# APOPKA PLANNING COMMISSION AGENDA

**March 11, 2025 5:30 PM**
**Apopka City Hall Council Chambers**

**APOPKA PLANNING COMMISSION MEETING WILL BE LIVE-STREAMED ON YOUTUBE. TO WATCH, PLEASE VISIT:**
**https://www.youtube.com/CityofApopkaFL**

**CALL TO ORDER**

**OPENING AND INVOCATION**

**PUBLIC COMMENT PERIOD**

The Public Comment Period is for City-related issues that may or may not be on today's Agenda. If you are here for a matter that requires a public hearing, please wait for that item to come up on the agenda. If you wish to address the Council, you must fill out an Intent to Speak form and provide it to the City Clerk prior to the start of the meeting. If you wish to speak during the Public Comment Period, please fill out a green-colored Intent-to-Speak form. If you wish to speak on a matter that requires a public hearing, please fill out a white-colored Intent-to-Speak form. Speaker forms may be completed up to 48 hours in advance of the Council meeting. Each speaker will have four minutes to give remarks, regardless of the number of items addressed. Please refer to Resolution No. 2016-16 for further information regarding our Public Participation Policy & Procedures for addressing the City Council.

**APPROVAL OF MINUTES**

1. Meeting Minutes from February 11, 2025

**PUBLIC HEARING**

**SITE PLANS**

1. 4101 Golden Gem Road - Major Development Plan
   Owner(s): Kelly Park VB Development, LLC c/o Kevin Barry
   Applicant(s): Kimley-Horn & Associates, Inc. c/o Mackenzie Cerjan, P.E.
   Location: East of Golden Gem Road and north of Capital Reef Way
   Project: 54 single-family units
   Density/Intensity: 5.99 dwelling units/acre
   Tract size: 9.01 acres+/-
   Project Manager: Jean Sanchez

2. Eden Crest Phase 1 - Plat
   Owner(s): Apopka Project I LLC
   Applicant(s): Ovidio S. Sanchez
   Location: East of S Binion Road and North of Boy Scout Road
   Project: Eden Crest Phase 1 - Plat
   Density: 5 DU/AC
   Tract size: 85.16 +/- acres
   Project Manager: Amer Hamza

3. Willow Run - Plat
   Owner(s): M/I Homes of Orlando, LLC
   Applicant(s): Luke M. Classon, P.E.
   Location: Northeast corner of Plymouth Sorrento Road and Lent Road
   Tract Size: 56.67 +/- acres
   Project Manager: Jean Sanchez

**OLD BUSINESS**

**NEW BUSINESS**

**ADJOURNMENT**

Individuals with disabilities needing assistance to participate in any of these proceedings should contact the City Clerk at least two (2) working days in advance of the meeting date and time at (407) 703-1704. F.S. 286.0105 If a person decides to appeal any decision or recommendation made by Planning Commission with respect to any matter considered at this meeting, he will need record of the proceedings, and that for such purposes he may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based.

Any opening invocation that is offered before the official start of the Planning Commission meeting shall be the voluntary offering of a private person, to and for the benefit of the Planning Commission. The views or beliefs expressed by the invocation speaker have not been previously reviewed or approved by the Planning Commission or the city staff, and the City is not allowed by law to endorse the religious or non-religious beliefs or views of such speaker. Persons in attendance at the Planning Commission meeting are invited to stand during the opening ceremony. However, such invitation shall not be construed as a demand, order, or any other type of command. No person in attendance at the meeting shall be required to participate in any opening invocation that is offered or to participate in the Pledge of Allegiance. You may remain seated within the City Council Chambers or exit the City Council Chambers and return upon completion of the opening invocation and/or Pledge of Allegiance if you do not wish to participate in or witness the opening invocation and/or the recitation of the Pledge of Allegiance.

**MINUTES OF THE PLANNING COMMISSION REGULAR MEETING HELD ON FEBRUARY 11, 2025 AT 5:30 P.M. IN THE CITY COUNCIL CHAMBERS, APOPKA, FLORIDA.**

**MEMBERS PRESENT:** William Gusler, Eric Mock, Mary Norwood, Wes Dumey and David Woods

**ABSENT:** Howard Washington, Robert Ryan and Orange County Public Schools (Non-voting)

**STAFF PRESENT:** Bobby Howell – Planning Manager, Jean Sanchez – Senior Project Coordinator/Planner, Andrew Hand – City Attorney (Cliff Sheppard's Office), Kelly Robertson – Content Administrator and Erin Arnold – Executive Assistant.

**OTHERS PRESENT:** Nick Nesta, Diane Velazquez, Darenda Marvin, Nathan Milch, Luke Classon, Tom Smith, Jonathan Huels, Llewellyn Larmond and Kurt Brown.

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

Chairperson Gusler introduced the new Planning Commission board member, Mr. David Woods.

**PUBLIC COMMENT:** Chairperson Gusler asked if anyone from the public wished to speak on a matter that is not on the agenda. With no one wishing to speak, Chairperson Gusler closed the public comment period.

**APPROVAL OF MINUTES:** Chairperson Gusler asked if there were any corrections or additions to the regular meeting minutes of January 14, 2025 at 5:30 p.m.

**MOTION: Eric Mock made a motion to approve the Planning Commission minutes from the regular meeting held on January 14, 2025 at 5:30 p.m. and seconded by Mary Norwood. Aye votes were cast by William Gusler, Eric Mock, Mary Norwood, Wes Dumey and David Woods (5-0).**

**QUASI JUDICIAL – ORDINANCE NUMBER 3093 – REZONING/KPI MASTER PLAN – CHANDLER HILLS**

Chairperson Gusler read the item description and asked if anyone had ex-parte communication on this matter. All commissioners responded no.

Staff Presentation: Bobby Howell presented the item based on the staff report.

Commissioner Mock asked if Chandler Road terminated at the entrance or does it continue down across the bottom.

Mr. Howell responded that Chandler Road is private property and currently a dirt road but that the applicant may be able to give further information about it.

Applicant, Jonathan Huels with Lowndes Law Firm located at 215 N Eola Drive stated that Bobby did a great job of introducing the project and his presentation was much of the same. He responded to Mr. Mock's question about Chandler Road and stated that road is private and it is substandard but it does act as an access point for many of the parcels that are part of this project. This project is not going to change

that access at all within its scope. It is providing legal rights for the future improvements of Chandler Road.

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

**MOTION: Mary Norwood made a motion to find the proposed Change in Zoning from County A-1 (Citrus Rural), County A-2 (Farmland Rural District), City T (Transitional), and RSF-1A (Residential Single-Family Estate) to KPI-MU (Kelly Park Interchange-Mixed Use) consistent with the Comprehensive Plan and Land Development Code, and compatible with the character of the surrounding areas, and recommends approval of the proposed Change of Zoning, based on the findings and facts presented in the staff report and exhibits. Motion seconded by David Woods. Aye votes were cast by William Gusler, Eric Mock, Mary Norwood, Wes Dumey and David Woods (5-0).**

**LEGISLATIVE – ORDINANCE NO. 3095 – SMALL-SCALE FUTURE LAND USE AMENDMENT – ADVENTHEALTH ED**

Chairperson Gusler read the item description.

Staff Presentation: Jean Sanchez presented the item based on the staff report.

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

**MOTION: Wes Dumey made a motion to find the proposed amendment consistent with the Comprehensive Plan and compatible with the character of the surrounding area, and recommends approval of the change in Future Land Use designation from Residential Very Low Suburban to Mixed-Use. Motion seconded by Eric Mock. Aye votes were cast by William Gusler, Eric Mock, Mary Norwood, Wes Dumey and David Woods (5-0).**

**QUASI-JUDICIAL – ORDINANCE NO. 3096 – CHANGE OF ZONING – ADVENTHEALTH ED**

Chairperson Gusler read the item description and asked if anyone had ex-parte communication on this matter. All commissioners responded no.

Staff Presentation: Jean Sanchez presented the item based on the staff report.

Chairperson Gusler asked if there was anyone else from the public who would like to speak on the matter. With no one wishing to speak, Chairperson Gusler closed the public hearing.

**MOTION: Eric Mock made a motion to find the proposed Change of Zoning from T (Transition) to KPI-MU (Kelly Park Interchange – Mixed-Use) and assignment of Village Center District Overlay and Master Plan, finding the proposed change**

**consistent with the Comprehensive Plan and Land Development Code, and compatible with the character of the surrounding areas, based on the findings and facts presented in the staff report and exhibits. Motion seconded by Mary Norwood. Aye votes were cast by William Gusler, Eric Mock, Mary Norwood, Wes Dumey and David Woods (5-0).**

**SHOPPES AT EAST SHORE - PLAT**

Chairperson Gusler read the item description.

Staff Presentation: Jean Sanchez presented the item based on the staff report.

Chairperson Gusler asked staff about the number of ingress and egress as well as the locations.

Mrs. Sanchez pointed out the information on the map and also mentioned that in the back there is a stormwater pond.

Commissioner Dumey asked about the enhanced buffering behind the grocery store along the wall.

Mrs. Sanchez stated that since this is just the plat do it's dividing the property but it is part of the construction site plan.

Commissioner Woods mentioned that the dry retention pond shows the overflow going into Lake Rutherford and wanted to know if the owners were notified.

Applicant, Darenda Marvin with WMD Development located at 270 W Plant St Winter Garden, FL stated that the water must be maintained at the same flow and rate as it historically has done and that all of their water management district permits are in place and they would have looked at that historic flow. They don't get direct permission from someone because the happen to own the lake. With historic water flow, the law says that the water cannot change. No more no less and it has to be maintained.

Commissioner Woods said that a topographic view of the property shows that it slopes towards Ocoee Apopka & Keene Road. His understanding is that they are raising to make it level and that all the water will now flow towards the north side of retention pond. He says that Lake Rutherford is already at flood level and its only February. It is his understanding that it would be 100-year storm before it would come out of the dry retention pond into Lake Rutherford. He also stated that he's concerned about why only one owner of the pond was notified and not the other which is Emerson Park Board of Directors.

Ms. Marvin responded that the action before them is a subdivision plot to divide the property into lots. They have all of the permits from St John's River Water Management District from the City of Apopka and Orange County and if there is a question that Mr. Woods is disputing than that is separate from tonight's action.

Commissioner Woods stated that he is not against the project, he was just stating his concerns for Emerson Park and is trying to understand how the water runoff is going to affect them. He mentioned

the Clear Lake Estates subdivision where something like this happened and one builder was dumping water into somebody else's pond and they were never notified.

Ms. Marvin stated that she personally attended a meeting with a member of the board of the HOA, Jennifer, before they even started the process of rezoning because there were a lot of questions from the neighborhood. This was back in 2021. She said that if there was a question about how the engineering was approved and there is an engineer that represents their HOA perhaps they can speak to the Water Management District.

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

**MOTION: Wes Dumey made a motion to approve the Shoppes at East Shore Plat based on the findings and facts in the staff report and exhibits. Motion seconded by David Woods. Aye votes were cast by William Gusler, Eric Mock, Mary Norwood, Wes Dumey and David Woods (5-0).**

**OLD BUSINESS:** None

**NEW BUSINESS:** None

**ADJOURNMENT:** The meeting adjourned at 5:55 p.m.

_____
William Gusler, Chairperson

_____
Bobby Howell, Planning Manager

# City of Apopka
# PLANNING COMMISSION STAFF REPORT

**Section:** SITE PLANS
**Item #:** 1.
**Meeting Date:** March 11, 2025
**Department:** Community Development

**SUBJECT:**
4101 Golden Gem Road - Major Development Plan

**REQUEST:**
Approve the 4101 Golden Gem Road - Major Development Plan.

**SUMMARY:**
Owner(s): Kelly Park VB Development, LLC c/o Kevin Barry
Applicant(s): Kimley-Horn & Associates, Inc. c/o Mackenzie Cerjan, P.E.
Location: 4101 Golden Gem Road
Project: 54 single family units
Density/Intensity: 5.99 dwelling units/acre
Project Manager: Jean Sanchez

### Zoning Report:

| Direction | Future Land Use | Zoning | Present Use |
|---|---|---|---|
| **North** | Mixed Use | KPI-MU (Kelly Park Interchange - Mixed Use) | Wyld Oaks Development - Neighborhood District |
| **East** | Mixed Use | KPI-MU | Wyld Oaks Development - Employment District |
| **South** | Mixed Use | KPI-MU | Parkview Preserve Residential Subdivision |
| **West** | County Rural | County A-1 (Citrus Rural) | Mid-Florida Material Landfill and Recycling Facility |

## PROJECT SUMMARY:

The 4101 Golden Gem Road Residential – Major Development Plan (MDP) proposes the development of 54 single-family detached units on 9.01 acres, east of Golden Gem Road and north of the Neighborhood District Overlay of the Wyld Oaks Development. This Neighborhood District Overlay permits a maximum of 198 residential units to be constructed in a single phase. As noted in the Wyld Oaks development agreement, development shall be calculated based on the total gross acreage of each district overlay. Therefore, there are 144 units remaining

within the Wyld Oaks Neighborhood District Overlay, as calculated in the following table:

| Wyld Oaks Neighborhood District | |
|---|---|
| Maximum Residential Units | 198 |
| Residential Units Previously Allocated to Other Projects in the Interchange District | 0 |
| Residential Units Allocated to this Project (4101 Golden Gem Road Residential) | 54 |
| Residential Units Remaining in Neighborhood District | 144 |

The site design comprises 40-foot-wide and 60-foot-wide corner typical lot sizes. The parcel currently houses agricultural structures. This development benefits from the Wyld Oaks' 10-acre open space/amenity/recreation spaces in the north and northeast areas. The applicant provide cross access to the adjacent areas, as required by the Code. Sidewalks are located along the Golden Gem Road frontage, as well as, internally, leading to unit entrances and promoting pedestrian and vehicular movement to the commercial pods of the Wyld Oaks development..

The landscape plan proposes a diverse variety of trees that includes Southern Live Oaks and Dahoon Holly Trees are located within the project area and will be installed with root barriers to block or redirect tree roots, preventing damage to structures and pavements.

The Development Review Committee finds that the applicant demonstrates there is competent substantial evidence in the record that all of the following standards are met:

a. The proposed development and use(s) in the development plan comply with Article 3: Zoning Districts, and Article 4: Use Regulations;
b. The development proposed in the development plan and its general layout and design comply with all the standards in Article 5: Development Standards, and Article 6: Environmental Standards;
c. The development proposed in the development plan complies with all conditions of approval in any development approval or permit to which the plan is subject;
d. The development proposed in the development plan complies with all other applicable standards in this LDC and all other City regulations.

## ACCESS/TRANSPORTATION:

The ingress/egress points are on Sadler and Golden Gem Road.

## ORANGE COUNTY NOTIFICATION:

Orange County was notified at the time of the site plan submittal for this property through the DRC agenda distribution.

## PUBLIC HEARING SCHEDULE:

March 11, 2025 – Planning Commission (5:30 P.M.)
April 2, 2025 – City Council (1:30 P.M.)

**FUNDING SOURCE:**
Not applicable.

**RECOMMENDED MOTION:**

## Development Review Committee:

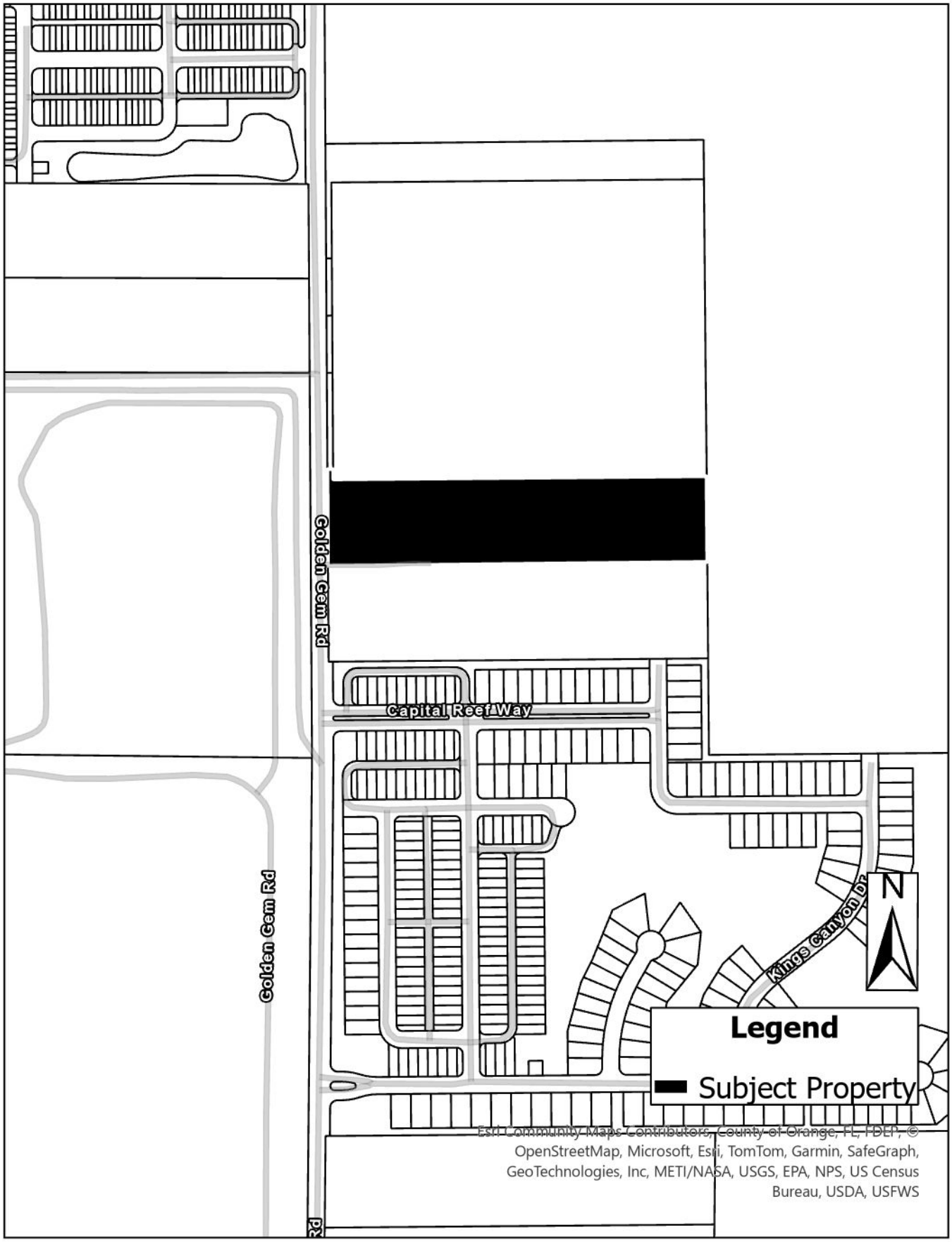
Recommends approval of the 4101 Golden Gem Road - Major Development Plan, subject to the findings in the staff report.

## Recommended Motion – Planning Commission:

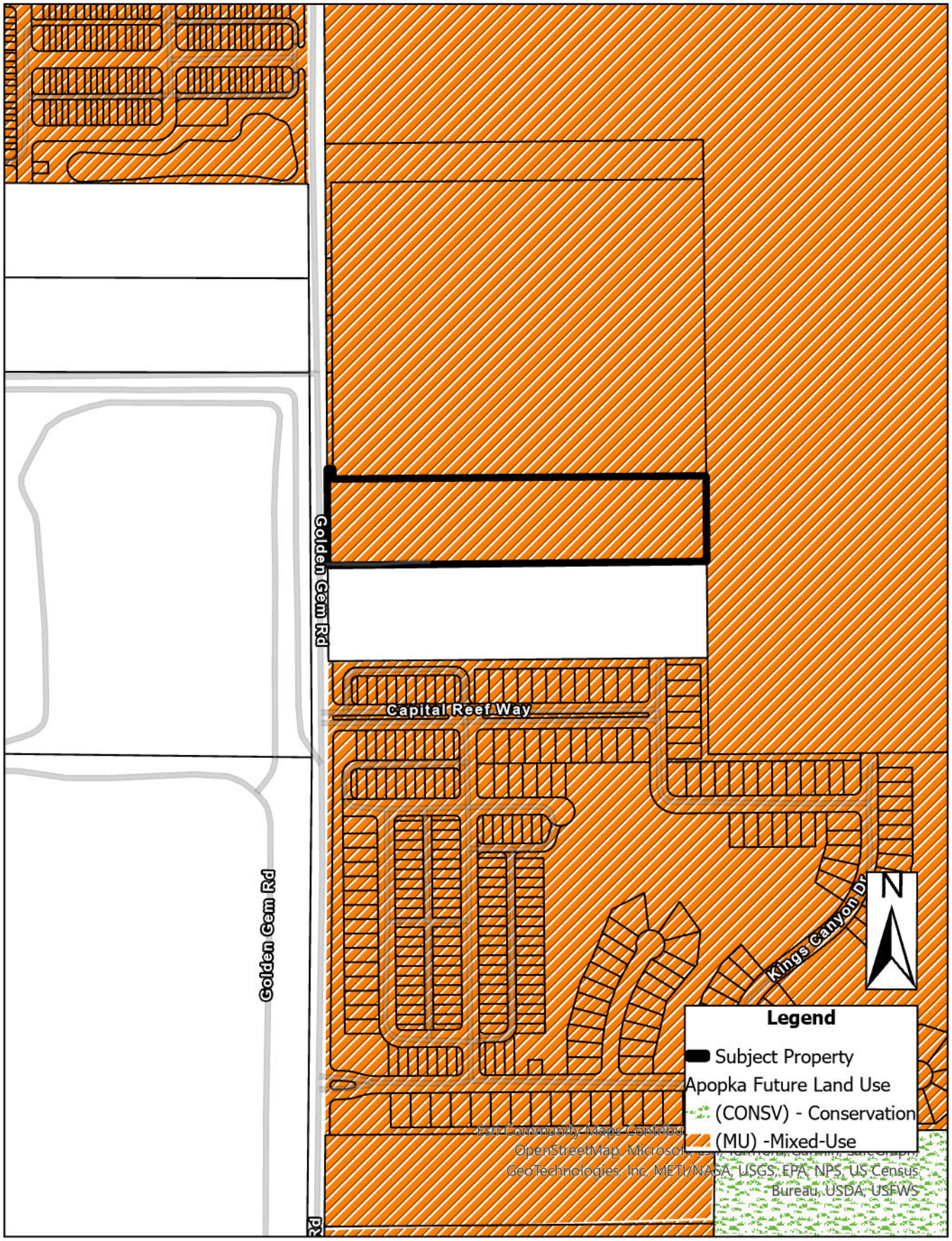
Recommend approval of 4101 Golden Gem Road - Major Development Plan, subject to the findings and exhibits in the staff report.

**ATTACHMENTS:**
1. Maps
2. 4101 Golden Gem Road Residential - MDP

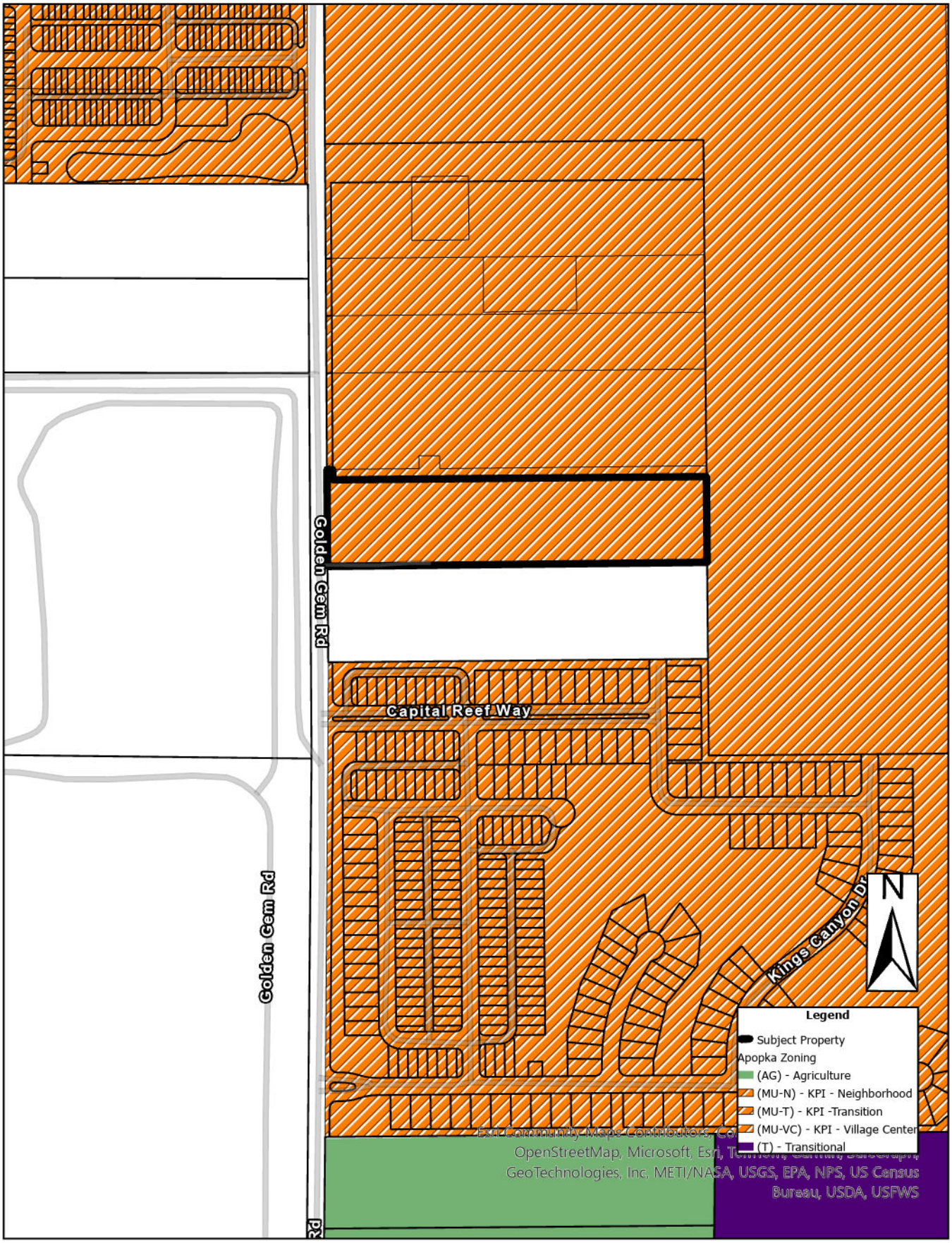
# Vicinity


Golden Gem Rd
Capital Reef Way
Golden Gem Rd
Kings Canyon Dr
N
Legend
Subject Property
Esri Community Maps Contributors, County of Orange, FL, FDEP, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS

