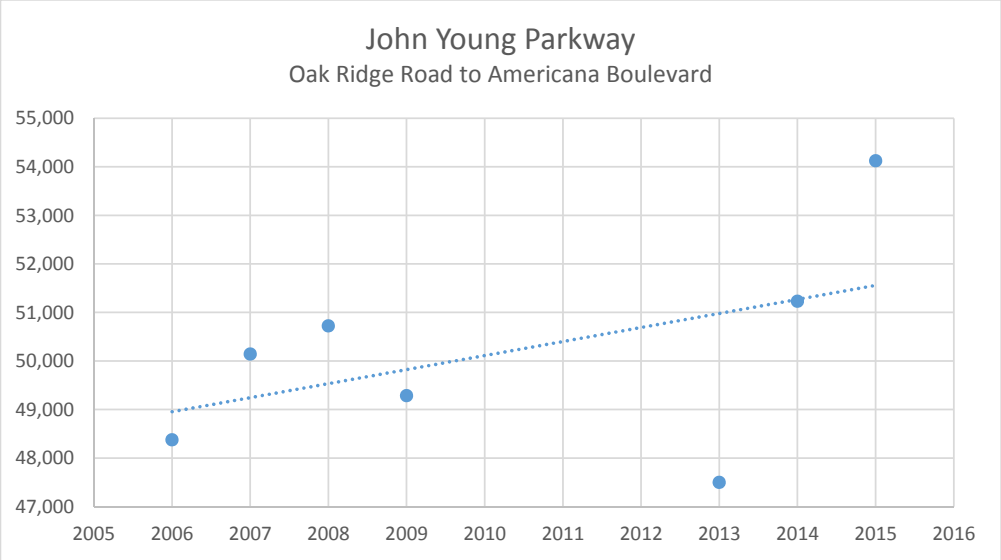
Roadway: John Young Parkway
Segment: President's Drive to Oak Ridge Road

Year	AADT	Annual Percentage Change	Regression Equation Prediction
2006	44,993		
2007	47,070	4.62%	
2008	46,644	-0.91%	
2009	45,330	-2.82%	
2013	45,516	0.41%	
2014	48,475	6.50%	
2015	50,758	4.71%	
2016			49,164
2021			51,084
Observed Average Annual Growth Rate:			0.78%
Growth Rate Used in Study:			1.00%



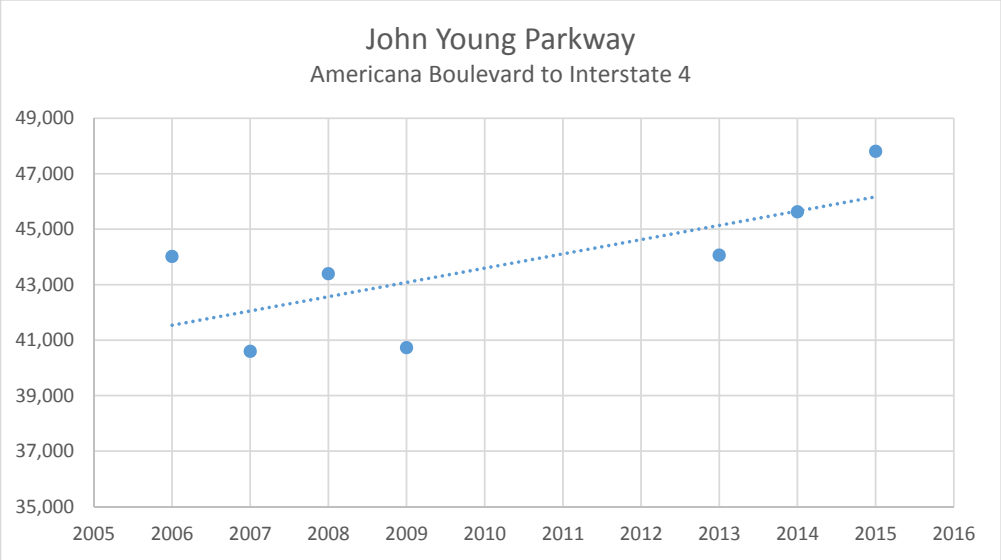
Roadway: John Young Parkway
Segment: Oak Ridge Road to Americana Boulevard

Year	AADT	Annual Percentage Change	Regression Equation Prediction
2006	48,377		
2007	50,143	3.65%	
2008	50,722	1.15%	
2009	49,286	-2.83%	
2013	47,499	-3.63%	
2014	51,229	7.85%	
2015	54,124	5.65%	
2016			51,850
2021			53,296
Observed Average Annual Growth Rate:			0.56%
Growth Rate Used in Study:			1.00%



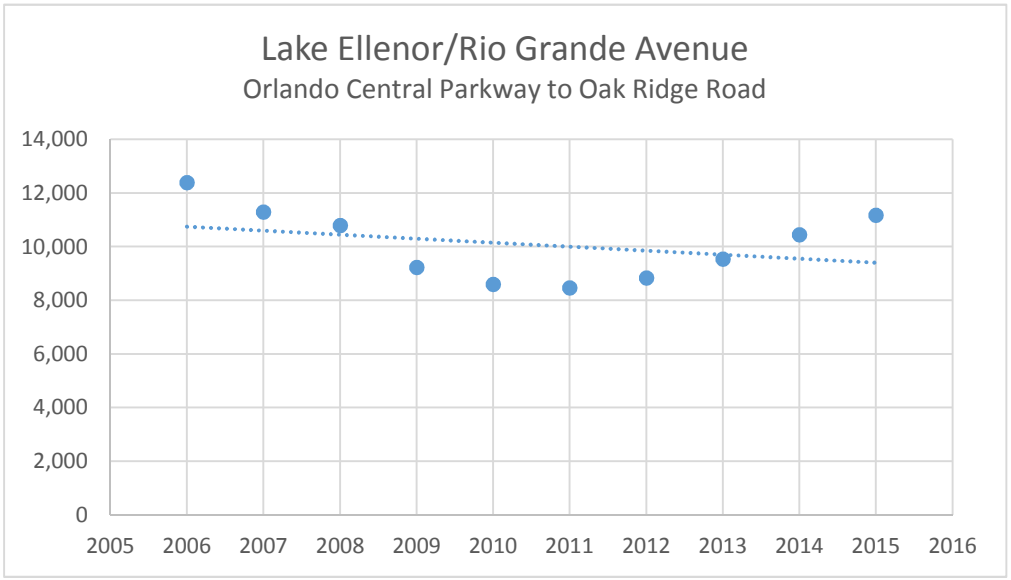
Roadway: John Young Parkway
Segment: Americana Boulevard to Interstate 4

Year	AADT	Annual Percentage Change	Regression Equation Prediction
2006	44,018		
2007	40,599	-7.77%	
2008	43,395	6.89%	
2009	40,732	-6.14%	
2013	44,062	8.18%	
2014	45,628	3.55%	
2015	47,807	4.78%	
2016			46,687
2021			49,258
Observed Average Annual Growth Rate:			1.10%
Growth Rate Used in Study:			1.10%



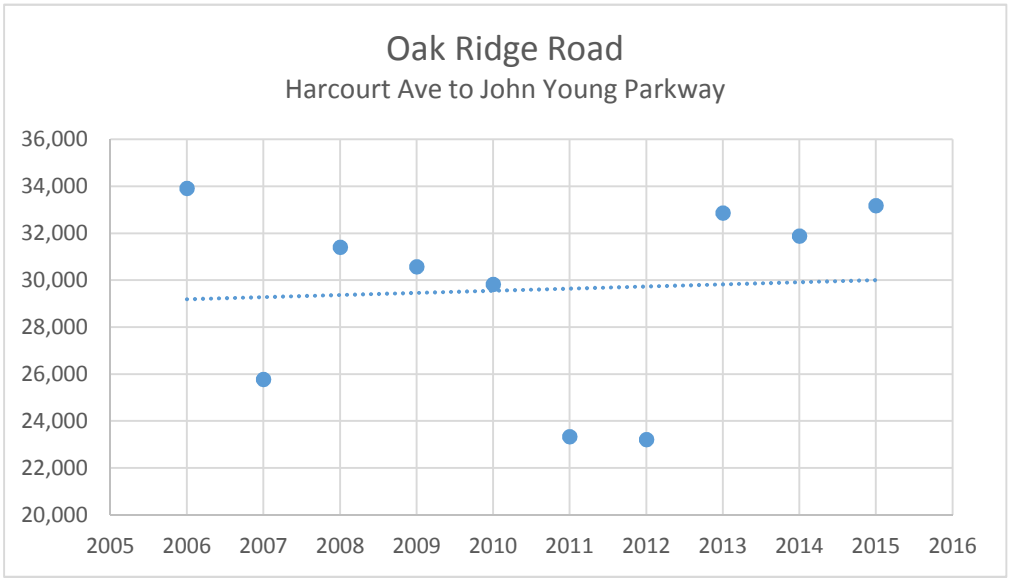
Roadway: Lake Ellenor/Rio Grande Avenue
Segment: Orlando Central Parkway to Oak Ridge Road

Year	AADT	Annual Percentage Change	Regression Equation Prediction
2006	12,393		
2007	11,297	-8.84%	
2008	10,791	-4.48%	
2009	9,234	-14.43%	
2010	8,601	-6.86%	
2011	8,470	-1.52%	
2012	8,836	4.32%	
2013	9,534	7.90%	
2014	10,442	9.52%	
2015	11,169	6.96%	
2016			9,256
2021			8,511
Observed Average Annual Growth Rate:			-1.61%
Growth Rate Used in Study:			1.00%



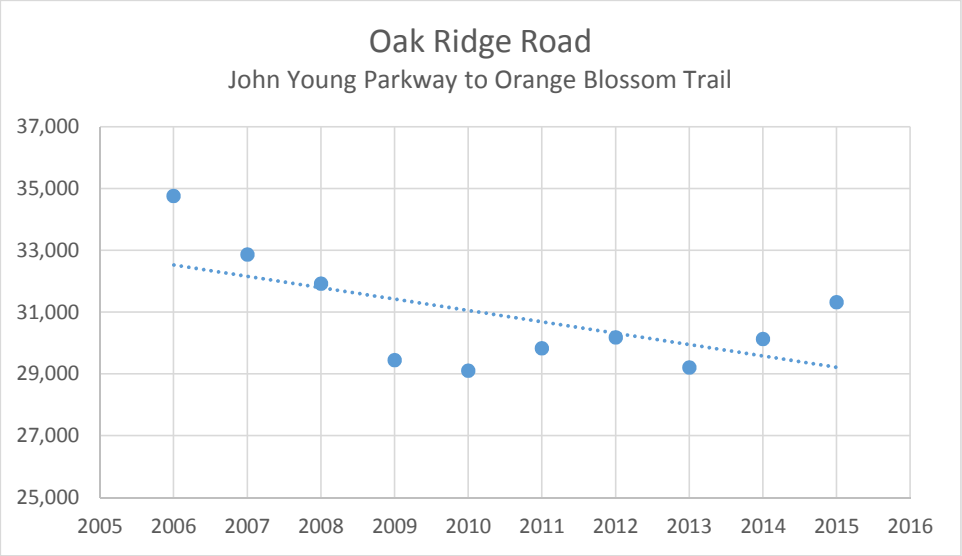
Roadway: Oak Ridge Road
Segment: Harcourt Ave to John Young Parkway

Year	AADT	Annual Percentage Change	Regression Equation Prediction
2006	33,915		
2007	25,772	-24.01%	
2008	31,402	21.85%	
2009	30,582	-2.61%	
2010	29,832	-2.45%	
2011	23,335	-21.78%	
2012	23,210	-0.54%	
2013	32,869	41.62%	
2014	31,886	-2.99%	
2015	33,185	4.07%	
2016			30,097
2021			30,550
Observed Average Annual Growth Rate:			0.30%
Growth Rate Used in Study:			1.00%



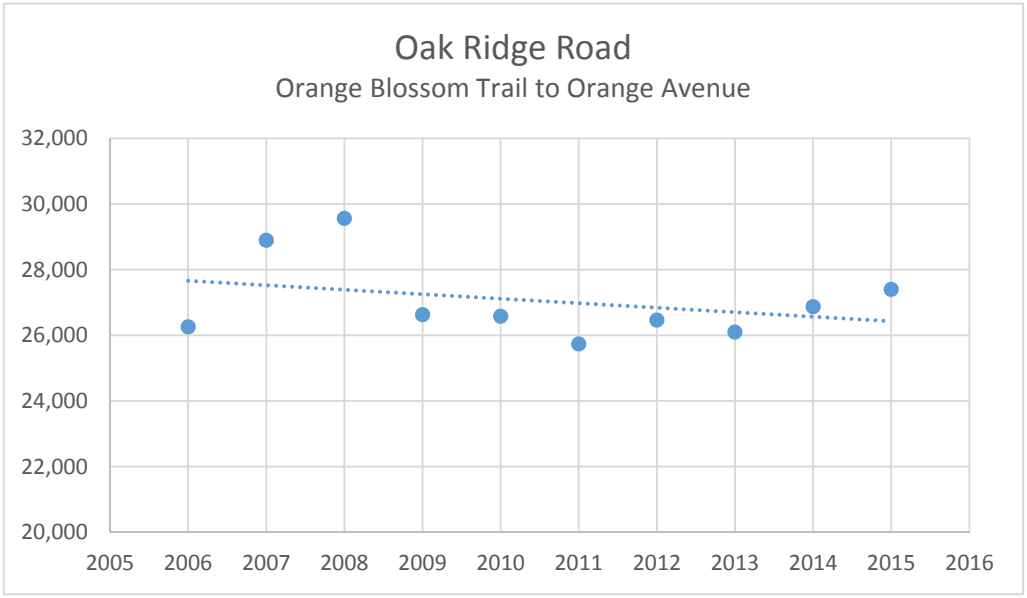
Roadway: Oak Ridge Road
Segment: John Young Parkway to Orange Blossom Trail

Year	AADT	Annual Percentage Change	Regression Equation Prediction
2006	34,757		
2007	32,864	-5.45%	
2008	31,924	-2.86%	
2009	29,450	-7.75%	
2010	29,104	-1.17%	
2011	29,832	2.50%	
2012	30,179	1.16%	
2013	29,206	-3.22%	
2014	30,125	3.15%	
2015	31,324	3.98%	
2016			28,852
2021			27,011
Observed Average Annual Growth Rate:			-1.28%
Growth Rate Used in Study:			1.00%



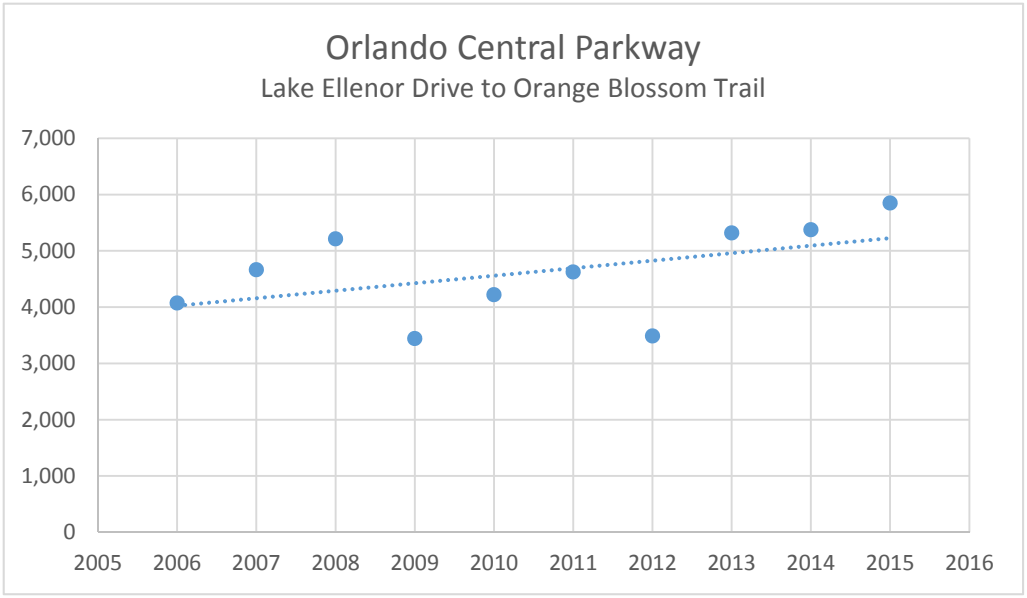
Roadway: Oak Ridge Road
Segment: Orange Blossom Trail to Orange Avenue

Year	AADT	Annual Percentage Change	Regression Equation Prediction
2006	26,256		
2007	28,894	10.05%	
2008	29,563	2.32%	
2009	26,626	-9.93%	
2010	26,579	-0.18%	
2011	25,734	-3.18%	
2012	26,461	2.83%	
2013	26,093	-1.39%	
2014	26,869	2.97%	
2015	27,397	1.97%	
2016			26,294
2021			25,609
Observed Average Annual Growth Rate:			-0.52%
Growth Rate Used in Study:			1.00%



