



REVISED
City of Apopka
Planning Commission
Meeting Agenda
September 11, 2018
5:30 PM @ City Council Chambers

I. CALL TO ORDER

If you wish to appear before the Planning Commission, please submit a “Notice of Intent to Speak” card to the Recording Secretary.

II. OPENING AND INVOCATION

III. APPROVAL OF MINUTES:

1. Approve minutes of the Planning Commission regular meeting held August 14, 2018.

IV. PUBLIC HEARING:

1. City of Apopka Code of Ordinances - PART III – Land Development Code, Article V, Section 5.05.00 – Floodplains; and recommend adoption of the technical amendments to the Florida Building Code.
2. City of Apopka Comprehensive Plan – Capital Improvements Element – Amending the City’s Five-Year Capital Improvements Plan to add recreation improvements.
3. Change Of Zoning - Mid-Florida Logistics Park – From I-1 (Restricted Industrial), Mixed-EC, R-1AA (Residential), AG (Agriculture), A-1 (Zip) to PUD Master Plan/Preliminary Development Plan; Subdivision and Site Plan for property owned by Mid-Florida Freezer Warehouses LTD and Eagles Landing at Ocoee, LLC; and located on the west side of SR 429, south of General Electric Road, east of Hermit Smith Road. (Parcel ID #s: 01-21-27-0000-00-030; 01-21-27-0000-00-060; 06-21-28-7172-12-020; 06-21-28-7172-12-041; 06-21-28-7172-12-060; 06-21-28-7172-13-000; 12-21-27-0000-00-010; 12-21-27-0000-00-015; 12-21-27-0000-00-017; 12-21-27-0000-00-018; 12-21-27-0000-00-021)

V. SITE PLANS:

1. Final Development Plan – Apopka Medical Office – Property owned by Urgent Care Developers of Apopka, LLC, c/o Tim Burrill, and located at 1520 West Orange Blossom Trail. (Parcel ID #s: 05-21-28-0000-00-008; 05-21-28-0000-00-038)
2. Plat - Lakeside, Phase 2 – Property owned by Avatar Properties, Inc. and located south of Marshall Lake and West of SR 451. (Parcel ID #s: 17-21-28-0000-00-014, 08-21-28-0000-00-043)
3. Plat – Vista Reserve – Property owned by Mikhail Wafaa, Abdelsayed George, Abdelsayed Lucy, Abdelsayed Wafeek, and located on the east side of Rogers Road, approximately one half mile north of the intersection of Rogers Road and Lester Road. (Parcel ID #: 29-20-28-0000-00-003)

VI. OLD BUSINESS:

VII. NEW BUSINESS:

VIII. ADJOURNMENT:

All interested parties may appear and be heard with respect to this agenda. Please be advised that, under state law, if you decide to appeal any decision made by the City Council with respect to any matter considered at this meeting or hearing, you will need a record of the proceedings, and that, for such purpose, you may need to ensure that a verbatim record of the proceedings is made, which record includes a testimony and evidence upon which the appeal is to be based. The City of Apopka does not provide a verbatim record.

In accordance with the American with Disabilities Act (ADA), persons with disabilities needing a special accommodation to participate in any of these proceedings should contact the City Clerk's Office at 120 East Main Street, Apopka, FL 32703, telephone (407) 703-1704, no less than 48 hours prior to the proceeding.

MINUTES OF THE PLANNING COMMISSION REGULAR MEETING HELD ON AUGUST 14, 2018, AT 5:30 P.M. IN THE CITY COUNCIL CHAMBERS, APOPKA, FLORIDA.

MEMBERS PRESENT: James Greene, Linda Laurendeau, Robert Ryan, and John Sprinkle

ABSENT: Jose Molina, Butch Stanley, Orange County Public Schools (Non-voting)

STAFF PRESENT: James Hitt, FRA-RA – Community Development Director, David Moon, AICP - Planning Manager, Patrick Brackins – City Attorney, Pamela Richmond – Senior Planner, Jean Sanchez – Planner II, and Jeanne Green – Recording Secretary

OTHERS PRESENT: Barbara Fox, Gregory Fox, John Dingman, Richard Jennings, Erika Hughes, James Palm, Frank Bombeeck, Eduardo Garcia, Suzanne Kidd, Jeffrey Chaffee, Rigo Noriega, Gordon Lovestrand, Judith Lovestrand, Aflred Kager, Theresa Sargeant – Apopka Chief

OPENING AND INVOCATION: Chairperson Greene called the meeting to order and asked for a moment of silent prayer. The Pledge of Allegiance followed.

INTRODUCTION: Chairperson Greene introduced and welcomed Robert Ryan as a new member to the Planning Commission. Mr. Ryan previously served for three years (2013 – 2016) on the Commission.

APPROVAL OF MINUTES: Chairperson Greene asked if there were any additional corrections or additions to the regular meeting minutes of July 10, 2018, at 5:30 p.m.

Motion: **John Sprinkle made a motion to approve the Planning Commission minutes from the regular meeting held on July 10, 2018, at 5:30 p.m. and seconded by Linda Laurendeau. Aye votes were cast by James Greene, Linda Laurendeau, Robert Ryan, and John Sprinkle (4-0).**

LEGISLATIVE – LAND DEVELOPMENT CODE AMENDMENT – KELLY PARK INTERCHANGE FORM-BASED CODE – MEdTECH CAMPUS OVERLAY DISTRICT - Chairperson Greene stated this is a request to find the MEdTech Campus Overlay District within Employment District of the Kelly Park Form-Based Code for the Wekiva Parkway Interchange Plan Area to be consistent with the Comprehensive Plan; and recommend approval to adopt this overlay district.

Staff Presentation: James Hitt, FRA-RA, Community Development Director, stated the Kelly Park Interchange Form-Based Code was approved by the Apopka City Council on June 21, 2017. The Form-Based Code was developed to guide and regulate development within the Wekiva Parkway Interchange Plan area to achieve a specific urban form or character and physical urban form – such as building design and scale while placing less focus on land use or zoning.

This is in accordance with Objective 19 of the Future Land Use Element (Comp Plan) directs the City to implement a form-based code to further the Wekiva Parkway Interchange Plan; and, Objective 20 of the Comprehensive Plan, Future Land Use Element.

A primary purpose of the proposed development standards is to create a sustainable community in the Interchange area – a place where people can live, work, play and shop.

MINUTES OF THE PLANNING COMMISSION REGULAR MEETING HELD ON AUGUST 14, 2018, AT 5:30 P.M.

The proposed MEdTech Campus Overlay District is being created within the existing Employment District as a means to establish specific development criteria for a campus-type area for Medical, Educational and Technology. This overlay district standards include, but are not limited to: permitted uses, district size (40 to 100 acres), building materials, building step-backs, buffers, size, orientation, pedestrian, bicycle and auto connectivity, and other guidelines for the campus development.

This MEdTech Overlay District is only applicable within the Employment District to the Kelly Park Interchange Form-Based Code. This area is west of S.R. 429, generally east of Effie Drive, and is both north and south of Kelly Park Rd, all within the Kelly Park Interchange Form-Based Code area.

Staff's recommendation is to find the MEdTech Campus Overlay District within Employment District of the Kelly Park Form-Based Code for the Wekiva Parkway Interchange Plan Area to be consistent with the Comprehensive Plan, and Recommend that City Council adopt this overlay district.

This item is considered legislative. The staff report and its findings are to be incorporated into and made a part of the minutes of this meeting

Chairperson Greene opened the meeting for public hearing.

In response to an inquiry by Suzanne Kidd, 1260 Lexington Parkway, Erika Hughes, the City's consultant from VHB, 225 East Robinson Street, Orlando, stated that since the overlay district could be applied in other areas of the city, the language does not provide specific guidelines so as not to handicap those potential developments. The types of development being proposed for this area go towards health and wellness so developers will have more incentive to go "Green."

Mr. Hitt stated that the healthcare design field has seen a decided shift in the last several years as LEED® (Leadership in Energy and Environmental Design) certification has become a standard for many healthcare organizations.

With no one else wishing to speak, Chairperson Greene closed the public hearing.

Motion: Linda Laurendeau made a motion to find the MEdTech Campus Overlay District within Employment District of the Kelly Park Form-Based Code for the Wekiva Parkway Interchange Plan Area to be consistent with the Comprehensive Plan; and recommend approval to adopt this overlay district. Motion seconded by Robert Ryan. Aye votes were cast by James Greene, Linda Laurendeau, Robert Ryan and John Sprinkle (4-0). (Vote taken by poll.)

QUASI-JUDICIAL – PLANNED UNIT DEVELOPMENT AMENDMENT – AVIAN POINTE -

Chairperson Greene stated this is a request to find the proposed amendment to the PUD zoning and Master Plan consistent with the Comprehensive Plan and Land Development Code; and recommend approval of the Avian Pointe Planned Unit Development Master Plan for property owned by Apopka Clear Lake Investments, LLC, and located on the east side of SR 429, north of Lust Road.

Chairperson Greene asked if there were any affected parties in attendance that wished to speak. No one spoke.

Chairperson Greene asked if the Commission members had any ex parte communications to divulge regarding this item. No ex parte communications occurred.

MINUTES OF THE PLANNING COMMISSION REGULAR MEETING HELD ON AUGUST 14, 2018, AT 5:30 P.M.

Staff Presentation: David Moon, AICP, Planning Manager, stated this is a request to find the proposed amendment to the PUD zoning and Master Plan consistent with the Comprehensive Plan and Land Development Code; and recommend approval of the Avian Pointe Planned Unit Development Master Plan for property owned by Apopka Clear Lake Investments, LLC, and located on the east side of SR 429, north of Lust Road. The applicant is Frank Bombeeck. The existing use is vacant land and the proposed use is a residential development with 56 single family homes; 222 townhomes, 480 apartments. The future land uses are Residential Low and medium Density and the zoning is PUD (Planned Unit Development). The tract size is 127.21 +/- acres.

The subject property is approximately 127.21 acres in size and is zoned PUD (Planned Unit Development) and has a future land use designations of Residential Medium Density and Residential Low Density. The subject property is located on the east side of SR 429, north of Lust Road, and south of Peterson Road. Access to the development is proposed via Lust Road and Peterson Road.

The original Avian Pointe PUD Master Plan was approved via Ordinance No. 2433 and permitted up to 758 residential units consisting of single-family, townhomes, apartments, a shared use recreation area, and a flex use parcel consisting of either a school or daycare facility, senior housing facility, or a 100 room boutique hotel. The PUD Master Plan was amended in 2017 to allow the apartment units to be up to four stories, not to exceed 50-feet in height. The applicant is requesting an amendment to the PUD (Planned Unit Development) zoning and Master Plan, and proposed revisions to the Master Plan appear in the attached phase-by-phase comparison table.

The amendment to the PUD Zoning and Master Plan does not propose an increase in the total amount of residential units that are permitted pursuant to Ordinance No. 2433. Development design standards from the current Master Plan are carried over to the Proposed Master Plan.

Residential development profile:

| Unit type | Number of units | Minimum Livable Area (Square Feet) | Building Height |
|---|--------------------|------------------------------------|------------------------|
| Single Family (75' width; 8,400 sq.ft. min.) (60-feet x 125-feet, 60-feet x 132-feet, 70-feet x 120-feet) | 58 56 | 1,700 | 35-foot maximum height |
| Townhomes: | 216 222 | 1,350 | 3 stories; 45-feet |
| Apartments: | 484 480 | | 4 stories; 50-feet |
| | 1-Bedroom: | 750 minimum | |
| | 2-Bedroom: | 900 minimum | |
| | 3-Bedroom: | 1,050 minimum | |
| Total Residential units: | 758 | | |

B. Deviations. The applicant is requesting one deviation to the City's required development standards. For a PUD Master Plan, a deviation from the City's Land Development Code does not represent a variance but a development standard or zoning condition unique to and approved as part of the Planned Unit Development zoning. PUD's are required to satisfy the requirements of the Land Development Code unless the City Council finds that, based on substantial evidence, a proposed alternative development guideline is adequate to protect to the public health safety, and welfare. Any deviations must be consistent with the policies of the Comprehensive Plan.

MINUTES OF THE PLANNING COMMISSION REGULAR MEETING HELD ON AUGUST 14, 2018, AT 5:30 P.M.

1. Typical Lot Width Standard, Land Development Code Section 2.02.18.D.11. requires a minimum lot size within a PUD to be 70-feet in width, and to have a minimum site area of 7,500 square feet. The developer is proposing 39, 60-foot wide lots with minimum lots sizes of 7,500 square feet. 17 units are proposed at 75-feet in width.
- C. Justification for Deviations/Development Standard. The following justifications are provided for the deviations that is proposed.
1. Dedication of right-of-way - The PUD Master Plan proposes the dedication of right-of-way to the City referred to as Grand Avian Parkway on the PUD Master Plan which will connect Lust Road to Peterson Road. The right-of-way is proposed to range in width from 75-feet to 80-feet. An 11-foot wide bike path/trail will be provided on the west side of the right-of-way. A 5-foot wide sidewalk will be provided on the east side. A landscape median ranging in width between 10-feet and 15-feet is provided.
 2. An improved recreation amenities package is proposed – The PUD Master Plan proposes the construction of a 7.071 acre Community Park and Recreation area that will consist of a tot lot, restrooms, basketball courts, tennis courts, soccer field, and baseball field.
 3. Abutting Site Characteristics - The PUD Master Plan proposes a 20-foot landscape buffer between the proposed single-family homes and the Clear Lake Estates subdivision to the east. The development will not be visible from the homes within Clear Lake Estates and separation between the larger lots in Clear Lake Estates and the smaller lots within the Avian Pointe PUD will be provided with the landscape buffer. The developer is proposing 75-foot wide lots adjacent to the Clear Lake Estates subdivision. 60-foot wide lots will be provided adjacent to Clearwater Lake and within the interior of the single-family subdivision.
 4. Protection of Environmentally Sensitive Areas and Preservation of Open Space - The PUD Master Plan protects wetlands adjacent to Clearwater Lake. Single-family homes will be setback approximately 190-feet from Clearwater Lake.
 5. Flex Zone Development tract – The PUD Master Plan reserves a 14.998 acre tract for either of the following uses: 1) School or daycare facility, 2) Senior Housing Facility, or 3) 100 room boutique hotel. The School site was expanded to

The PUD recommendations are that the zoning classification of the following described property be designated as Planned Unit Development (PUD), as defined in the Apopka Land Development Code, and with the following Master Plan provisions subject to the following zoning provisions:

- A. The uses permitted within the PUD district shall be single-family residential uses.
- B. Terms of Expiration for this PUD shall be as follows:

If a Final Development Plan associated with the PUD district has not been approved by the City within three years, and site development has not commenced within four years after approval of these Master Plan provisions, the approval of the Master Plan provisions will expire. At such time, the City Council may:

1. Permit a single six-month extension for submittal of the required Final Development Plan;
2. Allow the PUD zoning designation to remain on the property pending resubmittal of new Master Plan provisions and any conditions of approval; or
3. Rezone the property to a more appropriate zoning classification.

The proposed use of the property is consistent with the Low Density and Medium Density Residential Future Land Use designation and is consistent with the Land Development Code.

Per Orange County Public Schools, the project is vested to satisfy capacity, however there are outstanding concurrency issues that will be required to be satisfied prior to approval of a residential plat or prior to a final development plan for a multi-family apartment site plan.

Pursuant to Section 7 of the Joint Planning Area agreement, notification to Orange County is not required for a rezoning application as the subject parcels are not adjacent to unincorporated Orange County.

The Development Review Committee finds the proposed amendment to the PUD zoning and Master Plan consistent with the Comprehensive Plan and Land Development Code and recommends approval of the Avian Pointe Planned Unit Development Master Plan.

Staff recommended the Planning Commission find the proposed amendment to the PUD zoning and Master Plan consistent with the Comprehensive Plan and Land Development Code; and to recommend approval of the amendment to the PUD zoning and Master Plan for Avian Pointe based on the findings and facts presented in the staff report and exhibits.

This item is considered quasi-judicial. The staff report and its findings are to be incorporated into and made a part of the minutes of this meeting.

In response to questions by Ms. Laurendeau, Frank Bombeeck, Apopka Clear Lake Investments, LLC, 1810 West Kennedy Boulevard, #237, Tampa, confirmed that a large section of the Clear Lake Estates fence adjacent to Avian Pointe was blown down during the hurricane. He added that a 20-foot landscape buffer is proposed between the single-family homes in Avian Pointe and the Clear Lake Estates subdivision to the east. The development will not be visible from the homes within Clear Lake Estates and separation between the larger lots in Clear Lake Estates and the smaller lots within the Avian Pointe PUD will be provided with the landscape buffer.

Petitioner: Thomas Sullivan, Gray Robinson, 301 East Pine Street, Suite 1400, Orlando, stated he represents the owner and there are only a handful of changes to the proposed plan. The entire project was re-configured to accommodate the Orange County Public Schools request for 15 acres on the southwest side of the project for an elementary school. The lot width for the interior single family residences section was reduced to 60 feet. Although the same number of residential units were kept, two of the single family lots were removed; four of the apartments were remove; and six to townhomes were added. The spine road was realigned.

MINUTES OF THE PLANNING COMMISSION REGULAR MEETING HELD ON AUGUST 14, 2018, AT 5:30 P.M.

Mr. Sprinkle expressed his concerns regarding the numerous requests from developers in the past few months for smaller lot sizes.

Mr. Bombbeck stated that due to the additional land required to accommodate the Orange County School Board and the wetlands on the north side of the property, moving the project up has created a very difficult problem. He said he is trying to make money but probably won't because they had to realign the spine road and he lost two lots.

In response to Mr. Sprinkle, Patrick Brackins, Board Attorney, stated that the smaller lot sizes is a deviation as allowed because the purpose of a Planned Unit Development (PUD) district is to: "permit planned unit developments which are intended to promote efficient and economical land use; improve the level of amenities; provide appropriate and harmonious variety in physical development; permit creative site design; provide improved living environments; provide orderly and economic development in the city; and, protect adjacent and nearby existing and future city development. In view of the substantial public advantages of planned unit development, it is the intent of PUD regulations to promote and encourage development in this form where tracts suitable in size, location, and character for the uses and structures proposed are to be planned and developed as unified and coordinated units."

Mr. Sullivan added that each development is considered different. While they are requesting a reduction of lots for the interior section, they are keeping the same house sizes; and there will be a 25 foot landscape buffer between the Avian Pointe residences and those in Clear Lake.

In response to a question by Ms. Laurendeau, Mr. Sullivan stated that they are removing two single family residential lots and four apartments; and they are adding six townhomes.

Mr. Moon added that the master plan proposes a 25 foot landscape buffer while the code only requires a 10 foot landscape buffer.

In response to a question by Ms. Laurendeau, Mr. Sullivan stated the Master Homeowners' Association will be responsible for the upkeep of all the buffer areas.

Chairperson Greene opened the meeting for public hearing.

In response to questions by Barbara Fox, 2452 Pickford Circle, Apopka, Mr. Moon stated that there are no current plans for any improvements or vacation of King Street.

In response to a question by Ms. Laurendeau, Mr. Moon stated there will be roundabouts within the project but not at Peterson Road.

In response to questions by Jeff Chaffee, 2444 Wyndham Bay Place, Apopka, Mr. Moon stated the 20-foot landscape buffer will be owned and maintained by the Avian Pointe HOA and will comprise trees and shrubs as indicated in the preliminary and final development plans.

Mr. Hitt stated there is no development planned for around the lake.

In response to questions by Richard Jennings, 519 Natural Bridge Court, Apopka, Mr. Bombbeck stated the fence between where Mr. Jennings' lot is and Avian Pointe is still in place. Although his lot is across from the Avian Pointe recreation area, there will still be a 25 foot landscape buffer area as well as the fence between that area and Mr. Jennings' lot.

With no one else wishing to speak, Chairperson Greene closed the public hearing.

Motion: Robert Ryan made a motion to find the proposed amendment to the PUD zoning and Master Plan consistent with the Comprehensive Plan and Land Development Code; and to recommend approval of the amendment to the PUD zoning and Master Plan for Avian Pointe based on the findings and facts presented in the staff report and exhibits, and City Council approval of the Development Agreement for the property owned by Apopka Clear Lake Investments, LLC, and located on the east side of SR 429, north of Lust Road. Motion seconded by John Sprinkle. Aye votes were cast by Aye votes were cast by James Greene, Linda Laurendeau, Robert Ryan, and John Sprinkle (4-0). (Vote taken by poll.)

QUASI-JUDICIAL – FINAL DEVELOPMENT PLAN – AUTOZONE STORE - Chairperson Greene stated this is a request to find the AutoZone Store Final Development Plan consistent with the Land Development Code and Comprehensive Plan; and recommend approval of Final Development Plan, subject to the Condition of Approval and the findings of the staff report for the property owned by Calmil Investment Group LP and Kenneth Lee Jureit and located at 1120 West Orange Blossom Trail.

Chairperson Greene asked if there were any affected parties in attendance that wished to speak. No one spoke.

Chairperson Greene asked if the Commission members had any ex parte communications to divulge regarding this item. No ex parte communications occurred.

Staff Presentation: Jean Sanchez, Planner II, stated this is a request to find the AutoZone Store Final Development Plan consistent with the Land Development Code and Comprehensive Plan; and recommend approval of Final Development Plan, subject to the Condition of Approval and the findings of the staff report for the property owned by Calmil Investment Group LP and Kenneth Lee Jureit and located at 1120 West Orange Blossom Trail. The engineer is Rogers Engineering, LLC, c/o Wallace L. Brinkman III, P.E. The future land use is Commercial and the zoning is C-2 (General Commercial). The existing use is vacant land and the proposed use is retail sales. The proposed building size is 6,815 sq. ft. with a Floor Area Ratio of 0.146 (0.25 Maximum). The tract size is 1.07 +/- acres

This is a request to approve the AutoZone Store Final Development Plan that includes a building size of 6,815 square feet. A preliminary development plan is not required for development proposing less than 10,000 sq. ft. of building floor area. The site plan takes into consideration the future potential to plat the property into separate lots.

Per the Land Development Code parking requirements, 35 parking spaces are required while the applicant is proposing 42 parking spaces, two of which are reserved as a handicapped accessible spaces.

The site will have access to U.S. 441 via a cross-access easement through the Verizon Store to Lake Doe Boulevard. Two other access points will be available through cross-access easement across the IHOP property.

AutoZone and IHOP are proposed on a single parcel and will share all access; accordingly, a single transportation impact analysis (TIA) was submitted to evaluate the combined impacts of AutoZone and

MINUTES OF THE PLANNING COMMISSION REGULAR MEETING HELD ON AUGUST 14, 2018, AT 5:30 P.M.

IHOP on the surrounding roadway segments and intersections. Included in the analysis were segments of U.S 441/W Orange Blossom Trail, Errol Parkway, Lake Doe Boulevard, and Old Dixie Highway. Intersections analyzed were U.S. 441/W Orange Blossom Trail and Vick Road; U.S. 441/W Orange Blossom Trail and Errol Parkway; Old Dixie Highway and Errol Parkway; Old Dixie Highway and Vick Road; Lake Doe Boulevard site entrance; and U.S. 441/W Orange Blossom Trail site entrances.

The projects will generate 503 daily and 44 P.M. Peak Hour Net New trips. The addition of these project trips to the study roadways and intersections will not cause the Level of Service (LOS) to fall below the City's adopted LOS standard.

Right and left turn warrant analyses were conducted for the site entrances on U.S. 441 and concluded that turn lanes are not needed to safely accommodate project traffic.

Both access driveways on U.S. 441/W Orange Blossom Trail are required for the site at the time of development of either project if they are not developed simultaneously.

The height of the proposed building is 25 feet, well below the maximum allowable height of 35 feet. Staff has found the proposed building elevations meet the intent of the City's Development Design Standards\Guidelines.

The stormwater management system includes an on-site retention area, on the southern portion of the project site. The stormwater pond design meets the City's Land Development Code requirements.

As part of the development plan approval, Ligustrum and Crepe Myrtles, and Indian Hawthorn shrubs line the 10-foot wide buffer adjacent to the U.S. Highway 441. Magnolias are placed in the parking landscaped islands

Arbor Assessment:

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| Total inches on-site (before removal): | 163 |
| Total specimen inches removed | 110 |
| Total inches retained: | 17 |
| Total inches added: | 174 |
| Total inches post development: | 97 |

A Condition of Approval is that all access driveways must be constructed and all associated cross access easements must be recorded across both the IHOP and AutoZone sites prior to issuance of a certificate of occupancy on either site.

The Development Review Committee recommends approval of the AutoZone Store – Final Development Plan, subject to the findings of this staff report.

Staff recommends the Planning Commission find the Final Development Plan consistent with the Comprehensive Plan and Land Development Code; compatible with the character of the surrounding area; and recommend approval of AutoZone Store Final Development Plan, subject to the findings of the staff report.

MINUTES OF THE PLANNING COMMISSION REGULAR MEETING HELD ON AUGUST 14, 2018, AT 5:30 P.M.

The role of the Planning Commission for this development application is to advise the City Council to approve or deny based on consistency with the Comprehensive Plan and Land Development Code.

This item is considered quasi-judicial. The staff report and its findings are to be incorporated into and made a part of the minutes of this meeting.

In response to questions by Ms. Laurendeau, John Dingman, Rogers Engineering, LLC, 1105 SE 3rd Avenue, Ocala, stated that the turn radius for the trailer trucks meet industry standards and all stormwater will be kept onsite.

Petitioner: Mr. Dingman stated he supports the staff report and was available to answer any questions.

Chairperson Greene opened the meeting for public hearing. With no one wishing to speak, Chairperson Greene closed the public hearing.

Motion: **John Sprinkle made a motion to find the AutoZone Store Final Development Plan consistent with the Comprehensive Plan and Land Development Code; compatible with the character of the surrounding area; and recommend approval of AutoZone Store Final Development Plan, subject to the findings of the staff report for the property owned by Calmil Investment Group LP and Kenneth Lee Jureit and located at 1120 West Orange Blossom Trail. Motion seconded by Linda Laurendeau. Aye votes were cast by James Greene, Linda Laurendeau, Robert Ryan, and John Sprinkle (4-0). (Vote taken by poll.)**

QUASI-JUDICIAL – FINAL DEVELOPMENT PLAN – IHOP RESTAURANT - Chairperson Greene stated this is a request to find the IHOP Restaurant Final Development Plan consistent with the Land Development Code and Comprehensive Plan; and recommend approval of Final Development Plan, subject to the Condition of Approval and the findings of the staff report for the property owned by Calmil Investment Group LP and Kenneth Lee Jureit and located at 1120 West Orange Blossom Trail.

Chairperson Greene asked if there were any affected parties in attendance that wished to speak. No one spoke.

Chairperson Greene asked if the Commission members had any ex parte communications to divulge regarding this item. No ex parte communications occurred.

Staff Presentation: Ms. Sanchez stated this is a request to find the IHOP Restaurant Final Development Plan consistent with the Land Development Code and Comprehensive Plan; and recommend approval of Final Development Plan, subject to the Condition of Approval and the findings of the staff report for the property owned by Calmil Investment Group LP and Kenneth Lee Jureit and located at 1120 West Orange Blossom Trail. The engineer is Rogers Engineering, LLC, c/o Wallace L. Brinkman III, P.E. The future land use is Commercial and the zoning is C-2 (General Commercial). The existing use is vacant land and the proposed use is a restaurant. The proposed building size is 4,400 sq. ft. with a Floor Area Ratio of 0.046 (0.25 Maximum). The tract size is 2.25 +/- acres

This is a request to approve the IHOP Restaurant – Final Development Plan that includes a building size of 4,500 square feet. A preliminary development plan is not required for development proposing less than 10,000 sq. ft. of building floor area.

MINUTES OF THE PLANNING COMMISSION REGULAR MEETING HELD ON AUGUST 14, 2018, AT 5:30 P.M.

Per Land Development Code parking requirements, 48 parking spaces are required while the applicant is proposing 70 parking spaces, four of which are reserved as a handicapped accessible spaces.

The site will have access to U.S. 441 via a full access at the northern end through cross-access easement within the Verizon Store and AutoZone parcels, and two access driveways along U.S. 441 within the IHOP site, one full-access and one right-in, right-out only.

AutoZone and IHOP are proposed on a single parcel and will share all access; accordingly, a single transportation impact analysis (TIA) was submitted to evaluate the combined impacts of AutoZone and IHOP on the surrounding roadway segments and intersections. Included in the analysis were segments of U.S 441/W Orange Blossom Trail, Errol Parkway, Lake Doe Boulevard, and Old Dixie Highway. Intersections analyzed were U.S. 441/W Orange Blossom Trail and Vick Road; U.S. 441/W Orange Blossom Trail and Errol Parkway; Old Dixie Highway and Errol Parkway; Old Dixie Highway and Vick Road; Lake Doe Boulevard site entrance; and U.S. 441/W Orange Blossom Trail site entrances.

The projects will generate 503 daily and 44 P.M. Peak Hour Net New trips. The addition of these project trips to the study roadways and intersections will not cause the Level of Service (LOS) to fall below the City's adopted LOS standard.

Right and left turn warrant analyses were conducted for the site entrances on U.S. 441 and concluded that turn lanes are not needed to safely accommodate project traffic.

Both access driveways on U.S. 441/W Orange Blossom Trail are required for the site at the time of development of either project if they are not developed simultaneously.

The height of the proposed building is 27 feet, well below the maximum allowable height of 35 feet. Staff has found the proposed building elevations meet the intent of the City's Development Design Standards\Guidelines.

The stormwater management system includes an on-site retention area, on the southern portion of the project site. The stormwater pond design meets the City's Land Development Code requirements.

As part of the development plan approval, Ligustrum and Crepe Myrtles, and Indian Hawthorn shrubs line the 10-foot wide buffer adjacent to the U.S. Highway 441. Magnolias are placed in the parking landscaped islands

Arbor Assessment

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|--|-----|
| Total inches on-site (before removal): | 161 |
| Total specimen inches removed | 56 |
| Total non-specimen inches removed | 95 |
| Total inches retained: | 10 |
| Total inches added: | 281 |
| Total inches post development: | 291 |

A Condition of Approval is that all access driveways must be constructed and all associated cross access easements must be recorded across both the IHOP and AutoZone sites prior to issuance of a certificate of occupancy on either site.

MINUTES OF THE PLANNING COMMISSION REGULAR MEETING HELD ON AUGUST 14, 2018, AT 5:30 P.M.

The Development Review Committee recommends approval of the IHOP Restaurant – Final Development Plan, subject to the Conditions of Approval and the findings of this staff report.

Staff recommends the Planning Commission find the IHOP Restaurant Final Development Plan consistent with the Land Development Code and Comprehensive Plan, and recommend approval of Final Development Plan, subject to the Conditions of Approval and findings of the staff report.

The role of the Planning Commission for this development application is to advise the City Council to approve or deny based on consistency with the Comprehensive Plan and Land Development Code.

This item is considered quasi-judicial. The staff report and its findings are to be incorporated into and made a part of the minutes of this meeting.

Petitioner: John Dingman, Rogers Engineering, LLC, 1105 SE 3rd Avenue, Ocala, stated he represented the owner, supported the staff report, and was available to answer any questions.

Chairperson Greene opened the meeting for public hearing. With no one wishing to speak, Chairperson Greene closed the public hearing.

Motion: **Linda Laurendeau made a motion to find the IHOP Restaurant Final Development Plan consistent with the Comprehensive Plan and Land Development Code; compatible with the character of the surrounding area; and recommend approval of AutoZone Store Final Development Plan, subject to the findings of the staff report for the property owned by Calmil Investment Group LP and Kenneth Lee Jureit and located at 1120 West Orange Blossom Trail. Motion seconded by John Sprinkle. Aye votes were cast by James Greene, Linda Laurendeau, Robert Ryan, and John Sprinkle (4-0). (Vote taken by poll.)**

QUASI-JUDICIAL – PLAT – BRIDLEWOOD SUBDIVISION (FKA EQUESTRIAN CENTER SUBDIVISION) - Chairperson Greene stated this is a request to recommend approval of the Bridlewood Subdivision Plat subject to the Condition of Approval, findings of the staff report and final review by the City surveyor and city engineer prior to recording the plat for property owned by Laura R. Murphy and located at 359 West Lester Road.

Chairperson Greene asked if there were any affected parties in attendance that wished to speak. No one spoke.

Chairperson Greene asked if the Commission members had any ex parte communications to divulge regarding this item. No ex parte communications occurred.

Staff Presentation: Ms. Sanchez stated this is a request to recommend approval of the Bridlewood Subdivision Plat subject to the Condition of Approval, findings of the staff report and final review by the City surveyor and city engineer prior to recording the plat for property owned by Laura R. Murphy and located at 359 West Lester Road. The applicant is Appian Engineering c/o Luke Classon, P.E. The existing use is Errol Equestrian Center and the proposed use is a 52 lot single family residential subdivision. The minimum lot width will be 75 feet and the minimum lot size is 8,000 square feet. The proposed density is 2.6 du/ac up to a maximum of 3.5 du/ac. The tract size is 19.94 +/- acres.

MINUTES OF THE PLANNING COMMISSION REGULAR MEETING HELD ON AUGUST 14, 2018, AT 5:30 P.M.

The Bridlewood Subdivision – Plat involves the development of 52 single family residential lots. The minimum typical lot width is 75 feet with a minimum lot size of 8,000 square feet. The required minimum living area for the subdivision is 1,500 square feet as set forth in Chapter 2 of the Land Development Code for single-family lots located within the R-1 zoning. The minimum setbacks applicable to this project are:

| Setback | Min. Standard |
|----------------|----------------------|
| Front* | 25' |
| Side | 10' |
| Rear | 20' |
| Corner | 25' |

*Front-entry garage must be setback 30 feet.

Ingress/egress access points for the development will be via full access onto Lester Road. A future connection occurs through a stub-out street at the northwest corner of the project.

The stormwater management system includes an on-site retention area and located on the north portion of the project site. The stormwater pond design meets the City’s Land Development Code requirements.

The applicant is providing 0.47 acre/approximately 20,473 square feet of recreation space that includes a playground.

A school concurrency mitigation agreement has been executed and a copy of the letter from Orange County Public Schools (OCPS) has been supplied to Staff.

The County was notified at the time of the plat for this property through the DRC agenda distribution.

A Condition of Approval is that the Plat will be revised to assign maintenance and ownership of the L & F five-foot wide easement (Landscape and Fence) to the HOA; and re-number the notes on the front sheet.

The Development Review Committee recommends approval of the Bridlewood Subdivision – Plat, subject to the findings of this staff report.

Staff is recommending the Planning Commission recommend approval of the Bridlewood Subdivision – Plat subject to the Condition of Approval, findings of the staff report and final review by the City surveyor and city engineer prior to recording the plat.

The role of the Planning Commission for this development application is to advise the City Council to approve or deny based on consistency with the Comprehensive Plan and Land Development Code.

This item is considered quasi-judicial. The staff report and its findings are to be incorporated into and made a part of the minutes of this meeting.

In response to a question by Mr. Sprinkle, Mr. Moon stated the setbacks for garages are: front entry - 30 feet; side-entry - 25 feet; and rear-entry - 22 feet.

Petitioner: The petitioner did not have a presentation.

Chairperson Greene opened the meeting for public hearing. With no one wishing to speak, Chairperson Greene closed the public hearing.

Motion: Linda Laurendeau made a motion to recommend approval of the Bridlewood Subdivision – Plat subject to the Condition of Approval, findings of the staff report and final review by the City surveyor and city engineer prior to recording the plat for property owned by Laura R. Murphy and located at 359 West Lester Road. Motion seconded by Robert Ryan. Aye votes were cast by James Greene, Linda Laurendeau, Robert Ryan, and John Sprinkle (4-0). (Vote taken by poll.)

QUASI-JUDICIAL – PRELIMINARY DEVELOPMENT PLAN – CARRIAGE HILL PHASE II SUBDIVISION - Chairperson Greene stated this is a request to find the Preliminary Development Plan consistent with the Comprehensive Plan and Land Development Code; compatible with the character of the surrounding area; and recommend approval of Carriage Hill Phase II Subdivision – Preliminary Development Plan, subject to the findings of this staff report for the property owned by JTD Land at Rogers Rd, LLC, and located at 1455 West Lester Road.

Chairperson Greene asked if there were any affected parties in attendance that wished to speak. No one spoke.

Chairperson Greene asked if the Commission members had any ex parte communications to divulge regarding this item. No ex parte communications occurred.

Staff Presentation: Ms. Sanchez stated this is a request to find the Preliminary Development Plan consistent with the Comprehensive Plan and Land Development Code; compatible with the character of the surrounding area; and recommend approval of Carriage Hill Phase II Subdivision – Preliminary Development Plan, subject to the findings of this staff report for the property owned by JTD Land at Rogers Rd, LLC, and located at 1455 West Lester Road. The engineer is Dewberry Engineers, Inc. c/o Christopher Allen, P.E. The existing use is vacant land and the proposed use is a single family residential subdivision with 15 lots. The minimum lot width is 75 feet and the minimum lot size is 9,000 square feet. The proposed density is 1.69 du/ac. The future land use is Residential Low Suburban (Max 3.5 du/ac) and the zoning is R-1 (Single Family Residential) District. The overall tract size is 10.31 +/- acres and the developable area is 8.89 +/- acres.

The Carriage Hill Phase II Subdivision – Preliminary Development Plan proposes the development of 15 single family residential lots. The minimum typical lot width is 75 feet with a minimum lot size of 9,000 square feet. Lots abutting the Oak Hill Reserve neighborhood are 11,996 sq. ft. to 21,046 sq. ft. The required minimum living area for a house in this subdivision is 1,500 square feet as set forth in Chapter 2 of the Land Development Code for single-family lots located within the R-1 zoning. The minimum setbacks applicable to this project are:

| Setback | Min. Standard |
|---------|---------------|
| Front* | 25' |
| Side | 10' |
| Rear | 20' |
| Corner | 25' |

*Front-entry garage must be setback 30 feet.

Ingress/egress access points for the development will be via full access onto Rogers Road as approved in Phase I of the Carriage Hill Subdivision.

Per Code, a transportation impact analysis (TIA) was not required for this development as it generates under 400 daily trips.

The stormwater management system includes an on-site retention area and located on the southern portion of the project site. The stormwater pond design meets the City's Land Development Code requirements.

For the entire Carriage Hill Subdivision (Phase I), the applicant provided 0.46 acre/approximately 20,038 square feet of recreation space that includes a playground with the Phase I Final Development Plan. Phase II contains a total of 5.58 acres of open space including drainage, existing wetland, buffer and pond.

Trumpet trees and live oaks line the single family lots. The landscape plan meets the requirements of the Land Development Code.

A school concurrency mitigation agreement has been executed and a copy of the letter from Orange County Public Schools (OCPS) has been supplied to Staff.

The County was notified at the time of the plat for this property through the DRC agenda distribution.

The Development Review Committee recommends approval of the Carriage Hill Phase II Subdivision Preliminary Development Plan, subject to the findings of this staff report.

Staff recommended the Planning Commission recommend approval of the Carriage Hill Phase II Subdivision Preliminary Development Plan subject to the findings of the staff report.

The role of the Planning Commission for this development application is to advise the City Council to approve or deny based on consistency with the Comprehensive Plan and Land Development Code.

This item is considered quasi-judicial. The staff report and its findings are to be incorporated into and made a part of the minutes of this meeting.

Petitioner: The petitioner did not have a presentation.

Chairperson Greene opened the meeting for public hearing. With no one wishing to speak, Chairperson Greene closed the public hearing.

Motion: Linda Laurendeau made a motion to find the Preliminary Development Plan consistent with the Comprehensive Plan and Land Development Code; compatible with the character of the surrounding area; and recommend approval of Carriage Hill Phase II Subdivision – Preliminary Development Plan, subject to the findings of this staff report for the property owned by JTD Land at Rogers Rd, LLC, and located at 1455 West Lester Road. Motion seconded by John Sprinkle. Aye votes were cast by James Greene, Linda Laurendeau, Robert Ryan, and John Sprinkle (4-0). (Vote taken by poll.)

OLD BUSINESS: None.

NEW BUSINESS: In response to an inquiry by Brian Persad, 1833 Dunn Cove Court, Apopka, Chairperson Greene explained that the Planning Commission was not able to assist Mr. Persad in his pursuit to open a car hand-wash/detailing business in the Downtown Overlay District. He encouraged Mr. Persad to work with staff.

Mr. Hitt explained that staff has spoken to Mr. Persad several times. He explained that since the property, located at 545 South Orange Blossom Trail, is within the Downtown Overlay District, a hand-wash car wash is not permitted. Additionally, there are environmental issues with runoff. He said there is no on-site retention pond with filtration. He had suggested that Mr. Persad do the business on the interior of the building.

Mr. Sprinkle encouraged Mr. Persad to get the engineering done to see about keeping the runoff on the site.

ADJOURNMENT: The meeting was adjourned at 7:24 p.m.

James Greene, Chairperson

James K. Hitt, FRA-RA
Community Development Director



CITY OF APOPKA PLANNING COMMISSION

PUBLIC HEARING
 SITE PLANS
 SPECIAL REPORTS
 OTHER: Ordinance

MEETING OF: September 11, 2018
FROM: Community Development
EXHIBITS: Ordinance No. 2673

SUBJECT: **ORDINANCE NO. 2673 – AMENDING THE APOPKA CODE OF ORDINANCES, PART III, LAND DEVELOPMENT CODE, ARTICLE V, SECTION 5.05.00 – FLOODPLAINS; AND ADOPT TECHNICAL AMENDMENTS TO THE FLORIDA BUILDING CODE.**

REQUEST: **RECOMMEND APPROVAL OF ORDINANCE NO. 2673 – AMENDING THE APOPKA CODE OF ORDINANCES, PART III, LAND DEVELOPMENT CODE, ARTICLE V, SECTION 5.05.00 – FLOODPLAINS; AND ADOPT TECHNICAL AMENDMENTS TO THE FLORIDA BUILDING CODE.**

SUMMARY:

On January 5, 2018, the City of Apopka was formally notified by the State of Florida, Division of Emergency Management that the Florida Building Code 6th Edition, became effective on January 1, 2018. In order for the City to maintain compliance with the minimum requirements of the Federal Emergency Management Agency (FEMA) National Flood Insurance Program (NFIP), revisions to the City's Floodplain Ordinance and associated Floodplain elements of the Land Development Code are required.

This year, the Florida Division of Emergency Management (FDEM) collaborated with the City Engineer/Floodplain Administrator to develop code revisions. This request includes all FDEM and FEMA required revisions.

Only one proposed revision is in excess of minimum FDEM and FEMA requirements. As a minimum, FEMA requires that the Finished Floor Elevation (FFE) of all new and substantially improved structures be constructed at least 1-foot above the FEMA 100-year Floodplain Elevation. This proposed code revision requires 2-feet above the FEMA 100-year Floodplain Elevation. The FFE increase above the minimum provides both additional protection from flooding, and additional FEMA Community Rating System (CRS) credits. CRS credits are used by FEMA to calculate the amount of Floodplain Insurance Policy discount policy holders receive. FEMA's 2017 audit of the City's CRS program scored the City in Class 8. CRS Class 8 Communities enjoy a 10% discount on flood insurance policies for structures within the 100-year Special Flood Hazard Area and 5% discount on policies for structures outside of the 100-year Special Flood Hazard Area.

DISTRIBUTION

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Commissioners
City Administrator
Community Development Director

Finance Director
HR Director
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Public Services Director
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City Clerk
Fire Chief

PLANNING COMMISSION – SEPTEMBER 11, 2018
ORDINANCE NO. 2673 - FLOODPLAINS
PAGE 2

PUBLIC HEARING SCHEDULE:

Planning Commission – September 11, 2018

City Council – September 19, 2018, 7:00 p.m. – First Reading

City Council – October 3, 1:30 p.m. – Second Reading

DULY ADVERTISED:

August 31, 2018 - Public Notice (Apopka Chief)

RECOMMENDATION ACTION:

Recommend approval of the amendment to the Apopka Code of Ordinances, Part III, Land Development Code, Article V, Section 5.05.00 – Floodplains; and recommend adoption of the Technical Amendments to the Florida Building Code.

ORDINANCE NO. 2673

AN ORDINANCE BY THE APOPKA CITY COUNCIL AMENDING THE APOPKA CODE OF ORDINANCES TO REPEAL LAND DEVELOPMENT CODE SECTION 5.05.00 FLOODPLAINS; TO ADOPT A NEW SECTION 5.05.00; TO AMEND LAND DEVELOPMENT CODE SECTION 1.08.13 DEFINITIONS; TO ADOPT FLOOD HAZARD MAPS, TO DESIGNATE A FLOODPLAIN ADMINISTRATOR, TO ADOPT PROCEDURES AND CRITERIA FOR DEVELOPMENT IN FLOOD HAZARD AREAS, AND FOR OTHER PURPOSES; TO ADOPT TECHNICAL AMENDMENTS TO THE FLORIDA BUILDING CODE; PROVIDING FOR APPLICABILITY; SEVERABILITY; AND AN EFFECTIVE DATE.

WHEREAS, the Legislature of the State of Florida has, in Chapter 166, Florida Statutes, conferred upon local governments the authority to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry; and

WHEREAS, the Federal Emergency Management Agency has identified special flood hazard areas within the boundaries of the City of Apopka and such areas may be subject to periodic inundation which may result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare, and

WHEREAS, the City of Apopka was accepted for participation in the National Flood Insurance Program on September 29, 1978 and the City Council desires to continue to meet the requirements of Title 44 Code of Federal Regulations, Sections 59 and 60, necessary for such participation; and

WHEREAS, Chapter 553, Florida Statutes, was adopted by the Florida Legislature to provide a mechanism for the uniform adoption, updating, amendment, interpretation and enforcement of a state building code, called the *Florida Building Code*; and

WHEREAS, Chapter 553, Florida Statutes, allows for local technical amendments to the *Florida Building Code* that provide for more stringent requirements than those specified in the Code and allows adoption of local administrative and local technical amendments to the Florida Building Code to implement the National Flood Insurance Program and incentives;

WHEREAS, the City Council previously adopted a requirement to increase the minimum elevation requirement, but that requirement is now a minimum requirement of the *Florida Building Code*;

WHEREAS, the City Council previously adopted a requirement to limit partitioning of enclosed areas below elevated dwellings and to limit access to enclosed areas for buildings and structures in flood hazard areas prior to July 1, 2010 and, pursuant to section 553.73(5), F.S., is formatting that requirement to coordinate with the *Florida Building Code*;

WHEREAS, the City Council has determined that it is in the public interest to adopt the proposed local technical amendments to the *Florida Building Code* and the proposed amendments are not more stringent than necessary to address the need identified, do not discriminate against materials, products or construction techniques of demonstrated capabilities, are in compliance with section 553.73(4), Florida Statutes.

WHEREAS, the City Council has determined that it is in the public interest to adopt the proposed floodplain management regulations that are coordinated with the *Florida Building Code*.

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of Apopka, Florida, as follows:

LEGISLATIVE UNDERSCORING: Underlined words constitute additions to the City of Apopka Code of Ordinances or Land Development Code, ~~striketrough~~ constitutes deletions from the original, and asterisks (***) indicate an omission from the existing text which is intended to remain unchanged. No legislative underscoring is used where a section is repealed or replaced in its entirety.

SECTION 1. RECITALS. The foregoing whereas clauses are incorporated herein by reference and made a part hereof.

SECTION 2. FLOODPLAINS SECTION. That Section 5.05.00 of the Land Development Code, City of Apopka, Florida, is hereby repealed in its entirety and replaced to be read as follows:

5.05.00 FLOODPLAINS

SECTION 5.05.01 GENERAL

A. Title. These regulations under Article V, Chapter 5 of the Land Development Code shall be known as the *Floodplain Management Ordinance* of the City of Apopka, hereinafter referred to as “this Chapter.”

B. Scope. The provisions of this Chapter shall apply to all development that is wholly within or partially within any flood hazard area, including but not limited to the subdivision of land; filling, grading, and other site improvements and utility installations; construction, alteration, remodeling, enlargement, improvement, replacement, repair, relocation or demolition of buildings, structures, and facilities that are exempt from the *Florida Building Code*; placement, installation, or replacement of manufactured homes and manufactured buildings; installation or replacement of tanks; placement of recreational vehicles; installation of swimming pools; and any other development.

C. Intent. The purposes of this Chapter and the flood load and flood resistant construction requirements of the *Florida Building Code* are to establish minimum requirements to safeguard the public health, safety, and general welfare and to minimize public and private losses due to flooding through regulation of development in flood hazard areas to:

- (1) Minimize unnecessary disruption of commerce, access and public service during times of flooding;
- (2) Require the use of appropriate construction practices in order to prevent or minimize future flood damage;
- (3) Manage filling, grading, dredging, mining, paving, excavation, drilling operations, storage of equipment or materials, and other development which may increase flood damage or erosion potential;

- (4) Manage the alteration of flood hazard areas, watercourses, and shorelines to minimize the impact of development on the natural and beneficial functions of the floodplain;
- (5) Minimize damage to public and private facilities and utilities;
- (6) Help maintain a stable tax base by providing for the sound use and development of flood hazard areas;
- (7) Minimize the need for future expenditure of public funds for flood control projects and response to and recovery from flood events; and
- (8) Meet the requirements of the National Flood Insurance Program for community participation as set forth in Title 44 Code of Federal Regulations, Section 59.22.

D. Coordination with the *Florida Building Code*. This ordinance is intended to be administered and enforced in conjunction with the *Florida Building Code*. Where cited, ASCE 24 refers to the edition of the standard that is referenced by the *Florida Building Code*.

E. Warning. The degree of flood protection required by this ordinance and the *Florida Building Code*, as amended by this community, is considered the minimum reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur. Flood heights may be increased by man-made or natural causes. This ordinance does not imply that land outside of mapped special flood hazard areas, or that uses permitted within such flood hazard areas, will be free from flooding or flood damage. The flood hazard areas and base flood elevations contained in the Flood Insurance Study and shown on Flood Insurance Rate Maps and the requirements of Title 44 Code of Federal Regulations, Sections 59 and 60 may be revised by the Federal Emergency Management Agency, requiring this community to revise these regulations to remain eligible for participation in the National Flood Insurance Program. No guaranty of vested use, existing use, or future use is implied or expressed by compliance with this ordinance.

F. Disclaimer of Liability. This ordinance shall not create liability on the part of the City Council of the City of Apopka or by any officer or employee thereof for any flood damage that results from reliance on this ordinance or any administrative decision lawfully made thereunder.

SECTION 5.05.02 APPLICABILITY

A. General. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable.

B. Areas to which this Chapter applies. This Chapter shall apply to all flood hazard areas within the City of Apopka, as established in Section 5.05.02(C) of this Chapter.

C. Basis for establishing flood hazard areas. The Flood Insurance Study for Orange County, Florida and Incorporated Areas dated June 20, 2018, and all subsequent amendments and revisions, and the accompanying Flood Insurance Rate Maps (FIRM), and all subsequent amendments and revisions to such maps, are adopted by reference as a part of this Chapter and shall serve as the minimum basis for establishing flood hazard areas. Studies and maps that establish flood hazard areas are on file at the Community Development Department, 120 East Main Street, 2nd Floor, Apopka.

D. Submission of additional data to establish flood hazard areas. To establish flood hazard areas and base flood elevations, pursuant to Section 5.05.05 of this Chapter the Floodplain Administrator may require submission of additional data. Where field surveyed topography prepared by a Florida licensed professional surveyor or digital topography accepted by the community indicates that ground elevations:

- (1) Are below the closest applicable base flood elevation, even in areas not delineated as a special flood hazard area on a FIRM, the area shall be considered as flood hazard area and subject to the requirements of this Chapter and, as applicable, the requirements of the *Florida Building Code*.
- (2) Are above the closest applicable base flood elevation, the area shall be regulated as special flood hazard area unless the applicant obtains a Letter of Map Change that removes the area from the special flood hazard area.

E. Other laws. The provisions of this Chapter shall not be deemed to nullify any provisions of local, state or federal law.

F. Abrogation and greater restrictions. This Chapter supersedes any ordinance in effect for management of development in flood hazard areas. However, it is not intended to repeal or abrogate any existing ordinances including but not limited to land development regulations, zoning ordinances, stormwater management regulations, or the *Florida Building Code*. In the event of a conflict between this Chapter and any other ordinance, the more restrictive shall govern. This Chapter shall not impair any deed restriction, covenant or easement, but any land that is subject to such interests shall also be governed by this Chapter.

G. Interpretation. In the interpretation and application of this Chapter, all provisions shall be:

- (1) Considered as minimum requirements;
- (2) Liberally construed in favor of the governing body; and
- (3) Deemed neither to limit nor repeal any other powers granted under state statutes.

SECTION 5.05.03 DUTIES AND POWERS OF THE FLOODPLAIN ADMINISTRATOR

A. Designation. The City Engineer is designated as the Floodplain Administrator. The Floodplain Administrator may delegate performance of certain duties to other employees.

B. General. The Floodplain Administrator is authorized and directed to administer and enforce the provisions of this Chapter. The Floodplain Administrator shall have the authority to render interpretations of this Chapter consistent with the intent and purpose of this Chapter and may establish policies and procedures in order to clarify the application of its provisions. Such interpretations, policies, and procedures shall not have the effect of waiving requirements specifically provided in this Chapter without the granting of a variance pursuant to Section 5.05.07 of this Chapter.

C. Applications and permits. The Floodplain Administrator, in coordination with other pertinent offices of the community, shall:

- (1) Review applications and plans to determine whether proposed new development will be located in flood hazard areas;

- (2) Review applications for modification of any existing development in flood hazard areas for compliance with the requirements of this Chapter;
- (3) Interpret flood hazard area boundaries where such interpretation is necessary to determine the exact location of boundaries; a person contesting the determination shall have the opportunity to appeal the interpretation;
- (4) Provide available flood elevation and flood hazard information;
- (5) Determine whether additional flood hazard data shall be obtained from other sources or shall be developed by an applicant;
- (6) Review applications to determine whether proposed development will be reasonably safe from flooding;
- (7) Issue floodplain development permits or approvals for development other than buildings and structures that are subject to the *Florida Building Code*, including buildings, structures and facilities exempt from the *Florida Building Code*, when compliance with this Chapter is demonstrated, or disapprove the same in the event of noncompliance; and
- (8) Coordinate with and provide comments to the Building Official to assure that applications, plan reviews, and inspections for buildings and structures in flood hazard areas comply with the applicable provisions of this Chapter.

D. Substantial improvement and substantial damage determinations. For applications for building permits to improve buildings and structures, including alterations, movement, enlargement, replacement, repair, change of occupancy, additions, rehabilitations, renovations, substantial improvements, repairs of substantial damage, and any other improvement of or work on such buildings and structures, the Floodplain Administrator, in coordination with the Building Official, shall:

- (1) Estimate the market value, or require the applicant to obtain an appraisal of the market value prepared by a qualified independent appraiser, of the building or structure before the start of construction of the proposed work; in the case of repair, the market value of the building or structure shall be the market value before the damage occurred and before any repairs are made;
- (2) Compare the cost to perform the improvement, the cost to repair a damaged building to its pre-damaged condition, or the combined costs of improvements and repairs, if applicable, to the market value of the building or structure;
- (3) Determine and document whether the proposed work constitutes substantial improvement or repair of substantial damage; and
- (4) Notify the applicant if it is determined that the work constitutes substantial improvement or repair of substantial damage and that compliance with the flood resistant construction requirements of the *Florida Building Code* and this Chapter is required.

E. Modifications of the strict application of the requirements of the *Florida Building Code*. The Floodplain Administrator shall review requests submitted to the Building Official that seek approval to modify the strict application of the flood load and flood resistant construction requirements of the *Florida Building Code* to determine whether such requests require the granting of a variance pursuant to Section 5.05.07 of this Chapter.

F. Notices and orders. The Floodplain Administrator shall coordinate with appropriate local agencies for the issuance of all necessary notices or orders to ensure compliance with this Chapter.

G. Inspections. The Floodplain Administrator shall make the required inspections as specified in Section 5.05.06 of this Chapter for development that is not subject to the *Florida Building Code*, including buildings, structures and facilities exempt from the *Florida Building Code*. The Floodplain Administrator shall inspect flood hazard areas to determine if development is undertaken without issuance of a permit.

H. Other duties of the Floodplain Administrator. The Floodplain Administrator shall have other duties, including but not limited to:

- (1) Establish, in coordination with the Building Official, procedures for administering and documenting determinations of substantial improvement and substantial damage made pursuant to Section 5.05.03(D) of this Chapter;
- (2) Require that applicants proposing alteration of a watercourse notify adjacent communities and the Florida Division of Emergency Management, State Floodplain Management Office, and submit copies of such notifications to the Federal Emergency Management Agency (FEMA);
- (3) Require applicants who submit hydrologic and hydraulic engineering analyses to support permit applications to submit to FEMA the data and information necessary to maintain the Flood Insurance Rate Maps if the analyses propose to change base flood elevations, flood hazard area boundaries, or floodway designations; such submissions shall be made within 6 months of such data becoming available;
- (4) Review required design certifications and documentation of elevations specified by this Chapter and the *Florida Building Code* to determine that such certifications and documentations are complete; and
- (5) Notify the Federal Emergency Management Agency when the corporate boundaries of **the City of Apopka** are modified.

I. Floodplain management records. Regardless of any limitation on the period required for retention of public records, the Floodplain Administrator shall maintain and permanently keep and make available for public inspection all records that are necessary for the administration of this Chapter and the flood resistant construction requirements of the *Florida Building Code*, including Flood Insurance Rate Maps; Letters of Map Change; records of issuance of permits and denial of permits; determinations of whether proposed work constitutes substantial improvement or repair of substantial damage; required design certifications and documentation of elevations specified by the *Florida Building Code* and this Chapter; notifications to adjacent communities, FEMA, and the state related to alterations of watercourses; assurances that the flood carrying capacity of altered watercourses will be maintained; documentation related to appeals and variances, including justification for issuance or denial; and records of enforcement actions taken pursuant to this Chapter and the flood resistant construction requirements of the *Florida Building Code*. These records shall be available for public inspection at Community Development Department, 120 East Main Street, 2nd Floor, Apopka, Florida 32703.

SECTION 5.05.04 PERMITS

A. Permits required. Any owner or owner's authorized agent (hereinafter "applicant") who intends to undertake any development activity within the scope of this Chapter, including buildings, structures and facilities exempt from the *Florida Building Code*, which is wholly within or partially within any flood hazard area shall first make application to the Floodplain Administrator, and the Building Official if applicable, and shall obtain the required permit(s) and approval(s). No such permit or approval shall be issued until compliance with the requirements of this Chapter and all other applicable codes and regulations has been satisfied.

B. Floodplain development permits or approvals. Floodplain development permits or approvals shall be issued pursuant to this Chapter for any development activities not subject to the requirements of the *Florida Building Code*, including buildings, structures and facilities exempt from the *Florida Building Code*. Depending on the nature and extent of proposed development that includes a building or structure, the Floodplain Administrator may determine that a floodplain development permit or approval is required in addition to a building permit.

C. Buildings, structures and facilities exempt from the *Florida Building Code*. Pursuant to the requirements of federal regulation for participation in the National Flood Insurance Program (44 C.F.R. Sections 59 and 60), floodplain development permits or approvals shall be required for the following buildings, structures and facilities that are exempt from the *Florida Building Code* and any further exemptions provided by law, which are subject to the requirements of this Chapter:

- (1) Railroads and ancillary facilities associated with the railroad.
- (2) Nonresidential farm buildings on farms, as provided in section 604.50, F.S.
- (3) Temporary buildings or sheds used exclusively for construction purposes.
- (4) Mobile or modular structures used as temporary offices.
- (5) Those structures or facilities of electric utilities, as defined in section 366.02, F.S., which are directly involved in the generation, transmission, or distribution of electricity.
- (6) Chickees constructed by the Miccosukee Tribe of Indians of Florida or the Seminole Tribe of Florida. As used in this paragraph, the term "chickee" means an open-sided wooden hut that has a thatched roof of palm or palmetto or other traditional materials, and that does not incorporate any electrical, plumbing, or other non-wood features.
- (7) Family mausoleums not exceeding 250 square feet in area which are prefabricated and assembled on site or preassembled and delivered on site and have walls, roofs, and a floor constructed of granite, marble, or reinforced concrete.
- (8) Temporary housing provided by the Department of Corrections to any prisoner in the state correctional system.
- (9) Structures identified in section 553.73(10)(k), F.S., are not exempt from the *Florida Building Code* if such structures are located in flood hazard areas established on Flood Insurance Rate Maps

D. Application for a permit or approval. To obtain a floodplain development permit or approval the applicant shall first file an application in writing on a form furnished by the community. The information provided shall:

- (1) Identify and describe the development to be covered by the permit or approval.
- (2) Describe the land on which the proposed development is to be conducted by legal description, street address or similar description that will readily identify and definitively locate the site.
- (3) Indicate the use and occupancy for which the proposed development is intended.
- (4) Be accompanied by a site plan or construction documents as specified in Section 5.05.05 of this Chapter.
- (5) State the valuation of the proposed work.
- (6) Be signed by the applicant or the applicant's authorized agent.
- (7) Give such other data and information as required by the Floodplain Administrator.

E. Validity of permit or approval. The issuance of a floodplain development permit or approval pursuant to this Chapter shall not be construed to be a permit for, or approval of, any violation of this Chapter, the *Florida Building Codes*, or any other ordinance of this community. The issuance of permits based on submitted applications, construction documents, and information shall not prevent the Floodplain Administrator from requiring the correction of errors and omissions.

F. Expiration. A floodplain development permit or approval shall become invalid unless the work authorized by such permit is commenced within 180 days after its issuance, or if the work authorized is suspended or abandoned for a period of 180 days after the work commences. Extensions for periods of not more than 180 days each shall be requested in writing and justifiable cause shall be demonstrated.

G. Suspension or revocation. The Floodplain Administrator is authorized to suspend or revoke a floodplain development permit or approval if the permit was issued in error, on the basis of incorrect, inaccurate or incomplete information, or in violation of this Chapter or any other ordinance, regulation or requirement of this community.

H. Other permits required. Floodplain development permits and building permits shall include a condition that all other applicable state or federal permits be obtained before commencement of the permitted development, including but not limited to the following:

- (1) The St. Johns River Water Management District; section 373.036, F.S.
- (2) Florida Department of Health for onsite sewage treatment and disposal systems; section 381.0065, F.S. and Chapter 64E-6, F.A.C.
- (3) Florida Department of Environmental Protection for activities subject to the Joint Coastal Permit; section 161.055, F.S.
- (4) Florida Department of Environmental Protection for activities that affect wetlands and alter surface water flows, in conjunction with the U.S. Army Corps of Engineers; Section 404 of the Clean Water Act.
- (5) Federal permits and approvals.

SECTION 5.05.05 SITE PLANS AND CONSTRUCTION DOCUMENTS

A. Information for development in flood hazard areas. The site plan or construction documents for any development subject to the requirements of this Chapter shall be drawn to scale and shall include, as applicable to the proposed development:

- (1) Delineation of flood hazard areas, floodway boundaries and flood zone(s), base flood elevation(s), and ground elevations if necessary for review of the proposed development.
- (2) Where base flood elevations or floodway data are not included on the FIRM or in the Flood Insurance Study, they shall be established in accordance with Section 5.05.05(B)(2) or (3) of this Chapter.
- (3) Where the parcel on which the proposed development will take place will have more than 50 lots or is larger than 5 acres and the base flood elevations are not included on the FIRM or in the Flood Insurance Study, such elevations shall be established in accordance with Section 5.05.05(B)(1) of this Chapter.
- (4) Location of the proposed activity and proposed structures, and locations of existing buildings and structures.
- (5) Location, extent, amount, and proposed final grades of any filling, grading, or excavation.
- (6) Where the placement of fill is proposed, the amount, type, and source of fill material; compaction specifications; a description of the intended purpose of the fill areas; and evidence that the proposed fill areas are the minimum necessary to achieve the intended purpose.
- (7) Existing and proposed alignment of any proposed alteration of a watercourse.

The Floodplain Administrator is authorized to waive the submission of site plans, construction documents, and other data that are required by this Chapter but that are not required to be prepared by a registered design professional if it is found that the nature of the proposed development is such that the review of such submissions is not necessary to ascertain compliance with this Chapter.

B. Information in flood hazard areas without base flood elevations (approximate Zone A). Where flood hazard areas are delineated on the FIRM and base flood elevation data have not been provided, the Floodplain Administrator shall:

- (1) Require the applicant to include base flood elevation data prepared in accordance with currently accepted engineering practices.
- (2) Obtain, review, and provide to applicants base flood elevation and floodway data available from a federal or state agency or other source or require the applicant to obtain and use base flood elevation and floodway data available from a federal or state agency or other source.
- (3) Where base flood elevation and floodway data are not available from another source, where the available data are deemed by the Floodplain Administrator to not reasonably reflect flooding conditions, or where the available data are known to be scientifically or technically incorrect or otherwise inadequate:
 - (a) Require the applicant to include base flood elevation data prepared in accordance with currently accepted engineering practices; or

- (b) Specify that the base flood elevation is two (2) feet above the highest adjacent grade at the location of the development, provided there is no evidence indicating flood depths have been or may be greater than two (2) feet.
- (4) Where the base flood elevation data are to be used to support a Letter of Map Change from FEMA, advise the applicant that the analyses shall be prepared by a Florida licensed engineer in a format required by FEMA, and that it shall be the responsibility of the applicant to satisfy the submittal requirements and pay the processing fees.

C. Additional analyses and certifications. As applicable to the location and nature of the proposed development activity, and in addition to the requirements of this section, the applicant shall have the following analyses signed and sealed by a Florida licensed engineer for submission with the site plan and construction documents:

- (1) For development activities proposed to be located in a regulatory floodway, a floodway encroachment analysis that demonstrates that the encroachment of the proposed development will not cause any increase in base flood elevations; where the applicant proposes to undertake development activities that do increase base flood elevations, the applicant shall submit such analysis to FEMA as specified in Section 5.05.05(D) of this Chapter and shall submit the Conditional Letter of Map Revision, if issued by FEMA, with the site plan and construction documents.
- (2) For development activities proposed to be located in a riverine flood hazard area for which base flood elevations are included in the Flood Insurance Study or on the FIRM and floodways have not been designated, hydrologic and hydraulic analyses that demonstrate that the cumulative effect of the proposed development, when combined with all other existing and anticipated flood hazard area encroachments, will not increase the base flood elevation more than one (1) foot at any point within the community. This requirement does not apply in isolated flood hazard areas not connected to a riverine flood hazard area or in flood hazard areas identified as Zone AO or Zone AH.
- (3) For alteration of a watercourse, an engineering analysis prepared in accordance with standard engineering practices which demonstrates that the flood-carrying capacity of the altered or relocated portion of the watercourse will not be decreased, and certification that the altered watercourse shall be maintained in a manner which preserves the channel's flood-carrying capacity; the applicant shall submit the analysis to FEMA as specified in Section 5.05.05(D) of this Chapter.

D. Submission of additional data. When additional hydrologic, hydraulic or other engineering data, studies, and additional analyses are submitted to support an application, the applicant has the right to seek a Letter of Map Change from FEMA to change the base flood elevations, change floodway boundaries, or change boundaries of flood hazard areas shown on FIRMs, and to submit such data to FEMA for such purposes. The analyses shall be prepared by a Florida licensed engineer in a format required by FEMA. Submittal requirements and processing fees shall be the responsibility of the applicant.

SECTION 5.05.06 INSPECTIONS

A. General. Development for which a floodplain development permit or approval is required shall be subject to inspection.

B. Development other than buildings and structures. The Floodplain Administrator shall inspect all development to determine compliance with the requirements of this Chapter and the conditions of issued floodplain development permits or approvals.

C. Buildings, structures and facilities exempt from the *Florida Building Code*. The Floodplain Administrator shall inspect buildings, structures and facilities exempt from the *Florida Building Code* to determine compliance with the requirements of this Chapter and the conditions of issued floodplain development permits or approvals.

D. Buildings, structures and facilities exempt from the *Florida Building Code*, lowest floor inspection. Upon placement of the lowest floor, including basement, and prior to further vertical construction, the owner of a building, structure or facility exempt from the *Florida Building Code*, or the owner's authorized agent, shall submit to the Floodplain Administrator:

- (1) If a design flood elevation was used to determine the required elevation of the lowest floor, the certification of elevation of the lowest floor prepared and sealed by a Florida licensed professional surveyor; or
- (2) If the elevation used to determine the required elevation of the lowest floor was determined in accordance with Section 5.05.05(B)(3)(b) of this Chapter, the documentation of height of the lowest floor above highest adjacent grade, prepared by the owner or the owner's authorized agent.

E. Buildings, structures and facilities exempt from the *Florida Building Code*, final inspection. As part of the final inspection, the owner or owner's authorized agent shall submit to the Floodplain Administrator a final certification of elevation of the lowest floor or final documentation of the height of the lowest floor above the highest adjacent grade; such certifications and documentations shall be prepared as specified in Section 5.05.06(D) of this Chapter.

F. Manufactured homes. The Floodplain Administrator shall inspect manufactured homes that are installed or replaced in flood hazard areas to determine compliance with the requirements of this Chapter and the conditions of the issued permit. Upon placement of a manufactured home, certification of the elevation of the lowest floor shall be submitted to the Floodplain Administrator.

SECTION 5.05.07 VARIANCES AND APPEALS

A. General. The City Council shall hear and decide on requests for appeals and requests for variances from the strict application of this Chapter. Pursuant to section 553.73(5), F.S., the City Council shall hear and decide on requests for appeals and requests for variances from the strict application of the flood resistant construction requirements of the *Florida Building Code*.

B. Appeals. The City Council shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the Floodplain Administrator in the administration and enforcement of this Chapter. Any person aggrieved by the decision may appeal such decision to the Circuit Court, as provided by Florida Statutes.

C. Limitations on authority to grant variances. The City Council shall base its decisions on variances on technical justifications submitted by applicants, the considerations for issuance in Section 5.05.07(G) of this Chapter, the conditions of issuance set forth in Section 5.05.07(H) of

this Chapter, and the comments and recommendations of the Floodplain Administrator and the Building Official. The City Council has the right to attach such conditions as it deems necessary to further the purposes and objectives of this Chapter.

D. Restrictions in floodways. A variance shall not be issued for any proposed development in a floodway if any increase in base flood elevations would result, as evidenced by the applicable analyses and certifications required in Section 5.05.05(C) of this Chapter.

E. Historic buildings. A variance is authorized to be issued for the repair, improvement, or rehabilitation of a historic building that is determined eligible for the exception to the flood resistant construction requirements of the *Florida Building Code, Existing Building*, Chapter 12 Historic Buildings, upon a determination that the proposed repair, improvement, or rehabilitation will not preclude the building's continued designation as a historic building and the variance is the minimum necessary to preserve the historic character and design of the building. If the proposed work precludes the building's continued designation as a historic building, a variance shall not be granted and the building and any repair, improvement, and rehabilitation shall be subject to the requirements of the *Florida Building Code*.

F. Functionally dependent uses. A variance is authorized to be issued for the construction or substantial improvement necessary for the conduct of a functionally dependent use, as defined in this Chapter, provided the variance meets the requirements of Section 5.05.07(D), is the minimum necessary considering the flood hazard, and all due consideration has been given to use of methods and materials that minimize flood damage during occurrence of the base flood.

G. Considerations for issuance of variances. In reviewing requests for variances, the City Council shall consider all technical evaluations, all relevant factors, all other applicable provisions of the *Florida Building Code*, this Chapter, and the following:

- (1) The danger that materials and debris may be swept onto other lands resulting in further injury or damage;
- (2) The danger to life and property due to flooding or erosion damage;
- (3) The susceptibility of the proposed development, including contents, to flood damage and the effect of such damage on current and future owners;
- (4) The importance of the services provided by the proposed development to the community;
- (5) The availability of alternate locations for the proposed development that are subject to lower risk of flooding or erosion;
- (6) The compatibility of the proposed development with existing and anticipated development;
- (7) The relationship of the proposed development to the comprehensive plan and floodplain management program for the area;
- (8) The safety of access to the property in times of flooding for ordinary and emergency vehicles;
- (9) The expected heights, velocity, duration, rate of rise and debris and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site; and

- (10) The costs of providing governmental services during and after flood conditions including maintenance and repair of public utilities and facilities such as sewer, gas, electrical and water systems, streets and bridges.

H. Conditions for issuance of variances. Variances shall be issued only upon:

- (1) Submission by the applicant, of a showing of good and sufficient cause that the unique characteristics of the size, configuration, or topography of the site limit compliance with any provision of this Chapter or the required elevation standards;
- (2) Determination by the City Council that:
 - (a) Failure to grant the variance would result in exceptional hardship due to the physical characteristics of the land that render the lot undevelopable; increased costs to satisfy the requirements or inconvenience do not constitute hardship;
 - (b) The granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, nor create nuisances, cause fraud on or victimization of the public or conflict with existing local laws and ordinances; and
 - (c) The variance is the minimum necessary, considering the flood hazard, to afford relief;
- (3) Receipt of a signed statement by the applicant that the variance, if granted, shall be recorded in the Office of the Clerk of the Court in such a manner that it appears in the chain of title of the affected parcel of land; and
- (4) If the request is for a variance to allow construction of the lowest floor of a new building, or substantial improvement of a building, below the required elevation, a copy in the record of a written notice from the Floodplain Administrator to the applicant for the variance, specifying the difference between the base flood elevation and the proposed elevation of the lowest floor, stating that the cost of federal flood insurance will be commensurate with the increased risk resulting from the reduced floor elevation (up to amounts as high as \$25 for \$100 of insurance coverage), and stating that construction below the base flood elevation increases risks to life and property.

SECTION 5.05.08 VIOLATIONS

A. Violations. Any development that is not within the scope of the *Florida Building Code* but that is regulated by this Chapter that is performed without an issued permit, that is in conflict with an issued permit, or that does not fully comply with this Chapter, shall be deemed a violation of this Chapter. A building or structure without the documentation of elevation of the lowest floor, other required design certifications, or other evidence of compliance required by this Chapter or the *Florida Building Code* is presumed to be a violation until such time as that documentation is provided.

B. Authority. For development that is not within the scope of the *Florida Building Code* but that is regulated by this Chapter and that is determined to be a violation, the Floodplain Administrator is authorized to serve notices of violation or stop work orders to owners of the property involved, to the owner's agent, or to the person or persons performing the work.

C. Unlawful continuance. Any person who shall continue any work after having been served with a notice of violation or a stop work order, except such work as that person is directed to perform to remove or remedy a violation or unsafe condition, shall be subject to penalties as prescribed by law.

SECTION 5.05.09 BUILDINGS AND STRUCTURES

A. Design and construction of buildings, structures and facilities exempt from the *Florida Building Code*. Pursuant to Section 5.05.04(C) of this Chapter, buildings, structures, and facilities that are exempt from the *Florida Building Code*, including substantial improvement or repair of substantial damage of such buildings, structures and facilities, shall be designed and constructed in accordance with the flood load and flood resistant construction requirements of ASCE 24. Structures exempt from the *Florida Building Code* that are not walled and roofed buildings shall comply with the requirements of Section 5.05.15 of this Chapter.

SECTION 5.05.10 SUBDIVISIONS

A. Minimum requirements. Subdivision proposals, including proposals for manufactured home parks and subdivisions, shall be reviewed to determine that:

- (1) Such proposals are consistent with the need to minimize flood damage and will be reasonably safe from flooding;
- (2) All public utilities and facilities such as sewer, gas, electric, communications, and water systems are located and constructed to minimize or eliminate flood damage; and
- (3) Adequate drainage is provided to reduce exposure to flood hazards; in Zones AH and AO, adequate drainage paths shall be provided to guide floodwaters around and away from proposed structures.

B. Subdivision plats. Where any portion of proposed subdivisions, including manufactured home parks and subdivisions, lies within a flood hazard area, the following shall be required:

- (1) Delineation of flood hazard areas, floodway boundaries and flood zones, and design flood elevations, as appropriate, shall be shown on preliminary plats;
- (2) Where the subdivision has more than 50 lots or is larger than 5 acres and base flood elevations are not included on the FIRM, the base flood elevations determined in accordance with Section 5.05.05(B)(1) of this Chapter; and
- (3) Compliance with the site improvement and utilities requirements of Section 5.05.11 of this Chapter.
- (4) Each lot must include a site suitable for constructing a structure in conformity with the standards of these flood damage prevention regulations.

SECTION 5.05.11 SITE IMPROVEMENTS, UTILITIES AND LIMITATIONS

A. Minimum requirements. All proposed new development shall be reviewed to determine that:

- (1) Such proposals are consistent with the need to minimize flood damage and will be reasonably safe from flooding;

- (2) All public utilities and facilities such as sewer, gas, electric, communications, and water systems are located and constructed to minimize or eliminate flood damage; and
- (3) Adequate drainage is provided to reduce exposure to flood hazards; in Zones AH and AO, adequate drainage paths shall be provided to guide floodwaters around and away from proposed structures.

B. Sanitary sewage facilities. All new and replacement sanitary sewage facilities, private sewage treatment plants (including all pumping stations and collector systems), and on-site waste disposal systems shall be designed in accordance with the standards for onsite sewage treatment and disposal systems in Chapter 64E-6, F.A.C. and ASCE 24 Chapter 7 to minimize or eliminate infiltration of floodwaters into the facilities and discharge from the facilities into flood waters, and impairment of the facilities and systems.

C. Water supply facilities. All new and replacement water supply facilities shall be designed in accordance with the water well construction standards in Chapter 62-532.500, F.A.C. and ASCE 24 Chapter 7 to minimize or eliminate infiltration of floodwaters into the systems.

D. Limitations on sites in regulatory floodways. No development, including but not limited to site improvements, and land disturbing activity involving fill or regrading, shall be authorized in the regulatory floodway unless the floodway encroachment analysis required in Section 5.05.05(C)(1) of this Chapter demonstrates that the proposed development or land disturbing activity will not result in any increase in the base flood elevation.

E. Limitations on placement of fill. Subject to the limitations of this Chapter, fill shall be designed to be stable under conditions of flooding including rapid rise and rapid drawdown of floodwaters, prolonged inundation, and protection against flood-related erosion and scour. In addition to these requirements, if intended to support buildings and structures (Zone A only), fill shall comply with the requirements of the *Florida Building Code*.

SECTION 5.05.12 MANUFACTURED HOMES

A General. All manufactured homes installed in flood hazard areas shall be installed by an installer that is licensed pursuant to section 320.8249, F.S., and shall comply with the requirements of Chapter 15C-1, F.A.C. and the requirements of this Chapter.

B. Foundations. All new manufactured homes and replacement manufactured homes installed in flood hazard areas shall be installed on permanent, reinforced foundations that are designed in accordance with the foundation requirements of the *Florida Building Code Residential* Section R322.2 and this Chapter. Foundations for manufactured homes subject to Section 5.05.12(F) of this Chapter are permitted to be reinforced piers or other foundation elements of at least equivalent strength.

C. Anchoring. All new manufactured homes and replacement manufactured homes shall be installed using methods and practices which minimize flood damage and shall be securely anchored to an adequately anchored foundation system to resist flotation, collapse or lateral movement. Methods of anchoring include, but are not limited to, use of over-the-top or frame ties to ground anchors. This anchoring requirement is in addition to applicable state and local anchoring requirements for wind resistance.

D. Elevation. Manufactured homes that are placed, replaced, or substantially improved shall comply with Section 5.05.12(E) or 5.05.12(F) of this Chapter, as applicable.

E. General elevation requirement. Unless subject to the requirements of Section 5.05.12(F) of this Chapter, all manufactured homes that are placed, replaced, or substantially improved on sites located: (a) outside of a manufactured home park or subdivision; (b) in a new manufactured home park or subdivision; (c) in an expansion to an existing manufactured home park or subdivision; or (d) in an existing manufactured home park or subdivision upon which a manufactured home has incurred "substantial damage" as the result of a flood, shall be elevated such that the bottom of the frame is at or above the elevation required, as applicable to the flood hazard area, in the *Florida Building Code, Residential* Section R322.2 (Zone A).

F. Elevation requirement for certain existing manufactured home parks and subdivisions. Manufactured homes that are not subject to Section 5.05.12(E) of this Chapter, including manufactured homes that are placed, replaced, or substantially improved on sites located in an existing manufactured home park or subdivision, unless on a site where substantial damage as result of flooding has occurred, shall be elevated such that either the:

- (1) Bottom of the frame of the manufactured home is at or above the elevation required in the *Florida Building Code, Residential* Section R322.2 (Zone A); or
- (2) Bottom of the frame is supported by reinforced piers or other foundation elements of at least equivalent strength that are not less than 36 inches in height above grade.

G. Enclosures. Enclosed areas below elevated manufactured homes shall comply with the requirements of the *Florida Building Code, Residential* Section R322.2 for such enclosed areas.

H. Utility equipment. Utility equipment that serves manufactured homes, including electric, heating, ventilation, plumbing, and air conditioning equipment and other service facilities, shall comply with the requirements of the *Florida Building Code, Residential* Section R322.

SECTION 5.05.13 RECREATIONAL VEHICLES AND PARK TRAILERS

A. Temporary placement. Recreational vehicles and park trailers placed temporarily in flood hazard areas shall:

- (1) Be on the site for fewer than 180 consecutive days; or
- (2) Be fully licensed and ready for highway use, which means the recreational vehicle or park model is on wheels or jacking system, is attached to the site only by quick-disconnect type utilities and security devices, and has no permanent attachments such as additions, rooms, stairs, decks and porches.

B. Permanent placement. Recreational vehicles and park trailers that do not meet the limitations in Section 5.05.13(A) of this Chapter for temporary placement shall meet the requirements of Section 5.05.12 of this Chapter for manufactured homes.

SECTION 5.05.14 TANKS

A. Underground tanks. Underground tanks in flood hazard areas shall be anchored to prevent flotation, collapse or lateral movement resulting from hydrodynamic and hydrostatic loads during conditions of the design flood, including the effects of buoyancy assuming the tank is empty.

B. Above-ground tanks, not elevated. Above-ground tanks that do not meet the elevation requirements of Section 5.05.14(C) of this Chapter shall be permitted in flood hazard areas provided the tanks are anchored or otherwise designed and constructed to prevent flotation, collapse or lateral movement resulting from hydrodynamic and hydrostatic loads during conditions of the design flood, including the effects of buoyancy assuming the tank is empty and the effects of flood-borne debris.

C. Above-ground tanks, elevated. Above-ground tanks in flood hazard areas shall be elevated to or above the design flood elevation and attached to a supporting structure that is designed to prevent flotation, collapse or lateral movement during conditions of the design flood. Tank-supporting structures shall meet the foundation requirements of the applicable flood hazard area.

D. Tank inlets and vents. Tank inlets, fill openings, outlets and vents shall be:

- (1) At or above the design flood elevation or fitted with covers designed to prevent the inflow of floodwater or outflow of the contents of the tanks during conditions of the design flood; and
- (2) Anchored to prevent lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, during conditions of the design flood.

SECTION 5.05.15 OTHER DEVELOPMENT

A. General requirements for other development. All development, including man-made changes to improved or unimproved real estate for which specific provisions are not specified in this Chapter or the *Florida Building Code*, shall:

- (1) Be located and constructed to minimize flood damage;
- (2) Meet the limitations of Section 5.05.11(D) of this Chapter if located in a regulated floodway;
- (3) Be anchored to prevent flotation, collapse or lateral movement resulting from hydrostatic loads, including the effects of buoyancy, during conditions of the design flood;
- (4) Be constructed of flood damage-resistant materials; and
- (5) Have mechanical, plumbing, and electrical systems above the design flood elevation or meet the requirements of ASCE 24, except that minimum electric service required to address life safety and electric code requirements is permitted below the design flood elevation provided it conforms to the provisions of the electrical part of building code for wet locations.

B. Fences in regulated floodways. Fences in regulated floodways that have the potential to block the passage of floodwaters, such as stockade fences and wire mesh fences, shall meet the limitations of Section 5.05.11(D) of this Chapter.

C. Retaining walls, sidewalks and driveways in regulated floodways. Retaining walls and sidewalks and driveways that involve the placement of fill in regulated floodways shall meet the limitations of Section 5.05.11(D) of this Chapter.

D. Roads and watercourse crossings in regulated floodways. Roads and watercourse crossings, including roads, bridges, culverts, low-water crossings and similar means for vehicles or pedestrians to travel from one side of a watercourse to the other side, that encroach into regulated floodways shall meet the limitations of Section 5.05.11(D) of this Chapter. Alteration of a watercourse that is part of a road or watercourse crossing shall meet the requirements of Section 5.05.05(C)(3) of this Chapter.

SECTION 3. DEFINITIONS AMENDMENT. That Section 1.08.13 of the Land Development Code, City of Apopka, Florida, is hereby amended to read as follows:

Alteration of a watercourse. A dam, impoundment, channel relocation, change in channel alignment, channelization, or change in cross-sectional area of the channel or the channel capacity, or any other form of modification which may alter, impede, retard or change the direction and/or velocity of the riverine flow of water during conditions of the base flood.

Appeal. A request for a review of the Floodplain Administrator's interpretation of any provision of Chapter 5.05.00 of this Code.

~~Area of shallow flooding:~~ A designated AO or VO zone on a community's flood insurance rate map (FIRM) with base flood depths from one to three feet, where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident.

~~Area of special flood hazard:~~ The area of special flood hazard shall include:

~~All areas designated on a flood hazard boundary map as zone A or a flood insurance rate map as zones A, AO, AH, A1-30, AE, A99, VO, or V1-30, VE, or V. The relevant flood hazard boundary map and flood insurance rate maps, and any revisions thereto, are adopted by reference and declared to be a part of this code.~~

~~Other areas of the community designated on a map by the director as having a one percent or greater chance of flooding in any given year. This may include isolated topographic depressions with a history of flooding or a high potential for flooding.~~

ASCE 24: A standard titled *Flood Resistant Design and Construction* that is referenced by the *Florida Building Code*. ASCE 24 is developed and published by the American Society of Civil Engineers, Reston, VA.

Base flood: The flood having a one percent chance of being equaled or exceeded in any given year. [Also defined in FBC, B, Section 202.] The base flood is commonly referred to as the "100-year flood" or the "1-percent-annual chance flood."

Base flood elevation: The elevation of the base flood, including wave height, relative to the National Geodetic Vertical Datum (NGVD), North American Vertical Datum (NAVD) or other datum specified on the Flood Insurance Rate Map (FIRM). [Also defined in FBC, B, Section 202.]

Basement: A portion of a building located partly or wholly underground, but having not less than half its clear floor-to-ceiling height below the average grade of the adjoining ground. The portion of a building having its floor subgrade (below ground level) on all sides. [Also defined in FBC, B, Section 202; see "Basement (for flood loads)".]

Breakaway wall: A wall that is designed and constructed to collapse under specified lateral loading forces without causing damage to the elevated portion of the building or the supporting foundation system.

Design flood: The flood associated with the greater of the following two areas: [Also defined in FBC, B, Section 202.]

- (1) Area with a floodplain subject to a 1-percent or greater chance of flooding in any year; or
- (2) Area designated as a flood hazard area on the community's flood hazard map, or otherwise legally designated.

Design flood elevation: The elevation of the "design flood," including wave height, relative to the datum specified on the community's legally designated flood hazard map. In areas designated as Zone AO, the design flood elevation shall be the elevation of the highest existing grade of the building's perimeter plus the depth number (in feet) specified on the flood hazard map. In areas designated as Zone AO where the depth number is not specified on the map, the depth number shall be taken as being equal to 2 feet. [Also defined in FBC, B, Section 202.]

Development or development activity: Any of the following activities:

1. Construction,
2. Building,
3. Subdividing
4. A tree removal
5. Erection of a permanent sign
6. Alteration of a historic property
7. Changing the use

8. Construction.
9. For the purposes of floodplain management, any man-made change to improved or unimproved real estate, including but not limited to, buildings or other structures, tanks, temporary structures, temporary or permanent storage of equipment or materials, mining, dredging, filling, grading, paving, excavations, drilling operations or any other land disturbing activities.

Encroachment: The placement of fill, excavation, buildings, permanent structures or other development into a flood hazard area which may impede or alter the flow capacity of riverine flood hazard areas.

Existing building and existing structure: Any buildings and structures for which the “start of construction” commenced before September 29, 1978. [Also defined in FBC, B, Section 202.]

Existing manufactured home park or subdivision: A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before September 29, 1978.

Expansion to an existing manufactured home park or subdivision: The preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

Federal Emergency Management Agency (FEMA): The federal agency that, in addition to carrying out other functions, administers the National Flood Insurance Program.

~~Flood elevation: Maximum water elevation achieved during the 100 year flood as identified by FEMA.~~

~~Flood protection elevation: The elevation of the base flood plus one foot.~~

~~Floodplain: Level land that may be submerged by floodwater.~~

~~Floodway: The channel of a natural stream or river and portions of the floodplain adjoining the channel, which are reasonably required to carry and discharge the floodwater or flood flow of any natural stream or river.~~

Flood damage-resistant materials: Any construction material capable of withstanding direct and prolonged contact with floodwaters without sustaining any damage that requires more than cosmetic repair. [Also defined in FBC, B, Section 202.]

Flood hazard area: The greater of the following two areas: [Also defined in FBC, B, Section 202.]

- (1) The area within a floodplain subject to a 1-percent or greater chance of flooding in any year.
- (2) The area designated as a flood hazard area on the community's flood hazard map, or otherwise legally designated.

Flood Insurance Rate Map (FIRM): The official map of the community on which the Federal Emergency Management Agency has delineated both special flood hazard areas and the risk premium zones applicable to the community. [Also defined in FBC, B, Section 202.]

Flood Insurance Study (FIS): The official report provided by the Federal Emergency Management Agency that contains the Flood Insurance Rate Map, the Flood Boundary and Floodway Map (if applicable), the water surface elevations of the base flood, and supporting technical data. [Also defined in FBC, B, Section 202.]

Floodplain Administrator: The office or position designated and charged with the administration and enforcement of Section 5.05.00 of this Code (may be referred to as the Floodplain Manager).

Floodplain development permit or approval: An official document or certificate issued by the community, or other evidence of approval or concurrence, which authorizes performance of specific development activities that are located in flood hazard areas and that are determined to be compliant with Section 5.05.00 of this Code.

Floodway: The channel of a river or other riverine watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one (1) foot. [Also defined in FBC, B, Section 202.]

Floodway encroachment analysis: An engineering analysis of the impact that a proposed encroachment into a floodway is expected to have on the floodway boundaries and base flood elevations; the evaluation shall be prepared by a qualified Florida licensed engineer using standard engineering methods and models.

Florida Building Code: The family of codes adopted by the Florida Building Commission, including: *Florida Building Code, Building*; *Florida Building Code, Residential*; *Florida Building Code, Existing Building*; *Florida Building Code, Mechanical*; *Florida Building Code, Plumbing*; *Florida Building Code, Fuel Gas*.

Functionally dependent use: A use which cannot perform its intended purpose unless it is located or carried out in close proximity to water, including only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities; the term does not include long-term storage or related manufacturing facilities.

Highest adjacent grade: The highest natural elevation of the ground surface prior to construction next to the proposed walls or foundation of a structure.

Historic structure: Any structure that is determined eligible for the exception to the flood hazard area requirements of the *Florida Building Code, Existing Building*, Chapter 12 Historic Buildings.

Letter of Map Change (LOMC): An official determination issued by FEMA that amends or revises an effective Flood Insurance Rate Map or Flood Insurance Study. Letters of Map Change include:

Letter of Map Amendment (LOMA): An amendment based on technical data showing that a property was incorrectly included in a designated special flood hazard area. A LOMA amends the current effective Flood Insurance Rate Map and establishes that a specific property, portion of a property, or structure is not located in a special flood hazard area.

Letter of Map Revision (LOMR): A revision based on technical data that may show changes to flood zones, flood elevations, special flood hazard area boundaries and floodway delineations, and other planimetric features.

Letter of Map Revision Based on Fill (LOMR-F): A determination that a structure or parcel of land has been elevated by fill above the base flood elevation and is, therefore, no longer located within the special flood hazard area. In order to qualify for this determination, the fill must have been permitted and placed in accordance with the community's floodplain management regulations.

Conditional Letter of Map Revision (CLOMR): A formal review and comment as to whether a proposed flood protection project or other project complies with the minimum NFIP requirements for such projects with respect to delineation of special flood hazard areas. A CLOMR does not revise the effective Flood Insurance Rate Map or Flood Insurance Study; upon submission and approval of certified as-built documentation, a Letter of Map Revision may be issued by FEMA to revise the effective FIRM.

Light-duty truck: As defined in 40 C.F.R. 86.082-2, any motor vehicle rated at 8,500 pounds Gross Vehicular Weight Rating or less which has a vehicular curb weight of 6,000 pounds or less and which has a basic vehicle frontal area of 45 square feet or less, which is:

- (1) Designed primarily for purposes of transportation of property or is a derivation of such a vehicle, or
- (2) Designed primarily for transportation of persons and has a capacity of more than 12 persons; or
- (3) Available with special features enabling off-street or off-highway operation and use.

Lowest floor: ~~The lowest enclosed floor of a structure, including a basement, but not including the floor of an area enclosed only with insect screening or wood lattice as permitted by the flood~~

~~damage prevention regulations in this code.~~ The lowest floor of the lowest enclosed area of a building or structure, including basement, but excluding any unfinished or flood-resistant enclosure, other than a basement, usable solely for vehicle parking, building access or limited storage provided that such enclosure is not built so as to render the structure in violation of the non-elevation requirements of the *Florida Building Code* or ASCE 24. [Also defined in FBC, B, Section 202.]

Manufactured home: A structure, transportable in one or more sections, which is eight (8) feet or more in width and greater than four hundred (400) square feet, and which is built on a permanent, integral chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term "manufactured home" does not include a "recreational vehicle" or "park trailer." [Also defined in 15C-1.0101, F.A.C.]

Manufactured home park or subdivision: A parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

Market value: The price at which a property will change hands between a willing buyer and a willing seller, neither party being under compulsion to buy or sell and both having reasonable knowledge of relevant facts. As used in Section 5.05.00 of this Code, the term refers to the market value of buildings and structures, excluding the land and other improvements on the parcel. Market value may be established by a qualified independent appraiser, Actual Cash Value (replacement cost depreciated for age and quality of construction), or tax assessment value adjusted to approximate market value by a factor provided by the Property Appraiser.

~~*Mean sea level:* The average height of the sea for all stages of the tide. For purposes of this code the term is synonymous with National Geodetic Vertical Datum (NGVD).~~

New construction: For the purposes of administration of Section 5.05.00 of this Code and the flood resistant construction requirements of the *Florida Building Code*, structures for which the "start of construction" commenced on or after September 29, 1978 and includes any subsequent improvements to such structures.

New manufactured home park or subdivision: A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after September 29, 1978.

Park trailer: A transportable unit which has a body width not exceeding fourteen (14) feet and which is built on a single chassis and is designed to provide seasonal or temporary living quarters when connected to utilities necessary for operation of installed fixtures and appliances. [Defined in section 320.01, F.S.]

Recreational vehicle: A vehicular type portable structure without permanent foundation, which is built on a single chassis; measures 400 square feet or less at the largest horizontal projection; can be towed, hauled or driven, and is primarily designed as temporary living accommodations for recreation, camping, and travel use, and including, but not limited to, travel trailers, truck campers, camping trailers, and self-propelled motor homes.

Regulatory floodway: ~~Channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 100-year flood discharge can be conveyed without increasing the base flood elevation (BFE) more than a specified amount.~~

Special flood hazard area: An area in the floodplain subject to a 1 percent or greater chance of flooding in any given year. Special flood hazard areas are shown on FIRMs as Zone A, AO, A1-A30, AE, A99, AH, V1-V30, VE or V. [Also defined in FBC, B Section 202.]

Start of construction: The date of issuance of permits for new construction and substantial improvements, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement is within 180 days of the date of the issuance. The actual start of construction means either the first placement of permanent construction of a building (including a manufactured home) on a site, such as the pouring of slab or footings, the installation of piles, or the construction of columns.

Permanent construction does not include land preparation (such as clearing, grading, or filling), the installation of streets or walkways, excavation for a basement, footings, piers, or foundations, the erection of temporary forms or the installation of accessory buildings such as garages or sheds not occupied as dwelling units or not part of the main buildings. For a substantial improvement, the actual "start of construction" means the first alteration of any wall, ceiling, floor or other structural part of a building, whether or not that alteration affects the external dimensions of the building. [Also defined in FBC, B Section 202.]

Substantial damage: Damage of any origin sustained by a building or structure whereby the cost of restoring the building or structure to its before-damaged condition would equal or exceed 50 percent of the market value of the building or structure before the damage occurred. [Also defined in FBC, B Section 202.]

Substantial improvement: Any repair, reconstruction, rehabilitation, alteration, addition, or other improvement of a building or structure, the cost of which equals or exceeds 50 percent of the market value of the building or structure before the improvement or repair is started. If the structure has incurred "substantial damage," any repairs are considered substantial improvement regardless of the actual repair work performed. The term does not, however, include either: [Also defined in FBC, B, Section 202.]

- (1) Any project for improvement of a building required to correct existing health, sanitary, or safety code violations identified by the building official and that are the minimum necessary to assure safe living conditions.
- (2) Any alteration of a historic structure provided the alteration will not preclude the structure's continued designation as a historic structure.

Variance (Floodplain Management): For the purposes of floodplain management, a grant of relief from the requirements of Chapter 5.05.00 of this Code, or the flood resistant construction requirements of the *Florida Building Code*, which permits construction in a manner that would not otherwise be permitted by this ordinance or the *Florida Building Code*.

SECTION 4. The Apopka Code of Ordinances, Chapter 22 Buildings and Building Regulations, Article II Building Code, Section 22-37 Amendments, is hereby amended by the following technical amendments to the *Florida Building Code, Residential*.

R322.2.2 Enclosed area below design flood elevation. Enclosed areas, including crawl spaces, that are below the design flood elevation shall:

1. Be used solely for parking of vehicles, building access or storage. The interior portion of such enclosed areas shall not be partitioned or finished into separate rooms except for stairwells, ramps, and elevators, unless a partition is required by the fire code. The limitation on partitions does not apply to load bearing walls interior to perimeter wall (crawlspace) foundations. Access to enclosed areas shall be the minimum necessary to allow for the parking of vehicles (garage door) or limited storage of maintenance equipment used in connection with the premises (standard exterior door) or entry to the building (stairway or elevator).

SECTION 5. FISCAL IMPACT STATEMENT. In terms of design, plan application review, construction and inspection of buildings and structures, the cost impact as an overall average is negligible in regard to the local technical amendments because all development has been subject to the requirements of the local floodplain management ordinance adopted for participation in the National Flood Insurance Program. In terms of lower potential for flood damage, there will be continued savings and benefits to consumers.

SECTION 6. APPLICABILITY. For the purposes of jurisdictional applicability, this ordinance shall apply in the City of Apopka. This ordinance shall apply to all applications for development, including building permit applications and subdivision proposals, submitted on or after the effective date of this ordinance.

SECTION 7. INCLUSION INTO THE CODE OF ORDINANCES. It is the intent of the City Council that the provisions of this ordinance shall become and be made a part of the City

of Apopka’s Code of Ordinances, and that the sections of this ordinance may be renumbered or relettered and the word “ordinance” may be changed to “section,” “article,” “regulation,” or such other appropriate word or phrase in order to accomplish such intentions.

SECTION 8. SEVERABILITY. If any section, subsection, sentence, clause or phrase of this ordinance is, for any reason, declared by the courts to be unconstitutional or invalid, such decision shall not affect the validity of the ordinance as a whole, or any part thereof, other than the part so declared.

SECTION 9. EFFECTIVE DATE. This ordinance shall take effect on **{insert date}**.

PASSED and ADOPTED in regular session, with a quorum present and voting, by the Apopka City Council, upon second and final reading this **{insert date}**.

READ FIRST TIME: _____

READ SECOND TIME
AND DOPTED: _____

Bryan Nelson, Mayor

ATTEST:

Linda G. Goff, City Clerk

APPROVED as to form and legality for use and reliance by the City of Apopka, Florida.

Clifford B. Shepard, City Attorney

DULY ADVERTISED FOR PUBLIC HEARING:



CITY OF APOPKA PLANNING COMMISSION

PUBLIC HEARING
 SITE PLAN
 SPECIAL REPORTS
 OTHER:

MEETING OF: September 11, 2018
FROM: Community Development
EXHIBITS: Appendix 7-1 – CIE – Five-Year CIP

SUBJECT: AMENDMENT TO THE CITY’S FIVE-YEAR CAPITAL IMPROVEMENTS PLAN TO ADD RECREATION IMPROVEMENTS, AND INCORPORATING INTO THE CITY OF APOPKA, COMPREHENSIVE PLAN, CAPITAL IMPROVEMENTS ELEMENT

REQUEST: RECOMMEND APPROVAL OF THE AMENDMENT TO THE CITY OF APOPKA, FIVE-YEAR CAPITAL IMPROVEMENTS PLAN AND INCORPORATE INTO THE CITY OF APOPKA COMPREHENSIVE PLAN, CAPITAL IMPROVEMENT ELEMENT

SUMMARY:

The City desires to conduct recreation improvements at Kit Land Nelson Park and at Northwest Recreation Complex to accommodate a need for additional and improved playground equipment and facilities for youth. To fund these recreation improvements, the City proposes to apply for available grant funds sponsored by the Florida Department of Environmental Project.

Eligibility requirements for the grant program require that the proposed recreation improvement must be recognized within the City’s capital improvement program (CIP) established in the Comprehensive Plan. Further, the City must proceed expeditiously at this time to meet grant application deadlines. Hence, the proposed update to the five-year CIP of the Comprehensive Plan at this time only addresses the new recreation improvements at Kit Land Nelson Park and at Northwest Recreation Complex.

After the Fiscal year 2018-19 budget has been approved by City Council, staff will conduct an annual update of the five-year CIP to address necessary to meet accepted levels of service (LOS), to maintain and repair failing facilities, and to provide additional infrastructure facilities and roads to meet demands generated by new growth and development. Typically, the five-year CIP within the Comprehensive Plan addresses the infrastructure needs related to transportation, water, sewer, reclaimed water, stormwater management, and recreation.

Exhibit ‘A’ of this report includes the updated CIP to be incorporated as Appendix 7-1 of the Capital Improvements Element. The proposed CIP changes (additions) are included in the ‘General Fund’ and ‘FDEP Grant Fund’ sections of the Recreation CIP (shown in Exhibit ‘A’). Funds appearing in the ‘General Fun’ serve as the local government match requirement per the conditions of the FDEP grant program.

Legislative changes in 2011 to Chapter 163, Florida Statutes allow local governments to update their five-year CIP by ordinance, and is not considered a comprehensive plan policy amendment. Therefore, incorporation of the updated CIP into the Capital Improvements Element does not require transmittal to the Florida Department of Economic Opportunity for state agency review.

DISTRIBUTION

| | | |
|--------------------------------|------------------|--------------------------|
| Mayor Nelson | Finance Director | Public Services Director |
| Commissioners | HR Director | Recreation Director |
| City Administrator | IT Director | City Clerk |
| Community Development Director | Police Chief | Fire Chief |

PUBLIC HEARING SCHEDULE:

September 11, 2018 – Planning Commission (5:30 pm)
September 19, 2018 – City Council 1st Reading (7:00 pm)
October 3, 2018 – City Council 2nd Reading (1:30 pm)

DULY ADVERTISED:

August 31, 2018 – Public Hearing Notice
September 7, 2018 – Public Hearing Notice

RECOMMENDATION ACTION:

The **Development Review Committee** recommends approval of the update of the City of Apopka Five-Year Capital Improvements Plan to be incorporated into the Apopka Comprehensive Plan – Capital Improvements Element.

RECOMMENDED MOTION: Find the proposed amendment of the Apopka Five-Year Capital Improvements Plan consistent with the Apopka Comprehensive Plan, recommend approval of the Five-Year Capital Improvements Plan amendment and the incorporation into the Capital Improvements Element of the Comprehensive Plan.

Note: This item is considered legislative and establishes general policy. The staff report and its findings are to be incorporated into and made a part of the minutes of this meeting.

APPENDIX 7-1: FIVE-YEAR SCHEDULE OF CAPITAL IMPROVEMENTS - RECREATION

PROPOSED CHANGES - UNDERScoreD

| Comprehensive Plan Element/Project | Source of Funding | FY 16-17 | FY 17-18 | FY 18-19 | FY 19-20 | FY 20-21 | FY 21-22 | Totals | |
|--|------------------------|------------------|--------------------|--------------------|------------------|------------------|--------------------|--------------------|-------------|
| Concession, bathrooms, building and sidewalks at NWRC | General Fund | | \$300,000 | | | \$0 | | \$300,000 | |
| Parking Lot-NWRC Little League Fields | | | \$510,000 | | | \$0 | | \$510,000 | |
| Picnic Pavilions | | | \$100,000 | | \$100,000 | \$0 | \$100,000 | \$300,000 | |
| NWRC Ball Field Renovations | | \$23,900 | \$50,000 | \$50,000 | \$50,000 | \$0 | | \$173,900 | |
| Fitness Equipment for Kit Land Nelson Park (with grant) | | | | | | \$0 | | \$23,900 | |
| Bleacher Covers Over Quad 3 | | | \$60,000 | | | \$0 | | \$60,000 | |
| Tennis Court Resurfacing – NWRC | | | | | \$50,000 | \$0 | | \$50,000 | |
| Basketball Resurfacing – NWRC | | | | | \$50,000 | \$0 | | \$50,000 | |
| Lk. Ave. Park – Playground, Pavilion, Shade Structure | | | | | \$350,000 | | \$0 | | \$350,000 |
| Old Little League Fields New Park | | | | | \$200,000 | \$0 | | | \$200,000 |
| NWRC Scoreboards for (1) Quad | | | | \$30,000 | \$30,000 | | \$0 | | \$60,000 |
| New ball fields (Baseball, soccer, etc.) | | | | | \$2,200,000 | | \$0 | | \$2,200,000 |
| Alonzo Williams Park Improvements (Contingent upon CDBG grant award) | | | | \$50,000 | | | \$0 | | \$50,000 |
| Kit Land Nelson Park Fitness (grant contingent)* | | | | \$80,000 | | | \$0 | | \$80,000 |
| <u>Kit Land Nelson Park Playground (Grant Match)</u> | | | \$75,000 | | | \$0 | | \$75,000 | |
| <u>Northwest Recreation Complex Playground (Grant Match)</u> | | | \$35,000 | | | \$0 | | \$35,000 | |
| TOTAL GENERAL FUND | | \$23,900 | \$1,290,000 | \$2,630,000 | \$450,000 | \$0 | \$100,000 | \$4,493,900 | |
| Recreation Splash Pad at NWRC | Recreation Impact Fund | | | | | \$400,000 | | \$400,000 | |
| Skate Park | | | \$300,000 | | | | | \$300,000 | |
| Playground at Apopka Athletic Complex (AAC) | | | | \$75,000 | | | | | \$75,000 |
| Splash Pad w/ Restrooms (Kit Land Nelson Park) | | \$750,000 | | | | | | | \$750,000 |
| Park Lot - NWRC | | | | | \$267,000 | \$865,000 | | \$1,165,000 | \$2,297,000 |
| TOTAL RECREATION IMPACT FUND | | \$750,000 | \$375,000 | \$267,000 | \$865,000 | \$400,000 | \$1,165,000 | \$3,822,000 | |

APPENDIX 7-1: FIVE-YEAR SCHEDULE OF CAPITAL IMPROVEMENTS - RECREATION

PROPOSED CHANGES - UNDERScoreD

| Comprehensive Plan Element/Project | Source of Funding | FY 16-17 | FY 17-18 | FY 18-19 | FY 19-20 | FY 20-21 | FY 21-22 | Totals |
|--|-------------------|-----------------|------------------|------------|------------------|------------|------------|------------------|
| Alonzo Williams Community Center Bldg. | CDBG | | \$750,000 | | | | | \$750,000 |
| TOTAL CDBG | | | \$750,000 | | | | | \$750,000 |
| Alonzo Williams Park[1] Renovations | FRDAP Grant | \$28,000 | | | | | | \$28,000 |
| Alonzo Williams Park New Construction[2] | | \$22,000 | | | | | | \$22,000 |
| Kit Land Nelson Park Renovations[3] | | \$3,700 | | | | | | \$3,700 |
| Kit Land Nelson Park New Construction[4] | | \$42,500 | | | | | | \$42,500 |
| AAC Renovations[5] | | | \$17,000 | | | | | \$17,000 |
| AAC New Construction[6] | | | \$33,000 | | | | | \$33,000 |
| Old Little League Fields New Park Construction | | | | | | \$200,000 | | |
| TOTAL FRDAP GRANT FUNDS | | \$96,200 | \$50,000 | \$0 | \$200,000 | \$0 | \$0 | \$346,200 |

[1] Resurfacing, irrigation, drinking fountain, picnic facilities

[2] Playground, security lighting

[3] Resurfacing, tennis court maintenance, drinking fountain, picnic facilities, miscellaneous maintenance

[4] New playground, bike rack, picnic facilities

[5] Restrooms, playground surface materials, baseball dugout shelters, drinking fountain & picnic facilities

[6] Playground, landscaping, picnic facilities

| | | | | | | | | |
|--|-------------|------------------|---------------------|------------------|-----------------|------------|------------|---------------------|
| Kit Land Nelson Park Fitness Track/Trail* | FDEP GRANT | | \$200,000 | | | | | \$200,000 |
| Kit Land Nelson Park Playground | | | | \$75,000 | | | | \$75,000 |
| Northwest Recreation Complex Playground | | | | | \$35,000 | | | \$35,000 |
| TOTAL FDEP GRANT FUNDS | | \$310,000 | \$200,000 | \$110,000 | \$0 | \$0 | \$0 | \$310,000 |
| Gymnasium/Aquatic Center (GO Bond) | Other Funds | | \$20,000,000 | | | | | \$20,000,000 |
| Fitness Equipment for Kit Land Nelson Park/Outdoor Fitness Grant | | \$9,560 | | | | | | \$9,560 |
| TOTAL OTHER FUNDS | | \$9,560 | \$20,000,000 | \$0 | \$0 | \$0 | \$0 | \$20,009,560 |
| Downtown Parking Lot | CRA | \$200,000 | | | | | | \$200,000 |
| Downtown Park Lot Upgrades | | | | \$500,000 | | | | |
| TOTAL CRA FUND | | \$200,000 | \$500,000 | | | | | \$700,000 |

APPENDIX 7-1: FIVE-YEAR SCHEDULE OF CAPITAL IMPROVEMENTS - RECREATION

PROPOSED CHANGES - UNDERScoreD

| Comprehensive Plan Element/Project | Source of Funding | FY 16-17 | FY 17-18 | FY 18-19 | FY 19-20 | FY 20-21 | FY 21-22 | Totals |
|---|-------------------|-----------|--------------------|--------------------|------------------|------------------|--------------------|------------------|
| Binion Rd RWM, IFAS to Ocoee Apopka Rd, 5,329 LF, | Reclaim Fund | | | | \$511,584 | | | \$511,584 |
| 16" Golden Gem Reuse Station HSP | | | | | | \$6,500,000 | | \$6,500,000 |
| Keene Rd RWM, Marden Rd to Ocoee Apopka Rd, 4,413 LF, 36" | | \$794,340 | | | | | | \$794,340 |
| Kelly Park Rd RMW II, Jason Dwelley Pkwy to Rock Springs Rd 16", 8,801 LF (2) | | | | \$705,000 | | | | \$705,000 |
| Kelly Park Rd RWM, Golden Gem Rd to Round Lake Rd 24" | | | \$371,400 | | | | | \$371,400 |
| Miscellaneous RWM (5) | | \$100,000 | \$100,000 | \$100,000 | \$100,000 | \$100,000 | \$100,000 | \$600,000 |
| Northwest Reclaim Water Pump Station, 2 @ \$3,000 | | | | \$700,000 | | | | \$700,000 |
| Northwest Reclaim Water Pond 2 & 3 | | \$250,000 | | | | | | \$250,000 |
| Ocoee Apopka Rd, RWM, Harmon Rd to Alston Bay Blvd, 2,500 LF, 30" | | \$412,500 | | | | | | \$412,500 |
| Ocoee Apopka Rd RWM, Keene Rd to Alston Bay Blvd, 4,000 LF 30" | | \$660,000 | | | | | | \$660,000 |
| Plymouth Sorrento Rd RWM, Yothers Rd to Ponkan Rd, 4,654 LF 24" (2) | | | \$670,176 | | | | | \$670,176 |
| Ocoee Apopka Rd RWM, Keene Rd to Binion Rd, 3,500 LF 30" | | \$308,000 | | | | | | \$308,000 |
| Plymouth Sorrento Rd RWM, Ponkan Rd to Kelly Park Rd 2,745 LF, 20" (2) | | | \$645,000 | | | | | \$645,000 |
| TOTAL RELAIM FUND | | | \$2,524,840 | \$2,486,576 | \$805,000 | \$611,584 | \$6,600,000 | \$100,000 |
| Grossenbacher WTP, Replace Well | Water Impact Fee | | | | \$910,000 | | | \$910,000 |
| Haas Rd WM, Mt. Plymouth Rd to Round Lake Rd, 22,708 LF 12" (1) | | | | | \$1,634,976 | | | \$1,634,976 |
| Kelly Park Rd WM, Golden Gem Rd to Round Lake Rd, 4,035 LF 16" (1) | | | \$387,360 | | | | | \$387,360 |
| Kelly Park Rd WM, Plymouth Sorrento Rd to Golden Gem, 6,672 LF 12" (1) | | \$400,320 | | | | | | \$400,320 |
| Miscellaneous Water Mains (2) | | \$100,000 | \$100,000 | \$100,000 | \$100,000 | \$100,000 | \$100,000 | \$600,000 |
| Mt. Plymouth Water Plant (Well #1) modifications and improvements | | \$700,000 | | | | | | \$700,000 |
| Mt. Plymouth Water Plant (Well #4) modifications and improvements | | | \$900,000 | | | | | \$900,000 |
| NW WTP (1 MG Storage Tank) (1) | | | | \$850,000 | | | | \$850,000 |
| Plymouth Sorrento Rd WM Ponkan Rd to Kelly Park Rd, 10,720 LF 16" (1) | | | | \$1,030,000 | | | | \$1,030,000 |
| Plymouth Sorrento Rd WM, Yothers Rd to Ponkan Rd, 5,423 LF 12" (1) | | \$390,456 | | | | | | \$390,456 |



**CITY OF APOPKA
PLANNING COMMISSION**

| | | |
|---|-------------|---------------------------------|
| <u> X </u> PUBLIC HEARING | MEETING OF: | September 11, 2018 |
| <u> </u> SITE PLAN | FROM: | Community Development |
| <u> </u> SPECIAL REPORTS | EXHIBITS: | Zoning Report |
| <u> X </u> OTHER: PUD Master Plan/PDP/PSP | | Vicinity Map |
| | | Adjacent Zoning Map |
| | | Adjacent Uses Map |
| | | Existing Use Map |
| | | Ex. A – PUD Master Plan/PDP/PSP |
| | | Copart Development Agreement |

SUBJECT: CHANGE OF ZONING - PUD MASTER PLAN/PRELIMINARY DEVELOPMENT PLAN; SUBDIVISION AND SITE PLAN – MID-FLORIDA LOGISITCS PARK

REQUEST:

- 1. RECOMMEND APPROVAL OF THE CHANGE OF ZONING:
FROM: I-1 (RESTRICTED INDUSTRIAL DISTRICT), MIXED-EC, R-1AA (RESIDENTIAL SINGLE-FAMILY DISTRICT), AG (AGRICULTURE DISTRICT), A-1 (ZIP)
TO: PUD (PLANNED UNIT DEVELOPMENT)**
- 2. THE PUD MASTER PLAN/PRELIMINARY DEVELOPMENT PLAN; AND THE SUBDIVISION AND SITE PLAN**

SUMMARY:

OWNERS: Mid-Florida Freezer Warehouses LTD; Eagles Landing at Ocoee, LLC.

APPLICANT: Dave Schmitt Engineering, Inc., c/o Bryan Gaines, AICP

LOCATION: West side of SR 429, south of General Electric Road, east of Hermit Smith Road

PARCEL ID NUMBERS: 01-21-27-0000-00-030; 01-21-27-0000-00-060; 06-21-28-7172-12-020; 06-21-28-7172-12-041; 06-21-28-7172-12-060; 06-21-28-7172-13-000; 12-21-27-0000-00-010; 12-21-27-0000-00-015; 12-21-27-0000-00-017; 12-21-27-0000-00-018; 12-21-27-0000-00-021

EXISTING USE: Vacant

FLUM DESIGNATION: Current: Industrial, Mixed-Use, Agriculture
Proposed: Industrial (adoption hearing scheduled for September 19, 2018)

CURRENT ZONING: I-1 (Restricted Industrial District), Mixed-EC, R-1AA (Residential Single-Family District), AG (Agriculture District), A-1 (ZIP)

PROPOSED DEVELOPMENT: 2,406,095 square feet industrial buildings; developed in multiple phases

PROPOSED ZONING: Planned Unit Development (PUD)

TRACT SIZE: 186.03 +/- acres

DISTRIBUTION

| | | |
|--------------------------------|------------------|--------------------------|
| Mayor Nelson | Finance Director | Public Services Director |
| Commissioners | HR Director | Recreation Director |
| City Administrator | IT Director | City Clerk |
| Community Development Director | Police Chief | Fire Chief |

ADDITIONAL INFORMATION: The subject property is approximately 186.03 acres in size and is zoned I-1 (Restricted Industrial District), Mixed-EC, R-1AA (Residential Single-Family District), AG (Agriculture District), and A-1 (ZIP) and has a future land use designation of Industrial, Mixed Use and Agriculture. A large-scale future land use amendment is scheduled for adoption before City Council on September 19, 2018, which will re-designate the future land use of the entire property to Industrial. The subject property is located west of SR 429, south of General Electric Road and east of Hermit Smith Road. The proposed change of zoning to PUD (Planned Unit Development) is being requested by the prospective developer, who proposes to construct a subdivision consisting of five industrial warehouse buildings totaling 2,406,095 on the property.

PROJECT DESCRIPTION: The PUD Master Plan/Preliminary Development Plan/Preliminary Site Plan proposes a subdivision consisting of five industrial warehouse buildings totaling 2,406,095 square feet. Access to the site is proposed an ingress/egress point on Hermit Smith Road, two ingress/egress points on General Electric Road, and a yet to be constructed road that is dedicated to the public that is referred to as Fern Industrial Road, which is proposed to be constructed in a north-south configuration. In addition, three railroad spurs are proposed to lead into buildings 1A and 1B, 2, and 3. The railroad spurs will be located along the right-of-way of Fern Industrial Drive. An unimproved platted right-of-way known as Peterson Road bisects the property from east to west. This right-of-way is proposed to be vacated when the property is platted, and the right-of-way of Peterson Road will be relocated to the south to allow access to the property owners located to the south of the PUD. The proposed relocation of the Peterson Road right-of-way is shown on the PUD Master Plan. The new right-of-way of Peterson Road is proposed at 50-feet in width. Parking will be provided on each lot, and will be owned and maintained by each property owner.

Fromm Road must also be vacated in order accommodated the subdivision plan and site plan.

Four Stormwater retention areas are proposed on site. Pond A (dry retention) is proposed south of Building 3, Pond B is proposed east of Building 1A and 1B and adjacent to SR 429, and Ponds C1 (dry retention) and C2 (wet detention) are proposed south and west of Building 5.

Deviations: The applicant is requesting six deviations to the City’s required development standards. For a PUD Master Plan, a deviation from the City’s Land Development Code (LDC) does not represent a variance but a development standard or zoning condition unique to and approved as part of the Planned Unit Development zoning. PUD’s are required to satisfy the requirements of the Land Development Code unless the City Council finds that, based on substantial evidence, a proposed alternative development guideline is adequate to protect to the public health safety, and welfare. Any deviations must be consistent with the policies of the Comprehensive Plan.

1. LDC, Section 6.03.02.A. Number of parking spaces required (Wholesale, industrial, manufacture, processing or assembly uses) - 2 spaces per 1,000 square feet of gross floor area up to 150,000 square feet, plus 1 space per vehicle operating from premises or 1 space per 2 employees. 1 space per 1,000 square feet over 150,000 square feet of gross floor area.

The applicant is proposing 0.89 parking spaces per 1,000 square feet of gross floor area.

The following justification has been provided: “The ITE Parking Generation Manual, 4th Edition, 85th percentile parking requirement for warehouse use is 0.81 spaces per 1,000 square feet of gross floor area.”

2. LDC, Section 2.02.01.A. - Maximum building height for all zoning districts is 35-feet.

The applicant is proposing a maximum building height of 55-feet within the PUD.

The following justification has been provided: “The modern warehouses require 36-feet to 45-feet of clear space under roof to accommodate automated materials handling equipment and maximize storage.”

3. LDC, Section 2.02.15.F. Yard requirements - Front yard – 25-feet, side yard – 10-feet, Yards adjacent to road right-of-ways shall be a minimum of 25-feet, Rear Yard – 10-feet (30-feet adjacent to residential)

The applicant is proposing 15-foot setback on General Electric Road, Hermit Smith Road to main entrance, 0-feet to 10-feet adjacent to SR 429, 10-feet to 25-feet adjacent to Peterson Road, 10-feet adjacent to Fern Industrial Drive.

The following justification has been provided: “The northwestern portion of the site is constrained by the encroachment of General Electric Road. SR 429 has 300-feet of right-of-way, 6 lanes, and provides a 20-foot high barrier to adjacent property to the east.”

4. LDC, Section 2.02.01.b(8a) – Roof top equipment shall be completely screened from adjacent properties and rights-of-way to the maximum extent possible.

The applicant is proposing roof top equipment shall be screened from view from adjacent property lines and public right-of-way, with the exception of SR 429 due to the large elevation change of the roadway and the finished floor elevation of the building. SR 429 is at an elevation of 135-feet, approximately 20-feet above the finished floor height of Building 2. Screening shall be reviewed to be in conformance by the subdivision president and the City of Apopka. Screening shall be reviewed through a sight line document from the nearest adjacent property line and/or from the center line of the public right-of-way. The eye line shall be from the typical height of a person driving an automobile.

The following justification has been provided: “All buildings will have a site line evaluation to confirm that rooftop equipment will not be visible from adjacent properties and right-of-way.”

5. LDC, Section 2.02.16.B.2 – Long term outdoor vehicle storage.

The applicant is proposing long term outdoor vehicle (bus, car, cab, and truck) storage and terminal as a permitted use within the PUD.

The following justification has been provided: “Increased business flexibility. Permitted vehicle storage will be screened from the ground.”

6. LDC, Section 6.02.08.B.2 – All subdivisions are required to have four-foot wide concrete sidewalks on both sides of all local and minor collector streets.

The applicant is proposing to construct a sidewalk along only one side of Fern Industrial Drive.

The following justification has been provided: “We are requesting that we do not place a sidewalk on the east side of the right-of-way proximate to the rail spurs. The pedestrian access plan provided on Sheet 6 of the PUD Master Plan shows a network of pedestrian facilities serving the entire site. The sidewalk on the west side of Fern Industrial is the spine connecting the southern end of the site with General Electric Road. All buildings are connected to this north/south spine and the appropriate crosswalks are provided when needed. We [BlueScope] remain concerned that placement of a sidewalk will not increase the pedestrian connectivity over the current plan but will put pedestrians in close proximity to the rail spurs to the east of Fern Industrial serving the site. The benefit of the additional sidewalk does not, in our opinion, warrant the risk of inadvertent interaction of pedestrians and rail vehicles.”

TRANSPORTATION IMPACTS: Access to the site is provided from General Electric Road and Hermit Smit Road. Peterson Road is also a future access point for this project as well as for properties to the south of the Mid-Florida Logistics Park site. Peterson Road and Fromm Road are both proposed to be vacated at the request of the applicant and property owner. The vacated road right-of-way will become part of the development site, making it more compact and contiguous. Peterson Road access will serve as a future secondary access for emergency response. The proposed Peterson Road alignment will also create connection to Peterson Road east of SR 429, allowing any residents of Avian Pointe to reach the Logistics Park. The Peterson Road connection between the east and west side

PLANNING COMMISSION – SEPTEMBER 11, 2018
MID-FLORIDA LOGISTICS PARK – CHANGE OF ZONING
PAGE 4

of SR 429 also allows another road connection besides using West Orange Avenue and Binion Road, thus allowing traffic to distribute over more routes.

A transportation impact analysis (TIA) was conducted for this project to assess its impacts on the surrounding roadway segments and intersections within a one-mile radius of the project per the City's adopted TIA methodology. Included in the analysis were segments of US 441, General Electric Road, Binion Road, Hermit Smith Road and Hogshhead Road. Intersections analyzed were General Electric Road & Orange Avenue, Hermit Smith Road & General Electric Road, Hermit Smith Road & US 441, SR 429 Connector Road & US 441, Orange Avenue & US 441, Plymouth Sorrento Road & US 441, Boy Scout Boulevard & U&S 441, General Electric Road & Site Access, and Hermit Smith Road & Site Access. Peterson Road connection requires additional right-of-way east of SR 429. In exchange for the City vacating Fromm Road and Peterson Road, Mid-Florida Freezer will be obligated to donate an additional 30-foot width of land along Peterson Road, east of SR 429, to create a 50-foot wide right-of-way.

The project will generate 3,444 daily trips and 246 P.M. Peak Hour trips. It is estimated that 20% of the total traffic generated by this project will be truck traffic. The nature of the land use supports the assumption that most of the truck traffic will leave the site and access SR 429 from US 441 and SR 429 Connector Road.

The addition of project trips to the study roadways will not cause the Level of Service (LOS) to fall below the City's adopted LOS standard. The addition of project traffic to the intersection of Hermit Smith Road and US 441 will cause the intersection to fail. The applicant is required to design and construct a dedicated right turn lane on Hermit Smith Road to allow for safe access to US 441. The addition of project traffic to the other study intersections is not project to cause failures in the future.

The tenants of the Mid-Florida Logistics Park are unknown at this time, so trip generation is based on the best information currently available; however, it is possible that tenants occupying space at Mid-Florida Logistics Park will exceed the trip generation used to conduct the analysis. As the site develops and becomes occupied, the applicant must reassess the trip generation. If it exceeds the projected trip generation used in the analysis, an updated study is required and additional mitigation for roadway and intersection failures caused by the project traffic.

PUD RECOMMENDATIONS: That the zoning classification of the following described property be designated as Planned Unit Development (PUD), as defined in the Apopka Land Development Code, and with the following Master Plan provisions subject to the following zoning provisions:

- A. The uses permitted within the PUD district shall be single-family residential uses.
- B. Terms of Expiration for this PUD shall be as follows:

If a Final Development Plan associated with the PUD district has not been approved by the City within three years, and site development has not commenced within four years after approval of these Master Plan provisions, the approval of the Master Plan provisions will expire. At such time, the City Council may:

- 1. Permit a single six-month extension for submittal of the required Final Development Plan;
- 2. Allow the PUD zoning designation to remain on the property pending resubmittal of new Master Plan provisions and any conditions of approval; or
- 3. Rezone the property to a more appropriate zoning classification.

C. Zoning Standards

- 1. Permitted Uses:
 - (a) All permitted uses allowed under I-1 zoning district;

- (b) The uses allowed by the “Developer’s Agreement for Development of Copart, Inc. Apopka Property,” as recorded as document number 20160275220 within the official records of Orange County, Florida, shall be available uses within this PUD if the Copart Developer’s Agreement is terminated with the mutual consent of City Council and the property owner subject to the Copart Developer’s Agreement;
- (c) Long-term outdoor vehicle (bus, car, cab, and truck) storage and terminal use is permitted within the PUD as an accessory use if said vehicle parking is associated with an enclosed building having a minimum floor area of 10,000 square feet and located within the same Lot or abutting lots. All vehicles stored outdoors must be operable.
- (d) Prohibited Use: Flea markets; day-care centers except when provided solely for on-site employees; churches, public or private schools (k-12th grade) except when located within a stand-alone building; community residential homes;
- (e) All prohibited uses for the I-1 zoning district.

Special Exceptions: As set forth by the I-1 zoning district except if listed as a permitted or prohibited uses above.

COMPREHENSIVE PLAN COMPLIANCE: The proposed use of the property is consistent with the proposed Industrial Future Land Use designation and is consistent with the Land Development Code, except for those which deviations are proposed to.

ORANGE COUNTY NOTIFICATION: Pursuant to Section 7 of the Joint Planning Area agreement, notification to Orange County was provided on July 18, 2018.

PUBLIC HEARING SCHEDULE:

September 11, 2018 - Planning Commission (5:30 pm)
October 3, 2018 - City Council (1:30 pm) - 1st Reading
October 17, 2018 – City Council (7:00 pm) - 2nd Reading

DULY ADVERTISED:

August 24, 2018 – Public Notice (Apopka Chief); Letter, Poster

RECOMMENDATION ACTION:

The **Development Review Committee** finds the proposed rezoning to Planned Unit Development (PUD), PUD Master Plan/Preliminary Development Plan/Preliminary Site Plan consistent with the Comprehensive Plan and Land Development Code and recommends approval of the Mid-Florida Logistics Park PUD Master Plan/Preliminary Development Plan/Preliminary Site Plan.

Recommended Motion: Recommend to approve the rezoning of the subject parcel from I-1 (Restricted Industrial District), Mixed-EC, R-1AA (Residential Single-Family District), AG (Agriculture District), and A-1 (ZIP) to PUD (Planned Unit Development), and approval of the PUD Master Plan/Preliminary Development Plan/Preliminary Site Plan based on the findings and facts presented in the staff report and exhibits, and subject to City Council approving a development agreement.

Note: This item is considered quasi-judicial. The staff report and its findings are to be incorporated into and made a part of the minutes of this meeting.

ZONING REPORT

RELATIONSHIP TO ADJACENT PROPERTIES:

| <i>Direction</i> | <i>Future Land Use</i> | <i>Zoning</i> | <i>Present Use</i> |
|------------------|---------------------------|---------------|--------------------------------|
| North (City) | Industrial (max FAR 0.60) | I-1 | Transport/freight uses, Copart |
| East (City) | None assigned | N/A | SR 429 right-of-way |
| South (County) | Orange County Rural | AG | Vacant property |
| West (City) | Orange County Rural | AG | Lake Apopka Restoration Area |

LAND USE &

TRAFFIC COMPATIBILITY:

The property is accessed via Hermit Smith Road and General Electric Road and a yet to be constructed public roadway referred to as Fern Industrial Drive, which will be owned and maintained by the City of Apopka. Future land use designations and zoning categories assigned to properties to the north, south, east, and west are predominantly Industrial and Rural.

**COMPREHENSIVE
 PLAN COMPLIANCE:**

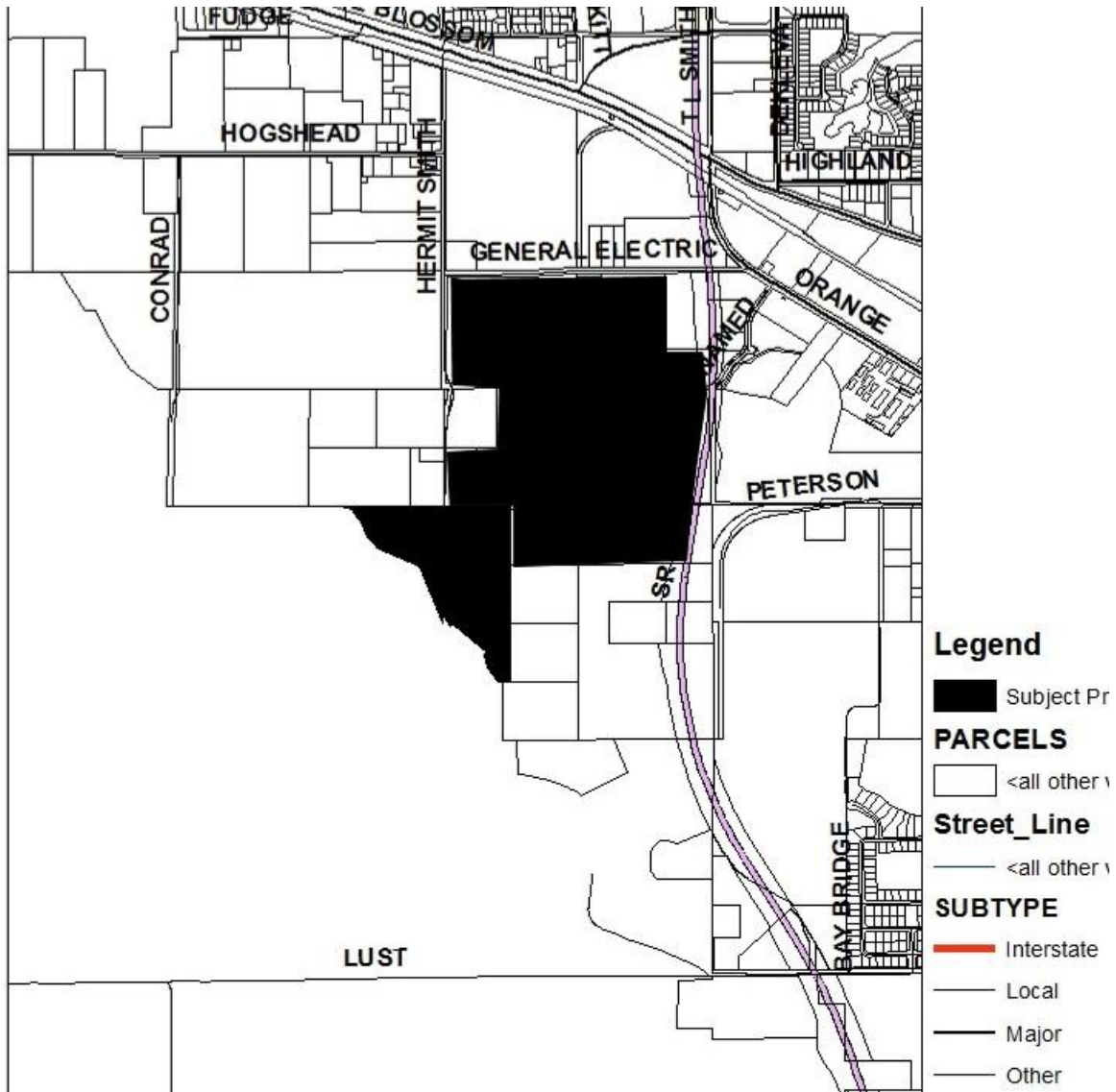
The proposed PUD zoning is compatible with policies set forth in the Comprehensive Plan.

**ALLOWABLE
 USES:**

Industrial uses as set forth within the Planned Unit Development Master Plan.

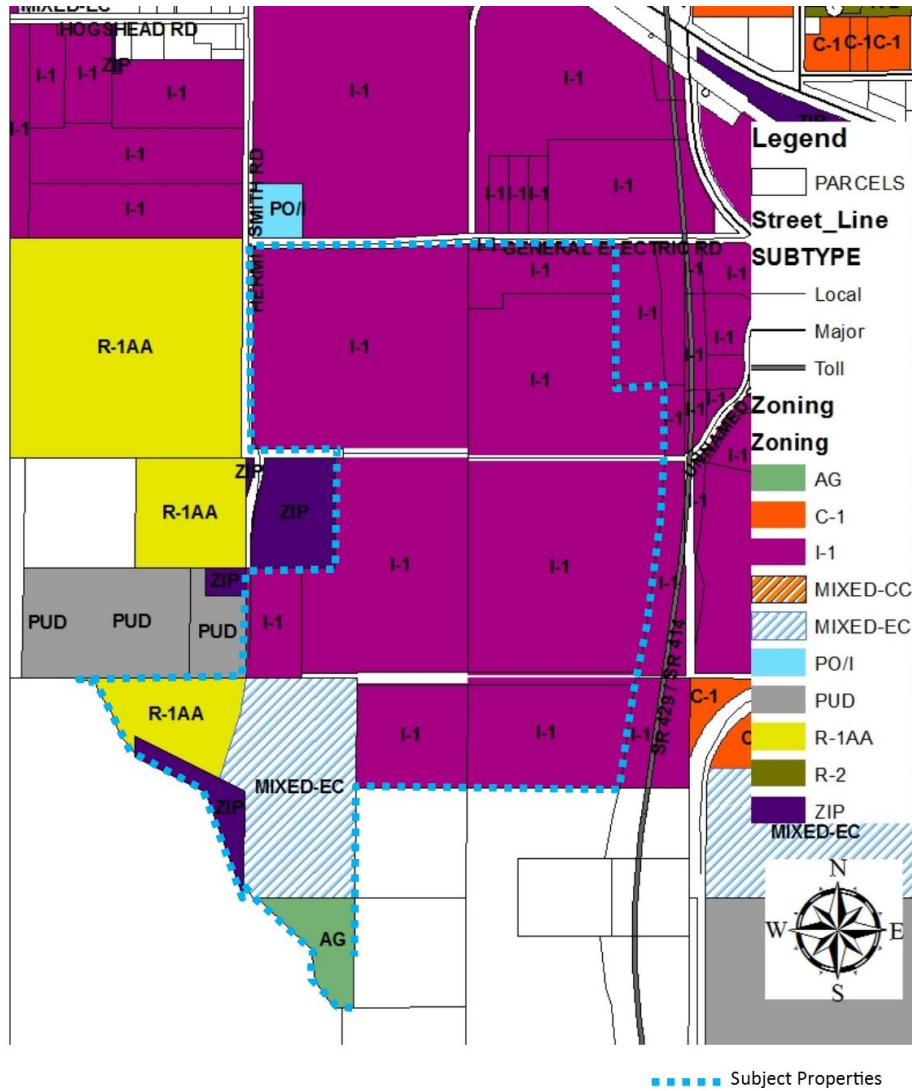
Project: MID-FLORIDA LOGISTICS PARK
Owned by: Mid-Florida Freezer Warehouses, LTD, Eagles Landing at Ocoee, LLC
Located: East side of Hermit Smith Road, South of General Electric Road, west of SR 429
Parcel ID#s: 01-21-27-0000-00-060, 06-21-28-7172-12-020, 06-21-28-7172-12-041, 06-21-28-7172-12-060, 01-21-27-0000-00-030, 06-21-28-7172-13-000, 12-21-27-0000-00-010, 12-21-27-0000-00-018, 12-21-27-0000-00-015, 12-21-27-0000-00-017, 12-21-27-0000-00-021

VICINITY MAP





ADJACENT ZONING



PUD MASTER PLAN for MID-FLORIDA LOGISTICS PARK APOPKA, FLORIDA

ENGINEER / PLANNER:

DAVE SCHMITT ENGINEERING, INC.
12301 LAKE UNDERHILL ROAD SUITE 241.
ORLANDO, FL 32828
407-207-9088
FAX 407-207-9089
CONTACTS: DAVE SCHMITT, P.E.

DEVELOPER:

BlueScope Properties Group LLC
1540 Genessee Street
Kansas City, MO 64102
Matt Roth, VP and General Counsel

OWNER:

Mid Florida Freezer Warehouse Ltd.
2560 West Orange Blossom Trail
Apopka, FL 32761
Pat Lee

Eagles Landing

PO Box 770609
Winter Garden, FL 34777-0609
Randy June

DEVIATIONS OF WAIVER REQUEST TABLE

| Code Number | Code Requirement | Requested Modification | Justification | Location |
|----------------|--|--|--|----------------|
| 6.03.02A | Parking 2 spaces per 1,000 of GFA up to 150,000 sf plus 1 space per vehicle operating on the premises or 2 spaces per employee and 1 space per 1,000 sf of over 150,000 sf of GFA. | 0.89 Space per 1,000 sf of GFA | The ITE Parking Generation Manual, 4th Edition, 85th percentile parking requirement for warehouse use is 0.81 spaces per 1,000 sf of GFA. | Entire Site |
| 2.02.01A | Building Height Maximum Building Height 35' | Maximum Building Height 55' | The modern warehouses require 35' to 45' of clear space under roof to accommodate automated materials handling equipment and maximize storage. | All Buildings |
| 2.02.15F | Buffer Yard Front 25', Side 10', Rear 10' (30' Adjacent to Residential), 25' Road ROW | 15' on GE Road, Hermit Smith Road to Main Entrance, 0/10' Adjacent to SR 429, 10/25' Adjacent to Peterson Road, 10' Adjacent to Fern Industrial | The northwestern portion of the site is constrained by the encroachment of GE Road, SR 429 has 300' of ROW, 6 lanes, and provides a ~20' high barrier to adjacent property to the east. | North and East |
| 2.02.01 BS (b) | Roof Top Screening All roof top equipment shall be completely screened from adjacent properties and rights-of-way to the maximum extent possible. | Roof top equipment shall be screened from view from adjacent property line and public rights-of-way, with the exception of SR 429 due to the large elevation change of the roadway and the finished floor elevation of the building. SR 429 is at an elevation of 125', approximately 20' above the finished floor height of Building 2. Screening shall be reviewed to be in conformance by the Subdivision President and the City of Apopka. Screening shall be reviewed through a sight line document from the nearest adjacent property line and/or from the centerline of the public right-of-way. The eye line shall be from the typical height of a person driving an automobile. | All buildings will have a site line evaluation to confirm that roof top equipment will not be visible from adjacent properties and ROW. | Entire Site |
| 2.02.16 B2 | Outdoor Vehicle | Longterm outdoor vehicle (bus, car, cab, and truck) storage and terminal is a permitted use within the PUD. | Increased business flexibility. Permitted vehicle storage will be screened from the ground. | Entire Site |
| 6.02.08 | Sidewalk Location Build sidewalks on both sides of public streets | Build sidewalk only on the west side of Fern Industrial Drive. | We are requesting that we do not place a sidewalk on the east side of the ROW proximate to the rail spurs. The pedestrian access plan provided on Sheet 6 of the PUD Master Plan shows a network of pedestrian facilities serving entire site. The sidewalk on the west side of Fern Industrial is the spine connecting the southern end of the site with GE Road. All buildings are connected to this north-south spine and the appropriate crosswalks are provided where needed. We remain concerned that placement of a sidewalk will not increase the pedestrian connectivity over the current plan but will put pedestrians in close proximity to the internal rail spurs east of Fern Industrial serving the site. The benefits of the additional sidewalk does not, in our opinion, warrant the risk of inadvertent interaction of pedestrians and rail vehicles. | Entire Site |

NOTE: THIS PROJECT WILL CONFORM TO ALL REQUIREMENTS OF I-1 ZONING WITH THE EXCEPTION OF THE DEVIATIONS NOTED ON THE DEVIATION TABLE.

PARCEL ID No.
#01-21-27-0000-00-060, #06-21-28-7172-12-020
#06-21-28-7172-12-041, #06-21-28-7172-12-060
#01-21-27-0000-00-030, #06-21-28-7172-13-000
#12-21-27-0000-00-010, #12-21-27-0000-00-018
#12-21-27-0000-00-015, #12-21-27-0000-00-017
#12-21-27-0000-00-021

NOTE: THE TWENTY-FIVE FOOT WIDE PROPERTY WHICH IS THE SUBJECT OF OR BOOK 10014, PAGE 4293 IS NOT PROPOSED FOR DEDICATION OR INCLUSION IN THE RIGHT OF WAY FOR THE RE-ALIGNED PETERSON ROAD.



**Know what's below.
Call before you dig.**

FL STATUTE 553.851 (1979) REQUIRES
MIN. OF 2 DAYS AND MAX. OF 5 DAYS
NOTICE BEFORE YOU EXCAVATE.

PREPARED FOR:

BLUESCOPE PROPERTIES GROUP LLC

SITE DATA

| | |
|--|--|
| TOTAL SITE AREA | 189.00 ACRES |
| TOTAL PUD AREA (SITE AREA LESS PETERSON ROAD) | 186.03 ACRES |
| FUTURE LAND USE | INDUSTRIAL, MIXED USE, AGRICULTURE |
| EXISTING ZONING | I-1, MIXED EC, R-1AA, AG, ZIP-(I-1) |
| PROPOSED ZONING | PUD |
| BUILDING HEIGHT | 35' MAX (PROPOSED 55') |
| FLOOR AREA | 60% |
| BUILDING AREA | |
| BUILDING 1A | 330,565 SF |
| BUILDING 1B | 324,000 SF |
| BUILDING 2 | 514,930 SF |
| BUILDING 3 | 399,000 SF |
| BUILDING 4 | 537,600 SF |
| BUILDING 5 | 300,000 SF |
| TOTAL | 2,406,095 SF |
| BUILDING SETBACKS | |
| FRONT | 25' |
| SIDE | 10' |
| CORNER | 25' |
| REAR | 10' |
| ADJACENT TO RESIDENTIAL USE: | 30' |
| LANDSCAPE BUFFER | |
| FRONT: | 25' |
| SIDE: | 10' |
| REAR: | 10' |
| CORNER: | 25' |
| SR429: | 25' (PROPOSED 0') |
| GE ROAD: | 25' (PROPOSED 15' WEST OF MAIN ENTRANCE) |
| HERMIT SMITH ROAD | 25' |
| FERN INDUSTRIAL ROAD | 10' |
| PETERSON ROAD | 25' (PROPOSED 10') |
| PARKING PROPOSED: | |
| 1,579 REGULAR | |
| 526 TRUCK | |
| 36 HANDICAP | |
| 2,141 TOTAL (2141 REQUIRED) | |
| OPEN SPACE: | 48.34 AC |
| POND TRACT AREA: | 42.87 AC |
| IMPERVIOUS AREA: | 138.88 AC 74.65% |
| PERVIOUS AREA: | 47.15 AC 25.35% |
| TOTAL PUD AREA: | 186.03 AC 100.00% |

TABLE OF CONTENTS

| Sheet Number | Sheet Title |
|--------------|---|
| 01 | COVER SHEET |
| 02 | EXISTING CONDITION PLAN |
| 03 | PUD MASTER PLAN |
| 04 | PRELIMINARY DEVELOPMENT PLAN / SUBDIVISION PLAN |
| 05 | OWNERSHIP & MAINTENANCE PLAN |
| 06 | PEDESTRIAN ACCESS PLAN |
| 07 | LOT 1 PLAN |
| 08 | LOT 1 PRELIMINARY GRADING PLAN |
| 09 | LOT 2 PLAN |
| 10 | LOT 2 PRELIMINARY GRADING PLAN |
| 11 | LOT 3 PLAN |
| 12 | LOT 3 PRELIMINARY GRADING PLAN |
| 13 | LOT 4 PLAN |
| 14 | LOT 4 PRELIMINARY GRADING PLAN |
| 15 | LOT 5 PLAN |
| 16 | LOT 5 PRELIMINARY GRADING PLAN |
| 17 | PRELIMINARY STORMWATER POND PLAN |
| 18 | GE ROAD OFFSITE IMPROVEMENTS |

PLANS BY OTHERS:

LANDSCAPE PLAN



SITE

SITE LOCATION

SCALE = 1 MILE
0 1/4 1/2 1



**DAVE SCHMITT
ENGINEERING, INC.**
12301 LAKE UNDERHILL RD. SUITE 241
ORLANDO, FL 32828
407-207-9088 FAX 407-207-9089
Certification of Authorization #27471

DAVE M. SCHMITT
FLORIDA REG. NUMBER
48274

DATE: JUNE 2018

JOB NO.: ANC-1

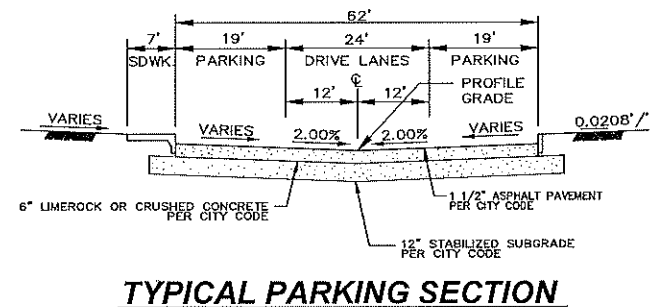
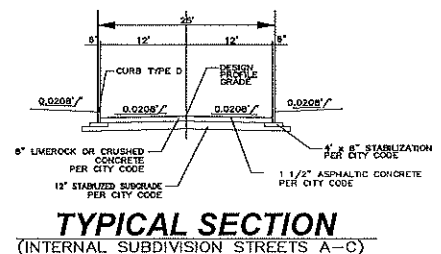
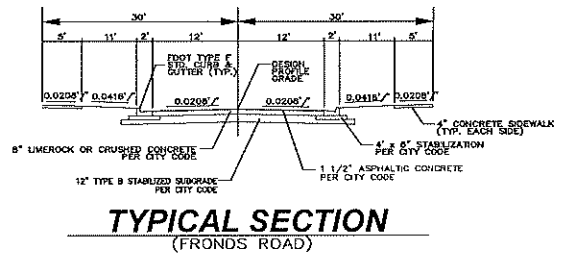
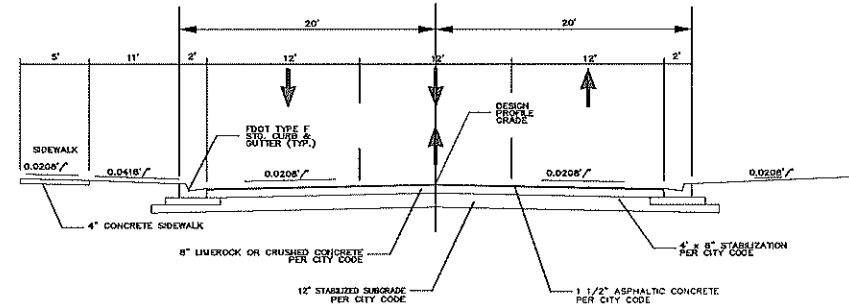
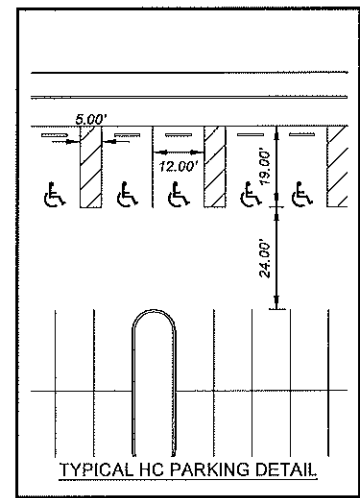
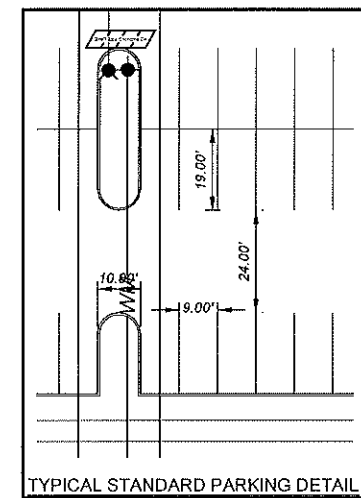
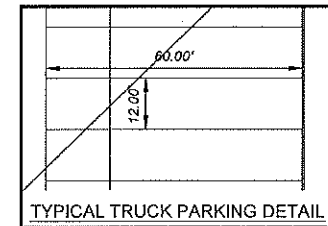
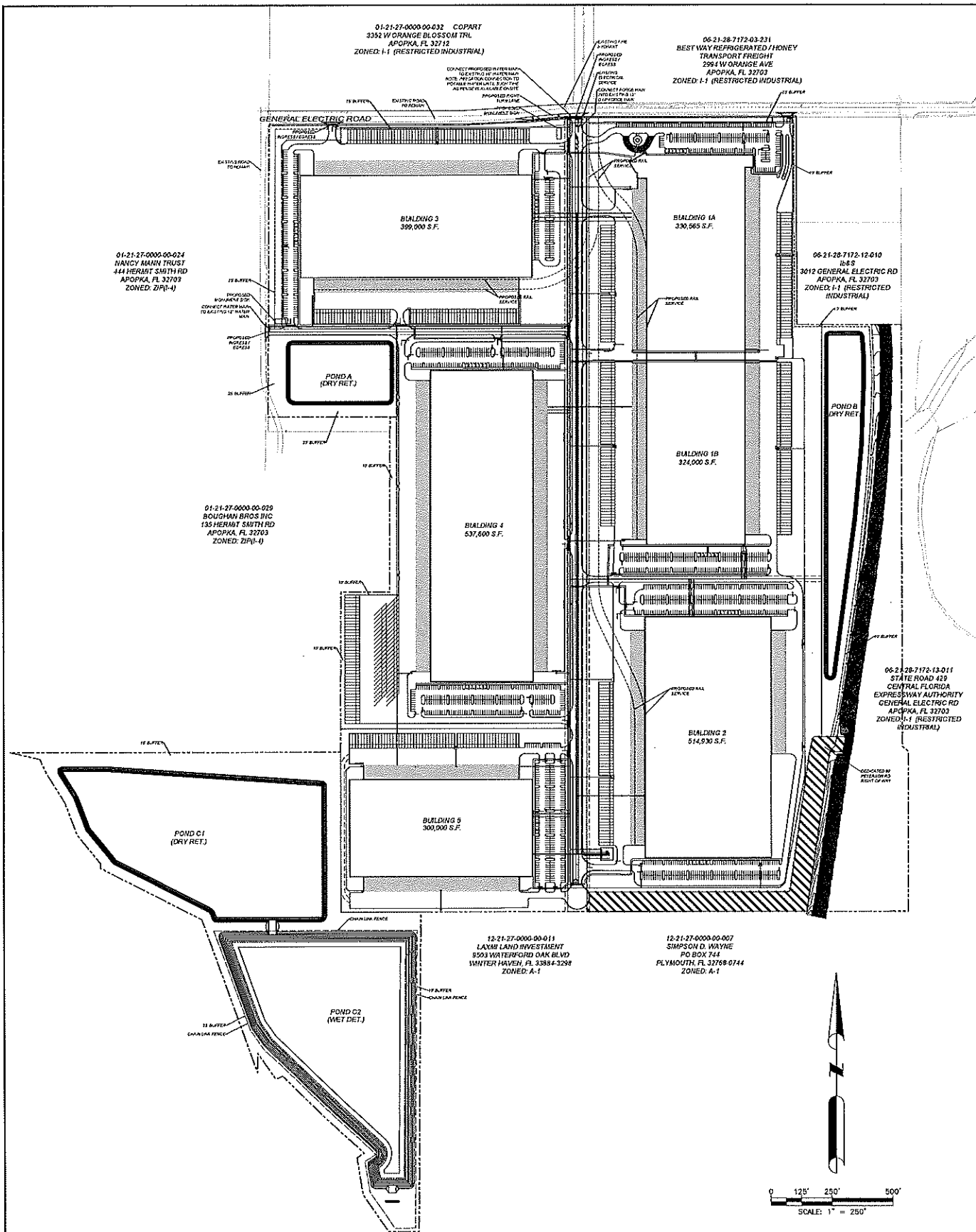
SHEET: 01 OF 18

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| REVISIONS | | | | | |
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| DATE | BY | DESCRIPTION | DATE | BY | DESCRIPTION |
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| | | | | | |
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THIS IS TO CERTIFY THAT THE ROADWAY CONSTRUCTION PLANS AND SPECIFICATIONS AS CONTAINED HEREIN WERE DESIGNED TO APPLICABLE STANDARDS AS SET FORTH IN THE "MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS" AS PREPARED BY FLORIDA DEPARTMENT OF TRANSPORTATION

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DAVE SCHMITT ENGINEERING, INC.
12301 Lake Underhill Road Suite 241
ORLANDO, FL 32826
407-207-9088 FAX 407-207-9089
Certification of Authorization #27471

CONTRACTOR "AS-BUILTS"
I hereby state that those "As-Builts" were furnished to me by the contractor listed below, I, or an employee under my direct supervision have reviewed these "As-Builts" and believe them to be in compliance with my knowledge of what was actually constructed. This statement is based upon site observations of the construction.
Contractor: _____ Engineer: _____
Not valid without the signature and the original raised seal of a Florida Registered Engineer.