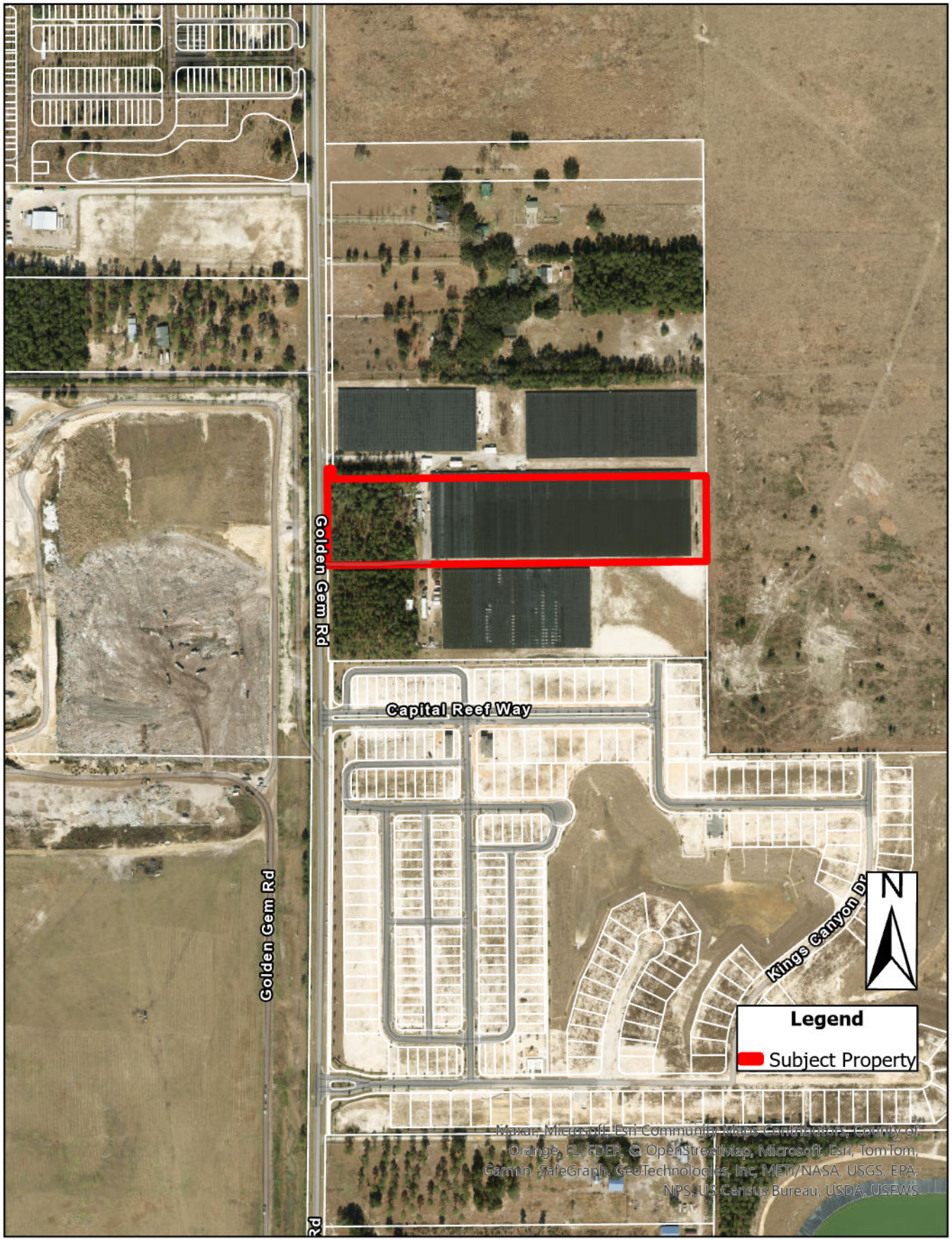
# Future Land Use



# Zoning


Golden Gem Rd
Capital Reef Way
Golden Gem Rd
Kings Canyon Dr
N
Legend
Subject Property
Apopka Zoning
(AG) - Agriculture
(MU-N) - KPI - Neighborhood
(MU-T) - KPI -Transition
(MU-VC) - KPI - Village Center
(T) - Transitional
Esri Community Maps Contributors, Co
OpenStreetMap, Microsoft, Esri, T
GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census
Bureau, USDA, USFWS

# Aerial


Golden Gem Rd
Capital Reef Way
Golden Gem Rd
Kings Canyon Dr
N
Legend
Subject Property
Maxar, Microsoft, Esri Community Maps Contributors, County of Orange, FL, FDEP, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS

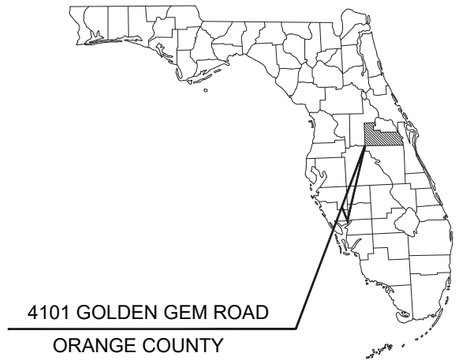
# MAJOR DEVELOPMENT PLANS

FOR

# KELLY PARK VB DEVELOPMENT LLC

LOCATED AT

## 4101 GOLDEN GEM ROAD
## APOPKA, FL 32712




## PROJECT TEAM

**OWNER**
KELLY PARK VB DEVELOPMENT LLC
660 BEACHLAND BLVD, SUITE 301
VERO BEACH, FL 32963

**DEVELOPER**
DOUBLE B DEVELOPMENT, LLC
660 BEACHLAND BLVD., SUITE 301
VERO BEACH, FL 32963
(772) 234-2410
CONTACT: JOE BENINATI

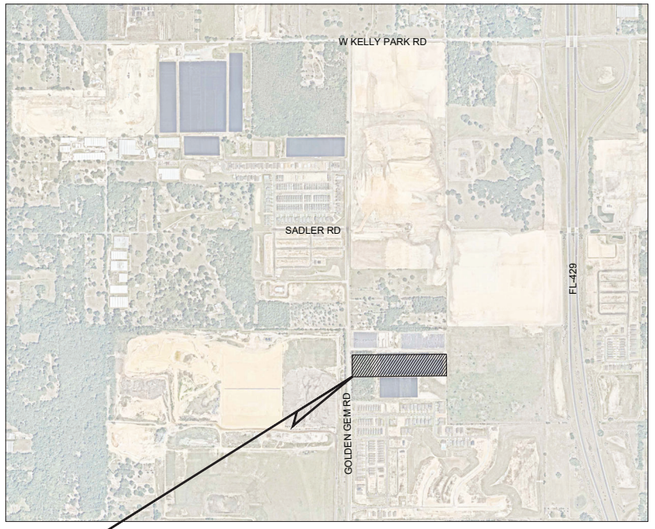
**ARCHITECT**
ONX HOMES
4813 N INTERSTATE 35
BUILDING 1
GEORGETOWN, TX 78633
(844) 466-9462

**SURVEYOR**
GET TO THE POINT SURVEYING
34414 ALICANTE CT
SORRENTO, FL 32776
SBRAYGTTPSURVEY@GMAIL.COM
CONTACT: STEVE BRAY

**CIVIL ENGINEER**
KIMLEY-HORN AND ASSOCIATES, INC.
445 24TH STREET, SUITE 200
VERO BEACH, FL 32960
(772) 794-4100
CONTACT: MACKENZIE CERJAN, P.E.

**LANDSCAPE ARCHITECT**
KIMLEY-HORN AND ASSOCIATES, INC.
200 SOUTH ORANGE AVE, SUITE 600
ORLANDO, FL 32801
(407)247-8404
ED.LINQUIST@KIMLEY-HORN.COM
CONTACT: ED LINQUIST

**GEOTECHNICAL CONSULTANT**
S&ME
1615 EDGEWATER DRIVE SUITE 200
ORLANDO, FL 32804
(407) 652-0043
CONTACT: WILLIAM L. FOX, P.E.




VICINITY MAP
N.T.S.

## LIST OF CONTACTS

**PLANNING AND ZONING**
CITY OF APOPKA
120 E. MAIN ST, 2ND FLOOR
APOPKA, FL 32703
(407) 703-1684
CONTACT: JEAN SANCHEZ

**STORMWATER**
ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
4049 REID STREET
PALATKA, FL 32177
(386) 329-4500

**WATER AND SANITARY SEWER**
CITY OF APOPKA PUBLIC SERVICES
748 E CLEVELAND ST
APOPKA, FL 32703
(407) 703-1731
CONTACT: RICHARD EARP

**FIRE PREVENTION**
CITY OF APOPKA FIRE DEPARTMENT
175 E 5TH ST
APOPKA, FL 32703
(407) 703-1754
CONTACT: JEREMY HOLDERFIELD

**TRANSPORTATION**
CITY OF APOPKA
120 E. MAIN ST, 2ND FLOOR
APOPKA, FL 32703
(407) 703-1739
CONTACT: PAMELA RICHMOND

**TELEPHONE PROVIDER**
LUMEN (CENTURYLINK)
555 LAKE BORDER DR.
APOPKA, FL 32703
(407) 814-5310

**CABLE PROVIDER**
SPECTRUM
3301 E STATE RD 436
APOPKA, FL 32703
(407) 532-8509

**NATURAL GAS PROVIDER**
LAKE APOPKA NATURAL GAS
1320 WINTER GARDEN VINELAND RD
WINTER GARDEN, FL 34787
(407) 656-2734

**ELECTRIC PROVIDER**
DUKE ENERGY
RDT SUBDIVISIONS - APOPKA
P.O. BOX 14042
SAINT PETERSBURG, FL 33733
(321) 280-3534
CONTACT: KRISTIN CORDELL

**RECLAIMED WATER**
CITY OF APOPKA PUBLIC SERVICES
748 E CLEVELAND ST
APOPKA, FL 32703
(407) 703-1731
REARP@APAPKA.NET
CONTACT: RICHARD EARP

PROJECT SCOPE:

THIS PROJECT INCLUDES THE DEVELOPMENT OF 54 SINGLE FAMILY DETACHED LOTS. CONSTRUCTION IS EXPECTED TO BE COMPLETED IN A SINGLE PHASE. THIS PROJECT IS PART OF THE LARGER DEVELOPMENT, WYLD OAKS (FKA KELLY PARK CROSSINGS). THIS APPLICATION (4101 GOLDEN GEM RESIDENTIAL, ALSO REFERRED TO AS ONX) IS PART OF THE NEIGHBORHOOD DISTRICT IDENTIFIED ON THE WYLD OAKS PROJECT.

SCREEN READER TECHNOLOGY TAG:

IF YOU REQUIRE FURTHER CLARIFICATION OF WHAT THIS DOCUMENT REPRESENTS, PLEASE CONTACT THE ADA COORDINATOR OF CITY OF APOPKA AT 407-703-1700.

PREPARED BY:
Kimley»Horn

### Sheet List Table

| Sheet Number | Sheet Title |
|---|---|
| C-000 | COVER SHEET |
| C-100 | GENERAL NOTES |
| C-150 | OVERALL PLAN |
| C-200 | DEMOLITION AND EROSION CONTROL PLAN |
| C-201 | DEMOLITION AND EROSION CONTROL PLAN |
| C-220 | EROSION CONTROL DETAILS |
| C-300 | SITE PLAN |
| C-301 | SITE PLAN |
| C-400 | GRADING PLAN |
| C-401 | GRADING PLAN |
| C-402 | PAVING AND DRAINAGE PLAN |
| C-403 | PAVING AND DRAINAGE PLAN |
| ~~C-405~~ | ~~DRAINAGE PROFILE~~ |
| ~~C-407~~ | ~~DRAINAGE PROFILE~~ |
| ~~C-406~~ | ~~DRAINAGE PROFILE~~ |
| ~~C-450~~ | ~~PAVING GRADING AND DRAINAGE DETAILS~~ |
| ~~C-451~~ | ~~PAVING GRADING AND DRAINAGE DETAILS~~ |
| C-500 | UTILITY PLAN |
| C-501 | UTILITY PLAN |
| ~~C-510~~ | ~~UTILITY PROFILE~~ |
| C-550 | UTILITY DETAILS |
| ~~C-551~~ | ~~UTILITY DETAILS~~ |
| C-600 | TRUCK MOVEMENT PLAN |
| ~~LS-1~~ | ~~LIFT STATION PLAN~~ |
| ~~SLC-01~~ | ~~SITE LIGHTING PLAN~~ |

STRIKETHROUGH NOTE:

THE STRIKETHROUGHS ABOVE INDICATE SHEETS THAT WILL BE INCLUDED DURING THE CSP PHASE, BUT ARE NOT PART OF THIS CURRENT APPLICATION

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE.

**Always call 811 two full business days before you dig to have underground utilities located and marked.**

Sunshine811.com

| No. | REVISIONS | DATE | BY |
|---|---|---|---|
| 3 | ADDED GAS MAIN FOR THE SITE | 12/18/2024 | TPC |
| 2 | REVISED LIFT STATION TO CITY REQUIREMENTS | 12/18/2024 | TPC |
| 1 | ADDED BUILDING FOOTPRINTS AND DRIVEWAYS | 12/18/2024 | TPC |

Kimley»Horn
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
445 24TH STREET, SUITE 200, VERO BEACH, FL 32960
PHONE: 772-794-4100
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

MACKENZIE CERJAN LICENSE No. 90545 STATE OF FLORIDA PROFESSIONAL ENGINEER
2/6/2025

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MACKENZIE CERJAN ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

KHA PROJECT 147864008
DATE 8/7/2024
SCALE AS SHOWN
DESIGNED BY ---
DRAWN BY ---
CHECKED BY ---

# COVER SHEET

# 4101 GOLDEN GEM RESIDENTIAL

PREPARED FOR
DOUBLE B DEVELOPMENT FL
APOPKA

SHEET NUMBER
C-000



Plotted By:DeArmas, Moises Sheet Set:4101 GOLDEN GEM RESIDENTIAL Layout:C-000 COVER SHEET February 06, 2025 04:52:27pm K:\VRB_LDE\147864008 - 4101 Golden Gem Res\CADD\PlanSheets\C-000 COVER SHEET.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

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Plotted By:DeArmas, Moises Sheet Set:4101 GOLDEN GEM RESIDENTIAL Layout:C-100 GENERAL NOTES February 06, 2025 04:52:39pm K:\VRB_LDEV\147864008 - 4101 Golden Gem Resi\CADD\PlanSheets\C-100 GENERAL NOTES.dwg

## GENERAL CONSTRUCTION NOTES

1. THE CONTRACTOR AND SUBCONTRACTORS SHALL OBTAIN A COPY OF THE FLORIDA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" (LATEST EDITION) AND BECOME FAMILIAR WITH THE CONTENTS PRIOR TO COMMENCING WORK, AND, UNLESS OTHERWISE NOTED, ALL WORK SHALL CONFORM AS APPLICABLE TO THESE STANDARDS AND SPECIFICATIONS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ALL MATERIAL AND LABOR TO CONSTRUCT THE FACILITY AS SHOWN AND DESCRIBED IN THE CONSTRUCTION DOCUMENTS IN ACCORDANCE WITH THE APPROPRIATE APPROVING AUTHORITIES, SPECIFICATIONS AND REQUIREMENTS. CONTRACTOR SHALL CLEAR AND GRUB ALL AREAS UNLESS OTHERWISE INDICATED, REMOVING TREES, STUMPS, ROOTS, MUCK, EXISTING PAVEMENT AND ALL OTHER DELETERIOUS MATERIAL.
3. EXISTING UTILITIES SHOWN ARE LOCATED ACCORDING TO THE INFORMATION AVAILABLE TO THE ENGINEER AT THE TIME OF THE TOPOGRAPHIC SURVEY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR THE ENGINEER. GUARANTEE IS NOT MADE THAT ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN OR THAT THE LOCATION OF THOSE SHOWN ARE ENTIRELY ACCURATE. FINDING THE ACTUAL LOCATION OF ANY EXISTING UTILITIES IS THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE DONE BEFORE COMMENCING ANY WORK IN THE VICINITY. FURTHERMORE, THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES DUE TO THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE OWNER OR ENGINEER WILL ASSUME NO LIABILITY FOR ANY DAMAGES SUSTAINED OR COST INCURRED BECAUSE OF THE OPERATIONS IN THE VICINITY OF EXISTING UTILITIES OR STRUCTURES, NOR FOR TEMPORARY BRACING AND SHORING OF SAME. IF IT IS NECESSARY TO SHORE, BRACE, SWING OR RELOCATE A UTILITY, THE UTILITY COMPANY OR DEPARTMENT AFFECTED SHALL BE CONTACTED AND THEIR PERMISSION OBTAINED REGARDING THE METHOD TO USE FOR SUCH WORK.
4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES WHICH MAY HAVE BURIED OR AERIAL UTILITIES WITHIN OR NEAR THE CONSTRUCTION AREA BEFORE COMMENCING WORK. THE CONTRACTOR SHALL PROVIDE 48 HOURS MINIMUM NOTICE TO ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION. AN APPROXIMATE LIST OF THE UTILITY COMPANIES WHICH THE CONTRACTOR MUST CALL BEFORE COMMENCING WORK IS PROVIDED ON THE COVER SHEET OF THESE CONSTRUCTION PLANS. THIS LIST SERVES AS A GUIDE ONLY AND IS NOT INTENDED TO LIMIT THE UTILITY COMPANIES WHICH THE CONTRACTOR MAY WISH TO NOTIFY.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED CONSTRUCTION PERMITS AND BONDS IF REQUIRED PRIOR TO CONSTRUCTION.
6. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES ONE COPY OF THE CONSTRUCTION DOCUMENTS INCLUDING PLANS, SPECIFICATIONS, GEOTECHNICAL REPORT AND SPECIAL CONDITIONS AND COPIES OF ANY REQUIRED CONSTRUCTION PERMITS.
7. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL OF THE OWNER AND NOTIFICATION TO THE ENGINEER.
8. ALL COPIES OF COMPACTION, CONCRETE AND OTHER REQUIRED TEST RESULTS ARE TO BE SENT TO THE OWNER AND DESIGN ENGINEER OF RECORD DIRECTLY FROM THE TESTING AGENCY.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING TO THE ENGINEER A CERTIFIED RECORD SURVEY SIGNED AND SEALED BY A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA DEPICTING THE ACTUAL FIELD LOCATION OF ALL CONSTRUCTED IMPROVEMENTS THAT ARE REQUIRED BY THE JURISDICTIONAL AGENCIES FOR THE CERTIFICATION PROCESS. ALL SURVEY COSTS WILL BE THE CONTRACTORS RESPONSIBILITY.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DOCUMENTING AND MAINTAINING AS-BUILT INFORMATION WHICH SHALL BE RECORDED AS CONSTRUCTION PROGRESSES OR AT THE COMPLETION OF APPROPRIATE CONSTRUCTION INTERVALS AND SHALL BE RESPONSIBLE FOR PROVIDING AS-BUILT DRAWINGS TO THE OWNER FOR THE PURPOSE OF CERTIFICATION TO JURISDICTIONAL AGENCIES AS REQUIRED. ALL AS-BUILT DATA SHALL BE COLLECTED BY A STATE OF FLORIDA PROFESSIONAL LAND SURVEYOR WHOSE SERVICES ARE ENGAGED BY THE CONTRACTOR.
11. ANY WELLS DISCOVERED ON SITE THAT WILL HAVE NO USE MUST BE PLUGGED BY A LICENSED WELL DRILLING CONTRACTOR IN A MANNER APPROVED BY ALL JURISDICTIONAL AGENCIES. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY WELL ABANDONMENT PERMITS REQUIRED.
12. ANY WELL DISCOVERED DURING EARTH MOVING OR EXCAVATION SHALL BE REPORTED TO THE APPROPRIATE JURISDICTIONAL AGENCIES WITHIN 24 HOURS AFTER DISCOVERY IS MADE.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS DO NOT CONFLICT WITH ANY KNOWN EXISTING OR OTHER PROPOSED IMPROVEMENTS. IF ANY CONFLICTS ARE DISCOVERED, THE CONTRACTOR SHALL NOTIFY THE OWNER PRIOR TO INSTALLATION OF ANY PORTION OF THE SITE WORK THAT WOULD BE AFFECTED. FAILURE TO NOTIFY OWNER OF AN IDENTIFIABLE CONFLICT PRIOR TO PROCEEDING WITH INSTALLATION RELIEVES OWNER OF ANY OBLIGATION TO PAY FOR A RELATED CHANGE ORDER.

## DEMOLITION NOTES

1. ALL MATERIAL REMOVED FROM THIS SITE BY THE CONTRACTOR SHALL BE DISPOSED OF BY THE CONTRACTOR IN A LEGAL MANNER.
2. REFER TO THE TOPOGRAPHIC SURVEY FOR ADDITIONAL DETAILS OF EXISTING STRUCTURES, ETC., LOCATED WITHIN THE PROJECT SITE. UNLESS OTHERWISE NOTED, ALL EXISTING BUILDINGS, STRUCTURES, SLABS, CONCRETE, ASPHALT, DEBRIS PILES, SIGNS, AND ALL APPURTENANCES ARE TO BE REMOVED FROM THE SITE BY THE CONTRACTOR AND PROPERLY DISPOSED OF IN A LEGAL MANNER AS PART OF THIS CONTRACT. SOME ITEMS TO BE REMOVED MAY NOT BE DEPICTED ON THE TOPOGRAPHIC SURVEY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE AND DETERMINE THE FULL EXTENT OF ITEMS TO BE REMOVED. IF ANY ITEMS ARE IN QUESTION, THE CONTRACTOR SHALL CONTACT THE OWNER PRIOR TO REMOVAL OF SAID ITEMS.
3. THE CONTRACTOR SHALL REFER TO THE DEMOLITION PLAN AND TREE INVENTORY PLAN FOR DEMOLITION/PRESERVATION OF EXISTING TREES. ALL TREES NOT SPECIFICALLY SHOWN TO BE PRESERVED OR RELOCATED SHALL BE REMOVED AS A PART OF THIS CONTRACT. TREE PROTECTION FENCING SHALL BE INSTALLED PRIOR TO ANY DEMOLITION.
4. CONTRACTOR SHALL ADJUST GRADE OF ANY EXISTING UTILITIES TO REMAIN.

## PAVING, GRADING AND DRAINAGE NOTES

1. ALL PAVING, CONSTRUCTION, MATERIALS, AND WORKMANSHIP WITHIN JURISDICTION'S RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH LOCAL OR COUNTY SPECIFICATIONS AND STANDARDS (LATEST EDITION) OR FDOT SPECIFICATIONS AND STANDARDS (LATEST EDITION) IF NOT COVERED BY LOCAL OR COUNTY REGULATIONS.
2. ALL UNPAVED AREAS IN EXISTING RIGHTS-OF-WAY DISTURBED BY CONSTRUCTION SHALL BE REGRADED AND SODDED.
3. TRAFFIC CONTROL ON ALL FDOT, LOCAL AND COUNTY RIGHTS-OF-WAY SHALL MEET THE REQUIREMENTS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (U.S. DOT/FHA) AND THE REQUIREMENTS OF THE STATE AND ANY LOCAL AGENCY HAVING JURISDICTION. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
4. THE CONTRACTOR SHALL GRADE THE SITE TO THE ELEVATIONS INDICATED AND SHALL REGRADE WASHOUTS WHERE THEY OCCUR AFTER EVERY RAINFALL UNTIL A GRASS STAND IS WELL ESTABLISHED OR ADEQUATE STABILIZATION OCCURS.
5. ALL OPEN AREAS WITHIN THE PROJECT SITE SHALL BE SODDED UNLESS INDICATED OTHERWISE ON THE LANDSCAPE PLAN.
6. ALL AREAS INDICATED AS PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TYPICAL PAVEMENT SECTIONS AS INDICATED ON THE DRAWINGS.
7. WHERE EXISTING PAVEMENT IS INDICATED TO BE REMOVED AND REPLACED, THE CONTRACTOR SHALL SAW CUT A MINIMUM 2" DEEP FOR A SMOOTH AND STRAIGHT JOINT AND REPLACE THE PAVEMENT WITH THE SAME TYPE AND DEPTH OF MATERIAL AS EXISTING OR AS INDICATED.
8. WHERE NEW PAVEMENT MEETS THE EXISTING PAVEMENT, THE CONTRACTOR SHALL SAW CUT THE EXISTING PAVEMENT A MINIMUM 2" DEEP FOR A SMOOTH AND STRAIGHT JOINT AND MATCH THE EXISTING PAVEMENT ELEVATION WITH THE PROPOSED PAVEMENT UNLESS OTHERWISE INDICATED.
9. THE CONTRACTOR SHALL INSTALL FILTER FABRIC OVER ALL DRAINAGE STRUCTURES FOR THE DURATION OF CONSTRUCTION AND UNTIL ACCEPTANCE OF THE PROJECT BY THE OWNER. ALL DRAINAGE STRUCTURES SHALL BE CLEANED OF DEBRIS AS REQUIRED DURING AND AT THE END OF CONSTRUCTION TO PROVIDE POSITIVE DRAINAGE FLOWS.
10. IF DEWATERING IS REQUIRED, THE CONTRACTOR SHALL OBTAIN ANY APPLICABLE REQUIRED PERMITS. THE CONTRACTOR IS TO COORDINATE WITH THE OWNER AND THE DESIGN ENGINEER PRIOR TO ANY EXCAVATION.
11. STRIP TOPSOIL AND ORGANIC MATTER FROM ALL AREAS OF THE SITE AS REQUIRED. IN SOME CASES TOPSOIL MAY BE STOCKPILED ON SITE FOR PLACEMENT WITHIN LANDSCAPED AREAS BUT ONLY AS DIRECTED BY THE OWNER.
12. FIELD DENSITY TESTS SHALL BE TAKEN AT INTERVALS IN ACCORDANCE WITH THE LOCAL JURISDICTIONAL AGENCY OR TO FDOT STANDARDS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
13. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED AS PER PLANS. THE AREAS SHALL THEN BE SODDED OR SEEDED AS SPECIFIED IN THE PLANS, FERTILIZED, MULCHED, WATERED AND MAINTAINED UNTIL HARDY GRASS GROWTH IS ESTABLISHED IN ALL AREAS. ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE JOB SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. ALL EARTHEN AREAS WILL BE SODDED OR SEEDED AND MULCHED AS SHOWN ON THE LANDSCAPING PLAN.
14. ALL CUT OR FILL SLOPES SHALL BE 4 (HORIZONTAL) :1 (VERTICAL) OR FLATTER UNLESS OTHERWISE SHOWN.
15. THE CONTRACTOR SHALL TAKE ALL REQUIRED MEASURES TO CONTROL TURBIDITY, INCLUDING BUT NOT LIMITED TO THE INSTALLATION OF TURBIDITY BARRIERS AT ALL LOCATIONS WHERE THE POSSIBILITY OF TRANSFERRING SUSPENDED SOLIDS INTO THE RECEIVING WATER BODY EXISTS DUE TO THE PROPOSED WORK. TURBIDITY BARRIERS MUST BE MAINTAINED IN EFFECTIVE CONDITION AT ALL LOCATIONS UNTIL CONSTRUCTION IS COMPLETED AND DISTURBED SOIL AREAS ARE STABILIZED. THEREAFTER, THE CONTRACTOR MUST REMOVE THE BARRIERS. AT NO TIME SHALL THERE BE ANY OFF-SITE DISCHARGE WHICH VIOLATES THE WATER QUALITY STANDARDS IN CHAPTER 17-302, FLORIDA ADMINISTRATIVE CODE.
16. SOD, WHERE CALLED FOR, MUST BE INSTALLED AND MAINTAINED ON EXPOSED SLOPES WITHIN 48 HOURS OF COMPLETING FINAL GRADING, AND AT ANY OTHER TIME AS NECESSARY, TO PREVENT EROSION, SEDIMENTATION OR TURBID DISCHARGES.
17. THE CONTRACTOR MUST REVIEW AND MAINTAIN A COPY OF THE ENVIRONMENTAL RESOURCE PERMIT COMPLETE WITH ALL CONDITIONS, ATTACHMENTS, EXHIBITS, AND PERMIT MODIFICATIONS IN GOOD CONDITION AT THE CONSTRUCTION SITE. THE COMPLETE PERMIT MUST BE AVAILABLE FOR REVIEW UPON REQUEST BY WATER MANAGEMENT DISTRICT REPRESENTATIVES.
18. THE CONTRACTOR SHALL ENSURE THAT ISLAND PLANTING AREAS AND OTHER PLANTING AREAS ARE NOT COMPACTED AND DO NOT CONTAIN ROAD BASE MATERIALS. THE CONTRACTOR SHALL ALSO EXCAVATE AND REMOVE ALL UNDESIRABLE MATERIAL FROM ALL AREAS ON THE SITE TO BE PLANTED AND PROPERLY DISPOSED OF IN A LEGAL MANNER.
19. THE CONTRACTOR SHALL INSTALL ALL UNDERGROUND STORM WATER PIPING PER MANUFACTURER'S RECOMMENDATIONS.

## RECORD DRAWINGS

1. CONTRACTOR SHALL PROVIDE TO THE ENGINEER AND OWNER A MINIMUM OF 2 HARD COPIES OF A PAVING, GRADING AND DRAINAGE RECORD DRAWING AND A SEPARATE UTILITY RECORD DRAWING, AS WELL AS BOTH IN AUTOCAD 2007 OR LATER, BOTH PREPARED BY A FLORIDA REGISTERED SURVEYOR. THE RECORD DRAWINGS SHALL VERIFY ALL DESIGN INFORMATION INCLUDED ON THE DESIGN PLANS OF THE SAME NAME.