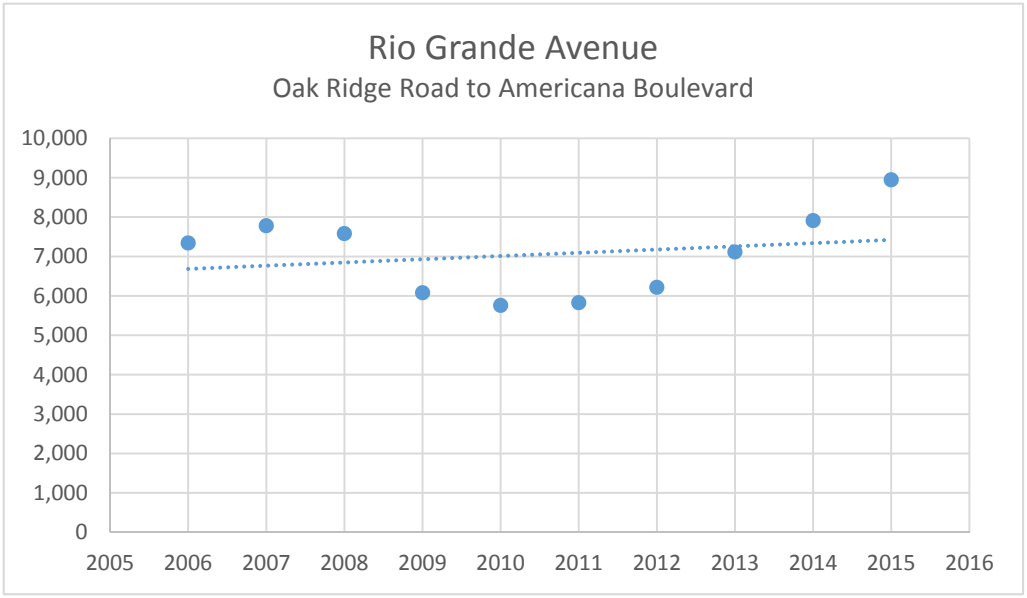
Roadway: Orlando Central Parkway
Segment: Lake Ellenor Drive to Orange Blossom Trail

Year	AADT	Annual Percentage Change	Regression Equation Prediction
2006	4,074		
2007	4,665	14.51%	
2008	5,213	11.75%	
2009	3,441	-33.99%	
2010	4,220	22.64%	
2011	4,625	9.60%	
2012	3,487	-24.61%	
2013	5,319	52.54%	
2014	5,374	1.03%	
2015	5,850	8.86%	
2016			5,361
2021			6,028
Observed Average Annual Growth Rate:			2.49%
Growth Rate Used in Study:			2.49%



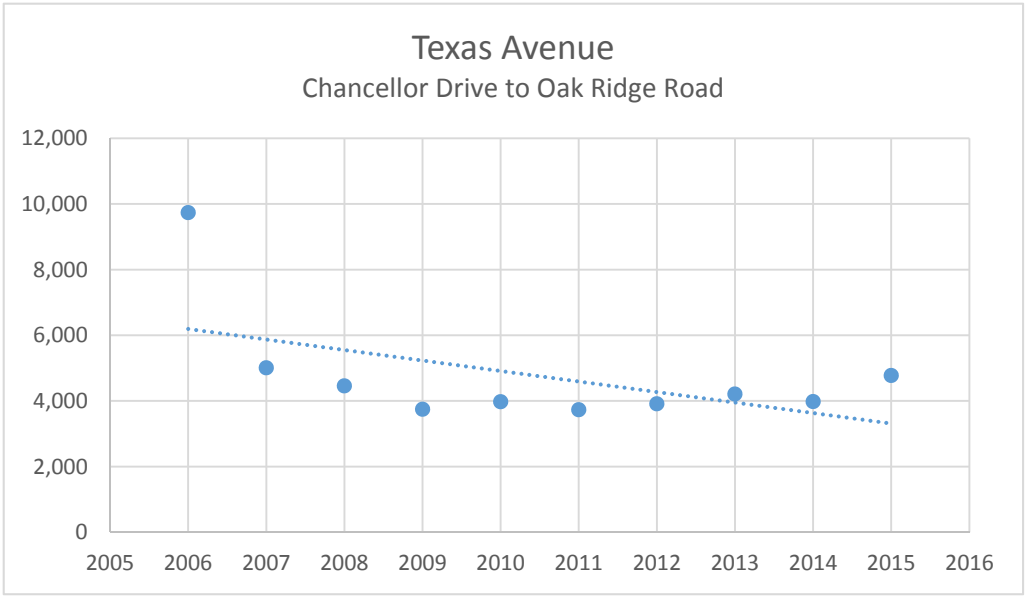
Roadway: Rio Grande Ave
Segment: Oak Ridge Road to Americana Boulevard

Year	AADT	Annual Percentage Change	Regression Equation Prediction
2006	7,340		
2007	7,780	5.99%	
2008	7,583	-2.53%	
2009	6,077	-19.86%	
2010	5,756	-5.28%	
2011	5,826	1.22%	
2012	6,215	6.68%	
2013	7,113	14.45%	
2014	7,912	11.23%	
2015	8,946	13.07%	
2016			7,505
2021			7,915
Observed Average Annual Growth Rate:			1.09%
Growth Rate Used in Study:			1.09%



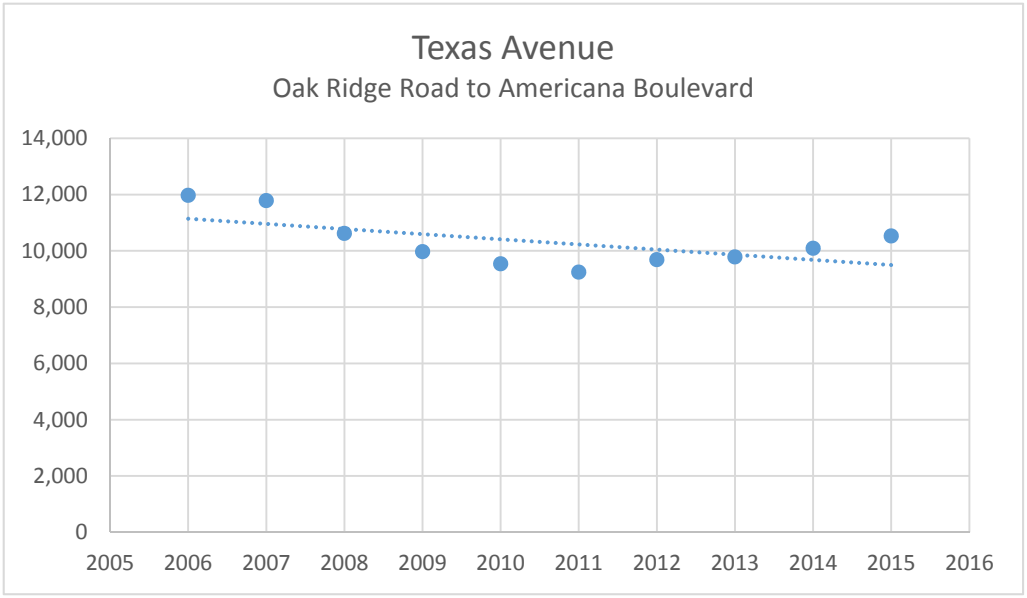
Roadway: S Texas Avenue
Segment: Chancellor Drive to Oak Ridge Road

Year	AADT	Annual Percentage Change	Regression Equation Prediction
2006	9,734		
2007	5,009	-48.54%	
2008	4,458	-11.00%	
2009	3,748	-15.93%	
2010	3,974	6.03%	
2011	3,733	-6.06%	
2012	3,914	4.85%	
2013	4,207	7.49%	
2014	3,982	-5.35%	
2015	4,776	19.94%	
2016			2,993
2021			1,393
Observed Average Annual Growth Rate:			-10.69%
Growth Rate Used in Study:			1.00%



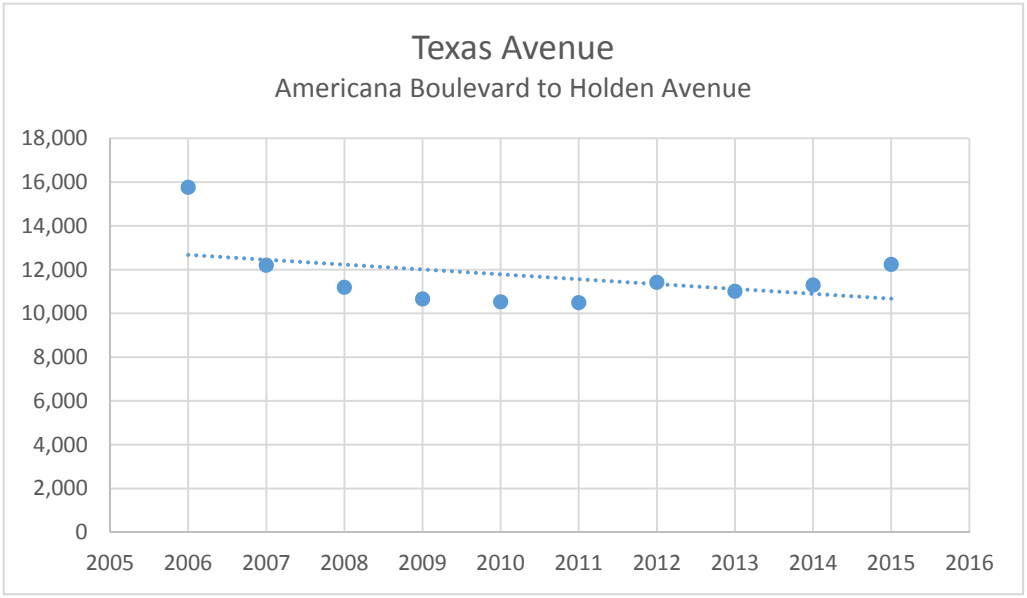
Roadway: S Texas Avenue
Segment: Oak Ridge Road to Americana Boulevard

Year	AADT	Annual Percentage Change	Regression Equation Prediction
2006	11,971		
2007	11,785	-1.55%	
2008	10,620	-9.89%	
2009	9,972	-6.10%	
2010	9,539	-4.34%	
2011	9,243	-3.10%	
2012	9,687	4.80%	
2013	9,782	0.98%	
2014	10,093	3.18%	
2015	10,530	4.33%	
2016			9,317
2021			8,403
Observed Average Annual Growth Rate:			-1.96%
Growth Rate Used in Study:			1.00%



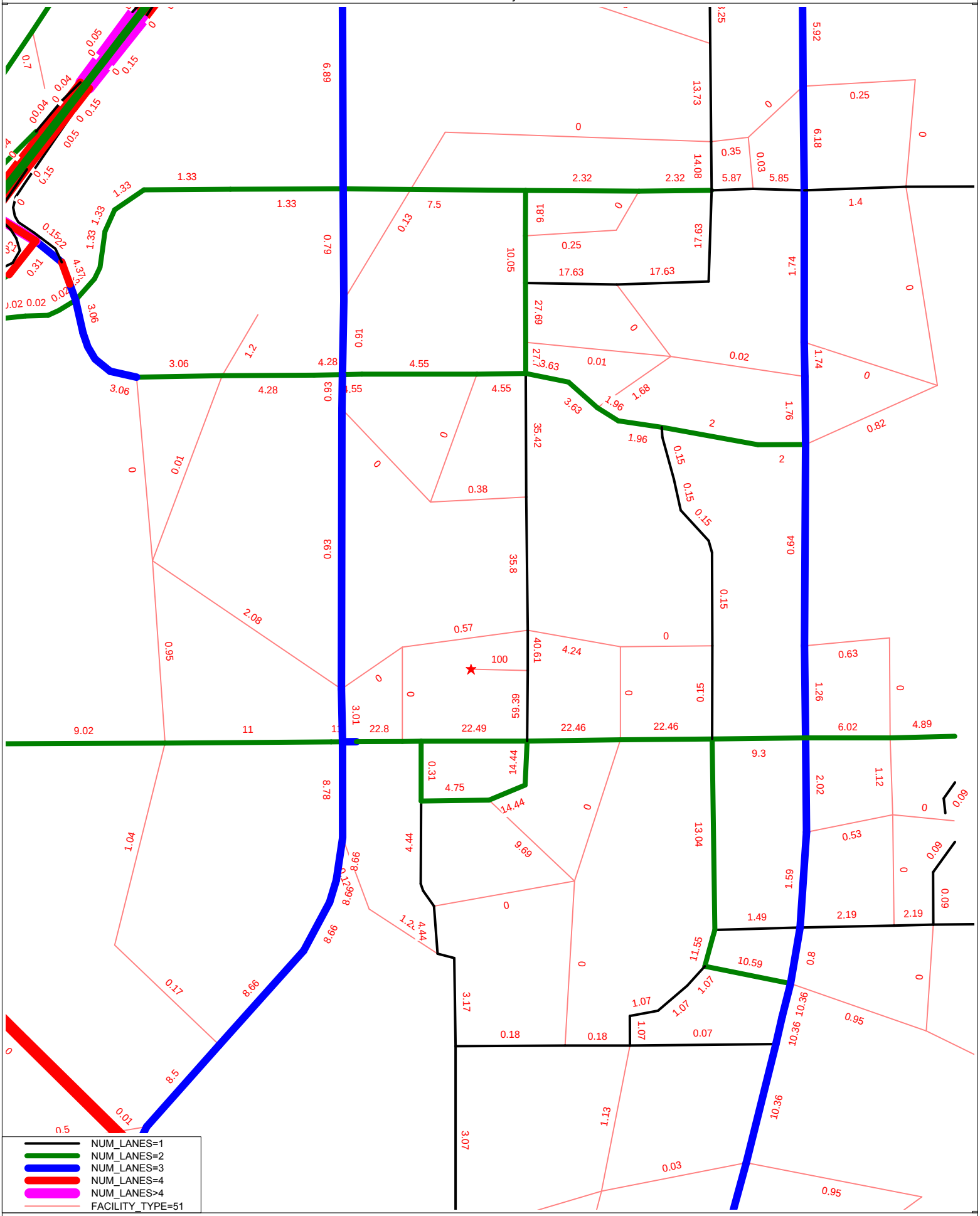
Roadway: S Texas Avenue
Segment: Americana Boulevard to Holden Avenue

Year	AADT	Annual Percentage Change	Regression Equation Prediction
2006	15,758		
2007	12,201	-22.57%	
2008	11,187	-8.31%	
2009	10,658	-4.73%	
2010	10,523	-1.27%	
2011	10,486	-0.35%	
2012	11,420	8.91%	
2013	11,007	-3.62%	
2014	11,291	2.58%	
2015	12,238	8.39%	
2016			10,454
2021			9,341
Observed Average Annual Growth Rate:			-2.13%
Growth Rate Used in Study:			1.00%



C. OUATS Model Output

Year 2040 OUATS - Project Distribution



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D. 2040 AADT Calculations

2009 Raw Model Volumes

On: Americana Boulevard
From: John Young Parkway
To: Orange Blossom Trail

	Link								
	1	2	3	4	5	6	7	8	9
2009 RMV [veh/day]	23,557.87	23,557.87	23,579.92	15,617.52	15,617.52	11,307.30	11,307.30	4,267.71	4,267.71
Segment Length [miles]	0.055780	0.30973	0.13216	0.11545	0.1008	0.06602	0.12	0.26359	0.12721
2009 RMV Weighted Avg. [veh/day]									14,624

On: Chancellor Drive
From: Sand Lake Road
To: Orlando Central Parkway

	Link		
	1	2	3
2009 RMV [veh/day]	13,575.30	13,443.04	10,967.81
Segment Length [miles]	0.180570	0.5069	0.24345
2009 RMV Weighted Avg. [veh/day]			12,821

On: Chancellor Drive
From: Orlando Central Parkway
To: Oak Ridge Road

	Link					
	1	2	3	4	5	6
2009 RMV [veh/day]	10,967.81	10,402.27	10,026.75	10,026.75	10,026.75	16,688.15
Segment Length [miles]	0.050850	0.1295	0.05	0.02	0.23	0.16
2009 RMV Weighted Avg. [veh/day]						11,842

On: Conroy Road
From: Millenia Boulevard
To: John Young Parkway

	Link							
	1	2	3	4	5	6	7	8
2009 RMV [veh/day]	28,954.12	28,954.12	28,954.12	28,954.12	28,954.12	18,364.06	31,806.98	31,806.98
Segment Length [miles]	0.090740	0.03958	0.0408	0.05428	0.07129	0.23201	0.24722	0.07613
2009 RMV Weighted Avg. [veh/day]								27,153

On: John Young Parkway
From: Sand Lake Road
To: President's Drive

	Link							
	1	2	3	4	5	6	7	8
2009 RMV [veh/day]	46,512.29	46,512.29	46,512.29	46,635.62	45,455.08	45,455.08	45,455.08	45,455.08
Segment Length [miles]	0.206260	0.12011	0.17026	0.2955	0.3472	0.15024	0.05647	0.11669
2009 RMV Weighted Avg. [veh/day]								46,053

On: John Young Parkway
From: President's Drive
To: Oak Ridge Road

	Link
	1
2009 RMV [veh/day]	46,948.48
Segment Length [miles]	0.263700
2009 RMV Weighted Avg. [veh/day]	46,948

On: John Young Parkway
From: Oak Ridge Road
To: Americana Boulevard

	Link		
	1	2	3
2009 RMV [veh/day]	59,169.09	50,672.32	51,451.50
Segment Length [miles]	0.143700	0.76497	0.09089
2009 RMV Weighted Avg. [veh/day]			51,965

On: John Young Parkway
From: Americana Boulevard
To: Interstate 4

	Link			
	1	2	3	4
2009 RMV [veh/day]	60,443.68	60,502.75	54,774.02	57,925.34
Segment Length [miles]	0.202030	0.29905	0.62999	0.25789
2009 RMV Weighted Avg. [veh/day]				57,417

On: Lake Ellenor Drive/S Rio Grande Avenue
From: Orlando Central Parkway
To: Oak Ridge Road

	Link		
	1	2	3
2009 RMV [veh/day]	12,065.67	12,065.67	13879.83
Segment Length [miles]	0.074230	0.02544	0.52455
2009 RMV Weighted Avg. [veh/day]			13,590

On: Oak Ridge Road
From: Harcourt Ave
To: John Young Parkway

	Link			
	1	2	3	4
2009 RMV [veh/day]	31,056.44	31,056.44	23,743.67	23,743.67
Segment Length [miles]	0.050000	0.44	0.45	0.03
2009 RMV Weighted Avg. [veh/day]				27,438