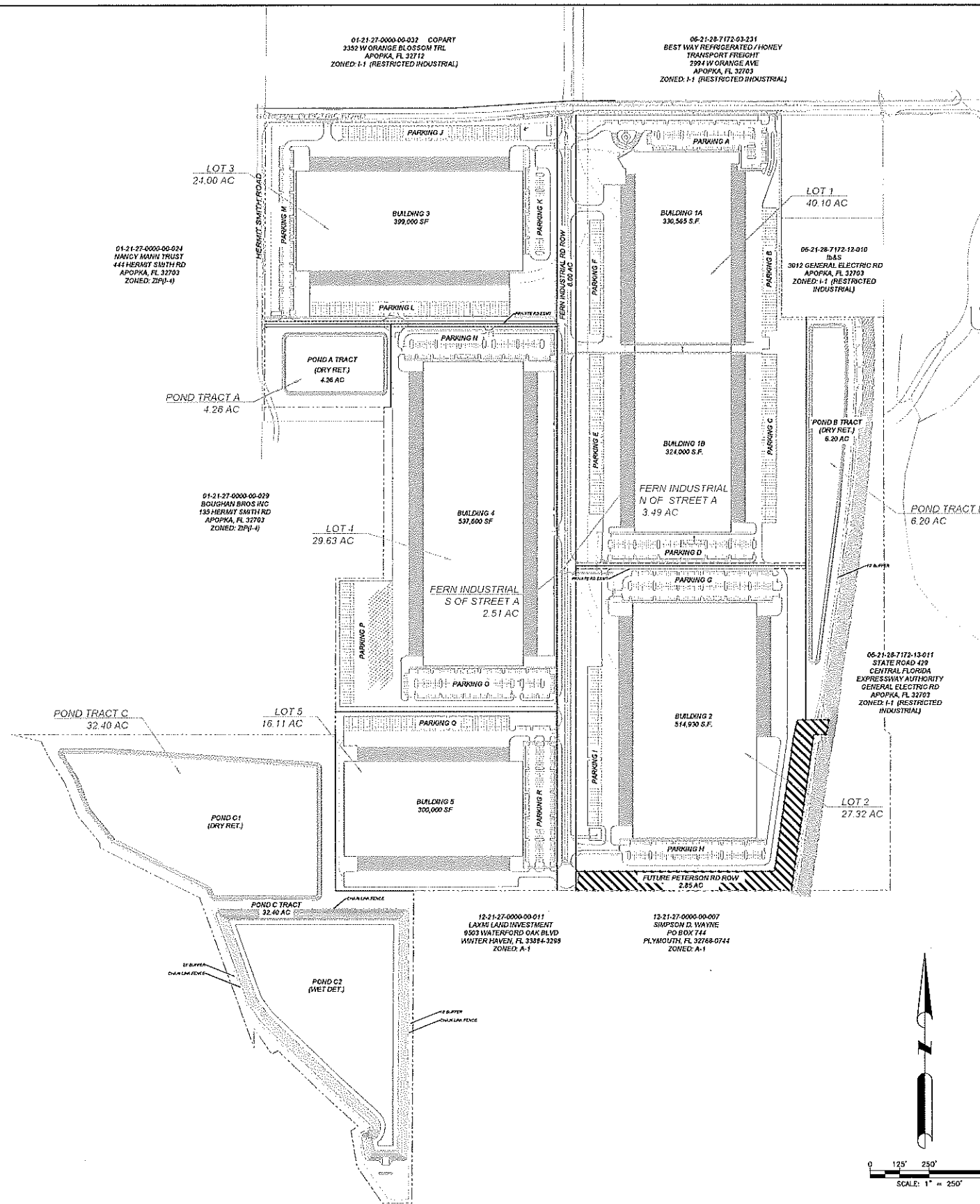
| REVISIONS | | REVISIONS | |
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| DATE | BY | DATE | BY |
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| | | | |
| | | | |

DAVE M. SCHMITT
FLORIDA REG. NUMBER
48274

PUD MASTER PLAN
MID-FLORIDA LOGISTICS PARK
APOPKA, FLORIDA

DATE: JUNE 2018
PROJECT NO.: ANC-1
DRAWN BY: MTP
CHECKED BY: DSE
SCALE: 1"=250'
SHEET: 03 OF 18

F:\ANC1\CAD\PlanSet\dp-pd-dev-plan\04 SUBDIVISION & LOT PLANS.dwg, 8/31/2018 2:16:03 PM



| LOT AREAS | |
|-----------------------|---------------------|
| LOT 1 | 40.10 ACRES |
| LOT 2 | 27.32 ACRES |
| LOT 3 | 24.00 ACRES |
| LOT 4 | 29.63 ACRES |
| LOT 5 | 16.11 ACRES |
| TOTAL LOT AREA | 137.16 ACRES |

| BUILDING AREAS | |
|----------------------------|---------------------|
| BUILDING 1A | 330,565 SF |
| BUILDING 1B | 324,000 SF |
| BUILDING 2 | 514,930 SF |
| BUILDING 3 | 399,000 SF |
| BUILDING 4 | 537,600 SF |
| BUILDING 5 | 300,000 SF |
| TOTAL BUILDING AREA | 2,406,095 SF |

| POND TRACT AREAS | |
|------------------------------|--------------------|
| POND A TRACT | 4.26 ACRES |
| POND B TRACT | 6.20 ACRES |
| POND C TRACT | 32.41 ACRES |
| TOTAL POND TRACT AREA | 42.87 ACRES |

| PLANNED UNIT DEVELOPMENT AREA | |
|-------------------------------|---------------------|
| TOTAL LOT AREA | 137.16 ACRES |
| TOTAL POND TRACT AREA | 42.87 ACRES |
| TOTAL PUD AREA | 180.03 ACRES |

| TOTAL SITE AREA | |
|------------------------|---------------------|
| PUD AREA | 180.03 ACRES |
| FERN INDUSTRIAL ROW | 6.00 ACRES |
| PETERSON ROAD ROW | 2.97 ACRES |
| TOTAL SITE AREA | 189.00 ACRES |

OPEN SPACE
 AREA REQUIRED: 20 % OF TOTAL SITE AREA
 $189.00 \times 0.20 = 37.80$ ACRES

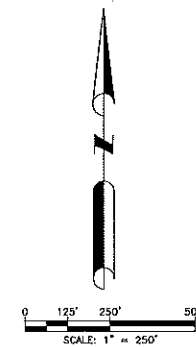
OPEN SPACE PROVIDED PER LOT: (FOR PONDS, 50% OF OPEN TRACT AREA)

| | |
|-------------------------|-------------|
| LOT 1 OPEN SPACE | 8.55 ACRES |
| LOT 2 OPEN SPACE | 6.03 ACRES |
| LOT 3 OPEN SPACE | 4.78 ACRES |
| LOT 4 OPEN SPACE | 3.05 ACRES |
| LOT 5 OPEN SPACE | 2.38 ACRES |
| PETERSON ROAD ROW | 2.97 ACRES |
| FERN INDUSTRIAL ROW | 2.24 ACRES |
| POND A TRACT OPEN SPACE | 2.04 ACRES |
| POND B TRACT OPEN SPACE | 3.10 ACRES |
| POND C TRACT OPEN SPACE | 16.20 ACRES |

TOTAL OPEN SPACE PROVIDED **48.34 ACRES**

PRELIMINARY PHASING PLAN

| | | |
|----------|-------|--|
| PHASE 1: | LOT 1 | PETERSON RD DEDICATION POND B TRACT NORTHERN 1900' OF FERN INDUSTRIAL RD |
| PHASE 2: | LOT 2 | REMAINDER OF FERN INDUSTRIAL RD POND C TRACT |
| PHASE 3: | LOT 3 | POND A TRACT |
| PHASE 4: | LOT 4 | |
| PHASE 5: | LOT 5 | |



DAVE SCHMITT ENGINEERING, INC.
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 ORLANDO, FL 32826
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 Certification of Authorization #27471

CONTRACTOR "AS-BUILTS"

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Contractor: _____ Engineer: _____
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| REVISIONS | | | | | |
|-----------|----|-------------|------|----|-------------|
| DATE | BY | DESCRIPTION | DATE | BY | DESCRIPTION |
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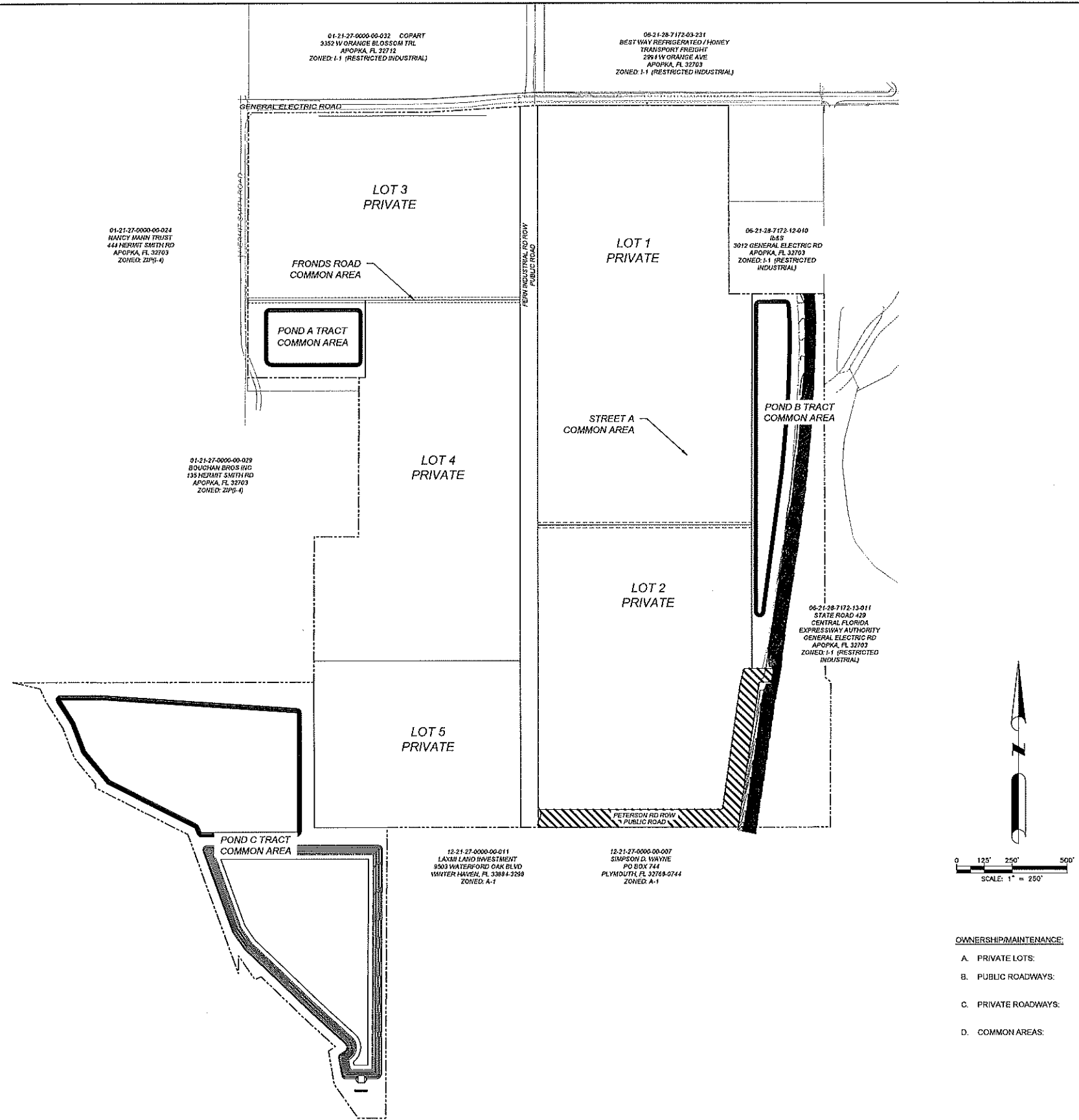
DAVE M. SCHMITT
 FLORIDA REG. NUMBER
 48274

PRELIMINARY DEVELOPMENT PLAN - SUBDIVISION PLAN

MID-FLORIDA LOGISTICS PARK
 APOPKA, FLORIDA

| | |
|--------------|-----------|
| DATE: | JUNE 2018 |
| PROJECT NO.: | ANC-1 |
| DRAWN BY: | MTP |
| CHECKED BY: | DSE |
| SCALE: | 1"=250' |
| SHEET: | 04 OF 18 |

F:\ANC\CAD\Plans\dp-pd-dev-plan\05 OWNERSHIP AND MAINTENANCE PLAN.dwg, 8/17/2018 9:53:28 AM



OWNERSHIP/MAINTENANCE:

| | |
|----------------------|---|
| A. PRIVATE LOTS: | TO BE OWNED AND MAINTAINED BY THE PROPERTY OWNER. |
| B. PUBLIC ROADWAYS: | FERN INDUSTRIAL ROAD & PETERSON ROAD: TO BE OWNED AND MAINTAINED BY THE CITY OF APOPKA |
| C. PRIVATE ROADWAYS: | FRONDS ROAD & STREET A: TO BE OWNED AND MAINTAINED BY THE POA |
| D. COMMON AREAS: | POND TRACTS/OPEN SPACE TO BE OWNED AND MAINTAINED BY THE POA. |



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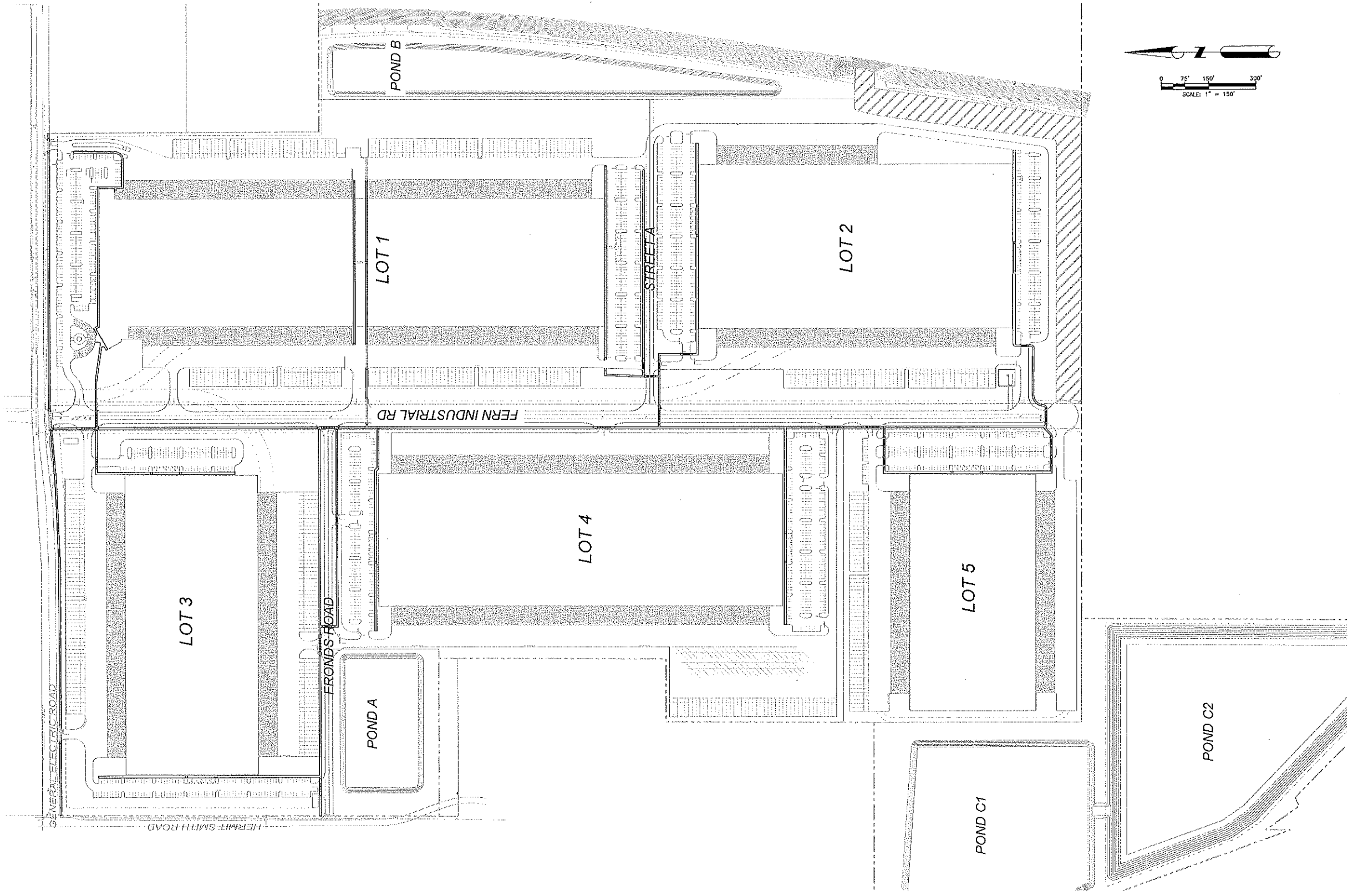
| REVISIONS | | | | | |
|-----------|----|-------------|------|----|-------------|
| DATE | BY | DESCRIPTION | DATE | BY | DESCRIPTION |
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DAVE M. SCHMITT
 FLORIDA REG. NUMBER
 48274

OWNERSHIP & MAINTENANCE PLAN
 MID-FLORIDA LOGISTICS PARK
 APOPKA, FLORIDA

DATE: JUNE 2018
 PROJECT NO.: ANC-1
 DRAWN BY: MTP
 CHECKED BY: DSE
 SCALE: 1"=250'
 SHEET: 05 OF 18

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**DAVE SCHMITT
ENGINEERING, INC.**
12301 Lake Underhill Road Suite 241
ORLANDO, FL 32828
407-207-9088 FAX 407-207-9089
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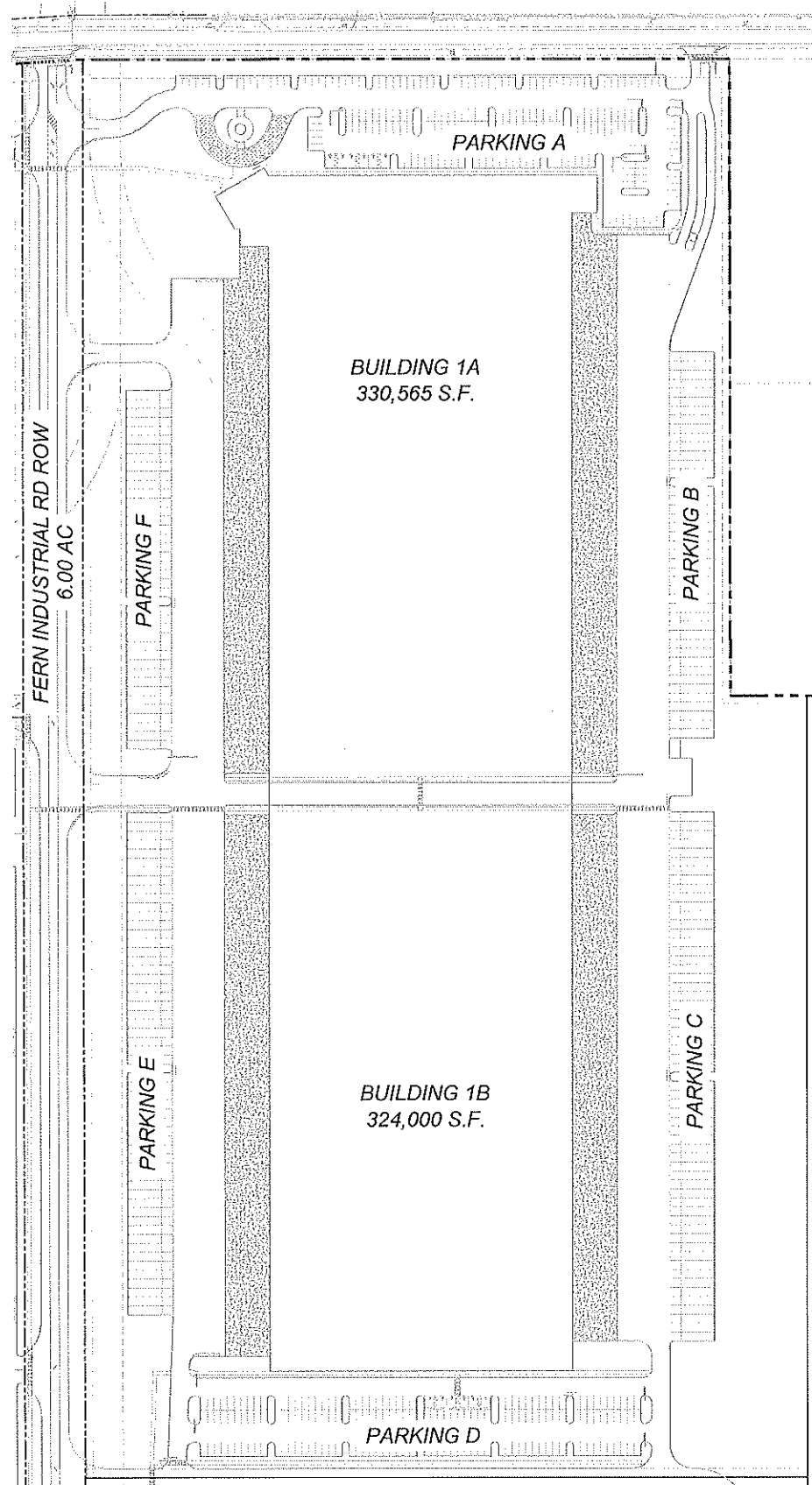
| | | REVISIONS | | | |
|------|----|-------------|------|----|-------------|
| DATE | BY | DESCRIPTION | DATE | BY | DESCRIPTION |
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DAVE M. SCHMITT
FLORIDA REG. NUMBER
48274

PEDESTRIAN ACCESS PLAN
MID-FLORIDA LOGISTICS PARK
APOPKA, FLORIDA

DATE: JUNE 2018
PROJECT NO.: ANC-1
DRAWN BY: MTP
CHECKED BY: DSE
SCALE: 1"=250'
SHEET: 06 OF 18

F:\ANC1\CAD\Plans\set\dp-pd-dev plan\04 SUBDIVISION & LOT PLANS.dwg, 8/31/2018 2:16:03 PM



LOT 1 PARCEL NUMBERS
 #06-21-28-7172-12-020
 #06-21-28-7172-12-041
 #06-21-28-7172-12-060

LOT 1 AREA 40.10 ACRES

OPEN SPACE REQUIRED: 20% OF LOT AREA
 40.10 x 0.20 = 8.02 ACRES

OPEN SPACE PROVIDED
 LOT 1 OPEN SPACE 8.55 ACRES
 POND B TRACT OPEN SPACE 3.10 ACRES

TOTAL OPEN SPACE 11.65 ACRES

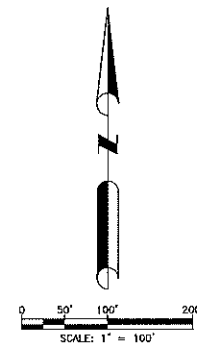
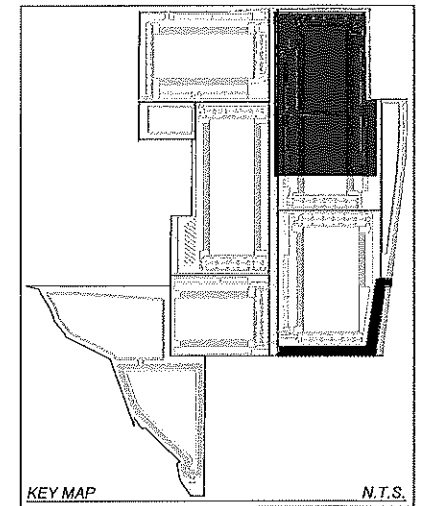
BUILDING 1 AREA 654,565 SF

PARKING REQUIRED: 0.89 SPACE PER 1,000 SF OF GROSS FLOOR AREA
PARKING SPACES REQUIRED 583 SPACES

PARKING PROVIDED:

| | PARKING AREA A | PARKING AREA B | PARKING AREA C | PARKING AREA D | PARKING AREA E | PARKING AREA F |
|-----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| STANDARD SPACES | 205 | 0 | 0 | 168 | 0 | 0 |
| HANDICAP SPACES | 6 | 0 | 0 | 6 | 0 | 0 |
| TRUCK SPACES | 0 | 43 | 59 | 0 | 56 | 40 |
| SUBTOTAL | 211 | 43 | 59 | 174 | 56 | 40 |

TOTAL PARKING SPACES 583



DEVIATIONS OF WAIVER REQUEST TABLE

| Code Number | Code Requirement | Requested Modification | Justification | Location |
|-------------------|--|--|---|----------------|
| 6.02.02 A | Parking 2 spaces per 1,000 sf of GFA up to 150,000 sf plus 1 space per vehicle operating on the premises or 2 spaces per employee and 1 space per 1,000 sf of GFA. | 0.89 Space per 1,000 sf of GFA | The ITE Parking Generation Manual, 6th Edition, 8th percentile parking requirement for warehouse use is 0.81 spaces per 1,000 sf of GFA. | Entire Site |
| 2.02.01 A | Building Height Maximum Building Height 35' | Maximum Building Height 55' | The modern warehouses require 36' to 45' of clear space under roof to accommodate automated materials handling equipment and maximize storage. | All Buildings |
| 2.02.19 F | Buffer Yard Front 25', Side 10', Rear 10' (30' Adjacent to Residential, 25' Road ROW) | 15' on GE Road, Hermit Smith Road to Main Entrance, 0710' Adjacent to SR 429, 10/25' Adjacent to Palmetto Row, 10' Adjacent to Fern Industrial | The northwestern portion of the site is constrained by the encroachment of GE Road. SR 429 has 300' of ROW, 5 lanes, and provides a 20' high barrier to adjacent property to the east. | North and East |
| 2.02.01 B5 (b)(4) | Roof Top Screening All roof top equipment shall be completely screened from adjacent properties and rights-of-way to the maximum extent possible. | Roof top equipment shall be screened from view from adjacent property line and public rights-of-way, with the exception of SR 429 due to the large elevation change of the roadway and the finished floor elevation of the building. SR 429 is at an elevation of 150', approximately 50' above the finished floor height of Building 2. Screening shall be reviewed to be in accordance with the subdivision President and the City of Apopka. Screening shall be reviewed through a sight line drawn from the nearest adjacent property line and/or from the centerline of the public right-of-way. The eye line shall be from the typical height of a person driving an automobile. | All buildings will have a site elevation to confirm that rooftop equipment will not be visible from adjacent properties and ROW. | Entire Site |
| 2.02.16 B2 | Outdoor Vehicle | Long-term outdoor vehicle (bus, car, cab, and truck) storage and terminal is a permitted use within the PUD. | Increased business flexibility. Permitted vehicle storage will be screened from the ground. | Entire Site |
| 6.02.08 | Sidewalk Location Build sidewalks on both sides of public streets | Build sidewalk only on the west side of Fern Industrial Drive. | We are requesting that we do not place a sidewalk on the east side of the ROW proximate to the rail spur. The pedestrian access plan provided on Sheet 8 of the PUD Master Plan shows a network of pedestrian facilities serving entire site. The sidewalk on the west side of Fern Industrial is the spine connecting the southern end of the site with GE Road. All buildings are connected to this north-south spine and the appropriate crosswalks are provided where needed. We remain concerned that placement of a sidewalk will not increase the pedestrian connectivity over the current plan but will not pedestrians in close proximity to the industrial rail spur east of Fern Industrial serving the site. The benefit of the additional sidewalk does not, in our opinion, warrant the risk of inadvertent interaction of pedestrians and rail vehicles. | Entire Site |

NOTE: THIS PROJECT WILL CONFORM TO ALL REQUIREMENTS OF I-1 ZONING WITH THE EXCEPTION OF THE DEVIATIONS NOTED ON THE DEVIATION TABLE.



DAVE SCHMITT ENGINEERING, INC.
 12301 Lake Underhill Road Suite 241
 ORLANDO, FL 32828
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 Certification of Authorization #27471

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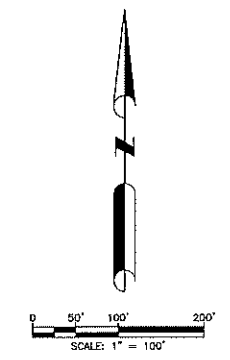
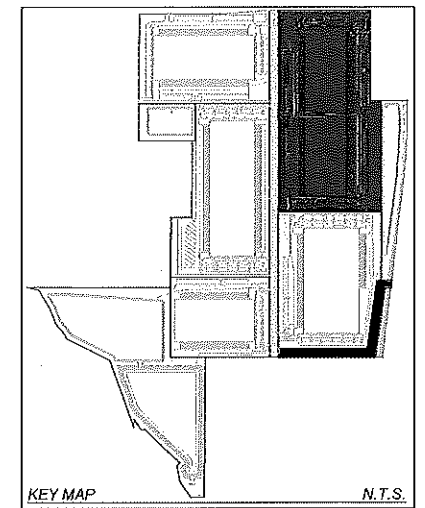
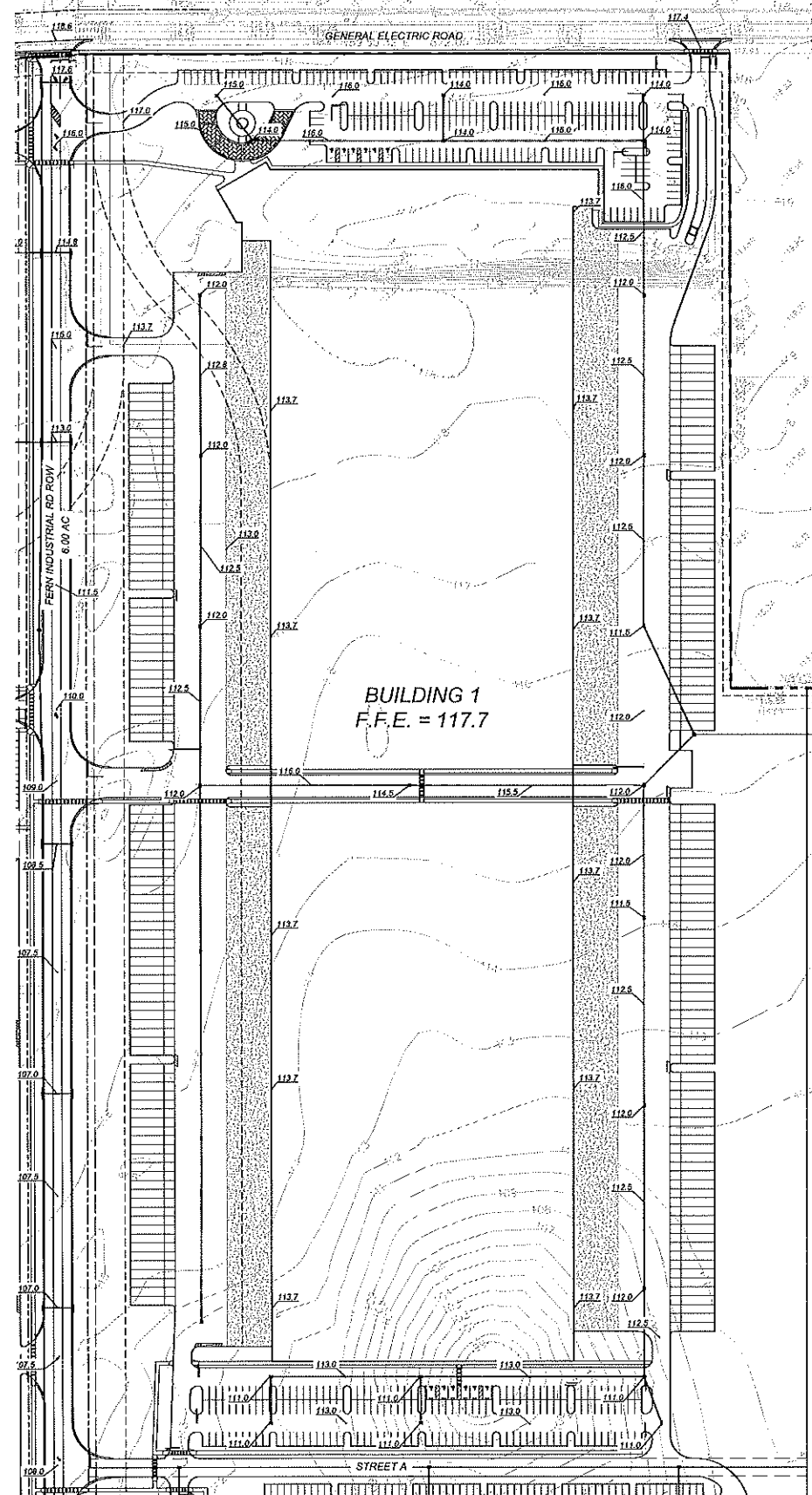
| REVISIONS | | | | | |
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| DATE | BY | DESCRIPTION | DATE | BY | DESCRIPTION |
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DAVE M. SCHMITT
 FLORIDA REG. NUMBER
 48274

LOT 1 PLAN
 MID-FLORIDA LOGISTICS PARK
 APOPKA, FLORIDA

DATE: JUNE 2018
 PROJECT NO.: ANC-1
 DRAWN BY: MTP
 CHECKED BY: DSE
 SCALE: 1"=100'
 SHEET: 07 OF 18

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**DAVE SCHMITT
ENGINEERING, INC.**
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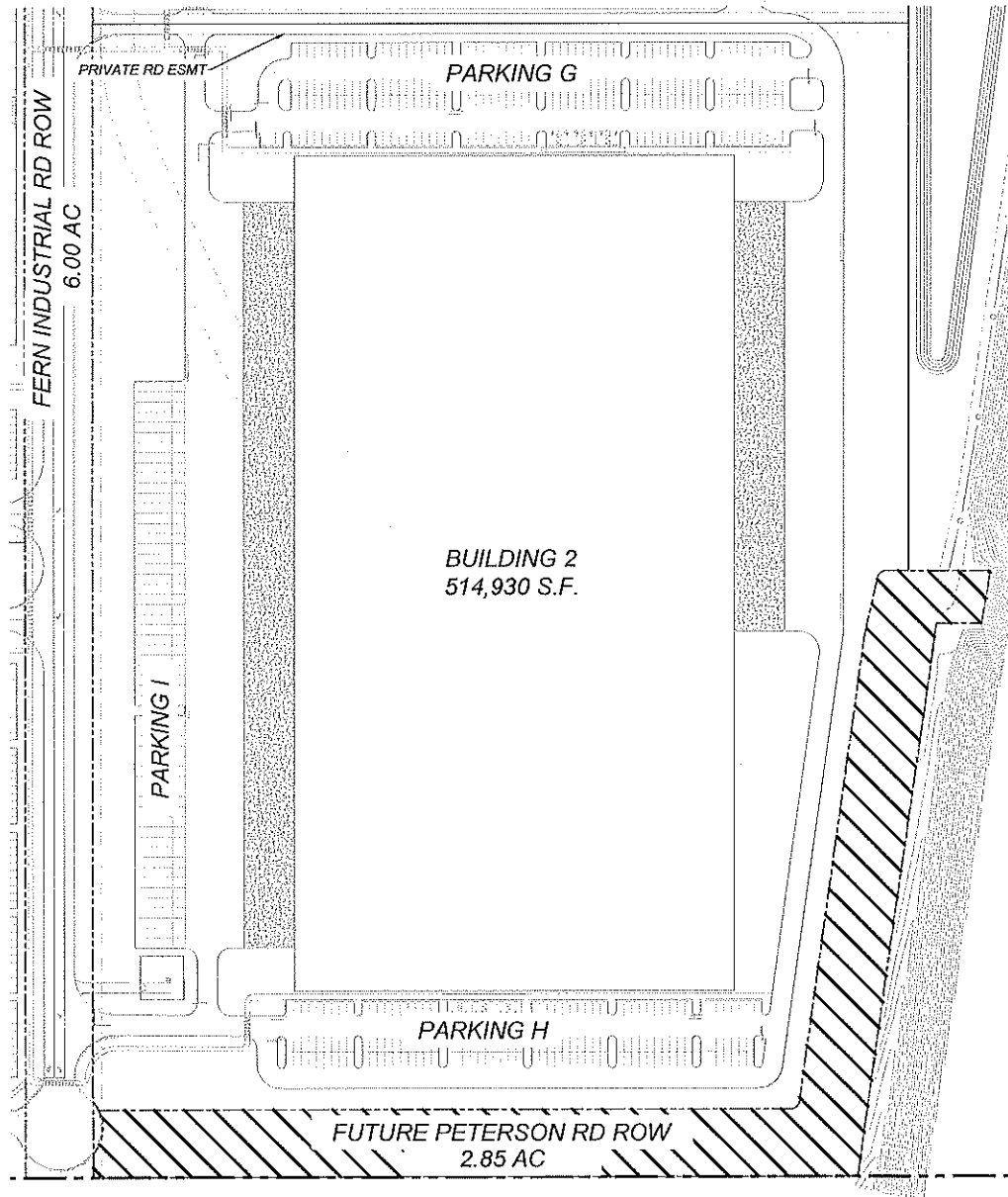
| REVISIONS | | | | | |
|-----------|----|-------------|------|----|-------------|
| DATE | BY | DESCRIPTION | DATE | BY | DESCRIPTION |
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DAVE M. SCHMITT
FLORIDA REG. NUMBER
48274

LOT 1 PRELIMINARY GRADING PLAN
MID-FLORIDA LOGISTICS PARK
APOPKA, FLORIDA

DATE: JUNE 2018
PROJECT NO.: ANC-1
DRAWN BY: MTP
CHECKED BY: DSE
SCALE: 1"=100'
SHEET: 08 OF 18

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LOT 2 PARCEL NUMBERS
 #06-21-28-7172-12-060
 #06-21-28-7172-13-000

LOT 2 AREA 27.32 ACRES

OPEN SPACE REQUIRED: 20 % OF USABLE LOT AREA
 27.32 x 0.20 = 5.46 ACRES

OPEN SPACE PROVIDED
 LOT 2 OPEN SPACE 6.03 ACRES
 1/3 OF POND C TRACT OPEN SPACE 5.40 ACRES

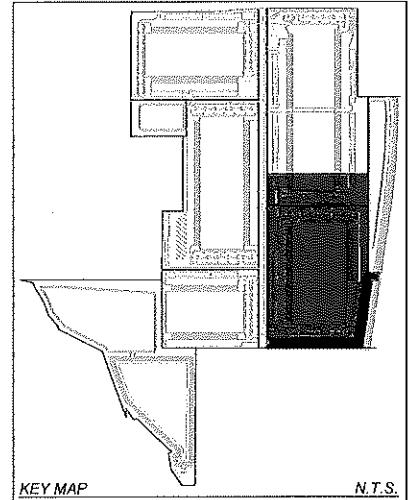
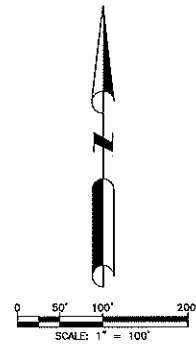
TOTAL OPEN SPACE 11.43 ACRES

BUILDING 2 AREA 514,930 SF

PARKING REQUIRED: 0.89 SPACE PER 1,000 SF OF GROSS FLOOR AREA
PARKING SPACES REQUIRED 458 SPACES

| PARKING PROVIDED: | PARKING AREA G | PARKING AREA H | PARKING AREA I |
|-------------------|----------------|----------------|----------------|
| STANDARD SPACES | 231 | 159 | 0 |
| HANDICAP SPACES | 6 | 6 | 0 |
| TRUCK SPACES | 0 | 0 | 56 |
| SUBTOTAL | 237 | 165 | 56 |

TOTAL PARKING SPACES 458



DEVIATIONS OF WAIVER REQUEST TABLE

| Code Number | Code Requirement | Requested Modification | Justification | Location |
|-------------------|--|--|--|----------------|
| 6.03.02 A | Parking 2 spaces per 1,000 sf of GFA up to 150,000 sf plus 1 space per vehicle operating on the premises or 2 spaces per employee and 1 space per 1,000 sf over 150,000 sf of GFA. | 0.89 Space per 1,000 sf of GFA | The ITE Parking Generation Manual, 4th Edition, 95th percentile parking requirement for warehouse use is 0.81 spaces per 1,000 sf of GFA. | Entire Site |
| 2.02.01 A | Building Height Maximum Building Height 35' | Maximum Building Height 55' | The modern warehouses require 35' to 45' of clear space under roof to accommodate automated materials handling equipment and maximize storage. | All Buildings |
| 2.02.15 F | Buffer Yard Front 25', Side 10', Rear 10' (20' Adjacent to Residence), 25' Road ROW | 15' on GE Road, Hermit Smith Road to Main Entrance, 0'/10' Adjacent to SR 429, 10'/25' Adjacent to Peterson Road, 10' Adjacent to Fern Industrial Road ROW | The northeastern portion of the site is constrained by the encroachment of GE Road, SR 429 has 500' of ROW, 5 lanes, and provides a 30' high barrier to adjacent property to the east. | North and East |
| 2.02.01 BS (b)(4) | Roof Top Screening All roof top equipment shall be completely screened from adjacent properties and rights-of-way to the maximum extent possible. | Roof top equipment shall be screened from view from adjacent property line and public rights-of-way, with the exception of SR 429 due to the large elevation change of the roadway and the finished floor elevation of the building. SR 429 is at an elevation of 135', approximately 20' above the finished floor height of Building 2. Screening shall be reviewed to be in accordance with the Subdivision President and the City of Apopka. Screening shall be reviewed through a sign line document from the nearest adjacent property line and/or from the centerline of the public right-of-way. The eye line shall be from the typical height of a person driving an automobile. | All buildings will have a site line elevation to conform that rooftop equipment will not be visible from adjacent properties and ROW. | Entire Site |
| 2.02.16 B2 | Outdoor Vehicle | Long-term outdoor vehicle (bus, car, cab, and truck) storage and terminal is a permitted use within the PUD. | Increased business flexibility. Permitted vehicle storage will be screened from the ground. | Entire Site |
| 6.02.08 | Sidewalk Location Build sidewalks on both sides of public streets. | Build sidewalk only on the west side of Fern Industrial Drive. | We are requesting that we do not place a sidewalk on the east side of the ROW proximate to the rail spur. The pedestrian access plan provided on sheet 6 of the PUD Master Plan shows a network of pedestrian facilities serving entire site. The sidewalk on the west side of Fern Industrial is the spine connecting the southern end of the site with GE Road. All buildings are connected to this north-south spine and the appropriate crosswalks are provided where needed. We remain concerned that placement of a sidewalk will not increase the pedestrian connectivity over the current plan but will put pedestrians in close proximity to the lateral rail spur east of Fern Industrial serving the site. The benefit of the additional sidewalk does not, in our opinion, warrant the risk of inadvertent interaction of pedestrians and rail vehicles. | Entire Site |

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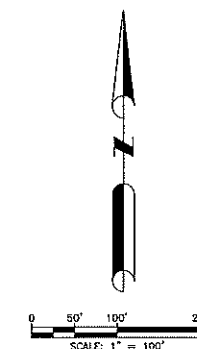
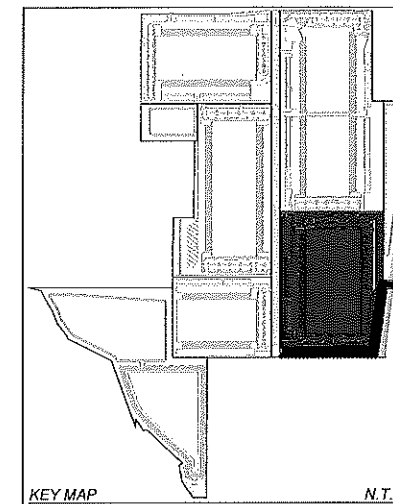
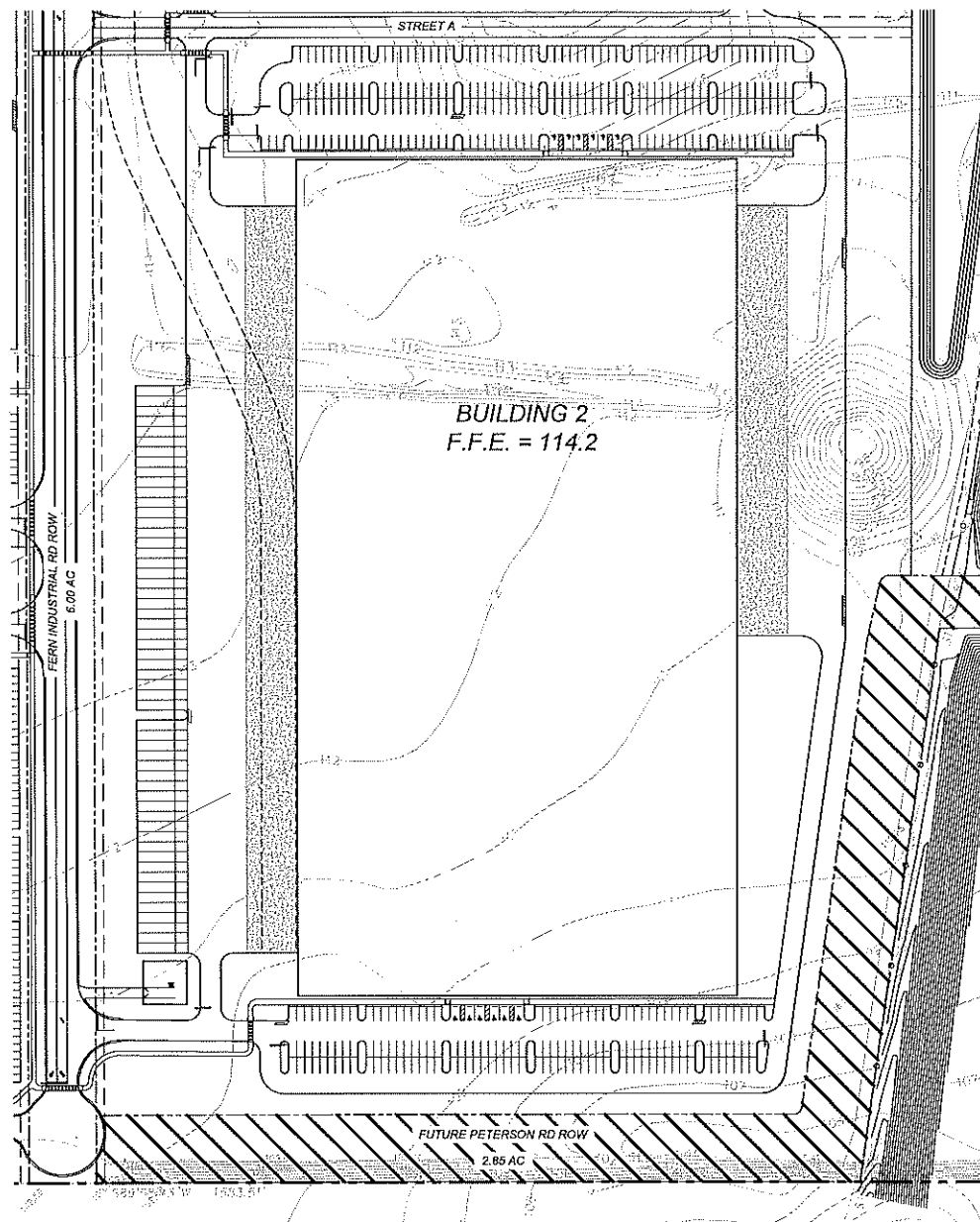
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| DATE | BY | DESCRIPTION | DATE | BY | DESCRIPTION |
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DAVE M. SCHMITT
 FLORIDA REG. NUMBER
 48274

LOT 2 PLAN
 MID-FLORIDA LOGISTICS PARK
 APOPKA, FLORIDA

DATE: JUNE 2018
 PROJECT NO.: ANC-1
 DRAWN BY: MTP
 CHECKED BY: DSE
 SCALE: 1"=100'
 SHEET: 09 OF 18

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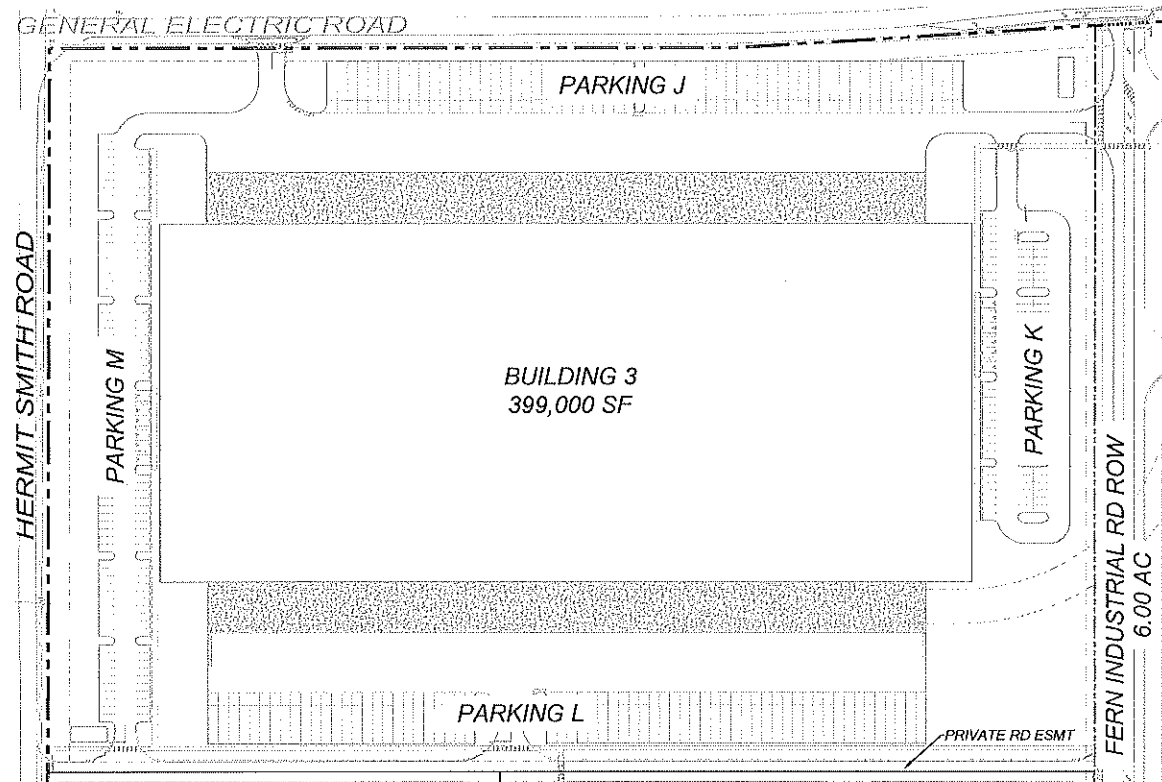
| REVISIONS | | | | | |
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| DATE | BY | DESCRIPTION | DATE | BY | DESCRIPTION |
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DAVE M. SCHMITT
FLORIDA REG. NUMBER
48274

LOT 2 PRELIMINARY GRADING PLAN
MID-FLORIDA LOGISTICS PARK
APOPKA, FLORIDA

DATE: JUNE 2018
PROJECT NO.: ANC-1
DRAWN BY: MTP
CHECKED BY: DSE
SCALE: 1"=100'
SHEET: 10 OF 16

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LOT 3 PARCEL NUMBERS
#01-21-27-0000-00-060

LOT 3 AREA 24.00 ACRES

OPEN SPACE REQUIRED: 20% OF USABLE LOT AREA
24.00 x 0.20 = 4.80 ACRES

OPEN SPACE PROVIDED
LOT 3 OPEN SPACE 4.78 ACRES
POND A TRACT OPEN SPACE 2.04 ACRES

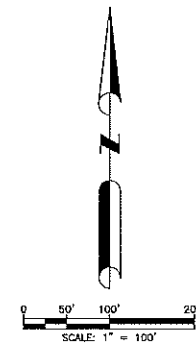
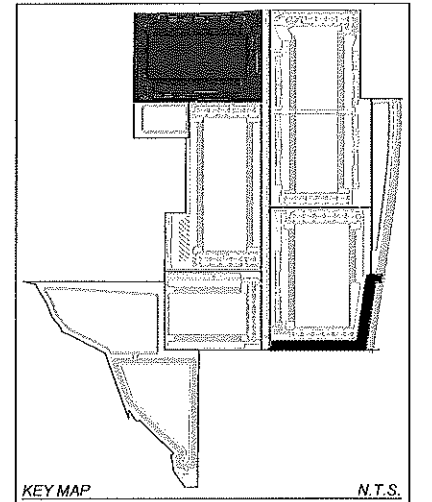
TOTAL OPEN SPACE 6.82 ACRES

BUILDING 3 AREA 399,000 SF

PARKING REQUIRED: 0.89 SPACE PER 1,000 SF OF GROSS FLOOR AREA
PARKING SPACES REQUIRED 355 SPACES

| PARKING PROVIDED: | PARKING AREA J | PARKING AREA K | PARKING AREA L | PARKING AREA M |
|-------------------|----------------|----------------|----------------|----------------|
| STANDARD SPACES | 0 | 90 | 0 | 128 |
| HANDICAP SPACES | 0 | 6 | 0 | 6 |
| TRUCK SPACES | 62 | 0 | 63 | 0 |
| SUBTOTAL | 62 | 96 | 63 | 134 |

TOTAL PARKING SPACES 355



DEVIATIONS OF WAIVER REQUEST TABLE

| Code Number | Code Requirement | Requested Modification | Justification | Location |
|-----------------|---|--|--|----------------|
| 6.03.02 A | Parking 2 spaces per 1,000 sf of GFA up to 150,000 sf plus 1 space per vehicle operating on the premises or 2 spaces per employee and 1 space per 1,000 sf of over 150,000 sf of GFA. | 0.89 Space per 1,000 sf of GFA | The ITE Parking Generation Manual, 4th Edition, 55th percentile parking requirement for warehouse use is 0.81 spaces per 1,000 sf of GFA. | Entire Site |
| 2.02.01 A | Building Height Maximum Building Height 35' | Maximum Building Height 55' | The modern warehouses require 35' to 45' of clear space under roof to accommodate automated materials handling equipment and maximize storage. | At Building |
| 2.02.15 F | Buffer Yard Front 25', Side 10', Rear 10' (30' Adjacent to Residential), 25' Road ROW | 15' on GE Road, Hermit Smith Road to Main Entrance, 0'110' Adjacent to SR 429, 10'225' Adjacent to Peterson Road, 10' Adjacent to Fern Industrial | The northeastern portion of the site is constrained by the encroachment of GE Road. SR 429 has 500' of ROW, 6 lanes, and provides a ~20' high barrier to adjacent property to the east. | North and East |
| 2.02.01.05 4(a) | Roof Top Screening All roof top equipment shall be completely screened from adjacent properties and rights-of-way to the maximum extent possible. | Roof top equipment shall be screened from view from adjacent property line and public rights-of-way, with the exception of SR 429 due to the large elevation change of the roadway and the finished floor elevation of the building. SR 429 is at an elevation of 133', approximately 70' above the finished floor height of Building 2. Screening shall be reviewed through a sight line document from the nearest adjacent property line and/or from the centerline of the public right-of-way. The sight line shall be from the typical height of a person driving an automobile. | All buildings will have a site elevation to confirm that rooftop equipment will not be visible from adjacent properties and ROW. | Entire Site |
| 2.02.16 B2 | Outdoor Vehicle | Long-term outdoor vehicle (bus, car, cab, and truck) storage and terminal is a permitted use within the PLUD. | Increased business flexibility. Permitted vehicle storage will be screened from the ground. | Entire Site |
| 6.02.09 | Sidewalk Location Build sidewalks on both sides of public streets | Build sidewalk only on the west side of Fern Industrial Drive. | We are requesting that we do not place a sidewalk on the east side of the ROW proximate to the rail spur. The pedestrian access plus provided on Sheet 8 of the PLUD Master Plan shows a network of pedestrian facilities serving entire site. The sidewalk on the west side of Fern Industrial is the spine connecting the southern end of the site with GE Road. All buildings are connected to this north/south spine and the appropriate crosswalks are provided where needed. We remain concerned that placement of a sidewalk will not increase the pedestrian connectivity over the current plan but will put pedestrians in close proximity to the Federal rail spur east of Fern Industrial serving the site. The benefits of the additional sidewalk does not, in our opinion, warrant the risk of inadvertent interaction of pedestrians and rail vehicles. | Entire Site |

NOTE: THIS PROJECT WILL CONFORM TO ALL REQUIREMENTS OF I-1 ZONING WITH THE EXCEPTION OF THE DEVIATIONS NOTED ON THE DEVIATION TABLE.



DAVE SCHMITT ENGINEERING, INC.
12301 Lake Underhill Road Suite 241
ORLANDO, FL 32828
407-207-9088 FAX 407-207-9089
Certification of Authorization #27471

CONTRACTOR "AS-BUILTS"

I hereby state that these "As-Builts" were furnished to me by the contractor listed below, or an employee under my direct supervision have reviewed these "As-Builts" and believe them to be in compliance with my knowledge of what was actually constructed. This statement is based upon site observations of the construction.

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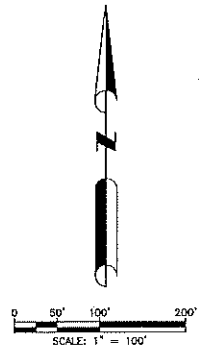
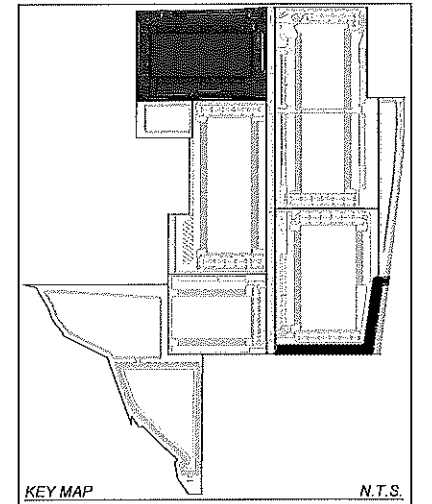
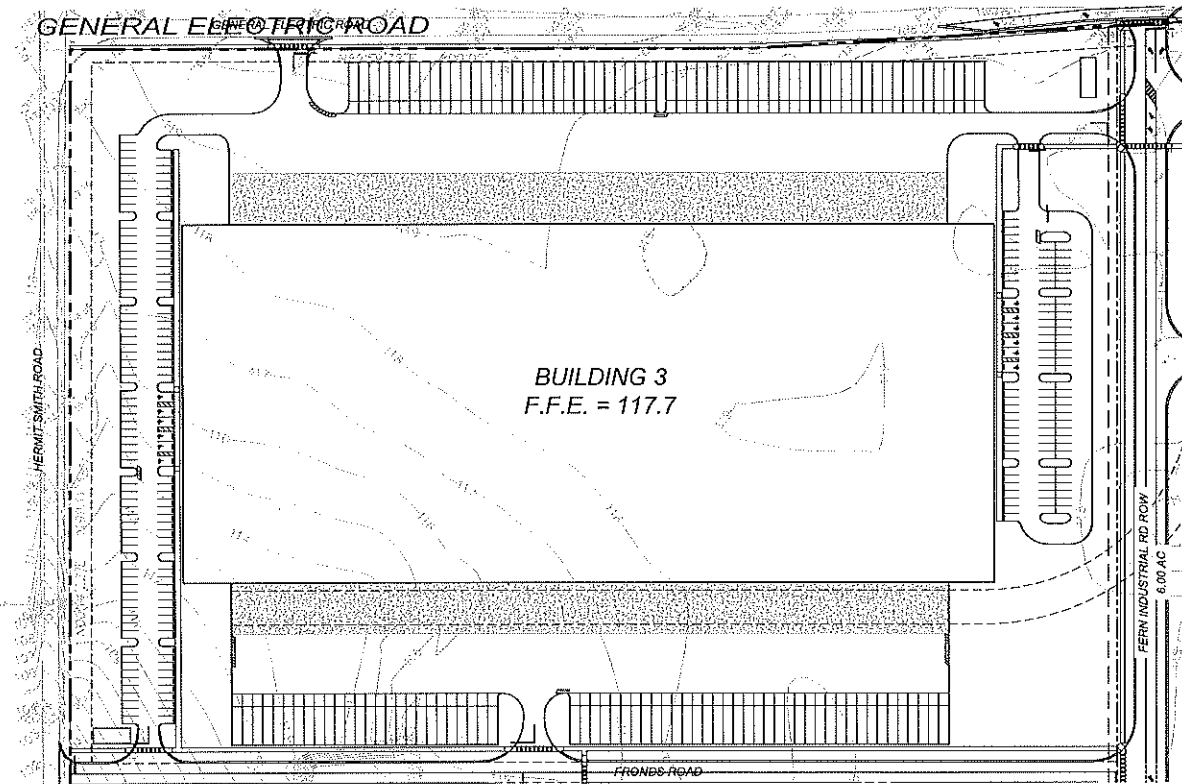
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DAVE M. SCHMITT
FLORIDA REG. NUMBER
48274

LOT 3 PLAN
MID-FLORIDA LOGISTICS PARK
APOPKA, FLORIDA

DATE: JUNE 2018
PROJECT NO.: ANC-1
DRAWN BY: MTP
CHECKED BY: DSE
SCALE: 1"=100'
SHEET: 11 OF 18

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**DAVE SCHMITT
ENGINEERING, INC.**
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ORLANDO, FL 32828
407-207-9088 FAX 407-207-9089
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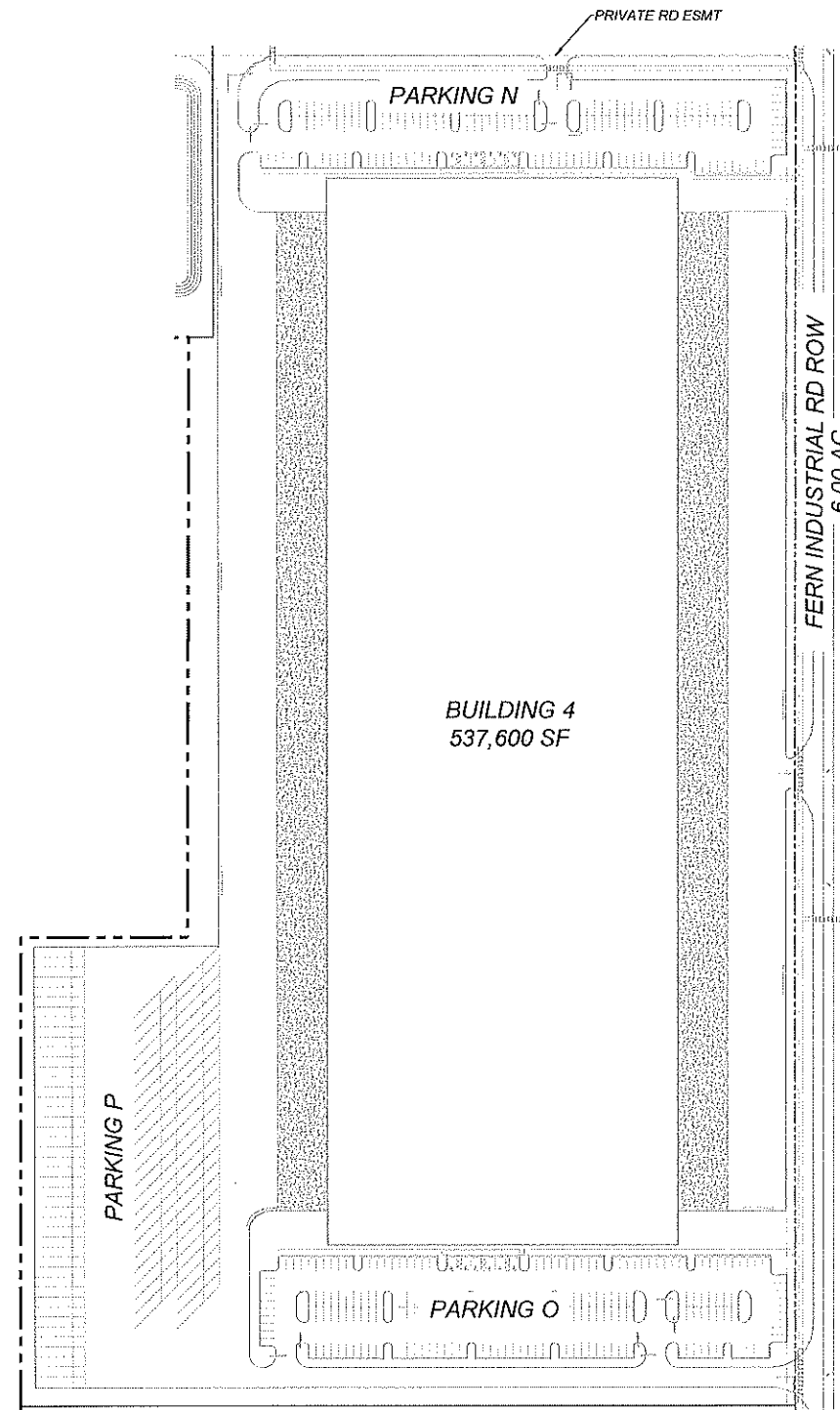
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DAVE M. SCHMITT
FLORIDA REG. NUMBER
48274

LOT 3 PRELIMINARY GRADING PLAN
MID-FLORIDA LOGISTICS PARK
APOPKA, FLORIDA

DATE: JUNE 2018
PROJECT NO.: ANC-1
DRAWN BY: MTP
CHECKED BY: DSE
SCALE: 1"=100'
SHEET: 12 OF 18

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LOT 4 PARCEL NUMBERS
#01-21-27-0000-00-060
#01-21-27-0000-00-030

LOT 4 AREA 29.63 ACRES

OPEN SPACE REQUIRED: 20% OF USABLE LOT AREA
29.63 x 0.20 = 5.93 ACRES

OPEN SPACE PROVIDED
LOT 4 OPEN SPACE 3.05 ACRES
1/3 OF POND 3 & 4 OPEN SPACE 5.40 ACRES

TOTAL OPEN SPACE 8.45 ACRES

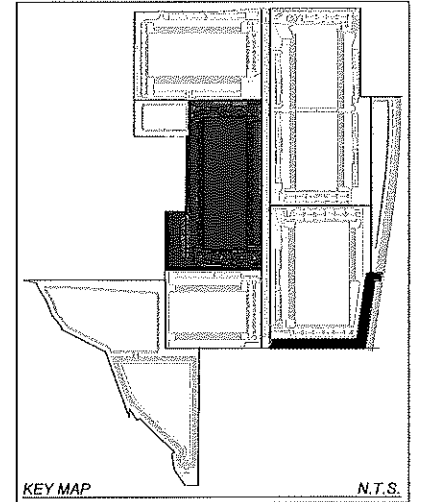
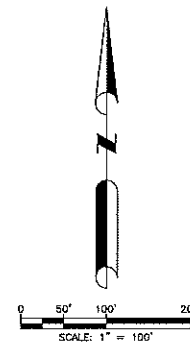
BUILDING 4 AREA 537,600 SF

PARKING REQUIRED: 0.89 SPACE PER 1,000 SF OF GROSS FLOOR AREA
PARKING SPACES REQUIRED 478 SPACES

PARKING PROVIDED:

| | PARKING AREA N | PARKING AREA O | PARKING AREA P |
|-----------------|----------------|----------------|----------------|
| STANDARD SPACES | 160 | 216 | 0 |
| HANDICAP SPACES | 6 | 6 | 0 |
| TRUCK SPACES | 0 | 0 | 90 |
| SUBTOTAL | 166 | 222 | 90 |

TOTAL PARKING SPACES 478



DEVIATIONS OF WAIVER REQUEST TABLE

| Code Number | Code Requirement | Requested Modification | Justification | Location |
|----------------|---|---|---|----------------|
| 6.02.02 A | Parking 2 spaces per 1,000 sf of GFA up to 150,000 sf plus 1 space per vehicle operating on the premises or 2 spaces per employee and 1 space per 1,000 sf of over 150,000 sf of GFA. | 0.89 Space per 1,000 sf of GFA | The ITE Parking Generation Manual, 4th Edition, 828 prescribes parking requirements for warehouse uses is 0.81 spaces per 1,000 sf of GFA. | Entire Site |
| 2.02.01 A | Building Height Maximum Building Height 35' | Maximum Building Height 55' | The modern warehouses require 36' to 45' of clear space under roof to accommodate automated materials handling equipment and maximize storage. | All Buildings |
| 2.02.15 F | Buffer Yard Front 25', Side 10', Rear 10' (30' Adjacent to Residential), 25' Road ROW | 15' on GE Road, Hermit Smith Road to Main Entrance, 0/10' Adjacent to SR 429, 10/20' Adjacent to Peterson Road, 10' Adjacent to Fern Industrial Road ROW | The northern portion of the site is constrained by the requirement of GE Road. SR 429 has 300' of ROW, 6 lanes, and provides a 20' high barrier to adjacent property to the east. | North and East |
| 2.02.01 B5 (b) | Roof Top Screening All roof top equipment shall be completely screened from adjacent properties and rights-of-way to the maximum extent possible. | Roof top equipment shall be screened from view from adjacent property line and public rights-of-way, with the exception of SR 429 due to the large elevation change of the roadway and the finished floor elevation of the Building. SR 429 is at an elevation of 130', approximately 50' above the finished floor height of Building 2. Screening shall be reviewed to be in conformance by the Subdivision President and the City of Apopka. Screening shall be reviewed through a sight line drawn from the nearest adjacent property line and/or from the centerline of the public right-of-way. The eye line shall be from the typical height of a person driving an automobile. | All buildings will have a site line evaluation to confirm that rooftop equipment will not be visible from adjacent properties and ROW. | Entire Site |
| 2.02.16 B2 | Outdoor Vehicle | Long-term outdoor vehicle (bus, car, cab, and truck) storage and terminal is a permitted use within the PUD. | Increased business flexibility. Permitted vehicle storage will be screened from the ground. | Entire Site |
| 6.02.02 | Sidewalk Location Build sidewalks on both sides of public streets | Build sidewalk only on the west side of Fern Industrial Drive. | We are requesting that we do not place a sidewalk on the east side of the ROW proximate to the rail spur. The pedestrian access plan provided on sheet 6 of the PID Master Plan shows a network of pedestrian facilities serving entire site. The sidewalk on the west side of Fern Industrial is the spine connecting the southern end of the site with GE Road. All buildings are connected to this north-south spine and the appropriate crosswalks are provided where needed. We remain concerned that placement of a sidewalk will not increase the pedestrian connectivity over the current plan but will put pedestrians in close proximity to the internal rail spur east of Fern Industrial serving the site. The benefit of the additional sidewalk does not, in our opinion, warrant the risk of inadvertent interaction of pedestrians and rail vehicles. | Entire Site |

NOTE: THIS PROJECT WILL CONFORM TO ALL REQUIREMENTS OF I-1 ZONING WITH THE EXCEPTION OF THE DEVIATIONS NOTED ON THE DEVIATION TABLE.



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12301 Lake Underhill Road Suite 241
ORLANDO, FL 32828
407-207-9088 FAX 407-207-9089
Certification of Authorization #27471

CONTRACTOR "AS-BUILT"

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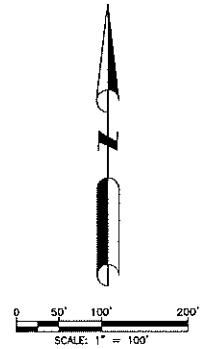
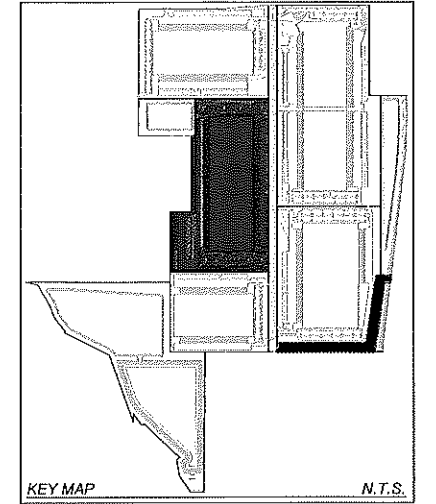
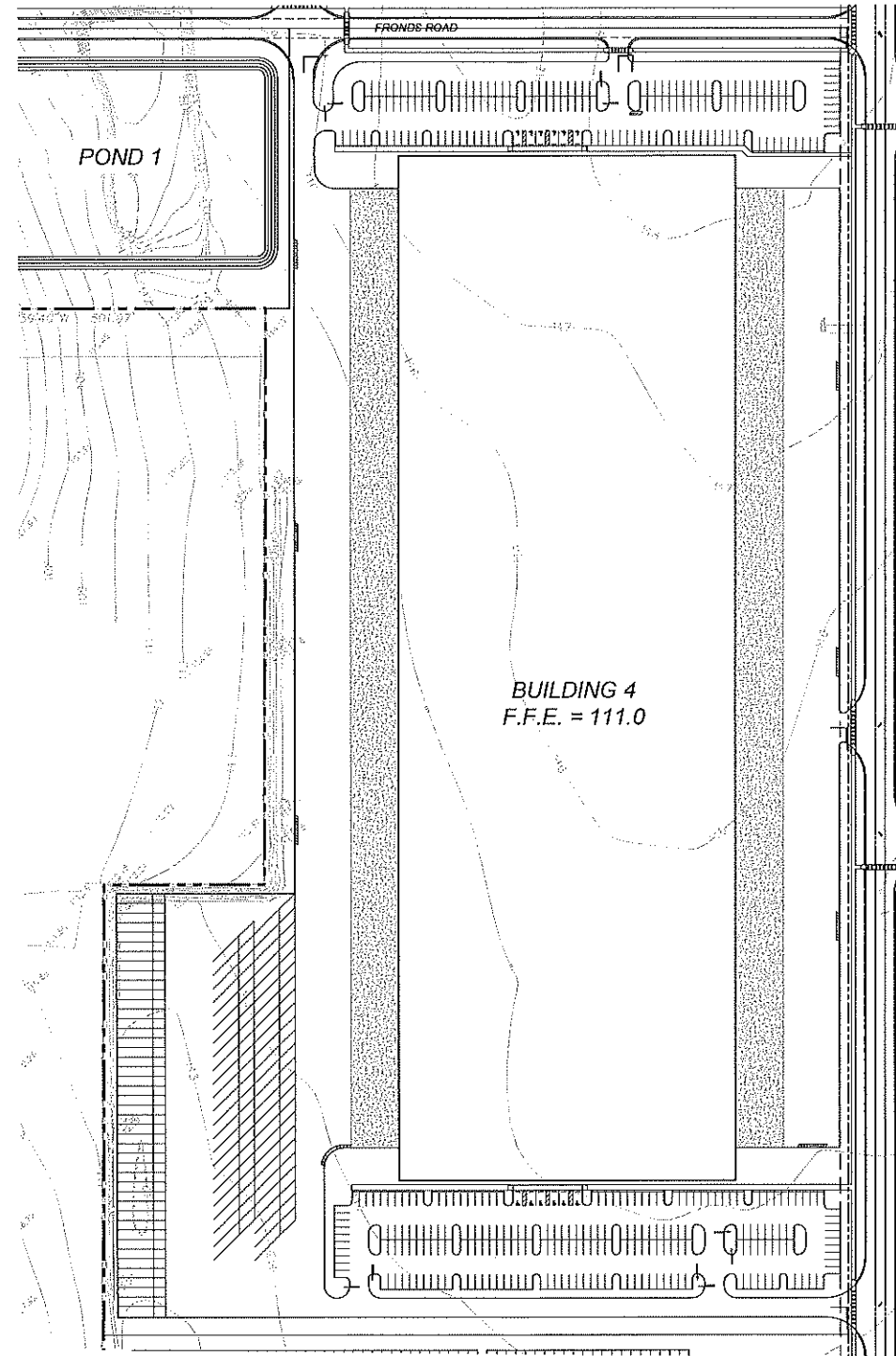
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DAVE M. SCHMITT
FLORIDA REG. NUMBER
48274

LOT 4 PLAN
MID-FLORIDA LOGISTICS PARK
APOPKA, FLORIDA

DATE: JUNE 2018
PROJECT NO.: ANC-1
DRAWN BY: MTP
CHECKED BY: DSE
SCALE: 1"=100'
SHEET: 13 OF 18

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**DAVE SCHMITT
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| REVISIONS | | | | | |
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DAVE M. SCHMITT
FLORIDA REG. NUMBER
48274

LOT 4 PRELIMINARY GRADING PLAN
MID-FLORIDA LOGISTICS PARK
APOPKA, FLORIDA

DATE: JUNE 2018
PROJECT NO.: ANC-1
DRAWN BY: MTP
CHECKED BY: DSE
SCALE: 1"=100'
SHEET: 14 OF 18

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LOT 5 PARCEL NUMBERS
 #12-21-27-0000-00-010
 #12-21-27-0000-00-0315

LOT 5 AREA 16.11 ACRES

OPEN SPACE REQUIRED: 20% OF USABLE LOT AREA
 16.11 x 0.20 = 3.22 ACRES

OPEN SPACE PROVIDED
 LOT 5 OPEN SPACE 2.37 ACRES
 1/3 OF POND 3 & 4 OPEN SPACE 5.40 ACRES

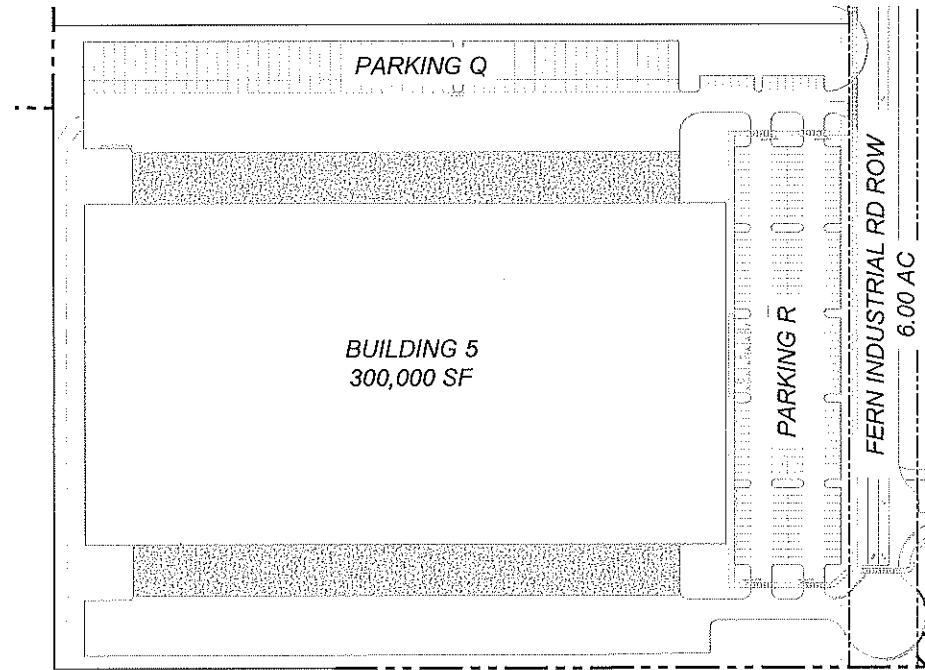
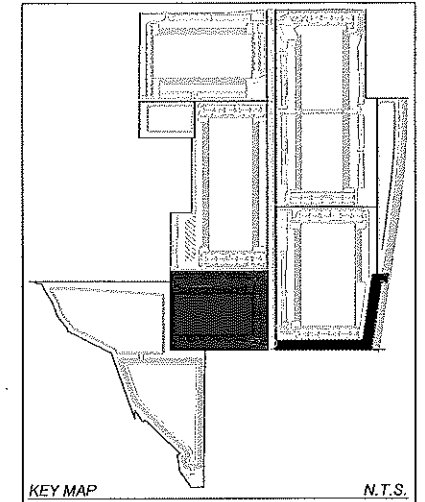
TOTAL OPEN SPACE 6.77 ACRES

BUILDING 5 AREA 300,000 SF

PARKING REQUIRED: 0.89 SPACE PER 1,000 SF OF GROSS FLOOR AREA
PARKING SPACES REQUIRED 267 SPACES

| PARKING PROVIDED: | | PARKING AREA Q | PARKING AREA R |
|-------------------|--|----------------|----------------|
| STANDARD SPACES | | 0 | 203 |
| HANDICAP SPACES | | 0 | 6 |
| TRUCK SPACES | | 58 | 0 |
| SUBTOTAL | | 58 | 209 |

TOTAL PARKING SPACES 267



DEVIATIONS OF WAIVER REQUEST TABLE

| Code Number | Code Requirement | Requested Modification | Justification | Location |
|----------------|--|--|--|----------------|
| 6.03.02 A | Parking 2 spaces per 1,000 sf of GFA up to 150,000 sf plus 1 space per vehicle operating on the premises or 2 spaces per employee and 1 space per 1,000 sf over 150,000 sf of GFA. | 0.89 Space per 1,000 sf of GFA | The ITE Parking Generation Manual, 4th Edition, 82th percentile parking requirement for warehouse use is 0.81 spaces per 1,000 sf of GFA. | Entire Site |
| 2.02.01 A | Building Height Maximum Building Height 35' | Maximum Building Height 55' | The modern warehouses require 30' to 45' of clear space under roof to accommodate automated materials handling equipment and maximize storage. | At Building |
| 2.02.15 F | Buffer Yard Front 25', Side 10', Rear 10' (30' Adjacent to Residential), 25' Road ROW | 15' on GE Road, Hermit Smith Road to Main Entrance, 0710' Adjacent to SR 429, 1072' Adjacent to Petersen Road, 10' Adjacent to Fern Industrial | The northwest portion of the site is constrained by the encroachment of GE Road. SR 429 has 300' of ROW, 5 lanes, and provides a ~20' high barrier to adjacent property to the east. | North and East |
| 2.02.01 DS (G) | Roof Top Screening All roof top equipment shall be completely screened from adjacent properties and rights-of-way to the maximum extent possible. | Floor top equipment shall be screened from view from adjacent property line and public rights-of-way, with the exception of SR 429 due to the large skid-steer charge of the roadway and the finished floor elevation of the building. SR 429 is at an elevation of 135', approximately 20' above the finished floor height of Building 2. Screening shall be reviewed to be in accordance by the Subdivision President and the City of Apopka. Screening shall be reviewed through a sign line document from the nearest adjacent property line and/or from the centerline of the public right-of-way. The eye line shall be from the typical height of a person driving an automobile. | All buildings will have a site elevation to confirm that rooftop equipment will not be visible from adjacent properties and ROW. | Entire Site |
| 2.02.16 B2 | Outdoor Vehicle | Long-term outdoor vehicle (bus, car, cab, and truck) storage and terminal is a permitted use within the PUD. | Increased business flexibility. Permitted vehicle storage will be screened from the ground. | Entire Site |
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NOTE: THIS PROJECT WILL CONFORM TO ALL REQUIREMENTS OF I-1 ZONING WITH THE EXCEPTION OF THE DEVIATIONS NOTED ON THE DEVIATION TABLE.



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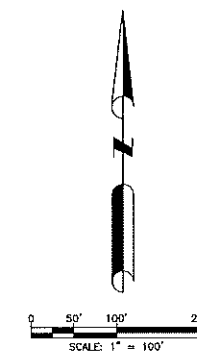
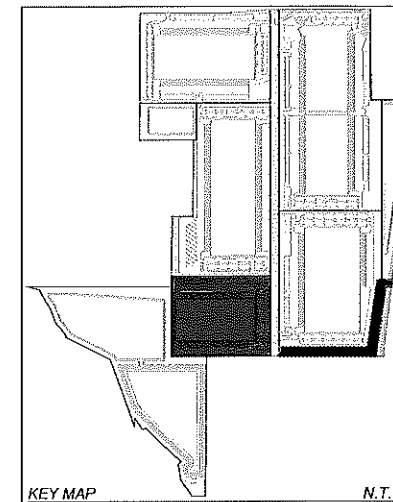
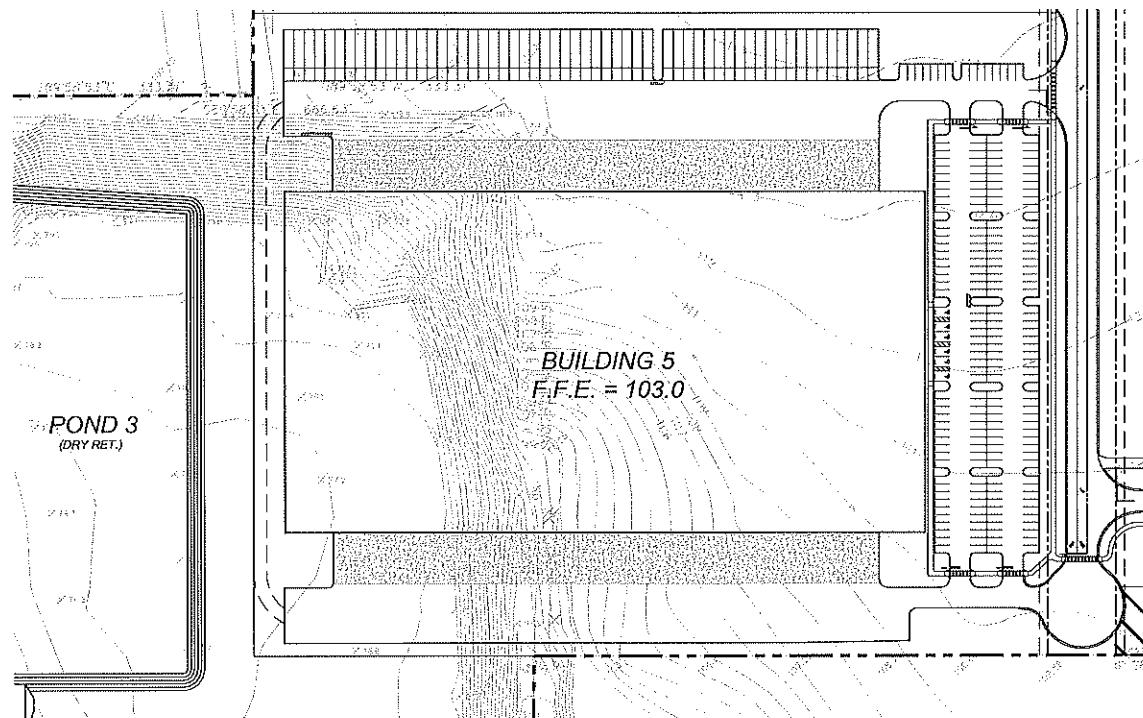
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DAVE M. SCHMITT
 FLORIDA REG. NUMBER
 48274

LOT 5 PLAN
 MID-FLORIDA LOGISTICS PARK
 APOPKA, FLORIDA

DATE: JUNE 2018
 PROJECT NO.: ANC-1
 DRAWN BY: MTP
 CHECKED BY: DSE
 SCALE: 1"=10'
 SHEET: 15 OF 18

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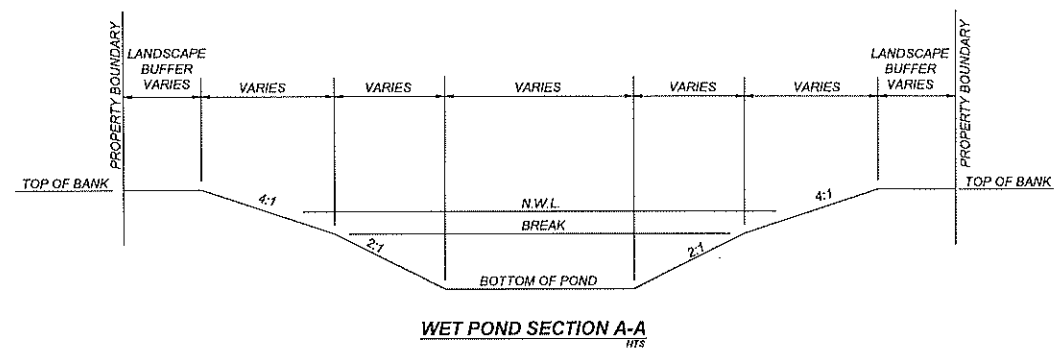
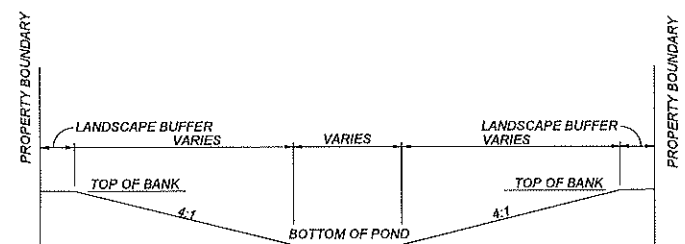
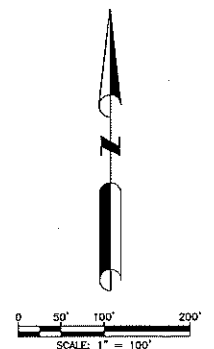
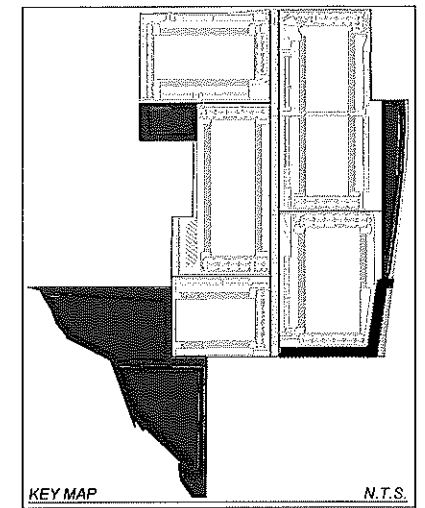
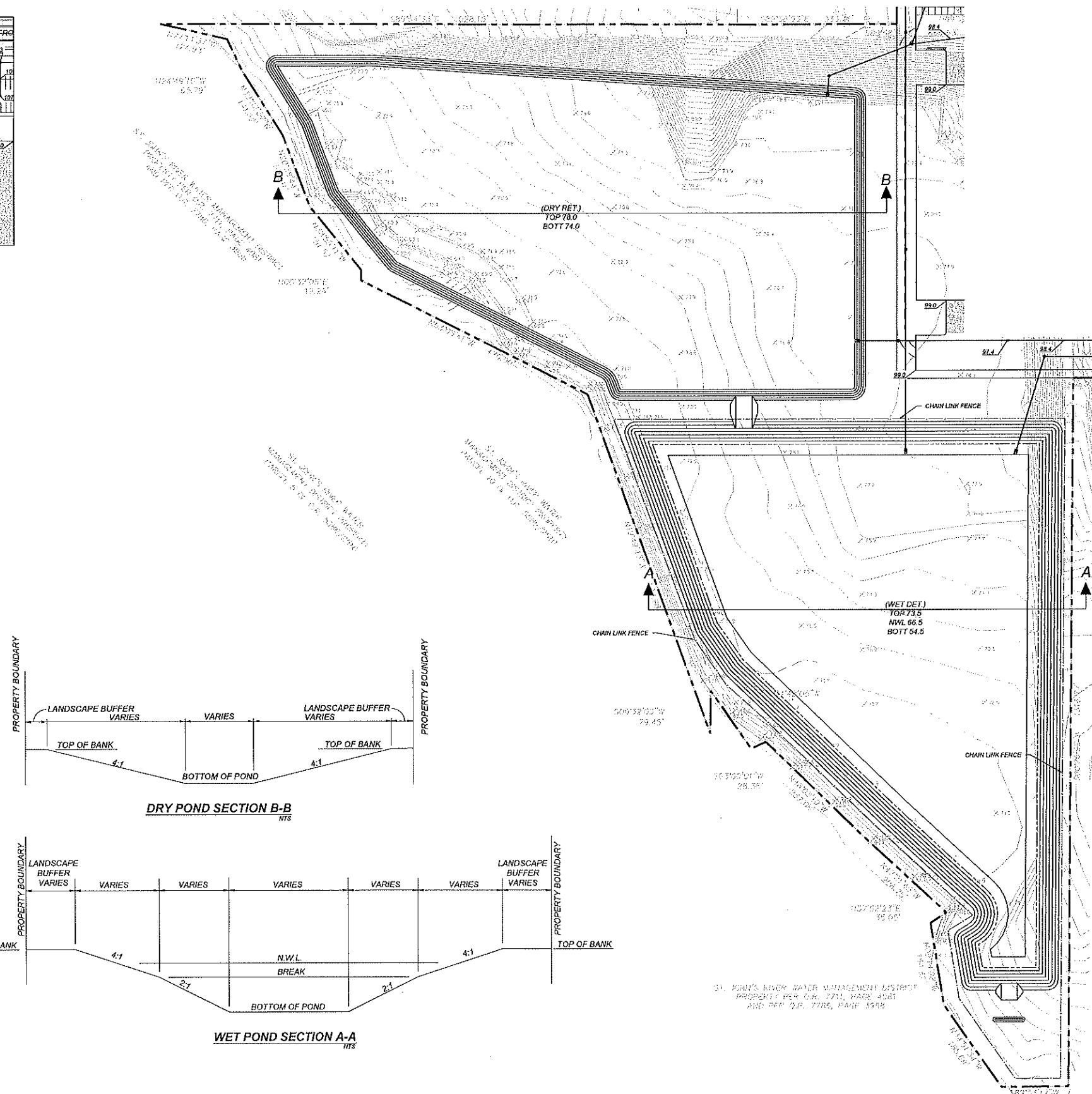
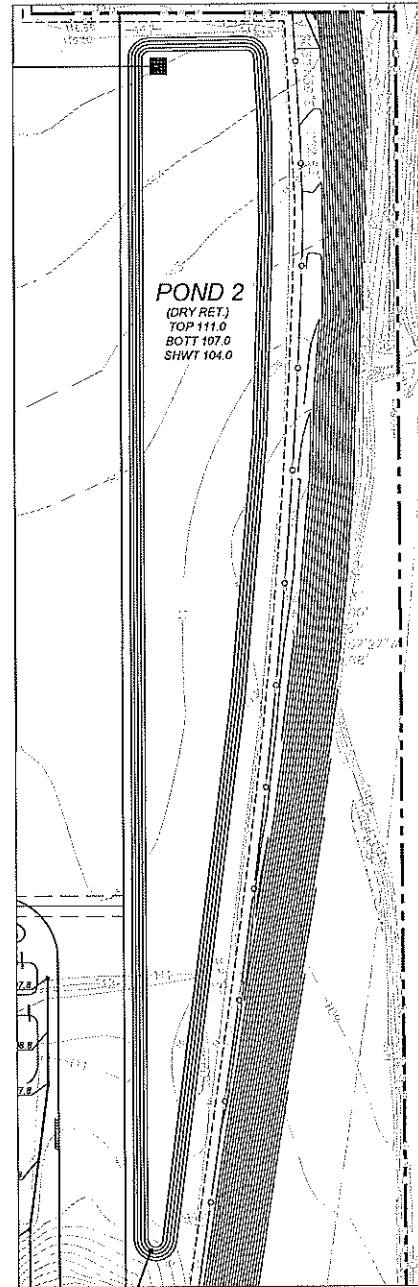
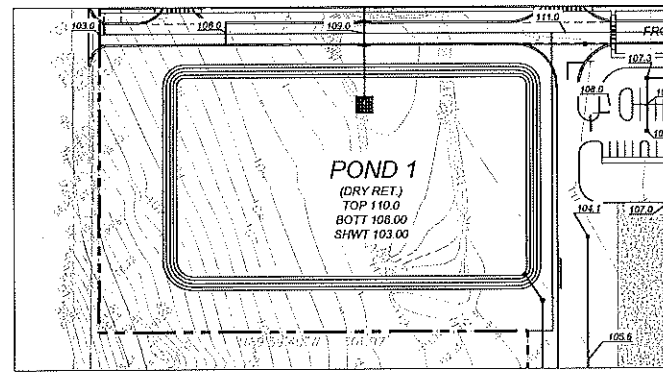
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DAVE M. SCHMITT
FLORIDA REG. NUMBER
48274

LOT 5 PRELIMINARY GRADING PLAN
MID-FLORIDA LOGISTICS PARK
APOPKA, FLORIDA

DATE: JUNE 2018
PROJECT NO.: ANC-1
DRAWN BY: MTP
CHECKED BY: DSE
SCALE: 1"=100'
SHEET: 16 OF 18

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 407-207-9088 FAX 407-207-9089
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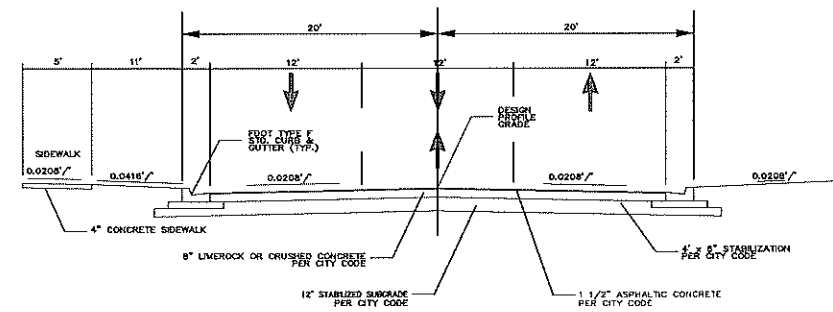
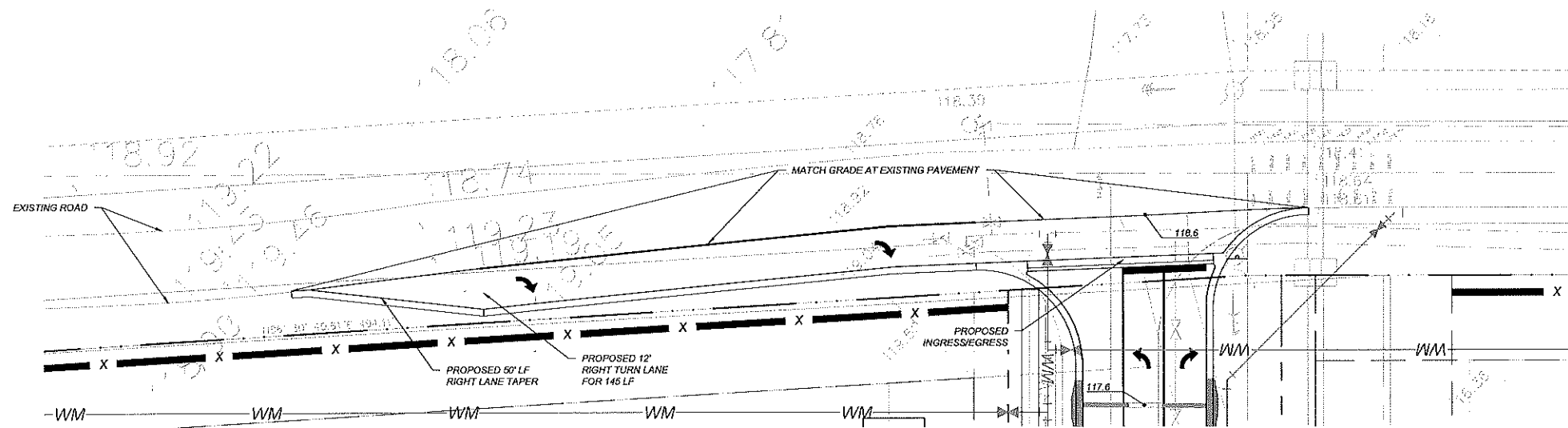
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DAVE M. SCHMITT
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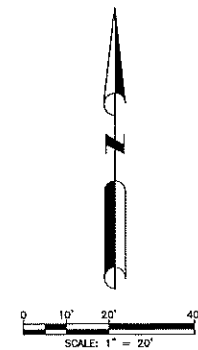
PRELIMINARY STORMWATER POND PLAN
 MID-FLORIDA LOGISTICS PARK
 APOPKA, FLORIDA

DATE: JUNE 2018
 PROJECT NO.: ANC-1
 DRAWN BY: MTP
 CHECKED BY: DSE
 SCALE: 1"=100'
 SHEET: 17 OF 18

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TYPICAL SECTION
(FERN INDUSTRIAL DRIVE)



DAVE SCHMITT ENGINEERING, INC.
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DAVE M. SCHMITT
FLORIDA REG. NUMBER
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GE ROAD OFFSITE IMPROVEMENTS
MID-FLORIDA LOGISTICS PARK
APOPKA, FLORIDA

DATE: JUNE 2018
PROJECT NO.: ANC-1
DRAWN BY: MTP
CHECKED BY: DSE
SCALE: 1"=20'
SHEET: 18 OF 18

PRELIMINARY LANDSCAPE PLANS

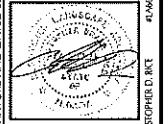
MID-FLORIDA LOGISTICS PARK

CITY OF APOPKA, FLORIDA

SHEET INDEX

| | | | |
|-------|-------------------------------|-------|-------------------------------|
| C-100 | COVER SHEET | L-102 | LANDSCAPE PLAN |
| K-100 | MASTER KEY PLAN | L-103 | LANDSCAPE PLAN |
| L-100 | OVERALL BUFFER PLAN & DETAILS | L-104 | LANDSCAPE PLAN |
| L-101 | LANDSCAPE PLAN | L-105 | LANDSCAPE PLAN |
| | | L-106 | RETENTION POND LANDSCAPE PLAN |

MID-FLORIDA LOGISTICS PARK



SIGNATURE AND DATED SEAL

SEAL VERIFICATION

COVER SHEET

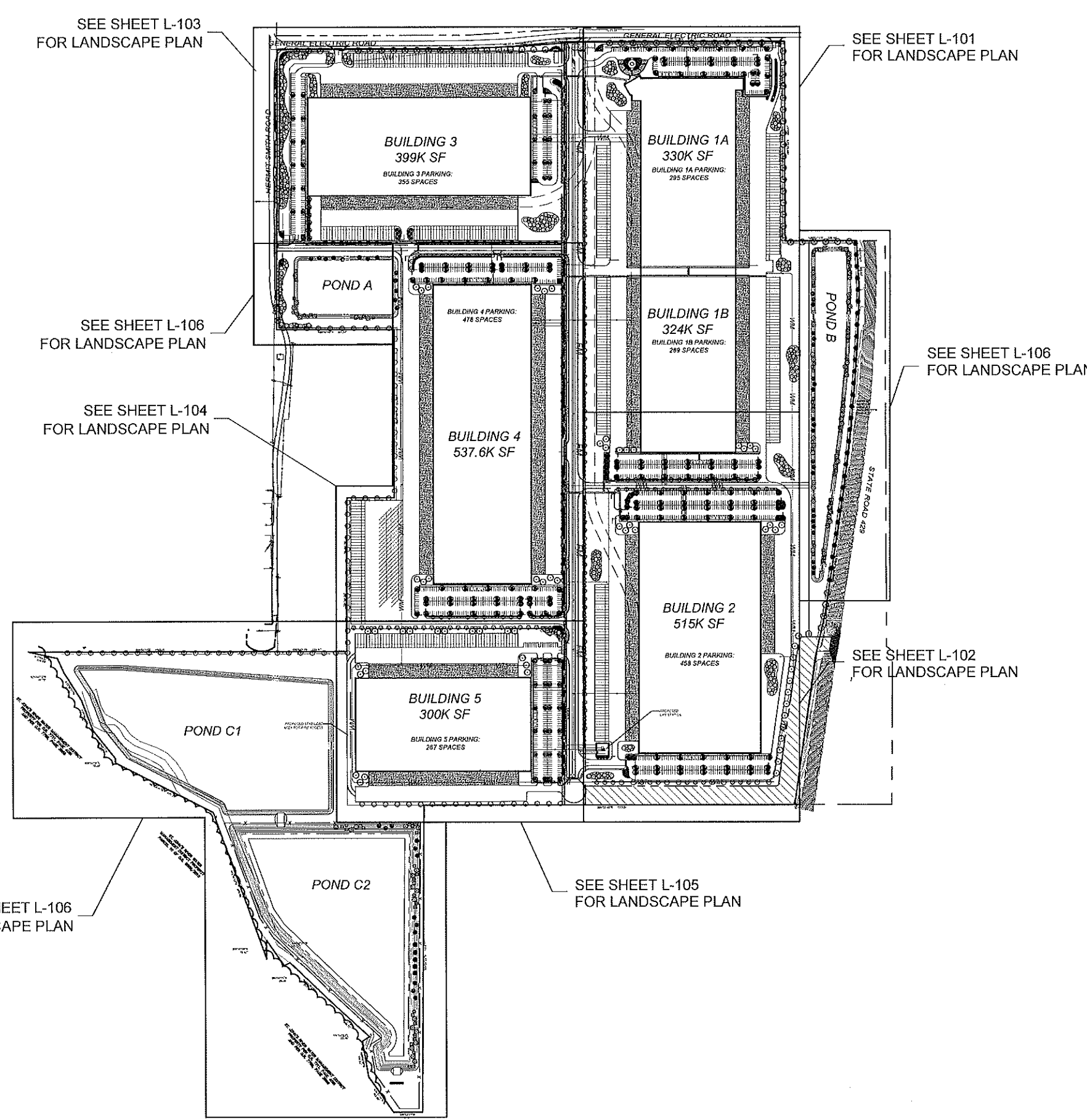
DRAWING TITLE

PROJECT ADDRESS

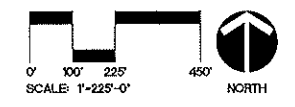
REV. DESCRIPTION | DATE

PROJECT NO. 14634
PHASE PRELIMINARY
SCALE N.T.S.
FILE NAME 14-02
DRAWN BY JTB
CHECKED BY CBL
DATE 08/23/18





SEE SHEET L-106 FOR LANDSCAPE PLAN



MID-FLORIDA LOGISTICS PARK

DRAWING TITLE: MASTER KEY PLAN

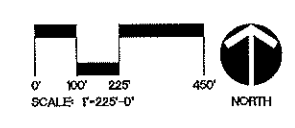
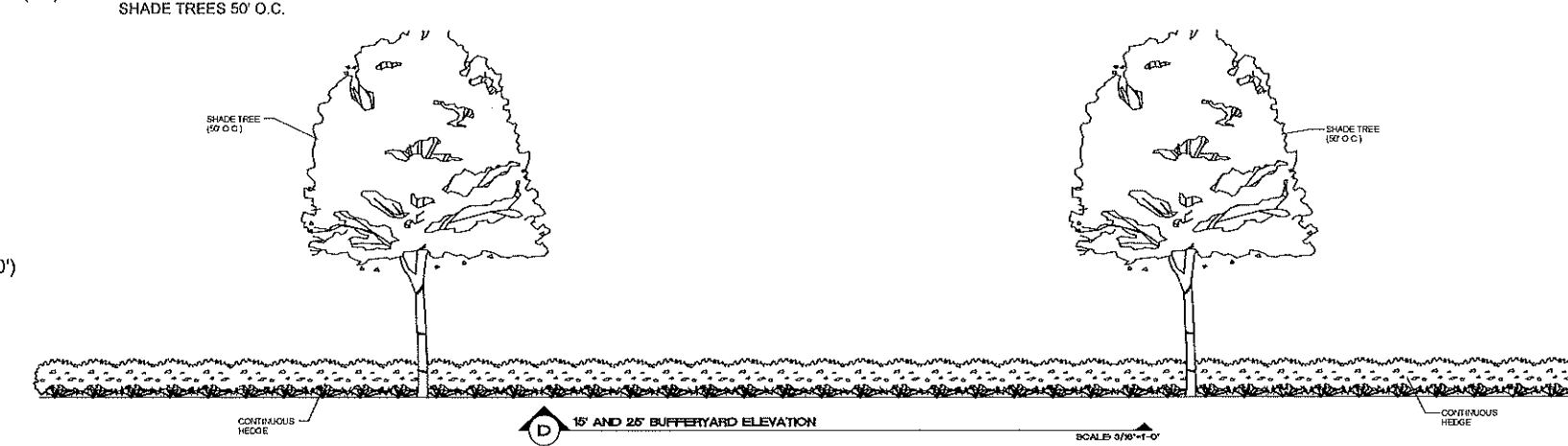
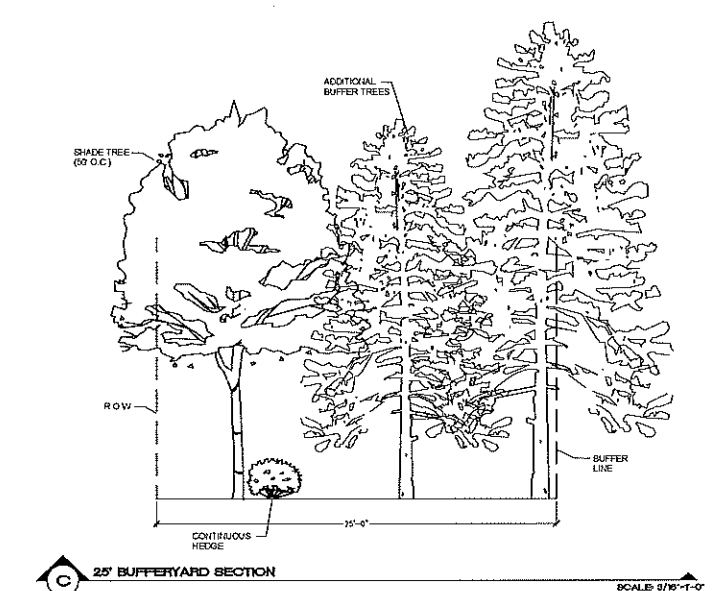
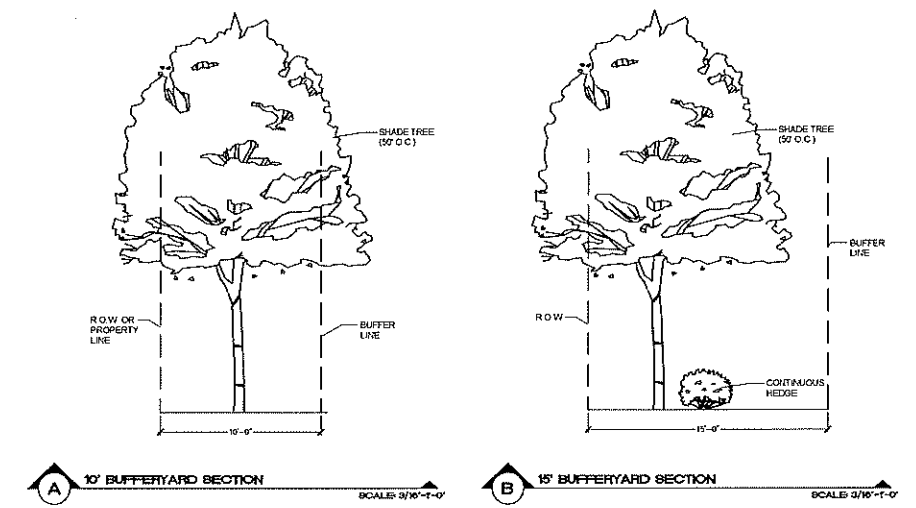
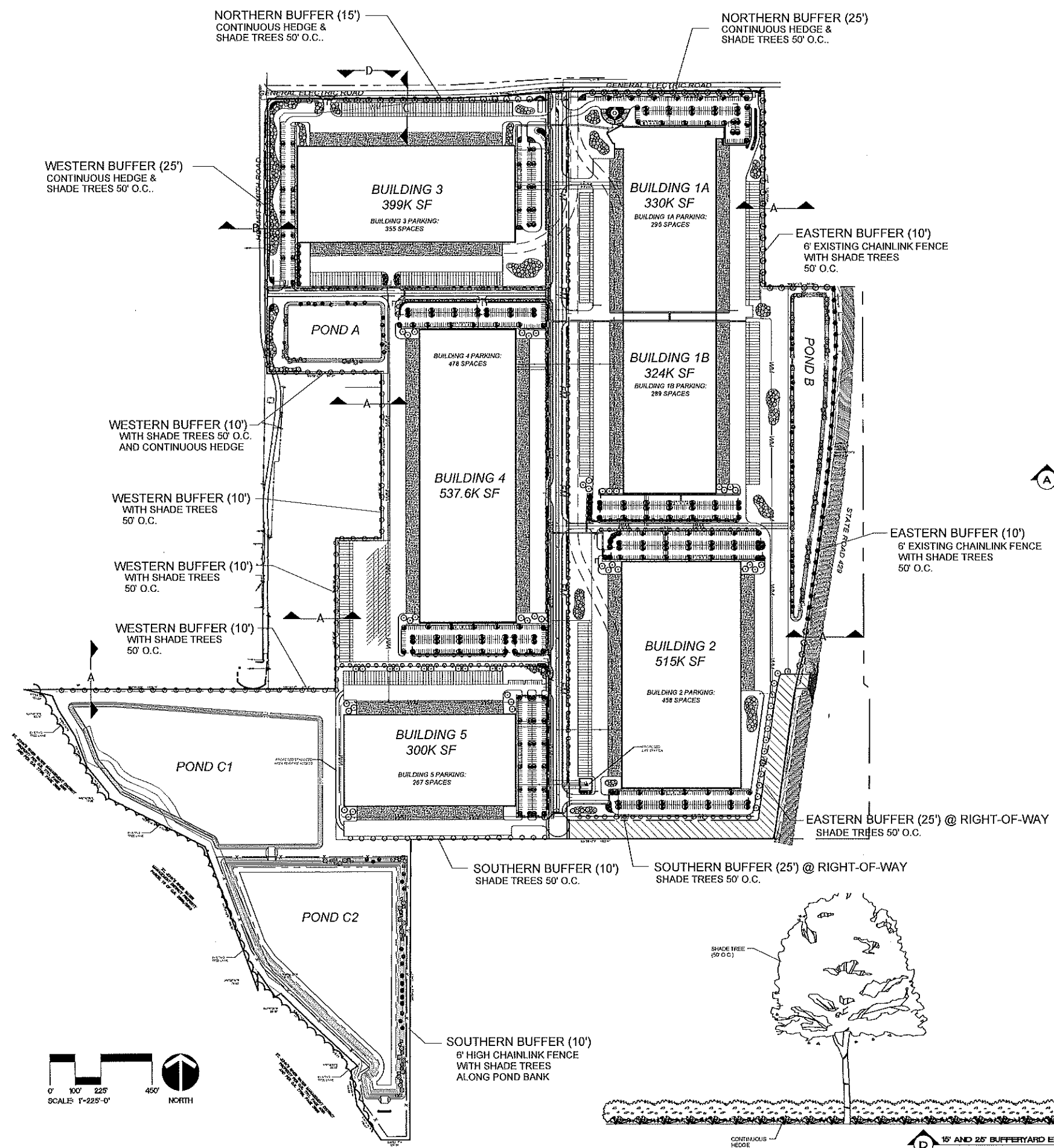
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|-------------|-------------|-------------------------|-------------------------|--------------------------|-----------------|
| PROJECT NO. | 16434 | PROJECT ADDRESS | CITY OF APOPKA, FLORIDA | DRAWING TITLE | MASTER KEY PLAN |
| PHASE | PRELIMINARY | CITY OF APOPKA, FLORIDA | CITY OF APOPKA, FLORIDA | SEAL VERIFICATION | |
| SCALE | 1"=225'-0" | OWNER NAME AND ADDRESS | | SIGNATURE AND DATED SEAL | |
| FILE NAME | 16434 | | | | |
| DRAWN BY | JTD | | | | |
| CHECKED BY | CRK | | | | |
| DATE | 06/23/18 | | | | |

CHRISTOPHER J. EICK
LICENSE NO. 12345
STATE OF FLORIDA

K-100

BB PARTNERS
LANDSCAPE ARCHITECTS
ORLANDO, FL 32834 (407) 418-1338

SHADE TREE CALCULATIONS
 PER SECTION 5.01.08 A OF THE CITY OF APOPKA LDC
 TOTAL SITE = 187.44 ACRES (8,164,886 S.F.)
 SHADE TREES REQUIRED 1/8000S.F. = 1,020 TREES
 SHADE TREES PROVIDED = 1,253 TREES



MID-FLORIDA LOGISTICS PARK

OVERALL LANDSCAPE BUFFER PLAN & DETAILS

BORRELLI + PARTNERS
 Landscape Architecture
 10000 W. BOULEVARD
 SUITE 100
 ORLANDO, FL 32838
 TEL: 407.418.1338
 FAX: 407.418.1339
 WWW.BORRELLI-PA.COM

SIGNATURE AND DATED SEAL
 SEAL VERIFICATION
 DRAWING TITLE

PROJECT ADDRESS
 CITY OF APOPKA, FLORIDA
 OWNER NAME AND ADDRESS

| REV. | DESCRIPTION | DATE |
|------|-------------|------|
| | | |
| | | |
| | | |
| | | |

| | | | |
|-------------|-------------|----------|------------|
| PROJECT NO. | 18074 | DATE | 06/23/18 |
| PHASE | PRELIMINARY | SCALE | 1"=225'-0" |
| FILE NAME | 18074 | DRAWN BY | JTD |
| CHECKED BY | | DATE | |

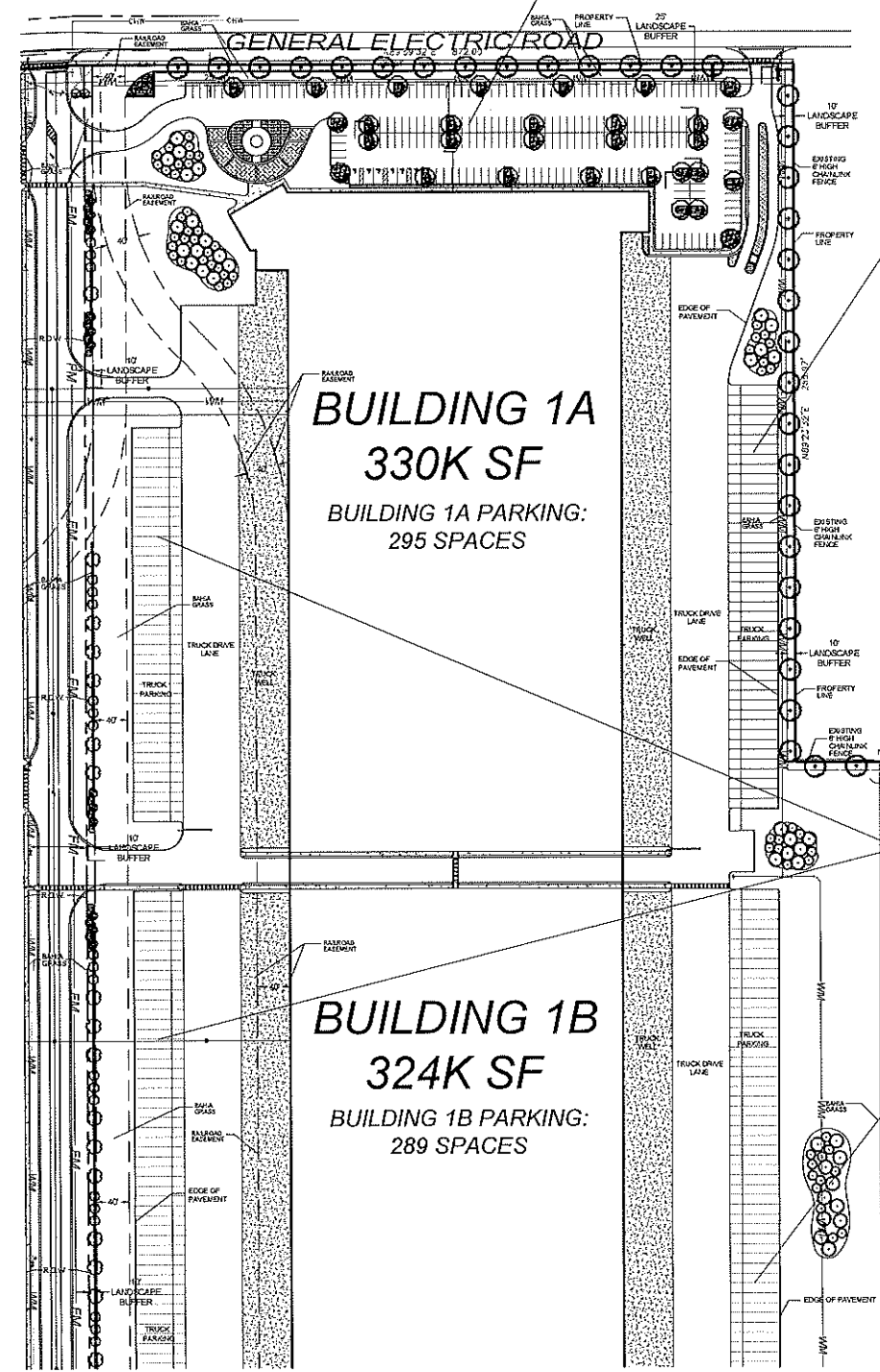
L-100

NOTE:
 ALL TREE AND SHRUB ROOTBALLS SHALL BE PLACED WITH A MINIMUM OF 5' HORIZONTAL SEPARATION FROM ALL CITY MAINTAINED UTILITY LINES.
 FINAL LANDSCAPE AND IRRIGATION PLANS TO BE DESIGNED IN ACCORDANCE WITH CITY OF APOPKA ORDINANCE NUMBER 2069 OR CURRENT CODE IN EFFECT AT TIME OF CONSTRUCTION PLAN SUBMITTAL.

PARKING 'A'
 TOTAL 75,445 S.F.
 LS ISLANDS 7,729.26 S.F.
 % LS 10.25% (10% REQ.)
 % SHADE 58.3% (30% REQ.)

PLANT LEGEND

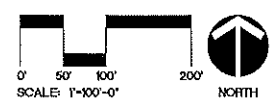
| | | |
|---|---|--|
| <p>LARGE SHADE TREE</p> <ul style="list-style-type: none"> LIVE OAK - QUERCUS VIRGINIANA 3" DBH, 15' SPAD, 114' HT. HIGHBUSH LIVE OAK - QUERCUS VIRGINIANA 3" DBH, 15' SPAD, 114' HT. ALLEE PALM - SPANIS AMERICANA 3" DBH, 16' SPAD, 114' HT. SWEETGUM - LIQUIDAMBAR STYRACIUM 3" DBH, 16' SPAD, 114' HT. RED MAPLE - ACER RUBRUM 3" DBH, 15' SPAD, 112' HT. SOUTHERN RED CEDAR - CUPRESSUS SEMPERVIRENS 3" DBH, 15' SPAD, 112' HT. | <p>MEDIUM SHADE TREE</p> <ul style="list-style-type: none"> SOUTHERN MAGNOLIA - MAGNOLIA GRANDIFLORA 3" DBH, 15' SPAD, 117' HT. SLASH PINE - PINUS ELIOTTII 2.5" DBH, 14' SPAD, 110' HT. 3" DBH, 15' SPAD, 112' HT. BALD CYPRESS - TAXODIUM DISTICHUM 2.5" DBH, 14' SPAD, 110' HT. 3" DBH, 15' SPAD, 112' HT. LIGUSTRUM TREE - LIGUSTRUM JAPONICUM 2" DBH, 8' SPAD, 78' HT. JAKU-TI-TRUNKED CRANE WHEATLE - LAGENSTROEMIA INXCA 2" DBH, 6' SPAD, 110' HT. | <p>PALM TREE</p> <ul style="list-style-type: none"> SABAL PALM - SABAL PALMETTO 10, 14, 16 CT., STRAIGHT TRUNK |
| <p>SHRUBS / GROUND COVER</p> <ul style="list-style-type: none"> WALTERS VIBURNUM, SWEET VIBURNUM, FLORIBUNDA, MIMULUS GRASS, CORD GRASS, BURFORD HOLLY, PINEAPPLE GUAVA, FICUS BICOLOR, SWAMPY STOPPER, WILD COFFEE, TIBERON, FLORIDA ANISE, CRONQUIA LILY, CARDONADO PALM, HARPOUR LEAF VIBURNUM. LIRIOPE, ASIAN JASMINE, HISSAH HEMLOCK, COONHIE, BULBIE, PERSEAL PEANUT, AKEBEE, BOXWOOD, FLAX LILY, AFRICAN FIG, SIBLING'S HOLLY. | | |
| <p>UNDERSTORY TREE</p> | | |



PARKING 'B'
 TRUCK PARKING (NOT APPLICABLE)

PARKING 'C'
 TRUCK PARKING (NOT APPLICABLE)

PARKING 'D'
 TRUCK PARKING (NOT APPLICABLE)



MID-FLORIDA LOGISTICS PARK

BORELLI + PARTNERS
 LANDSCAPE ARCHITECTURE

PROJECT NO. 18004
 PHASE PRELIMINARY
 SCALE 1"=100'-0"
 FILE NAME 18-018
 DRAWN BY JTB
 CHECKED BY CRB
 DATE 08/23/18

PROJECT ADDRESS: CITY OF APOPKA, FLORIDA
 OWNER NAME AND ADDRESS:

LANDSCAPE PLAN

SEAL VERIFICATION

SIGNATURE AND DATED SEAL

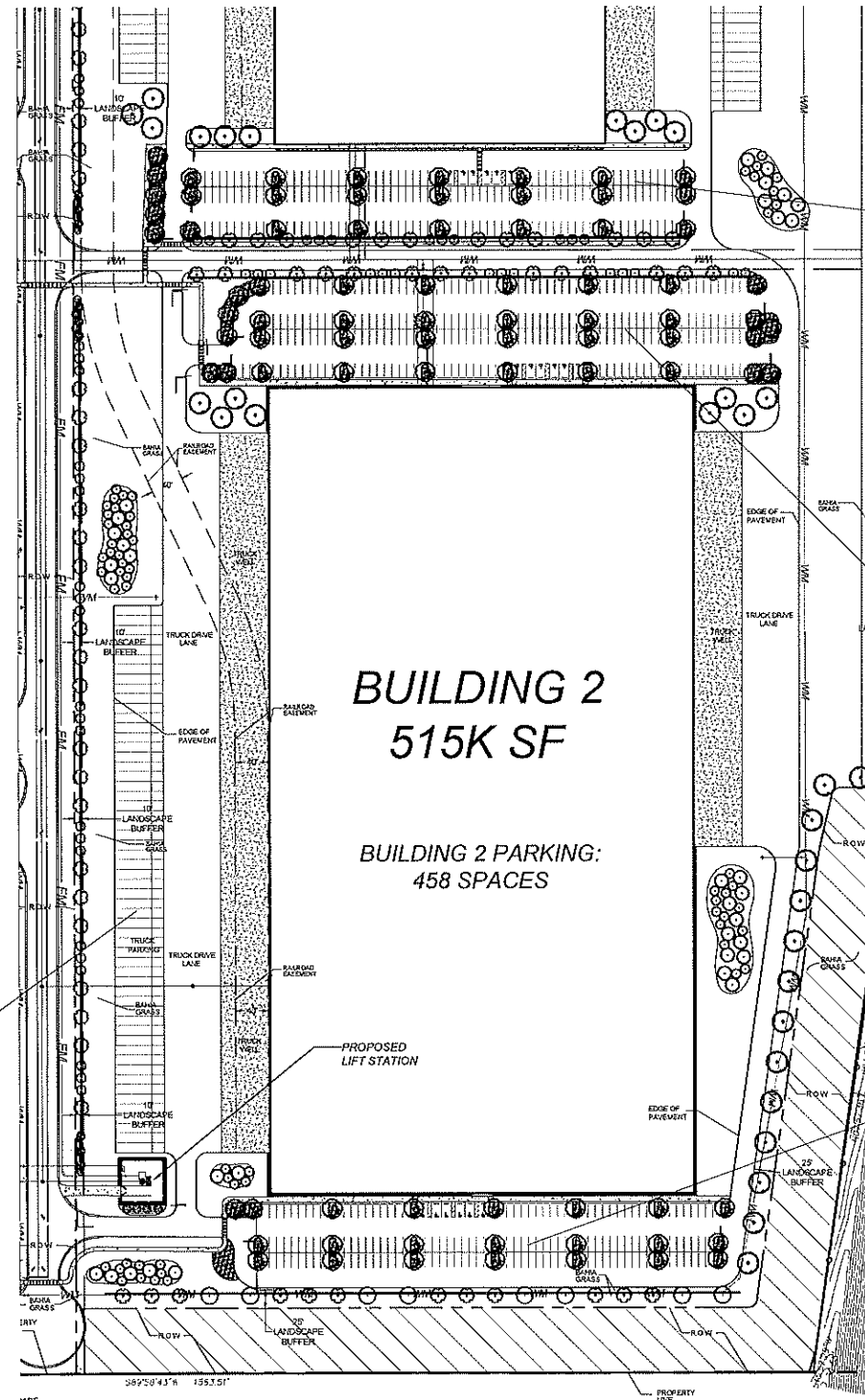
CRISTOPHER D. BERT
 LANDSCAPE ARCHITECT
 11/26/2018

NOTE:
 ALL TREE AND SHRUB ROOTBALLS
 SHALL BE PLACED WITH A MINIMUM OF
 5' HORIZONTAL SEPARATION FROM ALL
 CITY MAINTAINED UTILITY LINES.

FINAL LANDSCAPE AND IRRIGATION PLANS
 TO BE DESIGNED IN ACCORDANCE WITH
 CITY OF APOPKA ORDINANCE NUMBER 2069
 OR CURRENT CODE IN EFFECT AT TIME OF
 CONSTRUCTION PLAN SUBMITTAL.

PLANT LEGEND

| LARGE SHADE TREE | MEDIUM SHADE TREE | PALM TREE | |
|--|---|---|---|
| LIVE OAK - QUERCUS VIRGINIANA 3" DBH, 7.5' SPAD, 114' HT. | SOUTHERN MAGNOLIA - MAGNOLIA GRANDIFLORA 3" DBH, 7.5' SPAD, 71.2' HT. | SABAL PALM - SABAL PALMETTO 10, 14, 18 CT. (STRAIGHT TRUNK) | |
| HIGHWAY LIVE OAK - QUERCUS VIRGINIANA 3" DBH, 7.5' SPAD, 114' HT. | SLASH PINE - PINUS ELIOTTII 2.5" DBH, 7.4' SPAD, 112' HT. 3" DBH, 7.5' SPAD, 112' HT. | <th>SHRUBS / GROUND COVER</th> | SHRUBS / GROUND COVER |
| ALLEE ELM - ULMUS AMERICANA 3" DBH, 7.5' SPAD, 114' HT. | BALD CYPRESS - TAXODIUM DISTICHUM 2.5" DBH, 7.4' SPAD, 110' HT. 3" DBH, 7.5' SPAD, 114' HT. | WALTERS VIRGINIANA, SWEET VIRGINIANA, PLUMBAGO, AURRY GRASS, COARD GRASS, BURGARD HOLLY, FINE LEAF E. QUAYA, PIRLODOTHORON, SAMPSON'S STOPPER, WILD COFFEE, EREBONIA, FLORIDA ANISE, CRISTINA LILY, CAROLINA PALM, HERRING LEAF VIRGINIANA. | |
| SWEETGUM - LIQUIDAMBAR STYRACIFLUA 3" DBH, 7.5' SPAD, 114' HT. | <th>UNDERSTORY TREE</th> <td> LIRIOPE, ADAM JASMINE, EUDORA HAWTHORN, COONHIE, BULBINE, PEREKHUAL PEANUT, JUMPER, BOXWOOD, FLAX LILY, AFRICAN IRIS, SHELLBAG'S HOLLY. </td> | UNDERSTORY TREE | LIRIOPE, ADAM JASMINE, EUDORA HAWTHORN, COONHIE, BULBINE, PEREKHUAL PEANUT, JUMPER, BOXWOOD, FLAX LILY, AFRICAN IRIS, SHELLBAG'S HOLLY. |
| RED MAPLE - ACER RUBRUM 3" DBH, 7.5' SPAD, 112' HT. | LIGUSTRUM TREE - LIGUSTRUM JAPONICUM 2" DBH, 7.5' SPAD, 78' HT. (AUKI-TI-TROKED) | | |
| SOUTHERN RED CEDAR - CUPRESSUS SEMPERVIRENS 3" DBH, 7.5' SPAD, 112' HT. | CRAB APPLE - LAGERSTROEMIA INYCA 2" DBH, 7.5' SPAD, 110' HT. | | |



PARKING 'E'

TOTAL 63,268 S.F.
 LS ISLANDS 6,445 S.F.
 % LS 10.19% (10% REQUIRED)
 % SHADE 51.67% (30% REQUIRED)

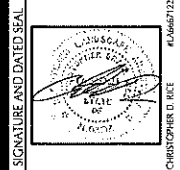
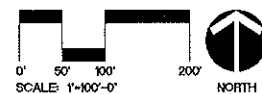
PARKING 'F'

TOTAL 77,739 S.F.
 LS ISLANDS 8,081 S.F.
 % LS 10.4% (10% REQUIRED)
 % SHADE 55.66% (30% REQUIRED)

PARKING 'G'

TOTAL 45,725 S.F.
 LS ISLANDS 4,579 S.F.
 % LS 10% (10% REQUIRED)
 % SHADE 50.97% (30% REQUIRED)

PARKING 'H'
 TRUCK PARKING
 (NOT APPLICABLE)



MID-FLORIDA LOGISTICS PARK

LANDSCAPE PLAN

| PROJECT NO. | REV. | DESCRIPTION | DATE |
|-------------|------------|-------------|------|
| PRELIMINARY | | | |
| SCALE | 1"=100'-0" | | |
| FILE NAME | 14-03 | | |
| DRAWN BY | JTD | | |
| CHECKED BY | CR | | |
| DATE | 08/23/18 | | |

L-102

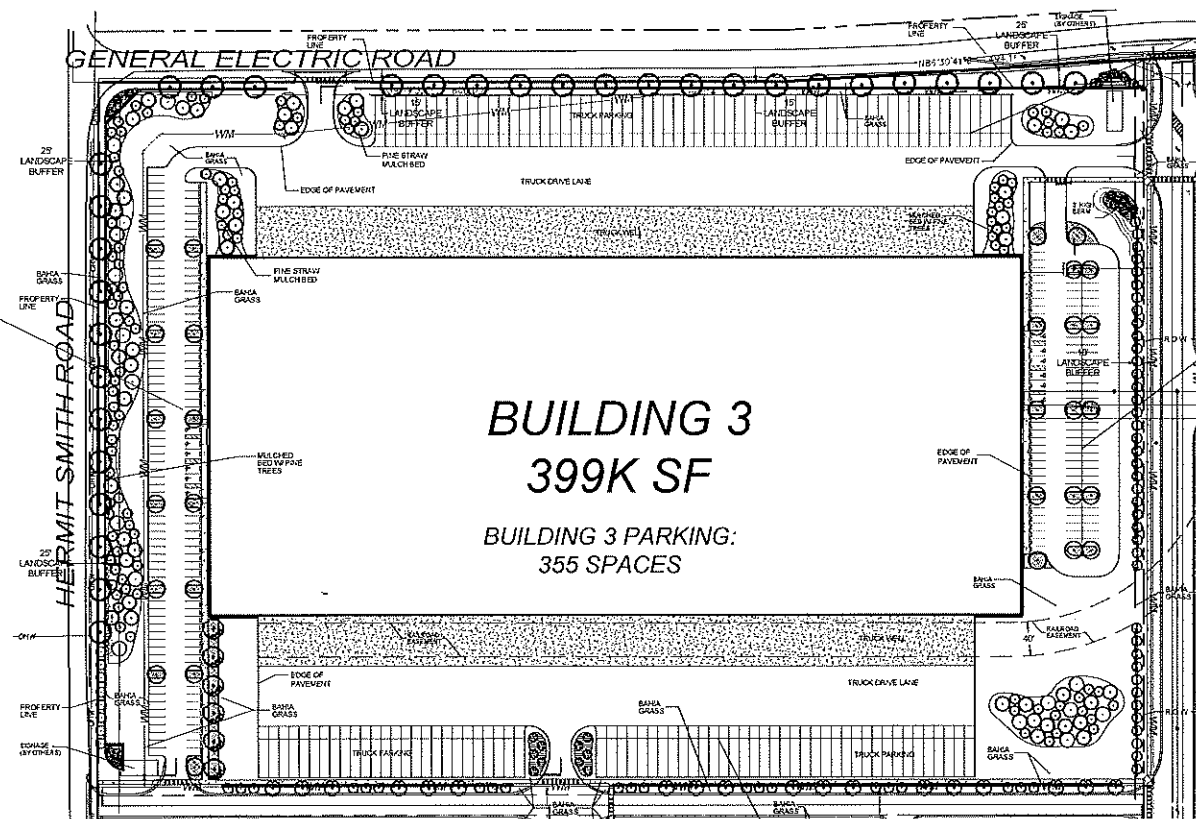
NOTE:
 ALL TREE AND SHRUB ROOTBALLS SHALL BE PLACED WITH A MINIMUM OF 5' HORIZONTAL SEPARATION FROM ALL CITY MAINTAINED UTILITY LINES.
 FINAL LANDSCAPE AND IRRIGATION PLANS TO BE DESIGNED IN ACCORDANCE WITH CITY OF APOPKA ORDINANCE NUMBER 2069 OR CURRENT CODE IN EFFECT AT TIME OF CONSTRUCTION PLAN SUBMITTAL.

PLANT LEGEND

| LARGE SHADE TREE | MEDIUM SHADE TREE | PALM TREE |
|---|---|--|
| LIVE OAK - QUERCUS VIRGINIANA 3" DBH./5' SPAD./14' HT. | SOUTHERN MAGNOLIA - MAGNOLIA GRANDIFLORA 3" DBH./5' SPAD./12' HT. | SABAL PALM - SABAL PALMETTO 10", 14", 18" CT./STRAIGHT TRUNK |
| HIGHWIDE LEAF OAK - QUERCUS VIRGINIANA 3" DBH./4' SPAD./14' HT. | SLASH PINE - PINUS ELIOTTI 2.5" DBH./4' SPAD./12' HT. | SHRUBS / GROUNDCOVER |
| ALLEE ELM - ULMUS AMERICANA 3" DBH./5' SPAD./14' HT. | BALD CYPRESS - TAXODIUM DISTICHUM 2.5" DBH./4' SPAD./12' HT. | WALTERS VIRIBIDIA, SWEET VIBURNUM, PEARLAGO, HENRY GRASS, CORN GRASS, BURENID HOLLY, PINEAPPLE GUAVA, PIRLODEIDRON, STUPSON'S STOPPER, WILD COFFEE, FIREBUSH, FLORIDA ANISE, CARDINAL LILY, CARIBBEAN PALM, HAWKOR-LEAF VIRIBIDIA. |
| SWEETGUM - LIQUIDAMBAR STRUCIFLUA 3" DBH./4' SPAD./14' HT. | UNDERSTORY TREE | LINDSEY, ASIAN JASMINE, BUDAN HAWTHORN, COONITE, BUSHBEE, FIBROBLAST PEANUT, JUMPER, BOYWOOD, FLAX LILY, AFRICAN IRIS, SHALBOS HOLLY. |
| RED MAPLE - ACER RUBRUM 3" DBH./5' SPAD./12' HT. | ELAUSTRUM TREE - ELAUSTRUM JAPONICUM 2" DBH./5' SPAD./8' HT. MULTI-TRUNKED | |
| SOUTHERN RED CEDAR - CUPRESSUS SEMPERVIRENS 3" DBH./5' SPAD./12' HT. | CRAPE MYRTLE - LAURASTROGATEA INHCA 2" DBH./5' SPAD./10' HT. | |

PARKING 'L'

TOTAL 40,672 S.F.
 LS ISLANDS 4,417 S.F.
 % LS 10.86% (10% REQUIRED)
 % SHADE 50.39% (30% REQUIRED)



PARKING 'I'

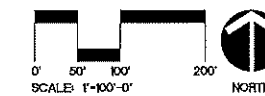
TRUCK PARKING
 (NOT APPLICABLE)

PARKING 'J'

TOTAL 37,873 S.F.
 LS ISLANDS 3,937 S.F.
 % LS 10.4% (10% REQUIRED)
 % SHADE 66% (30% REQUIRED)

PARKING 'K'

TRUCK PARKING
 (NOT APPLICABLE)



MID-FLORIDA LOGISTICS PARK

| | |
|--------------------------|-------------------------|
| | |
| | |
| SIGNATURE AND DATED SEAL | |
| SEAL VERIFICATION | |
| DRAWING TITLE | |
| LANDSCAPE PLAN | |
| PROJECT NO. | 14034 |
| PHASE | PRELIMINARY |
| SCALE | 1"=100'-0" |
| FILE NAME | 14034 |
| DRAWN BY | JTD |
| CHECKED BY | CR |
| DATE | 08/23/18 |
| PROJECT ADDRESS | CITY OF APOPKA, FLORIDA |
| OWNER NAME AND ADDRESS | |
| REV. | DESCRIPTION |
| | |
| | |
| | |
| | |

NOTE:
 ALL TREE AND SHRUB ROOTBALLS SHALL BE PLACED WITH A MINIMUM OF 5' HORIZONTAL SEPARATION FROM ALL CITY MAINTAINED UTILITY LINES.
 FINAL LANDSCAPE AND IRRIGATION PLANS TO BE DESIGNED IN ACCORDANCE WITH CITY OF APOPKA ORDINANCE NUMBER 2069 OR CURRENT CODE IN EFFECT AT TIME OF CONSTRUCTION PLAN SUBMITTAL.

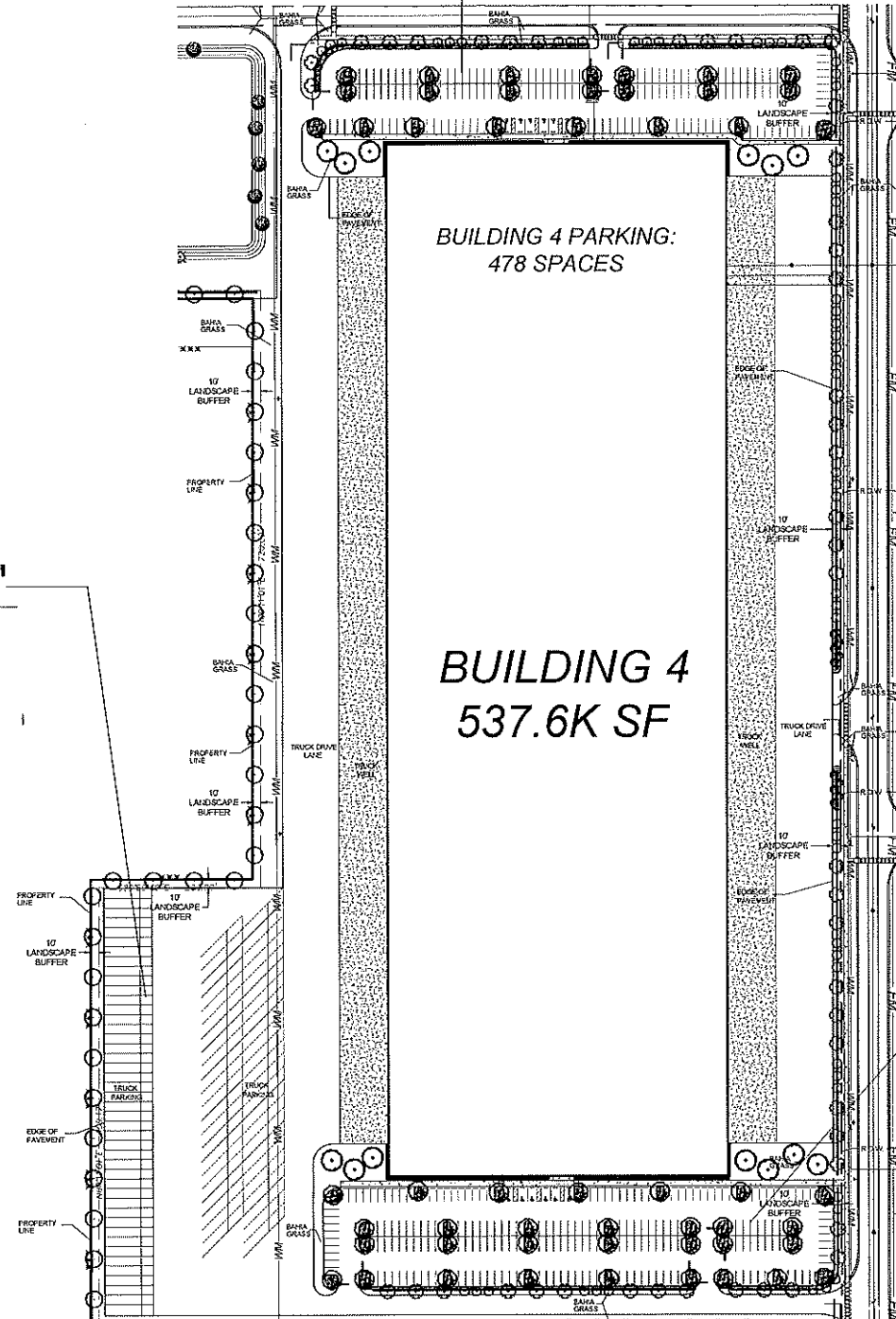
PARKING 'M'

TOTAL 62,919 S.F.
 LS ISLANDS 6,980 S.F.
 % LS 10% (10% REQUIRED)
 % SHADE 62.16% (30% REQUIRED)

PLANT LEGEND

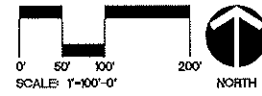
| LARGE SHADE TREE | MEDIUM SHADE TREE | PALM TREE |
|--|---|--|
| <ul style="list-style-type: none"> LIVE OAK - QUERCUS VIRGINIANA 3" DBH/14' SPRD./14' HT. HIGHRISE LIVE OAK - QUERCUS VIRGINIANA 3" DBH/10' SPRD./14' HT. ALLEE OAK - QUERCUS AMERICANA 3" DBH/10' SPRD./14' HT. SWEETGUM - LIQUIDAMBAR STYRACIFLUA 3" DBH/10' SPRD./12' HT. RED MAPLE - ACER RUBRUM 3" DBH/10' SPRD./12' HT. SOUTHERN RED CEDAR - CYPRESSUS SEMPERVERENS 3" DBH/10' SPRD./12' HT. | <ul style="list-style-type: none"> SOUTHERN MAGNOLIA - MAGNOLIA GRANDIFLORA 3" DBH/10' SPRD./12' HT. SLASH PINE - PINUS ELLIOTTI 2.5" DBH/14' SPRD./12' HT. 3" DBH/10' SPRD./12' HT. BALD CYPRESS - TAXODIUM DISTICHUM 2.5" DBH/14' SPRD./10' HT. 3.5" DBH/10' SPRD./14' HT. | <ul style="list-style-type: none"> SABAL PALM - SABAL PALMETTO 10", 14", 18" CT./STRAIGHT TRUNK |
| | <ul style="list-style-type: none"> UNDERSTORY TREE LIGUSTRUM TREE - LIGUSTRUM JAPONICUM 2" DBH/8' SPRD./8' HT./JAMAICA TREKING ORANGE AVOCETLE - LACCASTROGNA INKCA 3" DBH/8' SPRD./10' HT. | <ul style="list-style-type: none"> SHRUBS / GROUNDCOVER WALTERS VIBURNUM, SWEET VIBURNUM, PLUMBAGO, MERCY GRASS, CORD GRASS, BURFORD HOLLY, PINEAPPLE GUAVA, PHLOEDERHOD, SPOONWOOD STOPPER, WILD COFFEE, FIREBUSH, FLORIDA ANISE, CROCKMILLER, CAROLINA PALM, ANAKOR LEAF VIBURNUM. LIRIOPE, ASIAN BASHINE, INDIAN HAWTHORN, COHITIE, BULBINE, PERSENA PEANUT, JUTIPA, BOXWOOD, FLAX LILY, AFRICAN IRS, SIBLING'S HOLLY. |

PARKING 'O'
 TRUCK PARKING
 (NOT APPLICABLE)



PARKING 'N'

TOTAL 72,060 S.F.
 LS ISLANDS 7,226 S.F.
 % LS 10.03% (10% REQUIRED)
 % SHADE 67.87% (30% REQUIRED)



MID-FLORIDA LOGISTICS PARK

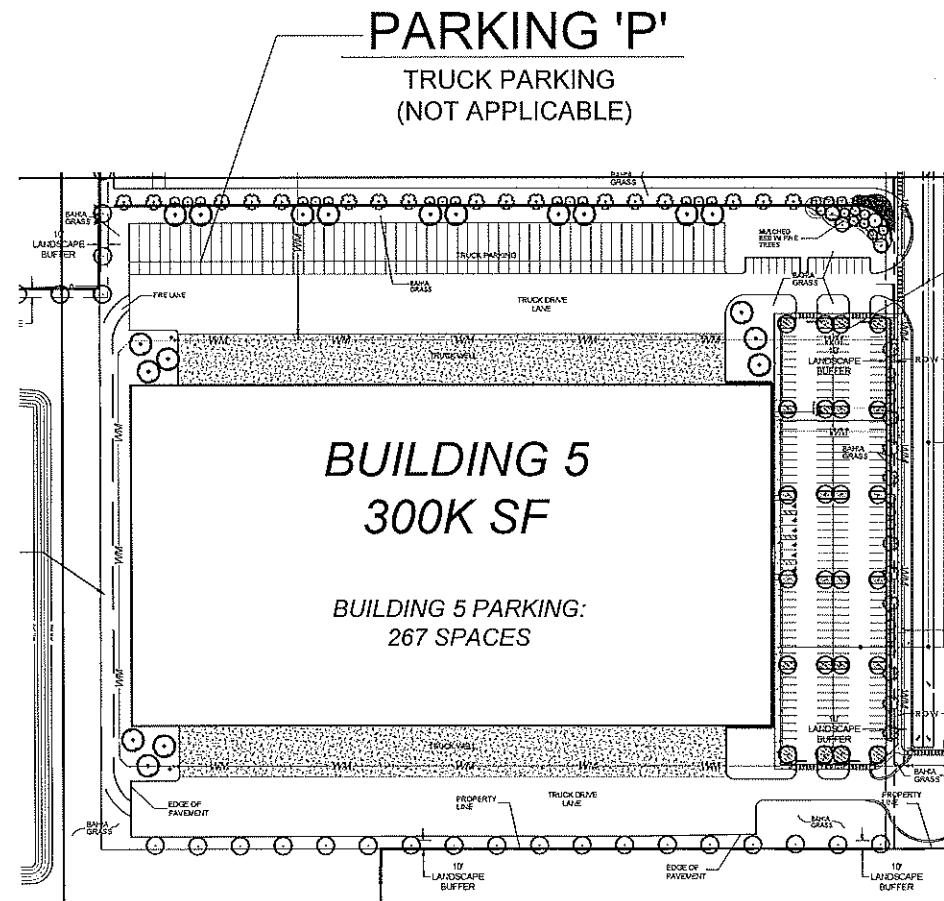
| | | | |
|--------------------------|---|--|------------|
| | | 270 VASSAR STREET ORLANDO, FL 32804-1407, 407-418-1338 <small>ORLANDO, FL 32804-1407, 407-418-1338 100% PROFESSIONAL LIABILITY INSURANCE 100% PROFESSIONAL LIABILITY INSURANCE</small> | |
| SIGNATURE AND DATED SEAL | | | |
| SEAL VERIFICATION | | LANDSCAPE PLAN | |
| DRAWING TITLE | PROJECT ADDRESS | DATE | REV. |
| | CITY OF APOPKA, FLORIDA OWNER NAME AND ADDRESS | | |
| PROJECT NO. | SCALE | DRAWN BY | CHECKED BY |
| 14-002 | 1"=100'-0" | JTD | 08/23/18 |
| DATE | | DATE | |
| L-104 | | | |

NOTE:
 ALL TREE AND SHRUB ROOTBALLS
 SHALL BE PLACED WITH A MINIMUM OF
 5' HORIZONTAL SEPARATION FROM ALL
 CITY MAINTAINED UTILITY LINES.

FINAL LANDSCAPE AND IRRIGATION PLANS
 TO BE DESIGNED IN ACCORDANCE WITH
 CITY OF APOPKA ORDINANCE NUMBER 2069
 OR CURRENT CODE IN EFFECT AT TIME OF
 CONSTRUCTION PLAN SUBMITTAL.

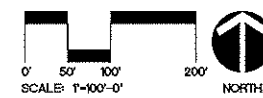
PLANT LEGEND

| LARGE SHADE TREE | MEDIUM SHADE TREE | PALM TREE | |
|---|---|---|--|
| LIVE OAK - QUERCUS VIRGINIANA 3" DBH / 5' SPAD / 14' HT. | SOUTHERN MAGNOLIA - MAGNOLIA GRANDIFLORA 3" DBH / 5' SPAD / 12' HT. | SABAL PALM - SABAL PALMETTO 10, 14, 16 CT. / 5' SPAD / 12' HT. | |
| HOOPAIVE LIVE OAK - QUERCUS VIRGINIANA 3" DBH / 5' SPAD / 14' HT. | SLASH PINE - PINUS ELLIOTTII 2.5" DBH / 4.5' SPAD / 10' HT. 1.5" DBH / 3' SPAD / 7.5' HT. | <th>SHRUBS / GROUNDCOVER</th> | SHRUBS / GROUNDCOVER |
| ALLEE ELM - ULMUS AMERICANA 3" DBH / 5' SPAD / 14' HT. | BALD CYPRESS - TAXODIUM DISTICHUM 2.5" DBH / 4.5' SPAD / 10' HT. 1.5" DBH / 3' SPAD / 7.5' HT. | WALTER'S VIBURNUM, SWEET VIBURNUM, FLORADO, HONEY GRASS, CORD GRASS, BUREDS HOLEY, FLORAPLE GUAVA, FLOQUENHOL, SHAWSONS STOPPEN, VALE COFFEE, FIREBUSH, FLORIDA ANISE, CRISTINA LILY, CAROBOARD PALM, MIMOSA LEAF VIBURNUM. | |
| SWEETGUM - LIQUIDAMBAR STYRACIFLUA 3" DBH / 5' SPAD / 14' HT. | <th>UNDERSTORY TREE</th> <td> LIRIOPE, ASIAN JASMINE, BIDARI MAWTHORN, COONTIE, RUBBER, NERAMEDICAL PEANUT, ZERDOR, BONWOOD, FLAX LILY, AFRICAN TREE, SHELING'S HOLLY. </td> | UNDERSTORY TREE | LIRIOPE, ASIAN JASMINE, BIDARI MAWTHORN, COONTIE, RUBBER, NERAMEDICAL PEANUT, ZERDOR, BONWOOD, FLAX LILY, AFRICAN TREE, SHELING'S HOLLY. |
| RED MAPLE - ACER RUBRUM 3" DBH / 5' SPAD / 14' HT. | LIGULASTRUM TREE - LIGULASTRUM JAPONICUM 2" DBH / 5' SPAD / 8' HT. / MULTI-TRUNKED | | |
| SOUTHERN RED CEDAR - CUPRESSUS SEMPERVERENS 3" DBH / 5' SPAD / 14' HT. | CRAFT MYRTLE - LAGELSTRONIA INDICA 2" DBH / 5' SPAD / 10' HT. | | |



PARKING 'Q'

TOTAL 58,566 S.F.
 LS ISLANDS 5,876 S.F.
 % LS 10.03% (10% REQUIRED)
 % SHADE 57.6% (30% REQUIRED)



MID-FLORIDA LOGISTICS PARK

BCRELLI + PARTNERS
 Landscape Architecture
 1000 W. WINDY HILL BLVD.
 ORLANDO, FL 32817
 (407) 226-1138
 www.bcrelli.com

Signature and Dated Seal
 Seal Verification
 Drawing Title

LANDSCAPE PLAN

PROJECT ADDRESS: CITY OF APOPKA, FLORIDA
 OWNER NAME AND ADDRESS:

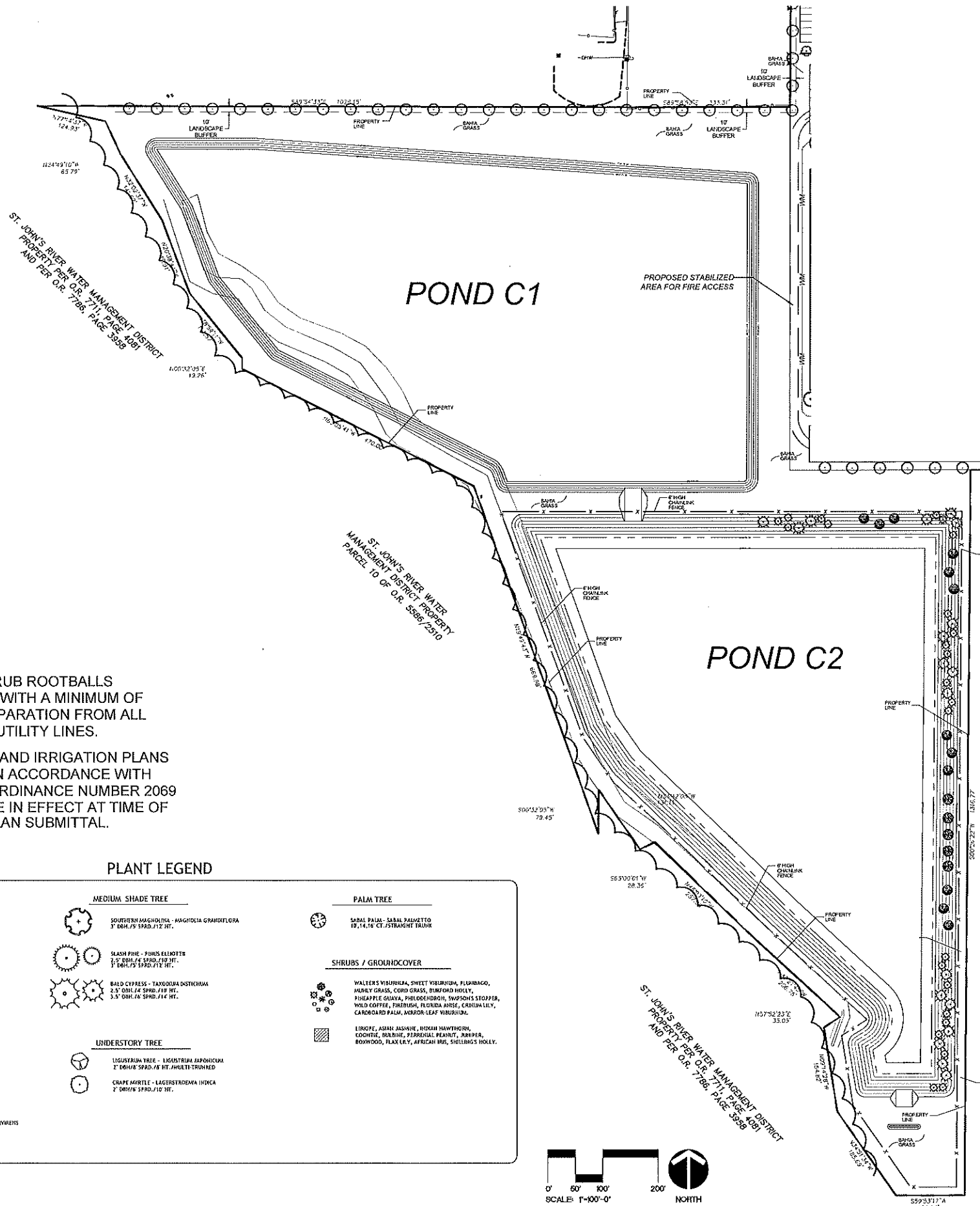
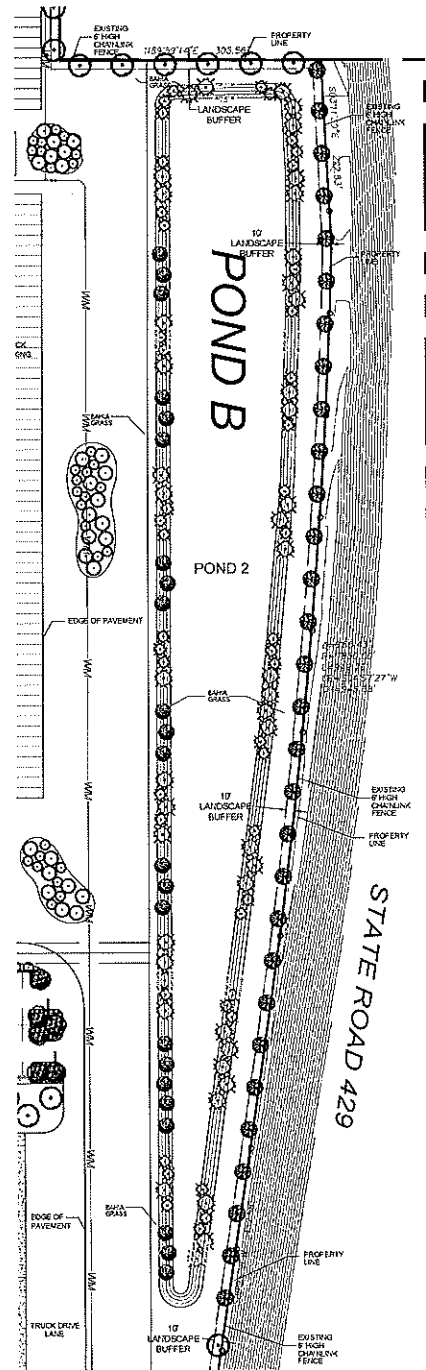
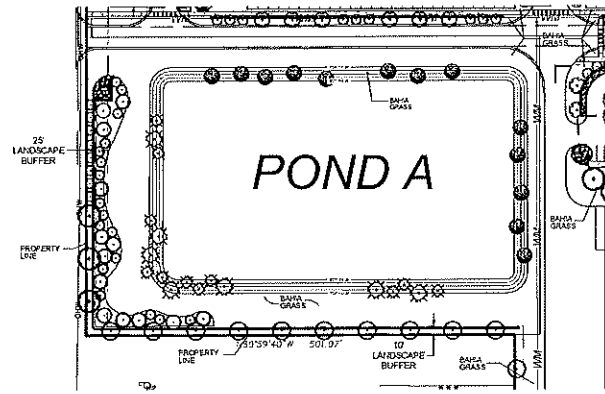
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L-105



NOTE:
 ALL TREE AND SHRUB ROOTBALLS SHALL BE PLACED WITH A MINIMUM OF 5' HORIZONTAL SEPARATION FROM ALL CITY MAINTAINED UTILITY LINES.

FINAL LANDSCAPE AND IRRIGATION PLANS TO BE DESIGNED IN ACCORDANCE WITH CITY OF APOPKA ORDINANCE NUMBER 2069 OR CURRENT CODE IN EFFECT AT TIME OF CONSTRUCTION PLAN SUBMITTAL.

PLANT LEGEND

| LARGE SHADE TREE | MEDIUM SHADE TREE | PALM TREE |
|---|---|---|
| <ul style="list-style-type: none"> LIVE OAK - QUERCUS VIRGINIANA 3" DBH./6' SPRD./14' HT. HIGHBRUSH LIVE OAK - QUERCUS VIRGINIANA 3" DBH./6' SPRD./14' HT. ALLEE ELM - ULMUS AMERICANA 3" DBH./6' SPRD./14' HT. SWEETGUM - LIQUIDAMBAR STYRACIUM 3" DBH./6' SPRD./14' HT. RED MAPLE - ACER RUBRUM 3" DBH./6' SPRD./12' HT. SOUTHERN RED CEDAR - CUPRESSUS SEMPERVERENS 3" DBH./5' SPRD./12' HT. | <ul style="list-style-type: none"> SOUTHERN MAGNOLIA - MAGNOLIA GRANDIFLORA 3" DBH./5' SPRD./12' HT. SLASH PINE - PINUS ELLIOTTI 3" DBH./6' SPRD./12' HT. RAID CYPRESS - TAXODIUM DISTICHUM 3" DBH./6' SPRD./12' HT. UNDERSTORY TREE LIGUSTRUM TREE - LIGUSTRUM JAPONICUM 3" DBH./6' SPRD./8' HT. MULTI-TRUNKED CRAPE MYRTLE - LAGERSTROEMIA INDICA 2" DBH/5' SPRD./10' HT. | <ul style="list-style-type: none"> SARAL PALM - SARAL PALMETTO 10, 14, 16 CT. /STRAIGHT TRUNK |
| | | SHRUBS / GROUND COVER |
| | | <ul style="list-style-type: none"> WALTER'S WISSENERIA, SWEET WISSENERIA, FLAMBAGO, HONEY GRASS, COHO GRASS, BURNING HOLLY, PINEAPPLE GUAVA, PHELODENDRON, SWAMPSON STOPPER, WILD COFFEE, FIREBUSH, FLORIDA ARISE, CRISTINA LILY, CAROLINA PALM, ARIZON-LEAF WISSENERIA. ERUPE, ASIAN JASMINE, INDIAN HAWTHORN, COONTIE, BURNING, PERSIANAL BEAN, BANANA, BOWWOOD, FLAX LEVY, AFRICAN BRU, SHELLEN'S HOLLY. |



MID-FLORIDA LOGISTICS PARK

BORRELLI + PARTNERS
 Landscape Architecture
 11000 W. BOULEVARD
 SUITE 100
 ORLANDO, FL 32838 (407) 418-1138

SEAL VERIFICATION

DRAWING TITLE: RETENTION POND LANDSCAPE PLAN

PROJECT ADDRESS: CITY OF APOPKA, FLORIDA

OWNER NAME AND ADDRESS: CITY OF APOPKA, FLORIDA

| REV. | DESCRIPTION | DATE | PROJECT ADDRESS |
|------|-------------|------|-----------------|
| | | | |

| PROJECT NO. | THATCH | DATE | PROJECT ADDRESS |
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| PRELIMINARY | SCALE | FILE NAME | DRAWN BY | CHECKED BY | DATE |
|-------------|-------|-----------|----------|------------|------|
| | | | | | |

L-106

August 23, 2018

David B. Moon, AICP
Planning Manager
Community Development Department, Planning and Zoning Division
City of Apopka
120 E. Main Street
Apopka, Florida 32703

Sent via email to: dmoon@apopka.net

Dear Mr. Moon:

This letter is regarding the current development plans submitted by Mid-Florida Freezer Warehouse Ltd. to the City of Apopka. First, we would like to express our appreciation to Mid-Florida Freezer, as well as the City, for hearing our concerns related to the original project plans which included a request to vacate Peterson Road.

With the increase in development in the area, we believe that traffic will increase, thus requiring road expansions and/or additional access points. The unpaved portions of Peterson Road can provide future access points to neighboring developments and property. Additionally, the expansion of Peterson Road could also impact long-term property values in the area and future uses of nearby undeveloped property.

As owners and developers of neighboring property, we strongly believe that Peterson Road could become a vital transportation artery for the area, especially as development continues to increase. Going forward, we ask that Peterson Road remain in the forefront as the City considers plans for future development in the area.

We all are proud to have a presence in Apopka and to play a role in its bright future. We appreciate your consideration of our request and look forward to hearing from you.

Sincerely,



Eric T. Bennett
General Manager, Flavor Manufacturing Apopka
The Coca-Cola Company


ROBERT NAMOFF - PRES

Print Name & Title
Developers Unlimited



Print Name & Title
Apopka Clear Lake Investments LLC, F. Bombeeck, Managing Member

DOC# 20160275220
05/27/2016 10:29:28 AM Page 1 of 12
Rec Fee: \$103.50
Deed Doc Tax: \$0.00
DOR Admin Fee: \$0.00
Intangible Tax: \$0.00
Mortgage Stamp: \$0.00
Martha O. Haynie, Comptroller
Orange County, FL
PU - Ret To: DEAN MEAD EGERTON BLOODW



**DEVELOPER'S AGREEMENT
FOR DEVELOPMENT OF COPART, INC. APOPKA PROPERTY**

THIS AGREEMENT, made effective as of the date specified in paragraph 3 below, by and among the CITY OF APOPKA, a municipal corporation existing and organized under the laws of the State of Florida, hereinafter sometimes referred to as "CITY," and COPART OF CONNECTICUT, INC., a Connecticut corporation, hereinafter sometimes referred to as "COPART." WITNESSETH THAT:

WHEREAS, COPART warrants that it holds legal title to certain land situated in the City of Apopka, Orange County, Florida, as described in Exhibit "A" hereto (the "Property"); and

WHEREAS, the subject Property is substantially undeveloped at the present time and will require site plan approval and the installation of certain capital improvements as it is developed, which improvements, hereinafter the "Improvements," are more specifically described herein; and

WHEREAS, it is the purpose of this Agreement to set forth clearly the understanding and agreement of the parties with respect to the contemplated Improvements.

NOW, THEREFORE, THIS AGREEMENT WITNESSETH:

1. COPART agrees that it and its successors and assigns will abide by the provisions of this Agreement and will install the following Improvements:

- a. COPART will, at its sole expense, install and maintain an eight foot (8') high masonry wall along the north, south and west sides of the Property, as well as the northerly +/- 475 LF of the east side of the Property (adjoining to the masonry wall at the northeast corner of the Property), except as set forth

below. COPART will, at its sole expense install an eight foot (8') metal wall along the east side of the Property where the masonry wall stops to the Property's southerly property boundary. Architectural renderings showing the design and placement of the masonry and metal walls on the Property are attached hereto as Exhibit "B" and Exhibit "C-1 & C-2," respectively."

- b. COPART will, at its sole expense, install and maintain a landscape buffer on all four sides of the property, as set forth and attached hereto as Exhibits C-1 & C-2. Said buffer is to be maintained by COPART and will be subject to code enforcement action and plant replacement at COPART's expense should COPART breach this maintenance obligation.
- c. Use of the Property is limited to COPART's current proposed use, as well as any other use that is or may be permitted under the Property's current and/or future zoning designation. Any expansion of COPART's operations not currently approved under this Agreement or currently permissible under the current or future zoning designation will require the approval of the CITY Council.
- d. The Property will be subject to code enforcement inspections by the City as set forth in Chapter 54, Article II, of the City Code, to insure the Property is only used as approved.
- e. No more than twenty percent (20%) of the overall Property may be used to store vehicles that exceed a height of fourteen feet (14') and those exceeding fourteen feet (14') in height must be stored more than eight hundred feet (800') from the front property line along West Orange Blossom Trail as shown on Exhibit "E".
- f. COPART'S ordinary and regular operations, as detailed on Exhibit "D" attached hereto, shall not be deemed "on-site sales" and/or "live auctions", and shall

be deemed compliant with this Agreement and the Property zoning designation.

- g. All 'for-sale' vehicles, product, or equipment must be stored within the designated vehicle storage areas indicated on Exhibit "E" attached hereto and shall not be stored at any time within paved business parking areas, within landscape buffers or parked within travel aisles of the designated storage areas as indicated on Exhibit "E". Vehicle storage space and driving aisles shall be constructed of asphalt tailings and gravel as shown on Exhibit "E".
- h. All tow trucks or company trucks parked overnight at the Property shall be parked within the designated vehicle storage areas indicated on Exhibit "E".
- i. No vehicle, equipment or product dismantling, crushing or sale of parts shall occur on or within the Property.
- j. Construction or utility vehicles, product, or equipment with aerial buckets or cranes shall be stored with the crane arm or boom in the down position to the greatest extent possible to a height of less than fourteen feet (14').
- k. No sign appearing on any vehicle or equipment placed in the designated vehicle storage areas indicated on Exhibit "E" shall be visible outside the Property boundaries
- l. Vehicles, product, and equipment stored within the designated storage areas indicated on the Preliminary Development Plan shall never be stacked upon one another.
- m. No more than twenty percent (20%) of the vehicles, products or equipment shall be stored on the Property for more than one hundred eighty (180) consecutive days.
- n. COPART will possess and keep current any and all licenses required to operate its business on the Property which may include:
 - 1. Florida VA – Motor Vehicle Auction;

2. Florida VI – Motor Vehicle Dealer;
 3. Florida RV – Used Recreational Vehicle Dealer;
 4. Florida VW – Wholesale Dealer.
- o. The CITY acknowledges that the Property is approved for the business operations as permitted under each of the licenses listed in Paragraph 1.n above with the limitation that the operation falls within the confines of the outlined in the Copart Operations as described in Exhibit “D” .
 - p. Any violation of this Agreement by COPART may result in code enforcement and all remedies and penalties available through that process, as well as all remedies available to the CITY through Article 12.07.00 of the CITY Code and all other legal means.

2. This Agreement shall be binding upon and shall inure to the benefit of the subject Property and be binding upon any person, firm, or corporation who may become the successor in interest, directly or indirectly, to the subject Property. COPART shall pay all costs of recording this Agreement. No site improvements shall occur until this Agreement is recorded. This Agreement is intended to be and become effective as of the date it is executed by the last to sign of the CITY or COPART.

[Signature Pages Follow]

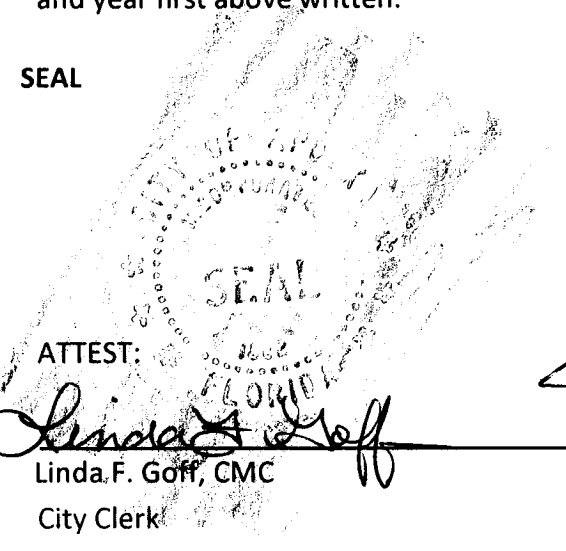

IN WITNESS WHEREOF, the parties hereto have entered into this Agreement as of the day and year first above written.