## WATER AND SEWER UTILITY NOTES

1. THE CONTRACTOR SHALL CONSTRUCT GRAVITY SEWER LATERALS, MANHOLES GRAVITY SEWER LINES AND DOMESTIC WATER AND FIRE PROTECTION SYSTEM AS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL FURNISH ALL NECESSARY MATERIALS, EQUIPMENT, MACHINERY, TOOLS, MEANS OF TRANSPORTATION AND LABOR NECESSARY TO COMPLETE THE WORK IN FULL AND COMPLETE ACCORDANCE WITH THE SHOWN, DESCRIBED AND REASONABLY INTENDED REQUIREMENTS OF THE CONTRACT DOCUMENTS AND JURISDICTIONAL AGENCY REQUIREMENTS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
2. ALL EXISTING UNDERGROUND UTILITY LOCATIONS SHOWN ARE APPROXIMATE THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS FOR UTILITY LOCATION AND COORDINATION IN ACCORDANCE WITH THE NOTES CONTAINED IN THE GENERAL CONSTRUCTION SECTION OF THIS SHEET.
3. THE CONTRACTOR SHALL RESTORE ALL DISTURBED VEGETATION IN KIND, UNLESS SHOWN OTHERWISE.
4. DEFLECTION OF PIPE JOINTS AND CURVATURE OF PIPE SHALL NOT EXCEED THE MANUFACTURER'S SPECIFICATIONS. SECURELY CLOSE ALL OPEN ENDS OF PIPE AND FITTINGS WITH A WATERTIGHT PLUG WHEN WORK IS NOT IN PROGRESS. THE INTERIOR OF ALL PIPES SHALL BE CLEAN AND JOINT SURFACES WIPED CLEAN AND DRY AFTER THE PIPE HAS BEEN LOWERED INTO THE TRENCH. VALVES SHALL BE PLUMB AND LOCATED ACCORDING TO THE PLANS.
5. ALL PHASES OF INSTALLATION, INCLUDING UNLOADING, TRENCHING, LAYING AND BACK FILLING, SHALL BE DONE IN A FIRST CLASS WORKMANLIKE MANNER. ALL PIPE AND FITTINGS SHALL BE CAREFULLY STORED FOLLOWING MANUFACTURER'S RECOMMENDATIONS. CARE SHALL BE TAKEN TO AVOID DAMAGE TO THE COATING OR LINING IN ANY D.I. PIPE FITTINGS. ANY PIPE OR FITTING WHICH IS DAMAGED OR WHICH HAS FLAWS OR IMPERFECTIONS WHICH, IN THE OPINION OF THE ENGINEER OR OWNER, RENDERS IT UNFIT FOR USE, SHALL NOT BE USED. ANY PIPE NOT SATISFACTORY FOR USE SHALL BE CLEARLY MARKED AND IMMEDIATELY REMOVED FROM THE JOB SITE, AND SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
6. WATER FOR FIRE FIGHTING SHALL BE AVAILABLE FOR USE PRIOR TO COMBUSTIBLES BEING BROUGHT ON SITE.
7. ALL UTILITY AND STORM DRAIN TRENCHES LOCATED UNDER AREAS TO RECEIVE PAVING SHALL BE COMPLETELY BACK FILLED IN ACCORDANCE WITH THE GOVERNING JURISDICTIONAL AGENCY'S SPECIFICATIONS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
8. UNDERGROUND LINES SHALL BE SURVEYED BY A STATE OF FLORIDA PROFESSIONAL LAND SURVEYOR PRIOR TO BACK FILLING.
9. CONTRACTOR SHALL PERFORM, AT HIS OWN EXPENSE, ANY AND ALL TESTS REQUIRED BY THE SPECIFICATIONS AND/OR ANY AGENCY HAVING JURISDICTION. THESE TESTS MAY INCLUDE, BUT MAY NOT BE LIMITED TO, INFILTRATION AND EXFILTRATION, TELEVISION INSPECTION AND A MANDREL TEST ON GRAVITY SEWER. A COPY OF THE TEST RESULTS SHALL BE PROVIDED TO THE UTILITY PROVIDER, OWNER AND JURISDICTIONAL AGENCY AS REQUIRED.

## EROSION CONTROL NOTES

1. THE STORM WATER POLLUTION PREVENTION PLAN ("SWPPP") IS COMPRISED OF THIS EROSION CONTROL PLAN, THE STANDARD DETAILS, THE PLAN NARRATIVE, ATTACHMENTS INCLUDED IN SPECIFICATIONS OF THE SWPPP, PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.
2. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORM WATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN AND THE STATE OF FLORIDA NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERIC PERMIT (NPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.
3. THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST TO THE OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
4. BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY THE PERMITTING AGENCY OR OWNER.
5. EROSION CONTROL PLAN MUST CLEARLY DELINEATE ALL STATE WATERS. PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS MUST BE MAINTAINED ON SITE AT ALL TIMES.
6. THE CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERIC PERMIT.
7. CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES.
8. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.
9. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING AND SCATTERING IN THE AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING OR OTHER SUITABLE METHODS OF CONTROL. THE CONTRACTOR SHALL COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
11. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORM WATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
12. ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THE PLAN, SHALL BE INITIATED AS SOON AS PRACTICABLE.

## EROSION CONTROL NOTES (CONT.)

13. STABILIZATION PRACTICES SHOULD BE INITIATED AS SOON AS PRACTICAL, BUT IN NO CASE MORE THAN 7 DAYS WHERE CONSTRUCTION HAS TEMPORARILY CEASED.
14. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENTLY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 7 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRED IN THESE AREAS. REFER TO SECTION 981 OF THE STANDARD SPECIFICATIONS FOR SEEDING AND MAINTENANCE REQUIREMENTS.
15. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE.
16. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED AS SOON AS POSSIBLE.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING SEDIMENT IN THE DETENTION POND AND ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.
18. ON-SITE & OFF SITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE EROSION CONTROL PLAN AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.
19. SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.
20. DUE TO GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL MEASURES (SILT FENCES, ETC.) TO PREVENT EROSION.
21. ALL CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH WORKING DAY, THIS INCLUDES BACK FILLING OF TRENCHES FOR UTILITY CONSTRUCTION.

## MAINTENANCE

ALL MEASURES STATED ON THE EROSION AND SEDIMENT CONTROL PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A 0.5" RAINFALL EVENT, AND CLEANED AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

1. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING, OR DETERIORATION.
2. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED AND RESEEDED AS NEEDED. FOR MAINTENANCE REQUIREMENTS REFER THE STANDARD SPECIFICATIONS.
3. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-HALF THE HEIGHT OF THE SILT FENCE.
4. THE CONSTRUCTION ENTRANCE(S) SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION ENTRANCES AS CONDITIONS DEMAND.
5. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AS CONDITIONS DEMAND.
6. OUTLET STRUCTURES, IF APPLICABLE, IN THE SEDIMENTATION BASINS SHALL BE MAINTAINED IN OPERATIONAL CONDITIONS AT ALL TIMES. SEDIMENT SHALL BE REMOVED FROM SEDIMENT BASINS OR TRAPS WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY 55 CUBIC YARDS / ACRE.
7. ALL MAINTENANCE OPERATIONS SHALL BE DONE IN A TIMELY MANNER BUT IN NO CASE LATER THAN 2 CALENDAR DAYS FOLLOWING THE INSPECTION.

## TYPICAL ENGINEER OBSERVATIONS

CONTRACTOR SHALL NOTIFY ENGINEER 48 HOURS IN ADVANCE OF THE FOLLOWING ACTIVITIES:

- PRE-CONSTRUCTION MEETING
- SUBGRADE PREPARATION
- BASE INSTALLATION
- ASPHALT INSTALLATION
- UNDERGROUND PIPING AND UTILTIES INSTALLATION
- INSTALLATION OF STRUCTURES, DDCV, HYDRANTS, METERS, ETC.
- SIDEWALK INSTALLATION
- CONNECTIONS TO WATER AND SEWER MAINS
- TESTS OF UTILITIES

## 3RD PARTY TEST REPORTS REQ'D

TEST REPORTS REQUIRED FOR CLOSE OUT INCLUDE, BUT ARE NOT LIMITED TO:

- DENSITY TEST REPORTS
- BACTERIOLOGICAL TESTS OF WATER SYSTEM
- PRESSURE TEST OF WATER/SEWER
- LEAK TESTS ON SEWER SYSTEM AND GREASE TRAPS
- ANY OTHER TESTING REQUIRED BY THE AGENCY

| No. | REVISIONS | DATE | BY |
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Kimley»Horn

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445 24TH STREET, SUITE 200, VERO BEACH, FL 32960
PHONE: 772-794-4100
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

MACKENZIE CERJAN LICENSE No. 90545 STATE OF FLORIDA PROFESSIONAL ENGINEER
2/6/2025

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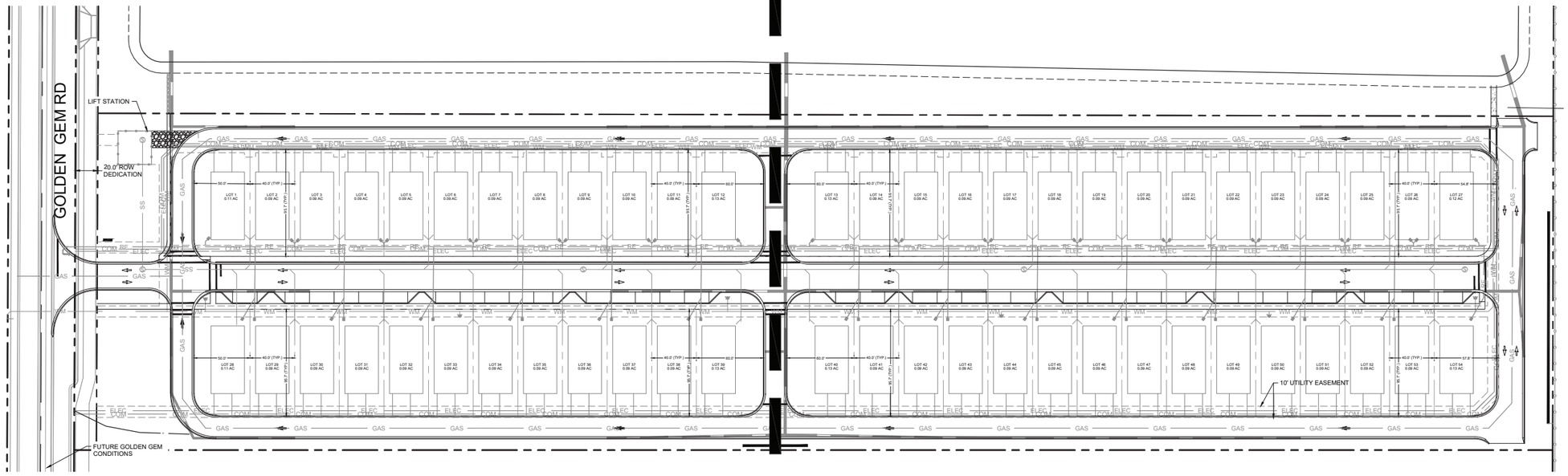
GENERAL NOTES

4101 GOLDEN GEM RESIDENTIAL
PREPARED FOR
DOUBLE B DEVELOPMENT FL
APOPKA

SHEET NUMBER
C-100




MATCHLINE: C-200 - DEMOLITION AND EROSION CONTROL PLAN
C-300 - SITE PLAN
C-400 - GRADING PLAN
C-402 - PAVING AND DRAINAGE PLAN
C-500 - UTILITY PLAN
C-600 - TRUCK MOVEMENT PLAN

MATCHLINE: C-201 - DEMOLITION AND EROSION CONTROL PLAN
C-301 - SITE PLAN
C-401 - GRADING PLAN
C-403 - PAVING AND DRAINAGE PLAN
C-501 - UTILITY PLAN

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| DESIGNED BY | ### |
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| CHECKED BY | ### |

# OVERALL PLAN

# 4101 GOLDEN GEM RESIDENTIAL
PREPARED FOR
DOUBLE B DEVELOPMENT
APOPKA FL

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE.

Always call 811 two full business days before you dig to have underground utilities located and marked.

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SHEET NUMBER
C-150



Plotted By:DeArmas, Moises Sheet Set:4101 GOLDEN GEM RESIDENTIAL Layout:C-150 OVERALL PLAN February 06, 2025 04:53:16pm K:\VRB_LDEV\147864008 — 4101 Golden Gem Res\CADD\PlanSheets\C-150 OVERALL PLAN.dwg
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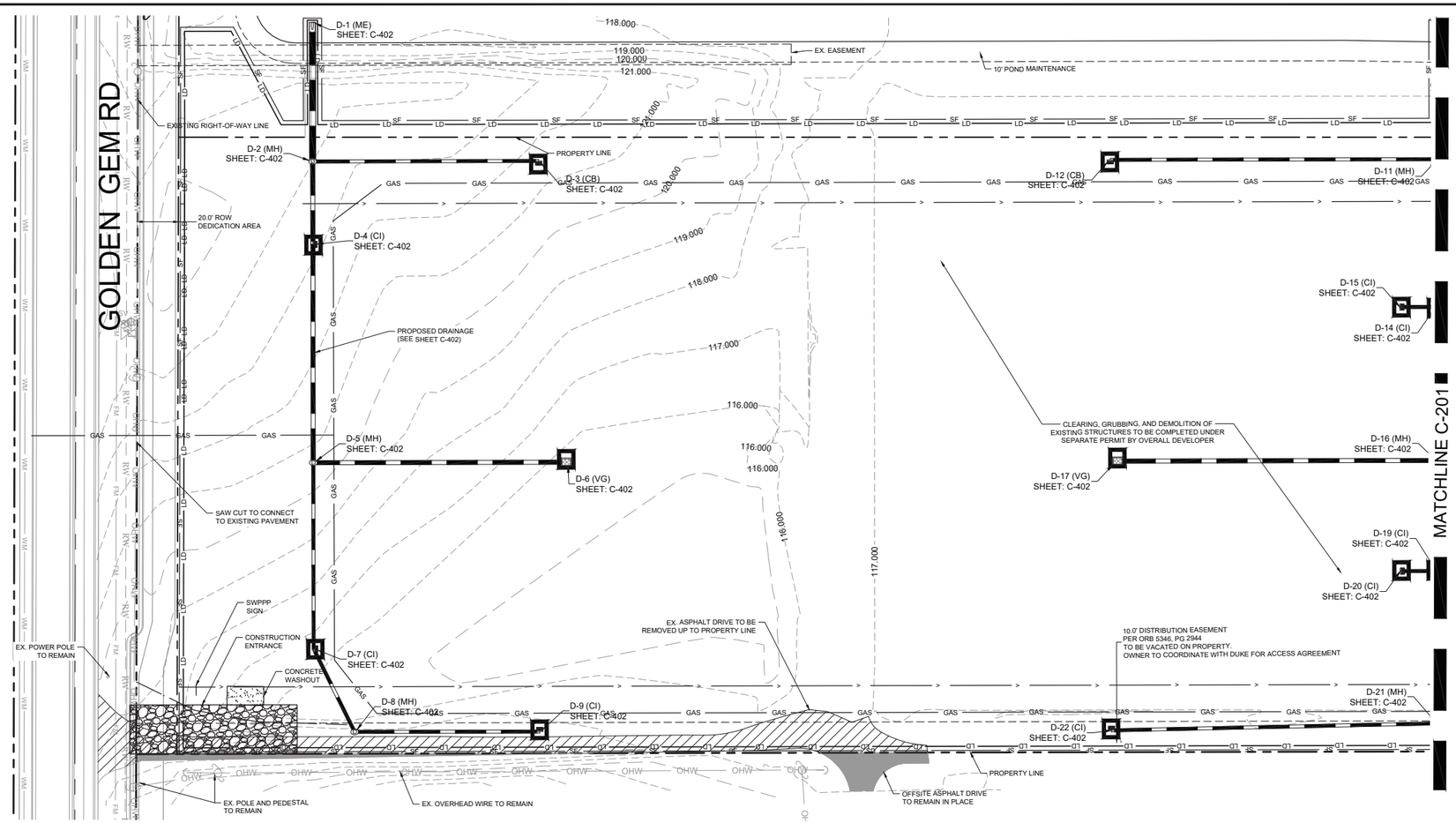


## LEGEND

- PROPERTY LINE
- EXISTING WATERMAIN
- EXISTING SANITARY SEWER
- EXISTING DRAINAGE
- EXISTING FORCE MAIN
- EXISTING RECLAIMED WATER
- EXISTING OVERHEAD WIRE
- LIMITS OF DISTURBANCE
- SILT FENCE/TREE PROTECTION FENCE
- SILT DIKE
- TEMPORARY WINDROW
- CURB TO REMAIN
- SWPPP INFORMATION SIGN
- CONSTRUCTION ENTRANCE
- INLET PROTECTION

| ACREAGE SUMMARY | |
|---|---|
| TOTAL PROJECT AREA | 9.01 AC |
| ON-SITE DISTURBED AREA | 9.01 AC |
| OFF-SITE DISTURBED AREA | 0.93 AC |
| TOTAL DISTURBED AREA | 9.94 AC |
| IMPERVIOUS AREA AT COMPLETION | 5.17 AC |
| PERVIOUS / SEEDED AREA AT COMPLETION | 3.84 AC |

NOTES:

1. CONTRACTOR TO CONSIDER DEWATERING ACTIVITIES WHEN PREPARING BID DOCUMENTS FOR THIS PROJECT.
2. CONTRACTOR SHALL OBTAIN ANY NECESSARY DEWATERING PERMITS AS SITE CONDITIONS AND CONSTRUCTION ACTIVITIES REQUIRE.
3. CONTRACTOR TO USE BEST MANAGEMENT PRACTICES TO ENSURE COMPLIANCE WITH NPDES AND WATER MANAGEMENT DISTRICT REGULATIONS FOR STORMWATER DISCHARGE FROM CONSTRUCTION ACTIVITIES AND DEWATERING OPERATIONS.

SITE PREPARATION SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL INVESTIGATION

SOIL EROSION/SEDIMENTATION CONTROL OPERATION TIME SCHEDULE

NOTE: GENERAL CONTRACTOR TO COMPLETE TABLE WITH THEIR SPECIFIC PROJECT SCHEDULE

| CONSTRUCTION SEQUENCE | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TEMPORARY CONSTRUCTION EXITS | | | | | | | | | | | | | | | | | | | | | | | | |
| TEMPORARY CONTROL MEASURES | | | | | | | | | | | | | | | | | | | | | | | | |
| SEDIMENT CONTROL BASINS | | | | | | | | | | | | | | | | | | | | | | | | |
| STRIP & STOCKPILE TOPSOIL | | | | | | | | | | | | | | | | | | | | | | | | |
| ROUGH GRADE | | | | | | | | | | | | | | | | | | | | | | | | |
| STORM FACILITIES | | | | | | | | | | | | | | | | | | | | | | | | |
| SITE CONSTRUCTION | | | | | | | | | | | | | | | | | | | | | | | | |
| PERMANENT CONTROL STRUCTURES | | | | | | | | | | | | | | | | | | | | | | | | |
| FOUNDATION / BUILDING CONSTRUCTION | | | | | | | | | | | | | | | | | | | | | | | | |
| FINISH GRADING | | | | | | | | | | | | | | | | | | | | | | | | |
| LANDSCAPING/SEED/FINAL STABILIZATION | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |

## SEQUENCE OF CONSTRUCTION

UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: TRAILER, PARKING, LAYDOWN, PORTA-POTTY, WHEEL WASH, CONCRETE WASHOUT, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC., IMMEDIATELY DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN LOCATION AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS.

PHASE 1:

1. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE (1) AND INSTALL SILT FENCE.
2. CONSTRUCT AND STABILIZE SEDIMENT BASIN AND DRAINAGE SWALES WITH APPROPRIATE OUTFALL STRUCTURES (CLEARLY ONLY THOSE AREAS NECESSARY TO INSTALL CONTROL DEVICES LISTED ABOVE).
3. INSTALL INLET PROTECTION AT EXISTING INLET(S).
4. INSTALL AND STABILIZE ANY NECESSARY HYDRAULIC CONTROL STRUCTURES (DIKES, CHECK DAMS, OUTLET TRAPS, RISER PIPE DISCHARGE POINT, ETC.)
5. PREPARE CLEARING AND GRUBBING OF THE SITE IF, APPLICABLE.

HALT ALL ACTIVITIES AND CONTACT THE CONSULTANT TO PERFORM INSPECTION AND CERTIFICATION OF BMPS. GENERAL CONTRACTOR SHALL SCHEDULE AND CONDUCT STORM WATER PRE-CONSTRUCTION MEETING WITH CONSULTANT AND ALL GROUND-DISTURBING CONTRACTORS BEFORE PROCEEDING WITH CONSTRUCTION.

PHASE 2:

6. ROUGH GRADE TO ESTABLISH PROPOSED DRAINAGE PATTERNS.
7. START CONSTRUCTION OF THE BUILDING PAD AND STRUCTURES.
8. TEMPORARILY SEED WITH PURE LIVE SEED, THROUGHOUT CONSTRUCTION, DISTURBED AREAS THAT WILL BE INACTIVE FOR 7 DAYS OR MORE OR AS REQUIRED BY GENERIC PERMIT.

CONTRACTOR TO BE RESPONSIBLE FOR OBTAINING ALL DEWATERING PERMITS NECESSARY FOR CONSTRUCTION

MAINTENANCE

ALL MEASURES STATED ON THIS SITE MAP, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

1. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.
2. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RESEEDED AS NEEDED.
3. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-HALF THE HEIGHT OF THE SILT FENCE.
4. THE CONSTRUCTION EXITS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION EXITS AS CONDITIONS DEMAND.
5. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AREA AS CONDITIONS DEMAND.

## DEMOLITION NOTES:

1. THE INTENT OF THE DEMOLITION PLAN IS TO DEPICT EXISTING FEATURES THAT ENCUMBER THE PROPOSED CONSTRUCTION AREA AND ARE SCHEDULED FOR REMOVAL. SOME INCIDENTAL ITEMS MAY HAVE BEEN INADVERTENTLY OMITTED FROM THE PLAN. THE CONTRACTOR IS ENCOURAGED TO THOROUGHLY INSPECT THE SITE AS WELL AS REVIEW THE PLANS AND SPECIFICATIONS PRIOR TO SUBMITTING PRICING. CONTRACTOR WILL NOT RECEIVE ADDITIONAL COMPENSATION FOR INCIDENTAL ITEMS NOT SHOWN ON THIS DEMOLITION PLAN.
2. THIS DEMOLITION PLAN IS BASED ON AVAILABLE UTILITY INFORMATION AND MAY OR MAY NOT BE ALL INCLUSIVE FOR THIS SITE. ANY UTILITIES ENCOUNTERED DURING DEMOLITION THAT ARE NOT DEPICTED/ADDRESSED ON THIS DRAWING SHOULD BE BROUGHT TO THE ATTENTION OF THE PROJECT ENGINEER IMMEDIATELY.
3. CONTRACTOR IS REQUIRED TO OBTAIN ALL DEMOLITION PERMITS.
4. ALL FEATURES IDENTIFIED ON THIS PLAN WHICH ARE LISTED TO BE DEMOLISHED ARE TO BE REMOVED FROM THE SITE. AFTER DEMOLITION IS COMPLETE THE SITE SHALL BE DELIVERED IN A CONDITION SUITABLE FOR DEVELOPMENT.
5. CONTRACTOR SHALL LIMIT ALL DEMOLITION ACTIVITIES TO THOSE AREAS DELINEATED ON THE CONSTRUCTION DRAWINGS UNLESS OTHERWISE DIRECTED BY THE DEVELOPER OR AS REQUIRED FOR CONSTRUCTION OF IMPROVEMENTS.
6. CONTRACTOR IS RESPONSIBLE FOR CONTROLLING AIRBORNE DUST AND POLLUTANTS BY USING WATER SPRINKLING OR OTHER SUITABLE MEANS OF CONTROL.
7. CONTRACTOR TO USE CARE IN HANDLING DEBRIS FROM SITE TO ENSURE THE SAFETY OF THE PUBLIC. HAUL ROUTE TO BE CLOSELY MONITORED FOR DEBRIS OR MATERIALS TRACKED ONTO ADJOINING ROADWAYS, SIDEWALKS, ETC. ROADWAYS AND WALKWAYS TO BE CLEARED DAILY OR AS NECESSARY TO MAINTAIN PUBLIC SAFETY.
8. DEWATERING SHOULD BE ANTICIPATED AND INCLUDED.
9. ALL ASPHALT TO BE REMOVED SHALL BE SAW CUT ADJACENT TO REMAINING IMPROVEMENTS.
10. WHERE REMAINING, INLETS, MANHOLE COVERS, AND VALVE COVERS TO BE PROTECTED IN PAVEMENT REMOVAL AREAS. CONTRACTOR SHALL REPLACE DAMAGED STRUCTURES AT THEIR EXPENSE.
11. CONTRACTOR SHALL INSTALL A CONTINUOUS SCREENED CONSTRUCTION FENCING ALONG PROJECT BOUNDARY.
12. CONTRACTOR MUST PROTECT THE PUBLIC AT ALL TIMES WITH FENCING, BARRICADES, ENCLOSURES, ETC. AS APPROVED BY ORANGE COUNTY AND CONSTRUCTION MANAGER.
13. CONTINUOUS ACCESS SHALL BE MAINTAINED FOR SURROUNDING PROPERTIES AT ALL TIMES DURING DEMOLITION OF EXISTING FACILITIES AND CONSTRUCTION OF NEW FACILITIES. SIGNAGE SHALL BE POSTED TO DIRECT THE PUBLIC TO THE PATH OF TRAVEL.
14. ELEVATIONS SHOWN HEREON ARE IN THE NORTH AMERICAN VERTICAL DATUM (NAVD) 1988 BASED ON ORANGE COUNTY BENCHMARK L708026, ELEVATION 127.968 (REFER TO SURVEY BY JIM SHANNON DATED 2/21/2023.
15. SEE SHEET C-220 FOR EROSION CONTROL NOTES.