On: Oak Ridge Road
From: John Young Parkway
To: Orange Blossom Trail

	Link						
	1	2	3	4	5	6	7
2009 RMV [veh/day]	33,669.44	33,669.44	34,555.61	17,867.46	18886.02	24,865.37	24,908.86
Segment Length [miles]	0.040000	0.13	0.05	0.29	0.25	0.25	0.25
2009 RMV Weighted Avg. [veh/day]							23,649

On: Oak Ridge Road
From: Orange Blossom Trail
To: Orange Avenue

	Link				
	1	2	3	4	5
2009 RMV [veh/day]	23,174.02	19,562.84	21,397.18	19,295.05	19,940.29
Segment Length [miles]	0.230000	0.18	0.35	0.49	0.42
2009 RMV Weighted Avg. [veh/day]					20,461

On: Orlando Central Parkway
From: Lake Ellenor Drive
To: Orange Blossom Trail

	Link
	1
2009 RMV [veh/day]	11,518.09
Segment Length [miles]	0.238500
2009 RMV Weighted Avg. [veh/day]	11,518

On: Rio Grande Avenue
From: Oak Ridge Road
To: Americana Boulevard

	Link						
	1	2	3	4	5	6	7
2009 RMV [veh/day]	8,340.15	9,260.47	9,260.47	9,260.47	9,260.47	9,260.47	9,260.47
Segment Length [miles]	0.250000	0.25	0.03	0.11	0.09	0.12	0.02651
2009 RMV Weighted Avg. [veh/day]							8,998

On: S Texas Avenue
From: Chancellor Drive
To: Oak Ridge Road

	Link		
	1	2	3
2009 RMV [veh/day]	10,163.37	4,123.28	4,123.28
Segment Length [miles]	0.180000	0.11	0.12
2009 RMV Weighted Avg. [veh/day]			6,775

On: S Texas Avenue
From: Oak Ridge Road
To: Americana Boulevard

	Link		
	1	2	3
2009 RMV [veh/day]	4,441.79	5,657.31	5830.75
Segment Length [miles]	0.250000	0.41	0.33909
2009 RMV Weighted Avg. [veh/day]			5,412

On: S Texas Avenue
From: Americana Boulevard
To: Holden Avenue

	Link			
	1	2	3	4
2009 RMV [veh/day]	12,624.02	12,622.97	8,489.32	7,676.70
Segment Length [miles]	0.080840	0.1608	0.1293	0.1215
2009 RMV Weighted Avg. [veh/day]				10,317

2040 Raw Model Volumes

On: Americana Boulevard
From: John Young Parkway
To: Orange Blossom Trail

	Link								
	1	2	3	4	5	6	7	8	9
2040 RMV [veh/day]	16,665.47	16,665.47	17,278.54	20,887.35	20,887.35	18,137.96	18,137.96	10,383.99	10,383.99
Segment Length [miles]	0.055780	0.30973	0.13216	0.11545	0.1008	0.06602	0.12	0.26359	0.12721
2040 RMV Weighted Avg. [veh/day]									15,746
2040 AADT									**15,431**

On: Chancellor Drive
From: Sand Lake Road
To: Orlando Central Parkway

	Link		
	1	2	3
2040 RMV [veh/day]	14,807.70	14,852.42	11,645.60
Segment Length [miles]	0.180570	0.5069	0.24345
2040 RMV Weighted Avg. [veh/day]			14,005
2040 AADT			**13,725**

On: Chancellor Drive
From: Orlando Central Parkway
To: Oak Ridge Road

	Link					
	1	2	3	4	5	6
2040 RMV [veh/day]	11,645.60	11,026.42	10,477.61	10,477.61	10,477.61	15,488.52
Segment Length [miles]	0.050850	0.1295	0.05	0.02	0.23	0.16
2040 RMV Weighted Avg. [veh/day]						11,933
2040 AADT						**11,694**

On: Conroy Road
From: Millenia Boulevard
To: John Young Parkway

	Link							
	1	2	3	4	5	6	7	8
2040 RMV [veh/day]	39,029.94	39,029.94	39,029.94	39,029.94	39,029.94	24,202.88	32,288.37	32,288.37
Segment Length [miles]	0.090740	0.03958	0.0408	0.05428	0.07129	0.23201	0.24722	0.07613
2040 RMV Weighted Avg. [veh/day]								32,434
2040 AADT								**31,785**

On: John Young Parkway
From: Sand Lake Road
To: President's Drive

	Link							
	1	2	3	4	5	6	7	8
2040 RMV [veh/day]	63,541.84	63,541.84	63,541.84	63,768.50	57,860.01	57,860.01	57,860.01	57,860.01
Segment Length [miles]	0.172680	0.12011	0.17026	0.2955	0.3472	0.15024	0.05647	0.11669
2040 RMV Weighted Avg. [veh/day]								60,923
2040 AADT								**59,705**

On: John Young Parkway
From: President's Drive
To: Oak Ridge Road

	Link
	1
2040 RMV [veh/day]	58,820.73
Segment Length [miles]	0.263700
2040 RMV Weighted Avg. [veh/day]	58,821
2040 AADT	**57,645**

On: John Young Parkway
From: Oak Ridge Road
To: Americana Boulevard

	Link		
	1	2	3
2040 RMV [veh/day]	67,531.24	60,714.82	61,541.67
Segment Length [miles]	0.143700	0.76497	0.09089
2040 RMV Weighted Avg. [veh/day]			61,770
2040 AADT			**60,535**

On: John Young Parkway
From: Americana Boulevard
To: Interstate 4

	Link			
	1	2	3	4
2040 RMV [veh/day]	59,898.50	59,155.25	59,658.43	62,911.75
Segment Length [miles]	0.202030	0.29905	0.62999	0.25789
2040 RMV Weighted Avg. [veh/day]				60,189
2040 AADT				**58,985**

On: Lake Ellenor Drive/S Rio Grande Avenue
From: Orlando Central Parkway
To: Oak Ridge Road

	Link		
	1	2	3
2040 RMV [veh/day]	13,893.93	13,893.93	15602.4
Segment Length [miles]	0.074230	0.02544	0.52455
2040 RMV Weighted Avg. [veh/day]			15,330
2040 AADT			**15,023**

On: Oak Ridge Road
From: Harcourt Ave
To: John Young Parkway

	Link			
	1	2	3	4
2040 RMV [veh/day]	29,082.68	29,082.68	27,240.29	27,240.29
Segment Length [miles]	0.050000	0.44	0.45	0.03
2040 RMV Weighted Avg. [veh/day]				28,171
2040 AADT				**27,608**

On: Oak Ridge Road
From: John Young Parkway
To: Orange Blossom Trail

	Link						
	1	2	3	4	5	6	7
2040 RMV [veh/day]	33,011.05	33,011.05	34,004.87	18,516.35	22398.71	28,801.07	27,582.77
Segment Length [miles]	0.040000	0.13	0.05	0.29	0.25	0.25	0.25
2040 RMV Weighted Avg. [veh/day]							25,696
2040 AADT							**25,182**

On: Oak Ridge Road
From: Orange Blossom Trail
To: Orange Avenue

	Link				
	1	2	3	4	5
2040 RMV [veh/day]	30,168.20	28,240.11	30,594.82	27,613.31	28,265.54
Segment Length [miles]	0.230000	0.18	0.35	0.49	0.42
2040 RMV Weighted Avg. [veh/day]					28,822
2040 AADT					**28,246**

On: Orlando Central Parkway
From: Lake Ellenor Drive
To: Orange Blossom Trail

	Link
	1
2040 RMV [veh/day]	12,192.03
Segment Length [miles]	0.238500
2040 RMV Weighted Avg. [veh/day]	12,192
2040 AADT	**11,948**

On: Rio Grande Avenue
From: Oak Ridge Road
To: Americana Boulevard

	Link						
	1	2	3	4	5	6	7
2040 RMV [veh/day]	10,447.26	11,641.03	11,641.03	11,641.03	11,641.03	11,641.03	11,641.03
Segment Length [miles]	0.250000	0.25	0.03	0.11	0.09	0.12	0.02651
2040 RMV Weighted Avg. [veh/day]							11,301
2040 AADT							**11,075**

On: S Texas Avenue
From: Chancellor Drive
To: Oak Ridge Road

	Link		
	1	2	3
2040 RMV [veh/day]	9,621.32	6,611.16	6,611.16
Segment Length [miles]	0.180000	0.11	0.12
2040 RMV Weighted Avg. [veh/day]			7,933
2040 AADT			**7,774**

On: S Texas Avenue
From: Oak Ridge Road
To: Americana Boulevard

	Link			
	1	2	3	4
2040 RMV [veh/day]	10,463.60	10167.177	12,235.42	11581.21
Segment Length [miles]	0.191460	0.10914	0.35962	0.33909
2040 RMV Weighted Avg. [veh/day]				11,448
2040 AADT				**11,219**

On: S Texas Avenue
From: Americana Boulevard
To: Holden Avenue

	Link			
	1	2	3	4
2040 RMV [veh/day]	17,638.51	17,761.12	15,676.93	15,040.26
Segment Length [miles]	0.080840	0.1608	0.1293	0.1215
2040 RMV Weighted Avg. [veh/day]				16,522
2040 AADT				**16,192**

Roadway	Segment	2009 AADT	2009 RMV	2040 RMV	MOCF	2040 Diff	2040 Ratio	2040 AVG
Americana Boulevard	John Young Parkway to Orange Blossom Trail	19,139	14,624	15,746	0.98	20,239	20,607	20,423
Chancellor Drive	Sand Lake Road to Orlando Central Parkway	6,394	12,821	14,005	0.98	7,554	6,984	7,269
Chancellor Drive	Orlando Central Parkway to Oak Ridge Road	5,165	11,842	11,933	0.98	5,254	5,205	5,230
Conroy Road	Millenia Boulevard to John Young Parkway	27,121	27,153	32,434	0.98	32,296	32,396	32,346
John Young Parkway	Sand Lake Road to President's Drive	46,283	46,053	60,923	0.98	60,856	61,227	61,042
John Young Parkway	President's Drive to Oak Ridge Road	45,330	46,948	58,821	0.98	56,966	56,794	56,880
John Young Parkway	Oak Ridge Road to Americana Boulevard	49,286	51,965	61,770	0.98	58,895	58,586	58,741
John Young Parkway	Americana Boulevard to Interstate 4	40,732	57,417	60,189	0.98	43,449	42,698	43,074
Lake Ellenor Dr/S Rio Grande Ave	Orlando Central Parkway to Oak Ridge Road	9,234	13,590	15,330	0.98	10,939	10,416	10,678
Oak Ridge Road	Harcourt Ave to John Young Parkway	30,582	27,438	28,171	0.98	31,300	31,399	31,350
Oak Ridge Road	John Young Parkway to Orange Blossom Trail	29,450	23,649	25,696	0.98	31,456	31,999	31,728
Oak Ridge Road	Orange Blossom Trail to Orange Ave	26,626	20,461	28,822	0.98	34,820	37,506	36,163
Orlando Central Parkway	Lake Ellenor Drive to Orange Blossom Trail	3,441	11,518	12,192	0.98	4,102	3,642	3,872
Rio Grande Ave	Oak Ridge Road to Americana Boulevard	6,077	8,998	11,301	0.98	8,334	7,632	7,983
S Texas Ave	Chancellor Drive to Oak Ridge Road	3,748	6,775	7,933	0.98	4,883	4,389	4,636
S Texas Ave	Oak Ridge Road to Americana Boulevard	9,972	5,412	11,448	0.98	15,887	21,094	18,491
S Texas Ave	Americana Boulevard to Holden Avenue	10,658	10,317	16,522	0.98	16,739	17,068	16,904

Interoffice Memorandum

DATE: November 17, 2016

TO: Alberto Vargas, Manager
Planning Division

THROUGH: John Geiger, PE, Senior Engineer
Environmental Protection Division

FROM: Sarah Bernier, REM, Senior Environmental Specialist
Environmental Protection Division

SUBJECT: Facilities Analysis and Capacity Report Request for the
2017-1 Regular Cycle Comprehensive Plan Amendments

As requested, the Environmental Protection Division staff reviewed the subject Comprehensive Plan Amendments. We understand that the first public hearing for these requests will be on December 15, 2016, before the Local Planning Agency. Attached are summary charts with the environmental analysis results.

If you have any questions regarding the information provided, please contact Sarah Bernier at 407-836-1471 or John Geiger at 407-836-1504.

Attachment

SB/JG

cc:

Greg Golgowski, Chief Planner, Comprehensive Planning
Nicolas Thalmueller, Planner, Comprehensive Planning
Lori Cunniff, Deputy Director, Community, Environmental and Development Services
Elizabeth Johnson, Environmental Programs Administrator, Natural Resource Management

Orange County Environmental Protection Division
Comments to the Local Planning Agency for the
2017-1 Regular Cycle Comprehensive Plan Amendments

1) Amendment # 2017-1-A-1-1 (also under review as CDR-16-07-253)
Hannah Smith Property PD
FLU from: Activity Center Mixed-Use (ACMU)
To: Planned Development-Low-Medium Density Residential/Medium Density Residential/ Commercial (PD-LMDR/MDR/C)
Owner: Daryl M. Carter (As Trustee)
Agent: Jim Hall, VHB
Parcels: 11-24-28-0000-00-020; 14-24-28-1242-66-000; portions of 14-24-28-1242-66-001 and 14-24-28-1242-60-000
Address: west of I-4, north of Daryl Carter Parkway
District: 1
Area: 69.00 gross acres

EPD Comments:
An Orange County Conservation Area Determination (CAD) must be complete before subdivision or development plan submittal as directed in Orange County Code Chapter 34 Subdivision Regulations Article IV Specifications for Plans and Plats, Section 34-131(d)(2). Refer to Chapter 15, Article X Wetland Conservation Areas for specific information.

A previous CAD #09-007 covered a portion of the subject site however it expired on March 4, 2014. Therefore a new CAD is required for the entire site to determine the developable acreage, establish conservation easements/tracts, and to calculate open space.

Until wetland permitting is complete (actual acreages to be determined in that process) the net developable acreage is only an approximation. The developable acreage is the gross acreage less the wetlands and surface waters. The buildable area is the gross acreage less the wetlands and less protective buffer areas if required to prevent secondary wetland impacts and surface waters. The applicant is advised not to make financial decisions based upon development within the wetland or the upland protective buffer areas. Any plan showing development in a wetland or protective upland buffer area without Orange County and other jurisdictional governmental agency wetland permits is speculative and may not be approved. This land use map amendment does not guarantee density based upon assumed surface water or conservation area impact approvals.

If any impacts to the wetlands or wetland protective buffer areas are needed for roads, outfall pipes, or other design features of the development then submit an application for a Conservation Area Impact (CAI) Permit to the Orange County Environmental Protection Division as outlined in Orange County Code Chapter 15, Article X Wetland Conservation Areas. Early submittal will avoid delays later in the process for mitigation arrangements and conservation easement recording (if necessary).

Approval of this land use map amendment does not constitute approval of a permit for the construction of a boat dock, boardwalk, observation pier, fishing pier, community pier or other similar permanently fixed or floating structures. Any person desiring to construct any of these structures shall apply for an Orange County Dock Construction Permit. Application shall be

made to the Orange County Environmental Protection Division as specified in Orange County Code Chapter 15 Environmental Control, Article IX Dock Construction prior to installation. Prior to application, contact the EPD Environmental Permitting office, Neal Thomas, 407-836-1451, to determine if the proposed design qualifies for a dock construction permit or a conservation area impact. Note that there are side setback requirements for docks from adjacent properties that may limit or prohibit the use of such a narrow access parcel at the lake front for a dock, however, a boardwalk/observation pier would be also need to be reviewed with this consideration. Discuss with EPD Permitting. It is not clear if the lake front narrow parcel is for a potential observation deck or a stormwater outfall.

Comply with the February 10, 2001 BCC condition: No motorized watercraft shall be permitted onto Big Sand Lake from this development. This condition may only be modified by the Board of County Commissioners.

Discharged stormwater runoff shall not degrade receiving surface water bodies below the minimum conditions established by state water quality standards. Florida Administrative Code (FAC) 62-302) per Orange County Code Chapter 30 Planning and Development, Article XII Concurrency Management, Division 2 Level of Service Standards, Section 30-520 Performance Standards, Stormwater 30-520(5)e. All development is required to pretreat runoff for pollution abatement purposes. Discharge that flows directly into wetlands or surface waters without pretreatment is prohibited. Orange County Code Chapter 34 Subdivision Regulations, Article VII Stormwater Management, Division 1 General Requirements, 34-227 Disposition of Runoff.

Prior to mass grading, clearing, grubbing or construction, the applicant is hereby noticed that this site must comply with habitat protection regulations of the U.S. Fish and Wildlife Service (USFWS) and the Florida Fish & Wildlife Conservation Commission (FWC).

Vegetation - If the habitat survey identifies threatened and endangered plants, and removal is permissible, then the applicant may contact the Florida Native Plant Society (FNPS) or other similar non-profit agency to grant access to the site for removal of the threatened and endangered plants and/or collect seeds. This will preserve the genetic material and provide plants for restoration of other areas. Either the FNPS, similar non-profit or the Developer will have to secure all appropriate permits for these activities. This location has rare upland scrub (dry prarie) and rare species per Florida Natural Areas Inventory.

A portion of this site is located east of a site proposed for the Orange County School Board's Dr. Phillips Relief High School planned to be 6-stories. Note that scheduled organized activities at a publicly-owned or operated facility are exempt from the Orange County Code Chapter 15, Article V. Noise Pollution Control in Section 15-185. The covenants, conditions, and restrictions (CC&Rs), or as appropriate, a recorded restrictive covenant on the property and a note on the plat shall contain notification to potential purchasers, builders or tenants of this development that the adjacent land use includes a high school that may result in periodic temporary conditions that may cause a noise disturbance. Engineered noise reduction materials and design of the structures can minimize this impact.