SEAL

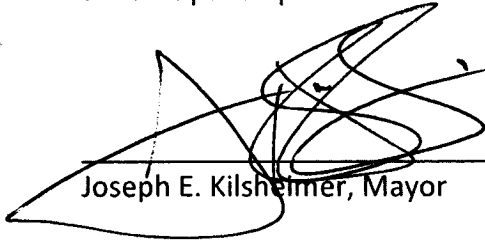
CITY OF APOPKA

The CITY OF APOPKA, FLORIDA
a municipal corporation of the State of Florida

ATTEST:

Linda F. Goff, CMC
City Clerk



Joseph E. Kilshelmer, Mayor

May 18, 2016

COPART

WITNESS:

COPART OF CONNECTICUT, INC.,
a Connecticut Corporation

Paul Wright
Name: Paul Wright

By: *Paul A. Styer*
Name: Paul A. Styer
Title: Secretary

Saori Higa
Name: Saori Higa

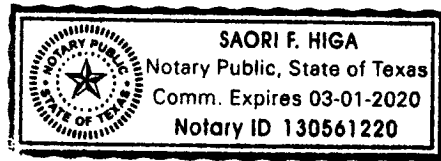
Date: May 25, 2016

STATE OF Texas

COUNTY OF Dallas

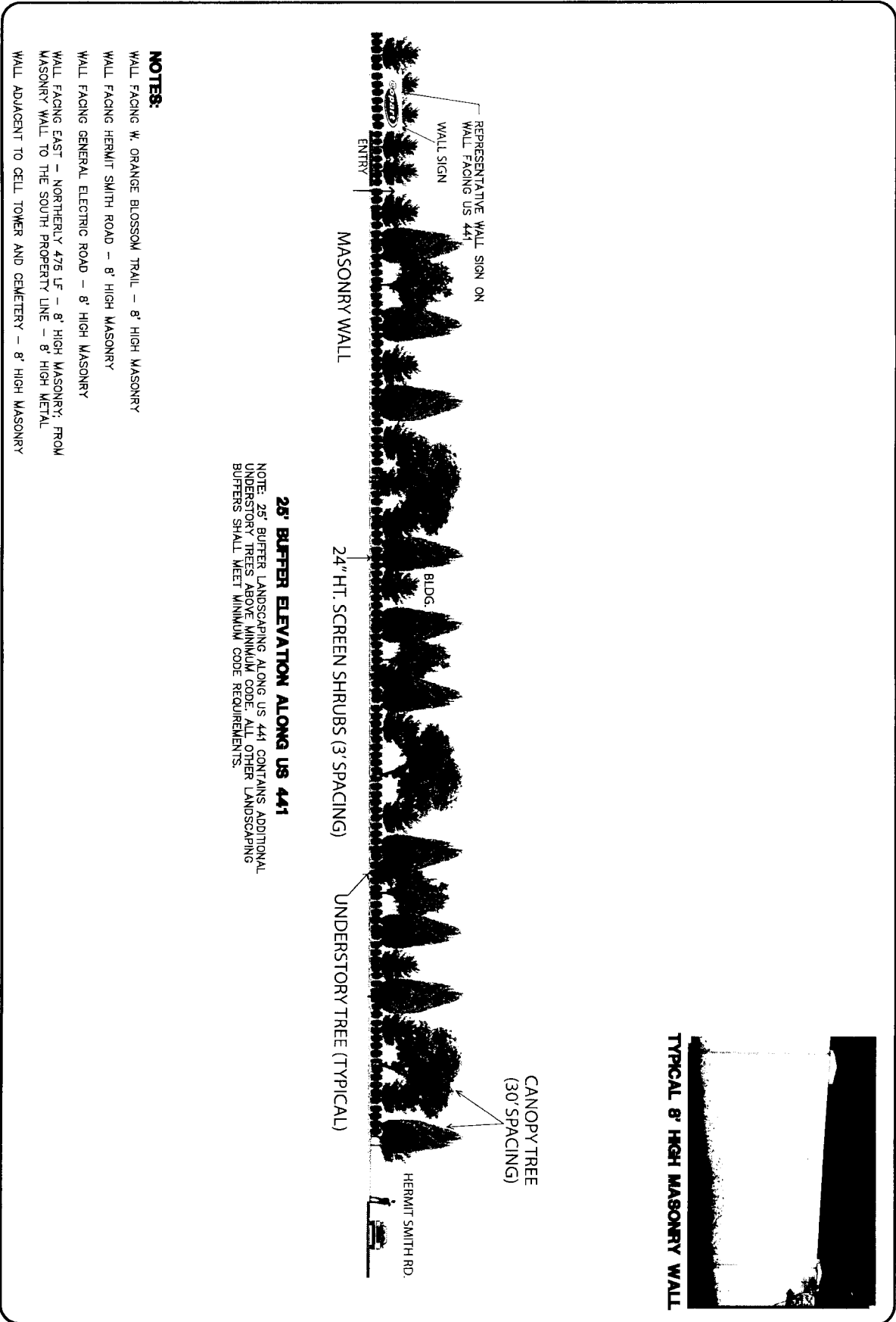
The foregoing instrument was acknowledged before me this 25th day of May, 2016, by Paul A. Styer, as Secretary of COPART OF CONNECTICUT, INC., a Connecticut corporation, on behalf of said corporation. Said person did not take an oath and is personally known to me, produced a driver's license (issued by a state of the United States within the last five (5) years) as identification, or produced other identification, to wit:

Saori Higa
Print Name: Saori F. Higa
Notary Public - State of Texas
Commission No.: 130561220
My Commission Expires: 3/1/2020



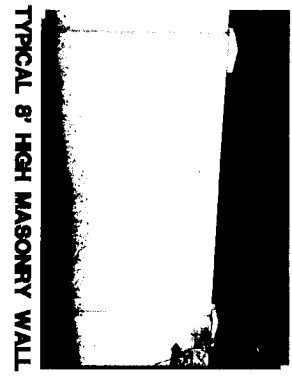
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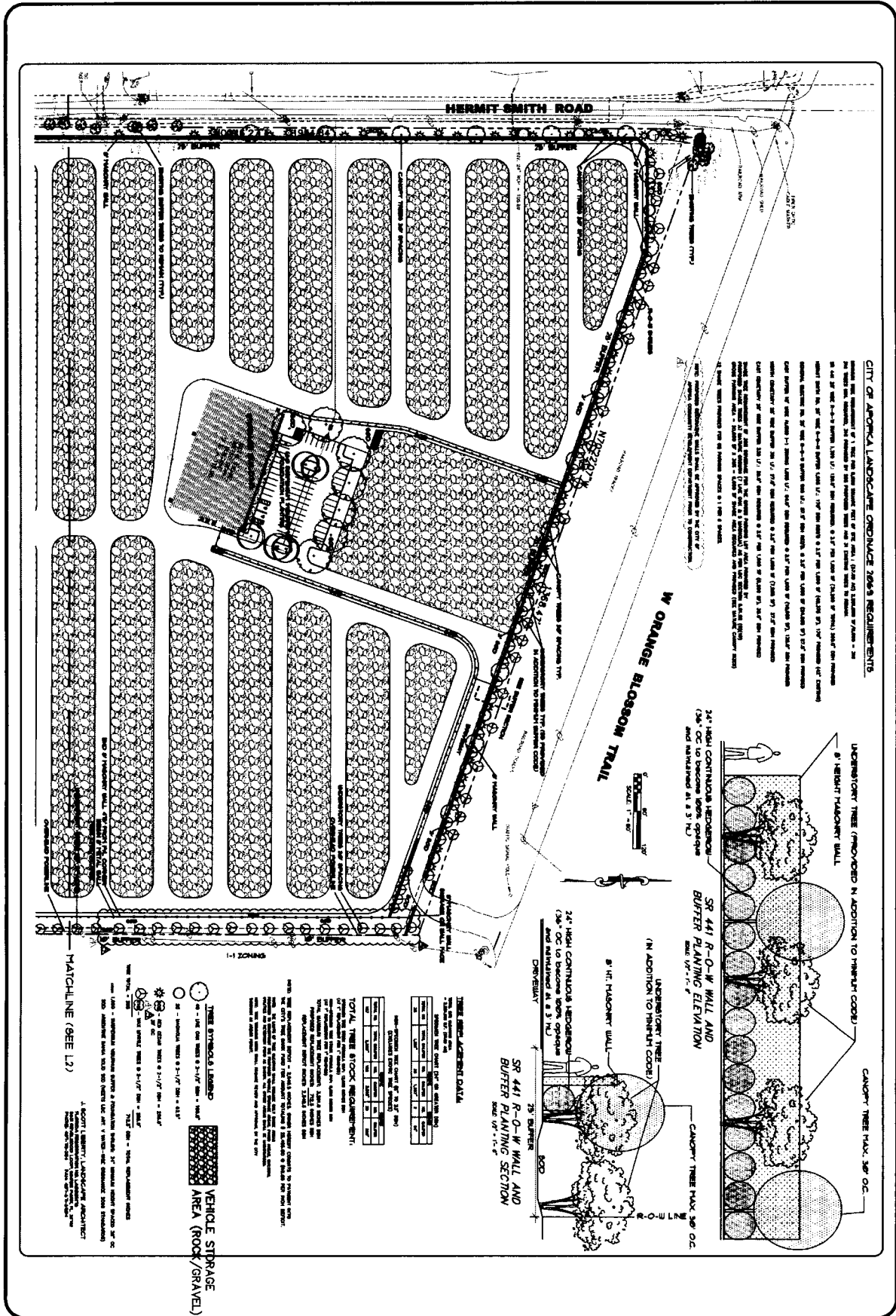
THE SW ¼ OF THE NE ¼, LESS THE SW ¼ OF THE SW ¼ OF THE NE ¼,
AND THAT PART OF THE NW ¼ OF THE NE ¼, LYING SOUTH OF RAILROAD RIGHT
OF WAY ALL IN SECTION 1, TOWNSHIP 21 SOUTH, RANGE 27 EAST, ORANGE
COUNTY, FLORIDA.



NOTES:
 WALL FACING W. ORANGE BLOSSOM TRAIL - 8' HIGH MASONRY
 WALL FACING HERMIT SMITH ROAD - 8' HIGH MASONRY
 WALL FACING GENERAL ELECTRIC ROAD - 8' HIGH MASONRY
 WALL FACING EAST - NORTHERLY 475 LF - 8' HIGH MASONRY; FROM MASONRY WALL TO THE SOUTH PROPERTY LINE - 8' HIGH METAL
 WALL ADJACENT TO CELL TOWER AND CEMETERY - 8' HIGH MASONRY

25' BUFFER ELEVATION ALONG US 441
 NOTE: 25' BUFFER LANDSCAPING ALONG US 441 CONTAINS ADDITIONAL UNDERSTORY TREES ABOVE MINIMUM CODE. ALL OTHER LANDSCAPING BUFFERS SHALL MEET MINIMUM CODE REQUIREMENTS.





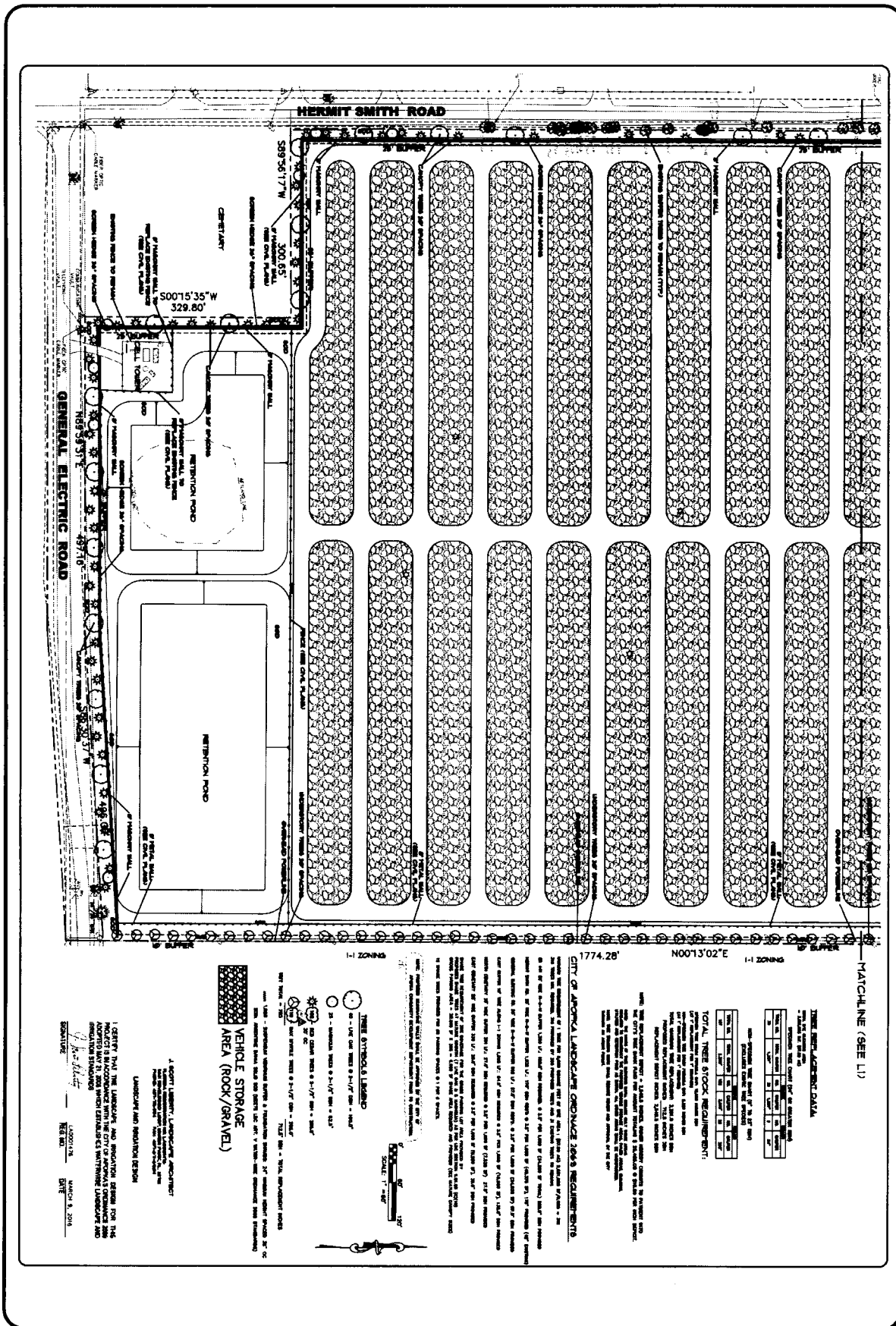


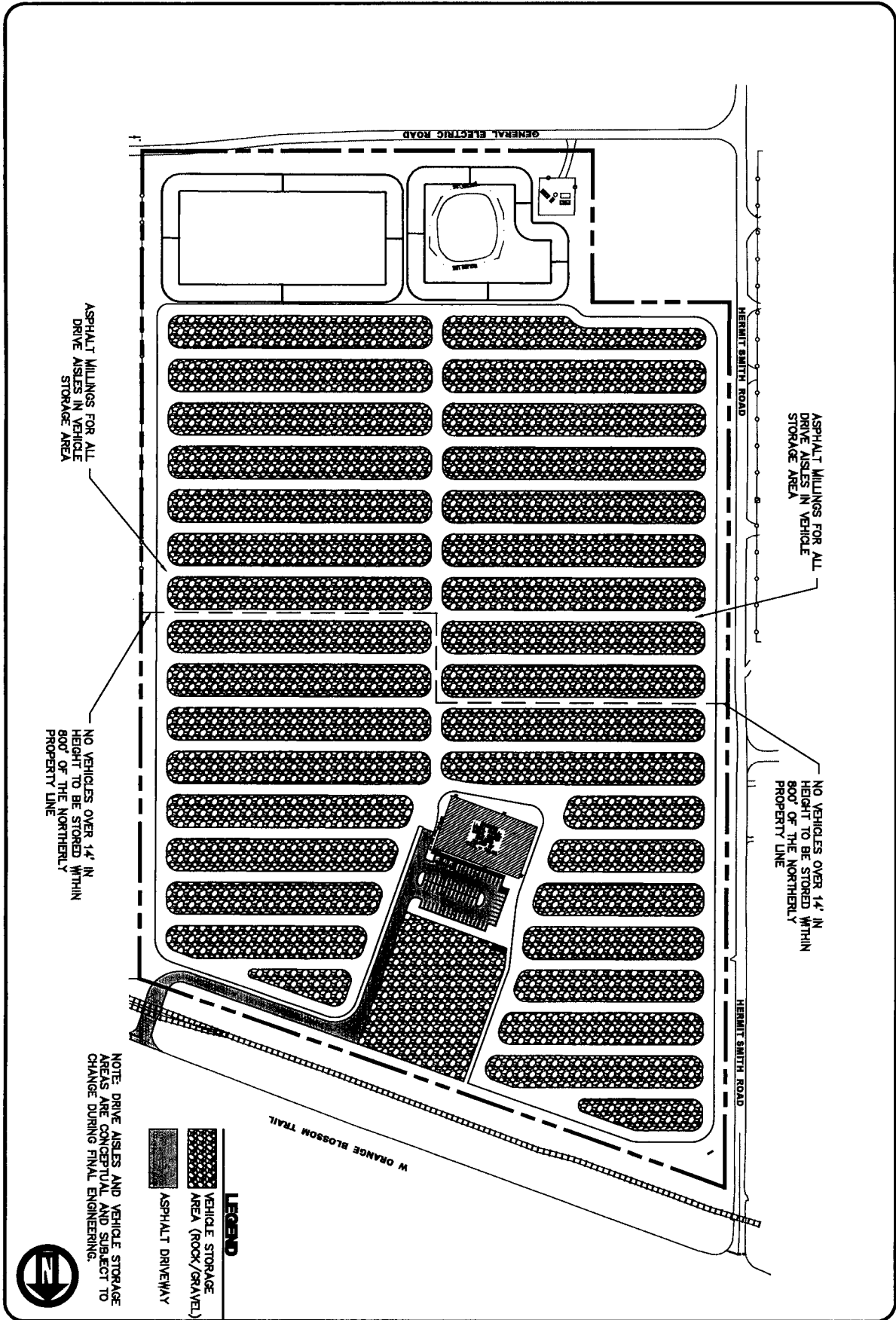
EXHIBIT "D"

COPART OPERATIONS

Storage and online auction and sale of used and damaged (a) vehicles, (b) trailers, (c) watercraft, and (d) powersports, industrial and construction equipment (collectively, "**Inventory**"), and ancillary receiving, shipping, lien auction and administrative activities related thereto.

After being received at the Copart facility ("**Facility**"), Inventory is listed for sale on Copart's proprietary online auction-style website and mobile apps for purchase only by Copart registered members ("**Members**"). All bids are submitted and accepted electronically, without the use of a live auctioneer. Members are provided the opportunity to inspect Inventory at the Facility, although most inspections are limited to viewing Inventory images and information made available online. Members may electronically submit preliminary bids from (i) anywhere in the world via a personal computer or mobile device with internet access (each, a "**Remote Online Device**"), or (ii) a limited number of computer kiosks located at the Facility. The high preliminary bid is carried over to the online virtual sale, during which Members may submit bids electronically only from a Remote Online Device.

All Inventory is sold to the Member with the highest bid ("**New Owner**"), who then arranges for pickup and transportation of their Inventory from the Facility. Payment for sold Inventory may be made electronically, via wire-transfer, or in person at the Facility or any other Copart facility located in the United States. Titles to sold Inventory are either picked up by the New Owner along with the sold Inventory, or mailed by Copart to the New Owner.



MID-FLORIDA LOGISTICS PARK

Project № 18008, v2.0
August 2018

**TRAFFIC IMPACT ANALYSIS
CITY OF AOPKA
FLORIDA**

Prepared by:



Traffic & Mobility Consultants

3101 Maguire Boulevard, Suite 265
Orlando, Florida 32803
www.trafficmobility.com
(407) 531-5332

Prepared for:

BlueScope Properties Group
1540 Genessee Street
Kansas City, Missouri 64102

ARCO National Construction-KC
5015 NW Canal Street, Suite 110
Riverside, Missouri 64150

Dave Schmitt Engineering, Inc
12301 Lake Underhill Road, Suite 241
Orlando, Florida 32828

EXECUTIVE SUMMARY

Project Information

Name: Mid-Florida Logistics Park
Location: South of General Electric Road, east of Hermit Smith Road and west of SR 429, in the City of Apopka, Florida.
Description: 2,459,755 square feet of warehousing

Findings

Trip Generation: 3,444 ADT / 246 PM Peak Hour Trips
Approximately 20% of trips projected to be trucks.

Roadway Capacity: All study segments currently operate within their adopted capacity and are projected to continue to do so at project buildout.

Intersection Capacity: All study intersections operate at adequate LOS and are projected to continue to do so at project buildout. Except for US 441 & Hermit Smith Road.

Mitigation: The deficient intersection of US 441 and Hermit Smith Road will require a dedicated northbound right turn lane to more efficiently serve the projected traffic volume.
A modified timing plan may be implemented in the future as vested and project traffic materialize on the minor approaches to the intersection.

PROFESSIONAL ENGINEERING CERTIFICATION

I hereby certify that I am a Professional Engineer properly registered in the State of Florida practicing with Traffic & Mobility Consultants LLC, a corporation authorized to operate as an engineering business, CA-30024, by the State of Florida Department of Professional Regulation, Board of Professional Engineers, and that I have prepared or approved the evaluations, findings, opinions, conclusions, or technical advice attached hereto for:

PROJECT: Mid-Florida Logistics Park

LOCATION: City of Apopka, Florida

CLIENT: Dave Schmitt Engineering, Inc

I hereby acknowledge that the procedures and references used to develop the results contained in these computations are standard to the professional practice of Transportation Engineering as applied through professional judgment and experience.

NAME: Mohammed N. Abdallah

P.E. No.: Florida P.E. No. 56169

DATE: August 30, 2018

SIGNATURE: _____

TABLE OF CONTENTS

| | Page |
|--|-----------|
| 1.0 INTRODUCTION..... | 1 |
| 2.0 EXISTING CONDITIONS ANALYSIS..... | 3 |
| 2.1 Roadway Segment Capacity | 3 |
| 2.2 Intersection Capacity | 4 |
| 3.0 PROJECT TRAFFIC..... | 6 |
| 3.1 Trip Generation..... | 6 |
| 3.2 Truck Traffic..... | 6 |
| 3.3 Trip Distribution/Assignment..... | 6 |
| 4.0 PROJECTED CONDITIONS ANALYSIS | 8 |
| 4.1 Background Traffic Volumes | 8 |
| 4.2 Roadway Segment Capacity | 8 |
| 4.3 Intersection Capacity | 9 |
| 4.4 Intersection Mitigation..... | 11 |
| 5.0 STUDY CONCLUSIONS | 12 |
| APPENDICES..... | 13 |
| Appendix A Response to City of Apopka Comments | |
| Appendix B Preliminary Site Plan | |
| Appendix C Mid-Florida Logistics Park Methodology | |
| Appendix D City of Apopka CMS Data | |
| Appendix E Traffic Counts & FDOT Seasonal Factor Report | |
| Appendix F Existing Conditions Analysis Worksheets | |
| Appendix G Trip Generation Sheets | |
| Appendix H OUATS Model | |
| Appendix I Background & Projected Conditions Analysis Worksheets | |
| Appendix J Improved Intersection Analysis Worksheets | |

LIST OF TABLES

| | |
|--|-------------------------------------|
| Table 1 Existing Roadway Capacity Analysis | 3 |
| Table 2 Existing Intersection Capacity Analysis | 4 |
| Table 3 Trip Generation Analysis..... | 6 |
| Table 4 Projected Roadway Capacity Analysis | 8 |
| Table 5 Background and Projected Intersection Capacity Analysis..... | 9 |
| Table 6 Review of Right Turn Warrant..... | Error! Bookmark not defined. |

LIST OF FIGURES

| | |
|---|----|
| Figure 1 Site Location Map | 2 |
| Figure 2 Existing Intersection Volumes..... | 5 |
| Figure 3 Project Trip Distribution | 7 |
| Figure 4 Projected Intersection Volumes | 10 |

1.0 INTRODUCTION

This traffic analysis was performed to assess the impact of the proposed Mid-Florida Logistics Park development located south of General Electric Road, east of Hermit Smith Road and west of SR 429, in the City of Apopka. **Figure 1** depicts the location of the project site and the surrounding roadway network.

The analysis was updated to address comments received by the City, included in **Appendix A** and to reflect the revised development plan, which includes a total of 2,459,755 square feet of warehousing at full buildout in the year 2022. A preliminary site plan is provided in **Appendix B**.

The following analysis was conducted in accordance with the approved methodology, included in **Appendix C**. The analysis considers the project's impacts on the following roadways and intersections, within the project's influence area:

Roadway Segments

US 441 (Orange Blossom Trail)

- Yothers Road to SR 429 Connector
- SR 429 Connector to Plymouth Sorrento Road
- Plymouth Sorrento Road to Boy Scout Boulevard
- Boy Scout Boulevard to Errol Parkway
- General Electric Road
- Hermit Smith Road to Orange Avenue

Binion Road/Orange Avenue (CR 437)

- Boy Scout Boulevard to Lakeview Drive
- Lakeview Drive to US 441

Hermit Smith Road

- General Electric Road to US 441

Hogshead Road

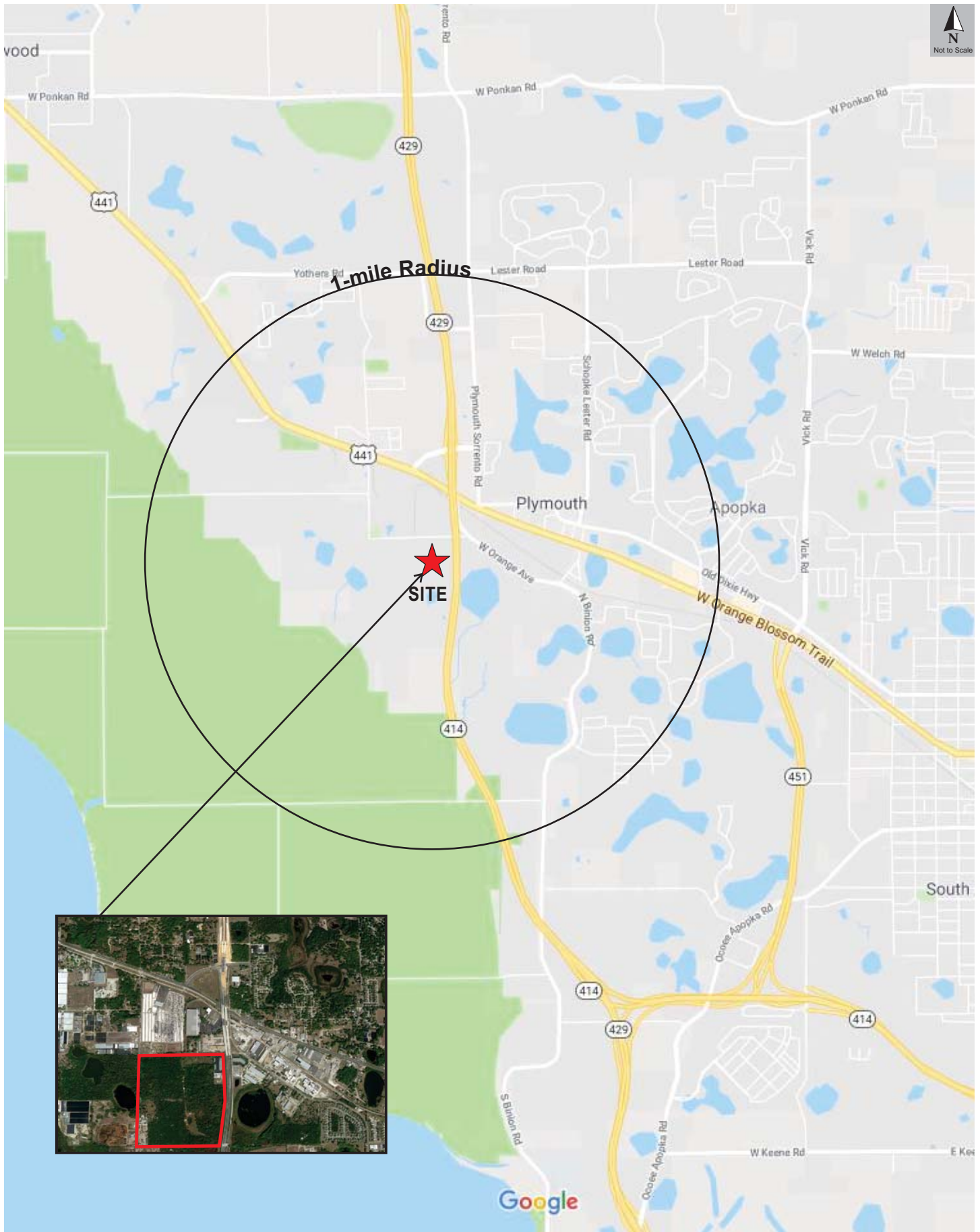
- Hermit Smith Road to Conrad Road

Study Intersections

The following intersection will be analyzed for PM peak hour capacity and operations:

- General Electric Road & Orange Avenue
- Hermit Smith Road & General Electric Road
- Hermit Smith Road & US 441
- SR 429 Connector Road & US 441
- Orange Avenue & US 441
- Plymouth Sorrento Road & US 441
- Boy Scout Boulevard & US 441
- General Electric Road & Access
- Hermit Smith Road & Access

Data used in the analysis consisted of site plan/development information provided by the Project Engineers, PM peak hour traffic counts obtained by Traffic & Mobility Consultants LLC (TMC), road segment data obtained from the City of Apopka, and seasonal data obtained from Florida Department of Transportations (FDOT).



2.0 EXISTING CONDITIONS ANALYSIS

2.1 Roadway Segment Capacity

Table 1 presents a summary of the existing conditions for the roadway segments examined in this study. Roadway segments were analyzed by comparing the existing Level of Service (LOS) for each roadway segment with the adopted LOS standard. Existing Daily and PM peak hour directional traffic volumes, capacities, and committed trips were obtained from the City of Apopka's *Encumbered Traffic Allocation Worksheets*, which are included in **Appendix D**.

**Table 1
Existing Roadway Capacity Analysis**

| Roadway Segment | No Lns | LOS Std | Daily | | | | | PM Peak Hour | | | | | |
|---|--------|---------|--------|--------|-------|--------|-----|--------------|--------|-------|------|-------|-----|
| | | | Cap | Volume | Comm | Total | LOS | Cap | Volume | PD | Comm | Total | LOS |
| US 441 (Orange Blossom Trail) | | | | | | | | | | | | | |
| Yothers Road to SR 429 Connector Road | 4 | D | 49,500 | 41,556 | 3,419 | 44,975 | A | 2,480 | 2,045 | SB/WB | 345 | 2,390 | B |
| SR 429 Connector Road to Plymouth Sorrento Road | 4 | D | 49,500 | 24,974 | 5,179 | 30,153 | A | 2,480 | 1,114 | NB/EB | 444 | 1,558 | A |
| Plymouth Sorrento Road to Boy Scout Boulevard | 4 | D | 49,500 | 28,506 | 1,956 | 30,462 | A | 2,480 | 1,310 | NB/EB | 260 | 1,570 | A |
| Boy Scout Boulevard to Errol Parkway | 4 | D | 55,400 | 29,279 | 659 | 29,938 | A | 2,600 | 1,179 | SB/WB | 58 | 1,237 | A |
| Binion | | | | | | | | | | | | | |
| Boy Scout Boulevard to Lakeview Drive | 2 | E | 17,700 | 4,774 | 1,669 | 6,443 | C | 880 | 278 | NB/EB | 141 | 419 | C |
| Lakeview Drive to US 441 | 2 | E | 17,700 | 4,009 | 1,210 | 5,219 | C | 880 | 244 | SB/WB | 139 | 383 | C |
| General Electric Road | | | | | | | | | | | | | |
| Hermit Smith Road to Orange Avenue | 2 | D | 13,300 | 532 | 713 | 1,245 | C | 680 | 38 | NB/EB | 101 | 139 | C |
| Hermit Smith Road | | | | | | | | | | | | | |
| General Electric Road to US 441 | 2 | E | 15,900 | 691 | 802 | 1,493 | C | 790 | 53 | NB/EB | 113 | 166 | C |
| Hogshead Road | | | | | | | | | | | | | |
| Hermit Smith Road to Conrad Road | 2 | E | 14,000 | 777 | 890 | 1,667 | C | 720 | 107 | NB/EB | 57 | 164 | C |

The existing conditions analysis reveals that the study roadway segments currently operate at satisfactory LOS.

2.2 Intersection Capacity

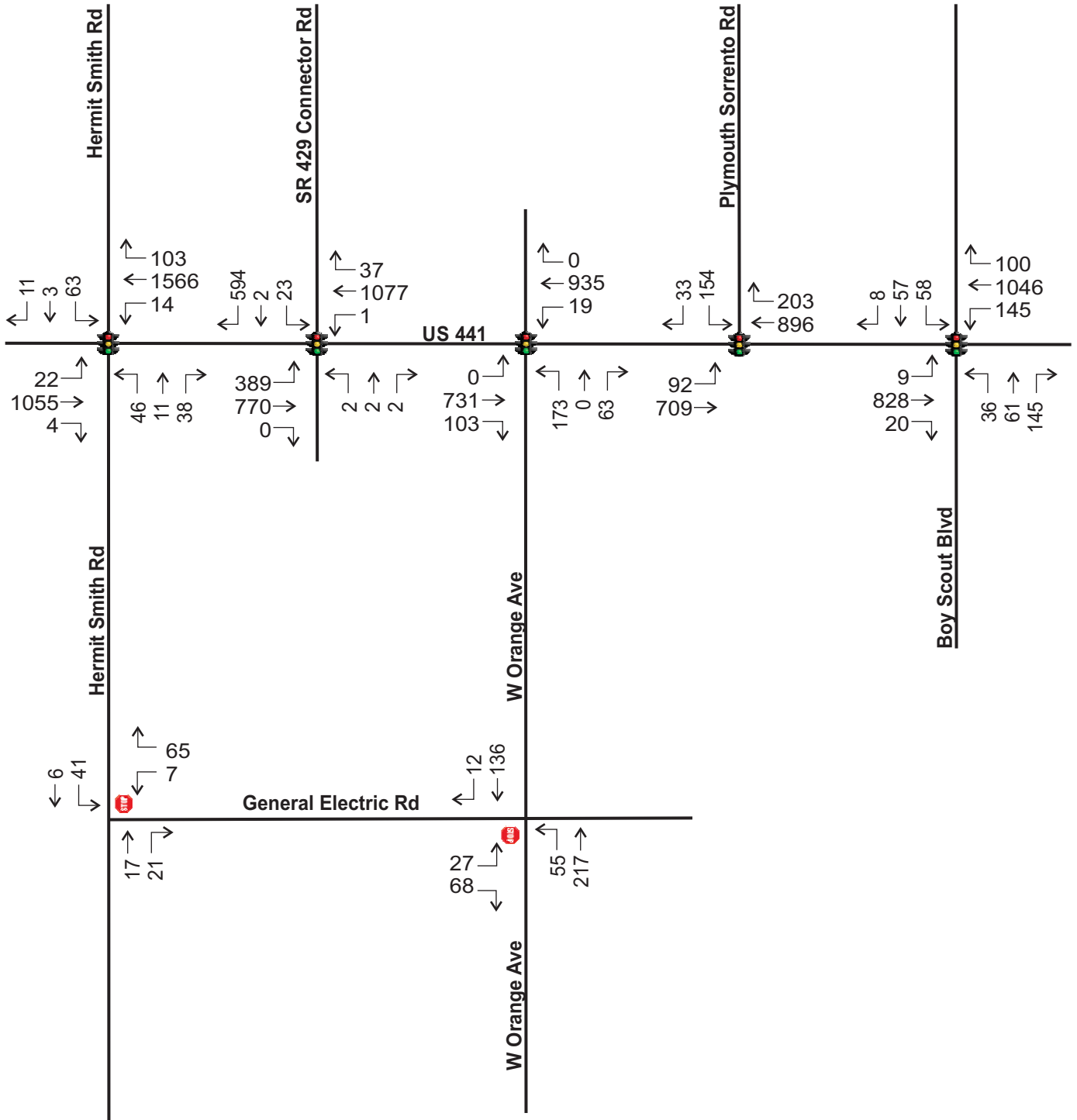
An intersection analysis was conducted using the Synchro Software and the methods of the *2010 Highway Capacity Manual (HCM)*. The capacity analysis was performed using the existing intersection geometries and traffic volumes during the PM peak hour. Based on the date of the data collection, a seasonal factor of 1.04 was applied to the traffic volumes to adjust for seasonal variation in traffic volumes. The field counts along with FDOT's 2017 Seasonal Factor report are included in **Appendix E**.

The existing intersection volumes are displayed in **Figure 2**. A summary of the intersection capacity analysis is shown in **Table 2**, which indicates that the study intersections currently operate at satisfactory LOS. Detailed analysis worksheets are included in **Appendix F**.

Table 2
Existing Intersection Capacity Analysis

| Intersection | Control | EB | | WB | | NB | | SB | | Overall | |
|---------------------------------------|---------|-------|-----|-------|-----|-------|-----|-------|-----|---------|-----|
| | | Delay | LOS | Delay | LOS | Delay | LOS | Delay | LOS | Delay | LOS |
| US 441 & Hermit Smith Rd | Signal | 6.9 | A | 1.8 | A | 72.5 | E | 72.2 | E | 7.8 | A |
| US 441 & SR 429 Connector Rd | Signal | 26.1 | C | 4.0 | A | 98.4 | F | 48.0 | D | 21.0 | C |
| US 441 & Orange Ave | Signal | 0.5 | A | 6.9 | A | 68.9 | E | -- | -- | 13.4 | B |
| US 441 & Plymouth Sorrento Rd | Signal | 4.0 | A | 9.4 | A | 92.3 | F | -- | -- | 14.8 | B |
| US 441 & Boy Scout Blvd | Signal | 14.1 | B | 9.7 | A | 72.6 | E | 63.4 | E | 19.9 | B |
| Hermit Smith Rd & General Electric Rd | TWSC | -- | -- | 9.2 | A | -- | -- | 7.6 | A | -- | -- |
| General Electric Rd & Orange Ave | TWSC | 11.2 | B | -- | -- | 7.9 | A | -- | -- | -- | -- |

Average delay is expressed seconds/vehicle



3.0 PROJECT TRAFFIC

3.1 Trip Generation

Information published by the Institute of Transportation Engineers (ITE) in the *Trip Generation Manual, 10th Edition* was used to determine the trip generation of the proposed development as summarized in **Table 3**. ITE Code 154 for High-Cube Transload and Short-Term Storage Warehouse trip generation rates which were used in trip generation calculations. Detailed trip generation sheets are included in **Appendix G**.

Table 3
Trip Generation Analysis

| ITE Code | Land Use | Size | Daily | | PM Peak Hour | | | |
|----------|-----------|-------------|-------|-------|--------------|-------|-------|------|
| | | | Rate | Trips | Rate | Total | Enter | Exit |
| 154 | Warehouse | 2,459.8 KSF | 1.40 | 3,444 | 0.10 | 246 | 69 | 177 |

Trip generation analysis based on ITE Trip Generation Manual, 10th Edition.

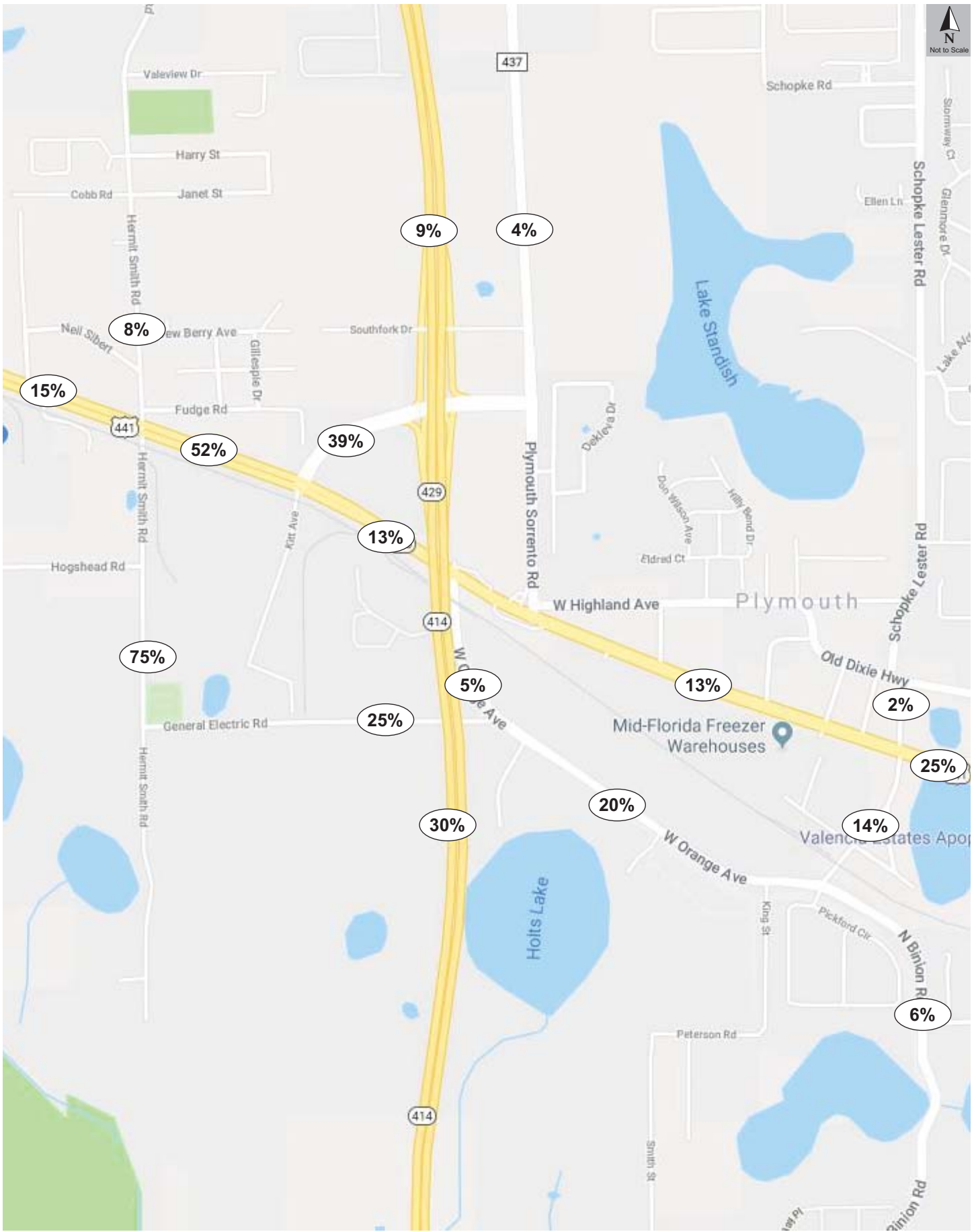
The proposed development generates a total of 3,444 trips per day, of which 246 trips will occur during the PM peak hour.

3.2 Truck Traffic

Based on information from the ITE Trip Generation Manual, approximately 20% of the trips generated by the warehouse development are anticipated to be truck trips. The remaining trips are generated by employees, deliveries, visitors and other business activity that supports the truck transport activities at the warehouse. For the proposed development, it is expected that most truck traffic will use the newly completed expressway to access the regional transportation network, as will be reflected in the project's trip distribution pattern.

3.3 Trip Distribution/Assignment

To assign the peak hour trips generated by the proposed development to the study roadways, a distribution pattern in the general vicinity of the project site was determined based on the OUATS model output, included in **Appendix H**, which was modified to reflect the local network and prevailing traffic patterns. The project's trip distribution pattern is provided in **Figure 3**.



4.0 PROJECTED CONDITIONS ANALYSIS

Projected traffic conditions were analyzed for Daily and PM peak hour traffic for the anticipated buildout year 2022.

4.1 Background Traffic Volumes

The analysis of the background traffic was performed to ascertain the future conditions prior to the development of Mid-Florida Logistics Park. Background traffic consists of existing traffic and committed trips from approved developments in the area, which were obtained from the *City's Encumbered Traffic Allocation Worksheets*. Background traffic volumes were calculated by adding the existing volumes to the committed trips (E+C) for each of the study segments.

4.2 Roadway Segment Capacity

The roadway segment analysis was performed by comparing the projected LOS of the roadway with the adopted LOS standard. This analysis is summarized in **Table 4** for full buildout of the development, which reveals that the segments will continue to operate at satisfactory LOS in the projected condition.

Table 4
Projected Roadway Capacity Analysis

| Roadway Segment | No Lns | LOS Std | Daily | | | | | | | PM Peak Hour | | | | | | |
|---|--------|---------|--------|--------|-------|------|---------|--------|-----|--------------|--------|-------|------|---------|-------|-----|
| | | | Cap | Volume | Comm | Dist | Project | Total | LOS | Cap | Volume | PD | Comm | Project | Total | LOS |
| US 441 (Orange Blossom Trail) | | | | | | | | | | | | | | | | |
| Yothers Road to SR 429 Connector Road | 4 | D | 49,500 | 41,556 | 3,419 | 53% | 1,825 | 44,975 | A | 2,480 | 2,045 | SB/WB | 345 | 94 | 2,390 | B |
| SR 429 Connector Road to Plymouth Sorrento Road | 4 | D | 49,500 | 24,974 | 5,179 | 11% | 379 | 30,153 | A | 2,480 | 1,114 | NB/EB | 444 | 19 | 1,558 | A |
| Plymouth Sorrento Road to Boy Scout Boulevard | 4 | D | 49,500 | 28,506 | 1,956 | 11% | 379 | 30,462 | A | 2,480 | 1,310 | NB/EB | 260 | 19 | 1,570 | A |
| Boy Scout Boulevard to Errol Parkway | 4 | D | 55,400 | 29,279 | 659 | 25% | 861 | 29,938 | A | 2,600 | 1,179 | SB/WB | 58 | 44 | 1,237 | A |
| Binion | | | | | | | | | | | | | | | | |
| Boy Scout Boulevard to Lakeview Drive | 2 | E | 17,700 | 4,774 | 1,669 | 6% | 207 | 6,443 | C | 880 | 278 | NB/EB | 141 | 11 | 419 | C |
| Lakeview Drive to US 441 | 2 | E | 17,700 | 4,009 | 1,210 | 20% | 689 | 5,219 | C | 880 | 244 | SB/WB | 139 | 35 | 383 | C |
| General Electric Road | | | | | | | | | | | | | | | | |
| Hermit Smith Road to Orange Avenue | 2 | D | 15,900 | 532 | 713 | 25% | 861 | 1,245 | C | 680 | 38 | NB/EB | 101 | 44 | 139 | C |
| Hermit Smith Road | | | | | | | | | | | | | | | | |
| General Electric Road to US 441 | 2 | E | 15,900 | 691 | 802 | 75% | 2,583 | 1,493 | C | 790 | 53 | NB/EB | 113 | 133 | 166 | C |
| Hogshead Road | | | | | | | | | | | | | | | | |
| Hermit Smith Road to Conrad Road | 2 | E | 14,000 | 777 | 890 | 0% | 0 | 1,667 | C | 720 | 58 | NB/EB | 126 | 0 | 184 | C |

4.3 Intersection Capacity

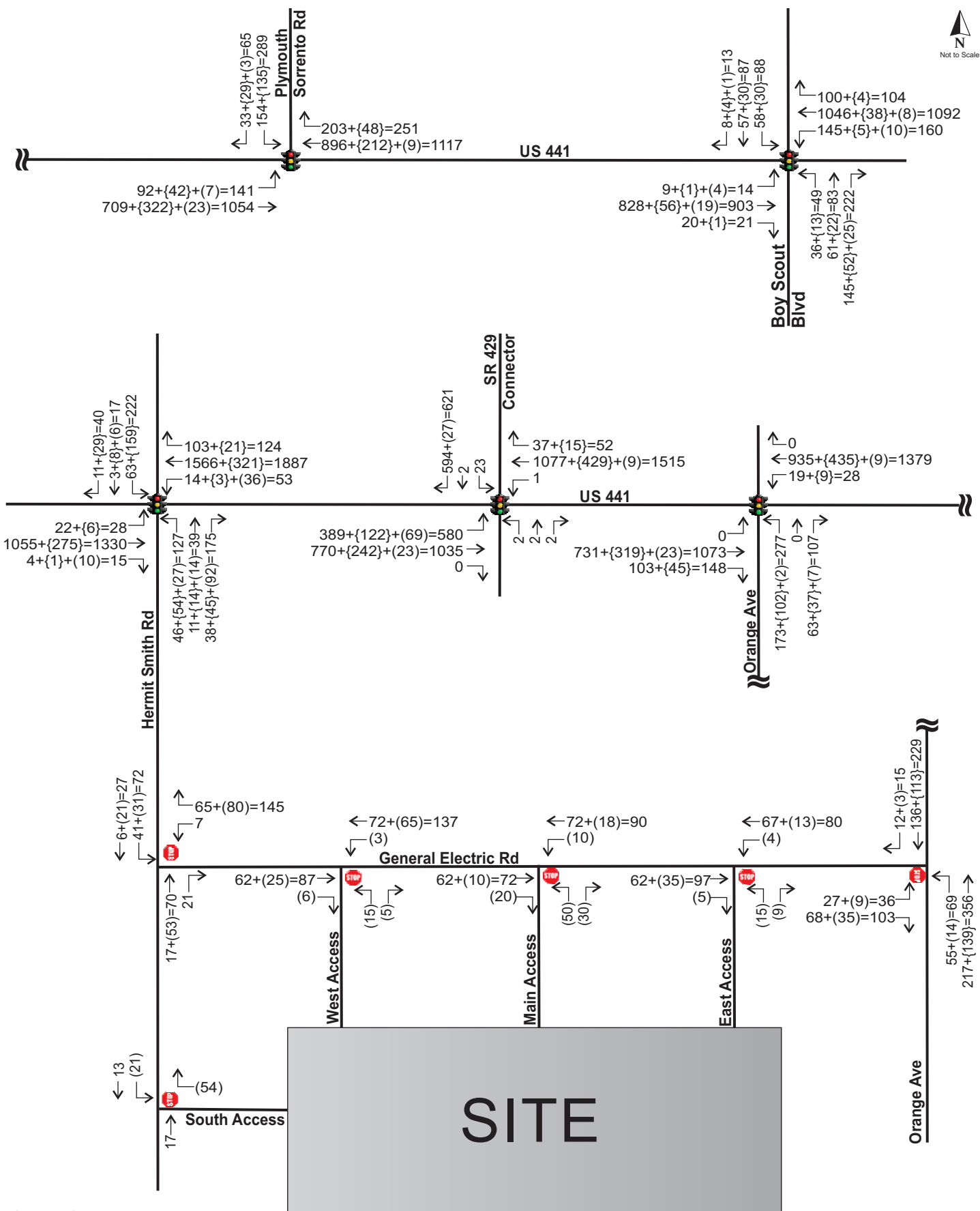
To assess the background and projected operating conditions at the study intersections, an intersection capacity analysis was conducted using background traffic volumes and projected traffic volumes. The intersection was analyzed using *Synchro Software*. Projected peak hour volumes were calculated by adding background traffic and project trips at the intersections.

The projected intersection volumes are shown in **Figure 4** and intersection analysis for both background and projected volumes are summarized **Table 5**. Detailed printouts of the analysis are included in **Appendix I**.

**Table 5
Projected Intersection Capacity Analysis**

| Intersection | Control | Scenario | EB | | WB | | NB | | SB | | Overall | |
|---------------------------------------|---------|------------|-------|-----|-------|-----|-------|-----|-------|-----|---------|-----|
| | | | Delay | LOS | Delay | LOS | Delay | LOS | Delay | LOS | Delay | LOS |
| US 441 & Hermit Smith Rd | Signal | Background | 8.9 | A | 1.3 | A | 207.0 | F | 595.8 | F | 56.9 | E |
| | | Projected | 9.7 | A | 2.6 | A | 536.7 | F | 709.1 | F | 98.5 | F |
| US 441 & SR 429 Connector Rd | Signal | Background | 53.5 | D | 18.2 | B | 98.4 | F | 47.7 | D | 37.3 | D |
| | | Projected | 81.6 | F | 19.6 | B | 98.4 | F | 48.5 | D | 50.8 | D |
| US 441 & Orange Ave | Signal | Background | 0.2 | A | 0.3 | A | 113.3 | F | -- | -- | 14.5 | B |
| | | Projected | 0.2 | A | 0.3 | A | 120.7 | F | -- | -- | 15.6 | B |
| US 441 & Plymouth Sorrento Rd | Signal | Background | 5.6 | A | 12.2 | B | -- | -- | 251.7 | F | 38.8 | D |
| | | Projected | 5.7 | A | 12.4 | B | -- | -- | 250.2 | F | 38.5 | D |
| US 441 & Boy Scout Blvd | Signal | Background | 6.5 | A | 3.9 | A | 84.8 | F | 130.1 | F | 22.9 | C |
| | | Projected | 6.6 | A | 4.0 | A | 100.1 | F | 141.4 | F | 26.0 | C |
| Hermit Smith Rd & General Electric Rd | TWSC | Background | -- | -- | 9.2 | A | -- | -- | 7.6 | A | -- | -- |
| | | Projected | -- | -- | 10.6 | B | -- | -- | 7.9 | A | -- | -- |
| General Electric Rd & Orange Ave | TWSC | Background | 13.3 | B | -- | -- | 8.2 | A | -- | -- | -- | -- |
| | | Projected | 14.3 | B | -- | -- | 8.2 | A | -- | -- | -- | -- |
| General Electric Rd & West Access | TWSC | Projected | -- | -- | 7.6 | A | 10.0 | A | -- | -- | -- | -- |
| General Electric Rd & Main Access | TWSC | Projected | -- | -- | 7.5 | A | 9.9 | A | -- | -- | -- | -- |
| General Electric Rd & East Access | TWSC | Projected | -- | -- | 7.6 | A | 9.6 | A | -- | -- | -- | -- |
| Hermit Smith Rd & South Access | TWSC | Projected | -- | -- | 8.8 | A | -- | -- | 7.5 | A | -- | -- |

The results of the background and projected analysis indicate that the intersections will continue to operate at satisfactory overall LOS, except for the intersection of Hermit Smith Road and US 441. This intersection is projected to become deficient on the side streets with the additional committed and project traffic.



Legend
 Background + {Committed} + (Project) = Total

4.4 Intersection Mitigation

In order to mitigate the projected deficiency at the intersection of Hermit Smith Road and US 441, additional capacity will be necessary to serve the minor approaches. The northbound and southbound approaches to the intersection are currently a single shared lane for all movements on each approach. The configuration results in a concurrent signal phase for all minor street movements. Additionally, the current timing plan at the intersection does not account for the significant number of committed and project trips that would be on the side streets in the long term. As vested and project traffic materialize on the minor approaches, it is reasonable to consider that the intersection timing plan would be modified to respond to the growing volumes in the future.

Therefore, to mitigate the project’s impact and improve the overall operations at the intersection, it is recommended that a dedicated northbound right turn lane is constructed. The additional lane will facilitate the movement of right turning traffic traveling from Hermit Smith Road toward the SR 429 expressway via US 441.

The results of the capacity analysis with the right turn lane and a slightly modified timing plan are summarized in **Table 5**. The worksheet is included in **Appendix J**.

Table 5
Improved Intersection Capacity Analysis

| Intersection | Control | Scenario | EB | | WB | | NB | | SB | | Overall | |
|--------------------------|---------|----------|-------|-----|-------|-----|-------|-----|-------|-----|---------|-----|
| | | | Delay | LOS | Delay | LOS | Delay | LOS | Delay | LOS | Delay | LOS |
| US 441 & Hermit Smith Rd | Signal | Improved | 17.4 | B | 4.0 | A | 57.4 | E | 658.4 | F | 58.1 | E |

5.0 STUDY CONCLUSIONS

This traffic analysis was performed to assess the impact of the proposed Mid-Florida Logistics Park development. The site is located south of General Electric Road, east of Hermit Smith Road and west of SR 429, in the City of Apopka. The development will include a total of 2,459,755 square feet of warehousing at full buildout. The results of the analysis as documented herein are summarized below:

- The proposed development will generate a new daily traffic volume of 3,444 trips per day, of which 246 trips will occur during the PM peak hour. Approximately 20% of the total project traffic will be truck traffic.
- Analysis of roadway segment capacity reveals that all study segments currently operate within their adopted capacity and are projected to continue to do so at both project buildout phases.
- Analysis of the study intersections indicates that they currently operate at adequate LOS and are projected to continue to do so at buildout of the project, except for the intersection of US 441 and Hermit Smith Road.
- The intersection will require a dedicated northbound right turn lane to more efficiently serve traffic traveling toward SR 429 via eastbound US 441.
- A modified timing plan may be necessary in the future as vested and project traffic materialize on the minor approaches to intersection.

APPENDICES

Appendix A
Response to City of Apopka Comments

**CITY OF APOPKA
DEVELOPMENT REVIEW COMMITTEE COMMENTS**

DATE: July 25, 2018

NAME: Pamela Richmond, AICP - Senior Planner

DEPARTMENT: Community Development

TELEPHONE: 407-703-1764 FAX: 407-703-1686 Email: pricchmond@apopka.net

PROJECT: Mid-Florida Logistics Park

PLAN NO: SPR18-16 PUD Master Plan – 2nd submittal

Traffic Impact Analysis Comments:

1. Revise the trip generation table to reflect the new site plan.
2. Revise Table 4, Projected Roadway Capacity Analysis, using the revised trip generation.
3. In Figure 4, there does not appear to be any committed trips represented on Hermit Smith Road or General Electric Road. However, committed trips are documented in Table 4. Please revise Figure 4 and any of the operational analyses included in the study that do not include the committed trips.
4. Table 5 shows the intersection of US 441 at Hermit Smith Rd not meeting the LOS standards for the approaching roadway segments. Specifically, the westbound direction is impacted dropping from an LOS C to an LOS F in the projected traffic conditions. This is in part due to changes in the signal timing assumptions between the existing, background and project traffic scenarios. Mitigation for the project traffic should not negatively impact the other approaches.

This study was done at a time when US 441 was under construction and before FDOT completed a signal timing study for the US 441 corridor. The current signal timing for signalized study intersections on US 441 should be revised using the new signal timing to ensure the analysis is consistent with the new coordinated signal plan.

5. The TIA does not outline the existing or proposed truck traffic percentages. The applicant should provide estimates of truck traffic and the ability of the surrounding roads (including General Electric Road, Orange Avenue, and Hermit Smith Road) to support the projected loads. If the roadway infrastructure is not suitable for proposed amount of truck travel, mitigation should be proposed.
6. Central Florida Expressway has provided comments on the TIA (see attached). Please address these comments and include as a part of your response to the City's comments.

800 N. Magnolia Ave., Suite 1000
Orlando, FL 32803
321.354.9687 Direct
407.649.8664 Fax
321.663.5663 Mobile
www.dewberry.com
kjackson@dewberry.com

From: Bickar, Scott
Sent: Thursday, July 19, 2018 11:03 AM
To: Jackson, Raymond Keith <kjackson@dewberry.com>
Subject: RE: TIA for Mid Florida Logistics Park

Keith,

A 2,561,800 warehouse development is being proposed in the southwest quadrant of the SR 429 interchange at US 441 and SR 429 Connector Road. The warehouse is projected to generate 3587 daily trips with 256 of them occurring during the PM Peak Hour. Full buildout of the development is anticipated in 2022. 41% of the trips generated will utilize SR 429 with 9% coming from the north and 33% coming from the south. The following comments were developed after reviewing FDOT TIA guidelines:

- Include analysis for the single point intersection at SR 429 (Ramps) and SR 429 Connector Road. The intersection is located within the 1 mile study area radius and will be impacted by 42% of the added trips from the development.
- Include analysis for the SR 429 Connector Road and Plymouth Sorrento Road intersection. The intersection is located within the 1 mile study area radius.
- Traffic patterns in the area have changed due to the opening of Wekiva Phase II at the end of March 2018. Existing traffic counts were taken March 13, 2018. Since there is significant change in traffic patterns consider obtaining new counts.
- The report only addresses the PM peak hour. Was the AM peak hour considered?
- Provide analysis for full buildout of the development in 2022.
- Include a future conditions analysis for a future horizon year. Typically 10 years from full buildout.
- Was mitigation considered for the SB SR 429 Connector Road approach to US 441. The projected SB delay is 121.5 seconds (F) which is a 25.3 second increase in delay from the existing condition.

Thanks

Scott Bickar, P.E.
Project Engineer
Transportation Services
Dewberry
800 North Magnolia Avenue
Suite 1000
Orlando, FL 32803
321-354-9784
www.dewberry.com

From: Jackson, Raymond Keith
Sent: Wednesday, July 18, 2018 9:04 AM
To: Glenn Pressimone <Glenn.Pressimone@cfxway.com>
Cc: Will Hawthorne <Will.Hawthorne@cfxway.com>; Bickar, Scott <sbickar@Dewberry.com>
Subject: RE: TIA for Mid Florida Logistics Park

We will have this reviewed by Friday.





August 30, 2018

Ms. Pamela Richmond, AICP
Community Development
City of Apopka
120 E Main Street
Apopka, Florida 32703

Email: prichmond@apopka.net

Re: Mid-Florida Logistics Park
Response to Review Comments
TMC Project № 18008
City of Apopka, Florida

Ms. Richmond,

Please find below our response to the City of Apopka review comments dated July 25, 2018 and Central Florida Expressway comments dated July 19, 2018, regarding the above referenced Traffic Impact Analysis dated March 2018. The comments are listed in **bold** typeface and the TMC responses follow in *italic* typeface.

CITY OF APOPKA COMMENTS

1. Revise the trip generation table to reflect the new site plan.

TMC Response: The trip generation table has been revised to reflect the new plan.

2. Revise Table 4, Projected Roadway Capacity Analysis, using the revised trip generation.

TMC Response: Table 4 has been revised

3. In Figure 4, there does not appear to be any committed trips represented on Hermit Smith Road or General Electric Road. However, committed trips are documented in Table 4. Please revise Figure 4 and any of the operational analyses included in the study that do not include the committed trips.

TMC Response: Figure 4 and the intersection analyses have been revised to include the committed trips.

4. Table 5 shows the intersection of US 441 at Hermit Smith Rd not meeting the LOS standards for the approaching roadway segments. Specifically, the westbound direction is impacted dropping from an LOS C to an LOS F in the projected traffic conditions. This is in part due to changes in the signal timing assumptions between the existing, background and project traffic scenarios. Mitigation for the project traffic should not negatively impact the other approaches.

This study was done at a time when US 441 was under construction and before FDOT completed a signal timing study for the US 441 corridor. The current signal timing for signalized study intersections on US 441 should be revised using the new signal timing to ensure the analysis is consistent with the new coordinated signal plan.

TMC Response: The analysis was revised with the updated traffic volumes, committed trips, and newly implemented signal timing plans. The results indicate that the intersection will require a northbound right turn lane on Hermit Smith Road to adequately accommodate project trips.

5. The TIA does not outline the existing or proposed truck traffic percentages. The applicant should provide estimates of truck traffic and the ability of the surrounding roads (including General Electric Road, Orange Avenue, and Hermit Smith Road) to support the projected loads. If the roadway infrastructure is not suitable for proposed amount of truck travel, mitigation should be proposed.

TMC Response: The TIA has been updated to include a discussion of projected truck traffic volumes generated by the development on a daily basis. The structural capacity of the pavement on Hermit Smith Road and on General Electric Road will be addressed separately with the City outside of the TIA.

6. Central Florida Expressway has provided comments on the TIA (see attached). Please address these comments and include as a part of your response to the City's comments.

TMC Response: Noted. Please see responses to Central Florida Expressway comments below.

CENTRAL FLORIDA EXPRESSWAY COMMENTS

1. Include analysis for the single point intersection at SR 429 {Ramps} and SR 429 Connector Road. The intersection is located within the 1 mile study area radius and will be impacted by 42% of the added trips from the development.

TMC Response: The interchange at SR 429 was recently completed based on design traffic volumes projected for the life of the facility. This development is a minor generator of traffic in comparison to the design traffic volumes for which the facility was designed.

2. Include analysis for the SR 429 Connector Road and Plymouth Sorrento Road intersection. The intersection is located within the 1 mile study area radius.

TMC Response: Based on a study methodology reviewed and approved by the City of Apopka, these facilities are not within the project's study area. This development is a minor generator of traffic in comparison to the design traffic volumes for which the facility was designed.

3. Traffic patterns in the area have changed due to the opening of Wekiva Phase II at the end of March 2018. Existing traffic counts were taken March 13, 2018. Since there is significant change in traffic patterns consider obtaining new counts.

TMC Response: Updated traffic counts were obtained within the study area on August 28, 2018.

5. The report only addresses the PM peak hour. Was the AM peak hour considered?

TMC Response: The City of Apopka requires PM peak hour analysis.

6. Provide analysis for full build out of the development in 2022.

TMC Response: The buildout analysis is provided.

7. Include a future conditions analysis for a future horizon year. Typically 10 years from full buildout.

TMC Response: An analysis of future horizon is not required or customary for development projects in the City of Apopka.

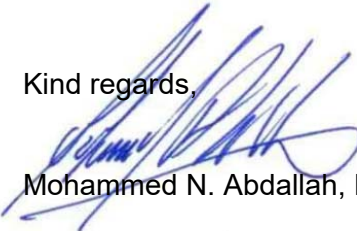
8. Was mitigation considered for the SB SR 429 Connector Road approach to US 441. The projected SB delay is 121.5 seconds (F) which is a 25.3 second increase in delay from the existing condition.

TMC Response: The intersection is projected to operate adequately at project buildout. No additional mitigation is recommended.

END OF COMMENTS

We trust these responses address the review comments. A revised analysis will be provided for your further review. We remain available to discuss this matter further or to answer any questions.

Kind regards,



Mohammed N. Abdallah, PE, PTOE

Appendix B
Preliminary Site Plan

Appendix C
Mid-Florida Logistics Park Methodology

MEMORANDUM

February 28, 2018

Re: Mid-Florida Logistics Park
Traffic Impact Analysis Methodology
Project № 18008

The following is an outline of the methodology for the Traffic Impact Analysis (TIA) for the above referenced project.

Project Description

The proposed development is approximately 2,562,800 square feet of the high-cube transload and short-term storage warehouse, which will include five buildings at full buildout. A conceptual site plan is included in the **Attachments**.

Project Location

The site is located south of General Electric Road, east of Hermit Smith Road and west of the Western Beltway, in the City of Apopka, Florida, as illustrated in **Figure 1**.



Figure 1 – Study Area

Project Access

Access to the site will be provided via two access points on General Electric Road and one access point on Hermit Smith Road, as shown in the conceptual plan included in the **Attachments**.

Trip Generation

The trip generation analysis was conducted using information published by the Institute of Transportation Engineers (ITE) in the *Trip Generation Manual, 10th Edition* for the High Cube Transload and Short-Term Storage Warehouse land use, which most accurately reflect the proposed use of the site. **Table 1** summarizes the results of the trip generation analysis for the development. The ITE information sheets are included in the **Attachments**.

Table 1
Trip Generation Summary

| ITE Code | Land Use | Size | Daily | | PM Peak Hour | | | |
|----------|-----------|-------------|-------|-------|--------------|-------|-------|------|
| | | | Rate | Trips | Rate | Total | Enter | Exit |
| 154 | Warehouse | 2,562.8 KSF | 1.40 | 3,588 | 0.10 | 256 | 69 | 187 |

Trip generation analysis based on ITE Trip Generation Manual, 10th Edition.

The proposed development is projected to generate 3,588 new daily trips of which 256 trips occur during the PM peak hour. It should be noted that approximately 33% of the total daily site-generated trips and 22% of PM peak hour project trips are anticipated to be truck traffic based on ITE information.

Trip Distribution

The Orlando Urban Area Transportation Study (OUATS) model was used to generate an areawide travel distribution pattern for the development. The model output is included in the **Attachments**.

The model shows that traffic using Binion Road will merge to SR 429 downstream, also more traffic is indicated to use SR 451 and Plymouth Sorrento Road rather than using SR 429 located east of the property. Manual modification and adjustments were made to reflect the nature of the proposed development, which includes moving all trips indicated on SR 451 on to SR 429, half the trips on Binion Road on to SR 429 and reducing the number of project trips on Plymouth Sorrento Road. Finally, these modifications placed approximately 42% of the project trips on SR 429, with the anticipated truck percentage and the likelihood of trucks using SR 429, the distribution pattern will reflect the proposed development. The proposed distribution pattern for use in this study is illustrated in **Figure 2**.



Figure 2 – Proposed Distribution Pattern

Study Area

Study Segments

The following roadway segments located within 1-mile of the site will be analyzed for Daily and PM peak hour capacity:

US 441 (Orange Blossom Trail)

- Yothers Road to SR 429 Connector Road
- SR 429 Connector Road to Plymouth Sorrento Road
- Plymouth Sorrento Road to Boy Scout Boulevard
- Boy Scout Boulevard to Errol Parkway

Binion Road (CR 437)/Orange Avenue (CR 437)

- Boy Scout Boulevard to Lakeview Drive
- Lakeview Drive to US 441

General Electric Road

- Hermit Smith Road to Orange Avenue

Hermit Smith Road

- General Electric Road to US 441

Hogshead Road

- Hermit Smith Road to Conrad Road

Study Intersections

The following intersection will be analyzed for PM peak hour capacity and operations:

- General Electric Road and Orange Avenue
- Hermit Smith Road and General Electric Road
- SR 429 Connector Road and US 441
- Hermit Smith Road and US 441
- Orange Avenue and US 441
- Boy Scout Boulevard and US 441
- Proposed access points and General Electric Road

Peterson Road

An existing public Right-of-way (ROW), known as Peterson Road, runs from Kings Street in the east, through the property east to the western boundary. The ROW varies in width and passes under SR 429 at an underpass. This ROW traverses the proposed development and bisects the planned 1,024,400 square foot warehouse building (Building 2 on the plans included in the **Attachments**). Therefore, the analysis will evaluate access conditions to the site without the need to connect Peterson Road through the property. If these currently proposed connections on General Electric Road and Hermit Smith Road are projected to adequately serve the property, then it will be determined that Peterson Road is not essential for access, which supports a request to vacate the existing ROW.

Documentation

A report documenting the methods, assumptions, and findings of the traffic analysis will be prepared for submittal to the City in support of the development application.

Appendix D
City of Apopka CMS Data

City of Apopka
2014 Traffic Count Program
Roadway Service Volumes (Capacities)

| Class Roadway Segment | No. of Lanes | Posted Speed Limit | A.M./P.M. | | | | | Daily Capacities ¹ | | | | |
|---|-----------------|--------------------------|---|-------|-------|-------|-------|-------------------------------|--------|--------|--------|--------|
| | | | Peak Hour Directional Capacities ¹ | | | | | A | B | C | D | E |
| | | | A | B | C | D | E | A | B | C | D | E |
| Major Arterial | | | | | | | | | | | | |
| SR 436 (Semoran Boulevard) | | | | | | | | | | | | |
| US 441 to Sheeler Rd | 8LD | 45 | - | - | 3,970 | 4,040 | 4,040 | - | - | 78,800 | 80,100 | 80,100 |
| Sheeler Rd to Thompson Rd | 8LD | 45 | - | - | 3,970 | 4,040 | 4,040 | - | - | 78,800 | 80,100 | 80,100 |
| Thompson Rd to Roger Williams Rd | 8LD | 45 | - | - | 3,970 | 4,040 | 4,040 | - | - | 78,800 | 80,100 | 80,100 |
| Roger Williams Rd to Piedmont-Wekiva Rd | 8LD | 45 | - | - | 3,970 | 4,040 | 4,040 | - | - | 78,800 | 80,100 | 80,100 |
| Piedmont-Wekiva Rd to Seminole County Line | 6LD | 45 | - | - | 2,940 | 3,020 | 3,020 | - | - | 58,400 | 59,900 | 59,900 |
| US 441 (Orange Blossom Trail) | | | | | | | | | | | | |
| Ponkan Rd to Yothers Rd | 4LD | 55 | - | - | 1,910 | 2,000 | 2,000 | - | - | 37,900 | 39,800 | 39,800 |
| 2 * Yothers Rd to SR 429 Connector Rd | 4LD | 55 | 2,370 | 2,480 | 2,480 | 2,480 | 2,480 | 47,200 | 49,500 | 49,500 | 49,500 | 49,500 |
| 2 * SR 429 Connector Rd to Plymouth Sorrento Rd | 4LD | 45 | 2,370 | 2,480 | 2,480 | 2,480 | 2,480 | 47,200 | 49,500 | 49,500 | 49,500 | 49,500 |
| 2 * Plymouth Sorrento Rd to Boy Scout Blvd | 4LD | 45 | 2,370 | 2,480 | 2,480 | 2,480 | 2,480 | 47,200 | 49,500 | 49,500 | 49,500 | 49,500 |
| 2 * Boy Scout Blvd to Errol Pkwy | 4LD | 45 | 2,270 | 2,520 | 2,600 | 2,600 | 2,600 | 48,300 | 53,600 | 55,400 | 55,400 | 55,400 |
| 2 * Errol Pkwy to SR 451 | 4LD | 45 | 2,270 | 2,520 | 2,600 | 2,600 | 2,600 | 48,300 | 53,600 | 55,400 | 55,400 | 55,400 |
| 2 * SR 451 to Bradshaw Rd | 4LD | 45 | 2,270 | 2,520 | 2,600 | 2,600 | 2,600 | 48,300 | 53,600 | 55,400 | 55,400 | 55,400 |
| 2 * Bradshaw Rd to Hawthorne Ave | 5L | 45 | 1,980 | 2,160 | 2,160 | 2,160 | 2,160 | 52,500 | 57,100 | 57,100 | 57,100 | 57,100 |
| 2 * Hawthorne Ave to Central Ave | 5L | 35 | 1,980 | 2,160 | 2,160 | 2,160 | 2,160 | 52,500 | 57,100 | 57,100 | 57,100 | 57,100 |
| 2 * Central Ave to Park Ave | 5L | 35 | 1,980 | 2,160 | 2,160 | 2,160 | 2,160 | 52,500 | 57,100 | 57,100 | 57,100 | 57,100 |
| 2 * Park Ave to Highland Ave | 5L | 35 | 1,980 | 2,160 | 2,160 | 2,160 | 2,160 | 52,500 | 57,100 | 57,100 | 57,100 | 57,100 |
| 2 * Highland Ave to Alabama Ave | 5L | 35 | 1,980 | 2,160 | 2,160 | 2,160 | 2,160 | 52,500 | 57,100 | 57,100 | 57,100 | 57,100 |
| 2 * Alabama Ave to SR 436 | 4LD | 35 | 1,980 | 2,160 | 2,160 | 2,160 | 2,160 | 52,500 | 57,100 | 57,100 | 57,100 | 57,100 |
| SR 436 to Sheeler Rd | 4LD | 45 | - | - | 1,910 | 2,000 | 2,000 | - | - | 37,900 | 39,800 | 39,800 |
| Sheeler Rd to Roger Williams Rd | 4LD | 45 | - | - | 1,910 | 2,000 | 2,000 | - | - | 37,900 | 39,800 | 39,800 |
| Roger Williams Rd to Piedmont-Wekiva Rd | 4LD | 50 | - | - | 1,910 | 2,000 | 2,000 | - | - | 37,900 | 39,800 | 39,800 |
| Piedmont-Wekiva Rd to Seminole County Line | 4LD | 50 | - | - | 1,910 | 2,000 | 2,000 | - | - | 37,900 | 39,800 | 39,800 |
| Minor Arterial | | | | | | | | | | | | |
| CR 424 (Alabama Avenue/Apopka Boulevard) | | | | | | | | | | | | |
| US 441 to 8th St | 2L | 45 | - | - | 370 | 750 | 800 | - | - | 7,300 | 14,800 | 15,600 |
| 8th St to Sheeler Rd | 2L | 45 | - | - | 830 | 880 | 880 | - | - | 16,800 | 17,700 | 17,700 |
| Sheeler Rd to Lakeville Rd | 2L | 45 | - | - | 830 | 880 | 880 | - | - | 16,800 | 17,700 | 17,700 |
| Lakeville Rd to Hiwassee Rd | 3L | 45 | - | - | 870 | 920 | 920 | - | - | 17,600 | 18,600 | 18,600 |
| Hiwassee Rd to Overland Rd | 2L | 35 | - | - | 370 | 750 | 800 | - | - | 7,300 | 14,800 | 15,600 |
| Overland Rd to US 441 | 2L | 35 | - | - | 370 | 750 | 800 | - | - | 7,300 | 14,800 | 15,600 |
| Minor Arterial | | | | | | | | | | | | |
| CR 435 (Rock Spring Road/Park Avenue/Clarcona Road) | | | | | | | | | | | | |
| Kelly Park Rd to Ponkan Rd | 5L | 45 | - | - | 1,530 | 1,580 | 1,580 | - | - | 29,300 | 30,400 | 30,400 |
| Ponkan Rd to Welch Rd | 5L | 45 | - | - | 1,910 | 2,000 | 2,000 | - | - | 37,900 | 39,800 | 39,800 |
| Welch Rd to Sandpiper Rd | 5L | 45 | - | - | 1,910 | 2,000 | 2,000 | - | - | 37,900 | 39,800 | 39,800 |
| Sandpiper Rd to Votaw Rd | 5L | 35 | - | - | 730 | 1,630 | 1,700 | - | - | 14,500 | 32,400 | 33,800 |
| Votaw Rd to Orange St | 5L | 35 | - | - | 730 | 1,630 | 1,700 | - | - | 14,500 | 32,400 | 33,800 |
| Orange St to US 441 | 5L | 35 | - | - | 730 | 1,630 | 1,700 | - | - | 14,500 | 32,400 | 33,800 |
| US 441 to Michael Gladden Blvd | 3L | 30 | - | - | 390 | 790 | 840 | - | - | 7,700 | 15,540 | 16,400 |
| Michael Gladden Blvd to Cleveland St | 2L | 30 | - | - | 370 | 750 | 800 | - | - | 7,300 | 14,800 | 15,600 |
| Cleveland St to Keene Rd | 2L | 45 | - | - | 830 | 880 | 880 | - | - | 16,800 | 17,700 | 17,700 |
| Keene Rd to McCormick Rd | 2L | 45 | - | - | 830 | 880 | 880 | - | - | 16,800 | 17,700 | 17,700 |
| McCormick Rd to Clarcona-Ocoee Rd | 2L | 45 | - | - | 830 | 880 | 880 | - | - | 16,800 | 17,700 | 17,700 |
| CR 437A (Ocoee-Apopka Road/Michael Gladden Boulevard/Central Avenue) | | | | | | | | | | | | |
| McCormick Rd to Binion Rd | 2L | 45 | - | 420 | 840 | 1,190 | 1,640 | - | 8,600 | 17,000 | 24,200 | 33,300 |
| Binion Rd to SR 429 | 2L | 45 | - | 420 | 840 | 1,190 | 1,640 | - | 8,600 | 17,000 | 24,200 | 33,300 |
| SR 429 to Keene Rd | 2L | 45 | - | 420 | 840 | 1,190 | 1,640 | - | 8,600 | 17,000 | 24,200 | 33,300 |
| Keene Rd to Boy Scout Rd | 2L | 45 | - | 420 | 840 | 1,190 | 1,640 | - | 8,600 | 17,000 | 24,200 | 33,300 |
| Boy Scout Rd to Bradshaw Rd | 2L | 45 | - | 420 | 840 | 1,190 | 1,640 | - | 8,600 | 17,000 | 24,200 | 33,300 |
| Bradshaw Rd to Central Ave | 2L | 30 | - | - | 370 | 750 | 800 | - | - | 7,300 | 14,800 | 15,600 |
| Michael Gladden Blvd to US 441 | 2L | 35 | - | - | 370 | 750 | 800 | - | - | 7,300 | 14,800 | 15,600 |
| Lakeville Road | | | | | | | | | | | | |
| Apopka Blvd to Wildwood St | 2L | 35 | - | - | 370 | 750 | 800 | - | - | 7,300 | 14,800 | 15,600 |
| Plymouth-Sorrento Road (CR 437) | | | | | | | | | | | | |
| County Line to Kelly Park Rd | 2L | 45 | - | 450 | 850 | 1,200 | 1,640 | - | 8,700 | 16,400 | 23,100 | 31,500 |
| Kelly Park Rd to Ponkan Rd | 2L | 45 | - | - | 830 | 880 | 880 | - | - | 16,800 | 17,700 | 17,700 |
| Ponkan Rd to Lester Rd/Yothers Rd | 2L | 45 | - | - | 830 | 880 | 880 | - | - | 16,800 | 17,700 | 17,700 |
| Lester Rd/Yothers Rd to SR 429 Connector Rd | 2L | 45 | - | - | 870 | 920 | 920 | - | - | 17,600 | 18,600 | 18,600 |
| SR 429 Connector Rd to US 441 | 2L | 45 | - | - | 870 | 920 | 920 | - | - | 17,600 | 18,600 | 18,600 |

**City of Apopka
2014 Traffic Count Program
Roadway Service Volumes (Capacities)**

| Class Roadway Segment | No. of Lanes | Posted Speed Limit | A.M./P.M. | | | | | Daily Capacities ¹ | | | | |
|---|-----------------|--------------------------|---|-----|-------|-------|-------|-------------------------------|-------|--------|--------|--------|
| | | | Peak Hour Directional Capacities ¹ | | | | | A | B | C | D | E |
| | | | A | B | C | D | E | A | B | C | D | E |
| Sheeler Road | | | | | | | | | | | | |
| SR 436 to US 441 | 3L | 35 | - | - | 390 | 790 | 840 | - | - | 7,700 | 15,540 | 16,400 |
| US 441 to Apopka Blvd | 2L | 45 | - | - | 830 | 880 | 880 | - | - | 16,800 | 17,700 | 17,700 |
| Apopka Blvd to Cleveland St | 2L | 45 | - | - | 830 | 880 | 880 | - | - | 16,800 | 17,700 | 17,700 |
| Cleveland St to Keene Rd | 2L | 45 | - | - | 830 | 880 | 880 | - | - | 16,800 | 17,700 | 17,700 |
| Wekiva Springs Road/Piedmont-Wekiwa Road/Hiawasse Road | | | | | | | | | | | | |
| Welch Rd to Votaw Rd | 3L | 45 | - | 470 | 890 | 1,260 | 1,720 | - | 9,100 | 17,200 | 24,300 | 33,100 |
| Votaw Rd to SR 436 | 5L | 45 | - | - | 1,910 | 2,000 | 2,000 | - | - | 37,900 | 39,800 | 39,800 |
| SR 436 to Piedmont Lakes Blvd | 5L | 45 | - | - | 1,910 | 2,000 | 2,000 | - | - | 37,900 | 39,800 | 39,800 |
| Piedmont Lakes Blvd to US 441 | 5L | 45 | - | - | 1,910 | 2,000 | 2,000 | - | - | 37,900 | 39,800 | 39,800 |
| US 441 to CR 424 (Apopka Blvd) | 4LD | 45 | - | - | 1,910 | 2,000 | 2,000 | - | - | 37,900 | 39,800 | 39,800 |
| CR 424 (Apopka Blvd) to SR 414 | 4LD | 45 | - | - | 1,910 | 2,000 | 2,000 | - | - | 37,900 | 39,800 | 39,800 |
| SR 414 to Beggs Rd | 4LD | 45 | - | - | 1,910 | 2,000 | 2,000 | - | - | 37,900 | 39,800 | 39,800 |
| Beggs Rd to Clarcona Ocoee Rd | 4LD | 45 | - | - | 1,910 | 2,000 | 2,000 | - | - | 37,900 | 39,800 | 39,800 |
| Minor Arterial | | | | | | | | | | | | |
| Welch Road | | | | | | | | | | | | |
| Vick Rd to Rock Springs Rd | 2L | 35 | - | - | 390 | 790 | 840 | - | - | 7,700 | 15,540 | 16,400 |
| Rock Springs Rd to Ustler Rd | 3L | 45 | - | 440 | 880 | 1,250 | 1,720 | - | 9,000 | 17,900 | 25,400 | 35,000 |
| Ustler Road to Thompson Rd | 2L | 45 | - | 420 | 840 | 1,190 | 1,640 | - | 8,600 | 17,000 | 24,200 | 33,300 |
| Thompson Rd to Wekiva Springs Rd | 2L | 45 | - | 420 | 840 | 1,190 | 1,640 | - | 8,600 | 17,000 | 24,200 | 33,300 |
| Minor Collector | | | | | | | | | | | | |
| 2nd Street (Monroe Avenue) | | | | | | | | | | | | |
| Central Ave to Park Ave | 2L | 30 | - | - | 240 | 490 | 520 | - | - | 4,700 | 9,600 | 10,100 |
| 5th Street | | | | | | | | | | | | |
| Park Ave to Highland Ave | 2L | 30 | - | - | 240 | 490 | 520 | - | - | 4,700 | 9,600 | 10,100 |
| 6th Street | | | | | | | | | | | | |
| Park Ave to Alabama Ave | 2L | 30 | - | - | 240 | 490 | 520 | - | - | 4,700 | 9,600 | 10,100 |
| Alabama Ave to US 441 | 2L | 30 | - | - | 240 | 490 | 520 | - | - | 4,700 | 9,600 | 10,100 |
| 8th Street | | | | | | | | | | | | |
| Park Ave to Highland Ave | 2L | 30 | - | - | 240 | 490 | 520 | - | - | 4,700 | 9,600 | 10,100 |
| 9th Street | | | | | | | | | | | | |
| Central Ave to Park Ave | 2L | 30 | - | - | 240 | 490 | 520 | - | - | 4,700 | 9,600 | 10,100 |
| Alabama Ave to Sheeler Ave | 2L | 30 | - | - | 240 | 490 | 520 | - | - | 4,700 | 9,600 | 10,100 |
| 13th Street | | | | | | | | | | | | |
| Ocoee-Apopka Rd to Park Ave | 2L | 25 | - | - | 240 | 490 | 520 | - | - | 4,700 | 9,600 | 10,100 |
| Park Ave to Apopka Blvd | 2L | 25 | - | - | 240 | 490 | 520 | - | - | 4,700 | 9,600 | 10,100 |
| Alabama Avenue | | | | | | | | | | | | |
| Monroe Ave to US 441 | 2L | 25 | - | - | 240 | 490 | 520 | - | - | 4,700 | 9,600 | 10,100 |
| Appy Lane | | | | | | | | | | | | |
| Plymouth-Sorrento Rd to Jason Dwelley Pkwy | 2L | 35 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,320 | 14,000 |
| Binion Road (CR 437)/Orange Avenue (CR 437) | | | | | | | | | | | | |
| Ocoee-Apopka Rd to Harmon Rd | 2L | 55 | - | - | 830 | 880 | 880 | - | - | 16,800 | 17,700 | 17,700 |
| Harmon Rd to Boy Scout Rd | 2L | 55 | - | - | 830 | 880 | 880 | - | - | 16,800 | 17,700 | 17,700 |
| Boy Scout Rd to Lakeview Dr | 2L | 40 | - | - | 830 | 880 | 880 | - | - | 16,800 | 17,700 | 17,700 |
| Lakeview Dr to US 441 | 2L | 40 | - | - | 830 | 880 | 880 | - | - | 16,800 | 17,700 | 17,700 |
| Boy Scout Road | | | | | | | | | | | | |
| Binion Rd to Ocoee-Apopka Rd | 2L | 45 | - | - | 750 | 790 | 790 | - | - | 15,100 | 15,900 | 15,900 |
| Bradshaw Road | | | | | | | | | | | | |
| Old Dixie Hwy to US 441 | 2L | 45 | - | - | 750 | 790 | 790 | - | - | 15,100 | 15,900 | 15,900 |
| Christiana Avenue | | | | | | | | | | | | |
| Monroe Ave to Votaw Rd | 2L | 30 | - | - | 240 | 490 | 520 | - | - | 4,700 | 9,600 | 10,100 |
| Cleveland Street | | | | | | | | | | | | |
| Park Ave to Sheeler Rd | 2L | 40 | - | - | 750 | 790 | 790 | - | - | 15,100 | 15,900 | 15,900 |
| Edgewood Drive | | | | | | | | | | | | |
| Monroe Ave to US 441 | 2L | 30 | - | - | 240 | 490 | 520 | - | - | 4,700 | 9,600 | 10,100 |
| Minor Collector (Continued) | | | | | | | | | | | | |
| Errol Parkway | | | | | | | | | | | | |
| Lake Francis Dr to Lake Alden Dr | 2LD | 25 | - | - | 350 | 710 | 760 | - | - | 6,900 | 13,990 | 14,700 |
| Lake Alden Dr to Old Dixie Hwy | 2L | 25 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,320 | 14,000 |
| Old Dixie Hwy to US 441 | 2LD | 30 | - | - | 350 | 710 | 840 | - | - | 6,900 | 14,000 | 14,700 |
| General Electric Road | | | | | | | | | | | | |
| Hermit Smith Rd to Orange Ave | 2L | 30 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 |
| Golden Gem Road | | | | | | | | | | | | |
| Kelly Park Rd to Ponkan Rd | 2L | 30 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 |
| Greenacre Road | | | | | | | | | | | | |
| Piedmont-Wekiwa Rd to Neil Rd | 2L | 25 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 |
| Haas Road | | | | | | | | | | | | |
| Plymouth-Sorrento Rd to Mt Plymouth Rd | 2L | 40 | - | - | 750 | 790 | 790 | - | - | 15,100 | 15,900 | 15,900 |
| Harmon Road | | | | | | | | | | | | |
| Binion Rd to Ocoee-Apopka Rd | 2L | 40 | - | - | 750 | 790 | 790 | - | - | 15,100 | 15,900 | 15,900 |
| Hawthorne Avenue | | | | | | | | | | | | |
| US 441 to Ocoee-Apopka Rd | 2L | 30 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 |
| Ocoee-Apopka Rd to 13th St | 2L | 30 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 |

City of Apopka
2014 Traffic Count Program
Roadway Service Volumes (Capacities)

| Class Roadway Segment | No. of Lanes | Posted Speed Limit | A.M./P.M. | | | | | Daily Capacities ¹ | | | | | |
|---|-----------------|--------------------------|---|-----|-----|-------|-------|-------------------------------|-------|--------|--------|--------|--|
| | | | Peak Hour Directional Capacities ¹ | | | | | A | B | C | D | E | |
| Hermit Smith Road | | | | | | | | | | | | | |
| General Electric Rd to US 441 | 2L | 40 | - | - | 750 | 790 | 790 | - | - | 15,100 | 15,900 | 15,900 | |
| Highland Avenue | | | | | | | | | | | | | |
| Monroe Ave to US 441 | 2L | 25 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 | |
| US 441 to 6th St | 2L | 25 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 | |
| Hogshead Road | | | | | | | | | | | | | |
| Hermit Smith Rd to Conrad Rd | 2L | 30 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 | |
| Jason Dwelley Parkway | | | | | | | | | | | | | |
| Kelly Park Rd to Ponkan Rd | 2L | 35 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 | |
| Keene Road | | | | | | | | | | | | | |
| Ocoee-Apopka Rd to Marden Rd | 2L | 45 | - | - | 750 | 790 | 790 | - | - | 15,100 | 15,900 | 15,900 | |
| Marden Rd to Clarcona Rd (CR 435) | 2L | 45 | - | - | 750 | 790 | 790 | - | - | 15,100 | 15,900 | 15,900 | |
| Clarcona Rd (CR 435) to Sheeler Rd | 2L | 45 | - | - | 750 | 790 | 790 | - | - | 15,100 | 15,900 | 15,900 | |
| Kelly Park Road | | | | | | | | | | | | | |
| Round Lake Rd to Plymouth-Sorrento Rd | 2L | 55 | - | 450 | 850 | 1,200 | 1,640 | - | 8,700 | 16,400 | 23,100 | 31,500 | |
| Plymouth-Sorrento Rd to Jason Dwelley Pkwy | 2L | 55 | - | 450 | 850 | 1,200 | 1,640 | - | 8,700 | 16,400 | 23,100 | 31,500 | |
| Jason Dwelley Pkwy to Mt. Plymouth Rd | 2L | 40 | - | 450 | 850 | 1,200 | 1,640 | - | 8,700 | 16,400 | 23,100 | 31,500 | |
| Mt. Plymouth Rd to Rock Springs Rd | 2L | 40 | - | 450 | 850 | 1,200 | 1,640 | - | 8,700 | 16,400 | 23,100 | 31,500 | |
| Lake Avenue/Marvin C Zanders Avenue | | | | | | | | | | | | | |
| Martin St to Orange St | 2L | 25 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 | |
| Orange St to US 441 | 2L | 25 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 | |
| US 441 to 4th St | 2L | 25 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 | |
| Lake Cortez Drive | | | | | | | | | | | | | |
| SR 436 to Evelyn Dr | 2L | 25 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 | |
| Minor Collector (Continued) | | | | | | | | | | | | | |
| Lake Doe Boulevard | | | | | | | | | | | | | |
| US 441 to Dunn Cove Dr | 2L | 25 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 | |
| Lake Francis Drive | | | | | | | | | | | | | |
| Schopke Lester Rd to Errol Pkwy | 2L | 25 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 | |
| Errol Pkwy to Vick Rd | 2L | 25 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 | |
| Lakeville Road | | | | | | | | | | | | | |
| Wildwood St to Beggs Rd | 2L | 50 | - | - | 750 | 790 | 790 | - | - | 15,100 | 15,900 | 15,900 | |
| Beggs Rd to Clarcona Ocoee Rd | 2L | 50 | - | - | 750 | 790 | 790 | - | - | 15,100 | 15,900 | 15,900 | |
| Lester Road | | | | | | | | | | | | | |
| Vick Rd to Schopke Lester Rd | 2L | 35 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 | |
| Schopke Lester Rd to Plymouth Sorrento Rd | 2L | 35 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 | |
| Marden Road | | | | | | | | | | | | | |
| Ocoee Apopka Rd to Keene Rd | 2L | 35 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 | |
| Martin Street | | | | | | | | | | | | | |
| Park Ave to Lake Ave | 2L | 25 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 | |
| Maine Ave to Vick Rd | 2L | 25 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 | |
| McCormick Road | | | | | | | | | | | | | |
| Ocoee-Apopka Rd to Clarcona Rd (CR 435) | 2L | 50 | - | - | 750 | 790 | 790 | - | - | 15,100 | 15,900 | 15,900 | |
| Midland Avenue | | | | | | | | | | | | | |
| US 441 to 6th St | 2L | 25 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 | |
| Monroe Avenue | | | | | | | | | | | | | |
| Park Ave to Alabama Ave | 2L | 25 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 | |
| Alabama Ave to Sheeler Rd | 2L | 25 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 | |
| Mt. Plymouth Road | | | | | | | | | | | | | |
| Kelly Park Rd to Haas Rd | 2L | 45 | - | - | 750 | 790 | 790 | - | - | 15,100 | 15,900 | 15,900 | |
| Haas Rd to Lake County Line | 2L | 45 | - | - | 750 | 790 | 790 | - | - | 15,100 | 15,900 | 15,900 | |
| North Maine Avenue | | | | | | | | | | | | | |
| Martin St to Old Dixie Hwy | 2L | 25 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 | |
| Old Dixie Highway/West Highland Avenue/Orange Street | | | | | | | | | | | | | |
| Plymouth-Sorrento Rd to Boy Scout Blvd | 2L | 30 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 | |
| Boy Scout Blvd to Errol Pkwy | 2L | 30 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 | |
| Errol Pkwy to Vick Rd | 2L | 30 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 | |
| Vick Rd to Bradshaw Rd | 2L | 30 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 | |
| Bradshaw Rd to Hawthorne Ave | 2L | 25 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 | |
| Hawthorne Ave to Park Ave | 2L | 25 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 | |
| Ondich Road | | | | | | | | | | | | | |
| Round Lake Rd to Plymouth-Sorrento Rd | 2L | 30 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 | |
| Ponkan Road | | | | | | | | | | | | | |
| Round Lake Rd to Plymouth-Sorrento Rd | 2L | 35 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 | |
| Plymouth-Sorrento Rd to Vick Rd | 2L | 45 | - | - | 750 | 790 | 790 | - | - | 15,100 | 15,900 | 15,900 | |
| Vick Rd to Rock Springs Rd | 2L | 45 | - | - | 750 | 790 | 790 | - | - | 15,100 | 15,900 | 15,900 | |
| Rock Ridge Boulevard | | | | | | | | | | | | | |
| Rock Springs Rd to Haddington Ct | 2L | 30 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 | |

City of Apopka
2014 Traffic Count Program
Roadway Service Volumes (Capacities)

| Class Roadway Segment | No. of Lanes | Posted Speed Limit | A.M./P.M. | | | | | Daily Capacities ¹ | | | | |
|-----------------------------------|-----------------|--------------------------|---|---|-----|-------|-------|-------------------------------|---|--------|--------|--------|
| | | | Peak Hour Directional Capacities ¹ | | | | | A | B | C | D | E |
| | | | A | B | C | D | E | A | B | C | D | E |
| Minor Collector | | | | | | | | | | | | |
| Roger Williams Road | | | | | | | | | | | | |
| US 441 to SR 436 | 2L | 30 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 |
| Round Lake Road | | | | | | | | | | | | |
| Ponkan Rd to Sadler Ave | 2L | 50 | - | - | 750 | 790 | 790 | - | - | 15,100 | 15,900 | 15,900 |
| Sadler Ave to Kelly Park Rd | 2L | 50 | - | - | 750 | 790 | 790 | - | - | 15,100 | 15,900 | 15,900 |
| Kelly Park Rd to Lake County Line | 2L | 50 | - | - | 750 | 790 | 790 | - | - | 15,100 | 15,900 | 15,900 |
| Sandpiper Road | | | | | | | | | | | | |
| Park Ave to Ustler Rd | 2L | 40 | - | - | 750 | 790 | 790 | - | - | 15,100 | 15,900 | 15,900 |
| Ustler Rd to Thompson Rd | 2L | 40 | - | - | 750 | 790 | 790 | - | - | 15,100 | 15,900 | 15,900 |
| Schopke-Lester Road | | | | | | | | | | | | |
| Lester Rd to Old Dixie Hwy | 2L | 35 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 |
| Sheeler Oaks Drive | | | | | | | | | | | | |
| Sheeler Rd to Saddleback Ridge | 2L | 45 | - | - | 750 | 790 | 790 | - | - | 15,100 | 15,900 | 15,900 |
| Summit Street | | | | | | | | | | | | |
| Rock Springs Rd to Lake Ave | 2L | 30 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 |
| Tanglewild Street | | | | | | | | | | | | |
| Rock Springs Rd to Ulster Rd | 2L | 30 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 |
| Thompson Road | | | | | | | | | | | | |
| Welch Rd to Votaw Rd | 2L | 45 | - | - | 750 | 790 | 790 | - | - | 15,100 | 15,900 | 15,900 |
| Votaw Rd to SR 436 | 2L | 35 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 |
| Ustler Road | | | | | | | | | | | | |
| Sandpiper Rd to Welch Rd | 2L | 30 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 |
| Vick Road | | | | | | | | | | | | |
| US 441 to Old Dixie Hwy | 4LD | 35 | - | - | 730 | 1,630 | 1,700 | - | - | 14,500 | 32,400 | 33,800 |
| Old Dixie Hwy to Martin St | 2LD | 35 | - | - | 390 | 790 | 840 | - | - | 7,700 | 15,500 | 16,400 |
| Martin St to Welch Rd | 2LD | 35 | - | - | 390 | 790 | 840 | - | - | 7,700 | 15,500 | 16,400 |
| Welch Rd to Lake Francis Dr | 2L | 35 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 |
| Lake Francis Dr to Lester Rd | 2L | 35 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 |
| Lester Rd to Ponkan Rd | 2L | 35 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 |
| Votaw Road | | | | | | | | | | | | |
| Park Ave to Christiana Ave | 2L | 45 | - | - | 750 | 790 | 790 | - | - | 15,100 | 15,900 | 15,900 |
| Christiana Ave to Thompson Rd | 2L | 45 | - | - | 750 | 790 | 790 | - | - | 15,100 | 15,900 | 15,900 |
| Thompson Rd to Wekiva Springs Rd | 2L | 45 | - | - | 750 | 790 | 790 | - | - | 15,100 | 15,900 | 15,900 |
| Woodfield Oaks Drive | | | | | | | | | | | | |
| Arbor Way to Regal St | 2L | 25 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 |
| Yothers Rd/Church Drive | | | | | | | | | | | | |
| US 441 to Plymouth Sorrento Rd | 2L | 35 | - | - | 330 | 680 | 720 | - | - | 6,600 | 13,300 | 14,000 |

Notes:

- 1** - Based on capacities from the Florida DOT 2013 Quality/Level of Service Handbook, Florida DOT ArtPlan2012 Software or Orange County.
- 2** - Roadway capacities calculated using ArtPlan updated with 2012 software
- * - These segments of US 441 OBT are Constrained.

Source: 2014 Traffic Counts from **Luke Transportation Engineering Consultants, Inc.**

City of Apopka CMS
Daily and PM Peak Hour/Peak Direction (PH/PD) Encumbered Traffic Allocation Worksheets
FINAL REPORT

Base Traffic Volume: 2015

Revision Date: 2/9/2016

| Roadway Section | # of Lanes | LOS | Adopted Standard Roadway Capacity | | Applicant Inventory | Encumbered Trips | | Daily Traffic | | PM PH/PD Traffic | | |
|---|------------|-----|-----------------------------------|------------------|-----------------------------|------------------|----------|---------------|--------------------|------------------|--------------------|----------------|
| | | | Daily | PHPD | | Daily | PM PH/PD | Base Volume | Available Capacity | Base Volume | Available Capacity | Peak Direction |
| | | | | | | | | | | | | |
| Major Arterials | | | | | | | | | | | | |
| SR 436 (Semoran Avenue) | | | | | | | | | | | | |
| US 441 to Sheeler Rd | 8LD | D | 80,100 | 4,040 | | | | 24,039 | 56,061 | 987 | 3,053 | NB/EB |
| | | | | | Development Name | 0 | 0 | | 69.99% | | 75.57% | |
| | | | | | Applicant Inventory Total | 0 | 0 | | | | | |
| Sheeler Rd to Thompson Rd | 8LD | D | 80,100 | 4,040 | | | | 33,464 | 46,636 | 1,438 | 2,602 | SB/WB |
| | | | | | Development Name | 0 | 0 | | 58.22% | | 64.41% | |
| | | | | | Applicant Inventory Total | 0 | 0 | | | | | |
| Thompson Rd to Roger Williams Rd | 8LD | D | 80,100 | 4,040 | | | | 43,213 | 35,988 | 1,877 | 2,036 | NB/EB |
| | | | | | Apopka Gateway Center | 170 | 7 | | 44.93% | | 50.40% | |
| | | | | | North Park (FF Rests) | 729 | 120 | | | | | |
| | | | | | Applicant Inventory Total | 899 | 127 | | | | | |
| Roger Williams Rd to Piedmont-Wekiwa Rd | 8LD | D | 80,100 | 4,040 | | | | 42,004 | 37,108 | 1,810 | 2,099 | SB/WB |
| | | | | | Apopka Gateway Center | 259 | 11 | | 46.33% | | 51.96% | |
| | | | | | North Park (FF Rests) | 729 | 120 | | | | | |
| | | | | | Applicant Inventory Total | 988 | 131 | | | | | |
| Piedmont Wekiwa Rd to Seminole County Line | 6LD | D | 59,900 | 3,020 | | | | 58,406 | 916 | 2,507 | 488 | SB/WB |
| | | | | | Apopka Gateway Center | 578 | 25 | | 1.53% | | 16.16% | |
| | | | | | Applicant Inventory Total | 578 | 25 | | | | | |
| US 441 (Orange Blossom Trail) | | | | | | | | | | | | |
| Yothers Rd to SR 429 Connector Rd | 4LD | D | 49,500 | 2,480 | | | | 41,556 | 4,525 | 2,045 | 90 | SB/WB |
| | | | | | Avion Point | 1,361 | 64 | | 9.14% | | 3.63% | |
| | | | | | Avion Point West | 1,782 | 252 | | | | | |
| | | | | | Chandler Estates | 238 | 25 | | | | | |
| | | | | | Orlando Country Airport | 38 | 4 | | | | | |
| | | | | | Applicant Inventory Total | 3,419 | 345 | | | | | |
| SR 429 Connector Rd to Plymouth Sorrento Rd | 4LD | D | 49,500 | 2,480 | | | | 24,974 | 19,347 | 1,114 | 922 | SB/WB |
| | | | | | Apopka Expressway Commerce | 156 | 11 | | 39.08% | | 37.18% | |
| | | | | | Avion Point | 2,643 | 124 | | | | | |
| | | | | | Avion Point West | 1,782 | 252 | | | | | |
| | | | | | Chandler Estates | 318 | 34 | | | | | |
| | | | | | Clearlake Landing | 213 | 16 | | | | | |
| | | | | | Maudehelen, Phase 1, 2, & 3 | 32 | 3 | | | | | |
| | | | | | Orlando Country Airport | 35 | 4 | | | | | |
| | | | | | Applicant Inventory Total | 5,179 | 444 | | | | | |
| Plymouth Sorrento Rd to Boy Scout Blvd | 4LD | D | 49,500 | 2,480 | | | | 28,506 | 19,038 | 1,310 | 910 | NB/EB |
| | | | | | Apopka Expressway Commerce | 104 | 8 | | 38.46% | | 36.69% | |
| | | | | | Avion Point West | 1,692 | 239 | | | | | |
| | | | | | Clearlake Landing | 142 | 11 | | | | | |
| | | | | | Maudehelen, Phase 1, 2, & 3 | 18 | 2 | | | | | |
| | | | | | Applicant Inventory Total | 1,956 | 260 | | | | | |
| Boy Scout Blvd to Errol Parkway | 4LD | D | 55,400 | 2,600 | | | | 29,279 | 25,462 | 1,179 | 1,363 | NB/EB |
| | | | | | Clearlake Landing | 355 | 27 | | 45.96% | | 52.42% | |
| | | | | | Maudehelen, Phase 1, 2, & 3 | 97 | 10 | | | | | |
| | | | | | Poe Reserve | 207 | 21 | | | | | |
| | | | | | Applicant Inventory Total | 659 | 58 | | | | | |
| Errol Parkway to SR 451 | 4LD | D | 5,009 ¹ | 230 ¹ | | | | N/A | 4,553 | N/A | 184 | SB/WB |
| | | | | | Poe Reserve | 456 | 46 | | 90.90% | | 80.00% | |
| | | | | | Applicant Inventory Total | 456 | 46 | | | | | |

City of Apopka CMS
Daily and PM Peak Hour/Peak Direction (PH/PD) Encumbered Traffic Allocation Worksheets
FINAL REPORT

Base Traffic Volume: 2015

Revision Date: 2/9/2016

| Roadway Section | # of Lanes | LOS | Adopted Standard | | Applicant Inventory | Encumbered Trips | | Daily Traffic | | PM PH/PD Traffic | | |
|--|------------|-----|------------------------|-------|--|------------------|----------|---------------|--------------------|------------------|--------------------|----------------|
| | | | Roadway Capacity Daily | PHPD | | Daily | PM PH/PD | Base Volume | Available Capacity | Base Volume | Available Capacity | Peak Direction |
| Minor Arterials (Continued) | | | | | | | | | | | | |
| Wekiva Springs Road/Piedmont-Wekiwa Road/Hiawassee Road | | | | | | | | | | | | |
| Votaw Rd to SR 436 | 5L | E | 39,800 | 2,000 | | | | | | | | |
| | | | | | Apopka Gateway Center | 50 | 2 | 23,591 | 16,078 | 1,304 | 690 | NB/EB |
| | | | | | North Park (FF Rests) | 81 | 4 | | 40.40% | | 34.50% | |
| | | | | | Applicant Inventory Total | 131 | 6 | | | | | |
| SR 436 to Piedmont Lakes Blvd | 5L | E | 39,800 | 2,000 | | | | 26,964 | 12,276 | 1,423 | 542 | NB/EB |
| | | | | | Apopka Gateway Center | 269 | 12 | | 30.84% | | 27.10% | |
| | | | | | North Park (FF Rests) | 291 | 23 | | | | | |
| | | | | | Applicant Inventory Total | 560 | 35 | | | | | |
| Piedmont Lakes Blvd to US 441 | 5L | E | 39,800 | 2,000 | | | | 28,809 | 10,700 | 1,772 | 205 | NB/EB |
| | | | | | North Park (FF Rests) | 291 | 23 | | 26.88% | | 10.25% | |
| | | | | | Applicant Inventory Total | 291 | 23 | | | | | |
| US 441 to CR 424 (Apopka Blvd) | 4LD | E | 39,800 | 2,000 | | | | 23,571 | 16,229 | 1,111 | 889 | NB/EB |
| | | | | | Development Name | 0 | 0 | | 40.78% | | 44.45% | |
| | | | | | Applicant Inventory Total | 0 | 0 | | | | | |
| CR 424 (Apopka Blvd) to SR 414 | 4LD | E | 39,800 | 2,000 | | | | 19,336 | 20,464 | 864 | 1,136 | NB/EB |
| | | | | | Development Name | 0 | 0 | | 51.42% | | 56.80% | |
| | | | | | Applicant Inventory Total | 0 | 0 | | | | | |
| SR 414 to Beggs Rd | 4LD | E | 39,800 | 2,000 | | | | 21,460 | 18,340 | 908 | 1,092 | NB/EB |
| | | | | | Development Name | 0 | 0 | | 46.08% | | 54.60% | |
| | | | | | Applicant Inventory Total | 0 | 0 | | | | | |
| Welch Road | | | | | | | | | | | | |
| Vick Rd to Rock Springs Rd (CR 435) | 2L | E | 16,400 | 840 | | | | 10,312 | 5,861 | 518 | 298 | NB/EB |
| | | | | | Ladybird Academy | 72 | 8 | | 35.74% | | 35.48% | |
| | | | | | Sanctuary Golf Estates (fka Apopka Golf Residence) | 155 | 16 | | | | | |
| | | | | | Applicant Inventory Total | 227 | 24 | | | | | |
| Rock Springs Rd (CR 435) to Ustler Rd | 3L | E | 35,000 | 1,720 | | | | 16,707 | 18,222 | 774 | 938 | SB/WB |
| | | | | | Ladybird Academy | 71 | 8 | | 52.06% | | 54.53% | |
| | | | | | Applicant Inventory Total | 71 | 8 | | | | | |
| Ustler Rd to Thompson Rd | 2L | E | 33,300 | 1,640 | | | | 16,277 | 17,023 | 845 | 795 | NB/EB |
| | | | | | Development Name | 0 | 0 | | 51.12% | | 48.48% | |
| | | | | | Applicant Inventory Total | 0 | 0 | | | | | |
| Minor Collectors | | | | | | | | | | | | |
| 6th Street | | | | | | | | | | | | |
| Park Avenue to Alabama Ave | 2L | D | 9,600 | 490 | | | | 1,963 | 7,637 | 155 | 335 | SB/WB |
| | | | | | Development Name | 0 | 0 | | 79.55% | | 68.37% | |
| | | | | | Applicant Inventory Total | 0 | 0 | | | | | |
| Binion Road (CR 437)/Orange Avenue (CR 437) | | | | | | | | | | | | |
| Ocoee-Apopka Rd to Harmon Rd | 2L | E | 17,700 | 880 | | | | 3,580 | 12,086 | 242 | 486 | NB/EB |
| | | | | | Apopka Woods | 67 | 7 | | 68.28% | | 55.23% | |
| | | | | | Breckenridge (fka Pines of Lake Apopka) | 21 | 1 | | | | | |
| | | | | | Clearlake Landing | 284 | 21 | | | | | |
| | | | | | Clear Lake Reserve | 21 | 2 | | | | | |
| | | | | | Florida Hospital Replacement | 1,109 | 66 | | | | | |
| | | | | | Magnolia Park Estates (fka Park Place) | 87 | 8 | | | | | |
| | | | | | Maudehelen, Phase 1, 2, & 3 | 63 | 7 | | | | | |
| | | | | | Old Palm Center PUD (fka, Thompson Hills Estates) | 382 | 40 | | | | | |
| | | | | | Applicant Inventory Total | 2,034 | 152 | | | | | |
| Harmon Rd to Boy Scout Rd | 2L | E | 17,700 | 880 | | | | 3,899 | 11,615 | 227 | 493 | NB/EB |
| | | | | | Apopka Woods | 67 | 7 | | 65.62% | | 56.02% | |
| | | | | | Breckenridge (fka Pines of Lake Apopka) | 21 | 1 | | | | | |
| | | | | | Clearlake Landing | 284 | 21 | | | | | |
| | | | | | Clear Lake Reserve | 21 | 2 | | | | | |
| | | | | | Florida Hospital Replacement | 1,261 | 74 | | | | | |
| | | | | | Magnolia Park Estates (fka Park Place) | 87 | 8 | | | | | |
| | | | | | Maudehelen, Phase 1, 2, & 3 | 63 | 7 | | | | | |
| | | | | | Old Palm Center PUD (fka, Thompson Hills Estates) | 382 | 40 | | | | | |
| | | | | | Applicant Inventory Total | 2,186 | 160 | | | | | |

**City of Apopka CMS
Daily and PM Peak Hour/Peak Direction (PH/PD) Encumbered Traffic Allocation Worksheets
FINAL REPORT**

Base Traffic Volume: 2015

Revision Date: 2/9/2016

| Roadway Section | # of Lanes | LOS | Adopted Standard Roadway Capacity | | Applicant Inventory | Encumbered Trips | | Daily Traffic | | PM PH/PD Traffic | | |
|--|------------|-----|-----------------------------------|------|---|------------------|----------|---------------|--------------------|------------------|--------------------|----------------|
| | | | Daily | PHPD | | Daily | PM PH/PD | Base Volume | Available Capacity | Base Volume | Available Capacity | Peak Direction |
| Minor Collectors (Continued) | | | | | | | | | | | | |
| Binion Road (CR 437)/Orange Avenue (CR 437) (Continued) | | | | | | | | | | | | |
| Boy Scout Rd to Lakeview Dr | 2L | E | 17,700 | 880 | | | | | | | | |
| | | | | | Apopka Expressway Commerce | 130 | 10 | 4,774 | 11,257 | 278 | 461 | NB/EB |
| | | | | | Breckenridge (fka Pines of Lake Apopka) | 5 | 0 | | 63.60% | | 52.39% | |
| | | | | | Clearlake Landing | 852 | 64 | | | | | |
| | | | | | Clear Lake Reserve | 43 | 5 | | | | | |
| | | | | | Lake Doe Reserve (fka Lake Doe Cove, Phase 5) | 178 | 19 | | | | | |
| | | | | | Maudehelen, Phase 1, 2, & 3 | 255 | 27 | | | | | |
| | | | | | Oakmont Industrial | 206 | 16 | | | | | |
| | | | | | Applicant Inventory Total | 1,669 | 141 | | | | | |
| Lakeview Dr to US 441 | 2L | E | 17,700 | 880 | | | | 4,009 | 12,481 | 244 | 497 | SB/WB |
| | | | | | Apopka Expressway Commerce | 312 | 23 | | 70.51% | | 56.48% | |
| | | | | | Avion Point West | 624 | 88 | | | | | |
| | | | | | Chandler Estates | 79 | 8 | | | | | |
| | | | | | Clearlake Landing | 32 | 3 | | | | | |
| | | | | | Lake Doe Reserve (fka Lake Doe Cove, Phase 5) | 119 | 12 | | | | | |
| | | | | | Maudehelen, Phase 1, 2, & 3 | 44 | 5 | | | | | |
| | | | | | Applicant Inventory Total | 1,210 | 139 | | | | | |
| Boy Scout Road | | | | | | | | | | | | |
| Binion Rd to Ocoee-Apopka Rd | 2L | E | 15,900 | 790 | | | | 1,062 | 13,659 | 58 | 644 | NB/EB |
| | | | | | Breckenridge (fka Pines of Lake Apopka) | 64 | 4 | | 85.91% | | 81.52% | |
| | | | | | Clearlake Landing | 284 | 22 | | | | | |
| | | | | | Florida Hospital Replacement | 434 | 26 | | | | | |
| | | | | | Maudehelen, Phase 1, 2, & 3 | 191 | 20 | | | | | |
| | | | | | Oakmont Industrial | 206 | 16 | | | | | |
| | | | | | Applicant Inventory Total | 1,179 | 88 | | | | | |
| Bradshaw Road | | | | | | | | | | | | |
| US 441 to Ocoee-Apopka Rd | 2L | E | 15,900 | 790 | | | | 3,458 | 9,715 | 183 | 345 | NB/EB |
| | | | | | Cooper Oak (fka Bradshaw Commerce Park) | 179 | 34 | | 61.10% | | 43.67% | |
| | | | | | Cooper Palms | 605 | 87 | | | | | |
| | | | | | Emerson Point | 408 | 25 | | | | | |
| | | | | | Faircloth Lakes | 290 | 29 | | | | | |
| | | | | | Florida Hospital Replacement | 806 | 48 | | | | | |
| | | | | | Johns Road Commerce Center | 259 | 25 | | | | | |
| | | | | | Oakmont Industrial | 180 | 14 | | | | | |
| | | | | | Applicant Inventory Total | 2,727 | 262 | | | | | |
| Christiana Ave | | | | | | | | | | | | |
| Votaw Rd to Monroe Ave | 2L | E | 10,100 | 520 | | | | 2,149 | 7,951 | 157 | 363 | NB/EB |
| | | | | | Development Name | 0 | 0 | | 78.72% | | 69.81% | |
| | | | | | Applicant Inventory Total | 0 | 0 | | | | | |
| Cleveland Street | | | | | | | | | | | | |
| Park Ave to Sheeler Rd | 2L | E | 15,900 | 790 | | | | 2,279 | 13,621 | 99 | 691 | SB/WB |
| | | | | | Development Name | 0 | 0 | | 85.67% | | 87.47% | |
| | | | | | Applicant Inventory Total | 0 | 0 | | | | | |
| Errol Parkway | | | | | | | | | | | | |
| Lake Francis Dr to Lake Alden Dr | 2L | D | 13,990 | 710 | | | | 2,762 | 11,097 | 148 | 547 | NB/EB |
| | | | | | Errol Clubhouse Villas | 131 | 15 | | 79.32% | | 77.04% | |
| | | | | | Applicant Inventory Total | 131 | 15 | | | | | |
| Lake Alden Dr to Old Dixie Hwy | 2L | D | 13,320 | 680 | | | | 7,633 | 4,560 | 424 | 126 | NB/EB |
| | | | | | Dixie Manor @ Errol | 41 | 2 | | 34.23% | | 18.53% | |
| | | | | | Errol Clubhouse Villas | 1,086 | 128 | | | | | |
| | | | | | Applicant Inventory Total | 1,127 | 130 | | | | | |
| Old Dixie Hwy to US 441 | 2L | D | 14,000 | 710 | | | | 8,186 | 4,898 | 452 | 157 | NB/EB |
| | | | | | Dixie Manor @ Errol | 67 | 3 | | 34.99% | | 22.11% | |
| | | | | | Errol Clubhouse Villas | 724 | 85 | | | | | |
| | | | | | Poe Reserve | 125 | 13 | | | | | |
| | | | | | Applicant Inventory Total | 916 | 101 | | | | | |

City of Apopka CMS
Daily and PM Peak Hour/Peak Direction (PH/PD) Encumbered Traffic Allocation Worksheets
FINAL REPORT

Base Traffic Volume: 2015

Revision Date: 2/9/2016

| Roadway Section | # of Lanes | LOS | Adopted Standard | | Applicant Inventory | Encumbered Trips | | Daily Traffic | | PM PH/PD Traffic | | |
|--|------------|-----|------------------------|------|--|------------------|----------|---------------|--------------------|------------------|--------------------|----------------|
| | | | Roadway Capacity Daily | PHPD | | Daily | PM PH/PD | Base Volume | Available Capacity | Base Volume | Available Capacity | Peak Direction |
| Minor Collectors (Continued) | | | | | | | | | | | | |
| General Electric Road | | | | | | | | | | | | |
| Hermit Smith Rd to Orange Ave | 2L | D | 15,900 | 790 | | | | | | | | |
| | | | | | Avion Point West | 713 | 101 | 532 | 14,655 | 38 | 651 | NB/EB |
| | | | | | Applicant Inventory Total | 713 | 101 | | 92.17% | | 82.41% | |
| Golden Gem Road | | | | | | | | | | | | |
| Kelly Park Rd to Ponkan Rd | 2L | D | 13,300 | 680 | | | | | | | | |
| | | | | | Development Name | 0 | 0 | 716 | 12,584 | 27 | 653 | SB/WB |
| | | | | | Applicant Inventory Total | 0 | 0 | | 94.62% | | 96.03% | |
| Haas Road | | | | | | | | | | | | |
| Plymouth-Sorrento Rd to Mt Plymouth Rd | 2L | D | 15,900 | 790 | | | | | | | | |
| | | | | | Development Name | 0 | 0 | 677 | 15,223 | 48 | 742 | NB/EB |
| | | | | | Applicant Inventory Total | 0 | 0 | | 95.74% | | 93.92% | |
| Harmon Road | | | | | | | | | | | | |
| Ocoee-Apopka Rd to Binion Rd | 2L | D | 15,900 | 790 | | | | | | | | |
| | | | | | Florida Hospital Replacement | 2,377 | 140 | 552 | 12,971 | 31 | 619 | SB/WB |
| | | | | | Applicant Inventory Total | 2,377 | 140 | | 81.58% | | 78.35% | |
| Hawthorne Avenue | | | | | | | | | | | | |
| US 441 to Ocoee-Apopka Rd | 2L | D | 13,300 | 680 | | | | | | | | |
| | | | | | Development Name | 0 | 0 | 1,252 | 12,048 | 71 | 609 | SB/WB |
| | | | | | Applicant Inventory Total | 0 | 0 | | 90.59% | | 89.56% | |
| Ocoee-Apopka Rd to 13th St | 2L | D | 13,300 | 680 | | | | | | | | |
| | | | | | Development Name | 0 | 0 | 1,403 | 11,897 | 66 | 614 | SB/WB |
| | | | | | Applicant Inventory Total | 0 | 0 | | 89.45% | | 90.29% | |
| Hermit Smith Road | | | | | | | | | | | | |
| General Electric Rd to US 441 | 2L | E | 15,900 | 790 | | | | | | | | |
| | | | | | Avion Point West | 802 | 113 | 691 | 14,407 | 53 | 624 | NB/EB |
| | | | | | Applicant Inventory Total | 802 | 113 | | 90.61% | | 78.99% | |
| US 441 to Yothers Rd | 2L | E | 15,900 | 790 | | | | | | | | |
| | | | | | Avion Point West | 1,692 | 239 | 1,425 | 12,783 | 109 | 442 | NB/EB |
| | | | | | Applicant Inventory Total | 1,692 | 239 | | 80.40% | | 55.95% | |
| Hogshead Road | | | | | | | | | | | | |
| Hermit Smith Rd to Conrad Rd | 2L | E | 14,000 | 720 | | | | | | | | |
| | | | | | Avion Point West | 890 | 126 | 777 | 12,333 | 58 | 536 | NB/EB |
| | | | | | Applicant Inventory Total | 890 | 126 | | 88.09% | | 74.44% | |
| Jason Dwelley Parkway | | | | | | | | | | | | |
| Kelly Park Rd to Ponkan Rd | 2L | E | 14,000 | 720 | | | | | | | | |
| | | | | | Appy Lane Subdivision | 161 | 17 | 2,089 | 11,127 | 107 | 556 | NB/EB |
| | | | | | Orchid Estates (fka J.B. Nurseries) | 623 | 40 | | 79.48% | | 77.22% | |
| | | | | | Applicant Inventory Total | 784 | 57 | | | | | |
| Keene Road | | | | | | | | | | | | |
| Ocoee-Apopka Rd to Marden Rd | 2L | E | 15,900 | 790 | | | | | | | | |
| | | | | | Emerson Point | 68 | 4 | 2,841 | 12,078 | 168 | 577 | NB/EB |
| | | | | | Florida Hospital Replacement | 31 | 2 | | | | | |
| | | | | | Magnolia Park Estates (fka Park Place) | 58 | 6 | | | | | |
| | | | | | Marden Ridge Apartments | 704 | 24 | | | | | |
| | | | | | Oakmont Industrial | 120 | 9 | | | | | |
| | | | | | Applicant Inventory Total | 981 | 45 | | | | | |
| Marden Rd to Clarcona Rd (CR 435) | 2L | E | 15,900 | 790 | | | | | | | | |
| | | | | | Alicante Subdivision | 58 | 6 | 4,202 | 10,021 | 205 | 496 | NB/EB |
| | | | | | Circle K Retail | 570 | 22 | | 63.03% | | 62.78% | |
| | | | | | Emerson Point | 476 | 29 | | | | | |
| | | | | | Magnolia Park Estates (fka Park Place) | 58 | 6 | | | | | |
| | | | | | Marden Ridge Apartments | 352 | 12 | | | | | |
| | | | | | Oakmont Industrial | 120 | 9 | | | | | |
| | | | | | Silver Oaks | 43 | 5 | | 47.99% | | 46.08% | |
| | | | | | Applicant Inventory Total | 1,677 | 89 | | | | | |
| Clarcona Rd (CR 435) to Sheeler Rd | 2L | D | 15,900 | 790 | | | | | | | | |
| | | | | | Circle K Retail | 351 | 13 | 7,784 | 7,630 | 399 | 364 | NB/EB |
| | | | | | Silver Oaks | 135 | 14 | | 47.99% | | 46.08% | |
| | | | | | Applicant Inventory Total | 486 | 27 | | 47.99% | | 46.08% | |

City of Apopka CMS
Daily and PM Peak Hour/Peak Direction (PH/PD) Encumbered Traffic Allocation Worksheets
FINAL REPORT

Base Traffic Volume: 2015

Revision Date: 2/9/2016

| Roadway Section | # of Lanes | LOS | Adopted Standard | | Applicant Inventory | Encumbered Trips | | Daily Traffic | | PM PH/PD Traffic | | Peak Direction |
|---|------------|-----|------------------------|------|---|------------------|----------|---------------|--------------------|------------------|--------------------|----------------|
| | | | Roadway Capacity Daily | PHPD | | Daily | PM PH/PD | Base Volume | Available Capacity | Base Volume | Available Capacity | |
| Minor Collectors (Continued) | | | | | | | | | | | | |
| Mt. Plymouth Road | | | | | | | | | | | | |
| Kelly Park Rd to Haas Rd | 2L | D | 15,900 | 790 | | | | 7,506 | 8,394 | 465 | 325 | NB/EB |
| | | | | | Development Name | 0 | 0 | | | | 41.14% | |
| | | | | | Applicant Inventory Total | 0 | 0 | | | | | |
| Haas Rd to Lake County Line | 2L | D | 15,900 | 790 | | | | 5,346 | 10,554 | 309 | 481 | NB/EB |
| | | | | | Development Name | 0 | 0 | | | | 60.89% | |
| | | | | | Applicant Inventory Total | 0 | 0 | | | | | |
| North Maine Avenue | | | | | | | | | | | | |
| Martin St to Old Dixie Hwy | 2L | D | 13,300 | 680 | | | | 1,875 | 11,425 | 110 | 570 | NB/EB |
| | | | | | Development Name | 0 | 0 | | | | 83.82% | |
| | | | | | Applicant Inventory Total | 0 | 0 | | | | | |
| Old Dixie Highway/West Highland Avenue/Orange Street | | | | | | | | | | | | |
| Plymouth Sorrento Rd to Boy Scout Blvd | 2L | E | 14,000 | 720 | | | | 2,154 | 11,846 | 119 | 601 | NB/EB |
| | | | | | Development Name | 0 | 0 | | | | 83.47% | |
| | | | | | Applicant Inventory Total | 0 | 0 | | | | | |
| Boy Scout Blvd to Errol Pkwy | 2L | E | 14,000 | 720 | | | | 3,857 | 9,817 | 191 | 512 | NB/EB |
| | | | | | Dixie Manor @ Errol | 326 | 17 | | | | 71.11% | |
| | | | | | Applicant Inventory Total | 326 | 17 | | | | | |
| Errol Pkwy to Vick Rd | 2L | E | 14,000 | 720 | | | | 7,118 | 6,665 | 344 | 365 | SB/WB |
| | | | | | Dixie Manor @ Errol | 217 | 11 | | | | 50.69% | |
| | | | | | Applicant Inventory Total | 217 | 11 | | | | | |
| Vick Rd to Bradshaw Rd | 2L | E | 14,000 | 720 | | | | 7,707 | 6,293 | 364 | 356 | NB/EB |
| | | | | | Development Name | 0 | 0 | | | | 49.44% | |
| | | | | | Applicant Inventory Total | 0 | 0 | | | | | |
| Bradshaw Rd to Hawthorne Ave | 2L | E | 14,000 | 720 | | | | 3,964 | 10,036 | 232 | 488 | NB/EB |
| | | | | | Development Name | 0 | 0 | | | | 67.78% | |
| | | | | | Applicant Inventory Total | 0 | 0 | | | | | |
| Hawthorne Ave to Park Ave | 2L | E | 14,000 | 720 | | | | 2,345 | 11,640 | 111 | 608 | NB/EB |
| | | | | | Park Ave Professional Center | 15 | 1 | | | | 84.44% | |
| | | | | | Applicant Inventory Total | 15 | 1 | | | | | |
| Ponkan Road | | | | | | | | | | | | |
| Round Lake Rd to Plymouth-Sorrento Rd | 2L | E | 14,000 | 720 | | | | 3,830 | 10,170 | 179 | 541 | NB/EB |
| | | | | | Development Name | 0 | 0 | | | | 75.14% | |
| | | | | | Applicant Inventory Total | 0 | 0 | | | | | |
| Plymouth-Sorrento Rd to Vick Rd | 2L | E | 15,900 | 790 | | | | 5,063 | 9,836 | 355 | 361 | SB/WB |
| | | | | | Appy Lane Subdivision | 46 | 5 | | | | 45.70% | |
| | | | | | Hillside at Wekiva (fka Ponkan Reserve - North) | 122 | 13 | | | | | |
| | | | | | Oak Ridge Subdivision | 186 | 12 | | | | | |
| | | | | | Orchid Estates (fka J.B. Nurseries) | 565 | 36 | | | | | |
| | | | | | Ponkan Reserve - South | 79 | 8 | | | | | |
| | | | | | Rock Springs Ridge | 3 | 0 | | | | | |
| | | | | | Applicant Inventory Total | 1,001 | 74 | | | | | |
| Vick Rd to Rock Springs Rd | 2L | E | 15,900 | 790 | | | | 3,756 | 11,078 | 208 | 489 | NB/EB |
| | | | | | Appy Lane Subdivision | 115 | 12 | | | | 61.90% | |
| | | | | | Hillside at Wekiva (fka Ponkan Reserve - North) | 293 | 31 | | | | | |
| | | | | | Orchid Estates (fka J.B. Nurseries) | 462 | 29 | | | | | |
| | | | | | Ponkan Reserve - South | 190 | 20 | | | | | |
| | | | | | Rock Springs Ridge | 6 | 1 | | | | | |
| | | | | | Applicant Inventory Total | 1,066 | 93 | | | | | |

Appendix E
Traffic Counts & FDOT Seasonal Factor Report

TURNING MOVEMENT COUNT ANALYSIS
AUTOS & TRUCKS

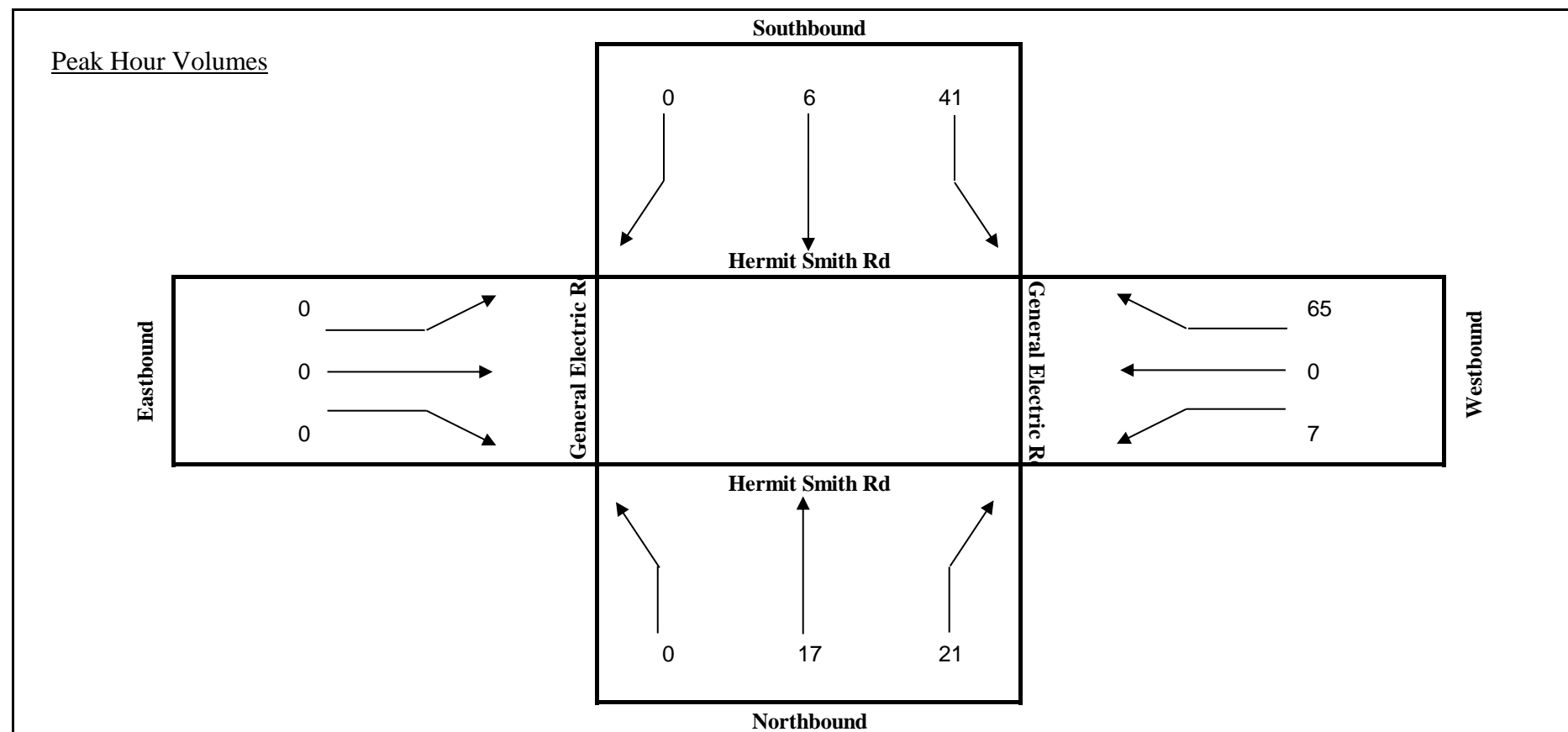
Intersection (N/S): Hermit Smith Rd

Intersection (E/W): General Electric Rd

Date: 3/13/2018

| Start | End | Hermit Smith Rd | | | Hermit Smith Rd | | | General Electric Rd | | | General Electric Rd | | | TOTAL |
|---------|---------|-----------------|---|---|-----------------|---|---|---------------------|---|---|---------------------|---|----|-------|
| | | L | T | R | L | T | R | L | T | R | L | T | R | |
| 4:00 PM | 4:15 PM | 0 | 5 | 3 | 3 | 4 | 0 | 0 | 0 | 0 | 1 | 0 | 7 | 23 |
| 4:15 PM | 4:30 PM | 0 | 4 | 5 | 5 | 2 | 0 | 0 | 0 | 0 | 4 | 0 | 11 | 31 |
| 4:30 PM | 4:45 PM | 0 | 8 | 5 | 4 | 4 | 0 | 0 | 0 | 0 | 2 | 0 | 12 | 35 |
| 4:45 PM | 5:00 PM | 0 | 1 | 5 | 4 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 18 | 30 |
| 5:00 PM | 5:15 PM | 0 | 6 | 6 | 23 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 19 | 57 |
| 5:15 PM | 5:30 PM | 0 | 2 | 5 | 10 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 16 | 35 |
| 5:30 PM | 5:45 PM | 0 | 2 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 19 |
| 5:45 PM | 6:00 PM | 0 | 6 | 3 | 3 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 5 | 20 |

| | | | | | | | | | | | | | | | |
|------------------------|---------|---------|---|----|----|----|----|---|---|---|---|---|---|----|-----|
| Total for: | 4:00 PM | 5:00 PM | 0 | 18 | 18 | 16 | 10 | 0 | 0 | 0 | 0 | 9 | 0 | 48 | 119 |
| Total for: | 5:00 PM | 6:00 PM | 0 | 16 | 14 | 39 | 5 | 0 | 0 | 0 | 0 | 4 | 0 | 53 | 131 |
| Tota Peak Hour: | 4:30 PM | 5:30 PM | 0 | 17 | 21 | 41 | 6 | 0 | 0 | 0 | 0 | 7 | 0 | 65 | 157 |
| Overall PHF: | 0.69 | | | | | | | | | | | | | | |

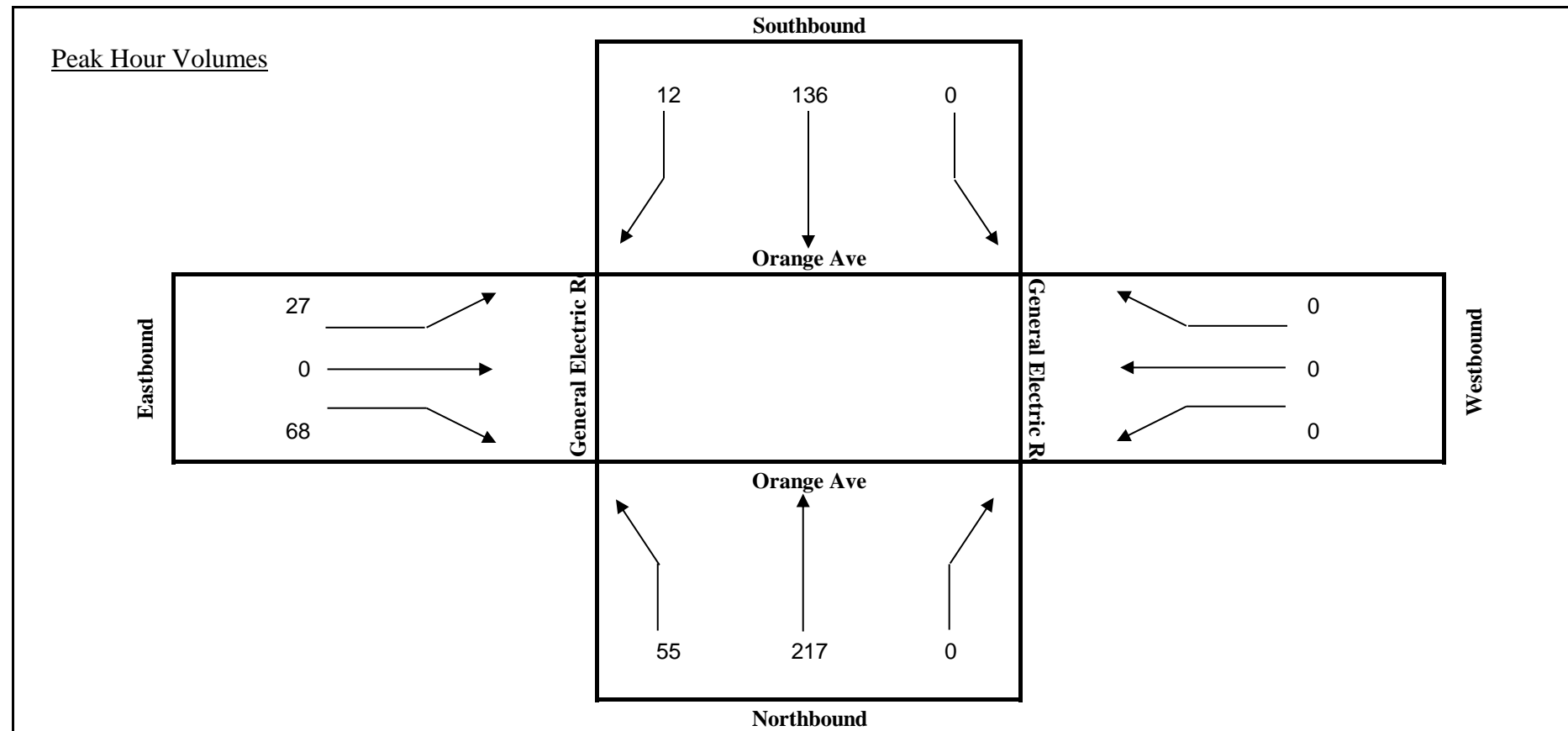


TURNING MOVEMENT COUNT ANALYSIS
AUTOS & TRUCKS

Intersection (N/S): Orange Ave
Intersection (E/W): General Electric Rd
Date: 3/13/2018

| Start | End | Orange Ave | | | Orange Ave | | | General Electric Rd | | | General Electric Rd | | | TOTAL |
|---------|---------|------------|----|---|------------|----|---|---------------------|---|----|---------------------|---|---|-------|
| | | L | T | R | L | T | R | L | T | R | L | T | R | |
| 4:00 PM | 4:15 PM | 8 | 41 | 0 | 0 | 28 | 3 | 4 | 0 | 6 | 0 | 0 | 0 | 90 |
| 4:15 PM | 4:30 PM | 7 | 50 | 0 | 0 | 35 | 3 | 3 | 0 | 10 | 0 | 0 | 0 | 108 |
| 4:30 PM | 4:45 PM | 12 | 62 | 0 | 0 | 28 | 2 | 6 | 0 | 11 | 0 | 0 | 0 | 121 |
| 4:45 PM | 5:00 PM | 14 | 48 | 0 | 0 | 27 | 4 | 6 | 0 | 12 | 0 | 0 | 0 | 111 |
| 5:00 PM | 5:15 PM | 12 | 52 | 0 | 0 | 34 | 4 | 8 | 0 | 31 | 0 | 0 | 0 | 141 |
| 5:15 PM | 5:30 PM | 17 | 55 | 0 | 0 | 47 | 2 | 7 | 0 | 14 | 0 | 0 | 0 | 142 |
| 5:30 PM | 5:45 PM | 11 | 65 | 0 | 0 | 30 | 0 | 1 | 0 | 8 | 0 | 0 | 0 | 115 |
| 5:45 PM | 6:00 PM | 6 | 31 | 0 | 0 | 29 | 1 | 4 | 0 | 5 | 0 | 0 | 0 | 76 |

| | | | | | | | | | | | | | | | |
|------------------------|---------|---------|----|-----|---|---|-----|----|----|---|----|---|---|---|-----|
| Total for: | 4:00 PM | 5:00 PM | 41 | 201 | 0 | 0 | 118 | 12 | 19 | 0 | 39 | 0 | 0 | 0 | 430 |
| Total for: | 5:00 PM | 6:00 PM | 46 | 203 | 0 | 0 | 140 | 7 | 20 | 0 | 58 | 0 | 0 | 0 | 474 |
| Tota Peak Hour: | 4:30 PM | 5:30 PM | 55 | 217 | 0 | 0 | 136 | 12 | 27 | 0 | 68 | 0 | 0 | 0 | 515 |
| Overall PHF: | 0.91 | | | | | | | | | | | | | | |



**TURNING MOVEMENT COUNT ANALYSIS
AUTOS & TRUCKS**

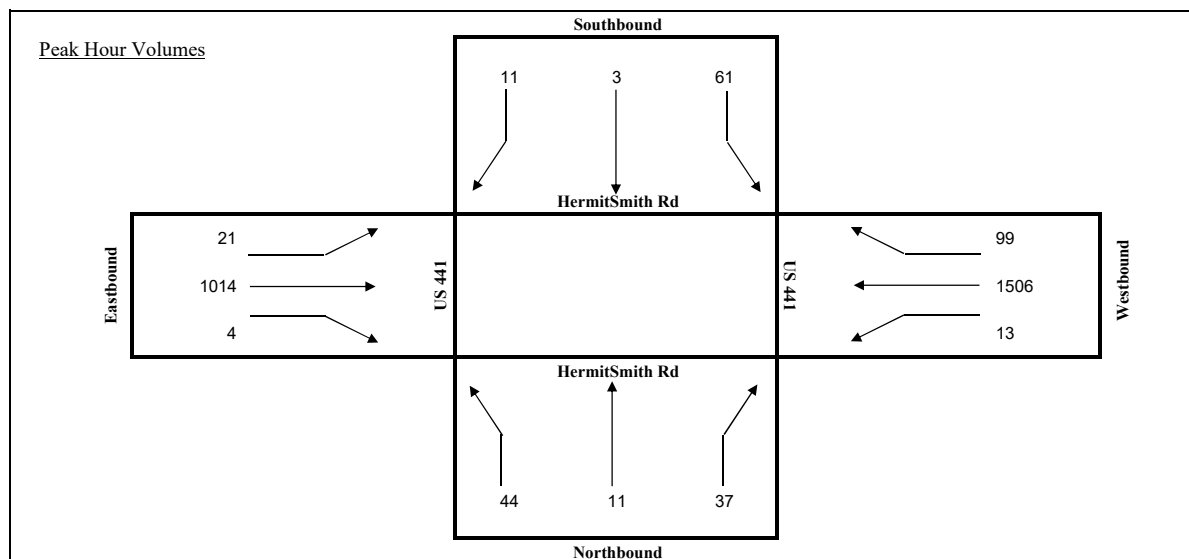
Intersection (N/S): HermitSmith Rd

Intersection (E/W): US 441

Date: 8/28/2018

| Start | End | HermitSmith Rd | | | HermitSmith Rd | | | US 441 | | | US 441 | | | TOTAL |
|---------|---------|----------------|---|----|----------------|---|---|--------|-----|---|--------|-----|----|-------|
| | | L | T | R | L | T | R | L | T | R | L | T | R | |
| 4:00 PM | 4:15 PM | 7 | 3 | 13 | 14 | 1 | 3 | 1 | 179 | 7 | 7 | 252 | 20 | 507 |
| 4:15 PM | 4:30 PM | 8 | 0 | 5 | 10 | 1 | 3 | 3 | 215 | 1 | 3 | 348 | 22 | 619 |
| 4:30 PM | 4:45 PM | 7 | 0 | 10 | 8 | 1 | 5 | 9 | 224 | 2 | 4 | 394 | 27 | 691 |
| 4:45 PM | 5:00 PM | 11 | 1 | 5 | 18 | 0 | 1 | 4 | 237 | 1 | 5 | 349 | 21 | 653 |
| 5:00 PM | 5:15 PM | 16 | 7 | 18 | 21 | 1 | 1 | 4 | 273 | 0 | 2 | 392 | 22 | 757 |
| 5:15 PM | 5:30 PM | 10 | 3 | 4 | 14 | 1 | 4 | 4 | 280 | 1 | 2 | 371 | 29 | 723 |
| 5:30 PM | 5:45 PM | 5 | 2 | 4 | 17 | 0 | 3 | 4 | 245 | 0 | 3 | 366 | 17 | 666 |
| 5:45 PM | 6:00 PM | 10 | 2 | 3 | 18 | 1 | 1 | 3 | 220 | 1 | 4 | 329 | 28 | 620 |

| | | | | | | | | | | | | | | | |
|------------------------|---------|---------|----|----|----|----|---|----|----|------|----|----|------|----|------|
| Total for: | 4:00 PM | 5:00 PM | 33 | 4 | 33 | 50 | 3 | 12 | 17 | 855 | 11 | 19 | 1343 | 90 | 2470 |
| Total for: | 5:00 PM | 6:00 PM | 41 | 14 | 29 | 70 | 3 | 9 | 15 | 1018 | 2 | 11 | 1458 | 96 | 2766 |
| Tota Peak Hour: | 4:30 PM | 5:30 PM | 44 | 11 | 37 | 61 | 3 | 11 | 21 | 1014 | 4 | 13 | 1506 | 99 | 2824 |
| Overall PHF: | 0.93 | | | | | | | | | | | | | | |



**TURNING MOVEMENT COUNT ANALYSIS
AUTOS & TRUCKS**

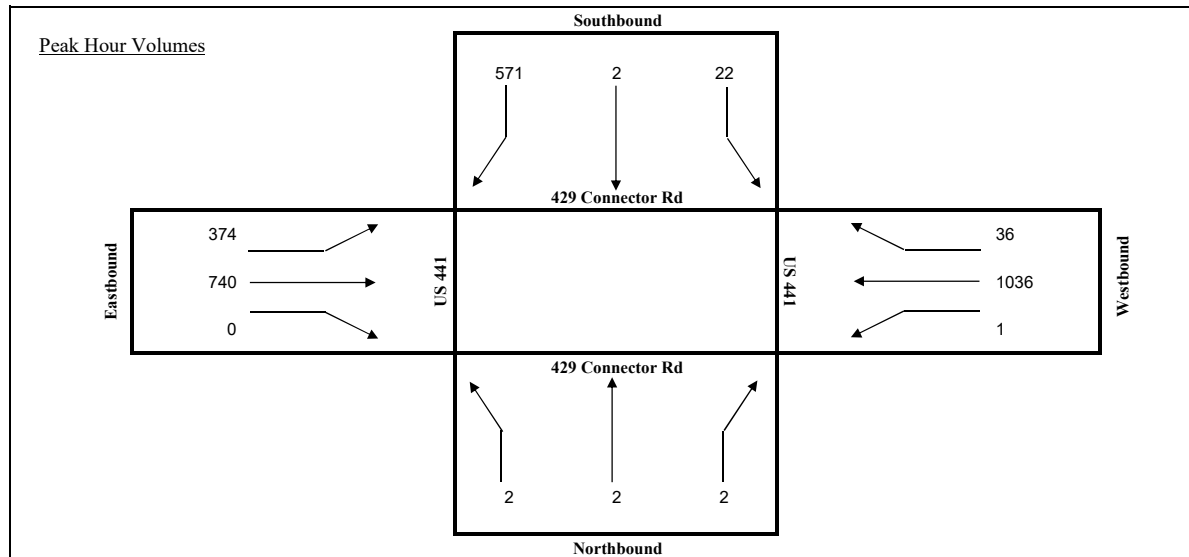
Intersection (N/S): 429 Connector Rd

Intersection (E/W): US 441

Date: 8/28/2018

| Start | End | 429 Connector Rd | | | 429 Connector Rd | | | US 441 | | | US 441 | | | TOTAL |
|---------|---------|------------------|---|---|------------------|---|-----|--------|-----|---|--------|-----|----|-------|
| | | L | T | R | L | T | R | L | T | R | L | T | R | |
| 4:00 PM | 4:15 PM | 0 | 1 | 1 | 3 | 0 | 90 | 76 | 128 | 0 | 0 | 188 | 10 | 497 |
| 4:15 PM | 4:30 PM | 2 | 4 | 0 | 2 | 1 | 119 | 90 | 135 | 0 | 0 | 250 | 8 | 611 |
| 4:30 PM | 4:45 PM | 0 | 1 | 0 | 13 | 1 | 148 | 86 | 153 | 0 | 0 | 273 | 8 | 683 |
| 4:45 PM | 5:00 PM | 1 | 1 | 1 | 4 | 0 | 134 | 97 | 164 | 0 | 0 | 234 | 9 | 645 |
| 5:00 PM | 5:15 PM | 1 | 0 | 1 | 3 | 1 | 138 | 91 | 225 | 0 | 0 | 277 | 9 | 746 |
| 5:15 PM | 5:30 PM | 0 | 0 | 0 | 2 | 0 | 151 | 100 | 198 | 0 | 1 | 252 | 10 | 714 |
| 5:30 PM | 5:45 PM | 0 | 0 | 1 | 2 | 0 | 138 | 79 | 184 | 0 | 0 | 256 | 10 | 670 |
| 5:45 PM | 6:00 PM | 1 | 1 | 0 | 3 | 0 | 124 | 73 | 172 | 0 | 1 | 240 | 8 | 623 |

| | | | | | | | | | | | | | | |
|--------------------------------|---------|---|---|---|----|---|-----|-----|-----|---|---|------|----|------|
| Total for: 4:00 PM | 5:00 PM | 3 | 7 | 2 | 22 | 2 | 491 | 349 | 580 | 0 | 0 | 945 | 35 | 2436 |
| Total for: 5:00 PM | 6:00 PM | 2 | 1 | 2 | 10 | 1 | 551 | 343 | 779 | 0 | 2 | 1025 | 37 | 2753 |
| Tota Peak Hour: 4:30 PM | 5:30 PM | 2 | 2 | 2 | 22 | 2 | 571 | 374 | 740 | 0 | 1 | 1036 | 36 | 2788 |
| Overall PHF: | 0.93 | | | | | | | | | | | | | |

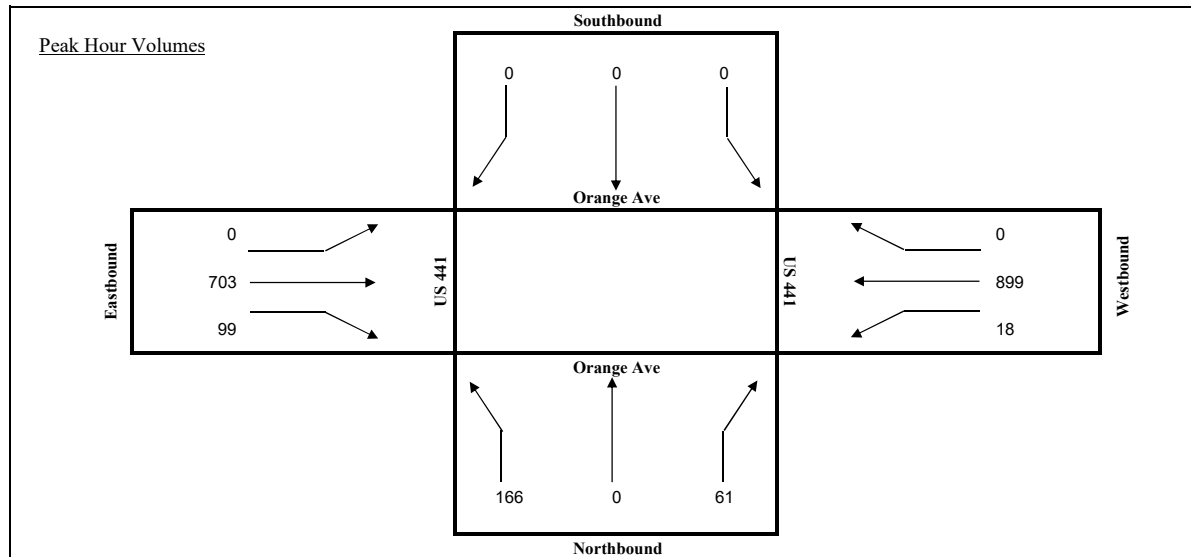


**TURNING MOVEMENT COUNT ANALYSIS
AUTOS & TRUCKS**

Intersection (N/S): Orange Ave
 Intersection (E/W): US 441
 Date: 8/28/2018

| Start | End | Orange Ave | | | Orange Ave | | | US 441 | | | US 441 | | | TOTAL |
|---------|---------|------------|---|----|------------|---|---|--------|-----|----|--------|-----|---|-------|
| | | L | T | R | L | T | R | L | T | R | L | T | R | |
| 4:00 PM | 4:15 PM | 28 | 0 | 12 | 0 | 0 | 0 | 0 | 117 | 15 | 5 | 171 | 0 | 348 |
| 4:15 PM | 4:30 PM | 47 | 0 | 9 | 0 | 0 | 0 | 0 | 124 | 13 | 7 | 211 | 0 | 411 |
| 4:30 PM | 4:45 PM | 38 | 0 | 20 | 0 | 0 | 0 | 0 | 136 | 30 | 6 | 243 | 0 | 473 |
| 4:45 PM | 5:00 PM | 43 | 0 | 15 | 0 | 0 | 0 | 0 | 150 | 18 | 3 | 200 | 0 | 429 |
| 5:00 PM | 5:15 PM | 38 | 0 | 29 | 0 | 0 | 0 | 0 | 194 | 37 | 4 | 249 | 0 | 551 |
| 5:15 PM | 5:30 PM | 43 | 0 | 10 | 0 | 0 | 0 | 0 | 178 | 22 | 7 | 220 | 0 | 480 |
| 5:30 PM | 5:45 PM | 59 | 0 | 13 | 0 | 0 | 0 | 0 | 180 | 15 | 6 | 207 | 0 | 480 |
| 5:45 PM | 6:00 PM | 26 | 0 | 9 | 0 | 0 | 0 | 0 | 151 | 25 | 1 | 223 | 0 | 435 |

| | | | | | | | | | | | | | | | |
|------------------------|---------|---------|------|---|----|---|---|---|---|-----|----|----|-----|---|------|
| Total for: | 4:00 PM | 5:00 PM | 156 | 0 | 56 | 0 | 0 | 0 | 0 | 527 | 76 | 21 | 825 | 0 | 1661 |
| Total for: | 5:00 PM | 6:00 PM | 166 | 0 | 61 | 0 | 0 | 0 | 0 | 703 | 99 | 18 | 899 | 0 | 1946 |
| Tota Peak Hour: | 5:00 PM | 6:00 PM | 166 | 0 | 61 | 0 | 0 | 0 | 0 | 703 | 99 | 18 | 899 | 0 | 1946 |
| Overall PHF: | | | 0.88 | | | | | | | | | | | | |



**TURNING MOVEMENT COUNT ANALYSIS
AUTOS & TRUCKS**

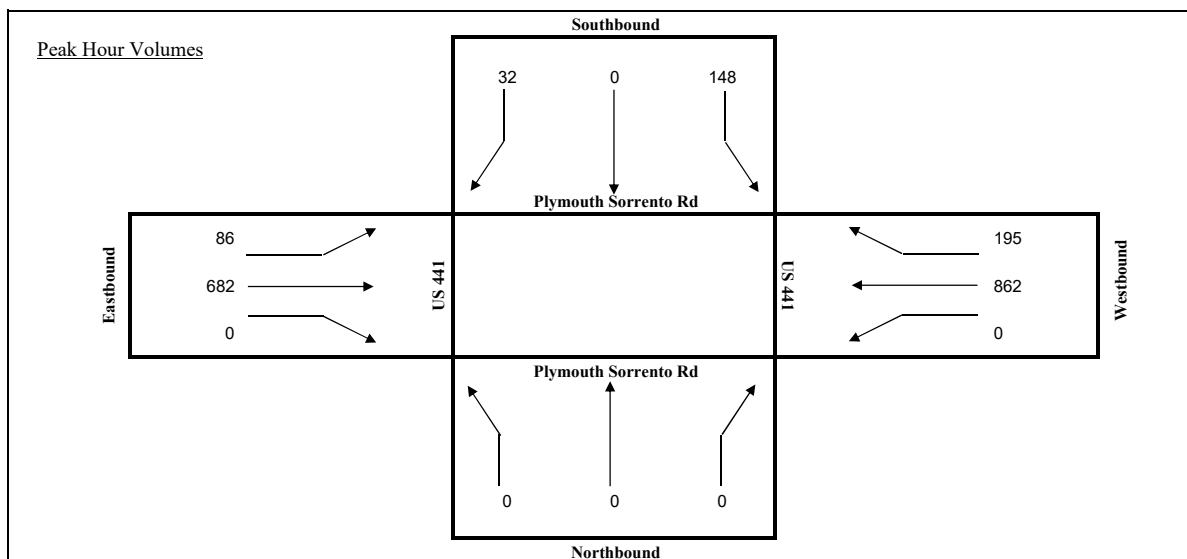
Intersection (N/S): Plymouth Sorrento Rd

Intersection (E/W): US 441

Date: 8/28/2018

| Start | End | Plymouth Sorrento Rd | | | Plymouth Sorrento Rd | | | US 441 | | | US 441 | | | TOTAL |
|---------|---------|----------------------|---|---|----------------------|---|----|--------|-----|---|--------|-----|----|-------|
| | | L | T | R | L | T | R | L | T | R | L | T | R | |
| 4:00 PM | 4:15 PM | 0 | 0 | 0 | 31 | 0 | 7 | 20 | 111 | 0 | 0 | 166 | 46 | 381 |
| 4:15 PM | 4:30 PM | 0 | 0 | 0 | 39 | 0 | 6 | 15 | 119 | 0 | 0 | 200 | 45 | 424 |
| 4:30 PM | 4:45 PM | 0 | 0 | 0 | 36 | 0 | 8 | 18 | 140 | 0 | 0 | 236 | 47 | 485 |
| 4:45 PM | 5:00 PM | 0 | 0 | 0 | 29 | 0 | 3 | 14 | 152 | 0 | 0 | 195 | 46 | 439 |
| 5:00 PM | 5:15 PM | 0 | 0 | 0 | 36 | 0 | 4 | 29 | 197 | 0 | 0 | 245 | 43 | 554 |
| 5:15 PM | 5:30 PM | 0 | 0 | 0 | 33 | 0 | 11 | 19 | 172 | 0 | 0 | 211 | 49 | 495 |
| 5:30 PM | 5:45 PM | 0 | 0 | 0 | 40 | 0 | 7 | 21 | 169 | 0 | 0 | 196 | 55 | 488 |
| 5:45 PM | 6:00 PM | 0 | 0 | 0 | 39 | 0 | 10 | 17 | 144 | 0 | 0 | 210 | 48 | 468 |

| | | | | | | | | | | | | | | | |
|-------------------------|---------|---------|---|---|---|-----|---|----|----|-----|---|---|-----|-----|------|
| Total for: | 4:00 PM | 5:00 PM | 0 | 0 | 0 | 135 | 0 | 24 | 67 | 522 | 0 | 0 | 797 | 184 | 1729 |
| Total for: | 5:00 PM | 6:00 PM | 0 | 0 | 0 | 148 | 0 | 32 | 86 | 682 | 0 | 0 | 862 | 195 | 2005 |
| Total Peak Hour: | 5:00 PM | 6:00 PM | 0 | 0 | 0 | 148 | 0 | 32 | 86 | 682 | 0 | 0 | 862 | 195 | 2005 |
| Overall PHF: | 0.90 | | | | | | | | | | | | | | |



**TURNING MOVEMENT COUNT ANALYSIS
AUTOS & TRUCKS**

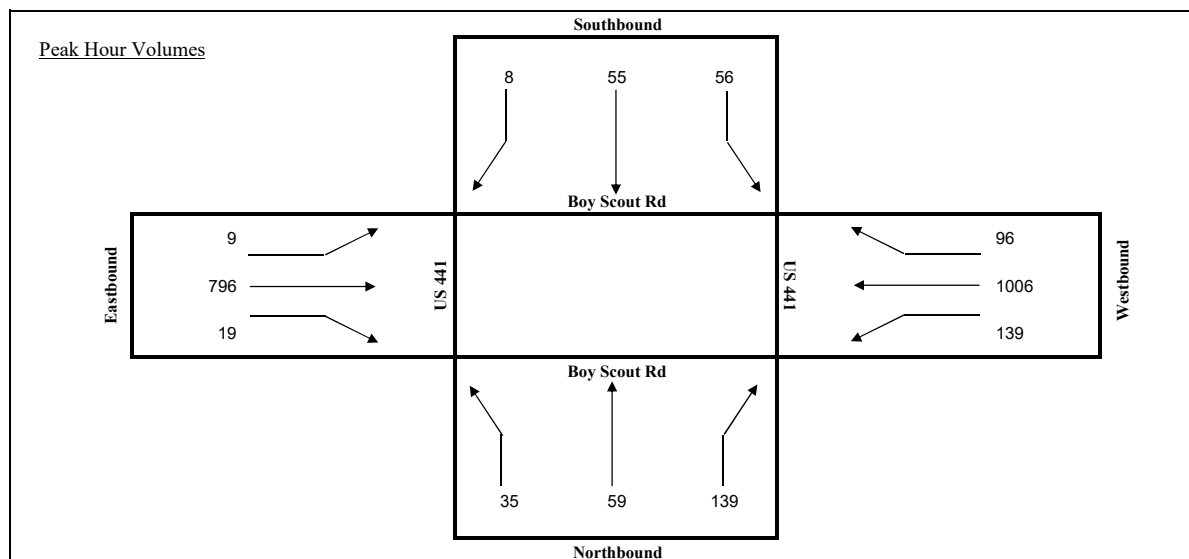
Intersection (N/S): Boy Scout Rd

Intersection (E/W): US 441

Date: 8/28/2018

| Start | End | Boy Scout Rd | | | Boy Scout Rd | | | US 441 | | | US 441 | | | TOTAL |
|---------|---------|--------------|----|----|--------------|----|---|--------|-----|----|--------|-----|----|-------|
| | | L | T | R | L | T | R | L | T | R | L | T | R | |
| 4:00 PM | 4:15 PM | 6 | 8 | 22 | 5 | 8 | 2 | 1 | 137 | 2 | 15 | 201 | 10 | 417 |
| 4:15 PM | 4:30 PM | 9 | 13 | 26 | 8 | 14 | 3 | 3 | 145 | 3 | 22 | 230 | 12 | 488 |
| 4:30 PM | 4:45 PM | 10 | 22 | 54 | 7 | 7 | 0 | 4 | 168 | 2 | 15 | 276 | 14 | 579 |
| 4:45 PM | 5:00 PM | 8 | 27 | 31 | 14 | 6 | 2 | 1 | 166 | 12 | 20 | 224 | 14 | 525 |
| 5:00 PM | 5:15 PM | 9 | 17 | 46 | 10 | 16 | 1 | 3 | 221 | 7 | 34 | 276 | 24 | 664 |
| 5:15 PM | 5:30 PM | 9 | 18 | 34 | 20 | 17 | 4 | 2 | 203 | 3 | 28 | 243 | 28 | 609 |
| 5:30 PM | 5:45 PM | 8 | 14 | 35 | 9 | 9 | 2 | 1 | 203 | 3 | 32 | 235 | 18 | 569 |
| 5:45 PM | 6:00 PM | 9 | 10 | 24 | 17 | 13 | 1 | 3 | 169 | 6 | 45 | 252 | 26 | 575 |

| | | | | | | | | | | | | | | | |
|------------------------|---------|---------|----|----|-----|----|----|---|---|-----|----|-----|------|----|------|
| Total for: | 4:00 PM | 5:00 PM | 33 | 70 | 133 | 34 | 35 | 7 | 9 | 616 | 19 | 72 | 931 | 50 | 2009 |
| Total for: | 5:00 PM | 6:00 PM | 35 | 59 | 139 | 56 | 55 | 8 | 9 | 796 | 19 | 139 | 1006 | 96 | 2417 |
| Tota Peak Hour: | 5:00 PM | 6:00 PM | 35 | 59 | 139 | 56 | 55 | 8 | 9 | 796 | 19 | 139 | 1006 | 96 | 2417 |
| Overall PHF: | 0.91 | | | | | | | | | | | | | | |