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NORTH

GRAPHIC SCALE IN FEET
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| No. | REVISIONS | DATE | BY |
|---|---|---|---|

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445 24TH STREET, SUITE 200, VERO BEACH, FL 32960
PHONE: 772-794-4100
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

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MACKENZIE CERJAN LICENSE No. 90545 STATE OF FLORIDA ENGINEER PROFESSIONAL
2/6/2025

KHA PROJECT 147864008
DATE 8/7/2024
SCALE AS SHOWN
DESIGNED BY ###
DRAWN BY ###
CHECKED BY ###

# DEMOLITION AND EROSION CONTROL PLAN

# 4101 GOLDEN GEM RESIDENTIAL

PREPARED FOR
DOUBLE B DEVELOPMENT FL
APOPKA

SHEET NUMBER
C-200



Plotted By:DeArmas, Moises Sheet Set:4101 GOLDEN GEM RESIDENTIAL Layout:C-200 DEMOLITION AND EROSION CONTROL PLAN February 06, 2025 04:53:45pm K:\VRB_LDEV\147864008 - 4101 Golden Gem Res\CADD\PlanSheets\C-200 DEMOLITION AND EROSION CONTROL PLAN.dwg
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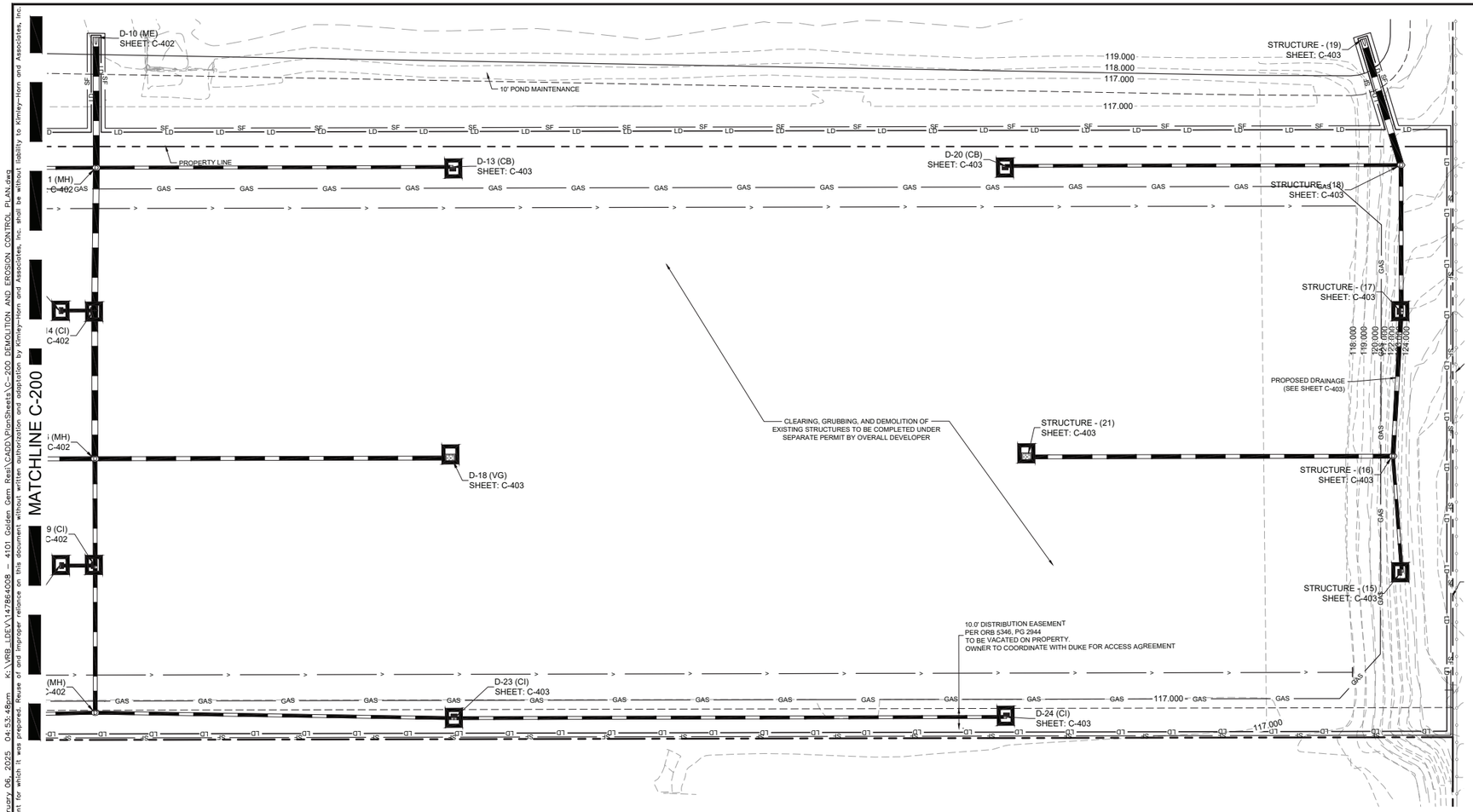


## LEGEND

- PROPERTY LINE
- EXISTING WATERMAIN
- EXISTING SANITARY SEWER
- EXISTING DRAINAGE
- EXISTING FORCE MAIN
- EXISTING RECLAIMED WATER
- EXISTING OVERHEAD WIRE
- LIMITS OF DISTURBANCE
- SILT FENCE/TREE PROTECTION FENCE
- SILT DIKE
- TEMPORARY WINDROW
- CURB TO REMAIN
- SWPPP INFORMATION SIGN
- CONSTRUCTION ENTRANCE
- INLET PROTECTION

NOTES:

1. SEE SHEET C-220 FOR EROSION CONTROL NOTES.
2. SEE SHEET C-200 FOR DEMOLITION NOTES, DEWATERING NOTES, AND SEQUENCE OF CONSTRUCTION.

NORTH

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0 15 30 60

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MACKENZIE CERJAN
LICENSE No. 90545
STATE OF FLORIDA
PROFESSIONAL ENGINEER
2/6/2025

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| DATE | 8/7/2024 |
| SCALE | AS SHOWN |
| DESIGNED BY | ### |
| DRAWN BY | ### |
| CHECKED BY | ### |

# DEMOLITION AND EROSION CONTROL PLAN

# 4101 GOLDEN GEM RESIDENTIAL

PREPARED FOR
DOUBLE B DEVELOPMENT FL
APOPKA

SHEET NUMBER
C-201

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE.

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| | | |
|---|---|---|
| Section 1 | Project Name and location information: | 4101 GOLDEN GEM ROAD APOPKA, FL 32712 |
| Section 2 | Describe the nature of the construction activity: | CONSTRUCTION OF INFRASTRUCTURE FOR NEW SINGLE-FAMILY RESIDENTIAL |
| Section 3 | Describe the intended sequence of major soil disturbing activities: | CONSTRUCTION OF EROSION AND SEDIMENT CONTROLS, GRADING AND CONSTRUCTION OF STORM SEWER |
| Section 4 | Total area of the site: | 9.01 AC. |
| Section 5 | Total area of the site to be disturbed: | 9.01 AC. |
| Section 6 | Existing data describing the soil or quality of any stormwater discharge from the site: | BASED ON THE SOIL SURVEY OF ORANGE COUNTY, FLORIDA, AS PREPARED BY THE U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCE CONSERVATION SERVICE (FORMERLY THE SOIL CONSERVATION SERVICE), THE PROPERTY IS UNDERLAIN BY BROAD AREAS OF SANDY SOILS IDENTIFIED AS VARIANTS OF "CANDLER FINE SANDS". THESE SANDY SOILS ARE COMMONLY FOUND ON KNOLLS AND RIDGES ON MARINE TERRACES. THESE SOILS REPORTEDLY ARE MODERATELY TO STEEPLY SLOPING AND EXCESSIVELY WELL DRAINED. DEPTHS TO GROUNDWATER ARE TYPICALLY MORE THAN 80 INCHES BELOW THE NATURAL GROUND SURFACE FOR MOST OF THE YEAR. |
| Section 7 | Estimate the drainage area size for each discharge point: | DISCHARGE POINT N= 3.01 AC<br>DISCHARGE POINT NW= 3.00 AC<br>DISCHARGE POINT NE= 3.00 AC |
| Section 8 | Latitude and longitude of each discharge point and identify the receiving water or MS4 for each discharge point: | DISCHARGE POINT:<br>WYLD OAKS MASTER DEVELOPMENT SYSTEM<br>LAT: 28°44'59.15"<br>LONG: 81°34'20.75" |
| Section 9 | Give a detailed description of all controls, Best Management Practices (BMPs) and measures that will be implemented at the construction site for each activity identified in the intended sequence of major soil disturbing activities section. Provide time frames in which the controls will be implemented.<br>NOTE: All controls shall be consistent with performance standards for erosion and sediment control and stormwater treatment set forth in s. 62-40.432, F.A.C., the applicable Stormwater or Environmental Resource Permitting requirements of the Department or a Water Management District, and the guidelines contained in the State of Florida Erosion and Sediment Control Designer and Reviewer Manual, FDOT, FDEP, and any subsequent amendments. | |
| | SILT FENCE AND SHALL BE INSTALLED AROUND THE PERIMETER OF THE CONSTRUCTION SITE. | |
| Section 10 | Describe all temporary and permanent stabilization practices. Stabilization practices include temporary seeding, mulching, permanent seeding, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, vegetative preservations, etc. | |
| | THE PERIMETER SILT FENCE SHALL BE MAINTAINED AROUND THE ENTIRE PROJECT SITE UNTIL LANDSCAPE HAS BEEN INSTALLED. | |
| Section 11 | Describe all structural controls to be implemented to divert stormwater flow from exposed soils and structural practices to store flows, retain sediment on-site or in any other way limit stormwater runoff. These controls include silt fences, earth dikes, diversions, swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, coagulating agents and temporary or permanent sediment basins. | |
| | SILT FENCE | |
| Section 12 | Describe all sediment basins to be implemented for areas that will disturb 10 or more acres at one time. The sediment basins (or an equivalent alternative) should be able to provide 3,600 cubic feet of storage for each acre drained. Temporary sediment basins (or an equivalent alternative) are recommended for drainage areas under 10 acres. | |
| | N/A | |
| Section 13 | Describe all permanent stormwater management controls such as, but not limited to, detention or retention systems or vegetated swales that will be installed during the construction process. | |
| | N/A | |

| | | |
|---|---|---|
| Section 14 | Waste disposal, this may include construction debris, chemicals, litter, and sanitary wastes: | All construction materials and debris will be placed in a dumpster and hauled off site to a landfill or other proper disposal site. No materials will be buried on site. |
| Section 15 | Offsite vehicle tracking from construction entrances/exits: | Off site vehicle tracking of sediments and dust generation will be minimized via a rock construction entrance, street sweeping and the use of water to keep dust down. |
| Section 16 | The proper application rates of all fertilizers, herbicides and pesticides used at the construction site: | Florida-friendly fertilizers and pesticides will be used at a minimum and in accordance with the manufacturer's suggested application rates. |
| Section 17 | The storage, application, generation and migration of all toxic substances: | All paints and other chemicals will be stored in a locked covered shed. |
| Section 18 | Other: | Port-o-lets will be placed away from storm sewer systems, storm inlet(s), surface waters and wetlands. No vehicle maintenance shall be conducted on-site. A washdown area shall be designated at all times and will not be located in any area that will allow for the discharge of pollutated runoff. |
| Section 19 | Provide a detailed description of the maintenance plan for all structural and non-structural controls to assure that they remain in good and effective operating condition. | |
| | Contractor shall provide routine maintenance of permanent and temporary sediment and erosion control features in accordance with the technical specifications or as follows, whichever is more stringent:<br>• Silt fence shall be inspected at least weekly. Any required repairs shall be made immediately. Sediment deposits shall be removed when they reach approximately one-half the height of the barrier.<br>• Maintenance shall be performed on the rock entrance when any void spaces are full of sediment.<br>• Inlet(s)/outfalls shall be inspected immediately after each rain event and any required repairs to the filter inlets, silt fence, or filter fabric shall be performed immediately.<br>• Bare areas of the site that were previously seeded shall be reseeded per manufactures' instructions.<br>• Mulch and sod that has been washed out shall be replaced immediately.<br>• Maintain all other areas of the site with proper controls as necessary. | |
| Section 20 | Inspections: Describe the inspection and inspection documentation procedures, as required by the FDEP NPDES Generic Permit for Stormwater Discharge from Large and Small Construction Activities. | |
| | Qualified personnel will inspect all points of discharges, all disturbed areas of construction that have not been stabilized, constructed areas and locations where vehicles enter and exit the site, and all BMPs at least once every 7 calendar days and within 24 hours of the end of a rainfall event that is 0.5 inches or greater. Where sites have been finally stabilized, said inspections shall be conducted at least once every month until the Notice of Termination is filed. | |
| Section 21 | Identify and describe all sources of non-stormwater discharges as allowed by the FDEP NPDES Generic Permit for Stormwater Discharge from Large and Small Construction Activities. | |
| | N/A | |
| Section 22 | All contractor(s) and subcontractor(s) identified in the SWPPP must sign the following certification: | |
| | "I certify under penalty of law that I understand, and shall comply with, the terms and conditions of the State of Florida Generic Permit for Stormwater Discharge from Large and Small Construction Activities and this Stormwater Pollution Prevention Plan prepared thereunder." | |

| Section 22 | Name | Title | Company Name, Address and Phone Number | Date |
|---|---|---|---|---|
| | | | | |
| | | | | |
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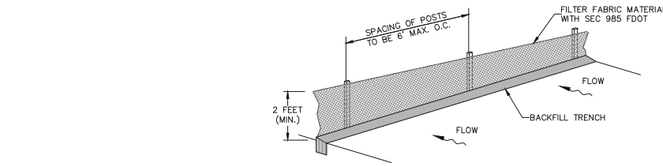
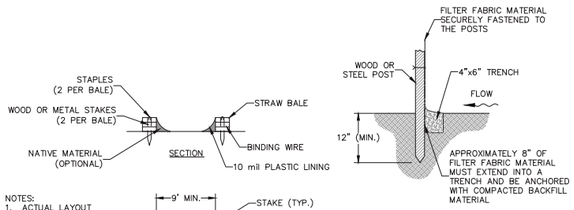
| | | | | |

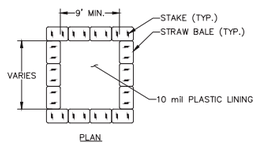
## EROSION CONTROL NOTES

1. SEDIMENT BASINS AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UP-SLOPE LAND DISTURBANCE TAKES PLACE.
2. ALL SEDIMENT CONTROL MEASURES ARE TO BE ADJUSTED TO MEET FIELD CONDITIONS AT THE TIME OF CONSTRUCTION AND BE CONSTRUCTED PRIOR TO ANY GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL ON BALANCE OF SITE. PERIMETER SEDIMENT BARRIERS SHALL BE CONSTRUCTED TO PREVENT SEDIMENT OR TRASH FROM FLOWING OR FLOATING ON TO ADJACENT PROPERTIES.
3. PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN (7) DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN (7) DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN UNDISTURBED FOR LONGER THAN 30 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT UNDISTURBED FOR MORE THAN ONE YEAR.
4. DURING CONSTRUCTION OF THE PROJECT, SOIL STOCK PILES SHALL BE STABILIZED, COVERED OR CONTAINED WITH SEDIMENT TRAPPING MEASURES. THE APPLICANT IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON SITE AS WELL AS SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.
5. A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED.
6. AFTER ANY SIGNIFICANT RAINFALL, SEDIMENT CONTROL STRUCTURES WILL BE INSPECTED FOR INTEGRITY. ANY DAMAGED DEVICES SHALL BE CORRECTED IMMEDIATELY.
7. CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME, SLOPE DRAIN STRUCTURE OR APPROVED CONTROL.
8. SEDIMENT WILL BE PREVENTED FROM ENTERING ANY STORM WATER SYSTEM, DITCH OR CHANNEL. ALL STORM WATER INLETS THAT ARE MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT SEDIMENT-LADEN WATER CANNOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT.
9. WHEN WORK IN A LIVE WATERCOURSE IS PERFORMED, PRECAUTIONS SHALL BE TAKEN TO MINIMIZE ENCROACHMENT, CONTROL SEDIMENT TRANSPORT AND STABILIZE THE WORK AREA TO THE GREATEST EXTENT POSSIBLE DURING CONSTRUCTION.
10. PERIODIC INSPECTION AND MAINTENANCE OF ALL SEDIMENT CONTROL STRUCTURES MUST BE PROVIDED TO ENSURE INTENDED PURPOSE IS ACCOMPLISHED. THE DEVELOPER, OWNER AND/OR CONTRACTOR SHALL BE CONTINUALLY RESPONSIBLE FOR ALL SEDIMENT CONTROLS. SEDIMENT CONTROL MEASURES SHALL BE IN WORKING CONDITION AT THE END OF EACH WORKING DAY.
11. WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED PUBLIC ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY TRACKING ONTO THE PAVED SURFACE. WHERE SEDIMENT IS TRANSPORTED ONTO A PUBLIC ROAD SURFACE WITH CURBS AND GUTTERS, THE ROAD SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER. THIS PROVISION SHALL APPLY TO INDIVIDUAL SUBDIVISION LOTS AS WELL AS TO LARGER LAND DISTURBING ACTIVITIES.
12. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED.
13. PROPERTIES AND WATERWAYS DOWNSTREAM FROM CONSTRUCTION SITES SHALL BE PROTECTED FROM SEDIMENT DEPOSITION AND EROSION AT ALL TIMES DURING CONSTRUCTION.
14. EROSION CONTROL DESIGN AND CONSTRUCTION SHALL FOLLOW THE REQUIREMENTS IN THE "FLORIDA EROSION AND SEDIMENT CONTROL MANUAL" AND COUNTY PERMITS.
15. CONTRACTOR IS RESPONSIBLE FOR ALL SURFACE WATER DISCHARGES, RAINFALL RUN OFF OR DEWATERING ACTIVITIES.
16. CONTRACTOR MUST INCORPORATE ALL BMP'S NECESSARY TO MEET OR EXCEED STATE WATER QUALITY AND SWPPP REQUIREMENTS.
17. THE POLLUTION PREVENTION PLAN IS A MINIMUM GUIDELINE ONLY. ADDITIONAL BMP'S MAY BE NECESSARY AT CONTRACTOR'S EXPENSE.
18. NOI TO BE POSTED ON SITE.
19. FILTER FABRIC MUST BE INSTALLED UNTIL THE SITE IS STABLE.

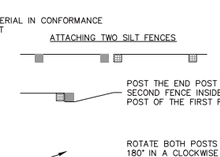



NOTES:
1. ACTUAL LAYOUT DETERMINED IN THE FIELD.
2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.

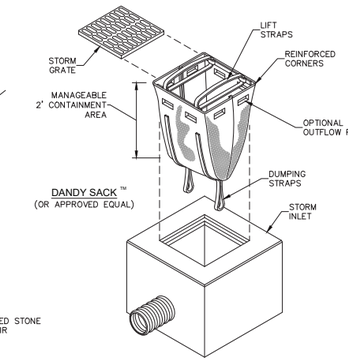



SILT FENCE INSTALLATION
N.T.S

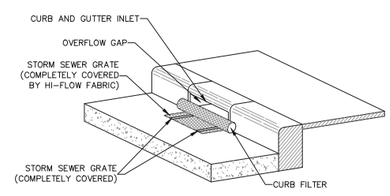


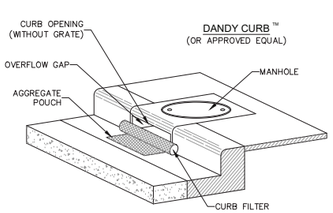

NOTES:
1. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.
2. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
3. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.

## CONCRETE & STUCCO WASTE MANAGEMENT
N.T.S

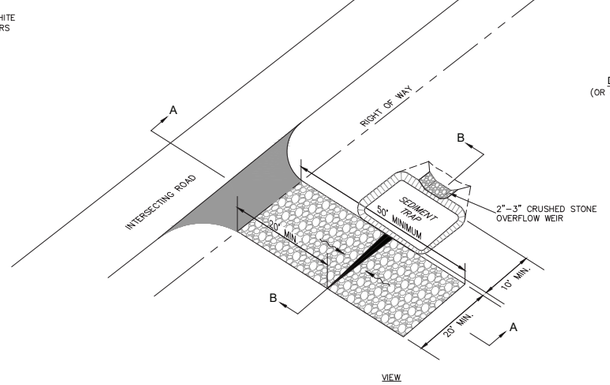



INLET INSERT
N.T.S

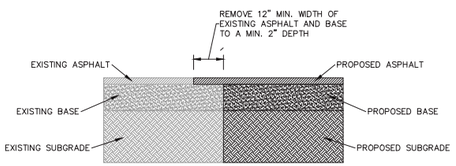


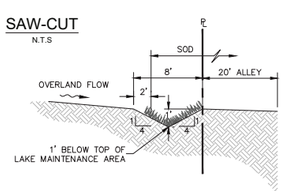

CURB INLET SEDIMENT CONTROL
N.T.S




CONCRETE WASHOUT SIGN
N.T.S

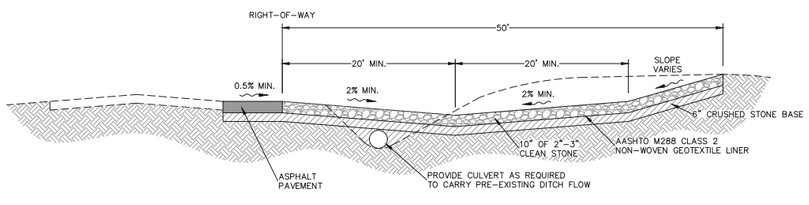


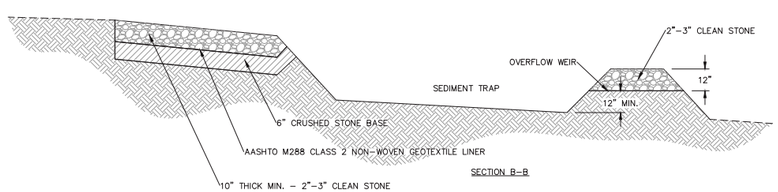

SAW-CUT
N.T.S



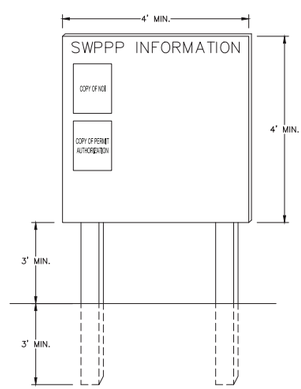

TEMPORARY WINDROW
N.T.S

NOTES:
1. TEMPORARY WINDROW TO BE INSTALLED AT THE BACK OF ALL LOTS.




CONSTRUCTION EXIT
N.T.S




NOTES:
1. "SWPPP INFORMATION" MUST BE DISPLAYED PROMINENTLY ACROSS THE TOP OF THE SIGN, AS SHOWN IN THE DETAIL.
2. SIGN TO BE CONSTRUCTED OF A RIGID MATERIAL, SUCH AS PLYWOOD OR OUTDOOR SIGN BOARD. SIGN MUST BE CONSTRUCTED IN A MANNER TO PROTECT DOCUMENTS FROM DAMAGE DUE TO WEATHER (WIND, SUN, MOISTURE, ETC.).
3. THE SWPPP INFORMATION SIGN MUST BE LOCATED NEAR THE ENTRANCE/EXIT OF THE SITE, SUCH THAT IT IS ACCESSIBLE/VIEWABLE BY THE GENERAL PUBLIC, BUT NOT OBSTRUCTING VIEWS AS TO CAUSE A SAFETY HAZARD.
4. ALL POSTED DOCUMENTS MUST BE MAINTAINED IN A CLEARLY READABLE CONDITION AT ALL TIMES THROUGHOUT CONSTRUCTION AND UNTIL THE NOTICE-OF-TERMINATION (NOT) IS FILED FOR THE PERMIT.
5. CONTRACTOR SHALL POST OTHER STORM WATER AND/OR EROSION AND SEDIMENT CONTROL RELATED PERMITS ON THE SIGN AS REQUIRED BY THE LOCAL AGENCY.
6. SIGN SHALL BE LOCATED OUTSIDE OF PUBLIC RIGHT-OF-WAY AND EASEMENTS UNLESS APPROVED BY THE GOVERNING AGENCY.
7. CONTRACTOR IS RESPONSIBLE FOR ENSURING STABILITY OF THIS SWPPP INFORMATION SIGN.

SWPPP INFORMATION SIGN
N.T.S

| No. | REVISIONS | DATE | BY |
|---|---|---|---|
| | | | |

Kimley»Horn
445 24TH STREET, SUITE 200, VERO BEACH, FL 32960
PHONE: 772-794-4100
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

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MACKENZIE CERJAN LICENSE No. 90545 STATE OF FLORIDA PROFESSIONAL ENGINEER
2/6/2025

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| | |
|---|---|
| KHA PROJECT | 147864008 |
| DATE | 8/7/2024 |
| SCALE | AS SHOWN |
| DESIGNED BY | ----- |
| DRAWN BY | ----- |
| CHECKED BY | ----- |

# EROSION CONTROL DETAILS

4101 GOLDEN GEM RESIDENTIAL
PREPARED FOR
DOUBLE B DEVELOPMENT
APOPKA FL

SHEET NUMBER
C-220

Plotted By:DeArmas, Moises Sheet Set:4101 GOLDEN GEM RESIDENTIAL Layout:C-220 EROSION CONTROL DETAILS February 06, 2025 04:53:58pm K:\VRB_LDEV\147864008 - 4101 Golden Gem Resi\CADD\PlanSheets\C-220 EROSION CONTROL DETAILS.dwg
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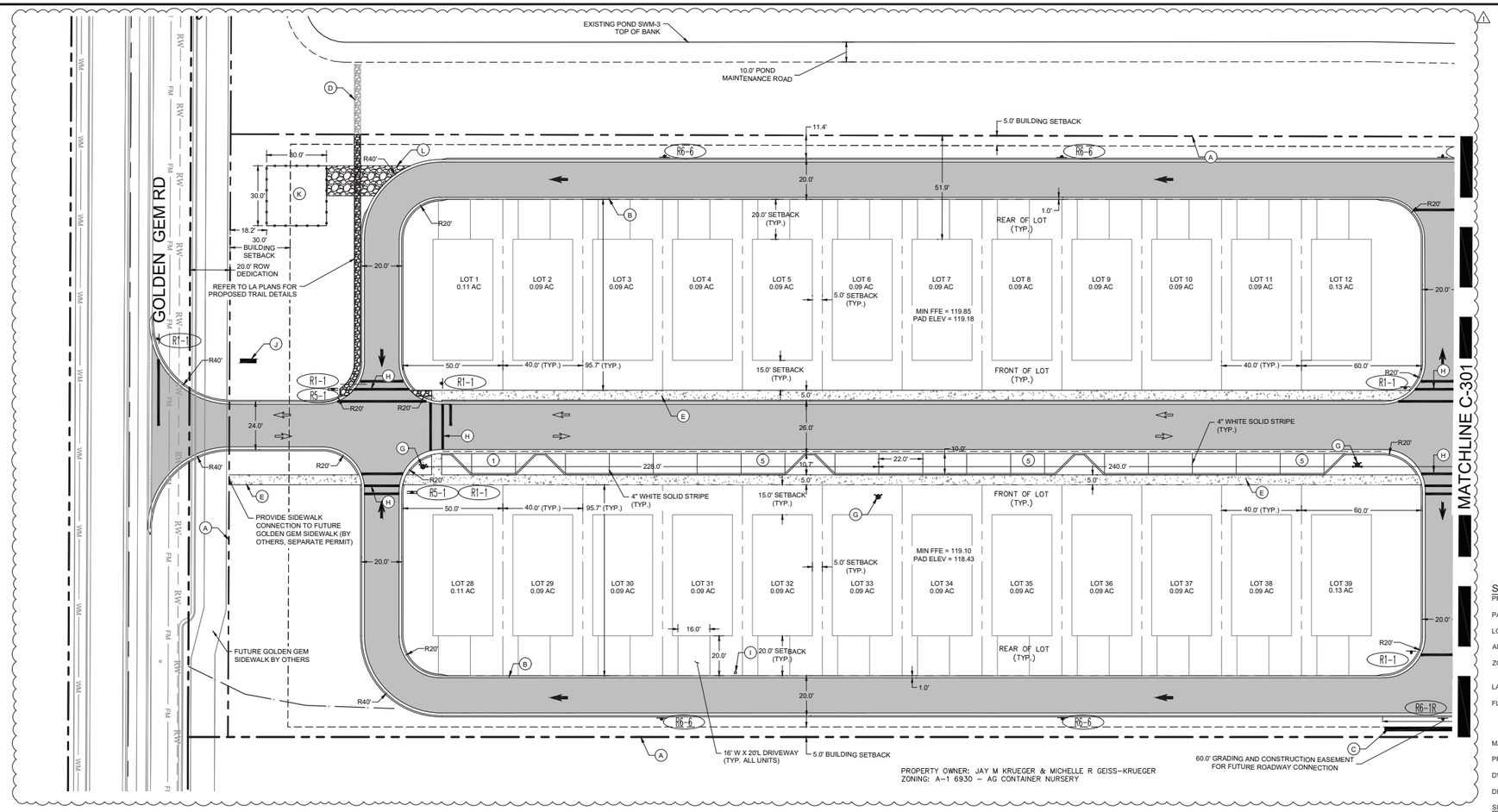


NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

## SIGN LEGEND

| | | |
|---|---|---|
| STOP | R1-1 | STOP SIGN MUTCD 24" x 24" |
| DO NOT ENTER | R5-1 | DO NOT ENTER SIGN MUTCD 24" x 24" |
| ONE WAY | R6-1L | LEFT ONE WAY SIGN MUTCD 8" x 24" |
| ONE WAY | R6-1R | RIGHT ONE WAY SIGN MUTCD 8" x 24" |
| ONE WAY | R6-6 | ONE WAY SIGN MUTCD 18" x 24" |
| | OM4-1 | TYPE 4 OBJECT MARKERS (END OF ROADWAY) 18"X18" |

### LEGEND

- (A) PROPERTY LINE
- (B) 12" HEADER CURB
- (C) RETAINING WALL
- (D) TRAIL TO INTERCONNECT WITH WYLD OAKS (NOT PART OF THIS APPLICATION)
- (E) CONCRETE SIDEWALK (REFER TO DETAIL, SHEET C-450)
- (F) ACCESSIBLE CURB RAMP (REFER TO DETAIL, SHEET C-450)
- (G) FIRE HYDRANT (SEE NOTE 5)
- (H) CROSSWALK PER FDOT INDEX #711-001
- (I) MAILBOX - (SEE NOTE 6)
- (J) MONUMENT SIGN (REFER TO ARCH. DRAWINGS AND SIGNAGE PACKAGE)
- (K) LIFT STATION - CITY OWNED AND MAINTAINED
- (L) LIFT STATION ACCESS ROAD (2" #57 STONE OVER 8" STABILIZED BASE)

### SYMBOL LEGEND

- (#) PARKING STALL COUNT - DO NOT PAINT
- T 4 TRANSFORMER PAD
- PROPERTY LINE
- LIGHT POLE
- DIRECTIONAL ARROW FOR REFERENCE ONLY - DO NOT STRIPE
- DIRECTIONAL ARROW TO BE STRIPED

## SITE DATA

| | |
|---|---|
| PROJECT DESCRIPTION: | CONSTRUCTION OF 54 SINGLE FAMILY LOTS |
| PARCEL ID: | 13-20-27-0000-00-024 |
| LOCATION: | SECTION 13, TOWNSHIP 20, RANGE 27 |
| ADDRESS: | 4101 GOLDEN GEM ROAD, APOPKA, FL 32712 |
| ZONING: | (MU-N) -KPI-NEIGHBORHOOD |
| LAND USE: | MU MIXED USE |
| FLOOD ZONE: | ZONE X, AS SHOWN ON FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP COMMUNITY PANEL NUMBER 12095C0125H, EFFECTIVE DATE 9/24/2021 |

| | REQUIRED | PROVIDED |
|---|---|---|
| MAX. BUILDING HEIGHT | 35' HEIGHT MAX. | |
| PROPERTY AREA: | 392,331 S.F. (9.01 AC.) | |
| DWELLING UNITS: | | 54 |
| DENSITY: | 54 UNITS / 9.01 AC | 5.99 DU/AC[4] |

| SITE COVERAGE: | REQUIRED | PROVIDED | | |
|---|---|---|---|---|
| SITE AREA: | | 392,331 S.F. | (9.01 AC) | 100.00% |
| BUILDING AREA[1]: | | 98,334 S.F. | (2.26 AC) | 25.06% |
| DRIVEWAYS[2]: | | 17,280 S.F. | (0.40 AC) | 4.40% |
| ROADWAY AND SIDEWALK: | | 114,507 S.F. | (2.63 AC) | 29.19% |
| PERVIOUS AREA: | | 162,210 S.F. | (3.72 AC) | 41.35% |

[1] BUILDING AREA ASSUMES ONE (1) 30' x 60.7' BUILDING PER LOT.
[2] DRIVEWAYS ASSUME 20' x 16' PER LOT.
[3] UP TO 75% ALLOWED BY CODE, PLUS THE TEXT AMENDMENT CURRENTLY BEING PROCESSED FOR WYLD OAKS.
[4] MAX DENSITY BY CODE IS 5 DU/AC; HOWEVER, THE WYLD OAKS DEVELOPMENT AGREEMENT ALLOWS FOR HIGHER DENSITY GIVEN THAT THE TOTAL NUMBER OF ALLOWABLE UNITS (PER DISTRICT) IS NOT EXCEEDED. SEE TABLE BELOW FOR REFERENCE.