Any development on this site will have to comply with the requirements of the National Pollutant Discharge Elimination System (NPDES) for off-site sediment and erosion control including a Stormwater Pollution Prevention Plan (SWPPP). Construction will require Best Management Practices (BMPs) for erosion control.

2) Amendment # 2017-1-A-3-1
Oasis at Crosstown
FLU from: Commercial (C)
To: Medium Density Residential (MDR)
Zoning from: C-1 (Retail Commercial District)
To: PD (Planned Development District)
Owner: Abdul Musa Ali, Yusef Musa Cortes, and Samuel Musa Cortes
Agent: Stephen Novacki, Picerne Development Corporation of Florida
Parcels: 26-22-30-8418-00-010/020
Address: 200 S. Goldenrod Road and 7302 Yucatan Drive
District: 3
Area: 17.20 gross acres

EPD Comments:
This site is adjacent to existing residential neighborhoods, therefore dust control during all site preparation and construction will be necessary. Fugitive dust emissions shall not be allowed from any activity including: vehicular movement, transportation of materials, construction, alteration, loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions include application of water, dust suppressants, and other measures defined in Orange County Code Chapter 15 Environmental Control, Article III Air Quality Control, Division 2 Rules, Section 15-89.1 Air Pollution Prohibited and defined in the Florida Department of Environmental Protection 62-296.320(4)(c) adopted by Orange County Code 15-90 Adoption of state and federal rules by reference.

This site is adjacent to existing residential neighborhoods, therefore noise limiting efforts during all site preparation and construction will be necessary. Construction Noise is limited by Orange County Code Chapter 15 Environmental Control, Article V Noise Pollution Control, Section 15-185 Exemptions that allows for construction or demolition activities between 7:00 am and 10:00 pm. Any construction after 10:00 PM and prior to 7:00 AM needs to comply with the requirements of the ordinance. In addition, dewatering pumps shall be shielded from exposure to the adjacent residential units and located as far away as possible to minimize adverse noise level impacts.

This site is within the boundary of the Orlando Range & Chemical Yard formerly known as the Orlando Army Airfield (OAA) Toxic Gas & Decontamination Yard. The applicant should use caution in the event any unexploded ordinance or chemical residue is discovered during site studies, surveying or clearing. As a general safety precaution, all site workers should be trained if any suspicious items are located. Should anyone encounter or suspect they have encountered munitions, it is vitally important that they follow the U.S. Army Corps of Engineers recommended “3 Rs”: Recognize the item may be dangerous, Retreat and do not touch it, and Report the location to the local Sheriff's office immediately. For further information visit www.saj.usace.army.mil and click on Formerly Used Defense Sites (FUDS) and then click on the Orlando Range and Chemical Yard link or call 1-800-291-9413. Items of concern were located on this site and Orange County understands that they were disposed of properly,

therefore, the applicant will need to submit verification of clean-up of this debris from the U.S. Army Corps of Engineers prior to approval of subdivision (PSP) or development plans (DP).

Prior to platting, the CC&Rs (covenants, conditions, and restrictions) shall state that this site is within the boundary of the Orlando Range & Chemical Yard formerly known as the Orlando Army Airfield (OAA) Toxic Gas & Decontamination Yard that is a Formerly Used Defense Site (FUDS).

Any miscellaneous garbage, waste and construction debris, demolition debris, or waste material found on site during clearing and grading shall be properly disposed of off-site according to the solid waste and hazardous waste regulations. Use caution if any hazardous waste is present. Call the Orange County Solid Waste Hotline at 407-836-6601 for information.

Brownfield Designation - Due to the prior activity on this property, the applicant should consider, and request a determination whether or not this site qualifies for, or would benefit from the designation as a brownfield redevelopment area. For information regarding financial incentives and regulatory benefits contact the Orange County Environmental Protection Division (EPD), David Jones 407-836-1434. Also contact the Florida Department of Environmental Protection Central District, George Houston 407-897-4322.

Any development on this site will have to comply with the requirements of the National Pollutant Discharge Elimination System (NPDES) for off-site sediment and erosion control including a Stormwater Pollution Prevention Plan (SWPPP). Construction will require Best Management Practices (BMPs) for erosion control.

3) Amendment # 2017-1-A-4-1
Moss Park North
FLU from: Rural (R)
To: Planned Development-Medium Density Residential/Office/Conservation (PD-MDR/O/CONS) and Urban Service Area (USA) expansion
Owner: Gary T. Randall (As Trustee)
Agent: Stephen Novacki
Parcels: 09-24-31-0000-00-003/011
Address: 11001 Moss Park Road
District: 4
Area: 108.30 gross acres

EPD Comments:
An Orange County Conservation Area Determination (CAD) must be complete before subdivision (PSP) or development plan (DP) submittal as directed in Orange County Code Chapter 34 Subdivision Regulations Article IV Specifications for Plans and Plats, Section 34-131(d)(2). Refer to Chapter 15, Article X Wetland Conservation Areas for specific information.

Until wetland permitting is complete (actual acreages to be determined in that process) the net

developable acreage is only an approximation. The developable acreage is the gross acreage less the wetlands and surface waters. The buildable area is the gross acreage less the wetlands and protective buffer areas if required to prevent secondary wetland impacts and surface waters. The applicant is advised not to make financial decisions based upon development within the wetland or the upland protective buffer areas. Any plan showing development in a wetland or protective upland buffer area without Orange County and other jurisdictional governmental agency wetland permits is speculative and may not be approved. This land use map amendment does not guarantee density based upon assumed surface water or conservation area impact approvals.

If any impacts to the wetlands or wetland protective buffer areas are needed for roads, outfall pipes, or other design features of the development then submit an application for a Conservation Area Impact (CAI) Permit to the Orange County Environmental Protection Division as outlined in Orange County Code Chapter 15, Article X Wetland Conservation Areas. Early submittal will avoid delays later in the process for mitigation arrangements and conservation easement recording (if necessary).

The plan has to comply with the Orange County Code Chapter 15 Environmental Control, Article XVIII Environmental Land Stewardship known as the Environmental Land Stewardship Program (ELSP) Ordinance Section 15-820. Mr. Neal Thomas, EPD Permitting, 407-836-1451 will provide direction. Some of these requirements need to begin as soon as possible.

The developer must create provisions for wildlife connectivity across or under roadways that traverse wetland systems and associated buffers. Road and pedestrian crossings of the wetland and environmentally sensitive corridors shall be minimized over wetlands and floodplains and be designed to allow for unimpeded passage of wildlife.

Discharged stormwater runoff shall not degrade receiving surface water bodies below the minimum conditions established by state water quality standards. Florida Administrative Code (FAC) 62-302) per Orange County Code Chapter 30 Planning and Development, Article XII Concurrency Management, Division 2 Level of Service Standards, Section 30-520 Performance Standards, Stormwater 30-520(5)e. All development is required to pretreat runoff for pollution abatement purposes. Discharge that flows directly into wetlands or surface waters without pretreatment is prohibited. Orange County Code Chapter 34 Subdivision Regulations, Article VII Stormwater Management, Division 1 General Requirements, 34-227 Disposition of Runoff.

Any development on this site will have to comply with the requirements of the National Pollutant Discharge Elimination System (NPDES) for off-site sediment and erosion control including a Stormwater Pollution Prevention Plan (SWPPP). Construction will require Best Management Practices (BMPs) for erosion control.

Prior to mass grading, clearing, grubbing or construction, the applicant is hereby noticed that this site must comply with habitat protection regulations of the U.S. Fish and Wildlife Service (USFWS) and the Florida Fish & Wildlife Conservation Commission (FWC).

4) Amendment # 2017-1-A-5-1
Orlando East Manufactured Home Park
FLU from: Rural (R)
To: Planned Development-Low-Medium Density Residential/Commercial/Office/Conservation
Zoning from: R-T
To: PD (Planned Development)
Owner: 151 Col Inc.
Agent: Thomas Sullivan, Gray Robinson P.A
Parcels: 19-22-32-7976-00-020
Address: 15169 E. Colonial Dr.
District: 5
Area: 12.10 gross acres

EPD Comments:
All acreages regarding conservation areas including wetlands and buffers are considered approximate until finalized by Conservation Area Determinations and Conservation Area Impact permits. The net developable acreage will be the gross acreage less any surface water and wetlands.

An Orange County Conservation Area Determination (CAD) must be complete before subdivision or development plan submittal as directed in Orange County Code Chapter 34 Subdivision Regulations Article IV Specifications for Plans and Plats, Section 34-131(d)(2). Refer to Chapter 15, Article X Wetland Conservation Areas for specific information.

If a conservation area determination and/or a conservation area impact permit have previously been completed for Orange County, then submit a copy to the Orange County EPD for verification. Note that wetland permitting by state or federal agencies does not satisfy the county requirements.

Until wetland permitting is complete (actual acreages to be determined in that process) the net developable acreage is only an approximation. The developable acreage is the gross acreage less the wetlands and surface waters. The buildable area is the gross acreage less the wetlands and protective buffer areas if required to prevent secondary wetland impacts and surface waters. The applicant is advised not to make financial decisions based upon development within the wetland or the upland protective buffer areas. Any plan showing development in a wetland or protective upland buffer area without Orange County and other jurisdictional governmental agency wetland permits is speculative and may not be approved. This land use map amendment does not guarantee density based upon assumed surface water or conservation area impact approvals.

If any impacts to the wetlands or wetland protective buffer areas are needed for roads, outfall pipes, or other design features of the development then submit an application for a Conservation Area Impact (CAI) Permit to the Orange County Environmental Protection Division as outlined in Orange County Code Chapter 15, Article X Wetland Conservation Areas. Early submittal will avoid delays later in the process for mitigation arrangements and conservation easement

recording (if necessary).

This site is located within the geographical limits of the Econlockhatchee River Protection ordinance area. Basin-wide regulations apply. Reference the Econlockhatchee River Protection ordinance in Chapter 15 Article XI. All future plans submitted must acknowledge this with a note on the plan and must comply with all protection ordinance codes.

Project plans should indicate the Econlockhatchee River corridor protection zone located on this development site at the 1,100 foot distance landward from the stream's edge (i.e. waterward extent of the forested wetlands) of the Econ main channel (per OCC 15-443), and at least 550 feet landward as measured from the stream's edge of the major tributaries, and 50 feet of uplands landward of the landward edge of the wetlands abutting the main river channel and the named tributaries. Applicability will be determined about the location of the waterward extent of the forested wetlands as a result of a completed Conservation Area Determination.

Discharged stormwater runoff shall not degrade receiving surface water bodies below the minimum conditions established by state water quality standards. Florida Administrative Code (FAC) 62-302) per Orange County Code Chapter 30 Planning and Development, Article XII Concurrency Management, Division 2 Level of Service Standards, Section 30-520 Performance Standards, Stormwater 30-520(5)e. All development is required to pretreat runoff for pollution abatement purposes. Discharge that flows directly into wetlands or surface waters without pretreatment is prohibited. Orange County Code Chapter 34 Subdivision Regulations, Article VII Stormwater Management, Division 1 General Requirements, 34-227 Disposition of Runoff.

Any existing septic tanks or wells (potable or irrigation water supply wells) onsite shall be properly abandoned prior to earthwork or construction. Permits shall be applied for and issued by the appropriate agencies. Contact the Department of Health (DOH) for the septic system and both DOH and the Water Management District for wells.

The developer must create provisions for wildlife connectivity across or under roadways that traverse wetland systems and associated buffers. Road and pedestrian crossings of the wetland and environmentally sensitive corridors shall be minimized over wetlands and floodplains and be designed to allow for unimpeded passage of wildlife.

Prior to mass grading, clearing, grubbing or construction, the applicant is hereby noticed that this site must comply with habitat protection regulations of the U.S. Fish and Wildlife Service (USFWS) and the Florida Fish & Wildlife Conservation Commission (FWC).

Any miscellaneous garbage, waste and construction debris or demolition debris, or waste material found on site during clearing and grading shall be properly disposed of off-site according to the solid waste and hazardous waste regulations. Use caution if any hazardous waste is present." Call the Orange County Solid Waste Hotline at 407-836-6601 for information.

Any development on this site will have to comply with the requirements of the National

Pollutant Discharge Elimination System (NPDES) for off-site sediment and erosion control including a Stormwater Pollution Prevention Plan (SWPPP). Construction will require Best Management Practices (BMPs) for erosion control.

5) Amendment # 2017-1-A-6-1
The Seasons
FLU from: Low-Medium Density Residential (LMDR)
To: Medium Density Residential (MDR)
Owner: Texas Avenue Development LTD
Agent: Jim Hall, VH
Parcel: 21-23-29-5361-00-170
Address: 5736 S. Texas Ave.
District: 6
Area: 19.40 gross / 17.70 net developable acres

EPD Comments:
All acreages regarding conservation areas including wetlands and buffers are considered approximate until finalized by Conservation Area Determinations and Conservation Area Impact permits. The net developable acreage will be the gross acreage less any surface water and wetlands.

An Orange County Conservation Area Determination (CAD) must be complete before subdivision or development plan submittal as directed in Orange County Code Chapter 34 Subdivision Regulations Article IV Specifications for Plans and Plats, Section 34-131(d)(2). Refer to Chapter 15, Article X Wetland Conservation Areas for specific information.

If a conservation area determination and/or a conservation area impact permit have previously been completed for Orange County, then submit a copy to the Orange County EPD for verification. Note that wetland permitting by state or federal agencies does not satisfy the county requirements.

Until wetland permitting is complete (actual acreages to be determined in that process) the net developable acreage is only an approximation. The developable acreage is the gross acreage less the wetlands and surface waters. The buildable area is the gross acreage less the wetlands and less protective buffer areas if required to prevent secondary wetland impacts and surface waters. The applicant is advised not to make financial decisions based upon development within the wetland or the upland protective buffer areas. Any plan showing development in a wetland or protective upland buffer area without Orange County and other jurisdictional governmental agency wetland permits is speculative and may not be approved. This land use map amendment does not guarantee density based upon assumed surface water or conservation area impact approvals.

If any impacts to the wetlands or wetland protective buffer areas are needed for roads, outfall

pipes, or other design features of the development then submit an application for a Conservation Area Impact (CAI) Permit to the Orange County Environmental Protection Division as outlined in Orange County Code Chapter 15, Article X Wetland Conservation Areas. Early submittal will avoid delays later in the process for mitigation arrangements and conservation easement recording (if necessary).

Discharged stormwater runoff shall not degrade receiving surface water bodies below the minimum conditions established by state water quality standards. Florida Administrative Code (FAC) 62-302) per Orange County Code Chapter 30 Planning and Development, Article XII Concurrency Management, Division 2 Level of Service Standards, Section 30-520 Performance Standards, Stormwater 30-520(5)e. All development is required to pretreat runoff for pollution abatement purposes. Discharge that flows directly into wetlands or surface waters without pretreatment is prohibited. Orange County Code Chapter 34 Subdivision Regulations, Article VII Stormwater Management, Division 1 General Requirements, 34-227 Disposition of Runoff.

This site is adjacent to existing residential neighborhoods, therefore dust control during all site preparation and construction will be necessary. Fugitive dust emissions shall not be allowed from any activity including: vehicular movement, transportation of materials, construction, alteration, loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions include application of water, dust suppressants, and other measures defined in Orange County Code Chapter 15 Environmental Control, Article III Air Quality Control, Division 2 Rules, Section 15-89.1 Air Pollution Prohibited and defined in the Florida Department of Environmental Protection 62-296.320(4)(c) adopted by Orange County Code 15-90 Adoption of state and federal rules by reference.

This site is adjacent to existing residential neighborhoods, therefore noise control during all site preparation and construction will be necessary. Construction Noise is limited by Orange County Code Chapter 15 Environmental Control, Article V Noise Pollution Control, Section 15-185 Exemptions that allows for construction or demolition activities between 7:00 am and 10:00 pm. Any construction after 10:00 PM and prior to 7:00 AM needs to comply with the requirements of the ordinance. In addition, dewatering pumps shall be shielded from exposure to the adjacent residential units and located as far away as possible to minimize adverse noise level impacts.

Any miscellaneous garbage, waste and construction debris or demolition debris, or waste material found on site during clearing and grading shall be properly disposed of off-site according to the solid waste and hazardous waste regulations. Use caution if any hazardous waste is present." Call the Orange County Solid Waste Hotline at 407-836-6601 for information.

Any development on this site will have to comply with the requirements of the National Pollutant Discharge Elimination System (NPDES) for off-site sediment and erosion control including a Stormwater Pollution Prevention Plan (SWPPP). Construction will require Best Management Practices (BMPs) for erosion control.

Bio-Tech Consulting Inc.
Environmental and Permitting Services

info@bio-techconsulting.com
www.bio-techconsulting.com

August 15, 2016

Bill Shallcross
Picerne Development Corporation of Florida
247 North Westmonte Dr.
Altamonte Springs, FL 32714

Proj: The Oasis at Crosstown - Orange County, Florida
Section 26, Township 22 South, Range 30 East
(BTC File #899-05)
Re: Environmental Assessment

Dear Mr. Shallcross:

During August of 2016, Bio-Tech Consulting Inc. (BTC) conducted an environmental assessment on The Oasis at Crosstown site. The subject site is approximately 17.2 acres in size and located west of Goldenrod Road immediately north of the State Road 408 interchange, within Section 26; Township 22 South; Range 30 East; Orange County, Florida (Figures 1, 2, & 3). The environmental assessment included the following elements:

- Review of soil types mapped within the site boundaries;
- Evaluation of land use types/vegetative communities present;
- Field review for occurrence of protected flora and fauna, and;
- A brief description of any constraints on development.