2017 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
 CATEGORY: 7500 ORANGE COUNTYWIDE

| WEEK | DATES | SF | MOCF: 0.98 PSCF |
|------|-------------------------|------|--------------------|
| 1 | 01/01/2017 - 01/07/2017 | 1.01 | 1.03 |
| 2 | 01/08/2017 - 01/14/2017 | 1.03 | 1.05 |
| 3 | 01/15/2017 - 01/21/2017 | 1.04 | 1.06 |
| 4 | 01/22/2017 - 01/28/2017 | 1.03 | 1.05 |
| 5 | 01/29/2017 - 02/04/2017 | 1.02 | 1.04 |
| 6 | 02/05/2017 - 02/11/2017 | 1.00 | 1.02 |
| 7 | 02/12/2017 - 02/18/2017 | 0.99 | 1.01 |
| 8 | 02/19/2017 - 02/25/2017 | 0.99 | 1.01 |
| * 9 | 02/26/2017 - 03/04/2017 | 0.98 | 1.00 |
| *10 | 03/05/2017 - 03/11/2017 | 0.98 | 1.00 |
| *11 | 03/12/2017 - 03/18/2017 | 0.97 | 0.99 |
| *12 | 03/19/2017 - 03/25/2017 | 0.97 | 0.99 |
| *13 | 03/26/2017 - 04/01/2017 | 0.97 | 0.99 |
| *14 | 04/02/2017 - 04/08/2017 | 0.97 | 0.99 |
| *15 | 04/09/2017 - 04/15/2017 | 0.97 | 0.99 |
| *16 | 04/16/2017 - 04/22/2017 | 0.97 | 0.99 |
| *17 | 04/23/2017 - 04/29/2017 | 0.97 | 0.99 |
| *18 | 04/30/2017 - 05/06/2017 | 0.98 | 1.00 |
| *19 | 05/07/2017 - 05/13/2017 | 0.98 | 1.00 |
| *20 | 05/14/2017 - 05/20/2017 | 0.98 | 1.00 |
| *21 | 05/21/2017 - 05/27/2017 | 0.99 | 1.01 |
| 22 | 05/28/2017 - 06/03/2017 | 1.00 | 1.02 |
| 23 | 06/04/2017 - 06/10/2017 | 1.00 | 1.02 |
| 24 | 06/11/2017 - 06/17/2017 | 1.01 | 1.03 |
| 25 | 06/18/2017 - 06/24/2017 | 1.01 | 1.03 |
| 26 | 06/25/2017 - 07/01/2017 | 1.01 | 1.03 |
| 27 | 07/02/2017 - 07/08/2017 | 1.01 | 1.03 |
| 28 | 07/09/2017 - 07/15/2017 | 1.02 | 1.04 |
| 29 | 07/16/2017 - 07/22/2017 | 1.01 | 1.03 |
| 30 | 07/23/2017 - 07/29/2017 | 1.00 | 1.02 |
| 31 | 07/30/2017 - 08/05/2017 | 1.00 | 1.02 |
| 32 | 08/06/2017 - 08/12/2017 | 0.99 | 1.01 |
| 33 | 08/13/2017 - 08/19/2017 | 0.99 | 1.01 |
| 34 | 08/20/2017 - 08/26/2017 | 1.01 | 1.03 |
| 35 | 08/27/2017 - 09/02/2017 | 1.04 | 1.06 |
| 36 | 09/03/2017 - 09/09/2017 | 1.06 | 1.08 |
| 37 | 09/10/2017 - 09/16/2017 | 1.09 | 1.11 |
| 38 | 09/17/2017 - 09/23/2017 | 1.07 | 1.09 |
| 39 | 09/24/2017 - 09/30/2017 | 1.05 | 1.07 |
| 40 | 10/01/2017 - 10/07/2017 | 1.03 | 1.05 |
| 41 | 10/08/2017 - 10/14/2017 | 1.01 | 1.03 |
| 42 | 10/15/2017 - 10/21/2017 | 0.99 | 1.01 |
| 43 | 10/22/2017 - 10/28/2017 | 0.99 | 1.01 |
| 44 | 10/29/2017 - 11/04/2017 | 0.99 | 1.01 |
| 45 | 11/05/2017 - 11/11/2017 | 1.00 | 1.02 |
| 46 | 11/12/2017 - 11/18/2017 | 1.00 | 1.02 |
| 47 | 11/19/2017 - 11/25/2017 | 1.00 | 1.02 |
| 48 | 11/26/2017 - 12/02/2017 | 1.01 | 1.03 |
| 49 | 12/03/2017 - 12/09/2017 | 1.01 | 1.03 |
| 50 | 12/10/2017 - 12/16/2017 | 1.01 | 1.03 |
| 51 | 12/17/2017 - 12/23/2017 | 1.02 | 1.04 |
| 52 | 12/24/2017 - 12/30/2017 | 1.03 | 1.05 |
| 53 | 12/31/2017 - 12/31/2017 | 1.04 | 1.06 |

* PEAK SEASON

02-MAR-2018 15:35:06

830UPD

5_7500_PKSEASON.TXT

ORANGE COUNTY TRAFFIC SIGNAL TIMING SHEET

Intersection: US 441 & Boy Scout Blvd/Lake View Dr
 Equipment: Eagle ATCnx

Int. # 20 Node 37
 Date: 5/1/2018 Address:

BASIC TIMING

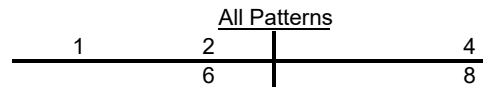
| Phase | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---------------------------------|------|-------|---|------|---|-------|---|-------|
| Direction | WBL | EB | | SB | | WB | | NB |
| Min Green (sec) | 5 | 15 | | 5 | | 15 | | 5 |
| Vehicle Gap (sec) | 2.0 | 3.0 | | 3.0 | | 3.0 | | 3.0 |
| Max Green 1 (sec) | 15 | 50 | | 25 | | 50 | | 15 |
| Max Green 2 (sec) | 15 | 50 | | 25 | | 50 | | 25 |
| Yellow Change Interval (sec) | 4.8 | 5.2 | | 3.7 | | 4.8 | | 3.9 |
| Red Clearance Interval (sec) | 2.3 | 2.0 | | 2.8 | | 2.0 | | 2.9 |
| Walk (sec) | | 7 | | 7 | | 7 | | |
| Flash Don't Walk (sec) | | 13 | | 31 | | 15 | | |
| Min Split (sec) | 13 | 28 | | 45 | | 29 | | 12 |
| Recall/Memory | NL | SF/LK | | NL | | SF/LK | | NL |
| Detector Delay (sec) | 5 | | | 5 | | | | |
| Detector Switching | 1>6 | | | | | | | |
| Dual Entry | | Y | | Y | | Y | | Y |
| Overlap | | | | | | | | |
| Flash | | Y | | R | | Y | | R |
| Speed (mph) | 45 | 45 | | 30 | | 45 | | 30 |
| Approach Grades (%) | 2.2% | -3.5% | | 0.4% | | 2.2% | | -3.6% |
| Veh Traversed Distance (ft) | 98 | 113 | | 147 | | 135 | | 148 |
| Ped Crossing Distance (ft) | | 43 | | 108 | | 50 | | |
| Ped Clearance (sec) | | 13 | | 31 | | 15 | | |
| Ped-button to curb (ft) | | 25 | | 16 | | 16 | | |
| Ped-button to far curb (ft) | | 68 | | 124 | | 66 | | |
| Ped Clearance to far curb (sec) | | 23 | | 42 | | 22 | | |

COORDINATION PLANS

| Coordination Pattern | 1/1/1 | 2/1/1 | 3/1/1 | 3/2/2 | Day | Time | Pattern | |
|----------------------|----------|----------|----------|----------|----------|-------|---------|------|
| Cycle | 150 | 140 | 150 | 140 | 1 | 0:01 | FREE | |
| Split 1 | 18 | 23 | 19 | 20 | 1 | 9:45 | 2/1/1 | |
| Split 2 | 97 | 87 | 91 | 85 | 1 | 19:00 | FREE | |
| Split 3 | 0 | 0 | 0 | 0 | 2 | 0:01 | FREE | |
| Split 4 | 35 | 30 | 40 | 35 | 2 | 6:30 | 1/1/1 | |
| Split 5 | 18 | 0 | 0 | 0 | 2 | 9:30 | 2/1/1 | |
| Split 6 | 97 | 110 | 110 | 105 | 2 | 14:00 | 3/1/1 | |
| Split 7 | 0 | 0 | 0 | 0 | 2 | 18:00 | 2/1/1 | |
| Split 8 | 35 | 30 | 40 | 35 | 2 | 20:00 | FREE | |
| Offset | 91 | 87 | 102 | 109 | 7 | 0:01 | FREE | |
| Lagging Phases | 0/0/0/0 | 0/0/0/0 | 0/0/0/0 | 0/0/0/0 | 7 | 9:30 | 2/1/1 | |
| Source Day | Equate 1 | Equate 2 | Equate 3 | Equate 4 | Equate 5 | 7 | 19:30 | FREE |
| (Sunday) 1 | | | | | | | | |
| (Monday) 2 | 3 | 4 | 5 | 6 | | | | |
| (Saturday) 7 | | | | | | | | |

Notes:

- Offset referenced to start of mainstreet green
- Use Plan Force-offs
- Use Max Inhibit during coordination



ORANGE COUNTY TRAFFIC SIGNAL TIMING SHEET

Intersection: US 441 & Plymouth Sorrento Rd Int. # 21 Node 202
 Equipment: Eagle ACTnx Date: 5/1/2018 Address:

BASIC TIMING

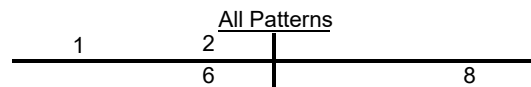
| Phase | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---------------------------------|-------|-------|---|---|---|-------|---|------|
| Direction | EBL | WB | | | | EB | | SB |
| Min Green (sec) | 5 | 15 | | | | 15 | | 5 |
| Vehicle Gap (sec) | 1.8 | 3.0 | | | | 3.0 | | 4.0 |
| Max Green 1 (sec) | 25 | 35 | | | | 35 | | 30 |
| Max Green 2 (sec) | 25 | 35 | | | | 35 | | 30 |
| Yellow Change Interval (sec) | 4.9 | 4.8 | | | | 4.9 | | 4.8 |
| Red Clearance Interval (sec) | 2.9 | 2.0 | | | | 2.0 | | 2.0 |
| Walk (sec) | | | | | | | | |
| Flash Don't Walk (sec) | | | | | | | | |
| Min Split (sec) | 13 | 22 | | | | 22 | | 12 |
| Recall/Memory | NL | SF/LK | | | | SF/LK | | NL |
| Detector Delay (sec) | | | | | | | | |
| Detector Switching | 1>6 | | | | | | | |
| Dual Entry | | Y | | | | Y | | |
| Overlap | | | | | | | | |
| Flash | | Y | | | | Y | | R |
| Speed (mph) | 45 | 45 | | | | 45 | | 45 |
| Approach Grades (%) | -1.0% | 0.1% | | | | -1.0% | | 0.2% |
| Veh Traversed Distance (ft) | 122 | 136 | | | | 141 | | 119 |
| Ped Crossing Distance (ft) | | | | | | | | |
| Ped Clearance (sec) | | | | | | | | |
| Ped-button to curb (ft) | | | | | | | | |
| Ped-button to far curb (ft) | | | | | | | | |
| Ped Clearance to far curb (sec) | | | | | | | | |

COORDINATION PLANS

| Coordination Pattern | 1/1/1 | 2/1/1 | 3/1/1 | 3/2/2 | Day | Time | Pattern | |
|----------------------|----------|----------|----------|----------|----------|-------|---------|------|
| Cycle | 150 | 140 | 150 | 140 | 1 | 0:01 | FREE | |
| Split 1 | 18 | 18 | 20 | 20 | 1 | 9:45 | 2/1/1 | |
| Split 2 | 107 | 101 | 110 | 100 | 1 | 19:00 | FREE | |
| Split 3 | 0 | 0 | 0 | 0 | 2 | 0:01 | FREE | |
| Split 4 | 0 | 0 | 0 | 0 | 2 | 6:30 | 1/1/1 | |
| Split 5 | 0 | 0 | 0 | 0 | 2 | 9:30 | 2/1/1 | |
| Split 6 | 125 | 119 | 130 | 120 | 2 | 14:00 | 3/1/1 | |
| Split 7 | 0 | 0 | 0 | 0 | 2 | 18:00 | 2/1/1 | |
| Split 8 | 25 | 21 | 20 | 20 | 2 | 20:00 | FREE | |
| Offset | 66 | 69 | 31 | 106 | 7 | 0:01 | FREE | |
| Lagging Phases | 0/0/0/0 | 0/0/0/0 | 0/0/0/0 | 0/0/0/0 | 7 | 9:30 | 2/1/1 | |
| Source Day | Equate 1 | Equate 2 | Equate 3 | Equate 4 | Equate 5 | 7 | 19:30 | FREE |
| (Sunday) 1 | | | | | | | | |
| (Monday) 2 | 3 | 4 | 5 | 6 | | | | |
| (Saturday) 7 | | | | | | | | |

Notes:

1. Offset referenced to start of mainstreet green
2. Use Plan Force-offs
3. Use Max Inhibit during coordination



ORANGE COUNTY TRAFFIC SIGNAL TIMING SHEET

Intersection: US 441 & Orange Ave /T. L. Smith Rd
 Equipment: Siemens m50

Int. # 22 Node 247
 Date: 5/1/2018 Address:

BASIC TIMING

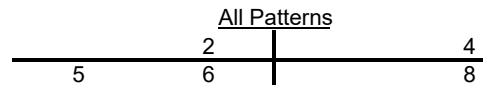
| Phase | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---------------------------------|---|-------|---|-------|-------|-------|---|-------|
| Direction | | WB | | NB | WBL | EB | | SB |
| Min Green (sec) | | 20 | | 5 | 5 | 15 | | 5 |
| Vehicle Gap (sec) | | 3.0 | | 3.0 | 3.0 | 3.0 | | 3.0 |
| Max Green 1 (sec) | | 67 | | 18 | 14 | 45 | | 18 |
| Max Green 2 (sec) | | 67 | | 18 | 14 | 45 | | 18 |
| Yellow Change Interval (sec) | | 4.9 | | 4.4 | 4.9 | 4.8 | | 3.4 |
| Red Clearance Interval (sec) | | 2.0 | | 2.1 | 3.0 | 2.0 | | 4.1 |
| Walk (sec) | | | | | | | | |
| Flash Don't Walk (sec) | | | | | | | | |
| Min Split (sec) | | 27 | | 12 | 13 | 22 | | 13 |
| Recall/Memory | | NL | | NL | NL | SF/LK | | NL |
| Detector Delay (sec) | | | | | | | | |
| Detector Switching | | | | | | | | |
| Dual Entry | | Y | | Y | | Y | | Y |
| Overlap | | | | | | | | |
| Flash | | Y | | R | Y | Y | | R |
| Speed (mph) | | 45 | | 40 | 45 | 45 | | 25 |
| Approach Grades (%) | | -1.0% | | -0.4% | -1.0% | -0.6% | | -2.3% |
| Veh Traversed Distance (ft) | | 168 | | 160 | 125 | 162 | | 167 |
| Ped Crossing Distance (ft) | | | | | | | | |
| Ped Clearance (sec) | | | | | | | | |
| Ped-button to curb (ft) | | | | | | | | |
| Ped-button to far curb (ft) | | | | | | | | |
| Ped Clearance to far curb (sec) | | | | | | | | |

COORDINATION PLANS

| Coordination Pattern | 1/1/1 | 2/1/1 | 3/1/1 | 3/2/2 | Day | Time | Pattern | |
|----------------------|----------|----------|----------|----------|----------|-------|---------|------|
| Cycle | 150 | 140 | 150 | 140 | 1 | 0:01 | FREE | |
| Split 1 | 0 | 0 | 0 | 0 | 1 | 9:45 | 2/1/1 | |
| Split 2 | 130 | 120 | 108 | 100 | 1 | 19:00 | FREE | |
| Split 3 | 0 | 0 | 0 | 0 | 2 | 0:01 | FREE | |
| Split 4 | 20 | 20 | 42 | 40 | 2 | 6:30 | 1/1/1 | |
| Split 5 | 20 | 18 | 18 | 18 | 2 | 9:30 | 2/1/1 | |
| Split 6 | 110 | 102 | 90 | 82 | 2 | 14:00 | 3/1/1 | |
| Split 7 | 0 | 0 | 0 | 0 | 2 | 18:00 | 2/1/1 | |
| Split 8 | 20 | 20 | 42 | 40 | 2 | 20:00 | FREE | |
| Offset | 64 | 66 | 43 | 51 | 7 | 0:01 | FREE | |
| Lagging Phases | 0/0/0/0 | 0/0/0/0 | 0/0/0/0 | 0/0/0/0 | 7 | 9:30 | 2/1/1 | |
| Source Day | Equate 1 | Equate 2 | Equate 3 | Equate 4 | Equate 5 | 7 | 19:30 | FREE |
| (Sunday) 1 | | | | | | | | |
| (Monday) 2 | 3 | 4 | 5 | 6 | | | | |
| (Saturday) 7 | | | | | | | | |

Notes:

- Offset referenced to start of mainstreet green
- Use Plan Force-offs
- Use Max Inhibit during coordination



ORANGE COUNTY TRAFFIC SIGNAL TIMING SHEET

Intersection: US 441 & SR 429 Connector Rd Int. # 23 Node 624
 Equipment: Siemens m50 Date: 5/1/2018 Address:

BASIC TIMING

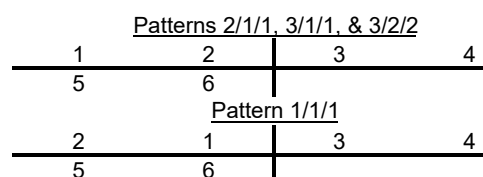
| Phase | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---------------------------------|------|--------|-------|------|------|--------|---|---|
| Direction | EBL | WB | SB | NB | WBL | EB | | |
| Min Green (sec) | 5 | 20 | 20 | 5 | 5 | 20 | | |
| Vehicle Gap (sec) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | |
| Max Green 1 (sec) | 30 | 77 | 40 | 17 | 21 | 77 | | |
| Max Green 2 (sec) | 45 | 55 | 50 | 17 | 30 | 60 | | |
| Yellow Change Interval (sec) | 4.8 | 4.8 | 4.2 | 3.4 | 4.8 | 4.8 | | |
| Red Clearance Interval (sec) | 5.2 | 2.2 | 4.4 | 4.3 | 3.4 | 2.3 | | |
| Walk (sec) | | 7 | | 7 | | 7 | | |
| Flash Don't Walk (sec) | | 35 | | 34 | | 17 | | |
| Min Split (sec) | 15 | 49 | 29 | 49 | 14 | 32 | | |
| Recall/Memory | NL | MIN/LK | NL | NL | NL | MIN/LK | | |
| Detector Delay (sec) | | | CDR 5 | CD 5 | CD 5 | | | |
| Detector Switching | | | | | | | | |
| Dual Entry | | Y | | | | Y | | |
| Overlap | | | | | | | | |
| Flash | R | Y | R | R | R | Y | | |
| Speed (mph) | 45 | 45 | 35 | 25 | 45 | 45 | | |
| Approach Grades (%) | 0.4% | 0.1% | -2.1% | 0.4% | 0.1% | 0.4% | | |
| Veh Traversed Distance (ft) | 207 | 191 | 175 | 172 | 139 | 192 | | |
| Ped Crossing Distance (ft) | | 121 | | 119 | | 58 | | |
| Ped Clearance (sec) | | 35 | | 34 | | 17 | | |
| Ped-button to curb (ft) | | 8 | | 13 | | 13 | | |
| Ped-button to far curb (ft) | | 129 | | 132 | | 71 | | |
| Ped Clearance to far curb (sec) | | 43 | | 44 | | 24 | | |

COORDINATION PLANS

| Coordination Pattern | 1/1/1 | 2/1/1 | 3/1/1 | 3/2/2 | Day | Time | Pattern | |
|----------------------|----------|----------|----------|----------|----------|-------|---------|------|
| Cycle | 150 | 140 | 150 | 140 | 1 | 0:01 | FREE | |
| Split 1 | 56 | 30 | 30 | 28 | 1 | 9:45 | 2/1/1 | |
| Split 2 | 47 | 63 | 70 | 64 | 1 | 19:00 | FREE | |
| Split 3 | 29 | 29 | 32 | 30 | 2 | 0:01 | FREE | |
| Split 4 | 18 | 18 | 18 | 18 | 2 | 6:30 | 1/1/1 | |
| Split 5 | 18 | 18 | 18 | 18 | 2 | 9:30 | 2/1/1 | |
| Split 6 | 85 | 75 | 82 | 74 | 2 | 14:00 | 3/1/1 | |
| Split 7 | 0 | 0 | 0 | 0 | 2 | 18:00 | 2/1/1 | |
| Split 8 | 0 | 0 | 0 | 0 | 2 | 20:00 | FREE | |
| Offset | 16 | 29 | 45 | 59 | 7 | 0:01 | FREE | |
| Lagging Phases | 1/0/0/0 | 0/0/0/0 | 0/0/0/0 | 0/0/0/0 | 7 | 9:30 | 2/1/1 | |
| Source Day | Equate 1 | Equate 2 | Equate 3 | Equate 4 | Equate 5 | 7 | 19:30 | FREE |
| (Sunday) 1 | | | | | | | | |
| (Monday) 2 | 3 | 4 | 5 | 6 | | | | |
| (Saturday) 7 | | | | | | | | |

Notes:

- Offset referenced to start of mainstreet green
- Use Cycle Force-offs
- Use Max II during coordination



ORANGE COUNTY TRAFFIC SIGNAL TIMING SHEET

Intersection: US 441 & Hermit Smith Rd Int. # 24 Node 672
 Equipment: Siemens m50 Date: 5/1/2018 Address:

BASIC TIMING

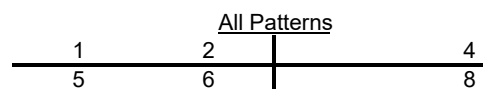
| Phase | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---------------------------------|-----------|--------|---|------|-----------|--------|---|-------|
| Direction | EBL | WB | | NB | WBL | EB | | SB |
| Min Green (sec) | 5 | 17 | | 5 | 5 | 17 | | 5 |
| Vehicle Gap (sec) | 3.0 | 3.0 | | 3.0 | 4.0 | 3.0 | | 3.0 |
| Max Green 1 (sec) | 25 | 77 | | 25 | 25 | 77 | | 25 |
| Max Green 2 (sec) | 30 | 50 | | 50 | 30 | 50 | | 50 |
| Yellow Change Interval (sec) | 4.9 | 4.8 | | 4.0 | 4.8 | 4.9 | | 4.1 |
| Red Clearance Interval (sec) | 3.7 | 2.0 | | 3.0 | 2.8 | 2.0 | | 3.1 |
| Walk (sec) | | 7 | | 7 | | 7 | | 7 |
| Flash Don't Walk (sec) | | 14 | | 37 | | 17 | | 37 |
| Min Split (sec) | 14 | 28 | | 51 | 13 | 31 | | 52 |
| Recall/Memory | NL | MIN/LK | | NL | NL | MIN/LK | | NL |
| Detector Delay (sec) | | | | CD 5 | | | | CD 5 |
| Detector Switching | | | | | | | | |
| Dual Entry | | Y | | Y | | Y | | Y |
| Overlap | | | | | | | | |
| Flash | 4-SECTION | Y | | R | 4-SECTION | Y | | R |
| Speed (mph) | 45 | 45 | | 35 | 45 | 45 | | 35 |
| Approach Grades (%) | -1.6% | 0.5% | | 1.0% | 0.5% | -1.6% | | -1.0% |
| Veh Traversed Distance (ft) | 151 | 157 | | 182 | 116 | 153 | | 187 |
| Ped Crossing Distance (ft) | | 46 | | 127 | | 59 | | 128 |
| Ped Clearance (sec) | | 14 | | 37 | | 17 | | 37 |
| Ped-button to curb (ft) | | 13 | | 9 | | 11 | | 9 |
| Ped-button to far curb (ft) | | 59 | | 136 | | 70 | | 137 |
| Ped Clearance to far curb (sec) | | 20 | | 46 | | 24 | | 46 |

COORDINATION PLANS

| Coordination Pattern | 1/1/1 | 2/1/1 | 3/1/1 | 3/2/2 | Day | Time | Pattern | |
|----------------------|----------|----------|----------|----------|----------|-------|---------|------|
| Cycle | 150 | 140 | 150 | 140 | 1 | 0:01 | FREE | |
| Split 1 | 18 | 18 | 18 | 18 | 1 | 9:45 | 2/1/1 | |
| Split 2 | 112 | 104 | 111 | 102 | 1 | 19:00 | FREE | |
| Split 3 | 0 | 0 | 0 | 0 | 2 | 0:01 | FREE | |
| Split 4 | 20 | 18 | 21 | 20 | 2 | 6:30 | 1/1/1 | |
| Split 5 | 18 | 18 | 18 | 18 | 2 | 9:30 | 2/1/1 | |
| Split 6 | 112 | 104 | 111 | 102 | 2 | 14:00 | 3/1/1 | |
| Split 7 | 0 | 0 | 0 | 0 | 2 | 18:00 | 2/1/1 | |
| Split 8 | 20 | 18 | 21 | 20 | 2 | 20:00 | FREE | |
| Offset | 35 | 36 | 39 | 53 | 7 | 0:01 | FREE | |
| Lagging Phases | 0/0/0/0 | 0/0/0/0 | 0/0/0/0 | 0/0/0/0 | 7 | 9:30 | 2/1/1 | |
| Source Day | Equate 1 | Equate 2 | Equate 3 | Equate 4 | Equate 5 | 7 | 19:30 | FREE |
| (Sunday) 1 | | | | | | | | |
| (Monday) 2 | 3 | 4 | 5 | 6 | | | | |
| (Saturday) 7 | | | | | | | | |

Notes:





















- Offset referenced to start of mainstreet green
- Use Plan Force-offs
- Use Max Inhibit during coordination
- 4-section heads for PH 1 & PH 5 shall operate in protected/permissive mode
- Rail Road Preemption



Appendix F
Existing Conditions Analysis Worksheets

HCM 6th Signalized Intersection Summary

3: Hermit Smith Rd & US 441

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  |  | | |  | | |  |  |
| Traffic Volume (veh/h) | 22 | 1055 | 4 | 14 | 1566 | 103 | 46 | 11 | 38 | 63 | 3 | 11 |
| Future Volume (veh/h) | 22 | 1055 | 4 | 14 | 1566 | 103 | 46 | 11 | 38 | 63 | 3 | 11 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1796 | 1678 | 1678 | 1796 | 1796 | 1678 | 1678 | 1678 | 1678 | 1678 | 1678 |
| Adj Flow Rate, veh/h | 23 | 1088 | 4 | 14 | 1614 | 106 | 47 | 11 | 39 | 65 | 3 | 11 |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Percent Heavy Veh, % | 2 | 7 | 15 | 15 | 7 | 7 | 15 | 15 | 15 | 15 | 15 | 15 |
| Cap, veh/h | 296 | 2587 | 1078 | 370 | 2425 | 158 | 89 | 21 | 50 | 118 | 7 | 13 |
| Arrive On Green | 0.02 | 0.76 | 0.76 | 0.03 | 1.00 | 1.00 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 |
| Sat Flow, veh/h | 1781 | 3413 | 1422 | 1598 | 3252 | 212 | 648 | 252 | 605 | 898 | 90 | 160 |
| Grp Volume(v), veh/h | 23 | 1088 | 4 | 14 | 842 | 878 | 97 | 0 | 0 | 79 | 0 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1706 | 1422 | 1598 | 1706 | 1758 | 1506 | 0 | 0 | 1148 | 0 | 0 |
| Q Serve(g_s), s | 0.5 | 17.0 | 0.1 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 0.5 | 17.0 | 0.1 | 0.3 | 0.0 | 0.0 | 9.3 | 0.0 | 0.0 | 10.4 | 0.0 | 0.0 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.12 | 0.48 | | 0.40 | 0.82 | | 0.14 |
| Lane Grp Cap(c), veh/h | 296 | 2587 | 1078 | 370 | 1272 | 1311 | 160 | 0 | 0 | 138 | 0 | 0 |
| V/C Ratio(X) | 0.08 | 0.42 | 0.00 | 0.04 | 0.66 | 0.67 | 0.61 | 0.00 | 0.00 | 0.57 | 0.00 | 0.00 |
| Avail Cap(c_a), veh/h | 371 | 2587 | 1078 | 458 | 1272 | 1311 | 175 | 0 | 0 | 150 | 0 | 0 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.66 | 0.66 | 0.66 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 |
| Uniform Delay (d), s/veh | 4.2 | 6.4 | 4.4 | 5.1 | 0.0 | 0.0 | 67.4 | 0.0 | 0.0 | 67.9 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 0.1 | 0.5 | 0.0 | 0.0 | 1.8 | 1.8 | 5.1 | 0.0 | 0.0 | 4.3 | 0.0 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 0.3 | 8.7 | 0.0 | 0.2 | 1.1 | 1.2 | 7.0 | 0.0 | 0.0 | 5.7 | 0.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 4.3 | 6.9 | 4.4 | 5.1 | 1.8 | 1.8 | 72.5 | 0.0 | 0.0 | 72.2 | 0.0 | 0.0 |
| LnGrp LOS | A | A | A | A | A | A | E | A | A | E | A | A |
| Approach Vol, veh/h | | 1115 | | | 1734 | | | 97 | | | 79 | |
| Approach Delay, s/veh | | 6.9 | | | 1.8 | | | 72.5 | | | 72.2 | |
| Approach LOS | | A | | | A | | | E | | | E | |
| Timer - Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 11.7 | 118.7 | | 19.6 | 9.8 | 120.6 | | 19.6 | | | | |
| Change Period (Y+Rc), s | * 8.6 | * 6.9 | | * 7.2 | * 7.6 | 6.9 | | 7.2 | | | | |
| Max Green Setting (Gmax), s | * 9.4 | * 1E2 | | * 14 | * 10 | 104.1 | | 13.8 | | | | |
| Max Q Clear Time (g_c+I1), s | 2.5 | 2.0 | | 11.3 | 2.3 | 19.0 | | 12.4 | | | | |
| Green Ext Time (p_c), s | 0.0 | 18.7 | | 0.0 | 0.0 | 8.6 | | 0.0 | | | | |

Intersection Summary

| | |
|--------------------|-----|
| HCM 6th Ctrl Delay | 7.8 |
| HCM 6th LOS | A |

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

7: US 441 & SR 429 Connector Rd



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|-------|-------|------|-------|------|-------|------|------|------|------|------|------|
| Lane Configurations | ↖↗ | ↑↑ | ↖ | ↖ | ↑↑ | ↖ | | ↕ | | ↖ | ↖ | ↖↗ |
| Traffic Volume (veh/h) | 389 | 770 | 0 | 1 | 1077 | 37 | 2 | 2 | 2 | 23 | 2 | 594 |
| Future Volume (veh/h) | 389 | 770 | 0 | 1 | 1077 | 37 | 2 | 2 | 2 | 23 | 2 | 594 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | No | | No | | No | | No | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1796 | 1870 | 1870 | 1796 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1796 |
| Adj Flow Rate, veh/h | 418 | 828 | 0 | 1 | 1158 | 40 | 2 | 2 | 2 | 26 | 0 | 478 |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Percent Heavy Veh, % | 2 | 7 | 2 | 2 | 7 | 2 | 2 | 2 | 2 | 2 | 2 | 7 |
| Cap, veh/h | 454 | 2132 | 990 | 2 | 1647 | 765 | 4 | 4 | 4 | 556 | 0 | 875 |
| Arrive On Green | 0.26 | 1.00 | 0.00 | 0.00 | 0.97 | 0.97 | 0.01 | 0.01 | 0.01 | 0.16 | 0.00 | 0.16 |
| Sat Flow, veh/h | 3456 | 3413 | 1585 | 1781 | 3413 | 1585 | 579 | 579 | 579 | 3563 | 0 | 3045 |
| Grp Volume(v), veh/h | 418 | 828 | 0 | 1 | 1158 | 40 | 6 | 0 | 0 | 26 | 0 | 478 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1706 | 1585 | 1781 | 1706 | 1585 | 1737 | 0 | 0 | 1781 | 0 | 1522 |
| Q Serve(g_s), s | 17.6 | 0.0 | 0.0 | 0.1 | 5.5 | 0.1 | 0.5 | 0.0 | 0.0 | 0.9 | 0.0 | 19.9 |
| Cycle Q Clear(g_c), s | 17.6 | 0.0 | 0.0 | 0.1 | 5.5 | 0.1 | 0.5 | 0.0 | 0.0 | 0.9 | 0.0 | 19.9 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 0.33 | | 0.33 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 454 | 2132 | 990 | 2 | 1647 | 765 | 13 | 0 | 0 | 556 | 0 | 875 |
| V/C Ratio(X) | 0.92 | 0.39 | 0.00 | 0.41 | 0.70 | 0.05 | 0.47 | 0.00 | 0.00 | 0.05 | 0.00 | 0.55 |
| Avail Cap(c_a), veh/h | 461 | 2132 | 990 | 116 | 1647 | 765 | 119 | 0 | 0 | 556 | 0 | 875 |
| HCM Platoon Ratio | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.92 | 0.92 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 54.5 | 0.0 | 0.0 | 74.7 | 1.4 | 1.4 | 74.2 | 0.0 | 0.0 | 53.8 | 0.0 | 45.2 |
| Incr Delay (d2), s/veh | 22.3 | 0.5 | 0.0 | 85.3 | 2.5 | 0.1 | 24.3 | 0.0 | 0.0 | 0.2 | 0.0 | 2.4 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 2.3 | 0.3 | 0.0 | 0.2 | 2.3 | 0.1 | 0.6 | 0.0 | 0.0 | 0.8 | 0.0 | 12.5 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 76.8 | 0.5 | 0.0 | 160.0 | 4.0 | 1.5 | 98.4 | 0.0 | 0.0 | 54.0 | 0.0 | 47.6 |
| LnGrp LOS | E | A | A | F | A | A | F | A | A | D | A | D |
| Approach Vol, veh/h | | 1246 | | | 1199 | | | 6 | | | 504 | |
| Approach Delay, s/veh | | 26.1 | | | 4.0 | | | 98.4 | | | 48.0 | |
| Approach LOS | | C | | | A | | | F | | | D | |
| Timer - Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 100.8 | | | 8.8 | 29.7 | 79.5 | | 32.0 | | | | |
| Change Period (Y+Rc), s | 8.2 | * 7.1 | | * 7.7 | 10.0 | * 7.1 | | 8.6 | | | | |
| Max Green Setting (Gmax), s | 75 | | | * 10 | 20.0 | * 63 | | 23.4 | | | | |
| Max Q Clear Time (g_c+1), s | 2.0 | | | 2.5 | 19.6 | 7.5 | | 21.9 | | | | |
| Green Ext Time (p_c), s | 0.0 | 6.3 | | 0.0 | 0.1 | 10.4 | | 0.4 | | | | |

Intersection Summary

| | |
|--------------------|------|
| HCM 6th Ctrl Delay | 21.0 |
| HCM 6th LOS | C |





















Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

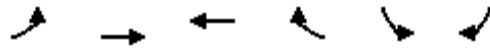
HCM 6th Signalized Intersection Summary

6: Orange Ave & US 441

| |  |  |  |  |  |  |  |  |  |  |  |  |
|--|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  |  | | |  | | |  |  |
| Traffic Volume (veh/h) | 0 | 731 | 103 | 19 | 935 | 0 | 173 | 0 | 63 | 0 | 0 | 0 |
| Future Volume (veh/h) | 0 | 731 | 103 | 19 | 935 | 0 | 173 | 0 | 63 | 0 | 0 | 0 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1796 | 1796 | 1796 | 1796 | 1796 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 0 | 778 | 110 | 20 | 995 | 0 | 184 | 0 | 67 | 0 | 0 | 0 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 2 | 7 | 7 | 7 | 7 | 7 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 48 | 2038 | 909 | 522 | 2448 | 0 | 242 | 0 | 73 | 0 | 351 | 0 |
| Arrive On Green | 0.00 | 1.00 | 1.00 | 0.07 | 0.72 | 0.00 | 0.19 | 0.00 | 0.19 | 0.00 | 0.00 | 0.00 |
| Sat Flow, veh/h | 566 | 3413 | 1522 | 1711 | 3503 | 0 | 1069 | 0 | 389 | 0 | 1870 | 0 |
| Grp Volume(v), veh/h | 0 | 778 | 110 | 20 | 995 | 0 | 251 | 0 | 0 | 0 | 0 | 0 |
| Grp Sat Flow(s),veh/h/ln | 566 | 1706 | 1522 | 1711 | 1706 | 0 | 1459 | 0 | 0 | 0 | 1870 | 0 |
| Q Serve(g_s), s | 0.0 | 0.0 | 0.0 | 0.6 | 17.5 | 0.0 | 25.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 0.0 | 0.0 | 0.0 | 0.6 | 17.5 | 0.0 | 25.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.00 | 0.73 | | 0.27 | 0.00 | | 0.00 |
| Lane Grp Cap(c), veh/h | 48 | 2038 | 909 | 522 | 2448 | 0 | 315 | 0 | 0 | 0 | 351 | 0 |
| V/C Ratio(X) | 0.00 | 0.38 | 0.12 | 0.04 | 0.41 | 0.00 | 0.80 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Avail Cap(c_a), veh/h | 48 | 2038 | 909 | 522 | 2448 | 0 | 387 | 0 | 0 | 0 | 430 | 0 |
| HCM Platoon Ratio | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.00 | 0.92 | 0.92 | 0.89 | 0.89 | 0.00 | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Uniform Delay (d), s/veh | 0.0 | 0.0 | 0.0 | 7.9 | 8.5 | 0.0 | 59.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 0.0 | 0.5 | 0.3 | 0.1 | 0.4 | 0.0 | 9.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 0.0 | 0.3 | 0.1 | 0.4 | 9.7 | 0.0 | 15.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 0.0 | 0.5 | 0.3 | 8.0 | 8.9 | 0.0 | 68.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| LnGrp LOS | A | A | A | A | A | A | E | A | A | A | A | A |
| Approach Vol, veh/h | | 888 | | | 1015 | | | 251 | | | | 0 |
| Approach Delay, s/veh | | 0.5 | | | 8.9 | | | 68.9 | | | | 0.0 |
| Approach LOS | | A | | | A | | | E | | | | |
| Timer - Assigned Phs | | 2 | | 4 | 5 | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 114.4 | | 35.6 | 18.0 | 96.4 | | 35.6 | | | | |
| Change Period (Y+Rc), s | | * 6.8 | | * 7.5 | 7.9 | 6.8 | | 7.5 | | | | |
| Max Green Setting (Gmax), s | | * 1E2 | | * 36 | 10.1 | 83.2 | | 34.5 | | | | |
| Max Q Clear Time (g_c+I1), s | | 19.5 | | 27.3 | 2.6 | 2.0 | | 0.0 | | | | |
| Green Ext Time (p_c), s | | 8.2 | | 0.8 | 0.0 | 6.2 | | 0.0 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 6th Ctrl Delay | | | | 12.4 | | | | | | | | |
| HCM 6th LOS | | | | B | | | | | | | | |
| Notes | | | | | | | | | | | | |
| * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier. | | | | | | | | | | | | |

HCM 6th Signalized Intersection Summary

17: US 441 & Plymouth Sorrento



| Movement | EBL | EBT | WBT | WBR | SBL | SBR | |
|------------------------------|------|------|------|-------|------|------|-------|
| Lane Configurations | ↙ | ↑↑ | ↑↑ | | ↙ | ↗ | |
| Traffic Volume (veh/h) | 92 | 709 | 896 | 203 | 154 | 33 | |
| Future Volume (veh/h) | 92 | 709 | 896 | 203 | 154 | 33 | |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | |
| Ped-Bike Adj(A_pbT) | 1.00 | | | 1.00 | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Work Zone On Approach | | No | No | | No | | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | |
| Adj Flow Rate, veh/h | 95 | 731 | 924 | 209 | 159 | 34 | |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | |
| Cap, veh/h | 401 | 2878 | 2096 | 474 | 181 | 161 | |
| Arrive On Green | 0.03 | 0.81 | 0.73 | 0.73 | 0.10 | 0.10 | |
| Sat Flow, veh/h | 1781 | 3647 | 2973 | 651 | 1781 | 1585 | |
| Grp Volume(v), veh/h | 95 | 731 | 570 | 563 | 159 | 34 | |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1777 | 1777 | 1753 | 1781 | 1585 | |
| Q Serve(g_s), s | 2.0 | 7.6 | 19.9 | 20.0 | 13.6 | 3.1 | |
| Cycle Q Clear(g_c), s | 2.0 | 7.6 | 19.9 | 20.0 | 13.6 | 3.1 | |
| Prop In Lane | 1.00 | | | 0.37 | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 401 | 2878 | 1293 | 1276 | 181 | 161 | |
| V/C Ratio(X) | 0.24 | 0.25 | 0.44 | 0.44 | 0.88 | 0.21 | |
| Avail Cap(c_a), veh/h | 484 | 2878 | 1293 | 1276 | 207 | 184 | |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Upstream Filter(I) | 0.91 | 0.91 | 0.87 | 0.87 | 1.00 | 1.00 | |
| Uniform Delay (d), s/veh | 6.2 | 3.5 | 8.4 | 8.5 | 68.7 | 63.9 | |
| Incr Delay (d2), s/veh | 0.3 | 0.2 | 1.0 | 1.0 | 29.6 | 0.6 | |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| %ile BackOfQ(95%),veh/ln | 1.1 | 3.6 | 11.3 | 11.2 | 12.3 | 5.1 | |
| Unsig. Movement Delay, s/veh | | | | | | | |
| LnGrp Delay(d),s/veh | 6.4 | 3.7 | 9.4 | 9.4 | 98.2 | 64.6 | |
| LnGrp LOS | A | A | A | A | F | E | |
| Approach Vol, veh/h | | 826 | 1133 | | 193 | | |
| Approach Delay, s/veh | | 4.0 | 9.4 | | 92.3 | | |
| Approach LOS | | A | A | | F | | |
| Timer - Assigned Phs | | | | 4 | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | | | | 132.4 | 22.6 | 12.7 | 119.7 |
| Change Period (Y+Rc), s | | | | 6.9 | 6.8 | 7.8 | * 6.9 |
| Max Green Setting (Gmax), s | | | | 123.1 | 18.0 | 12.2 | * 1E2 |
| Max Q Clear Time (g_c+I1), s | | | | 9.6 | 15.6 | 4.0 | 22.0 |
| Green Ext Time (p_c), s | | | | 4.9 | 0.1 | 0.1 | 8.9 |

Intersection Summary

| | |
|--------------------|------|
| HCM 6th Ctrl Delay | 14.8 |
| HCM 6th LOS | B |

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

12: US 441 & Boy Scout Blvd



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|-------|------|------|------|-------|------|-------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 9 | 828 | 20 | 145 | 1046 | 100 | 36 | 61 | 145 | 58 | 57 | 8 |
| Future Volume (veh/h) | 9 | 828 | 20 | 145 | 1046 | 100 | 36 | 61 | 145 | 58 | 57 | 8 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | No | | No | | No | | No | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1826 | 1826 | 1826 | 1826 | 1826 | 1826 | 1826 | 1826 | 1826 | 1826 | 1826 |
| Adj Flow Rate, veh/h | 10 | 881 | 21 | 154 | 1113 | 106 | 38 | 65 | 154 | 62 | 61 | 9 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 2 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Cap, veh/h | 316 | 2213 | 53 | 435 | 2338 | 222 | 59 | 82 | 169 | 97 | 86 | 11 |
| Arrive On Green | 0.64 | 0.64 | 0.64 | 0.04 | 0.73 | 0.73 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 |
| Sat Flow, veh/h | 458 | 3463 | 83 | 1739 | 3201 | 305 | 178 | 463 | 958 | 351 | 489 | 61 |
| Grp Volume(v), veh/h | 10 | 441 | 461 | 154 | 603 | 616 | 257 | 0 | 0 | 132 | 0 | 0 |
| Grp Sat Flow(s),veh/h/ln | 458 | 1735 | 1811 | 1739 | 1735 | 1771 | 1599 | 0 | 0 | 901 | 0 | 0 |
| Q Serve(g_s), s | 1.4 | 18.5 | 18.5 | 4.4 | 21.5 | 21.6 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 9.3 | 18.5 | 18.5 | 4.4 | 21.5 | 21.6 | 23.6 | 0.0 | 0.0 | 23.0 | 0.0 | 0.0 |
| Prop In Lane | 1.00 | | 0.05 | 1.00 | | 0.17 | 0.15 | | 0.60 | 0.47 | | 0.07 |
| Lane Grp Cap(c), veh/h | 316 | 1108 | 1157 | 435 | 1267 | 1293 | 310 | 0 | 0 | 194 | 0 | 0 |
| V/C Ratio(X) | 0.03 | 0.40 | 0.40 | 0.35 | 0.48 | 0.48 | 0.83 | 0.00 | 0.00 | 0.68 | 0.00 | 0.00 |
| Avail Cap(c_a), veh/h | 316 | 1108 | 1157 | 497 | 1267 | 1293 | 380 | 0 | 0 | 260 | 0 | 0 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.94 | 0.94 | 0.94 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 |
| Uniform Delay (d), s/veh | 13.1 | 13.1 | 13.1 | 9.5 | 8.4 | 8.4 | 60.5 | 0.0 | 0.0 | 59.1 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 0.2 | 1.0 | 1.0 | 0.5 | 1.3 | 1.3 | 12.1 | 0.0 | 0.0 | 4.3 | 0.0 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 0.3 | 11.0 | 11.4 | 2.9 | 12.1 | 12.2 | 16.0 | 0.0 | 0.0 | 8.9 | 0.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 13.3 | 14.1 | 14.1 | 10.0 | 9.6 | 9.6 | 72.6 | 0.0 | 0.0 | 63.4 | 0.0 | 0.0 |
| LnGrp LOS | B | B | B | A | A | A | E | A | A | E | A | A |
| Approach Vol, veh/h | | 912 | | | 1373 | | | 257 | | | 132 | |
| Approach Delay, s/veh | | 14.1 | | | 9.7 | | | 72.6 | | | 63.4 | |
| Approach LOS | | B | | | A | | | E | | | E | |
| Timer - Assigned Phs | 1 | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 33.7 | 103.1 | | 33.3 | | 116.7 | | 33.3 | | | | |
| Change Period (Y+Rc), s | 7.1 | 7.2 | | 6.8 | | * 7.2 | | * 6.8 | | | | |
| Max Green Setting (Gmax), s | 33.8 | 83.8 | | 33.2 | | * 1E2 | | * 34 | | | | |
| Max Q Clear Time (g_c+1), s | 20.5 | 20.5 | | 25.6 | | 23.6 | | 25.0 | | | | |
| Green Ext Time (p_c), s | 0.2 | 5.7 | | 0.9 | | 10.0 | | 0.4 | | | | |

Intersection Summary

| | |
|--------------------|------|
| HCM 6th Ctrl Delay | 19.9 |
| HCM 6th LOS | B |

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC
 15: Hermit Smith Rd & General Electric Rd

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 6.2 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | W | W | T | T | S | S |
| Traffic Vol, veh/h | 7 | 65 | 17 | 21 | 41 | 6 |
| Future Vol, veh/h | 7 | 65 | 17 | 21 | 41 | 6 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 69 | 69 | 69 | 69 | 69 | 69 |
| Heavy Vehicles, % | 20 | 20 | 20 | 20 | 20 | 20 |
| Mvmt Flow | 10 | 94 | 25 | 30 | 59 | 9 |

| Major/Minor | Minor1 | Major1 | Major2 | | | |
|----------------------|--------|--------|--------|---|------|---|
| Conflicting Flow All | 167 | 40 | 0 | 0 | 55 | 0 |
| Stage 1 | 40 | - | - | - | - | - |
| Stage 2 | 127 | - | - | - | - | - |
| Critical Hdwy | 6.6 | 6.4 | - | - | 4.3 | - |
| Critical Hdwy Stg 1 | 5.6 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.6 | - | - | - | - | - |
| Follow-up Hdwy | 3.68 | 3.48 | - | - | 2.38 | - |
| Pot Cap-1 Maneuver | 783 | 982 | - | - | 1442 | - |
| Stage 1 | 938 | - | - | - | - | - |
| Stage 2 | 856 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | - | - |
| Mov Cap-1 Maneuver | 751 | 982 | - | - | 1442 | - |
| Mov Cap-2 Maneuver | 751 | - | - | - | - | - |
| Stage 1 | 900 | - | - | - | - | - |
| Stage 2 | 856 | - | - | - | - | - |

| Approach | WB | NB | SB |
|----------------------|-----|----|-----|
| HCM Control Delay, s | 9.2 | 0 | 6.6 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL | SBT |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h) | - | - | 953 | 1442 |
| HCM Lane V/C Ratio | - | - | 0.109 | 0.041 |
| HCM Control Delay (s) | - | - | 9.2 | 7.6 |
| HCM Lane LOS | - | - | A | A |
| HCM 95th %tile Q(veh) | - | - | 0.4 | 0.1 |

HCM 6th TWSC
 16: Orange Ave & General Electric Rd

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 2.9 | | | | | |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | T | | | T | | |
| Traffic Vol, veh/h | 27 | 68 | 55 | 217 | 136 | 12 |
| Future Vol, veh/h | 27 | 68 | 55 | 217 | 136 | 12 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 91 | 91 | 91 | 91 | 91 | 91 |
| Heavy Vehicles, % | 20 | 20 | 20 | 2 | 2 | 20 |
| Mvmt Flow | 30 | 75 | 60 | 238 | 149 | 13 |

| Major/Minor | Minor2 | Major1 | | Major2 | |
|----------------------|--------|--------|------|--------|---|
| Conflicting Flow All | 514 | 156 | 162 | 0 | 0 |
| Stage 1 | 156 | - | - | - | - |
| Stage 2 | 358 | - | - | - | - |
| Critical Hdwy | 6.6 | 6.4 | 4.3 | - | - |
| Critical Hdwy Stg 1 | 5.6 | - | - | - | - |
| Critical Hdwy Stg 2 | 5.6 | - | - | - | - |
| Follow-up Hdwy | 3.68 | 3.48 | 2.38 | - | - |
| Pot Cap-1 Maneuver | 490 | 845 | 1314 | - | - |
| Stage 1 | 830 | - | - | - | - |
| Stage 2 | 669 | - | - | - | - |
| Platoon blocked, % | | | | - | - |
| Mov Cap-1 Maneuver | 464 | 845 | 1314 | - | - |
| Mov Cap-2 Maneuver | 464 | - | - | - | - |
| Stage 1 | 786 | - | - | - | - |
| Stage 2 | 669 | - | - | - | - |

| Approach | EB | NB | SB |
|----------------------|------|-----|----|
| HCM Control Delay, s | 11.2 | 1.6 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h) | 1314 | - | 685 | - | - |
| HCM Lane V/C Ratio | 0.046 | - | 0.152 | - | - |
| HCM Control Delay (s) | 7.9 | 0 | 11.2 | - | - |
| HCM Lane LOS | A | A | B | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | 0.5 | - | - |

Appendix G
Trip Generation Sheets

High-Cube Transload and Short-Term Storage Warehouse (154)

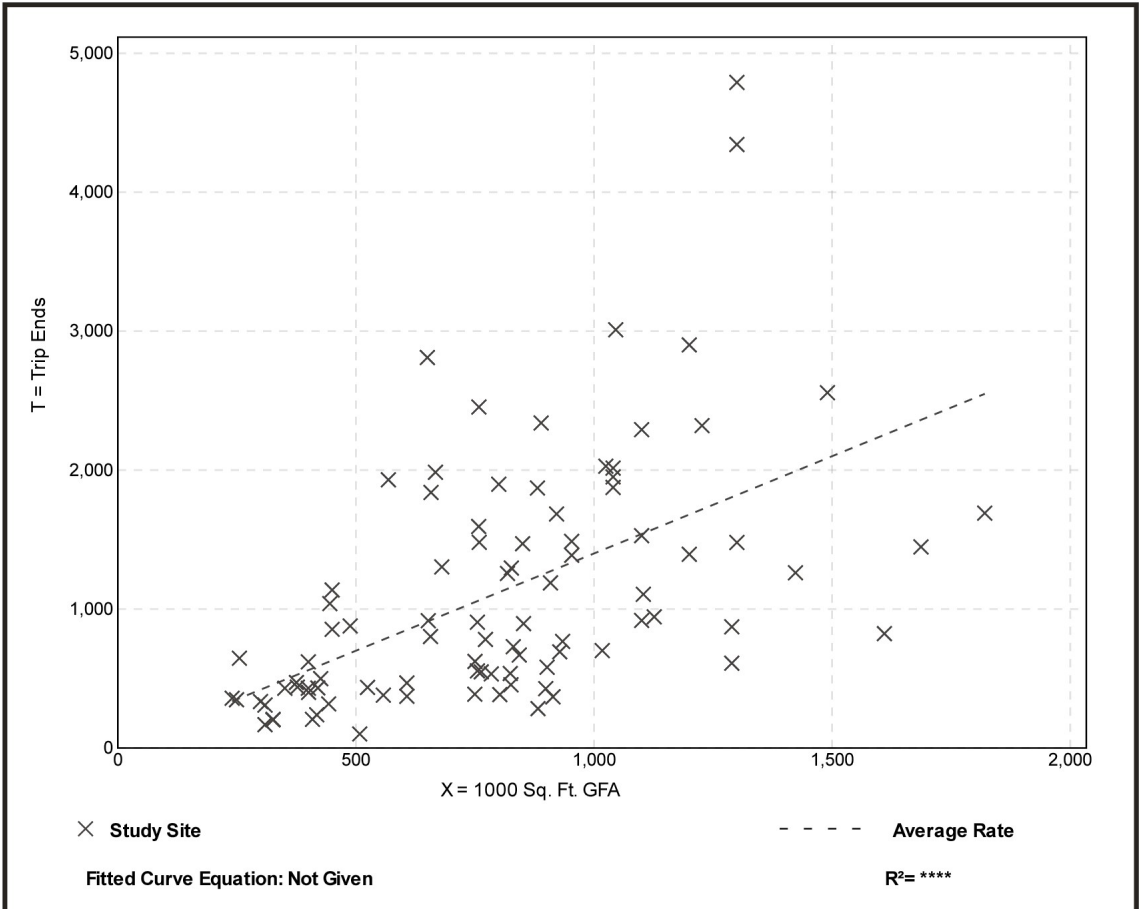
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 91
1000 Sq. Ft. GFA: 798
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

| Average Rate | Range of Rates | Standard Deviation |
|--------------|----------------|--------------------|
| 1.40 | 0.20 - 4.32 | 0.86 |

Data Plot and Equation



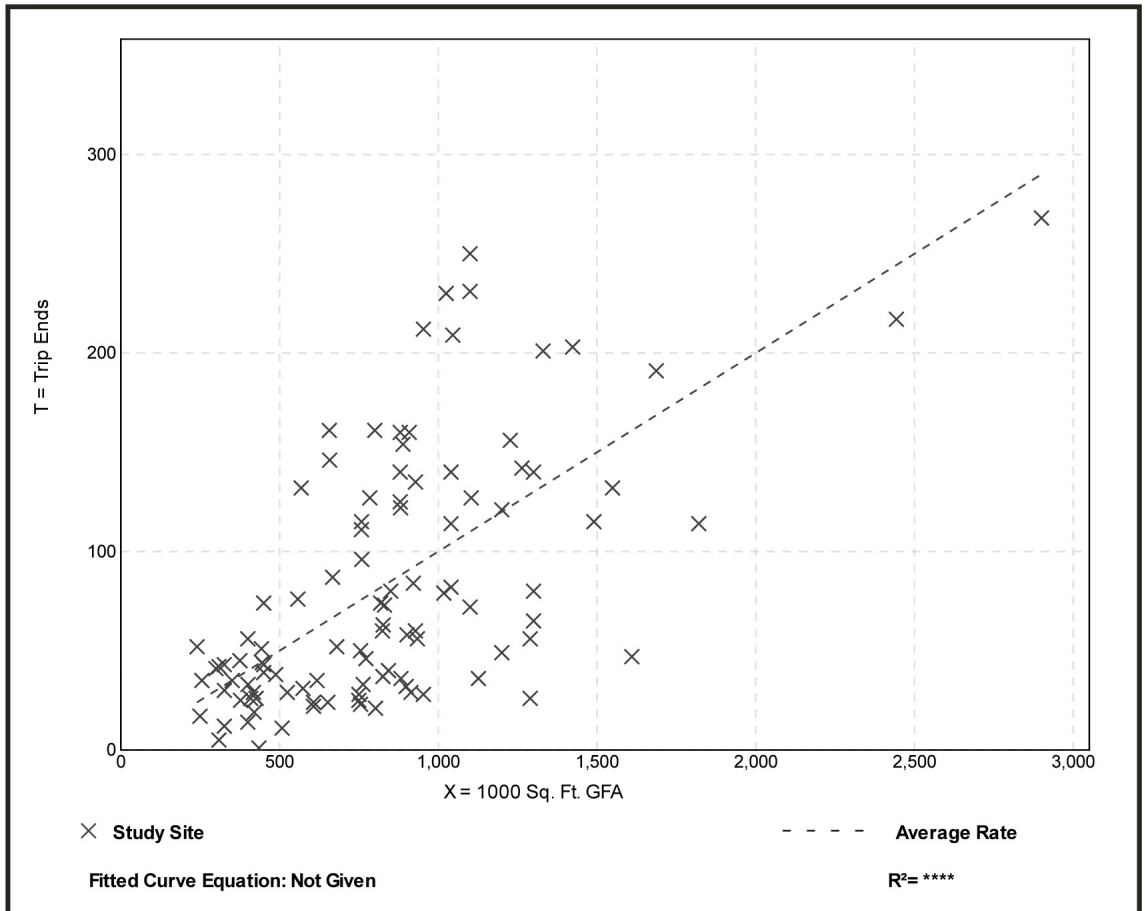
High-Cube Transload and Short-Term Storage Warehouse (154)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
 Number of Studies: 103
 1000 Sq. Ft. GFA: 840
 Directional Distribution: 28% entering, 72% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

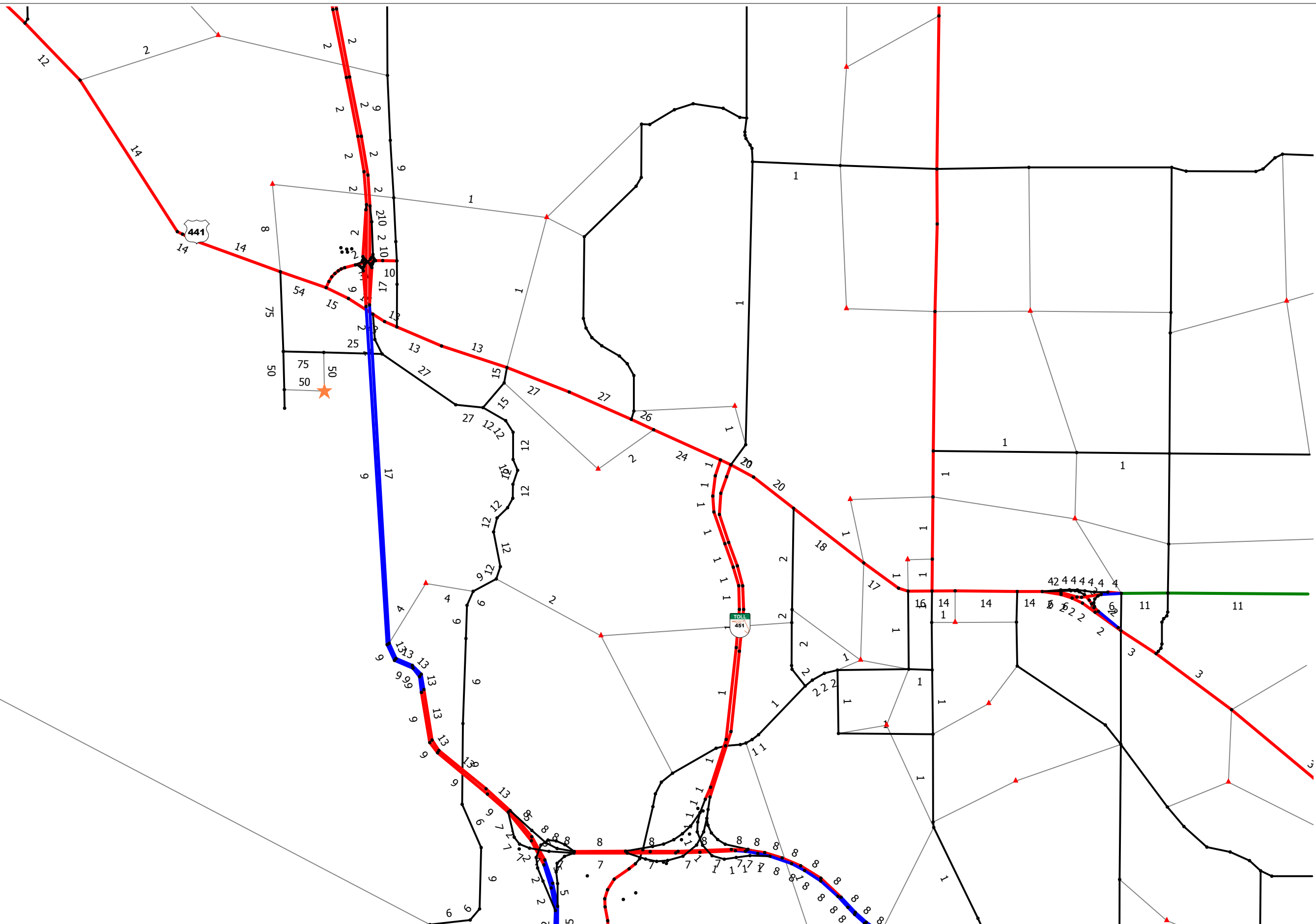
| Average Rate | Range of Rates | Standard Deviation |
|--------------|----------------|--------------------|
| 0.10 | 0.00 - 0.25 | 0.06 |

Data Plot and Equation



Appendix H
OUATS Model






















- Legend:
- 1 lane per direction
 - 2 lanes per direction
 - 3 lanes per direction
 - 4 lanes per direction
 - 5 lanes per direction
 - 6+ lanes per direction
 - Centroid connector



OUATS YEAR 2040 LRTP - CF 2025 ANC-Mid-Florida Logistics Park
 Project Distribution Percentages (TAZ=1091)
 C:\FSUTMS\ID5\OUATS.2040\Base\CF2025\P18008\Output\HRLDXY_C25.NET Fri 24 Aug 2018

Appendix I
Background & Projected Conditions Analysis Worksheets

HCM 6th Signalized Intersection Summary 3: Hermit Smith Rd & US 441

| |  |  |  |  |  |  |  |  |  |  |  |  |
|--|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  |  |  | |  | | |  |  |
| Traffic Volume (veh/h) | 28 | 1330 | 15 | 53 | 1887 | 124 | 127 | 39 | 175 | 222 | 17 | 40 |
| Future Volume (veh/h) | 28 | 1330 | 15 | 53 | 1887 | 124 | 127 | 39 | 175 | 222 | 17 | 40 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1796 | 1678 | 1678 | 1796 | 1796 | 1678 | 1678 | 1678 | 1678 | 1678 | 1678 |
| Adj Flow Rate, veh/h | 29 | 1371 | 15 | 55 | 1945 | 128 | 131 | 40 | 180 | 229 | 18 | 41 |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Percent Heavy Veh, % | 2 | 7 | 15 | 15 | 7 | 7 | 15 | 15 | 15 | 15 | 15 | 15 |
| Cap, veh/h | 236 | 2498 | 1041 | 289 | 2381 | 155 | 86 | 16 | 73 | 106 | 5 | 11 |
| Arrive On Green | 0.02 | 0.73 | 0.73 | 0.06 | 1.00 | 1.00 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 |
| Sat Flow, veh/h | 1781 | 3413 | 1422 | 1598 | 3253 | 212 | 572 | 175 | 786 | 671 | 53 | 120 |
| Grp Volume(v), veh/h | 29 | 1371 | 15 | 55 | 1010 | 1063 | 351 | 0 | 0 | 288 | 0 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1706 | 1422 | 1598 | 1706 | 1758 | 1532 | 0 | 0 | 843 | 0 | 0 |
| Q Serve(g_s), s | 0.6 | 27.0 | 0.4 | 1.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 0.6 | 27.0 | 0.4 | 1.3 | 0.0 | 0.0 | 14.0 | 0.0 | 0.0 | 14.0 | 0.0 | 0.0 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.12 | 0.37 | | 0.51 | 0.80 | | 0.14 |
| Lane Grp Cap(c), veh/h | 236 | 2498 | 1041 | 289 | 1249 | 1287 | 176 | 0 | 0 | 122 | 0 | 0 |
| V/C Ratio(X) | 0.12 | 0.55 | 0.01 | 0.19 | 0.81 | 0.83 | 2.00 | 0.00 | 0.00 | 2.36 | 0.00 | 0.00 |
| Avail Cap(c_a), veh/h | 306 | 2498 | 1041 | 352 | 1249 | 1287 | 176 | 0 | 0 | 122 | 0 | 0 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.18 | 0.18 | 0.18 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 |
| Uniform Delay (d), s/veh | 4.6 | 9.0 | 5.4 | 7.0 | 0.0 | 0.0 | 69.3 | 0.0 | 0.0 | 70.5 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 0.2 | 0.9 | 0.0 | 0.1 | 1.1 | 1.2 | 467.4 | 0.0 | 0.0 | 638.6 | 0.0 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 0.4 | 13.3 | 0.2 | 0.6 | 0.7 | 0.8 | 46.5 | 0.0 | 0.0 | 42.3 | 0.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 4.8 | 9.9 | 5.5 | 7.1 | 1.1 | 1.2 | 536.7 | 0.0 | 0.0 | 709.1 | 0.0 | 0.0 |
| LnGrp LOS | A | A | A | A | A | A | F | A | A | F | A | A |
| Approach Vol, veh/h | | 1415 | | | 2128 | | | 351 | | | 288 | |
| Approach Delay, s/veh | | 9.7 | | | 1.3 | | | 536.7 | | | 709.1 | |
| Approach LOS | | A | | | A | | | F | | | F | |
| Timer - Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 12.1 | 116.7 | | 21.2 | 12.1 | 116.7 | | 21.2 | | | | |
| Change Period (Y+Rc), s | * 8.6 | * 6.9 | | * 7.2 | * 7.6 | 6.9 | | 7.2 | | | | |
| Max Green Setting (Gmax), s | * 9.4 | * 1E2 | | * 14 | * 10 | 104.1 | | 13.8 | | | | |
| Max Q Clear Time (g_c+I1), s | 2.6 | 2.0 | | 16.0 | 3.3 | 29.0 | | 16.0 | | | | |
| Green Ext Time (p_c), s | 0.0 | 32.0 | | 0.0 | 0.1 | 12.8 | | 0.0 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 6th Ctrl Delay | | | | 97.8 | | | | | | | | |
| HCM 6th LOS | | | | F | | | | | | | | |
| Notes | | | | | | | | | | | | |
| * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier. | | | | | | | | | | | | |

HCM 6th Signalized Intersection Summary

6: Orange Ave & US 441



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|-------|------|-------|------|-------|-------|-------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 0 | 1073 | 148 | 28 | 1379 | 0 | 277 | 0 | 107 | 0 | 0 | 0 |
| Future Volume (veh/h) | 0 | 1073 | 148 | 28 | 1379 | 0 | 277 | 0 | 107 | 0 | 0 | 0 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | No | | No | | No | | No | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1796 | 1796 | 1796 | 1796 | 1796 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 0 | 1141 | 157 | 30 | 1467 | 0 | 295 | 0 | 114 | 0 | 0 | 0 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 2 | 7 | 7 | 7 | 7 | 7 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 48 | 3263 | 1455 | 548 | 3672 | 0 | 291 | 0 | 96 | 0 | 443 | 0 |
| Arrive On Green | 0.00 | 1.00 | 1.00 | 0.07 | 1.00 | 0.00 | 0.24 | 0.00 | 0.24 | 0.00 | 0.00 | 0.00 |
| Sat Flow, veh/h | 361 | 3413 | 1522 | 1711 | 3503 | 0 | 1053 | 0 | 407 | 0 | 1870 | 0 |
| Grp Volume(v), veh/h | 0 | 1141 | 157 | 30 | 1467 | 0 | 409 | 0 | 0 | 0 | 0 | 0 |
| Grp Sat Flow(s),veh/h/ln | 361 | 1706 | 1522 | 1711 | 1706 | 0 | 1461 | 0 | 0 | 0 | 1870 | 0 |
| Q Serve(g_s), s | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 35.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 35.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.00 | 0.72 | | 0.28 | 0.00 | | 0.00 |
| Lane Grp Cap(c), veh/h | 48 | 3263 | 1455 | 548 | 3672 | 0 | 387 | 0 | 0 | 0 | 443 | 0 |
| V/C Ratio(X) | 0.00 | 0.35 | 0.11 | 0.05 | 0.40 | 0.00 | 1.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Avail Cap(c_a), veh/h | 48 | 3263 | 1455 | 548 | 3672 | 0 | 387 | 0 | 0 | 0 | 443 | 0 |
| HCM Platoon Ratio | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.00 | 0.82 | 0.82 | 0.79 | 0.79 | 0.00 | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Uniform Delay (d), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 59.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 0.0 | 0.2 | 0.1 | 0.2 | 0.3 | 0.0 | 61.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 0.0 | 0.2 | 0.1 | 0.0 | 0.2 | 0.0 | 30.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 0.0 | 0.2 | 0.1 | 0.2 | 0.3 | 0.0 | 120.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| LnGrp LOS | A | A | A | A | A | A | F | A | A | A | A | A |
| Approach Vol, veh/h | | 1298 | | | 1497 | | | 409 | | | | 0 |
| Approach Delay, s/veh | | 0.2 | | | 0.3 | | | 120.7 | | | | 0.0 |
| Approach LOS | | A | | | A | | | F | | | | |
| Timer - Assigned Phs | | 2 | | 4 | 5 | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 170.0 | | 43.0 | 18.0 | 152.0 | | 43.0 | | | | |
| Change Period (Y+Rc), s | | * 6.8 | | * 7.5 | 7.9 | 6.8 | | 7.5 | | | | |
| Max Green Setting (Gmax), s | | * 1E2 | | * 36 | 10.1 | 83.2 | | 34.5 | | | | |
| Max Q Clear Time (g_c+I1), s | | 2.0 | | 37.5 | 2.0 | 2.0 | | 0.0 | | | | |
| Green Ext Time (p_c), s | | 16.2 | | 0.0 | 0.0 | 11.1 | | 0.0 | | | | |

Intersection Summary

| | |
|--------------------|------|
| HCM 6th Ctrl Delay | 15.6 |
| HCM 6th LOS | B |

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

7: US 441 & SR 429 Connector Rd



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|-------|-------|------|-------|------|-------|------|------|------|------|------|------|
| Lane Configurations | ↔↔ | ↑↑ | ↗ | ↖ | ↑↑ | ↗ | | ↕ | | ↖ | ↗ | ↔↔ |
| Traffic Volume (veh/h) | 580 | 1035 | 0 | 1 | 1515 | 52 | 2 | 2 | 2 | 23 | 2 | 621 |
| Future Volume (veh/h) | 580 | 1035 | 0 | 1 | 1515 | 52 | 2 | 2 | 2 | 23 | 2 | 621 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | No | | No | | No | | No | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1796 | 1870 | 1870 | 1796 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1796 |
| Adj Flow Rate, veh/h | 624 | 1113 | 0 | 1 | 1629 | 56 | 2 | 2 | 2 | 26 | 0 | 507 |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Percent Heavy Veh, % | 2 | 7 | 2 | 2 | 7 | 2 | 2 | 2 | 2 | 2 | 2 | 7 |
| Cap, veh/h | 461 | 2132 | 990 | 2 | 1640 | 762 | 4 | 4 | 4 | 556 | 0 | 881 |
| Arrive On Green | 0.27 | 1.00 | 0.00 | 0.00 | 0.96 | 0.96 | 0.01 | 0.01 | 0.01 | 0.16 | 0.00 | 0.16 |
| Sat Flow, veh/h | 3456 | 3413 | 1585 | 1781 | 3413 | 1585 | 579 | 579 | 579 | 3563 | 0 | 3045 |
| Grp Volume(v), veh/h | 624 | 1113 | 0 | 1 | 1629 | 56 | 6 | 0 | 0 | 26 | 0 | 507 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1706 | 1585 | 1781 | 1706 | 1585 | 1737 | 0 | 0 | 1781 | 0 | 1522 |
| Q Serve(g_s), s | 20.0 | 0.0 | 0.0 | 0.1 | 61.1 | 0.2 | 0.5 | 0.0 | 0.0 | 0.9 | 0.0 | 21.3 |
| Cycle Q Clear(g_c), s | 20.0 | 0.0 | 0.0 | 0.1 | 61.1 | 0.2 | 0.5 | 0.0 | 0.0 | 0.9 | 0.0 | 21.3 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 0.33 | | 0.33 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 461 | 2132 | 990 | 2 | 1640 | 762 | 13 | 0 | 0 | 556 | 0 | 881 |
| V/C Ratio(X) | 1.35 | 0.52 | 0.00 | 0.41 | 0.99 | 0.07 | 0.47 | 0.00 | 0.00 | 0.05 | 0.00 | 0.58 |
| Avail Cap(c_a), veh/h | 461 | 2132 | 990 | 116 | 1640 | 762 | 119 | 0 | 0 | 556 | 0 | 881 |
| HCM Platoon Ratio | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.81 | 0.81 | 0.00 | 0.73 | 0.73 | 0.73 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 55.0 | 0.0 | 0.0 | 74.7 | 2.7 | 1.5 | 74.2 | 0.0 | 0.0 | 53.8 | 0.0 | 45.4 |
| Incr Delay (d2), s/veh | 170.7 | 0.7 | 0.0 | 65.9 | 17.4 | 0.1 | 24.3 | 0.0 | 0.0 | 0.2 | 0.0 | 2.7 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 17.8 | 0.4 | 0.0 | 0.1 | 8.3 | 0.2 | 0.6 | 0.0 | 0.0 | 0.8 | 0.0 | 13.2 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 225.7 | 0.7 | 0.0 | 140.6 | 20.1 | 1.7 | 98.4 | 0.0 | 0.0 | 54.0 | 0.0 | 48.2 |
| LnGrp LOS | F | A | A | F | C | A | F | A | A | D | A | D |
| Approach Vol, veh/h | | 1737 | | | 1686 | | | 6 | | | 533 | |
| Approach Delay, s/veh | | 81.6 | | | 19.6 | | | 98.4 | | | 48.5 | |
| Approach LOS | | F | | | B | | | F | | | D | |
| Timer - Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 8.4 | 100.8 | | 8.8 | 30.0 | 79.2 | | 32.0 | | | | |
| Change Period (Y+Rc), s | 8.2 | * 7.1 | | * 7.7 | 10.0 | * 7.1 | | 8.6 | | | | |
| Max Green Setting (Gmax), s | 8 | * 75 | | * 10 | 20.0 | * 63 | | 23.4 | | | | |
| Max Q Clear Time (g_c+1), s | 12 | 2.0 | | 2.5 | 22.0 | 63.1 | | 23.3 | | | | |
| Green Ext Time (p_c), s | 0.0 | 9.7 | | 0.0 | 0.0 | 0.0 | | 0.0 | | | | |

Intersection Summary

| | |
|--------------------|------|
| HCM 6th Ctrl Delay | 50.8 |
| HCM 6th LOS | D |

Notes

- User approved pedestrian interval to be less than phase max green.
- User approved volume balancing among the lanes for turning movement.
- * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

12: US 441 & Boy Scout Blvd



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|-------|------|------|------|-------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 14 | 903 | 21 | 160 | 1092 | 104 | 49 | 83 | 222 | 88 | 87 | 13 |
| Future Volume (veh/h) | 14 | 903 | 21 | 160 | 1092 | 104 | 49 | 83 | 222 | 88 | 87 | 13 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | No | | No | | No | | No | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1826 | 1826 | 1826 | 1826 | 1826 | 1826 | 1826 | 1826 | 1826 | 1826 | 1826 |
| Adj Flow Rate, veh/h | 15 | 961 | 22 | 170 | 1162 | 111 | 52 | 88 | 236 | 94 | 93 | 14 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 2 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Cap, veh/h | 371 | 2628 | 60 | 478 | 2695 | 257 | 67 | 93 | 223 | 95 | 84 | 11 |
| Arrive On Green | 0.76 | 0.76 | 0.76 | 0.04 | 0.84 | 0.84 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 |
| Sat Flow, veh/h | 435 | 3467 | 79 | 1739 | 3200 | 305 | 178 | 415 | 999 | 267 | 378 | 48 |
| Grp Volume(v), veh/h | 15 | 481 | 502 | 170 | 629 | 644 | 376 | 0 | 0 | 201 | 0 | 0 |
| Grp Sat Flow(s),veh/h/ln | 435 | 1735 | 1812 | 1739 | 1735 | 1771 | 1592 | 0 | 0 | 693 | 0 | 0 |
| Q Serve(g_s), s | 1.4 | 13.9 | 13.9 | 3.1 | 13.5 | 13.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 3.8 | 13.9 | 13.9 | 3.1 | 13.5 | 13.5 | 33.5 | 0.0 | 0.0 | 33.5 | 0.0 | 0.0 |
| Prop In Lane | 1.00 | | 0.04 | 1.00 | | 0.17 | 0.14 | | 0.63 | 0.47 | | 0.07 |
| Lane Grp Cap(c), veh/h | 371 | 1315 | 1373 | 478 | 1461 | 1491 | 383 | 0 | 0 | 190 | 0 | 0 |
| V/C Ratio(X) | 0.04 | 0.37 | 0.37 | 0.36 | 0.43 | 0.43 | 0.98 | 0.00 | 0.00 | 1.06 | 0.00 | 0.00 |
| Avail Cap(c_a), veh/h | 371 | 1315 | 1373 | 553 | 1461 | 1491 | 383 | 0 | 0 | 190 | 0 | 0 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.75 | 0.75 | 0.75 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 |
| Uniform Delay (d), s/veh | 5.2 | 6.1 | 6.1 | 4.5 | 2.9 | 2.9 | 59.1 | 0.0 | 0.0 | 59.9 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 0.2 | 0.6 | 0.6 | 0.4 | 0.9 | 0.9 | 41.1 | 0.0 | 0.0 | 81.5 | 0.0 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 0.2 | 7.2 | 7.4 | 1.6 | 6.1 | 6.2 | 26.0 | 0.0 | 0.0 | 17.8 | 0.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 5.3 | 6.7 | 6.6 | 4.9 | 3.9 | 3.9 | 100.1 | 0.0 | 0.0 | 141.4 | 0.0 | 0.0 |
| LnGrp LOS | A | A | A | A | A | A | F | A | A | F | A | A |
| Approach Vol, veh/h | | 998 | | | 1443 | | | 376 | | | 201 | |
| Approach Delay, s/veh | | 6.6 | | | 4.0 | | | 100.1 | | | 141.4 | |
| Approach LOS | | A | | | A | | | F | | | F | |
| Timer - Assigned Phs | 1 | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 12.5 | 121.7 | | 40.3 | | 134.2 | | 40.3 | | | | |
| Change Period (Y+Rc), s | 7.1 | 7.2 | | 6.8 | | * 7.2 | | * 6.8 | | | | |
| Max Green Setting (Gmax), s | 83.8 | | | 33.2 | | * 1E2 | | * 34 | | | | |
| Max Q Clear Time (g_c+1), s | 15.9 | | | 35.5 | | 15.5 | | 35.5 | | | | |
| Green Ext Time (p_c), s | 0.2 | 6.6 | | 0.0 | | 10.8 | | 0.0 | | | | |

Intersection Summary

| | |
|--------------------|------|
| HCM 6th Ctrl Delay | 26.0 |
| HCM 6th LOS | C |

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC
 15: Hermit Smith Rd & General Electric Rd

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 6.4 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | Y | | B | | | A |
| Traffic Vol, veh/h | 7 | 145 | 70 | 21 | 72 | 27 |
| Future Vol, veh/h | 7 | 145 | 70 | 21 | 72 | 27 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 69 | 69 | 69 | 69 | 69 | 69 |
| Heavy Vehicles, % | 20 | 20 | 20 | 20 | 20 | 20 |
| Mvmt Flow | 10 | 210 | 101 | 30 | 104 | 39 |

| Major/Minor | Minor1 | Major1 | Major2 | | |
|----------------------|--------|--------|--------|---|------|
| Conflicting Flow All | 363 | 116 | 0 | 0 | 131 |
| Stage 1 | 116 | - | - | - | - |
| Stage 2 | 247 | - | - | - | - |
| Critical Hdwy | 6.6 | 6.4 | - | - | 4.3 |
| Critical Hdwy Stg 1 | 5.6 | - | - | - | - |
| Critical Hdwy Stg 2 | 5.6 | - | - | - | - |
| Follow-up Hdwy | 3.68 | 3.48 | - | - | 2.38 |
| Pot Cap-1 Maneuver | 602 | 890 | - | - | 1350 |
| Stage 1 | 866 | - | - | - | - |
| Stage 2 | 754 | - | - | - | - |
| Platoon blocked, % | | | - | - | - |
| Mov Cap-1 Maneuver | 554 | 890 | - | - | 1350 |
| Mov Cap-2 Maneuver | 554 | - | - | - | - |
| Stage 1 | 798 | - | - | - | - |
| Stage 2 | 754 | - | - | - | - |

| Approach | WB | NB | SB |
|----------------------|------|----|-----|
| HCM Control Delay, s | 10.6 | 0 | 5.7 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL | SBT |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h) | - | - | 866 | 1350 |
| HCM Lane V/C Ratio | - | - | 0.254 | 0.077 |
| HCM Control Delay (s) | - | - | 10.6 | 7.9 |
| HCM Lane LOS | - | - | B | A |
| HCM 95th %tile Q(veh) | - | - | 1 | 0.3 |

HCM 6th TWSC
 16: Orange Ave & General Electric Rd

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 3.1 | | | | | |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | T | | | T | | T |
| Traffic Vol, veh/h | 36 | 103 | 69 | 356 | 229 | 15 |
| Future Vol, veh/h | 36 | 103 | 69 | 356 | 229 | 15 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 91 | 91 | 91 | 91 | 91 | 91 |
| Heavy Vehicles, % | 20 | 20 | 20 | 10 | 10 | 20 |
| Mvmt Flow | 40 | 113 | 76 | 391 | 252 | 16 |

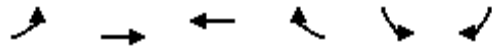
| Major/Minor | Minor2 | Major1 | | Major2 | |
|----------------------|--------|--------|------|--------|---|
| Conflicting Flow All | 803 | 260 | 268 | 0 | 0 |
| Stage 1 | 260 | - | - | - | - |
| Stage 2 | 543 | - | - | - | - |
| Critical Hdwy | 6.6 | 6.4 | 4.3 | - | - |
| Critical Hdwy Stg 1 | 5.6 | - | - | - | - |
| Critical Hdwy Stg 2 | 5.6 | - | - | - | - |
| Follow-up Hdwy | 3.68 | 3.48 | 2.38 | - | - |
| Pot Cap-1 Maneuver | 329 | 737 | 1198 | - | - |
| Stage 1 | 743 | - | - | - | - |
| Stage 2 | 548 | - | - | - | - |
| Platoon blocked, % | | | | - | - |
| Mov Cap-1 Maneuver | 302 | 737 | 1198 | - | - |
| Mov Cap-2 Maneuver | 302 | - | - | - | - |
| Stage 1 | 683 | - | - | - | - |
| Stage 2 | 548 | - | - | - | - |

| Approach | EB | NB | SB |
|----------------------|------|-----|----|
| HCM Control Delay, s | 14.3 | 1.3 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h) | 1198 | - | 537 | - | - |
| HCM Lane V/C Ratio | 0.063 | - | 0.284 | - | - |
| HCM Control Delay (s) | 8.2 | 0 | 14.3 | - | - |
| HCM Lane LOS | A | A | B | - | - |
| HCM 95th %tile Q(veh) | 0.2 | - | 1.2 | - | - |

HCM 6th Signalized Intersection Summary

17: US 441 & Plymouth Sorrento



| Movement | EBL | EBT | WBT | WBR | SBL | SBR | |
|--|------|------|------|-------|-------|------|-------|
| Lane Configurations | | | | | | | |
| Traffic Volume (veh/h) | 141 | 1054 | 1117 | 251 | 289 | 65 | |
| Future Volume (veh/h) | 141 | 1054 | 1117 | 251 | 289 | 65 | |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | |
| Ped-Bike Adj(A_pbT) | 1.00 | | | 1.00 | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Work Zone On Approach | | No | No | | No | | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | |
| Adj Flow Rate, veh/h | 145 | 1087 | 1152 | 259 | 298 | 67 | |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | |
| Cap, veh/h | 306 | 2827 | 2049 | 457 | 207 | 184 | |
| Arrive On Green | 0.04 | 0.80 | 0.71 | 0.71 | 0.12 | 0.12 | |
| Sat Flow, veh/h | 1781 | 3647 | 2981 | 644 | 1781 | 1585 | |
| Grp Volume(v), veh/h | 145 | 1087 | 706 | 705 | 298 | 67 | |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1777 | 1777 | 1754 | 1781 | 1585 | |
| Q Serve(g_s), s | 3.3 | 14.0 | 29.6 | 30.3 | 18.0 | 6.0 | |
| Cycle Q Clear(g_c), s | 3.3 | 14.0 | 29.6 | 30.3 | 18.0 | 6.0 | |
| Prop In Lane | 1.00 | | | 0.37 | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 306 | 2827 | 1261 | 1245 | 207 | 184 | |
| V/C Ratio(X) | 0.47 | 0.38 | 0.56 | 0.57 | 1.44 | 0.36 | |
| Avail Cap(c_a), veh/h | 383 | 2827 | 1261 | 1245 | 207 | 184 | |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Upstream Filter(I) | 0.76 | 0.76 | 0.82 | 0.82 | 1.00 | 1.00 | |
| Uniform Delay (d), s/veh | 10.4 | 4.7 | 10.8 | 10.9 | 68.5 | 63.2 | |
| Incr Delay (d2), s/veh | 0.9 | 0.3 | 1.5 | 1.5 | 223.5 | 1.2 | |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| %ile BackOfQ(95%),veh/ln | 2.2 | 6.7 | 15.9 | 16.0 | 32.7 | 9.3 | |
| Unsig. Movement Delay, s/veh | | | | | | | |
| LnGrp Delay(d),s/veh | 11.2 | 5.0 | 12.3 | 12.5 | 292.0 | 64.4 | |
| LnGrp LOS | B | A | B | B | F | E | |
| Approach Vol, veh/h | | 1232 | 1411 | | 365 | | |
| Approach Delay, s/veh | | 5.7 | 12.4 | | 250.2 | | |
| Approach LOS | | A | B | | F | | |
| Timer - Assigned Phs | | | | 4 | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | | | | 130.2 | 24.8 | 13.3 | 116.9 |
| Change Period (Y+Rc), s | | | | 6.9 | 6.8 | 7.8 | * 6.9 |
| Max Green Setting (Gmax), s | | | | 123.1 | 18.0 | 12.2 | * 1E2 |
| Max Q Clear Time (g_c+I1), s | | | | 16.0 | 20.0 | 5.3 | 32.3 |
| Green Ext Time (p_c), s | | | | 8.5 | 0.0 | 0.2 | 13.3 |
| Intersection Summary | | | | | | | |
| HCM 6th Ctrl Delay | | | 38.5 | | | | |
| HCM 6th LOS | | | D | | | | |
| Notes | | | | | | | |
| User approved pedestrian interval to be less than phase max green. | | | | | | | |
| * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier. | | | | | | | |

HCM 6th TWSC
 19: Hermit Smith Rd & Access

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 6 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | W | | T | | | T |
| Traffic Vol, veh/h | 0 | 54 | 17 | 0 | 21 | 13 |
| Future Vol, veh/h | 0 | 54 | 17 | 0 | 21 | 13 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 2 | 20 | 2 | 2 | 20 | 2 |
| Mvmt Flow | 0 | 57 | 18 | 0 | 22 | 14 |

| Major/Minor | Minor1 | Major1 | Major2 | | | |
|----------------------|--------|--------|--------|---|------|---|
| Conflicting Flow All | 76 | 18 | 0 | 0 | 18 | 0 |
| Stage 1 | 18 | - | - | - | - | - |
| Stage 2 | 58 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.4 | - | - | 4.3 | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.48 | - | - | 2.38 | - |
| Pot Cap-1 Maneuver | 927 | 1011 | - | - | 1489 | - |
| Stage 1 | 1005 | - | - | - | - | - |
| Stage 2 | 965 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 913 | 1011 | - | - | 1489 | - |
| Mov Cap-2 Maneuver | 913 | - | - | - | - | - |
| Stage 1 | 990 | - | - | - | - | - |
| Stage 2 | 965 | - | - | - | - | - |

| Approach | WB | NB | SB |
|----------------------|-----|----|-----|
| HCM Control Delay, s | 8.8 | 0 | 4.6 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL | SBT |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h) | - | - | 1011 | 1489 |
| HCM Lane V/C Ratio | - | - | 0.056 | 0.015 |
| HCM Control Delay (s) | - | - | 8.8 | 7.5 |
| HCM Lane LOS | - | - | A | A |
| HCM 95th %tile Q(veh) | - | - | 0.2 | 0 |

HCM 6th TWSC
 21: West Access & General Electric Rd

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.9 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 87 | 6 | 3 | 137 | 15 | 5 |
| Future Vol, veh/h | 87 | 6 | 3 | 137 | 15 | 5 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 10 | 20 | 20 | 10 | 20 | 20 |
| Mvmt Flow | 92 | 6 | 3 | 144 | 16 | 5 |

| Major/Minor | Major1 | Major2 | Minor1 | | |
|----------------------|--------|--------|--------|---|-----------|
| Conflicting Flow All | 0 | 0 | 98 | 0 | 245 95 |
| Stage 1 | - | - | - | - | 95 - |
| Stage 2 | - | - | - | - | 150 - |
| Critical Hdwy | - | - | 4.3 | - | 6.6 6.4 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.6 - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.6 - |
| Follow-up Hdwy | - | - | 2.38 | - | 3.68 3.48 |
| Pot Cap-1 Maneuver | - | - | 1390 | - | 706 914 |
| Stage 1 | - | - | - | - | 886 - |
| Stage 2 | - | - | - | - | 836 - |
| Platoon blocked, % | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1390 | - | 705 914 |
| Mov Cap-2 Maneuver | - | - | - | - | 705 - |
| Stage 1 | - | - | - | - | 884 - |
| Stage 2 | - | - | - | - | 836 - |

| Approach | EB | WB | NB |
|----------------------|----|-----|----|
| HCM Control Delay, s | 0 | 0.2 | 10 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h) | 748 | - | - | 1390 | - |
| HCM Lane V/C Ratio | 0.028 | - | - | 0.002 | - |
| HCM Control Delay (s) | 10 | - | - | 7.6 | 0 |
| HCM Lane LOS | B | - | - | A | A |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0 | - |

HCM 6th TWSC
 23: Main Access & General Electric Rd

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 3.2 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 72 | 20 | 10 | 90 | 50 | 30 |
| Future Vol, veh/h | 72 | 20 | 10 | 90 | 50 | 30 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 10 | 20 | 10 | 20 | 10 | 20 |
| Mvmt Flow | 76 | 21 | 11 | 95 | 53 | 32 |

| Major/Minor | Major1 | Major2 | Minor1 | | |
|----------------------|--------|--------|--------|---|------|
| Conflicting Flow All | 0 | 0 | 97 | 0 | 204 |
| Stage 1 | - | - | - | - | 87 |
| Stage 2 | - | - | - | - | 117 |
| Critical Hdwy | - | - | 4.2 | - | 6.5 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.5 |
| Critical Hdwy Stg 2 | - | - | - | - | 5.5 |
| Follow-up Hdwy | - | - | 2.29 | - | 3.59 |
| Pot Cap-1 Maneuver | - | - | 1448 | - | 767 |
| Stage 1 | - | - | - | - | 917 |
| Stage 2 | - | - | - | - | 889 |
| Platoon blocked, % | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1448 | - | 761 |
| Mov Cap-2 Maneuver | - | - | - | - | 761 |
| Stage 1 | - | - | - | - | 910 |
| Stage 2 | - | - | - | - | 889 |

| Approach | EB | WB | NB |
|----------------------|----|-----|-----|
| HCM Control Delay, s | 0 | 0.8 | 9.9 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h) | 815 | - | - | 1448 | - |
| HCM Lane V/C Ratio | 0.103 | - | - | 0.007 | - |
| HCM Control Delay (s) | 9.9 | - | - | 7.5 | 0 |
| HCM Lane LOS | A | - | - | A | A |
| HCM 95th %tile Q(veh) | 0.3 | - | - | 0 | - |

HCM 6th TWSC
 25: East Access & General Electric Rd

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 1.3 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 97 | 5 | 4 | 80 | 15 | 9 |
| Future Vol, veh/h | 97 | 5 | 4 | 80 | 15 | 9 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 97 | 97 | 97 | 97 | 97 | 97 |
| Heavy Vehicles, % | 10 | 20 | 20 | 10 | 20 | 20 |
| Mvmt Flow | 100 | 5 | 4 | 82 | 15 | 9 |























| Major/Minor | Major1 | Major2 | Minor1 | Minor2 | Minor3 |
|----------------------|--------|--------|--------|--------|--------|
| Conflicting Flow All | 0 | 0 | 105 | 0 | 193 |
| Stage 1 | - | - | - | - | 103 |
| Stage 2 | - | - | - | - | 90 |
| Critical Hdwy | - | - | 4.3 | - | 6.6 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.6 |
| Critical Hdwy Stg 2 | - | - | - | - | 5.6 |
| Follow-up Hdwy | - | - | 2.38 | - | 3.68 |
| Pot Cap-1 Maneuver | - | - | 1381 | - | 757 |
| Stage 1 | - | - | - | - | 878 |
| Stage 2 | - | - | - | - | 890 |
| Platoon blocked, % | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1381 | - | 755 |
| Mov Cap-2 Maneuver | - | - | - | - | 755 |
| Stage 1 | - | - | - | - | 875 |
| Stage 2 | - | - | - | - | 890 |

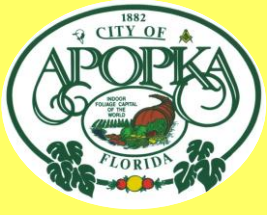
| Approach | EB | WB | NB |
|----------------------|----|-----|-----|
| HCM Control Delay, s | 0 | 0.4 | 9.6 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h) | 805 | - | - | 1381 | - |
| HCM Lane V/C Ratio | 0.031 | - | - | 0.003 | - |
| HCM Control Delay (s) | 9.6 | - | - | 7.6 | 0 |
| HCM Lane LOS | A | - | - | A | A |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0 | - |

Appendix J
Improved Intersection Analysis Worksheets

HCM 6th Signalized Intersection Summary 3: Hermit Smith Rd & US 441

| |  |  |  |  |  |  |  |  |  |  |  |  |
|--|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  |  |  | |  |  | |  |  |
| Traffic Volume (veh/h) | 28 | 1330 | 15 | 53 | 1887 | 124 | 127 | 39 | 175 | 222 | 17 | 40 |
| Future Volume (veh/h) | 28 | 1330 | 15 | 53 | 1887 | 124 | 127 | 39 | 175 | 222 | 17 | 40 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1796 | 1678 | 1678 | 1796 | 1796 | 1678 | 1678 | 1678 | 1678 | 1678 | 1678 |
| Adj Flow Rate, veh/h | 29 | 1371 | 15 | 55 | 1945 | 128 | 131 | 40 | 103 | 229 | 18 | 41 |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Percent Heavy Veh, % | 2 | 7 | 15 | 15 | 7 | 7 | 15 | 15 | 15 | 15 | 15 | 15 |
| Cap, veh/h | 218 | 2184 | 910 | 235 | 2082 | 135 | 241 | 61 | 264 | 111 | 5 | 12 |
| Arrive On Green | 0.02 | 0.64 | 0.64 | 0.06 | 1.00 | 1.00 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 |
| Sat Flow, veh/h | 1781 | 3413 | 1422 | 1598 | 3253 | 212 | 1073 | 328 | 1422 | 364 | 29 | 65 |
| Grp Volume(v), veh/h | 29 | 1371 | 15 | 55 | 1010 | 1063 | 171 | 0 | 103 | 288 | 0 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1706 | 1422 | 1598 | 1706 | 1758 | 1401 | 0 | 1422 | 458 | 0 | 0 |
| Q Serve(g_s), s | 0.8 | 36.3 | 0.6 | 1.8 | 0.0 | 0.0 | 0.0 | 0.0 | 9.5 | 10.8 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 0.8 | 36.3 | 0.6 | 1.8 | 0.0 | 0.0 | 17.0 | 0.0 | 9.5 | 27.8 | 0.0 | 0.0 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.12 | 0.77 | | 1.00 | 0.80 | | 0.14 |
| Lane Grp Cap(c), veh/h | 218 | 2184 | 910 | 235 | 1092 | 1125 | 302 | 0 | 264 | 128 | 0 | 0 |
| V/C Ratio(X) | 0.13 | 0.63 | 0.02 | 0.23 | 0.92 | 0.94 | 0.57 | 0.00 | 0.39 | 2.25 | 0.00 | 0.00 |
| Avail Cap(c_a), veh/h | 288 | 2184 | 910 | 298 | 1092 | 1125 | 304 | 0 | 265 | 128 | 0 | 0 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.18 | 0.18 | 0.18 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 0.00 |
| Uniform Delay (d), s/veh | 8.6 | 16.2 | 9.8 | 13.2 | 0.0 | 0.0 | 56.7 | 0.0 | 53.7 | 71.4 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 0.3 | 1.4 | 0.0 | 0.1 | 3.3 | 4.2 | 2.4 | 0.0 | 0.9 | 587.0 | 0.0 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 0.6 | 18.9 | 0.3 | 1.0 | 1.7 | 2.1 | 10.3 | 0.0 | 6.3 | 43.3 | 0.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 8.9 | 17.6 | 9.9 | 13.3 | 3.3 | 4.2 | 59.1 | 0.0 | 54.6 | 658.4 | 0.0 | 0.0 |
| LnGrp LOS | A | B | A | B | A | A | E | A | D | F | A | A |
| Approach Vol, veh/h | | 1415 | | | 2128 | | | 274 | | | 288 | |
| Approach Delay, s/veh | | 17.4 | | | 4.0 | | | 57.4 | | | 658.4 | |
| Approach LOS | | B | | | A | | | E | | | F | |
| Timer - Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 12.1 | 102.9 | | 35.0 | 12.1 | 102.9 | | 35.0 | | | | |
| Change Period (Y+Rc), s | * 8.6 | * 6.9 | | * 7.2 | * 7.6 | 6.9 | | 7.2 | | | | |
| Max Green Setting (Gmax), s | * 9.4 | * 90 | | * 28 | * 10 | 90.1 | | 27.8 | | | | |
| Max Q Clear Time (g_c+I1), s | 2.8 | 2.0 | | 19.0 | 3.8 | 38.3 | | 29.8 | | | | |
| Green Ext Time (p_c), s | 0.0 | 31.1 | | 0.6 | 0.1 | 12.4 | | 0.0 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 6th Ctrl Delay | | | | 58.1 | | | | | | | | |
| HCM 6th LOS | | | | E | | | | | | | | |
| Notes | | | | | | | | | | | | |
| * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier. | | | | | | | | | | | | |



CITY OF APOPKA PLANNING COMMISSION

| | | |
|---|-------------|------------------------|
| <input type="checkbox"/> PUBLIC HEARING | MEETING OF: | September 11, 2018 |
| <input checked="" type="checkbox"/> SITE PLAN | FROM: | Community Development |
| <input type="checkbox"/> SPECIAL REPORTS | EXHIBITS: | Vicinity Map |
| <input checked="" type="checkbox"/> OTHER: Final Development Plan | | Aerial Map |
| | | Final Development Plan |

SUBJECT: FINAL DEVELOPMENT PLAN – APOPKA MEDICAL OFFICE BUILDING

REQUEST: RECOMMEND APPROVAL OF THE FINAL DEVELOPMENT PLAN FOR APOPKA MEDICAL OFFICE BUILDING SITE PLAN

SUMMARY:

OWNER/APPLICANT: Urgent Care Developers of Apopka, LLC c/o Tim Burrill

ENGINEER: Klima Weeks Civil Engineering, Inc., c/o Selby G. Weeks, P.E.

LOCATION: 1520 West Orange Blossom Trail; West Orange Blossom Trail

PARCEL ID #s: 05-21-28-0000-00-008 and 05-21-28-0000-00-038

FUTURE LAND USE: Commercial

ZONING: C-1 (Retail Commercial)

EXISTING USE: Vacant Land

PROPOSED USE: Medical Office

TRACT SIZE: 4.48 +/- acres

BUILDING SIZE: 5,285 square feet (proposed)

FLOOR AREA RATIO 0.03 (0.25 Maximum)

DISTRIBUTION

| | | |
|--------------------------------|------------------|--------------------------|
| Mayor Nelson | Finance Director | Public Services Director |
| Commissioners | HR Director | Recreation Director |
| City Administrator | IT Director | City Clerk |
| Community Development Director | Police Chief | Fire Chief |

RELATIONSHIP TO ADJACENT PROPERTIES:

| <i>Direction</i> | <i>Future Land Use</i> | <i>Zoning</i> | <i>Present Use</i> |
|-------------------------------|------------------------|---|---|
| North (City) | Commercial | Right-of-Way (ROW)/ C-1 (Retail Commercial) | U.S. Highway 441/Multi-tenant Shopping Center |
| East (City) | Commercial | C-1 | Motel |
| South (County and City) | Industrial | County Ind-4 (Heavy industrial)/R-1 (Residential Single-Family) | Railroad/Residential Subdivision |
| West (City) | Commercial | C-1 | Retention Pond |

PROJECT SUMMARY: This is a request to approve the Apopka Medical Office Building – Final Development Plan/Site Plan that includes a proposed building floor area of 5,285 square feet for medical office use. This project on Lot 1 will use 0.57 acre. Lot 2 is intended for future commercial use with a total of 3.92 acres. The entire parcel with total size of 4.48 acres is intended to be platted prior to the completion of the medical office building. A Certificate of Occupancy for this project will not be issued until a plat is approved. The stormwater pond may later be incorporated into a master stormwater pond jointly used by the entire development.

PARKING: A total of 26 parking spaces will be provided as required by Code, two of which are reserved as a handicap accessible parking spaces.

ACCESS/TRANSPORTATION: This project will have right-in-right-out only access to U.S. 441/W Orange Blossom Trail. Exiting traffic that wants to travel north on U.S. 441/W Orange Blossom trail will be required to make a U-turn at the U.S. 441/W Orange Blossom Trail and Errol Parkway signalized intersection.

Projects that generate less than 400 daily trips do not require the submittal of a Traffic Impact Analysis (TIA). The applicant was advised at DRC that when the remainder of the parcel is brought forward for development, a TIA will be required to assess the total site impacts.

EXTERIOR ELEVATIONS: The height of the proposed building is 25 feet, below the maximum allowable height of 35 feet. Staff has found the proposed building façade elevations to be in accordance with the City’s Development Design Guidelines.

STORMWATER: The stormwater management system includes an on-site retention area, on the southern portion of the site. The stormwater pond design meets the City’s Land Development Code requirements based on this project but may be amended at the time of Lot 2 development.

BUFFER/SCREENING/TREE PROGRAM: As part of the development plan approval, blue cypress, bottle brush and crepe myrtle trees will embellish the 10-foot wide landscaping buffer adjacent to U.S. Highway 441. Live oaks are located around the parking landscaped islands and blue cypress trees surround the building. The planting materials and irrigation system design are consistent with the water-efficient landscape standards set forth in Ordinance No. 2069.

PLANNING COMMISSION – SEPTEMBER 11, 2018
APOPKA MEDICAL OFFICE BUILDING – FINAL DEVELOPMENT PLAN
PAGE 3

Arbor Assessment:

| | |
|--------------------------------|----|
| Total inches on-site: | 12 |
| Total inches removed: | 12 |
| Total inches retained: | 0 |
| Total inches added: | 89 |
| Total inches post development: | 89 |

PUBLIC HEARING SCHEDULE:

September 11, 2018 - Planning Commission (5:30 pm)

September 19, 2018 - City Council (7:00 pm)

RECOMMENDATION ACTION:

The **Development Review Committee** recommends approval of the Apopka Medical Office Building Final Development Plan, subject to the findings of this staff report.

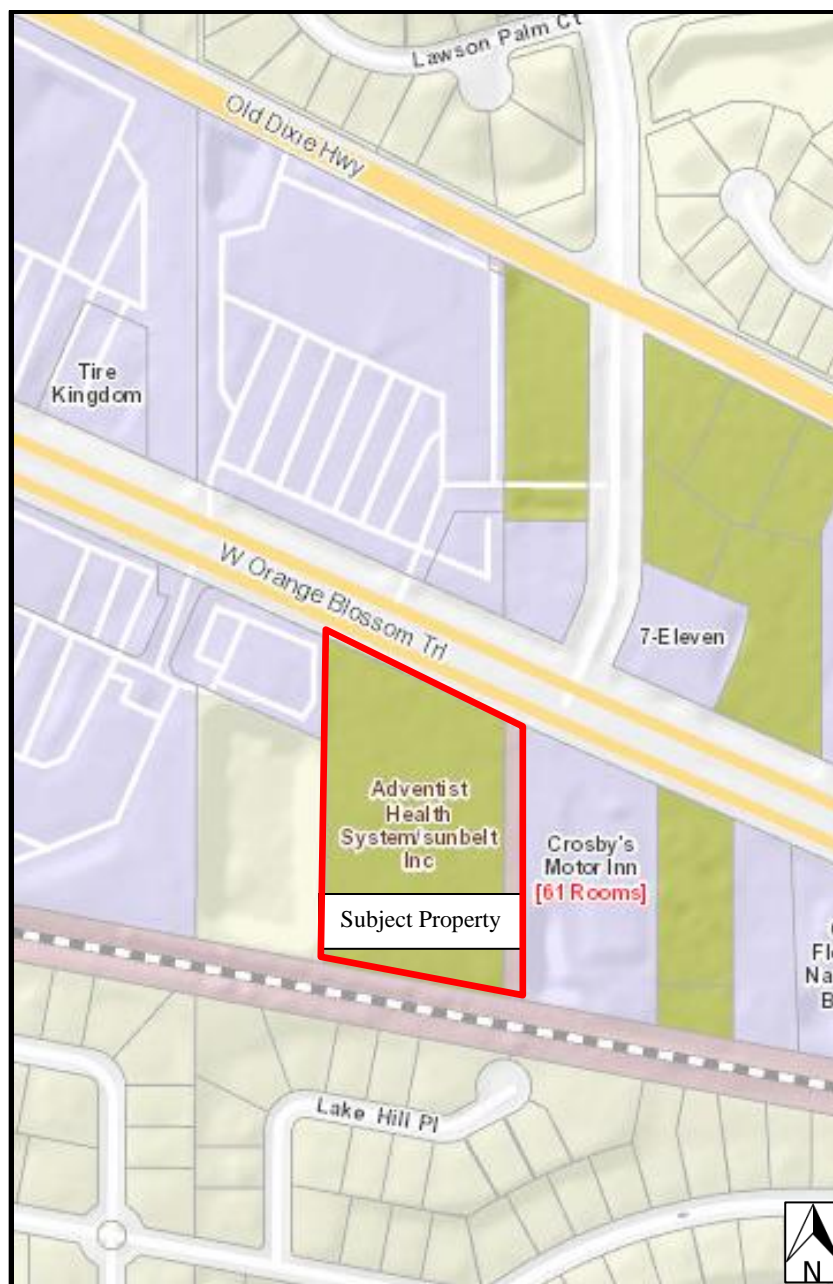
Planning Commission Recommendation: Find the Apopka Medical Office Building Final Development Plan consistent with the Land Development Code and Comprehensive Plan, and recommend approval of Apopka Medical Office Building Final Development Plan, subject to the findings of this staff report.

Planning Commission Role: The role of the Planning Commission for this development application is to advise the City Council to approve, deny, or approve with conditions based on consistency with the Comprehensive Plan and Land Development Code.

Note: This item is considered quasi-judicial. The staff report and its findings are to be incorporated into and made a part of the minutes of this meeting.

Application: Final Development Plan
Owner: Adventist Health System/Sunbelt, Inc.
Applicant: Urgent Care Developers of Apopka, LLC c/o Tim Burrill
Engineer: Klima Weeks Civil Engineering, Inc., c/o Selby G. Weeks, P.E.
Parcel I.D. #s: 05-21-28-0000-00-008 and 05-21-28-0000-00-038
Location: 1520 West Orange Blossom Trail and West Orange Blossom Trail
Acres: 4.48 acres +/-

VICINITY MAP



AERIAL MAP



APOPKA MEDICAL OFFICE BUILDING FINAL DEVELOPMENT PLANS

CITY OF APOPKA, FLORIDA

JULY 2018

SHEET INDEX

| | |
|-------|-------------------------------------|
| C000 | COVER SHEET |
| S 1 | BOUNDARY AND TOPOGRAPHIC SURVEY |
| C100 | SITE PLAN |
| C200 | EROSION CONTROL AND DEMOLITION PLAN |
| C300 | GEOMETRY & STRIPING PLAN |
| C400 | GRADING & DRAINAGE PLAN |
| C500 | UTILITY PLAN |
| C501 | PLAN AND PROFILE |
| C502 | PLAN AND PROFILE |
| C503 | PLAN AND PROFILE |
| C600 | SITE DETAILS |
| C700 | DRAINAGE DETAILS |
| C800 | WATER DETAILS |
| C801 | SANITARY DETAILS |
| C802 | LIFT STATION DETAILS |
| C900 | FDOT DETAILS |
| C901 | FDOT DETAILS |
| L1 | LANDSCAPE PLAN |
| L2 | LANDSCAPE PLAN |
| L3 | PLANTING NOTES AND DETAILS |
| L4 | IRRIGATION PLAN |
| L5 | IRRIGATION PLAN |
| L6 | IRRIGATION DETAILS |
| L7 | IRRIGATION DETAILS |
| L8 | IRRIGATION DETAILS |
| A4.1C | COLOR ELEVATIONS |
| A4.2C | COLOR ELEVATIONS |
| A6.1 | DUMPSTER ENCLOSURE & DETAILS |
| ES1.2 | SITE PLAN PHOTOMETRICS |

CONTACTS:

DEVELOPER/APPLICANT:
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LAKE MARY, FLORIDA 32746
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F: 407-585-0336
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ORLANDO, FL. 32809
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F: 407-859-8121
E: CCUNNINGHAM@ARDAMAN.COM

CIVIL ENGINEER:
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KLIMA WEEKS CIVIL ENGINEERING, INC.
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ALTAMONTE SPRINGS, FLORIDA 32714
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LANDSCAPE ARCHITECT:
KATY MAGLEY, R.L.A.
MAGLEY DESIGN, LLC.
1817 E. WASHINGTON STREET
ORLANDO, FL. 32803
P: 407-758-9456
E: KATYMAGLEY@MAGLEYDESIGN.COM

UTILITY PROVIDERS:

WATER / SEWER / STORMWATER / RECLAIMED & SOLID WASTE:
CITY OF APOPKA - PUBLIC SERVICES DEPARTMENT
748 E. CLEVELAND STREET
APOPKA, FL. 32703
P: 407-703-1731
F: 407-703-1748

POWER:
DUKE ENERGY
150 PROGRESS ENERGY WAY
LONGWOOD, FL. 32750
P: 407-850-2762

CABLE COMPANIES:
CENTURY LINK
555 LAKE BORDER DRIVE
APOPKA, FL. 32703
P: 407-889-6000

CHARTER COMMUNICATIONS
3767 ALL AMERICAN BLVD.
ORLANDO, FL. 32810
P: 407-532-8509



LEGAL DESCRIPTION

Parcel 1:

The East 325.31 feet of the West 558 feet of the Southeast 1/4 of the Southwest 1/4 of Section 5, Township 21 South, Range 28 East, Orange County, Florida, lying South of U.S. Highway 441 and North of Seaboard System Railroad Right-of-Way.

Parcel 2:

Commencing 483 feet North of the South 1/4 corner of Section 5, Township 21 South, Range 28 East, Orange County, Florida, run N. 65° W., along the south Right-of-Way line of U.S. Highway 441, a distance of 822.4 feet for a POINT OF BEGINNING, thence run Southerly parallel with the East line of the Southwest 1/4 of Section 5, to the North line of Seaboard Systems Railroad, thence run Northwesterly along Seaboard Systems Railroad a distance of 31 feet more or less to the East line of the West 558 feet of the Southeast 1/4 of the Southwest 1/4 of said Section 5, thence Northerly parallel with the West line of said Southeast 1/4 of the Southwest 1/4 a distance of 508.21 feet to the South Right-of-Way line of U.S. Highway 441, thence run S. 65° E., 33 feet, more or less to the Point of Beginning.

PARCEL ID: 05-21-28-0000-00-008
05-21-28-0000-00-038

CHARACTER AND INTENDED USE:

THE PROPOSED CONSTRUCTION CONSISTS OF A SINGLE STORY 5,285 SF. MEDICAL OFFICE BUILDING, DRIVEWAYS, PARKING LOT, ASSOCIATED WATER, SEWER AND STORMWATER MANAGEMENT.

PLAT NOTE:

A CERTIFICATE OF OCCUPANCY FOR THIS PROJECT WILL NOT BE ISSUED UNTIL A PLAT IS APPROVED.



LOCATION MAP & LAND USE MAP

N.T.S.

1520 WEST ORANGE BLOSSOM TRAIL, APOPKA, FLORIDA

| NO. | REVISION | BY | DATE |
|-----|-----------------|-----|---------|
| 1 | AGENCY COMMENTS | JED | 7/30/18 |
| | | | |
| | | | |

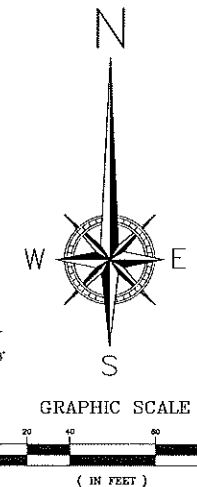
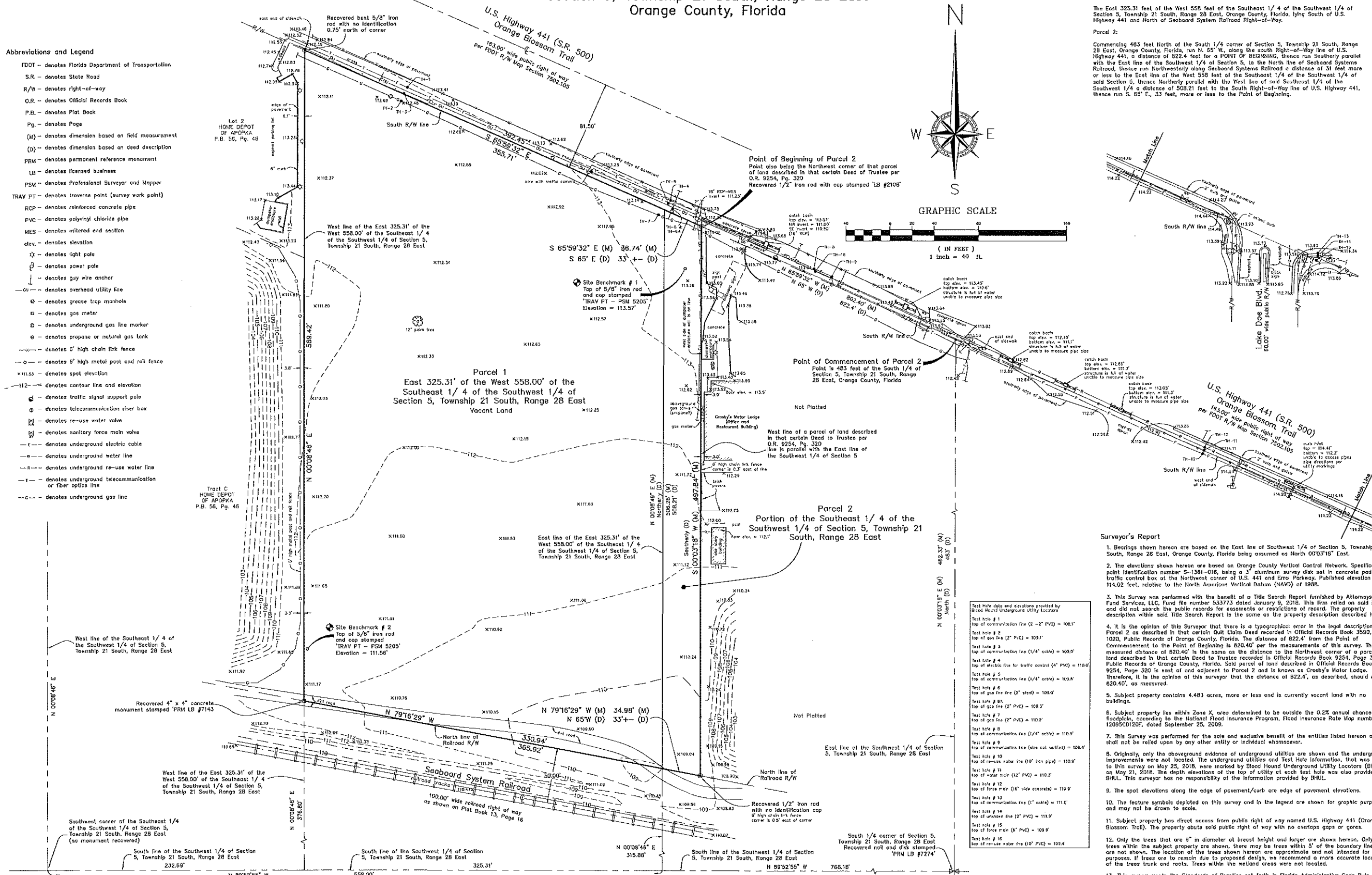
Klima Weeks
 CIVIL ENGINEERING
 385 DOUGLAS AVE
 STE 2100
 ALTAMONTE SPRINGS
 FLORIDA 32714
 TELEPHONE 407-478-8750
 FACSIMILE 407-478-8749

CERTIFICATE OF AUTHORIZATION No.: 9230

**Boundary and Topographic Survey of
1520 W Orange Blossom Trail, Apopka, Florida
Section 5, Township 21 South, Range 28 East
Orange County, Florida**

Abbreviations and Legend

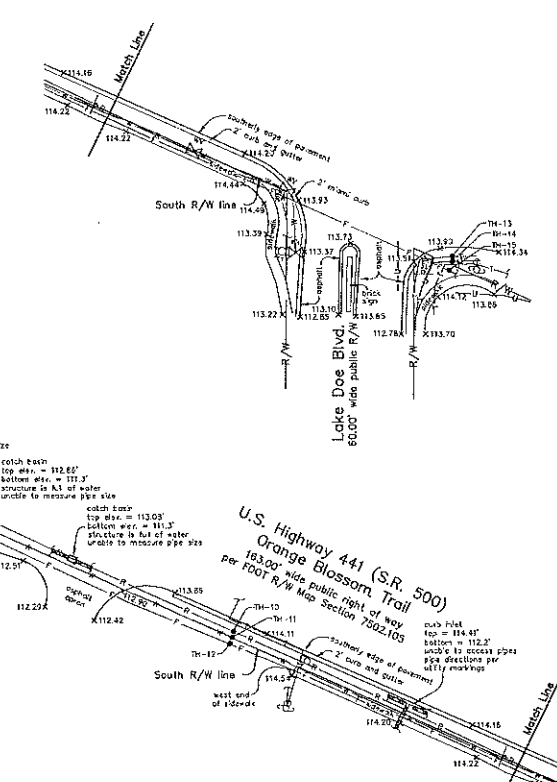
- FDOT - denotes Florida Department of Transportation
- S.R. - denotes State Road
- R/W - denotes Right-of-way
- O.R. - denotes Official Records Book
- P.B. - denotes Plat Book
- Pg. - denotes Page
- (M) - denotes dimension based on field measurement
- (D) - denotes dimension based on deed description
- PRM - denotes permanent reference monument
- LB - denotes Licensed business
- PSM - denotes Professional Surveyor and Mapper
- TRAV PT - denotes traverse point (survey work point)
- RCP - denotes reinforced concrete pipe
- PVC - denotes polyvinyl chloride pipe
- MES - denotes metered end section
- elev. - denotes elevation
- ⊙ - denotes sight pole
- ⊙ - denotes power pole
- ⊙ - denotes guy wire anchor
- ⊙ - denotes overhead utility line
- ⊙ - denotes grease trap manhole
- ⊙ - denotes gas meter
- ⊙ - denotes underground gas line marker
- ⊙ - denotes propane or natural gas tank
- ⊙ - denotes 6" high chain link fence
- ⊙ - denotes 6" high metal post and rail fence
- X111.55 - denotes spot elevation
- 112- - denotes contour line and elevation
- ⊙ - denotes telecommunication riser box
- ⊙ - denotes re-use water valve
- ⊙ - denotes sanitary force main valve
- E- - denotes underground electric cable
- W- - denotes underground water line
- R- - denotes underground re-use water line
- T- - denotes underground telecommunication or fiber optics line
- G- - denotes underground gas line



Property Description

Parcel 1:
The East 325.31 feet of the West 558 feet of the Southeast 1/4 of the Southwest 1/4 of Section 5, Township 21 South, Range 28 East, Orange County, Florida, lying South of U.S. Highway 441 and North of Seaboard System Railroad Right-of-Way.

Parcel 2:
Commencing 483 feet North of the South 1/4 corner of Section 5, Township 21 South, Range 28 East, Orange County, Florida, run N. 85° W., along the south Right-of-Way line of U.S. Highway 441, a distance of 822.4 feet for a POINT OF BEGINNING, thence run Southerly parallel with the East line of the Southwest 1/4 of Section 5, to the North line of Seaboard System Railroad, thence run Northwest along Seaboard System Railroad a distance of 31 feet more or less to the East line of the West 558 feet of the Southeast 1/4 of said Section 5, thence Northerly parallel with the West line of said Southeast 1/4 of said Section 5, a distance of 508.21 feet to the South Right-of-Way line of U.S. Highway 441, thence run S. 85° E., 33 feet, more or less to the Point of Beginning.



Surveyor's Report

- Bearings shown herein are based on the East line of Southwest 1/4 of Section 5, Township 21 South, Range 28 East, Orange County, Florida being assumed as North 00°31'18" East.
- The elevations shown herein are based on Orange County Vertical Control Network. Specifically, point identification number S-151-016, being a 3" aluminum survey disk set in concrete pad for traffic control box at the Northwest corner of U.S. 441 and Errol Parkway. Published elevation is 114.02 feet, relative to the North American Vertical Datum (NAVD) of 1988.
- This Survey was performed with the benefit of a Title Search Report furnished by Attorneys' Title Fund Services, LLC, Fund file number 533773 dated January 9, 2018. This Firm relied on said Report and did not search the public records for easements or restrictions of record. The property description within said Title Search Report is the same as the property description described herein.
- It is the opinion of this Surveyor that there is a typographical error in the legal description of Parcel 2 as described in that certain Quit Claim Deed recorded in Official Records Book 3050, Page 1020, Public Records of Orange County, Florida. The distance of 822.4' from the Point of Commencement to the Point of Beginning is 820.40' per the measurements of this survey. The measured distance of 820.40' is the same as the distance to the Northwest corner of a parcel of land described in that certain Deed to Trustee recorded in Official Records Book 9254, Page 320, Public Records of Orange County, Florida. Said parcel of land described in Official Records Book 9254, Page 320 is east of and adjacent to Parcel 2 and is known as Crosby Motor Lodge. Therefore, it is the opinion of this surveyor that the distance of 822.4', as described, should read 820.40', as measured.
- Subject property contains 4.483 acres, more or less and is currently vacant land with no buildings.
- Subject property lies within Zone X, area determined to be outside the 0.2% annual chance floodplain, according to the National Flood Insurance Program, Flood Insurance Rate Map number 12095C0120F, dated September 25, 2009.
- This Survey was performed for the sale and exclusive benefit of the entities listed herein and should not be relied upon by any other entity or individual whatsoever.
- Originally only the aboveground evidence of underground utilities are shown and the underground improvements were not located. The underground utilities and Test Hole information, that was added to this survey on May 25, 2018, were marked by Blood Hound Underground Utility Locators (BHUL) on May 21, 2018. The depth elevations of the top of utility at each test hole was also provided by BHUL. This surveyor has no responsibility of the information provided by BHUL.
- The spot elevations along the edge of pavement/curb are edge of pavement elevations.
- The feature symbols depicted on this survey and in the legend are shown for graphic purposes and may not be drawn to scale.
- Subject property has direct access from public right of way named U.S. Highway 441 (Orange Blossom Trail). The property abuts said public right of way with no overlaps gaps or gores.
- Only the trees that are 8" in diameter at breast height and larger are shown herein. Only the trees within the subject property are shown, there may be trees within 5' of the boundary lines that are not shown. The location of the trees shown herein are approximate and not intended for design purposes. If trees are to remain due to proposed design, we recommend a more accurate location of the trees trunk and roots. Trees within the wetland areas were not located.
- This survey meets the Standards of Practice set forth in Florida Administrative Code Rule 5J-17, pursuant to Florida Statute Chapter 472.
- A paper original of this Survey is not valid without the signature and original rolled seal of a Florida licensed surveyor and mapper and a Portable Document Format (PDF) file version of this survey is not valid without a digital signature and seal of a Florida licensed surveyor and mapper.

Benchmark Surveying & Mapping, LLC
Certificate of Authorization Number - LB-7874
Post Office Box 771085, Winter Garden, Florida 34777-1085
3110 Red Fox Run, Winter Garden, Florida 34746
www.benchmarksurveyingandmapping.com

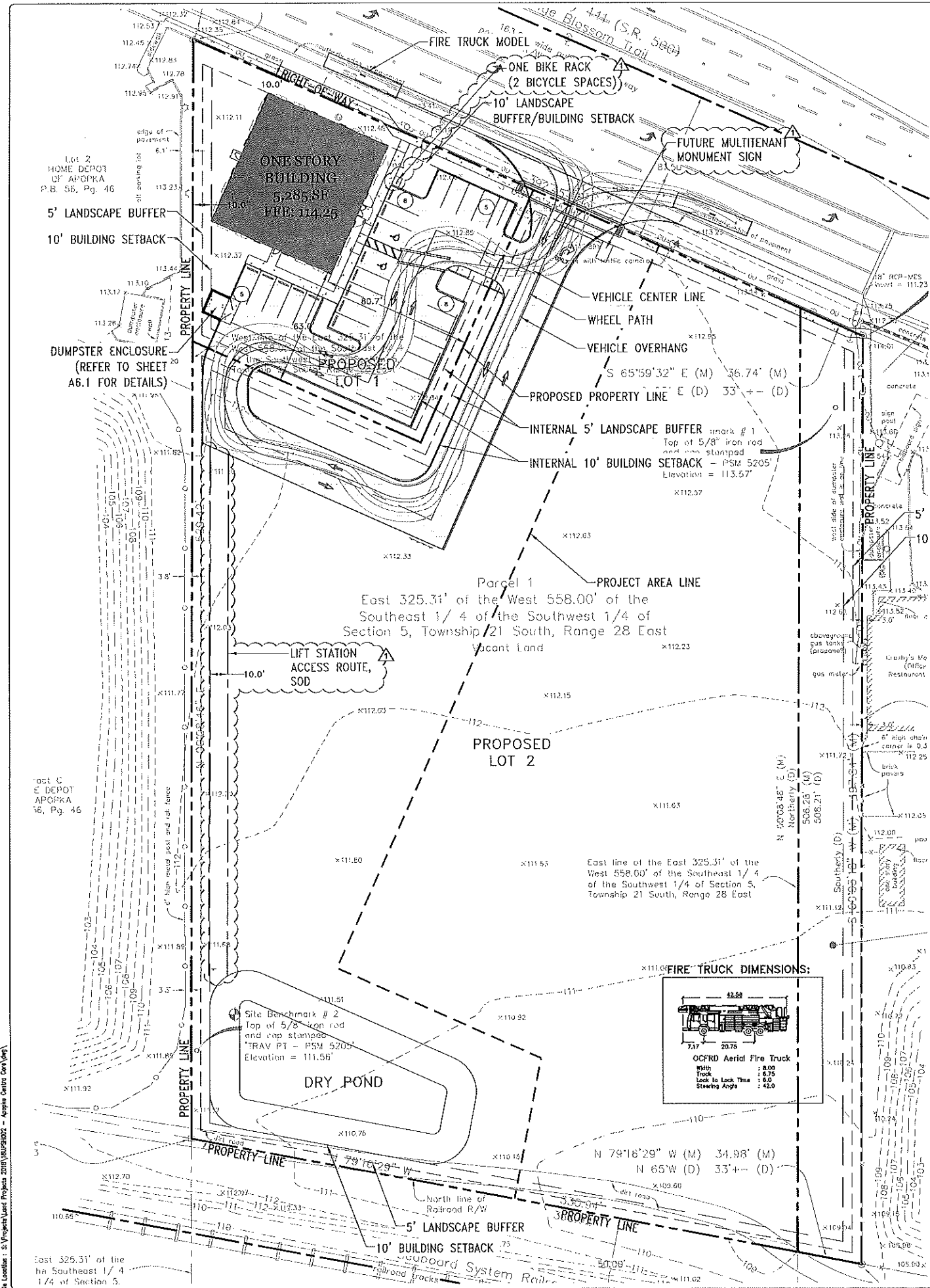
Prepared For: Upshot 1520 West Orange Blossom, LLC
Prepared By: Billy Joe Jenkins, Jr.
Professional Surveyor and Mapper
Florida License # 5205

**Boundary and Topographic Survey of
1520 W Orange Blossom Trail, Apopka, Florida
Section 5, Township 21 South, Range 28 East
Orange County, Florida**

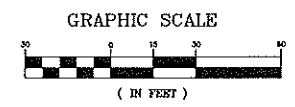
| Date | Revision |
|--------------|---|
| May 25, 2018 | Add underground utilities along R/W lines |

| Project Number | Scale |
|-----------------|----------|
| 935-22 BDY/TOPO | 1" = 40' |

| Field Date | Field Book/Page |
|-----------------|-----------------|
| January 8, 2018 | 113/40 |



FDOT DRIVEWAY PERMIT NOTE:
 THIS PROJECT WILL REQUIRE AN FDOT DRIVEWAY PERMIT FOR THE DRIVEWAY CONNECTION AND ANY WORK IN THE RIGHT-OF-WAY ADJACENT TO THE SITE. ALL CONSTRUCTION SHALL CONFORM TO THE LATEST EDITION OF THE FDOT STANDARD DESIGN, UAM AND STANDARD CONSTRUCTION SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.



GENERAL INFORMATION:

STATEMENT OF INTENT:
 THE PROPOSED CONSTRUCTION CONSISTS OF A SINGLE STORY 5,285 SF MEDICAL OFFICE BUILDING, DRIVEWAYS, PARKING LOT, ASSOCIATED WATER, SEWER AND STORMWATER MANAGEMENT.

BUILDING INFORMATION:
 BUILDING: MEDICAL OFFICE
 MEDICAL OFFICE: 5,285 SF
 MAXIMUM ALLOWED BUILDING HEIGHT: 35'
 PROPOSED BUILDING HEIGHT: 25'

PROPERTY INFORMATION:
 ADDRESS: 1520 W. ORANGE BLOSSOM TRAIL APOPKA, FL

SOILS (PROJECT AREA):
 CANDLER FINE SAND, LAKE FINE SAND

PROPOSED LOT 1: 24,687± SF = 0.57 AC
 PROPOSED LOT 2: 170,595± SF = 3.92 AC
 SITE TOTAL AREA: 195,282± SF = 4.48 AC

FEMA FLOOD DATA
 THIS SITE IS LOCATED IN ZONE X PER FEMA MAP No. 12095C0120 F, REVISED SEPTEMBER 25, 2009.

PROPOSED USE: MEDICAL OFFICE (LOT 1)
 FUTURE COMMERCIAL (LOT 2)
 NUMBER OF UNITS: 2
 EXISTING ZONING: C-1
 FUTURE LAND USE: COMMERCIAL

PARCEL ID No(s).
 05-21-28-0000-00-008 &
 05-21-28-0000-00-038

ADJACENT ZONING:
 SUBJECT SITE: C-1
 NORTH: C-1, C-2 (U.S. HWY 441/ORANGE BLOSSOM TRAIL)
 EAST: C-1
 WEST: C-1
 SOUTH: IND (CSX)

PROPOSED AREA CALCULATIONS:
 SITE TOTAL AREA: 195,282± SF = 4.48 AC

ADJACENT LAND USE:
 SUBJECT SITE: COMMERCIAL
 NORTH: COMMERCIAL (U.S. HWY 441/ORANGE BLOSSOM TRAIL)
 EAST: COMMERCIAL
 WEST: COMMERCIAL
 SOUTH: INDUSTRIAL (CSX)

LOT 1:
 IMPERVIOUS AREA: 16,986± SF = 0.39 AC
 PERVIOUS AREA: 7,701± SF = 0.18 AC
 TOTAL AREA: 24,687± SF = 0.57 AC

BUILDING SETBACKS (C-1):

| REQUIRED (FT.) | PROVIDED (FT.) |
|------------------------|--------------------------|
| FRONT: U.S. HWY 441 10 | FRONT: U.S. HWY 441 10.0 |
| EAST SIDE: 10 | EAST SIDE: 80.7 |
| WEST SIDE: 10 | WEST SIDE: 10.0 |
| REAR: 10 | SOUTH SIDE: 63.0 |

LOT 2:
 IMPERVIOUS AREA: 9,457± SF = 0.22 AC
 PERVIOUS AREA: 161,138± SF = 3.70 AC
 TOTAL AREA: 170,595± SF = 3.92 AC

LANDSCAPE BUFFER (C-1):

| REQUIRED (FT.) | PROVIDED (FT.) |
|------------------------|--------------------------|
| FRONT: U.S. HWY 441 10 | FRONT: U.S. HWY 441 10.0 |
| EAST SIDE: 5 | EAST SIDE: 5.0 |
| WEST SIDE: 5 | WEST SIDE: 5.0 |
| REAR: 5 | REAR: 5.0 |

MAX F.A.R. ALLOWABLE: 0.25
 PROPOSED F.A.R.: 0.21
 I.S.R. (PROVIDED)*: 0.69

LOT 2:
 MAX F.A.R. ALLOWABLE: 0.25
 PROPOSED F.A.R.: -NA-

I.S.R. (PROVIDED)*: 0.06
 OVERALL SITE:
 MAX F.A.R. ALLOWABLE: 0.25
 PROPOSED F.A.R.: 0.03
 *(NO OPEN SPACE REQUIRED PER LDC/CITY ORDINANCE)

PARKING CALCULATIONS:
 HEALTH OFFICE: 1 SPACE PER 200 SF OF GFA
 THEREFORE 5,285 SF/200 SF X 1 SPACE = 26 SPACES

PAVING LEGEND:

| | |
|----------|--|
| [Symbol] | CONCRETE WALKS, PADS AND PAYEMENT (REFER TO DETAILS ON SHEET C600) |
| [Symbol] | LIGHT-DUTY ASPHALT PAYEMENT SECTION |
| [Symbol] | HEAVY-DUTY ASPHALT PAYEMENT SECTION |
| [Symbol] | PROJECT AREA LINE |

LOADING AREA:
 REQUIRED: 10' X 25'
 PROVIDED: 0' X 0'

REQUIRED PARKING:
 STANDARD: 24
 ACCESSIBLE: 2
 TOTAL: 26 SPACES

PROPOSED PARKING:
 STANDARD: 24
 ACCESSIBLE: 2
 TOTAL: 26 SPACES

GENERAL NOTES:

- CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES PRIOR TO ANY CONSTRUCTION ACTIVITY FOR DIG PERMITS, ELECTRICAL PERMITS OR OTHER PERMITS AS APPLICABLE. CONTRACTOR IS ALSO TO COORDINATE FULLY WITH UTILITY COMPANIES ON EXACT LOCATION OF UNDERGROUND UTILITIES AND ANY UTILITY ADJUSTMENT REQUIRED. UTILITY COMPANIES SHALL BE NOTIFIED A MINIMUM OF THREE WORKING DAYS PRIOR TO EXCAVATION.
- THE LOCATION OF EXISTING UTILITIES SHOWN ON THESE PLANS WERE DEPICTED FROM ACTUAL FIELD MEASUREMENTS AND/OR DERIVED FROM RECORD DRAWINGS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM THE LOCATION OF EXISTING UTILITIES TO DETERMINE IF THERE ARE ANY CONFLICTS WITH THE PROPOSED CONSTRUCTION AND TO COORDINATE WITH THE UTILITY OWNERS TO RESOLVE THESE CONFLICTS.
- THE SUBSURFACE INFORMATION FOR THIS PROJECT WAS OBTAINED FOR DESIGN PURPOSES AND MAY NOT BE AN ADEQUATE REPRESENTATION OF ACTUAL CONDITIONS FOR PROJECT CONSTRUCTION. INFORMATION SHOWN, INCLUDING WATER LEVELS, REPRESENTS EXISTING CONDITIONS AT THE SPECIFIC BORING LOCATIONS AT THE TIME THE BORINGS WERE MADE.
- ANY DIFFERING SITE CONDITIONS FROM THAT WHICH IS REPRESENTED HEREON, WHETHER ABOVE, ON OR BELOW THE SURFACE OF THE GROUND, SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER, IN WRITING, WITHIN 48 HOURS OF DISCOVERY. NO CLAIM FOR EXPENSES INCURRED BY THE CONTRACTOR DUE TO SUCH DIFFERING CONDITIONS WILL BE ALLOWED IF HE OR SHE FAILS TO PROVIDE THE WRITTEN NOTIFICATION.
- ALL MATERIALS, INSTALLATION AND TESTING SHALL BE IN ACCORDANCE WITH THE CITY OF APOPKA, FLORIDA BUILDING CODE AND FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
- THE CONTRACTOR SHALL PROVIDE ALL SHEETING, SHORING AND BRACING REQUIRED TO PROTECT ADJACENT STRUCTURES AND UTILITIES OR MINIMIZE TRENCH WIDTH AS REQUIRED. SHEETING AND SHORING SHALL BE DESIGNED BY A STATE OF FLORIDA PROFESSIONAL ENGINEER RETAINED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL ENSURE THAT ALL REQUIRED CONSTRUCTION PERMITS HAVE BEEN OBTAINED PRIOR TO COMMENCING WORK.
- ALL DEBRIS AND WASTE MATERIALS GENERATED BY DEMOLITION OR SUBSEQUENT CONSTRUCTION ACTIVITIES SHALL BE DISPOSED OFF-SITE IN A LEGAL MANNER AT AN APPROVED DISPOSAL FACILITY. THE CONTRACTOR SHALL OBTAIN ANY AND ALL PERMITS REQUIRED FOR DEMOLITION, CONSTRUCTION WORK AND HAULING WASTE MATERIAL. ALL ASSOCIATED COSTS AND PERMIT FEES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- ANY PUBLIC LAND CORNER, WITHIN THE LIMITS OF CONSTRUCTION, IS TO BE PROTECTED. IF A CORNER MONUMENT IS IN DANGER OF BEING ALTERED AND HAS NOT YET BEEN PROPERLY REFERENCED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER WITHOUT DELAY.
- COORDINATE VALUES ARE BASED ON A LOCAL GRID ESTABLISHED BY THE ENGINEER AND ARE INDEPENDENT OF VALUES DEPICTED ON THE SURVEY.
- ALL REFERENCES TO PROPOSED CONSTRUCTION INDICATES CONSTRUCTION INCLUDED IN THIS CONTRACT.
- ALL PIPING TO HAVE A MINIMUM OF THREE (3) FEET COVER UNLESS OTHERWISE NOTED ON PLANS.
- THE CONTRACTOR SHALL FURNISH, ERECT AND MAINTAIN ALL NECESSARY STRIPING, TRAFFIC CONTROL AND SAFETY DEVICES IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES," LATEST EDITION, AND THE LATEST FLORIDA DEPARTMENT OF TRANSPORTATION "ROADWAY DESIGN STANDARDS."
- MAINTENANCE OF TRAFFIC: ACCESS FOR LOCAL TRAFFIC SHALL BE MAINTAINED. IF, DURING CONSTRUCTION, ACCESS FOR LOCAL TRAFFIC IS CHANGED, THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE JURISDICTIONAL AGENCY A MINIMUM OF THREE (3) WORKING DAYS IN ADVANCE. MAINTENANCE OF TRAFFIC SHALL BE IN ACCORDANCE WITH INDEX NO. 600 OF THE FLORIDA DEPARTMENT OF TRANSPORTATION ROADWAY AND TRAFFIC DESIGN STANDARDS.
- REFER TO FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS FOR THE FOLLOWING:
 A. TYPE "F" INLET (INDEX NO. 233)
 B. WINGED WALL (INDEX NO. 266)
 C. TYPE "D" CURB (INDEX NO. 300)
 D. CURB RAMP (INDEX NO. 304)
 E. CROSSWALK, STOP BAR (INDEX NO. 17346)
 F. PAYEMENT ARROWS & MESSAGE SIZE & SPACING (INDEX NO. 17346)
 G. CONCRETE BUMPER GUARD (WHEEL STOP) (INDEX NO. 300)
- AS-BUILT DRAWINGS, SIGNED AND SEALED BY A LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA, SHALL BE PROVIDED PER THE PROJECT SPECIFICATIONS AND SHALL COMPLY WITH CITY OF APOPKA REQUIREMENTS.
- ALL POWER SERVICES WILL HAVE TO BE PROVIDED UNDERGROUND, NO OVERHEAD SERVICE WILL BE ALLOWED.

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 CIVIL ENGINEERING
 385 Douglas Avenue, Ste 2100
 Altamonte Springs, FL 32714
 Telephone 407.478.8750
 Facsimile 407.478.8749
 Certificate of Authorization No.: 9230

Selby G. Weeks 56994

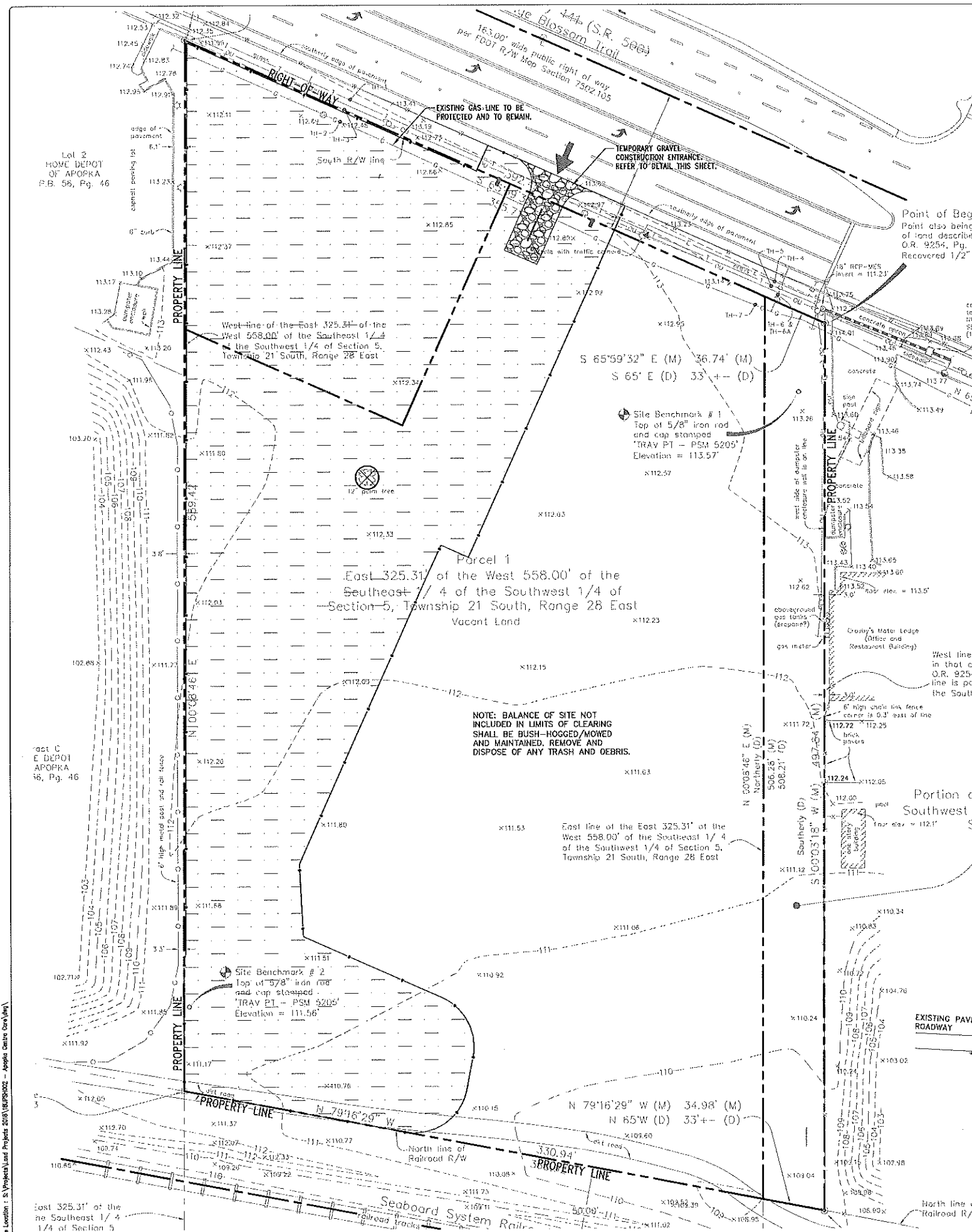
APOPKA MEDICAL OFFICE BUILDING
W. ORANGE BLOSSOM TRAIL
APOPKA, FL
SITE PLAN

| revision | description | date |
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| △ | AGENCY COMMENTS | 7/30/18 |
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drawn by: JAK
 checked by: SGV
 date: 06-26-2018
 plot scale: AS SHOWN
 project number: APOPKA MOB
 file name: C100-SITE PLAN.DWG

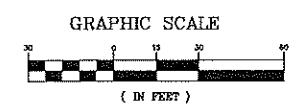
C100

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DEMOLITION LEGEND

- LIMITS OF CLEARING (REMOVAL OF SITE DEBRIS, ETC.) ALL IMPROVEMENTS IN THIS AREA, BOTH ABOVE GROUND AND BELOW, SHALL BE REMOVED UNLESS OTHERWISE NOTED ON THESE PLANS.
- SILT FENCE (REFER TO CITY DETAIL FIG. 602 ON SHEET C700)
- EXISTING TREE(S) TO BE REMOVED
- CONSTRUCTION ENTRANCE

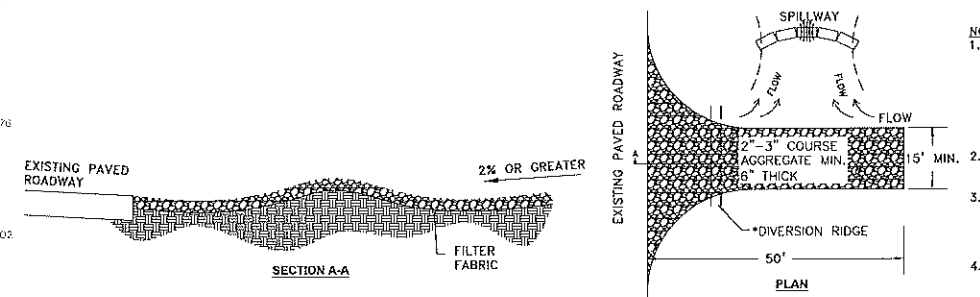


DEMOLITION NOTES:

1. CONTACT AND COORDINATE WITH THE CITY OF APOPKA PRIOR TO ANY REMOVAL OR CAPPING OF EXISTING WATER, SEWER & STORMWATER UTILITIES.
2. UTILITY LINES SHALL BE DEMOLISHED AND REMOVED OR LEFT IN PLACE AS REQUIRED BY THE UTILITY DEPARTMENT, LOCAL REQUIREMENTS AND THE HEALTH DEPARTMENT. ANY CONDUITS THAT ARE LEFT IN PLACE SHALL HAVE ENDS SEALED WITH LEAN CONCRETE.
3. ALL AREAS WHERE PAVEMENT, BUILDING SLABS, FOUNDATIONS, UTILITIES, CONDUITS, AND/OR UTILITY STRUCTURES HAVE BEEN REMOVED SHALL BE BACK FILLED WITH SELECT BACK FILL MATERIAL. ALL SELECT BACK FILL MATERIAL SHALL BE PLACED AND COMPACTED PER THE REQUIREMENTS OF THE SPECIFICATIONS AND THE ON-SITE GEOTECHNICAL ENGINEER.
4. CONTRACTOR TO COORDINATE WITH UTILITY COMPANIES PRIOR TO ANY CONSTRUCTION ACTIVITY FOR DIG PERMITS, ELECTRICAL PERMITS OR OTHER PERMITS AS APPLICABLE.
5. CONTRACTOR IS TO COORDINATE FULLY WITH UTILITY COMPANIES ON EXACT LOCATION OF UNDERGROUND UTILITIES PRIOR TO EXCAVATION. ALL DEBRIS AND WASTE MATERIALS GENERATED BY DEMOLITION OR SUBSEQUENT CONSTRUCTION ACTIVITIES SHALL BE DISPOSED OFF-SITE IN A LEGAL MANNER AT AN APPROVED DISPOSAL FACILITY.
6. THE CONTRACTOR SHALL OBTAIN ANY AND ALL PERMITS REQUIRED FOR DEMOLITION, CONSTRUCTION WORK AND HAULING WASTE MATERIAL. ALL ASSOCIATED COSTS AND PERMIT FEES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR ASPHALT RESURFACING AND STRIPING TO ALL EXISTING ROADS WHICH ARE DAMAGED DURING CONSTRUCTION. ALL REPAIRS TO BE MADE IN ACCORDANCE WITH FDOT REQUIREMENTS.
8. ANY ENCOUNTERED CONTAMINATED MATERIALS SHALL BE DISPOSED OF IN A MANNER APPROVED BY THE GEOTECHNICAL ENGINEER IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS.
9. THE CONTRACTOR IS ADVISED THAT UNCHARTED UTILITIES MAY BE FOUND TO EXIST WITHIN THE CONSTRUCTION AREA AND THAT CONSTRUCTION OPERATIONS SHOULD BE CONDUCTED WITH CAUTION.
10. REMOVE AND DISPOSE OF TREES TO BE REMOVED PER THIS SHEET.

EROSION CONTROL NOTES:

1. ALL EROSION AND SEDIMENT CONTROL WORK SHALL CONFORM TO STANDARDS OF THE CITY OF APOPKA, FLORIDA, FDOT AND THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT.
2. EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO, OR AS THE FIRST STEP IN, CONSTRUCTION. SEDIMENT CONTROL PRACTICES WILL BE APPLIED AS A PERIMETER DEFENSE AGAINST ANY TRANSPORTATION OF SILT OFF THE SITE.
3. SOIL MATERIALS FROM WORK ON THIS PROJECT SHALL BE CONTAINED AND NOT ALLOWED TO COLLECT ON ANY OFF-PERIMETER AREAS OR IN WATERWAYS. THESE INCLUDE BOTH NATURAL AND MAN-MADE OPEN DITCHES, STREAMS, STORM DRAINS, LAKES AND PONDS.
4. DAILY INSPECTIONS SHALL BE MADE BY THE CONTRACTOR TO DETERMINE THE EFFECTIVENESS OF EROSION/SEDIMENT CONTROL EFFORTS. ANY NECESSARY REMEDIES SHALL BE PERFORMED WITHOUT DELAY.
5. ALL MUD, DIRT, OR OTHER MATERIALS TRACKED OR SPILLED ONTO EXISTING PUBLIC OR PRIVATE ROADS AND FACILITIES FROM THIS SITE, DUE TO CONSTRUCTION, SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR.
6. ALL PERMANENT EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS AND ANY DISTURBED LAND AREAS SHALL BE COMPLETED WITHIN 15 CALENDAR DAYS AFTER FINAL GRADING.
7. ALL TEMPORARY PROTECTION SHALL BE MAINTAINED UNTIL PERMANENT MEASURES ARE IN PLACE AND ESTABLISHED.
8. THE EROSION CONTROL MEASURES ARE INTENDED AS MINIMUM STANDARDS. ANY EROSION CONTROL REQUIRED BEYOND THAT SPECIFIED SHALL BE CONSIDERED AS INCLUDED WITHIN THIS CONTRACT.



TEMPORARY GRAVEL CONSTRUCTION ENTRANCE

NOTES:

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
4. TEMPORARY CONSTRUCTION ENTRANCE SHALL BE IN ACCORDANCE WITH FDOT INDEX NO. 106.

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Selby G. Weeks 56991

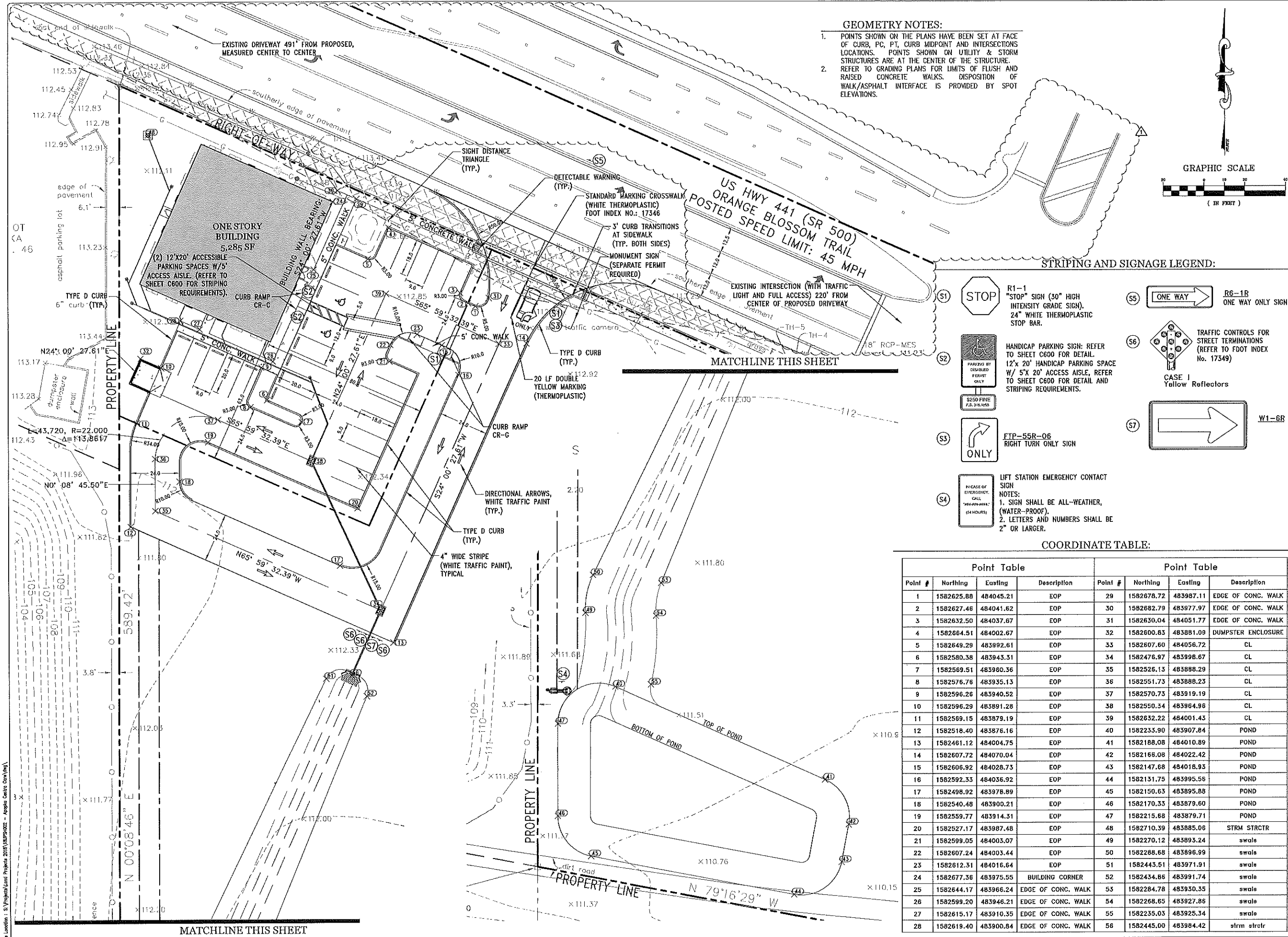
APOPKA MEDICAL OFFICE BUILDING
W. ORANGE BLOSSOM TRAIL
APOPKA, FL
DEMOLITION PLAN

| revision | description | date |
|----------|-----------------|---------|
| △ | AGENCY COMMENTS | 7/30/18 |
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drawn by: JAK
checked by: SGW
date: 06-26-2018
plot scale: AS SHOWN
project number: APOPKA MOB
file name: C200 - DEMOLITION & EROSION CONTROL PLAN.DWG

C200

File Location: S:\Projects\Lead Projects 2018\18070002 - Apopka Centre Core\Wk1



Selby G. Weeks 56991

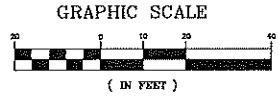
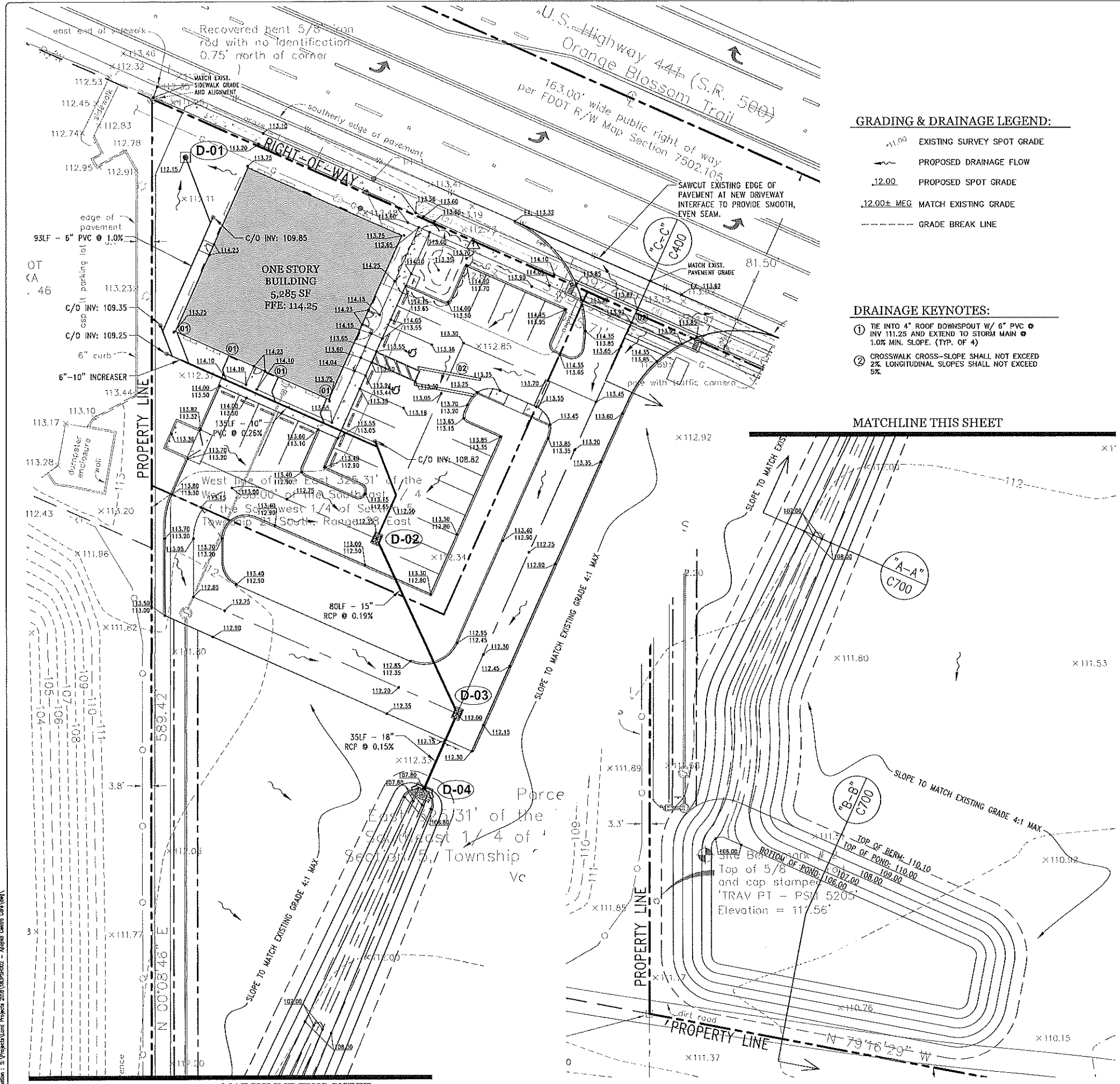
APOPKA MEDICAL OFFICE BUILDING
W. ORANGE BLOSSOM TRAIL
APOPKA, FL
GEOMETRY & STRIPING PLAN

| revision | description | date |
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| △ | AGENCY COMMENTS | 7/30/18 |
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drawn by: JAK
checked by: SOV
date: 06-26-2018
plot scale: AS SHOWN
project number: APOPKA MOB
file name: C300 - GEOMETRY & STRIPING PLAN.DWG

C300

File Location: S:\Projects\Local Projects\2018\18062018 - Aopka Centre Drive\dwg\



GRADING & DRAINAGE LEGEND:

- 11.00 EXISTING SURVEY SPOT GRADE
- PROPOSED DRAINAGE FLOW
- 12.00 PROPOSED SPOT GRADE
- 12.00± MEG MATCH EXISTING GRADE
- - - GRADE BREAK LINE

DRAINAGE KEYNOTES:

- ① TIE INTO 4" ROOF DOWNSPOUT W/ 6" PVC @ INV 111.25 AND EXTEND TO STORM MAIN @ 1.0% MIN. SLOPE. (TYP. OF 4)
- ② CROSSWALK CROSS-SLOPE SHALL NOT EXCEED 2% LONGITUDINAL SLOPES SHALL NOT EXCEED 5%.

PROJECT BENCHMARK:

SOURCE: BOUNDARY AND TOPOGRAPHIC SURVEY OF 1520 W ORANGE BLOSSOM TRAIL, APOPKA, FL, SECTION 05, TOWNSHIP 21 SOUTH, RANGE 26 EAST, BY BENCHMARK SURVEYING & MAPPING, LLC, DATED 05-25-18.

THE ELEVATIONS SHOWN HEREON ARE BASED ON ORANGE COUNTY VERTICAL CONTROL NETWORK, SPECIFICALLY POINT IDENTIFICATION NUMBER S-1361-016, BEING A 3" ALUMINUM SURVEY DISK SET IN CONCRETE PAD FOR TRAFFIC CONTROL BOX AT THE NORTHWEST CORNER OF U.S. 441 AND ERROL PARKWAY, PUBLISHED ELEVATION IS 114.02 FEET, RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988.

FLOOD INSURANCE RATE MAP:

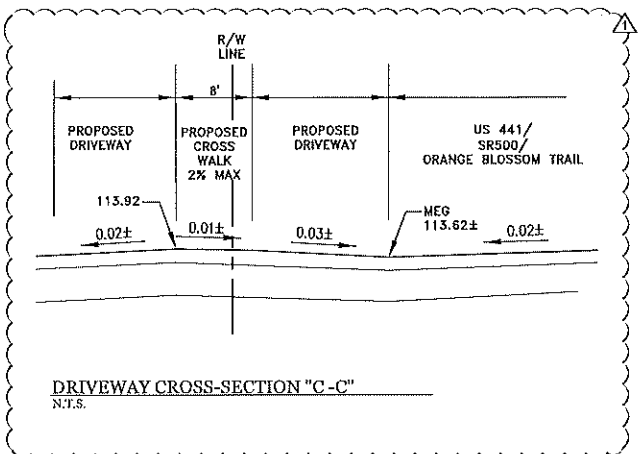
THE SITE IS LOCATED IN ZONE X PER THE "FIRM" MAP NO. 12095C 0120F, DATED SEPTEMBER 25, 2009.

DRAINAGE STRUCTURE TABLE:

- D-01 12" NYLOPLAST INLINE DRAIN
TOP: 112.15
SE INV: 110.15
- D-02 TYPE "T" INLET
FDOT INDEX #233
TOP: 112.35
NE INV: 108.70
SE INV: 108.25
- D-03 TYPE "T" INLET
FDOT INDEX #233
TOP: 112.00
NW INV: 108.10
SW INV: 107.85
- D-04 CONCRETE WINGED ENDWALL
W/ENERGY DISSIPATOR
FDOT INDEX #266
INV: 107.80

GRADING AND DRAINAGE NOTES

1. CONTRACTOR SHALL VERIFY EXISTING TOPOGRAPHIC DATA, LOCATION OF EXISTING UTILITIES AND ALL OTHER SITE CONDITIONS PRIOR TO BEGINNING CONSTRUCTION.
2. ALL GRADES SHOWN, WITH THE EXCEPTION OF THOSE INDICATED ON THE SURVEY BASE DRAWING, ARE FINISHED GRADES UNLESS INDICATED OTHERWISE.
3. ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE GRADED TO ORIGINAL GROUND LINES AND FINISHED WITH SOO PER PROJECT SPECIFICATIONS UNLESS NOTED OTHERWISE. THE CONTRACTOR SHALL MAINTAIN ALL AREAS UNTIL FINAL ACCEPTANCE.
4. ALL INLET AND MANHOLE TOPS SHALL BE TRAFFIC BEARING UNLESS OTHERWISE NOTED.
5. SIDEWALK CROSS-SLOPES SHALL NOT EXCEED 2% SIDEWALK LONGITUDINAL SLOPES SHALL NOT EXCEED 5%.