HOMES WILL BE 4 BEDROOMS.

TYPICAL LOT SIZE IS 40' W X 95.7' L UNLESS OTHERWISE NOTED ON THE PLAN.

| OPEN SPACE: | | |
|---|---|---|
| REQUIRED OPEN SPACE (15% OF SITE): | 58,850 S.F. | (1.35 AC) |
| PROVIDED OPEN SPACE (FROM SWM-3): | 58,850 S.F. | (1.35 AC) |

| BUILDING SETBACKS: | REQUIRED | PROVIDED |
|---|---|---|
| FRONT/STREET | 15' MIN. 30' MAX. | 15' |
| SIDE | 5' MIN. N/A MAX. | 5' |
| REAR/ALLEY | 5' MIN. | 20' |

PARKING
REQUIRED: 108 SPACES (2.0 SPACES PER UNIT X 54 UNITS)
PROVIDED: 253 SPACES:
- 108 GARAGE SPACES
- 108 DRIVEWAY SPACES
- 37 ON STREET SPACES

| WYLD OAKS KPI NEIGHBORHOOD DISTRICT | | | |
|---|---|---|---|
| ALLOWABLE DU'S | PREVIOUSLY PERMITTED DU'S | D.U.'S PROPOSED WITH THIS APPLICATION | REMAINING DU'S |
| 199 | 0 | 54 | 145 |

NOTES:

1. REFER TO PAVING, GRADING AND DRAINAGE DETAILS SHEET FOR PAVEMENT DETAILS.
2. REFER TO LANDSCAPE PLANS FOR LANDSCAPE DETAILS.
3. ALL STRIPING ON ROADWAYS AND DRIVE AISLES (STOP BARS, CROSSWALKS, LANE STRIPING) SHALL BE THERMOPLASTIC.
4. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
5. BLUE RPM TO BE INSTALLED IN PAVEMENT AT EACH HYDRANT LOCATION. OFFSET 6"
6. MAILBOX LOCATION TO BE PROVIDED AT EACH LOT BY BUILDING CONTRACTOR (TYP.) AND TO BE COORDINATED WITH PROPOSED DRIVEWAY LOCATIONS.

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE.

**Always call 811 two full business days before you dig to have underground utilities located and marked.**

Sunshine811.com

| No. | REVISIONS | DATE | BY |
|---|---|---|---|
| 1 | ADDED BUILDING FOOTPRINTS AND DRIVEWAYS | 12/18/2024 | TPC |

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2/6/2025

KHA PROJECT 147864008
DATE 8/7/2024
SCALE AS SHOWN
DESIGNED BY ###
DRAWN BY ###
CHECKED BY ###

SITE PLAN

4101 GOLDEN GEM RESIDENTIAL
PREPARED FOR
DOUBLE B DEVELOPMENT FL
APOPKA

SHEET NUMBER
C-300



Plotted By:DeArmas, Moises Sheet Set:4101 GOLDEN GEM RESIDENTIAL Layout:C-300 SITE PLAN February 06, 2025 04:54:12pm K:\ORB_LDEV\147864008 - 4101 Golden Gem Resi\CADD\PlanSheets\C-300 SITE PLAN.dwg
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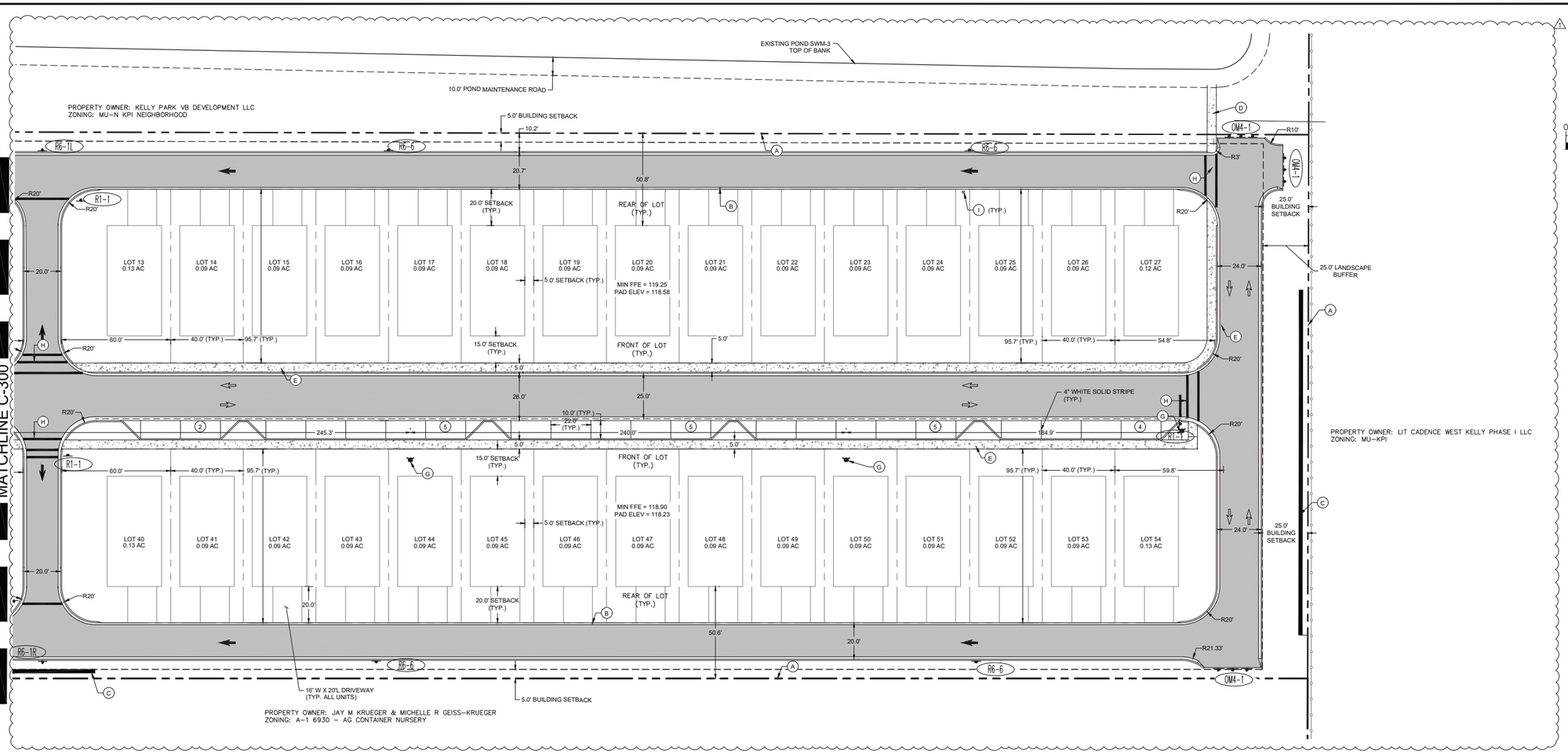


## SIGN LEGEND

R1-1 STOP SIGN
MUTCD 24" x 24"

R5-1 DO NOT ENTER SIGN
MUTCD 24" x 24"

R6-1L LEFT ONE WAY SIGN
MUTCD 8" x 24"

R6-1R RIGHT ONE WAY SIGN
MUTCD 8" x 24"

R6-6 ONE WAY SIGN
MUTCD 18" x 24"

OM4-1 TYPE 4 OBJECT MARKERS
(END OF ROADWAY)
18"X18"

### LEGEND

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- (B) 12" HEADER CURB
- (C) RETAINING WALL
- (D) TRAIL TO INTERCONNECT WITH WYLD OAKS (NOT PART OF THIS APPLICATION)
- (E) CONCRETE SIDEWALK (REFER TO DETAIL, SHEET C-450)
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- PROPERTY LINE
- LIGHT POLE
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- DIRECTIONAL ARROW TO BE STRIPED

| WYLD OAKS KPI NEIGHBORHOOD DISTRICT | | | |
|---|---|---|---|
| ALLOWABLE DU'S | PREVIOUSLY PERMITTED DU'S | D.U.'S PROPOSED WITH THIS APPLICATION | REMAINING DU'S |
| 199 | 0 | 54 | 145 |

NOTES:

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| No. | REVISIONS | DATE | BY |
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| 1 | ADDED BUILDING FOOTPRINTS AND DRIVEWAYS | 12/18/2024 | TPC |

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2/6/2025

KHA PROJECT 147864008
DATE 8/7/2024
SCALE AS SHOWN
DESIGNED BY ###
DRAWN BY ###
CHECKED BY ###

# SITE PLAN

# 4101 GOLDEN GEM RESIDENTIAL

PREPARED FOR
DOUBLE B DEVELOPMENT
APOPKA FL

SHEET NUMBER
C-301



Plotted By:DeArmas, Moises Sheet Set:4101 GOLDEN GEM RESIDENTIAL Layout:C-301 SITE PLAN February 06, 2025 04:54:20pm K:\VRB_LDEV\147864008 - 4101 Golden Gem Resi\CADD\PlanSheets\C-300 SITE PLAN.dwg
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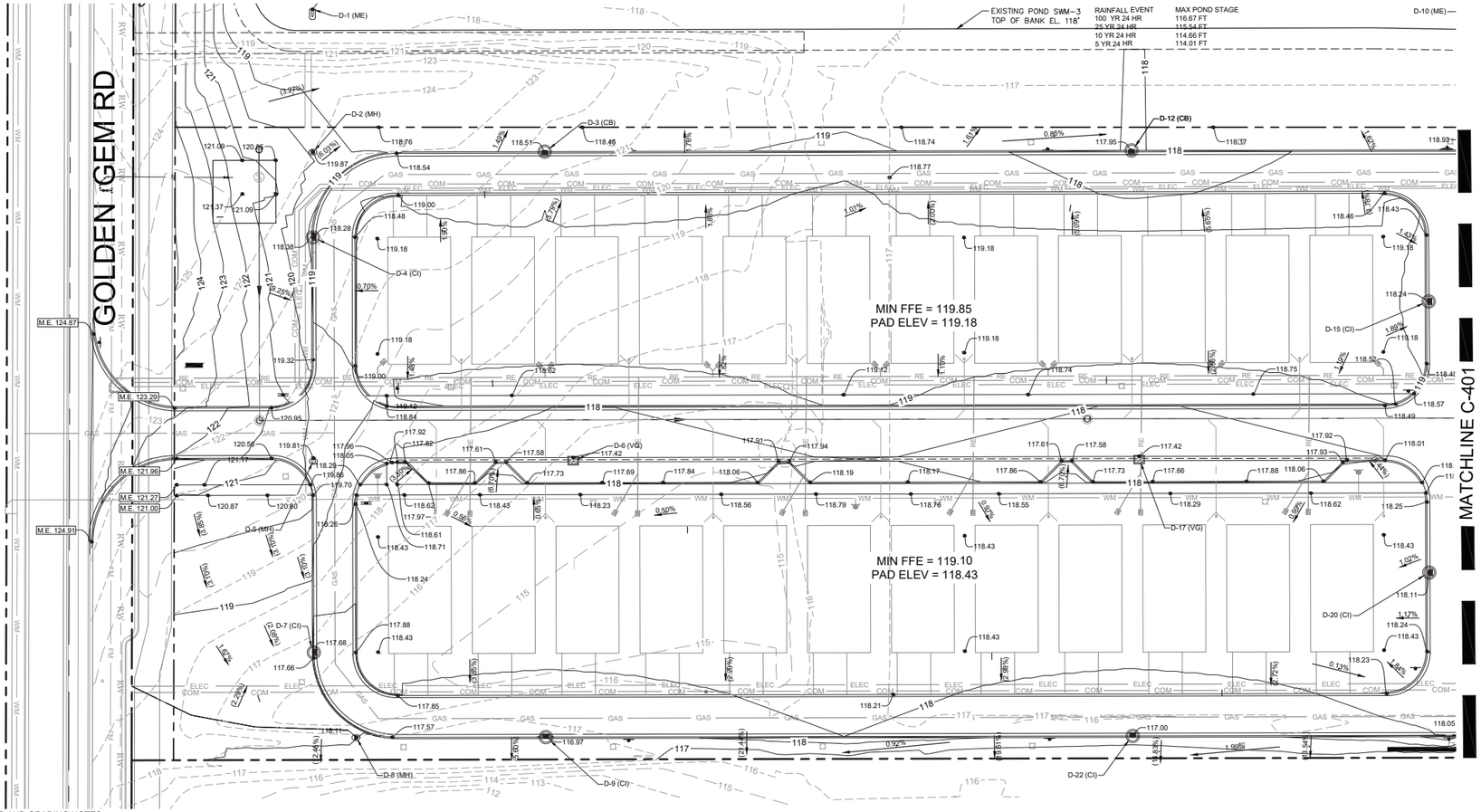
MATCHLINE C-300



GRAPHIC SCALE IN FEET
0 15 30 60

XX.XX / XX.XX — PROPOSED TOP OF CURB GRADE / PROPOSED EDGE OF PAVEMENT GRADE

XX.XX — PROPOSED GRADE

9.77 — EXISTING GRADES (FROM SURVEY)

DRAINAGE FLOW DIRECTION

H.P. — HIGH POINT

TOC — TOP OF CURB GRADE

TOS — TOP OF SIDEWALK GRADE

EX — DENOTES EXISTING FEATURE

PAVING AND GRADING NOTES

1. TOPOGRAPHIC INFORMATION IS TAKEN FROM A TOPOGRAPHIC SURVEY BY LAND SURVEYORS. IF THE CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, THEN THE CONTRACTOR SHALL SUPPLY, AT THEIR EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR TO THE OWNER FOR REVIEW.
2. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
3. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.
4. ALL MATERIALS AND CONSTRUCTION WITHIN THE FDOT RIGHT-OF-WAY SHALL CONFORM TO THE LATEST FDOT DESIGN STANDARDS AND LATEST STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
5. FIELD DENSITY TESTS SHALL BE TAKEN AT INTERVALS IN ACCORDANCE WITH THE SPECIFICATIONS AND LOCAL JURISDICTIONAL AGENCY. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
6. CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.
7. CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS.
8. ALL AREAS INDICATED AS PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TYPICAL PAVEMENT SECTIONS AS INDICATED ON THE DRAWINGS.
9. WHERE EXISTING PAVEMENT IS INDICATED TO BE REMOVED AND REPLACED, THE CONTRACTOR SHALL SAW-CUT THE FULL DEPTH OF PAVEMENT FOR A SMOOTH AND STRAIGHT JOINT AND REPLACE THE PAVEMENT WITH THE SAME TYPE AND DEPTH OF MATERIAL AS EXISTING OR AS INDICATED.
10. WHERE NEW PAVEMENT MEETS THE EXISTING PAVEMENT, THE CONTRACTOR SHALL SAW-CUT THE FULL DEPTH OF EXISTING PAVEMENT FOR A SMOOTH AND STRAIGHT JOINT AND MATCH THE EXISTING PAVEMENT ELEVATION WITH THE PROPOSED PAVEMENT UNLESS OTHERWISE INDICATED.
11. ELEVATIONS SHOWN AT CURB LINE ARE EDGE OF PAVEMENT UNLESS SPECIFIED OTHERWISE.
12. CONTRACTOR SHALL EXCAVATE EXISTING PAVEMENT/SIDEWALK AREAS THAT ARE TO BE LANDSCAPED A MINIMUM OF 30" OR AS DEEP AS NECESSARY TO ENSURE ALL STONE BASE / PAVEMENT MATERIAL IS REMOVED (WHICHEVER IS GREATER) AND BACKFILL WITH CLEAN / DRAINING SAND TO WITHIN 4" OF TOP OF CURB TO ENSURE PROPER SOIL FOR PLANT MATERIALS.
13. THE CONTRACTOR SHALL ENSURE THAT ISLAND PLANTING AREAS AND OTHER PLANTING AREAS ARE NOT OVER-COMPACTED AND DO NOT CONTAIN ROAD BASE MATERIALS. THE CONTRACTOR SHALL ALSO EXCAVATE AND REMOVE ALL UNDESIRABLE MATERIAL FROM ALL AREAS ON THE SITE TO BE PLANTED AND PROPERLY DISPOSED OF IN A LEGAL MANNER.
14. ALL CUT OR FILL SLOPES SHALL BE 4H:1V OR FLATTER UNLESS OTHERWISE NOTED.
15. ALL UN-SURFACED AREAS DISTURBED BY GRADING OPERATION SHALL RECEIVE 4 INCHES OF TOPSOIL. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES 3H:1V OR STEEPER. CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH GOVERNING SPECIFICATIONS UNTIL A HEALTHY STAND OF VEGETATION IS OBTAINED.
16. THE CONTRACTOR SHALL GRADE THE SITE TO THE ELEVATIONS INDICATED AND SHALL RE-GRADE WASHOUTS WHERE THEY OCCUR AFTER EVERY RAINFALL UNTIL A GRASS STAND IS WELL ESTABLISHED OR ADEQUATE STABILIZATION OCCURS.
17. LANDSCAPE ISLANDS IN PARKING AREA TO BE BERMED 18" ABOVE BACK OF CURB ELEVATION.
18. FINISHED FLOOR ELEVATIONS (FFE) AND GARAGE SHALL BE NO LOWER THAN BASE FLOOD ELEVATION PLUS 2 FEET.
19. DRIVEWAYS FOR LOTS SHALL BE NO STEEPER THAN 7%.
20. 14. ELEVATIONS SHOWN HEREON ARE IN THE NORTH AMERICAN VERTICAL DATUM (NAVD) 1988 BASED ON ORANGE COUNTY BENCHMARK L708026, ELEVATION 127.968 (REFER TO SURVEY BY JIM SHANNON DATED 2/21/2023.
21. CONTRACTOR TO VERIFY ALL EXISTING UTILITY RINGS AND COVERS ON SITE ARE HEAVY DUTY TRAFFIC RATED. CONTRACTOR TO REPLACE DEFICIENT RINGS AND COVERS WITH HEAVY DUTY TRAFFIC RATED RINGS AND COVERS. CONTRACTOR TO ADJUST RIM ELEVATIONS OF ANY UTILITIES THAT CHANGE IN ELEVATION DURING CONSTRUCTION. ALL EXISTING COVERS TO REMAIN SHALL BE ADJUSTED TO FINAL GRADE.
22. ALL CLEANOUT COVERS SHOULD BE RATED FOR HEAVY DUTY TRAFFIC.
23. ALL EXISTING PAVEMENT AND CONCRETE TO BE JOINED SHALL BE SAWCUT.
24. SIDEWALKS AND CROSSWALKS SHALL NOT EXCEED 2% CROSS SLOPE NOR 5% LONGITUDINALLY. GRADES IN ACCESSIBLE PARKING SPACES SHALL NOT EXCEED 2% IN ANY DIRECTION. IN CASES OF SIDEWALK LANDINGS AT BUILDING ENTRANCES, GRADES SHALL NOT EXCEED 2% IN ANY DIRECTION. ACCESSIBLE CURB RAMPS SHALL NOT EXCEED 6' IN LENGTH AND 1:12 SLOPE. LANDINGS AT CHANGES IN DIRECTION SHALL BE MINIMUM 60"x60" AND SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION.
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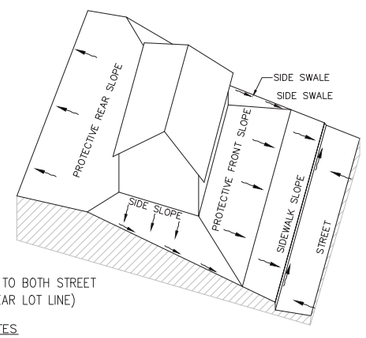
26. FLOOD ZONE: AE, AS SHOWN ON FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP COMMUNITY PANEL NUMBER 1251480218G, EFFECTIVE DATE SEPTEMBER 3, 2003. BASE FLOOD ELEVATION = 9.0.




(DRAINAGE TO BOTH STREET AND REAR LOT LINE)

NOTES

1. ALL SLOPES GREATER THAN 6:1 SHALL BE SODDED.
2. ROOF RUNOFF FROM SIDES AND REAR OF HOUSES SHALL BE DIRECTED TOWARD SIDE AND REAR YARD SWALES ACCORDINGLY.

## TYPICAL LOT GRADING DETAIL

N.T.S.

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE.

**Always call 811 two full business days before you dig to have underground utilities located and marked.**

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445 24TH STREET, SUITE 200, VERO BEACH, FL 32960
PHONE: 772-794-4100
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

MACKENZIE CERJAN — LICENSE No. 90545 — STATE OF FLORIDA — PROFESSIONAL ENGINEER

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2/6/2025

KHA PROJECT 147864008
DATE 8/7/2024
SCALE AS SHOWN
DESIGNED BY ###
DRAWN BY ###
CHECKED BY ###

# 4101 GOLDEN GEM RESIDENTIAL

PREPARED FOR
DOUBLE B DEVELOPMENT FL
APOPKA

## GRADING PLAN

SHEET NUMBER
C-400



Plotted By:DeArmas, Moises Sheet Set:4101 GOLDEN GEM RESIDENTIAL Layout:C-400 GRADING PLAN February 06, 2025 04:55:29pm K:\ORB_LDEV\147864008 - 4101 Golden Gem Rest\CADD\PlanSheets\C-400 GRADING PLAN.dwg
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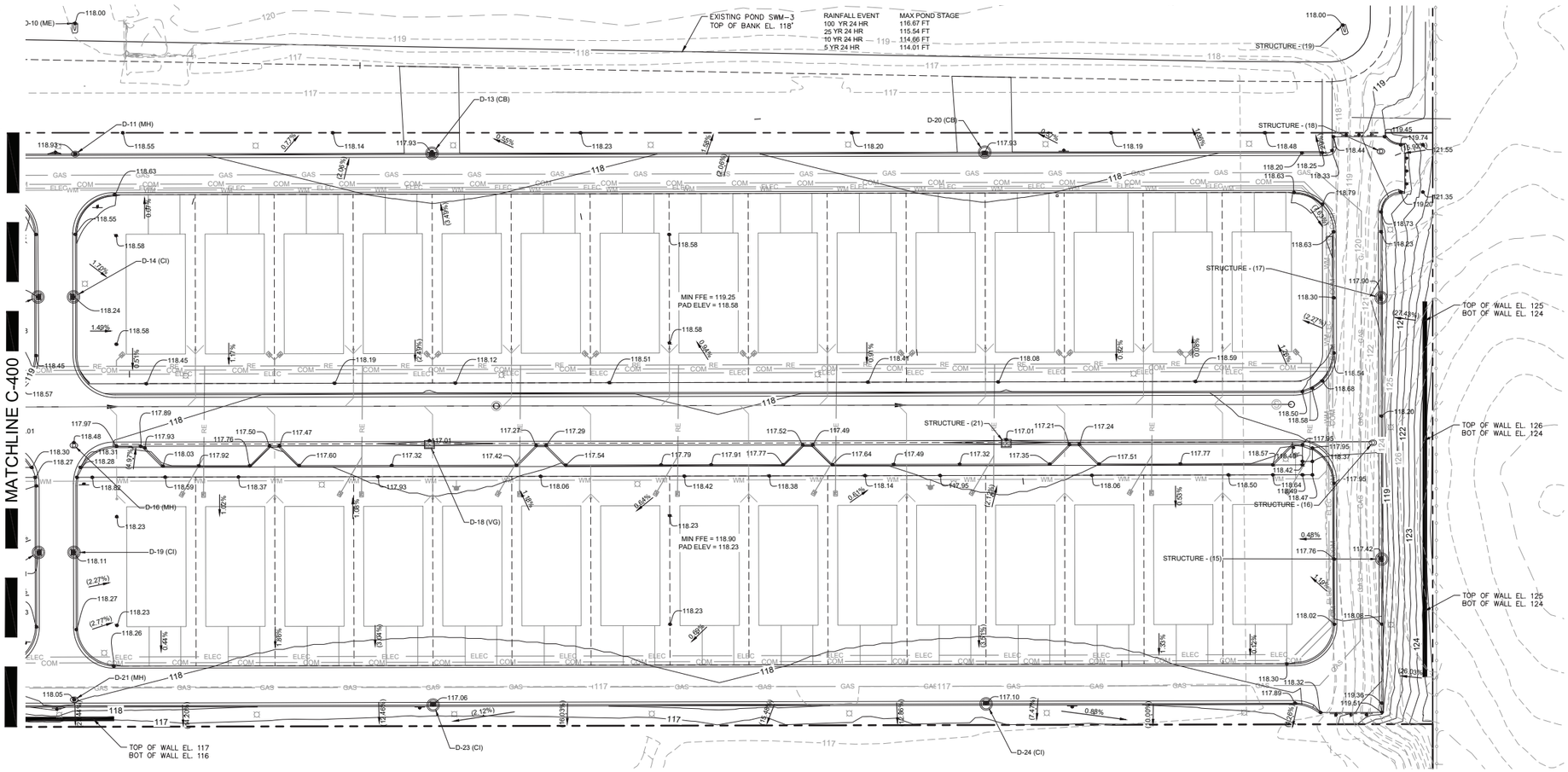