SOILS

According to the Soil Survey of Orange County, Florida, prepared by the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS), five (5) soil types occur within the subject property boundaries (Figure 4). These soil types include the following:

Orlando Office
2002 East Robinson St.
Orlando, FL 32803

Vero Beach Office
4445 N. A1A
Suite 221
Vero Beach, FL 32963

Jacksonville Office
2036 Forbes St.
Jacksonville, FL 32204

Tampa Office
6011 Benjamin Rd.
Suite 101 B
Tampa, FL 33634

Key West Office
1107 Key Plaza
Suite 259
Key West, FL 33040

Aquatic & Land
Management Operations
3825 Rouse Rd.
Orlando, FL 32817

Native Plant Nursery
DCC Farms
8580 Bunkhouse Rd.
Orlando, FL 32832

407.894.5969
877.894.5969
407.894.5970 fax

- **Pits (#33)**
- **Pomello fine sand, 0 to 5 percent slopes (#34)**
- **Samsula-Hontoon-Basinger association, depressional (#41)**
- **Sanibel muck (#42)**
- **Smyrna fine sand (#44)**

The following presents a brief description of the soil types mapped for the subject project:

Pits (#33) consists of excavated areas of unconsolidated or heterogeneous soil and geologic materials which have been removed primarily for use in road construction or as fill material for low areas and building foundations. These areas consist of a pit or depressed area, which is surrounded by sidewalls of variable steepness.

Pomello fine sand, 0 to 5 percent slopes (#34) is a nearly level to gently sloping, moderately well drained soil found on low ridges and knolls on the flatwoods. The surface layer of this soil type generally consists of gray fine sand about 3 inches thick. In most years, the seasonal high water table for this soil type is at a depth of 24 to 40 inches for 1 to 4 months and recedes to a depth of 40 to 60 inches during dry periods. Permeability of this soil type is very rapid in the surface and subsurface layers, moderately rapid in the subsoil, and rapid in the substratum.

Samsula-Hontoon-Basinger association, depressional (#41) are nearly level, very poorly drained soils found in freshwater swamps, depressions, sloughs and broad poorly defined drainageways. Typically the surface layer of Samsula soil is black and dark reddish brown muck about 34 inches thick. Typically the surface layer of Hontoon soil consists of black muck about 16 inches thick. Typically the surface layer of Basinger soil consists of black fine sand about 6 inches thick. During most years, the undrained areas of the soils in this map unit are ponded for 6 to 9 months or more except during extended dry periods. The permeability of Samsula and Hontoon soils is rapid. The permeability of Basinger soil is very rapid.

Sanibel muck (#42) is a nearly level, very poorly drained soil found in depressions, freshwater swamps and marshes and in poorly defined drainageways. Typically the surface layer of this soil type consists of black muck about 11 inches thick. In most years undrained areas mapped with this soil type are ponded for 6 to 9 months or more except during extended dry periods. Permeability of this soil type is rapid throughout.

Smyrna fine sand (#44) is a nearly level, poorly drained soil found on broad flatwoods. The surface layer of this soil type generally consists of black fine sand about 4 inches thick. The seasonal high water table for this soil type is within 10 inches of the surface for 1 to 4 months. It recedes to a depth of 10 to 40 inches for more than 6 months. Permeability of this soil type is rapid in the surface and subsurface layers and in the substratum. It is moderate to moderately rapid in the subsoil.

The Florida Association of Environmental Soil Scientists (FAESS) considers the main components of Samsula-Hontoon-Basinger association, depressional (#41) and Sanibel muck (#42) as hydric. The FAESS also considers the inclusions present in Pits (#33) and Smyrna fine sand (#44) as hydric. This information can be found in the Hydric Soils of Florida Handbook, Fourth Edition (March, 2007).

LAND USE TYPES/VEGETATIVE COMMUNITIES

The Oasis at Crosstown subject site currently supports one (1) land use type/vegetative community. The upland type/vegetative community within the subject site consists of Open Land (190). No wetland types/vegetative communities were identified within the subject property. These areas were mapped using the Florida Land Use, Cover and Forms Classification System, Level III (FLUCFCS, FDOT, 1999) (Figure 5). The following provides a brief description of this land use type/vegetative community identified within The Oasis at Crosstown site:

Upland:

190 – Open Land

The entire Oasis at Crosstown property is an area identified as Open Land (190). This area has remained cleared and undeveloped for the last seventeen years and sits surrounded by residential and commercial developments. Vegetation identified within this community includes broomsedge (*Andropogon virginicus*), hairy cow pea (*Vigna luteola*), Caesar's weed (*Urena lobata*), blackberry (*Rubus* spp.), dog fennel (*Eupatorium capillifolium*), bahiagrass (*Paspalum notatum*), beggars-tick (*Bidens alba*), muscadine grape (*Vitis rotundifolia*), passion fruit (*Passiflora edulis*), tropical soda apple (*Solanum viarum*), rose natal grass (*Rhynchelytrum repens*) and cogongrass (*Imperata cylindrica*).

PROTECTED SPECIES

Using methodologies outlined in the Florida's Fragile Wildlife (Wood, 2001); Measuring and Monitoring Biological Diversity Standard Methods for Mammals (Wilson, et al., 1996) and Florida Fish and Wildlife Conservation Commission's (FFWCC) Gopher Tortoise Permitting Guidelines (April 2013 - revised February 2016); a cursory assessment for "listed" floral and faunal species was conducted at the site on August 15, 2016. This assessment included both direct observations and indirect evidence, such as tracks, burrows, tree markings and vocalizations that indicated the presence of species observed. The assessment focused on species that are "listed" by the FFWCC's Official Lists - Florida's Endangered Species, Threatened Species and Species of Special Concern (January 2016) that have the potential to occur in Orange County (See attached Table 1).

Reptiles and Amphibians:
brown anole (*Anolis sagrei*)

Birds:
Black Vulture (*Coragyps atratus*)
Turkey Vulture (*Cathartes aura*)
American Crow (*Corvus brachyrhynchos*)
Red Shouldered Hawk (*Buteo lineatus*)

Mammals:
nine-banded armadillo (*Dasypus novemcinctus*)

No species listed in FWC's Official Lists - Florida's Endangered Species, Threatened Species and Species of Special Concern (January 2016) were observed within or adjacent to The Oasis at Crosstown site during the site in August of 2016.

Bald Eagle (Haliaeetus leucocephalus)
USFWS Listed as "Threatened"

In August of 2007, the US Fish and Wildlife Service (USFWS) removed the Bald Eagle from the list of federally endangered and threatened species. Additionally, the Bald Eagle was removed from FFWCC's imperiled species list in April of 2008. Although the Bald Eagle is no longer protected under the Endangered Species Act, it is still protected under the Bald and Golden Eagle Protection Act, the Migratory Bird Treaty Act, and FFWCC's Bald Eagle rule (Florida Administrative Code 68A-16.002 Bald Eagle (*Haliaeetus leuchocephalus*).

In May of 2007, the USFWS issued the National Bald Eagle Management Guidelines. In April of 2008, the FFWCC adopted a new Bald Eagle Management Plan that was written to closely follow the federal guidelines. Under FFWCC's new management plans, buffer zones are recommended based on the nature and magnitude of the project or activity. The recommended protective buffer zone is 660 feet or less from the nest tree, depending on what activities or structures are already near the nest. A FFWCC Eagle permit is not needed for any activity occurring outside of the 660-foot buffer zone. No activities are permitted within 330 feet of a nest during the nesting season, October 1 through May 15 or when eagles are present at the nest.

In addition to the on-site evaluation for "listed" species, BTC conducted a review for any FFWCC recorded Bald Eagle nests on or in the vicinity of the subject property. This review revealed no Bald Eagle nests located within one (1.0) mile of the subject property through the 2013-2014 nesting season. No further action is required with regard to the Bald Eagle.

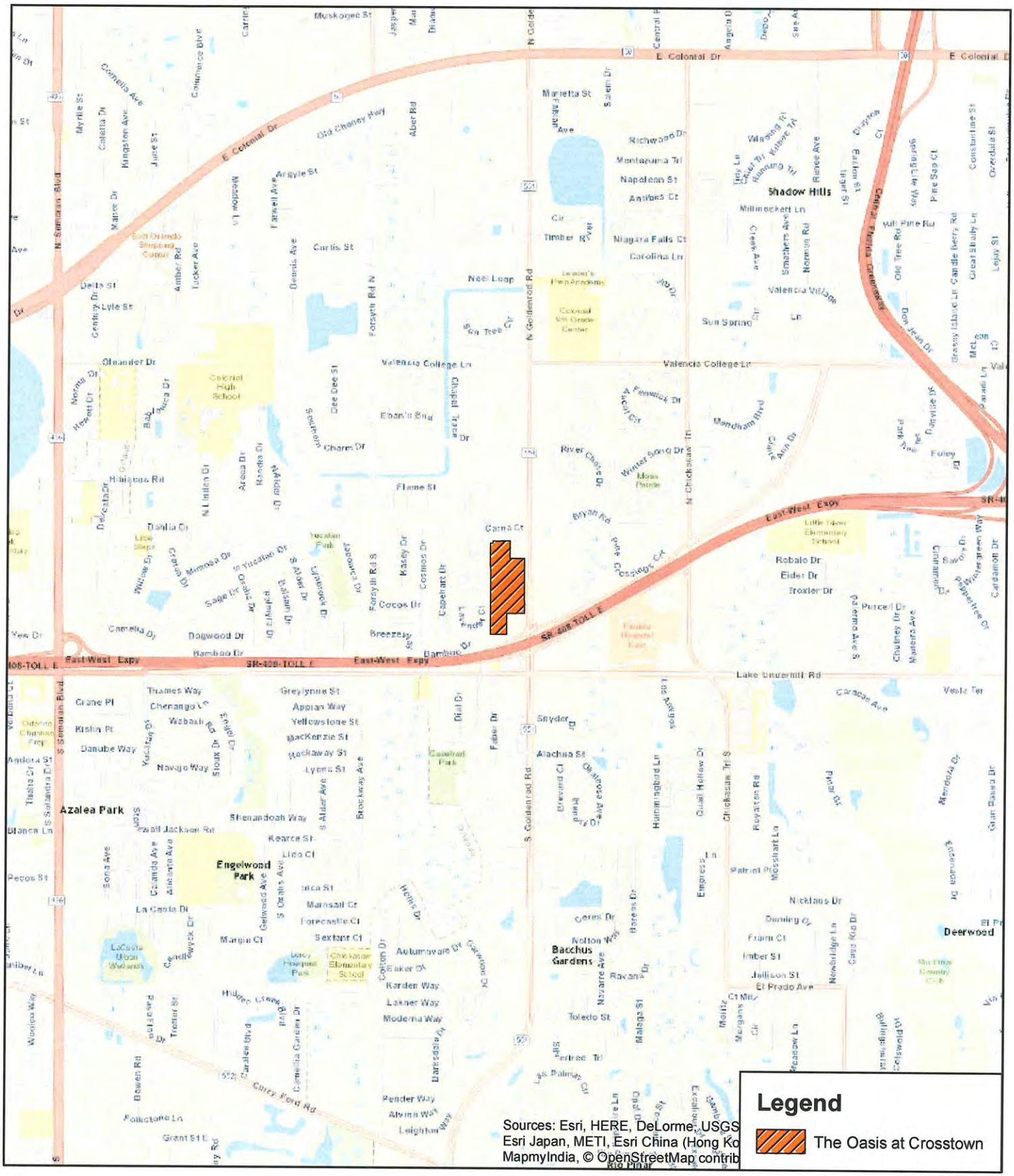
The environmental limitations described in this document are based on observations and technical information available on the date of the on-site evaluation. This report is for general planning purposes only. The limits of any on-site wetlands/surface waters can only be determined and verified through field delineation and/or on-site review by the pertinent regulatory agencies. The wildlife surveys conducted within the subject property boundaries do not preclude the potential for any listed species currently or in the future. Should you have any questions or require any additional information, please do not hesitate to contact our office at (407)894-5969. Thank you.

Regards,

Spencer Clark
Field Biologist

John Miklos
President

Attachments:



Bio-Tech Consulting Inc.
Environmental and Permitting Services
2002 E. Robinson St. Orlando, FL 32803
Ph: 407-894-5969 Fax: 407-894-5970
www.bio-techconsulting.com

The Oasis at Crosstown
Orange County, Florida
Figure 1
Location Map

N
W E
S

0.5
Miles

Project #: 899-05
Produced By: STC
Date: 8/15/2016

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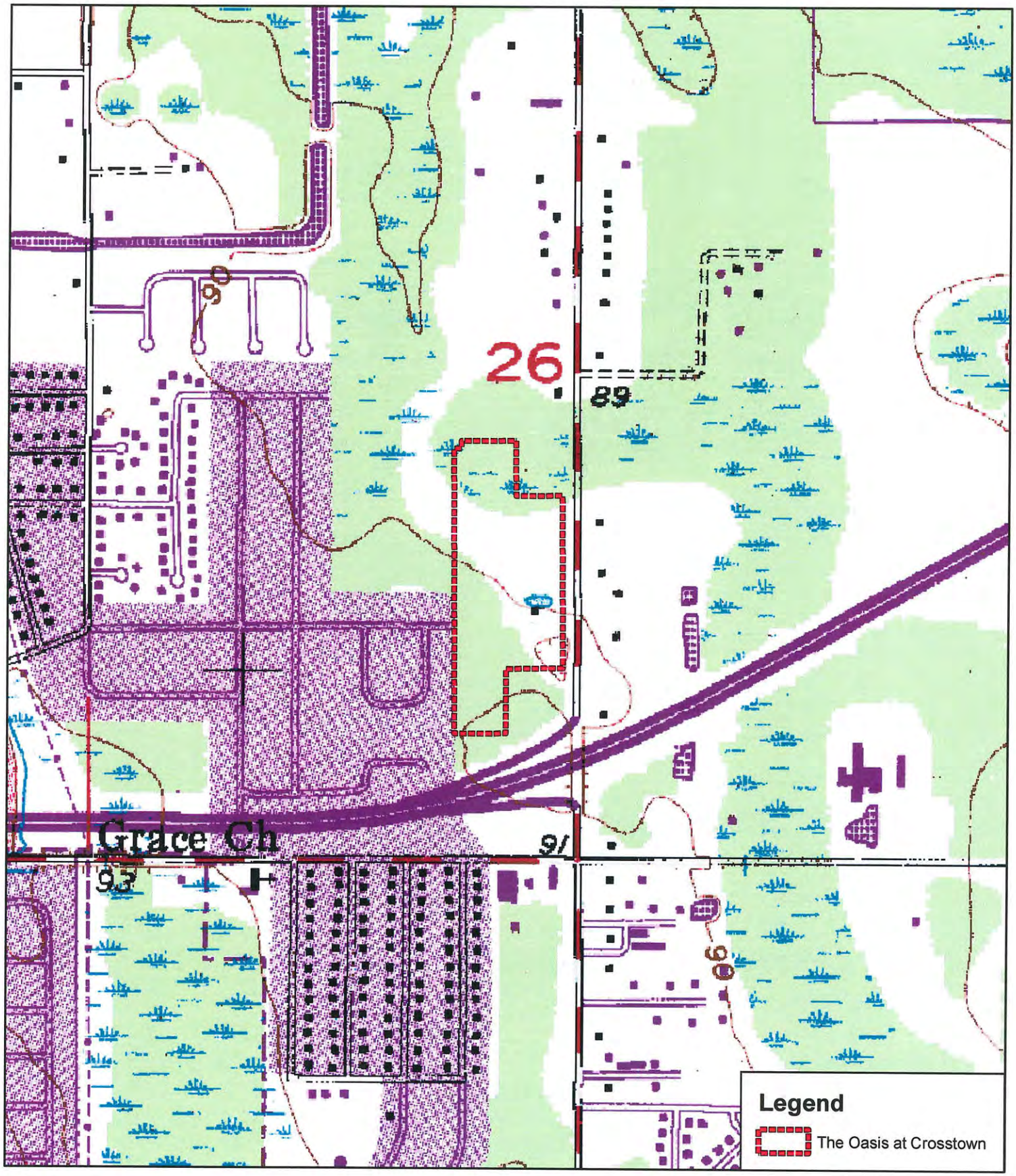
The Oasis at Crosstown
Orange County, Florida
Figure 2
2015 Aerial Photograph

N
W E
S

300
Feet

Project #: 899-05
Produced By: STC
Date: 8/15/2016



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The Oasis at Crosstown
Orange County, Florida
Figure 3
USGS Topographic Map