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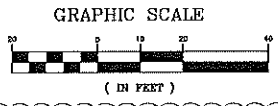
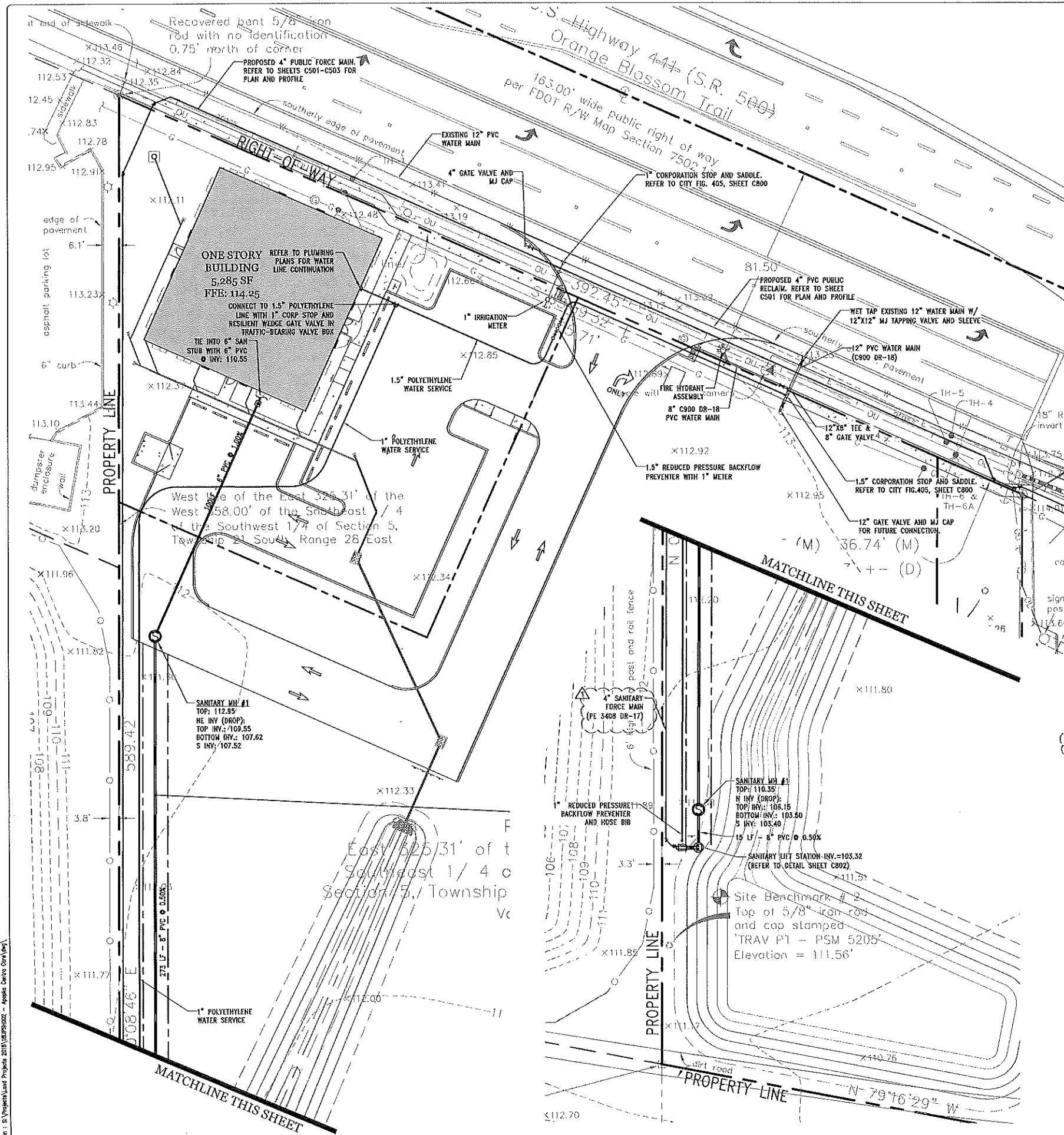
APOPKA MEDICAL OFFICE BUILDING
W. ORANGE BLOSSOM TRAIL
APOPKA, FL
GRADING & DRAINAGE PLAN

| revision | description | date |
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| △ | AGENCY COMMENTS | 7/30/18 |
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drawn by: JAK
checked by: SGV
date: 06-26-2018
plot scale: AS SHOWN
project number: APOPKA MOB
file name: C400 - GRADING & DRAINAGE PLAN.DWG

C400

File Location : S:\Projects\Local Projects 2018\18062002 - Apollo Center Cor\kwp
Filename : C400 - Grading & Drainage Plan.dwg Plot Date : JA. 26. 2018 5:20pm



FDOT PERMIT NOTES:

1. THE WATER LINE TAP AND CONSTRUCTION IN THE FDOT RIGHT-OF-WAY WILL REQUIRE A DRIVEWAY AND/OR UTILITY PERMIT.
2. THE RECLAIMED WATER LINE CONSTRUCTION IN THE FDOT RIGHT-OF-WAY WILL REQUIRE AN FDOT UTILITY PERMIT.
3. ALL CONSTRUCTION SHALL CONFORM TO THE LATEST EDITION OF THE FDOT STANDARD DESIGN, UAM AND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

BUILDING FIRE FLOW REQUIREMENTS:

BASIS: NFPA 1, 2015, TABLE 18.4.5.2.1
 BUILDING CONSTRUCTION: TYPE: II B, NOT SPRINKLERED
 BLDG. AREA: 5,285 SF
 FLOW REQUIRED: 1,500 GPM
 HYDRANTS PROVIDED: 1 WITHIN 250 FT. OF BUILDING
 (SUFFICIENT PER TABLE 18.5.4.3)

UTILITY NOTES:

1. ALL WATER & WASTEWATER MAIN MATERIALS AND APPURTENANCES SHALL CONFORM TO AND SHALL BE INSTALLED, TESTED AND CLEARED FOR SERVICE IN ACCORDANCE WITH THE STANDARDS OF THE CITY OF APOPKA UTILITIES AND THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION.
2. HORIZONTAL SEPARATION BETWEEN WATER MAINS AND SANITARY OR STORM SEWER, WASTEWATER OR STORMWATER FORCE MAINS, AND RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS.
 - A. WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE (3) FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER, REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
 - B. WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN (10) FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER.
 - C. WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN (10) FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY OR PRESSURE TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY TYPE SANITARY SEWERS SHALL BE REDUCED TO THREE (3) FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX (6) INCHES ABOVE THE TOP OF THE SEWER.
 - D. WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN (10) FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM.
3. VERTICAL SEPARATION BETWEEN WATER MAINS AND SANITARY OR STORM SEWER, WASTEWATER OR STORMWATER FORCE MAINS, AND RECLAIMED WATER PIPELINES.
 - A. WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST TWELVE (12) INCHES ABOVE THE OUTSIDE OF THE OTHER PIPELINE.
 - B. WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESSURE TYPE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST TWELVE (12) INCHES ABOVE THE OUTSIDE OF THE OTHER PIPELINE.
 - C. AT THE UTILITY CROSSINGS DESCRIBED IN PARAGRAPHS (A) AND (B) ABOVE, ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT SUCH CROSSINGS, THE PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE (3) FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER AND AT LEAST SIX (6) FEET FROM ALL JOINTS IN GRAVITY OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
4. ALL ON-SITE UTILITIES SHALL BE PRIVATELY OWNED AND MAINTAINED.
5. BACTERIOLOGICAL SAMPLE POINTS SHALL BE AS DESCRIBED IN THE FDOT PERMIT CONDITIONS.
6. ALL UNDERGROUND FIRE MAINS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 24, 2007 EDITION, "STANDARD FOR THE INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES [F.A.C. 68A-60.005 (2)]."
7. DIRECTIONAL DRILLING SHALL BE IN ACCORDANCE WITH SECTION 33 OF THE CITY OF APOPKA UTILITIES DESIGN AND CONSTRUCTION STANDARDS MANUAL.

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AOPKA MEDICAL OFFICE BUILDING
W. ORANGE BLOSSOM TRAIL
APOPKA, FL
UTILITY PLAN

| revision | description | date |
|----------|-----------------|---------|
| △ | AGENCY COMMENTS | 7/30/18 |
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drawn by: JAK
 checked by: SGW
 date: 06-26-2018
 plot scale: AS SHOWN
 project number: APOPKA MOB
 file name: C500 - UTILITY PLAN.DWG

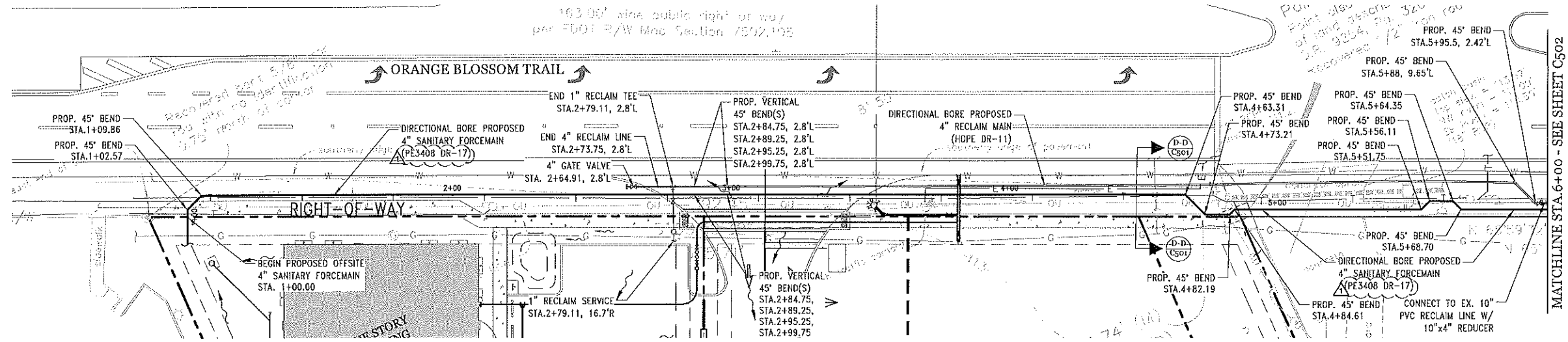
C500

File Location: S:\Projects\Lead Projects_2018\181020202 - Aopka Centre Core\Map1

APOPKA MEDICAL OFFICE BUILDING

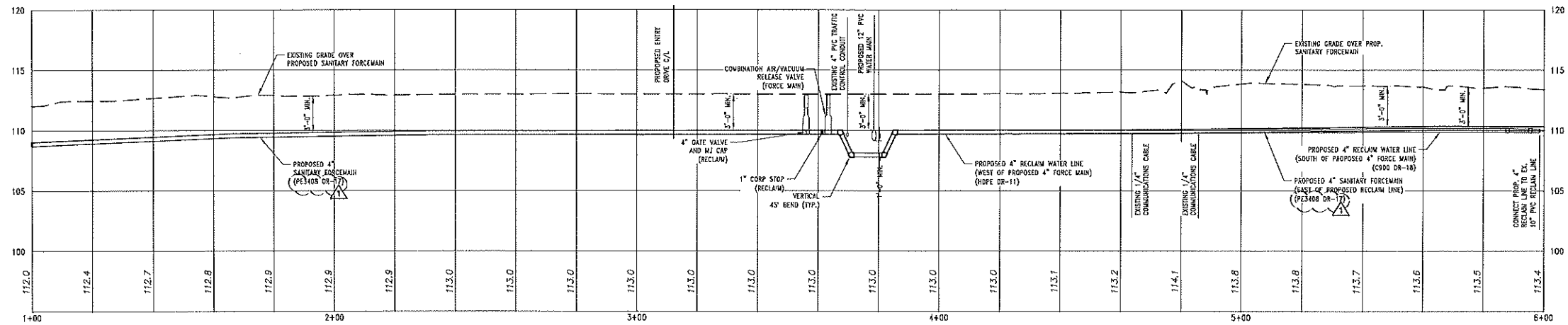
**W. ORANGE BLOSSOM TRAIL
APOPKA, FL**

PLAN & PROFILE



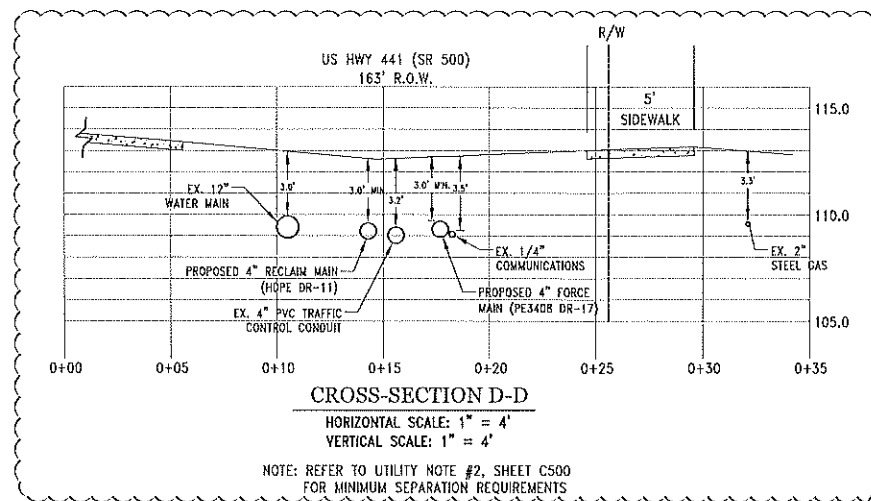
SANITARY FORCEMAIN & RECLAIM WATER LINE - PLAN

SCALE: 1" = 20'



SANITARY FORCEMAIN & RECLAIM WATER LINE - PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 5'



CROSS-SECTION D-D

HORIZONTAL SCALE: 1" = 4'
VERTICAL SCALE: 1" = 4'

NOTE: REFER TO UTILITY NOTE #2, SHEET C500
FOR MINIMUM SEPARATION REQUIREMENTS

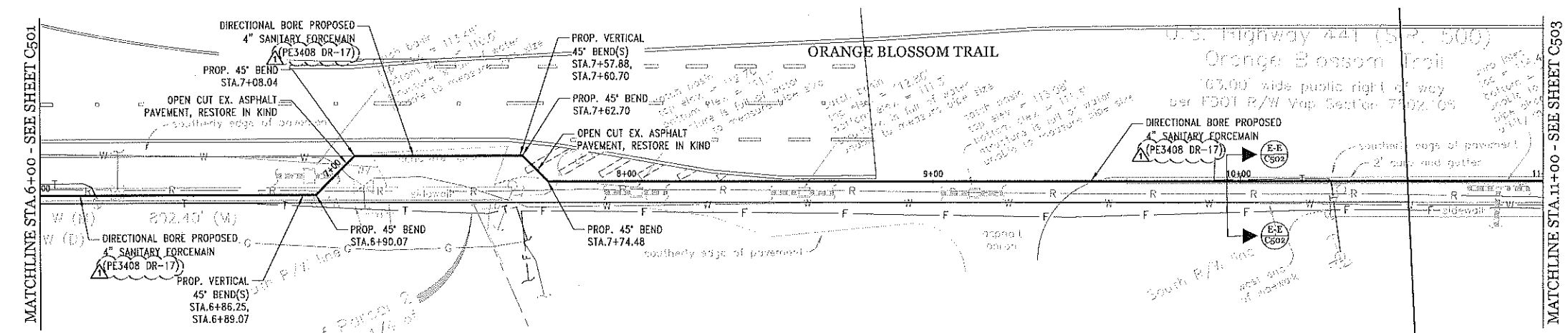
| revision | description | date |
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| △ | AGENCY COMMENTS | 7/30/18 |
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drawn by: JAK
checked by: SQW
date: 06-26-2018
plot scale: AS SHOWN
project number: APOPKA MOB
file name: C501 - C503 PLAN & PROFILE.DWG

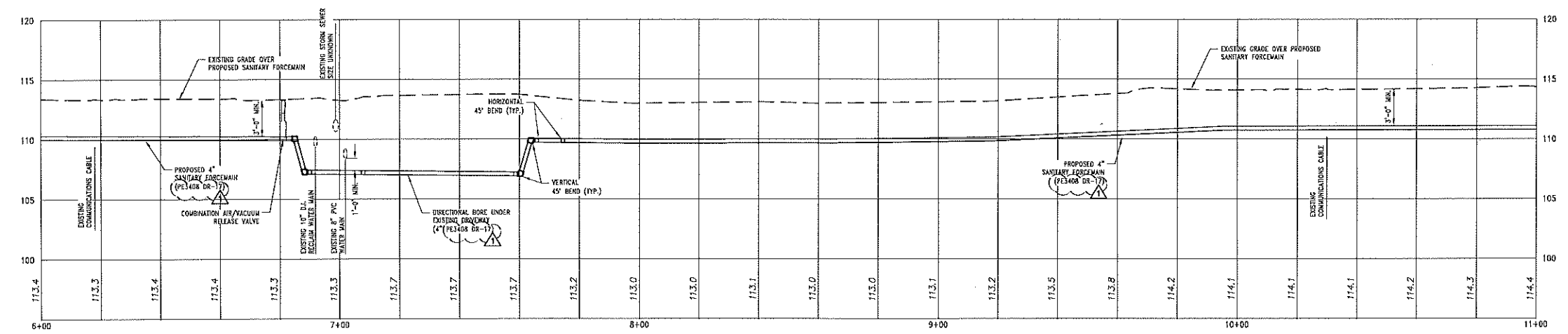
C501

Selby G. Weeks 56991

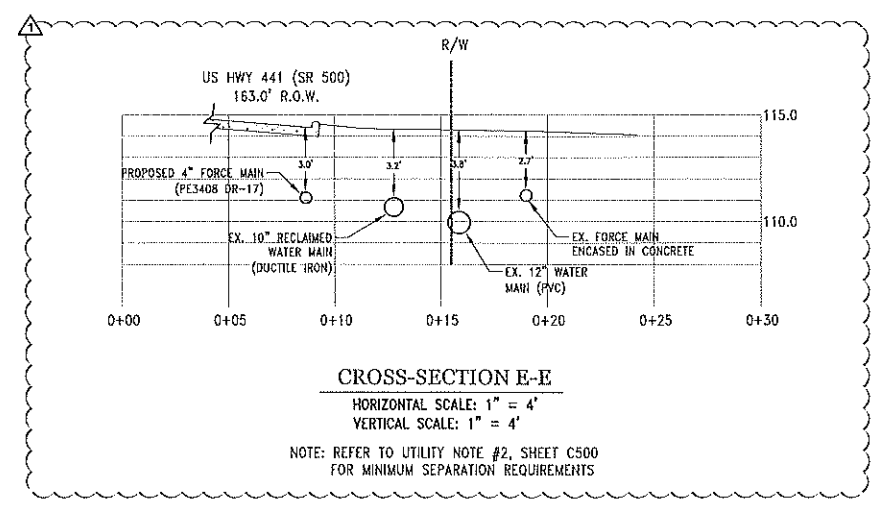
APOPKA MEDICAL OFFICE BUILDING
W. ORANGE BLOSSOM TRAIL
APOPKA, FL
PLAN & PROFILE



SANITARY FORCEMAIN - PLAN
SCALE: 1" = 20'



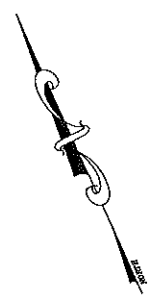
SANITARY FORCEMAIN - PROFILE
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 5'



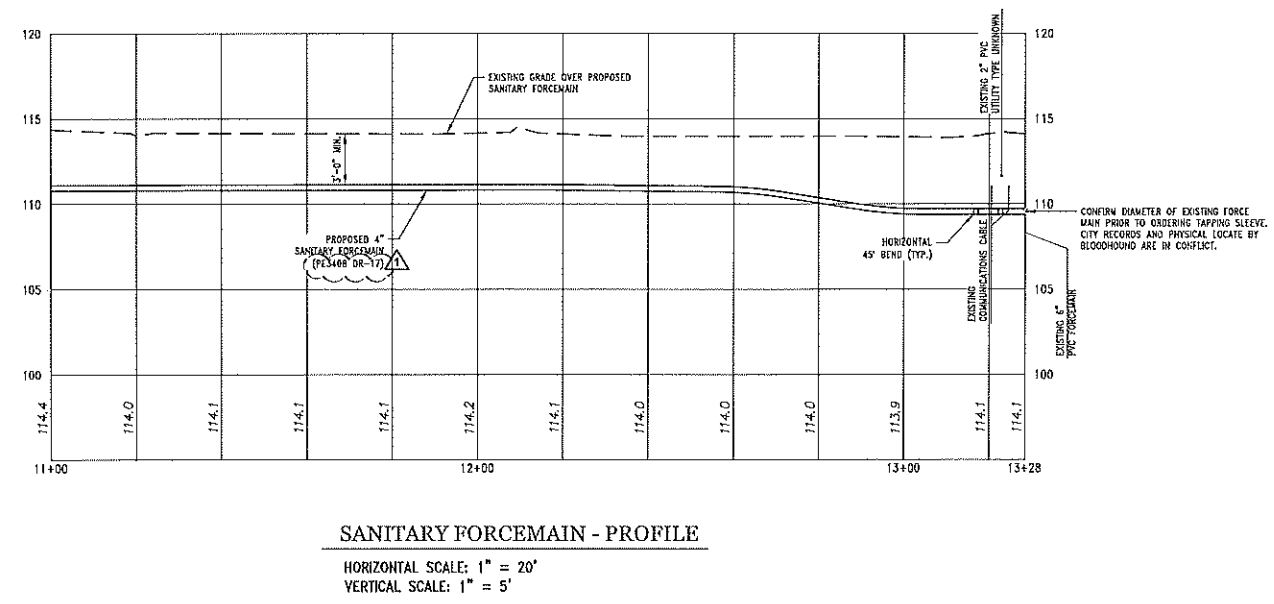
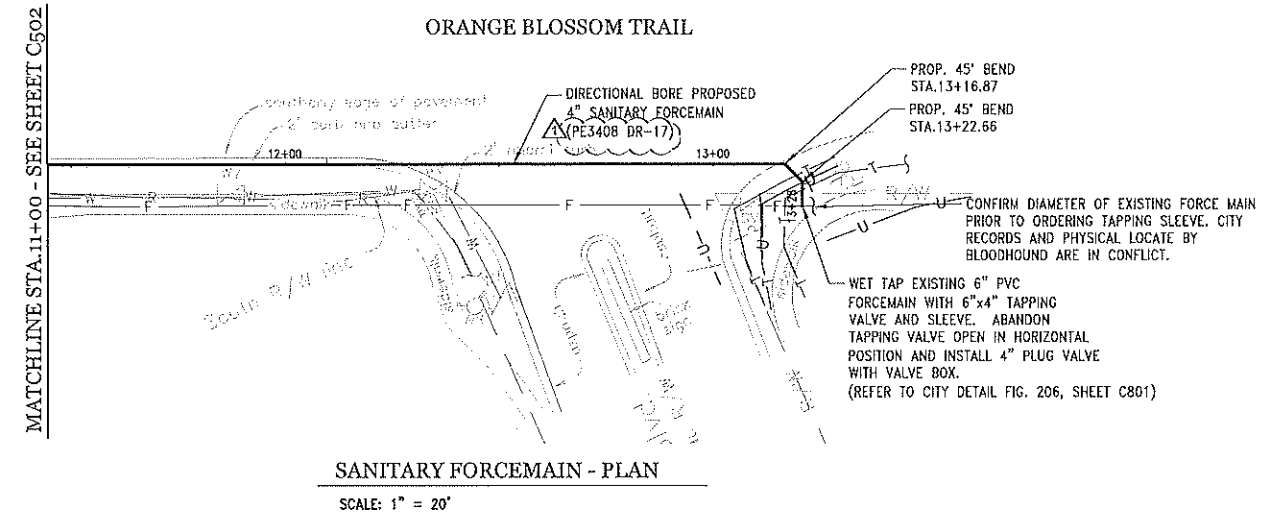
CROSS-SECTION E-E
HORIZONTAL SCALE: 1" = 4'
VERTICAL SCALE: 1" = 4'
NOTE: REFER TO UTILITY NOTE #2, SHEET C500 FOR MINIMUM SEPARATION REQUIREMENTS

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drawn by: JAK
checked by: SGV
date: 06-26-2018
plot scale: AS SHOWN
project number: APOPKA MOB
file name: C501 - C503 PLAN & PROFILE.DWG



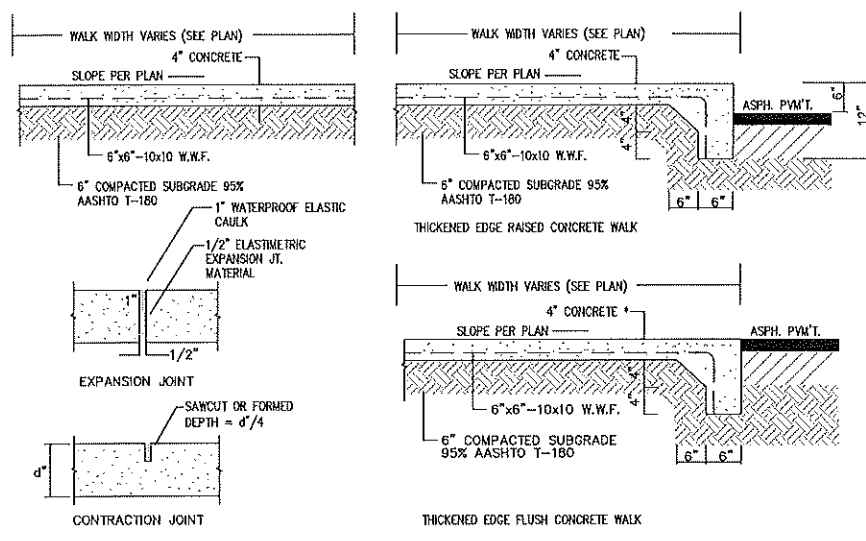
Selby G. Weeks 56991



APOPKA MEDICAL OFFICE BUILDING
W. ORANGE BLOSSOM TRAIL
APOPKA, FL
PLAN & PROFILE

| revision | description | date |
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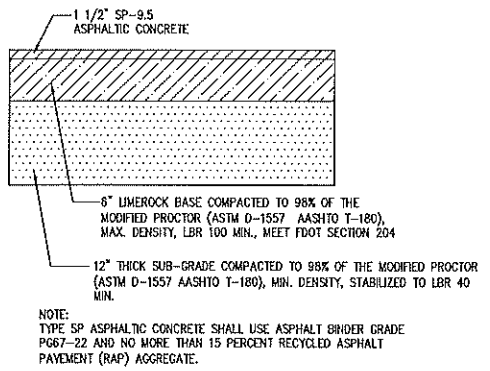
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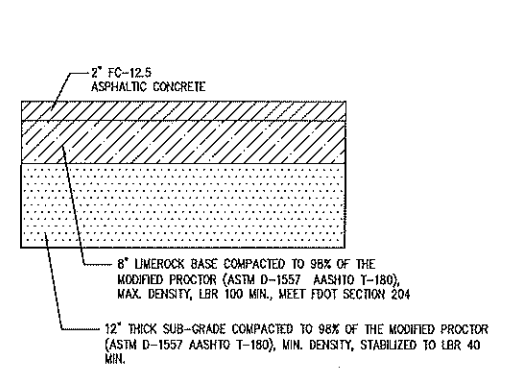
NOTE:
ALL CONCRETE SIDEWALKS SHALL HAVE A FULL 1/2" EXPANSION JOINT AT A MAXIMUM DISTANCE OF 30 LINEAR FEET AND A SAW CUT OR FORMED DUMMY CONTRACTION JOINT AT EVENLY SPACED INTERVALS NOT TO EXCEED 5 LINEAR FEET.

NOTE:
4" THICK SIDEWALK W/LIGHT BROOM FINISH & TROWELED EDGE.

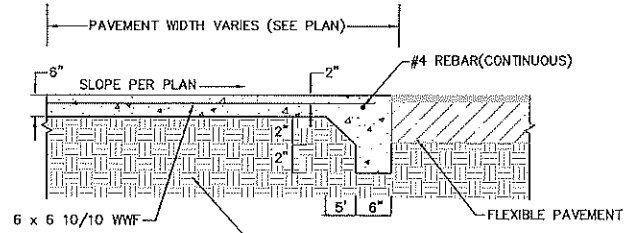
CONCRETE WALK DETAILS
N.T.S.



LIGHT-DUTY ASPHALT PAVEMENT SECTION
N.T.S.



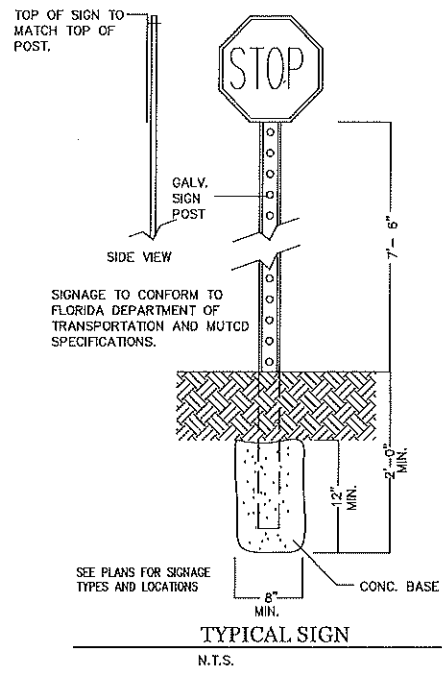
HEAVY-DUTY ASPHALT PAVEMENT SECTION
N.T.S.



NOTE:
1. ALL CONCRETE PAVEMENT SHALL HAVE A FULL 1/2" ISOLATION JOINT WHERE IT ABUTS EXISTING CONCRETE PAVEMENT AND OTHER RIGID STRUCTURES, SUCH AS BUILDING FOUNDATIONS AND WALLS. PROVIDE 2" SAW CUT OR DUMMY CONTRACTION JOINT AT EVENLY SPACED INTERVALS NOT TO EXCEED 20 FEET.
2. PORTLAND CEMENT CONCRETE PAVEMENT TO BE 4,000-PSI COMPRESSIVE STRENGTH, MIN.

NOTE:
PROVIDE 18" OF CLEAN, FREE DRAINING SAND SUBGRADE BENEATH CONCRETE PAVEMENT. COMPACT BOTTOM 6" TO 98% OF THE MODIFIED PROCTOR (ASTM D-1557, AASHTO T-180).

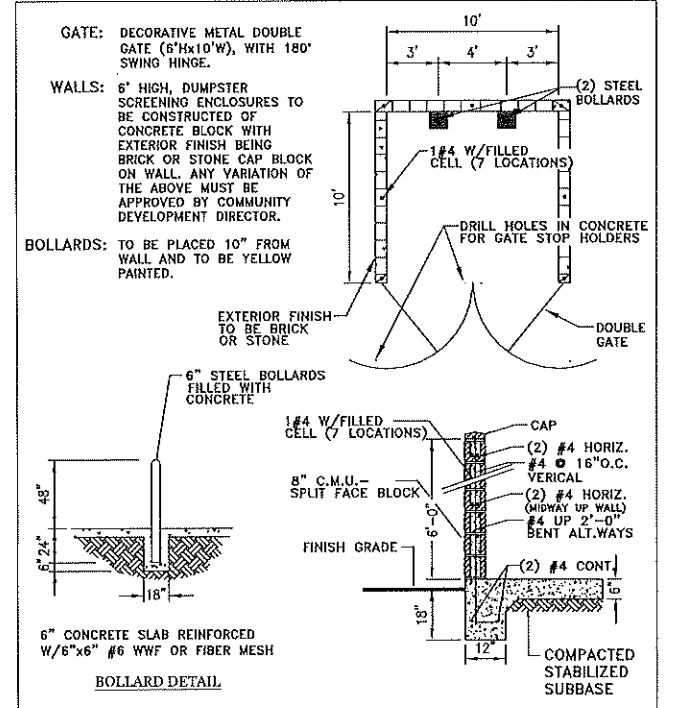
DUMPSTER PAD PAVEMENT DETAIL
N.T.S.



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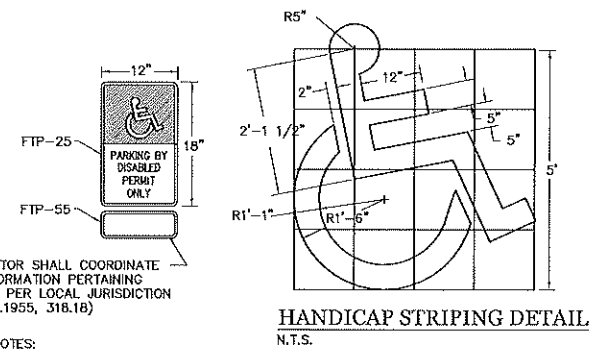
Selby G. Weeks 5/6/93

APOPKA MEDICAL OFFICE BUILDING
W. ORANGE BLOSSOM TRAIL
APOPKA, FL
SITE DETAILS



CITY OF APOPKA
DESIGN ENGINEERING DIVISION
JANUARY 2014
FIG. 601

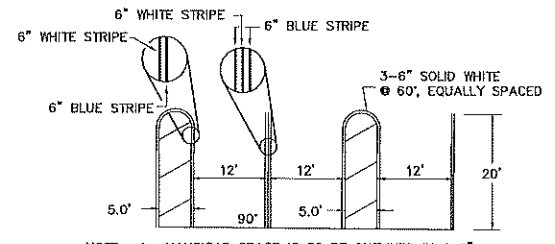
NOTE: CITY OF APOPKA DUMPSTER ENCLOSURE DETAIL IS TO BE THE MINIMUM STANDARD



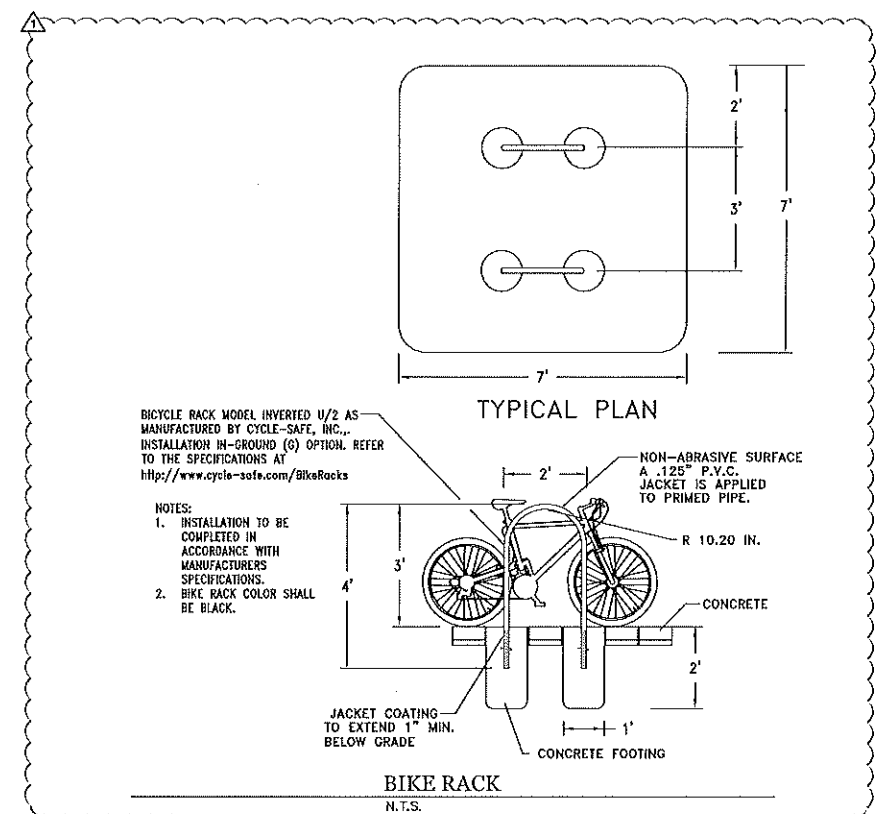
CONTRACTOR SHALL COORDINATE SIGN INFORMATION PERTAINING TO FINES PER LOCAL JURISDICTION (F.S. 316.1955, 318.18)

NOTES:
1. ALL LETTERS ARE 1" SERIES "C", PER MUTCD.
2. TOP PORTION OF SIGN SHALL HAVE REFLECTORIZED (ENGINEERING GRADE) BLUE BACKGROUND WITH WHITE REFLECTORIZED LEGEND AND BORDER.
3. BOTTOM PORTION OF SIGN SHALL HAVE A REFLECTORIZED (ENGINEERING GRADE) WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.
4. ONE (1) SIGN IS REQUIRED FOR EACH PARKING SPACE.
5. HEIGHT OF SIGN SHALL BE 7'-6" FROM FINISHED GROUND TO BOTTOM OF SIGN.

HANDICAP PARKING SYMBOL
N.T.S.



TYPICAL HANDICAP PARKING SECTION
N.T.S.



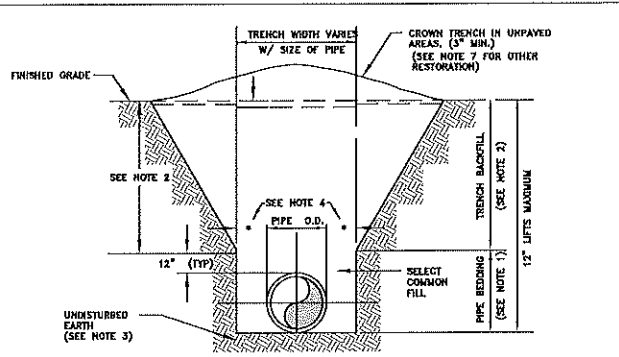
TYPICAL PLAN

BIKE RACK
N.T.S.

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plot scale: AS SHOWN
project number: APOPKA MOB
file name: C600 - C900 SERIES DETAILS.DWG

C 600



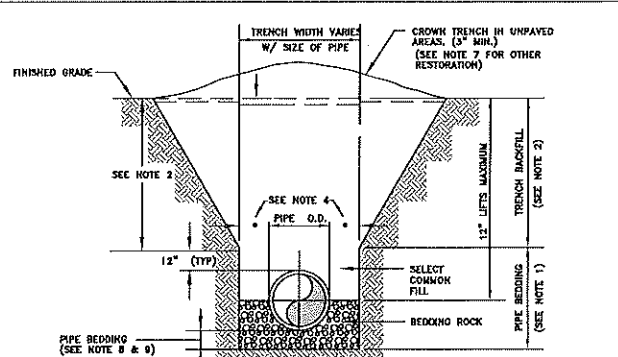
- NOTES:
1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 98% UNDER PAVEMENT OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
 2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 98% UNDER PAVEMENT OF THE MAXIMUM DENSITY AS TO AASHTO T-180.
 3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH TYPE A BEDDING AND TRENCHING DETAIL MAY BE REQUIRED AS DIRECTED BY THE CITY.
 4. (1) 15" MAX. FOR PIPE DIAMETERS LESS THAN 24", AND 24" FOR PIPE DIAMETER 24" AND LARGER.
 5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
 6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
 7. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES.
 8. SURFACE RESTORATION WITHIN CITY RIGHT-OF-WAY, SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS.
 9. ALL UNPAVED DISTURBED AREAS SHALL BE SOODED TO MATCH ADJACENT DOMINANT GRASS SPECIES.

TYPE "B" BEDDING AND OPEN-CUT DETAIL

CITY OF APOPKA
DESIGN ENGINEERING DIVISION

JANUARY 2014

FIG. 100



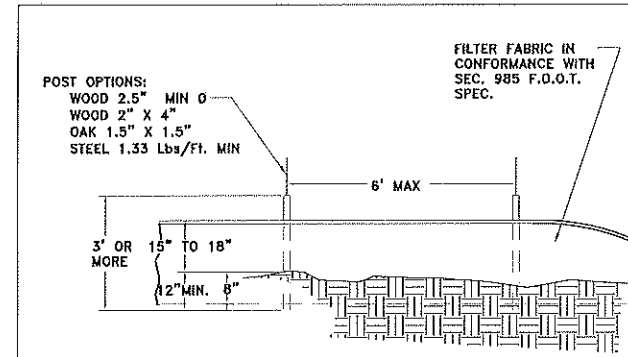
- NOTES:
1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 98% UNDER PAVEMENT OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
 2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 98% UNDER PAVEMENT OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
 3. USE OF TYPE A BEDDING TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE CITY.
 4. (1) 15" MAX. FOR PIPE DIAMETER LESS THAN 24", AND 24" MAX. FOR PIPE DIAMETER 24" AND LARGER.
 5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
 6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
 7. GRAVITY SEWERS SHALL UTILIZE TYPE A BEDDING IF REQUIRED BY THE CITY. BEDDING DEPTH SHALL BE 4" MINIMUM FOR PIPE DIAMETER LESS THAN 15" AND 8" MINIMUM FOR PIPE DIAMETER 15" AND LARGER.
 8. DEPTH FOR REMOVAL OF UNSUITABLE MATERIAL SHALL GOVERN DEPTH OF BEDDING ROCK BELOW THE PIPE. THE CITY SHALL DETERMINE IN THE FIELD IF REMOVAL OF UNSUITABLE MATERIAL IS REQUIRED TO REACH A SUITABLE FOUNDATION.
 9. ALL UNPAVED DISTURBED AREAS SHALL BE SOODED TO MATCH ADJACENT DOMINANT GRASS SPECIES.
 10. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF THE GOVERNING AGENCIES. SURFACE RESTORATION WITHIN CITY RIGHT-OF-WAY, SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS.

TYPE "A" BEDDING AND OPEN-CUT DETAIL

CITY OF APOPKA
DESIGN ENGINEERING DIVISION

JANUARY 2014

FIG. 101



ELEVATION VIEW

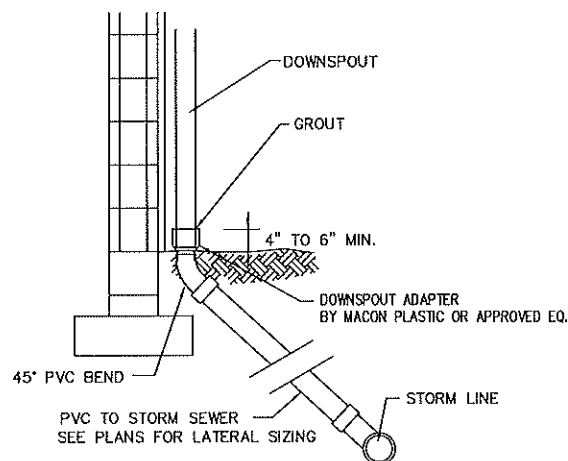
SECTION VIEW

SILTS FENCE INSTALLATION

CITY OF APOPKA
DESIGN ENGINEERING DIVISION

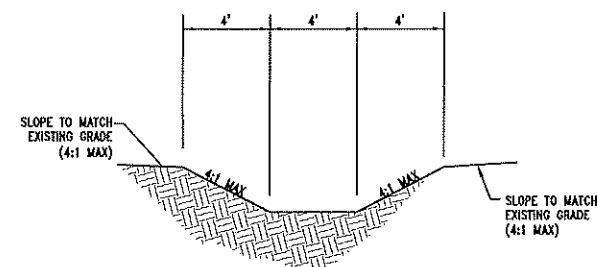
JANUARY 2014

FIG. 602

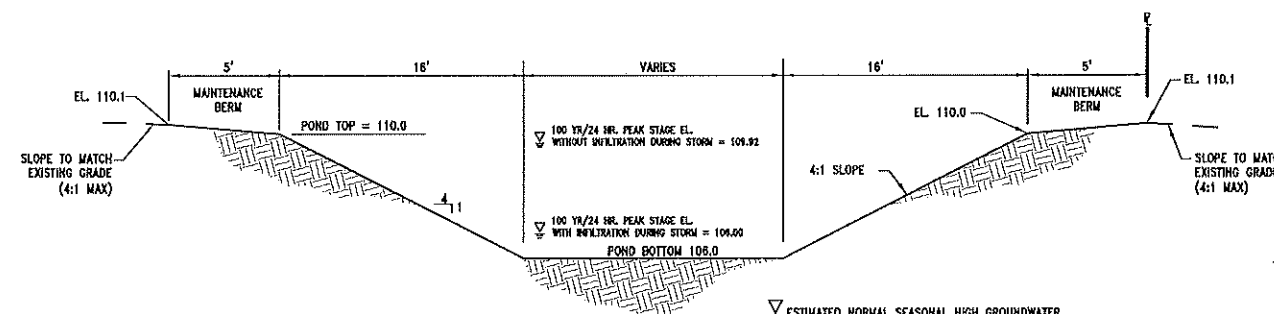


- NOTES:
1. VERIFY THAT THERE ARE NO CONFLICTS WITH BUILDING/WALK FOUNDATION. PROVIDE FITTINGS AS REQUIRED TO MITIGATE CONFLICT.
 2. ENSURE THAT CENTERLINE OF HUB MATCHES CENTERLINE OF DOWNSPOUT AT JUNCTION.
 3. REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.

DOWNSPOUT CONNECTION
DETAIL IN GRASS
N.T.S.



NOTE: REFER TO SHEET C400 FOR ELEVATIONS
TYPICAL SECTION A-A - SWALE
N.T.S.

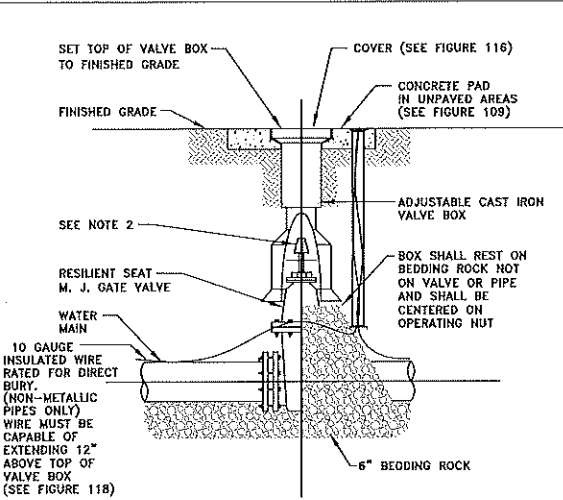


- NOTES:
1. POND SIDE SLOPES SHALL BE SOD. SEED POND BOTTOM.

TYPICAL SECTION B-B - DRY RETENTION POND
N.T.S.

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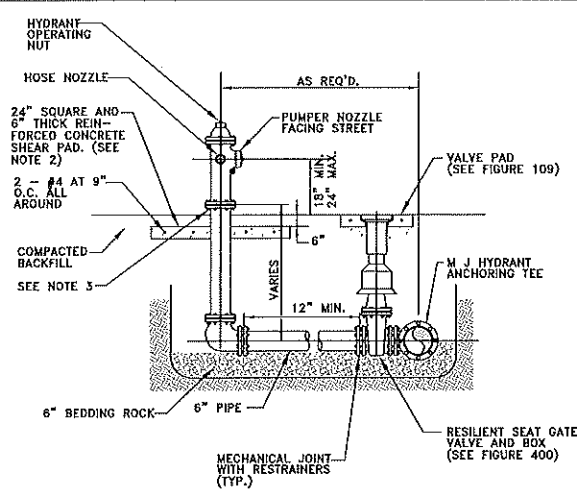
drawn by: JAK
checked by: SGV
date: 06-26-2018
plot scale: AS SHOWN
project number: APOPKA MOB
file name: C500-C500 SERIES DETAILS DWG



- NOTES:
1. PVC EXTENSIONS MAY BE USED ON VALVE BOX INSTALLATION.
 2. THE ACTUATING NUT FOR DEEPER VALVES SHALL BE EXTENDED TO WITHIN A 3 FEET BELOW FINISHED GRADE.

GATE VALVE AND BOX DETAIL

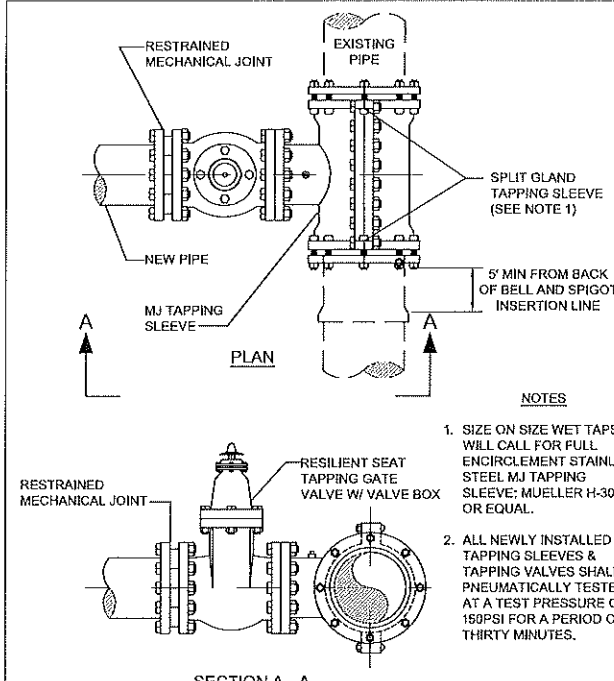
CITY OF APOPKA DESIGN ENGINEERING DIVISION JANUARY 2014 FIG. 400



- NOTES:
1. FIRE HYDRANT SHALL BE SUPPLIED WITHOUT A WEEP HOLE, OR WITH A PERMANENTLY PLUGGED WEEP HOLE.
 2. THE SHEAR PAD SHALL BE RECESSED SIX (6) INCHES BELOW THE FINISHED GRADE AND THE RECESSED SECTION SODDED.
 3. CLEARANCE BETWEEN BOTTOM OF BOLTS AND TOP OF SHEAR PAD SHALL BE A TWELVE (12) INCH MINIMUM.
 4. FIRE HYDRANTS SHALL BE IDENTIFIED IN ACCORDANCE WITH THE CITY OF APOPKA CONSTRUCTION DESIGN STANDARDS MANUAL.

FIRE HYDRANT ASSEMBLY DETAIL

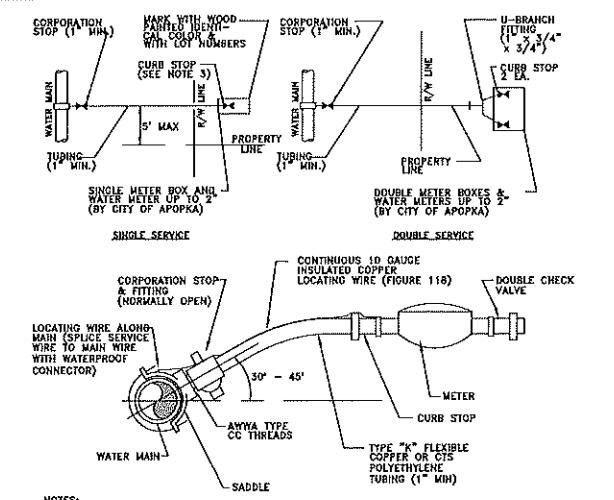
CITY OF APOPKA DESIGN ENGINEERING DIVISION JANUARY 2014 FIG. 402



- NOTES:
1. SIZE ON SIZE WET TAPS WILL CALL FOR FULL ENCIRCLEMENT STAINLESS STEEL MJ TAPPING SLEEVE; MUELLER H-304, OR EQUAL.
 2. ALL NEWLY INSTALLED TAPPING SLEEVES & TAPPING VALVES SHALL BE PNEUMATICALLY TESTED AT A TEST PRESSURE OF 150PSI FOR A PERIOD OF THIRTY MINUTES.

SECTION A-A
WATER AND RECLAIMED WATER MAINS
WET TAP TIE-IN DETAIL

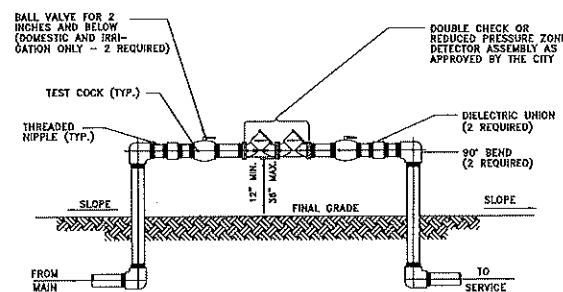
CITY OF APOPKA DESIGN ENGINEERING DIVISION JANUARY 2014 FIG. 406



- NOTES:
1. ALL FITTINGS SHALL BE BRASS WITH COMPRESSION/PACK JOINT TYPE CONNECTIONS.
 2. NO SERVICE LINE SHALL TERMINATE UNDER A DRIVEWAY.
 3. EACH SERVICE SHALL TERMINATE AT A CURB STOP(S) WHICH SHALL BE BURIED APPROXIMATELY 3\"/>
 - 4. RECLAIMED WATER SERVICES SHALL USE PURPLE COLORED CIS POLYETHYLENE TUBING.
 - 5. POTABLE WATER SERVICES SHALL USE BLUE COLORED CIS POLYETHYLENE TUBING.
 - 6. ALL SERVICE UNDER EXISTING OR PROPOSED PAVEMENT SHALL BE INSTALLED IN A MINIMUM 2\"/>

WATER PVC SERVICE CONNECTION DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION JANUARY 2014 FIG. 405



- NOTES:
1. ALL PIPE FITTINGS, MATERIALS, LABOR, AND APPURTENANCES SHALL BE SUPPLIED BY THE CONTRACTOR.
 2. ALL PIPE AND FITTINGS TWO (2) INCHES AND SMALLER SHALL BE THREADED SCHEDULE 40 GALVANIZED STEEL.

DOUBLE CHECK OR REDUCED PRESSURE ZONE DETECTOR ASSEMBLY
2 INCH AND BELOW ASSEMBLY

CITY OF APOPKA DESIGN ENGINEERING DIVISION JANUARY 2014 FIG. 500 A

| | PIPE SIZE | | | | | | | | | | |
|----------------------------|-----------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 6" | 8" | 10" | 12" | 16" | 18" | 20" | 24" | 30" | 36" | 48" |
| 90° BEND | 33 | 43 | 51 | 60 | | | | | | | |
| 45° BEND | 14 | 18 | 22 | 25 | | | | | | | |
| 22-1/2° BEND | 7 | 9 | 11 | 12 | | | | | | | |
| 11-1/4° BEND | 4 | 5 | 6 | 6 | | | | | | | |
| TEE** | 1 | 7 | 24 | 44 | | | | | | | |
| REDUCER (ONE SIZE SMALLER) | | 41 | 39 | 40 | | | | | | | |
| DEAD END | 74 | 96 | 115 | 136 | | | | | | | |

- * ONLY RESTRAIN BRANCH PIPE FOR TEES. ONLY RESTRAIN LARGER PIPE FOR REDUCERS
** LENGTH ALONG RUN ASSUMED TO BE 18'
- NOTES:
1. FITTINGS SHALL BE DUCTILE IRON RESTRAINED JOINT TYPE. FM FITTINGS TO BE LINED WITH PROTECTO 401.
 2. INSTALL FULL LENGTHS OF PIPE WITH TOTAL LENGTH CONTAINING ONLY RESTRAINED JOINTS EQUAL TO OR GREATER THAN LENGTH SHOWN IN TABLE.
 3. WHERE TWO OR MORE FITTINGS ARE TOGETHER, USE FITTING WHICH YIELDS GREATEST LENGTH OF RESTRAINED PIPE.
 4. IN LINE VALVES AND THROUGH RUN OF TEES OUTSIDE LIMITS OF RESTRAINED JOINTS FROM OTHER FITTINGS NEED NOT BE RESTRAINED UNLESS OTHERWISE INDICATED.
 5. LENGTHS SHOWN IN THE TABLE HAVE BEEN CALCULATED IN ACCORDANCE WITH THE PROCEDURE OUTLINED IN "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" AS PUBLISHED BY DIPRA, FOR PVC WITH THE FOLLOWING ASSUMPTIONS:
TYPE OF PIPE: PVC
WORKING PRESSURE: 150 P.S.I.**
SOIL DESIGNATION: SP-600
LAYING CONDITIONS: 3
** FM = 100 P.S.I. / WM OR RWM = 150 P.S.I.
 6. FOR PIPE ENCASED IN POLYETHYLENE INCREASE THE GIVEN VALUE BY A FACTOR OF 1.5.
 7. VALUES NOT LISTED IN THE TABLE TO BE COMPLETED BY THE ENGINEER.
- NOTE: RESTRAIN ALL JOINTS FOR DR-14 FIRE LINE.

RESTRAINED PIPE TABLE (PVC)

CITY OF APOPKA DESIGN ENGINEERING DIVISION JANUARY 2014 FIG. 105

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Altamonte Springs, FL 32714
Telephone 407.478.8750
Facsimile 407.478.8749
Certificate of Authorization No.: 9230

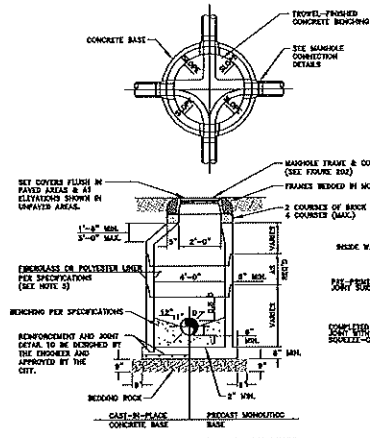
Selby G. Weeks 56991

APOPKA MEDICAL OFFICE BUILDING
W. ORANGE BLOSSOM TRAIL
APOPKA, FL
WATER DETAILS

| revision | description | date |
|----------|-----------------|---------|
| △ | AGENCY COMMENTS | 7/30/18 |
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| △ | | |

drawn by: JAK
checked by: SGV
date: 06-26-2018
plot scale: AS SHOWN
project number: APOPKA MOB
file name: C600-C900 SERIES DETAILS.DWG

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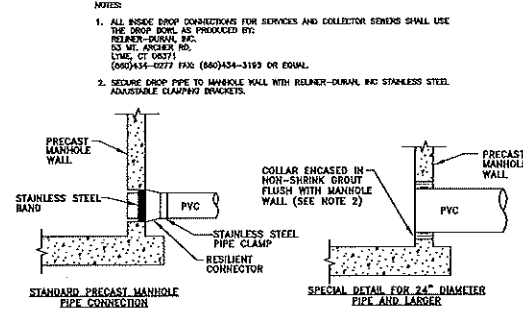
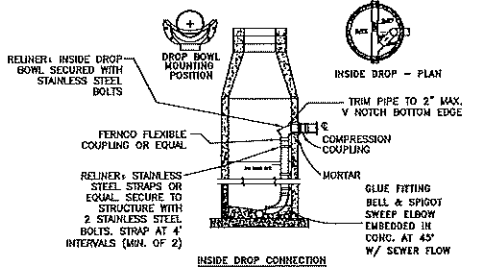


| FORCE MAIN MANHOLE LINER | | | |
|--------------------------|---------------|----------|--------------|
| DIAMETER (INCHES) | HEIGHT (FEET) | MATERIAL | MANUFACTURER |
| 48 | 3-6 | 7-12 | 113-17 |
| 60 | | | |
| 72 | | | |

- NOTES:
- MANHOLE SHOWN IS FOR SEWER SIZE 8" THRU 24". SEE SECTION 20.4 OF THE MANUAL FOR MANHOLE DIAMETER FOR SEWERS LARGER THAN 24".
 - DROP CONNECTIONS ARE REQUIRED WHENEVER INVERT OF INFLUENT SEWER IS 24" OR MORE ABOVE THE INVERT OF THE MANHOLE. SEE MANHOLE CONNECTION DETAILS.
 - THE THICKNESS OF THE LINER SHALL BE 3/8" MINIMUM.
 - EACH BENCH WALL SHALL BE A MINIMUM OF 18 INCHES LONG FROM THE WALL OF THE MANHOLE TOWARD THE CENTER.
 - SANITARY SEWER MANHOLES MAY BE REQUIRED TO BE LINED WITH HDPE OR FIBERGLASS AS DIRECTED BY THE CITY.

TYPICAL MANHOLE

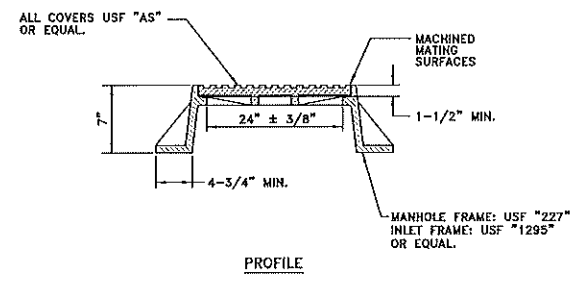
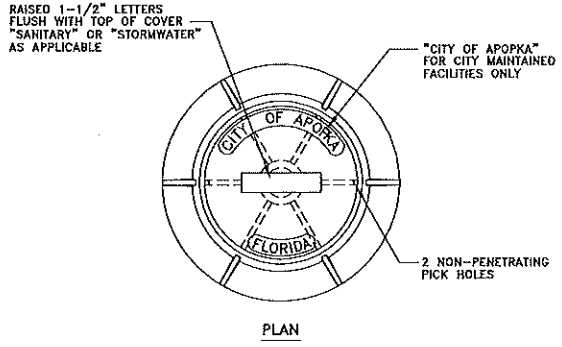
CITY OF APOPKA DESIGN ENGINEERING DIVISION JANUARY 2014 FIG. 200



- NOTES:
- DROP PIPE AND FITTINGS SHALL BE OF EQUAL SIZE AND MATERIAL AS THE INFLUENT SEWER.
 - THE CITY MAY APPROVE ALTERNATE WATER-TIGHT CONNECTION DETAILS FOR CONNECTION OF 24" DIAMETER PIPES AND LARGER.
 - AN INSIDE DROP CONNECTION SHALL BE REQUIRED FOR ALL INFLUENT WHICH HAVE AN INVERT 24" OR MORE ABOVE THE OUTFLOW PIPE INVERT.
 - CONCRETE TO BE MINIMUM OF 3000 PSI.

MANHOLE CONNECTION DETAILS

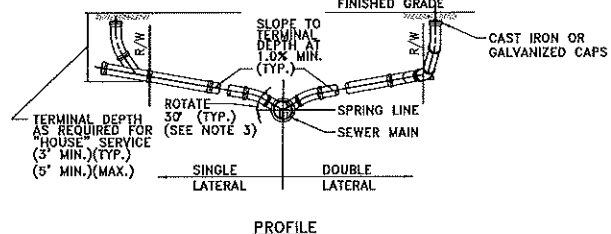
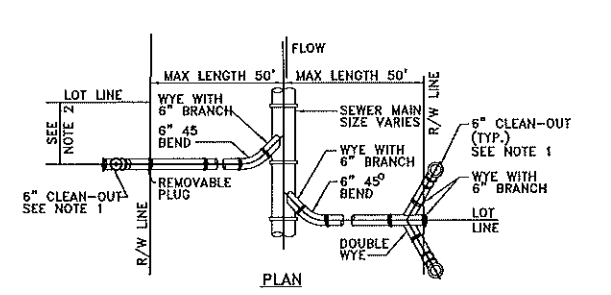
CITY OF APOPKA DESIGN ENGINEERING DIVISION JANUARY 2014 FIG. 201



- NOTES:
- MANHOLE FRAME AND COVER ARE TO BE TRAFFIC BEARING RATED H-20, CLASS 30 MEETING ASTM A 48.

STANDARD MANHOLE FRAME AND COVER

CITY OF APOPKA DESIGN ENGINEERING DIVISION JANUARY 2014 FIG. 202



- NOTES:
- CLEAN-OUT (SHOWN SHADED) SHALL BE INSTALLED BY THE BUILDER IN ACCORDANCE WITH STANDARD PLUMBING CODE.
 - LOCATE SINGLE LATERAL AS CLOSE TO LOT LINE AS POSSIBLE.
 - INVERT OF SERVICE LATERAL SHALL NOT ENTER SEWER MAIN BELOW SPRING LINE.
 - RESIDENTIAL SERVICES SHALL BE 4 INCHES & NON-RESIDENTIAL SERVICES SHALL BE 6 INCHES IN DIAMETER AS A MINIMUM.
 - GALVANIZED OR CAST IRON CLEAN-OUT CAP SHALL BE USED ON THE STUBOUT FOR EACH SERVICE.
 - LATERAL SHALL BE MARKED WITH AN "S" STAMPED OR CUT IN THE CURB.

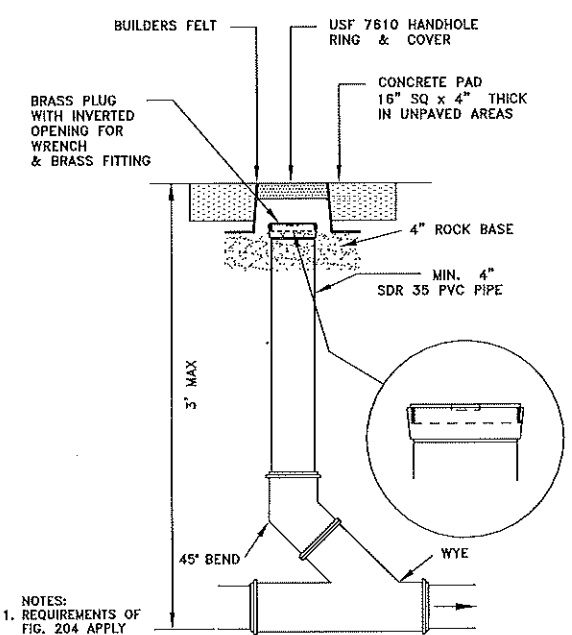
SERVICE LATERAL DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION JANUARY 2014 FIG. 204

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Certificate of Authorization No.: 9230

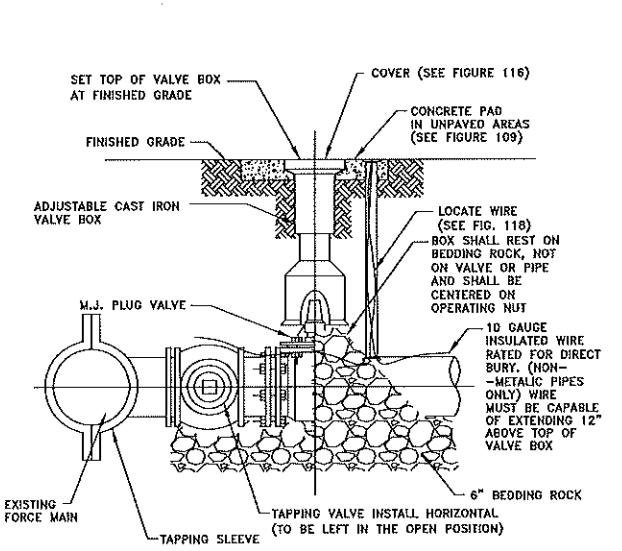
Selby G. Weeks 56991

APOPKA MEDICAL OFFICE BUILDING
W. ORANGE BLOSSOM TRAIL
APOPKA, FL
SANITARY DETAILS



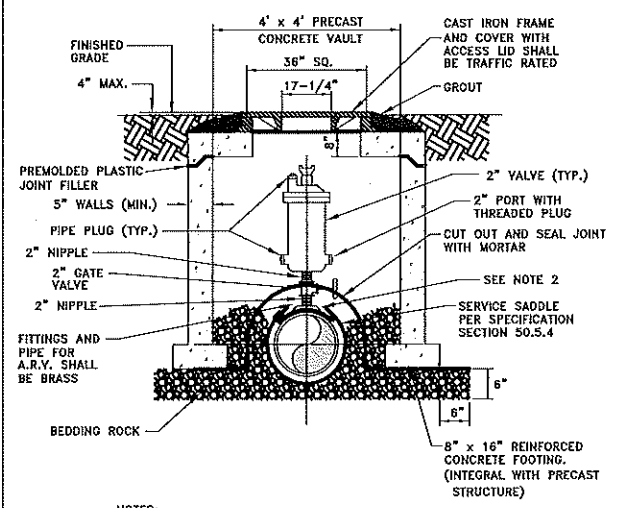
SANITARY SEWER SERVICE TRAFFIC RATED CLEAN-OUT DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION JANUARY 2014 FIG. 205



FORCE MAIN WET TAP TIE-IN DETAIL

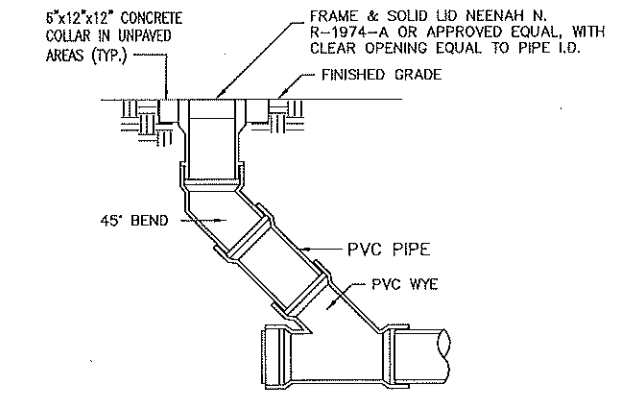
CITY OF APOPKA DESIGN ENGINEERING DIVISION JANUARY 2014 FIG. 206



- NOTES:
- ABOVE DETAIL IS BASED ON 2 INCH COMBINATION AIR/VACUUM RELEASE VALVE. CHANGE PIPE AND FITTINGS ACCORDINGLY FOR OTHER VALVE SIZES AND TYPES. VALVE SIZES TO BE DETERMINED BY THE ENGINEER AND APPROVED BY THE CITY PRIOR TO INSTALLATION.
 - THE MINIMUM DIMENSION FROM TOP OF PIPE TO FINISHED GRADE SHALL BE 4.0 FEET.
 - ALL STRUCTURES TO BE TRAFFIC BEARING RATED.

AIR OR COMBINATION AIR/VACUUM RELEASE VALVE DETAIL - UNDERGROUND

CITY OF APOPKA DESIGN ENGINEERING DIVISION JANUARY 2014 FIG. 119



CLEANOUT DETAIL N.T.S.

| revision | description | date |
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drawn by: JAK
checked by: SGW
date: 06-26-2018
plot scale: AS SHOWN
project number: APOPKA MOB
file name: C600 - C900 SERIES DETAILS.DWG

C 801

File Location: S:\Projects\Lead Projects 2013\18\PS6002 - Apopka, Central Court.dwg

RILEY & Company, Inc. (H-20 GP)

w/ BATTERY BACK-UP FOR AUDIO AND VISUAL ALARMS

SCOPE: Supply one complete H-20 GP Pre-Fab Lift Station, per design. Pumps shall be capable of grinding and pumping domestic & commercial sewage. Complete system shall be supplied by:
RILEY & Company, Inc.
 Sanford, FL 32773 (Ph. 407-265-9963)
NO SUBSTITUTIONS - NO ALTERNATES

PUMPS AND ELECTRICAL CONTROL PANEL MUST BE WARRANTED FOR A MINIMUM OF 3 YEARS.

FIBERGLASS WETWELL MUST BE WARRANTED FOR A MINIMUM OF 20 YEARS.

The H-20 Load Rated Fiberglass Wetwell Must Be Manufactured By L.F. Manufacturing, Giddings, Texas, Which Includes A Written 20 Yr. Warranty. Certification of the wetwell H-20 load rating must be supplied with submittals. H-20 certification must be signed and sealed by an engineer registered in the State of Florida.

After the H-20 load rated wetwell has been installed, the ASTM Certification Number and Serial Tracking Number must be visible.

PUMPS: (3 YEAR WARRANTY)

Submersible grinder pumps shall be RILEY Model RC30061, installed in the H-20 GP FRP wetwell utilizing a dual slide rail system. The grinder unit shall be capable of macerating materials normally found in domestic and commercial sewage into a fine slurry which will pass through the pump and the Sch.80 PVC discharge piping. Stator winding shall be open type with Class F insulation and shall be heat-shrink fitted into the stator housing. The use of pins, bolts, or other fastening devices is not acceptable. A heat sensor thermostat shall be attached to the top end of the motor winding and shall be connected in series with the magnetic contactor coil in the control panel to stop motor if winding temperature exceeds 140 C., but shall automatically reset when the winding temperature returns to normal. Two heat sensor thermostats shall be used on three phase motors. The pump motor grinder shaft shall be AISI 430F SS threaded to take the pump impeller and the grinder impeller. Upper & lower mechanical seals shall be Silicon Carbide vs Silicon Carbide.

DUPLEX CONTROL PANEL: (3 YEAR WARRANTY)

To insure complete unit and warranty responsibility the electrical control panel must be manufactured and built by the pump supplier. The pump supplier must be a TUV (UL508A CERTIFIED) manufacturing facility, with a minimum of 5 years history in the manufacturing of electrical control panels. The enclosure shall be NEMA 4X, minimum 30" high x 30" wide x 10" deep aluminum with 4 point latching system. The enclosure shall have external mounting feet to allow for wall mounting. The following components shall be mounted through the enclosure:
 1- ea. Red Alarm Beacon (Light 4" x 4" Minimum Diameter)
 1- ea. Alarm Horn (minimum 95 DCB)
 1- ea. Generator Receptacle w/ weatherproof cover (SCM460 -UL 1686)
 1- ea. Alarm Silence Pushbutton

The back panel shall be fabricated from .125, 5052-H32 marine alloy aluminum. All components shall be mounted by machined stainless steel screws.

The following components shall be mounted to back panel:
 2- ea. Motor Contactors
 1- ea. Volt Monitor (1 Ph) Phase Monitor (3 Ph) w/2 N/O & 1 N/C Contacts
 1- ea. Control Transformer (480 Volt Only) (Min. 500VA)
 1- ea. Silence Relay Module
 1- ea. Duplex Alternator w/ Pump Selector Switch
 1- ea. Model RCBSA Battery Back-Up w/ Smart Charger
 20- ea. Terminals For Field Connections
 6- ea. Terminals For Motor Connections (Single Phase Only)
 7- ea. Grounding Lugs
 1- ea. Seal Failure Relay

The inner door shall be fabricated from .080, 5052-H32 marine alloy aluminum. The inner door shall have a continuous aluminum piano hinge.

The following components shall be mounted through the inner door:
 1- ea. Main Circuit Breaker
 1- ea. Emergency Circuit Breaker
 1- ea. Mechanical Interlock For Emergency And Main Breakers (UL Listed)
 2- ea. Short Circuit Protectors w/ Auxiliary Contacts
 1- ea. Control Circuit Breaker
 2- ea. Seal Failure Indicator Lights
 1- ea. Hand-Off-Auto Selector Switches
 2- ea. Pump Run Pilot Lights
 1- ea. Power On Pilot Light
 2- ea. Elapse Time Meters (Non-Resettable)
 1- ea. GFI Duplex Convenience Outlet

COMPONENT SPECIFICATIONS:
 All circuit breakers shall be molded thermal magnetic. The mechanical interlock shall prevent the normal and emergency main breakers being energized at the same time. An emergency generator receptacle shall be supplied in accordance with DEP standards. The generator receptacle shall be 160 AMP, 230 V to meet the equipment operating conditions.

NEUTRAL TO BE SUPPLIED FOR BOTH 230V 3PHASE OR 230V SINGLE PHASE POWER

All motor short circuit protection devices must provide for under voltage release and class 10 overload protection on all three phases. Visible trip indication, test, and reset capability must be provided without opening inner door. Open frame, across the line, contactors shall be rated per IEC standards and properly sized per the motor requirements. Contactors shall provide for safe touch power and control terminals. Lightning Arrestor shall meet UL1449 3rd Edition or exceed the requirements of ANSI/IEEE Std. C62.21-1984 section 8.6.1. and 8.7.3 shall be supplied by electrician and mounted on the bottom side of the switch disconnect ahead of the pump control panel. A voltage monitor shall be supplied for single phase service. A phase monitor shall be supplied for (3) phase service. A green pilot light shall be supplied for each motor. The pilot light shall illuminate each time the motor is called to run. Each pump shall have an Elapso Time Meter to record the accumulated run time. The ETM shall be 2" diameter, non-resettable, six digit, totally encapsulated unit. A Red pilot light shall be supplied for control power. The pilot light shall illuminate when the control power is available inside the control panel. Relays shall be ice-cube plug in type. Relay contacts shall be rated 10 amp minimum, DPDT. Twenty (20) terminals shall be supplied for field connections. The terminals shall be rated 25 amps minimum. Each motor over-temperature contact shall be connected to the terminal strip and shall open a contact to de-energize the appropriate motor upon a high temperature within the motor. A 15 Amp GFI duplex receptacle shall be supplied and mounted on the innerdoor. Ground lugs shall be supplied and appropriately sized for each motor and for service entrance.

MISCELLANEOUS: All wiring on the back panel shall be contained within the wiring duct. All wiring between the inner door and the back panel shall be contained within a plastic spiral wrap. Each wire shall have a wire number at each end to correspond to the as built drawing for field troubleshooting. The control panel must be manufactured in-house by lift station supplier and be a TUV (UL508A Certified) facility.

FASTENERS & APPURTANCES: All fasteners, lifting cables, float cable bracket, hinges, and appurtenances shall be made of AISI 304SS. A 304SS slide/latch assembly shall be provided for holding the doors open on the wetwell and valve box. Slide rails shall be made of SCH.40 AISI 304SS pipe. Pump lifting cables shall be made of AISI 304 SS. Pump lifting bales shall be made of AISI 304 SS.

H-20 LOAD RATED WETWELL WITH LIFTING LUGS: The fiberglass wetwell must be H-20 load rated with integral lifting lugs, fiberglass slope in bottom of wetwell and valve box. Certification of the H-20 load rating must be supplied at the time of submittals to Engineer. The wetwell shall be manufactured of fiberglass reinforced polyester (FRP) of depth and diameter as shown on the lift station elevation detail. The wall thickness shall be adequate for the depth of the wetwell to maintain the H-20 LOAD RATING.

EXECUTION: Installation shall be in strict accordance with the manufacturer's recommendations in the locations shown on the drawing.

INSPECTION & TESTING: A factory representative shall be provided for a one (1) time start-up and shall have complete knowledge of the proper operation and maintenance of complete system. Megger the motors. The pump motors shall be meggered out prior to the start-up to ensure that the insulation of the pump motor cable is intact. The pump controls and pumps shall be checked for mechanical reliability and proper operation.

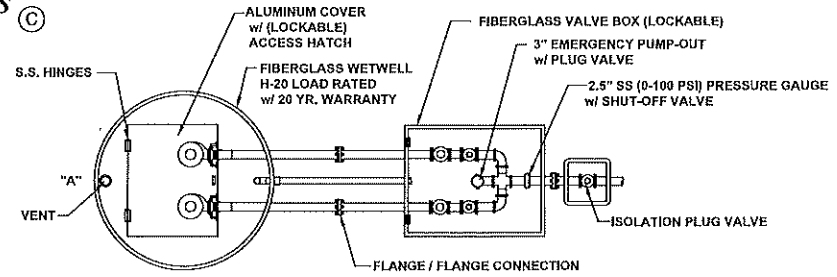
LIFT STATION WILL BE PRIVATELY OWNED AND MAINTAINED.

| PUMP DATA | | ELEVATIONS | |
|---------------------------|-----------|------------------------|--------|
| PRIMARY PUMP CAPACITY | 86 GPM | TOP OF WETWELL | 110.25 |
| PRIMARY TDH | 26 'TDH | INLET INVERT | 103.32 |
| PUMP MANUFACTURER | HOMA | HIGH LEVEL ALARM (HLA) | 103.32 |
| PUMP MODEL # | GRP26/3 | 2nd PUMP ON (LEAD) | 102.32 |
| R.P.M. | 3,450 | 1st PUMP ON (LEAD) | 99.82 |
| HORSEPOWER | 2.5 HP | PUMPS OFF (OFF) | 99.32 |
| ELECTRICAL/ VOLTS / PHASE | 460 V/3 P | BOTTOM OF WETWELL | 98.32 |
| PUMP DISCHARGE SIZE | 2" | WETWELL DIAMETER | 4 FT |

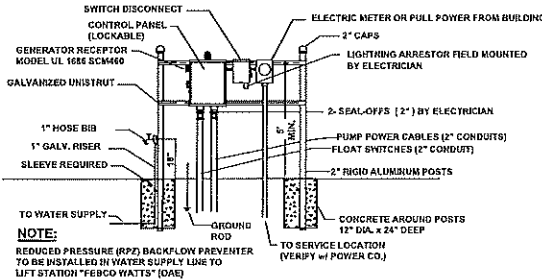
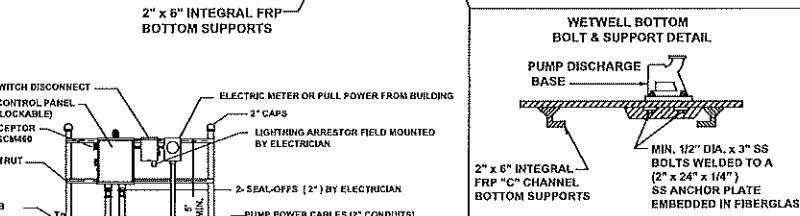
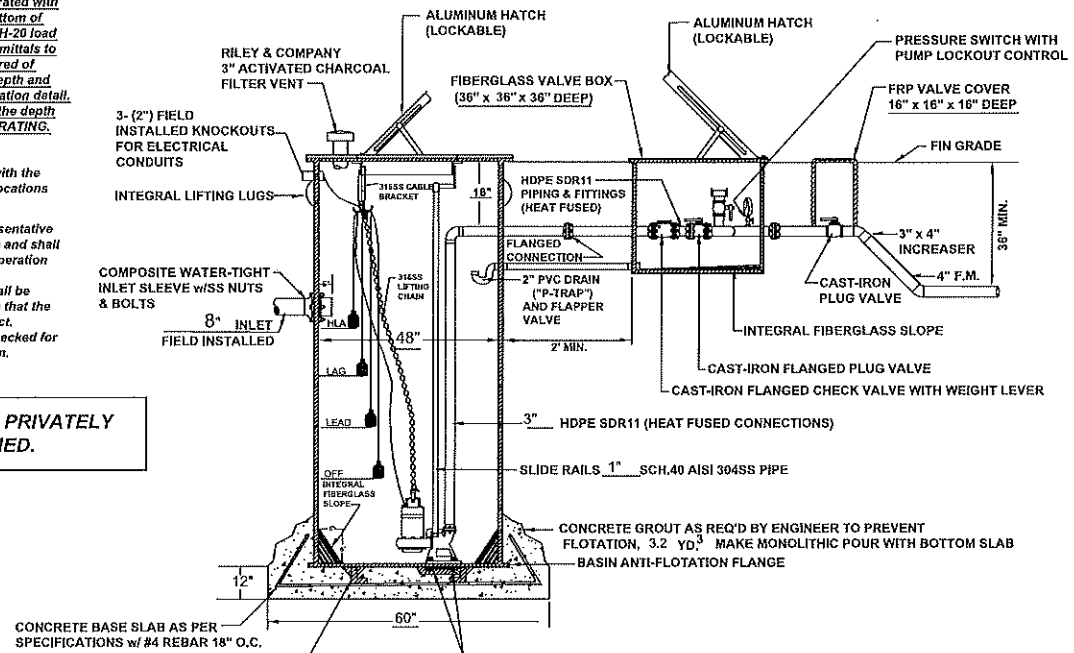
*** ELECTRICIAN NOTES:**

- DRAWING NOT TO SCALE
- ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES
- ELECTRICIAN SHALL SEAL OFF CONDUIT RUNS
- ELECTRICIAN TO MOUNT LIGHTNING ARRESTOR AT SWITCH DISCONNECT
- CONTRACTOR SHALL VERIFY POWER SOURCE PRIOR TO ORDERING EQUIPMENT
- NEUTRAL TO BE SUPPLIED FOR 230V-3 PHASE OR 230V-SINGLE PHASE POWER.

RILEY & CO. / H-20 GP 09-23-16



NOTE: PUMP CONTROL PANEL SHALL BE LOCATED 3 FEET FROM WETWELL PERIMETER AT POINT "A"



ELECTRICAL RISER FOR ILLUSTRATION PURPOSES ONLY

IN CASE OF EMERGENCY, CALL: 407-265-9963 (24 HOURS)
LIFT STATION EMERGENCY CONTACT SIGN NOTES:
 1. SIGN SHALL BE ALL-WEATHER, (WATER-PROOF).
 2. LETTERS AND NUMBERS SHALL BE 2" OR LARGER.

Selby G. Weeks 55991

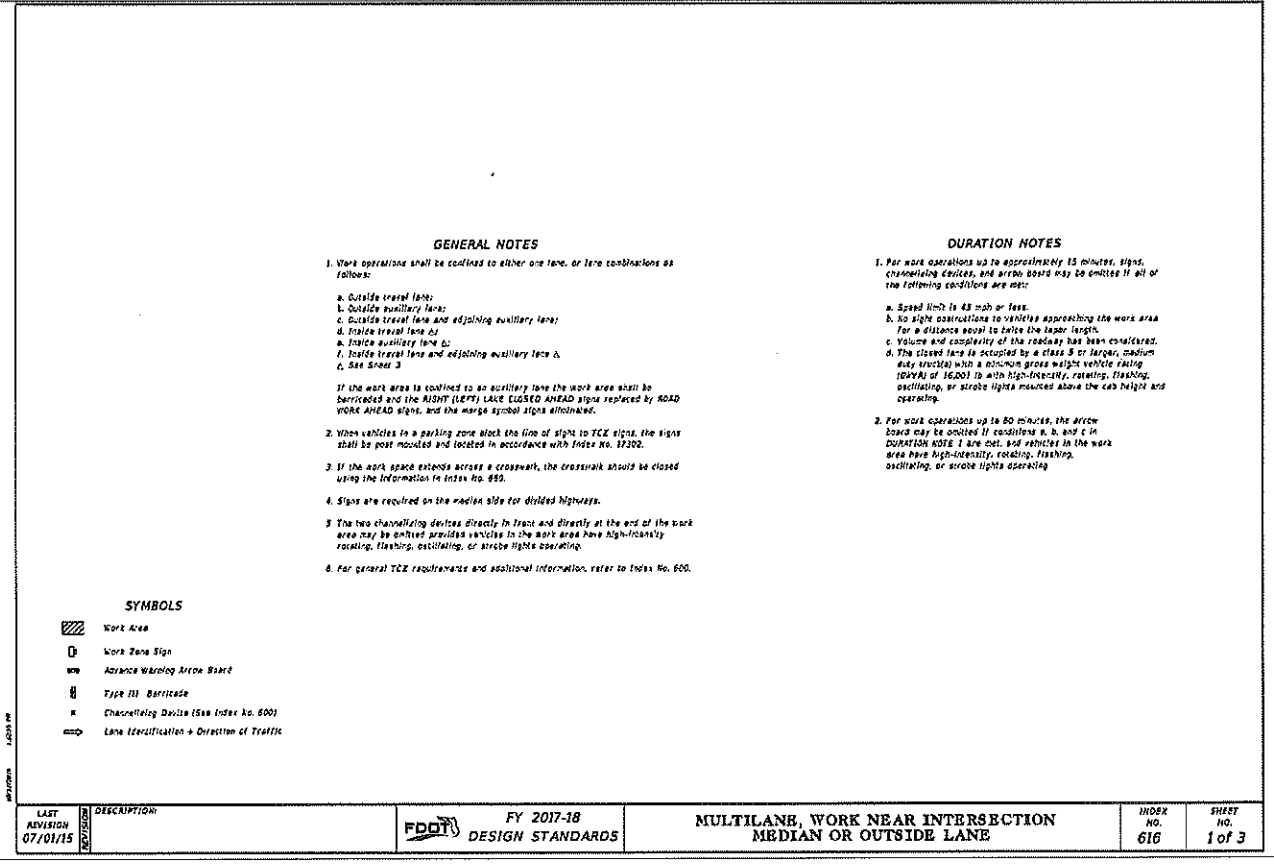
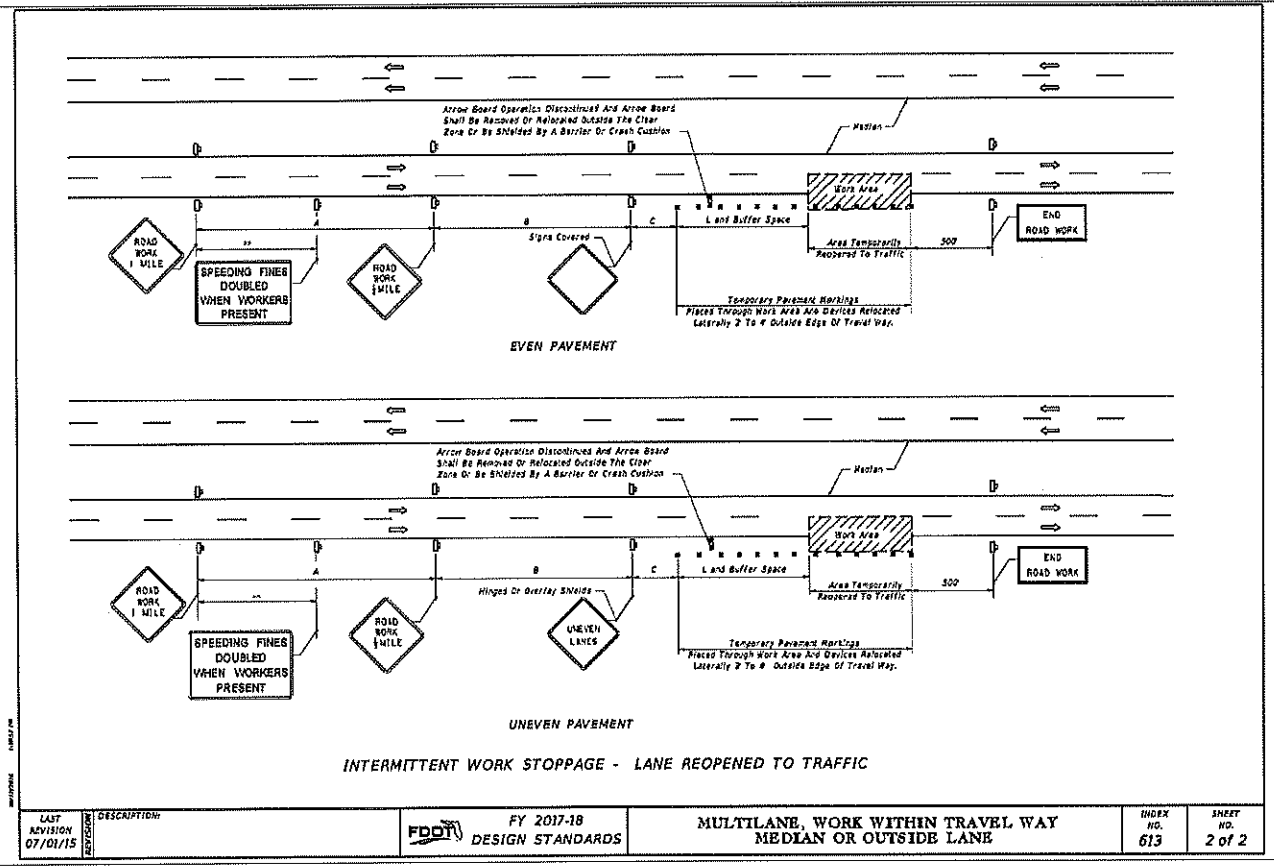
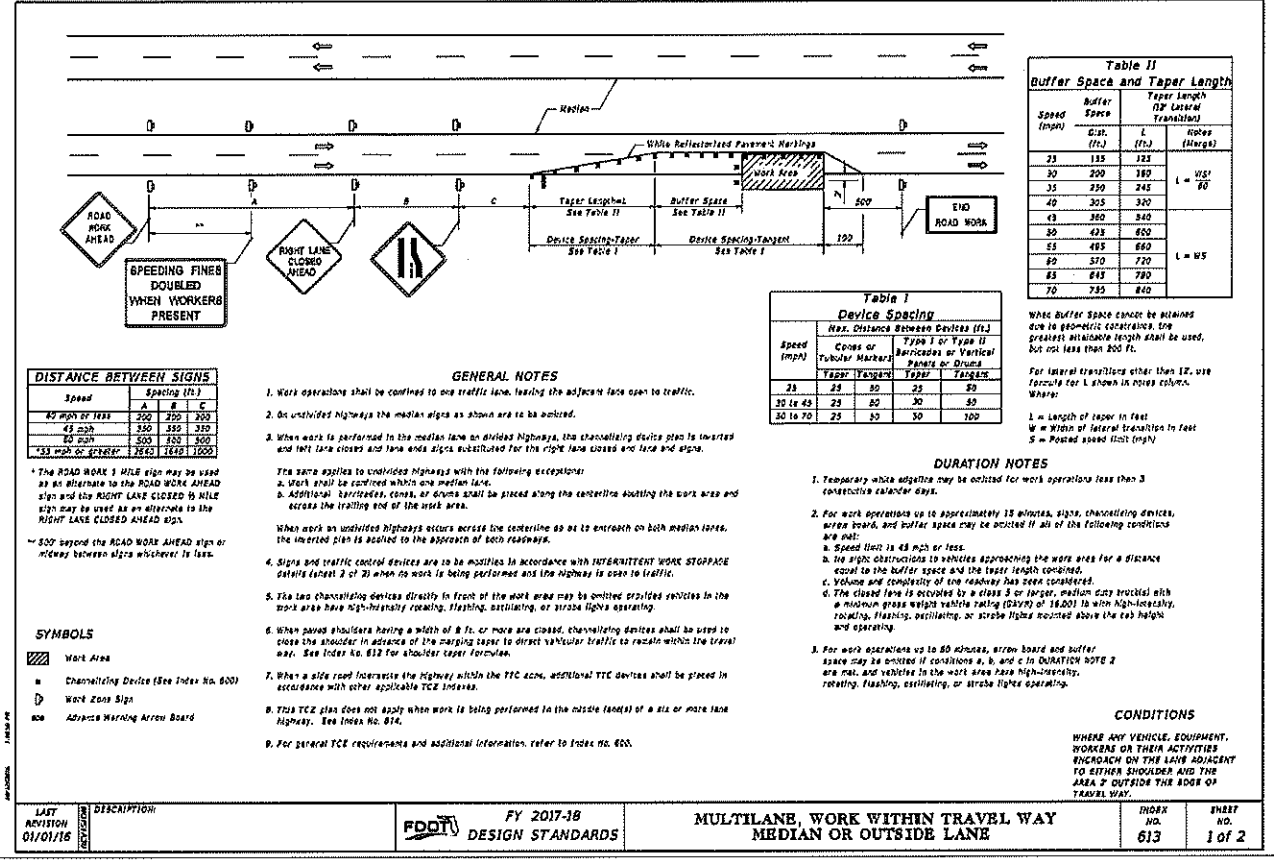
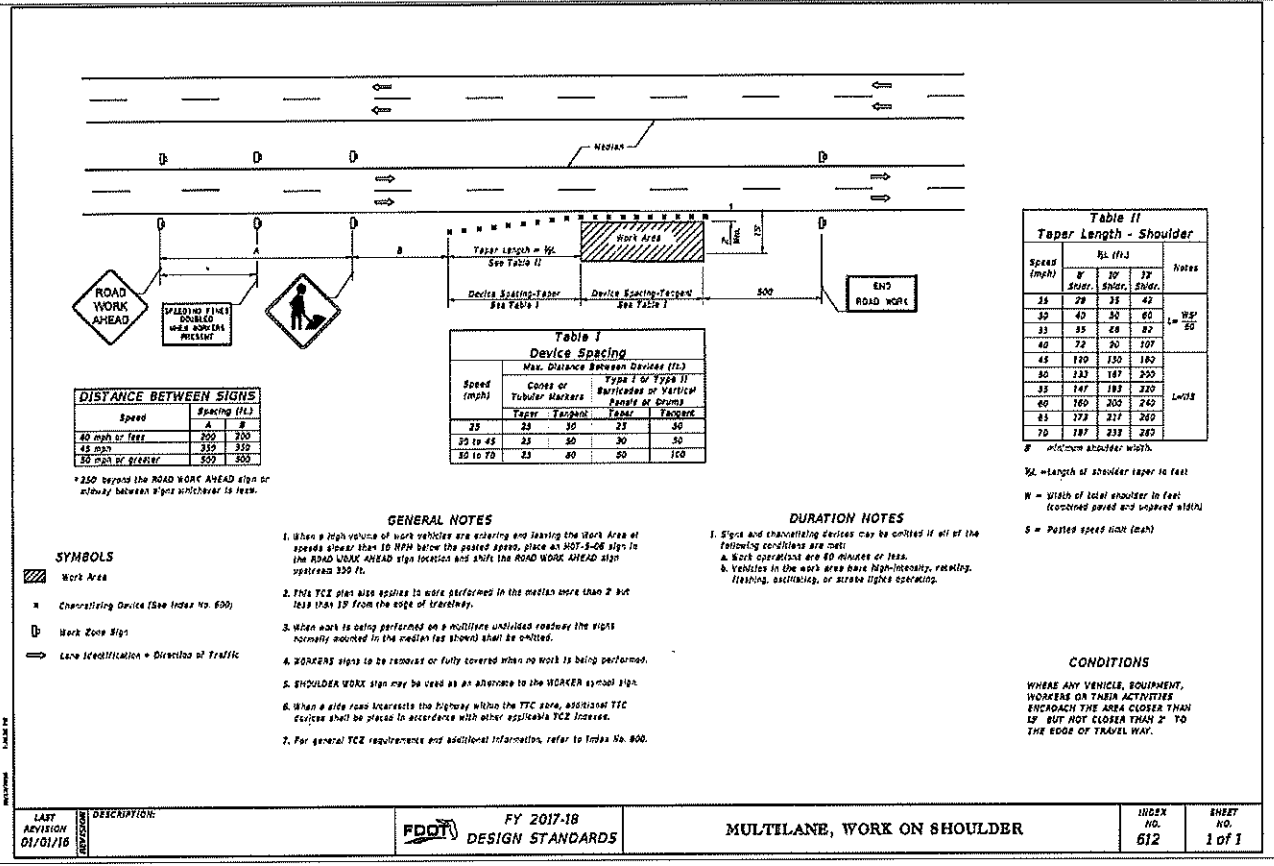
APOPKA MEDICAL OFFICE BUILDING
W. ORANGE BLOSSOM TRAIL
APOPKA, FL
LIFT STATION DETAILS

| revision | description | date |
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| △ | AGENCY COMMENTS | 7/30/18 |
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| △ | | |

drawn by: JAK
 checked by: SGW
 date: 06-26-2018
 plot scale: AS SHOWN
 project number: APOPKA MOB
 file name: C600 - C600 SERIES DETAILS.DWG

APOPKA MEDICAL OFFICE BUILDING
W. ORANGE BLOSSOM TRAIL
APOPKA, FL

FDOT DETAILS



File Location: I:\S\Projects\Used Projects\2018\Wetpavement - Apopka Centre Core (v2).dwg

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checked by: SGV
date: 06-26-2018
plot scale: AS SHOWN
project number: APOPKA MOB
file name: C600 - C900 SERIES DETAILS.DWG

APOPKA MEDICAL OFFICE BUILDING

W. ORANGE BLOSSOM TRAIL

APOPKA, FL

FDOT DETAILS

| revision | description | date |
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| △ | AGENCY COMMENTS | 7/30/18 |
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plot scale: AS SHOWN
project number: APOPKA MOB
file name: C600 - C900 SERIES DETAILS.DWG

C 901

RIGHT LANE CLOSED ON FAR SIDE OF MINOR SIDESTREET

Place STOP sign above the existing stop bar to close that 50' from the taper line. Remove or cover existing STOP sign and reinstall when through lane reopens to traffic.

RIGHT LANE CLOSED ON FAR SIDE OF INTERSECTION WITH SIGNIFICANT RIGHT TURNING MOVEMENTS

1. The normal procedure is to close on the near side of the intersection any lane that is not carried through the intersection. However, when this results in the closure of a right lane having significant right turning movements, then the right lane may be restricted to right turns only as shown in this detail.

2. For intersection approaches reduced to a single lane, left turning movements may be prohibited to maintain capacity for through vehicular traffic.

| Speed | Spacing (ft.) |
|----------------|---------------|
| 40 mph or less | 250 250 200 |
| 45 mph | 300 300 250 |

* 500' beyond the ROAD WORK AHEAD sign or midway between signs whichever is less.

| Speed (mph) | Max. Distance Between Devices (ft.) | |
|-------------|-------------------------------------|---|
| | Case or Tubular Markers | Type I or Type II Barricades or Vertical Posts or Drums |
| 30 to 45 | 25 | 25 25 25 25 |

| Speed (mph) | L (ft.) | Notes (Merges) |
|-------------|---------|-------------------------|
| 25 | 125 | L = W ² / 50 |
| 30 | 180 | |
| 35 | 245 | |
| 40 | 320 | |
| 45 | 405 | |

For lateral transitions other than 12', use formula for L shown in the notes column. Where:
L = Length of taper in feet
W = Width of lateral transition in feet
S = Posted speed limit (mph)

LEFT LANE CLOSED ON FAR SIDE OF MINOR SIDESTREET - RESTRICTED TURNING MOVEMENTS

LEFT LANE CLOSED ON FAR SIDE OF INTERSECTION TURNING MOVEMENTS ALLOWED

1. The normal procedure is to close on the near side of the intersection any lane that is not carried through the intersection. However, when this results in the closure of a left lane having significant left turning movements, then the left lane may be re-designated as a turn bay for left turns only as shown in this detail.

| Speed | Spacing (ft.) |
|----------------|---------------|
| 40 mph or less | 250 250 200 |
| 45 mph | 300 300 250 |

* 500' beyond the ROAD WORK AHEAD sign or midway between signs whichever is less.

| Speed (mph) | Max. Distance Between Devices (ft.) | |
|-------------|-------------------------------------|---|
| | Case or Tubular Markers | Type I or Type II Barricades or Vertical Posts or Drums |
| 30 to 45 | 25 | 25 25 25 25 |

| Speed (mph) | L (ft.) | Notes (Merges) |
|-------------|---------|-------------------------|
| 25 | 125 | L = W ² / 50 |
| 30 | 180 | |
| 35 | 245 | |
| 40 | 320 | |
| 45 | 405 | |

For lateral transitions other than 12', use formula for L shown in the notes column. Where:
L = Length of taper in feet
W = Width of lateral transition in feet
S = Posted speed limit (mph)

"SUNSHINE STATE ONE CALL
OF FLORIDA, INC."
1-800-432-4770
WWW.CALLSUNSHINE.COM
REPEATED BY FLORIDA STATUTE 323.85
A SIZE OF 2 DAYS AND A MAX OF 5 DAYS
BEFORE YOU EXCAVATE, YOU ARE TO NOTIFY
SUNSHINE STATE ONE CALL OF FLORIDA
SEE EXPLANATORY GUIDE - LATEST EDITION

I CERTIFY THAT THE LANDSCAPE AND IRRIGATION DESIGN FOR
AOPKA MOB IS IN ACCORDANCE WITH THE CITY OF AOPKA'S
ORDINANCE 2069 ADOPTED MAY 21, 2008 WHICH ESTABLISHES
WATERWISE LANDSCAPE AND IRRIGATION STANDARDS.



Landscape Architecture • Site Planning • Project Management
1817 E. Washington St. • Orlando, FL 32803 • 407.896.0723



385 Douglas Avenue, Ste. 2100
Altamonte Springs, FL 32714
Telephone 407.478.8750
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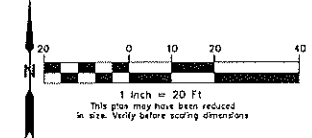
| | | |
|---|--------------|----------|
| AOPKA MOB | | 07 26 18 |
| TREES REMOVED | | |
| PALM | 12" TOTAL | 12" |
| TOTAL INCHES REMOVED | 12" TOTAL | 12" |
| TREES TO REMAIN | | |
| | 0" TOTAL | 0" |
| TOTAL INCHES ON SITE | | |
| | 12 PALM | 12" |
| TOTAL TREE INCHES ON SITE | | |
| | 12 | 12" |
| TOTAL TREE INCHES REMOVED | | |
| | 0 | 0" |
| TOTAL TREE INCHES REPLACED | | |
| | 275" | 275" |
| MAXIMUM TREE STOCK FORMULA AND CALCS. | | |
| | 0 | 0 |
| QUANTITY OF SPECIEN TREES (24" OR GREATER) REMOVE | | |
| | 0 | 0 |
| SITE CLEARING AREA | | |
| | 64,581.00 SF | 1.48 AC |
| BASES: 6,000-7858/1,000-78.6 X 8.5" -275" -0" -275" MAX | | |

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FL#0001375

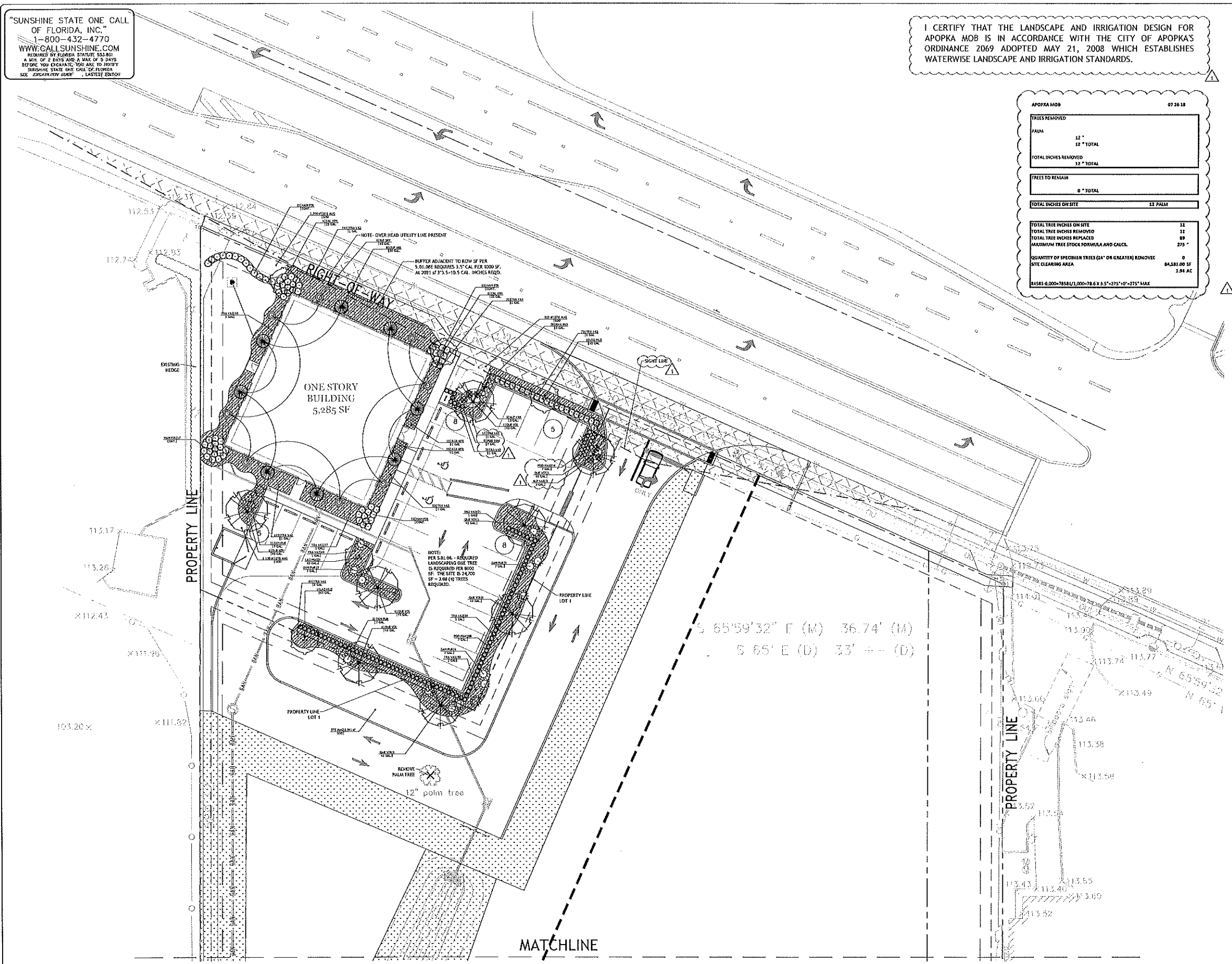
AOPKA MEDICAL OFFICE BUILDING
ORANGE BLOSSOM TRAIL
AOPKA, FL
LANDSCAPE PLAN

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| △ | AGENCY COMMENTS | 07-30-18 |
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checked by: MKM
date: 06-26-2018
plot scale: AS SHOWN
project number: MD18go
file name:



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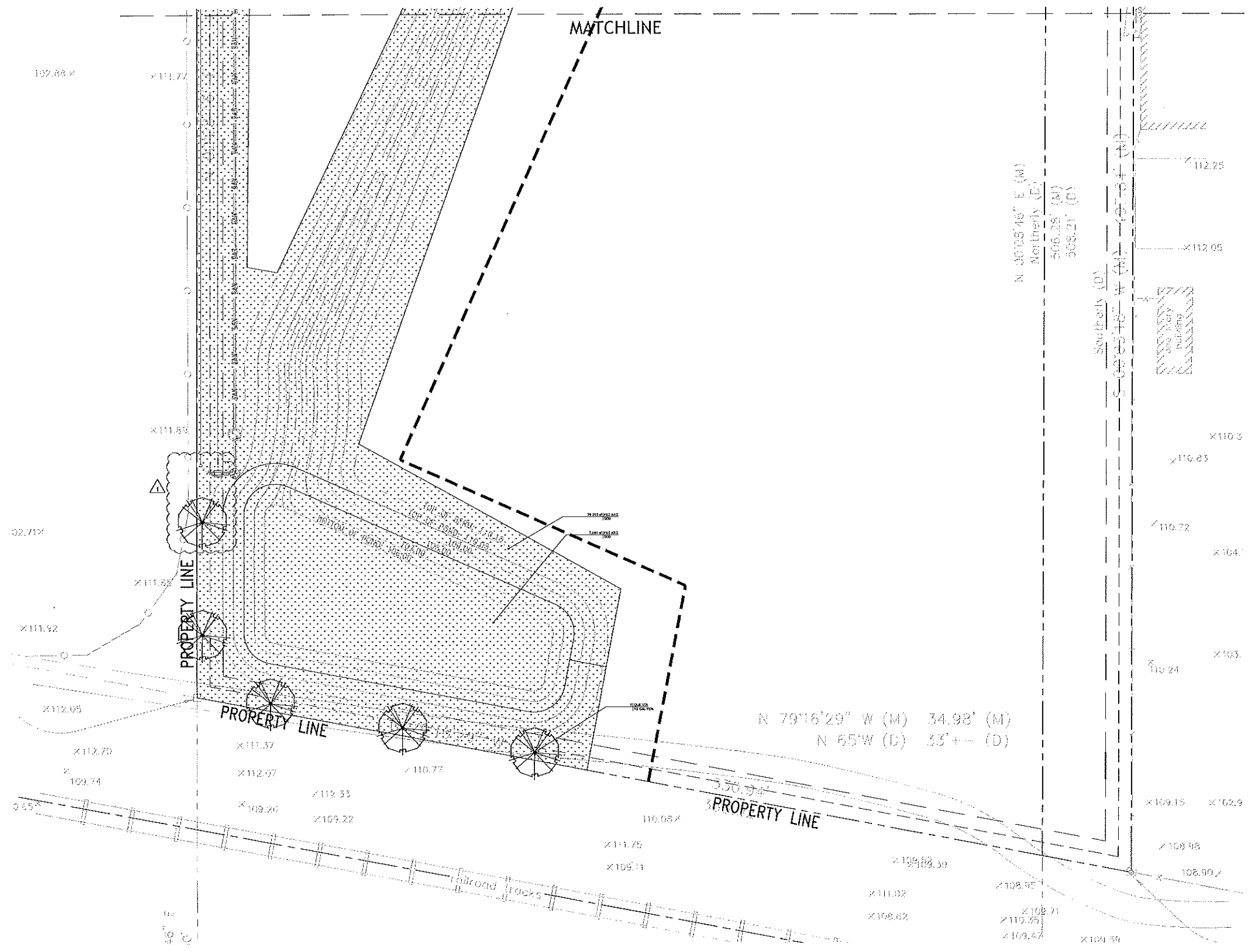
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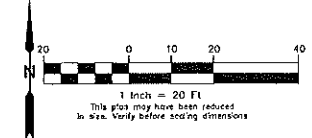
M. Katherine Magley, RLA
 FL#0001375

APOPKA MEDICAL OFFICE BUILDING
 ORANGE BLOSSOM TRAIL
 APOPKA, FL
 LANDSCAPE PLAN



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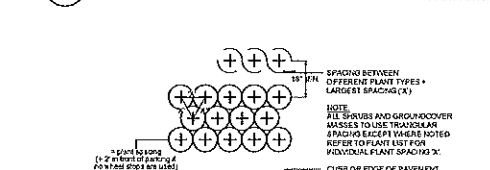
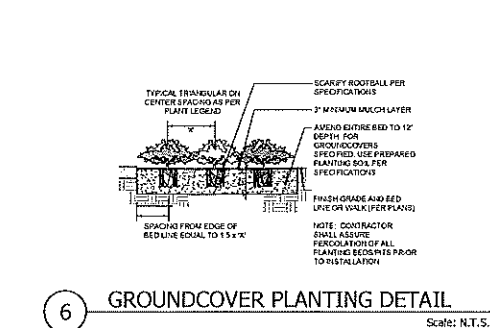
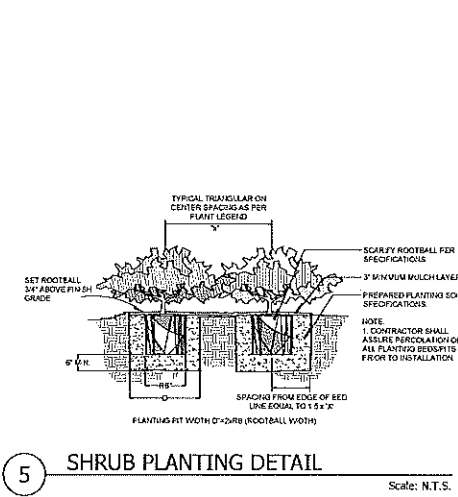
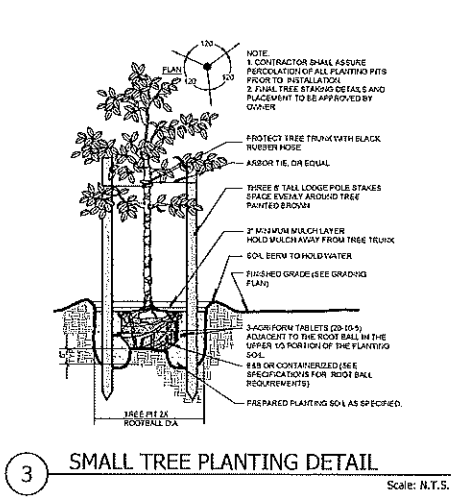
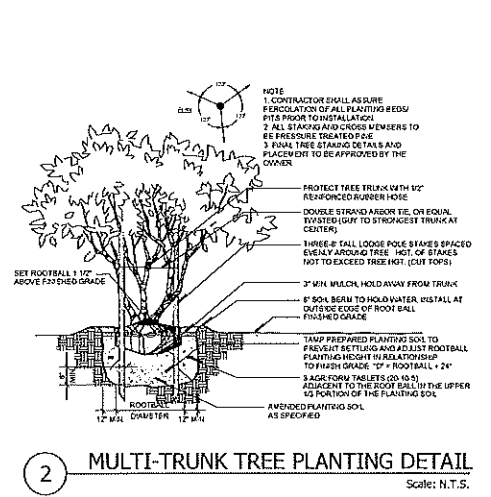
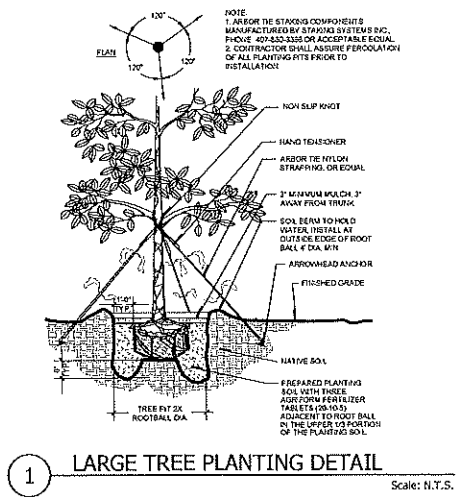
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M. Katherine Magley, RLA FL 0001375

APOPKA MEDICAL OFFICE BUILDING
ORANGE BLOSSOM TRAIL
APOPKA, FL
PLANTING NOTES AND DETAILS

- TYPICAL LANDSCAPE NOTES:**
- ALL TREE CALIPER SIZES NOTED ARE MINIMUM. INCREASE SIZE OR ANY OTHER SPECIFICATIONS AS REQUIRED, PROVIDING MINIMUM PLANT SIZE AND SPECIFICATIONS.
 - ALL CONTAINER SIZES NOTED ARE MINIMUM. INCREASE SIZE OF POT AS REQUIRED, PROVIDING MINIMUM PLANT SIZE AND SPECIFICATIONS. ALL HEIGHT AND SPREAD SPECIFICATIONS ARE MINIMUM.
 - SHRUB AND GROUND COVER BED QUANTITIES ARE INDICATED FOR EACH PLANT BED. ALL PLANT QUANTITIES FOR PROPOSALS SHALL BE DERIVED SOLELY FROM DRAWINGS AND SPECIFICATIONS.
 - SHRUB AND GROUND COVER SPACING IS INDICATED ON THE PLANT LIST AND SHALL APPLY FOR ALL "MASS PLANTING" BEDS.
 - OWNERS REPRESENTATIVE MUST TAG AN EXAMPLE OF EACH PALM SPECIES ACCORDING TO THE SPECIFICATIONS IN THE PLANT LIST.
 - SEE PLANT LIST DETAILS AND SPECIFICATIONS FOR FURTHER PLANTING INFORMATION.
 - LOCATION OF ALL UTILITIES AND BASE INFORMATION IS APPROXIMATE. CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES AND OBSTRUCTIONS AND COORDINATE WITH OWNERS REPRESENTATIVE PRIOR TO INITIATING INSTALLATION WORK. CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR OR REPLACE ANY DAMAGE COMMITTED TO EXISTING ELEMENTS ABOVE OR BELOW GROUND TO ITS ORIGINAL CONDITION AND TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE.
 - CONTRACTOR SHALL FIELD ADJUST LOCATION OF PLANT MATERIAL AS NECESSARY TO AVOID DAMAGE TO EXISTING UNDERGROUND UTILITIES AND/OR EXISTING ABOVE GROUND ELEMENTS. ALL CHANGES REQUIRED SHALL BE COMPLETED AT THE CONTRACTOR'S EXPENSE AND SHALL BE COORDINATED WITH THE OWNERS REPRESENTATIVE.
 - CONTRACTOR SHALL FIELD STAKE THE LOCATION OF ALL PLANT MATERIAL PRIOR TO INITIATING INSTALLATION FOR THE REVIEW AND APPROVAL OF THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE. THE LOCATION OF ALL PLANT MATERIAL IS SUBJECT TO FIELD CHANGE.
 - LANDSCAPE CONTRACTOR SHALL COORDINATE THEIR WORK WITH THE IRRIGATION CONTRACTOR AND ALL OTHER TRADES.
 - LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL HAND WATERING AS REQUIRED UNTIL PLANT MATERIAL IS WELL ESTABLISHED, TO SUPPLEMENT IRRIGATION WATERING AND RAINFALL.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAND WATERING IN ALL LANDSCAPE AREAS WHERE THE EXISTING OR PROPOSED IRRIGATION IS FOR WHATEVER REASON NOT OPERATING OR NOT OPERATING CORRECTLY.
 - CONTRACTOR SHALL CLEAN THE WORK AREAS AT THE END OF EACH WORKING DAY. RUBBISH AND DEBRIS SHALL BE COLLECTED AND DEPOSITED AS DIRECTED DAILY. ALL MATERIALS, PRODUCTS, AND EQUIPMENT SHALL BE STORED IN AN ORGANIZED FASHION AS DIRECTED BY THE OWNER OR OWNERS REPRESENTATIVE.
 - ALL PLANT MATERIAL SHALL BE IN FULL AND STRICT ACCORDANCE WITH FLORIDA NO. 1 GRADE, ACCORDING TO THE "GRADES AND STANDARDS FOR NURSERY PLANTS" PUBLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES, CURRENT EDITION.
 - CONTRACTOR SHALL REMOVE EXISTING SOO AND/OR VEGETATION IN ALL AREAS TO BE PLANTED WITH SHRUB/GROUNDCOVERS AND/OR ALL AREAS TO BE MULCHED.
 - CONTRACTOR SHALL REPLACE SOO IN ALL AREAS WHERE EXISTING VEGETATION IS REMOVED OR RELOCATED, WHERE EXISTING LAWN AREAS ARE DAMAGED BY HIS WORK, AND WHERE NEW VEGETATION IS INSTALLED (UNLESS OTHERWISE NOTED ON PLANS) WITH SAME GRASS SPECIES TO THE SATISFACTION OF THE OWNERS REPRESENTATIVE. CONTRACTOR SHALL BE RESPONSIBLE FOR FINISH GRADING ALL SUCH AREAS TO BLEND BOTH ELEVATIONS AND SOO INTO EXISTING SURROUNDING LAWN AREAS.
 - THE CONTRACTOR SHALL BEAR ALL COSTS OF TESTING OF SOILS, ADJUSTMENTS, ETC. ASSOCIATED WITH THE WORK AND INCLUDED IN THE SPECIFICATIONS. PRIOR TO COMMENCEMENT OF THE LANDSCAPING WORK. FOR EVERY BLOCK SECTION OF STREET THE CONTRACTOR SHALL PROVIDE COMPLETE SOIL TESTS FOR AT LEAST THREE AREAS UNDISTURBED BY PREVIOUS WORK AND TWO AREAS DISTURBED AND/OR REFILED. SEE SPECIFICATIONS FOR ADDITIONAL TESTING REQUIREMENTS.
 - THE CONTRACTOR SHALL PROVIDE UNIT PRICES AS REQUESTED WHICH INCLUDE THE TOTAL COST OF THE WORK INCLUDING BUT NOT LIMITED TO ANY AND ALL COSTS FOR EQUIPMENT, MATERIAL, PRODUCTS, OVERHEAD, PROFIT, GUARANTEES, LABOR, INSTALLATION, ETC. TO PROVIDE A COMPLETE JOB AS OUTLINED ON THE DRAWINGS. THE OWNER SHALL HAVE THE OPTION TO ADD OR DEDUCT FROM THE LUMP SUM BID CONTRACT AMOUNT, BASED ON THE QUOTED UNIT PRICES FOR ANY OR THE ITEMS LISTED IN THE "PLANT LIST".
 - CONTRACTOR SHALL PROTECT EXISTING VEGETATION TO REMAIN BY MEANS APPROVED BY THE OWNER/OWNERS REPRESENTATIVE AND AS DETAILED IN THE DRAWINGS.
 - CONTRACTOR SHALL CLEAN, PRUNE, AND SHAPE EDGES OF EXISTING VEGETATION AS DIRECTED BY OWNERS REPRESENTATIVE. CREATE SMOOTH BED LINES AROUND EXISTING VEGETATION.
 - CONTRACTOR AND EMPLOYEE VEHICLE PARKING SHALL BE COORDINATED WITH THE OWNER OR OWNERS REPRESENTATIVE. SHUTTLING OF EMPLOYEES TO THE PROJECT AREAS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL NOT DISRUPT OR CONFLICT IN ANY WAY WITH EXISTING TRAFFIC.
 - CONSTRUCTION ACCESS SHALL BE INDICATED BY THE OWNER. COORDINATION OF HEAVY EQUIPMENT AND MATERIALS SHALL BE THE CONTRACTORS RESPONSIBILITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING AND COORDINATION OF WORK WITH OTHER TRADES AND THE OWNER OR OWNERS REPRESENTATIVE.
 - THE CONTRACTOR SHALL TAKE WHATEVER MEANS THAT MAY BE NECESSARY TO FULLY UNDERSTAND ALL THE ACCESS ROUTES AND CONSTRUCTION SCHEDULES IN ORDER TO PROVIDE A COMPLETE AND FINISHED PROJECT ON SCHEDULE.
 - PINE STRAW MULCH OR APPROVED EQUAL SHALL BE USED (CYPRESS MULCH NOT ALLOWED).
 - ALL PLANTS SHALL BE FLORIDA FRIENDLY FOR CENTRAL FLORIDA ZONE.
 - ALL PLANTS SHALL BE PLANTED NO CLOSER THAN 30" FROM THE BUILDING FOUNDATION.

| PLANT SCHEDULE | | | | | | | | | | | |
|----------------|---------|-----------|--|----------------------------|--------------|----------------|------------------|-------------|--------|------------------------------|----------------------|
| TREES | CODE | QTY | BOTANICAL NAME | COMMON NAME | CONT. | CAL/DBH | SPECIFICATION | WATER USAGE | NATIVE | REMARKS | |
| | CAL VIM | 2 | CALLISTEMON VIMINALIS | WEeping BOTTLE BRUSH | 25 GAL. | 2" CAL. | | LOW | NO | MULTI-TRUNK, FULL | |
| | CUP ARI | 8 | CUPRESSUS ARIZONICA GLABRA 'CAROLINA SAPPHIRE' | ARIZONA BLUE CYPRESS | 30 GAL. | 2" CAL. MIN. | 5' H X 3' S | LOW-MEDIUM | NO | SINGLE, STRAIGHT TRUNK, FULL | |
| | LAG MUJ | 3 | LAGERSTROEMIA X 'MUSKOGEE' | LAVENDER CRAPE MYRTLE | 65 GAL. | 2.5" CAL. | 8' H X 4' S | LOW-MEDIUM | NO | STANDARD, FULL | |
| | QUE VIR | 5 | QUERCUS VIRGINIANA | SOUTHERN LIVE OAK | 45 GAL. MIN. | 2.5" CAL. MIN. | 10' H X 6' S | LOW-MEDIUM | YES | SINGLE, STRAIGHT TRUNK, FULL | |
| | | 8 | QUERCUS VIRGINIANA | SOUTHERN LIVE OAK | 45 GAL. | 3" CAL. | 13' H X 6' S | LOW-MEDIUM | YES | SINGLE, STRAIGHT TRUNK, FULL | |
| SHRUBS | CODE | QTY | BOTANICAL NAME | COMMON NAME | CONT. | | SPECIFICATION | WATER USAGE | NATIVE | REMARKS | |
| | ALP VAR | 6 | ALPINTIA ZERUMBERT 'VARIEGATA' | VARIEGATED SHELL GINGER | 3 GAL. | | 13" X 18" | LOW-MEDIUM | NO | FULL | |
| | HAM FIR | 70 | HAMELIA PATENS | FIRE BUSH | CONT. | | 24" H MIN | LOW-MEDIUM | YES | FULL | |
| | IEX SKY | 8 | ILEX CRENATA 'SKY PENCIL' | SKY PENCIL JAPANESE HOLLY | 15 GAL. | | 36" H X 10" S | LOW-MEDIUM | NO | FULL | |
| | POD MAK | 110 | PODOCARPUS MACROPHYLLUS MAKI | SHRUBBY YEW | 7 GAL. | | 36" HGT. X 18" W | LOW-MEDIUM | NO | FULL | |
| | RHA IND | 28 | RHAPHIOLEPIS INDICA | INDIAN HAWTHORN | 3 GAL. | | 12" H X 12" S | LOW-MEDIUM | NO | FULL | |
| | ZAM FIR | 18 | ZAMIA FURFURACEA | CARDBOARD PALM | 7 GAL. | | 24" H X 24" S | LOW | NO | FULL | |
| GROUND COVERS | CODE | QTY | BOTANICAL NAME | COMMON NAME | CONT. | | SPECIFICATION | WATER USAGE | NATIVE | SPACING | REMARKS |
| | AGA AFR | 30 | AGAPANTHUS AFRICANUS | LILY OF THE MILE | 1 GAL. | | 12" O.A. | LOW | NO | 18" o.c. | FULL |
| | TRA VAJ | 854 | TRACHELOSPERMUM ASIATICUM 'VARIEGATA' | VARIEGATED DWARF JASMINE | 1 GAL. | | 10" H X 12" S | LOW-MED | NO | 24" o.c. | FULL, 5 RUNNERS MIN. |
| SOD/SEED | CODE | QTY | BOTANICAL NAME | COMMON NAME | CONT. | | SPECIFICATION | WATER USAGE | NATIVE | SPACING | REMARKS |
| | PAS ARG | 36,284 SF | PASPALUM NOTATUM 'ARGENTINE' | BAHIA GRASS | SOD | | PALLET | N/A | NO | | CLEAN AND WEED FREE |
| | STE ALG | 6,210 SF | STENOTAPHRUM SECUNDATUM 'FLORITAM' | FLORITAM ST. AUGUSTINE SOD | SOD | | PALLET | MEDIUM | NO | | CLEAN AND WEED FREE |



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checked by: MKM
date: 06-26-2018
plot scale: AS SHOWN
project number: MD1830
file name:

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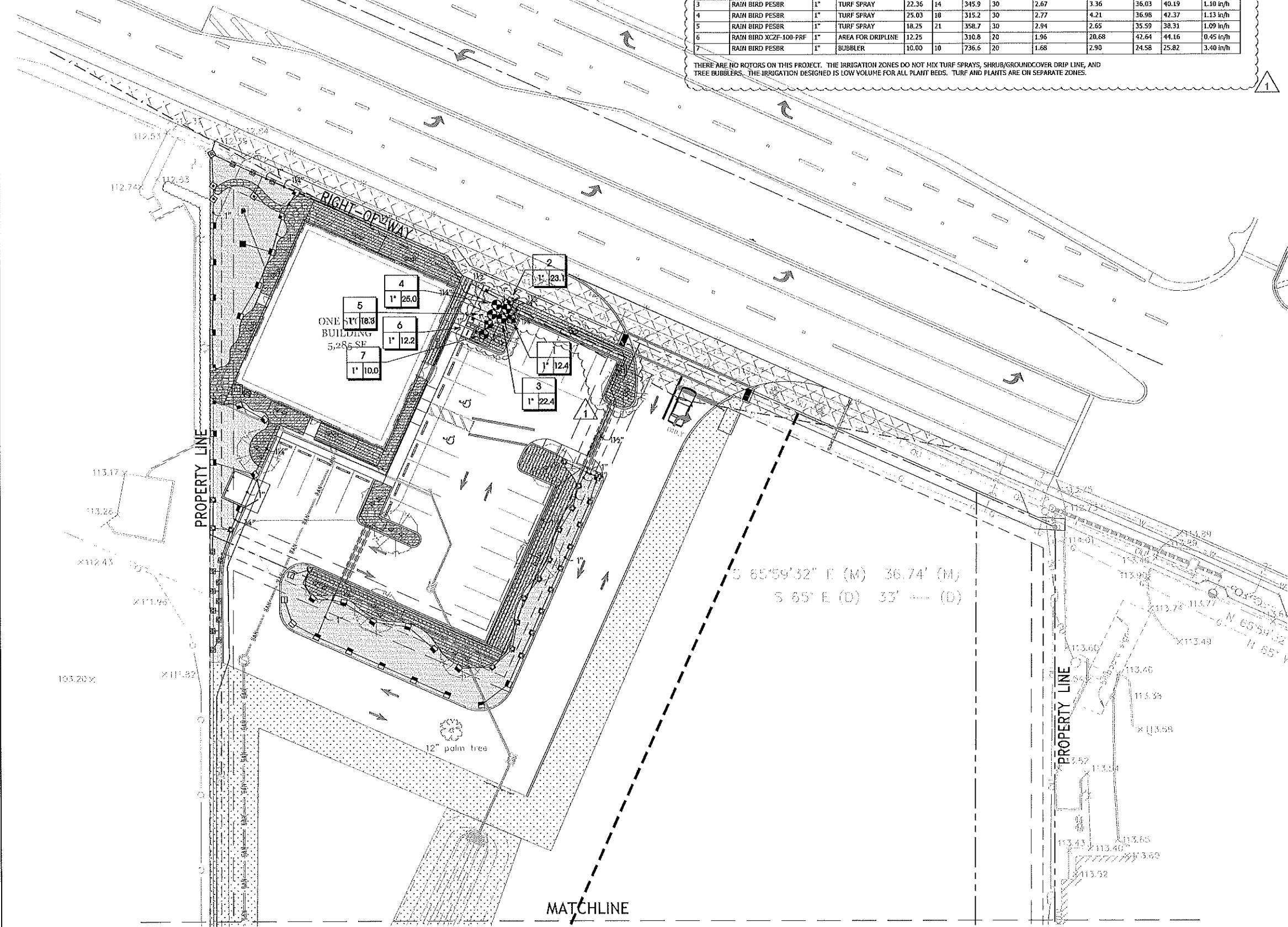
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| VALVE SCHEDULE NUMBER | MODEL | SIZE | TYPE | GPM | HEADS | PIPE | DESIGN PSI | FRICTION LOSS | VALVE LOSS | PSI | PSI @ POC | PRECIP |
|-----------------------|------------------------|------|-------------------|-------|-------|-------|------------|---------------|------------|-------|-----------|-----------|
| 1 | RAIN BIRD XCZF-100-PRF | 1" | AREA FOR DRIPLINE | 12.39 | 25 | 305.1 | 20 | 1.70 | 21.09 | 42.79 | 44.33 | 0.45 in/h |
| 2 | RAIN BIRD PESBR | 1" | TURF SPRAY | 23.05 | 25 | 380.7 | 30 | 2.32 | 3.58 | 35.90 | 40.01 | 1.08 in/h |
| 3 | RAIN BIRD PESBR | 1" | TURF SPRAY | 22.36 | 14 | 345.9 | 30 | 2.67 | 3.36 | 36.03 | 40.19 | 1.10 in/h |
| 4 | RAIN BIRD PESBR | 1" | TURF SPRAY | 25.03 | 18 | 315.2 | 30 | 2.77 | 4.21 | 36.98 | 42.37 | 1.13 in/h |
| 5 | RAIN BIRD PESBR | 1" | TURF SPRAY | 18.25 | 21 | 358.7 | 30 | 2.94 | 2.65 | 35.59 | 38.31 | 1.09 in/h |
| 6 | RAIN BIRD XCZF-100-PRF | 1" | AREA FOR DRIPLINE | 12.25 | 20 | 310.8 | 20 | 1.96 | 20.68 | 42.64 | 44.16 | 0.45 in/h |
| 7 | RAIN BIRD PESBR | 1" | BUBBLER | 10.00 | 10 | 736.6 | 20 | 1.68 | 2.90 | 24.58 | 25.82 | 3.40 in/h |

THERE ARE NO ROTORS ON THIS PROJECT. THE IRRIGATION ZONES DO NOT MIX TURF SPRAYS, SHRUB/GROUNDCOVER DRIP LINE, AND TREE BUBBLERS. THE IRRIGATION DESIGNED IS LOW VOLUME FOR ALL PLANT BEDS. TURF AND PLANTS ARE ON SEPARATE ZONES.



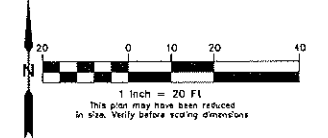
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 FL40001375

APOPKA MEDICAL OFFICE BUILDING
 ORANGE BLOSSOM TRAIL
 APOPKA, FL
 IRRIGATION PLAN

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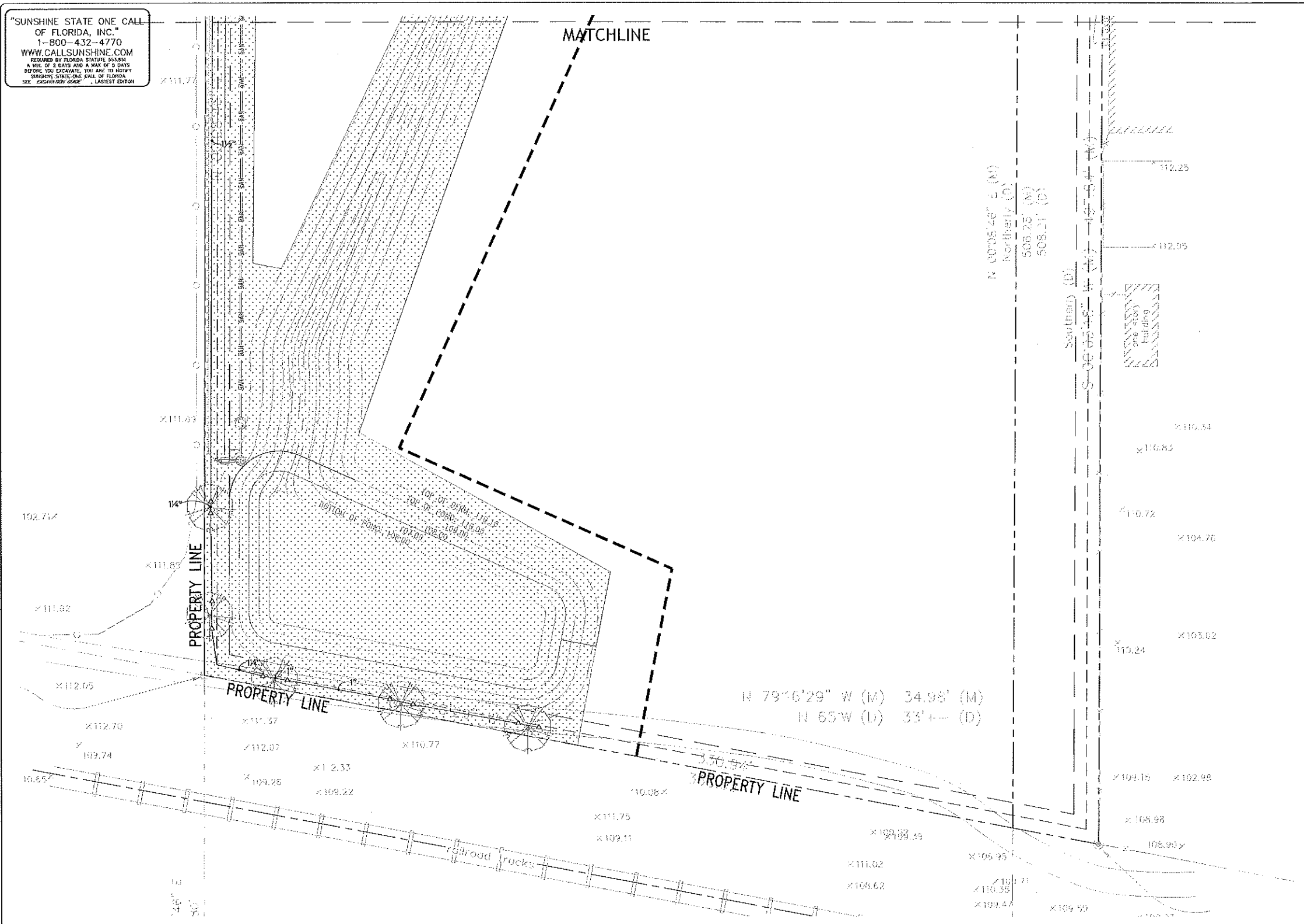
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CIVIL ENGINEERING

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M. Katherine Magley, R.L.A.
FL#0001375

**APOPKA MEDICAL OFFICE BUILDING
ORANGE BLOSSOM TRAIL
APOPKA, FL
IRRIGATION PLAN**



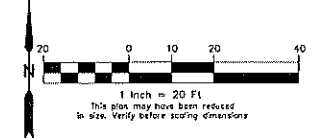
| VALVE SCHEDULE | MODEL | SIZE | TYPE | GPH | HEADS | PIPE | DESIGN PSI | FRICTION LOSS | VALVE LOSS | PSI | PSI @ POC | PRECIP |
|----------------|------------------------|------|-------------------|-------|-------|-------|------------|---------------|------------|-------|-----------|-----------|
| 1 | RAIN BIRD XCZF-100-PRF | 1" | AREA FOR DRUPLINE | 12.39 | | 305.1 | 20 | 1.70 | 21.09 | 42.79 | 44.33 | 0.45 in/h |
| 2 | RAIN BIRD PESBR | 1" | TURF SPRAY | 23.05 | 25 | 380.7 | 30 | 2.32 | 3.58 | 35.90 | 40.01 | 1.06 in/h |
| 3 | RAIN BIRD PESBR | 1" | TURF SPRAY | 22.36 | 14 | 345.9 | 30 | 2.67 | 3.36 | 36.03 | 40.19 | 1.10 in/h |
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| 6 | RAIN BIRD XCZF-100-PRF | 1" | AREA FOR DRUPLINE | 12.25 | | 310.8 | 20 | 1.96 | 20.68 | 42.64 | 44.16 | 0.45 in/h |
| 7 | RAIN BIRD PESBR | 1" | BUBBLER | 10.00 | 10 | 736.6 | 20 | 1.68 | 2.90 | 24.58 | 25.82 | 3.40 in/h |

THERE ARE NO ROTORS ON THIS PROJECT. THE IRRIGATION ZONES DO NOT MIX TURF SPRAYS, SHRUB/GROUNDCOVER DRIP LINE, AND TREE BUBBLERS. THE IRRIGATION DESIGNED IS LOW VOLUME FOR ALL PLANT BEDS. TURF AND PLANTS ARE ON SEPARATE ZONES.

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plot scale: AS SHOWN
project number: MD1830
file name:



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| SYMBOL | MANUFACTURER/MODEL/DESCRIPTION | QTY | ARC | GPM | RADIUS |
|--------|---|------------|-----|------|--------|
| ☒ | RAIN BIRD 1806-SAM-PRS-NP 8 SERIES MPR TURF SPRAY 6.0" POP-UP SPRINKLER WITH CO-MOLDED WIPER SEAL. 1/2" NPT FEMALE THREADED INLET. WITH SEAL-A-MATIC CHECK VALVE, PRESSURE REGULATING, AND NON POTABLE PURPLE CAP. | 14 | 180 | 0.52 | 8' |
| ☒ | RAIN BIRD 1806-SAM-PRS-NP 10 SERIES MPR TURF SPRAY 6.0" POP-UP SPRINKLER WITH CO-MOLDED WIPER SEAL. 1/2" NPT FEMALE THREADED INLET. WITH SEAL-A-MATIC CHECK VALVE, PRESSURE REGULATING, AND NON POTABLE PURPLE CAP. | 20 | 180 | 0.79 | 10' |
| ☒ | RAIN BIRD 1806-SAM-PRS-NP 10 SERIES MPR TURF SPRAY 6.0" POP-UP SPRINKLER WITH CO-MOLDED WIPER SEAL. 1/2" NPT FEMALE THREADED INLET. WITH SEAL-A-MATIC CHECK VALVE, PRESSURE REGULATING, AND NON POTABLE PURPLE CAP. | 2 | 90 | 0.39 | 10' |
| ☒ | RAIN BIRD 1806-SAM-PRS-NP 12 SERIES MPR TURF SPRAY 6.0" POP-UP SPRINKLER WITH CO-MOLDED WIPER SEAL. 1/2" NPT FEMALE THREADED INLET. WITH SEAL-A-MATIC CHECK VALVE, PRESSURE REGULATING, AND NON POTABLE PURPLE CAP. | 2 | 180 | 1.30 | 12' |
| ☒ | RAIN BIRD 1806-SAM-PRS-NP 12 SERIES MPR TURF SPRAY 6.0" POP-UP SPRINKLER WITH CO-MOLDED WIPER SEAL. 1/2" NPT FEMALE THREADED INLET. WITH SEAL-A-MATIC CHECK VALVE, PRESSURE REGULATING, AND NON POTABLE PURPLE CAP. | 1 | 120 | 0.87 | 12' |
| ☒ | RAIN BIRD 1806-SAM-PRS-NP 15 SERIES MPR TURF SPRAY 6.0" POP-UP SPRINKLER WITH CO-MOLDED WIPER SEAL. 1/2" NPT FEMALE THREADED INLET. WITH SEAL-A-MATIC CHECK VALVE, PRESSURE REGULATING, AND NON POTABLE PURPLE CAP. | 1 | 360 | 3.70 | 15' |
| ☒ | RAIN BIRD 1806-SAM-PRS-NP 15 SERIES MPR TURF SPRAY 6.0" POP-UP SPRINKLER WITH CO-MOLDED WIPER SEAL. 1/2" NPT FEMALE THREADED INLET. WITH SEAL-A-MATIC CHECK VALVE, PRESSURE REGULATING, AND NON POTABLE PURPLE CAP. | 23 | 180 | 1.85 | 15' |
| ☒ | RAIN BIRD 1806-SAM-PRS-NP 15 SERIES MPR TURF SPRAY 6.0" POP-UP SPRINKLER WITH CO-MOLDED WIPER SEAL. 1/2" NPT FEMALE THREADED INLET. WITH SEAL-A-MATIC CHECK VALVE, PRESSURE REGULATING, AND NON POTABLE PURPLE CAP. | 8 | 90 | 0.92 | 15' |
| ☒ | RAIN BIRD 1806-SAM-PRS-NP 15 SERIES MPR TURF SPRAY 6.0" POP-UP SPRINKLER WITH CO-MOLDED WIPER SEAL. 1/2" NPT FEMALE THREADED INLET. WITH SEAL-A-MATIC CHECK VALVE, PRESSURE REGULATING, AND NON POTABLE PURPLE CAP. | 3 | 120 | 1.23 | 15' |
| ☒ | RAIN BIRD 1806-SAM-PRS-NP HE-VAN SERIES TURF SPRAY 6.0" POP-UP SPRINKLER WITH CO-MOLDED WIPER SEAL. 1/2" NPT FEMALE THREADED INLET. WITH SEAL-A-MATIC CHECK VALVE, PRESSURE REGULATING, AND NON POTABLE PURPLE CAP. | 1 | ADJ | | 12' |
| ☒ | RAIN BIRD 1806-SAM-PRS-NP HE-VAN SERIES TURF SPRAY 6.0" POP-UP SPRINKLER WITH CO-MOLDED WIPER SEAL. 1/2" NPT FEMALE THREADED INLET. WITH SEAL-A-MATIC CHECK VALVE, PRESSURE REGULATING, AND NON POTABLE PURPLE CAP. | 3 | ADJ | | 15' |
| △ | RAIN BIRD 1800-1400 FLOOD FIXED FLOW RATE (0.25-2.0GPM), FULL CIRCLE BUBBLER, 1/2" FIPT. NP CAP. | 10 | 360 | 1.00 | 3' |
| SYMBOL | MANUFACTURER/MODEL/DESCRIPTION | QTY | | | |
| ☒ | RAIN BIRD XCZF-100-PRF 1" MEDIUM FLOW DRIP CONTROL KIT. 1" DV VALVE WITH 1" PRESSURE REGULATING FILTER AT 40PSI, AND MDGF FITTING. 3GPM-15GPM. IN A PURPLE VALVE BOX. | 2 | | | |
| ☒ | RAIN BIRD XB-PC SINGLE OUTLET EMITTER SINGLE OUTLET, PRESSURE COMPENSATING DRIP EMITTERS. FLOW RATES OF 0.5GPM-BLUE, 1.0GPM-BLACK, AND 2.0GPM-RED. COMES WITH A SELF-PIERCING BARB INLET X BARB OUTLET. | 38 | | | |
| | AREA TO RECEIVE DRIFLINE RAIN BIRD XFD-P-06-18 (18) XFD ON-SURFACE PRESSURE COMPENSATING LANDSCAPE DRIFLINE. 0.6GPM EMITTERS AT 18.0" O.C. DRIFLINE LATERALS SPACED AT 18.0" APART, WITH EMITTERS OFFSET FOR TRIANGULAR PATTERN. UV RESISTANT. PURPLE TUBING FOR NON-POTABLE WATER. SPECIFY XF INSERT FITTINGS. | 5,128 S.F. | | | |
| SYMBOL | MANUFACTURER/MODEL/DESCRIPTION | QTY | | | |
| ☒ | RAIN BIRD PESBR 1" 1", 1-1/2", AND 2" DURABLE CHLORINE-RESISTANT VALVES FOR RECLAIMED WATER APPLICATIONS. WITH SCRUBBER MECHANISM TECHNOLOGY, AND PURPLE FLOW CONTROL HANDLE. IN A PURPLE VALVE BOX. | 5 | | | |
| ☒ | RAIN BIRD ESPBXNME 8 STATION CAPABLE COMMERCIAL CONTROLLER. MOUNTED ON A PLASTIC WALL MOUNT. WITHOUT FLOW SENSOR. | 1 | | | |
| ☒ | RAIN BIRD RSD-BEX RAIN SENSOR, WITH METAL LATCHING BRACKET, EXTENSION WIRE. | 1 | | | |
| ☒ | WATER METER 1" | 1 | | | |
| --- | IRRIGATION LATERAL LINE: PVC CLASS 160 SDR 26-NP 3/4" | 1,172 L.F. | | | |
| --- | IRRIGATION LATERAL LINE: PVC CLASS 160 SDR 26-NP 1" | 260.4 L.F. | | | |
| --- | IRRIGATION LATERAL LINE: PVC CLASS 160 SDR 26-NP 1 1/4" | 411.3 L.F. | | | |
| --- | IRRIGATION LATERAL LINE: PVC CLASS 160 SDR 26-NP 1 1/2" | 909.2 L.F. | | | |
| --- | IRRIGATION MAINLINE: PVC SCHEDULE 40-NP 1" | 26.9 L.F. | | | |
| --- | IRRIGATION MAINLINE: PVC SCHEDULE 40-NP 1 1/4" | 4.6 L.F. | | | |
| --- | IRRIGATION MAINLINE: PVC SCHEDULE 40-NP 1 1/2" | 61.4 L.F. | | | |
| --- | PIPE SLEEVE: PVC SCHEDULE 40 | 112.9 L.F. | | | |



| VALVE SCHEDULE NUMBER | MODEL | SIZE | TYPE | GPM | HEADS | PIPE | DESIGN PSI | FRICTION LOSS | VALVE LOSS | PSI | PSI @ POC | PRECIP |
|-----------------------|------------------------|------|-------------------|-------|-------|-------|------------|---------------|------------|-------|-----------|-----------|
| 1 | RAIN BIRD XCZF-100-PRF | 1" | AREA FOR DRIFLINE | 12.39 | | 305.1 | 20 | 1.70 | 21.09 | 42.79 | 44.33 | 0.45 in/h |
| 2 | RAIN BIRD PESBR | 1" | TURF SPRAY | 23.05 | 25 | 380.7 | 30 | 2.32 | 3.58 | 35.90 | 40.01 | 1.08 in/h |
| 3 | RAIN BIRD PESBR | 1" | TURF SPRAY | 22.36 | 14 | 345.9 | 30 | 2.67 | 3.36 | 36.03 | 40.19 | 1.10 in/h |
| 4 | RAIN BIRD PESBR | 1" | TURF SPRAY | 25.03 | 18 | 315.2 | 30 | 2.77 | 4.21 | 36.98 | 42.37 | 1.13 in/h |
| 5 | RAIN BIRD PESBR | 1" | TURF SPRAY | 18.25 | 21 | 358.7 | 30 | 2.94 | 2.65 | 35.59 | 38.31 | 1.09 in/h |
| 6 | RAIN BIRD XCZF-100-PRF | 1" | AREA FOR DRIFLINE | 12.25 | | 310.8 | 20 | 1.95 | 20.68 | 42.64 | 44.16 | 0.45 in/h |
| 7 | RAIN BIRD PESBR | 1" | BUBBLER | 10.00 | 10 | 736.6 | 20 | 1.68 | 2.90 | 24.58 | 25.82 | 3.40 in/h |

THERE ARE NO ROTORS ON THIS PROJECT. THE IRRIGATION ZONES DO NOT MIX TURF SPRAYS, SHRUB/GROUNDCOVER DRIP LINE, AND TREE BUBBLERS. THE IRRIGATION DESIGNED IS LOW VOLUME FOR ALL PLANT BEDS. TURF AND PLANTS ARE ON SEPARATE ZONES.

CRITICAL ANALYSIS

Generated: 2018-07-26 09:20

P.O.C. NUMBER: 01
Water Source Information:

FLOW AVAILABLE
Water Meter Size: 1"
Flow Available: 37.50 gpm

PRESSURE AVAILABLE
Static Pressure at POC: 50.00 psi
Elevation Change: 5.00 R
Service Line Size: 5"
Length of Service Line: 20.00 ft
Pressure Available: 48.00 psi

DESIGN ANALYSIS
Maximum Station Flow: 25.03 gpm
Flow Available at POC: 37.50 gpm
Residual Flow Available: 12.47 gpm

Critical Station: 1
Design Pressure: 20.00 psi
Friction Loss: 1.55 psi
Fittings Loss: 0.15 psi
Elevation Loss: 0.00 psi
Loss through Valve: 21.09 psi
Pressure Req. at Critical Station: 42.79 psi
Loss for Fittings: 0.05 psi
Loss for Main Line: 0.55 psi
Loss for POC to Valve Elevation: 0.00 psi
Loss for Backflow: 0.00 psi
Loss for Water Meter: 0.94 psi
Critical Station Pressure at POC: 44.33 psi
Pressure Available: 48.00 psi
Residual Pressure Available: 3.67 psi

- CITY OF APOPKA IRRIGATION NOTES:**
- ALL IRRIGATION VALVE BOXES SHALL BE PURPLE IN COLOR.
 - NO RISERS PERMITTED.
 - ALL IRRIGATION DISTRIBUTION ITEMS MUST BE 24" FROM VERTICAL STRUCTURES.
 - ANY LANDSCAPE AREA LESS THAN 4' SHALL BE IRRIGATED WITH LOW VOLUME IRRIGATION (DRIP OR MICRO SPRAYS).
 - SYSTEM IS DESIGNED AND INSTALLED AT A PRESSURE OF 50 PSI.
 - MATCHED PRECIPITATION RATE REQUIRED FOR EACH ZONE.
 - WATER CONVEYANCE SYSTEMS HAVE A VELOCITY OF 5 fps (FEET PER SECOND) OR LESS.
 - SYSTEM INSTALLED AT 6" OR GREATER IN DEPTH.
 - CONTROLLER WILL HAVE A TAG OR STICKER WITH INSTALLATION DATE, INSTALLER NAME, ZONE CHART, AND PROPER IRRIGATION WATERING DAYS AND TIMES.
 - MAINTENANCE SCHEDULE WILL BE PROVIDED TO THE OWNER.

AREA OF LOW VOLUME IRRIGATION:

| | |
|------------------------------------|--------------------------------------|
| TOTAL IRRIGATED LANDSCAPE AREA: | 11,388 SF |
| TOTAL TURF IRRIGATED AREA: | 6,210 SF (54%) |
| TOTAL TREE BUBBLER IRRIGATED AREA: | 250 SF (2%) |
| TOTAL DRIP ZONE IRRIGATED AREA: | 5,128 SF (44%) WHERE 25% IS REQUIRED |

I CERTIFY THAT THE LANDSCAPE AND IRRIGATION DESIGN FOR APOPKA MOB IS IN ACCORDANCE WITH THE CITY OF APOPKA'S ORDINANCE 2069 ADOPTED MAY 21, 2008 WHICH ESTABLISHES WATERWISE LANDSCAPE AND IRRIGATION STANDARDS.



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M. Katherine Magley, RLA
FL#40601375

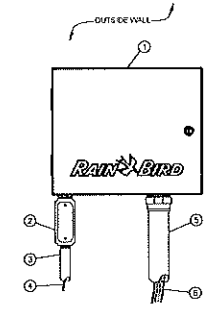
APOPKA MEDICAL OFFICE BUILDING
ORANGE BLOSSOM TRAIL
APOPKA, FL
IRRIGATION DETAILS

| revision | description | date |
|----------|-----------------|----------|
| △ | AGENCY COMMENTS | 07-30-18 |
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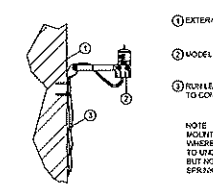
drawn by: MD
checked by: MKM
date: 06-26-2018
plot scale: AS SHOWN
project number: MD1830
file name:

L6

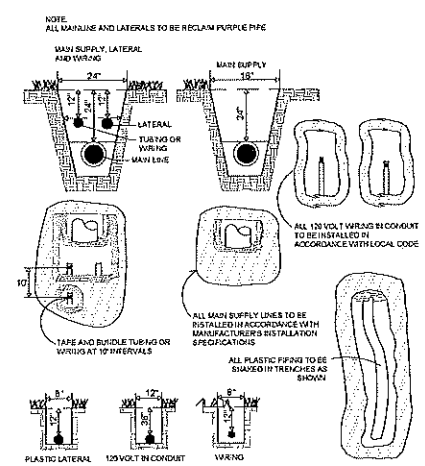
"SUNSHINE STATE ONE CALL OF FLORIDA, INC." 1-800-432-4770 WWW.CALLSUNSHINE.COM



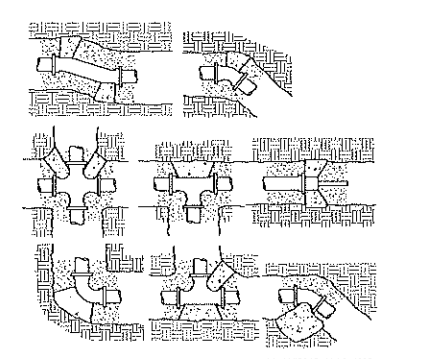
1 ESP-LXME CONTROLLER IN METAL CABINET Scale: N.T.S.



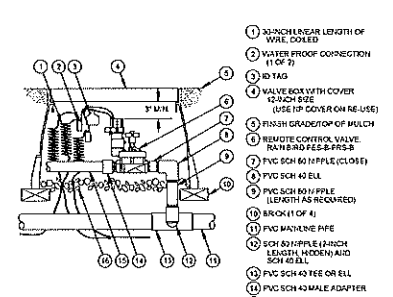
2 WALL MOUNTED RAIN SENSOR Scale: N.T.S.



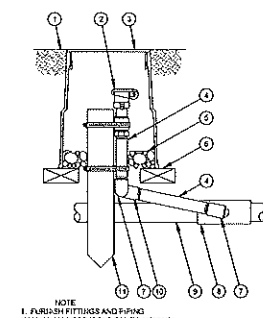
3 TYPICAL TRENCHING DETAIL Scale: N.T.S.



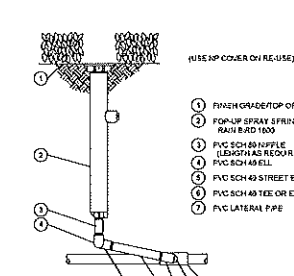
4 TYPICAL THRUST BLOCK DETAIL Scale: N.T.S.



5 REMOTE CONTROL VALVE Scale: N.T.S.



6 QUICK COUPLER VALVE Scale: N.T.S.



7 TYPICAL POP-UP SPRAY HEAD DETAIL Scale: N.T.S.

- TYPICAL IRRIGATION NOTES:**
- UNLESS OTHERWISE NOTED, THE LIMITS OF CONSTRUCTION ARE AS INDICATED ON DRAWINGS.
 - ANY TREES TO REMAIN WITHIN LIMIT OF WORK SHALL BE VERIFIED IN THE FIELD AND PROTECTED FROM DAMAGES.
 - ALL PROJECT BASE INFORMATION PROVIDED BY THE OWNER.
 - REFER TO ENGINEERING DRAWINGS FOR ALL UTILITY LOCATIONS, AND VERIFY IN THE FIELD PRIOR TO COMMENCING WORK. REFER TO ENGINEERING DRAWINGS FOR FINAL GRABINGS AND SPOT ELEVATIONS. VERIFY IN THE FIELD PRIOR TO CONSTRUCTION.
 - THE CONTRACTOR, PRIOR TO BEGINNING ANY UNDERGROUND EXCAVATION, DIGGING, OR BORING MUST FIRST OBTAIN ALL REQUIRED PERMITS. WORK IS NOT AUTHORIZED PRIOR TO THE ISSUANCE OF PERMITS. THE CONTRACTOR SHALL COMPLY WITH FL 77-153 REGARDING NOTIFICATIONS OF EXISTING GAS AND OIL PIPELINE COMPANY OWNERS. EVIDENCE OF SUCH NOTICE SHALL BE FURNISHED TO THE OWNER PRIOR TO EXCAVATING. THE CONTRACTOR SHALL COORDINATE FULLY WITH THE OWNER FOR ALL EXCAVATION PERMITS AND NOTIFICATIONS NECESSARY PRIOR TO INITIATING ALL WORK.
 - VERIFY GALLONAGE AND PRESSURE AVAILABILITY AND REPORT ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT BEFORE COMMENCING WITH THE INSTALLATION.
 - POP-UP SPRINKLER HEADS AND LATERALS SHALL BE INSTALLED 4" FROM EDGE OF PAVEMENT OR WALKS AND FLUSH WITH FINISH GRADE.
 - THE LOCATION OF ALL CONTROLLERS SHALL BE APPROVED BY THE OWNERS REPRESENTATIVE PRIOR TO INSTALLATION.
 - THE CONTRACTOR SHALL BE RESPONSIBLE TO FULLY COORDINATE THE INSTALLATION, LOCATION, AND CONNECTION OF THE POWER SOURCE AND SERVICE WITH THE OWNERS REPRESENTATIVE PRIOR TO INSTALLATION.
 - THE CONTRACTOR SHALL BE RESPONSIBLE TO FULLY COORDINATE THE INSTALLATION, LOCATION, AND CONNECTION OF THE TELEPHONE COMMUNICATION WIRE AND SERVICE WITH THE OWNERS REPRESENTATIVE AND THE COMMUNICATIONS PROVIDER PRIOR TO INSTALLATION.
 - THE CONTRACTOR SHALL BE RESPONSIBLE TO FULLY COORDINATE AND INTEGRATE THE OPERATION SCHEDULE OF THE IRRIGATION CONTROL SYSTEM PER THE OWNERS REPRESENTATIVE'S DIRECTION AND APPROVAL.
 - FIELD ALTERATIONS MADE IN THE IRRIGATION CONTRACT DRAWINGS MUST BE IN THE BEST INTEREST OF THE PLANT MATERIAL, SOO AND LANDSCAPE IRRIGATION SYSTEM. CHANGES MADE BY THE IRRIGATION CONTRACTOR SHALL BE APPROVED BY THE OWNER/LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
 - NO MATERIAL SUBSTITUTIONS ARE ALLOWED. ANY ALTERATION DEEMED BY THE OWNERS REPRESENTATIVE NOT IN CONFORMANCE WITH THE ABOVE CRITERIA SHALL BE REMOVED AND REPLACED AT THE IRRIGATION CONTRACTORS EXPENSE. IF QUESTIONS ARISE AS TO THE BEST WAY TO COMPLETE A FIELD ALTERATION, CONTACT THE OWNERS REPRESENTATIVE FOR APPROVAL.
 - THE LOCATION OF ALL PLANT MATERIAL SHALL BE FIELD STAKED BY THE LANDSCAPE CONTRACTOR FOR APPROVAL BY THE OWNERS REPRESENTATIVE OR LANDSCAPE ARCHITECT PRIOR TO INSTALLATION OF THE IRRIGATION SYSTEM.
 - CHANGES IN HEAD PLACEMENT OR A SPRAY SUBSTITUTION SHOULD ALWAYS TAKE INTO CONSIDERATION:
 - WHAT IS BEST FOR THE GROWTH AND MAINTENANCE OF THE SOO AND PLANT MATERIAL.
 - MAINTAINING A CONSTANT AND EVEN WATER DISTRIBUTION AND PRECIPITATION RATE (I.E., NEVER PUT ROTORS AND SPRAYS IN SAME ZONE)
 - INSTALL ALL CONNECTED PIPING SHOWN BETWEEN DIFFERENT PIPE SIZES LABELS AS THE LARGER OF THE TWO SIZES OF PIPE.
 - INSTALL ALL PIPING TO INDIVIDUAL SPRAY HEADS AND BUBBLERS AS 3/4"
 - EACH TYPE OF ZONE IS TO BE PIPED SEPARATELY. DO NOT INTERCONNECT DIFFERENT TYPES OF ZONES (I.E., ROTORS AND SPRAYS).
 - ANY IRRIGATION ITEMS NORMALLY INSTALLED IN LANDSCAPE AREAS THAT ARE SHOWN OUTSIDE OF LANDSCAPE AREAS OR OUTSIDE OF PROPERTY LINES ARE SHOWN AS SUCH FOR GRAPHIC CLARITY ONLY. INSTALL THESE ITEMS INSIDE OF PROPERTY LINES AND IN LANDSCAPE AREAS.
 - PROVIDE PROOF TO THE LANDSCAPE ARCHITECT THAT ALL AVAILABLE MAINTENANCE MANUALS FOR EACH OF THE PRODUCTS INCLUDED IN THIS INSTALLATION HAVE BEEN PROVIDED TO THE OWNER OR OWNERS REPRESENTATIVE.
 - VALVES ARE SHOWN OUTSIDE OF PLANT BEDS FOR GRAPHIC CLARITY. INSTALL ALL VALVES AND VALVE BOXES IN LAWN AREAS, NOT PLANTING BEDS.
 - THE CONTRACTORS ARE RESPONSIBLE FOR FAMILIARIZING THEMSELVES WITH ALL CODES, INCLUDING THOSE REGARDING SEPARATION DISTANCE MINIMUMS FOR POTABLE WATER VERSUS EFFLUENT WATER AND SHALL INSTALL THE SYSTEM IN ACCORDANCE WITH THOSE CODES.
 - SPACE ALL SPRAY HEADS AT A MAXIMUM OF 55% OF THEIR EFFECTIVE COVERAGE DIAMETER OR CLOSER WHERE SHOWN AS SUCH ON THE PLANS.
 - ALL BAHIA SOO WILL NOT BE IRRIGATED, UNLESS SHOWN OTHERWISE. CONTRACTOR WILL BE RESPONSIBLE FOR HAND WATERING UNTIL IT IS WELL ENOUGH ESTABLISHED TO SURVIVE THROUGH THE WARRANTY PERIOD.
 - ALL IRRIGATION DISTRIBUTION EQUIPMENT SHALL BE NO CLOSER THAN 24" FROM VERTICAL STRUCTURES.
 - CONTRACTOR MUST COMPLY WITH APOPKA ORDINANCE 2069.

I CERTIFY THAT THE LANDSCAPE AND IRRIGATION DESIGN FOR APOPKA MOB IS IN ACCORDANCE WITH THE CITY OF APOPKA'S ORDINANCE 2069 ADOPTED MAY 21, 2008 WHICH ESTABLISHES WATERWISE LANDSCAPE AND IRRIGATION STANDARDS.