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| KHA PROJECT | 147864008 |
| DATE | 8/7/2024 |
| SCALE | AS SHOWN |
| DESIGNED BY | ### |
| DRAWN BY | ### |
| CHECKED BY | ### |

GRADING PLAN

4101 GOLDEN GEM RESIDENTIAL
PREPARED FOR
DOUBLE B DEVELOPMENT
APOPKA FL

SHEET NUMBER
C-401

XX.XX / XX.XX — PROPOSED TOP OF CURB GRADE / PROPOSED EDGE OF PAVEMENT GRADE
XX.XX — PROPOSED GRADE
9.77' — EXISTING GRADES (FROM SURVEY)
DRAINAGE FLOW DIRECTION
H.P. — HIGH POINT
TOC — TOP OF CURB GRADE
TOS — TOP OF SIDEWALK GRADE
EX — DENOTES EXISTING FEATURE

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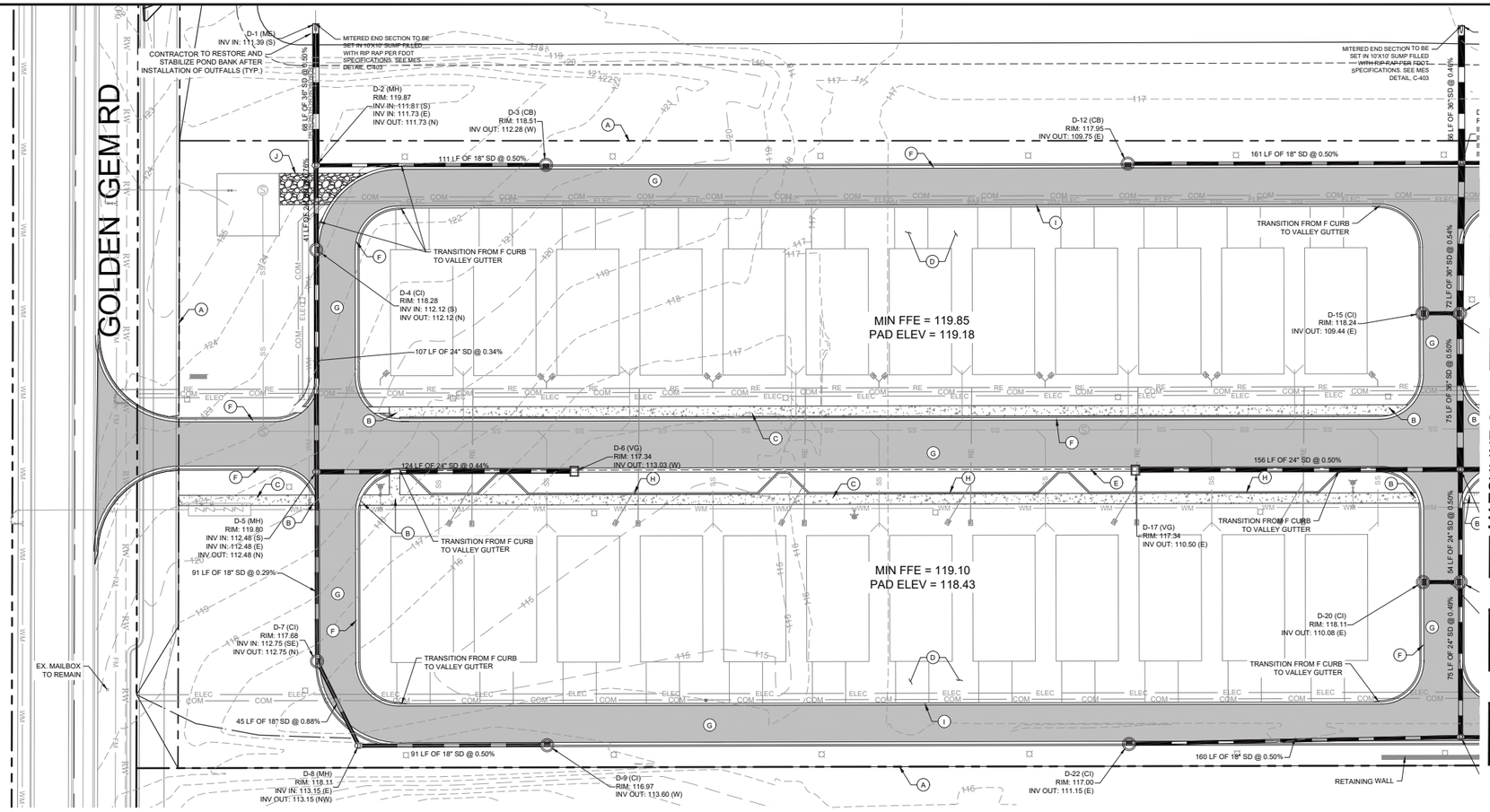
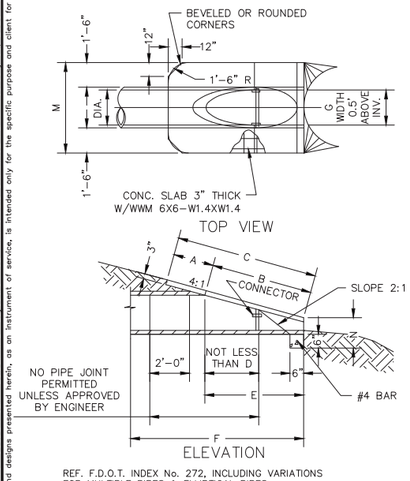



## LEGEND

- (A) PROPERTY LINE
- (B) ACCESSIBLE RAMP (SEE DETAIL SHEET C-450)
- (C) STANDARD CONCRETE SIDEWALK (SEE DETAIL SHEET C-450)
- (D) DRIVEWAYS BY BUILDING CONTRACTOR (TYP. 1 PER LOT)
- (E) 24" VALLEY GUTTER
- (F) FDOT TYPE "F" CURB (SEE DETAIL SHEET C-450)
- (G) STANDARD DUTY ASPHALT (SEE DETAIL SHEET C-450)
- (H) FDOT TYPE D CURB (SEE DETAIL SHEET C-450)
- (I) 12" RIBBON CURB
- (J) 15' WIDE LIFT STATION ACCESS ROAD (2" #57 STONE OVER 8" STABILIZED BASE)




REF. F.D.O.T. INDEX No. 272, INCLUDING VARIATIONS FOR MULTIPLE PIPES & ELLIPTICAL PIPES.

| DIA. | A | B | C | E | F | G | M | N |
|---|---|---|---|---|---|---|---|---|
| 18" | 1.97' | 2.74' | 4.71' | 2.56' | 6.00' | 1.41' | 4.92' | 1.21' |
| 24" | 2.06' | 3.85' | 5.91' | 3.56' | 7.00' | 1.73' | 5.50' | 1.25' |
| 30" | 2.15' | 4.95' | 7.10' | 4.56' | 8.00' | 2.00' | 6.08' | 1.29' |
| 36" | 2.25' | 6.08' | 8.33' | 5.56' | 9.00' | 2.24' | 6.67' | 1.33' |
| 42" | 2.34' | 7.21' | 9.55' | 6.56' | 10.00' | 2.45' | 7.25' | 1.38' |

M.E.S. DETAIL

N.T.S

### DRAINAGE NOTES

1. CONTRACTOR TO CONSTRUCT DRAINAGE STRUCTURES WITH USF GRATES, RIMS AND COVERS AS CALLED OUT OR APPROVED EQUAL. SHOP DRAWINGS ARE TO BE PROVIDED TO ENGINEER FOR APPROVAL PRIOR TO ANY CONSTRUCTION.
2. CONTRACTOR TO REFER TO FDOT DESIGN STANDARD (AND NOT LIMITED TO) INDEX'S 425-010, 425-001, 425-020, 425-021, 425-024, 425-052 & 425-053 FOR MANHOLE, INLET AND GRATE SPECIFICATIONS.
3. ALL DRAINAGE STRUCTURES SHALL BE CONSTRUCTED WITH (4) SIDED BEARING HEAVY DUTY H-20 RATED TRAFFIC RIMS AND GRATES.
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7. ALL DRAINAGE PIPE JOINTS SHALL BE FILTER FABRIC WRAPPED PER FDOT INDEX #280. ALL DRAINAGE PIPE JOINTS NEED TO BE FILTER FABRIC WRAPPED REGARDLESS OF MATERIAL.
8. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
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13. ALL STORM SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT, AND SHALL HAVE TRAFFIC BEARING RING & COVERS. MANHOLES IN UNPAVED AREAS SHALL BE 6" ABOVE FINISH GRADE. LIDS SHALL BE LABELED "STORM SEWER".
14. ALL CATCH BASINS WITHIN PROPOSED TRAFFIC AREAS SHALL HAVE BICYCLE PROOF GRATES.
15. CONTRACTOR TO FLUSH AND VACUUM ENTIRE ON-SITE STORM WATER SYSTEM UPON COMPLETION OF PROPOSED WORK.
16. ALL DRAINAGE STRUCTURES TO BE CONSTRUCTED WITH NO SUMPS PER FDOT INDEX 425-001.
17. STORM DRAIN PIPE ALTERNATES MAY BE APPROVED BY THE ENGINEER AS FOLLOWS:
    - 17.A. RCP CLASS III PER ASTM C-76
    - 17.B. ALUMINIZED STEEL TYPE 2 ULTRA FLO
      - 48"Ø AND SMALLER SHALL BE 3/4"X3/4"X7-1/2" CORRUGATION 16 GA WITH A MINIMUM THICKNESS OF 0.064"
      - 54"Ø AND LARGER SHALL BE 3/4"X3/4"X7-1/2" CORRUGATION 14 GA WITH A MINIMUM THICKNESS OF 0.079"
    - A. CORRUGATED POLYETHYLENE PIPE PER AASHTO M294 JOINTS SHALL BE WATER TIGHT

ANY STORM PIPE USED MUST BE APPROVED BY LOCAL AUTHORITIES. CONTRACTOR SHALL SELECT THE MOST ECONOMICAL PRODUCT.

### NOTES:

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5. SPOT ELEVATIONS ARE AT FACE OF CURB UNLESS OTHERWISE NOTED.
6. EXISTING INFORMATION HAS BEEN TAKEN FROM A SURVEY PREPARED BY TERRAMETRIX, LLC., DATED NOVEMBER 16, 2020. ELEVATIONS BASED ON NAVD 1988 DATUM.
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| | |
|---|---|
| EX | DENOTES EXISTING FEATURE |
| SD | STORM DRAIN (SEE NOTE 18) |
| (G) | STANDARD DUTY ASPHALT PAVEMENT |
| (C) | STANDARD CONCRETE SIDEWALK |
| | CATCH BASIN (CB) FDOT TYPE C |
| | CURB INLET (CI) FDOT TYPE 9 |
| (D) | MANHOLE (MH) |
| | MITERED END (ME) |
| | VALLEY GUTTER (VG) |

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KHA PROJECT 147864008
DATE 8/7/2024
SCALE AS SHOWN
DESIGNED BY ----
DRAWN BY ----
CHECKED BY ----

# PAVING AND DRAINAGE PLAN

# 4101 GOLDEN GEM RESIDENTIAL

PREPARED FOR
DOUBLE B DEVELOPMENT FL
APOPKA

SHEET NUMBER
C-402



Plotted By: DeArmas, Moises Sheet Set: 4101 GOLDEN GEM RESIDENTIAL Layout: C-402 PAVING AND DRAINAGE PLAN February 06, 2025 04:56:22pm K:\VRB_LDEV\147864008 – 4101 Golden Gem Res\CAD2\PlanSheets\C-402 PAVING AND DRAINING PLAN.dwg
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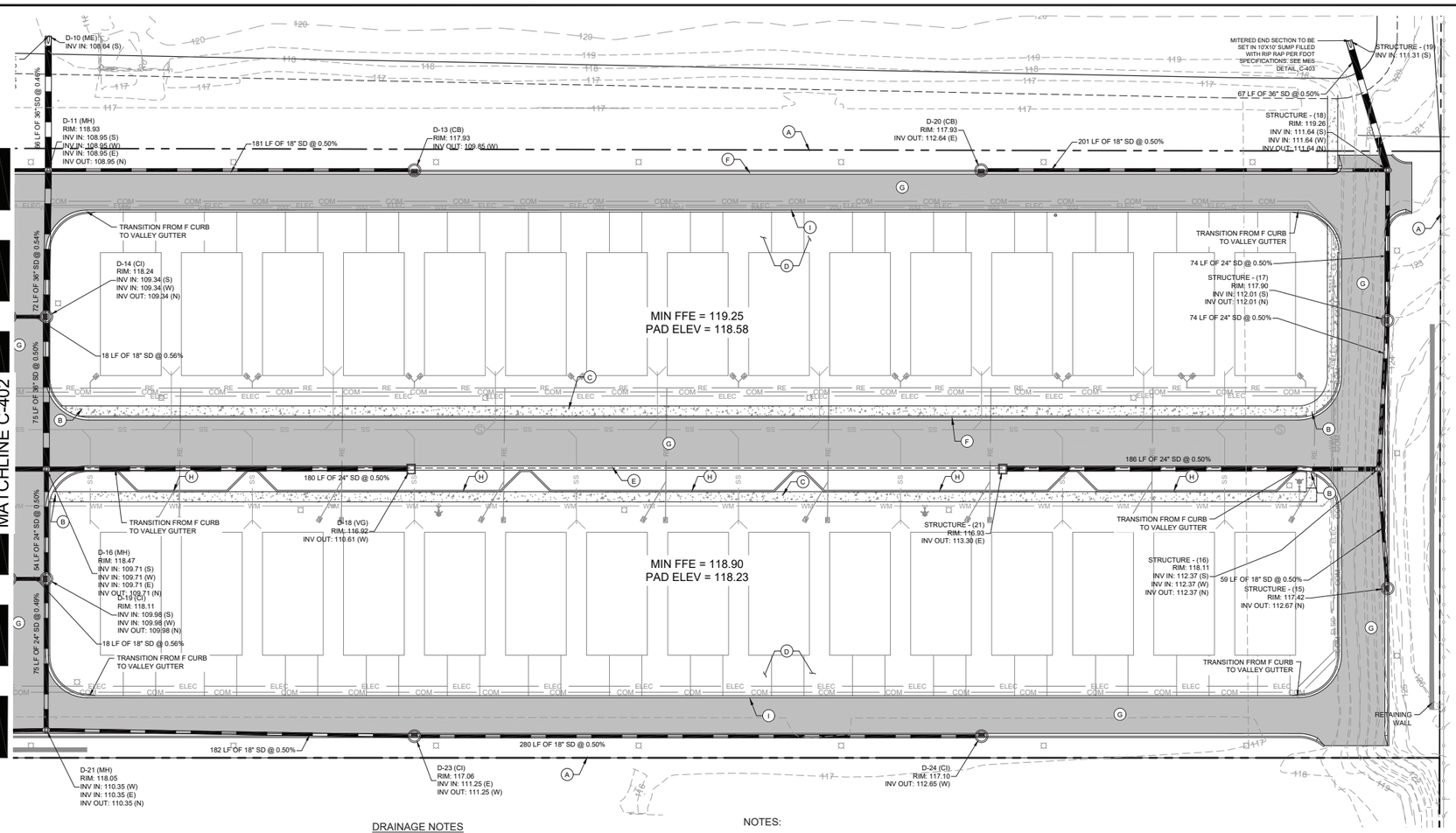


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NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

## LEGEND

- (A) PROPERTY LINE
- (B) ACCESSIBLE RAMP (SEE DETAIL SHEET C-450)
- (C) STANDARD CONCRETE SIDEWALK (SEE DETAIL SHEET C-450)
- (D) DRIVEWAYS BY BUILDING CONTRACTOR (TYP. 1 PER LOT)
- (E) 24" VALLEY GUTTER
- (F) FDOT TYPE "F" CURB (SEE DETAIL SHEET C-450)
- (G) STANDARD DUTY ASPHALT (SEE DETAIL SHEET C-450)
- (H) FDOT TYPE D CURB (SEE DETAIL SHEET C-450)
- (I) 12" RIBBON CURB
- (J) 15' WIDE LIFT STATION ACCESS ROAD (2" #57 STONE OVER 8" STABILIZED BASE)

EX DENOTES EXISTING FEATURE

SD STORM DRAIN (SEE NOTE 18)

(G) STANDARD DUTY ASPHALT PAVEMENT

(C) STANDARD CONCRETE SIDEWALK

CATCH BASIN (CB) FDOT TYPE C

CURB INLET (CI) FDOT TYPE 9

(D) MANHOLE (MH)

MITERED END (ME)

VALLEY GUTTER (VG)

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE.

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KHA PROJECT 147864008
DATE 8/7/2024
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# PAVING AND DRAINAGE PLAN

# 4101 GOLDEN GEM RESIDENTIAL

PREPARED FOR
DOUBLE B DEVELOPMENT FL
APOPKA

SHEET NUMBER
C-403



Plotted By:DeArmas, Moises Sheet Set:4101 GOLDEN GEM RESIDENTIAL Layout:C-403 PAVING AND DRAINAGE PLAN February 06, 2025 04:56:32pm K:\ORB_LDEV\147864008 – 4101 Golden Gem Res\CAD2\PlanSheets\C-402 PAVING AND DRAINING PLAN.dwg
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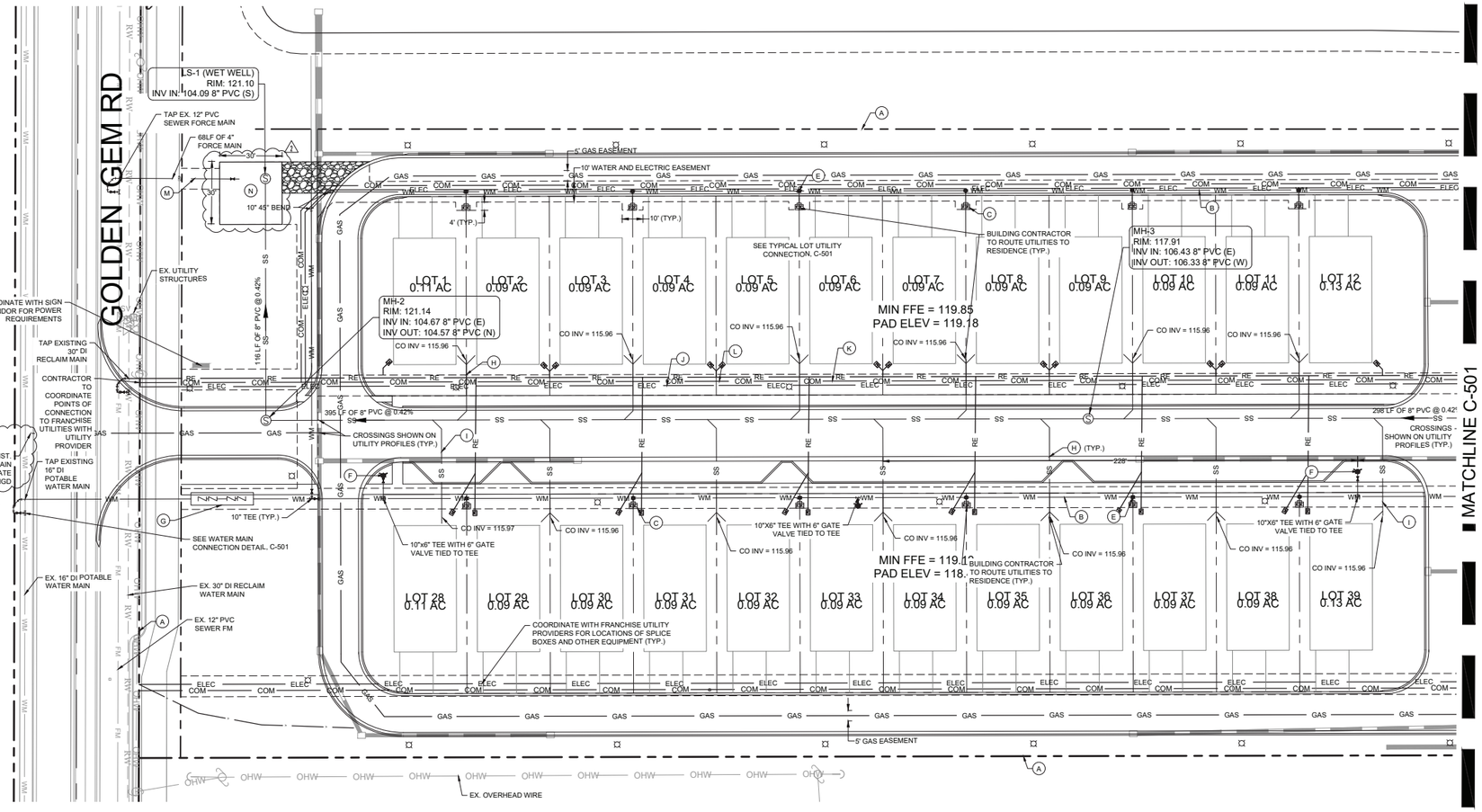


## UTILITY NOTES

1. ALL FILL MATERIAL IS TO BE IN PLACE AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
2. CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITIES INSPECTORS 72 HOURS BEFORE CONNECTING TO ANY EXISTING LINE.
3. SANITARY SEWER PIPE SHALL BE AS FOLLOWS:
   8" PVC SDR35 PER ASTM D 3034, FOR PIPES LESS THAT 12' DEEP
   8" PVC SDR26 PER ASTM D 3034, FOR PIPES MORE THAN 12' DEEP
   6" PVC SCHEDULE 40
   DUCTILE IRON PIPE PER AWWA C150
4. WATER LINES SHALL BE AS FOLLOWS:
   6" AND LARGER, PVC C-900 PER ASTM D 2241 CLASS 200 UNDER CITY ROADS, OTHERWISE CLASS 150
   6" AND LARGER DUCTILE IRON PIPE PER AWWA C150
   SMALLER THAN 6" EITHER COPPER TUBE TYPE "L" (SOFT) PER ANSI 816.22 OR PVC, 200 P.S.I., PER ASTM D1784 AND D2241 (ADS POLYFLEX OR APPROVED EQUAL).
5. MINIMUM TRENCH WIDTH SHALL BE 2 FEET.
6. ALL WATER JOINTS ARE TO BE MECHANICAL JOINTS WITH THRUST BLOCKING AS CALLED OUT IN SPECIFICATIONS.
7. ALL UTILITIES SHOULD BE KEPT TEN (10') APART (PARALLEL) OR WHEN CROSSING 18" VERTICAL CLEARANCE (OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE).
8. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 4'-0" COVER ON ALL WATERLINES.
9. IN THE EVENT OF A VERTICAL CONFLICT BETWEEN WATER LINES, SANITARY LINES, STORM LINES AND GAS LINES (EXISTING AND PROPOSED), THE SANITARY LINE SHALL BE DUCTILE IRON PIPE WITH MECHANICAL JOINTS AT LEAST 10 FEET ON BOTH SIDES OF CROSSING, THE WATER LINE SHALL HAVE MECHANICAL JOINTS WITH APPROPRIATE THRUST BLOCKING AS REQUIRED TO PROVIDE A MINIMUM OF 18" CLEARANCE. MEETING REQUIREMENTS OF ANSI A21.10 OR ANSI 21.11 (AWWA C-151) (CLASS 50).
10. UNDERGROUND LINES SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING.
11. TOPS OF EXISTING MANHOLES SHALL BE RAISED AS NECESSARY TO BE FLUSH WITH PROPOSED PAVEMENT ELEVATIONS WITHIN PAVED AREAS, AND TO BE ONE FOOT ABOVE FINISHED GROUND ELEVATIONS WITH WATER TIGHT LIDS WITHIN LANDSCAPED AREAS.
12. ALL CONCRETE FOR ENCASEMENTS SHALL HAVE A MINIMUM 28 DAY COMPRESSION STRENGTH AT 3000 P.S.I.
13. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW LINES.
14. REFER TO INTERIOR PLUMBING DRAWINGS FOR TIE-IN OF ALL UTILITIES.
15. CONTRACTOR IS RESPONSIBLE FOR COMPLYING TO THE SPECIFICATIONS OF THE LOCAL AUTHORITIES (CITY OF APOPKA) WITH REGARDS TO MATERIALS AND INSTALLATION OF THE WATER AND SEWER LINES.
16. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
17. CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES. THIS AND THE FINAL CONNECTIONS OF THE SERVICE SHALL BE COMPLETED 30 DAYS PRIOR TO STORE POSSESSION.
18. CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS.
19. REFER TO BUILDING PLANS FOR SITE LIGHTING ELECTRICAL PLAN.
20. UNDERGROUND UTILITY LINES SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING.
21. REFER TO INTERIOR PLUMBING DRAWINGS FOR TIE-IN OF ALL UTILITIES.
22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING EXISTING WATER MAINS, FORCE MAINS, SANITARY SEWER AND STORM MAINS AND MAINTAIN MINIMUM CLEARANCES BETWEEN WATER MAINS AND OTHER UTILITIES AT ALL POINTS ALONG THEIR LENGTH AS REQUIRED IN THE PLANS, DETAILS AND SPECIFICATIONS.
23. CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES. THIS AND THE FINAL CONNECTIONS OF THE SERVICE SHALL BE COMPLETED 30 DAYS PRIOR TO STORE POSSESSION.
24. THE ENTIRE FIRE SERVICE FROM BUILDING TO CONNECTION POINT IS TO BE INSTALLED BY A LICENSED UTILITY CONTRACTOR HOLDING A "CONTRACTOR V" LICENSE IN ACCORDANCE WITH CH. 489 OF THE FLORIDA STATUTES.
25. ALL UTILITY MAIN LENGTHS SHOWN ARE APPROXIMATE.
26. CONTRACTOR TO PROVIDE A SIGN AT EACH FDC.
27. UTILITY CROSSING PIPE DEFLECTIONS PER C.O.A FIG 117.
28. ALL PIPE LENGTHS ARE APPROXIMATIONS AND THE CONTRACTOR SHALL NOT USE FOR BIDDING PURPOSES.

FOLLOW CURRENT NFPA AND FLORIDA FIRE PREVENTION CODE 7TH EDITION CONCERNING FIRE AND LIFE SAFETY.

## CITY OF APOPKA (C.O.A.) UTILITY NOTES

1. THE DEVELOPER'S CONTRACTOR SHALL ACCOMPLISH ALL WATER MAIN & SERVICE WORK THROUGH THE POINT OF CONNECTION/FIRE SERVICE CONTROL VALVE & WATER METERS. C.O.A. WILL OWN & OPERATE UP TO & INCLUDING THE POINT OF CONNECTION/FIRE SERVICE CONTROL VALVE & METERS ONLY. THE REQUIRED WORK SHALL BE PERFORMED PER CURRENT C.O.A. MATERIAL SPECIFICATION & WATER DETAIL SHEET UNDER C.O.A. INSPECTION. TO SCHEDULE A C.O.A. INSPECTION, CALL 407-703-1718.
2. THE DEVELOPER/CONTRACTOR SHALL FILED VERIFY THE VERTICAL & HORIZONTAL LOCATION OF EXISTING C.O.A. WATER FACILITIES BEFORE COMMENCEMENT OF CONSTRUCTION.
3. THE DEVELOPER/CUSTOMER IS RESPONSIBLE FOR ALL REQUIRED PERMITS.

NOTE:
PRIVATE FIRE SERVICE MAIN SHOWN FOR ALIGNMENT PURPOSES ONLY. FIRE SERVICE MAIN TO BE DESIGNED BY A LICENSED FIRE SERVICE DESIGNER. PRIVATE FIRE SYSTEM MAIN DESIGN INSTALLATION IS PER NFPA 24. PLUMBING CONTRACTOR MUST SECURE FIRE SERVICE PERMIT.