1,000 Feet

N
W E
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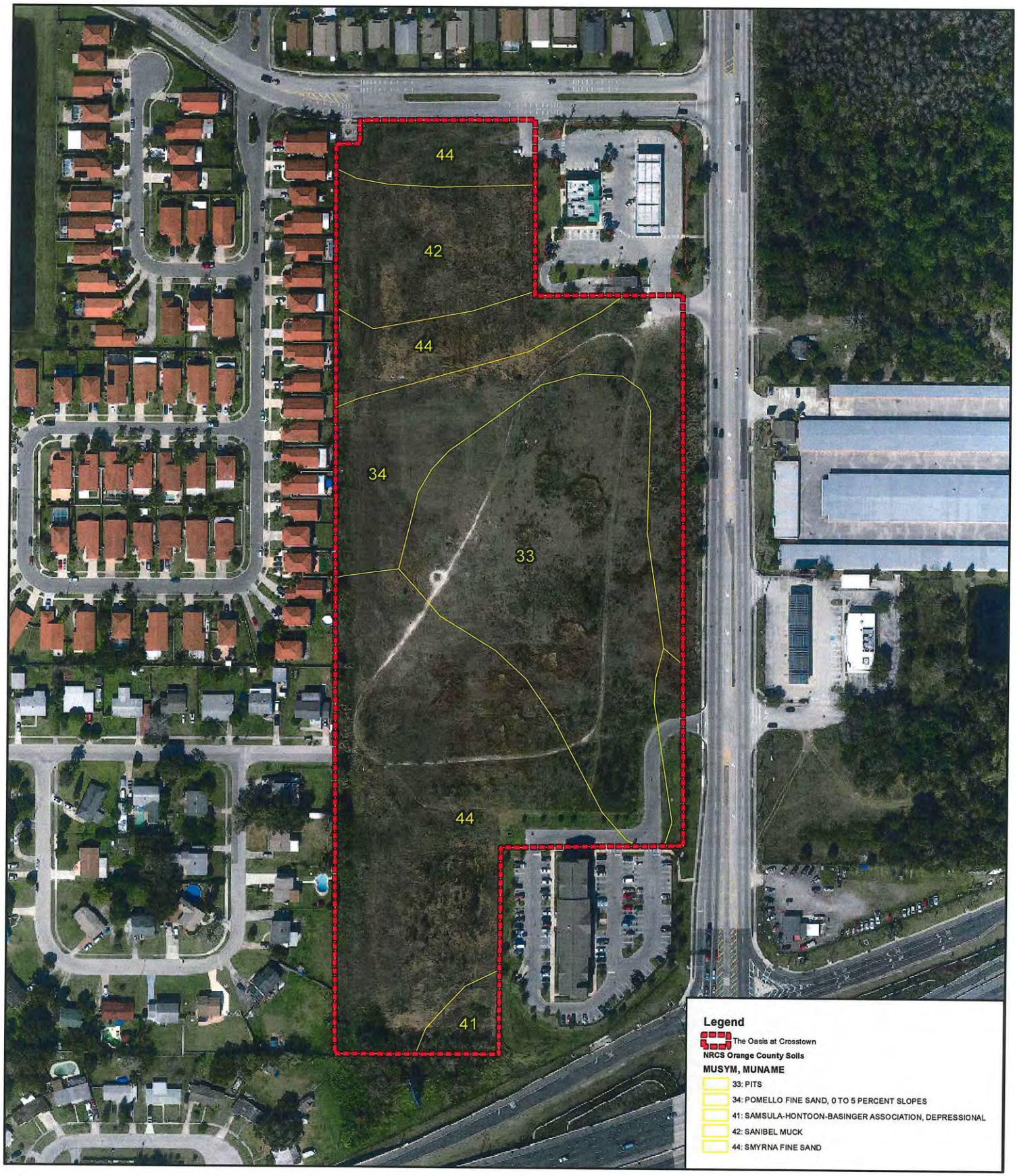
Project #: 899-05
Produced By: STC
Date: 8/15/2016



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The Oasis at Crosstown
Orange County, Florida
Figure 4
SSURGO Soils Map

N
W E
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300
Feet

Project #: 899-05
Produced By: STC
Date: 8/15/2016

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The Oasis at Crosstown
Orange County, Florida
Figure 5
FLUCFCS Map

N
W E
S

300
Feet

Project #: 899-05
Produced By: STC
Date: 8/15/2016

Table 1:	Potentially Occuring Listed Wildlife and Plant Species in Orange County, Florida		
Scientific Name	**Common Name**	**Federal Status**	**State Status**
FISH			
Cyprinodon variegatus hubbsi	Lake Eustis pupfish	N	SSC
AMPHIBIANS			
Lithobates capito	gopher frog	N	SSC
REPTILES			
Alligator mississippiensis	American alligator	SAT	FT(S/A)
Drymarchon corais couperi	eastern indigo snake	LT	FT
Gopherus polyphemus	gopher tortoise	C	FT
Lampropeltis extenuata	short-tailed snake	N	ST
Pituophis melanoleucus mugitus	Florida pine snake	N	SSC
Plestiodon reynoldsi	sand skink	LT	FT
BIRDS			
Aphelocoma coerulescens	Florida scrub-jay	LT	FT
Aramus guarauna	limpkin	N	SSC
Athene cunicularia floridana	Florida burrowing owl	N	SSC
Caracara cheriway	Crested Caracara	LT	FT
Egretta caerulea	little blue heron	N	SSC
Egretta thula	snowy egret	N	SSC
Egretta tricolor	tricolored heron	N	SSC
Eudocimus albus	white ibis	N	SSC
Falco sparverius paulus	southeastern American kestrel	N	ST
Grus canadensis pratensis	Florida sandhill crane	N	ST
Haliaeetus leucocephalus	bald eagle	N	**
Mycteria americana	wood stork	LT	FT
Pandion haliaetus	osprey	N	SSC*
Picoides borealis	red-cockaded woodpecker	LE	FE
Platalea ajaja	roseate spoonbill	N	SSC
Sterna antillarum	least tern	N	ST
MAMMALS			
Podomys floridanus	Florida mouse	N	SSC
Sciurus niger shermani	Sherman's fox squirrel	N	SSC
VASCULAR PLANTS			
Bonamia grandiflora	Florida bonamia	LT	E
Calopogon multiflorus	Many-flowered Grass-pink	N	T
Centrosema arenicola	Sand Butterfly Pea	N	E
Chionanthus pygmaeus	Pygmy Fringe Tree	LE	E
Centrosema arenicola	sand butterfly pea	N	N
Coelorachis tuberculosa	piedmont jointgrass	N	N
Deeringothamnus pulchellus	beautiful pawpaw	LE	E
Eriogonum longifolium var *gnaphalifolium*	scrub buckwheat	LT	E
Helianthus debilis ssp *tardiflorus*	beach sunflower	N	N
Ilex opaca var arenicola	scrub holly	N	N
Illicium parviflorum	star anise	N	E
Lechea cernua	nodding pinweed	N	T
Lupinus aridorum	scrub lupine	LE	E
Matelea floridana	Florida spiny-pod	N	E
Monotropa hypopithys	pinesap	N	E
Najas filifolia	Narrowleaf Naiad	N	T
Nemastylis floridana	Celestial Lily	N	E
Nolina atopocarpa	Florida beargrass	N	T
Nolina brittoniana	Britton's beargrass	LE	E
Ophioglossum palmatum	hand fern	N	E
Panicum abscissum	cutthroat grass	N	E
Paronychia chartacea ssp *chartacea*	paper-like nailwort	LT	E
Persea humilis	scrub bay	N	N
Pecluma plumula	Plume Polypody	N	E
Polygonella myriophylla	Small's jointweed	LE	E
Prunus geniculata	scrub plum	LE	E
Pteroglossaspis ecristata	Giant Orchid	N	T
Stylisma abdita	scrub stylisma	N	E
Warea amplexifolia	clasping warea	LE	E
Zephyranthes simpsonii	redmargin lily	N	T

FEDERAL LEGAL STATUS

LE-Endangered: species in danger of extinction throughout all or a significant portion of its range.
LT-Threatened: species likely to become Endangered within the foreseeable future throughout all or a significant portion of its range.
SAT-Endangered due to similarity of appearance to a species which is federally listed such that enforcement personnel have difficulty in attempting to differentiate between the listed and unlisted species.
C-Candidate species for which federal listing agencies have sufficient information on biological vulnerability and threats to support proposing to list the species as Endangered or Threatened.
XN-Non-essential experimental population.
N-Not currently listed, nor currently being considered for listing as Endangered or Threatened.

STATE LEGAL STATUS - ANIMALS

FE- Listed as Endangered Species at the Federal level by the U. S. Fish and Wildlife Service
FT- Listed as Threatened Species at the Federal level by the U. S. Fish and Wildlife Service
FXN- Federal listed as an experimental population in Florida
FT(S/A)- Federal Threatened due to similarity of appearance
ST- State population listed as Threatened by the FFWCC. Defined as a species, subspecies, or isolated population which is acutely vulnerable to environmental alteration, declining in number at a rapid rate, or whose range or habitat is decreasing in area at a rapid rate and as a consequence is destined or very likely to become an endangered species within the foreseeable future.
SSC-Listed as Species of Special Concern by the FFWCC. Defined as a population which warrants special protection, recognition, or consideration because it has an inherent significant vulnerability to habitat modification, environmental alteration, human disturbance, or substantial human exploitation which, in the foreseeable future, may result in its becoming a threatened species. (SSC* for Pandion haliaetus (Osprey) indicates that this status applies in Monroe county only.)
N-Not currently listed, nor currently being considered for listing.

*** State protected by F.A.C. 68A-16.002 and federally protected by both the Migratory Bird Treaty Act (1918) and the Bald and Golden Eagle Protection Act (1940)*

STATE LEGAL STATUS - PLANTS

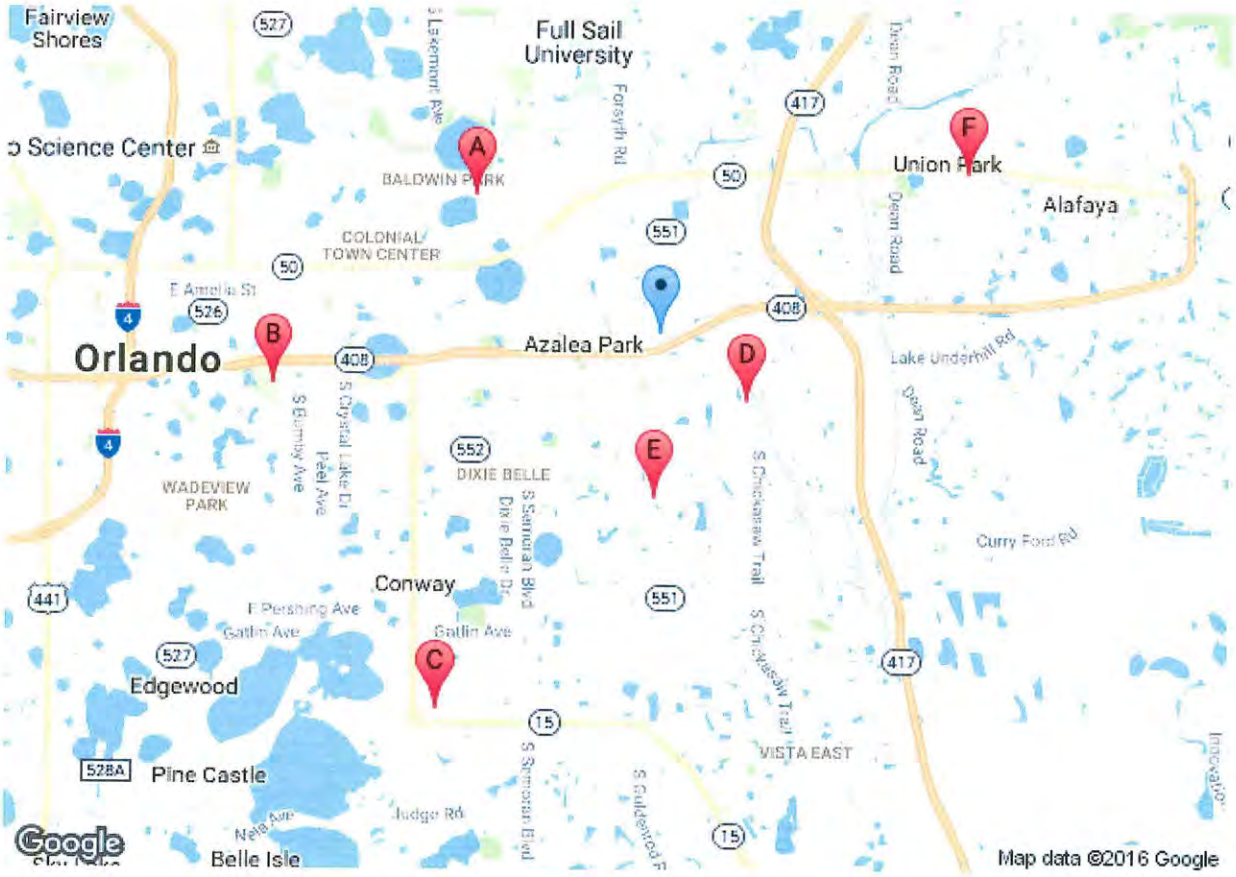
E-Endangered: species of plants native to Florida that are in imminent danger of extinction within the state, the survival of which is unlikely if the causes of a decline in the number of plants continue; includes all species determined to be endangered or threatened pursuant to the U.S. Endangered Species Act.
T-Threatened: species native to the state that are in rapid decline in the number of plants within the state, but which have not so decreased in number as to cause them to be Endangered.
N-Not currently listed, nor currently being considered for listing.

This report was generated using the bald eagle nest locator at https://public.myfwc.com/FWRI/EagleNests/nestlocator.aspx on 8/15/2016 11:59:20 AM.

Search Entered: Within 5 miles of latitude 28.5430555555556 and longitude -81.2869444444444; All Search Results

6 record(s) were found; 6 record(s) are shown

Bald Eagle Nest Map:



Bald Eagle Nest Data Search Results:

Results per page: All

Letter	Nest ID	County	Latitude	Longitude	Township	Range	Section	Gaz Page	Last Known Active	Last Surveyed	Act 11	Act 12	Act 13	Act 14	Act 15	Dist. (Mi)
A	OR037	Orange	28 33.90	81 19.20	22S	30E	21	80	2000	2014	*	*	*	-	*	2.51
B	OR042	Orange	28 32.10	81 21.42	22S	30E	31	80	2014	2014	Y	*	*	Y	*	4.29
C	OR046	Orange	28 28.99	81 19.63	23S	30E	17	86	2011	2014	Y	*	*	N	*	4.80
D	OR050	Orange	28 31.93	81 16.29	22S	30E	36	80	2008	2014	-	*	*	-	*	1.20
E	OR069	Orange	28 31.01	81 17.28	23S	30E	02	80	2014	2014	N	*	*	Y	*	1.81
F	OR071	Orange	28 34.13	81 13.90	22S	31E	17	80	2010	2014	N	*	*	-	*	3.80

"Y" denotes an active nest
"N" denotes an inactive nest
"-" denotes an unobserved nest
"U" denotes a nest that was visited but status was undetermined
"*" denotes a nest that was not surveyed

Bio-Tech Consulting Inc.
Environmental and Permitting Services

info@bio-techconsulting.com
www.bio-techconsulting.com

August 2, 2016

Bill Shallcross
Picerne Development Corporation of Florida
247 North Westmonte Drive
Altamonte Springs, Florida 32714

Proj: Oasis at Moss Park Phase II Site – Orange County, Florida
Section 9, Township 24 South, Range 31 East
Parcel ID's:09-24-31-0000-00-003 & 09-24-31-0000-00-011
(BTC File #899-01)
Re: Environmental Assessment Report

Dear Mr. Shallcross:

During January of 2016, Bio-Tech Consulting, Inc. (BTC) conducted an environmental assessment of the approximately 106-acre Oasis at Moss Park Phase II Site. This site is located north of Moss Park Road and east of State Road 417, within Section 9, Township 24 South, Range 31 East, Orange County, Florida (Figures 1, 2 & 3). This environmental assessment includes the following elements:

- review of soil types mapped within the site boundaries;
- evaluation of land use types/vegetative communities present;
- field review for occurrence of protected flora and fauna, and
- a review for potential development constraints.

SOILS

According to the Soil Survey of Orange County, Florida, prepared by the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS), seven (7) soil types occur within the subject property boundaries (Figure 4). These soils include the following:

Orlando Office
2002 East Robinson St.
Orlando, FL 32803

Vero Beach Office
4445 N. A1A
Suite 221
Vero Beach, FL 32963

Jacksonville Office
2036 Forbes St.
Jacksonville, FL 32204

Tampa Office
6011 Benjamin Rd.
Suite 101 B
Tampa, FL 33634

Key West Office
1107 Key Plaza
Suite 259
Key West, FL 33040

Aquatic & Land
Management Operations
3825 Rouse Rd.
Orlando, FL 32817

Native Plant Nursery
DCC Farms
8580 Bunkhouse Rd.
Orlando, FL 32832

407.894.5969
877.894.5969
407.894.5970 fax

- **Basinger fine sand, depressional (#3)**
- **Felda fine sand, frequently flooded (#15)**
- **Pomello fine sand, 0 to 5 percent slopes (#34)**
- **St. Johns fine sand (#37)**
- **Samsula muck (#40)**
- **Sanibel muck (#42)**
- **Smyrna fine sand (#44)**

The following presents a brief description of each of the soil types mapped for the subject site:

Basinger fine sand, depressional (#3) is a nearly level, very poorly drained soil found in shallow depressions and sloughs and along edges of freshwater marshes and swamps. The surface layer of this soil type generally consists of black fine sand about 7 inches thick. The water table for this soil type is above the surface for 6 to 9 months each year and is within 12 inches of the surface for the rest of the year. Permeability of this soil type is rapid throughout.

Felda fine sand, frequently flooded (#15) is a nearly level, poorly drained soil found on the floodplain of the Econlockhatchee River and other minor streams. This soil is flooded for very long periods following prolonged, intense rains. Typically, the surface layer of this soil type consists of very dark gray fine sand about 3 inches thick. In most years, the seasonal high water table for this soil type is within 10 inches of the surface for 2 to 6 months. Permeability of this soil type is rapid the surface and subsurface layers and in the substratum, and is moderate in the subsoil.

Pomello fine sand, 0 to 5 percent slopes (#34) is a nearly level to gently sloping, moderately well drained soil found on low ridges and knolls on the flatwoods. The surface layer of this soil type generally consists of gray fine sand about 3 inches thick. In most years, the seasonal high water table for this soil type is at a depth of 24 to 40 inches for 1 to 4 months and recedes to a depth of 40 to 60 inches during dry periods. Permeability of this soil type is very rapid in the surface and subsurface layers, moderately rapid in the subsoil, and rapid in the substratum.