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 Certificate of Authorization No. 9230

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APOPKA MEDICAL OFFICE BUILDING
ORANGE BLOSSOM TRAIL
APOPKA, FL
IRRIGATION DETAILS

| revision | description | date |
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| △ | AGENCY COMMENTS | 07-30-18 |
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drawn by: MD
 checked by: MKM
 date: 06-26-2018
 plot scale: AS SHOWN
 project number: MD1830
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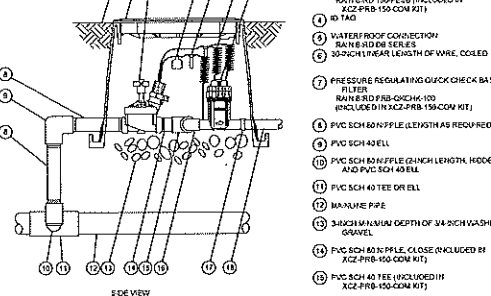
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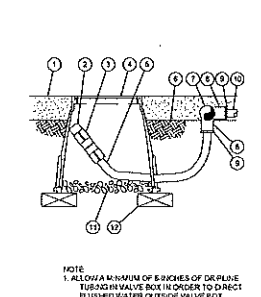
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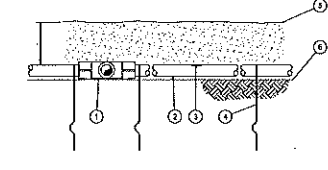
1. FINISH GRADE/OTOP OF MULCH
2. VALVE BOX WITH COVER RAINBRO 100-150
3. REMOTE CONTROL VALVE RAINBRO 100-FERB (INCLUDED IN XZC-PRB-150-COM-KIT)
4. WATERPROOF CONNECTION RAINBRO 100-FTES (INCLUDED IN XZC-PRB-150-COM-KIT)
5. PRESSURE REGULATING QUICK CHECK BASKET FILTER RAINBRO 100-FCOM-100 (INCLUDED IN XZC-PRB-150-COM-KIT)
6. PVC SCH 80 NYLON (LENGTH AS REQUIRED)
7. PVC SCH 40 CELL
8. PVC SCH 80 NYLON (LENGTH HIDDEN) AND PVC SCH 40 CELL
9. PVC SCH 40 TREE OR EL
10. MAINLINE PIPE
11. 3/8"X 3/4" MINIMUM DEPTH OF 3/4" SICH WASHED GRAVEL
12. PVC SCH 80 NYLON, CLOSE (INCLUDED IN XZC-PRB-150-COM-KIT)
13. PVC SCH 40 ELL (INCLUDED IN XZC-PRB-150-COM-KIT)
14. PVC SCH 40 FEMALE ADAPTOR
15. LATERAL PIPE



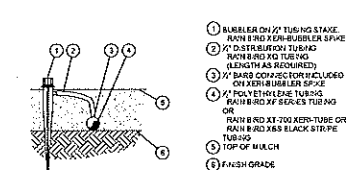
TOP VIEW



NOTE: 1. ALLOW A MINIMUM OF 8 INCHES OF DRIPLINE TUBING IN VALVE BOX IN ORDER TO DIRECT FLUSHED WATER OUTSIDE VALVE BOX



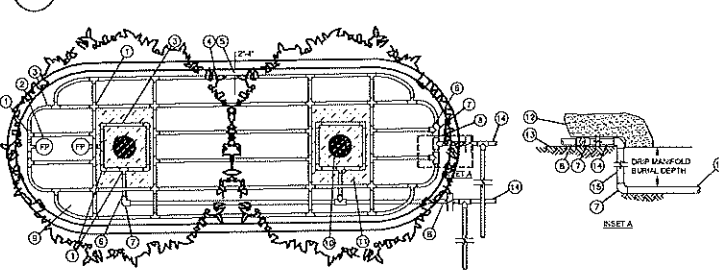
NOTES:
1. PLACE THE DOWN STAKES EVERY THREE FEET IN SAND, FOUR FEET BEYOND, AND FIVE FEET IN CLAY.
2. AT FITTINGS WHERE THERE IS A CHANGE OF DIRECTION SUCH AS TEES OR ELBOWS, USE THE DOWN STAKES ON EACH LEG OF THE CHANGE OF DIRECTION



NOTES:
1. USE RAINBRO XERIAN TOOL, XE-TOOL TO INSERT BARB CONNECTOR DIRECTLY INTO 1/2" OD SCH 40 NYLON TUBING.
2. RAINBRO XERIAN EMITTER SPACING AVAILABLE IN THE FOLLOWING MODELS:
528-100-SPW - HALF CIRCLE - 8 STREAMS - 11 GPM MAX
528-500-SPW - FULL CIRCLE - 8 STREAMS - 11 GPM MAX
USE: 1/2" DIA - 1/4" BORE - 1/4" DIA - 1/4" DIA

1 XZC-PRB DRIP CONTROL ZONE KIT

Scale: N.T.S.

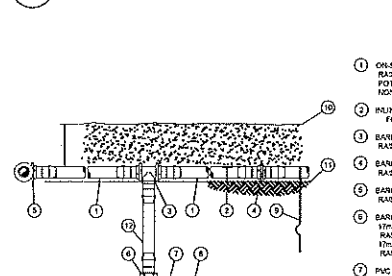


| Net Pressure (psi) | 12" Spacing | | | 18" Spacing | | | 24" Spacing | | |
|--------------------|--------------|------------|----------------|--------------|------------|----------------|--------------|------------|----------------|
| | 1/2" Spacing | 1" Spacing | 1 1/2" Spacing | 1/2" Spacing | 1" Spacing | 1 1/2" Spacing | 1/2" Spacing | 1" Spacing | 1 1/2" Spacing |
| 15 | 273 | 155 | 314 | 250 | 124 | 244 | 199 | 124 | 224 |
| 20 | 318 | 189 | 353 | 294 | 156 | 288 | 224 | 156 | 268 |
| 30 | 360 | 225 | 413 | 350 | 188 | 344 | 278 | 188 | 328 |
| 40 | 396 | 255 | 465 | 402 | 222 | 392 | 328 | 222 | 378 |
| 50 | 417 | 285 | 514 | 430 | 250 | 428 | 358 | 250 | 418 |
| 60 | 440 | 300 | 556 | 458 | 270 | 470 | 388 | 270 | 458 |

NOTES:
1. DISTANCE BETWEEN LATERAL ROWS AND EMITTER SPACING TO BE BASED ON SOIL TYPE, PLANT MATERIALS AND CHANGES IN ELEVATION. SEE INSTALLATION SPECIFICATIONS ON RAINBRO WEBSITE (WWW.RAINBRO.COM) FOR SUGGESTED SPACING.
2. LENGTH OF LOWEST DRAINAGE LATERAL SHOULD NOT EXCEED THE MAXIMUM SPACING SHOWN IN THE ACCOMPANYING TABLE.
3. PLACE THE DOWN STAKES EVERY THREE FEET IN SAND, FOUR FEET IN LOAM, AND FIVE FEET IN CLAY.
4. AT FITTINGS WHERE THERE IS A CHANGE OF DIRECTION SUCH AS TEES OR ELBOWS, USE THE DOWN STAKES ON EACH LEG OF THE CHANGE OF DIRECTION.
5. WHEN USING TUBING INSERT FITTINGS WITH DESIGNS PRESSURE OVER SOUP, IT IS RECOMMENDED THAT STAINLESS STEEL CLAMPS BE INSTALLED ON EACH FITTING.

2 DRIP LINE FLUSH POINT

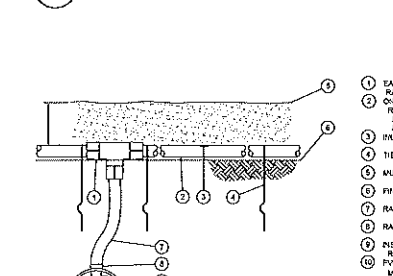
Scale: N.T.S.



NOTES:
1. PLACE THE DOWN STAKES EVERY THREE FEET IN SAND, FOUR FEET IN LOAM, AND FIVE FEET IN CLAY.
2. AT FITTINGS WHERE THERE IS A CHANGE OF DIRECTION SUCH AS TEES OR ELBOWS, USE THE DOWN STAKES ON EACH LEG OF THE CHANGE OF DIRECTION.
3. SAVE YOUR HANDS: USE THE RAINBRO FITTING TOOL, IF NECESSARY, FOR FITTING ASSEMBLY.

3 DRIP LINE AT GRADE

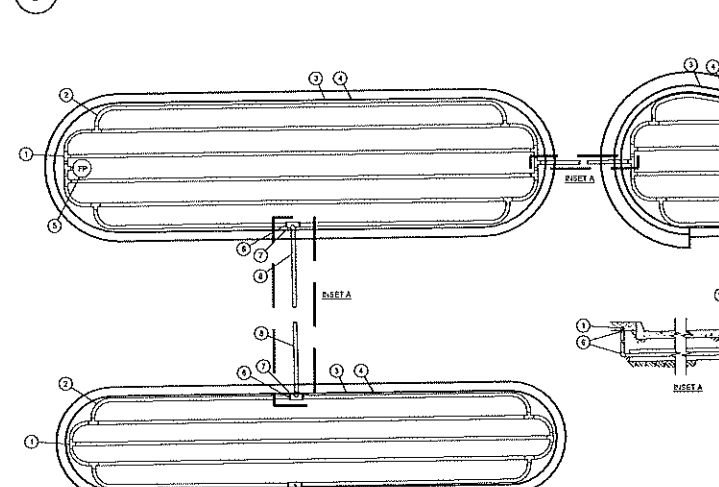
Scale: N.T.S.



NOTES:
1. PLACE THE DOWN STAKES EVERY THREE FEET IN SAND, FOUR FEET IN LOAM, AND FIVE FEET IN CLAY.
2. AT FITTINGS WHERE THERE IS A CHANGE OF DIRECTION SUCH AS TEES OR ELBOWS, USE THE DOWN STAKES ON EACH LEG OF THE CHANGE OF DIRECTION.

5 DRIP LINE PARKING LOT ISLANDS TYPICAL

Scale: N.T.S.

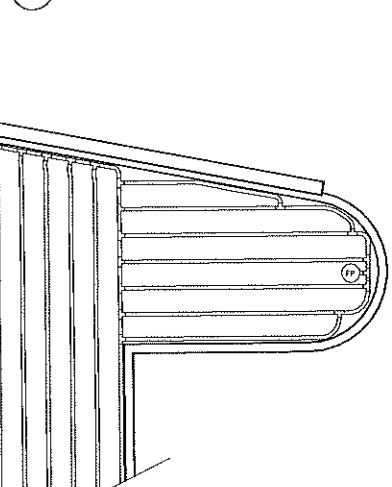


| Net Pressure (psi) | 12" Spacing | | | 18" Spacing | | | 24" Spacing | | |
|--------------------|--------------|------------|----------------|--------------|------------|----------------|--------------|------------|----------------|
| | 1/2" Spacing | 1" Spacing | 1 1/2" Spacing | 1/2" Spacing | 1" Spacing | 1 1/2" Spacing | 1/2" Spacing | 1" Spacing | 1 1/2" Spacing |
| 15 | 273 | 155 | 314 | 250 | 124 | 244 | 199 | 124 | 224 |
| 20 | 318 | 189 | 353 | 294 | 156 | 288 | 224 | 156 | 268 |
| 30 | 360 | 225 | 413 | 350 | 188 | 344 | 278 | 188 | 328 |
| 40 | 396 | 255 | 465 | 402 | 222 | 392 | 328 | 222 | 378 |
| 50 | 417 | 285 | 514 | 430 | 250 | 428 | 358 | 250 | 418 |
| 60 | 440 | 300 | 556 | 458 | 270 | 470 | 388 | 270 | 458 |

NOTES:
1. DISTANCE BETWEEN LATERAL ROWS AND EMITTER SPACING TO BE BASED ON SOIL TYPE, PLANT MATERIALS AND CHANGES IN ELEVATION. SEE INSTALLATION SPECIFICATIONS ON RAINBRO WEBSITE (WWW.RAINBRO.COM) FOR SUGGESTED SPACING.
2. LENGTH OF LOWEST DRAINAGE LATERAL SHOULD NOT EXCEED THE MAXIMUM SPACING SHOWN IN THE ACCOMPANYING TABLE.
3. PLACE THE DOWN STAKES EVERY THREE FEET IN SAND, FOUR FEET IN LOAM, AND FIVE FEET IN CLAY.
4. AT FITTINGS WHERE THERE IS A CHANGE OF DIRECTION SUCH AS TEES OR ELBOWS, USE THE DOWN STAKES ON EACH LEG OF THE CHANGE OF DIRECTION.

6 DRIP LINE RISER ASSEMBLY

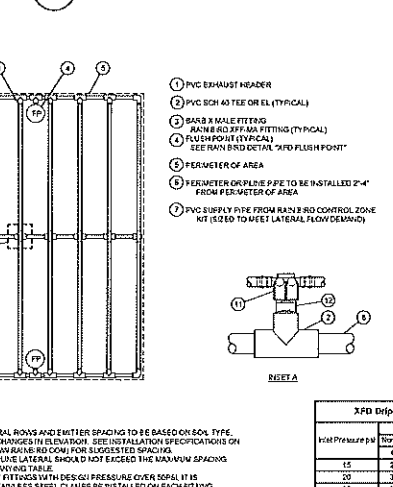
Scale: N.T.S.



NOTES:
1. PLACE THE DOWN STAKES EVERY THREE FEET IN SAND, FOUR FEET IN LOAM, AND FIVE FEET IN CLAY.
2. AT FITTINGS WHERE THERE IS A CHANGE OF DIRECTION SUCH AS TEES OR ELBOWS, USE THE DOWN STAKES ON EACH LEG OF THE CHANGE OF DIRECTION.

7 DRIP LINE INSERT ADAPTER

Scale: N.T.S.



| Net Pressure (psi) | 12" Spacing | | | 18" Spacing | | | 24" Spacing | | |
|--------------------|--------------|------------|----------------|--------------|------------|----------------|--------------|------------|----------------|
| | 1/2" Spacing | 1" Spacing | 1 1/2" Spacing | 1/2" Spacing | 1" Spacing | 1 1/2" Spacing | 1/2" Spacing | 1" Spacing | 1 1/2" Spacing |
| 15 | 273 | 155 | 314 | 250 | 124 | 244 | 199 | 124 | 224 |
| 20 | 318 | 189 | 353 | 294 | 156 | 288 | 224 | 156 | 268 |
| 30 | 360 | 225 | 413 | 350 | 188 | 344 | 278 | 188 | 328 |
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9 DRIP LINE PARKING LOT TYPICAL

Scale: N.T.S.



| Net Pressure (psi) | 12" Spacing | | | 18" Spacing | | | 24" Spacing | | |
|--------------------|--------------|------------|----------------|--------------|------------|----------------|--------------|------------|----------------|
| | 1/2" Spacing | 1" Spacing | 1 1/2" Spacing | 1/2" Spacing | 1" Spacing | 1 1/2" Spacing | 1/2" Spacing | 1" Spacing | 1 1/2" Spacing |
| 15 | 273 | 155 | 314 | 250 | 124 | 244 | 199 | 124 | 224 |
| 20 | 318 | 189 | 353 | 294 | 156 | 288 | 224 | 156 | 268 |
| 30 | 360 | 225 | 413 | 350 | 188 | 344 | 278 | 188 | 328 |
| 40 | 396 | 255 | 465 | 402 | 222 | 392 | 328 | 222 | 378 |
| 50 | 417 | 285 | 514 | 430 | 250 | 428 | 358 | 250 | 418 |
| 60 | 440 | 300 | 556 | 458 | 270 | 470 | 388 | 270 | 458 |

NOTES:
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I CERTIFY THAT THE LANDSCAPE AND IRRIGATION DESIGN FOR AOPOKA MOB IS IN ACCORDANCE WITH THE CITY OF AOPOKA'S ORDINANCE 2069 ADOPTED MAY 21, 2008 WHICH ESTABLISHES WATERWISE LANDSCAPE AND IRRIGATION STANDARDS.

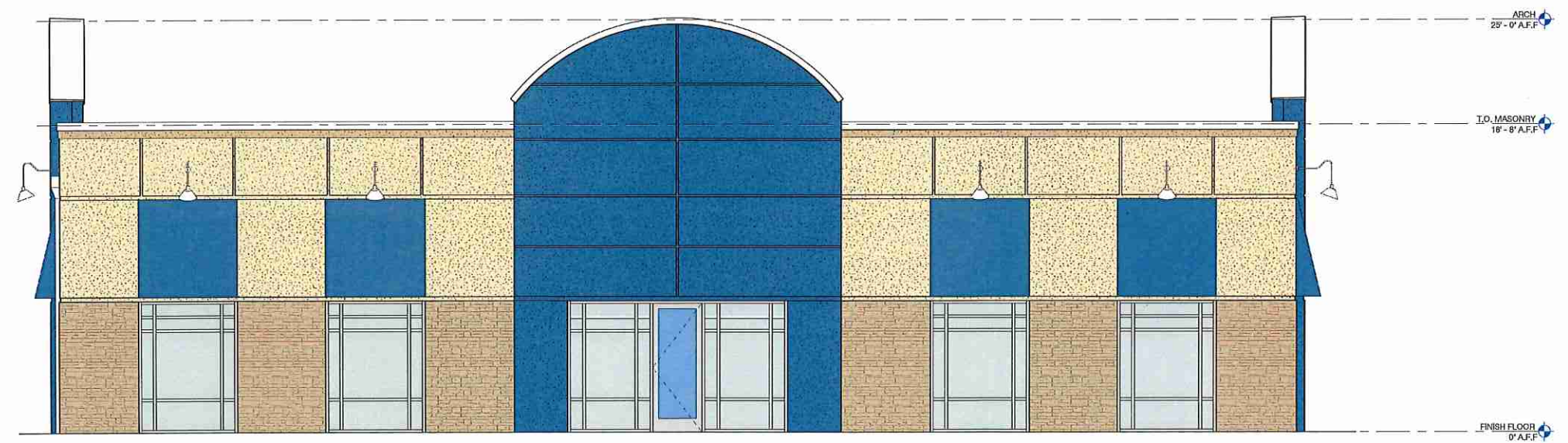
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WWW.CALLSUNSHINE.COM
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A MAX. OF 2 DAYS AND A MAX. OF 3 DAYS BEFORE YOU EXCAVATE. YOU ARE TO NOTIFY SUNSHINE STATE ONE CALL OF FLORIDA SEE "EXCAVATION GUIDE" - LATEST EDITION



SOUTH ELEVATION

SCALE: 1/4" = 1'-0"

1



NORTH ELEVATION

SCALE: 1/4" = 1'-0"

2

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 PARKWAY
 SUITE 250
 LAKE MARY, FLORIDA 32746
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 FAX: 407 556 0335
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SCOTT D. MALENOCK
 ARCHITECT ID#4969



A NEW DEVELOPMENT FOR
APOPKA MEDICAL BUILDING
 ORANGE BLOSSUM TRAIL
 APOPKA, FLORIDA

THIS DRAWING HAS BEEN ISSUED:
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 FOR PERMITTING ONLY
 SCHEMATIC DESIGN
 DESIGN DEVELOPMENT
 CONSTRUCTION DOCUMENTS

Drawing Title:
 COLOR ELEVATIONS

Date: 06/29/2018

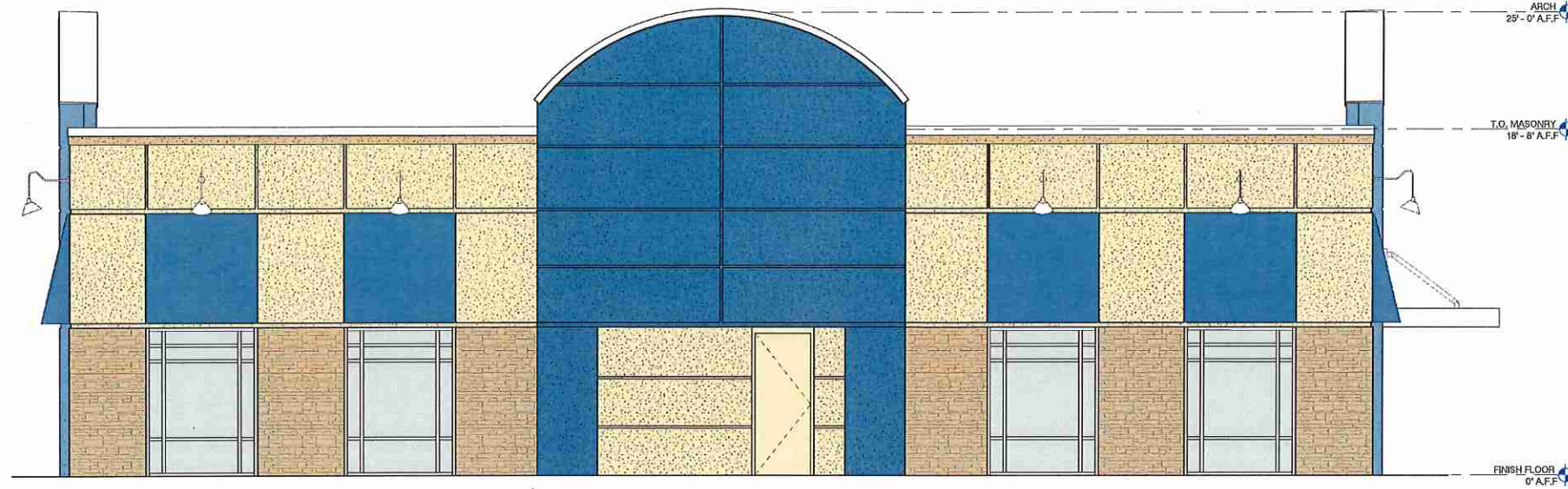
Designed By:
 Drawn By:
 Reviewed By:

Comm. No.
 Revisions:

Sheet: Sheet No. of A4.1-C

COLORS/ FINISHES:

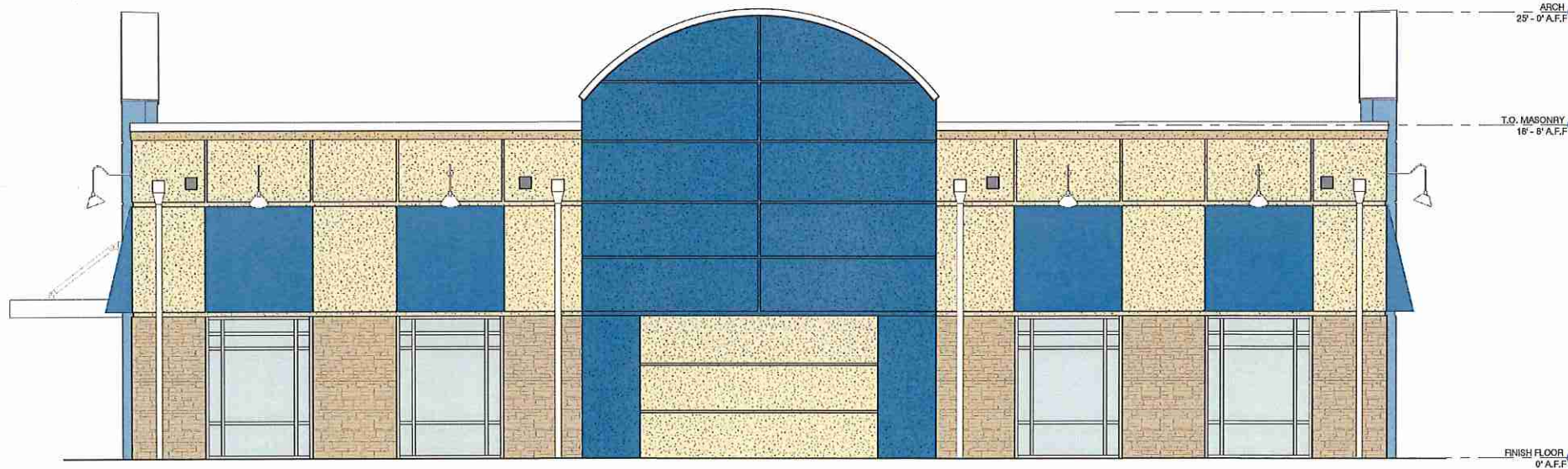
- 1 SIMULATED STACKED STONE TO BE STONE FIRST PROFESSIONALS - 'AUTUMN WHEAT'
- 2 TRIM COLOR: DECORATIVE BAND COLOR TO MATCH BENJAMIN MOORE 'NUGGET' (BM #AC-9)
- 3 COLOR TO MATCH SENTICLAD 'BONE WHITE'
- 4 BASE COLOR: EFS FIELD COLOR TO MATCH BENJAMIN MOORE 'OKLAHOMA WHEAT' (BM #2160-50)
- 5 ACCENT COLOR: CENTRA CARE BLUE ACCENT COLOR TO MATCH BEHR 'COBALT GLAZE' (570B-7), SANDBLAST FINISH



WEST ELEVATION

SCALE: 1/4" = 1'-0"

1



EAST ELEVATION

SCALE: 1/4" = 1'-0"

2

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A4000028 183000095

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ARCHITECT ID#9900



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APOPKA, FLORIDA

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Drawing Title:
COLOR ELEVATIONS

Date: 06/29/2018

Designed By:

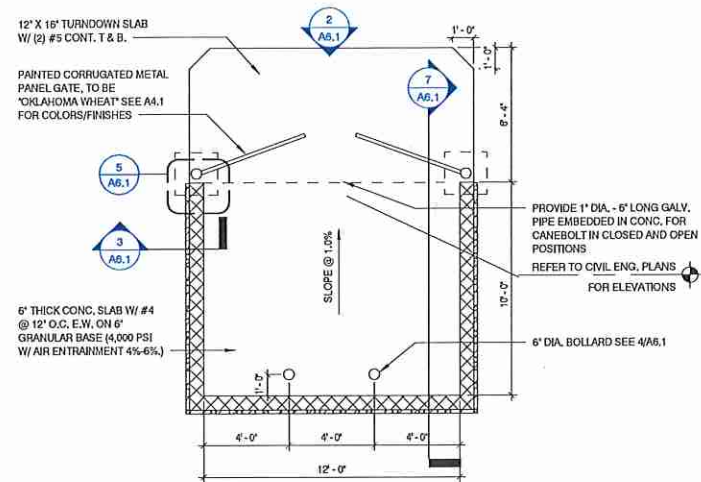
Drawn By:

Reviewed By:

Comm. No.

Revisions:

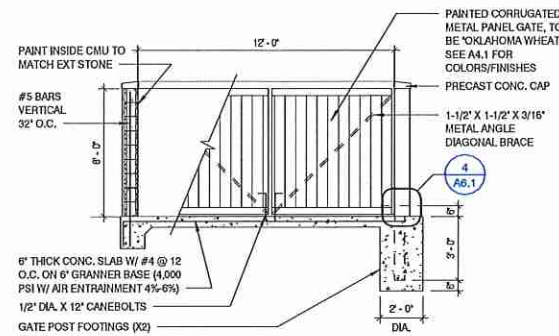
Sheet: _____
of _____
Sheet No. **A4.2-C**



DUMPSTER PLAN

SCALE: 1/4" = 1'-0"

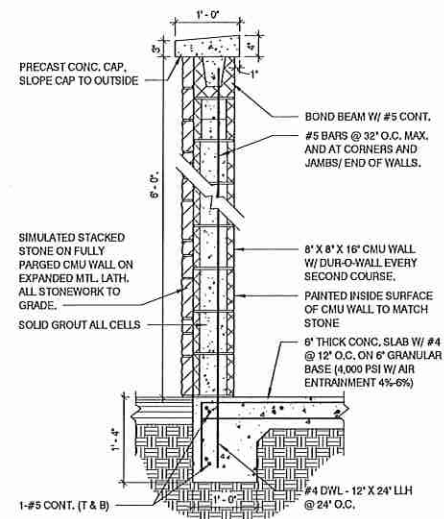
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ELEVATION

SCALE: 1/4" = 1'-0"

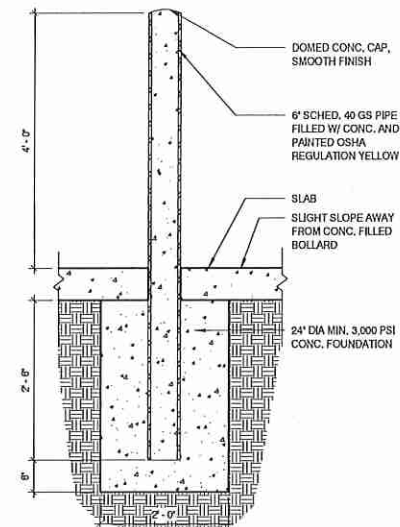
2



SECTION

SCALE: 3/4" = 1'-0"

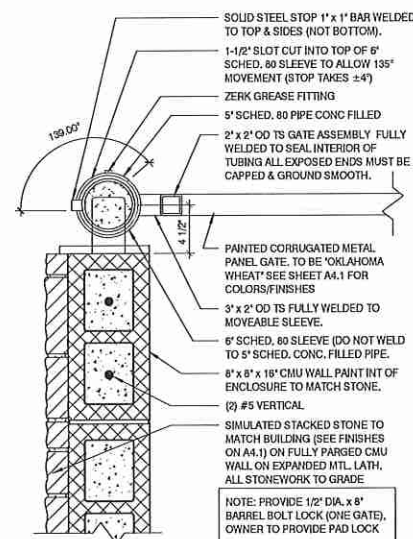
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BOLLARD DETAIL

SCALE: 3/4" = 1'-0"

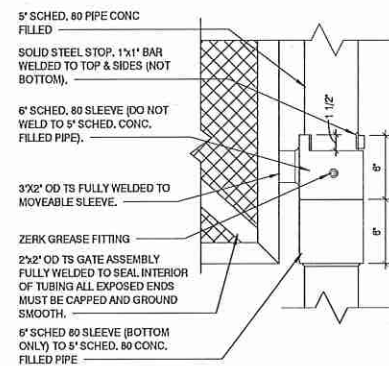
4



HINGE PLAN DETAIL

SCALE: 1 1/2" = 1'-0"

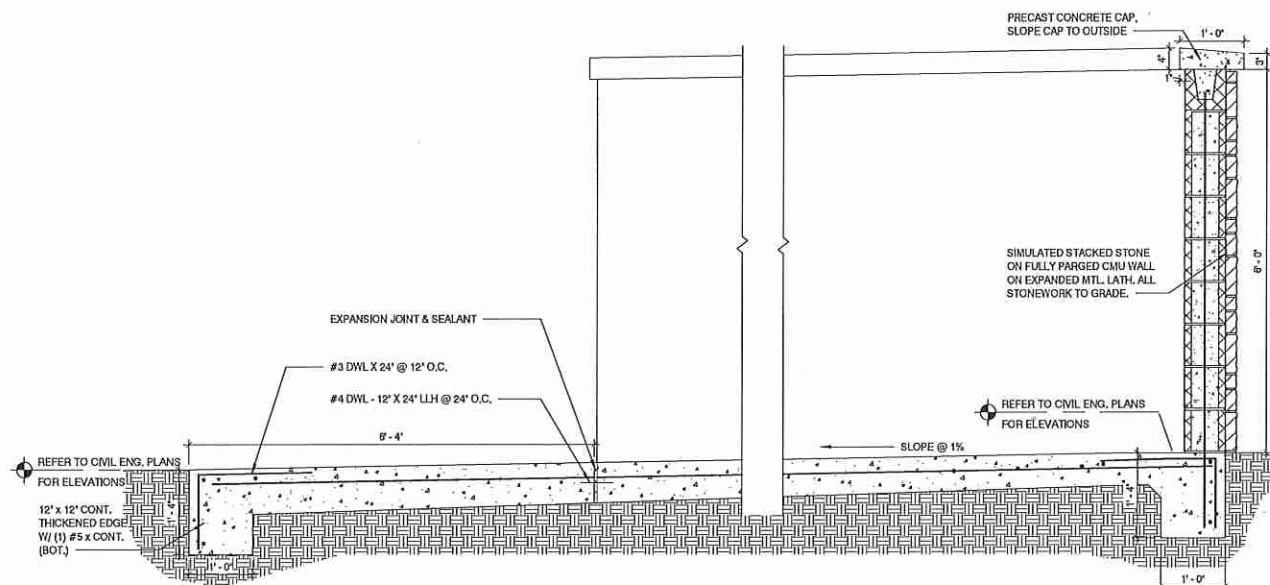
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HINGE ELEVATION

SCALE: 1 1/2" = 1'-0"

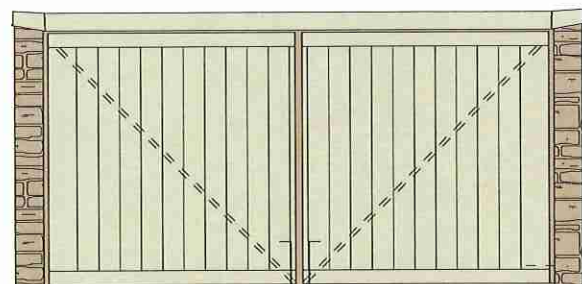
6



DUMPSTER PAD SECTION

SCALE: 3/4" = 1'-0"

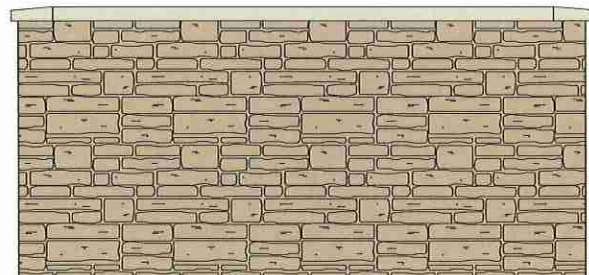
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FRONT ELEVATION

SCALE: 1/2" = 1'-0"

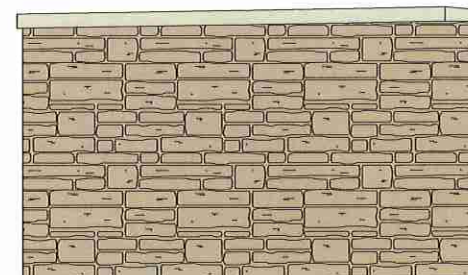
8



REAR ELEVATION

SCALE: 1/2" = 1'-0"

9



SIDE ELEVATION

SCALE: 1/2" = 1'-0"

10

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SCOTT D. MALENOCK
AR02510 ID0660

A NEW DEVELOPMENT FOR:
APOKA MEDICAL BUILDING
ORANGE BLOSSOM TRAIL
APOKA, FLORIDA

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 DESIGN DEVELOPMENT
 CONSTRUCTION DOCUMENTS

Drawing Title:
DUMPSTER ENCLOSURE & DETAILS

Date: 06/29/2018

Designed By: A.L.S.
Drawn By: L.D.A.
Reviewed By: S.D.M.

Comm. No.

Revisions:

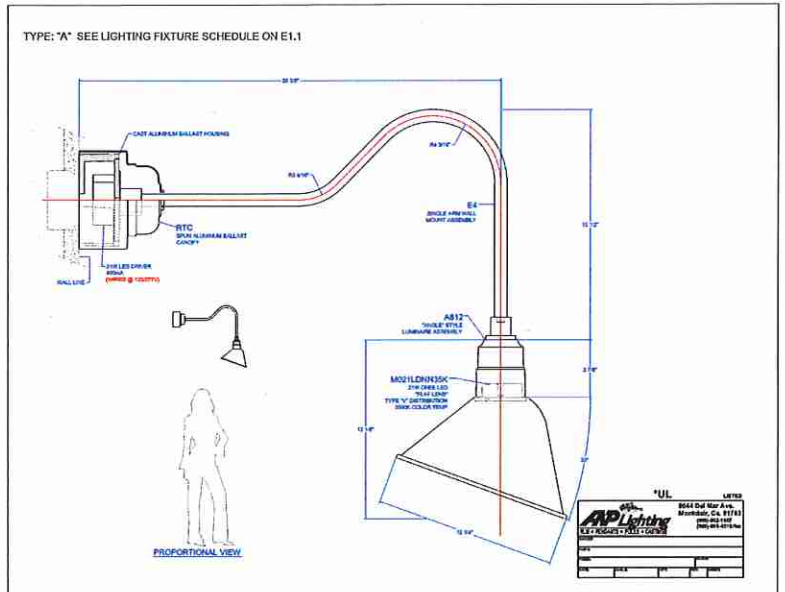
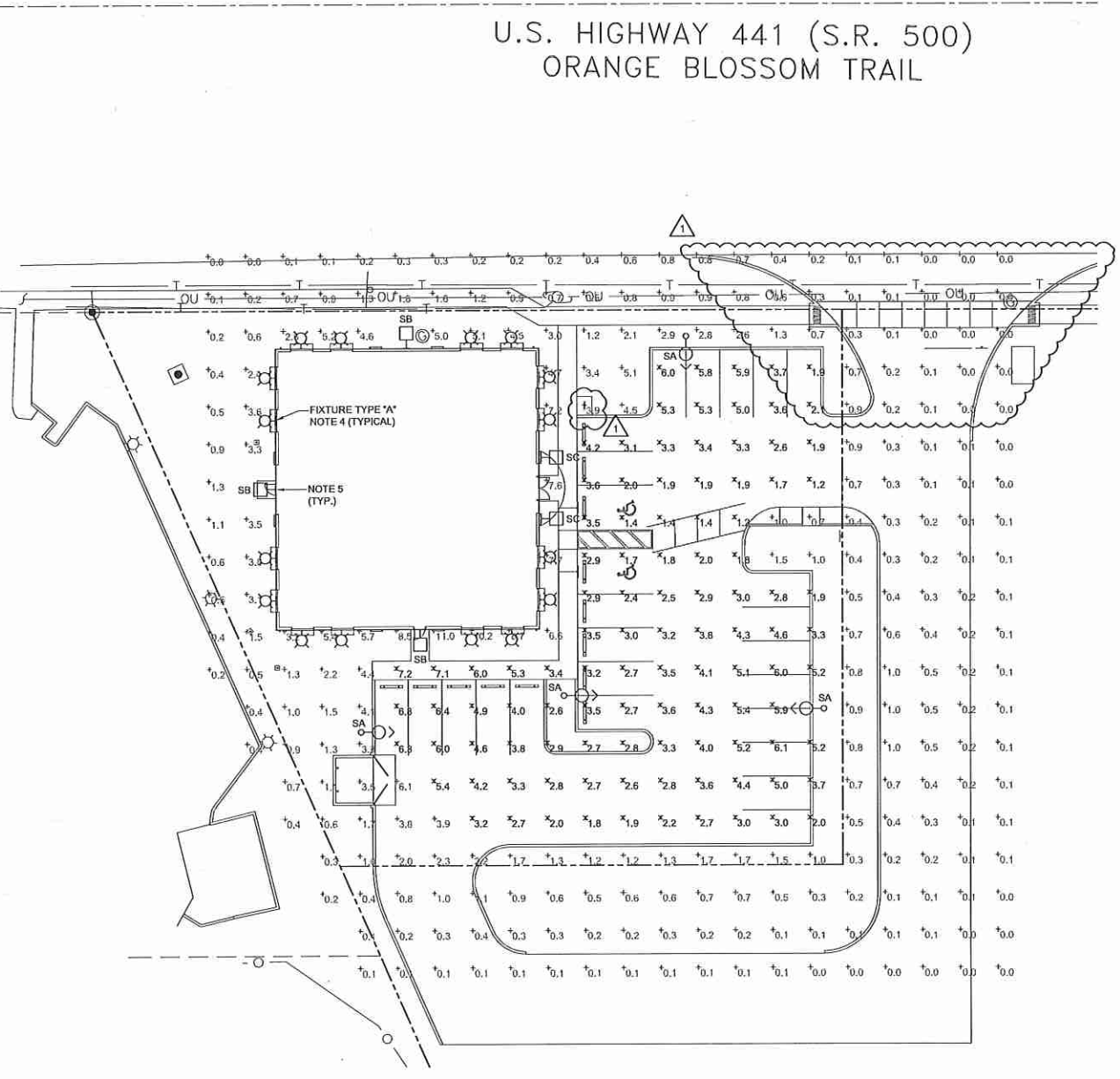
REV #1 07/30/18

Sheet: Sheet No. A6.1
of

| SITE LIGHTING FIXTURE SCHEDULE | | | | | | | | | |
|--------------------------------|------|-----|-------|-------|----------|--------|----------------------|--------------------------------------|--|
| TYPE | LAMP | NO. | WATTS | VOLTS | MOUNTING | HEIGHT | MANUFACTURER | CATALOG NO. | REMARKS |
| SA | LED | - | 145 | 208 | POLE | 20'-0" | ANTIQUE STREET LAMPS | EML25-RT-63525-4K-GCF-208-R4-DOB | DARK SKIES DECORATIVE STREET LAMP |
| SB | LED | - | 40 | 120 | WALL | NOTE 3 | LITHONIA | MRW-LED-P3-40K-SR3-MVOLT-E10WH-DWHXD | DARK SKIES LED WALL PACK WBATTERY BACK-UP, COLOR WHITE |
| SC | LED | - | 20 | 120 | WALL | NOTE 3 | LITHONIA | MRW-LED-P1-40K-SR3-MVOLT-E10WH-DWHXD | DARK SKIES LED WALL PACK WBATTERY BACK-UP, COLOR WHITE |
| P1 | | | | | | | ANTIQUE STREET LAMPS | EPAX-20-S4S6-ANDB WARM EAD41-ANDB | 20'-0" DECORATIVE POLE AND MOUNTING ARM |

NOTES:
 1. FURNISH AND INSTALL LAMPS FOR ALL FIXTURES
 2. CONTRACTOR MUST SUBMIT ENGINEERING AND SPECIFICATIONS FOR LIGHT POLES AT TIME OF PERMIT SUBMITTAL TO SHOW THAT LIGHT POLES ARE DESIGNED FOR A MINIMUM 141 MPH WIND SPEED.
 3. MOUNTING HEIGHTS VARY, SEE ARCHITECTS EXTERIOR ELEVATIONS FOR MOUNTING HEIGHTS.
 4. ALTERNATE MANUFACTURERS ARE ACCEPTABLE AS APPROVED BY THE OWNER AND ENGINEER. CONTRACTOR TO SUPPLY POINT-TO-POINT PHOTOMETRIC CALCULATIONS WITH THE AVERAGE, MAXIMUM, MINIMUM, MAX/MIN, AVG/MIN, CALCULATION ZONE HEIGHTS, LIGHT LOSS FACTOR, AND FIXTURE SPECIFICATIONS A MINIMUM OF 4 WEEKS BEFORE BID.

| PHOTOMETRIC SUMMARY | | | | | | | | |
|----------------------------------|--------|--------|---------|--------|---------|---------|------|--|
| PROJECT: APOPKA MEDICAL BUILDING | | | | | | | | |
| LABEL | SYMBOL | AVG | MAX | MIN | MAX/MIN | AVG/MIN | LLF | |
| CALC ZONE | + | 1.9 FC | 11.9 FC | 0.0 FC | N/A | N/A | 0.95 | |
| PARKING/DRIVE AISLE | ⌘ | 3.6 FC | 7.2 FC | 1.2 FC | 6.0:1 | 3.0:1 | 0.95 | |



- NOTES:
- SEE SHEET E0.1 FOR ELECTRICAL LEGEND AND GENERAL NOTES.
 - MOUNT FIXTURES SO THAT LIGHT IS DIRECTED IN THE DIRECTION OF THE ARROWS SHOWN ON THIS PLAN.
 - LIGHTING SHALL COMPLY WITH APPLICABLE REQUIREMENTS OF ALL COUNTY AND CITY CODES.
 - LIGHT FROM THE GOOSENECK FIXTURE TYPE 'A' WILL BE DIRECTED ONTO THE BUILDING FACADE WITH NO VISIBLE GLARE FROM THE LAMP. SEE FIXTURE TYPE 'A' DETAIL ON THIS SHEET.
 - DARK SKIES WALL PACK FIXTURE TYPE 'SB' AND 'SC', SEE TENANT DRAWINGS FOR CONTROLS AND CIRCUITING. SEE FIXTURE SPECIFICATION SHEET AND SITE LIGHTING FIXTURE SCHEDULE FOR ADDITIONAL INFORMATION.

MRW LED Architectural Wall Sconce

SEE SITE LIGHTING FIXTURE SCHEDULE
 FIXTURE "SB" AND "SC"

Introduction
 The classic Architectural Wall Sconce is now available with the latest in LED technology. The result is a long life, maintenance-free product with typical energy savings of 75% compared to metal halide versions. The integral battery back-up option provides emergency egress lighting, without the use of a back box or tamper gear, so installations maintain their aesthetic integrity. The MRW LED is ideal for replacing existing 50-175W metal halide wall mounted products. The expected service life is 20+ years of nighttime use.

Specifications Luminaire
 Height: 7 1/4" (183mm)
 Width: 1 1/2" (38mm)
 Depth: 5" (127mm)
 Weight: 1.8 lbs (0.8kg)

Optional Back Box (BBW)
 Height: 4" (102mm)
 Width: 1 1/2" (38mm)
 Depth: 1 1/2" (38mm)
 Weight: 0.8 lbs (0.4kg)

Emergency Battery Operation
 The emergency battery back-up system is a long life, maintenance-free product. The battery back-up system is designed to provide 90 minutes of emergency lighting. The battery back-up system is designed to provide 90 minutes of emergency lighting. The battery back-up system is designed to provide 90 minutes of emergency lighting.

Ordering Information
 EXAMPLE: MRW LED 2 10A700/40K 583 MVOLT DOBTKD

| MRW LED | Light Output | Power Input | Color Temp | Beam Angle | Mounting | Notes | Accessories |
|-----------|--------------|-------------|------------|------------|--------------|--------------|-------------|
| MRW LED 1 | 1000lm | 10W | 4000K | 120° | Direct Mount | Direct Mount | BBW |
| MRW LED 2 | 1000lm | 10W | 4000K | 120° | Direct Mount | Direct Mount | BBW |
| MRW LED 3 | 1000lm | 10W | 4000K | 120° | Direct Mount | Direct Mount | BBW |

LITHONIA LIGHTING
 One Atlanta Way • Conley, Georgia 30133 • Phone 800.275.8541 • Fax 770.812.2777 • www.lithonia.com

ANTIQUE STREET LAMPS EML25 LED MUNICH PENDANT

SEE SITE LIGHTING FIXTURE SCHEDULE
 FIXTURE "SA"

Ordering Guide:

| Fixture | Base | Socket & Voltage | Color Temp | Lamp Option | Voltage | Distribution | Options | Finish |
|---------|------|------------------|------------|-------------|---------|--------------|---------|--------|
| EML25 | ST | 41LED 350MA | 3K | GCF | AVOLT | R3 | ST | DBL |
| | FE | 41LED 350MA | 4K | GCSG | 120 | R3 | LF | DOB |
| | FT | 41LED 350MA | 5K | GCSG | 208 | R3 | IFD | DOB |
| | | 41LED 350MA | | | 240 | R3 | | DOB |
| | | 41LED 350MA | | | 277 | R3 | | DOB |
| | | 41LED 350MA | | | 347 | R3 | | DOB |
| | | 41LED 350MA | | | 480 | R3 | | DOB |

ANTIQUE STREET LAMP | 3225 Columbia Road | Grapeland, OH 43024 | Phone 1-800-413-8871 | www.antsighting.com
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RECOMMENDED POLES & ARMS

ANTIQUE STREET LAMPS EML25

PENDANT WALL BRACKET SERIES | **PHILADELPHIA SERIES** | **URBAN ALUMINUM POLE SERIES** | **URBAN STEEL POLE SERIES**

For detailed product specifications for Pole and Arm/Head Hardware see the Antique Street Lamps website.

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Drawing Title:
 SITE PLAN - PHOTOMETRIC

Date: 06/29/2018

Designed By: CHP
 Drawn By: JEE
 Reviewed By: CHP

Comm. No. 180000

Revisions:
 REVISION #01 07/30/2018

Sheet No. ES.1.2



CITY OF APOPKA PLANNING COMMISSION

PUBLIC HEARING
 SITE PLAN
 SPECIAL REPORTS
 OTHER: Plat

MEETING OF: September 11, 2018
FROM: Community Development
EXHIBITS: Vicinity Map
Aerial Map
Plat
Final Development Plan

SUBJECT: PLAT - LAKESIDE, PHASE 2 RESIDENTIAL SUBDIVISION

REQUEST: RECOMMEND APPROVAL OF THE PLAT FOR LAKESIDE, PHASE 2, RESIDENTIAL SUBDIVISION

SUMMARY:

OWNER: Avatar Properties Inc.
APPLICANT: Appian Engineering, LLC, c/o Luke M. Classon, P.E.
LOCATION: South of Marshall Lake and West of SR 451
EXISTING USE: Vacant land
FUTURE LAND USE: Low Density Residential, Mixed-Use
ZONING: PUD (Planned Unit Development)
PROPOSED USE: 124 single-family homes
TRACT SIZE: 154.18 +/- acres
DEVELOPABLE AREA: 52.06 +/- acres

DISTRIBUTION

Mayor Nelson
Commissioners
City Administrator
Community Development Director

Finance Director
HR Director
IT Director
Police Chief

Public Services Director
Recreation Director
City Clerk
Fire Chief

PLANNING COMMISSION – SEPTEMBER 11, 2018
LAKESIDE, PHASE 2 PLAT
PAGE 2

RELATIONSHIP TO ADJACENT PROPERTIES:

| <i>Direction</i> | <i>Future Land Use</i> | <i>Zoning</i> | <i>Present Use</i> |
|------------------|--|-------------------------|---|
| North (City) | Industrial (max 0.60 FAR) | I-1 | John’s Nursery, vacant property |
| East (City) | Industrial, None assigned (SR 451 right-of-way) | I-1, no zoning assigned | Existing agricultural use (John’s Nursery), SR 451 right-of-way |
| South (City) | Low Density Residential (0-5 du/ac), Commercial (max 0.25 FAR) | R-1A, C-1 | Vacant property, SR 451 retention pond |
| West (City) | Low Density Residential (0-5 du/ac) | PUD | Breckenridge residential subdivision buffer tract |

Project Use: On April 4, 2018 the City Council approved a PUD Master Plan/Preliminary Development Plan for the Lake Marshall subdivision, which details the development of 301 single family residential lots in two phases. The subject property is located south of Marshall Lake and west of SR 451. The surrounding properties consist primarily of single-family residential and agricultural uses. The developer has submitted a Final Development Plan and Plat for phase 2 of the Lake Marshall subdivision, now named Lakeside.

The applicant is requesting approval of the Plat for Phase 2 of Lakeside. The Lakeside Phase 2 plat is for 124 single-family residential lots. All internal roadways are proposed as privately owned and maintained, and the subdivision will be gated. Consistent with the approved PUD Master Plan/Preliminary Development Plan, lot widths of 55-feet and 60-feet are provided on the Phase 2 plat. A minimum living area of 1,600 square feet is provided for all units located within Phase 2.

The minimum setbacks applicable to this project are:

| Setback | Min. Standard |
|----------------|--------------------------------|
| Front | 25’ |
| Side | 5’ – 60’ lot 7.5’ – 55’ lot |
| Rear | 20’ |
| Corner | 15’ |

Access: Ingress/egress access points for the development will be via Johns Road. Adjacent to the west of the subject property is the Breckenridge subdivision. A gated access for emergency vehicles will be provided between the two subdivisions. This access point will only be for emergency vehicles. In response to the Breckenridge homeowners association, pedestrian access will not be permitted between the two subdivisions.

Stormwater: There are three (3) retention ponds designed to meet the City’s Land Development Code requirements.

Recreation and Open Space: Consistent with the approved PUD Master Plan/Preliminary Development Plan, the recreation package will be located within Phase 1 and will consist of a cabana with restrooms, a swimming pool, a playground, and a mixed-use active field at a minimum. In addition the developer is dedicating a tract in Phase 1 adjacent to Marshall Lake as a Community Lake Park that will have a community dock, and a 1.03 acre open space tract across the street from this park. These amenities will be

PLANNING COMMISSION – SEPTEMBER 11, 2018
LAKESIDE, PHASE 2 PLAT
PAGE 3

available to residents in Phase 2. In the Phase 2 area, two tracts will be dedicated as a park/open space area. A 15.12 acre Conservation area within Tract “II” will also be dedicated with an easement to the St. Johns River Water Management District.

Buffer/Tree Program: Consistent with the approved PUD Master Plan/Preliminary Development Plan, landscaping is provided at the subdivision entrance on Johns Road, a 10-foot landscape buffer is provided along Johns Road, and a 20-foot wide landscape buffer is provided along SR 451. An existing 50-foot landscape buffer occurs along the western and northern project line within the Breckenridge plat. This buffer is noted as a tract on the Breckenridge plat. The Lake Marshall development will not be visible from the homes within Breckenridge or along SR 451.

The following is a summary of the tree replacement program for this project:

| | |
|----------------------------------|--------|
| Total inches on-site: | 15,296 |
| Total number of specimen trees: | 45 |
| Total inches removed: | 15,161 |
| Total inches retained: | 135 |
| Total inches replaced: | 2,502 |
| Total Inches (Post Development): | 4,637 |

SCHOOL CAPACITY REPORT: The developer has obtained a school concurrency mitigation agreement with Orange County Public Schools to address school impacts generated by this residential development. The schools zoned to receive students from this community are the following: Apopka Elementary School, Wolf Lake Middle School and Apopka High School.

ORANGE COUNTY NOTIFICATION: The County was notified at the time of the subdivision plan and plat for this property through the DRC agenda distribution.

PUBLIC HEARING SCHEDULE:

September 11, 2018 - Planning Commission, 5:30 p.m.

October 3, 2018 - City Council, 1:30 p.m.

RECOMMENDATION ACTION:

The **Development Review Committee** recommends approval of the Lakeside, Phase 2 Plat subject to the final review by the City surveyor and City Engineer prior to recording the plat.

Recommended Motion: Recommend approval of the Lakeside, Phase 2 Plat, subject to final review by the City surveyor and City Engineer prior to recording the plat.

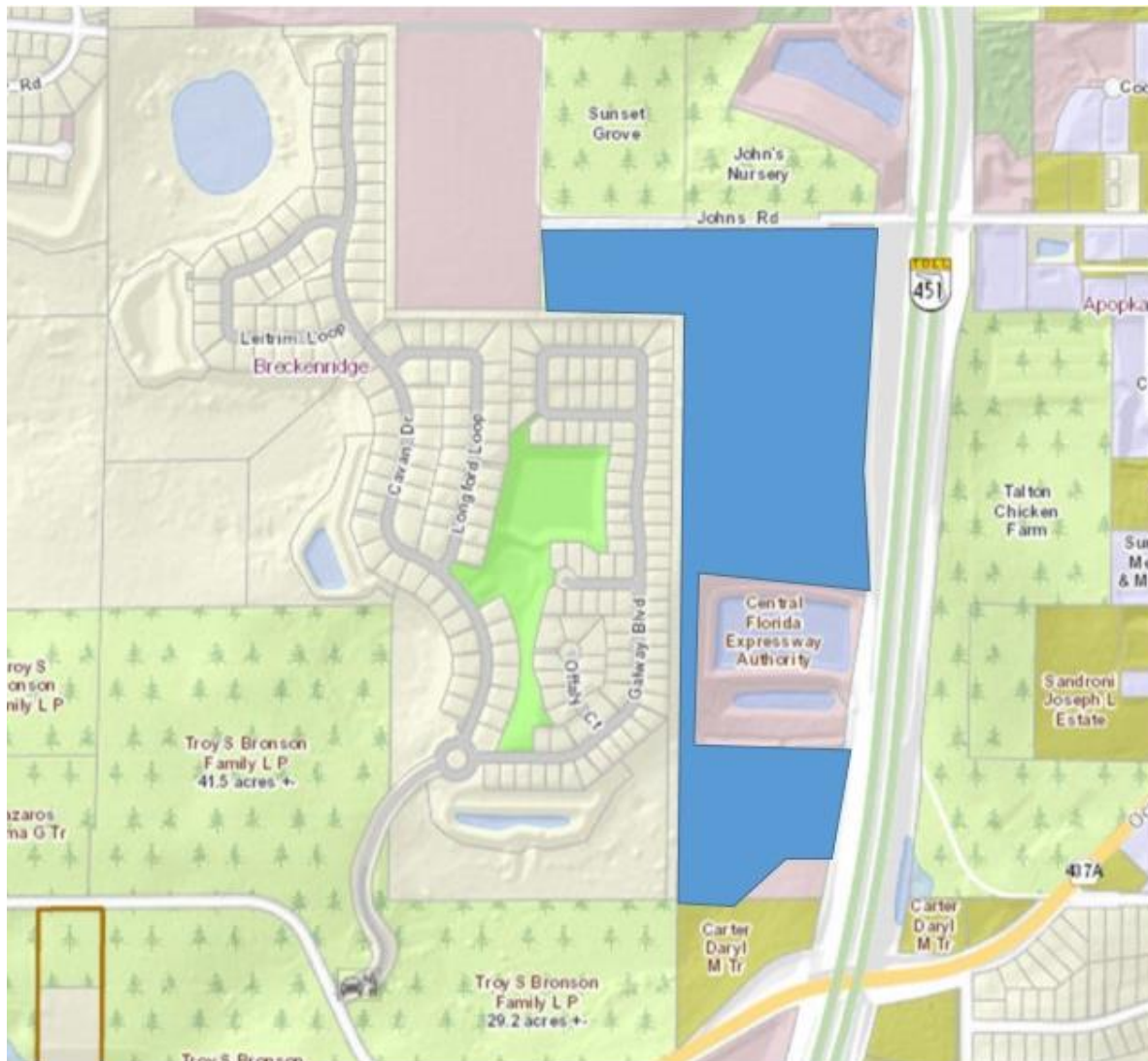
Planning Commission Role: The role of the Planning Commission for this development application is to advise the City Council to approve or deny based on consistency with the Comprehensive Plan and Land Development Code.

Note: This item is considered quasi-judicial. The staff report and its findings are to be incorporated into and made a part of the minutes of this meeting.

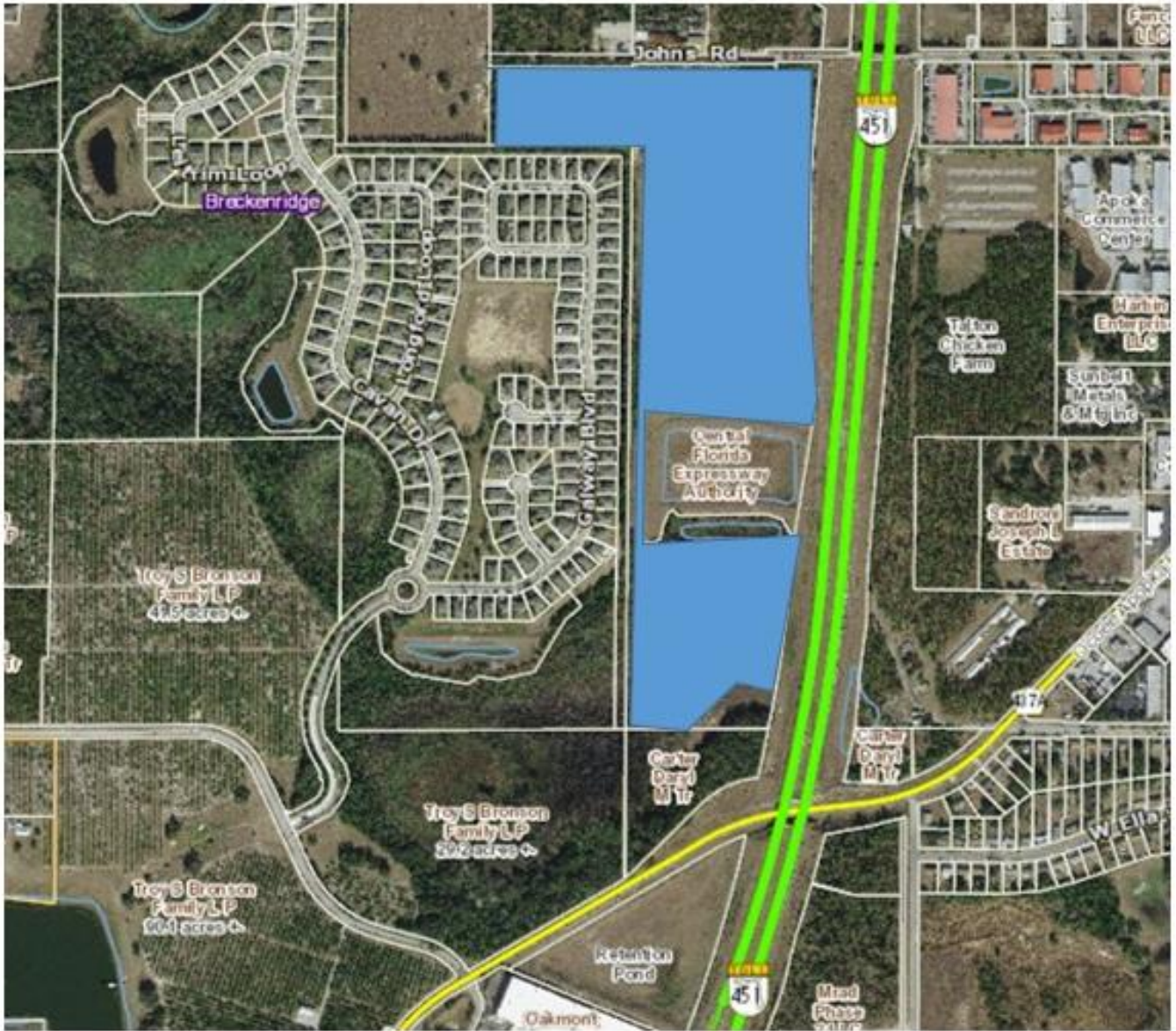
PLANNING COMMISSION – SEPTEMBER 11, 2018
LAKESIDE, PHASE 2 PLAT
PAGE 4

Application: Lakeside, Phase 2 plat
Owners: Avatar Properties, Inc
Project Engineer: Appian Engineering, Inc., c/o Luke M. Classon, P.E.
Parcel ID#s: 17-21-28-0000-00-014, 08-21-28-0000-00-043
Total Acres: 154.18 +/-

VICINITY MAP



AERIAL MAP



LAKESIDE PHASE II

SHEET 1 OF 5

A REPLAT

REPLATTING TRACT "Z", LAKESIDE PHASE I
 RECORDED IN PLAT BOOK _____, PAGES _____
 SECTIONS 8 AND 17, TOWNSHIP 21 SOUTH, RANGE 28 EAST
 CITY OF APOPKA, ORANGE COUNTY, FLORIDA

LEGAL DESCRIPTION

A TRACT OF LAND, BEING THE LANDS DESCRIBED IN THAT CERTAIN SPECIAL WARRANTY DEED, AS RECORDED IN DOCUMENT # 20180371602, DOCUMENT # 20180371656 AND TRACT "Z", LAKESIDE PHASE I, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK PAGES _____ THROUGH _____, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA, LYING IN SECTION 8 AND 17, TOWNSHIP 21 SOUTH, RANGE 28 EAST BEING DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHEAST CORNER OF TRACT "A", BRECKENRIDGE PHASE I, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 64, PAGES 74 THROUGH 81 OF SAID PUBLIC RECORDS; FOR A POINT OF BEGINNING; THENCE RUN NORTH 89°49'08" WEST, ALONG THE NORTH LINE OF SAID TRACT "A", A DISTANCE OF 910.14 FEET TO THE SOUTHWEST CORNER OF SAID TRACT "Z"; THENCE DEPARTING SAID NORTH LINE, RUN ALONG THE WESTERLY AND NORTHERLY LINES OF SAID TRACT "Z"; THE FOLLOWING 8 COURSES: THENCE RUN NORTH 31°15'18" EAST, 176.46 FEET; THENCE RUN NORTH 31°48'11" EAST, 50.00 FEET TO A POINT LYING ON A NON-TANGENT CURVE, CONCAVE NORTHEASTERLY; THENCE RUN NORTHWESTERLY, ALONG SAID NON-TANGENT CURVE, HAVING A RADIUS OF 25.00 FEET, A CENTRAL ANGLE OF 05°19'52", AN ARC LENGTH OF 2.33 FEET, A CHORD LENGTH OF 2.33 FEET AND A CHORD BEARING OF NORTH 55°31'53" WEST; THENCE RUN NORTH 00°15'51" EAST, NON-TANGENT TO SAID CURVE, 127.37 FEET; THENCE RUN NORTH 45°10'52" EAST, 15.00 FEET; THENCE RUN SOUTH 89°49'08" EAST, 124.41 FEET; THENCE RUN NORTH 00°15'51" EAST, 20.00 FEET TO A POINT LYING ON THE SOUTH RIGHT-OF-WAY LINE OF JOHN'S ROAD; THENCE RUN ALONG SAID SOUTH RIGHT-OF-WAY LINE, THE FOLLOWING COURSES: NORTH 87°35'15" EAST, 154.70 FEET; SOUTH 89°49'08" EAST, 1165.19 FEET; SOUTH 89°49'08" EAST, 203.84 FEET TO A POINT LYING ON THE WESTERLY LIMITED ACCESS RIGHT-OF-WAY LINE OF STATE ROAD 451. PER ORLANDO ORANGE COUNTY EXPRESSWAY AUTHORITY RIGHT-OF-WAY MAP, PROJECT NO. 75320-6460-604; THENCE RUN ALONG SAID WESTERLY LIMITED ACCESS RIGHT-OF-WAY LINE, THE FOLLOWING COURSES: SOUTH 05°01'30" WEST, 458.73 FEET; THENCE RUN SOUTH 01°12'39" WEST, 601.33 FEET; THENCE RUN SOUTH 03°49'01" EAST, 455.41 FEET; THENCE RUN SOUTH 05°01'32" WEST, 100.00 FEET; THENCE RUN NORTH 84°58'30" WEST, 801.32 FEET; THENCE RUN SOUTH 00°41'49" WEST, 645.63 FEET; THENCE RUN SOUTH 84°44'22" EAST, 52.19 FEET; THENCE RUN NORTH 73°48'49" EAST, 33.59 FEET; THENCE RUN NORTH 57°29'34" EAST, 21.16 FEET; THENCE RUN NORTH 10°24'19" EAST, 64.61 FEET; THENCE RUN NORTH 24°10'37" EAST, 70.40 FEET; THENCE RUN NORTH 81°03'59" EAST, 21.54 FEET; THENCE RUN SOUTH 37°36'17" EAST, 28.32 FEET; THENCE RUN NORTH 89°07'43" EAST, 410.24 FEET; THENCE RUN SOUTH 71°49'00" EAST, 76.48 FEET; THENCE RUN SOUTH 28°05'31" EAST, 110.79 FEET; THENCE RUN SOUTH 05°01'30" WEST, 104.77 FEET TO THE POINT OF CURVATURE OF A CURVE, CONCAVE NORTHWESTERLY; THENCE RUN SOUTHWESTERLY ALONG SAID CURVE, HAVING A RADIUS OF 749.44 FEET, A CENTRAL ANGLE OF 4°24'25.92", AN ARC LENGTH OF 573.01 FEET, A CHORD LENGTH OF 572.87 FEET AND A CHORD BEARING OF SOUTH 07°13'43" WEST; THENCE DEPARTING SAID WESTERLY LIMITED ACCESS RIGHT-OF-WAY LINE, RUN NORTH 65°58'01" WEST, NON-RADIAL TO SAID CURVE, 53.13 FEET; THENCE RUN SOUTH 89°43'43" WEST, 127.30 FEET; THENCE RUN SOUTH 86°22'15" WEST, 46.83 FEET; THENCE RUN SOUTH 43°11'29" WEST, 86.25 FEET; THENCE RUN SOUTH 48°18'50" WEST, 106.63 FEET; THENCE RUN SOUTH 42°29'39" WEST, 110.25 FEET TO A POINT LYING ON THE SOUTH LINE OF THE NORTHEAST QUARTER OF AFORESAID SECTION 17; THENCE RUN SOUTH 89°43'17" WEST, ALONG SAID SOUTH LINE, 259.84 FEET TO A POINT LYING ON THE EAST LINE OF AFORESAID TRACT "A", BRECKENRIDGE PHASE I; THENCE RUN NORTH 00°42'01" EAST, ALONG SAID EAST LINE, 2692.21 FEET TO THE POINT OF BEGINNING.

THE ABOVE DESCRIBED TRACT OF LAND LIES IN THE CITY OF APOPKA, ORANGE COUNTY, FLORIDA AND CONTAINS 49.807 ACRES MORE OR LESS.

LEGEND

- P.O.B. - POINT OF BEGINNING
- O.R.B. - OFFICIAL RECORDS BOOK
- PG.(S) - PAGE(S)
- SEC. - SECTION
- RAD - RADIAL
- R/W - RIGHT-OF-WAY
- LS. - LICENSED SURVEYOR
- LB. - LICENSED BUSINESS
- P.R.M. - PERMANENT REFERENCE MONUMENT
- C.M. - CONCRETE MONUMENT
- R.W.M. - RETAINING WALL MAINTENANCE EASEMENT
- U.E. - UTILITY EASEMENT
- L.E. - LANDSCAPE EASEMENT
- U.D.E. - UTILITY AND DRAINAGE EASEMENT
- P.C. - POINT OF CURVATURE
- P.T. - POINT OF TANGENCY
- P.B. - PLAT BOOK
- (N.R.) - NON-RADIAL
- F.K.A. - FORMERLY KNOWN AS
- P.I. - POINT OF INTERSECTION
- TYP. - TYPICAL
- W.M.E. - WALL MAINTENANCE EASEMENT

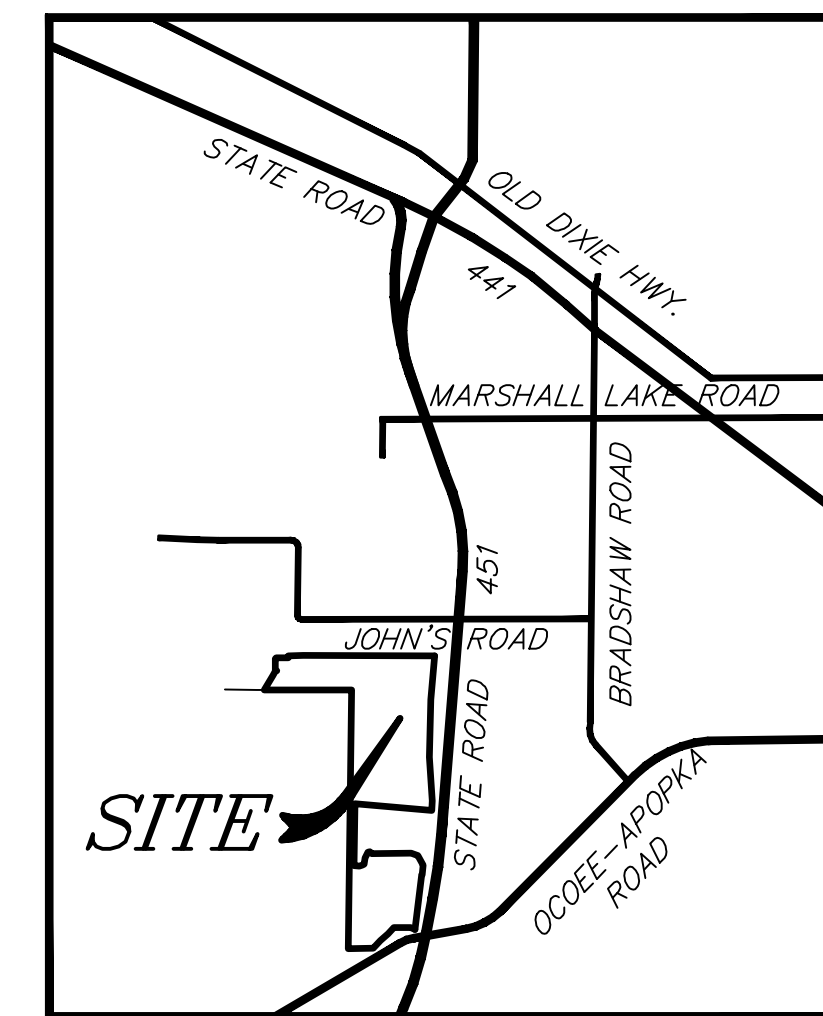
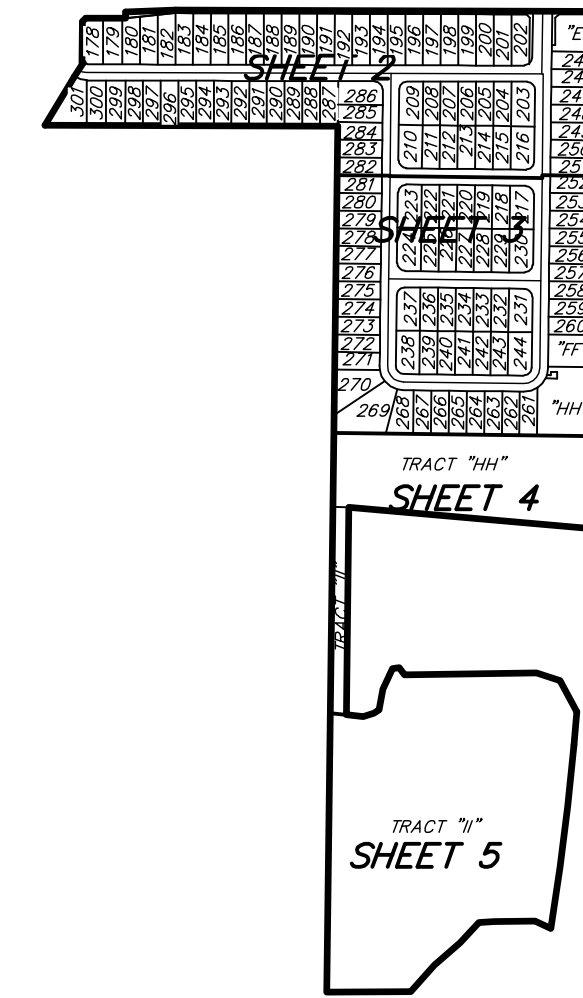
NOTICE:

"THIS PLAT, AS RECORDED IN ITS GRAPHIC FORM, IS THE OFFICIAL DEPICTION OF THE SUBDIVIDED LANDS DESCRIBED HEREIN AND WILL IN NO CIRCUMSTANCES BE SUPPLANTED IN AUTHORITY BY ANY OTHER GRAPHIC OR DIGITAL FORM OF THE PLAT.

THERE MAY BE ADDITIONAL RESTRICTIONS THAT ARE NOT RECORDED ON THIS PLAT THAT MAY BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY."

SURVEYOR'S NOTES:

- (1) BEARINGS SHOWN HEREON ARE RELATIVE TO THE FLORIDA STATE PLANE COORDINATE SYSTEM 1983 EAST ZONE, BASED ON GPS WITH L-NET CORRECTIONS. THE MONUMENTED SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 8, TOWNSHIP 21 SOUTH, RANGE 28 EAST. BEING NORTH 89°49'08" WEST.
- (2) — denotes a permanent reference monument (P.R.M.) A SET 4" X 4" CONCRETE MONUMENT STAMPED PRM. L.S. # 4044, UNLESS OTHERWISE NOTED.
- (3) — denotes a permanent control point (P.C.P.) A SET NAIL AND DISK STAMPED POP L.S. # 4044.
- (4) ALL PLATTED UTILITY EASEMENTS SHALL PROVIDE THAT SUCH EASEMENTS SHALL ALSO BE EASEMENTS FOR THE CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION OF CABLE TELEVISION SERVICES; PROVIDED, HOWEVER, NO SUCH CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION OF CABLE TELEVISION SERVICES SHALL INTERFERE WITH THE FACILITIES AND SERVICES OF AN ELECTRIC, TELEPHONE, GAS, OR OTHER PUBLIC UTILITY. IN THE EVENT A CABLE TELEVISION COMPANY DAMAGES THE FACILITIES OF A PUBLIC UTILITY, IT SHALL BE SOLELY RESPONSIBLE FOR THE DAMAGES.
- (5) ALL LINES INTERSECTING CURVES ARE RADIAL UNLESS OTHERWISE NOTED (N.R.).
- (6) TRACT "AA", (LANDSCAPE BUFFER AND WALL), AND TRACTS "BB" AND "CC", (LANDSCAPE BUFFER) SHALL BE OWNED AND MAINTAINED BY THE LAKESIDE APOPKA HOMEOWNERS ASSOCIATION, INC.
- (7) TRACT "DD" (PRIVATE RIGHT-OF-WAY), SHALL BE OWNED AND MAINTAINED BY THE LAKESIDE APOPKA HOMEOWNERS ASSOCIATION, INC.
- (8) TRACTS "EE" AND "FF" (PARK/OPEN SPACE), SHALL BE OWNED AND MAINTAINED BY THE LAKESIDE APOPKA HOMEOWNERS ASSOCIATION, INC.
- (9) TRACT "GG" (LIFT STATION), SHALL BE OWNED AND MAINTAINED BY THE THE LAKESIDE APOPKA HOMEOWNERS ASSOCIATION, INC.
- (10) TRACT "HH" (DRY POND), SHALL BE OWNED AND MAINTAINED BY THE LAKESIDE APOPKA HOMEOWNERS ASSOCIATION, INC.
- (11) TRACT "II" (CONSERVATION AREA), SHALL BE OWNED AND MAINTAINED BY THE LAKESIDE APOPKA HOMEOWNERS ASSOCIATION, INC., WITH DEVELOPMENT RIGHTS DEDICATED TO THE CITY OF APOPKA, FLORIDA. NO CONSTRUCTION, CLEARING, GRADING OR ALTERATION OF TRACT "II" IS ALLOWED UNLESS APPROVED BY THE CITY OF APOPKA AND THE OTHER APPLICABLE JURISDICTIONAL AGENCIES. TRACT "II" IS SUBJECT TO A CONSERVATION EASEMENT IN FAVOR OF THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT PURSUANT TO SECTION 704.06, FLORIDA STATUTES, TO BE DEDICATED BY SEPARATE INSTRUMENT IN THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.
- (12) THE 20.00 FOOT WIDE ACCESS EASEMENT IS DEDICATED TO THE CITY OF APOPKA AND THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT.



PLAT BOOK _____ PAGE _____
 LAKESIDE PHASE II

DEDICATION

KNOWN ALL MEN BY THESE PRESENTS, That the limited liability company named below, being the owner in fee simple of the lands described in the foregoing caption to this plat, hereby dedicates said lands and plat for the uses and purposes therein expressed and dedicates easements to the perpetual use of the public.
 Also dedicates a 20.00 foot wide access easement to the City of Apopka and St. Johns River Water Management District.

IN WITNESS WHEREOF, Avatar Properties Inc., a Florida corporation, has caused this Dedication to be executed in its name by the below-named officer thereto duly authorized this _____ day of _____, 2018.

Signed, sealed and delivered in the presence of the following two witnesses:

By: _____
 AVATAR PROPERTIES INC.
 a Florida corporation

Print Name: _____ By: Ken Thiryacre
 (Witness) Division President

Print Name: _____
 (Witness)

STATE OF FLORIDA

COUNTY OF _____

THIS IS TO CERTIFY that the foregoing Dedication was acknowledged before me this _____ day of _____, 2018, by Ken Thiryacre, as Division President of Avatar Properties Inc., a Florida corporation. Said person did not take an oath and is personally known to me or has produced the following identification _____

Print Name: _____
 Notary Public - State of Florida
 Commission No.: _____
 My Commission Expires: _____

CERTIFICATE OF SURVEYOR AND MAPPER

KNOWN ALL MEN BY THESE PRESENTS, that the undersigned, being a licensed and registered surveyor and mapper, does hereby certify that on _____

a survey of the lands shown in the foregoing plat was completed; that said plat is a true and correct representation of the lands surveyed; that the plat was prepared under my responsible direction and supervision, and that this plat complies with all the survey requirements of Chapter 177 and Chapter 95.361, Florida Statutes.

Date: LS 4044 Surveyor's Signature
 Surveyor's Registration Number: David A. White
 LB 7808 Surveyor's Name (printed)
 Certificate of Authorization Number
 PEC - Surveying and Mapping, LLC
 2100 Alafaya Trail, Suite 203, Oviedo, Florida, 32765

CERTIFICATE OF REVIEW BY CITY SURVEYOR

This plat has been reviewed for conformity with Chapter 95.361 and Chapter 177, Florida Statutes, as is appropriate.

By: _____
 Ralph A. Nieto, LS 6025

CERTIFICATE OF APPROVAL BY APOPKA PLANNING COMMISSION

THIS IS TO CERTIFY, that on _____, 2018 the undersigned approved the foregoing plat.

By: _____
 Chairman

CERTIFICATE OF APPROVAL BY THE MAYOR

THIS IS TO CERTIFY, that on _____, 2018 the undersigned approved the foregoing plat.

By: _____
 Bryan Nelson, Mayor of the City of Apopka

Attest: _____
 Linda F. Goff, City Clerk

CERTIFICATE OF APPROVAL BY CITY ENGINEER

THIS IS TO CERTIFY, that on _____, 2018 the undersigned approved the foregoing plat.

By: _____
 Richard W. Earp, City Engineer

CERTIFICATE OF COUNTY COMPTROLLER

I HEREBY CERTIFY, that the foregoing plat was recorded in the Orange County Official Records on _____ print _____

Comptroller in and for Orange County, Florida

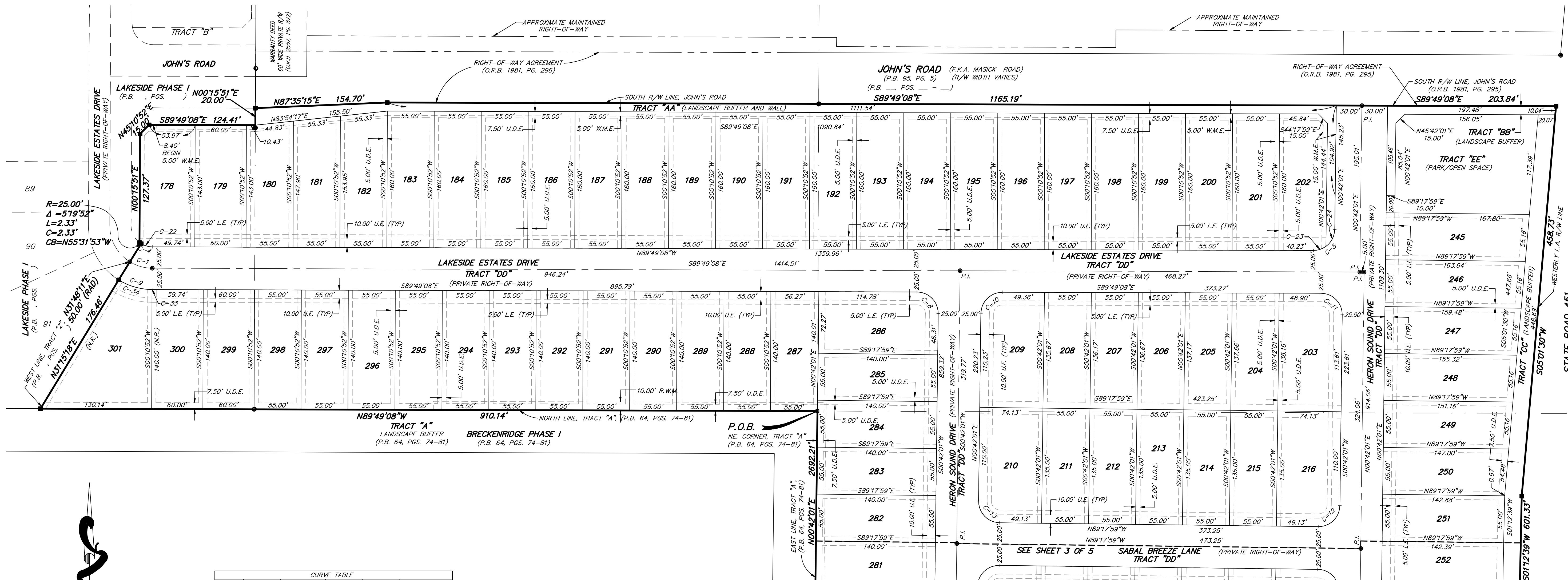
By: _____

C:\18-062 AV Homes Lake Marshall Phase 2\18-062 LAKESIDE PH 2.dwg Aug 29, 2018 - 9:50am

LAKESIDE PHASE II

A REPLAT

REPLATTING TRACT "Z", LAKESIDE PHASE I
 RECORDED IN PLAT BOOK _____, PAGES _____
 SECTIONS 8 AND 17, TOWNSHIP 21 SOUTH, RANGE 28 EAST
 CITY OF APOPKA, ORANGE COUNTY, FLORIDA

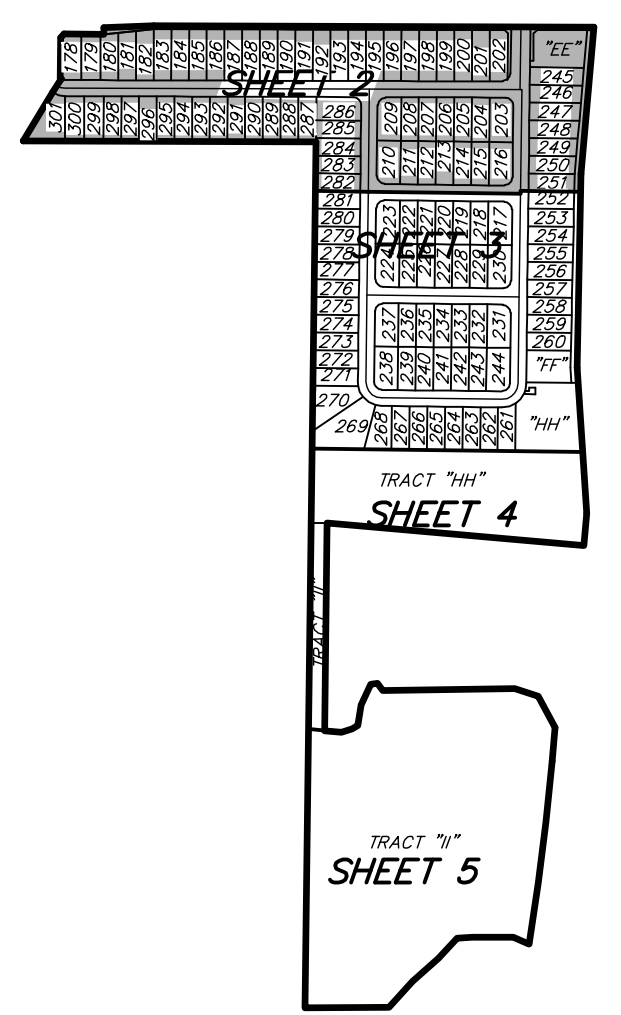


$R=25.00'$
 $\Delta=519'52''$
 $L=2.33'$
 $CB=N55'31'53''W$



SCALE 1"=60'

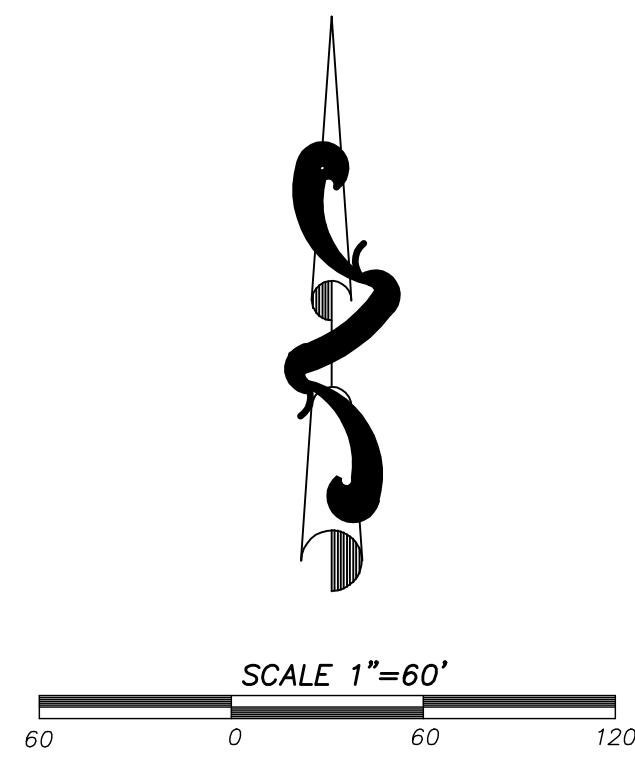
| CURVE | RADIUS | DELTA | LENGTH | CHORD | CH. BEARING |
|-------|--------|-----------|---------|---------|-------------|
| C-1 | 50.00' | 31°37'19" | 27.60' | 27.25' | S74°00'29"E |
| C-2 | 50.00' | 90°00'00" | 78.54' | 70.71' | N45°42'01"E |
| C-3 | 50.00' | 90°00'00" | 78.54' | 70.71' | S44°17'59"E |
| C-4 | 25.00' | 31°37'19" | 13.80' | 13.62' | S74°00'29"E |
| C-5 | 25.00' | 89°28'51" | 39.04' | 35.19' | N45°26'26"E |
| C-6 | 75.00' | 90°00'00" | 117.81' | 106.07' | N45°42'01"E |
| C-7 | 75.00' | 90°00'00" | 117.81' | 106.07' | S44°17'59"E |
| C-8 | 25.00' | 90°31'09" | 39.50' | 35.52' | S44°33'34"E |
| C-9 | 75.00' | 31°37'19" | 41.39' | 40.87' | S74°00'29"E |
| C-10 | 25.00' | 89°28'51" | 39.04' | 35.19' | N45°26'26"E |
| C-11 | 25.00' | 90°31'09" | 39.50' | 35.52' | S44°33'34"E |
| C-12 | 25.00' | 90°00'00" | 39.27' | 35.36' | S45°42'01"W |
| C-13 | 25.00' | 90°00'00" | 39.27' | 35.36' | N44°17'59"W |
| C-14 | 25.00' | 90°00'00" | 39.27' | 35.36' | N45°42'01"E |
| C-15 | 25.00' | 90°00'00" | 39.27' | 35.36' | S44°17'59"E |
| C-16 | 25.00' | 90°00'00" | 39.27' | 35.36' | S45°42'01"W |
| C-17 | 25.00' | 90°00'00" | 39.27' | 35.36' | N44°17'59"W |
| C-18 | 25.00' | 90°00'00" | 39.27' | 35.36' | N45°42'01"E |
| C-19 | 25.00' | 90°00'00" | 39.27' | 35.36' | S44°17'59"E |
| C-20 | 25.00' | 90°00'00" | 39.27' | 35.36' | S45°42'01"W |
| C-21 | 25.00' | 90°00'00" | 39.27' | 35.36' | N44°17'59"W |
| C-22 | 25.00' | 36°27'11" | 16.12' | 15.85' | S71°20'33"E |
| C-23 | 25.00' | 36°27'11" | 15.86' | 15.60' | N72°00'21"E |
| C-24 | 25.00' | 53°07'48" | 23.18' | 22.36' | N27°15'55"E |
| C-25 | 75.00' | 17°26'08" | 22.82' | 22.73' | N09°25'04"E |
| C-26 | 75.00' | 8°11'31" | 10.72' | 10.71' | N22°13'54"E |
| C-27 | 75.00' | 28°32'19" | 37.36' | 36.97' | N40°35'48"E |
| C-28 | 75.00' | 35°50'03" | 46.91' | 46.15' | N72°46'59"E |
| C-29 | 75.00' | 14°18'26" | 18.73' | 18.68' | S82°08'46"E |
| C-30 | 75.00' | 36°31'09" | 47.80' | 47.00' | S36°43'39"E |
| C-31 | 75.00' | 28°25'09" | 37.20' | 36.82' | S24°15'50"E |
| C-32 | 75.00' | 10°45'16" | 14.08' | 14.06' | S04°40'32"E |
| C-33 | 75.00' | 0°11'58" | 0.26' | 0.26' | S89°43'08"E |
| C-34 | 75.00' | 31°25'20" | 41.13' | 40.62' | S73°54'29"E |



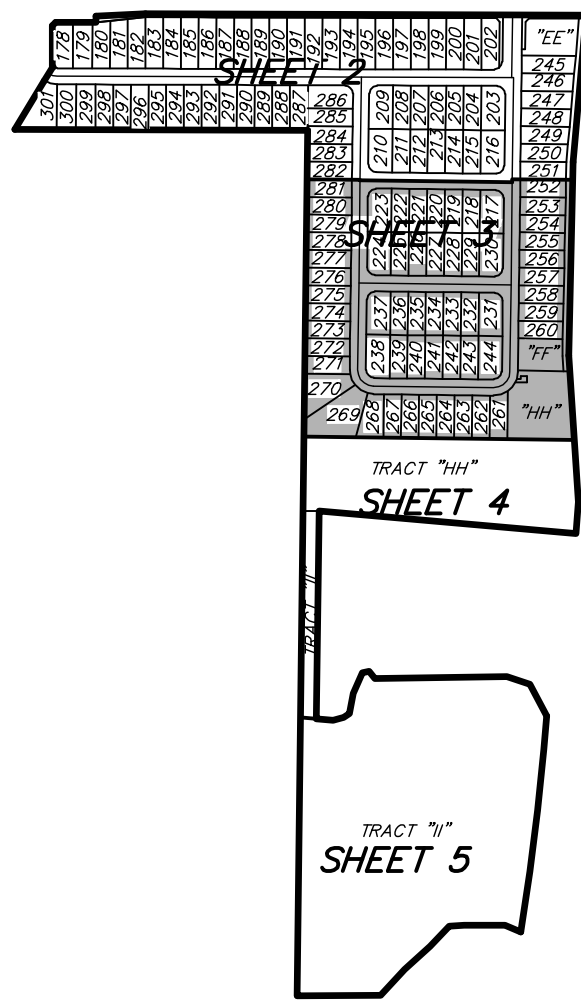
LAKE SIDE PHASE II

A REPLAT

REPLATTING TRACT "Z", LAKESIDE PHASE I
RECORDED IN PLAT BOOK _____, PAGES _____
SECTIONS 8 AND 17, TOWNSHIP 21 SOUTH, RANGE 28 EAST
CITY OF APOPKA, ORANGE COUNTY, FLORIDA



SCALE 1"=60'

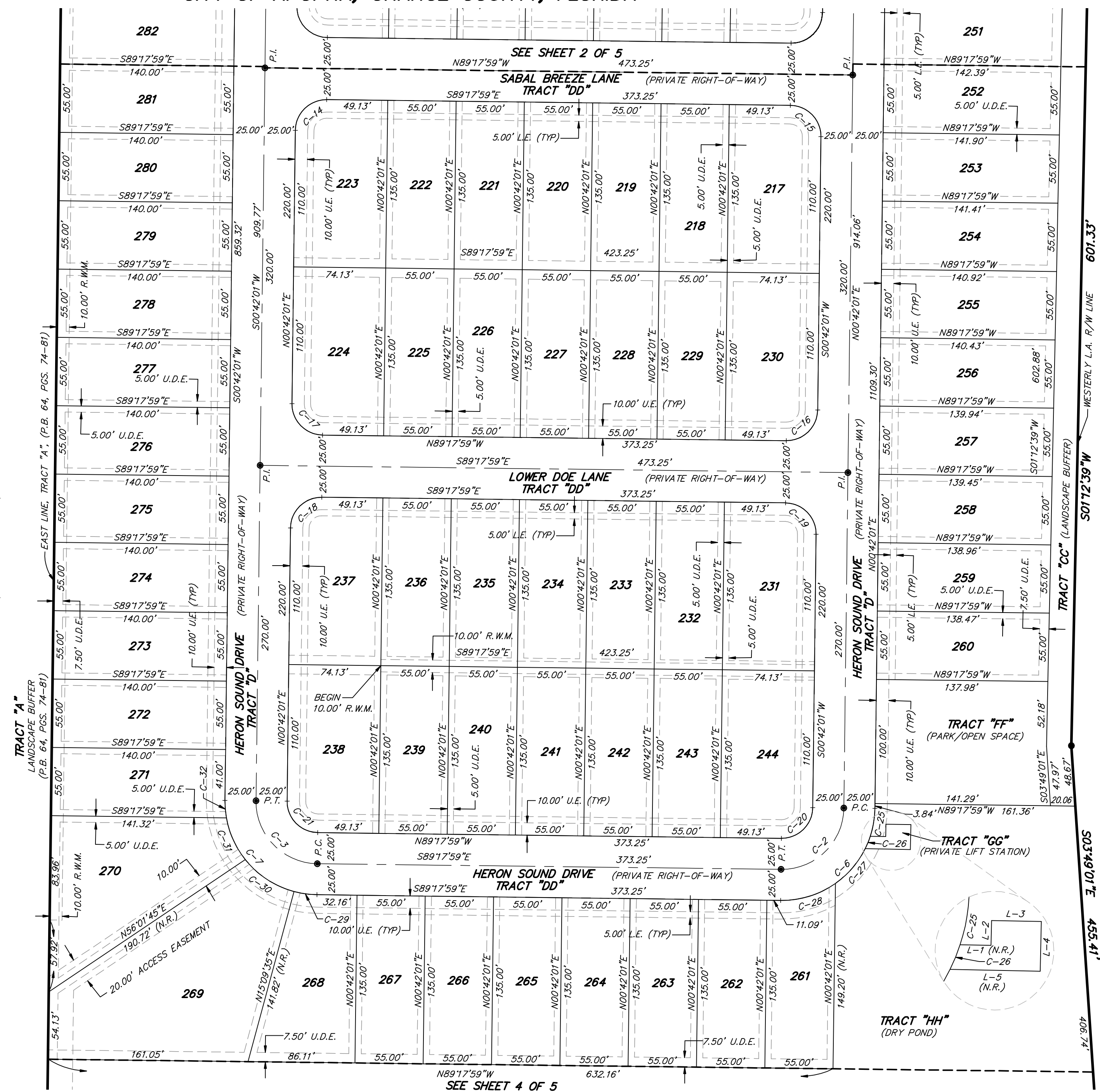


KEY MAP
NOT TO SCALE

| LINE | BEARING | LENGTH |
|------|-------------|--------|
| L-1 | N88°48'13"W | 12.42' |
| L-2 | S01°11'42"W | 10.00' |
| L-3 | N88°48'13"W | 20.00' |
| L-4 | S01°11'42"W | 20.00' |
| L-5 | N88°48'13"W | 36.27' |

| CURVE TABLE | | | | | |
|-------------|--------|-----------|---------|---------|-------------|
| CURVE | RADIUS | DELTA | LENGTH | CHORD | CH. BEARING |
| C-1 | 50.00' | 31.37°19" | 27.60' | 27.25' | S74°00'29"E |
| C-2 | 50.00' | 90°00'00" | 78.54' | 70.71' | N45°42'01"E |
| C-3 | 50.00' | 90°00'00" | 78.54' | 70.71' | S44°17'59"E |
| C-4 | 25.00' | 31.37°19" | 13.80' | 13.62' | S74°00'29"E |
| C-5 | 25.00' | 89°28'51" | 39.04' | 35.19' | N45°26'26"E |
| C-6 | 75.00' | 90°00'00" | 117.81' | 106.07' | N45°42'01"E |
| C-7 | 75.00' | 90°00'00" | 117.81' | 106.07' | S44°17'59"E |
| C-8 | 25.00' | 90°31'09" | 39.50' | 35.52' | S44°33'34"E |
| C-9 | 75.00' | 31.37°19" | 41.39' | 40.87' | S74°00'29"E |
| C-10 | 25.00' | 89°28'51" | 39.04' | 35.19' | N45°26'26"E |
| C-11 | 25.00' | 90°31'09" | 39.50' | 35.52' | S44°33'34"E |
| C-12 | 25.00' | 90°00'00" | 39.27' | 35.36' | S45°42'01"W |
| C-13 | 25.00' | 90°00'00" | 39.27' | 35.36' | N44°17'59"W |
| C-14 | 25.00' | 90°00'00" | 39.27' | 35.36' | N45°42'01"E |
| C-15 | 25.00' | 90°00'00" | 39.27' | 35.36' | S44°17'59"E |
| C-16 | 25.00' | 90°00'00" | 39.27' | 35.36' | S45°42'01"W |
| C-17 | 25.00' | 90°00'00" | 39.27' | 35.36' | N44°17'59"W |
| C-18 | 25.00' | 90°00'00" | 39.27' | 35.36' | N45°42'01"E |
| C-19 | 25.00' | 90°00'00" | 39.27' | 35.36' | S44°17'59"E |
| C-20 | 25.00' | 90°00'00" | 39.27' | 35.36' | S45°42'01"W |
| C-21 | 25.00' | 90°00'00" | 39.27' | 35.36' | N44°17'59"W |
| C-22 | 25.00' | 36°57'11" | 16.12' | 15.85' | S71°20'33"E |
| C-23 | 25.00' | 36°21'03" | 15.86' | 15.60' | N72°00'21"E |
| C-24 | 25.00' | 53°07'48" | 23.18' | 22.36' | N27°15'55"E |
| C-25 | 75.00' | 17°26'08" | 22.82' | 22.73' | N09°25'04"E |
| C-26 | 75.00' | 8°11'31" | 10.72' | 10.71' | N22°13'54"E |
| C-27 | 75.00' | 28°32'19" | 37.36' | 36.97' | N40°35'48"E |
| C-28 | 75.00' | 35°50'03" | 46.91' | 46.15' | N72°46'59"E |
| C-29 | 75.00' | 14°18'26" | 18.73' | 18.68' | S82°08'46"E |
| C-30 | 75.00' | 36°31'09" | 47.80' | 47.00' | S56°43'59"E |
| C-31 | 75.00' | 28°25'09" | 37.20' | 36.82' | S24°15'50"E |
| C-32 | 75.00' | 10°45'16" | 14.08' | 14.06' | S04°40'37"E |
| C-33 | 75.00' | 0°11'59" | 0.26' | 0.26' | S89°43'08"E |
| C-34 | 75.00' | 31°25'20" | 41.13' | 40.62' | S73°54'29"E |

BRECKENRIDGE PHASE I
(P.B. 64, PGS. 74-81)



STATE ROAD 451
PER ORLANDO - ORANGE COUNTY EXPRESSWAY AUTHORITY R/W MAP
(PROJECT NO. 7530-6460-604)
(R/W WIDTH VARIES)

LAKE SIDE PHASE II

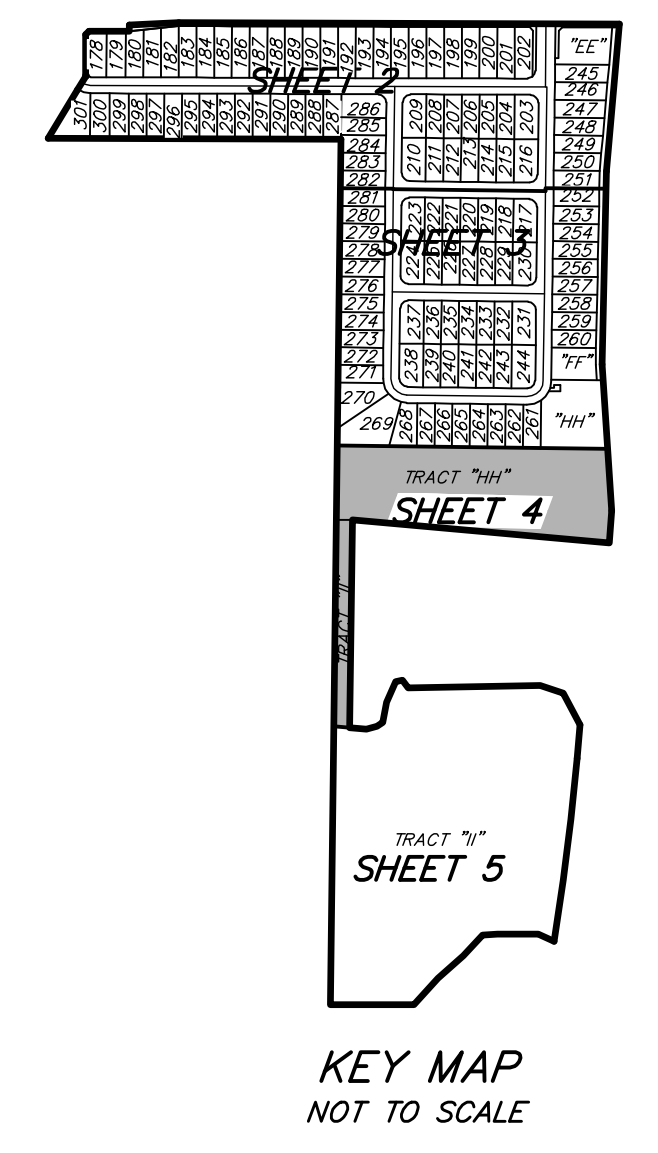
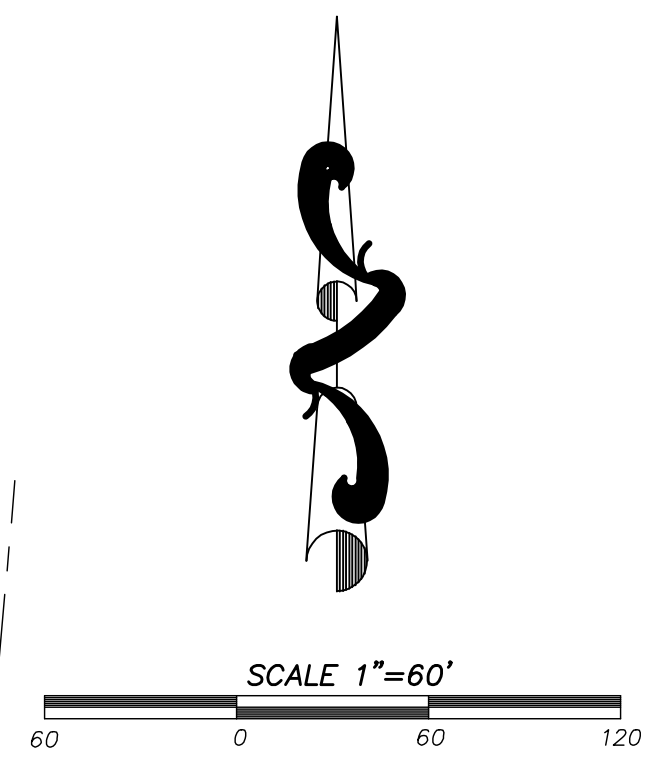
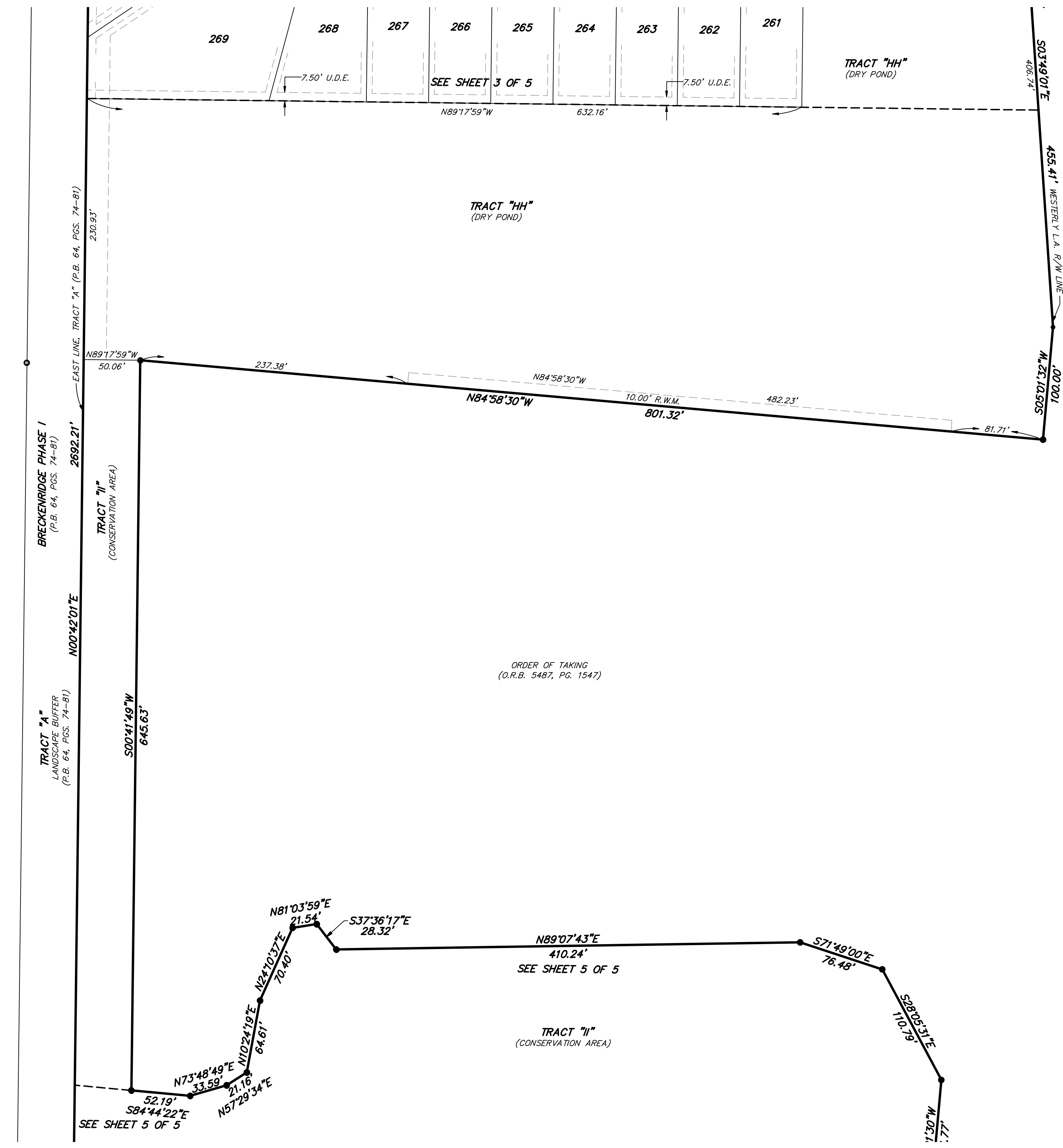
SHEET 4 OF 5

PLAT BOOK

PAGE

A REPLAT

REPLATTING TRACT "Z", LAKESIDE PHASE I
 RECORDED IN PLAT BOOK _____, PAGES _____
 SECTIONS 8 AND 17, TOWNSHIP 21 SOUTH, RANGE 28 EAST
 CITY OF APOPKA, ORANGE COUNTY, FLORIDA



PER ORLANDO - ORANGE COUNTY EXPRESSWAY AUTHORITY R/W MAP
 (PROJECT NO. 75320-6460-604)
 (P/W WIDTH VARIES)

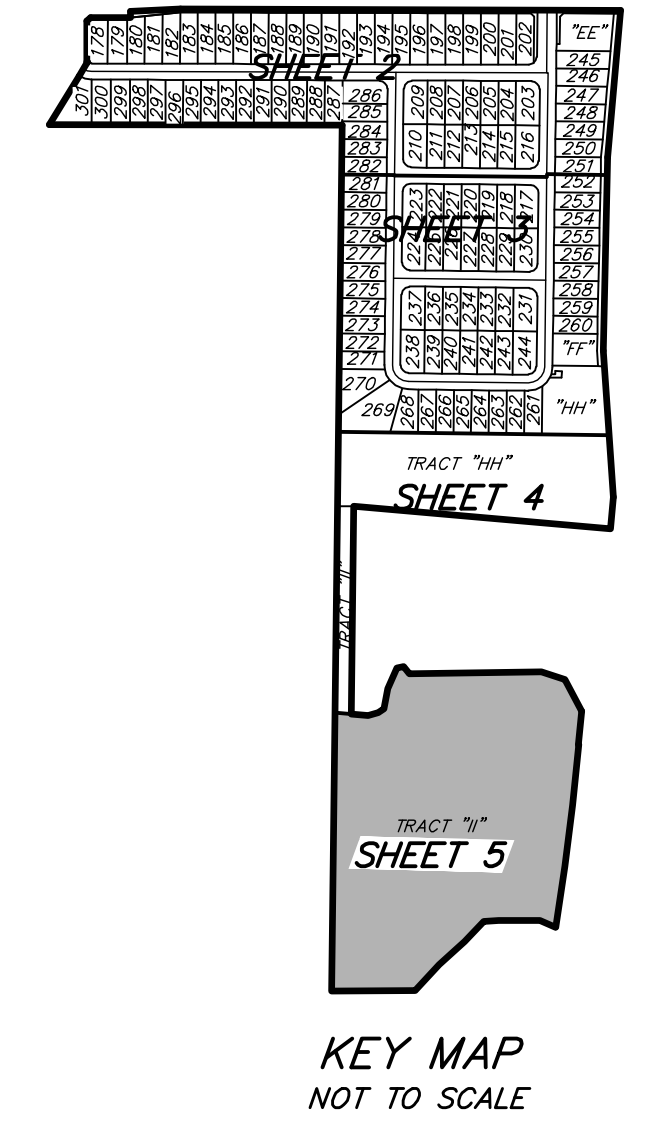
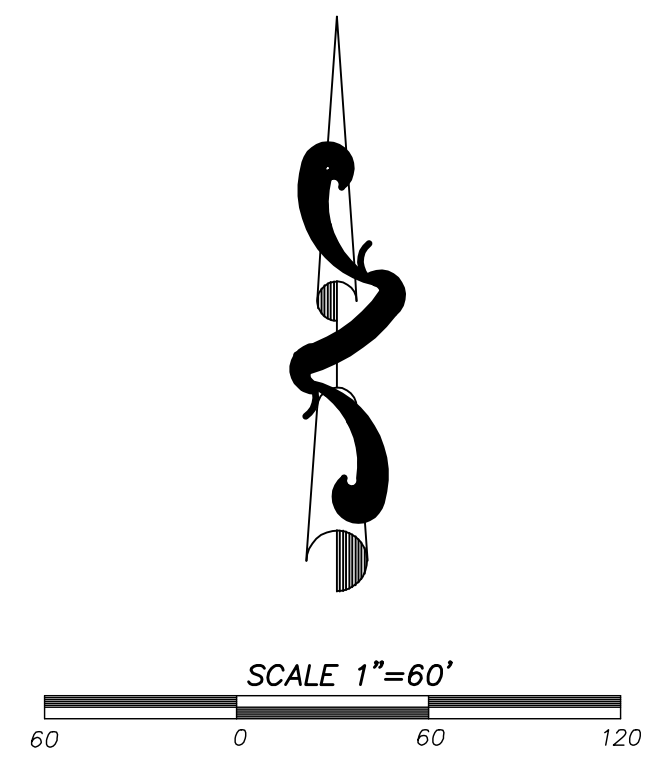
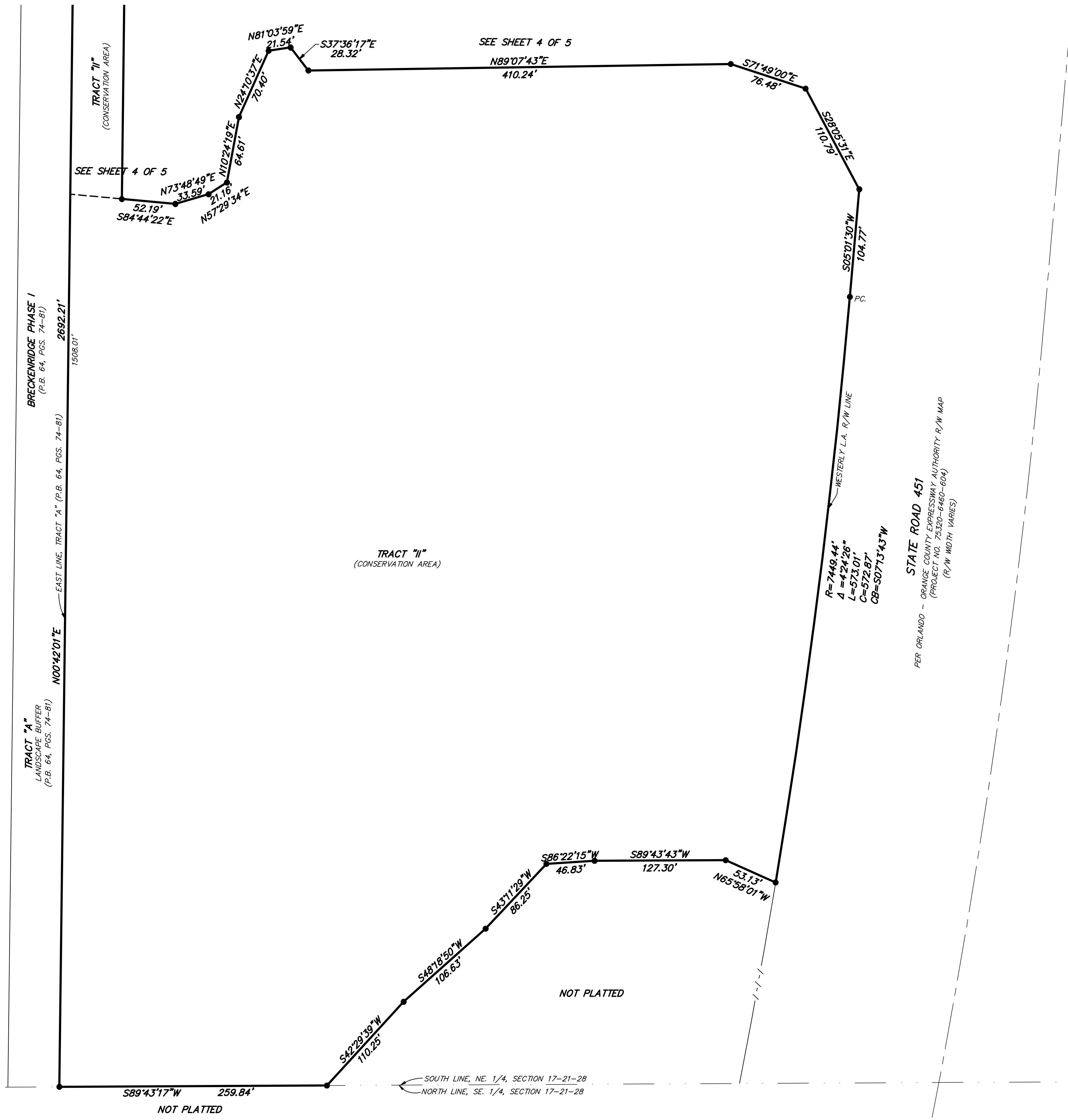
STATE ROAD 451

ORDER OF TAKING
 (O.R.B. 5487, PG. 1547)

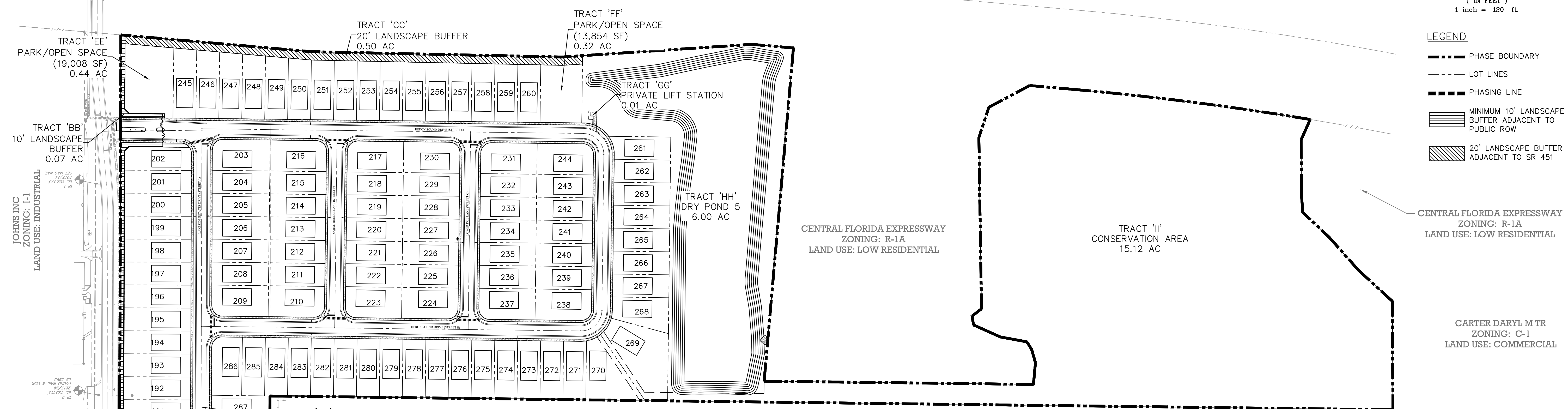
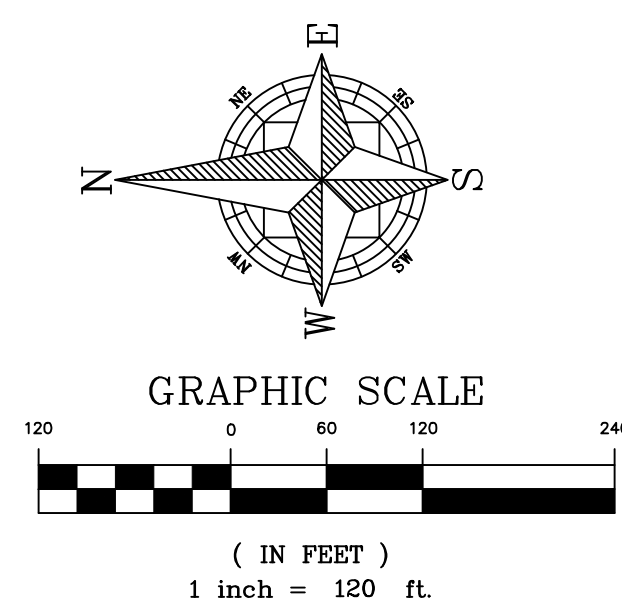
LAKE SIDE PHASE II

A REPLAT

REPLATTING TRACT "Z", LAKESIDE PHASE I
 RECORDED IN PLAT BOOK _____, PAGES _____
 SECTIONS 8 AND 17, TOWNSHIP 21 SOUTH, RANGE 28 EAST
 CITY OF APOPKA, ORANGE COUNTY, FLORIDA



P:\PROJECT DRAWINGS\ROY-001 - Lake Marshall Residential Development\5.9 Drawings\5.9 Final\Drawings\05 Final Development Plan - PHASE 2\Master Plan.dwg Modified: 6/12/2018 By: ssterrigli



- LEGEND**
- PHASE BOUNDARY
 - LOT LINES
 - PHASING LINE
 - MINIMUM 10' LANDSCAPE BUFFER ADJACENT TO PUBLIC ROW
 - 20' LANDSCAPE BUFFER ADJACENT TO SR 451
- CENTRAL FLORIDA EXPRESSWAY ZONING: R-1A LAND USE: LOW RESIDENTIAL
- CARTER DARYL M TR ZONING: C-1 LAND USE: COMMERCIAL

TRACT 'DD' PRIVATE RIGHT-OF-WAY
BRECKENRIDGE DEVELOPMENT
 SINGLE-FAMILY RESIDENCES
 ZONING: PUD
 LAND USE: LOW RESIDENTIAL

RECREATION

OVERALL:

| | |
|--|------------------------------------|
| POCKET PARKS REQUIRED FOR 301 DWELLING UNITS: | 3 |
| 76-100 UNITS | 0.43 AC. (TWO AND A HALF 55' LOTS) |
| 76-100 UNITS | 0.43 AC. (TWO AND A HALF 55' LOTS) |
| 76-100 UNITS | 0.43 AC. (TWO AND A HALF 55' LOTS) |
| REQUIRED ACTIVE AND PASSIVE RECREATION AREAS: | 2.82 AC. |
| 3.6 AC. PER 1,000 PROJECTED POPULATION ON A BASIS OF 2.6 PERSONS PER HOUSEHOLD (301 DU X 2.6 PERSONS/DU = 782.6 PERSONS; 783 PERSONS X 3.6 AC. / 1,000 PERSONS = 2.82 AC.) | |
| PROVIDED RECREATIONAL AREAS: | 9.96 AC. |
| PHASE 1 (9.21 AC.) | |
| PHASE 2 (0.75 AC.) | |

PHASE 2:

| | |
|--|------------------------------------|
| POCKET PARKS REQUIRED FOR 124 DWELLING UNITS: | 2 |
| 20-25 UNITS | 0.17 AC. (ONE 55' LOT) |
| 76-100 UNITS | 0.43 AC. (TWO AND A HALF 55' LOTS) |
| REQUIRED ACTIVE AND PASSIVE RECREATION AREAS: | 1.16 AC. |
| 3.6 AC. PER 1,000 PROJECTED POPULATION ON A BASIS OF 2.6 PERSONS PER HOUSEHOLD (124 DU X 2.6 PERSONS/DU = 322.4 PERSONS; 323 PERSONS X 3.6 AC. / 1,000 PERSONS = 1.16 AC.) | |
| PROVIDED RECREATIONAL AREAS: | 8.31 AC. |
| PHASE 2 | |
| TRACT 'E' PARK/OPEN SPACE | 0.44 AC. |
| TRACT 'F' PARK/OPEN SPACE | 0.32 AC. |
| PHASE 1 RECREATION GREATER THAN REQUIRED | 7.55 AC. |

OPEN SPACE

OVERALL:

| | |
|---|-------------------|
| PROJECT IMPROVEMENT AREA: | 116.42 AC. |
| (TOTAL PROJECT IMPROVEMENT AREAS FOR PHASE 1 AND PHASE 2) | |
| REQUIRED OPEN SPACE (30.0% X 116.42 AC.): | 34.93 AC. |
| PROVIDED OPEN SPACE: | 47.17 AC. (40.5%) |
| PHASE 1 (34.42 AC.) | |
| PHASE 2 (12.75 AC.) | |

PHASE 2:

| | |
|--|--------------------|
| DEVELOPABLE AREA: | 52.06 AC. |
| (TOTAL PROPERTY AREA - PHASE 1 AREAS) | |
| PROJECT IMPROVEMENT AREA: | 36.95 AC. |
| (DEVELOPABLE AREA - CONSERVATION AREA) | |
| REQUIRED OPEN SPACE (30.0% X 36.95 AC.): | 11.09 AC. |
| PROVIDED OPEN SPACE: | 23.33 AC. (63.14%) |
| CONSERVATION AREA (MAX 50% OF REQ.) | 5.54 AC. |
| DRY RETENTION POND (MAX 50% OF REQ.) | 5.54 AC. |
| PARKS / OPEN SPACE | 0.75 AC. |
| LANDSCAPE BUFFER | 0.92 AC. |
| PHASE 1 OPEN SPACE GREATER THAN REQUIRED | 10.58 AC. |

SITE DATA:

| | | |
|------------------------------------|----------------------------|----------|
| OCPA - PARCEL ID #: | 28-21-08-0000-00-043 | |
| TOTAL PARCEL AREA: | 11.18 AC. | |
| FUTURE LAND USE (FLU): | MIXED USE | |
| ADJACENT FUTURE LAND USE: | | |
| NORTH | INDUSTRIAL | |
| SOUTH | LOW RESIDENTIAL, MIXED USE | |
| EAST | MIXED USE | |
| WEST | LOW RESIDENTIAL | |
| ZONING: | PUD | |
| ADJACENT ZONING: | | |
| NORTH | I-1 | |
| SOUTH | R-1A | |
| EAST | I-1 | |
| WEST | PUD | |
| PROPOSED MINIMUM LOT REQUIREMENTS: | | |
| | 55' LOTS | 60' LOTS |
| MINIMUM LOT AREA | 7,425 SF | 8,100 SF |
| MINIMUM LOT WIDTH | 55 ft. | 60 ft. |
| MINIMUM LOT DEPTH | 135 ft. | 135 ft. |
| MAXIMUM BUILDING HEIGHT | 35 ft. | 35 ft. |
| SETBACKS: | | |
| FRONT YARD | 25 ft. | 25 ft. |
| SIDE YARD | 7.5 ft. | 5 ft. |
| REAR YARD | 20 ft. | 20 ft. |
| CORNER SIDE YARD | 17.5 ft. | 15 ft. |

SITE DATA:

| | |
|------------------------------------|----------------------------|
| OCPA - PARCEL ID #: | 28-21-17-0000-00-014 |
| TOTAL PARCEL AREA: | 39.89 AC. |
| FUTURE LAND USE (FLU): | MIXED USE |
| ADJACENT FUTURE LAND USE: | |
| NORTH | INDUSTRIAL |
| SOUTH | COMMERCIAL |
| EAST | INDUSTRIAL |
| WEST | MIXED USE, LOW RESIDENTIAL |
| ZONING: | PUD |
| ADJACENT ZONING: | |
| NORTH | I-1 |
| SOUTH | C-1 |
| EAST | I-1 |
| WEST | PUD |
| PROPOSED MINIMUM LOT REQUIREMENTS: | |
| | 55' LOTS |
| MINIMUM LOT AREA | 7,425 SF |
| MINIMUM LOT WIDTH | 55 ft. |
| MINIMUM LOT DEPTH | 135 ft. |
| MAXIMUM BUILDING HEIGHT | 35 ft. |
| SETBACKS: | |
| FRONT YARD | 25 ft. |
| SIDE YARD | 7.5 ft. |
| REAR YARD | 20 ft. |
| CORNER SIDE YARD | 17.5 ft. |

SITE DATA:

| | |
|--|-----------------------|
| OCPA - PARCEL ID #: | 28-21-08-0000-00-005 |
| TOTAL PARCEL AREA: | 103.11 AC. |
| TOTAL AREA INCLUDED WITHIN THIS PHASE: | 1.39 AC. |
| FUTURE LAND USE (FLU): | LOW RESIDENTIAL |
| ADJACENT FUTURE LAND USE: | |
| NORTH | LOW RESIDENTIAL |
| SOUTH | LOW RESIDENTIAL |
| EAST | INDUSTRIAL, MIXED USE |
| WEST | LOW RESIDENTIAL |
| ZONING: | PUD |
| ADJACENT ZONING: | |
| NORTH | R-3 |
| SOUTH | PUD |
| EAST | I-1 |
| WEST | PUD, R-1A, R-2 |
| PROPOSED MINIMUM LOT REQUIREMENTS: | |
| | 60' LOTS |
| MINIMUM LOT AREA | 8,100 SF |
| MINIMUM LOT WIDTH | 60 ft. |
| MINIMUM LOT DEPTH | 135 ft. |
| MAXIMUM BUILDING HEIGHT | 35 ft. |
| SETBACKS: | |
| FRONT YARD | 25 ft. |
| SIDE YARD | 5 ft. |
| REAR YARD | 20 ft. |
| CORNER SIDE YARD | 15 ft. |

OVERALL SITE DATA:

| | |
|--|----------------------|
| OCPA - PARCEL ID #: | 28-21-08-0000-00-005 |
| | 28-21-08-0000-00-043 |
| | 28-21-17-0000-00-014 |
| TOTAL PROPERTY AREA: | 154.18 AC. |
| PHASE 2 PROJECT IMPROVEMENT AREA | 36.95 AC. |
| PHASE 2 CONSERVATION AREA | 15.12 AC. |
| PHASE 1 DEVELOPMENT AREA | 79.47 AC. |
| PHASE 1 CONSERVATION AREA | 22.36 AC. |
| PHASE 1 DEDICATED PUBLIC RIGHT-OF-WAY AREA | 0.28 AC. |



CIVIL ENGINEERING | LAND PLANNING

APPIAN ENGINEERING LLC.

APPIANENGINEERING.COM • 407.960.5868

2231 Lee Road, Suite 17, Winter Park, Florida, 32789

STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION # 1215

DATE: 07/20/18 CITY OF APOPKA COMMENTS DATED 07/23/18

DESCRIPTION

PUD MASTER PLAN
 FINAL DEVELOPMENT PLAN

LAKESIDE - PHASE 2
 (FKA LAKE MARSHALL SUBDIVISION)
 CITY OF APOPKA, FLORIDA

SCALE: 1" = 120'

PROJECT: ROY-001

CHECKED: L. CLASSON

DATE: 8/2/2018

SHEET: C.3.1

BY



CITY OF APOPKA PLANNING COMMISSION

PUBLIC HEARING
 SITE PLAN
 SPECIAL REPORTS
 OTHER: Plat

MEETING OF: September 11, 2018
FROM: Community Development
EXHIBITS: Vicinity Map
Aerial Map
Plat
Final Development Plan
PUD Master Plan

SUBJECT: VISTA RESERVE – PLAT

REQUEST: RECOMMEND APPROVAL OF THE VISTA RESERVE PLAT

SUMMARY:

OWNERS: Mikhail Wafaa, Abdelsayed George, Abdelsayed Lucy, Abdelsayed Wafeek

APPLICANT: Pulte Home Corporation

LOCATION: East side of Rogers Road, approximately one half mile north of the intersection of Rogers Road and Lester Road

PARCEL ID NUMBERS: 29-20-28-0000-00-003

EXISTING USE: Vacant

FLUM DESIGNATION: Low Density Suburban Residential

CURRENT ZONING: PUD (Planned Unit Development)

PROPOSED DEVELOPMENT: 153 single family homes; developed in one phase

TRACT SIZE: 61.1 +/- acres

DISTRIBUTION

Mayor Nelson
Commissioners
City Administrator
Community Development Director

Finance Director
HR Director
IT Director
Police Chief

Public Services Director
Recreation Director
City Clerk
Fire Chief

RELATIONSHIP TO ADJACENT PROPERTIES:

| <i>Direction</i> | <i>Future Land Use</i> | <i>Zoning</i> | <i>Present Use</i> |
|------------------|--|---------------|--|
| North (City) | Low Density Suburban Residential (0-3.5 du/ac) | R-1AA | Vacant, Lake Merrill |
| East (City) | Low Density Suburban Residential (0-3.5 du/ac) | PUD | Oak Hill Reserve subdivision |
| South (City) | Low Density Suburban Residential (0-3.5 du/ac) | R-1AA, R-1 | Carriage Hills subdivision (under construction), Vacant property |
| West (City) | Low Density Suburban Residential (0-3.5 du/ac) | R-1AA | Wekiva Run subdivision |

Project Use: On August 1, 2018, the City Council approved a PUD Master Plan/Preliminary Development Plan for the Vista Reserve subdivision, which details the development of 153 single family residential lots in one phase. The subject property is located on the east side of Rogers Road, approximately one half mile north of the intersection of Rogers Road and Lester Road. The applicant is requesting approval of the Plat for Vista Reserve. The plat for Vista Reserve is for 153 lots. Consistent with the approved PUD Master Plan/Preliminary Development Plan, lot widths of 65-feet and 90-feet are provided on the plat. The minimum living area is proposed at 2,190 square feet.

Access: Ingress/egress access points for the development are located via Rogers Road. Rogers Road will terminate at the main entrance of the development. The developer will be dedicating a 0.68 acre portion of right-of-way along Rogers Road to the City. The subdivision will consist of public roads and infrastructure that is owned and maintained by the City. Vehicular and pedestrian connections are provided to the property to the north and to the Carriage Hills subdivision located to the south.

Stormwater: Two tracts located on the northwestern and northeastern corners of the site are reserved for stormwater retention. The stormwater retention areas will be owned and maintained by the homeowners association.

Recreation: Consistent with the approved PUD Master Plan/Preliminary Development Plan, a 1.67 acre tract is reserved for the community recreation facility that will be owned and maintained by the homeowners association. Included within the recreation facility is a picnic area, pool, pool cabana building, play structure, open play area, bicycle parking, and a parking area for 8 cars.

Buffer/Tree Program: Consistent with the approved PUD Master Plan/Preliminary Development Plan, a continuous open space tract with is provided around the perimeter of the subdivision to buffer the homes from the surrounding existing subdivisions. Thirty percent of the site, or 18.13 acres of open space is provided, and will be owned and maintained by the homeowners association. Landscaping and a 6-foot high brick wall is provided along Rogers Road. Trees are located within the open space tract provided around the perimeter of the subdivision.

The applicant has agreed to pay a tree mitigation payment of \$56,143.06.

SCHOOL CAPACITY REPORT: Per Orange County Public Schools, the project is vested to satisfy capacity, however there are outstanding concurrency issues that will be required to be satisfied prior to approval of a plat.

ORANGE COUNTY NOTIFICATION: The County was notified at the time of the subdivision plan and plat for this property through the DRC agenda distribution.

PUBLIC HEARING SCHEDULE:

September 11, 2018 - Planning Commission (5:30 pm)

October 3, 2018 - City Council (1:30 pm) - 1st Reading

RECOMMENDATION ACTION:

The **Development Review Committee** recommends approval of the Vista Reserve Plat, subject to final review by the City surveyor and City Engineer prior to recording the plat.

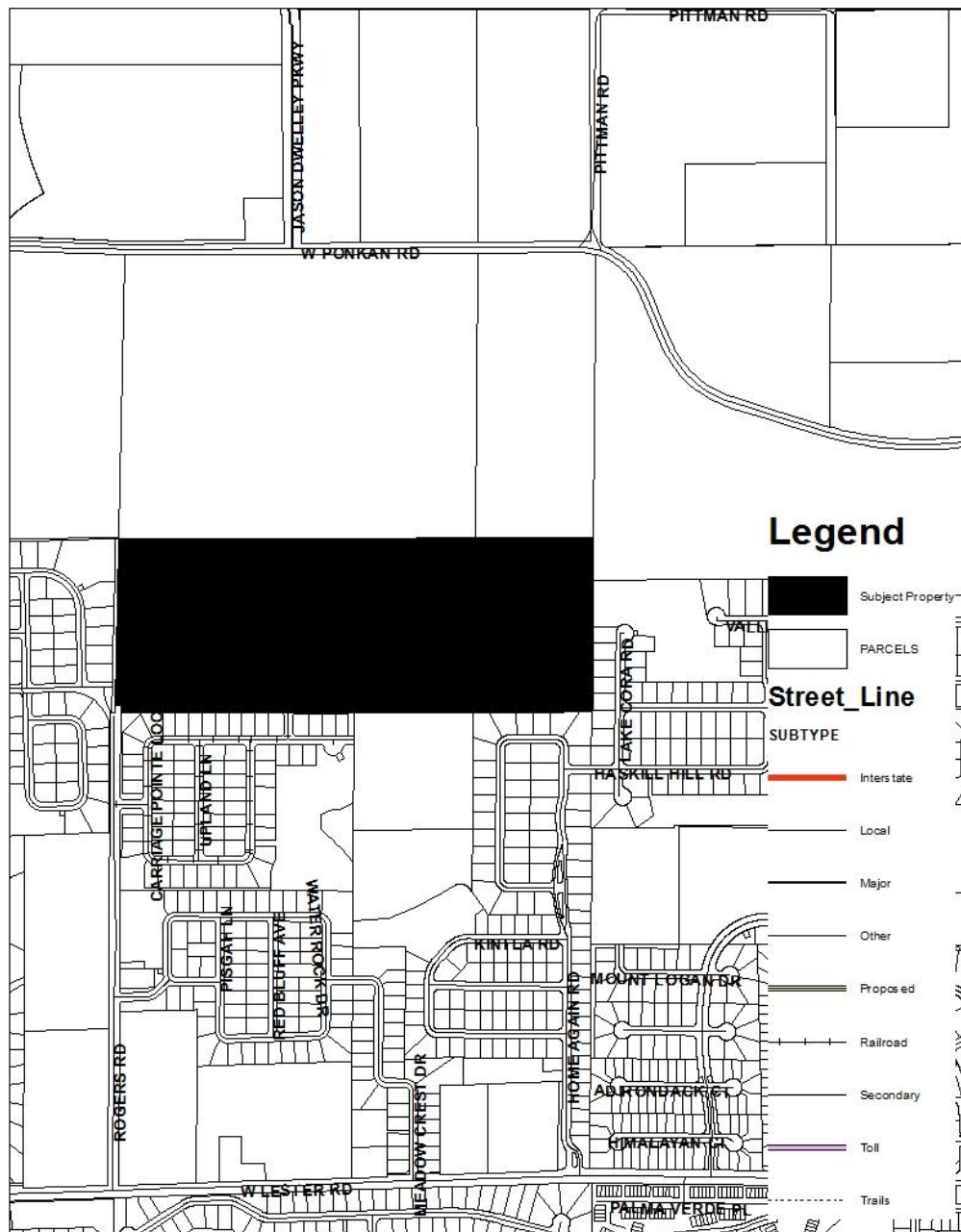
Recommended Motion: Recommend approval of the Vista Reserve plat, subject to final review by the City surveyor and City Engineer prior to recording the plat.

Planning Commission Role: The role of the Planning Commission for this development application is to advise the City Council to approve or deny based on consistency with the Comprehensive Plan and Land Development Code and Final Development Plan and Master Plan.

Note: This item is considered quasi-judicial. The staff report and its findings are to be incorporated into and made a part of the minutes of this meeting.

Project: VISTA RESERVE
Owned by: Mikhail Wafaa, Abdelsayed George, Abdelsayed Lucy, Abdelsayed Wafeek
Located: East side of Rogers Road, approximately one half mile north of the intersection of Rogers Road and Lester Road
Parcel ID#s: 29-20-28-0000-00-003

VICINITY MAP





AERIAL MAP



VISTA RESERVE

A PARCEL OF LAND LYING IN THE SOUTH 3/4 OF THE SOUTH 1/2 OF THE NORTHWEST 1/4 OF SECTION 29, TOWNSHIP 20 SOUTH, RANGE 28 EAST, CITY OF APOPKA, ORANGE COUNTY, FLORIDA

LEGAL DESCRIPTION:

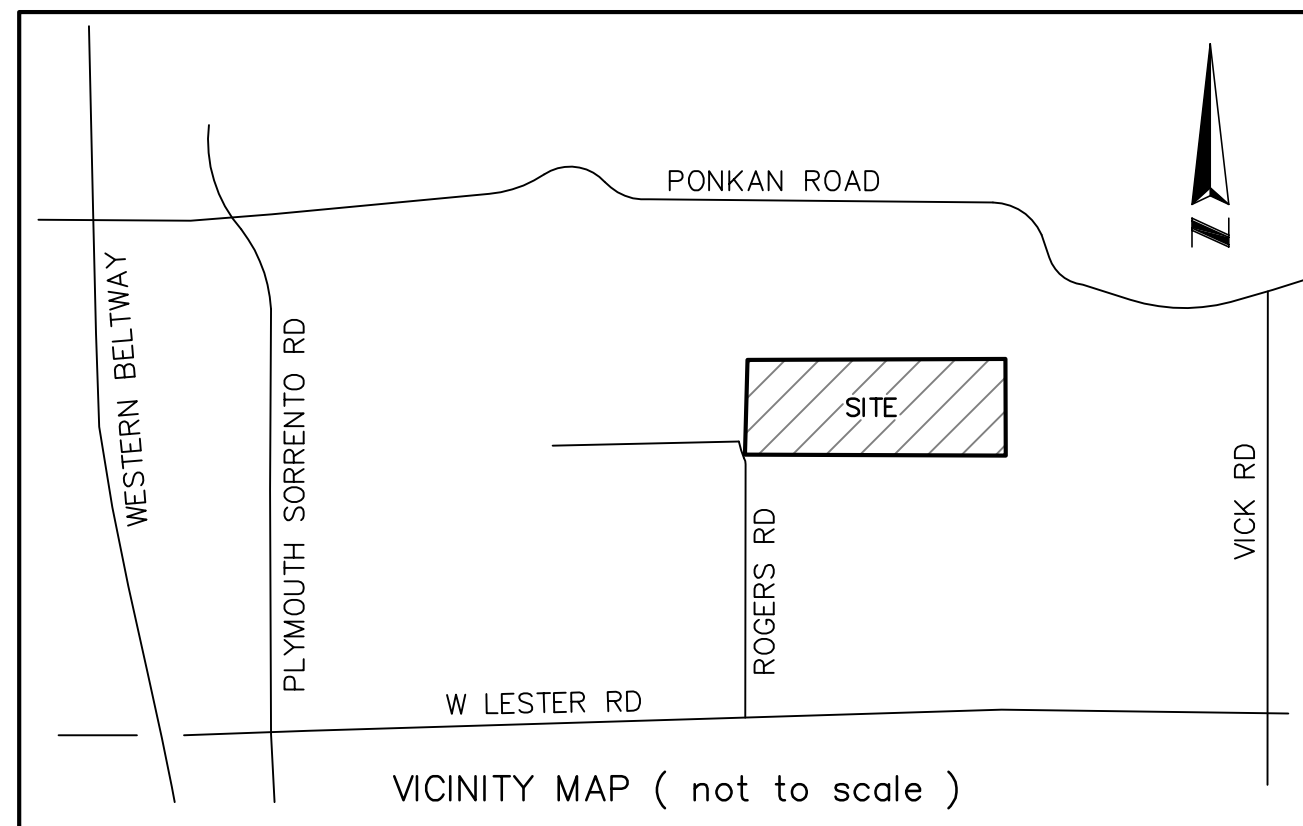
THE SOUTH THREE QUARTERS OF THE SOUTH HALF OF THE NORTHWEST QUARTER OF SECTION 29, TOWNSHIP 20 SOUTH, RANGE 28 EAST, ORANGE COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGIN AT THE SOUTHWEST CORNER OF THE NORTHWEST QUARTER OF SECTION 29, TOWNSHIP 20 SOUTH, RANGE 28 EAST, ORANGE COUNTY, FLORIDA; THENCE RUN NORTH 01°11'19" EAST ALONG THE WEST LINE OF SAID NORTHWEST QUARTER ALSO BEING THE EAST RIGHT-OF-WAY LINE OF ROGERS ROAD ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 77, PAGES 148-149 OF THE OFFICIAL RECORDS OF ORANGE COUNTY, FLORIDA, FOR A DISTANCE OF 984.97 FEET TO THE NORTHWEST CORNER OF THE SOUTH THREE QUARTERS OF THE SOUTH HALF OF SAID NORTHWEST QUARTER; THENCE RUN N89°48'58"E ALONG THE NORTH LINE OF SAID SOUTH THREE QUARTERS FOR A DISTANCE OF 2689.64 FEET TO THE NORTHEAST CORNER OF SAID SOUTH THREE QUARTERS; THENCE RUN S00°22'32"W ALONG THE EAST LINE OF SAID NORTHWEST QUARTER FOR A DISTANCE OF 989.15 FEET TO THE SOUTHEAST CORNER OF SAID NORTHWEST QUARTER; THENCE RUN S89°54'35"W ALONG THE SOUTH LINE OF SAID NORTHWEST QUARTER FOR A DISTANCE OF 2703.58 FEET TO THE SOUTHWEST CORNER THEREOF, AND THE POINT OF BEGINNING.

THE DESCRIBED PARCEL ALL LYING IN ORANGE COUNTY, FLORIDA CONTAINING 2,661,310 SQUARE FEET (61.1 ACRES), MORE OR LESS.

SURVEYOR'S NOTES:

- Bearings shown hereon are assumed and based on the South line of the Northwest Quarter of Section 29, Township 20 South, Range 28 East being an assumed bearing of South 89°54'35" West for angular designation only.
- All lot lines intersecting curves are radial, unless otherwise noted non-radial (N.R.).
- All platted utility easements shall also be easements for the construction, installation, maintenance, and operation of cable television and data services; provided, however, no such construction, installation, maintenance, and operation of cable television services shall interfere with the facilities and services of an electric, telephone, gas, or other public utility. In the event a cable television company damages the facilities of a public utility, it shall be solely responsible for the damages. This section shall not apply to those private easements granted to or obtained by a particular electric, telephone, gas, or other public utility. Such construction, installation, maintenance, and operation shall comply with the National Electrical Safety Code as adopted by the Florida Public Service Commission.
- Tracts OS-1, OS-2, OS-3, OS-4 (Open Space), R-1 (Recreation Tract), Tracts B-1, B-2 (Buffer), Tract M-1 (Median), and Tracts P-1, P-2 (Stormwater Pond) shall be owned and maintained by the VISTA RESERVE Homeowners Association, Inc. (the Association).
- Tract FC-1 (Floodplain Conservation), shall be owned by the Association with development rights dedicated to the City of Apopka. No soil excavation, fill, or removal within the conservation shall be permitted. The removal of vegetation within the conservation is prohibited unless approval from the City of Apopka or any other applicable jurisdictional agency is granted to remove dead or damaged vegetation that poses a hazard or approval is granted to remove exotic or nuisance vegetation.
- This plat contains 153 Lots.
- The street tree easements, wall access easements, and drainage easements shown hereon shall be dedicated to and maintained by the Association.
- A utility easement is hereby dedicated to the perpetual use of the public over the entirety of Tracts B-1 and B-2 (Buffer).
- The Floodplain Conservation line shown hereon was established by the Federal Emergency Management Association, utilizing the Base Flood Zone Elevation (B.F.E.) for Zone AE as being an elevation of 62.60', North American Vertical Datum of 1988 (NAVD 88). The elevation used to establish the B.F.E. is based on the St. Johns River Water Management District Benchmark #98-079-0-03, box cut in headwall at end of cul-de-sac on Championship Court, Elevation 59.619' (NAVD 88).



SHEET INDEX

- SHEET 1 of 4 - legal description, Surveyor's notes, legend & dedication
- SHEET 2 OF 4 - boundary information
- 3 through 4 of 4 - geometry

Building setback information according to engineers plans prepared by Madden, Moorhead & Stokes, Inc.

| | |
|--|--------|
| Front Primary..... | 25.00' |
| Entry Garage..... | 30.00' |
| Side..... | 7.50' |
| Rear Primary..... | 20.00' |
| Corner Side..... | 15.00' |
| Natural Surface waterbody or wetland edge..... | 50.00' |

LEGEND:

- | | | | |
|----------|--|--------|---|
| LB | denotes licensed business | S.T.E. | denotes street tree easement |
| U.E. | denotes utility easement | N.T. | denotes non tangent |
| R/W | denotes right-of-way | ● | denotes set nail & disk LB 6723 permanent control point (PCP) |
| • | denotes change in direction along right-of-way lines | ⊥ | denotes centerline |
| C.C.R. # | denotes Certified Corner Record Number | O.R. | denotes Official Records of Orange County, Florida |
| N.R. | denotes non-radial (see note 2) | PG(S). | denotes page(s) |
| ■ | denotes set 4" x 4" concrete monument LB 6723 permanent reference monument (PRM) | P.C. | denotes point of curvature |
| ▣ | denotes recovered 4" x 4" concrete monument permanent reference monument (PRM) | P.T. | denotes point of tangency |
| ○ | denotes recovered monumentation as labeled | P.I. | denotes point of intersection |
| D.E. | denotes drainage easement | P.B. | denotes Plat Book |
| W.A.E. | denotes wall access easement | R.P. | denotes |
| CR | denotes County Road | R | denotes radius |
| ORB | denotes Official Records of Orange County, Florida | Δ | denotes central angle |
| P.R.C. | denotes point of reverse curvature | L | denotes arc length |
| B.B. | denotes basis of bearing | CHD | denotes chord length |
| | | CHB | denotes chord bearing |
| | | P.C.C. | denotes point of compound curvature |
| | | P.S.M. | denotes Professional Surveyor and Mapper |
| | | ROW | denotes right-of-way |
| | | ☒ | denotes area of W.A.E and U.E. |



16 EAST PLANT STREET
WINTER GARDEN, FLORIDA 34787
(407) 654-5355

NOTICE: THIS PLAT, AS RECORDED IN ITS GRAPHIC FORM, IS THE OFFICIAL DEPICTION OF THE SUBDIVIDED LANDS DESCRIBED HEREIN AND WILL IN NO CIRCUMSTANCES BE SUPPLANTED IN AUTHORITY BY ANY OTHER GRAPHIC OR DIGITAL FORM OF THE PLAT. THERE MAY BE ADDITIONAL RESTRICTIONS THAT ARE NOT RECORDED ON THIS PLAT THAT MAY BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY.

CERTIFICATE OF REVIEW BY REVIEWING SURVEYOR

Pursuant to Section 177.081, Florida Statutes, I have reviewed this plat for conformity to Chapter 177 Part 1 of the Florida Statutes and that said plat complies with the technical requirements of that chapter; provided however, that my review does not include field verification of any of the coordinates, points or measurements shown on this plat.

Signed: _____ Date _____

Printed Name: Timothy O. Mosby, PSM
Registration Number 4732
Southeastern Surveying and Mapping Corp

QUALIFICATION STATEMENT OF SURVEYOR AND MAPPER

KNOW ALL MEN BY THESE PRESENTS, that I the undersigned, being a licensed surveyor and mapper, do hereby certify that on April 13, 2016 I completed the survey of the lands as shown in the foregoing plat or plan: that said plat is a true and correct representation of the lands surveyed and platted and was prepared under my direction and supervision; that permanent reference monuments have been placed as shown thereon; and this plat complies with all the survey requirements of Chapter 177, Florida Statutes; and that said land is located in the City of Apopka, Orange County, Florida.

By: _____ Date: _____

James L. Rickman P.S.M. # 5633 Allen & Company Licensed Business # 6723
16 East Plant Street, Winter Garden, Florida 34787

**VISTA RESERVE
DEDICATION**

THIS is to certify that the undersigned, Pulte Home Corporation, a Michigan Corporation, hereafter referred to as "Owner" is the lawful owner of the lands described in the caption hereon, and that it has caused the same to be surveyed, and this plat, made in accordance with said survey, is hereby adopted as the true and correct plat of said lands.

The Owner hereby dedicates Tract ROW-1 (Additional Right-of-Way Dedication), Streets, and Utility easements to the perpetual use of the public.

Tract LS-1 (Lift Station) is hereby dedicated in fee simple to the City of Apopka without any restriction whatsoever. City ownership of said Tracts and any improvements thereon vests upon approval of the Plat by the Apopka Planning Commission and City Council of Apopka. Recording of this Plat shall act as conveyance to the City of Apopka and no further instrument shall be necessary to vest fee simple title.

IN WITNESS WHEREOF, the undersigned, PULTE HOME COPORATION, a Michigan Corporation, has caused these presents to be executed and acknowledged by its undersigned Officer thereunto duly authorized on this ___ day of _____ 2018.

WITNESSES: PULTE HOME CORPORATION, a Michigan Corporation

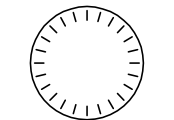
By: _____

Printed Name of Witness Printed name

Title

Printed Name of Witness (CORPORATE SEAL)

STATE OF FLORIDA
COUNTY OF _____



I HEREBY CERTIFY, that on this day, before me personally appeared _____, as _____ of PULTE HOME CORPORATION, a Michigan Corporation who is () personally known to me or () produced _____ as identification, and did/did not take an oath, the individual and officer described in and who executed the foregoing conveyance and acknowledged the execution thereof to be his free act and deed as such officer thereunto duly authorized.

WITNESS my hand and official seal this ___ day of _____ 2018.

Signature of Notary Public

Printed Name of Notary Public

Notary Public state of Florida

My Commission Expires: _____

Commission Number: _____

**CERTIFICATE OF APPROVAL
BY APOPKA PLANNING COMMISSION**

Examined and Approved _____
Chairman Date

**CERTIFICATE OF APPROVAL
BY CITY ENGINEER**

Examined and Approved _____
Richard Earp Date

CERTIFICATE OF APPROVAL BY MUNICIPALITY

THIS IS TO CERTIFY, that on _____ the foregoing plat was approved by the Municipality.

Mayor

Attest: _____

City Clerk

CERTIFICATE OF COUNTY COMPTROLLER

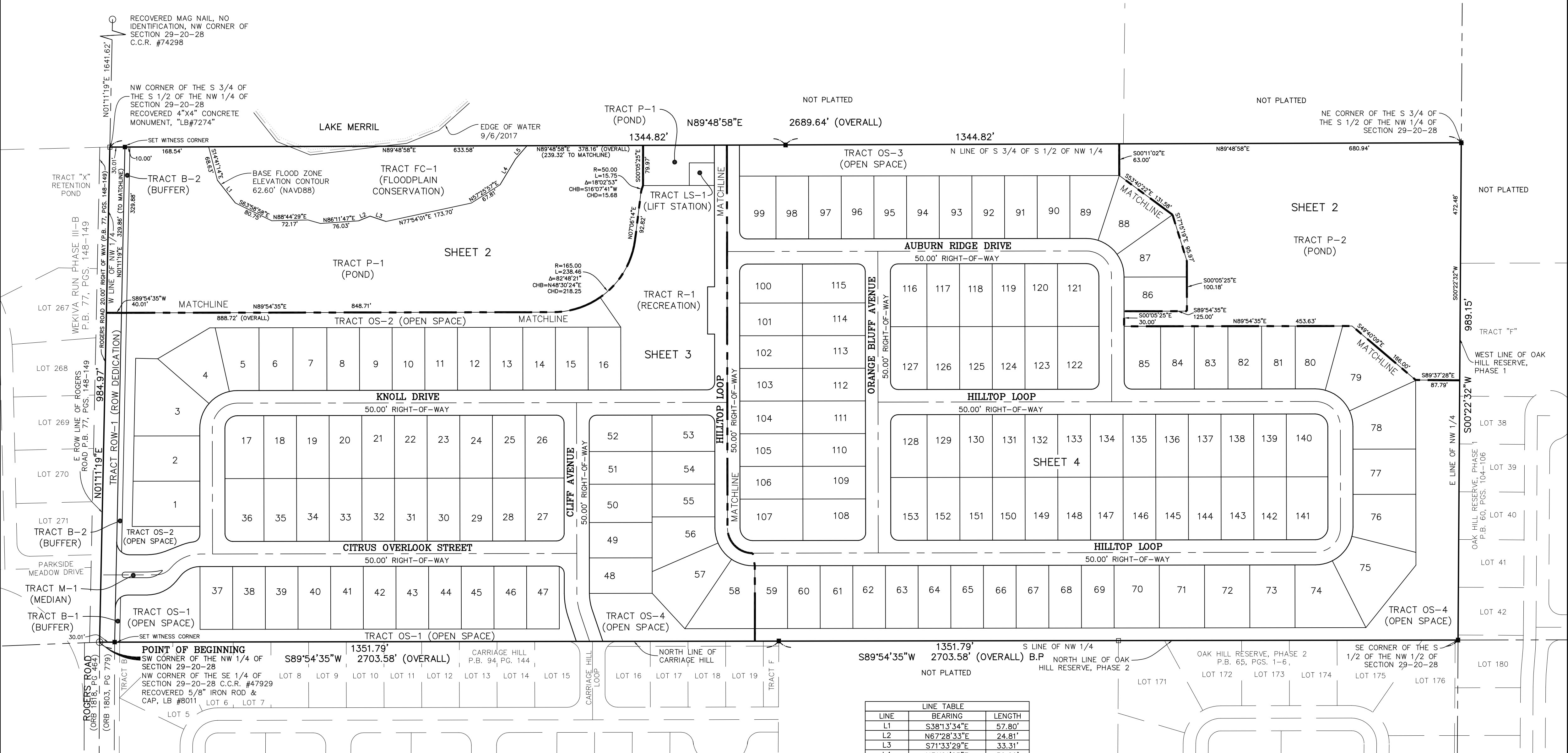
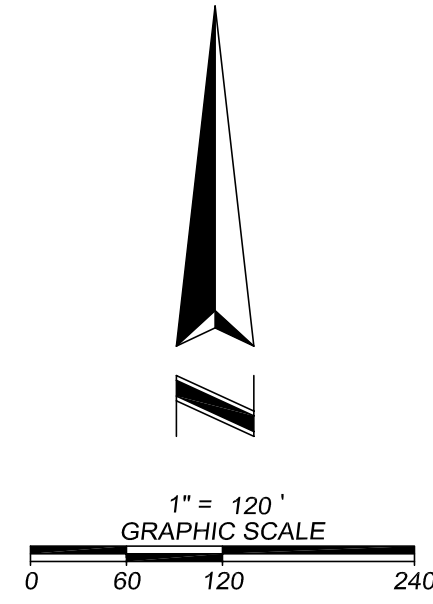
I HEREBY CERTIFY, that the foregoing plat was recorded in the Orange County Official Records on _____ as File No. _____

County Comptroller in and for Orange County, Florida.