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

## LEGEND

- (A) PROPERTY LINE
- (B) 10" PVC WATER MAIN
- (C) DUAL WATER SERVICE WITH (2) 5/8" METERS (TYP)
- (D) SINGLE WATER SERVICE WITH (1) 5/8" METER
- (E) 1.5" CORP STOP (TYP)
- (F) FIRE HYDRANT ASSEMBLY (TYP)
- (G) 10" FIRE LINE MASTER METER ASSEMBLY W/ BY-PASS (PER CITY OF APOPKA DETAIL SHEET C-551)
- (H) DUAL SEWER SERVICE (TYP.)
- (I) SINGLE SEWER SERVICE
- (J) ELECTRIC SERVICE
- (K) COMMUNICATION SERVICE
- (L) LIGHT POLE (TYP.), REFER TO PHOTOMETRIC PLANS
- (M) PVC FORCEMAIN
- (N) LIFT STATION - OWNED AND MAINTAINED BY THE CITY OF APOPKA

## LEGEND

- COM — PROPOSED COMMUNICATION LINE
- WM — DOMESTIC WATER SERVICE LINE
- RE — PROPOSED RECLAIMED WATER LINE
- SS — SANITARY SEWER LATERAL
- PROPOSED SANITARY MANHOLE
- WM — EXISTING WATER MAIN
- SS — EXISTING SANITARY SEWER MAIN
- OHW — EXISTING ELECTRIC LINE
- PROPOSED DRAINAGE
- GAS — PROPOSED GAS MAIN
- EXISTING POWER POLE
- PROPOSED PIPE BEND
- PROPOSED GATE VALVE
- PROPOSED FIRE HYDRANT
- GAS — PROPOSED SINGLE WATER SERVICE (1" LINE W/ 5/8" METER UNLESS OTHERWISE NOTED) (P.O.S.)
- PROPOSED DOUBLE WATER SERVICE (1.5" LINE W/ (2) 5/8" METERS UNLESS OTHERWISE NOTED) (P.O.S.)
- PROPOSED SINGLE SEWER SERVICE W/ CO (P.O.S.)
- PROPOSED DOUBLE SEWER SERVICE W/ CO (P.O.S.)
- PROPOSED TEE
- PROPOSED WATER BENDS
- PROPOSED WATER REDUCER
- PROPOSED LIGHT POLE
- CORP STOP
- MASTER METER ASSEMBLY PER CITY DETAILS

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE.

**Always call 811 two full business days before you dig to have underground utilities located and marked.**

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| No. | REVISIONS | DATE | BY |
|---|---|---|---|
| 3 | ADDED GAS MAIN FOR THE SITE | 12/18/2024 | TPC |
| 2 | REVISED LIFT STATION TO CITY REQUIREMENTS | 12/18/2024 | TPC |

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2/6/2025

KHA PROJECT 147864008
DATE 8/7/2024
SCALE AS SHOWN
DESIGNED BY ---
DRAWN BY ---
CHECKED BY ---

# UTILITY PLAN

# 4101 GOLDEN GEM RESIDENTIAL

PREPARED FOR
DOUBLE B DEVELOPMENT FL
APOPKA

SHEET NUMBER
C-500



Plotted By:DeArmas, Moises Sheet Set:4101 GOLDEN GEM RESIDENTIAL Layout:C-500 UTILITY PLAN February 06, 2025 04:57:07pm K:\VRB_LDEV\147864008 - 4101 Golden Gem Resi\CADD\PlanSheets\C-500 UTILITY PLAN.dwg
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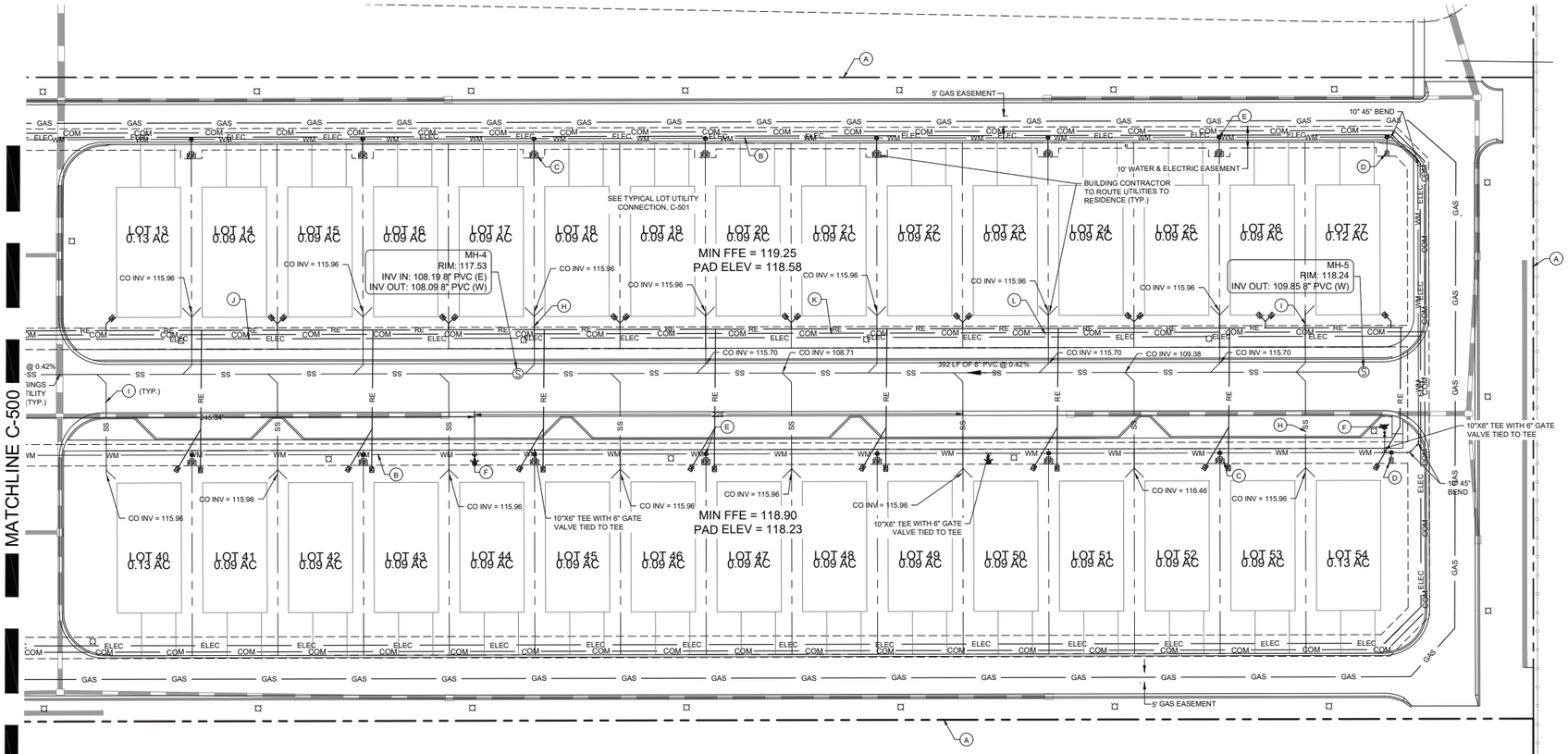
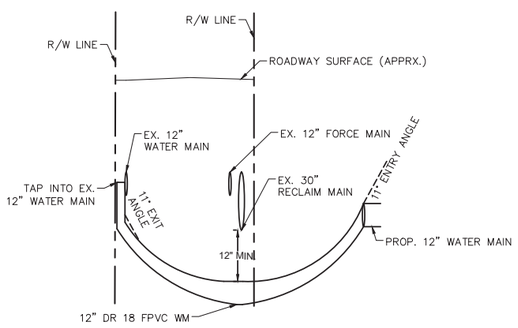
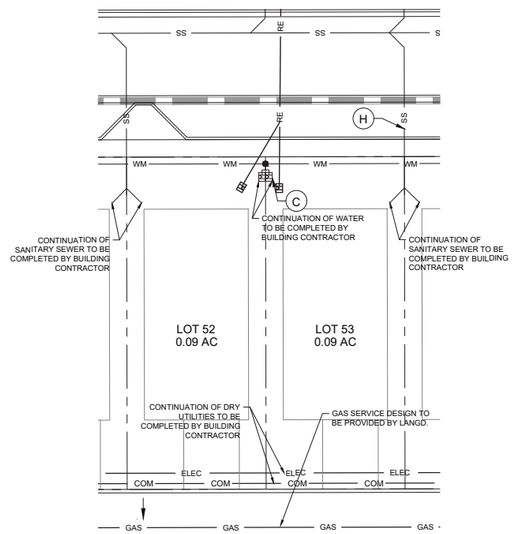



WATER MAIN CONNECTION DETAIL
SCALE: N.T.S.




TYPICAL LOT UTILITY CONNECTION

GRAPHIC SCALE IN FEET
0 10 20 40

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

LEGEND

- (A) PROPERTY LINE
- (B) 10" PVC WATER MAIN
- (C) DUAL WATER SERVICE WITH (2) 5/8" METERS (TYP)
- (D) SINGLE WATER SERVICE WITH (1) 5/8" METER
- (E) 1.5" CORP STOP (TYP)
- (F) FIRE HYDRANT ASSEMBLY (TYP)
- (G) 10" FIRE LINE MASTER METER ASSEMBLY W/ BY-PASS (PER CITY OF APOPKA DE
- (H) DUAL SEWER SERVICE (TYP.)
- (I) SINGLE SEWER SERVICE
- (J) ELECTRIC SERVICE
- (K) COMMUNICATION SERVICE
- (L) LIGHT POLE (TYP.), REFER TO PHOTOMETRIC PLANS
- (M) PVC FORCEMAIN
- (N) LIFT STATION - OWNED AND MAINTAINED BY THE CITY OF APOPKA

LEGEND

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- (S) PROPOSED SANITARY MANHOLE
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- PROPOSED DRAINAGE
- GAS — PROPOSED GAS MAIN
- EXISTING POWER POLE
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DATE 8/7/2024
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DRAWN BY ____
CHECKED BY ____

# UTILITY PLAN

# 4101 GOLDEN GEM RESIDENTIAL

PREPARED FOR
DOUBLE B DEVELOPMENT
APOPKA FL

SHEET NUMBER
C-501



Plotted By:DeArmas, Moises Sheet Set:4101 GOLDEN GEM RESIDENTIAL Layout:C-501 UTILITY PLAN February 06, 2025 04:57:17pm K:\ORB_LDEV\147864008 – 4101 Golden Gem Resi\CADD\PlanSheets\C-500 UTILITY PLAN.dwg
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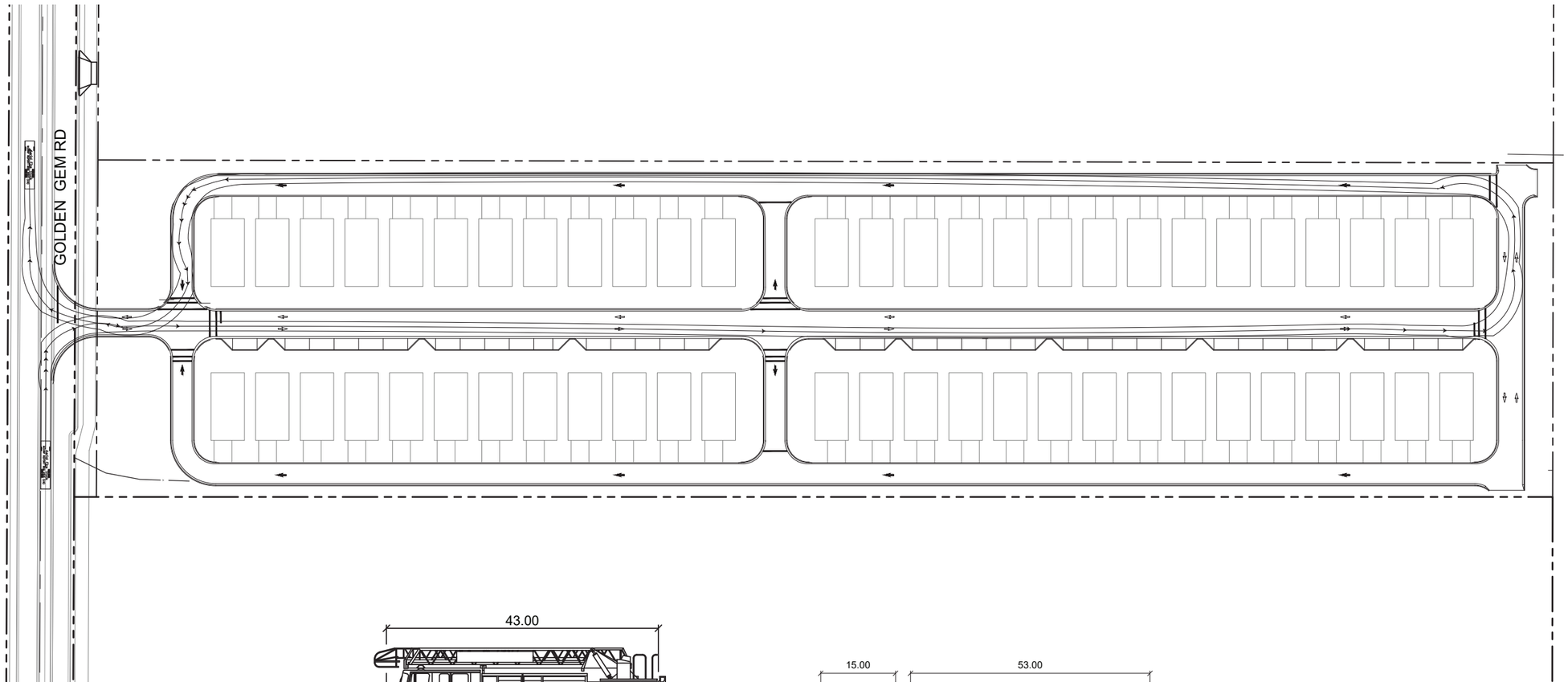
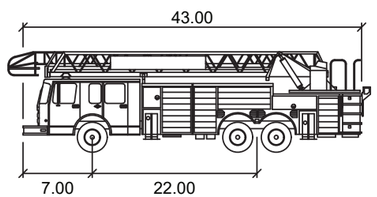
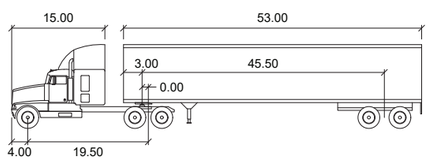



## Aerial Fire Truck

| | feet |
|---|---|
| Width | : 8.50 |
| Track | : 8.50 |
| Lock to Lock Time | : 6.0 |
| Steering Angle | : 33.3 |




## WB-67

| | feet | | |
|---|---|---|---|
| Tractor Width | : 8.00 | Lock to Lock Time | : 6.0 |
| Trailer Width | : 8.50 | Steering Angle | : 28.4 |
| Tractor Track | : 8.00 | Articulating Angle | : 75.0 |
| Trailer Track | : 8.50 | | |

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DRAWN BY ____
CHECKED BY ____

# TRUCK MOVEMENT PLAN

# 4101 GOLDEN GEM RESIDENTIAL

PREPARED FOR
DOUBLE B DEVELOPMENT
APOPKA FL

SHEET NUMBER
C-600



Plotted By:DeArmas, Moises Sheet Set:4101 GOLDEN GEM RESIDENTIAL Layout:C-600 TRUCK MOVEMENT PLAN February 06, 2025 04:57:29pm K:\VRB_LDEV\147864008 - 4101 Golden Gem Resi\CADD\PlanSheets\C-600 TRUCK MOVEMENT PLAN.dwg
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## LANDSCAPE CALCULATIONS

*PER "CITY OF APOPKA" LAND DEVELOPMENT CODE*

| | REQUIRED | PROVIDED |
|---|---|---|
| **BUFFERYARD LANDSCAPE REQUIREMENT**<br>BUFFER TYPE "C": 2 CANOPY TREES, 6 UNDERSTORY TREES, AND 15 SHRUBS PER 100 L.F.<br>*TABLE 5.2.5.B.3.D-2* | **EAST LANDSCAPE BUFFER 1 (TYPE C) 15' MIN WIDTH : 300 L.F.**<br>6 CANOPY TREES, 18 UNDERSTORY TREES, 45 SHRUBS | 6 CANOPY TREES, 18 UNDERSTORY TREES, 45 SHRUBS |
| **SINGLE FAMILY RESIDENTIAL LOT TREES**<br>LOTS LESS THAN 5,000 SQUARE FEET SHALL CONTAIN A MINIMUM OF ONE (1) CANOPY TREE<br>*SECTION 5.2.5.F.1* | 54 TOTAL LOTS UNDER 5000 SQ FT<br>54 X 1 = 54 REQUIRED CANOPY TREES | 54 CANOPY TREES |
| **OFF-STREET VEHICULAR PARKING AREA PLANTING**<br>MINIMUM ONE CANOPY SHADE TREE REQUIRED FOR AN OFF-STREET VEHICULAR PARKING AREA.<br>WILL CONSIST OF A MIX OF VEGETATION INCLUDING, BUT NOT LIMITED TO, TREES, SHRUBS AND GROUND COVER.<br>*SECTION 5.2.5.B.2.A* | 1 TREE PER ISLAND<br>1 TREE X 11 ISLANDS = 11 TREES | 11 TREES |

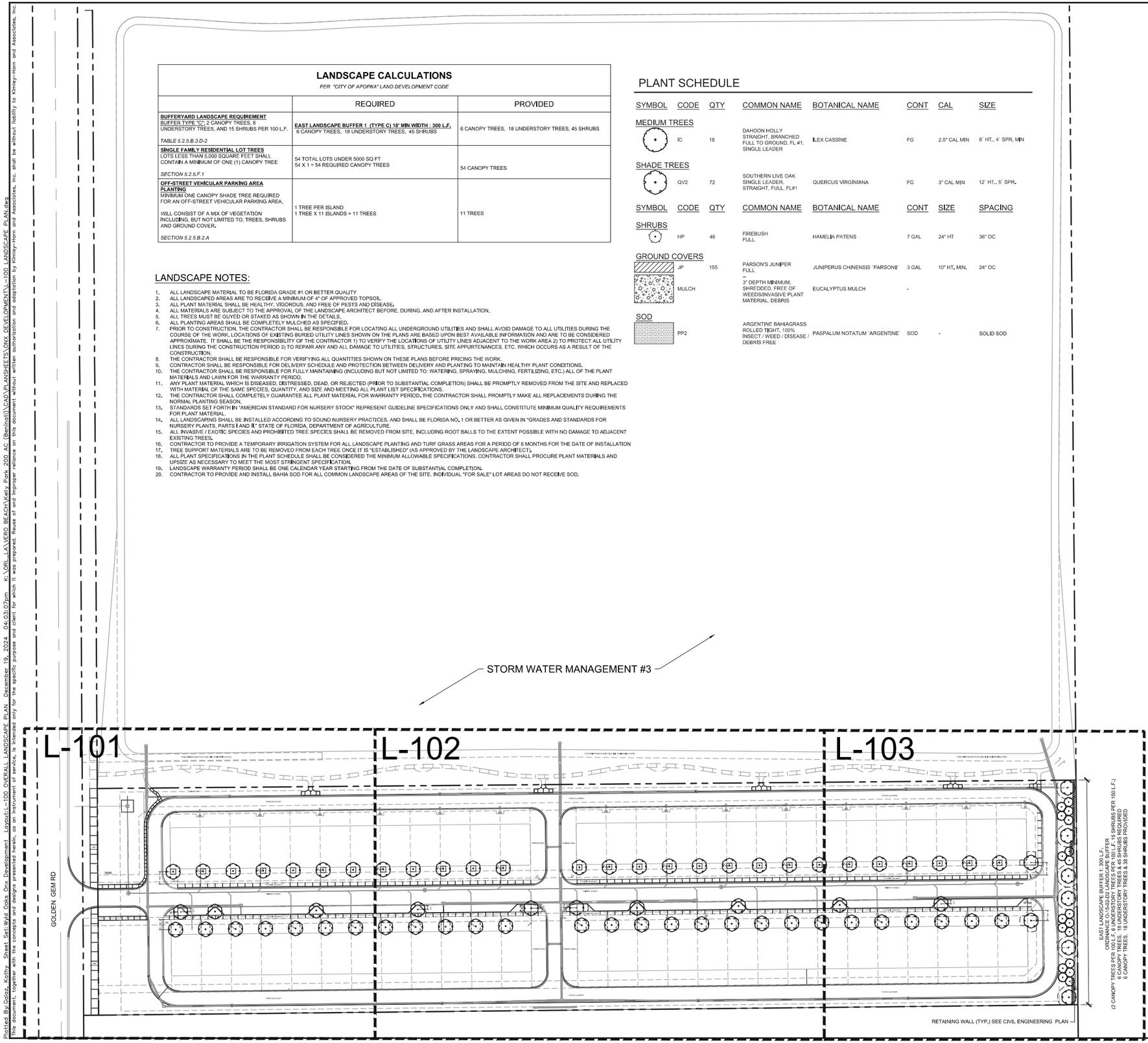
## LANDSCAPE NOTES:

1. ALL LANDSCAPE MATERIAL TO BE FLORIDA GRADE #1 OR BETTER QUALITY
2. ALL LANDSCAPED AREAS ARE TO RECEIVE A MINIMUM OF 4" OF APPROVED TOPSOIL.
3. ALL PLANT MATERIAL SHALL BE HEALTHY, VIGOROUS, AND FREE OF PESTS AND DISEASE.
4. ALL MATERIALS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT BEFORE, DURING, AND AFTER INSTALLATION.
5. ALL TREES MUST BE GUYED OR STAKED AS SHOWN IN THE DETAILS.
6. ALL PLANTING AREAS SHALL BE COMPLETELY MULCHED AS SPECIFIED.
7. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL AVOID DAMAGE TO ALL UTILITIES DURING THE COURSE OF THE WORK. LOCATIONS OF EXISTING BURIED UTILITY LINES SHOWN ON THE PLANS ARE BASED UPON BEST AVAILABLE INFORMATION AND ARE TO BE CONSIDERED APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR 1) TO VERIFY THE LOCATIONS OF UTILITY LINES ADJACENT TO THE WORK AREA 2) TO PROTECT ALL UTILITY LINES DURING THE CONSTRUCTION PERIOD 3) TO REPAIR ANY AND ALL DAMAGE TO UTILITIES, STRUCTURES, SITE APPURTENANCES, ETC. WHICH OCCURS AS A RESULT OF THE CONSTRUCTION.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON THESE PLANS BEFORE PRICING THE WORK.
9. CONTRACTOR SHALL BE RESPONSIBLE FOR DELIVERY SCHEDULE AND PROTECTION BETWEEN DELIVERY AND PLANTING TO MAINTAIN HEALTHY PLANT CONDITIONS.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FULLY MAINTAINING (INCLUDING BUT NOT LIMITED TO: WATERING, SPRAYING, MULCHING, FERTILIZING, ETC.) ALL OF THE PLANT MATERIALS AND LAWN FOR THE WARRANTY PERIOD.
11. ANY PLANT MATERIAL WHICH IS DISEASED, DISTRESSED, DEAD, OR REJECTED (PRIOR TO SUBSTANTIAL COMPLETION) SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, AND SIZE AND MEETING ALL PLANT LIST SPECIFICATIONS.
12. THE CONTRACTOR SHALL COMPLETELY GUARANTEE ALL PLANT MATERIAL FOR WARRANTY PERIOD. THE CONTRACTOR SHALL PROMPTLY MAKE ALL REPLACEMENTS DURING THE NORMAL PLANTING SEASON.
13. STANDARDS SET FORTH IN "AMERICAN STANDARD FOR NURSERY STOCK" REPRESENT GUIDELINE SPECIFICATIONS ONLY AND SHALL CONSTITUTE MINIMUM QUALITY REQUIREMENTS FOR PLANT MATERIAL.
14. ALL LANDSCAPING SHALL BE INSTALLED ACCORDING TO SOUND NURSERY PRACTICES, AND SHALL BE FLORIDA NO. 1 OR BETTER AS GIVEN IN "GRADES AND STANDARDS FOR NURSERY PLANTS, PARTS I AND II," STATE OF FLORIDA, DEPARTMENT OF AGRICULTURE.
15. ALL INVASIVE / EXOTIC SPECIES AND PROHIBITED TREE SPECIES SHALL BE REMOVED FROM SITE, INCLUDING ROOT BALLS TO THE EXTENT POSSIBLE WITH NO DAMAGE TO ADJACENT EXISTING TREES.
16. CONTRACTOR TO PROVIDE A TEMPORARY IRRIGATION SYSTEM FOR ALL LANDSCAPE PLANTING AND TURF GRASS AREAS FOR A PERIOD OF 6 MONTHS FOR THE DATE OF INSTALLATION
17. TREE SUPPORT MATERIALS ARE TO BE REMOVED FROM EACH TREE ONCE IT IS "ESTABLISHED" (AS APPROVED BY THE LANDSCAPE ARCHITECT).
18. ALL PLANT SPECIFICATIONS IN THE PLANT SCHEDULE SHALL BE CONSIDERED THE MINIMUM ALLOWABLE SPECIFICATIONS. CONTRACTOR SHALL PROCURE PLANT MATERIALS AND UPSIZE AS NECESSARY TO MEET THE MOST STRINGENT SPECIFICATION.
19. LANDSCAPE WARRANTY PERIOD SHALL BE ONE CALENDAR YEAR STARTING FROM THE DATE OF SUBSTANTIAL COMPLETION.
20. CONTRACTOR TO PROVIDE AND INSTALL BAHIA SOD FOR ALL COMMON LANDSCAPE AREAS OF THE SITE. INDIVIDUAL "FOR SALE" LOT AREAS DO NOT RECEIVE SOD.

## PLANT SCHEDULE

| SYMBOL | CODE | QTY | COMMON NAME | BOTANICAL NAME | CONT | CAL | SIZE |
|---|---|---|---|---|---|---|---|
| **MEDIUM TREES** | | | | | | | |
| | IC | 18 | DAHOON HOLLY STRAIGHT, BRANCHED FULL TO GROUND, FL #1, SINGLE LEADER | ILEX CASSINE | FG | 2.5" CAL MIN | 8` HT., 4` SPR. MIN |
| **SHADE TREES** | | | | | | | |
| | QV2 | 72 | SOUTHERN LIVE OAK SINGLE LEADER, STRAIGHT, FULL, FL#1 | QUERCUS VIRGINIANA | FG | 3" CAL MIN | 12` HT., 5` SPR. |

| SYMBOL | CODE | QTY | COMMON NAME | BOTANICAL NAME | CONT | SIZE | SPACING |
|---|---|---|---|---|---|---|---|
| **SHRUBS** | | | | | | | |
| | HP | 46 | FIREBUSH FULL | HAMELIA PATENS | 7 GAL | 24" HT | 36" OC |
| **GROUND COVERS** | | | | | | | |
| | JP | 155 | PARSON'S JUNIPER FULL | JUNIPERUS CHINENSIS `PARSONII` | 3 GAL | 10" HT. MIN. | 24" OC |
| | MULCH | | 3" DEPTH MINIMUM, SHREDDED, FREE OF WEEDS/INVASIVE PLANT MATERIAL, DEBRIS | EUCALYPTUS MULCH | - | | |
| **SOD** | | | | | | | |
| | PP2 | | ARGENTINE BAHIAGRASS ROLLED TIGHT, 100% INSECT / WEED / DISEASE / DEBRIS FREE | PASPALUM NOTATUM `ARGENTINE` | SOD | - | SOLID SOD |




NORTH

GRAPHIC SCALE IN FEET
0 30 60 120

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Edwin M Linquist
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DN: CN=Edwin M Linquist, O=Kimley-Horn and Associates, Inc., OU=FL-772-794-4100, E=edwin.linquist@kimley-horn.com, C=US
Date: 2024.12.19 16:37:25 -05'00'

KHA PROJECT 147864008
DATE 12/19/2024
SCALE AS SHOWN
DESIGNED BY KDG
DRAWN BY KDG
CHECKED BY EML

# OVERALL LANDSCAPE PLAN

# WYLD OAKS ONX DEVELOPMENT

PREPARED FOR
DOUBLE D DEVELOPMENT
CITY OF APOPKA FLORIDA

SHEET NUMBER
L-100



Plotted By:Golaz, Kathy Sheet Set:Wyld Oaks Onx Development Layout:L-100 OVERALL LANDSCAPE PLAN December 19, 2024 04:03:07pm K:\ORL_LA\VERO BEACH\Kelly Park 200 AC (Beninati)\CAD\PLANSHEETS\ONX DEVELOPMENT\L-100 LANDSCAPE PLAN.dwg
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## PLANT SCHEDULE

| SYMBOL | CODE | QTY | COMMON NAME | BOTANICAL NAME |
|---|---|---|---|---|
| **MEDIUM TREES** | | | | |
| | IC | 18 | DAHOON HOLLY STRAIGHT, BRANCHED FULL TO GROUND, FL #1, SINGLE LEADER | ILEX CASSINE |
| **SHADE TREES** | | | | |
| | QV2 | 72 | SOUTHERN LIVE OAK SINGLE LEADER, STRAIGHT, FULL, FL#1 | QUERCUS VIRGINIANA |
| **SYMBOL** | **CODE** | | **COMMON NAME** | **BOTANICAL NAME** |
| **SHRUBS** | | | | |
| | HP | | FIREBUSH FULL | HAMELIA PATENS |
| **GROUND COVERS** | | | | |
| | JP | | PARSON'S JUNIPER FULL -- | JUNIPERUS CHINENSIS 'PARSONII' |
| | MULCH | | 3" DEPTH MINIMUM, SHREDDED, FREE OF WEEDS/INVASIVE PLANT MATERIAL, DEBRIS | EUCALYPTUS MULCH |
| **SOD** | | | | |
| | PP2 | | ARGENTINE BAHIAGRASS ROLLED TIGHT, 100% INSECT / WEED / DISEASE / DEBRIS FREE | PASPALUM NOTATUM 'ARGENTINE' |

GOLDEN GEM RD

POND MAINTENANCE ROAD (SEE CIVIL ENGINEERING DOC'S)

FUTURE TRAIL

COMMON AREA

PAVED ALLEYWAY

REAR OF PROPERTY

FUTURE 10' WIDE PEDESTRIAN PATH (BY OTHERS)

10'-0"

LOCATION OF GROUND MOUNTED SIGN BY OTHERS (SHOWN FOR REFERENCE ONLY)

APPROX. LOCATION OF LOT TREES, FINAL LOCATION TO BE DETERMINED IN THE FIELD BASED ON BUILDING FOOTPRINT AND LOT LANDSCAPE PLANS

FRONT OF PROPERTY

ROOT BARRIER (TYP.)