St. Johns fine sand (#37) is a nearly level, poorly drained soil found in broad areas on the flatwoods. The upper portion of the surface layer of this soil type generally consists of black fine sand about 7 inches thick. In most years the seasonal high water table for this soil type is within 10 inches of the surface for 6 to 12 months and between depths of 10 to 40 inches for more than 6 months. Permeability of this soil type is rapid in the surface and subsurface layers and substratum, and medium to very high in the subsoil.

Samsula muck (#40) is a nearly level, very poorly drained soil found in freshwater marshes and swamps. Typically, the upper part of the organic surface layer of this soil type is black muck about 8 inches thick. In most years, undrained areas mapped with this soil type are ponded for 6 to 9 months or more each year except during extended dry periods. A seasonal high water table fluctuates between depths of about 10 inches and the surface. Permeability of this soil type is rapid throughout.

Sanibel muck (#42) is a nearly level, very poorly drained soil found in depressions, freshwater swamps and marshes and in poorly defined drainageways. Typically the surface layer of this soil type consists of black muck about 11 inches thick. In most years undrained areas mapped with this soil type are ponded for 6 to 9 months or more except during extended dry periods. Permeability of this soil type is rapid throughout.

Smyrna fine sand (#44) is a nearly level, poorly drained soil found on broad flatwoods. The surface layer of this soil type generally consists of black fine sand about 4 inches thick. The seasonal high water table for this soil type is within 10 inches of the surface for 1 to 4 months. It recedes to a depth of 10 to 40 inches for more than 6 months. Permeability of this soil type is rapid in the surface and subsurface layers and in the substratum. It is moderate to moderately rapid in the subsoil.

The Florida Association of Environmental Soil Scientists (FAESS) considers the main component of Basinger fine sand, depressional (#3), Felda fine sand, frequently flooded (#15), Samsula muck (#40) and Sanibel muck (#42) to be hydric. Furthermore, this Association considers inclusions present in St. Johns fine sand (#37) and Smyrna fine sand (#44) to be hydric. This information can be found in the Hydric Soils of Florida Handbook, Third Edition (March, 2000).

LAND USE TYPES/VEGETATIVE COMMUNITIES

The Oasis at Moss Park Phase II Site currently supports five (5) land use types/vegetative communities (Figure 5). These land use types were identified utilizing the Florida Land Use, Cover and Forms Classification System, Level III (FLUCFCS, FDOT, January 1999). The on-site upland land use types/vegetative communities are classified as Improved Pasture (211) and Pine Flatwoods (411). The wetland/surface water land use types/vegetative communities found on the site are classified as Reservoir (530), Wetland Forested Mixed (630) and Vegetated Non-Forested Wetland (640). The following provides a brief description of the on-site land use types/vegetative communities:

Uplands:

211 Improved Pasture 9.0 acres

The cleared grassy pasture located in the northern-central portion of the subject site is consistent with the Improved Pasture (211) FLUCFCS classification. These areas are dominated by bahiagrass *(Paspalum notatum)*. The other vegetative species that do exist consist of opportunistic, weed-type species, including dog fennel *(Eupatorium capillifolium)*, blackberry *(Rubus betulifolius)*, soda apple *(Solanum capsicoides)*, and caesarweed *(Urena lobata)*. Widely scattered and mostly solitary longleaf pines *(Pinus palustris)* and oaks *(Quercus virginiana, Q. laurifolia)* are present.

411 – Pine Flatwoods 47.8 acres

The majority of the uplands associated with the project site are most consistent with the Pine Flatwoods (411) FLUCFCS classification. These areas appear natural with some minor signs of disturbance, including dirt roadways. Vegetation observed within this community type includes slash pine (*Pinus elliottii*), water oak (*Quercus nigra*), live oak (*Quercus virginiana*), laurel oak (*Quercus laurifolia*), winged sumac (*Rhus copallium*), saw palmetto (*Serenoa repens*), blackberry (*Rubus cuneifolius*), dog fennel (*Eupatorium capillifolium*), broomsedge (*Andropogon* spp.), greenbriar (*Smilax* spp.), saltbush (*Baccharis halimifolia*), pokeweed (*Phytolacca americana*), lantana (*Lantana camara*), muscadine vine (*Vitis rotundifolia*), caesarweed (*Urena lobata*), hairy indigo (*Indigofera hirsuta*), balsam pear (*Momordica charantia*), Chinese tallowtree (*Sapium sebiferum*), cogongrass (*Imperata cylindrica*), and chinaberry tree (*Melia azerarach*).

Wetlands

530 – Reservoir 1.0 acres

A man-made stormwater management pond is located in the southeast corner of the property site and is classified as Reservoir (530), per the FLUCFCS. Vegetative species identified within this pond include pennywort (*Hydrocotyle umbellata*), torpedo grass (*Panicum repens*), arrowhead (*Sagittaria latifolia*) and pickerelweed (*Pontederia cordata*).

630 – Wetland Forested Mixed 48.2 acres

The majority of the wetlands on the subject property are consistent with the Wetland Forested Mixed (630) FLUCFCS classification. These wetlands appear to have been historically cypress

swamps that have had some minor hydrologic and vegetative alterations which allowed the introduction of a mixed forested canopy. The vegetation within these forested systems include cypress *(Taxodium distichum)*, red maple *(Acer rubrum)*, pond pine *(Pinus serotina)*, sweetbay *(Magnolia Virginia)*, laurel oak *(Quercus laurifolia)*, loblolly bay *(Gordonia lasianthus)*, water oak *(Quercus nigra)*, cabbage palm *(Sabal palmetto)*, swamp tupelo *(Nyssa sylvatica)*, royal fern *Osmunda regalis)*, poison ivy *(Toxicodendron radicans)*, wild azalea *(Rhododendron viscosum)*, coinwort *(Centella asiatica)*, pennywort *(Hydrocotle umbellata)*, maidencane *(Panicum hemitomon)*, spike rush *(Eleocharis baldwinii)*, soft rush *(Juncus effusus)*, *Juncus* spp., sedges *(Carex* sp. and *Cyperus* sp.), *Digitaria* sp., cinnamon fern (*Osmunda cinnamomea*), broomsedge *(Andropogon virginicus)*, beakrush *(Rhynchospora* sp.*)*, primrose willow *(Ludwigia octavalvis)*, cattail *(Typha* sp.*)*, pickerelweed *(Pontedaria cordata)*, duck potato *(Saggitaria lancifolia)* and umbrella grass *(Fuirena squarrosa)*, and wild elderberry *(Sambucus canadensis)*.

640 – Vegetated Non-Forested Wetland 0.06 acres

A very small isolated wetland located in the central portion of the property site and is classified as Vegetated Non-Forested Wetland (640), per the FLUCFCS. Vegetative species identified within this community include royal fern *Osmunda regalis)*, poison ivy *(Toxicodendron radicans)*, wild azalea *(Rhododendron viscosum)*, coinwort *(Centella asiatica)*, pennywort *(Hydrocotle umbellata)*, maidencane *(Panicum hemitomon)*, spike rush *(Eleocharis baldwinii)*, soft rush *(Juncus effusus)*, *Juncus* spp., sedges *(Carex* sp. and *Cyperus* sp.), *Digitaria* sp., broomsedge *(Andropogon virginicus)*, beakrush *(Rhynchospora* sp.*)*, primrose willow *(Ludwigia octavalvis)*, cattail *(Typha* sp.*)*, pickerelweed *(Pontedaria cordata)*, duck potato *(Saggitaria lancifolia)* and umbrella grass *(Fuirena squarrosa)*.

PROTECTED SPECIES

Using methodologies outlined in the Florida's Fragile Wildlife (Wood, 2001); Measuring and Monitoring Biological Diversity Standard Methods for Mammals (Wilson, et al., 1996); Wildlife Methodology Guidelines (1988); and Florida Fish and Wildlife Conservation Commission's (FFWCC) Gopher Tortoise Permitting Guidelines (April 2013 - revised February 2015); a cursory assessment for "listed" floral and faunal species was conducted at the site in January 2016. This assessment included both direct observations and indirect evidence, such as tracks, burrows, tree markings and vocalizations that indicated the presence of species observed. The assessment focused on species that are "listed" by the FFWCC's Official Lists - Florida's Endangered Species, Threatened Species and Species of Special Concern (January 2013) that have the potential to occur in Orange County (See attached Table 1).

No plant species "listed" by either the state or federal agencies were identified on the subject site during the assessments conducted. However, two (2) species were identified that are listed as "commercially exploited" by the Florida Department of Agriculture and Consumer Services (FDACS). The harvesting of these species, cinnamon fern (*Osmunda cinnamomea*) and royal fern (*Osmunda regalis*), for commercial gain, is not permitted. However, the listing of these species poses no restrictions towards the development of the subject property. The following is a list of those wildlife species identified during the evaluation of the site:

Reptiles and Amphibians
black racer (*Coluber constrictor*)
brown anole (*Anolis sagrei*)
gopher tortoise *(Gopherus polyphemus)*
green anole (*Anolis caroliniana*)
six-lined racerunner (*Cnemidophorus sexlineatus sexlineatus*)

Birds
Black Vulture (*Coragyps atratus*)
Downy Woodpecker (*Picoides pubescens*)
Mourning Dove (*Zenaida macroura*)
Northern Mockingbird (*Mimus polyglottos*)
Northern Cardinal (*Cardinalis cardinalis*)
Red-shouldered Hawk (*Buteo lineatus*)
Turkey Vulture (*Cathartes aura*)

Mammals
eastern gray squirrel (*Sciurus carolinensis*)
nine-banded armadillo (*Dasypus novemcinctus*)
southeastern pocket gopher (*Geomys pinetis*)
Virginia opossum (*Didelphis virginiana*)

One (1) of the above wildlife species, the gopher tortoise, is identified in the FFWCC's Official Lists - Florida's Endangered Species, Threatened Species and Species of Special Concern (January 2013). The following provides a brief description of this and several species as they relate to the development of the site.

Gopher Tortoise (Gopherus polyphemus)
State Listed as "Threatened"

Currently the gopher tortoise *(Gopherus polyphemus)* is classified as a "Category 2 Candidate Species" by USFWS, and as of September 2007 is now classified as "Threatened" by FFWCC, and as "Threatened" by FCREPA. The basis of the "Threatened" classification by the FFWCC for the gopher tortoise is due to habitat loss and destruction of burrows. Gopher tortoises are commonly found in areas with well-drained soils associated with pine flatwoods, pastures and abandoned orange groves. Several other protected species known to occur in Lake County have a possibility of occurring in this area, as they are gopher tortoise commensal species. These species include the eastern indigo snake *(Drymarchon corais couperi)*, Florida mouse *(Podomys floridanus)* and the gopher frog *(Rana capito)*. However, none of these species were observed during the survey conducted.

The FFWCC provides three (3) options for developers that have gopher tortoises on their property. These options include 1) Avoidance (i.e., 25-foot buffer around burrow), 2) Preservation of habitat, and 3) Off-site relocation. All gopher tortoises will be permitted for relocation through FFWCC within the project limits.

Bald Eagle (Haliaeetus leucocephalus)
State protected by F.A.C. 68A-16.002 and federally protected by both the Migratory Bird Treaty Act (1918) and the Bald and Golden Eagle Protection Act (1940)

In August of 2007, the US Fish and Wildlife Service (USFWS) removed the Bald Eagle from the list of federally endangered and threatened species. Additionally, the Bald Eagle was removed from FFWCC's imperiled species list in April of 2008. Although the Bald Eagle is no longer protected under the Endangered Species Act, it is still protected under the Bald and Golden Eagle Protection Act, the Migratory Bird Treaty Act, and FFWCC's Bald Eagle rule (Florida Administrative Code 68A-16.002 Bald Eagle (*Haliaeetus leucocephalus*).

In May of 2007, the USFWS issued the National Bald Eagle Management Guidelines. In April of 2008, the FFWCC adopted a new Bald Eagle Management Plan that was written to closely follow the federal guidelines. Under FFWCC's new management plans, buffer zones are recommended based on the nature and magnitude of the project or activity. The recommended protective buffer zone is 660 feet or less from the nest tree, depending on what activities or structures are already near the nest. A FFWCC Eagle permit is not needed for any activity occurring outside of the 660-foot buffer zone. No activities are permitted within 330 feet of a nest during the nesting season, October 1 through May 15 or when eagles are present at the nest.

In addition to the on-site evaluation for "listed" species, BTC conducted a review for any FFWCC recorded Bald Eagle nests on or in the vicinity of the subject property. This review revealed no Bald Eagle nests located within one (1) mile of the project boundaries. Therefore, no issue with regards to the Bald Eagle is expected to arise.

The environmental limitations described in this document are based on observations and technical information available on the date of the on-site evaluation. This report is for general planning purposes only. The limits of any on-site wetlands/surface waters can only be determined and verified through field delineation and/or on-site review by the pertinent regulatory agencies. The wildlife surveys conducted within the subject property boundaries do not preclude the potential for any listed species, as noted on Table 1 (attached), currently or in the future. Should you have any questions or require any additional information, please do not hesitate to contact our office at (407) 894-5969. Thank you.

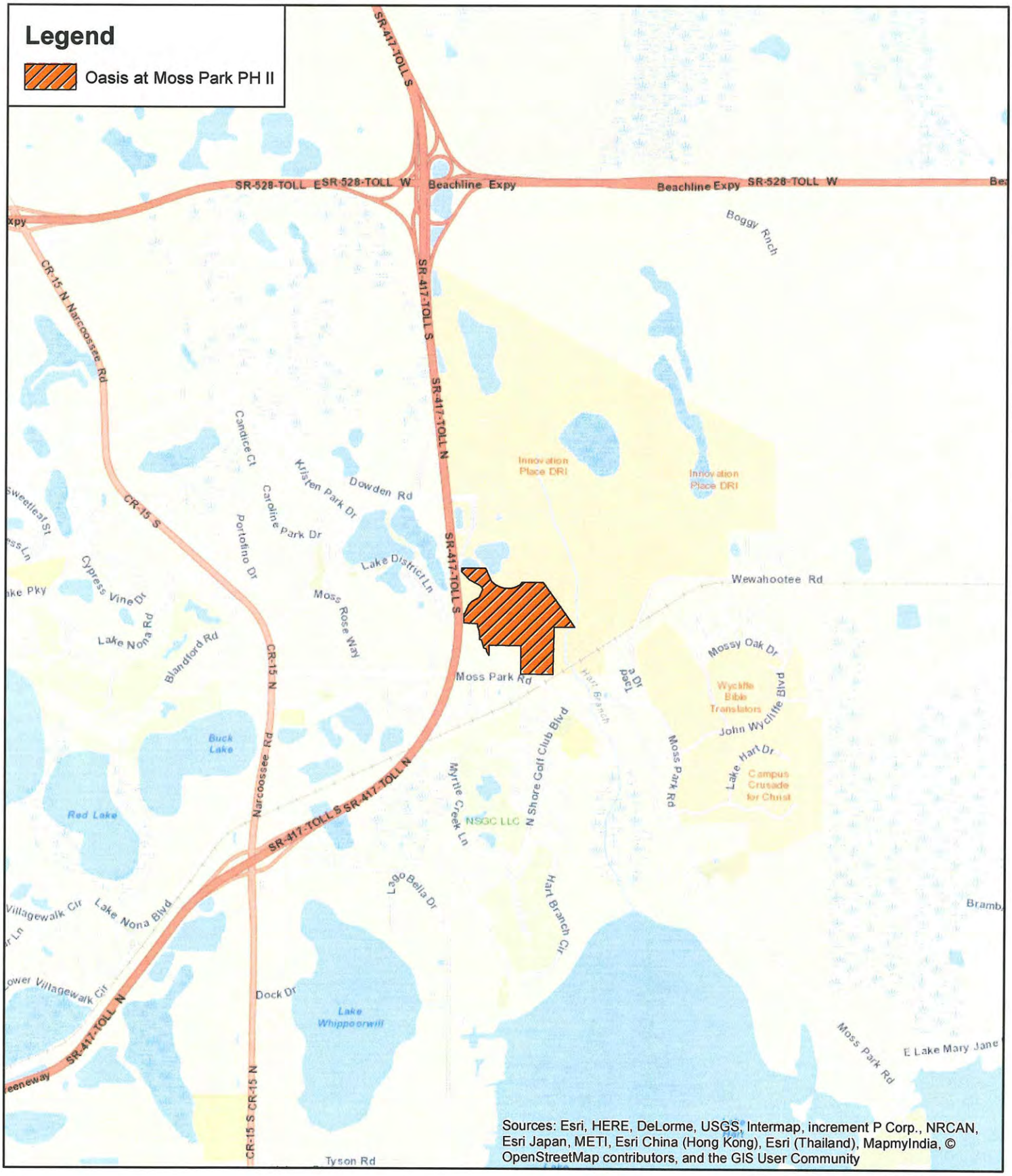
Regards,

Daniel Gough
Project Manager

John Miklos
President

attachments

Bio-Tech Consulting Inc.
Environmental and Permitting Services



Bio-Tech Consulting Inc.
Environmental and Permitting Services
2002 E. Robinson St. Orlando, FL 32803
Ph: 407-894-5969 Fax: 407-894-5970
www.bio-techconsulting.com