By _____

VISTA RESERVE

A PARCEL OF LAND LYING IN THE SOUTH 3/4 OF THE SOUTH 1/2 OF THE NORTHWEST 1/4 OF SECTION 29, TOWNSHIP 20 SOUTH, RANGE 28 EAST, CITY OF APOPKA, ORANGE COUNTY, FLORIDA



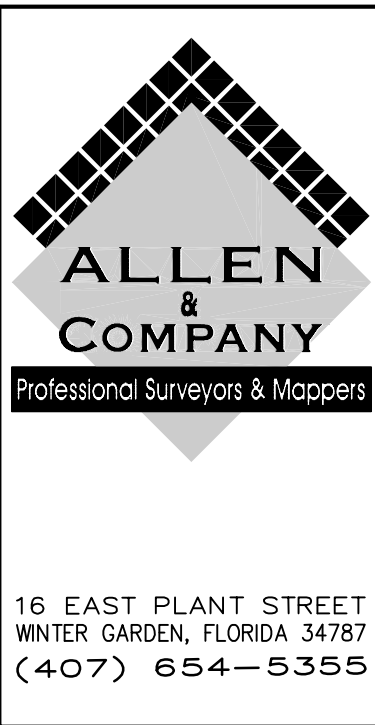
| LINE | BEARING | LENGTH |
|------|--------------|--------|
| L1 | S38°13'34\"E | 57.80' |
| L2 | N67°28'33\"E | 24.81' |
| L3 | S71°33'29\"E | 33.31' |
| L4 | N31°01'25\"E | 59.69' |
| L5 | N40°48'54\"E | 34.93' |

SHEET INDEX

- SHEET 1 of 4 - legal description, Surveyor's notes, legend & dedication
- SHEET 2 OF 4 - boundary information
- 3 through 4 of 4 - geometry



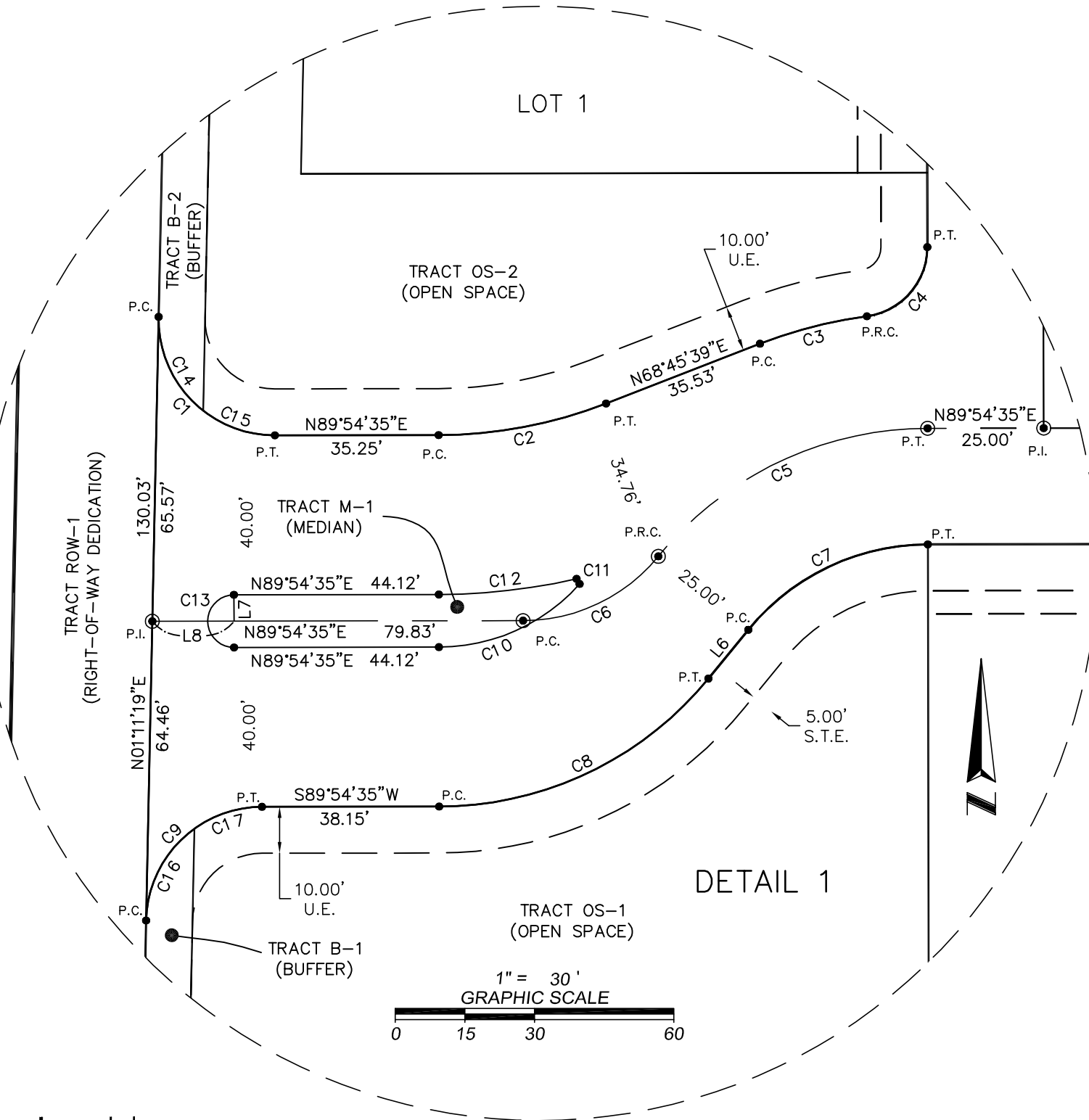
16 EAST PLANT STREET
WINTER GARDEN, FLORIDA 34787
(407) 654-5355



VISTA RESERVE

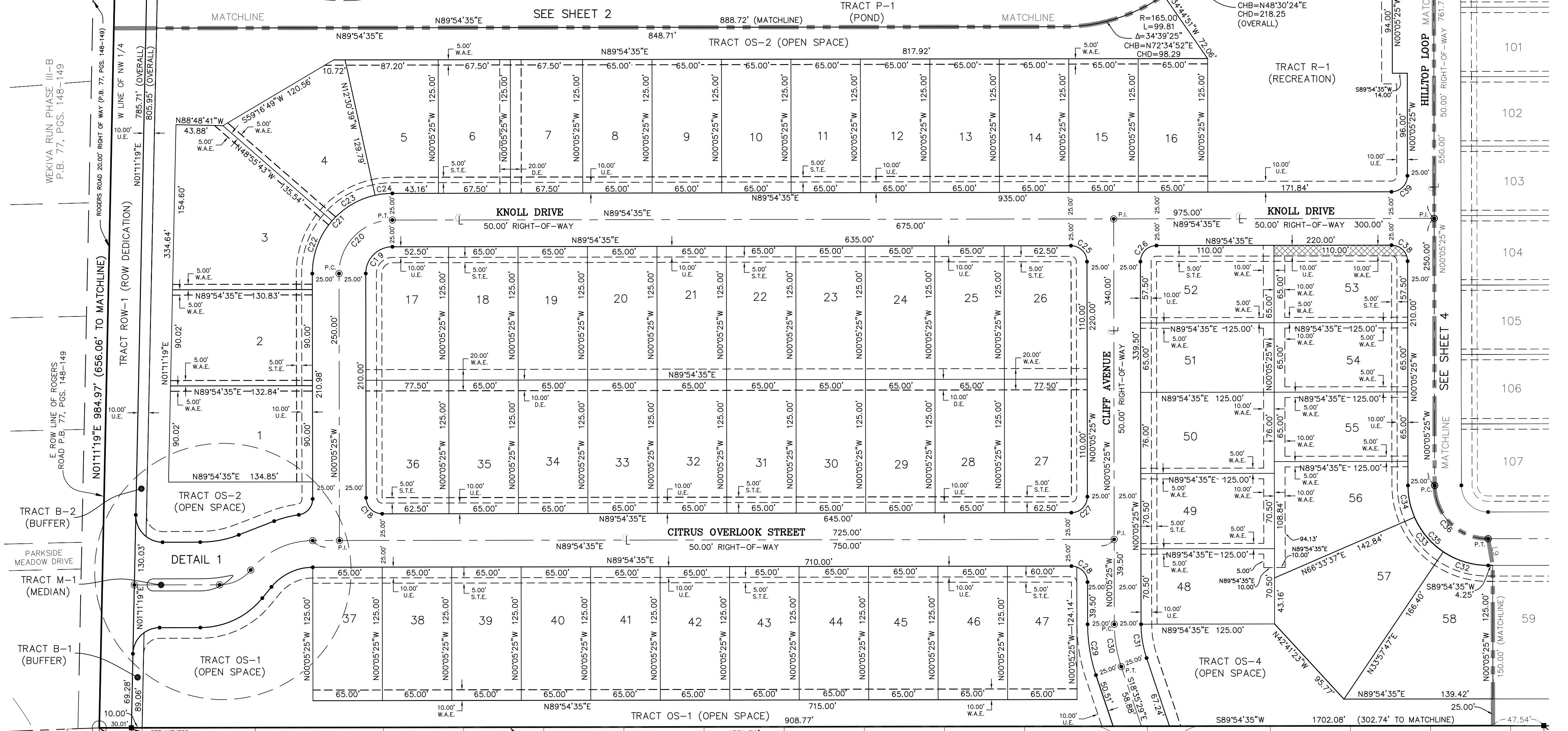
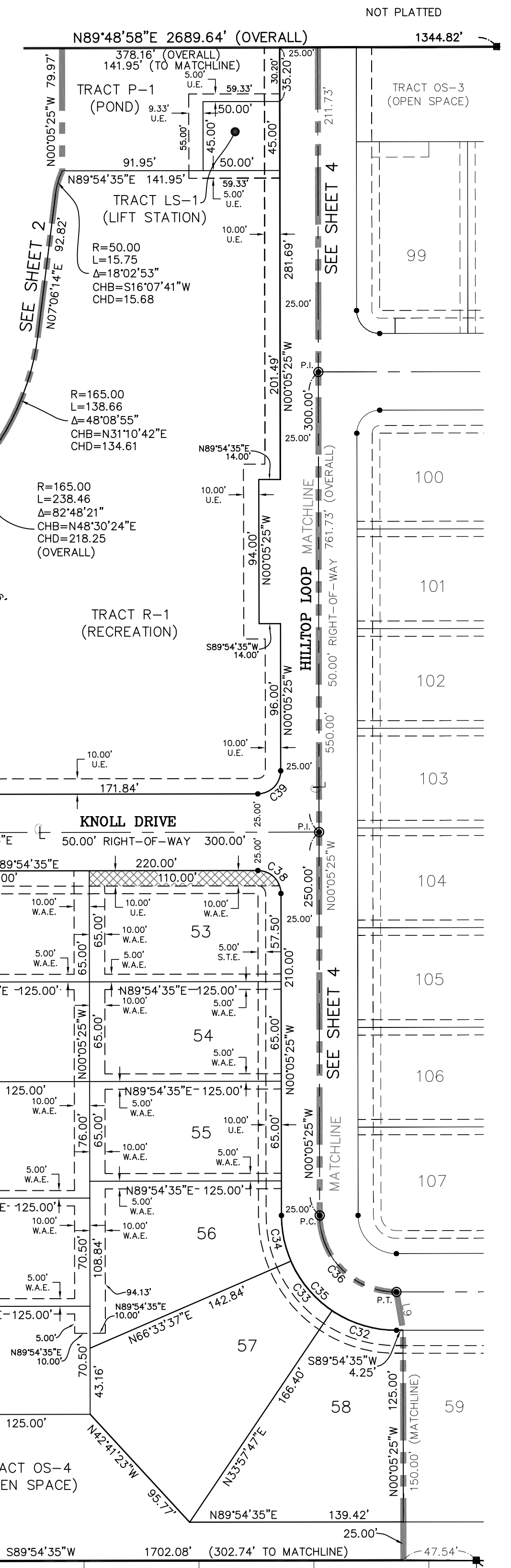
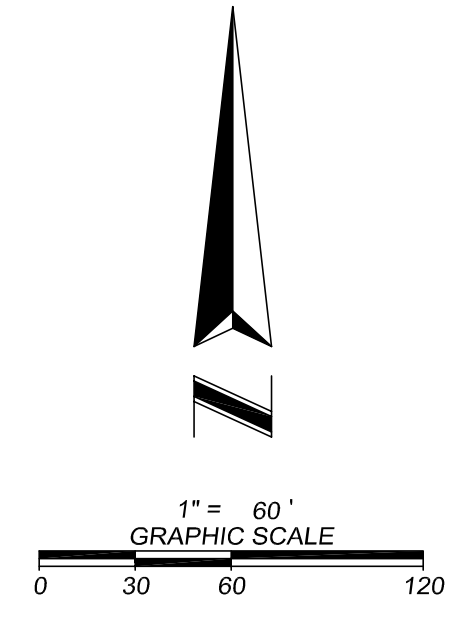
A PARCEL OF LAND LYING IN THE SOUTH 3/4 OF THE SOUTH 1/2 OF THE NORTHWEST 1/4 OF SECTION 29, TOWNSHIP 20 SOUTH, RANGE 28 EAST, CITY OF APOPKA, ORANGE COUNTY, FLORIDA

SHEET INDEX
 SHEET 1 of 4 – legal description, Surveyor's notes, legend & dedication
 SHEET 2 OF 4 – boundary information
 3 through 4 of 4 – geometry



| CURVE | RADIUS | CENTRAL ANGLE | ARC LENGTH | CHORD LENGTH | CHORD BEARING |
|-------|---------|---------------|------------|--------------|---------------|
| C1 | 25.00' | 91°16'44" | 39.83' | 35.75' | S44°27'03"E |
| C2 | 100.00' | 21°08'56" | 36.91' | 36.70' | N79°20'07"E |
| C3 | 100.00' | 13°39'15" | 23.83' | 23.77' | S75°35'16"W |
| C4 | 15.00' | 82°30'19" | 21.60' | 19.78' | N41°09'44"E |
| C5 | 75.00' | 50°41'15" | 66.35' | 64.21' | S64°33'57"W |
| C6 | 37.68' | 50°41'15" | 33.33' | 32.26' | N64°33'57"E |
| C7 | 50.00' | 50°41'15" | 44.23' | 42.80' | S64°33'57"W |
| C8 | 75.00' | 50°41'15" | 66.35' | 64.21' | N64°33'57"E |
| C9 | 25.00' | 88°43'16" | 38.71' | 34.96' | S45°32'57"W |
| C10 | 40.67' | 48°11'23" | 34.21' | 33.21' | N65°48'53"E |
| C11 | 0.67' | 144°34'09" | 1.69' | 1.28' | N30°33'53"W |
| C12 | 134.33' | 12°45'31" | 29.91' | 29.85' | N83°31'49"E |
| C13 | 5.67' | 180°00'00" | 17.81' | 11.34' | S00°05'25"E |
| C14 | 25.00' | 53°07'48" | 23.18' | 22.36' | S25°22'35"E |
| C15 | 25.00' | 38°08'56" | 16.65' | 16.34' | S71°00'57"E |
| C16 | 25.00' | 53°07'48" | 23.18' | 22.36' | S27°45'13"W |
| C17 | 25.00' | 35°35'27" | 15.53' | 15.28' | S72°06'51"W |
| C18 | 15.00' | 90°00'00" | 23.56' | 21.21' | S45°05'25"E |
| C19 | 25.00' | 90°00'00" | 39.27' | 35.36' | S44°54'35"W |
| C20 | 50.00' | 90°00'00" | 78.54' | 70.71' | S44°54'35"W |
| C21 | 75.00' | 90°00'00" | 117.81' | 106.07' | S44°54'35"W |
| C22 | 75.00' | 41°09'43" | 53.88' | 52.73' | S20°29'26"W |
| C23 | 75.00' | 36°25'03" | 47.67' | 46.87' | S59°16'49"W |
| C24 | 75.00' | 12°25'14" | 16.26' | 16.23' | S83°41'58"W |
| C25 | 15.00' | 90°00'00" | 23.56' | 21.21' | N45°05'25"E |
| C26 | 15.00' | 90°00'00" | 23.56' | 21.21' | S44°54'35"W |
| C27 | 15.00' | 90°00'00" | 23.56' | 21.21' | N44°54'35"E |
| C28 | 15.00' | 90°00'00" | 23.56' | 21.21' | N45°05'25"E |
| C29 | 150.00' | 18°30'04" | 48.44' | 48.23' | S09°20'27"E |
| C30 | 125.00' | 18°30'04" | 40.36' | 40.19' | S09°20'27"E |
| C31 | 100.00' | 18°30'04" | 32.29' | 32.15' | S09°20'27"E |
| C32 | 75.00' | 34°03'12" | 44.58' | 43.92' | S73°03'49"E |
| C33 | 75.00' | 32°35'50" | 42.67' | 42.10' | S39°44'18"E |
| C34 | 75.00' | 23°20'58" | 30.86' | 30.35' | S11°45'54"E |
| C35 | 75.00' | 90°00'00" | 117.81' | 106.07' | S45°05'25"E |
| C36 | 50.00' | 90°00'00" | 78.54' | 70.71' | S45°05'25"E |
| C38 | 15.00' | 90°00'00" | 23.56' | 21.21' | N45°05'25"W |
| C39 | 15.00' | 90°00'00" | 23.56' | 21.21' | N44°54'35"E |

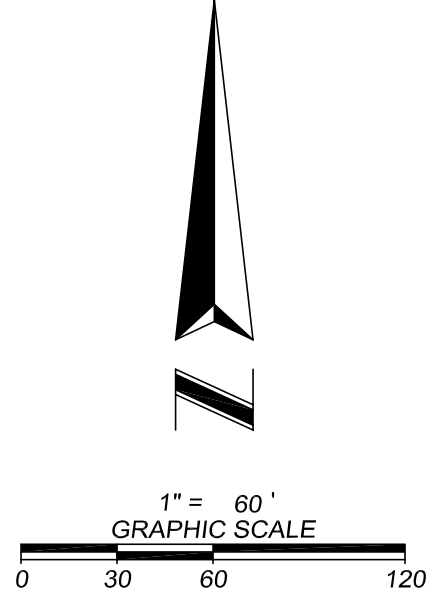
| LINE | BEARING | LENGTH |
|------|-------------|--------|
| L6 | S39°13'20"W | 13.65' |
| L7 | S00°05'25"E | 5.67' |
| L8 | S89°54'35"W | 17.59' |
| L9 | S09°43'58"E | 25.36' |



ROGERS ROAD (ORB 818, PG 494)
 TRACT B-2 (BUFFER)
 PARKSIDE MEADOW DRIVE
 TRACT M-1 (MEDIAN)
 TRACT B-1 (BUFFER)
 POINT OF BEGINNING
 SW CORNER OF THE NW 1/4 OF SECTION 29-20-28
 NW CORNER OF THE SE 1/4 OF SECTION 29-20-28 C.C.R. #47929
 LOT 5 LOT 6 LOT 7 LOT 8 LOT 9 LOT 10 LOT 11 LOT 12 LOT 13 LOT 14 LOT 15 LOT 16 LOT 17 LOT 18 LOT 19 TRACT F
 NORTH LINE OF CARRIAGE HILL
 1351.79'
 S89°54'35"W
 2703.58' (OVERALL)
 CARRIAGE HILL P.B. 94 PG. 144
 S LINE OF NW 1/4
 CARRIAGE HILL LOOP



16 EAST PLANT STREET
WINTER GARDEN, FLORIDA 34787
(407) 654-5355



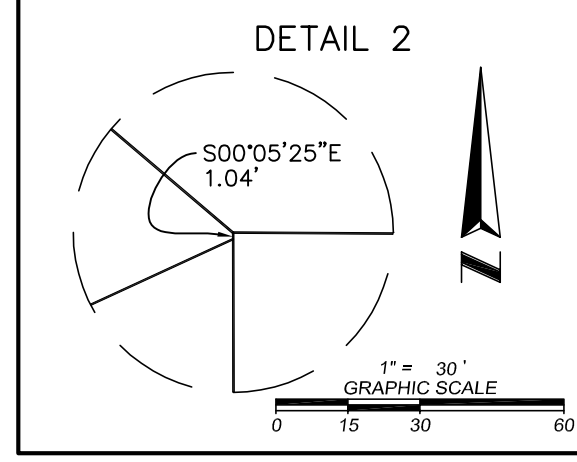
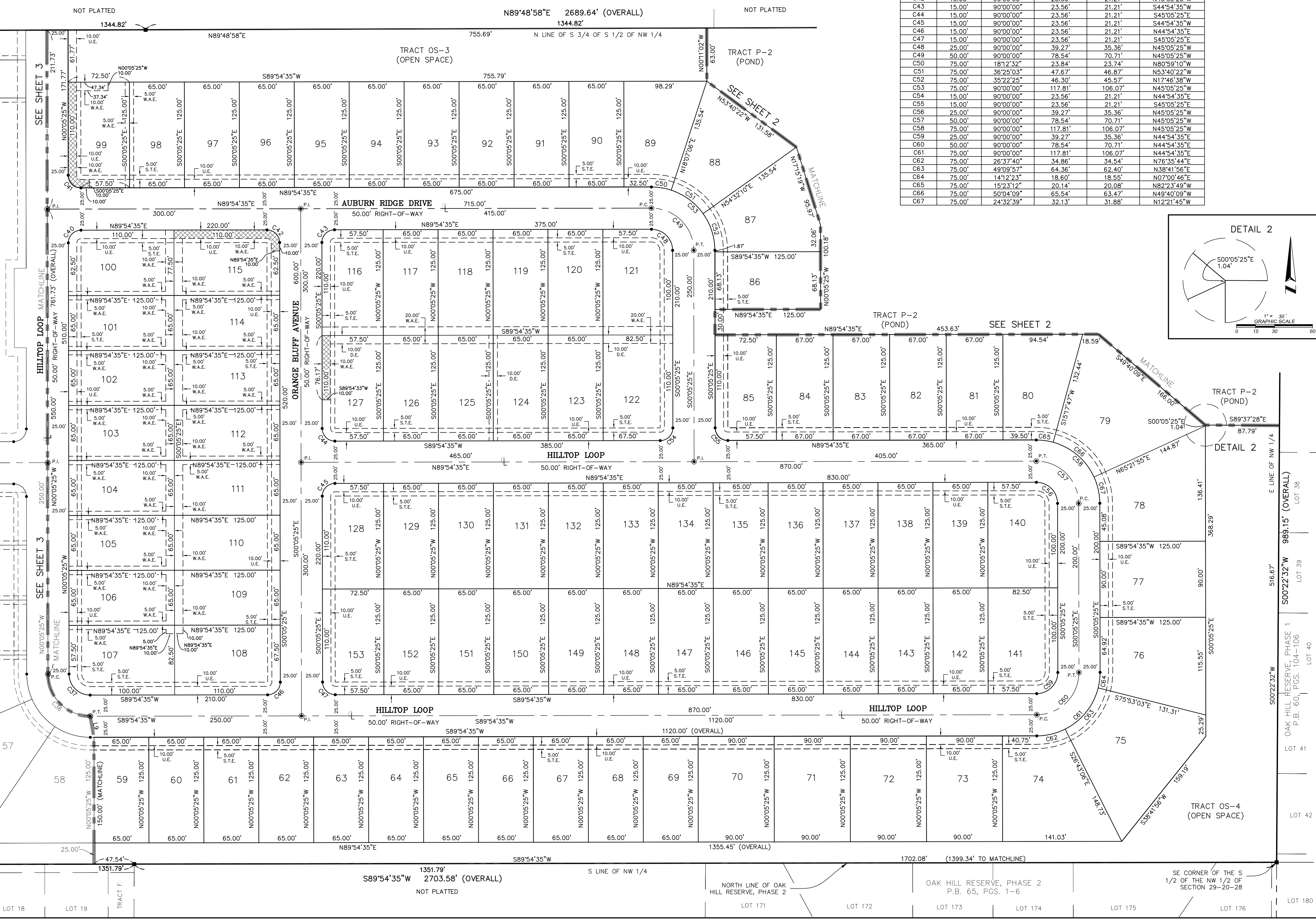
VISTA RESERVE

A PARCEL OF LAND LYING IN THE SOUTH 3/4 OF THE SOUTH 1/2 OF THE NORTHWEST 1/4 OF SECTION 29, TOWNSHIP 20 SOUTH, RANGE 28 EAST, CITY OF APOPKA, ORANGE COUNTY, FLORIDA

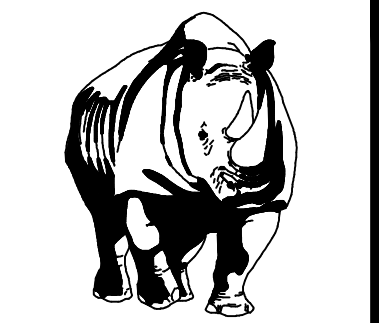
SHEET INDEX
SHEET 1 of 4 - legal description, Surveyor's notes, legend & dedication
SHEET 2 of 4 - boundary information
3 through 4 of 4 - geometry

| LINE | BEARING | LENGTH |
|------|-------------|--------|
| L9 | S09°43'56"E | 25.36' |

| CURVE | RADIUS | CENTRAL ANGLE | ARC LENGTH | CHORD LENGTH | CHORD BEARING |
|-------|--------|---------------|------------|--------------|---------------|
| C36 | 50.00' | 90°00'00" | 78.54' | 70.71' | S45°05'25"E |
| C37 | 25.00' | 90°00'00" | 39.27' | 35.36' | S45°05'25"E |
| C40 | 15.00' | 90°00'00" | 23.56' | 21.21' | S44°54'35"W |
| C41 | 15.00' | 90°00'00" | 23.56' | 21.21' | S45°05'25"E |
| C42 | 15.00' | 90°00'00" | 23.56' | 21.21' | N45°05'25"W |
| C43 | 15.00' | 90°00'00" | 23.56' | 21.21' | S44°54'35"W |
| C44 | 15.00' | 90°00'00" | 23.56' | 21.21' | S45°05'25"E |
| C45 | 15.00' | 90°00'00" | 23.56' | 21.21' | S44°54'35"W |
| C46 | 15.00' | 90°00'00" | 23.56' | 21.21' | N44°54'35"E |
| C47 | 15.00' | 90°00'00" | 23.56' | 21.21' | S45°05'25"E |
| C48 | 25.00' | 90°00'00" | 39.27' | 35.36' | N45°05'25"W |
| C49 | 50.00' | 90°00'00" | 78.54' | 70.71' | N45°05'25"W |
| C50 | 75.00' | 181°22'23" | 23.84' | 23.74' | N80°59'10"W |
| C51 | 75.00' | 38°25'03" | 47.87' | 48.87' | N53°40'22"W |
| C52 | 75.00' | 35°22'25" | 46.30' | 45.57' | N17°46'38"W |
| C53 | 75.00' | 90°00'00" | 117.81' | 106.07' | N45°05'25"W |
| C54 | 15.00' | 90°00'00" | 23.56' | 21.21' | N44°54'35"E |
| C55 | 15.00' | 90°00'00" | 23.56' | 21.21' | S45°05'25"E |
| C56 | 25.00' | 90°00'00" | 39.27' | 35.36' | N45°05'25"W |
| C57 | 50.00' | 90°00'00" | 78.54' | 70.71' | N45°05'25"W |
| C58 | 75.00' | 90°00'00" | 117.81' | 106.07' | N45°05'25"W |
| C59 | 25.00' | 90°00'00" | 39.27' | 35.36' | N44°54'35"E |
| C60 | 50.00' | 90°00'00" | 78.54' | 70.71' | N44°54'35"E |
| C61 | 75.00' | 90°00'00" | 117.81' | 106.07' | N44°54'35"E |
| C62 | 75.00' | 26°37'40" | 34.86' | 34.54' | N76°35'44"E |
| C63 | 75.00' | 49°09'57" | 64.36' | 62.40' | N38°41'56"E |
| C64 | 75.00' | 141°22'23" | 18.60' | 18.55' | N07°00'46"E |
| C65 | 75.00' | 182°31'03" | 20.14' | 20.08' | N82°33'49"W |
| C66 | 75.00' | 50°04'09" | 65.54' | 63.47' | N49°40'09"W |
| C67 | 75.00' | 24°32'39" | 32.13' | 31.88' | N12°21'45"W |



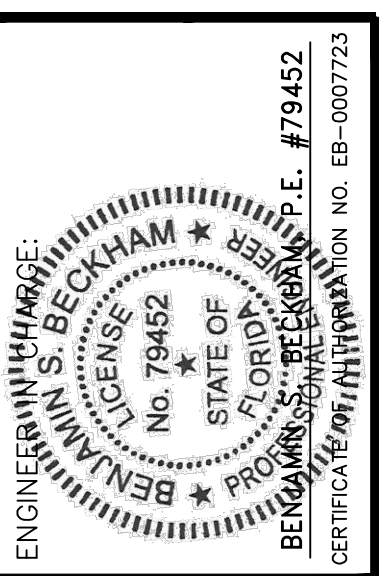
LOT 18 LOT 19 TRACT F
LOT 171 LOT 172 LOT 173 LOT 174 LOT 175 LOT 176 LOT 180
OAK HILL RESERVE, PHASE 1
P.B. 60, PGS. 104-106
OAK HILL RESERVE, PHASE 2
P.B. 65, PGS. 1-6
SE CORNER OF THE S
1/2 OF THE NW 1/2 OF
SECTION 29-20-28



MADDEN
MOORHEAD & STOKES, INC.
CIVIL ENGINEERS
431 E. Horatio Avenue
Suite 260
Maitland, Florida 32751
(407) 629-8330

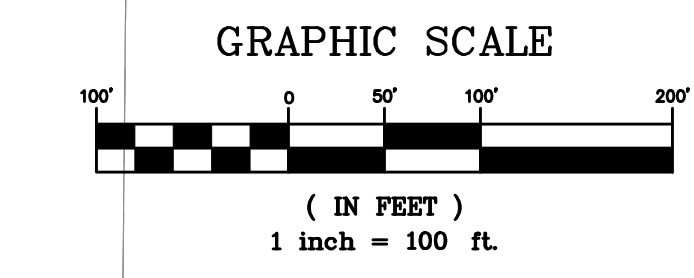
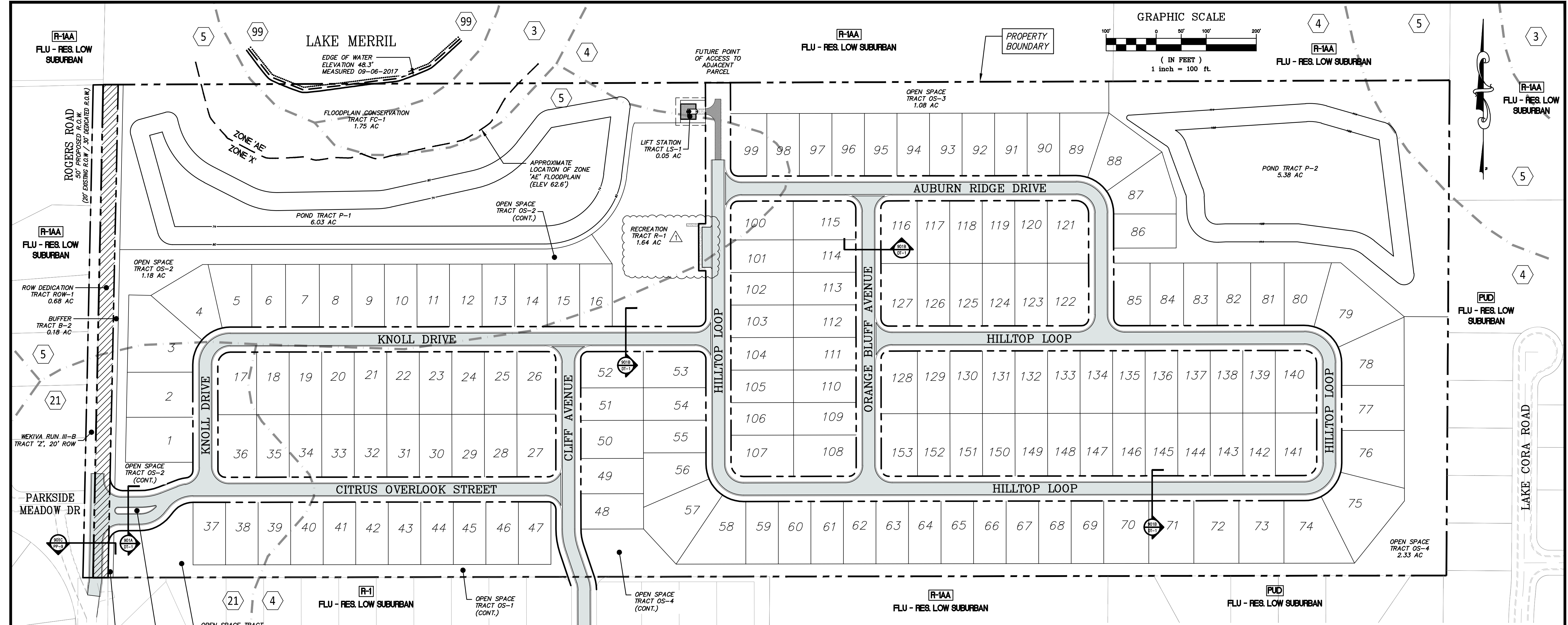
OVERALL SITE PLAN
FOR
VISTA RESERVE
CITY OF APOPKA, FLORIDA

THE PULTE GROUP
4901 WINDLAND ROAD, SUITE 900
ORLANDO, FLORIDA 32811
(407) 861-1514



| NO. | REVISIONS | DATE |
|-----|---------------------------|------------|
| 1 | ISSUE FOR PERMITS | 06/22/2018 |
| 2 | REVISED PER CITY COMMENTS | 06/22/2018 |
| 3 | REVISED PER CITY COMMENTS | 06/22/2018 |
| 4 | REVISED PER CITY COMMENTS | 06/22/2018 |
| 5 | REVISED PER CITY COMMENTS | 06/22/2018 |
| 6 | REVISED PER CITY COMMENTS | 06/22/2018 |
| 7 | REVISED PER CITY COMMENTS | 06/22/2018 |
| 8 | REVISED PER CITY COMMENTS | 06/22/2018 |
| 9 | REVISED PER CITY COMMENTS | 06/22/2018 |
| 10 | REVISED PER CITY COMMENTS | 06/22/2018 |
| 11 | REVISED PER CITY COMMENTS | 06/22/2018 |

JOB # 17051
DATE: 06/22/2018
SCALE: 1" = 100'
DESIGNED BY: BSB
DRAWN BY: BSB
APPROVED BY: BSB

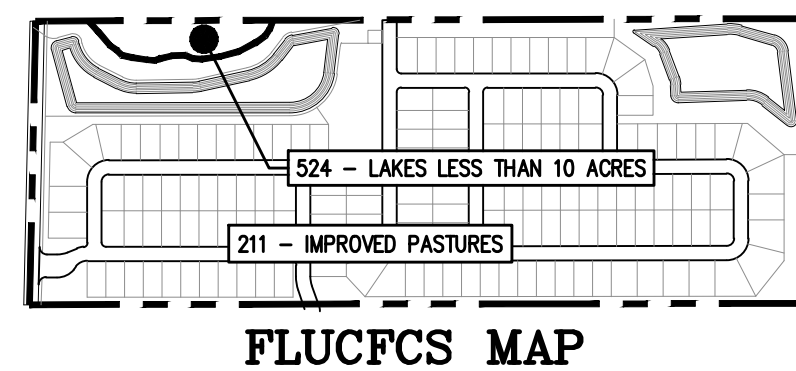


PROJECT NOTES

- THE PROJECT IS TO BE DEVELOPED IN ONE PHASE
- EXISTING FUTURE LAND USE: RESIDENTIAL LOW SUBURBAN
- EXISTING ZONING: PLANNED UNIT DEVELOPMENT (PUD)
- TOTAL DEVELOPABLE LAND AREA: 61.01 ACRES (2,661,310 SF)
- RIGHT-OF-WAY DEDICATION (TRACT ROW-1): 0.68 ACRES
- NET DEVELOPABLE LAND AREA: 60.42 ACRES
- MAXIMUM RESIDENTIAL DENSITY (ALLOWED): UP TO 3.5 DU/AC
- NET RESIDENTIAL DENSITY: 2.53 DU/AC
- PROPOSED SINGLE-FAMILY DETACHED LOTS: 153 LOTS
65'x125' LOT SIZE (MIN.): 140 LOTS (91.5%)
90'x125' LOT SIZE (MIN.): 13 LOTS (8.5%)
- MINIMUM LOT AREA: 8,125 SF
- MINIMUM LOT WIDTH: 65'
- MINIMUM LOT DEPTH: 125'
- MINIMUM LIVING AREA: 2,190 SF
- MAXIMUM BUILDING HEIGHT: 35'
- SETBACKS:
FROM NATURAL SURFACE WATER: 50'
FRONT PRIMARY: 25'
FRONT ENTRY GARAGE: 30'
REAR PRIMARY: 20'
SIDE: 7.5'
CORNER SIDE: 15'
ACCESSORY STRUCTURES: PER LDC SEC. 7.01.00
- RECREATION SPACE CALCULATIONS:
REQUIRED (153 UNITS x 2.6 POP/UNIT) x (3.6 ACRES / 1,000 POP) = 1.43 ACRES
PROVIDED: TRACT R-1 = 1.67 ACRES
- OPEN SPACE CALCULATIONS:
REQUIRED (60.42 ACRES x 30%) = 18.13 ACRES
PROVIDED: 18.16 ACRES
TRACTS P-1, P-2 (MAX 50% OF REQ.) = 9.06 AC.
TRACTS B-1, B-2, FC-1, M-1, OS-1, OS-2, OS-3, OS-4, R-1 = 9.10 AC.
- SCHOOLS:
ELEMENTARY: WOLF LAKE
MIDDLE: WOLF LAKE
HIGH: APOPKA
- STREET LIGHT POLES AND FIXTURES SHALL BE OF A DECORATIVE TYPE.
- THE RECREATION TRACT AMENITIES ARE TO BE CONSTRUCTED PRIOR TO THE FIRST HOME CLOSING. AS AN ALTERNATE, A BOND WILL BE PERMITTED.

TRACT TABLE

| TRACT | USAGE | OWNERSHIP | MAINTENANCE | AREA (AC) |
|------------------|-------------------------|----------------|----------------|-----------|
| B-1 | BUFFER | H.O.A. | H.O.A. | 0.02 |
| B-2 | BUFFER | H.O.A. | H.O.A. | 0.18 |
| FC-1 | FLOODPLAIN CONSERVATION | H.O.A. | H.O.A. | 1.75 |
| LS-1 | LIFT-STATION | CITY OF APOPKA | CITY OF APOPKA | 0.05 |
| M-1 | MEDIAN | H.O.A. | H.O.A. | 0.02 |
| OS-1 | OPEN SPACE | H.O.A. | H.O.A. | 0.87 |
| OS-2 | OPEN SPACE | H.O.A. | H.O.A. | 1.18 |
| OS-3 | OPEN SPACE | H.O.A. | H.O.A. | 1.08 |
| OS-4 | OPEN SPACE | H.O.A. | H.O.A. | 2.33 |
| P-1 | STORMWATER POND | H.O.A. | H.O.A. | 6.03 |
| P-2 | STORMWATER POND | H.O.A. | H.O.A. | 5.38 |
| R-1 | RECREATION | H.O.A. | H.O.A. | 1.64 |
| ROW-1 | RIGHT-OF-WAY DEDICATION | CITY OF APOPKA | CITY OF APOPKA | 0.68 |
| ROW-2 | RIGHT-OF-WAY | CITY OF APOPKA | CITY OF APOPKA | 8.51 |
| | SINGLE-FAMILY LOTS | PRIVATE | PRIVATE | 31.38 |
| GROSS LAND AREA: | | | | 61.10 |



SOILS LEGEND

- SOILS DELINEATION LINE
- 1 BASINGER FINE SAND, FREQUENTLY PONDED, 0-1% SLOPES, HSG-D
- 2 CANDLER FINE SAND, 0-5% SLOPES, HSG-A
- 3 CANDLER FINE SAND, 5-12% SLOPES, HSG-A
- 4 LAKE FINE SAND, 0-5% SLOPES, HSG-A
- 5 WATER

LOT AREA TABLE

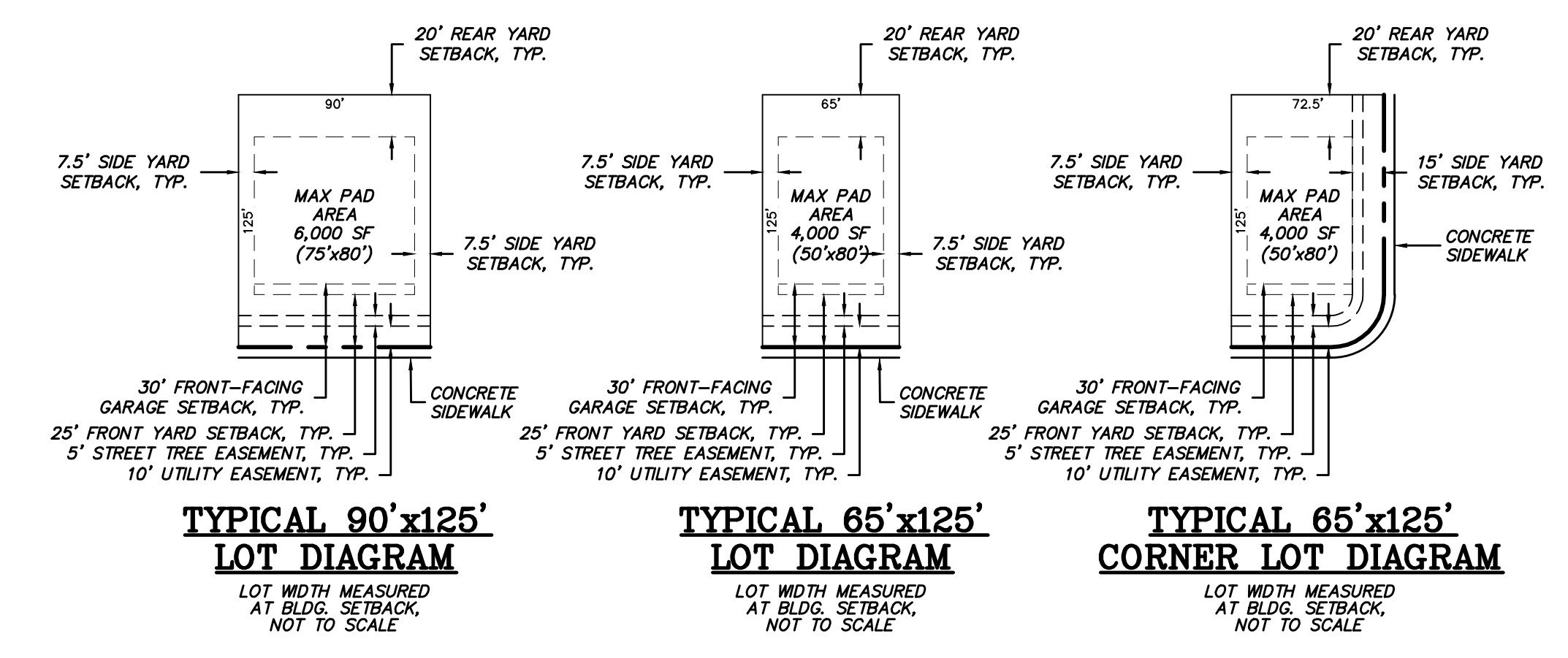
| LOT NO. | AREA (SF) | AREA (AC) | WIDTH (FT) |
|---------|-----------|-----------|------------|
| 1 | 12,046 | 0.277 | 90 |
| 2 | 11,865 | 0.272 | 90 |
| 3 | 17,241 | 0.396 | 69 |
| 4 | 11,340 | 0.260 | 48 |
| 5 | 9,190 | 0.211 | 60 |
| 6 | 8,438 | 0.194 | 67 |
| 7 | 8,438 | 0.194 | 67 |
| 8 | 8,125 | 0.187 | 65 |
| 9 | 8,125 | 0.187 | 65 |
| 10 | 8,125 | 0.187 | 65 |
| 11 | 8,125 | 0.187 | 65 |
| 12 | 8,125 | 0.187 | 65 |
| 13 | 8,125 | 0.187 | 65 |
| 14 | 8,125 | 0.187 | 65 |
| 15 | 8,125 | 0.187 | 65 |
| 16 | 8,125 | 0.187 | 65 |
| 17 | 9,553 | 0.219 | 77 |
| 18 | 8,125 | 0.187 | 65 |
| 19 | 8,125 | 0.187 | 65 |
| 20 | 8,125 | 0.187 | 65 |
| 21 | 8,125 | 0.187 | 65 |
| 22 | 8,125 | 0.187 | 65 |
| 23 | 8,125 | 0.187 | 65 |
| 24 | 8,125 | 0.187 | 65 |
| 25 | 8,125 | 0.187 | 65 |
| 26 | 9,639 | 0.221 | 77 |
| 27 | 9,639 | 0.221 | 77 |
| 28 | 8,125 | 0.187 | 65 |
| 29 | 8,125 | 0.187 | 65 |
| 30 | 8,125 | 0.187 | 65 |
| 31 | 8,125 | 0.187 | 65 |
| 32 | 8,125 | 0.187 | 65 |
| 33 | 8,125 | 0.187 | 65 |
| 34 | 8,125 | 0.187 | 65 |
| 35 | 8,125 | 0.187 | 65 |
| 36 | 9,639 | 0.221 | 77 |
| 37 | 8,125 | 0.187 | 65 |
| 38 | 8,125 | 0.187 | 65 |
| 39 | 8,125 | 0.187 | 65 |
| 40 | 8,125 | 0.187 | 65 |
| 41 | 8,125 | 0.187 | 65 |
| 42 | 8,125 | 0.187 | 65 |
| 43 | 8,125 | 0.187 | 65 |
| 44 | 8,125 | 0.187 | 65 |
| 45 | 8,125 | 0.187 | 65 |
| 46 | 8,125 | 0.187 | 65 |
| 47 | 8,124 | 0.186 | 65 |
| 48 | 8,813 | 0.202 | 70 |
| 49 | 8,813 | 0.202 | 70 |
| 50 | 9,500 | 0.218 | 76 |
| 51 | 8,125 | 0.187 | 68 |

LOT AREA TABLE

| LOT NO. | AREA (SF) | AREA (AC) | WIDTH (FT) |
|---------|-----------|-----------|------------|
| 52 | 9,014 | 0.207 | 72 |
| 53 | 9,014 | 0.207 | 72 |
| 54 | 8,125 | 0.187 | 65 |
| 55 | 8,125 | 0.187 | 65 |
| 56 | 10,300 | 0.236 | 53 |
| 57 | 13,964 | 0.321 | 42 |
| 58 | 12,377 | 0.284 | 49 |
| 59 | 8,125 | 0.187 | 65 |
| 60 | 8,125 | 0.187 | 65 |
| 61 | 8,125 | 0.187 | 65 |
| 62 | 8,125 | 0.187 | 65 |
| 63 | 8,125 | 0.187 | 65 |
| 64 | 8,125 | 0.187 | 65 |
| 65 | 8,125 | 0.187 | 65 |
| 66 | 8,125 | 0.187 | 65 |
| 67 | 8,125 | 0.187 | 65 |
| 68 | 8,125 | 0.187 | 65 |
| 69 | 8,125 | 0.187 | 65 |
| 70 | 11,250 | 0.258 | 90 |
| 71 | 11,250 | 0.258 | 90 |
| 72 | 11,250 | 0.258 | 90 |
| 73 | 11,250 | 0.258 | 90 |
| 74 | 13,814 | 0.317 | 76 |
| 75 | 16,309 | 0.374 | 64 |
| 76 | 12,481 | 0.287 | 83 |
| 77 | 11,250 | 0.258 | 90 |
| 78 | 13,563 | 0.311 | 77 |
| 79 | 16,104 | 0.370 | 65 |
| 80 | 9,686 | 0.222 | 60 |
| 81 | 8,375 | 0.192 | 67 |
| 82 | 8,375 | 0.192 | 67 |
| 83 | 8,375 | 0.192 | 67 |
| 84 | 8,375 | 0.192 | 67 |
| 85 | 9,014 | 0.207 | 72 |
| 86 | 8,125 | 0.187 | 65 |
| 87 | 11,114 | 0.255 | 44 |
| 88 | 11,371 | 0.261 | 48 |
| 89 | 9,748 | 0.224 | 56 |
| 90 | 8,125 | 0.187 | 65 |
| 91 | 8,125 | 0.187 | 65 |
| 92 | 8,125 | 0.187 | 65 |
| 93 | 8,125 | 0.187 | 65 |
| 94 | 8,125 | 0.187 | 65 |
| 95 | 8,125 | 0.187 | 65 |
| 96 | 8,125 | 0.187 | 65 |
| 97 | 8,125 | 0.187 | 65 |
| 98 | 8,125 | 0.187 | 65 |
| 99 | 9,014 | 0.207 | 72 |
| 100 | 8,125 | 0.187 | 65 |
| 101 | 8,125 | 0.187 | 65 |
| 102 | 8,125 | 0.187 | 65 |

LOT AREA TABLE

| LOT NO. | AREA (SF) | AREA (AC) | WIDTH (FT) |
|---------|-----------|-----------|------------|
| 103 | 8,125 | 0.187 | 65 |
| 104 | 8,125 | 0.187 | 65 |
| 105 | 8,125 | 0.187 | 65 |
| 106 | 8,125 | 0.187 | 65 |
| 107 | 10,178 | 0.234 | 82 |
| 108 | 10,264 | 0.236 | 82 |
| 109 | 8,125 | 0.187 | 65 |
| 110 | 8,125 | 0.187 | 65 |
| 111 | 8,125 | 0.187 | 65 |
| 112 | 8,125 | 0.187 | 65 |
| 113 | 8,125 | 0.187 | 65 |
| 114 | 8,125 | 0.187 | 65 |
| 115 | 9,639 | 0.221 | 77 |
| 116 | 9,014 | 0.207 | 72 |
| 117 | 8,125 | 0.187 | 65 |
| 118 | 8,125 | 0.187 | 65 |
| 119 | 8,125 | 0.187 | 65 |
| 120 | 8,125 | 0.187 | 65 |
| 121 | 10,178 | 0.234 | 82 |
| 122 | 10,264 | 0.236 | 82 |
| 123 | 8,125 | 0.187 | 65 |
| 124 | 8,125 | 0.187 | 65 |
| 125 | 8,125 | 0.187 | 65 |
| 126 | 8,125 | 0.187 | 65 |
| 127 | 9,014 | 0.207 | 72 |
| 128 | 9,014 | 0.207 | 72 |
| 129 | 8,125 | 0.187 | 65 |
| 130 | 8,125 | 0.187 | 65 |
| 131 | 8,125 | 0.187 | 65 |
| 132 | 8,125 | 0.187 | 65 |
| 133 | 8,125 | 0.187 | 65 |
| 134 | 8,125 | 0.187 | 65 |
| 135 | 8,125 | 0.187 | 65 |
| 136 | 8,125 | 0.187 | 65 |
| 137 | 8,125 | 0.187 | 65 |
| 138 | 8,125 | 0.187 | 65 |
| 139 | 8,125 | 0.187 | 65 |
| 140 | 10,178 | 0.234 | 82 |
| 141 | 10,178 | 0.234 | 82 |
| 142 | 8,125 | 0.187 | 65 |
| 143 | 8,125 | 0.187 | 65 |
| 144 | 8,125 | 0.187 | 65 |
| 145 | 8,125 | 0.187 | 65 |
| 146 | 8,125 | 0.187 | 65 |
| 147 | 8,125 | 0.187 | 65 |
| 148 | 8,125 | 0.187 | 65 |
| 149 | 8,125 | 0.187 | 65 |
| 150 | 8,125 | 0.187 | 65 |
| 151 | 8,125 | 0.187 | 65 |
| 152 | 8,125 | 0.187 | 65 |
| 153 | 9,014 | 0.207 | 72 |



TOTAL LOT AREA = 1,366,507 SF
AVERAGE AREA PER LOT = 8,931 SF

MASTER PLAN / PRELIMINARY DEVELOPMENT PLAN

FOR VISTA RESERVE



PARCELS: 29-20-28-0000-00-003

SECTIONS 29 AND 30, TOWNSHIP 20 SOUTH, RANGE 28 EAST

501 OLD DIXIE HIGHWAY

CITY OF APOPKA, FLORIDA

FOR

THE PULTE GROUP

4901 VINELAND ROAD, SUITE 500

ORLANDO, FLORIDA 32811

PHONE: (407) 661-1514

LEGAL DESCRIPTION:

BEGIN AT THE SOUTHWEST CORNER OF THE NW 1/4 OF SECTION 29, TOWNSHIP 20 SOUTH, RANGE 28 EAST, ORANGE COUNTY, FLORIDA; RUN THENCE NORTH ALONG THE WEST LINE OF SAID NW 1/4 A DISTANCE OF 985.01 FEET TO THE NORTH LINE OF THE SOUTH 3/4 OF THE SOUTH 1/2 OF SAID NW 1/4; RUN THENCE N88°38'14"E ALONG SAID NORTH LINE A DISTANCE OF 2689.71 FEET TO THE NORTHEAST CORNER OF SAID SOUTH 3/4; RUN THENCE S00°48'06"E ALONG THE EAST LINE OF SAID NW 1/4 A DISTANCE OF 989.23 FEET TO THE SOUTHEAST CORNER OF SAID NW 1/4; RUN THENCE S88°43'54"W ALONG THE SOUTH LINE OF SAID NW 1/4 A DISTANCE OF 2703.46 FEET TO THE SOUTHWEST CORNER THEREOF, AND THE POINT OF BEGINNING. ALL BEING AND LYING IN THE NW 1/4 OF SECTION 29, TOWNSHIP 20 SOUTH, RANGE 28 EAST, ORANGE COUNTY, FLORIDA.

ALSO DESCRIBED AS:

THE SOUTH 3/4 OF THE SOUTH 1/2 OF THE NW 1/4 OF SECTION 29, TOWNSHIP 20 SOUTH, RANGE 28 EAST, ORANGE COUNTY, FLORIDA.

ALSO DESCRIBED AS:

THE SOUTH SIXTY (60) ACRES OF THE NW 1/4 OF SECTION 29, TOWNSHIP 20 SOUTH, RANGE 28 EAST, ORANGE COUNTY, FLORIDA.

CONTAINING 2,661,310 SQUARE FEET (61.1 ACRES), MORE OR LESS.

INDEX OF SHEETS

| COV | COVER SHEET |
|------------------|--|
| 3 SHEETS | BOUNDARY, TOPOGRAPHIC, AND TREE SURVEY |
| SYM-1 | SYMBOLS AND ABBREVIATIONS |
| EC-1 | EXISTING CONDITIONS PLAN |
| MP-1 | MASTER PLAN |
| DD-1 | DEVELOPMENT NOTES AND DATA |
| SP-1 | SUBDIVISION PLAN |
| SP-2 | SUBDIVISION PLAN |
| DP-1 | MASTER DRAINAGE PLAN |
| DP-2 | MASTER DRAINAGE PLAN |
| UP-1 | MASTER UTILITY PLAN |
| UP-2 | MASTER UTILITY PLAN |
| TS-1 | TYPICAL SECTIONS |
| FA-1 | FIRE ACCESS PLAN |
| LP-001 | KEY PLAN |
| LP-002 TO LP-004 | TREE MITIGATION PLAN |
| LP-005 | RECREATION / OPEN SPACE PLAN |
| LP-100 TO LP-104 | LANDSCAPE PLAN |
| LP-105 | LANDSCAPE NOTES AND DETAILS |
| LP-200 | HARDSCAPE DETAILS |
| LP-201 | HARDSCAPE IMAGES |
| LP-300 TO LP-304 | IRRIGATION PLAN |
| LP-305 | IRRIGATION NOTES AND DETAILS |
| LP-306 TO LP-308 | IRRIGATION DETAILS |



MADDEN

MOORHEAD & STOKES, INC.
CIVIL ENGINEERS

431 E. HORATIO AVENUE, SUITE 260
MAITLAND, FLORIDA 32751
PHONE (407) 629-8330
FAX (407) 629-8336

PROJECT TEAM MEMBERS:

OWNER / DEVELOPER:

THE PULTE GROUP
4901 VINELAND RD., SUITE 500
ORLANDO, FL 32811
PHONE: (407) 661-1514
CONTACT: DOUG HOFFMAN

SURVEYOR:

ALLEN AND COMPANY, INC.
16 EAST PLANT STREET
WINTER GARDEN, FL 34787
PHONE: (407) 654-5355
CONTACT: JIM ROCKMAN, PSM

LANDSCAPE ARCHITECT:

FOSTER, CONANT, & ASSOCIATES
120 WEST ROBINSON STREET
ORLANDO, FL 32801
PHONE: (407) 648-2225
CONTACT: RICK CONANT, RLA

ENGINEER:

MADDEN, MOORHEAD, & STOKES, INC.
431 E. HORATIO AVENUE, SUITE 260
MAITLAND, FL 32751
PHONE: (407) 629-8330
CONTACT: CHAD MOORHEAD, PE

ENVIRONMENTAL:

BIO-TECH CONSULTING, INC.
3029 E. SOUTH STREET
ORLANDO, FL 32803
PHONE: (407) 894-5969
CONTACT: MORGAN CLARK

GEOTECHNICAL:

NATIVE GEOSCIENCE
2014 EDENWATER DR., SUITE 246
ORLANDO, FL 32804
PHONE: (407) 814-1443
CONTACT: JOHN C. DIEHL, PG

UTILITY PROVIDERS:

WATER:

CITY OF APOPKA
120 E. MAIN STREET
APOPKA, FL 32704
PHONE: (407) 703-1731
CONTACT: JAY DAVOLL, PE

WASTE WATER:

CITY OF APOPKA
120 E. MAIN STREET
APOPKA, FL 32704
PHONE: (407) 703-1731
CONTACT: JAY DAVOLL, PE

PHONE:

CENTURY LINK
3767 ALL AMERICAN BLVD.
WINTER GARDEN, FL 34787
PHONE: (407) 814-3551
CONTACT: DAVID BYRNES

POWER:

DURE ENERGY
275 PONTIAC ROAD
APOPKA, FL 32712
PHONE: (407) 938-8690
CONTACT: ROD RODRIGUEZ

RECLAIMED WATER:

CITY OF APOPKA
120 E. MAIN STREET
APOPKA, FL 32704
PHONE: (407) 703-1731
CONTACT: JAY DAVOLL, PE

SOLID WASTE:

CITY OF APOPKA
120 E. MAIN STREET
APOPKA, FL 32704
PHONE: (407) 703-1731
CONTACT: JAY DAVOLL, PE

CABLE:

CHARTER SPECTRUM
3767 ALL AMERICAN BLVD.
WINTER GARDEN, FL 34787
PHONE: (407) 532-8511
CONTACT: TRACEY DOMOSTOY

GAS:

LAKE APOPKA NATURAL GAS
1320 WINTER GARDEN VINELAND RD.
WINTER GARDEN, FL 34787
PHONE: (407) 658-2734 EXT. 104
CONTACT: EVERETT HOLMES

CODE DEVIATION

THE VISTA RESERVE COMMUNITY PROPOSES DEVIATION FROM THE CITY OF APOPKA LAND DEVELOPMENT CODE, SECTION 2.02.18(0)(1).

CODE DEVIATION JUSTIFICATION / SUMMARY

THE VISTA RESERVE COMMUNITY PROPOSES THE DEVELOPMENT OF 153 SINGLE-FAMILY DETACHED LOTS ON 61.10 ACRES OF LAND WITH A RESIDENTIAL LOW SUBURBAN FUTURE LAND USE DESIGNATION. THIS PROPOSAL WOULD REDUCE THE NET RESIDENTIAL DENSITY TO 2.53 DU/ACRE VERSUS THE ALLOWABLE 3.5 DU/ACRE. THIS NEIGHBORHOOD WILL PROPOSE A MINIMUM 2,100 SQ-FT SINGLE-FAMILY HOME, WHICH EXCEEDS THE LDC MINIMUM LIVING AREA FOR ALL RESIDENTIAL, SINGLE-FAMILY DISTRICTS. THE DEVELOPMENT WILL CONSIST OF 140 HOMES WITH A MINIMUM OF 85' X 125' TYPICAL LOT SIZE (8,125 SQ-FT) AND 13 HOMES WITH A MINIMUM OF 90' X 125' TYPICAL LOT SIZE (11,250 SQ-FT), WHICH EXCEEDS THE REQUIRED PUD SINGLE-FAMILY MINIMUM LOT AREA OF 7,500 SQ-FT. IN ADDITION, 90' WIDE LOTS ARE PLACED FOR COMPATIBILITY ADJACENT TO THE SURROUNDING ESTABLISHED COMMUNITIES. THIS METHOD OF DEVELOPMENT PROMOTES EFFICIENT AND ECONOMIC USE OF THE LAND WHICH MEETS THE INTENT OF THE LDC, PUD DISTRICT.

THE VISTA RESERVE NEIGHBORHOOD PROPOSES THE DEDICATION OF LAND FOR THE EXTENSION OF ROGERS ROAD, VEHICULAR AND PEDESTRIAN CONNECTION TO THE SOUTHERN CARRIAGE HILL SUBDIVISION, AND FUTURE VEHICULAR AND PEDESTRIAN CONNECTION TO THE NORTHERN VACANT PARCEL. THE COMMUNITY'S INTERNAL STREET NETWORK WAS DESIGNED IN THE TRADITIONAL GRID PATTERN, AS REFERENCED IN THE CITY'S DEVELOPMENT DESIGN GUIDELINES, RESIDENTIAL DESIGN STANDARDS SECTION, WHICH FURTHER SUPPORTS THE LDC AND PUD ZONING INTENT TO PROVIDE CROSSLINK DEVELOPMENT.

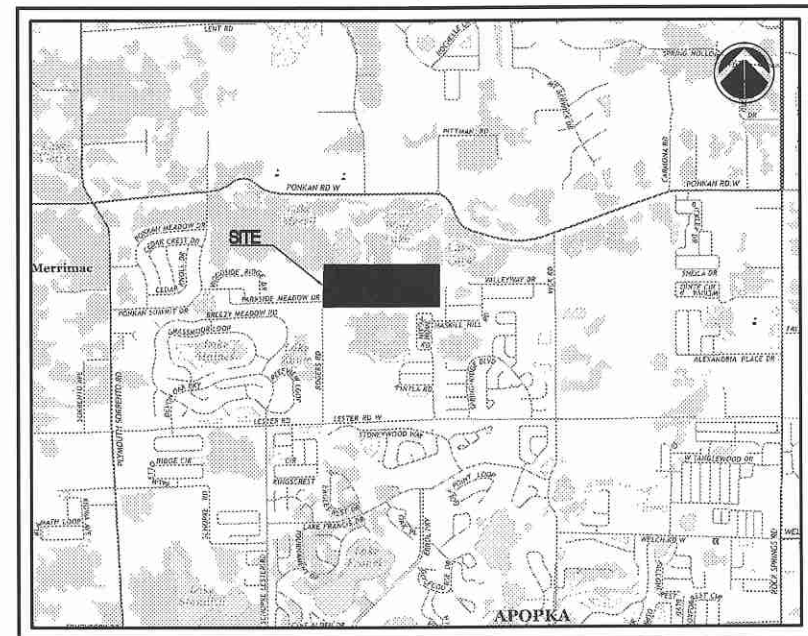
THE VISTA RESERVE NEIGHBORHOOD WILL PROVIDE THE 30% REQUIRED PUD OPEN SPACE AREA IN THE FORMS OF STORMWATER PONDS, BUFFERS, FLOODPLAIN CONSERVATION, OPEN SPACE, AND RECREATION. THE COMMUNITY DESIGN UTILIZES A COMBINATION OF OPEN SPACE AND STORMWATER POND TRACTS TO CREATE A GREENBELT SURROUNDING THE COMMUNITY. THIS GREENBELT IS INTENDED TO PROVIDE ADDITIONAL SEPARATION TO THE SURROUNDING COMMUNITIES, WHILE INCORPORATING THE BUILT ENVIRONMENT WITH THE SITE'S NATURAL ENVIRONMENT, AS REFERENCED IN THE CITY'S DEVELOPMENT DESIGN GUIDELINES, RESIDENTIAL DESIGN STANDARDS SECTION.

THE SUBJECT PROPERTY REQUIRES A MINIMUM 1.43 ACRES OF RECREATION BASED ON PROPOSED UNITS AS CALCULATED PER LDC SECTION 2.02.18 (7)(5). THE VISTA RESERVE RECREATION TRACT R-1 IS 1.67 ACRES IN AREA, WHICH EXCEEDS THE PUD CODE REQUIREMENT BY 0.24 ACRES. THE VISTA RESERVE RECREATION TRACT IS CENTRALLY LOCATED WITHIN THE DEVELOPMENT TO INCORPORATE VIEWS OF LAKE MERIBL AND THE NATURAL ENVIRONMENT. RECREATION FACILITIES WILL PROPOSE A COMPREHENSIVE AMENITY PACKAGE THAT INCLUDES A POOL, POOL CABANA, CHILDREN'S PLAY STRUCTURE, PICNIC AREA, BICYCLE PARKING, AND OPEN PLAY AREA FOR RESIDENTS.

IN SUMMARY, A NUMBER OF DESIGN ELEMENTS SUPPORT THE UTILIZATION OF 85 FT. LOTS IN THE COMMUNITY THROUGH THIS PUD REZONING REQUEST, INCLUDING (i) A DENSITY OF 2.53 DWELLING UNITS PER ACRE VERSUS THE 3.5 DWELLING UNITS PER ACRE ALLOWED UNDER THE PROPERTY'S EXISTING RESIDENTIAL LOW SUBURBAN FUTURE LAND USE; (ii) A MINIMUM TYPICAL LOT SIZE OF 8,125 S.F. WHICH EXCEEDS THE CURRENT MINIMUM REQUIREMENTS; (iii) PROVIDING A MINIMUM LIVING AREA OF 2,100 S.F. WHICH SIGNIFICANTLY EXCEEDS THE CURRENT MINIMUM REQUIREMENTS; (iv) PROVIDING A GREENBELT ON THE ENTIRE PERIMETER OF THE COMMUNITY AS WELL AS A FENCE ADJACENT ON THE EAST SIDE AS DEPICTED ON THE MASTER PLAN/PRELIMINARY DEVELOPMENT PLAN; AND (v) EXCEEDING THE RECREATIONAL REQUIREMENTS BY PROVIDING A COMPREHENSIVE AMENITY PACKAGE FOR FUTURE RESIDENTS.

VICINITY MAP

1" = 2,000'



CHADNYCK H. MOORHEAD, REGISTERED PROFESSIONAL ENGINEER, STATE OF FLORIDA, LICENSE NO. 161781, CERTIFICATE OF AUTHORIZATION NO. CE-00007723

VISTA RESERVE MP/PDP (JOB NO. 17051)
In: Vista\17051\Map\Map_Vista_2018-04-09-V01_ssc.dwg

LEGAL DESCRIPTION:

BEGIN AT THE SOUTHWEST CORNER OF THE NW 1/4 OF SECTION 29, TOWNSHIP 20 SOUTH, RANGE 28 EAST, ORANGE COUNTY, FLORIDA; RUN THENCE NORTH ALONG THE WEST LINE OF SAID NW 1/4 A DISTANCE OF 985.01 FEET TO THE NORTH LINE OF THE SOUTH 3/4 OF THE SOUTH 1/2 OF SAID NW 1/4; RUN THENCE N88°38'14"E ALONG SAID NORTH LINE A DISTANCE OF 2689.71 FEET TO THE NORTHEAST CORNER OF SAID SOUTH 3/4; RUN THENCE S00°48'00"E ALONG THE EAST LINE OF SAID NW 1/4 A DISTANCE OF 989.23 FEET TO THE SOUTHEAST CORNER OF SAID NW 1/4; RUN THENCE S88°43'54"W ALONG THE SOUTH LINE OF SAID NW 1/4 A DISTANCE OF 2703.46 FEET TO THE SOUTHWEST CORNER THEREOF, AND THE POINT OF BEGINNING. ALL BEING AND LYING IN THE NW 1/4 OF SECTION 29, TOWNSHIP 20 SOUTH, RANGE 28 EAST, ORANGE COUNTY, FLORIDA.

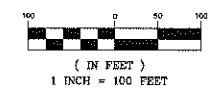
ALSO DESCRIBED AS:

THE SOUTH 3/4 OF THE SOUTH 1/2 OF THE NW 1/4 OF SECTION 29, TOWNSHIP 20 SOUTH, RANGE 28 EAST, ORANGE COUNTY, FLORIDA.

ALSO DESCRIBED AS:

THE SOUTH SIXTY (60) ACRES OF THE NW 1/4 OF SECTION 29, TOWNSHIP 20 SOUTH, RANGE 28 EAST, ORANGE COUNTY, FLORIDA, CONTAINING 2,661,310 SQUARE FEET (61.1 ACRES), MORE OR LESS.

GRAPHIC SCALE



16 EAST PLANT STREET
WINTER GARDEN, FLORIDA 34787
407 654-5365 FAX 407 654-5366

TOPOGRAPHIC SURVEY
OF
2351 ROGERS ROAD, APOPKA, FL
SECTION 29, TOWNSHIP 20 SOUTH, RANGE 28 EAST
ORANGE COUNTY, FLORIDA

FOR:
KB HOME ORLANDO, LLC

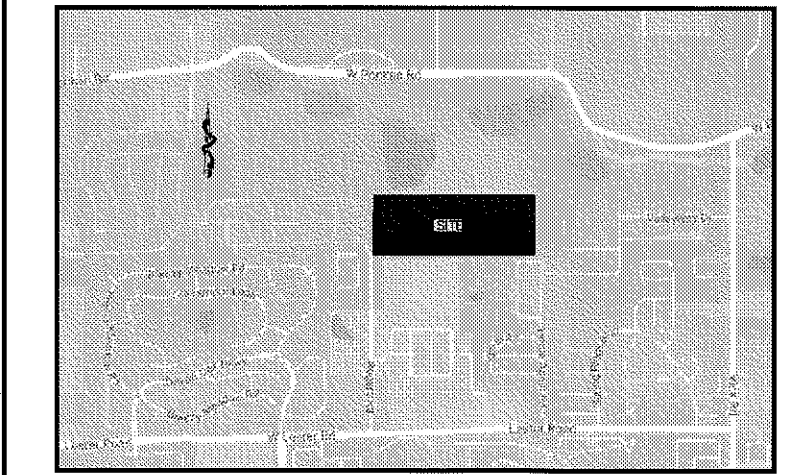
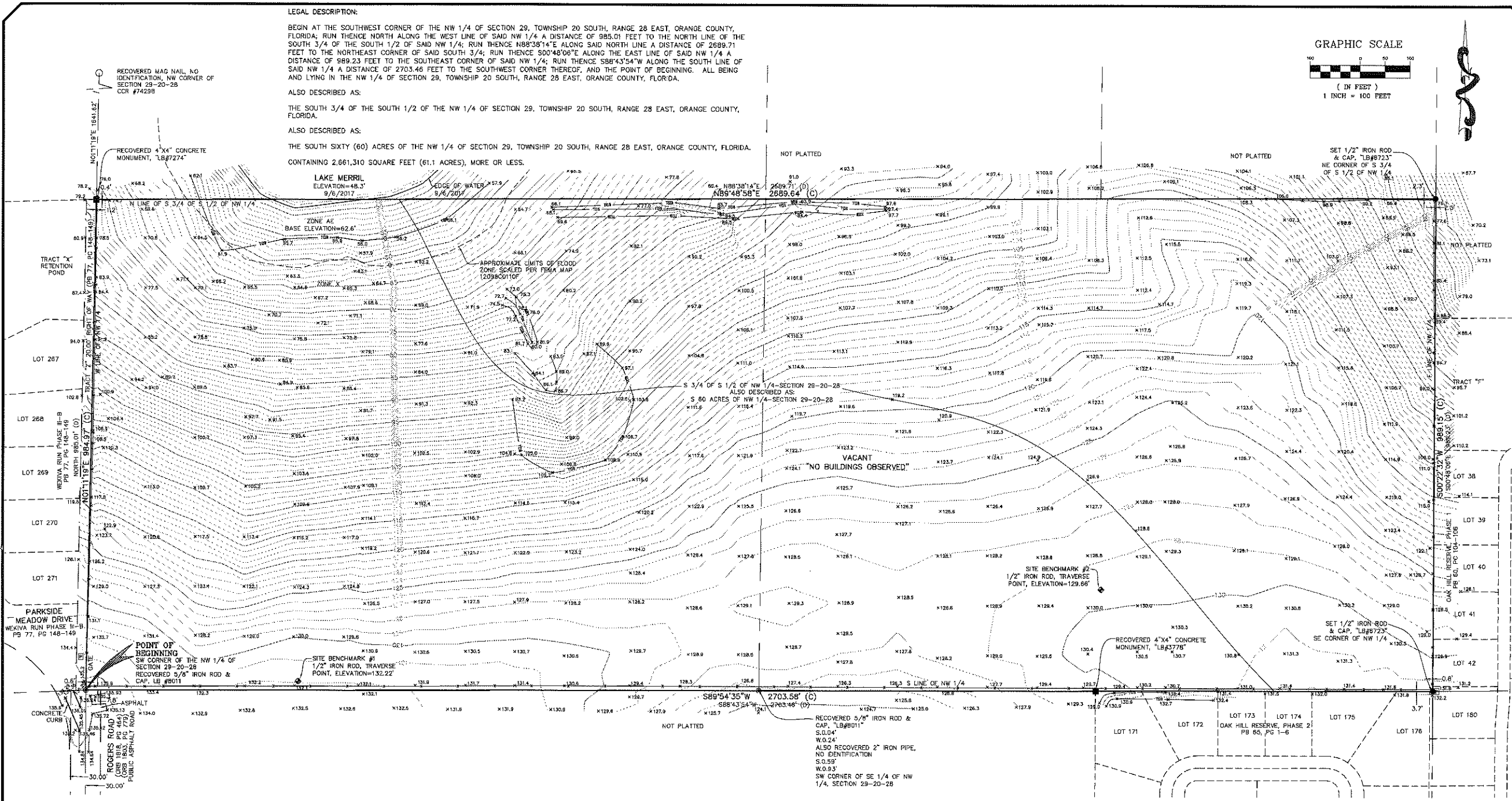
FOR THE LICENSED BUSINESS #2723 BY:



Table with columns for REVISIONS and DATE.

JOB # 20170463
DATE: 9/26/2017
SCALE: 1" = 100'
CALC BY: JLR
FIELD BY: JCS
DRAWN BY: SMO
CHECKED BY: MR

SHEET 1 OF 1



VICINITY MAP
NOT TO SCALE

SURVEYOR'S NOTES:

- 1. THIS IS NOT A BOUNDARY SURVEY.
2. BEARINGS SHOWN HEREON ARE ASSUMED BASED ON THE WEST LINE OF THE NORTHWEST 1/4, SECTION 29, TOWNSHIP 20 SOUTH, RANGE 28 EAST, AS BEING N01°11'19"E.
3. THERE MAY BE EASEMENTS AND RESTRICTIONS OF RECORD AND/OR PRIVATE AGREEMENTS NOT FURNISHED TO THIS SURVEYOR OR SHOWN ON THIS BOUNDARY SURVEY THAT MAY AFFECT PROPERTY RIGHTS AND/OR LAND USE RIGHTS OF THE SUBJECT PROPERTY.
4. THIS SURVEY WAS PERFORMED WITH THE BENEFIT OF AN INSURANCE TITLE COMMITMENT, PREPARED BY FIDELITY NATIONAL TITLE INSURANCE COMPANY, NUMBER 6504173, EFFECTIVE DATE JULY 31, 2017 @ 5:00 P.M.
5. THE LEGAL DESCRIPTION HEREON IS IN ACCORD WITH THE DESCRIPTION FURNISHED BY THE CLIENT.
6. THERE MAY BE ENVIRONMENTAL ISSUES AND/OR OTHER MATTERS REGULATED BY VARIOUS DEPARTMENTS OF FEDERAL, STATE OR LOCAL GOVERNMENTS AFFECTING THE SUBJECT PROPERTY NOT SHOWN ON THIS SURVEY.
7. THIS SURVEY WAS PERFORMED FOR THE SOLE AND EXCLUSIVE BENEFIT OF THE ENTITIES LISTED HEREON AND SHALL NOT BE RELIED UPON BY ANY OTHER ENTITY OR INDIVIDUAL, WHOMSOEVER.
8. THIS SURVEY IS NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
9. UNLESS OTHERWISE NOTED OR SHOWN HEREON, APPARENT AND/OR UNOBSTRUCTED VISIBLE, ABOVE GROUND IMPROVEMENTS WERE LOCATED. UNDERGROUND IMPROVEMENTS, SUCH AS FOUNDATIONS AND UTILITIES, WERE NOT LOCATED.
10. UNLESS OTHERWISE NOTED OR SHOWN HEREON, THERE ARE NO APPARENT AND/OR UNOBSTRUCTED, ABOVE GROUND ENCROACHMENTS. THE DISPOSITION OF ANY POTENTIAL ENCROACHING IMPROVEMENTS SHOWN IS BEYOND PROFESSIONAL PURVIEW AND SUBJECT TO LEGAL INTERPRETATION.
11. SUBJECT PROPERTY SHOWN HEREON IS IN ZONE X, DEFINED AS AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN, AND AE (BASE ELEVATION=62.8 NAVD 88), DEFINED AS AREAS OF SPECIAL FLOOD HAZARD WITH BASE FLOOD ELEVATIONS DETERMINED, ACCORDING TO FLOOD INSURANCE RATE MAP PANEL NUMBER 12005010F, MAP REVISED SEPTEMBER 25, 2009. THE ABOVE STATEMENT IS FOR INFORMATION ONLY AND THIS SURVEYOR ASSUMES NO LIABILITY FOR THE CORRECTNESS OF THE CITED MAP(S). IN ADDITION, THE ABOVE STATEMENT DOES NOT REPRESENT THIS SURVEYOR'S OPINION OF THE PROBABILITY OF FLOODING. THE LIMITS OF SAID ZONES ARE GRAPHICALLY SHOWN HEREON AS NEAR AS MAY BE SCALED FROM SAID MAP.
12. LAST DATE OF FIELD SURVEY: 11/13/2017
13. ELEVATIONS SHOWN HEREON ARE BASED ON ST. JOHN'S RIVER WATER MANAGEMENT DISTRICT BENCHMARK #98-079-D-03, BOX OUT IN HEADWALL AT END OF CUL-DE-SAC ON CHAMPIONSHIP COURT, ELEVATION=59.619, NAVD 1988.

LEGEND AND ABBREVIATIONS

- (C) CALCULATED
PB PLAT BOOK
(D) DESCRIPTION
ORB OFFICIAL RECORDS BOOK
PG PAGE OR PAGES
4" WIRE FENCE
LB LICENSED BUSINESS
CBR CERTIFIED CORNER RECORDS
NAVD NORTH AMERICAN VERTICAL DATUM OF 1988
TELEPHONE RISER
*1000 SPOT ELEVATION IN FEET
TOB TOP OF BANK
TOS TOE OF SLOPE

LEGAL DESCRIPTION:

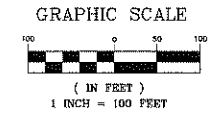
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ALSO DESCRIBED AS:

THE SOUTH 3/4 OF THE SOUTH 1/2 OF THE NW 1/4 OF SECTION 29, TOWNSHIP 20 SOUTH, RANGE 28 EAST, ORANGE COUNTY, FLORIDA.

ALSO DESCRIBED AS:

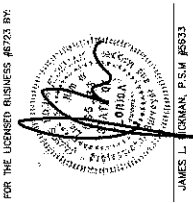
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407 654-5355 *FAX 407 654-5356

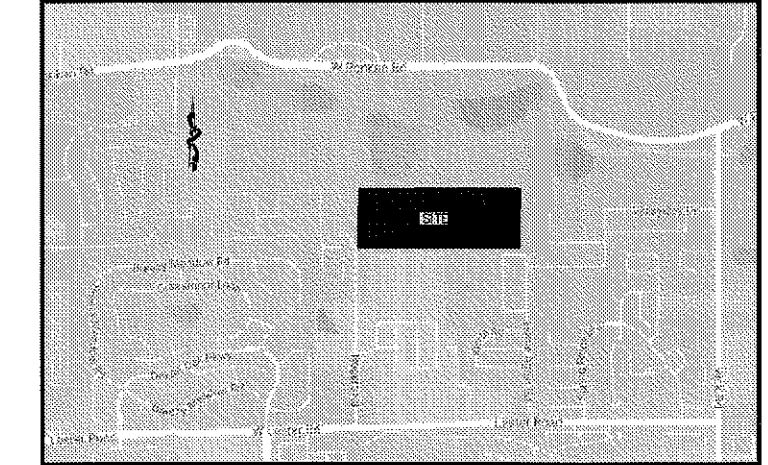
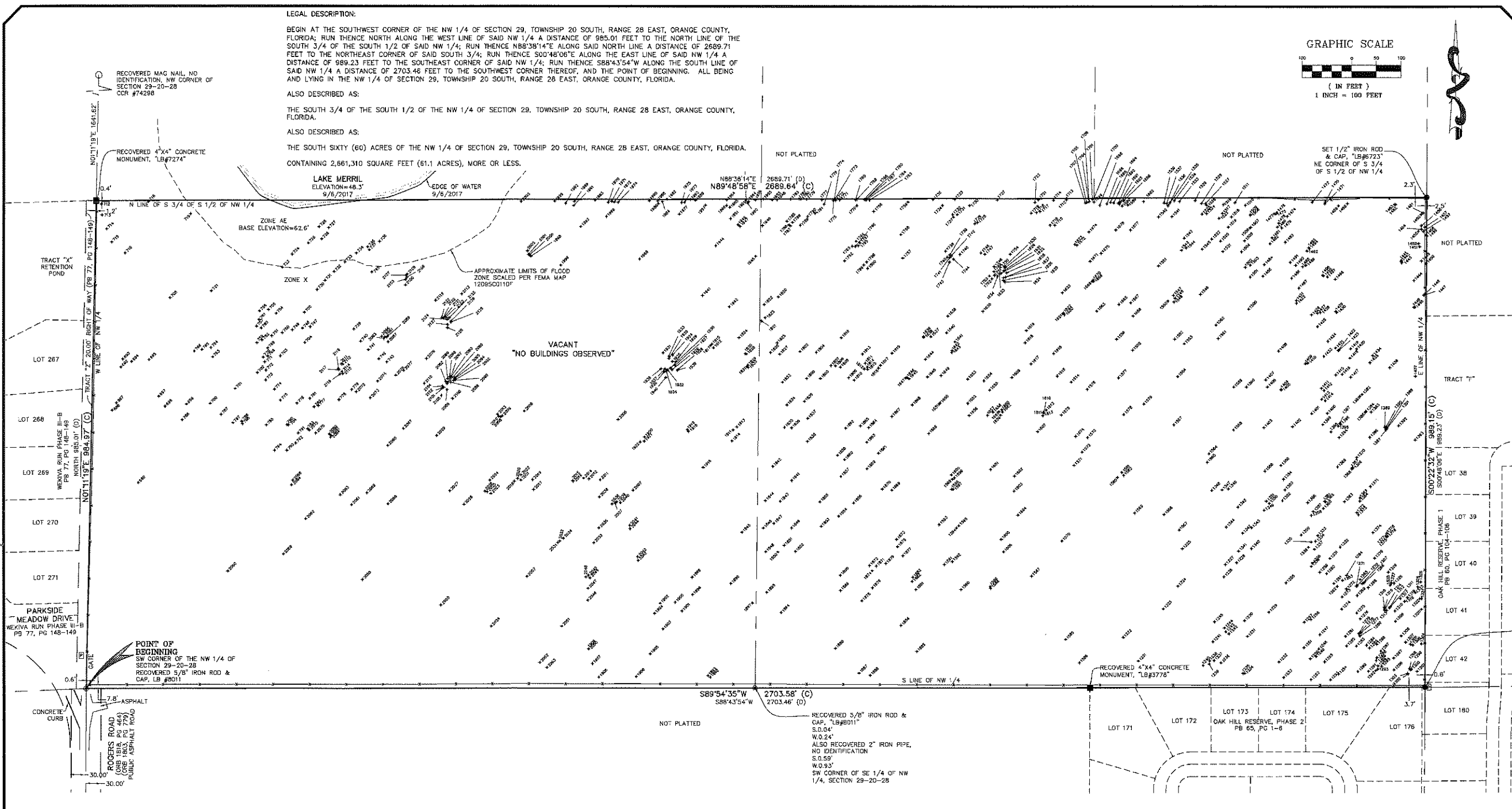
SPECIFIC PURPOSE SURVEY
OF
2351 ROGERS ROAD, APOKA, FL
SECTION 29, TOWNSHIP 20 SOUTH, RANGE 28 EAST
ORANGE COUNTY, FLORIDA

FOR:
KB HOME ORLANDO, LLC



| REVISIONS | DATE |
|-----------|------|
| | |
| | |

JOB # 20170463
DATE: 11/22/2017
SCALE: 1" = 100'
CALC BY: JLR
FIELD BY: JDS
DRAWN BY: BRH
CHECKED BY: SMO



SURVEYOR'S NOTES:

1. BEARINGS SHOWN HEREON ARE ASSUMED BASED ON THE WEST LINE OF THE NORTHWEST 1/4, SECTION 29, TOWNSHIP 20 SOUTH, RANGE 28 EAST, AS BEING N01°11'19"E.
2. THE SPECIFIC PURPOSE OF THIS SURVEY IS TO SHOW THE TREES AS THEY RELATE TO THE LANDS HEREON.
3. THIS IS NOT A BOUNDARY SURVEY.
4. THE LEGAL DESCRIPTION HEREON IS IN ACCORD WITH THE DESCRIPTION FURNISHED BY THE CLIENT.
5. THIS SURVEY WAS PERFORMED FOR THE SOLE AND EXCLUSIVE BENEFIT OF THE ENTITIES LISTED HEREON AND SHALL NOT BE RELIED UPON BY ANY OTHER ENTITY OR INDIVIDUAL WHOMSOEVER.
6. THIS SURVEY IS NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

LEGEND AND ABBREVIATIONS

- (C) CALCULATED
- PB PLAT BOOK
- (D) DESCRIPTION
- ORB OFFICIAL RECORDS BOOK
- PG PAGE OR PAGES
- 4" WIRE FENCE
- LB LICENSED BUSINESS
- CCR CERTIFIED CORNER RECORDS
- NAVD NORTH AMERICAN VERTICAL DATUM OF 1988
- ☐ TELEPHONE RISER
- ◆ 100 TREE LOCATION

Drawing name: L:\Survey\2017\11\22\2017\20170463.dwg Layout

| POINT NUMBER | DESCRIPTION |
|--------------|---------------------|
| 880 | 10' OAK |
| 885 | 18' OAK |
| 887 | 10' OAK |
| 889 | 9' OAK |
| 892 | 17' OAK |
| 893 | 13/8' OAK |
| 894 | 12' OAK |
| 895 | 15/15' OAK |
| 897 | 10/10' OAK |
| 898 | 15' OAK |
| 899 | 9' OAK |
| 900 | 8/7/6' OAK |
| 901 | 19/17/16/12/11' OAK |
| 902 | 22' OAK |
| 903 | 24/17' OAK |
| 904 | 11/9' OAK |
| 905 | 31' OAK |
| 908 | 39/21' OAK |
| 912 | 17/15' OAK |
| 913 | 14' OAK |
| 914 | 12' PALM |
| 916 | 11' OAK |
| 918 | 10' OAK |
| 919 | 8' OAK |
| 921 | 35/21' OAK |
| 922 | 14' PINE |
| 923 | 25' OAK |
| 924 | 11' OAK |
| 925 | 48' OAK |
| 926 | 11' OAK |
| 927 | 19' OAK |
| 928 | 12' PINE |
| 929 | 8' OAK |
| 931 | 13/11/11' OAK |
| 932 | 8' OAK |
| 933 | 11' OAK |
| 934 | 9' OAK |
| 935 | 8' OAK |
| 936 | 10' OAK |
| 937 | 15' PINE |
| 938 | 28' OAK |
| 939 | 12' OAK |
| 940 | 9' OAK |
| 941 | 13' OAK |
| 942 | 9' OAK |
| 943 | 11' OAK |
| 945 | 20/17/12/7' OAK |
| 947 | 18' OAK |
| 948 | 11' OAK |
| 949 | 10' OAK |
| 951 | 7' OAK |
| 951 | 15/9' OAK |
| 952 | 14/12' OAK |
| 954 | 11' OAK |
| 955 | 15' PINE |
| 956 | 15' OAK |
| 957 | 8' OAK |
| 959 | 5' OAK |
| 960 | 8' OAK |
| 961 | 6' OAK |
| 963 | 20' OAK |
| 964 | 6' OAK |
| 965 | 11/8' OAK |
| 966 | 9' OAK |
| 968 | 31' OAK |
| 969 | 6' OAK |
| 971 | 13' OAK |
| 972 | 19' OAK |
| 973 | 8' OAK |
| 974 | 7' OAK |
| 975 | 15' OAK |
| 976 | 11' OAK |
| 977 | 23' OAK |
| 978 | 10' OAK |
| 979 | 7' OAK |
| 981 | 15/9' OAK |
| 982 | 12' OAK |
| 984 | 9' OAK |
| 985 | 9' OAK |
| 986 | 34/31' OAK |
| 987 | 8' OAK |
| 988 | 33/21' OAK |
| 989 | 7/7/5' OAK |
| 991 | 9' OAK |
| 992 | 15' OAK |
| 993 | 7' OAK |
| 994 | 10' OAK |
| 995 | 10' OAK |
| 996 | 14/11' OAK |
| 997 | 13' OAK |
| 998 | 14' OAK |
| 999 | 14/10/10/10/8' OAK |
| 1000 | 8' OAK |
| 1001 | 12' OAK |
| 1002 | 15' OAK |
| 1003 | 8' OAK |
| 1004 | 11' OAK |
| 1005 | 12' OAK |
| 1006 | 12' OAK |
| 1007 | 12' OAK |
| 1008 | 12' OAK |
| 1009 | 12' OAK |
| 1010 | 12' OAK |
| 1011 | 12' OAK |
| 1012 | 12' OAK |
| 1013 | 12' OAK |
| 1014 | 12' OAK |
| 1015 | 12' OAK |
| 1016 | 12' OAK |
| 1017 | 12' OAK |
| 1018 | 12' OAK |
| 1019 | 12' OAK |
| 1020 | 12' OAK |
| 1021 | 12' OAK |
| 1022 | 12' OAK |
| 1023 | 12' OAK |
| 1024 | 12' OAK |
| 1025 | 12' OAK |
| 1026 | 12' OAK |
| 1027 | 12' OAK |
| 1028 | 12' OAK |
| 1029 | 12' OAK |
| 1030 | 12' OAK |
| 1031 | 12' OAK |
| 1032 | 12' OAK |
| 1033 | 12' OAK |
| 1034 | 12' OAK |
| 1035 | 12' OAK |
| 1036 | 12' OAK |
| 1037 | 12' OAK |
| 1038 | 12' OAK |
| 1039 | 12' OAK |
| 1040 | 12' OAK |
| 1041 | 12' OAK |
| 1042 | 12' OAK |
| 1043 | 12' OAK |
| 1044 | 12' OAK |
| 1045 | 12' OAK |
| 1046 | 12' OAK |
| 1047 | 12' OAK |
| 1048 | 12' OAK |
| 1049 | 12' OAK |
| 1050 | 12' OAK |
| 1051 | 12' OAK |
| 1052 | 12' OAK |
| 1053 | 12' OAK |
| 1054 | 12' OAK |
| 1055 | 12' OAK |
| 1056 | 12' OAK |
| 1057 | 12' OAK |
| 1058 | 12' OAK |
| 1059 | 12' OAK |
| 1060 | 12' OAK |
| 1061 | 12' OAK |
| 1062 | 12' OAK |
| 1063 | 12' OAK |
| 1064 | 12' OAK |
| 1065 | 12' OAK |
| 1066 | 12' OAK |
| 1067 | 12' OAK |
| 1068 | 12' OAK |
| 1069 | 12' OAK |
| 1070 | 12' OAK |
| 1071 | 12' OAK |
| 1072 | 12' OAK |
| 1073 | 12' OAK |
| 1074 | 12' OAK |
| 1075 | 12' OAK |
| 1076 | 12' OAK |
| 1077 | 12' OAK |
| 1078 | 12' OAK |
| 1079 | 12' OAK |
| 1080 | 12' OAK |
| 1081 | 12' OAK |
| 1082 | 12' OAK |
| 1083 | 12' OAK |
| 1084 | 12' OAK |
| 1085 | 12' OAK |
| 1086 | 12' OAK |
| 1087 | 12' OAK |
| 1088 | 12' OAK |
| 1089 | 12' OAK |
| 1090 | 12' OAK |
| 1091 | 12' OAK |
| 1092 | 12' OAK |
| 1093 | 12' OAK |
| 1094 | 12' OAK |
| 1095 | 12' OAK |
| 1096 | 12' OAK |
| 1097 | 12' OAK |
| 1098 | 12' OAK |
| 1099 | 12' OAK |
| 1100 | 12' OAK |

| | |
|------|---------------|
| 1264 | 23' OAK |
| 1265 | 11' OAK |
| 1266 | 13/8' OAK |
| 1267 | 9' OAK |
| 1268 | 8/8' OAK |
| 1269 | 8' OAK |
| 1270 | 7' OAK |
| 1271 | 7' OAK |
| 1272 | 13' OAK |
| 1273 | 6' OAK |
| 1274 | 18/11' OAK |
| 1275 | 18' OAK |
| 1276 | 19' OAK |
| 1277 | 11' OAK |
| 1278 | 9' OAK |
| 1279 | 8' OAK |
| 1280 | 8' OAK |
| 1281 | 8' OAK |
| 1282 | 10' OAK |
| 1283 | 15/12' OAK |
| 1284 | 9' OAK |
| 1285 | 8/8' OAK |
| 1286 | 11' OAK |
| 1287 | 11' OAK |
| 1288 | 13' OAK |
| 1289 | 6' OAK |
| 1290 | 13' OAK |
| 1291 | 14' OAK |
| 1292 | 9' OAK |
| 1293 | 19' OAK |
| 1294 | 10' OAK |
| 1295 | 10' OAK |
| 1296 | 12/8' OAK |
| 1297 | 20' OAK |
| 1298 | 12/10/8' OAK |
| 1299 | 18' OAK |
| 1300 | 7/8' OAK |
| 1301 | 13/11' OAK |
| 1302 | 8' OAK |
| 1303 | 8' OAK |
| 1304 | 11/20/10' OAK |
| 1305 | 12' OAK |
| 1306 | 25' OAK |
| 1307 | 16/7' OAK |
| 1308 | 14/12' OAK |
| 1309 | 13' OAK |
| 1310 | 18' OAK |
| 1311 | 7' OAK |
| 1312 | 6' OAK |
| 1313 | 7/8/6' OAK |
| 1314 | 7' OAK |
| 1315 | 7' OAK |
| 1316 | 7' OAK |
| 1317 | 15' OAK |
| 1318 | 13' OAK |
| 1319 | 20' OAK |
| 1320 | 20' OAK |
| 1321 | 11' OAK |
| 1322 | 10' OAK |
| 1323 | 9' OAK |
| 1324 | 27' OAK |
| 1325 | 13/12' OAK |
| 1326 | 10' OAK |
| 1327 | 10' OAK |
| 1328 | 14/11' OAK |
| 1329 | 6' OAK |
| 1331 | 8' OAK |
| 1332 | 19' OAK |
| 1333 | 14' OAK |
| 1334 | 11' OAK |
| 1335 | 14' OAK |
| 1336 | 18' OAK |
| 1337 | 11' OAK |
| 1338 | 20' OAK |
| 1339 | 10' OAK |
| 1340 | 14/11' OAK |
| 1341 | 25' OAK |
| 1342 | 26' OAK |
| 1343 | 23' OAK |
| 1344 | 13' PALM |
| 1345 | 7' OAK |
| 1346 | 7/8' OAK |
| 1347 | 14' OAK |
| 1348 | 21' OAK |
| 1349 | 24' OAK |
| 1350 | 22' OAK |
| 1351 | 4/8' OAK |
| 1352 | 18' OAK |
| 1353 | 19' OAK |
| 1354 | 17/12' OAK |
| 1355 | 24/8' OAK |
| 1356 | 15/14' OAK |
| 1357 | 14' OAK |
| 1358 | 19' OAK |
| 1359 | 12' OAK |
| 1360 | 21' OAK |
| 1361 | 12/10' OAK |
| 1362 | 10' OAK |
| 1363 | 30' OAK |
| 1364 | 24/20' OAK |
| 1365 | 9' OAK |
| 1366 | 13' OAK |
| 1367 | 11' OAK |
| 1368 | 6' OAK |
| 1369 | 13/13' OAK |
| 1370 | 17' OAK |
| 1371 | 13' OAK |
| 1372 | 13' OAK |
| 1373 | 20' OAK |
| 1374 | 21/17' OAK |
| 1375 | 18' OAK |
| 1376 | 31' OAK |
| 1377 | 19' OAK |
| 1378 | 24' OAK |
| 1379 | 12' OAK |
| 1381 | 8' OAK |
| 1382 | 10' OAK |
| 1383 | 14' OAK |
| 1384 | 12' OAK |
| 1385 | 7' OAK |
| 1386 | 21' OAK |
| 1387 | 10' OAK |
| 1388 | 9' OAK |
| 1389 | 8' OAK |
| 1390 | 13/14' OAK |
| 1391 | 12' OAK |
| 1392 | 9' OAK |
| 1393 | 30' OAK |
| 1394 | 19' OAK |
| 1395 | 8' OAK |
| 1396 | 10' OAK |
| 1397 | 17' OAK |
| 1398 | 14/12/11' OAK |
| 1399 | 10' OAK |

| | |
|------|-----------------|
| 1400 | 8' OAK |
| 1401 | 25' OAK |
| 1402 | 9/7' OAK |
| 1403 | 19/17' OAK |
| 1404 | 14/21/10' OAK |
| 1405 | 9' OAK |
| 1406 | 21' OAK |
| 1407 | 14' PALM |
| 1408 | 19' OAK |
| 1409 | 9/6' OAK |
| 1410 | 12' OAK |
| 1411 | 7' OAK |
| 1412 | 16/13/11' OAK |
| 1413 | 10' OAK |
| 1414 | 15' OAK |
| 1415 | 11/9/7' OAK |
| 1416 | 8' OAK |
| 1417 | 23' OAK |
| 1418 | 13/10' OAK |
| 1419 | 14/10' OAK |
| 1420 | 18' OAK |
| 1421 | 18' OAK |
| 1422 | 15' OAK |
| 1423 | 7' OAK |
| 1424 | 18/7' OAK |
| 1425 | 11' OAK |
| 1426 | 15' OAK |
| 1427 | 14' OAK |
| 1428 | 9' OAK |
| 1429 | 11' OAK |
| 1430 | 12' OAK |
| 1431 | 10' OAK |
| 1432 | 18' OAK |
| 1433 | 14' OAK |
| 1434 | 17' OAK |
| 1435 | 13' OAK |
| 1436 | 26/18/15' OAK |
| 1437 | 15' PALM |
| 1438 | 9/8' OAK |
| 1439 | 10/8' OAK |
| 1440 | 8' OAK |
| 1441 | 17' OAK |
| 1442 | 9' OAK |
| 1443 | 17' OAK |
| 1444 | 17' OAK |
| 1445 | 9' OAK |
| 1446 | 6' OAK |
| 1447 | 6/8' OAK |
| 1448 | 6' OAK |
| 1449 | 12/10/10/8' OAK |
| 1450 | 6' OAK |
| 1451 | 9' OAK |
| 1452 | 17' OAK |
| 1453 | 7/8' OAK |
| 1454 | 7' OAK |
| 1455 | 9' OAK |
| 1456 | 15' OAK |
| 1457 | 7' OAK |
| 1458 | 7' OAK |
| 1459 | 10' OAK |
| 1460 | 14' OAK |
| 1461 | 7' OAK |
| 1462 | 6' OAK |
| 1463 | 15' OAK |
| 1464 | 14' OAK |
| 1465 | 14' OAK |
| 1466 | 16' OAK |
| 1467 | 10' OAK |
| 1468 | 13' OAK |
| 1469 | 24' OAK |
| 1470 | 20' OAK |
| 1471 | 13' OAK |
| 1472 | 24' OAK |
| 1473 | 12/8' OAK |
| 1474 | 20' OAK |
| 1475 | 8' OAK |
| 1476 | 32/21' OAK |
| 1477 | 10/9' OAK |
| 1478 | 8' OAK |
| 1479 | 14' OAK |
| 1480 | 17' OAK |
| 1481 | 8' OAK |
| 1482 | 14' OAK |
| 1483 | 16/8' OAK |
| 1484 | 14' OAK |
| 1485 | 11' OAK |
| 1486 | 13/11' OAK |
| 1487 | 14' OAK |
| 1488 | 15' OAK |
| 1489 | 10' OAK |
| 1490 | 17/15' OAK |
| 1491 | 10' OAK |
| 1492 | 18' OAK |
| 1493 | 17' OAK |
| 1494 | 14' OAK |
| 1495 | 14' OAK |
| 1496 | 7' OAK |
| 1497 | 13' OAK |
| 1498 | 13' OAK |
| 1499 | 13' OAK |
| 1500 | 12/11/7' OAK |
| 1501 | 18' OAK |
| 1502 | 21' OAK |
| 1503 | 20' OAK |
| 1504 | 21' OAK |
| 1505 | 16' OAK |
| 1506 | 22' OAK |
| 1507 | 9' OAK |
| 1508 | 8' OAK |
| 1509 | 9' OAK |
| 1510 | 15' OAK |
| 1511 | 14' OAK |
| 1512 | 16' OAK |
| 1513 | 10' OAK |
| 1514 | 10/8' OAK |
| 1515 | 11' OAK |
| 1516 | 15' OAK |
| 1517 | 8' OAK |
| 1518 | 14/12' OAK |
| 1519 | 13' OAK |
| 1520 | 15' OAK |
| 1521 | 8' OAK |
| 1522 | 14/12' OAK |
| 1523 | 14/10' OAK |
| 1524 | 13' OAK |
| 1525 | 19' OAK |
| 1526 | 7' OAK |
| 1527 | 16' OAK |
| 1528 | 21' OAK |
| 1529 | 22' OAK |
| 1530 | 8' OAK |
| 1531 | 8' OAK |
| 1532 | 7' OAK |
| 1533 | 8' OAK |
| 1534 | 12' OAK |
| 1535 | 11' OAK |
| 1536 | 13/8' OAK |
| 1537 | 13' OAK |
| 1538 | 15/8' OAK |
| 1539 | 8' OAK |
| 1540 | 8' OAK |
| 1541 | 12/8' OAK |
| 1542 | 20' OAK |
| 1543 | 28' OAK |
| 1544 | 18' OAK |
| 1545 | 18' OAK |
| 1546 | 18' OAK |
| 1547 | 9' OAK |
| 1548 | 9' OAK |
| 1549 | 24' OAK |
| 1550 | 11' OAK |

| | |
|------|------------|
| 1551 | 24' OAK |
| 1552 | 42' OAK |
| 1553 | 19' OAK |
| 1554 | 32' OAK |
| 1555 | 16' OAK |
| 1556 | 17' OAK |
| 1557 | 27' OAK |
| 1558 | 11' OAK |
| 1559 | 26' OAK |
| 1560 | 19/18' OAK |
| 1561 | 22' OAK |
| 1562 | 12' OAK |
| 1563 | 27' OAK |
| 1564 | 27' OAK |
| 1565 | 26' OAK |
| 1566 | 21' OAK |
| 1567 | 18' OAK |
| 1568 | 15' PALM |
| 1569 | 32' OAK |
| 1570 | 34' OAK |
| 1571 | 18' OAK |
| 1572 | 26/17' OAK |
| 1573 | 13' OAK |
| 1574 | 11' OAK |
| 1575 | 16' OAK |
| 1576 | 24' OAK |
| 1577 | 41' OAK |

LEGEND

R-1 ZONING
FLU - RES. LOW SUBURBAN FUTURE LAND USE

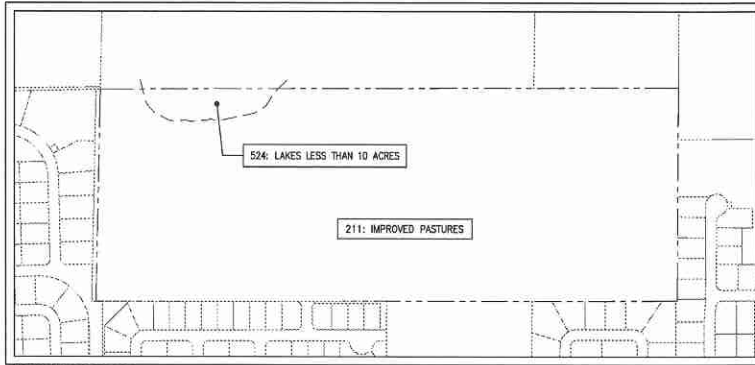
FEMA NOTE

PER FEMA FIRM PANEL NO. 12095C0110F, PANEL 110 OF 750, DATED SEPTEMBER 25, 2009, THE SUBJECT PROPERTY IS DESIGNATED ZONE AE. BASE FLOOD ELEVATIONS DETERMINED (82.6') AND ZONE 'X' AREAS DETERMINED TO BE OUTSIDE 0.2% ANNUAL CHANCE FLOODPLAIN.

SOILS LEGEND

| SOIL NUMBER | SOIL NAME | HYDROLOGIC GROUP |
|-------------|--|------------------|
| 3 | BASINGER FINE SAND, FREQUENTLY PONDED, 0 TO 1 PERCENT SLOPES | A/D |
| 4 | CANDLER FINE SAND, 0 TO 5 PERCENT SLOPES | A |
| 5 | CANDLER-APOPKA FINE SANDS, 5 TO 12 PERCENT SLOPES | A |
| 21 | CANDLER-URBAN LAND COMPLEX, 0 TO 5 PERCENT SLOPES | A |
| 99 | WATER | - |

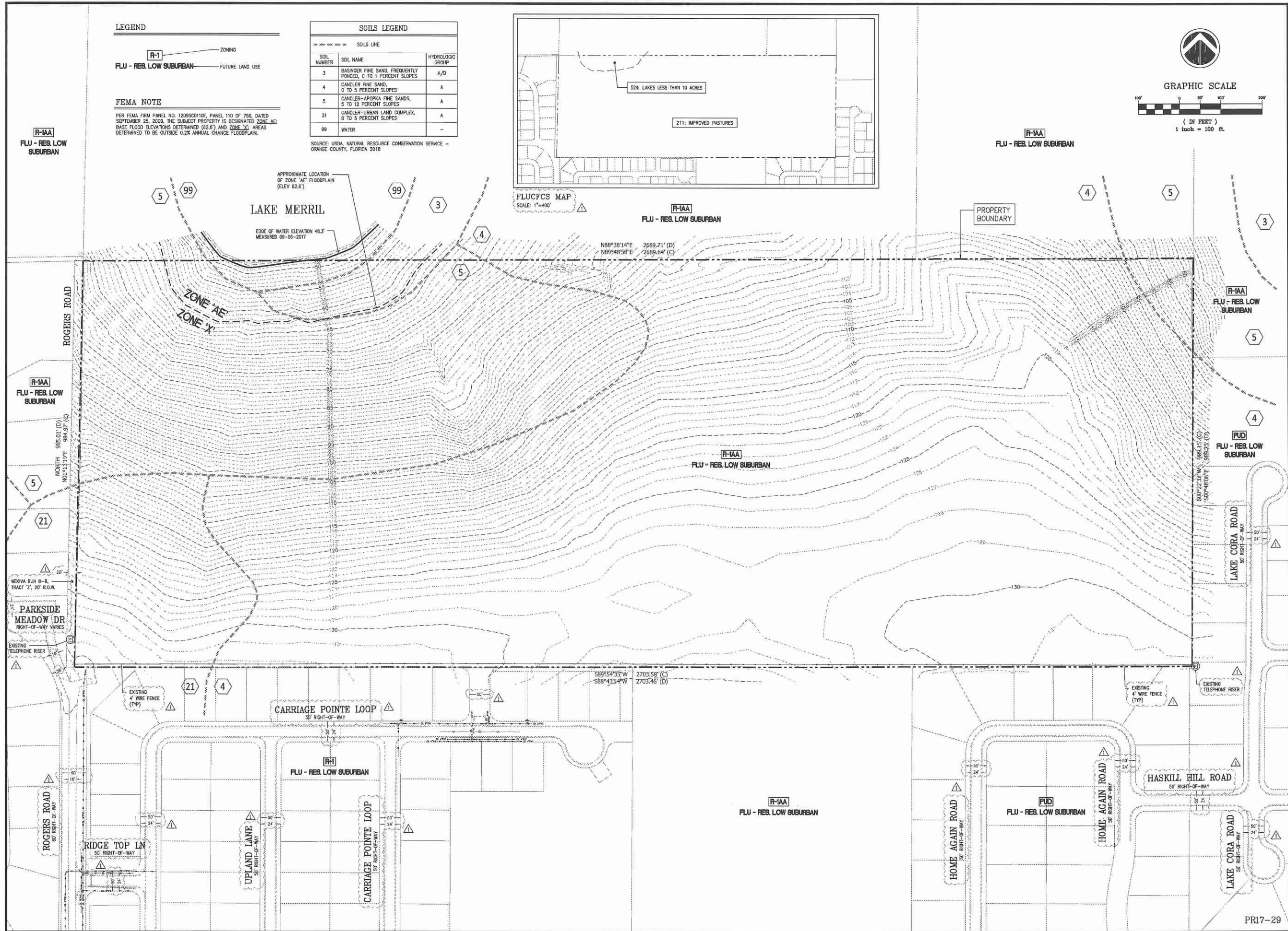
SOURCE: USDA, NATURAL RESOURCE CONSERVATION SERVICE - ORANGE COUNTY, FLORIDA 2018



GRAPHIC SCALE



(IN FEET)
1 inch = 100 ft.



MADDEN
 MODRHEAD & STOKES, INC.
 CIVIL ENGINEERS
 431 E. Horatio Avenue
 Suite 260
 Maitland, Florida 32751
 (407) 629-8330

EXISTING CONDITIONS PLAN
 FOR
VISTA RESERVE
 CITY OF APOPKA
 FLORIDA

THE PULTE GROUP
 4901 VINELAND ROAD, SUITE 500
 ORLANDO, FL 32811
 (407) 861-1514



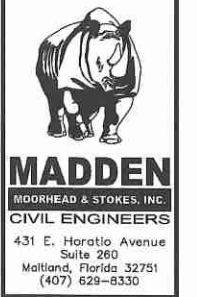
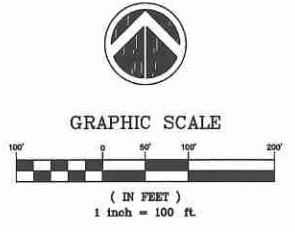
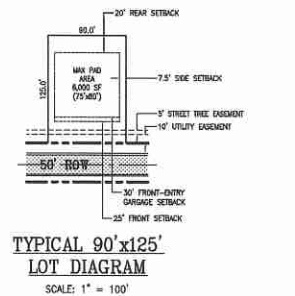
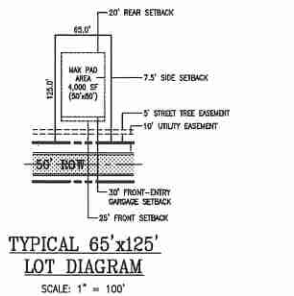
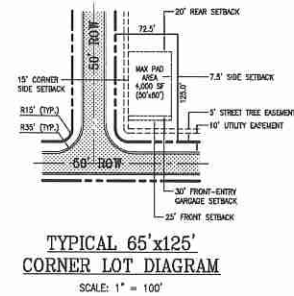
| NO. | DATE | REVISIONS |
|-----|------|-----------|
| | | |
| | | |
| | | |
| | | |
| | | |

JOB # 17051
 DATE: 04-05-2018
 SCALE: 1"=100'
 DESIGNED BY: BW
 DRAWN BY: BW
 APPROVED BY: CHM

EC - 1

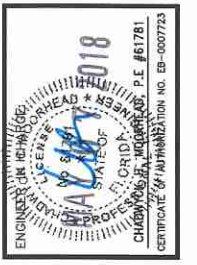
PRI7-29

| TRACT IDENTIFICATION TABLE | | | | | |
|----------------------------|-------------------------|-------|----------------|----------------|----------------|
| TRACT | USE | PHASE | OWNERSHIP | MAINTENANCE | AREA (ACREAGE) |
| B-1 | BUFFER | 1 | H.O.A. | H.O.A. | 0.02 |
| B-2 | BUFFER | 1 | H.O.A. | H.O.A. | 0.18 |
| FC-1 | FLOODPLAIN CONSERVATION | 1 | H.O.A. | H.O.A. | 1.75 |
| LS-1 | LIFT-STATION | 1 | CITY OF APOPKA | CITY OF APOPKA | 0.05 |
| M-1 | MEDIAN | 1 | H.O.A. | H.O.A. | 0.02 |
| OS-1 | OPEN SPACE | 1 | H.O.A. | H.O.A. | 0.87 |
| OS-2 | OPEN SPACE | 1 | H.O.A. | H.O.A. | 1.18 |
| OS-3 | OPEN SPACE | 1 | H.O.A. | H.O.A. | 1.08 |
| OS-4 | OPEN SPACE | 1 | H.O.A. | H.O.A. | 2.33 |
| P-1 | STORMWATER POND | 1 | H.O.A. | H.O.A. | 6.03 |
| P-2 | STORMWATER POND | 1 | H.O.A. | H.O.A. | 5.38 |
| R-1 | RECREATION | 1 | H.O.A. | H.O.A. | 1.67 |
| ROW-1 | RIGHT-OF-WAY | 1 | CITY OF APOPKA | CITY OF APOPKA | 0.68 |
| SUBTOTAL: | | | | | 21.24 |
| SINGLE-FAMILY LOTS | | | | | 31.38 |
| RIGHT-OF-WAY | | | | | 8.46 |
| SUBTOTAL: | | | | | 39.86 |
| GROSS LAND AREA: | | | | | 61.10 |



MASTER PLAN FOR VISTA RESERVE
CITY OF APOPKA, FLORIDA

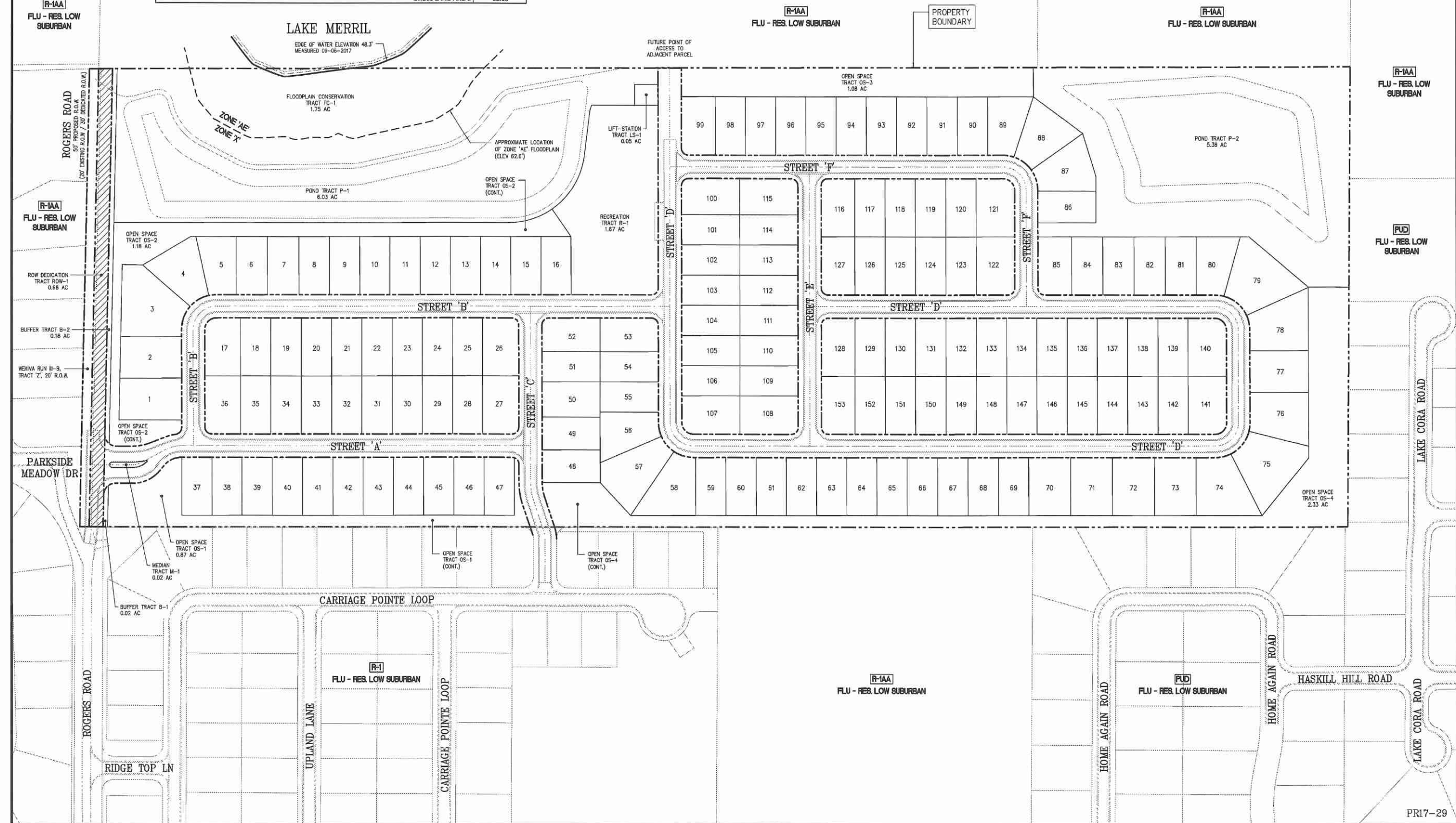
THE PULTE GROUP
4001 WINDLAND ROAD, SUITE 500
ORLANDO, FL 32811
(407) 661-1514



| NO. | DATE | REVISIONS |
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JOB # 17051
DATE 04-05-2018
SCALE 1"=100'
DESIGNED BY: BW
DRAWN BY: BW
APPROVED BY: CHM

MP-1



DEVELOPMENT INFORMATION

| | |
|---------------------------------------|--------------------------------|
| FUTURE LAND USE | RESIDENTIAL LOW SUBURBAN |
| EXISTING ZONING | R-1AA |
| ZONING | PLANNED UNIT DEVELOPMENT (PUD) |
| PROPOSED PSP UNITS | 153 UNITS |
| TOTAL DEVELOPABLE LAND AREA | 61.10 ACRES |
| RIGHT-OF-WAY DEDICATION (TRACT ROW-1) | 0.68 ACRES |
| NET DEVELOPABLE LAND AREA | 60.42 ACRES |
| MAXIMUM RESIDENTIAL DENSITY (ALLOWED) | UP TO 3.5 DU/AC |
| NET RESIDENTIAL DENSITY | 2.53 DU/AC |

RESIDENTIAL DEVELOPMENT STANDARDS

| | |
|--|--------------------|
| PHASE 1, SINGLE-FAMILY, DETACHED | |
| TOTAL DEVELOPABLE LAND AREA | 61.10 ACRES |
| RIGHT-OF-WAY DEDICATION (TRACT ROW-1) | 0.68 ACRES |
| NET DEVELOPABLE LAND AREA | 60.42 ACRES |
| NUMBER OF UNITS | 153 |
| MAXIMUM RESIDENTIAL DENSITY (ALLOWED) | UP TO 3.5 DU/AC |
| NET RESIDENTIAL DENSITY (PROPOSED) | 2.53 DU/AC |
| MIN. LOT AREA | 8,125 SF |
| MIN. LOT WIDTH | 65' |
| MIN. LOT DEPTH | 125' |
| MIN. LIVING AREA | (2,190 SF) |
| MAX BUILDING HEIGHT | 35' |
| SETBACKS (feet) (1) | |
| FROM NATURAL SURFACE WATERBODY OR WETLAND EDGE | 50' |
| FRONT PRIMARY | 25' |
| FRONT ENTRY GARAGE | 30' |
| REAR PRIMARY | 20' |
| SIDE | 7.5' |
| CORNER SIDE | 15' |
| ACCESSORY STRUCTURES | SEE NOTE (1) BELOW |

(1) ACCESSORY STRUCTURE SETBACKS SHALL COMPLY WITH LAND DEVELOPMENT CODE, ARTICLE VII, SECTION 7.01.00.

RECREATION AREA CALCULATIONS (1)(2)

| | | |
|---|-----------|-------------|
| RECREATION AREA REQUIRED = 3.6 ACRES PER 1,000 POPULATION | | |
| UNITS X 0.0026 PEOPLE PER UNIT X 3.6 ACRES = REQUIRED RECREATION AREA | | |
| PHASE 1 | 153 UNITS | 1.43 |
| TOTAL RECREATION REQUIRED: | | 1.43 |

| | | |
|-----------------------------------|----------|---------------|
| RECREATION AREA PROVIDED | | |
| PHASE | TRACT ID | AREA PROVIDED |
| 1 | R-1 | 1.67 |
| TOTAL RECREATION PROVIDED: | | 1.67 |

(1) ALL UNITS ARE ACRES.
(2) PER LAND DEVELOPMENT CODE, ARTICLE II, SECTION 2.02.18(E)(5).

OCPs SCHOOLS

| Student Population per Orange County Public Schools | | | | |
|---|-------------|-------------------|---------------------|--------------------|
| School Type | School Name | Residential Units | Multiplier per OCPs | Student Population |
| Elementary Students | Wolf Lake | 153 | 0.191 | 29 |
| Middle School Students | Wolf Lake | 153 | 0.095 | 15 |
| High School Students | Apoka High | 153 | 0.131 | 20 |
| Totals: | | 0.417 | | 64 |

TRAFFIC GENERATION, BASED ON ITE TRIP GENERATION 9TH EDITION

| Phase | ITE Code | Land Use | Number of Dwelling Units | DAILY | | PM PEAK HOUR | | | |
|---------------|----------|-------------------------|--------------------------|------------------------|-----------------------------|-----------------------------|-------------------------------|------------|-----------|
| | | | | Weekday Trips Per Unit | Total Generated Daily Trips | PM Peak Hour Trips Per Unit | Total Generated PM Hour Trips | PM In | PM Out |
| 1 | 210 | SINGLE-FAMILY, DETACHED | 153 | 9.52 | 1,457 | 1.00 | 153 | 103 | 50 |
| TOTAL: | | | 153 | - | 1,457 | - | 153 | 103 | 50 |

DEVELOPMENT NOTES

- THIS PROJECT SHALL BE DEVELOPED IN ONE PHASE.
- ALL ACREAGES ARE SUBJECT TO CHANGE WITH FINAL ENGINEERING AND FINAL PLAT REVIEW AND APPROVAL.
- COMMUNITY IDENTIFICATION SIGNAGE SHALL COMPLY WITH APPLICABLE CITY OF APOPKA LAND DEVELOPMENT CODE REQUIREMENTS.
- ARCHITECTURAL DESIGN SHALL MEET THE INTENT OF THE CITY OF APOPKA'S DEVELOPMENT DESIGN GUIDELINES.
- FRONT ENTRY GARAGES SHALL BE SETBACK A MINIMUM OF 30 FEET FROM THE FRONT PROPERTY LINE AND NOT EXTEND PAST THE FRONT BUILDING WALL.
- POWER SERVICE WITHIN THE DEVELOPMENT TO BE UNDERGROUND.
- ALL COMMON AREAS SHALL BE OWNED AND MAINTAINED BY A MANDATORY HOMEOWNERS ASSOCIATION.
- COMMUNITY RECREATION FACILITIES SHALL BE FOR THE PRIVATE USE OF COMMUNITY RESIDENTS ONLY AND OWNED AND MAINTAINED BY A MANDATORY HOMEOWNERS ASSOCIATION.
- THE FINAL DEVELOPMENT PLAN SHALL INCLUDE THE PLAT DOCUMENT. THE PLAT DOCUMENT SHALL INCLUDE A DEDICATED UTILITY EASEMENT TO THE CITY OF APOPKA FOR THE MAINTENANCE OF WATER, RECLAIMED WATER, AND SEWER SERVICE LINES OVER MEDIAN TRACT M-1.
- COMMUNITY IDENTIFICATION SIGNAGE SHALL NOT EXCEED 8 FEET IN HEIGHT PER CITY OF APOPKA LDC SECTION 8.04.15(b). SEE LANDSCAPE PLANS FOR FURTHER DETAILS.
- A MAIL KIOSK WILL BE PROVIDED FOR THE COMMUNITY AND INCORPORATED INTO THE POOL CABANA STRUCTURE OR AS A FREE STANDING STRUCTURE WITHIN RECREATION TRACT R-1. FINAL LOCATION WITHIN TRACT R-1 SHALL BE DETERMINED WITH THE FINAL DEVELOPMENT PLAN SUBMITTAL.
- RECREATION FACILITIES WITHIN RECREATION TRACT R-1 SHALL BE COMPLETED BY THE ISSUANCE OF THE TWENTY FIFTH (25) CERTIFICATE OF OCCUPANCY.
- ALL ACREAGES ARE SUBJECT TO CHANGE WITH FINAL ENGINEERING AND FINAL PLAT REVIEW AND APPROVAL.

OWNERSHIP / MAINTENANCE

| RIGHTS-OF-WAY | PUBLIC | TO BE OWNED AND MAINTAINED BY CITY OF APOPKA |
|--|------------------|---|
| POND TRACTS | PRIVATE | TO BE OWNED AND MAINTAINED BY HOMEOWNERS ASSOCIATION WITH A USE AGREEMENT TO ALLOW CITY OF APOPKA THE ABILITY TO MAINTAIN DRAINAGE STRUCTURES. |
| DRAINAGE EASEMENTS | PUBLIC | TO BE OWNED AND MAINTAINED BY THE CITY OF APOPKA WITH A USE AGREEMENT TO ALLOW HOMEOWNERS ASSOCIATION THE ABILITY TO MAINTAIN FOR AESTHETIC PURPOSES. |
| UTILITY, WALL, AND LANDSCAPE EASEMENTS | PUBLIC / PRIVATE | TO BE OWNED AND MAINTAINED BY HOMEOWNERS ASSOCIATION WITH UTILITY DEDICATIONS TO OTHER PRIVATE UTILITY COMPANIES. UTILITIES WITHIN THE EASEMENT TO BE OWNED AND MAINTAINED BY OTHER PRIVATE ENTITIES. |
| UTILITY EASEMENTS ADJACENT TO RIGHT-OF-WAY TRACT | PUBLIC / PRIVATE | TO BE DEDICATED TO THE CITY OF APOPKA, HOA AND/OR OTHER PRIVATE UTILITY COMPANIES. UTILITIES WITHIN THE EASEMENTS MAY BE OWNED AND MAINTAINED BY THE CITY OF APOPKA AND/OR OTHER PRIVATE ENTITIES. |
| WATER AND RECLAIMED WATER | PUBLIC | TO BE OWNED AND MAINTAINED BY CITY OF APOPKA |
| SANITARY SEWER AND FORCEMAIN | PUBLIC | TO BE OWNED AND MAINTAINED BY CITY OF APOPKA |
| BUFFER TRACTS | PRIVATE | TO BE OWNED AND MAINTAINED BY HOMEOWNERS ASSOCIATION |
| LIFT STATION TRACT | PUBLIC | TO BE OWNED AND MAINTAINED BY CITY OF APOPKA |
| RECREATION TRACTS | PRIVATE | TO BE OWNED AND MAINTAINED BY HOMEOWNERS ASSOCIATION |
| OPEN SPACE TRACTS | PRIVATE | TO BE OWNED AND MAINTAINED BY HOMEOWNERS ASSOCIATION |
| FLOODPLAIN (CONSERVATION EASEMENTS) | PRIVATE | TO BE OWNED AND MAINTAINED BY HOMEOWNERS ASSOCIATION |
| UTILITY PROVIDERS | | |
| POTABLE WATER SERVICE | | CITY OF APOPKA UTILITIES |
| RECLAIMED WATER SERVICE | | CITY OF APOPKA UTILITIES |
| WASTEWATER SERVICE | | CITY OF APOPKA UTILITIES |
| ELECTRIC SERVICE | | DUKE ENERGY |
| SOLID WASTE | | CITY OF APOPKA |
| CABLE | | SPECTRUM |
| NATURAL GAS | | LAKE APOPKA NATURAL GAS |
| FIRE PROTECTION | | CITY OF APOPKA |

OPEN SPACE CALCULATIONS (1)

| | |
|--|--------------|
| OPEN SPACE REQUIRED = 30% OF NET DEVELOPABLE LAND AREA | |
| NET DEV. LAND AREA X 30% = REQUIRED OPEN SPACE = | 18.13 |
| TOTAL OPEN SPACE REQUIRED: | 18.13 |

| OPEN SPACE PROVIDED | | | |
|-----------------------------------|--------|-------------------------------------|------|
| PHASE | TRACTS | AREA PROVIDED | |
| 1 | P-1 | STORMWATER PONDS (MAX. 50% OF REQ.) | 9.06 |
| | B-1 | BUFFER | 0.02 |
| | B-2 | BUFFER | 0.18 |
| | FC-1 | FLOODPLAIN CONSERVATION | 1.75 |
| | M-1 | MEDIAN | 0.02 |
| | OS-1 | OPEN SPACE | 0.87 |
| | OS-2 | OPEN SPACE | 1.18 |
| | OS-3 | OPEN SPACE | 1.08 |
| | OS-4 | OPEN SPACE | 2.33 |
| | R-1 | RECREATION | 1.67 |
| TOTAL OPEN SPACE PROVIDED: | | 18.16 | |

(1) ALL UNITS ARE ACRES.
(2) PER LAND DEVELOPMENT CODE, ARTICLE II, SECTION 2.02.18(1)(b)(1b).

INDIVIDUAL LOT TABLE (1)(2)(3)

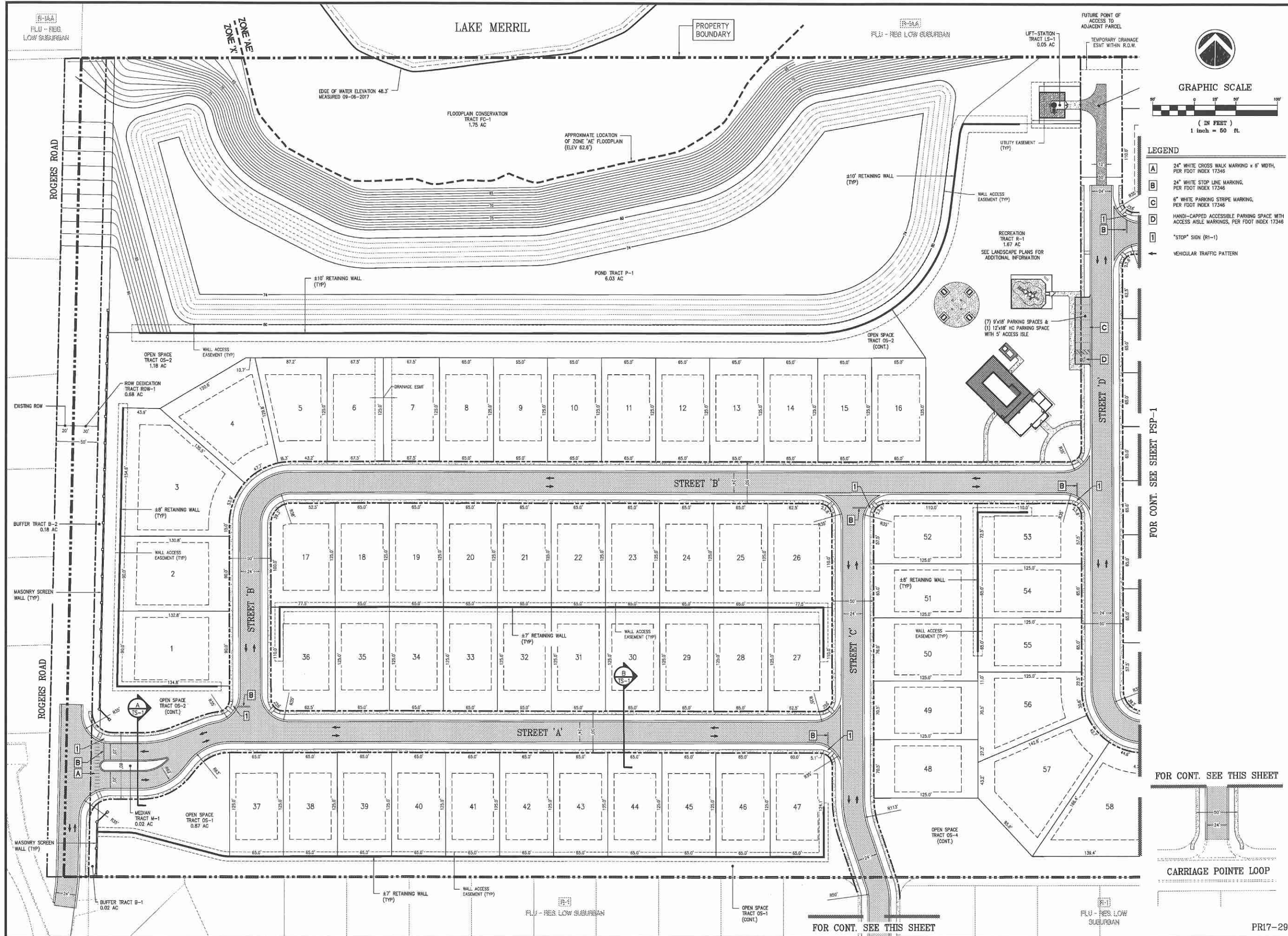
| LOT NUMBER | LOT FRONTAGE (FT) | APPROX. LOT DEPTH (FT) | LOT AREA (SQ-FT) | TYPICAL 65'x125' LOT | TYPICAL 90'x125' LOT |
|------------|-------------------|------------------------|------------------|----------------------|----------------------|
| LOT 1 | 90 | 132 | 12,046 | | X |
| LOT 2 | 90 | 130 | 11,865 | | X |
| LOT 3 | 69 | 130 | 17,241 | | X |
| LOT 4 | 48 | 130 | 11,440 | X | |
| LOT 5 | 60 | 125 | 9,190 | X | |
| LOT 6 | 67 | 125 | 8,438 | X | |
| LOT 7 | 67 | 125 | 8,438 | X | |
| LOT 8 | 65 | 125 | 8,125 | X | |
| LOT 9 | 65 | 125 | 8,125 | X | |
| LOT 10 | 65 | 125 | 8,125 | X | |
| LOT 11 | 65 | 125 | 8,125 | X | |
| LOT 12 | 65 | 125 | 8,125 | X | |
| LOT 13 | 65 | 125 | 8,125 | X | |
| LOT 14 | 65 | 125 | 8,125 | X | |
| LOT 15 | 65 | 125 | 8,125 | X | |
| LOT 16 | 65 | 125 | 8,125 | X | |
| LOT 17 | 77 | 125 | 9,539 | X | |
| LOT 18 | 65 | 125 | 8,125 | X | |
| LOT 19 | 65 | 125 | 8,125 | X | |
| LOT 20 | 65 | 125 | 8,125 | X | |
| LOT 21 | 65 | 125 | 8,125 | X | |
| LOT 22 | 65 | 125 | 8,125 | X | |
| LOT 23 | 65 | 125 | 8,125 | X | |
| LOT 24 | 65 | 125 | 8,125 | X | |
| LOT 25 | 65 | 125 | 8,125 | X | |
| LOT 26 | 77 | 125 | 9,539 | X | |
| LOT 27 | 77 | 125 | 9,539 | X | |
| LOT 28 | 65 | 125 | 8,125 | X | |
| LOT 29 | 65 | 125 | 8,125 | X | |
| LOT 30 | 65 | 125 | 8,125 | X | |
| LOT 31 | 65 | 125 | 8,125 | X | |
| LOT 32 | 65 | 125 | 8,125 | X | |
| LOT 33 | 65 | 125 | 8,125 | X | |
| LOT 34 | 65 | 125 | 8,125 | X | |
| LOT 35 | 65 | 125 | 8,125 | X | |
| LOT 36 | 77 | 125 | 9,539 | X | |
| LOT 37 | 65 | 125 | 8,125 | X | |
| LOT 38 | 65 | 125 | 8,125 | X | |
| LOT 39 | 65 | 125 | 8,125 | X | |
| LOT 40 | 65 | 125 | 8,125 | X | |
| LOT 41 | 65 | 125 | 8,125 | X | |
| LOT 42 | 65 | 125 | 8,125 | X | |
| LOT 43 | 65 | 125 | 8,125 | X | |
| LOT 44 | 65 | 125 | 8,125 | X | |
| LOT 45 | 65 | 125 | 8,125 | X | |
| LOT 46 | 65 | 125 | 8,125 | X | |
| LOT 47 | 65 | 125 | 8,124 | X | |
| LOT 48 | 70 | 125 | 8,813 | X | |
| LOT 49 | 70 | 125 | 8,813 | X | |
| LOT 50 | 76 | 125 | 9,500 | X | |
| LOT 51 | 68 | 125 | 8,125 | X | |
| LOT 52 | 72 | 125 | 9,014 | X | |
| LOT 53 | 72 | 125 | 9,014 | X | |
| LOT 54 | 65 | 125 | 8,125 | X | |
| LOT 55 | 65 | 125 | 8,125 | X | |
| LOT 56 | 53 | 125 | 10,300 | X | |
| LOT 57 | 42 | 142 | 13,964 | X | |
| LOT 58 | 49 | 125 | 12,377 | X | |
| LOT 59 | 65 | 125 | 8,125 | X | |
| LOT 60 | 65 | 125 | 8,125 | X | |
| LOT 61 | 65 | 125 | 8,125 | X | |
| LOT 62 | 65 | 125 | 8,125 | X | |
| LOT 63 | 65 | 125 | 8,125 | X | |
| LOT 64 | 65 | 125 | 8,125 | X | |
| LOT 65 | 65 | 125 | 8,125 | X | |
| LOT 66 | 65 | 125 | 8,125 | X | |
| LOT 67 | 65 | 125 | 8,125 | X | |
| LOT 68 | 65 | 125 | 8,125 | X | |
| LOT 69 | 65 | 125 | 8,125 | X | |
| LOT 70 | 90 | 125 | 11,250 | | X |
| LOT 71 | 90 | 125 | 11,250 | | X |
| LOT 72 | 90 | 125 | 11,250 | | X |
| LOT 73 | 90 | 125 | 11,250 | | X |
| LOT 74 | 76 | 125 | 13,814 | | X |
| LOT 75 | 64 | 125 | 16,309 | | X |
| LOT 76 | 83 | 125 | 12,481 | | X |
| LOT 77 | 90 | 125 | 11,250 | | X |

(1) LOTS SHALL MEET A TYPICAL 65'x125' OR 90'x125' STANDARD AS IDENTIFIED ON SHEET MP-1.
(2) DIMENSIONS AND AREAS SHOWN HAVE BEEN ROUNDED TO THE NEAREST WHOLE NUMBER.
(3) DIMENSIONS IDENTIFIED MAY VARY BASED ON LOT CONFIGURATION. PLEASE SEE SHEETS SP-1 AND SP-2 FOR SPECIFIC DIMENSIONING.

LOT DISTRIBUTION TABLE

| MINIMUM LOT STANDARD | QUANTITY | PERCENTAGE |
|----------------------|------------|---------------|
| 65'x125' TYPICAL LOT | 140 | 91.5% |
| 90'x125' TYPICAL LOT | 13 | 8.5% |
| TOTAL | 153 | 100.0% |

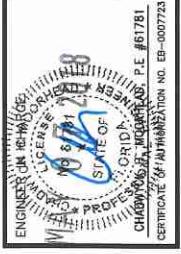
| LOT NUMBER | LOT FRONTAGE (FT) | APPROX. LOT DEPTH (FT) | LOT AREA (SQ-FT) | TYPICAL 65'x125' LOT | TYPICAL 90'x125' LOT |
|------------|-------------------|------------------------|------------------|----------------------|----------------------|
| LOT 78 | 77 | 125 | 13,563 | | X |
| LOT 79 | 65 | 125 | 16,104 | | X |
| LOT 80 | 60 | 125 | 9,686 | X | |
| LOT 81 | 67 | 125 | 8,375 | X | |
| LOT 82 | 67 | 125 | 8,375 | X | |
| LOT 83 | 67 | 125 | 8,375 | X | |
| LOT 84 | 67 | 125 | 8,375 | X | |
| LOT 85 | 72 | 125 | 9,014 | X | |
| LOT 86 | 68 | 125 | 8,516 | X | |
| LOT 87 | 44 | 125 | 11,114 | X | |
| LOT 88 | 48 | 125 | 11,371 | X | |
| LOT 89 | 56 | 125 | 9,748 | X | |
| LOT 90 | 65 | 125 | 8,125 | X | |
| LOT 91 | 65 | 125 | 8,125 | X | |
| LOT 92 | 65 | 125 | 8,125 | X | |
| LOT 93 | 65 | 125 | 8,125 | X | |
| LOT 94 | 65 | 125 | 8,125 | X | |
| LOT 95 | 65 | 125 | 8,125 | X | |
| LOT 96 | 65 | 125 | 8,125 | X | |
| LOT 97 | 65 | 125 | 8,125 | X | |
| LOT 98 | 65 | 125 | 8,125 | X | |
| LOT 99 | 72 | 125 | 9,014 | X | |
| LOT 100 | 77 | 125 | 9,539 | X | |
| LOT 101 | 65 | 125 | 8,125 | X | |
| LOT 102 | 65 | 125 | 8,125 | X | |
| LOT 103 | 65 | 125 | 8,125 | X | |
| LOT 104 | 65 | 125 | 8,125 | X | |
| LOT 105 | 65 | 125 | 8,125 | X | |
| LOT 106 | 65 | 125 | 8,125 | X | |
| LOT 107 | 82 | 125 | 10,178 | X | |
| LOT 108 | 82 | 125 | 10,264 | X | |
| LOT 109 | 65 | 125 | 8,125 | X | |
| LOT 110 | 65 | 125 | 8,125 | X | |
| LOT 111 | 65 | 125 | 8,125 | X | |
| LOT 112 | 65 | 125 | 8,125 | X | |
| LOT 113 | 65 | 125 | 8,125 | X | |
| LOT 114 | 65 | 125 | 8,125 | X | |
| LOT 115 | 77 | 125 | 9,539 | X | |
| LOT 116 | 72 | 125 | 9,014 | X | |
| LOT 117 | 65 | 125 | 8,125 | X | |
| LOT 118 | 65 | 125 | 8,125 | X | |
| LOT 119 | 65 | 125 | 8,125 | X | |
| LOT 120 | 65 | 125 | 8,125 | X | |
| LOT 121 | 82 | 125 | 10,178 | X | |
| LOT 122 | 82 | 125 | 10,264 | X | |
| LOT 123 | 65 | 125 | 8,125 | X | |
| LOT 124 | 65 | 125 | 8,125 | X | |
| LOT 125 | 65 | 125 | 8,125 | X | |
| LOT 126 | 65 | 125 | 8,125 | X | |
| LOT 127 | 72 | 125 | 9,014 | X | |
| LOT 128 | 72 | 125 | 9,014 | X | |
| LOT 129 | 65 | 125 | 8,125 | X | |
| LOT 130 | 65 | 125 | 8,125 | X | |
| LOT 131 | 65 | 125 | 8,125 | X | |
| LOT 132 | 65 | 125 | 8,125 | X | |
| LOT 133 | 65 | 125 | 8,125 | X | |
| LOT 134 | 65 | 125 | 8,125 | X | |
| LOT 135 | 65 | 125 | 8,125 | X | |
| LOT 136 | 65 | 125 | 8,125 | X | |
| LOT 137 | 65 | 125 | 8,125 | X | |
| LOT 138 | 65 | 125 | 8,125 | X | |
| LOT 139 | 65 | | | | |



MADDEN
 MOORHEAD & STOKES, INC.
 CIVIL ENGINEERS
 431 E. Horatio Avenue
 Suite 280
 Maitland, Florida 32751
 (407) 629-8330

SUBMISSION PLAN
 FOR
VISTA RESERVE
 CITY OF APOPKA
 FLORIDA

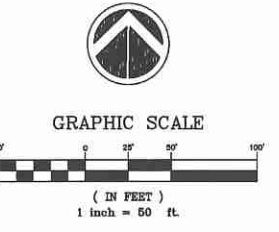
THE PULTE GROUP
 4001 WINDLAND ROAD, SUITE 500
 ORLANDO, FL 32811
 (407) 861-1514



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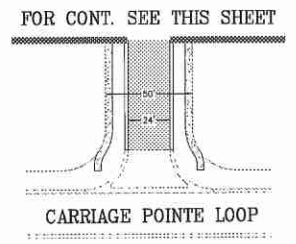
JOB # 17051
 DATE: 04-05-2018
 SCALE: 1" = 50'
 DESIGNED BY: BW
 DRAWN BY: BW
 APPROVED BY: CHM

SP-1



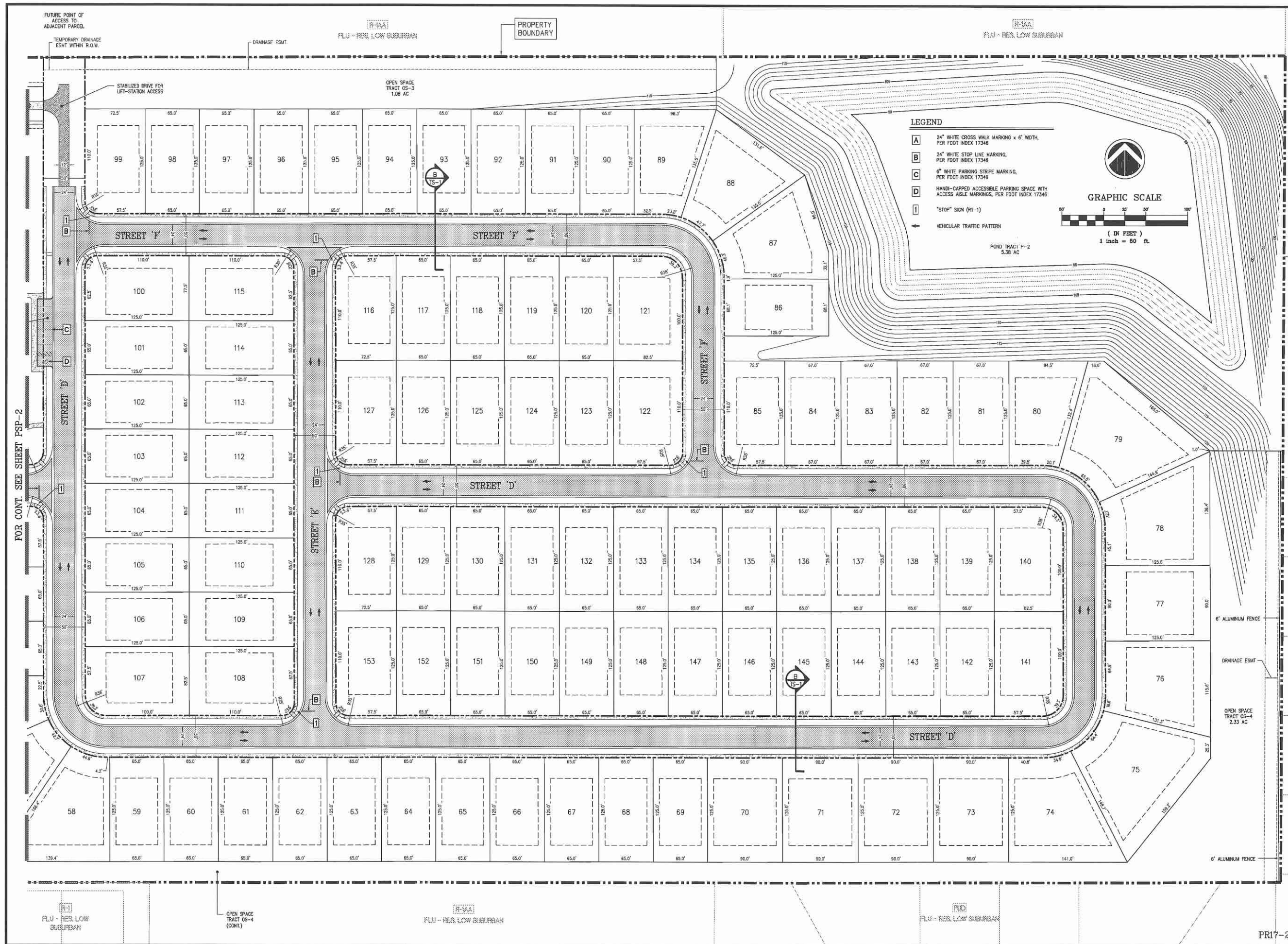
- LEGEND**
- A 24" WHITE CROSS WALK MARKING x 5' WIDTH, PER FDOT INDEX 17346
 - B 24" WHITE STOP LINE MARKING, PER FDOT INDEX 17346
 - C 6" WHITE PARKING STRIPE MARKING, PER FDOT INDEX 17346
 - D HANDI-CAPPED ACCESSIBLE PARKING SPACE WITH ACCESS AISLE MARKINGS, PER FDOT INDEX 17346
 - E "STOP" SIGN (R1-1)
 - F VEHICULAR TRAFFIC PATTERN

FOR CONT. SEE SHEET PSP-1



FOR CONT. SEE THIS SHEET

PR17-29



MADDEN
MOORHEAD & STOKES, INC.
CIVIL ENGINEERS
431 E. Horatio Avenue
Suite 260
Maitland, Florida 32751
(407) 629-8330

SUBDIVISION PLAN
FOR
VISTA RESERVE
CITY OF APOPKA
FLORIDA

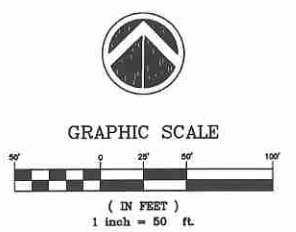
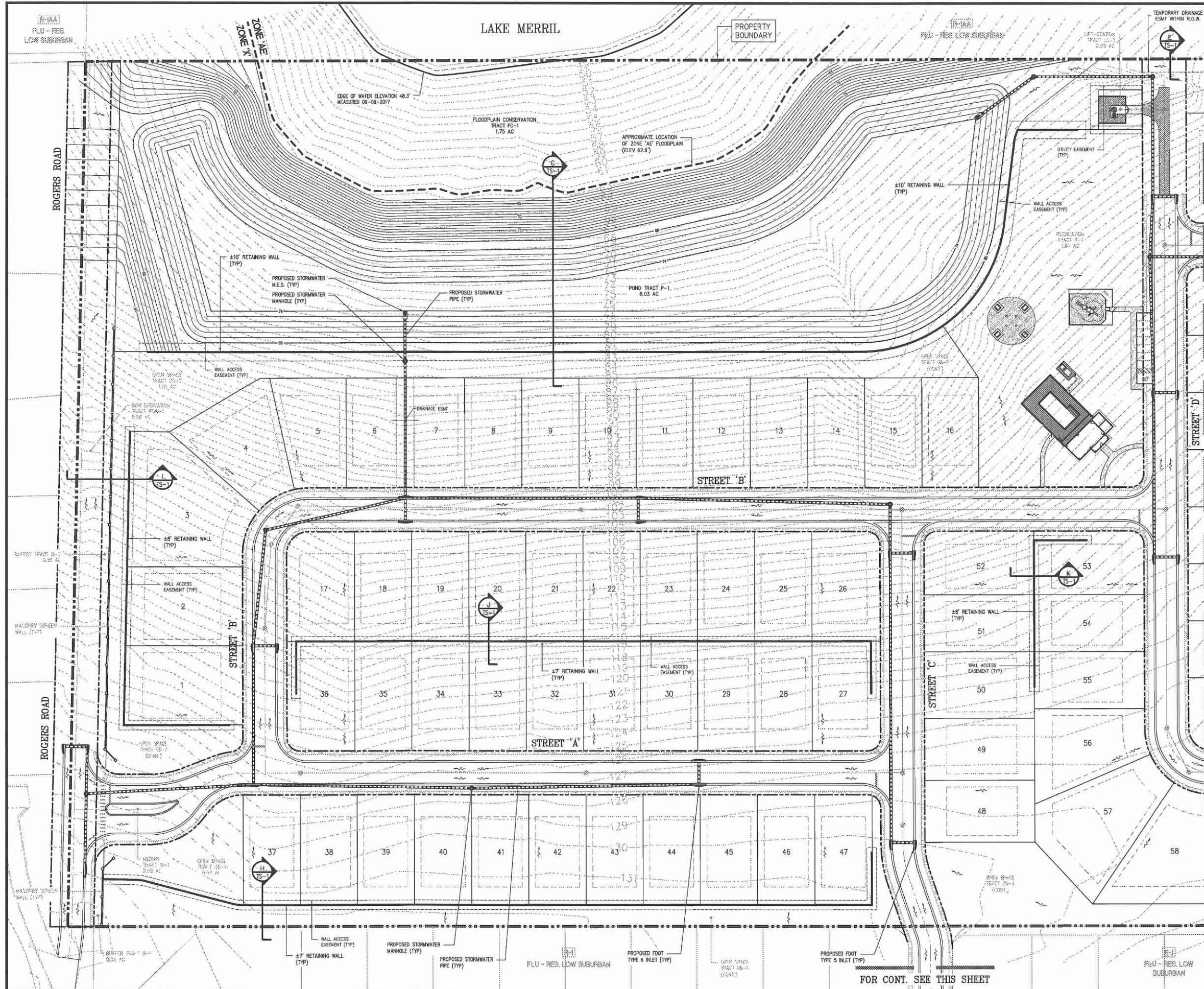
THE PULTE GROUP
4001 VINELAND ROAD, SUITE 500
ORLANDO, FL 32811
(407) 661-1514

CHADWICK E. MOORHEAD
P.E. #61781
CERTIFICATE OF ADOPTION NO. EB-007723

| NO. | DATE | REVISIONS |
|-----|------------|-------------------------------------|
| 1 | 04-05-2018 | PER CIVIL COMMENTS DATED 04-23-2018 |
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JOB # 17051
DATE: 04-05-2018
SCALE: 1" = 50'
DESIGNED BY: BW
DRAWN BY: BW
APPROVED BY: CHM

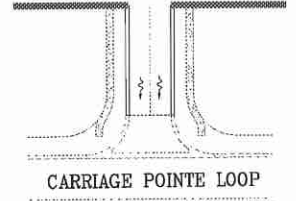
SP-2



- NOTES**
1. THE PROJECT SHALL BE SERVICED BY A MASTER STORMWATER MANAGEMENT SYSTEM DESIGNED TO MEET CITY OF APOPKA CODE AND APPLICABLE ST. JOHN'S RIVER WATER MANAGEMENT DISTRICT REQUIREMENTS.
 2. STORMWATER MANAGEMENT FACILITIES, STORM SEWER SYSTEM, AND GRADING PATTERNS SHOWN ARE PRELIMINARY IN NATURE AND SUBJECT TO CHANGE THE FINAL ENGINEERING PROCESS AND PERMITTING.
 3. EROSION AND SEDIMENT CONTROL AND STORMWATER POLLUTION PREVENTION MEASURES SHALL BE PROVIDED DURING THE FINAL ENGINEERING PROCESS.
 4. FINAL CONFIGURATION OF DRAINAGE EASEMENTS TO BE DETERMINED DURING THE FINAL ENGINEERING PROCESS.

FOR CONT. SEE SHEET DP-1

FOR CONT. SEE THIS SHEET



CARRIAGE POINTE LOOP

FOR CONT. SEE THIS SHEET

MADDEN
MOORHEAD & STOKES, INC.
CIVIL ENGINEERS
431 E. Horatio Avenue
Suite 260
Maitland, Florida 32751
(407) 629-8330

FLORIDA
CITY OF APOPKA
MASTER DRAINAGE PLAN
FOR
VISTA RESERVE

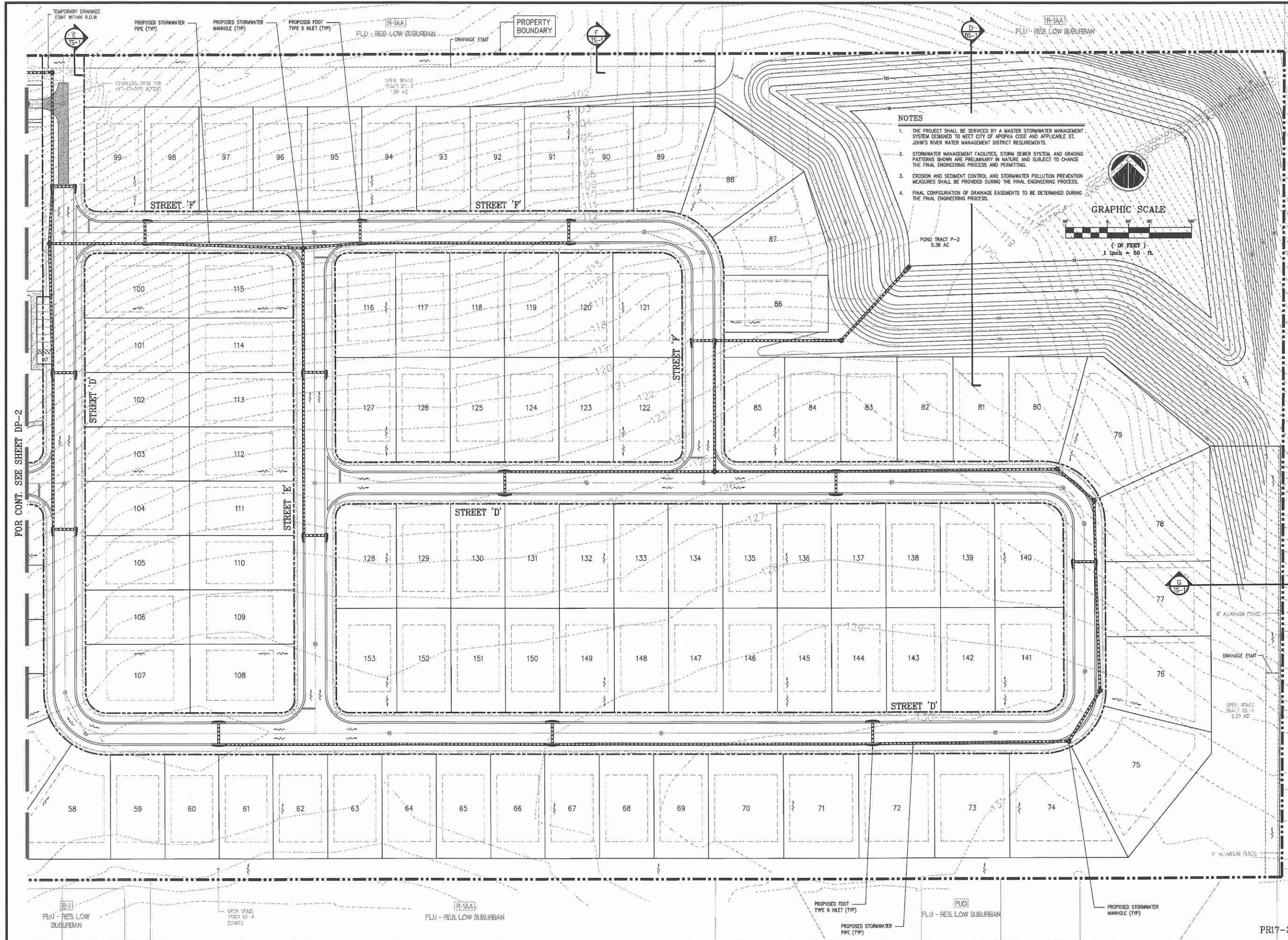
THE PULTE GROUP
4001 VINELAND ROAD, SUITE 900
ORLANDO, FL 32811
(407) 861-1514

ENGINEER OF MECHANICAL
CHADWICK J. HOGER, No. 6714, P.E. #61781
STATE OF FLORIDA
CERTIFICATE OF AUTHORIZATION NO. EB-0007723

| NO. | DATE | REVISIONS |
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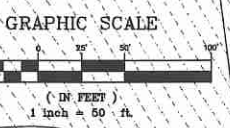
JOB # 17051
DATE: 04-05-2018
SCALE: 1" = 50'
DESIGNED BY: BW
DRAWN BY: BW
APPROVED BY: CHM

DP-1



NOTES

1. THE PROJECT SHALL BE SERVICED BY A MASTER STORMWATER MANAGEMENT SYSTEM DESIGNED TO MEET CITY OF APOPKA CODE AND APPLICABLE ST. JOHN'S RIVER WATER MANAGEMENT DISTRICT REQUIREMENTS.
2. STORMWATER MANAGEMENT FACILITIES, STORM SEWER SYSTEM, AND GRADING PATTERNS SHOWN ARE PRELIMINARY IN NATURE AND SUBJECT TO CHANGE THE FINAL ENGINEERING PROCESS AND PERMITTING.
3. EROSION AND SEDIMENT CONTROL AND STORMWATER POLLUTION PREVENTION MEASURES SHALL BE PROVIDED DURING THE FINAL ENGINEERING PROCESS.
4. FINAL CONFIGURATION OF DRAINAGE EASEMENTS TO BE DETERMINED DURING THE FINAL ENGINEERING PROCESS.



FOR CONT. SEE SHEET DP-2

MADDEN
 MOORHEAD & STOKES INC.
 CIVIL ENGINEERS
 431 E. Horatio Avenue
 Suite 250
 Maitland, Florida 32751
 (407) 629-8330

FLORIDA
 CITY OF APOPKA
MASTER DRAINAGE PLAN
 FOR
VISTA RESERVE

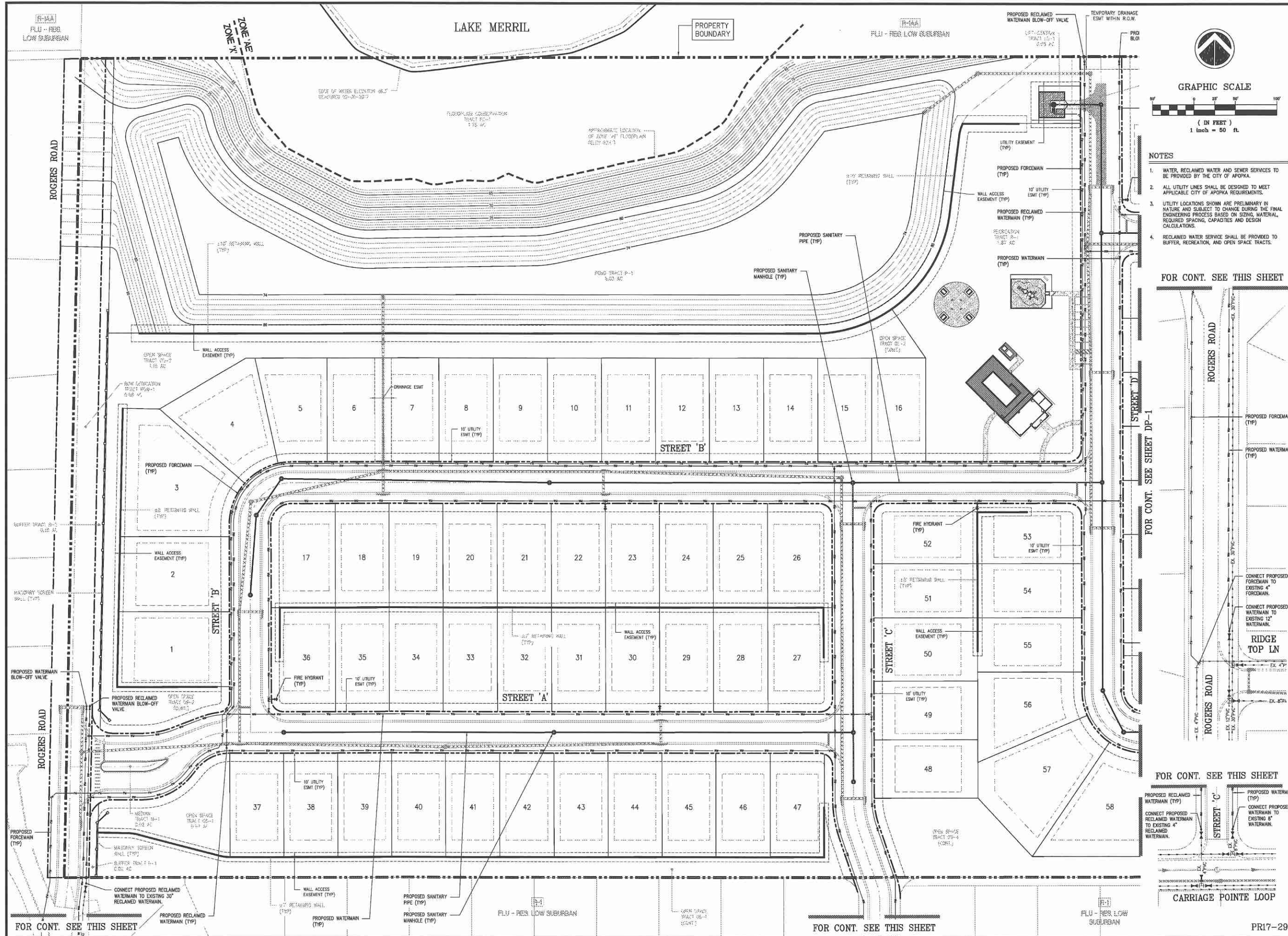
THE PULTE GROUP
 4001 VINELAND ROAD, SUITE 500
 ORLANDO, FL 32811
 (407) 661-1514

CHADWICK J. HUGGINS, P.E. #61781
 ENGINEER IN CHARGE
 STATE OF FLORIDA
 CERTIFICATE OF AUTHORIZATION NO. EP-000723

| NO. | DATE | REVISIONS |
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JOB # 17051
 DATE: 04-05-2018
 SCALE: 1" = 50'
 DESIGNED BY: BW
 DRAWN BY: BW
 APPROVED BY: CHM

DP-2



MADDEN
MOORHEAD & STOKES, INC.
CIVIL ENGINEERS
431 E. Horatio Avenue
Suite 280
Maitland, Florida 32751
(407) 629-8330

UTILITY PLAN
FOR
VISTA RESERVE
CITY OF APOPKA
FLORIDA

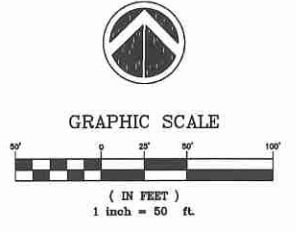
THE PULTE GROUP
4901 WINDLAND ROAD, SUITE 500
ORLANDO, FL 32811
(407) 861-1514



| NO. | DATE | REVISIONS |
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| 1 | 04-05-2018 | ISSUE FOR PERMIT |
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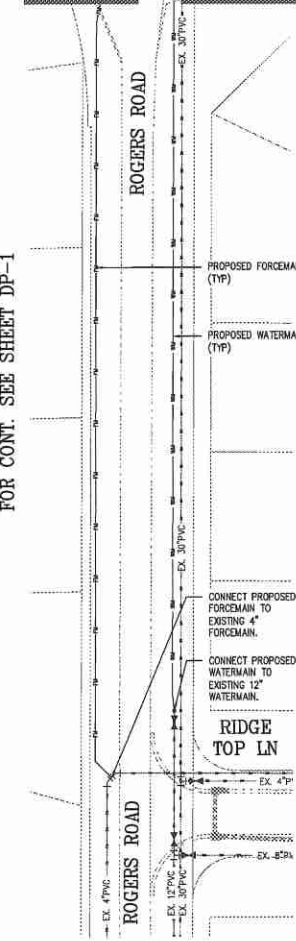
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DATE 04-05-2018
SCALE 1" = 50'
DESIGNED BY: BW
DRAWN BY: BW
APPROVED BY: CHM

UP-1

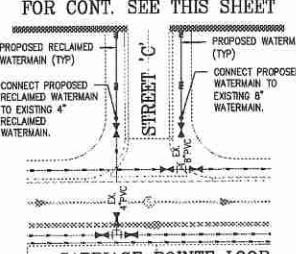


- NOTES**
1. WATER, RECLAIMED WATER AND SEWER SERVICES TO BE PROVIDED BY THE CITY OF APOPKA.
 2. ALL UTILITY LINES SHALL BE DESIGNED TO MEET APPLICABLE CITY OF APOPKA REQUIREMENTS.
 3. UTILITY LOCATIONS SHOWN ARE PRELIMINARY IN NATURE AND SUBJECT TO CHANGE DURING THE FINAL ENGINEERING PROCESS BASED ON SIZING, MATERIAL, REQUIRED SPACING, CAPACITIES AND DESIGN CALCULATIONS.
 4. RECLAIMED WATER SERVICE SHALL BE PROVIDED TO BUFFER, RECREATION, AND OPEN SPACE TRACTS.

FOR CONT. SEE THIS SHEET



FOR CONT. SEE THIS SHEET



CARRIAGE POINT LOOP

FOR CONT. SEE THIS SHEET

FOR CONT. SEE THIS SHEET

PR17-29



MADDEN
 MOORHEAD & STOKES, INC.
 CIVIL ENGINEERS
 431 E. Horatio Avenue
 Suite 250
 Maitland, Florida 32751
 (407) 629-8330

FLORIDA

UTILITY PLAN
 FOR
VISTA RESERVE

CITY OF APOPKA

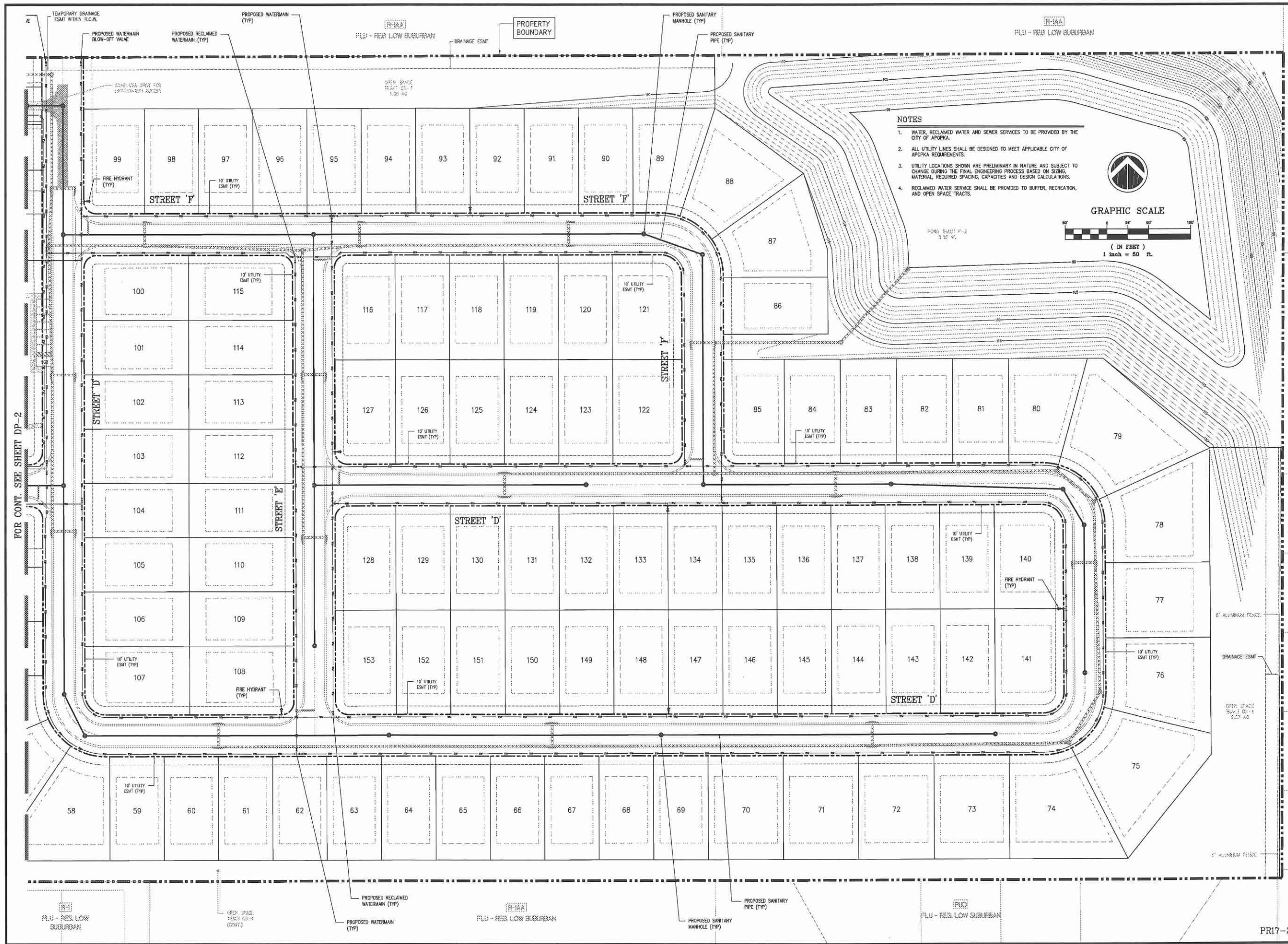
THE PULTE GROUP
 4901 WINDLAND ROAD, SUITE 500
 ORLANDO, FL 32811
 (407) 861-1514



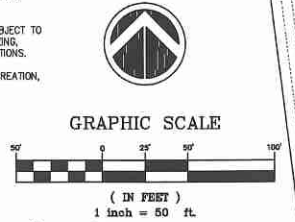
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JOB # 17051
 DATE: 04-05-2018
 SCALE: 1" = 50'
 DESIGNED BY: BW
 DRAWN BY: BW
 APPROVED BY: CHM

UP - 2



- NOTES**
1. WATER, RECLAIMED WATER AND SEWER SERVICES TO BE PROVIDED BY THE CITY OF APOPKA.
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 4. RECLAIMED WATER SERVICE SHALL BE PROVIDED TO BUFFER, RECREATION, AND OPEN SPACE TRACTS.