Oasis at Moss Park Phase II
Orange County, Florida
Figure 1
Location Map

0 0.25 0.5 Miles

Project #:899-01
Produced By: JDH
Date: 12/22/2015

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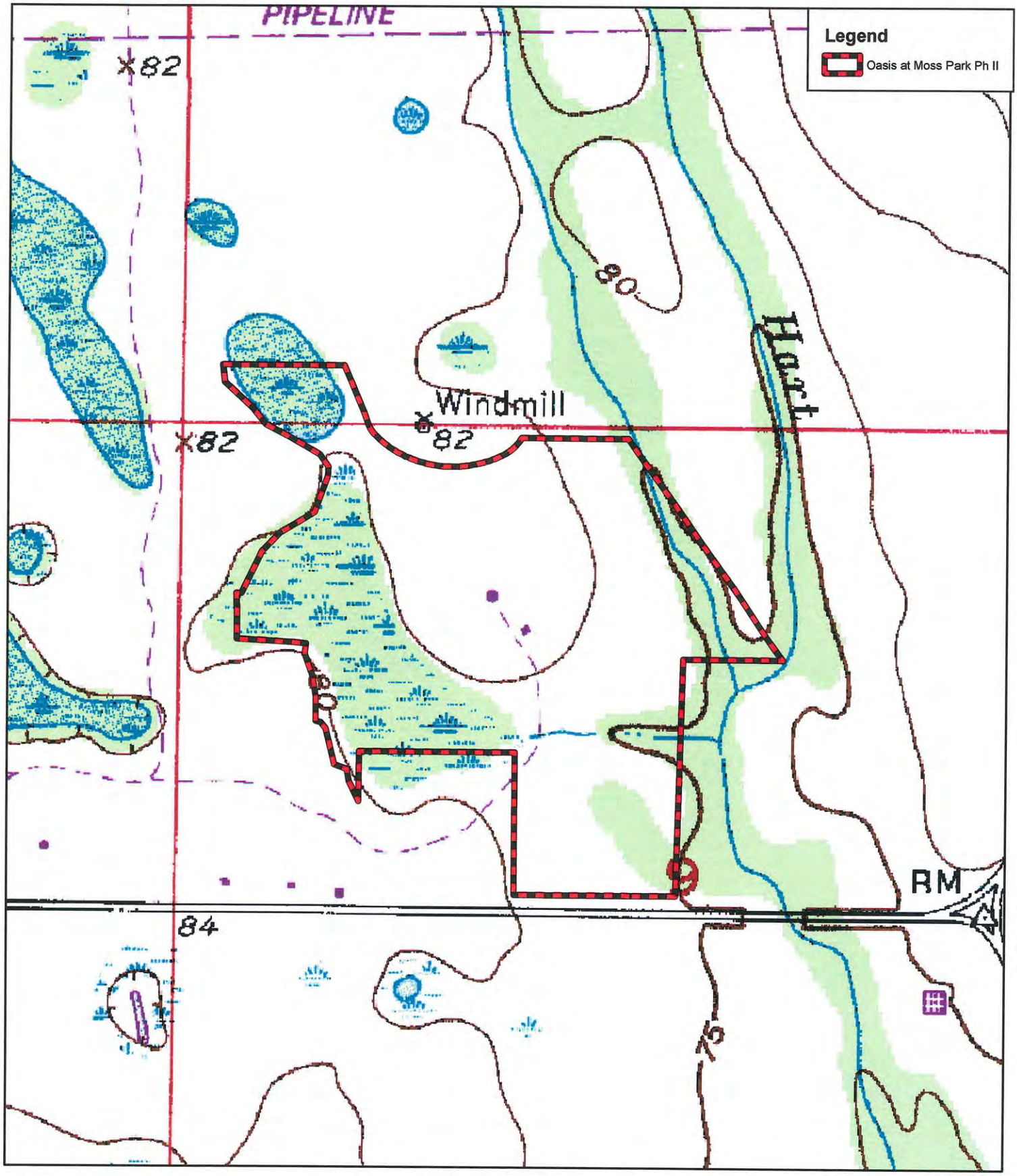
Oasis at Moss Park Phase II
Orange County, Florida
Figure 2
2014 Aerial Photograph

0 200 400 Feet

Project #:899-01
Produced By: JDH
Date: 2/9/2016



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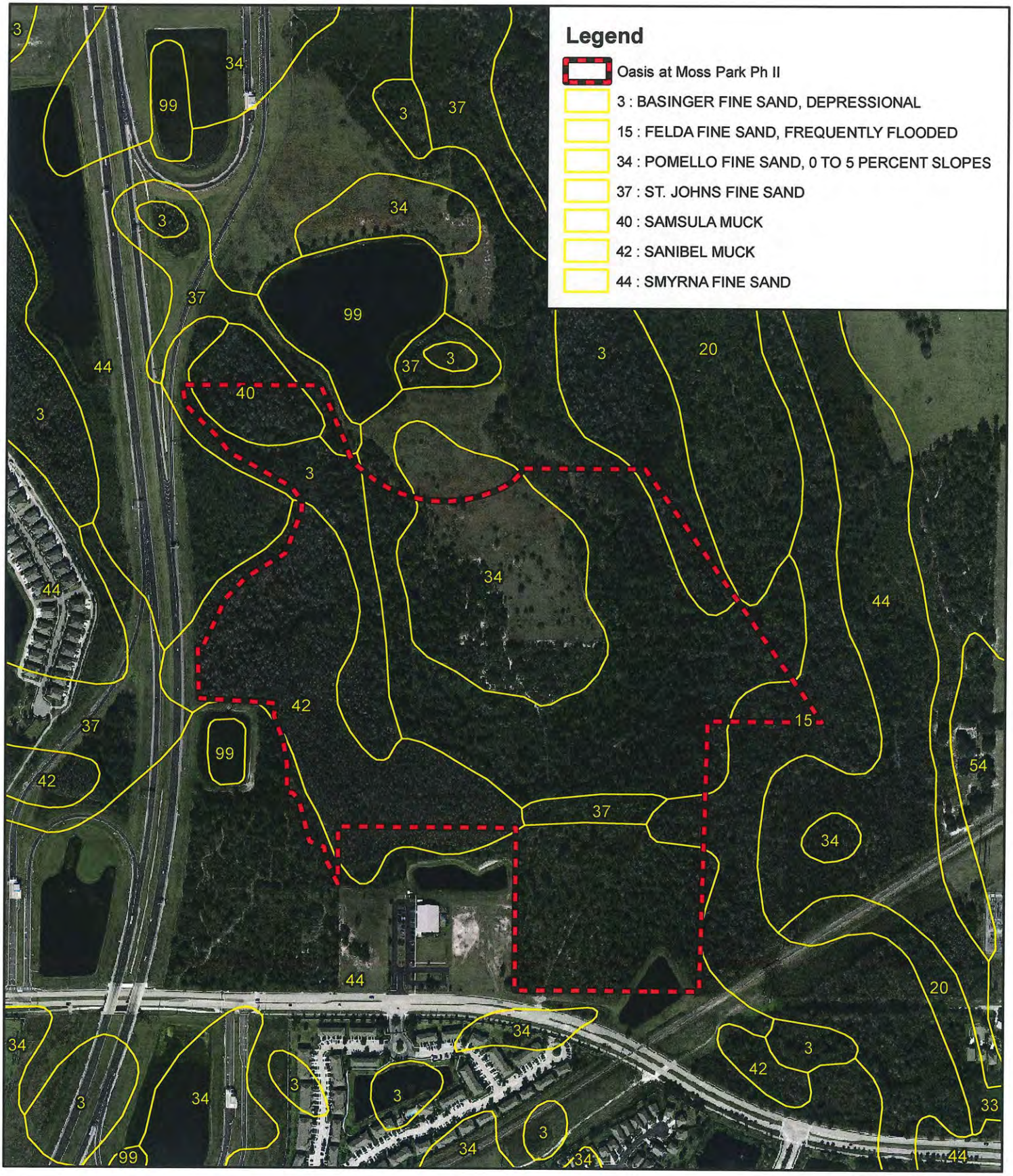
Oasis at Moss Park Phase II
Orange County, Florida
Figure 3
USGS Topographic Map

0 300 600 Feet

Project #:899-01
Produced By: JDH
Date: 12/23/2015



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Oasis at Moss Park Phase II
Orange County, Florida
Figure 4
USDA-NRCS Soils Map

0 200 400 Feet

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Date: 2/9/2016

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Oasis at Moss Park Phase II
Orange County, Florida
Figure 5
FLUCFCS Map

0 200 400 Feet

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Date: 2/9/2016

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Oasis at Moss Park Phase II
Orange County, Florida
Figure 6
Wetland Delineation Map

0 200 400 Feet

Project #:899-01
Produced By: JDH
Date: 12/23/2015

Table 1:	Potentially Occuring Listed Wildlife and Plant Species in Orange County, Florida		
Scientific Name	**Common Name**	**Federal Status**	**State Status**
FISH			
Cyprinodon variegatus hubbsi	Lake Eustis pupfish	N	SSC
AMPHIBIANS			
Lithobates capito	gopher frog	N	SSC
REPTILES			
Alligator mississippiensis	American alligator	SAT	FT(S/A)
Drymarchon corais couperi	eastern indigo snake	LT	FT
Gopherus polyphemus	gopher tortoise	C	FT
Lampropeltis extenuata	short-tailed snake	N	ST
Pituophis melanoleucus mugitus	Florida pine snake	N	SSC
Plestiodon reynoldsi	sand skink	LT	FT
BIRDS			
Aphelocoma coerulescens	Florida scrub-jay	LT	FT
Aramus guarauna	limpkin	N	SSC
Athene cunicularia floridana	Florida burrowing owl	N	SSC
Caracara cheriway	Crested Caracara	LT	FT
Egretta caerulea	little blue heron	N	SSC
Egretta thula	snowy egret	N	SSC
Egretta tricolor	tricolored heron	N	SSC
Eudocimus albus	white ibis	N	SSC
Falco sparverius paulus	southeastern American kestrel	N	ST
Grus canadensis pratensis	Florida sandhill crane	N	ST
Haliaeetus leucocephalus	bald eagle	N	**
Mycteria americana	wood stork	LT	FT
Pandion haliaetus	osprey	N	SSC*
Picoides borealis	red-cockaded woodpecker	LE	FE
Platalea ajaja	roseate spoonbill	N	SSC
Sterna antillarum	least tern	N	ST
MAMMALS			
Podomys floridanus	Florida mouse	N	SSC
Sciurus niger shermani	Sherman's fox squirrel	N	SSC
VASCULAR PLANTS			
Bonamia grandiflora	Florida bonamia	LT	E
Calopogon multiflorus	Many-flowered Grass-pink	N	T
Centrosema arenicola	Sand Butterfly Pea	N	E
Chionanthus pygmaeus	Pygmy Fringe Tree	LE	E
Centrosema arenicola	sand butterfly pea	N	N
Coelorachis tuberculosa	piedmont jointgrass	N	N
Deeringothamnus pulchellus	beautiful pawpaw	LE	E
Eriogonum longifolium var *gnaphalifolium*	scrub buckwheat	LT	E
Helianthus debilis ssp *tardiflorus*	beach sunflower	N	N
Ilex opaca var arenicola	scrub holly	N	N
Illicium parviflorum	star anise	N	E
Lechea cernua	nodding pinweed	N	T
Lupinus aridorum	scrub lupine	LE	E
Matelea floridana	Florida spiny-pod	N	E
Monotropa hypopithys	pinesap	N	E
Najas filifolia	Narrowleaf Naiad	N	T
Nemastylis floridana	Celestial Lily	N	E
Nolina atopocarpa	Florida beargrass	N	T
Nolina brittoniana	Britton's beargrass	LE	E
Ophioglossum palmatum	hand fern	N	E
Panicum abscissum	cutthroat grass	N	E
Paronychia chartacea ssp *chartacea*	paper-like nailwort	LT	E
Persea humilis	scrub bay	N	N
Pecluma plumula	Plume Polypody	N	E
Polygonella myriophylla	Small's jointweed	LE	E
Prunus geniculata	scrub plum	LE	E
Pteroglossaspis ecristata	Giant Orchid	N	T
Stylisma abdita	scrub stylisma	N	E
Warea amplexifolia	clasping warea	LE	E
Zephyranthes simpsonii	redmargin lily	N	T

FEDERAL LEGAL STATUS

LE-Endangered: species in danger of extinction throughout all or a significant portion of its range.
LT-Threatened: species likely to become Endangered within the foreseeable future throughout all or a significant portion of its range.
SAT-Endangered due to similarity of appearance to a species which is federally listed such that enforcement personnel have difficulty in attempting to differentiate between the listed and unlisted species.
C-Candidate species for which federal listing agencies have sufficient information on biological vulnerability and threats to support proposing to list the species as Endangered or Threatened.
XN-Non-essential experimental population.
N-Not currently listed, nor currently being considered for listing as Endangered or Threatened.

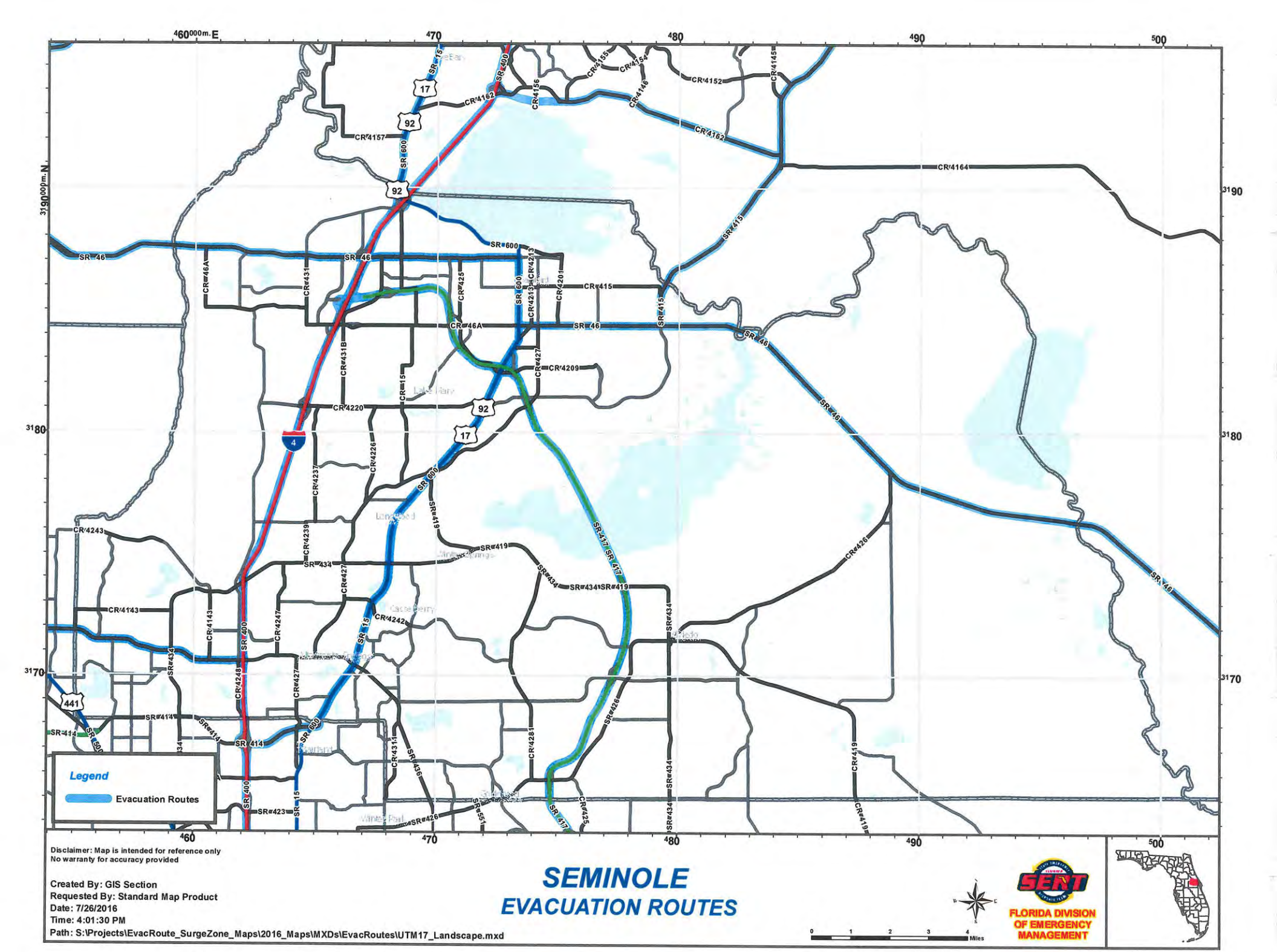
STATE LEGAL STATUS - ANIMALS

FE- Listed as Endangered Species at the Federal level by the U. S. Fish and Wildlife Service
FT- Listed as Threatened Species at the Federal level by the U. S. Fish and Wildlife Service
FXN- Federal listed as an experimental population in Florida
FT(S/A)- Federal Threatened due to similarity of appearance
ST- State population listed as Threatened by the FFWCC. Defined as a species, subspecies, or isolated population which is acutely vulnerable to environmental alteration, declining in number at a rapid rate, or whose range or habitat is decreasing in area at a rapid rate and as a consequence is destined or very likely to become an endangered species within the foreseeable future.
SSC-Listed as Species of Special Concern by the FFWCC. Defined as a population which warrants special protection, recognition, or consideration because it has an inherent significant vulnerability to habitat modification, environmental alteration, human disturbance, or substantial human exploitation which, in the foreseeable future, may result in its becoming a threatened species. (SSC* for Pandion haliaetus (Osprey) indicates that this status applies in Monroe county only.)
N-Not currently listed, nor currently being considered for listing.

*** State protected by F.A.C. 68A-16.002 and federally protected by both the Migratory Bird Treaty Act (1918) and the Bald and Golden Eagle Protection Act (1940)*

STATE LEGAL STATUS - PLANTS

E-Endangered: species of plants native to Florida that are in imminent danger of extinction within the state, the survival of which is unlikely if the causes of a decline in the number of plants continue; includes all species determined to be endangered or threatened pursuant to the U.S. Endangered Species Act.
T-Threatened: species native to the state that are in rapid decline in the number of plants within the state, but which have not so decreased in number as to cause them to be Endangered.
N-Not currently listed, nor currently being considered for listing.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FLORIDA DIVISION OF EMERGENCY MANAGEMENT