FOR CONT. SEE SHEET DP-2

PR17-29



MADDEN
 MOORHEAD & STOKES, INC.
 CIVIL ENGINEERS
 431 E. Horatio Avenue
 Suite 250
 Maitland, Florida 32751
 (407) 629-8330

FLORIDA
 CITY OF APOPKA

TYPICAL SECTIONS
 FOR
VISTA RESERVE

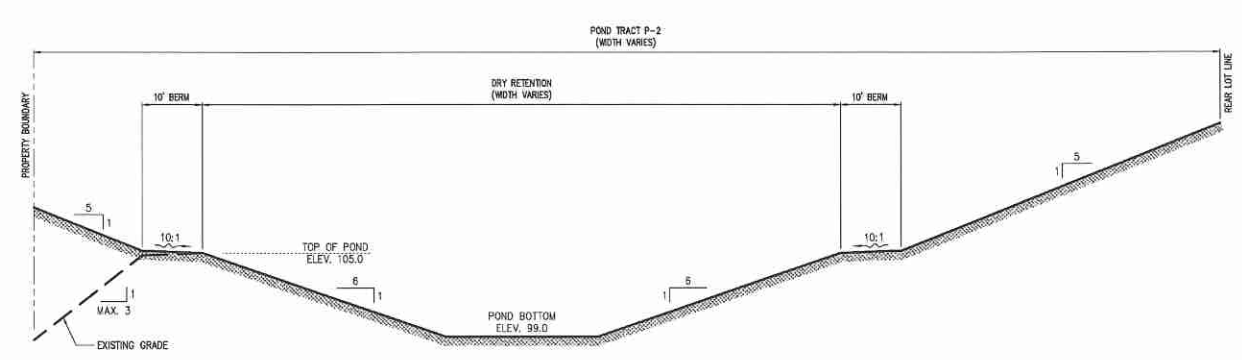
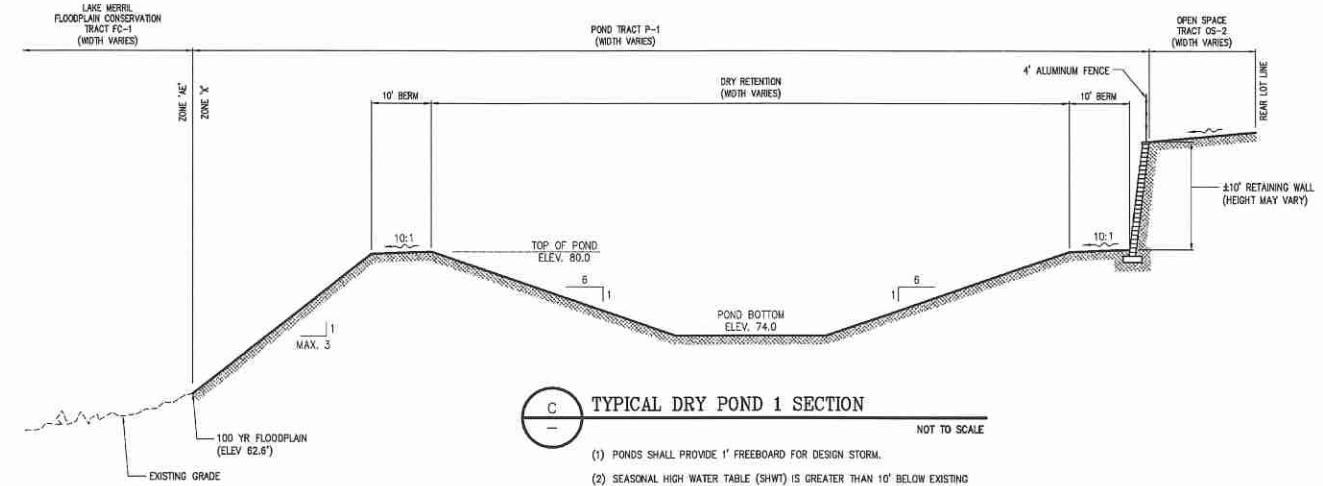
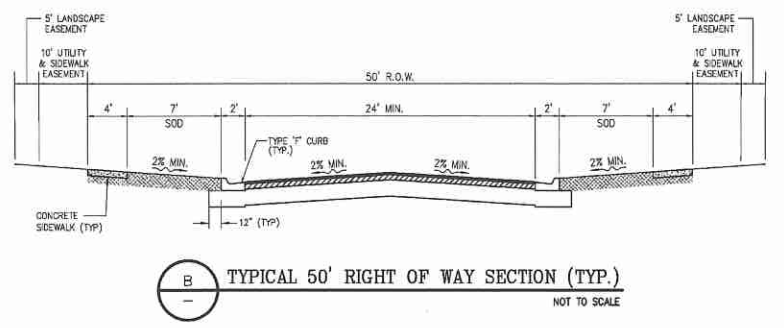
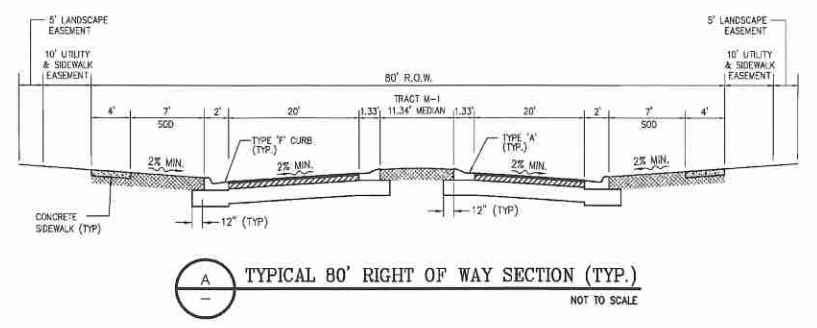
THE PULTE GROUP
 4901 WELAND ROAD, SUITE 500
 ORLANDO, FL 32811
 (407) 661-1514



| NO. | DATE | REVISIONS |
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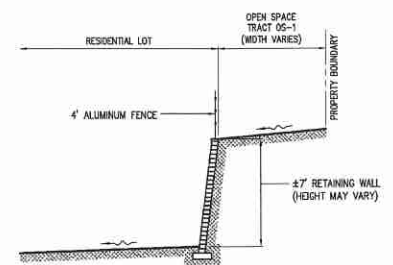
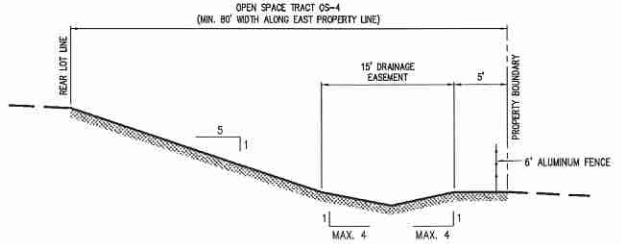
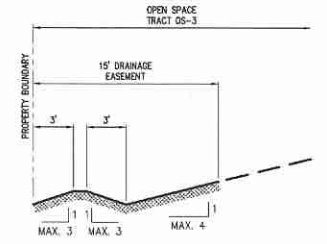
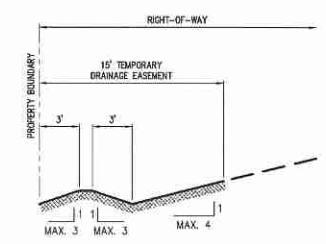
JOB # 17051
 DATE: 04-05-2018
 SCALE: NTS
 DESIGNED BY: BW
 DRAWN BY: SW
 APPROVED BY: CHM

TS-1



C TYPICAL DRY POND 1 SECTION
 NOT TO SCALE
 (1) PONDS SHALL PROVIDE 1' FREEBOARD FOR DESIGN STORM.
 (2) SEASONAL HIGH WATER TABLE (SHWT) IS GREATER THAN 10' BELOW EXISTING GRADE PER PRELIMINARY GEOTECHNICAL REPORT.
 (3) RETAINING WALL TYPE AND HEIGHT SHOWN IS APPROXIMATE AND SUBJECT TO CHANGE DURING THE FINAL DEVELOPMENT PLAN APPROVAL PROCESS.

D TYPICAL DRY POND 2 SECTION
 NOT TO SCALE
 (1) PONDS SHALL PROVIDE 1' FREEBOARD FOR DESIGN STORM.
 (2) SEASONAL HIGH WATER TABLE (SHWT) IS GREATER THAN 10' BELOW EXISTING GRADE PER PRELIMINARY GEOTECHNICAL REPORT.

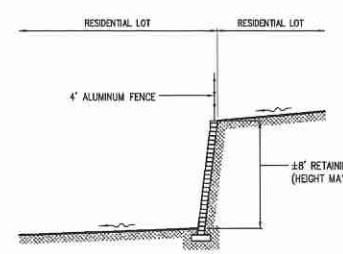
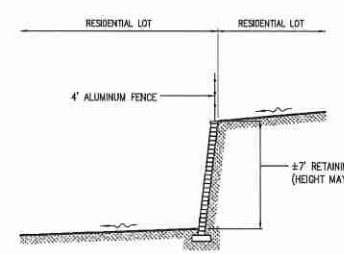
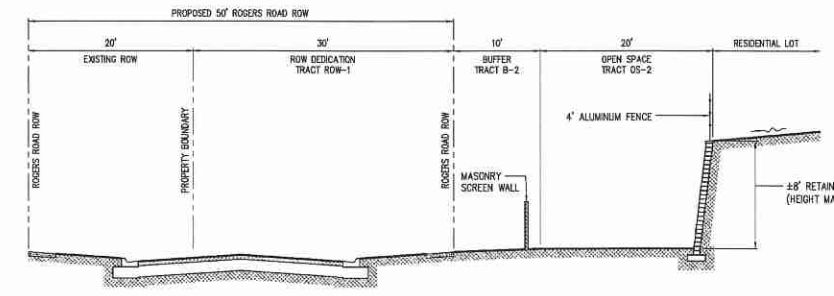


E TEMPORARY DRAINAGE SWALE SECTION
 NOT TO SCALE
 (1) DRAINAGE SWALE WIDTH IS SUBJECT TO CHANGE DURING THE FINAL DEVELOPMENT PLAN APPROVAL PROCESS.
 (2) TEMPORARY DRAINAGE SWALE TO BE REMOVED AT THE TIME OF RIGHT-OF-WAY EXTENSION TO ADJACENT NORTH PROPERTY.

F DRAINAGE SWALE SECTION
 NOT TO SCALE
 (1) DRAINAGE SWALE WIDTH IS SUBJECT TO CHANGE DURING THE FINAL DEVELOPMENT PLAN APPROVAL PROCESS.

G TYPICAL GRADING SECTION
 NOT TO SCALE
 (1) DRAINAGE SWALE WIDTH IS SUBJECT TO CHANGE DURING THE FINAL DEVELOPMENT PLAN APPROVAL PROCESS.

H TYPICAL GRADING SECTION
 NOT TO SCALE
 (1) RETAINING WALL TYPE AND HEIGHT SHOWN IS APPROXIMATE AND SUBJECT TO CHANGE DURING THE FINAL DEVELOPMENT PLAN APPROVAL PROCESS.

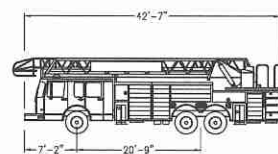
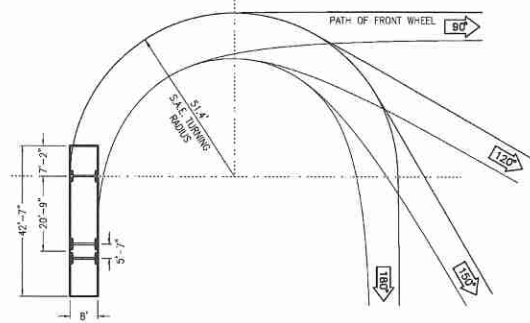


I TYPICAL GRADING SECTION
 NOT TO SCALE
 (1) RETAINING WALL TYPE AND HEIGHT SHOWN IS APPROXIMATE AND SUBJECT TO CHANGE DURING THE FINAL DEVELOPMENT PLAN APPROVAL PROCESS.

J TYPICAL GRADING SECTION
 NOT TO SCALE
 (1) RETAINING WALL TYPE AND HEIGHT SHOWN IS APPROXIMATE AND SUBJECT TO CHANGE DURING THE FINAL DEVELOPMENT PLAN APPROVAL PROCESS.

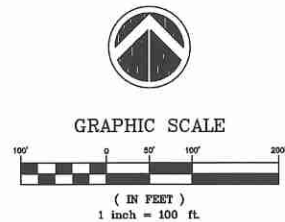
K TYPICAL GRADING SECTION
 NOT TO SCALE
 (1) RETAINING WALL TYPE AND HEIGHT SHOWN IS APPROXIMATE AND SUBJECT TO CHANGE DURING THE FINAL DEVELOPMENT PLAN APPROVAL PROCESS.

R-1AA
PLU - RES. LOW SUBURBAN



NOTES

1. ALL ROADWAYS, WATER LINE INFRASTRUCTURE AND FIRE HYDRANTS SHALL BE IN PLACE BEFORE BUILDING CONSTRUCTION MAY BEGIN.
2. FIRE HYDRANTS TO BE LOCATED WITHIN 500 FEET OF ALL SINGLE-FAMILY RESIDENCES AND IDENTIFIED WITH A BLUE ROADWAY REFLECTOR MARKING.
3. CONSTRUCTION OF SINGLE-FAMILY RESIDENCES SHALL FOLLOW FLORIDA STATUTE 633.027 CONCERNING LIGHT FRAME TRUSS CONSTRUCTION.



R-1AA
PLU - RES. LOW SUBURBAN

LAKE MERRIL

CITY OF APOPKA AERIAL TRUCK

NOT TO SCALE

R-1AA
PLU - RES. LOW SUBURBAN

PROPERTY BOUNDARY

R-1AA
PLU - RES. LOW SUBURBAN

PLU - RES. LOW SUBURBAN

ROGERS ROAD

R-1AA
PLU - RES. LOW SUBURBAN

PARKSIDE MEADOW DR

ROGERS ROAD

RIDGE TOP LN

UPLAND LANE

CARRIAGE POINTE LOOP

CARRIAGE POINTE LOOP

STREET 'B'

STREET 'A'

STREET 'C'

STREET 'D'

STREET 'E'

STREET 'D'

STREET 'F'

STREET 'F'

STREET 'D'

LAKE CORA ROAD

HOME AGAIN ROAD

HOME AGAIN ROAD

HASKILL HILL ROAD

LAKE CORA ROAD

FIRE ACCESS PLAN
FOR
VISTA RESERVE

THE PULTE GROUP
4901 WINDLAND ROAD, SUITE 500
ORLANDO, FL 32811
(407) 661-1514



| NO. | DATE | REVISIONS |
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| 1 | 04-05-2018 | PRELIMINARY |
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JOB # 17051
DATE: 04-05-2018
SCALE: 1"=100'
DESIGNED BY: BW
DRAWN BY: BW
APPROVED BY: CHM

FA-1

PRI7-29

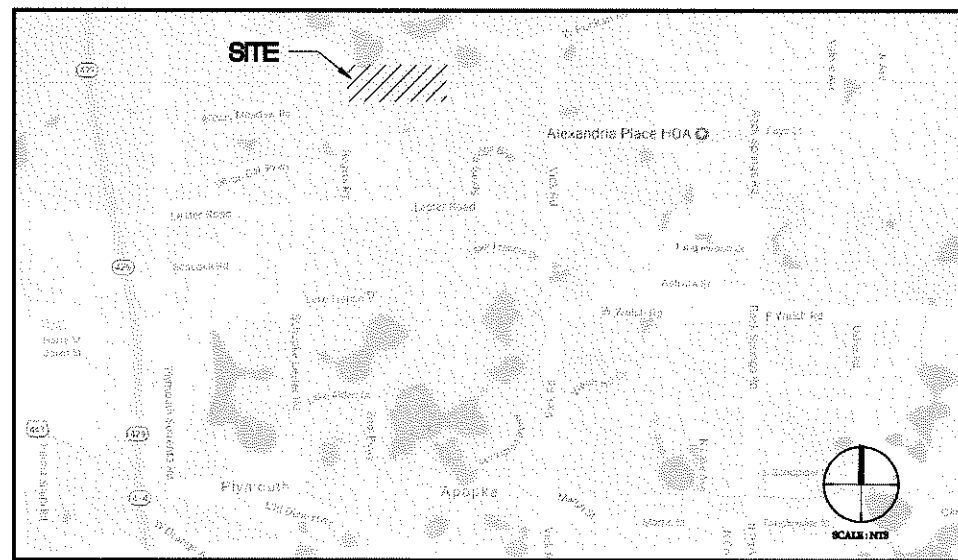
VISTA RESERVE

CITY OF APOPKA, FLORIDA

LANDSCAPE ARCHITECTURAL DRAWINGS PRELIMINARY DEVELOPMENT PLAN

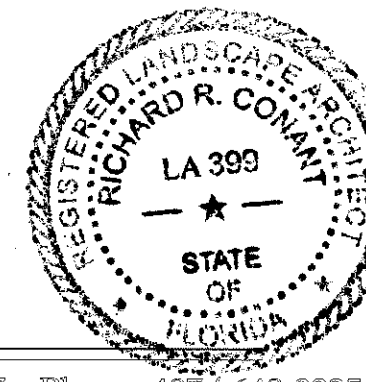
ISSUED FOR PERMIT - 04.05.18
REVISED: 04.30.18

VICINITY MAP



INDEX OF DRAWINGS

| SHT. NO. | ISSUE DATE | REV. NO. | REV. DATE | SHEET TITLE |
|----------|------------|----------|-----------|------------------------------|
| LP-001 | 04/05/18 | --- | --- | KEY PLAN |
| LP-002 | 04/05/18 | --- | --- | TREE MITIGATION PLAN |
| LP-003 | 04/05/18 | --- | --- | TREE MITIGATION PLAN |
| LP-004 | 04/05/18 | --- | --- | TREE MITIGATION PLAN |
| LP-005 | 04/27/18 | 1 | 04.30.18 | RECREATION/OPEN SPACE PLAN |
| LP-100 | 04/05/18 | 1 | 04.30.18 | LANDSCAPE PLAN |
| LP-101 | 04/05/18 | 1 | 04.30.18 | LANDSCAPE PLAN |
| LP-102 | 04/05/18 | 1 | 04.30.18 | LANDSCAPE PLAN |
| LP-103 | 04/05/18 | 1 | 04.30.18 | LANDSCAPE PLAN |
| LP-104 | 04/05/18 | 1 | 04.30.18 | LANDSCAPE PLAN |
| LP-105 | 04/05/18 | 1 | 04.30.18 | LANDSCAPE NOTES & DETAILS |
| LP-200 | 04/05/18 | 1 | 04.30.18 | HARDSCAPE DETAILS |
| LP-201 | 04/05/18 | 1 | 04.30.18 | HARDSCAPE IMAGES |
| LP-300 | 04/05/18 | 1 | 04.30.18 | IRRIGATION PLAN |
| LP-301 | 04/05/18 | --- | --- | IRRIGATION PLAN |
| LP-302 | 04/05/18 | --- | --- | IRRIGATION PLAN |
| LP-303 | 04/05/18 | --- | --- | IRRIGATION PLAN |
| LP-304 | 04/05/18 | 1 | 04.30.18 | IRRIGATION PLAN |
| LP-305 | 04/05/18 | 1 | 04.30.18 | IRRIGATION NOTES AND DETAILS |
| LP-306 | 04/05/18 | --- | --- | IRRIGATION DETAILS |
| LP-307 | 04/05/18 | --- | --- | IRRIGATION DETAILS |
| LP-308 | 04/05/18 | --- | --- | IRRIGATION DETAILS |

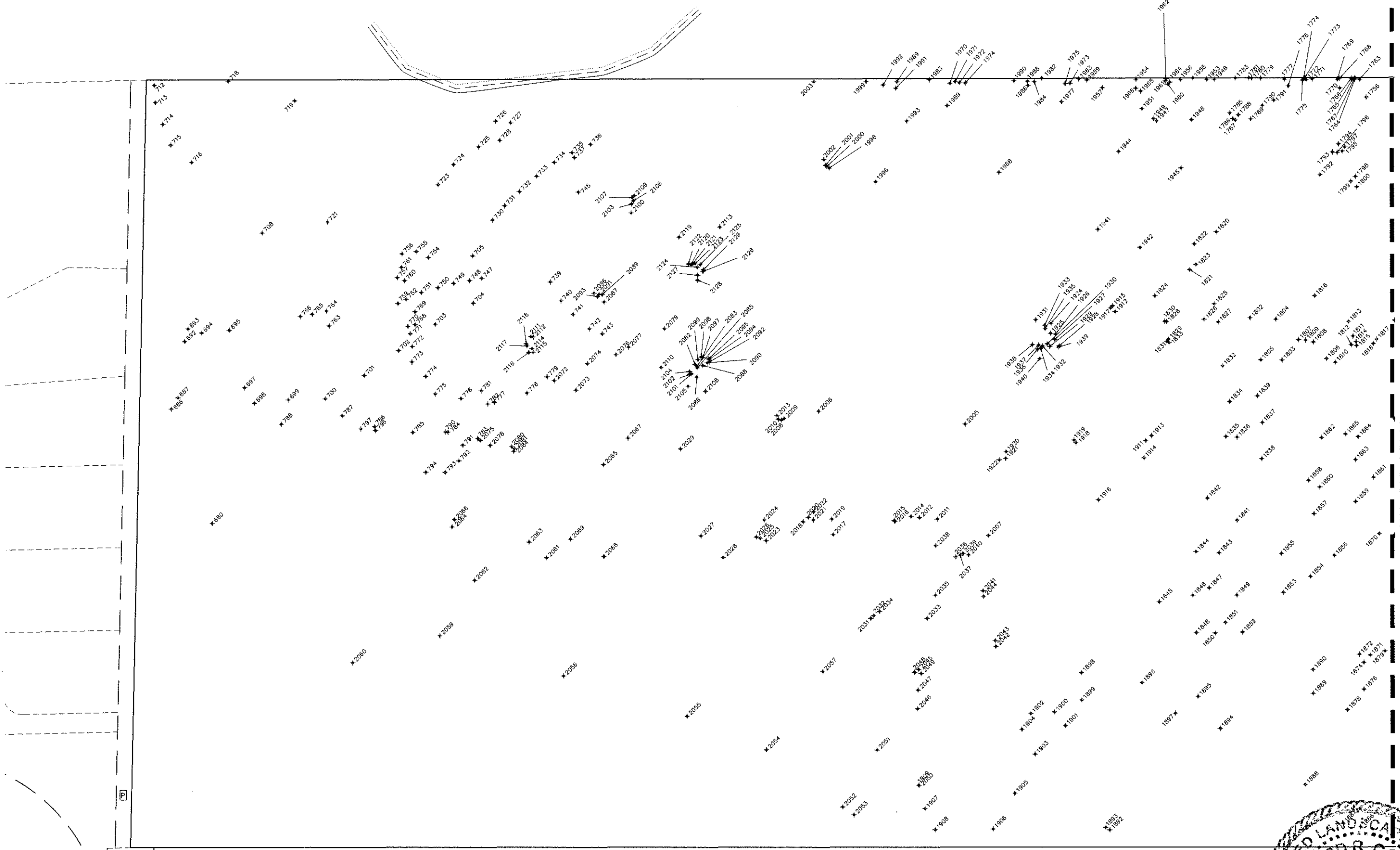


I CERTIFY THAT THE LANDSCAPE AND IRRIGATION DESIGN FOR THIS PROJECT IS IN ACCORDANCE WITH THE CITY OF APOPKA'S ORDINANCE 2069 ADOPTED MAY 21, 2008 WHICH ESTABLISHES WATERWISE LANDSCAPE AND IRRIGATION STANDARDS.

Richard R. Conant
SIGNATURE LA 399 4.30.18
REG. NO. DATE



120 West Robinson Street
Orlando, Florida 32801-1617
Phone (407) 648-2225
www.fosterconant.com



MATCHLINE SHEET LP-003

Table with 2 columns: Description and Quantity. The table is mostly blank with some faint lines.

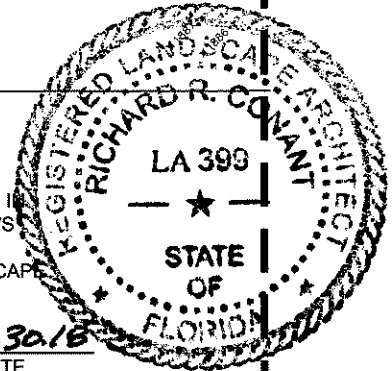
VISTA RESERVE
CITY OF APOPKA, FL
TREE MITIGATION PLAN

Date: 04/05/18
Scale: 1"=60'
Drawn: CFB Checked: RRC
File Name: SAMALP002.DWG
Sheet:

Sheet
LP-002

I CERTIFY THAT THE LANDSCAPE AND IRRIGATION DESIGN FOR THIS PROJECT IS IN ACCORDANCE WITH THE CITY OF APOPKA'S ORDINANCE 2069 ADOPTED MAY 21, 2008 WHICH ESTABLISHES WATERWISE LANDSCAPE AND IRRIGATION STANDARDS.

Richard R. Conant LA 399 4.30.18
SIGNATURE REG. NO. DATE



USER: JAMES CHRISTENSEN
PROJECT: VISTA RESERVE - TREE MITIGATION PLAN - LP002.DWG
DATE: 04/05/18 11:34AM

| POINT TABLE | |
|--------------|-----------------------|
| POINT NUMBER | DESCRIPTION |
| 680 | 10' OAK |
| 686 | 16' OAK |
| 687 | 10' OAK |
| 692 | 7' OAK |
| 693 | 13/8" OAK |
| 694 | 12' OAK |
| 695 | 15/15" OAK |
| 697 | 10/10" OAK |
| 698 | 15" OAK |
| 699 | 9' OAK |
| 700 | 9/7/8" OAK |
| 702 | 19/17/15/12/11" OAK |
| 703 | 24/17" OAK |
| 704 | 11/9" OAK |
| 705 | 31" OAK |
| 708 | 39/21" OAK |
| 712 | 17/15" OAK |
| 713 | 14" OAK |
| 714 | 12' PALM |
| 715 | 12' PALM |
| 716 | 10" OAK |
| 718 | 8" OAK |
| 719 | 36/21" OAK |
| 721 | 14" PINE |
| 723 | 25" OAK |
| 724 | 11" OAK |
| 725 | 46" OAK |
| 726 | 11" OAK |
| 728 | 15" PINE |
| 728 | 15" PINE |
| 730 | 6" PINE |
| 731 | 13/11/11" OAK |
| 732 | 8" OAK |
| 733 | 11" OAK |
| 734 | 9" OAK |
| 735 | 10" OAK |
| 736 | 10" OAK |
| 737 | 15" PINE |
| 739 | 28" OAK |
| 740 | 9" OAK |
| 741 | 13" OAK |
| 742 | 9" OAK |
| 743 | 11" OAK |
| 745 | 20/17/12/7" OAK |
| 747 | 18" OAK |
| 748 | 11" OAK |
| 749 | 10" OAK |
| 750 | 11" OAK |
| 751 | 15/9" OAK |
| 752 | 14/12" OAK |
| 754 | 11" OAK |
| 755 | 15" PINE |
| 756 | 15" OAK |
| 757 | 8" OAK |
| 759 | 6" OAK |
| 760 | 6" OAK |
| 761 | 6" OAK |
| 763 | 20" OAK |
| 764 | 6" OAK |
| 765 | 11/6" OAK |
| 766 | 9" OAK |
| 768 | 31" OAK |
| 769 | 6" OAK |
| 770 | 13" OAK |
| 771 | 7" OAK |
| 772 | 9" OAK |
| 773 | 14/10/10/10/10/8" OAK |
| 774 | 8" OAK |
| 775 | 6" OAK |
| 776 | 12" OAK |
| 777 | 11" OAK |
| 778 | 10" OAK |
| 779 | 7" OAK |
| 781 | 15" OAK |
| 782 | 11" OAK |
| 783 | 35" OAK |
| 784 | 12" OAK |
| 785 | 9" OAK |
| 786 | 34/31" OAK |
| 787 | 8" OAK |
| 788 | 33/21" OAK |
| 789 | 7/7/2" OAK |
| 791 | 9/8" OAK |
| 792 | 15" OAK |
| 793 | 7" OAK |
| 794 | 24" OAK |
| 796 | 16" OAK |
| 797 | 10/21/8" OAK |
| 799 | 21" OAK |
| 1221 | 24" OAK |
| 1222 | 23/22/18" OAK |
| 1228 | 14" OAK |
| 1229 | 15" OAK |
| 1230 | 15/10" OAK |
| 1231 | 13" OAK |
| 1232 | 20" OAK |
| 1233 | 18" OAK |
| 1234 | 18" OAK |
| 1235 | 13/10" OAK |
| 1236 | 12/9/8" OAK |
| 1237 | 8" OAK |
| 1238 | 8" OAK |
| 1239 | 27/6" OAK |
| 1240 | 14" OAK |
| 1241 | 15" OAK |
| 1242 | 11" OAK |
| 1243 | 17" OAK |
| 1244 | 14" OAK |
| 1245 | 14" OAK |
| 1247 | 12" OAK |
| 1248 | 19" OAK |
| 1249 | 11" OAK |
| 1250 | 11" OAK |
| 1251 | 12" OAK |
| 1252 | 13/12/11" OAK |
| 1253 | 18" OAK |
| 1254 | 14/14" OAK |
| 1255 | 7" OAK |
| 1256 | 12/9/8" OAK |
| 1257 | 9" OAK |
| 1258 | 22" OAK |
| 1259 | 10" OAK |
| 1260 | 19" OAK |
| 1261 | 7" OAK |
| 1262 | 13" OAK |
| 1263 | 7" OAK |

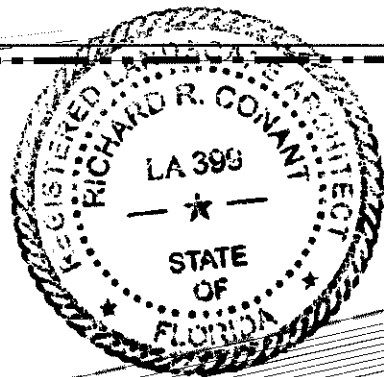
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|------|---------------|
| 1264 | 23" OAK |
| 1265 | 11" OAK |
| 1266 | 13/8" OAK |
| 1267 | 8" OAK |
| 1268 | 8" OAK |
| 1269 | 9/8" OAK |
| 1270 | 7" OAK |
| 1271 | 7" OAK |
| 1272 | 13" OAK |
| 1273 | 6" OAK |
| 1274 | 16/11" OAK |
| 1275 | 13" OAK |
| 1276 | 15" OAK |
| 1277 | 11" OAK |
| 1278 | 9" OAK |
| 1279 | 8" OAK |
| 1280 | 6" OAK |
| 1281 | 9" OAK |
| 1282 | 10" OAK |
| 1283 | 15/12" OAK |
| 1284 | 9" OAK |
| 1285 | 8/8" OAK |
| 1286 | 11" OAK |
| 1287 | 7" OAK |
| 1288 | 13" OAK |
| 1289 | 8" OAK |
| 1290 | 13" OAK |
| 1291 | 14" OAK |
| 1292 | 9" OAK |
| 1293 | 15" OAK |
| 1294 | 10" OAK |
| 1295 | 10" OAK |
| 1296 | 12/8" OAK |
| 1297 | 12/8/6" OAK |
| 1298 | 12/10/8" OAK |
| 1299 | 18" OAK |
| 1300 | 7" OAK |
| 1301 | 13/11" OAK |
| 1302 | 8" OAK |
| 1303 | 6" OAK |
| 1304 | 11/10/10" OAK |
| 1305 | 12" OAK |
| 1306 | 28" OAK |
| 1307 | 16/7" OAK |
| 1308 | 14/12" OAK |
| 1309 | 13" OAK |
| 1310 | 18" OAK |
| 1311 | 7" OAK |
| 1312 | 6" OAK |
| 1313 | 7/6/6" OAK |
| 1314 | 7" OAK |
| 1315 | 7" OAK |
| 1316 | 7" OAK |
| 1317 | 15" OAK |
| 1318 | 13" OAK |
| 1319 | 20" OAK |
| 1320 | 20" OAK |
| 1321 | 11" OAK |
| 1322 | 10" OAK |
| 1323 | 9" OAK |
| 1324 | 27" OAK |
| 1325 | 13/12" OAK |
| 1326 | 16" OAK |
| 1327 | 10" OAK |
| 1328 | 14/11" OAK |
| 1329 | 6" OAK |
| 1331 | 6" OAK |
| 1332 | 19" OAK |
| 1333 | 11" OAK |
| 1334 | 11" OAK |
| 1335 | 14" OAK |
| 1336 | 18" OAK |
| 1337 | 11" OAK |
| 1338 | 20" OAK |
| 1339 | 10" OAK |
| 1340 | 14/11" OAK |
| 1341 | 25" OAK |
| 1342 | 26" OAK |
| 1343 | 22" OAK |
| 1344 | 13" PALM |
| 1345 | 17/8" OAK |
| 1346 | 17" OAK |
| 1347 | 11" OAK |
| 1348 | 21" OAK |
| 1349 | 27" OAK |
| 1350 | 22" OAK |
| 1351 | 14/8" OAK |
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| 1353 | 18" OAK |
| 1354 | 17/12" OAK |
| 1355 | 24/6" OAK |
| 1356 | 15/14" OAK |
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| 1361 | 12/10" OAK |
| 1362 | 10" OAK |
| 1363 | 30" OAK |
| 1364 | 24/20" OAK |
| 1365 | 19" OAK |
| 1366 | 8" OAK |
| 1367 | 11" OAK |
| 1368 | 6" OAK |
| 1369 | 13/13" OAK |
| 1370 | 17" OAK |
| 1371 | 13" OAK |
| 1372 | 13" OAK |
| 1373 | 20" OAK |
| 1374 | 21/17" OAK |
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| 1376 | 13" OAK |
| 1377 | 31" OAK |
| 1378 | 24" OAK |
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| 1383 | 14" OAK |
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| 1396 | 10" OAK |
| 1397 | 15" OAK |
| 1398 | 14/12/11" OAK |
| 1399 | 7" OAK |

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|------|-----------------|
| 1400 | 8" OAK |
| 1401 | 25" OAK |
| 1402 | 9/7" OAK |
| 1403 | 19/17" OAK |
| 1404 | 14/11/10" OAK |
| 1405 | 9" OAK |
| 1406 | 21" OAK |
| 1407 | 14" PALM |
| 1408 | 19" OAK |
| 1409 | 8/6" OAK |
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| 1412 | 16/13/11" OAK |
| 1413 | 10" OAK |
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| 1415 | 11/9/7" OAK |
| 1416 | 8" OAK |
| 1417 | 23" OAK |
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| 1419 | 14/10" OAK |
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| 1421 | 16" OAK |
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| 1424 | 18/7" OAK |
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| 1427 | 11" OAK |
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| 1429 | 11" OAK |
| 1430 | 12" OAK |
| 1431 | 10" OAK |
| 1432 | 16" OAK |
| 1433 | 14" OAK |
| 1434 | 17" OAK |
| 1435 | 13" OAK |
| 1436 | 26/18/25" OAK |
| 1437 | 15" PALM |
| 1441 | 9/8" OAK |
| 1442 | 10/9" OAK |
| 1443 | 8" OAK |
| 1444 | 17" OAK |
| 1445 | 28" OAK |
| 1446 | 6" OAK |
| 1447 | 6/5" OAK |
| 1448 | 8" OAK |
| 1449 | 12/10/10/8" OAK |
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| 1477 | 10/9" OAK |
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| 1483 | 15/8" OAK |
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| 1485 | 11" OAK |
| 1486 | 13/11" OAK |
| 1487 | 14" OAK |
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| 1492 | 17" OAK |
| 1493 | 9" OAK |
| 1494 | 10" OAK |
| 1495 | 14" PALM |
| 1496 | 18" OAK |
| 1497 | 13" OAK |
| 1498 | 18" OAK |
| 1499 | 12/11/7" OAK |
| 1500 | 18" OAK |
| 1501 | 18" OAK |
| 1502 | 21" OAK |
| 1503 | 20" OAK |
| 1504 | 21" OAK |
| 1505 | 16" OAK |
| 1506 | 22" OAK |
| 1507 | 9" OAK |
| 1508 | 6" OAK |
| 1509 | 9" OAK |
| 1510 | 15" OAK |
| 1511 | 14" OAK |
| 1512 | 16" OAK |
| 1513 | 10" OAK |
| 1514 | 10/8" OAK |
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| 1530 | 8/7" OAK |
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| 1545 | 15" OAK |
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| 1551 | 24" OAK |
| 1552 | 42" OAK |
| 1553 | 19" OAK |
| 1554 | 32" OAK |
| 1555 | 16" OAK |
| 1556 | 17" OAK |
| 1557 | 27" OAK |
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| 1559 | 26" OAK |
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| 1567 | 16" OAK |
| 1568 | 15" PALM |
| 1569 | 32" OAK |
| 1570 | 34" OAK |
| 1571 | 18" OAK |
| 1572 | 26/17" OAK |
| 1573 | 34" OAK |
| 1574 | 11" OAK |
| 1575 | 16" OAK |
| 1576 | 24" OAK |
| 1577 | 41" OAK |
| 1578 | 29/7" OAK |
| 1579 | 25" OAK |
| 1580 | 22" OAK |
| 1581 | 7" OAK |
| 1582 | 7" OAK |
| 1585 | CLUSTER OAK |
| 1586 | 15" OAK |
| 1587 | 14/12" OAK |
| 1588 | 15" PALM |
| 1589 | 14" PALM |
| 1590 | 17" OAK |
| 1591 | 21" OAK |
| 1592 | 28" OAK |
| 1593 | 27" OAK |
| 1594 | 16" OAK |
| 1595 | 18" OAK |
| 1596 | 28" OAK |
| 1597 | 14" OAK |
| 1598 | 15" OAK |
| 1599 | 9/8/7" OAK |
| 1600 | 20" OAK |
| 1601 | 28" OAK |
| 1602 | 20/12" OAK |
| 1603 | 17" OAK |
| 1604 | 24/18" OAK |
| 1605 | 30" OAK |
| 1606 | 23" OAK |
| 1607 | 37" OAK |
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| 1613 | 15" OAK |
| 1614 | 24" OAK |
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| 1620 | 20" OAK |
| 1621 | 14/10" OAK |
| 1622 | 9" OAK |
| 1623 | 32/21" OAK |
| 1624 | 7" OAK |
| 1625 | 8" OAK |
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| 1627 | 9" OAK |
| 1628 | 7" OAK |
| 1629 | 9" OAK |
| 1630 | 8" OAK |
| 1631 | 6" OAK |
| 1632 | 13" OAK |
| 1633 | 10" OAK |
| 1634 | 11" PINE |
| 1635 | 38" OAK |
| 1636 | 14/12" OAK |
| 1637 | 13" OAK |
| 1638 | 18" OAK |
| 1639 | 16" OAK |
| 1640 | 14/9" OAK |
| 1641 | 30" OAK |
| 1642 | 14" PALM |
| 1643 | 7" OAK |
| 1644 | 16/15" OAK |
| 1645 | 13" OAK |
| 1646 | 25" OAK |
| 1647</ | |

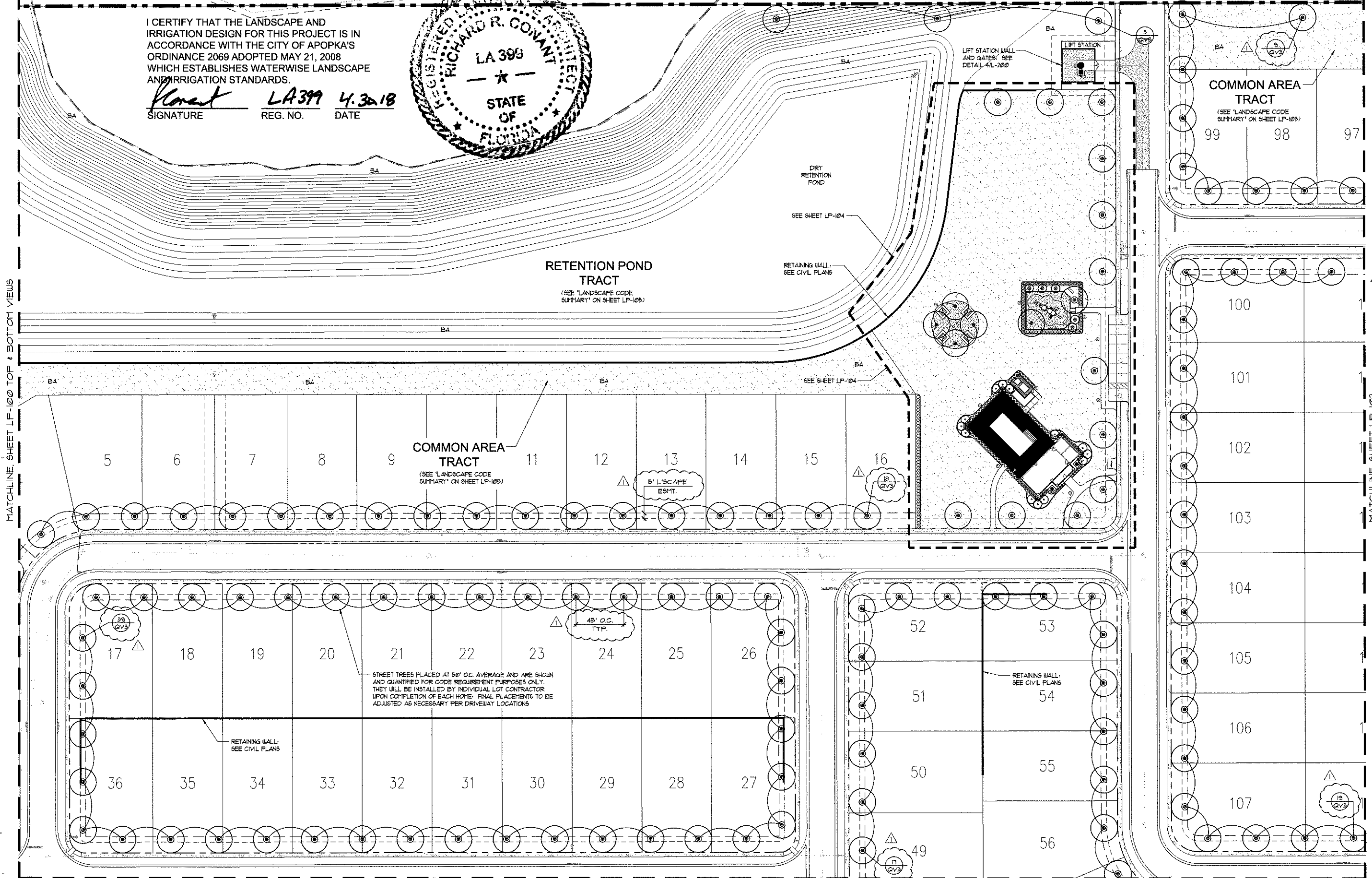
I CERTIFY THAT THE LANDSCAPE AND IRRIGATION DESIGN FOR THIS PROJECT IS IN ACCORDANCE WITH THE CITY OF APOPKA'S ORDINANCE 2069 ADOPTED MAY 21, 2008 WHICH ESTABLISHES WATERWISE LANDSCAPE AND IRRIGATION STANDARDS.

Richard R. Conant LA 399 4.30.18
SIGNATURE REG. NO. DATE



120 West Robinson Street
Orlando, Florida 32801-1617
Phone (407) 648-2225
www.fosterconant.com

MATCHLINE, SHEET LP-100 TOP & BOTTOM VIEWS



RETENTION POND TRACT
(SEE 'LANDSCAPE CODE SUMMARY' ON SHEET LP-105)

COMMON AREA TRACT
(SEE 'LANDSCAPE CODE SUMMARY' ON SHEET LP-105)

COMMON AREA TRACT
(SEE 'LANDSCAPE CODE SUMMARY' ON SHEET LP-105)

STREET TREES PLACED AT 50' O.C. AVERAGE AND ARE SHOWN AND QUANTIFIED FOR CODE REQUIREMENT PURPOSES ONLY. THEY WILL BE INSTALLED BY INDIVIDUAL LOT CONTRACTOR UPON COMPLETION OF EACH HOME. FINAL PLACEMENTS TO BE ADJUSTED AS NECESSARY PER DRIVEWAY LOCATIONS

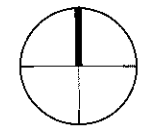
MATCHLINE, SHEET LP-103 TOP VIEW

Revision

| NO. | DATE | DESCRIPTION |
|-----|------|-------------|
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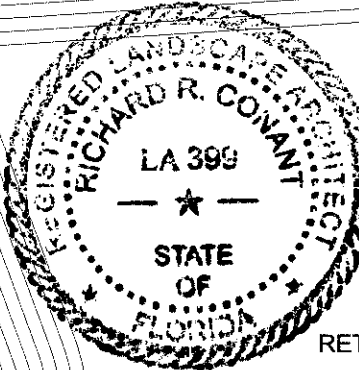
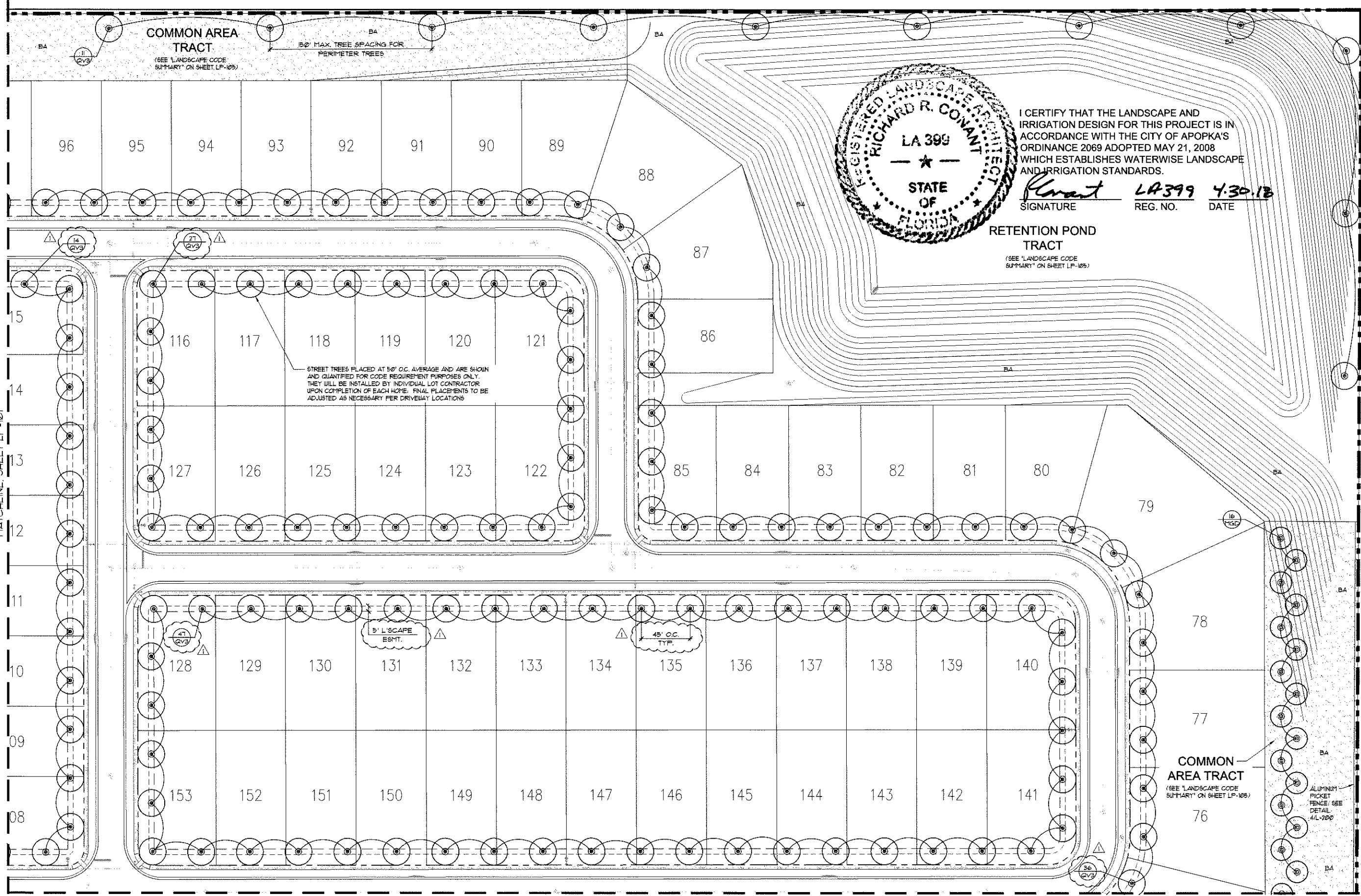
VISTA RESERVE
CITY OF APOPKA, FL
LANDSCAPE PLAN

Date: 04/05/18
Scale: 1"=40'
Drawn: CFB Checked: RRC
File Name: SAMALP101DWG
North



Sheet
LP-101

USER: RW CHRISTENSEN
DATE: 04/05/18 11:41:11 AM
PROJECT: VISTA RESERVE
TIME: 37 APR 2018 3:40PM



I CERTIFY THAT THE LANDSCAPE AND IRRIGATION DESIGN FOR THIS PROJECT IS IN ACCORDANCE WITH THE CITY OF APOPKA'S ORDINANCE 2069 ADOPTED MAY 21, 2008 WHICH ESTABLISHES WATERWISE LANDSCAPE AND IRRIGATION STANDARDS.

Richard R. Conant **LA 399** **4.30.18**
SIGNATURE REG. NO. DATE

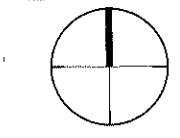
MATCHLINE SHEET LP-102

MATCHLINE, SHEET LP-103 BOTTOM VIEW

Revision
04.20.18 - CITY COMMENTS (04.23.18)

VISTA RESERVE
CITY OF APOPKA, FL
LANDSCAPE PLAN

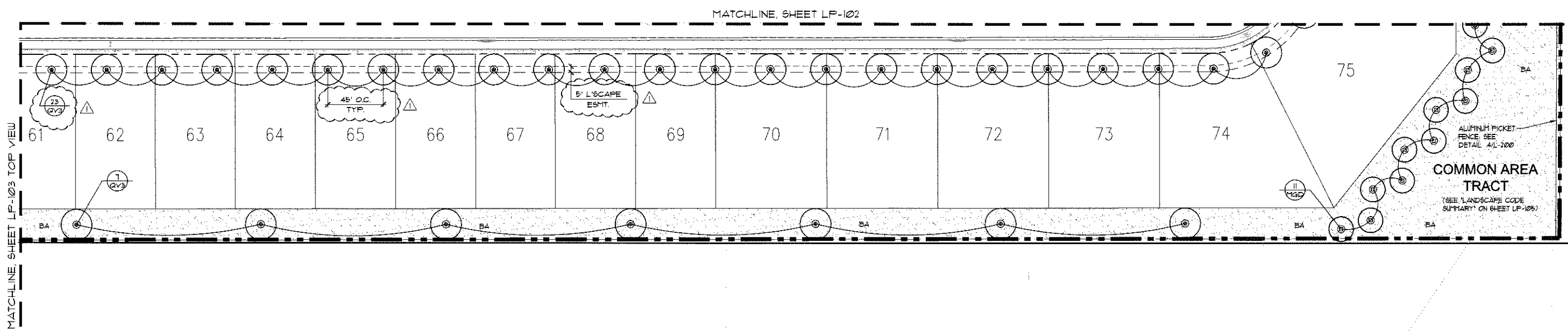
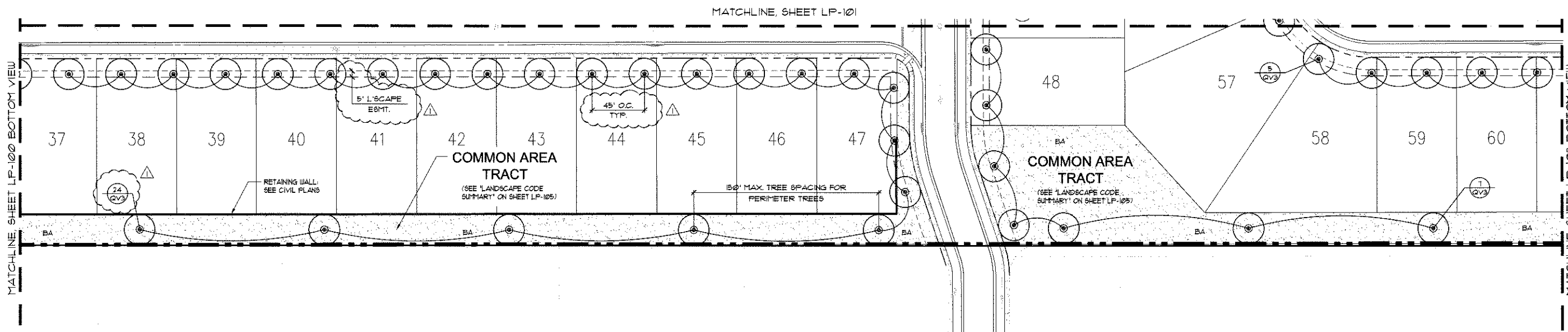
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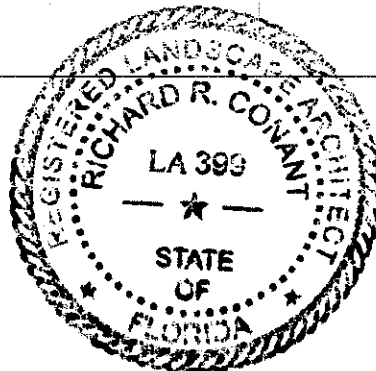
REVISIONS: 04/05/18
 FILE NAME: 5AMALP102.DWG
 USER: RRC
 TIME: 27 APR 2018 - 3:05PM



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Orlando, Florida 32801-1617
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SOUTH PROPERTY BOUNDARY COMMON AREA TRACTS



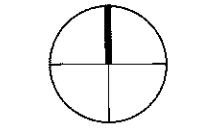
I CERTIFY THAT THE LANDSCAPE AND IRRIGATION DESIGN FOR THIS PROJECT IS IN ACCORDANCE WITH THE CITY OF APOPKA'S ORDINANCE 2069 ADOPTED MAY 21, 2008 WHICH ESTABLISHES WATERWISE LANDSCAPE AND IRRIGATION STANDARDS.

Conant LA 399 4.30.18
SIGNATURE REG. NO. DATE

SCALE: 1"=40'

VISTA RESERVE
CITY OF APOPKA, FL
LANDSCAPE PLAN

Date: 04/05/18
Scale: 1"=40'
Drawn: CFB Checked: RRC
File Name: 5AMALP103.DWG

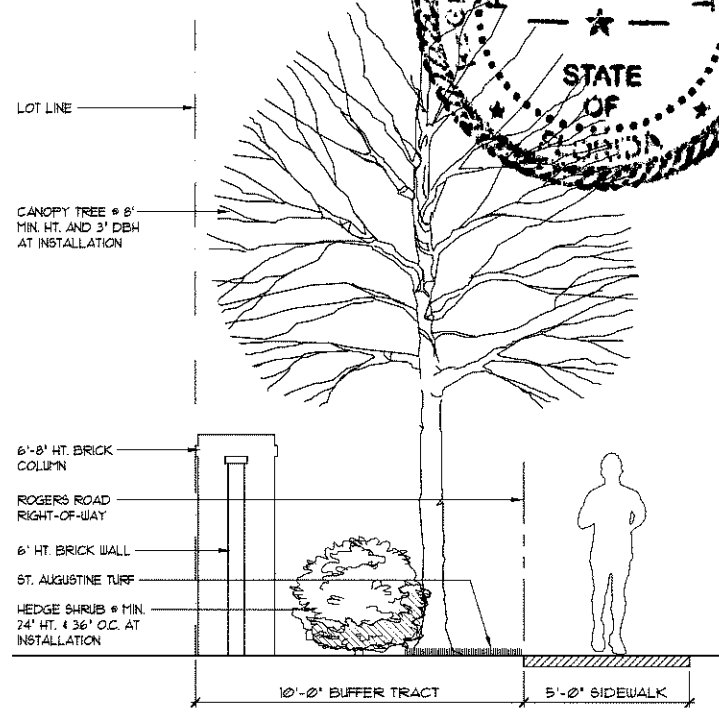
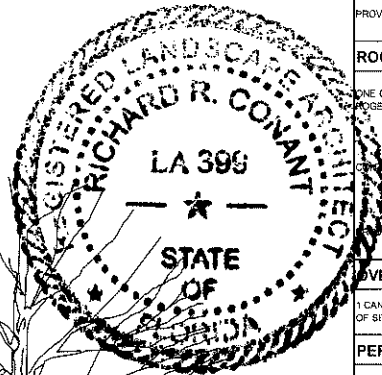


Sheet
LP-103

USER: RYAN_ACHUBAS/CSG
FILE NAME: LP-103.DWG
XREFS:
TIME: 27 APR 2018 - 3:46PM

I CERTIFY THAT THE LANDSCAPE AND IRRIGATION DESIGN FOR THIS PROJECT IS IN ACCORDANCE WITH THE CITY OF APOPKA'S ORDINANCE 2069 ADOPTED MAY 21, 2008 WHICH ESTABLISHES WATERWEE LANDSCAPE AND IRRIGATION STANDARDS.

Flament LA399 4.30.18
SIGNATURE REG. NO. DATE



10' ROGERS ROAD RIGHT-OF-WAY LANDSCAPE BUFFER SCALE: 3/8" = 1'-0"

CITY OF APOPKA CODE SUMMARY

| REQUIREMENT | CODE REFERENCE | CALCULATION | REQUIRED | PROVIDED | SIZE |
|---|--|------------------------------|------------------------------|------------------------------|-----------------------------------|
| ROGERS ROAD NORTH BUFFER TRACT | | | | | |
| ONE CANOPY TREE PER 40' ALONG ROGERS ROAD R.O.W. | SEC. 5.01.08(G) OF APOPKA CODE OF ORDINANCES (ACOD) | 78 L.F./45 = 17.3 | 17 CANOPY TREES | 17 CANOPY TREES | MIN 2.5' DBH & 8' HT. |
| CONTINUOUS HEDGE ALONG ROGERS ROAD R.O.W. | SEC. 5.01.08(G) OF APOPKA CODE OF ORDINANCES (ACOD) | N/A | CONTINUOUS ALONG ROAD R.O.W. | CONTINUOUS ALONG ROAD R.O.W. | MIN 24" HT. @ PLANTING & 36" O.C. |
| PROVIDE SCREEN WALL | SEC. 3.9 OF APOPKA DEVELOPMENT DESIGN GUIDELINES (ADDDG) | N/A | CONTINUOUS ALONG ROAD R.O.W. | CONTINUOUS ALONG ROAD R.O.W. | MAX 6' HT BRICK WALL |
| ROGERS ROAD SOUTH BUFFER TRACT | | | | | |
| ONE CANOPY TREE PER 25' ALONG ROGERS ROAD FRONTAGE R.O.W. | SEC. 2.02.18(D)(2)(1)(G) OF APOPKA CODE OF ORDINANCES (ACOD) | 67 L.F./25 = 2.68 | 3 CANOPY TREES | 3 CANOPY TREES | MIN 2.5' DBH & 8' HT. |
| CONTINUOUS HEDGE | SEC. 5.01.08(G) OF APOPKA CODE OF ORDINANCES (ACOD) | N/A | CONTINUOUS ALONG ROAD R.O.W. | CONTINUOUS ALONG ROAD R.O.W. | MIN 24" HT. @ PLANTING & 36" O.C. |
| PROVIDE SCREEN WALL | SEC. 3.9 OF APOPKA DEVELOPMENT DESIGN GUIDELINES (ADDDG) | N/A | CONTINUOUS ALONG ROAD R.O.W. | CONTINUOUS ALONG ROAD R.O.W. | MAX 6' HT BRICK WALL |
| OVERALL TREE REQUIREMENT | | | | | |
| 1 CANOPY TREE PER 8000 SQ. FT. OF SITE AREA | SEC. 5.01.08(A) | 2,680,965 S.F./8000 = 332.62 | 333 CANOPY TREES | 696 CANOPY TREES** | MIN 2.5' CAL. & 8' HT. |
| PERIMETER TREE REQUIREMENT | | | | | |
| 1 CANOPY TREE PER 150 FT. OF SITE PERIMETER | SEC. 2.02.18(D)(2)(1)(G) OF APOPKA CODE OF ORDINANCES (ACOD) | 630' L.F./150 = 42.00 | 42 CANOPY TREES | 60 CANOPY TREES | MIN 2.5' CAL. & 8' HT. |
| COMMUNITY RECREATION TRACT | | | | | |
| 1 CANOPY TREE PER 4000 SQ. FT. OF TRACT AREA | SEC. 5.01.08(F) OF APOPKA CODE OF ORDINANCES (ACOD) | 72,879 S.F./4000 = 18.16 | 18 CANOPY TREES | 18 CANOPY TREES | MIN 2.5' CAL. & 8' HT. |

** Since a 6' wall is also being provided in this buffer, a 24" shrub height is being substituted for the normally required 36" high berm/hedge screen requirement. ** Proposed overall tree total consists of 249 canopy street trees, 111 canopy trees to be placed in common tract areas and 306 canopy trees at 2 trees per residential lot to be placed in single family lots.

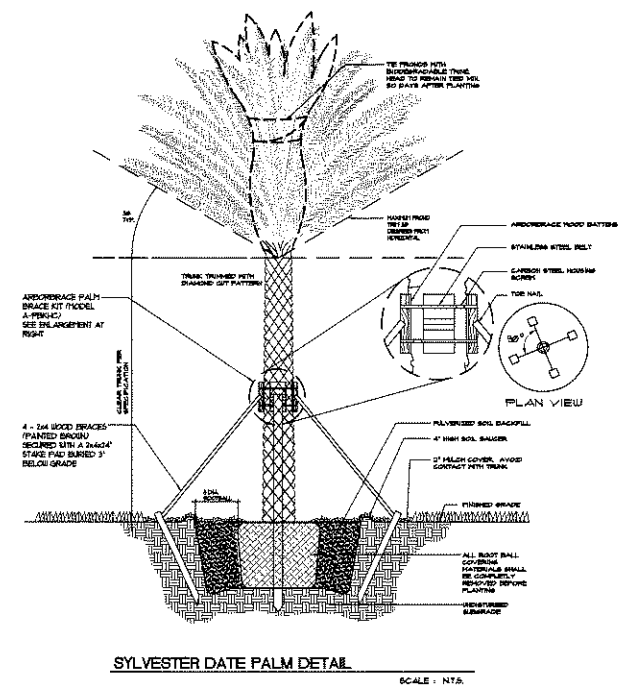
NOTE:
ALL SPECIFIED PLANTS IN THE PLANT LIST ARE "FLORIDA FRIENDLY" AS LISTED IN THE FLORIDA FRIENDLY LANDSCAPING GUIDE AS PUBLISHED BY THE UNIVERSITY OF FLORIDA/IFAS EXTENSION SERVICE AND THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

PLANT SCHEDULE

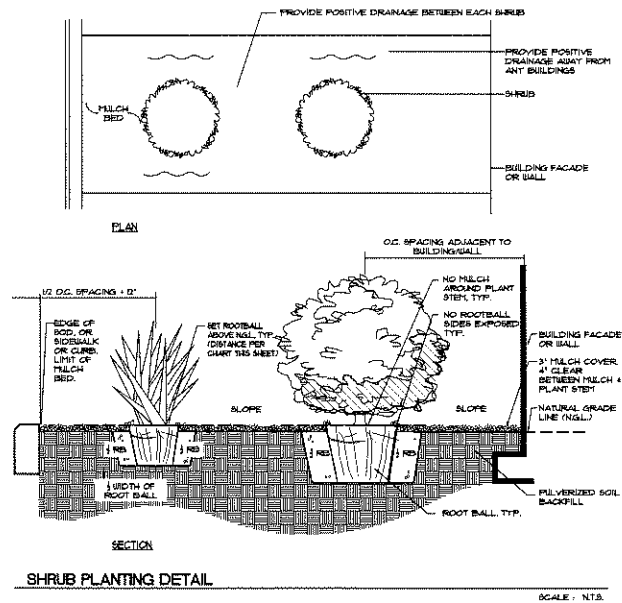
| SYM | QTY | BOTANICAL NAME | COMMON NAME | SPECIFICATION | WATER USE | NATIVE |
|---------------|-----|---------------------------------------|-------------------------|---|-----------|--------|
| ED | 6 | ELAEAGARPIUS DECIPENS | JAPANESE BLUEBERRY | MIN 8' HT. & 3" MIN CAL., FULL, 3' C.T. | LOW | NO |
| LJ | 2 | LIGUSTRUM JAPONICUM | TREE LIGUSTRUM | MIN 6' HT., FULL MULTI-STEM | MEDIUM | NO |
| MGD | 27 | MAGNOLIA GRANDIFLORA 'D.D. BLANCHARD' | D.D. BLANCHARD MAGNOLIA | MIN 8' HT. & 3" MIN CAL., FULL, SYMMETRICAL FORM | MEDIUM | YES |
| QV3 | 350 | QUERCUS VIRGINIANA | LIVE OAK | MIN 8' HT. & 2" MIN CAL., FULL, SYMMETRICAL FORM | LOW | YES |
| PALMS | | | | | | |
| SYM | QTY | BOTANICAL NAME | COMMON NAME | SPECIFICATION | WATER USE | NATIVE |
| PS | 3 | PHOENIX SYLVESTRIE | SILVER DATE PALM | MIN 10' C.T. DIAMOND-CUT TRUNK, SPECIMEN QUALITY | LOW | NO |
| SP | 28 | SABAL PALMETTO | CABBAGE PALM | REGENERATED ROOTS | LOW | YES |
| SHRUBS | | | | | | |
| SYM | QTY | BOTANICAL NAME | COMMON NAME | SPECIFICATION | WATER USE | NATIVE |
| CV | 123 | CALLISTEMON VIMINALIS 'LITTLE JOHN' | DWARF BOTTLEBRUSH | 3 GAL., 12"-14" HT. X 10"-14" SPRD, 24" O.C. | LOW | NO |
| DB | 56 | DIETES BICOLOR | YELLOW AFRICAN IRIS | 1 GAL., 16"-24" HT., 3-4 PPP, 18" O.C. | MEDIUM | NO |
| ICE | 2 | ILEX CRENATA 'SKY PENCIL' | SKY PENCIL HOLLY | 9 GAL., 24"-28" HT. X 24"-28" SPRD., 30" O.C., FULL | MEDIUM | YES |
| LMB | 80 | LIRIOPE MUSCARI 'BIG BLUE' | BIG BLUE BORDER GRASS | 1 GAL., FULL IN POT, 18" O.C. | LOW | NO |
| MG | 73 | MUHLENBERGIA CAPILLARS | MURPHY GRASS | 3 GAL., 24"-28" HT. X 24"-38" SPRD., 30" O.C., FULL | LOW | YES |
| PM | 106 | PODOCARPUS MACROPHYLLUS | YEW PODOCARPUS | 3 GAL., 20"-24" HT. X 14"-16" SPRD., 24" O.C. | LOW | NO |
| RIA | 105 | RHAPHIGOLEPIS INDICA 'A.L.B.A' | WHITE INDIAN HAWTHORN | 3 GAL., 12"-14" HT. X 12"-14" SPRD., 24" O.C. | LOW | NO |
| YC | 323 | VIBURNUM ODO RATISSIMUM | SWEET VIBURNUM | MIN 24" HT., 3" O.C., FULL | MEDIUM | NO |
| VS | 122 | VIBURNUM SUSPENSUM | INDIANWAX VIBURNUM | 3 GAL., 18"-20" HT. X 16"-20" SPRD., 30" O.C., FULL | MEDIUM | NO |
| GRASS | | | | | | |
| SYM | QTY | BOTANICAL NAME | COMMON NAME | SPECIFICATION | WATER USE | NATIVE |
| BA | TBD | PASPALUM NOTATUM 'ARGENTINE' | ARGENTINE BAHIA | FULL, DENSE FOLIAGE, PEST AND DISEASE FREE | LOW | NO |
| SA | TBD | STENOCHAPHRUM SECUNDATUM 'FLORATAM' | FLORATAM ST. AUGUSTINE | FULL, DENSE FOLIAGE, PEST AND DISEASE FREE | MEDIUM | NO |

GENERAL NOTES

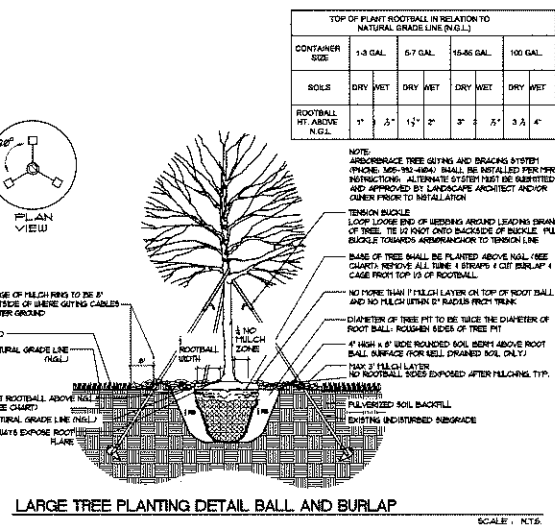
- ALL UNPAVED AREAS NOT DESIGNATED AS A LANDSCAPE SHRUB BED SHALL BE COVERED WITH SOG AS INDICATED ON PLANS.
- ALL SHRUBS SHALL BE PLANTED 1-1/2' AND TREES AT HEIGHT SPECIFIED IN TREE PLANTING DETAIL ABOVE GRADE. CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER PLANT HEALTH IN ON-SITE SOILS.
- NEULY INSTALLED TREES SHALL HAVE THEIR CALIPER MEASURED AT DIAMETER BREAST HEIGHT (DBH) PER CITY OF APOPKA CODE.
- ALL PLANT MATERIAL SHALL MEET OR EXCEED THE GRADE STANDARDS OF FLORIDA NO. 1 AS PROVIDED IN 'GRADES AND STANDARDS FOR NURSERY PLANTS' (LATEST EDITION), STATE OF FLORIDA DEPARTMENT OF AGRICULTURE, TALLAHASSEE, AND ANY AMENDMENTS THERETO.
- THE LANDSCAPE ARCHITECT MAY REJECT ANY PLANT MATERIAL BROUGHT TO THE SITE WHICH HE DEEMS TO BE OF INFERIOR QUALITY, DOES NOT MEET FLORIDA NO. 1 GRADE OR THAT DOES NOT MEET SPECIFIED SIZE.
- ALL TREES WITH THE EXCEPTION OF PALMS SHALL BE EITHER CONTAINER GROWN OR FIELD GROWN. NO GROW BAGS WILL BE ACCEPTED.
- ALL PLANT BEDS AND DESIGNATED 'MULCH' AREAS SHALL BE TOP-DRESSED WITH A MINIMUM OF 3" PINE BARK 'MINI-NUGGETS' MULCH.
- ALL TREES SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL INSPECTION.
- ALL TREES SHALL HAVE ALL SYNTHETIC BURLAP REMOVED FROM THE ENTIRE ROOT BALL. THE TOP THREE ROWS OF SQUARES ON ALL CAGES AROUND THE ROOT BALLS SHALL BE CLIPPED OFF AND REMOVED.
- THE CONTRACTOR SHALL READ AND ADHERE TO ALL WRITTEN SPECIFICATIONS.
- THE CONTRACTOR SHALL SUBMIT UNIT PRICES FOR ALL BID ITEMS.
- THE CONTRACTOR SHALL VERIFY ALL EXISTING UTILITY LOCATIONS AND DEPTHS PRIOR TO LANDSCAPE INSTALLATION.
- THE CONTRACTOR SHALL VISUALLY INSPECT THE SOILS CONDITION OF THE SITE. HE SHALL DIG A MINIMUM OF 12 TEST HOLES 3 FEET DEEP, RANDOMLY AROUND THE SITE. HE SHALL PERFORM PERCOLATION TESTS IN THESE HOLES FOR A PERIOD OF ONE HOUR EACH. THE HOLES SHALL BE FILLED WITH WATER AND IF THE HOLES HOLD MORE THAN 6" OF WATER AFTER ONE HOUR, THE LANDSCAPE ARCHITECT SHALL BE NOTIFIED OF THE PROBLEM. THE CONTRACTOR SHALL RECOMMEND SUBSTITUTIONS OF PLANT MATERIAL AND PLANTING INSTALLATION TO ACCOMMODATE POOR DRAINING SOILS.
- THE CONTRACTOR SHALL PROVIDE A SOIL TEST IN 4 LOCATIONS AND PROVIDE RECOMMENDATIONS FOR AMENDMENTS BASED ON THE RESULTS IN ORDER TO ACHIEVE A BALANCED PH FOR THE PLANTING BACKFILL. (SEE SECTION 2.02.B OF THE LANDSCAPE SPECIFICATIONS). IMPROPER SOIL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL RECTIFY ALL INCURRED DAMAGES AT NO ADDITIONAL COST TO THE OWNER.
- SUCCESSFUL BIDDER SHALL LOOK UP ALL MATERIALS IMMEDIATELY AFTER CONTRACT ASSIGNMENT. PLANTS SHALL BE HELD DURING THE PERIOD FROM CONTRACT TO INSTALLATION TO ALLOW FOR ADDITIONAL GROWTH. ALL PLANTS WILL BE REQUIRED TO BE FULL AND HEALTHY. CONTRACTOR SHALL ARRANGE FOR PLANT APPROVAL PRIOR TO DELIVERY EITHER BY SAMPLES, PHOTOS OR NURSERY VISITS.
- THE CONTRACTOR SHALL REVIEW THE SOILS REPORT ON FILE WITH THE OWNER.
- THE INSTALLATION OF PLANT MATERIAL SHALL BE VIEWED AS ACCEPTANCE BY THE CONTRACTOR OF EXISTING GRADES AS GIVEN TO HIM.
- THE CONTRACTOR SHALL PROVIDE TO THE LANDSCAPE ARCHITECT A WRITTEN LETTER OF ACCEPTABILITY OF GRADES. FAILURE TO DO SO WILL BE VIEWED AS AN ACCEPTANCE OF EXISTING GRADES BY THE CONTRACTOR.
- IN THE EVENT OF A VARIATION BETWEEN THE PLANT LIST AND THE ACTUAL QUANTITY OF PLANTS SHOWN ON THE PLAN DRAWINGS, THE PLANS SHALL CONTROL. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING A QUANTITY COUNT AS A CHECK FOR DISCREPANCIES.
- WHERE LIGHT POLES AND TREES OR STREET SIGNS AND TREES OCCUR IN PROXIMITY TO EACH OTHER, A MINIMUM SEPARATION OF 10 FEET SHALL BE MAINTAINED.
- THE CONTRACTOR WILL BE REQUIRED TO SAND AREAS OF SOG THAT ARE NOT SMOOTHLY APPLIED TO ELIMINATE SMALL IRREGULARITIES IN GRADES. LARGE GRADE IRREGULARITIES WILL REQUIRE REGRADING AND RESEEDING.
- THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF THE SITE INCLUDING ALL MOWING, EDGING, TRIMMING, PRUNING AND SPRAYING OF PESTICIDES AND FUNGICIDES UNTIL THE TIME OF FINAL ACCEPTANCE BY THE OWNER. IF PROJECT IS INSTALLED IN PHASES, OWNER WILL PROVIDE PHASING INFORMATION AT TIME OF BIDDING PROCESS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR RECEIVING THE LANDSCAPE ARCHITECT'S APPROVAL OF ALL PLANT BED LAYOUTS AND TREE LOCATIONS PRIOR TO INSTALLATION. IF PLANT MATERIAL IS INSTALLED PRIOR TO LANDSCAPE ARCHITECT'S APPROVAL, CONTRACTOR WILL BE SUBJECT TO RELOCATING THE MATERIAL AT THE LANDSCAPE ARCHITECT'S REQUEST AND AT THE CONTRACTOR'S OWN EXPENSE.
- PRIOR TO THE REMOVAL OF ANY TREES, THE TREES TO BE RETAINED SHALL HAVE PROTECTIVE TREE BARRIERS PER THE TREE PROTECTION DETAIL.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE NORMAL HIGH WATER ELEVATION OF THE RETENTION POND(S) WITH THE CIVIL ENGINEER PRIOR TO PLANTING ANY SPECIFIED TREES OR LITTORAL PLANTINGS IN THE IMMEDIATE POND VICINITY. THE LANDSCAPE ARCHITECT SHALL BE NOTIFIED IF THE NORMAL HIGH WATER ELEVATION IS NOT AS SHOWN ON THE LANDSCAPE PLANS SO THAT PROPER REVISIONS CAN BE MADE.
- CONTRACTOR IS EXPECTED TO CARRY OUT ALL RESPONSIBILITIES AS SET FORTH IN THESE LANDSCAPE NOTES AND IN THE LANDSCAPE SPECIFICATIONS. THEY WILL BE STRICTLY ENFORCED BY THE OWNER/LANDSCAPE ARCHITECT.



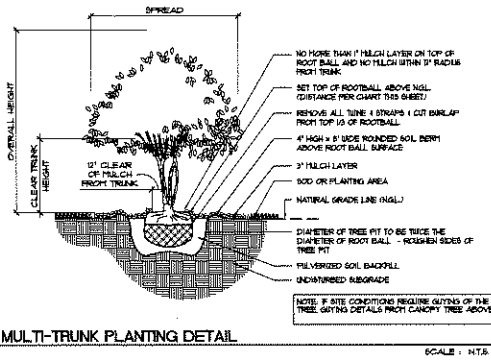
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SHRUB PLANTING DETAIL SCALE: N.T.S.



LARGE TREE PLANTING DETAIL BALL AND BURLAP SCALE: N.T.S.



MULTI-TRUNK PLANTING DETAIL SCALE: N.T.S.



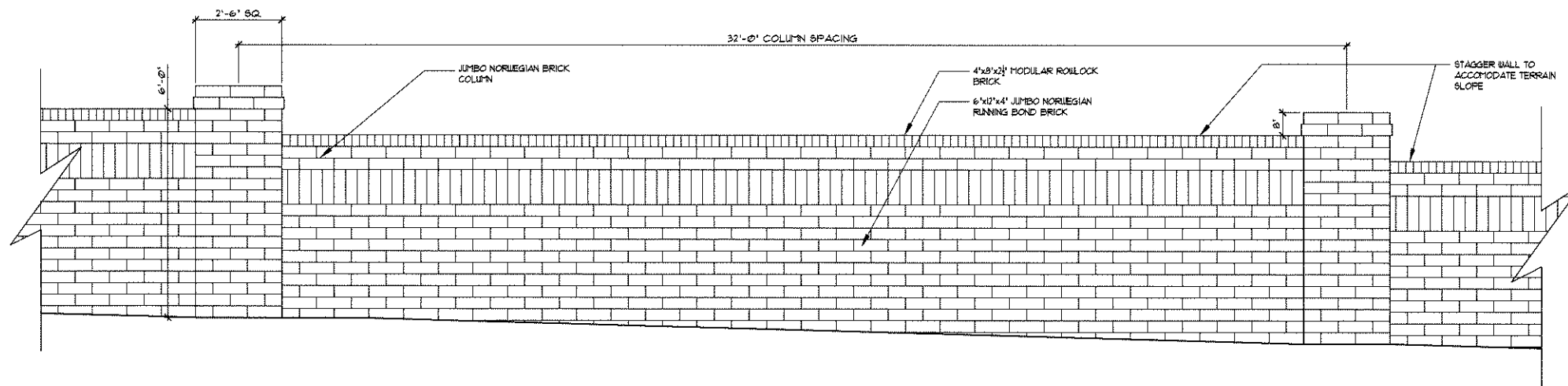
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24.5618 - CITY COMMENTS (6-13-18)

VISTA RESERVE
CITY OF APOPKA, FL
LANDSCAPE NOTES & DETAILS

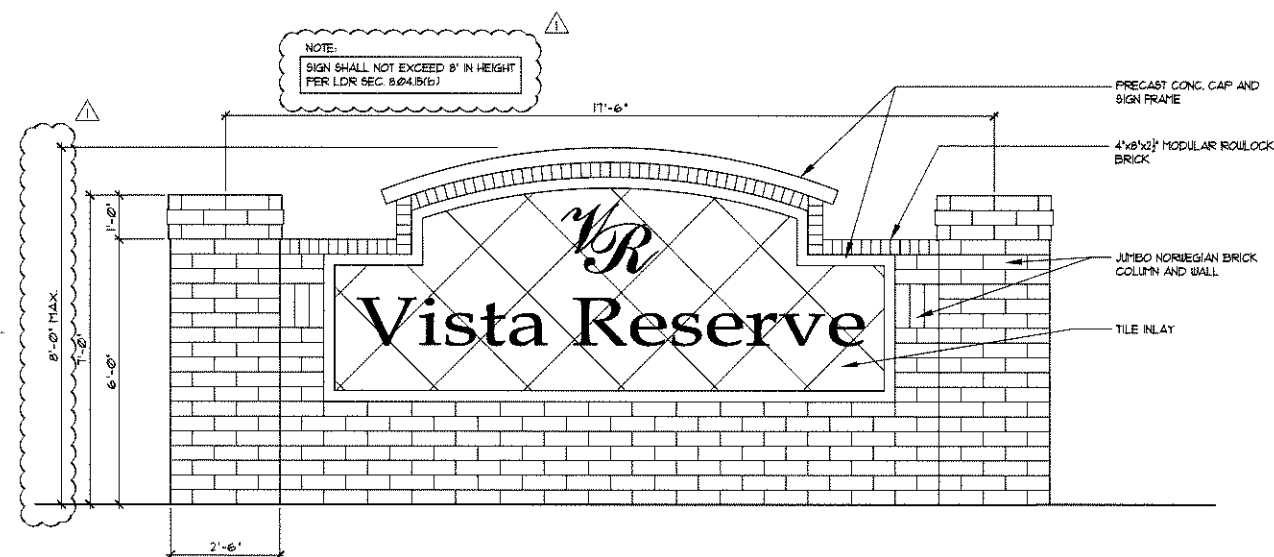
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LP-105



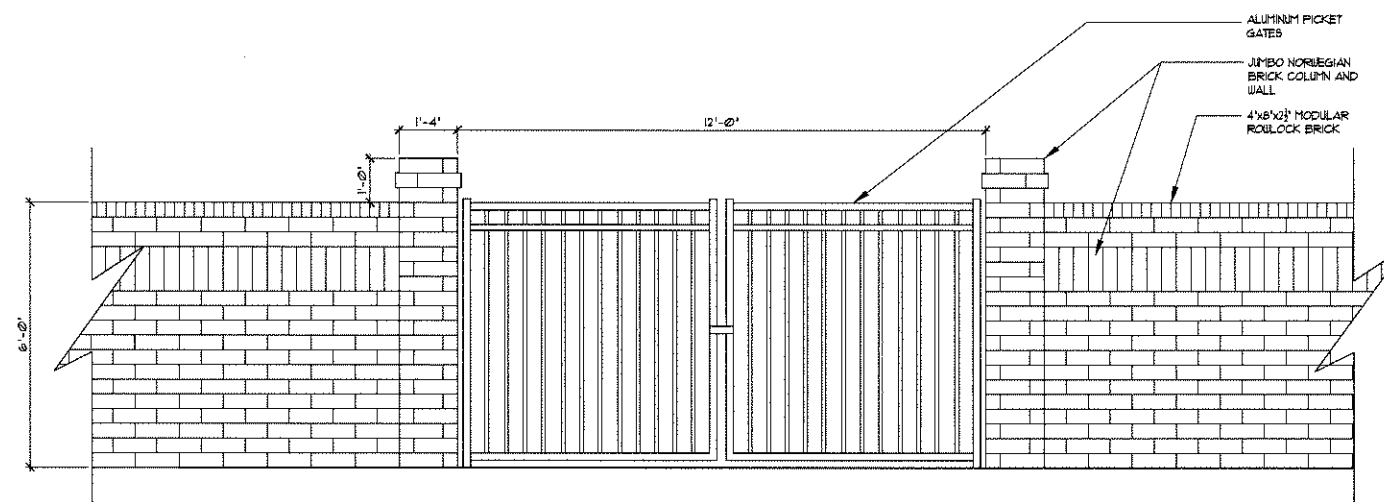
1 BUFFER WALL ELEVATION

SCALE: 1/2" = 1'-0"



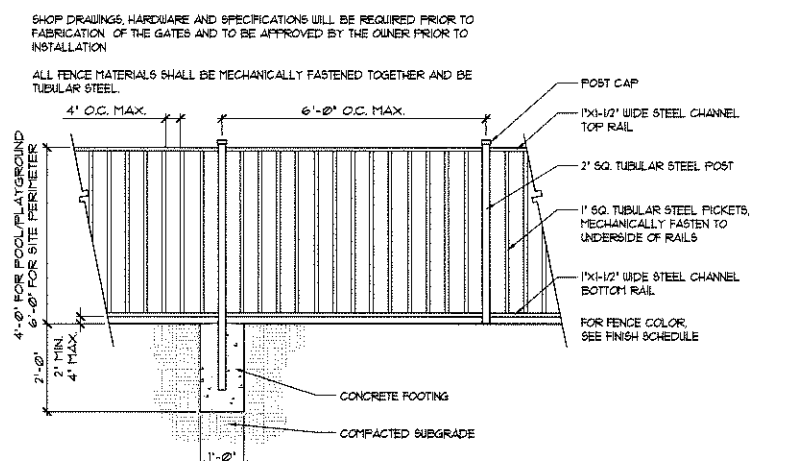
2 SIGN WALL ELEVATION

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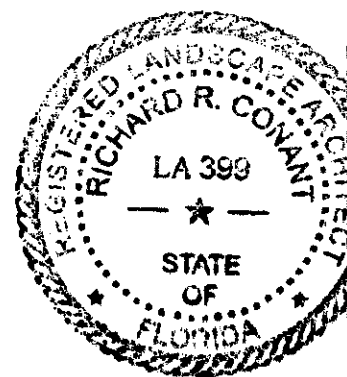
3 LIFT STATION WALL AND GATE ELEVATION

SCALE: 1/2" = 1'-0"



4 PLAYGROUND PICKET FENCE

SCALE: 1/2" = 1'-0"



RECORD DRAWINGS FOR THE PROJECT CONTAIN INFORMATION FURNISHED BY OTHERS WHO ASSURED ITS CORRECTNESS AND ACCURACY. THE DRAWINGS HAVE BEEN REVIEWED BY ME OR BY INDIVIDUALS UNDER MY DIRECT SUPERVISION AND FOUND TO BE ADEQUATE AND CONSISTENT WITH THE PERMIT AND THE APPROVED DRAWINGS AND SPECIFICATIONS. ANY ADJUSTMENTS AND MINOR DEVIATIONS, WHICH ARE DEPICTED, WERE MADE WITH PRIOR APPROVALS AND ARE JUDGED BY ME NOT TO ALTER THE MAIN INTENT OF THE DESIGN, THE SAFETY OR THE STRUCTURAL INTEGRITY OF THE CONSTRUCTED WORK AND WILL NOT PREVENT THE PROJECT FROM FUNCTIONING IN ACCORDANCE WITH THE RULE REQUIREMENTS.

Richard R. Conant
SIGNATURE
LA399 4.30.18
REG. NO. DATE

VISTA RESERVE

CITY OF APOPKA, FL

HARDSCAPE
DETAILS

Date: 04/05/18
Scale: AS NOTED
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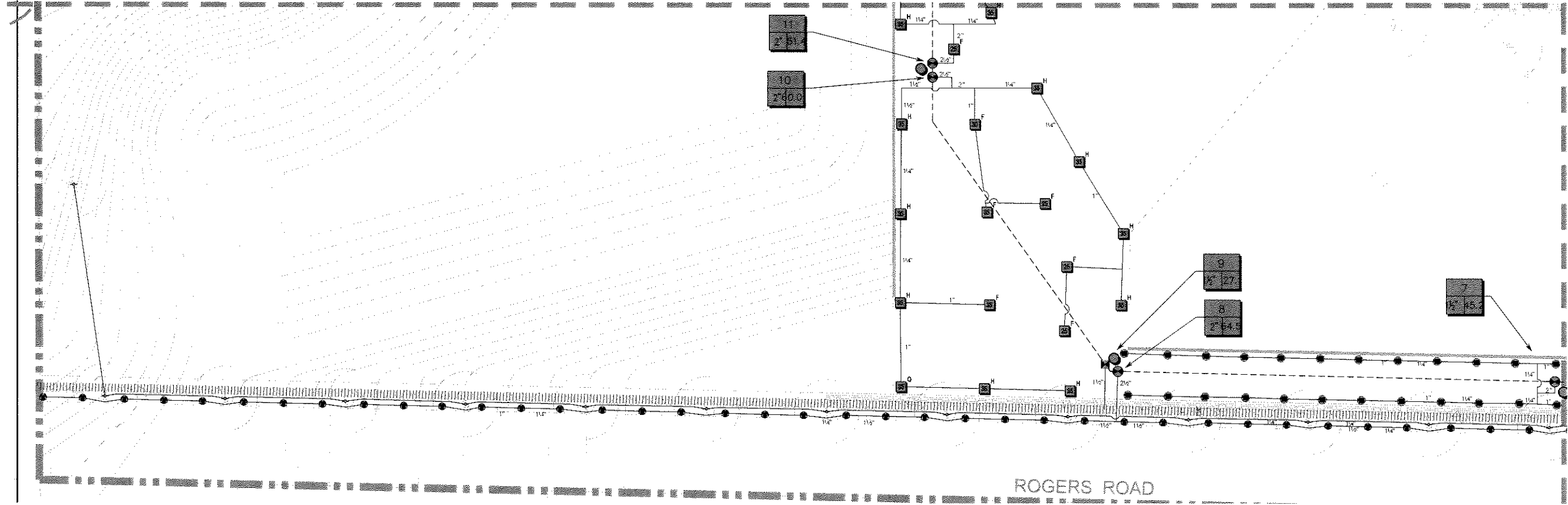
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MATCHLINE, SHEET LP-301



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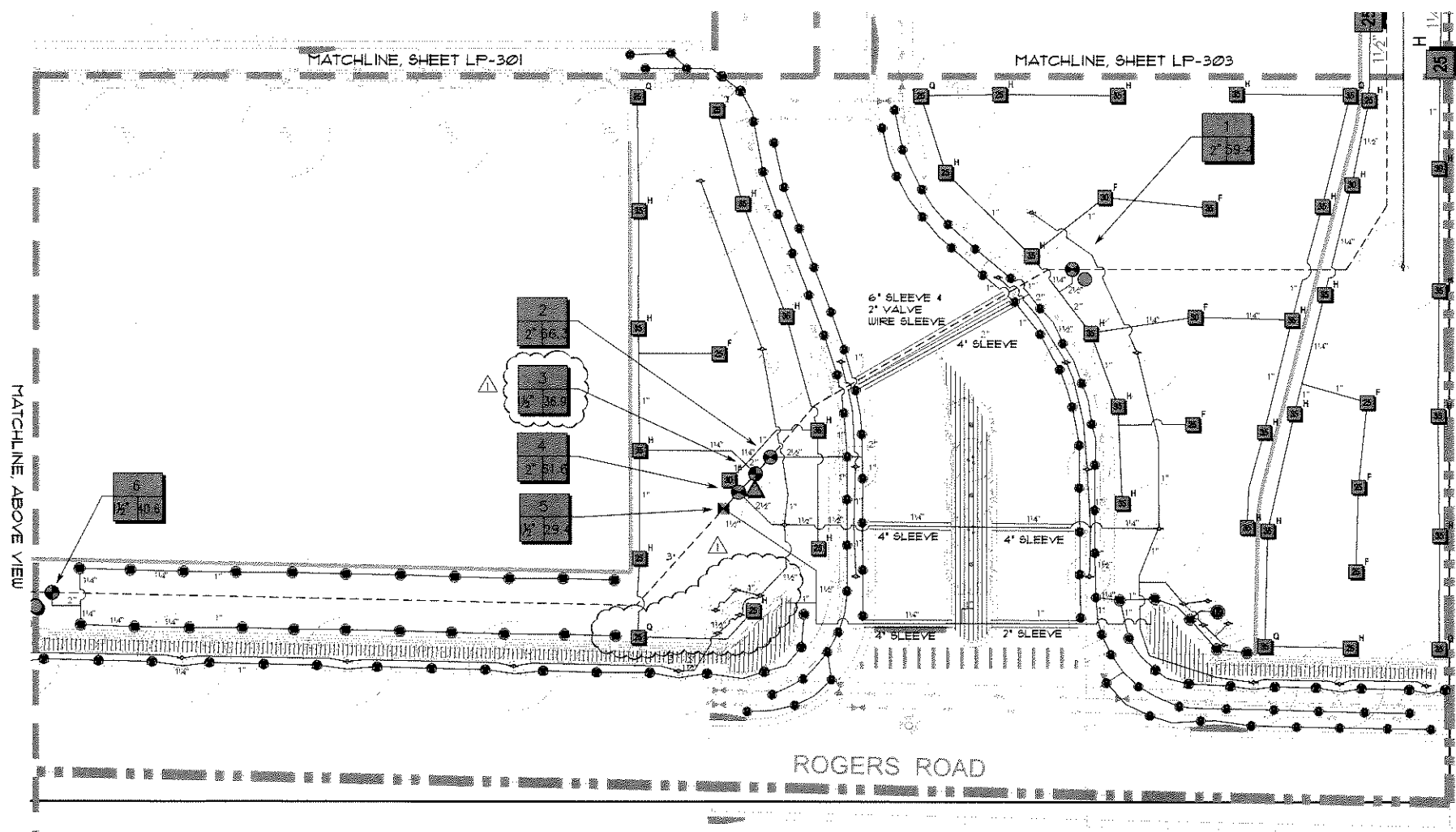
MATCHLINE, BELOW VIEW



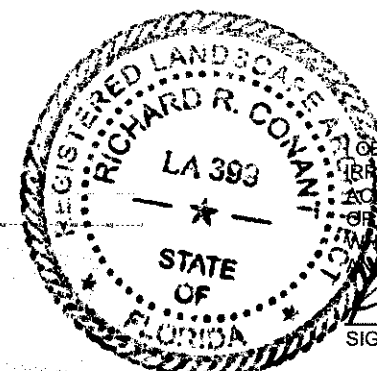
ROGERS ROAD

MATCHLINE, SHEET LP-301

MATCHLINE, SHEET LP-303



ROGERS ROAD



CERTIFY THAT THE LANDSCAPE AND IRRIGATION DESIGN FOR THIS PROJECT IS IN ACCORDANCE WITH THE CITY OF APOPKA'S ORDINANCE 2069 ADOPTED MAY 21, 2008 WHICH ESTABLISHES WATERWISE LANDSCAPE IRRIGATION STANDARDS.
SIGNATURE: *Richard R. Conant* REG. NO. LA399 DATE 4.30.18

△ Below
△ 04-3018 - CITY COMMENTS (04-23-18)

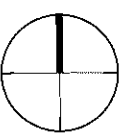
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VISTA RESERVE

CITY OF APOPKA, FL

IRRIGATION PLAN

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Sheet

LP-300

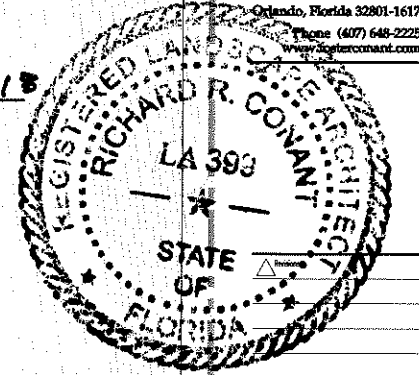
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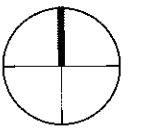
I CERTIFY THAT THE LANDSCAPE AND IRRIGATION DESIGN FOR THIS PROJECT IS IN ACCORDANCE WITH THE CITY OF AOPKA'S ORDINANCE 2069 ADOPTED MAY 21, 2008 WHICH ESTABLISHES WATERWISE LANDSCAPE AND IRRIGATION STANDARDS.

Richard R. Conant LA399 4.30.18
SIGNATURE REG. NO. DATE



VISTA RESERVE
CITY OF AOPKA, FL
IRRIGATION PLAN

Date: 04/05/18
Scale: 1" = 40'
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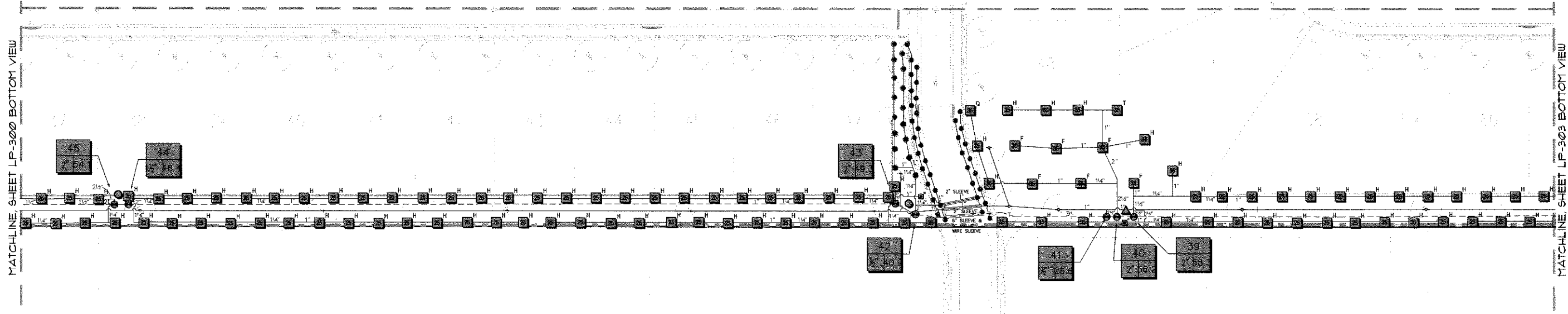
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MATCHLINE SHEET LP-301

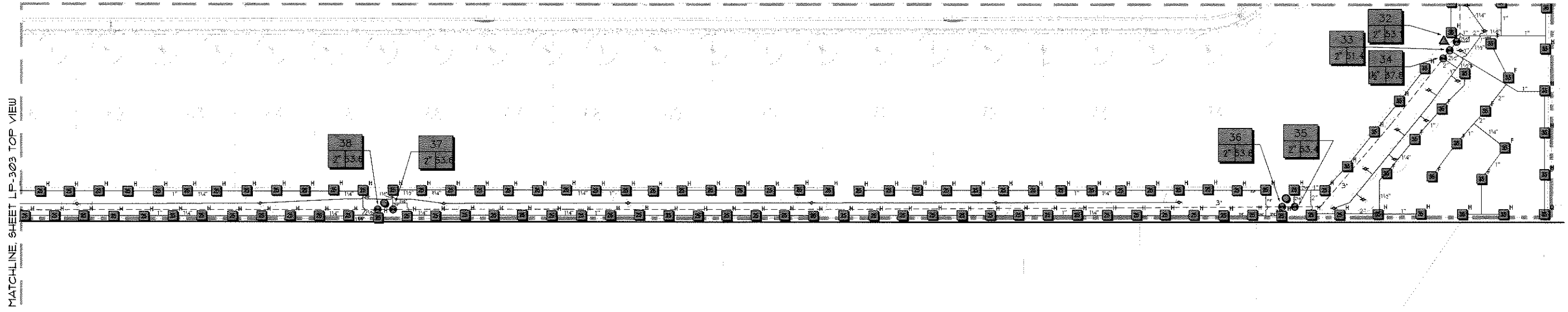
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USER: CHRISB556
DATE PLOTTED: 04/05/18 11:13 AM
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MATCHLINE, SHEET LP-301



MATCHLINE, SHEET LP-302



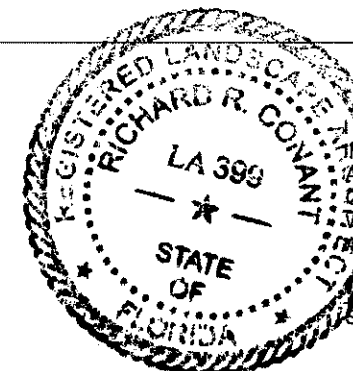
SOUTH PROPERTY BOUNDARY COMMON AREA TRACTS

VISTA RESERVE

CITY OF APOPKA, FL

IRRIGATION
PLAN

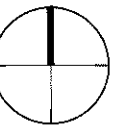
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I CERTIFY THAT THE LANDSCAPE AND IRRIGATION DESIGN FOR THIS PROJECT IS IN ACCORDANCE WITH THE CITY OF APOPKA'S ORDINANCE 2069 ADOPTED MAY 21, 2008 WHICH ESTABLISHES WATERWISE LANDSCAPE AND IRRIGATION STANDARDS.

Richard R. Conant
SIGNATURE
LA 399 REG. NO.
4.30.18 DATE

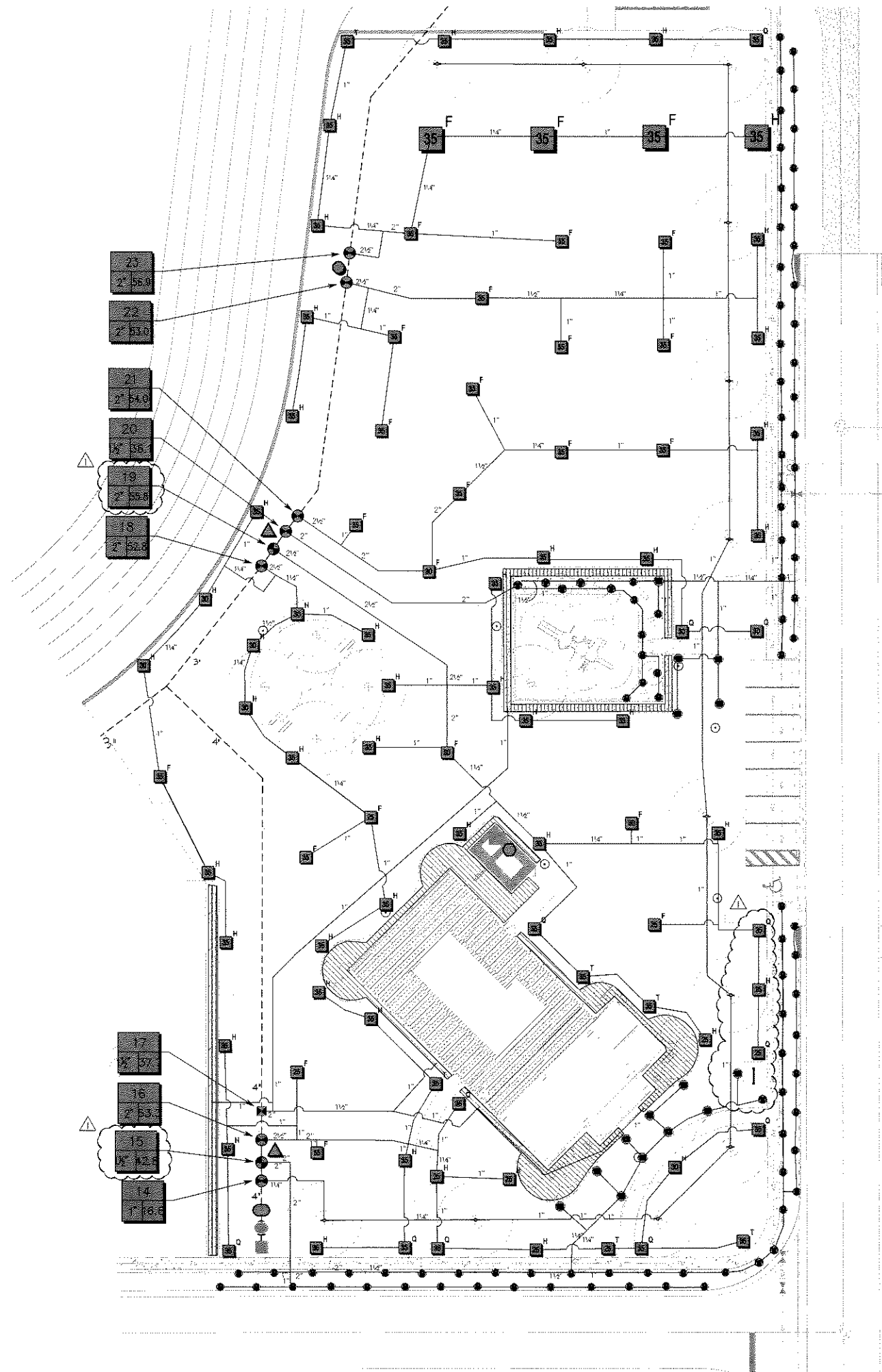
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LP-303



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 △ 04/20/18 - CITY COMMENTS (04/22/18)

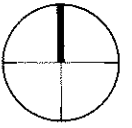
Project

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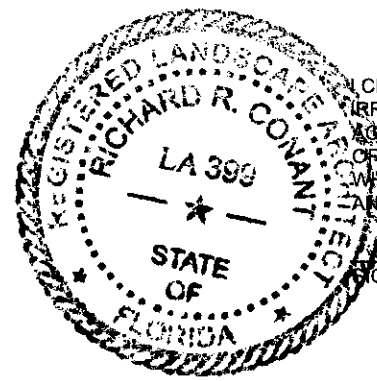
CITY OF APOPKA, FL

IRRIGATION PLAN

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Sheet



I CERTIFY THAT THE LANDSCAPE AND IRRIGATION DESIGN FOR THIS PROJECT IS IN ACCORDANCE WITH THE CITY OF APOPKA'S ORDINANCE 2069 ADOPTED MAY 21, 2008 WHICH ESTABLISHES WATERWISE LANDSCAPE AND IRRIGATION STANDARDS.

Richard R. Conant LA 399 4-30-18
 SIGNATURE REG. NO. DATE

LP-304

USER: RYAN.DUNN@FOSTERCONANT.COM
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 TIME: 30 APR 2018 - 12:18PM

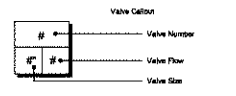
| SYMBOL | MANUFACTURER/MODEL | ARC | PSI | GPM | RADIUS | |
|--------|--|-----|-----|------|--------|----|
| ● | Rain Bird 1806-U-SAM-PRS 15 Strip Series | EST | 30 | 0.61 | 4'x15' | |
| ● | Rain Bird 1806-U-SAM-PRS 15 Strip Series | SST | 30 | 1.21 | 4'x30' | |
| ● | Rain Bird 1806-U-SAM-PRS U12 Series | | 360 | 3.0 | 12' | |
| ● | Rain Bird 1806-U-SAM-PRS U15 Series | | 360 | 3.0 | 15' | |
| ● | Rain Bird 1806-U-SAM-PRS HE-VAN Series | Adj | 30 | | 8' | |
| ● | Rain Bird 1806-U-SAM-PRS HE-VAN Series | Adj | 30 | | 10' | |
| ● | Rain Bird 1806-U-SAM-PRS HE-VAN Series | Adj | 30 | | 12' | |
| ● | Rain Bird 1806-U-SAM-PRS HE-VAN Series | Adj | 30 | | 15' | |
| ● | Rain Bird 1800-1300AF Flood | | 360 | 2.0 | 1.40 | 3' |

| SYMBOL | MANUFACTURER/MODEL/DESCRIPTION | PSI | GPM | RADIUS |
|--------|--|-----|-----|--------|
| ■ | Rain Bird 5006-NP-PC-FC-MPR Turf Rotor, 5.0" Pop-Up, Plastic Riser, Matched Precipitation Rotor (MPR nozzle), Arc and Radius as per Symbol. 25 ft=red, 30 ft=green, 35ft=beige. With Non-Potable Purple Cover. | 35 | | 24' |
| ■ | Rain Bird 5006-NP-PC-FC-MPR Turf Rotor, 5.0" Pop-Up, Plastic Riser, Matched Precipitation Rotor (MPR nozzle), Arc and Radius as per Symbol. 25 ft=red, 30 ft=green, 35ft=beige. With Non-Potable Purple Cover. | 35 | | 30' |
| ■ | Rain Bird 5006-NP-PC-FC-MPR Turf Rotor, 5.0" Pop-Up, Plastic Riser, Matched Precipitation Rotor (MPR nozzle), Arc and Radius as per Symbol. 25 ft=red, 30 ft=green, 35ft=beige. With Non-Potable Purple Cover. | 35 | | 34' |

| SYMBOL | MANUFACTURER/MODEL/DESCRIPTION |
|--------|--|
| ■ | Rain Bird XCZ-150-PRB-COM 1-1/2" High Flow Control Zone Kit, for Large Commercial Drip Zones. 1-1/2" PESB Valve with two 1" Pressure Regulating (40psi) Quick-Check Basket Filters. Flow range: 15-40gpm. |
| ■ | Area to Receive Dripline Rain Bird XFD-09-12 XFD On-Surface Pressure Compensating Landscape Dripline, 0.9 GPH emitters at 12" O.C. Dripline laterals spaced at 12" apart, with emitters offset for triangular pattern. UV Resistant. Specify XZ insert fittings. |

| SYMBOL | MANUFACTURER/MODEL/DESCRIPTION |
|--------|--|
| ● | Rain Bird PESBR 1-1/2" 1", 1-1/2", and 2" Durable Chlorine-Resistant Valves for Reclaimed Water Applications. With Scrubber Mechanism Technology, and Purple Flow Control Handle. |
| ● | Rain Bird PESBR 1" 1", 1-1/2", and 2" Durable Chlorine-Resistant Valves for Reclaimed Water Applications. With Scrubber Mechanism Technology, and Purple Flow Control Handle. |
| ● | Rain Bird PESBR 2" 1", 1-1/2", and 2" Durable Chlorine-Resistant Valves for Reclaimed Water Applications. With Scrubber Mechanism Technology, and Purple Flow Control Handle. |
| ● | Rain Bird 300-BPE-PRS-D-NP-HAN Globe 3" 3" Brass Master Valve, with Globe Configuration. With PRS-Dial Pressure Regulator Module. With Purple Flow Control Handle for Non-Potable Water Applications. |
| ● | Rain Bird ESP-LXD-LXMMSS-LXMMSSPED 50 station 2-wire, exterior stainless steel pedestal. Flow sensing. |
| ● | Rain Bird RSD-BEX Rain Sensor, with metal latching bracket, extension wire. |
| ● | Rain Bird FD-10TURF Field Decoder for Two-Wire system. Install in valve box for valve. Operates one valve/solenoid. Use line surge protection as per manufacturer's instructions. |
| ● | Rain Bird FD-20TURF Field Decoder for Two-Wire system. Install in valve box for valve. Operates two valve/solenoids or two pairs of valves. Use line surge protection as per manufacturer's instructions. |
| ● | Rain Bird FD-40TURF Field Decoder for Two-Wire system. Install in valve box for valve. Operates up to four valve/solenoids. Use line surge protection as per manufacturer's instructions. |
| ● | Rain Bird FS-300-P 3" Flow Sensor for use with Rain Bird Maxicom, SiteControl, and ESP-LXD Central Control Systems. Plastic (PVC) Model. Suggested Operating Range of 20.0 GPM to 300.0 GPM. Sensors should be sized for flow rather than pipe size. |

| | |
|-----|--|
| --- | Water Meter 2" RECLAIM POC |
| --- | Irrigation Lateral Line: PVC Class 160 SDR 26-NP |
| --- | SEE PLAN FOR PIPE SIZE. |
| --- | Irrigation Mainline: PVC Class 200 SDR 21 |
| --- | SEE PLAN FOR PIPE SIZE. |
| --- | Pipe Sleeve: PVC Schedule 40 |



VALVE SCHEDULE

| NUMBER | MODEL | SIZE | TYPE | GPM | WRE | PSI | PSI @ POC | PRECIP |
|--------|-----------------------------|--------|-------------------|-------|-------|-------|-----------|-----------|
| 1 | Rain Bird PESBR | 2" | Turf Rotor | 59.43 | 1,737 | 40.29 | 51.38 | 0.65 in/h |
| 2 | Rain Bird PESBR | 2" | Turf Spray | 66.27 | 1,635 | 36.65 | 48.16 | 1.18 in/h |
| 3 | Rain Bird PESBR | 1-1/2" | Turf Rotor | 33.95 | 1,629 | 38.84 | 46.99 | 0.63 in/h |
| 4 | Rain Bird PESBR | 2" | Bubbler | 61.60 | 1,622 | 34.22 | | 4.77 in/h |
| 5 | Rain Bird XCZ-150-PRB-COM | 1-1/2" | Area for Dripline | 29.42 | 1,616 | 34.58 | 42.40 | 1.44 in/h |
| 6 | Rain Bird PESBR | 2" | Turf Spray | 50.05 | 1,415 | 37.04 | 43.47 | 1.09 in/h |
| 7 | Rain Bird PESBR | 1-1/2" | Turf Spray | 45.22 | 1,407 | 34.46 | | 1.13 in/h |
| 8 | Rain Bird PESBR | 2" | Turf Rotor | 64.47 | 1,239 | 38.89 | | 4.76 in/h |
| 9 | Rain Bird XCZ-150-PRB-COM | 1-1/2" | Area for Dripline | 27.14 | 1,233 | 31.85 | 39.39 | 1.44 in/h |
| 10 | Rain Bird PESBR | 2" | Turf Rotor | 59.98 | 1,101 | 40.68 | 50.91 | 0.61 in/h |
| 11 | Rain Bird PESBR | 2" | Turf Rotor | 51.44 | 1,096 | 42.19 | 51.50 | 0.61 in/h |
| 12 | Rain Bird PESBR | 2" | Turf Rotor | 51.80 | 533.1 | 42.60 | 51.54 | 0.60 in/h |
| 13 | Rain Bird PESBR | 2" | Turf Rotor | 50.33 | 517.9 | 42.42 | 51.27 | 0.59 in/h |
| 14 | Rain Bird PESBR | 1" | Bubbler | 16.89 | 214.0 | 29.38 | 36.38 | 4.77 in/h |
| 15 | Rain Bird PESBR | 1-1/2" | Turf Spray | 40.23 | 207.8 | 37.31 | 45.24 | 1.08 in/h |
| 16 | Rain Bird PESBR | 2" | Turf Rotor | 53.25 | 200.4 | 40.87 | 49.66 | 0.60 in/h |
| 17 | Rain Bird XCZ-150-PRB-COM | 1-1/2" | Area for Dripline | 37.73 | 190.8 | 40.48 | 48.26 | 1.44 in/h |
| 18 | Rain Bird PESBR | 2" | Turf Rotor | 52.84 | 285.9 | 40.79 | 49.71 | 0.58 in/h |
| 19 | Rain Bird PESBR | 2" | Turf Rotor | 56.19 | 293.7 | 41.35 | 50.57 | 0.71 in/h |
| 20 | Rain Bird PESBR | 1-1/2" | Turf Spray | 36.09 | 299.9 | 35.26 | 43.03 | 1.19 in/h |
| 21 | Rain Bird PESBR | 2" | Turf Rotor | 53.96 | 306.4 | 40.98 | 50.01 | 0.61 in/h |
| 22 | Rain Bird PESBR | 2" | Turf Rotor | 53.04 | 386.6 | 40.55 | 49.06 | 0.59 in/h |
| 23 | Rain Bird PESBR | 2" | Turf Rotor | 56.90 | 396.4 | 41.39 | 50.75 | 0.54 in/h |
| 24 | Rain Bird PESBR | 2" | Turf Rotor | 57.97 | 690.0 | 41.23 | 50.91 | 0.55 in/h |
| 25 | Rain Bird PESBR | 2" | Turf Rotor | 55.37 | 990.4 | 40.68 | 50.27 | 0.53 in/h |
| 26 | Rain Bird PESBR | 2" | Turf Rotor | 55.37 | 998.6 | 40.30 | 49.90 | 0.56 in/h |
| 27 | Rain Bird PESBR | 1-1/2" | Bubbler | 22.40 | 1,006 | 38.15 | 45.38 | 4.77 in/h |
| 28 | Rain Bird PESBR | 2" | Turf Rotor | 52.04 | 1,286 | 40.63 | 50.37 | 0.54 in/h |
| 29 | Rain Bird PESBR | 2" | Turf Rotor | 52.89 | 1,296 | 40.78 | 50.63 | 0.54 in/h |
| 30 | Rain Bird PESBR | 2" | Turf Rotor | 53.13 | 2,424 | 40.47 | 51.24 | 0.55 in/h |
| 31 | Rain Bird PESBR | 2" | Turf Rotor | 53.12 | 2,432 | 40.40 | 51.48 | 0.55 in/h |
| 32 | Rain Bird PESBR | 2" | Turf Rotor | 53.12 | 2,650 | 40.50 | 51.51 | 0.59 in/h |
| 33 | Rain Bird PESBR | 2" | Turf Rotor | 51.42 | 2,659 | 40.80 | 51.55 | 0.58 in/h |
| 34 | Rain Bird PESBR | 1-1/2" | Bubbler | 37.80 | 2,668 | 28.28 | 42.36 | 4.77 in/h |
| 35 | Rain Bird PESBR | 2" | Turf Rotor | 53.38 | 2,845 | 41.45 | 52.53 | 0.59 in/h |
| 36 | Rain Bird PESBR | 2" | Turf Rotor | 53.63 | 2,856 | 43.26 | 54.38 | 0.59 in/h |
| 37 | Rain Bird PESBR | 2" | Turf Rotor | 53.63 | 3,430 | 43.31 | 55.16 | 0.58 in/h |
| 38 | Rain Bird PESBR | 2" | Turf Rotor | 53.83 | 3,417 | 43.27 | 55.11 | 0.58 in/h |
| 39 | Rain Bird PESBR | 2" | Turf Rotor | 58.29 | 2,783 | 41.75 | 54.35 | 0.57 in/h |
| 40 | Rain Bird PESBR | 2" | Turf Rotor | 56.15 | 2,769 | 40.97 | 53.15 | 0.58 in/h |
| 41 | Rain Bird PESBR | 1-1/2" | Bubbler | 26.60 | 2,760 | 34.30 | 42.36 | 4.77 in/h |
| 42 | Rain Bird PESBR | 1-1/2" | Turf Spray | 40.86 | 2,604 | 33.12 | | 1.11 in/h |
| 43 | Rain Bird PESBR | 2" | Turf Rotor | 49.32 | 2,585 | 40.73 | 51.48 | 0.60 in/h |
| 44 | Rain Bird PESBR | 1-1/2" | Turf Rotor | 48.44 | 1,958 | 41.60 | 51.51 | 0.60 in/h |
| 45 | Rain Bird PESBR Common Wire | 2" | Turf Rotor | 54.09 | 1,947 | 40.57 | 51.21 | 0.59 in/h |

WATERING SCHEDULE

| NUMBER | MODEL | TYPE | PRECIP | IN/WEEK | MIN/WEEK | GAL/WEEK | GAL/DAY | |
|---------|---------------------------|-------------------|-----------|---------|----------|----------|-----------|----------|
| 1 | Rain Bird PESBR | Turf Rotor | 0.65 in/h | 1.50 | 138 | 8,201 | 4,101 | |
| 2 | Rain Bird PESBR | Turf Spray | 1.18 in/h | 1.50 | 77 | 5,103 | 2,551 | |
| 3 | Rain Bird PESBR | Turf Rotor | 0.63 in/h | 1.50 | 144 | 4,889 | 2,444 | |
| 4 | Rain Bird PESBR | Bubbler | 4.77 in/h | 1 | 13 | 800.8 | 400.4 | |
| 5 | Rain Bird XCZ-150-PRB-COM | Area for Dripline | 1.44 in/h | 1 | 42 | 1,235 | 617.7 | |
| 6 | Rain Bird PESBR | Turf Spray | 1.09 in/h | 1.50 | 83 | 4,154 | 2,077 | |
| 7 | Rain Bird PESBR | Turf Spray | 1.13 in/h | 1.50 | 80 | 3,617 | 1,809 | |
| 8 | Rain Bird PESBR | Turf Spray | 1.76 in/h | 1.50 | 52 | 3,352 | 1,676 | |
| 9 | Rain Bird XCZ-150-PRB-COM | Area for Dripline | 1.44 in/h | 1 | 42 | 1,140 | 570.0 | |
| 10 | Rain Bird PESBR | Turf Rotor | 0.61 in/h | 1.50 | 149 | 8,937 | 4,469 | |
| 11 | Rain Bird PESBR | Turf Rotor | 0.61 in/h | 1.50 | 147 | 7,562 | 3,781 | |
| 12 | Rain Bird PESBR | Turf Rotor | 0.60 in/h | 1.50 | 151 | 7,822 | 3,911 | |
| 13 | Rain Bird PESBR | Turf Rotor | 0.59 in/h | 1.50 | 153 | 7,700 | 3,850 | |
| 14 | Rain Bird PESBR | Bubbler | 4.77 in/h | 1 | 13 | 218.4 | 109.2 | |
| 15 | Rain Bird PESBR | Turf Spray | 1.06 in/h | 1.50 | 84 | 3,379 | 1,689 | |
| 16 | Rain Bird PESBR | Turf Rotor | 0.60 in/h | 1.50 | 150 | 7,988 | 3,994 | |
| 17 | Rain Bird XCZ-150-PRB-COM | Area for Dripline | 1.44 in/h | 1 | 42 | 1,585 | 792.3 | |
| 18 | Rain Bird PESBR | Turf Rotor | 0.58 in/h | 1.50 | 156 | 8,243 | 4,122 | |
| 19 | Rain Bird PESBR | Turf Rotor | 0.71 in/h | 1.50 | 127 | 7,136 | 3,568 | |
| 20 | Rain Bird PESBR | Turf Spray | 1.19 in/h | 1.50 | 76 | 2,743 | 1,371 | |
| 21 | Rain Bird PESBR | Turf Rotor | 0.61 in/h | 1.50 | 149 | 8,040 | 4,020 | |
| 22 | Rain Bird PESBR | Turf Rotor | 0.59 in/h | 1.50 | 153 | 8,115 | 4,058 | |
| 23 | Rain Bird PESBR | Turf Rotor | 0.54 in/h | 1.50 | 167 | 9,502 | 4,751 | |
| 24 | Rain Bird PESBR | Turf Rotor | 0.55 in/h | 1.50 | 164 | 9,507 | 4,754 | |
| 25 | Rain Bird PESBR | Turf Rotor | 0.53 in/h | 1.50 | 169 | 9,358 | 4,679 | |
| 26 | Rain Bird PESBR | Turf Rotor | 0.56 in/h | 1.50 | 162 | 8,970 | 4,485 | |
| 27 | Rain Bird PESBR | Bubbler | 4.77 in/h | 1 | 13 | 291.2 | 145.6 | |
| 28 | Rain Bird PESBR | Turf Rotor | 0.54 in/h | 1.50 | 168 | 8,743 | 4,371 | |
| 29 | Rain Bird PESBR | Turf Rotor | 0.54 in/h | 1.50 | 166 | 8,780 | 4,390 | |
| 30 | Rain Bird PESBR | Turf Rotor | 0.55 in/h | 1.50 | 166 | 8,820 | 4,410 | |
| 31 | Rain Bird PESBR | Turf Rotor | 0.55 in/h | 1.50 | 164 | 8,712 | 4,356 | |
| 32 | Rain Bird PESBR | Turf Rotor | 0.58 in/h | 1.50 | 156 | 8,287 | 4,143 | |
| 33 | Rain Bird PESBR | Turf Rotor | 0.58 in/h | 1.50 | 156 | 8,022 | 4,011 | |
| 34 | Rain Bird PESBR | Bubbler | 4.77 in/h | 1 | 13 | 491.4 | 245.7 | |
| 35 | Rain Bird PESBR | Turf Rotor | 0.59 in/h | 1.50 | 154 | 8,221 | 4,110 | |
| 36 | Rain Bird PESBR | Turf Rotor | 0.59 in/h | 1.50 | 154 | 8,259 | 4,130 | |
| 37 | Rain Bird PESBR | Turf Rotor | 0.58 in/h | 1.50 | 154 | 8,259 | 4,130 | |
| 38 | Rain Bird PESBR | Turf Rotor | 0.58 in/h | 1.50 | 155 | 8,313 | 4,156 | |
| 39 | Rain Bird PESBR | Turf Rotor | 0.57 in/h | 1.50 | 158 | 9,210 | 4,605 | |
| 40 | Rain Bird PESBR | Turf Rotor | 0.58 in/h | 1.50 | 157 | 8,817 | 4,409 | |
| 41 | Rain Bird PESBR | Bubbler | 4.77 in/h | 1 | 13 | 345.8 | 172.9 | |
| 42 | Rain Bird PESBR | Turf Spray | 1.11 in/h | 1.50 | 82 | 3,351 | 1,675 | |
| 43 | Rain Bird PESBR | Turf Rotor | 0.60 in/h | 1.50 | 149 | 7,349 | 3,674 | |
| 44 | Rain Bird PESBR | Turf Rotor | 0.60 in/h | 1.50 | 151 | 7,314 | 3,657 | |
| 45 | Rain Bird PESBR | Turf Rotor | 0.59 in/h | 1.50 | 153 | 8,276 | 4,138 | |
| TOTALS: | | | | | | 5,365 | 2,791,155 | 1,39,578 |

CRITICAL ANALYSIS

| | | | |
|---------------------------|------------------|------------------------------------|-----------|
| Generated: | 2018-04-02 16:25 | DESIGN ANALYSIS | |
| P.O.C. NUMBER: | 01 | Maximum Station Flow: | 66.27 gpm |
| Water Source Information: | RECLAIM POC | Flow Available at POC: | 77.03 gpm |
| | | Residual Flow Available: | 10.76 gpm |
| FLOW AVAILABLE | | Pressure Req. at Critical Station: | 43.31 psi |
| Water Meter Size: | 2" | Loss for Fittings: | 0.28 psi |
| Flow Available: | 77.03 gpm | Loss for Main Line: | 2.78 psi |
| | | Loss for POC to Valve Elevation: | 0.00 psi |
| PRESSURE AVAILABLE | | Loss for Backflow: | 0.00 psi |
| Static Pressure at POC: | 65.00 psi | Loss for Master Valve: | 5.60 psi |
| Elevation Change: | 1.00 ft | Loss for Water Meter: | 2.19 psi |
| Service Line Size: | 2" | Critical Station Pressure at POC: | 55.16 psi |
| Length of Service Line: | 10.00 ft | Pressure Available: | 64.00 psi |
| Pressure Available: | 64.00 psi | Residual Pressure Available: | 8.84 psi |

GENERAL NOTES

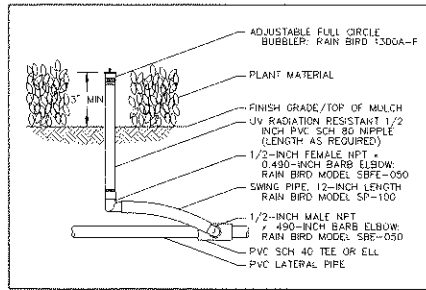
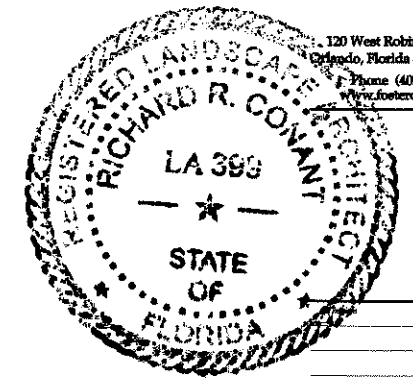
- REFER TO THE LANDSCAPE PLANS WHEN TRENCHING TO AVOID TREE AND SHRUB LOCATIONS.
- ALL MAINLINE PIPING SHALL BE BURIED TO A MINIMUM DEPTH OF 18" OF COVER AND ALL LATERAL PIPING SHALL BE BURIED TO A MINIMUM DEPTH OF 12" OF COVER.
- ALL POP-UP ROTOR AND SPRAY HEADS SHALL BE INSTALLED USING AN 18" PVC FLEX PIPE CONNECTION. CONTRACTOR SHALL NOT USE FUNNY PIPE.
- PIPE SIZES SHALL CONFORM TO THOSE SHOWN ON THE DRAWINGS. THE SMALLEST LATERAL PIPE SIZE TO A SINGLE SPRAY OR ROTOR HEAD SHALL BE 3/4".
- ALL REPIOTE CONTROL VALVES, GATE VALVES AND QUICK COUPLERS SHALL BE INSTALLED IN VALVE BOXES.
- THE EXACT HEIGHT OF ANY 12" POP-UP THAT IS SHOWN IN A SHRUB BED SHALL BE DETERMINED BY THE LANDSCAPE ARCHITECT IN THE FIELD.
- CONTROL WIRE SHALL BE 2-WIRE AS SPECIFIED FOR USE WITH RAINBIRD LXD CONTROLLER BY MANUFACTURER. NO CROSS CONNECTION BETWEEN CONTROLLERS SHALL BE ALLOWED. WIRE SPLICES SHALL BE MADE ONLY IN VALVE BOXES USING RAINBIRD DBTR-6' CONNECTORS.
- ANY PIPING OR VALVES SHOWN OUTSIDE THE PROPERTY LINE OR OUTSIDE OF A LANDSCAPE AREA IS SHOWN THERE FOR DESIGN CLARITY ONLY. ALL PIPING AND VALVES SHALL BE INSTALLED ON THE PROPERTY AND WITHIN LANDSCAPE AREAS.
- IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO FAMILIARIZE HIMSELF WITH AND EXERCISE CARE SO AS TO NOT DAMAGE ANY EXISTING BERMS, WALLS, STRUCTURES, PLANT MATERIALS AND UTILITIES. THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMMEDIATE REPAIR OR REPLACEMENT OF ALL ITEMS DAMAGED BY HIS WORK. HE SHALL COORDINATE HIS WORK WITH OTHER CONTRACTORS FOR THE LOCATION AND INSTALLATION OF SLEEVES AND PIPING THROUGH WALLS, UNDER ROADWAYS AND PAVING, ETC.
- DO NOT WILLFULLY INSTALL THE SPRINKLER SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN OBSTRUCTIONS, GRADE DIFFERENCES OR DIFFERENCES IN AREA DIMENSIONS EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN THE ENGINEERING. SUCH OBSTRUCTIONS OR DIFFERENCES SHOULD BE BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE. IN THE EVENT THIS NOTIFICATION IS NOT PERFORMED, THE IRRIGATION CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS.
- FINAL LOCATION OF THE AUTOMATIC CONTROLLER(S) SHALL BE APPROVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO INSTALLATION.
- ELECTRICAL SERVICE TO ALL EQUIPMENT SHALL BE PROVIDED TO A JUNCTION BOX AT THE EQUIPMENT LOCATION (BY OTHERS, NOT A PART OF THIS CONTRACT) THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR THE FINAL CONNECTION FROM THE JUNCTION BOX TO ALL EQUIPMENT.
- THE IRRIGATION CONTRACTOR SHALL FLUSH AND ADJUST ALL SPRINKLER HEADS AND VALVES TO PROVIDE OPTIMUM COVERAGE WITH MINIMAL OVERSPRAY ONTO WALKS, STREETS, WALLS, ETC. IN ORDER TO ACCOMPLISH THIS, THE CONTRACTOR MAY SUBSTITUTE VARIABLE ARC NOZZLES IN PLACE OF THE SPECIFIED FIXED ARC NOZZLES WHERE NECESSARY. PRESSURE COMPENSATING SCREENS MAY ALSO BE USED TO REDUCE SPRAY DISTANCE.
- THE CONTRACTOR SHALL COMPLETE ALL WORK IN ACCORDANCE WITH ALL PREVAILING LAWS, CODES AND REGULATIONS.
- ALL SPRINKLER EQUIPMENT NOT OTHERWISE DETAILED OR SPECIFIED SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL PREPARE AN AS-BUILT DRAWING ON A REPRODUCIBLE MYLAR SHOWING ALL IRRIGATION INSTALLATION. A MYLAR OF THE ORIGINAL PLAN MAY BE OBTAINED FROM THE LANDSCAPE ARCHITECT FOR A FEE. THE AS-BUILT DRAWING SHALL LOCATE ALL MAINLINE AND VALVES BY SHOWING EXACT MEASUREMENTS FROM HARD SURFACES.
- ALL WORK SHALL BE GUARANTEED FOR ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE AGAINST ALL DEFECTS IN EQUIPMENT AND WORKMANSHIP.
- SLEEVES SHALL BE PLACED UNDER PAVEMENT AS SHOWN ON PLANS AND SHALL BE A MINIMUM OF 2X THE SIZE OF THE IRRIGATION PIPE.
- ALL SPRAY HEADS IN THE ROW SHALL BE EITHER 6" OR 12" POP-UP AS INDICATED ON THE PLANS. NO RISERS SHALL BE USED ON SITE PER OSCEOLA COUNTY CODE.
- ALL EQUIPMENT SHALL BE PURPLE IN COLOR AS REQUIRED BY OSCEOLA COUNTY CODE INDICATING THE USE OF RECLAIM WATER FOR THE IRRIGATION SYSTEM.
- CONTRACTOR SHALL PERFORM PRESSURE AND VOLUME TEST ON IRRIGATION WATER SOURCE OVER A CONTINUOUS 24 HOUR PERIOD PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION WORK. SHOULD THE AVAILABLE SUPPLY NOT BE ADEQUATE TO MEET THE DEMANDS OF THE IRRIGATION SYSTEM AS DESIGNED, THE CONTRACTOR SHALL CONTACT THE LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION FOR DESIGN MODIFICATIONS.
- IN THE EVENT THAT A WELL IS USED AS THE WATER SOURCE FOR THE IRRIGATION SYSTEM, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING WATER SAMPLES FROM THE WELL. AT THE LANDSCAPE CONTRACTOR'S EXPENSE, HE SHALL HAVE A CERTIFIED LAB ANALYZE THE WATER QUALITY. THE LANDSCAPE CONTRACTOR SHALL REPORT TO THE LANDSCAPE ARCHITECT OR OWNER'S PROJECT

I CERTIFY THAT THE LANDSCAPE AND IRRIGATION DESIGN FOR THIS PROJECT IS IN ACCORDANCE WITH THE CITY OF APOPKA'S ORDINANCE 2069 ADOPTED MAY 21, 2008 WHICH ESTABLISHES WATERWISE LANDSCAPE AND IRRIGATION STANDARDS.

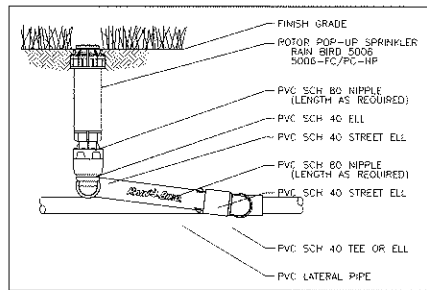
Richard R. Conant LA399 4.30.18
SIGNATURE REG. NO. DATE



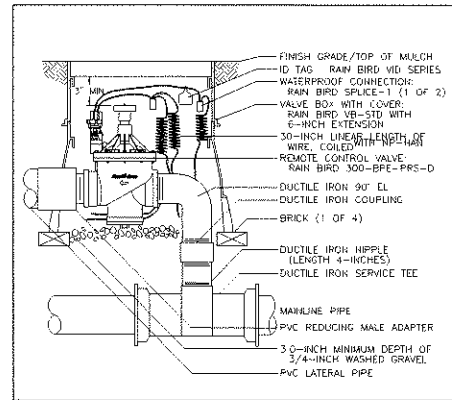
120 West Robinson Street
Apopka, Florida 32701-1617
Phone (407) 648-2225
www.fosterconant.com



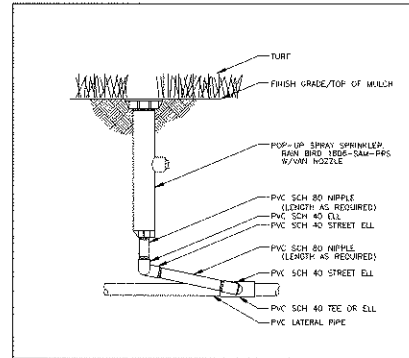
ADJUSTABLE FULL CIRCLE BUBBLER
NOT TO SCALE 1300 A-F ON RISER



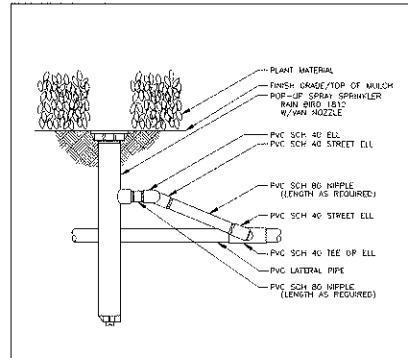
5006 ROTOR DETAIL
NOT TO SCALE



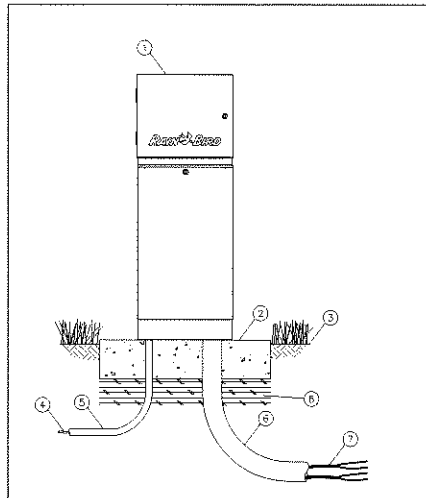
300 BPE ELECTRIC REMOTE-CONTROL VALVE
NOT TO SCALE



1806 POP UP SPRAY DETAIL
NOT TO SCALE



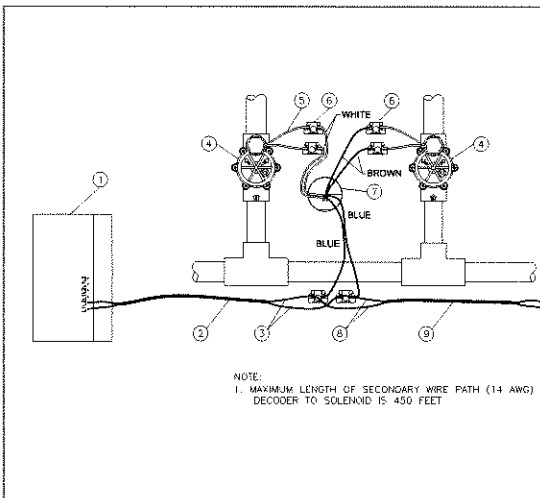
1812 POP UP SPRAY DETAIL
NOT TO SCALE



- TWO-WIRE DECODER CONTROLLER: RAIN BIRD ESP-LXD TWO-WIRE DECODER CONTROLLER WITH LXAM METAL CABINET AND LXAMPED METAL PEDESTAL. INSTALL CONTROLLER, CABINET AND PEDESTAL PER MANUFACTURER'S RECOMMENDATIONS.
- CONCRETE PAD: 6-INCH MINIMUM THICKNESS.
- FINISH GRADE.
- POWER SUPPLY WIRE.
- 1-INCH SCH 40 PVC CONDUIT, FITTINGS AND SWEEP ELL FOR POWER SUPPLY.
- 3-INCH SCH 40 PVC CONDUIT, FITTINGS AND SWEEP ELL FOR TWO-WIRE CABLE.
- MAXIMIZE TWO-WIRE PATH TO DECODERS. USE A DIFFERENT CABLE JACKET COLOR FOR EACH PATH.
- COMPACTED SUBGRADE.

NOTES:
1. ESP-LXD CONTROLLER COMES WITH 50 STATIONS AVAILABLE. TWO ADDITIONAL 75 STATION ESP-LXD-SUM75 MODULES MAY BE ADDED TO EXPAND THE CONTROLLER UP TO 300 TOTAL STATIONS.
2. PROVIDE PROPER GROUNDING COMPONENTS TO ACHIEVE GROUND RESISTANCE OF 10 OHMS OR LESS.

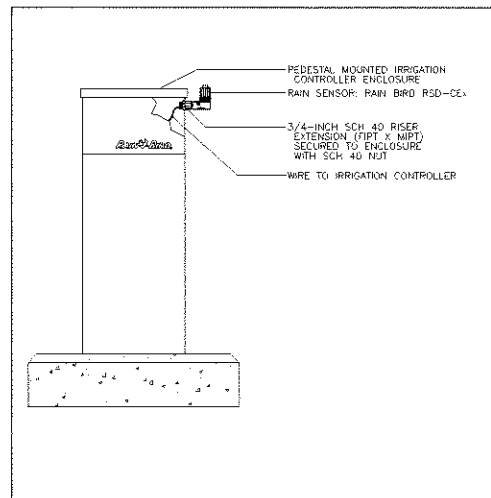
ESP-LXD TWO-WIRE DECODER CONTROLLER
PEDESTAL MOUNTED
NOT TO SCALE



- TWO-WIRE DECODER CONTROLLER: RAIN BIRD ESP-LXD.
- TWO-WIRE CABLE TO ESP-LXD CONTROLLER.
- COMMUNICATION WIRE TO ESP-LXD CONTROLLER.
- SOLENOID VALVE OR MASTER VALVE (1 OF 2).
- SOLENOID WIRE (1 OF 4).
- DB SERIES WIRE CONNECTOR: RAIN BIRD DBTWC25 (1 OF 6).
- FIELD DECODER: RAIN BIRD FD-202TURF M1300S DECODER.
- COMMUNICATION WIRE TO NEXT DEVICE (FIELD DECODER, SENSOR DECODER OR LINE SURGE PROTECTOR).
- TWO-WIRE CABLE TO NEXT DEVICE (FIELD DECODER, SENSOR DECODER OR LINE SURGE PROTECTOR).

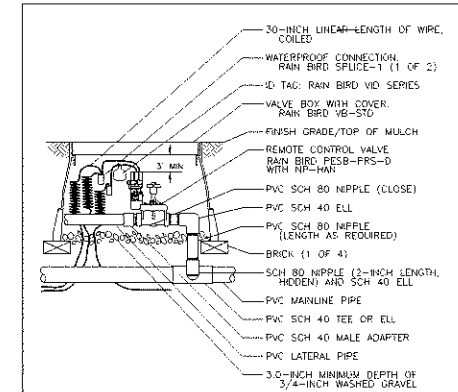
NOTE:
1. MAXIMUM LENGTH OF SECONDARY WIRE PATH (14 AWG) FROM DECODER TO SOLENOID IS 450 FEET.

FD-202TURF DECODER
WIRING TO VALVE AND CONTROLLER
NOT TO SCALE

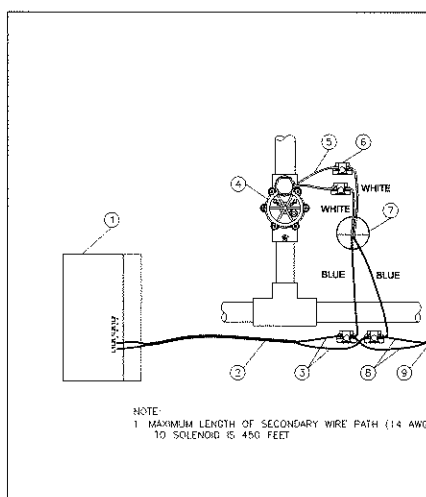


- PEDESTAL MOUNTED IRRIGATION CONTROLLER ENCLOSURE.
- RAIN SENSOR: RAIN BIRD RSD-CEX.
- 3/4-INCH SCH 40 RISER EXTENSION (FITS 1/2 NPT) SECURED TO ENCLOSURE WITH SCH 40 NUT.
- WIRE TO IRRIGATION CONTROLLER.

RAIN SENSOR
RSD-CEX PEDESTAL MOUNT
NOT TO SCALE



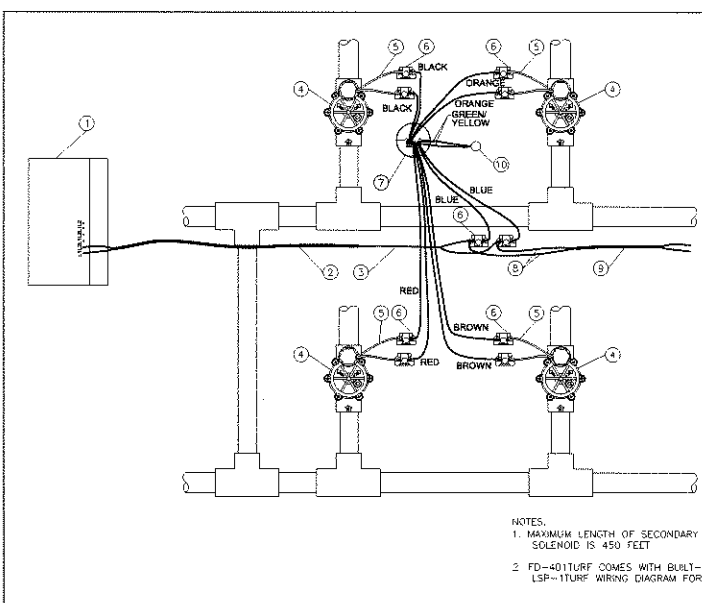
PEBB ELECTRIC REMOTE-CONTROL VALVE
NOT TO SCALE



- TWO-WIRE DECODER CONTROLLER: RAIN BIRD ESP-LXD CONTROLLER.
- TWO-WIRE TO ESP-LXD CONTROLLER.
- COMMUNICATION WIRE TO ESP-LXD CONTROLLER.
- SOLENOID VALVE OR MASTER VALVE (1 OF 4).
- SOLENOID WIRE (1 OF 2).
- DB SERIES WIRE CONNECTOR: RAIN BIRD DBTWC25 (1 OF 2).
- FIELD DECODER: RAIN BIRD FD-102TURF M13011 DECODER.
- COMMUNICATION WIRE TO NEXT DEVICE (FIELD DECODER, SENSOR DECODER OR LINE SURGE PROTECTOR).
- TWO-WIRE CABLE TO NEXT DEVICE (FIELD DECODER, SENSOR DECODER OR LINE SURGE PROTECTOR).

NOTE:
1. MAXIMUM LENGTH OF SECONDARY WIRE PATH (14 AWG) FROM FIELD DECODER TO SOLENOID IS 450 FEET.

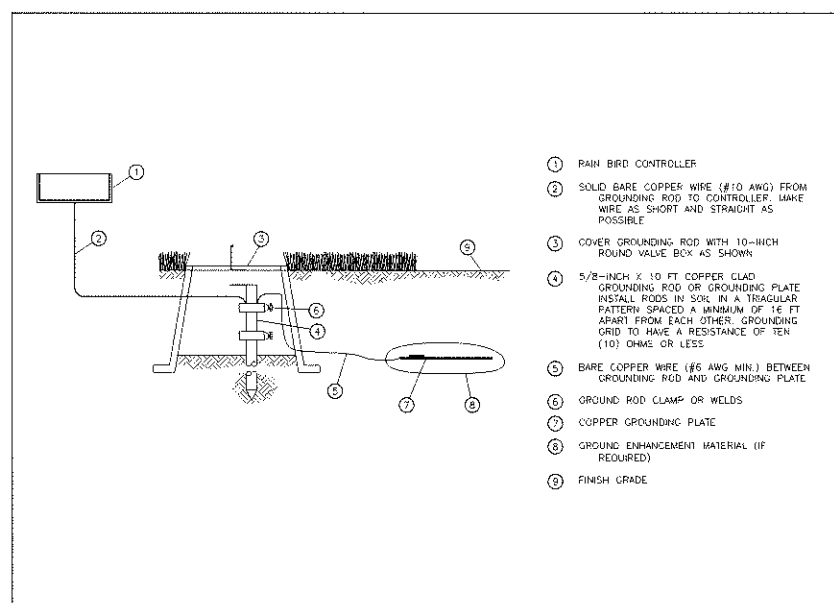
FD-102TURF DECODER
WIRING TO VALVE AND CONTROLLER
NOT TO SCALE



- TWO-WIRE DECODER CONTROLLER: RAIN BIRD ESP-LXD.
- TWO-WIRE CABLE TO ESP-LXD CONTROLLER.
- COMMUNICATION WIRE TO ESP-LXD CONTROLLER.
- SOLENOID VALVE OR MASTER VALVE (1 OF 4).
- SOLENOID WIRE (1 OF 8).
- DB SERIES WIRE CONNECTOR: RAIN BIRD DBTWC25 (1 OF 10).
- FIELD DECODER: RAIN BIRD FD-401TURF M1300S DECODER.
- COMMUNICATION WIRE TO NEXT DEVICE (FIELD DECODER, SENSOR DECODER, OR LSP-1TURF IF MORE THAN 500' BETWEEN DECODERS).
- TWO-WIRE CABLE TO NEXT DEVICE (FIELD DECODER, SENSOR DECODER, OR LSP-1TURF IF MORE THAN 500' BETWEEN DECODERS).
- GROUNDING ROD: 10 OHMS OR LESS.

NOTES:
1. MAXIMUM LENGTH OF SECONDARY WIRE PATH (14 AWG) FROM FIELD DECODER TO SOLENOID IS 450 FEET.
2. FD-401TURF COMES WITH BUILT-IN LSP-1TURF SURGE PROTECTOR. REFER TO LSP-1TURF WIRING DIAGRAM FOR GROUNDING INSTRUCTIONS.

FD-401TURF DECODER
WIRING TO VALVE AND CONTROLLER
NOT TO SCALE



- RAIN BIRD CONTROLLER.
- SOLID BARE COPPER WIRE (#10 AWG) FROM GROUNDING ROD TO CONTROLLER. MAKE WIRE AS SHORT AND STRAIGHT AS POSSIBLE.
- COVER GROUNDING ROD WITH 10-INCH ROUND VALVE BOX AS SHOWN.
- 5/8-INCH X 10 FT COPPER GLAD GROUNDING ROD OR GROUNDING PLATE. INSTALL RODS IN SOIL IN A TRIANGULAR PATTERN SPACED A MINIMUM OF 16 FT APART FROM EACH OTHER. GROUNDING GRID TO HAVE A RESISTANCE OF TEN (10) OHMS OR LESS.
- BARE COPPER WIRE (#6 AWG MIN.) BETWEEN GROUNDING ROD AND GROUNDING PLATE.
- GROUND ROD CLAMP OR WELDS.
- COPPER GROUNDING PLATE.
- GROUND ENHANCEMENT MATERIAL (IF REQUIRED).
- FINISH GRADE.

CONTROLLER GROUNDING GRID
GROUNDING PLATE DESIGN LAYOUT
NOT TO SCALE

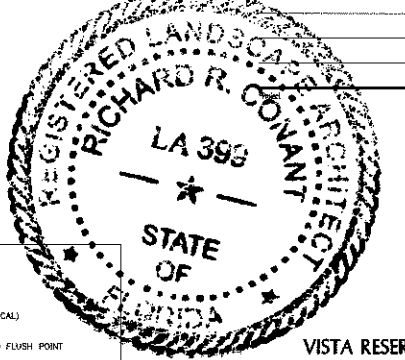
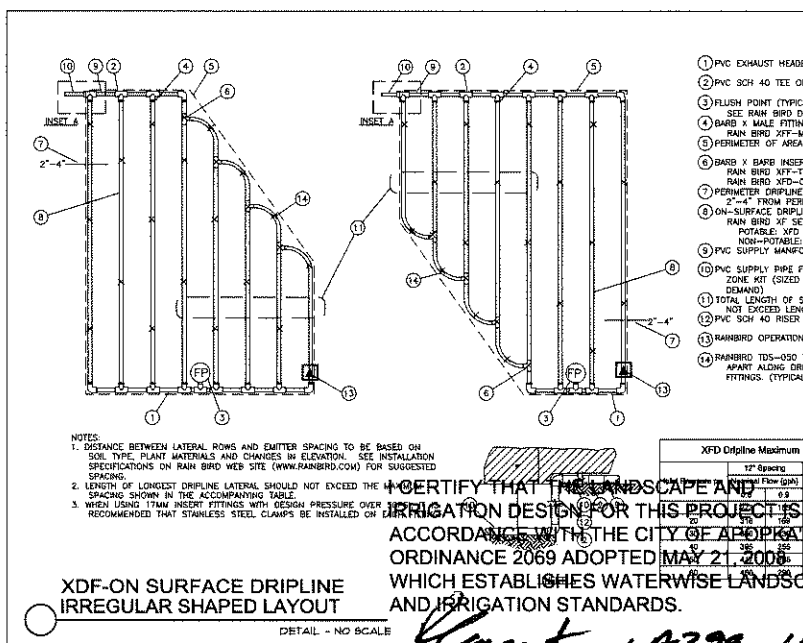
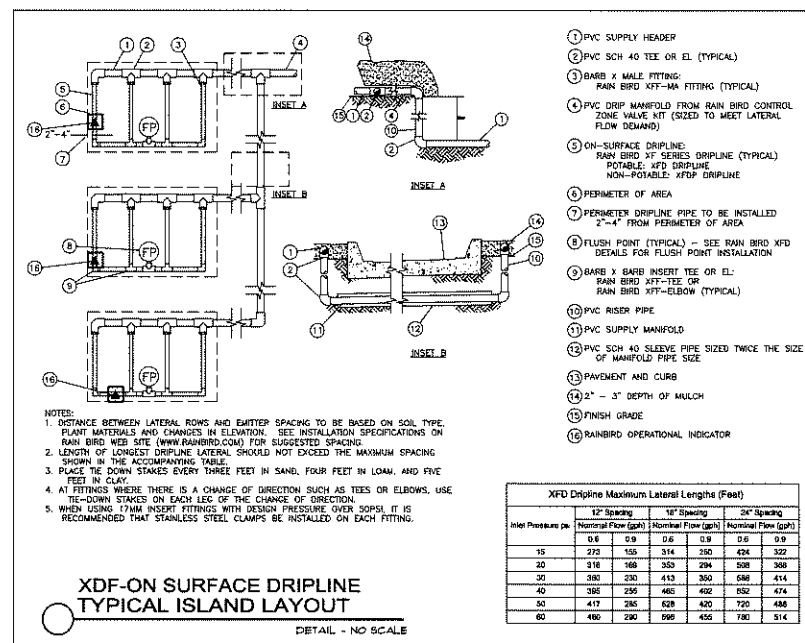
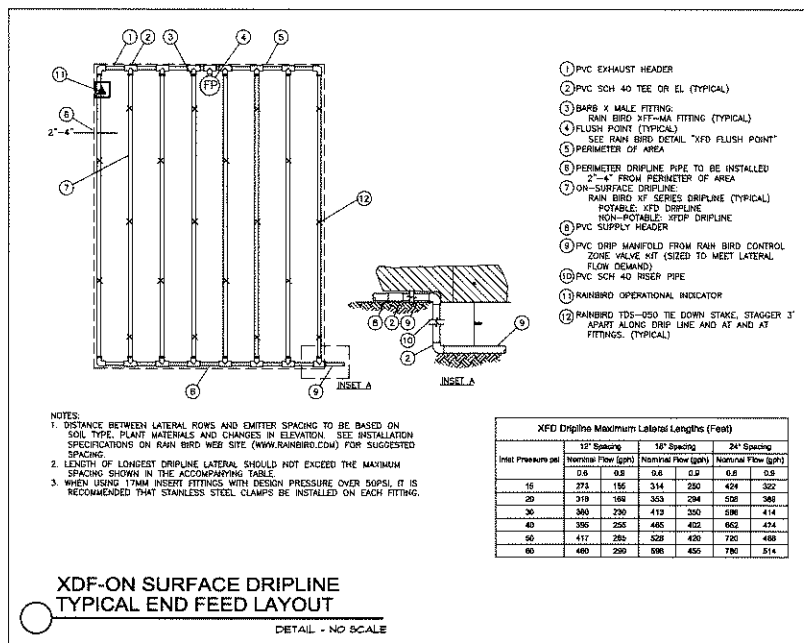
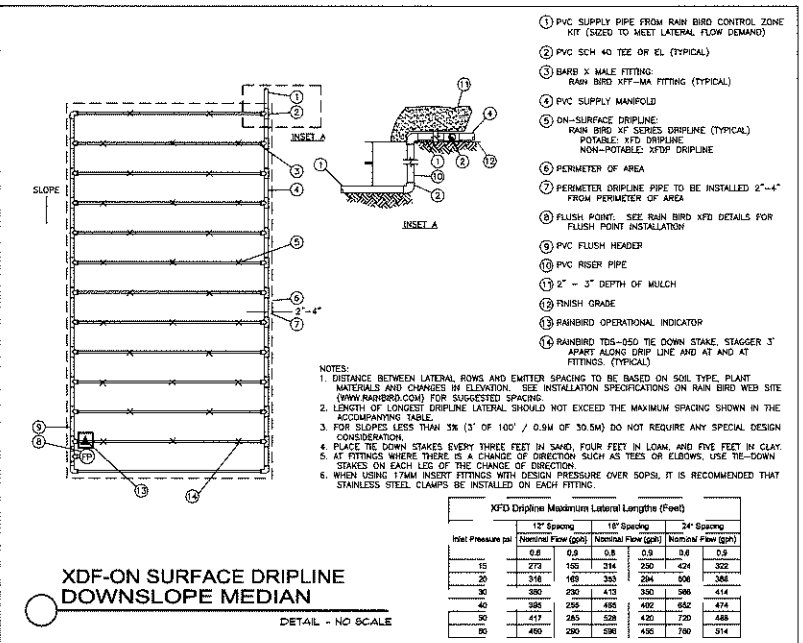
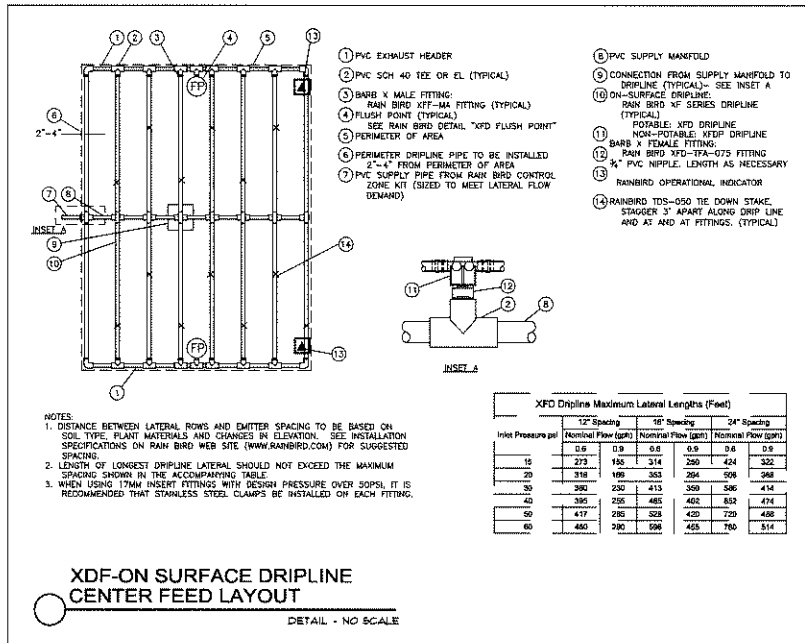
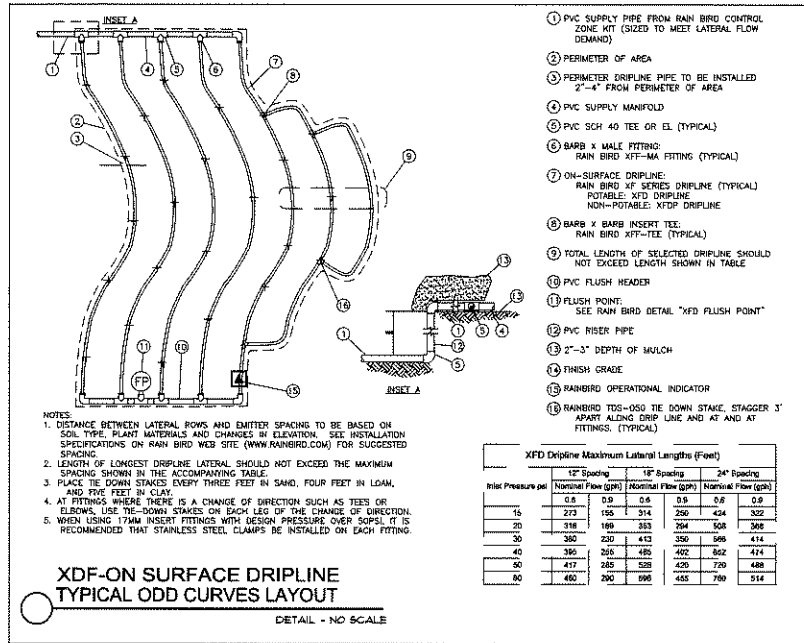
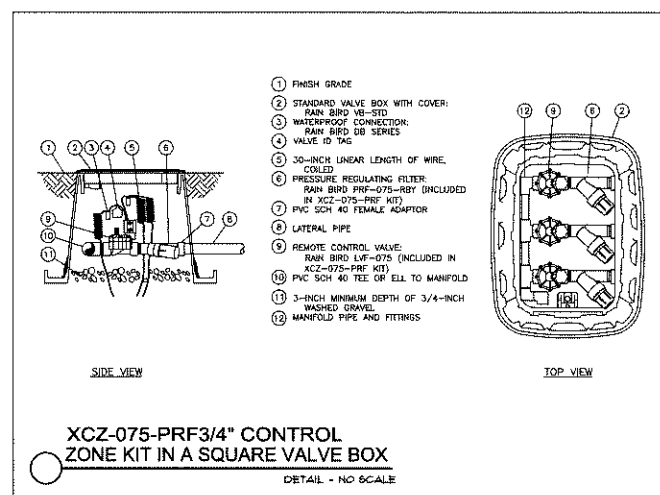
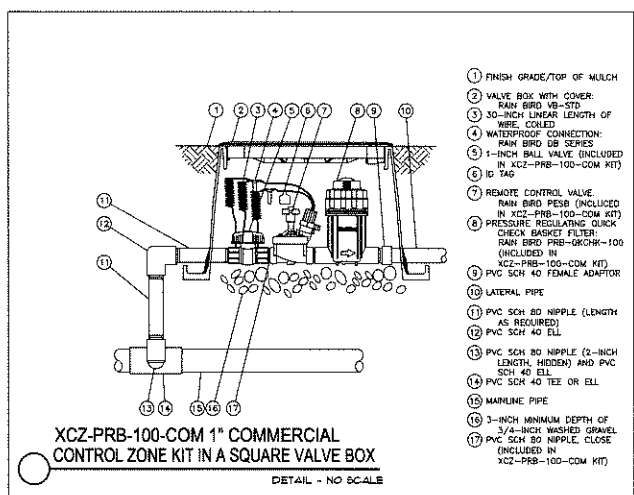
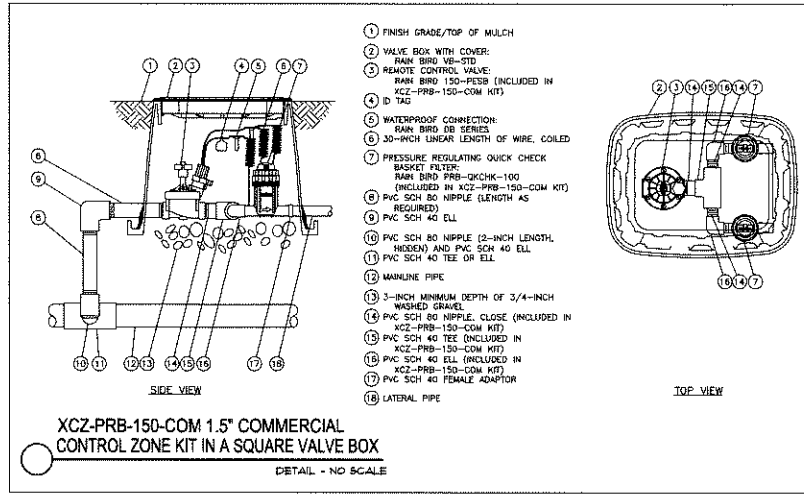
VISTA RESERVE

CITY OF APOPKA, FL

IRRIGATION DETAILS

Date: 04/05/18
Scale: AS SHOWN
Drawn: MJ Checked: RRC
File Name: 5AMALP306.DWG
North

Sheet
LP-306



VISTA RESERVE

CITY OF APOPKA, FL

IRRIGATION DETAILS

Date: 04/05/18
Scale: AS SHOWN
Drawn: MJ
Checked: RRC
File Name: 5AMALP301.DWG

CERTIFY THAT THE LANDSCAPE AND IRRIGATION DESIGN FOR THIS PROJECT IS IN ACCORDANCE WITH THE CITY OF APOPKA ORDINANCE 2069 ADOPTED MAY 21, 2008 WHICH ESTABLISHES WATERWISE LANDSCAPE AND IRRIGATION STANDARDS.

Fluorant LA398 4-3-18
SIGNATURE REG. NO. DATE