UTILITY EASEMENT (TYP.)

BUILDABLE AREA
MIN FFE = 119.85
PAD ELEV = 119.18

10'-6"

5' PUBLIC WALKWAY

MATCHLINE: SEE SHEET L-102

PROPERTY LINE, TYP.

PRIMARY STREET

ROOT BARRIER (TYP.)

APPROX. LOCATION OF STREET TREES. FINAL LOCATION TO BE DETERMINED IN THE FIELD TO AVOID CONFLICT WITH UTILITIES AND DRIVEWAYS

5'-0"

ON-STREET PARKING (TYP.)

13'-6"

5' PUBLIC WALKWAY

FRONT OF PROPERTY

BUILDABLE AREA
MIN FFE = 119.10
PAD ELEV = 118.43

FUTURE 10' WIDE PEDESTRIAN PATH (BY OTHERS)

10'-0"

REAR OF PROPERTY

PAVED ALLEYWAY

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

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Edwin M Linquist

KHA PROJECT 147864008
DATE 12/19/2024
SCALE AS SHOWN
DESIGNED BY KDG
DRAWN BY KDG
CHECKED BY EML

# LANDSCAPE PLAN

WYLD OAKS ONX DEVELOPMENT
PREPARED FOR
DOUBLE D DEVELOPMENT
CITY OF APOPKA FLORIDA

SHEET NUMBER
L-101



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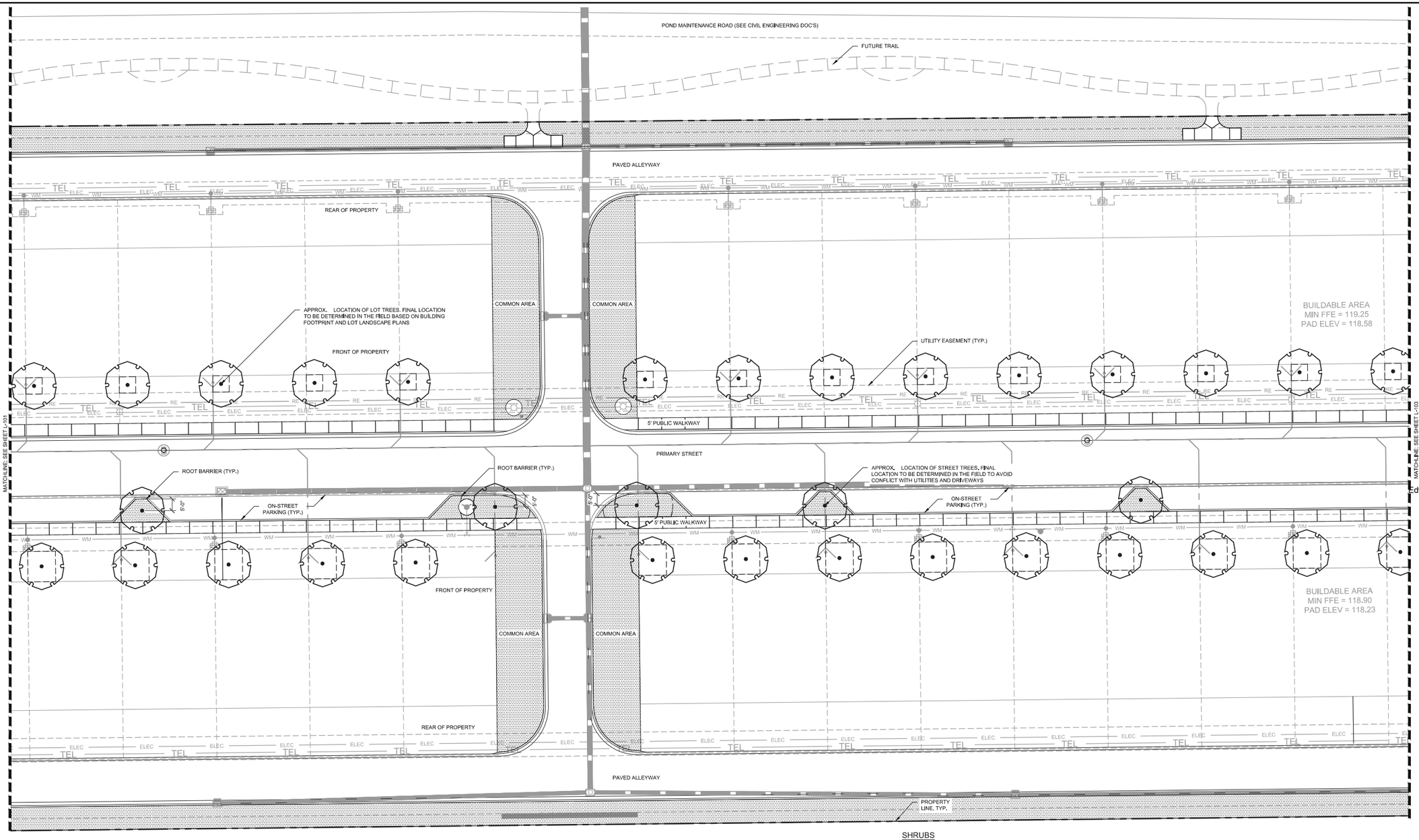


## PLANT SCHEDULE

| SYMBOL | CODE | QTY | COMMON NAME | BOTANICAL NAME |
|---|---|---|---|---|
| MEDIUM TREES | | | | |
| | IC | 18 | DAHOON HOLLY STRAIGHT, BRANCHED FULL TO GROUND, FL #1, SINGLE LEADER | ILEX CASSINE |
| SHADE TREES | | | | |
| | QV2 | 72 | SOUTHERN LIVE OAK SINGLE LEADER, STRAIGHT, FULL, FL#1 | QUERCUS VIRGINIANA |
| SYMBOL | CODE | | COMMON NAME | BOTANICAL NAME |
| SHRUBS | | | | |
| | HP | | FIREBUSH FULL | HAMELIA PATENS |

| | | | |
|---|---|---|---|
| SHRUBS | | | |
| HP | FIREBUSH FULL | HAMELIA PATENS | |
| GROUND COVERS | | | |
| JP | PARSON'S JUNIPER FULL – | JUNIPERUS CHINENSIS `PARSONII` | |
| MULCH | 3" DEPTH MINIMUM, SHREDDED, FREE OF WEEDS/INVASIVE PLANT MATERIAL, DEBRIS | EUCALYPTUS MULCH | |
| SOD | | | |
| PP2 | ARGENTINE BAHIAGRASS ROLLED TIGHT, 100% INSECT / WEED / DISEASE / DEBRIS FREE | PASPALUM NOTATUM `ARGENTINE` | |

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

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| DATE | 12/19/2024 |
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| DESIGNED BY | KDG |
| DRAWN BY | KDG |
| CHECKED BY | EML |

# LANDSCAPE PLAN

# WYLD OAKS ONX DEVELOPMENT

PREPARED FOR

DOUBLE D DEVELOPMENT

CITY OF APOPKA FLORIDA

SHEET NUMBER
L-102



Plotted By:Galaz, Kathy Sheet Set:Wyld Oaks Onx Development Layout:L-102 LANDSCAPE PLAN December 19, 2024 04:03:12pm K:\ORL_LA\VERO BEACH\Kelly Park 200 AC (Beninati)\CAD\PLANSHEETS\ONX DEVELOPMENT\L-100 LANDSCAPE PLAN.dwg
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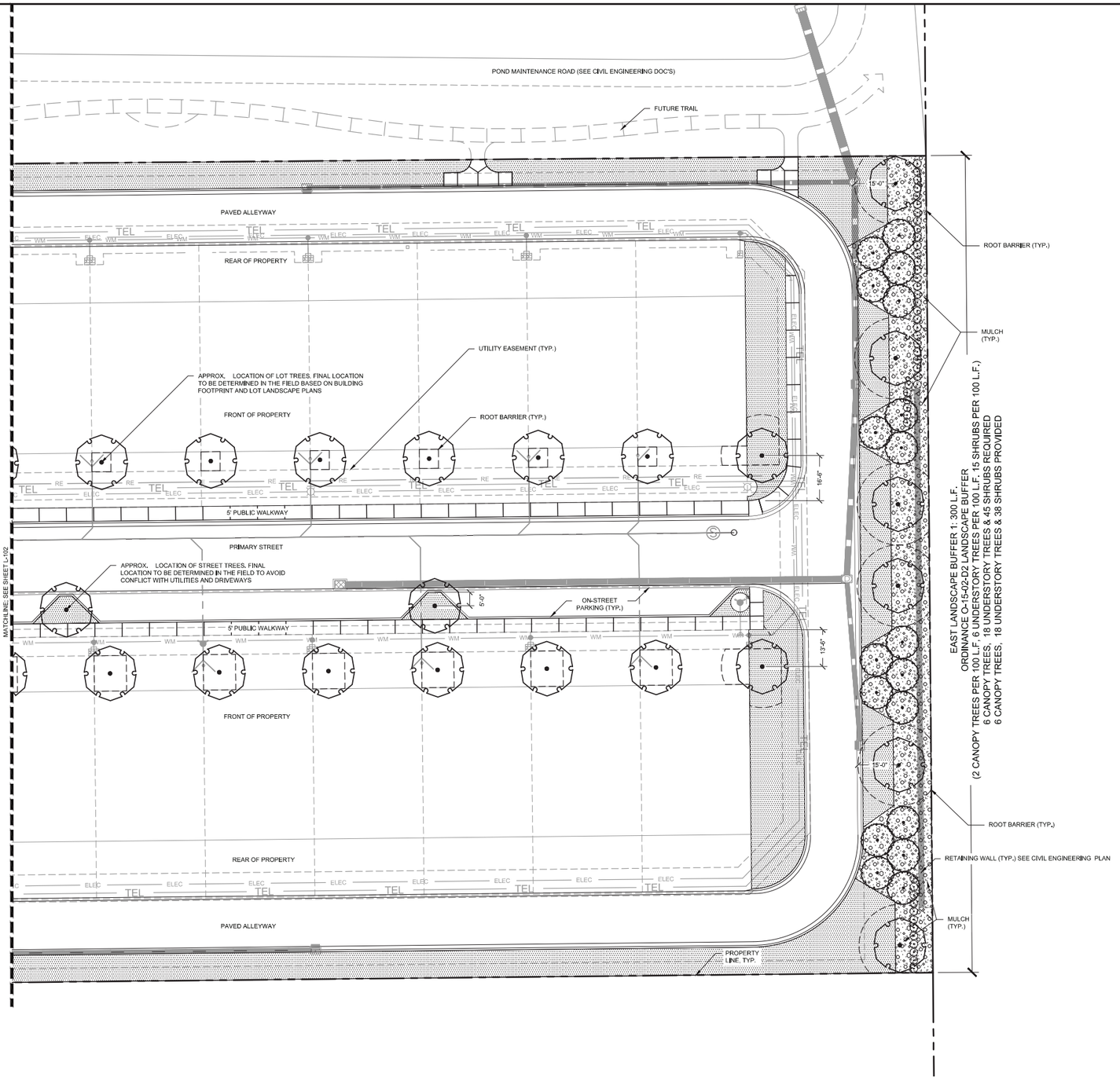


## PLANT SCHEDULE

| SYMBOL | CODE | QTY | COMMON NAME | BOTANICAL NAME |
|---|---|---|---|---|
| **MEDIUM TREES** | | | | |
| | IC | 18 | DAHOON HOLLY STRAIGHT, BRANCHED FULL TO GROUND, FL #1, SINGLE LEADER | ILEX CASSINE |
| **SHADE TREES** | | | | |
| | QV2 | 72 | SOUTHERN LIVE OAK SINGLE LEADER, STRAIGHT, FULL, FL#1 | QUERCUS VIRGINIANA |
| **SYMBOL** | **CODE** | | **COMMON NAME** | **BOTANICAL NAME** |
| **SHRUBS** | | | | |
| | HP | | FIREBUSH FULL | HAMELIA PATENS |
| **GROUND COVERS** | | | | |
| | JP | | PARSON'S JUNIPER FULL | JUNIPERUS CHINENSIS `PARSONII` |
| | MULCH | | 3" DEPTH MINIMUM, SHREDDED, FREE OF WEEDS/INVASIVE PLANT MATERIAL, DEBRIS | EUCALYPTUS MULCH |
| **SOD** | | | | |
| | PP2 | | ARGENTINE BAHIAGRASS ROLLED TIGHT, 100% INSECT / WEED / DISEASE / DEBRIS FREE | PASPALUM NOTATUM `ARGENTINE` |

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

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Edwin M Linquist

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Date: 2024.12.19 08:38:49-05'00'

KHA PROJECT 147864008
DATE 12/19/2024
SCALE AS SHOWN
DESIGNED BY KDG
DRAWN BY KDG
CHECKED BY EML

# LANDSCAPE PLAN

WYLD OAKS ONX DEVELOPMENT
PREPARED FOR
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ORLANDO FLORIDA

SHEET NUMBER
L-103



Plotted By:Galaz, Kathy Sheet Set:Wyld Oaks Onx Development Layout:L-103 LANDSCAPE PLAN December 19, 2024 04:03:14pm K:\ORL_LA\VERO BEACH\Kelly Park 200 AC (Beninati)\CAD\PLANSHEETS\ONX DEVELOPMENT\L-100 LANDSCAPE PLAN.dwg
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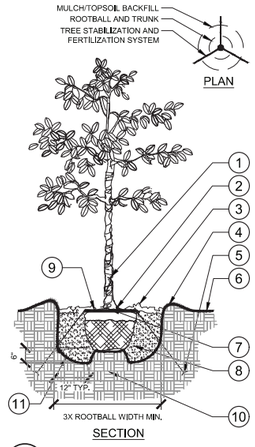



1. TRUNK/ROOT BALL TO BE CENTERED AND PLUMB/LEVEL IN PLANTING PIT.
2. 6" DIA. CLEAR OF MULCH AT TRUNK FLARE.
3. 3" MINIMUM MULCH AS SPECIFIED. WHERE TREES ARE PLACED IN SOD, MULCH RING FOR TREES SHALL BE 6' DIAMETER (MIN.) OR AS DIRECTED BY OWNER'S REPRESENTATIVE.
4. 4" HIGH BERM, FIRMLY COMPACTED.
5. TREE FROG ANCHOR SYSTEM INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
6. FINISHED GRADE. (SEE GRADING PLAN)
7. TOP OF ROOTBALL MIN. 1" ABOVE FINISHED GRADE.
8. PREPARED PLANTING SOIL AS SPECIFIED.
9. TOP OF ROOTBALL SHALL BE 1" ABOVE FINISHED GRADE. ROOTBALLS GREATER THAN 24" DIAMETER SHALL BE PLACED ON MOUND OF UNDISTURBED SOIL TO PREVENT SETTLING. ROOTBALLS SMALLER THAN 24" IN DIAMETER MAY SIT ON COMPACTED EARTH.
10. UNDISTURBED NATIVE SOIL.
11. SCARIFY BOTTOM AND SIDES OF PLANTING PIT.

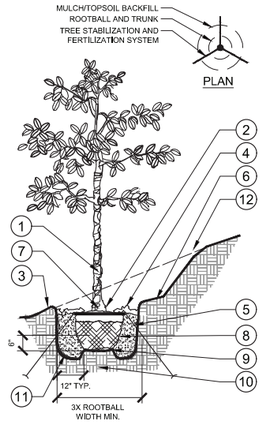
NOTES:

A. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.

B. REMOVE BURLAP, WIRE AND STRAPS (ANYTHING THAT COULD GIRDLE TREE OR RESTRICT ROOT GROWTH) ON UPPER 1/3 OF ROOTBALL.

C. PRUNE ALL TREES IN ACCORDANCE WITH ANSI A-300.

1 L1.50 TREE PLANTING — SECTION / PLAN — NTS




1. TRUNK/ROOT BALL TO BE CENTERED AND PLUMB/LEVEL IN PLANTING PIT.
2. 6" DIA. CLEAR OF MULCH AT TRUNK FLARE.
3. 3. 4" HIGH BERM, FIRMLY COMPACTED.
4. 3" MINIMUM OF HARDWOOD BARK MULCH AS SPECIFIED. WHERE TREES ARE PLACED IN SOD, MULCH RING FOR TREES SHALL BE 6' DIAMETER (MIN.) OR AS DIRECTED BY OWNER'S REPRESENTATIVE.
5. TREE FROG ANCHOR SYSTEM INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
6. 4" MIN. OF TOPSOIL TO BRING TO FINISHED GRADE. (SEE GRADING PLAN)
7. TOP OF ROOTBALL MIN. 1" ABOVE FINISHED GRADE.
8. PREPARED PLANTING SOIL AS SPECIFIED.
9. ROOTBALLS GREATER THAN 24" DIAMETER SHALL BE PLACED ON MOUND OF UNDISTURBED SOIL TO PREVENT SETTLING. ROOTBALLS SMALLER THAN 24" IN DIAMETER MAY SIT ON COMPACTED EARTH.
10. UNDISTURBED NATIVE SOIL.
11. SCARIFY BOTTOM AND SIDES OF PLANTING PIT.
12. CUT BACK SLOPE TO PROVIDE A FLAT SURFACE FOR PLANTING.

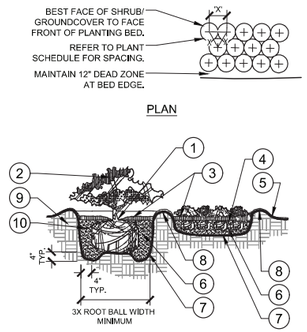
NOTES:

A. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.

B. REMOVE BURLAP, WIRE AND STRAPS (ANYTHING THAT COULD GIRDLE TREE OR RESTRICT ROOT GROWTH) ON UPPER 1/3 OF ROOTBALL.

C. PRUNE ALL TREES IN ACCORDANCE WITH ANSI A-300.

2 L1.50 TREE PLANTING ON A SLOPE — SECTION / PLAN — NTS




1. TOP OF SHRUB ROOTBALLS TO BE PLANTED 1" - 2" HIGH WITH SOIL MOUNDING UP TO THE TOP OF ROOTBALL.
2. PRUNE ALL SHRUBS TO ACHIEVE A UNIFORM MASS/HEIGHT.
3. 3" MULCH LAYER AS SPECIFIED.
4. EXCAVATE ENTIRE BED SPECIFIED FOR GROUNDCOVER BED.
5. FINISHED GRADE (SEE GRADING PLAN).
6. PREPARED PLANTING SOIL AS SPECIFIED. (SEE LANDSCAPE NOTES). NOTE: WHEN GROUNDCOVERS AND SHRUBS USED IN MASSES, ENTIRE BED TO BE AMENDED WITH PLANTING SOIL MIX AS SPECIFIED.
7. SCARIFY OF PLANTING PIT SIDES AND BOTTOM.
8. 4" HIGH BERM FIRMLY COMPACTED.
9. UNDISTURBED NATIVE SOIL.
10. FERTILIZER TABLETS (MAX 3" DEEP)

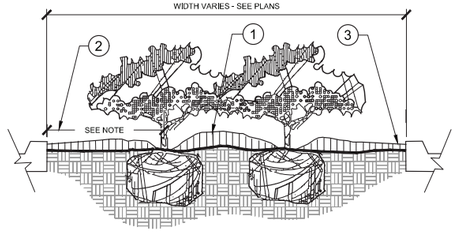
NOTES:

A. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION.

B. WHEN SHRUBS ARE PRUNED IN MASSES, PRUNE ALL SHRUBS TO ACHIEVE UNIFORM MASS / HEIGHT.

C. ALL SHRUBS AND GROUNDCOVERS SHALL BE PLUMB VERTICALLY, UNLESS OTHERWISE DIRECTED BY OWNERS REPRESENTATIVE.

3 L1.50 SHRUB/GROUNDCOVER PLANTING — SECTION / PLAN — NTS




1. CROWN ISLANDS @ 5:1 SLOPES (OR AS SPECIFIED ON THE LANDSCAPE PLANS).
2. CLEAR ZONE: 36" MIN. FROM BACK OF CURB TO CENTER OF NEAREST SHRUB. CLEAR ZONE SHALL CONTAIN 3" CONTINUOUS MULCH OR TURF. SEE PLANS.
3. 2" MIN VERTICAL CLEARANCE, TOP OF CURB TO TOP OF MULCH.

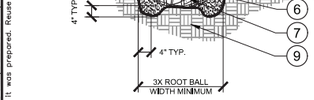
NOTES:

A. EXCAVATE A CONTINUOUS 24" DEEP PIT (FROM TOP OF CURB) FOR ENTIRE LENGTH AND WIDTH OF ISLAND & BACKFILL WITH APPROVED PLANTING MIX.

B. PROTECT AND RETAIN ALL CURBS AND BASE, COMPACTED SUBGRADE TO REMAIN FOR STRUCTURAL SUPPORT OF CURB SYSTEM (TYP.).

C. ALL ISLANDS SHALL UTILIZE POOR DRAINAGE DETAIL WHEN PERCOLATION RATES ARE 2" PER HOUR OR LESS.

4 L1.50 PLANTED PARKING LOT ISLANDS/MEDIANS — SECTION — NTS




1. TOP OF SHRUB ROOTBALLS TO BE PLANTED 1" - 2" HIGH WITH SOIL MOUNDING UP TO THE TOP OF ROOTBALL.
2. PRUNE SHRUBS AS DIRECTED BY OWNER'S REPRESENTATIVE.
3. 3" MINIMUM OF MULCH AS SPECIFIED. WHERE SHRUBS ARE PLACED IN MASSES, MULCH SHALL BE SPREAD IN A CONTINUOUS BED.
4. SOIL BERM TO HOLD WATER. TOP OF PLANTING PIT 'BERM' TO BE LEVEL ACROSS PIT. SLOPE DOWNHILL PORTION OF BERM AS REQUIRED TO MEET EXISTING GRADE, MULCH OVER EXPOSED TOPSOIL.
5. FINISHED GRADE (SEE GRADING PLAN)
6. PREPARED PLANTING SOIL AS SPECIFIED. (SEE LANDSCAPE NOTES).
7. SCARIFY SIDES AND BOTTOM OF PLANTING PIT.
8. FERTILIZER TABLETS (MAX 3" DEEP).
9. UNDISTURBED NATIVE SOIL

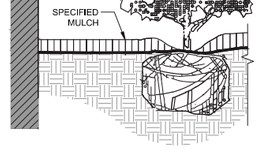
NOTES:

A. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION.

B. WHEN SHRUBS ARE PRUNED IN MASSES, PRUNE ALL SHRUBS TO ACHIEVE UNIFORM MASS / HEIGHT.

C. ALL SHRUBS AND GROUNDCOVERS SHALL BE PLUMB VERTICALLY, UNLESS OTHERWISE DIRECTED BY OWNERS REPRESENTATIVE.

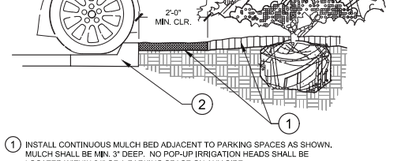
5 L1.50 SHRUB/GROUNDCOVER PLANTING ON A SLOPE — SECTION — NTS




NOTES:

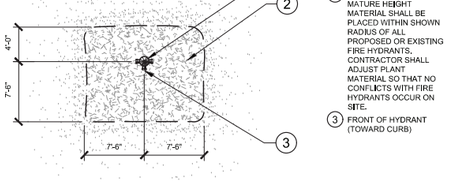
1. CLEAR ZONE: 36" MIN. FROM BUILDING TO CENTER OF NEAREST SHRUB.
2. INSTALL SPECIFIED MULCH: 24" MIN. FROM BUILDING. SPECIFIED MULCH TO BE INSTALLED AT A DEPTH OF 3" (MIN.)

6 L1.50 PLANTINGS ADJACENT TO BUILDINGS/WALLS — SECTION — NTS



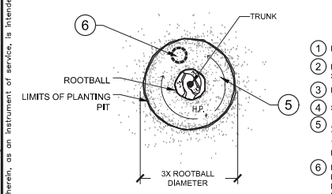

1. INSTALL CONTINUOUS MULCH BED ADJACENT TO PARKING SPACES AS SHOWN. MULCH SHALL BE MIN. 3" DEEP. NO POP-UP IRRIGATION HEADS SHALL BE LOCATED WITHIN 24" OF A PARKING SPACE ON ANY SIDE.
2. CURB / PARKING LOT EDGE.

7 L1.50 PARKING SPACE/CURB PLANTING — SECTION — NTS




1. FIRE HYDRANT.
2. NO PLANT EXCEEDING 12" MATURE HEIGHT MATERIAL SHALL BE PLACED WITHIN SHOWN RADIUS OF ALL PROPOSED OR EXISTING FIRE HYDRANTS. CONTRACTOR SHALL ADJUST PLANT MATERIAL SO THAT NO CONFLICTS WITH FIRE HYDRANTS OCCUR ON SITE.
3. FRONT OF HYDRANT (TOWARD CURB)

8 L1.50 SHRUB PLANTING AT FIRE HYDRANT — SECTION / PLAN — NTS




1. FINISH GRADE (SEE GRADING PLANS).
2. BACKFILL WITH PREPARED PLANTING SOIL MIX AS SPECIFIED.
3. FILTER CLOTH, MIRAFI 500X OR BETTER.
4. SLOPE BOTTOM TO DRAIN.
5. AUGURED HOLE Ø ±18" PENETRATE THROUGH OCCLUDING LAYER TO WATER TABLE OR TO A DEPTH OF 7' TO ASSURE PROPER PERCOLATION.
6. BACKFILL WITH 1/2" - 3/4" GRAVEL TO REQUIRED DEPTH THROUGH OCCLUDING LAYER TO ASSURE PROPER PERCOLATION.
7. WATER TABLE. (DEPTH VARIES)
8. UNDISTURBED NATIVE SOIL.
9. SET ROOTBALL ON UNDISTURBED STABLE SUBSOIL SO THAT TOP OF ROOT BALL IS 1" ABOVE FINISHED GRADE.

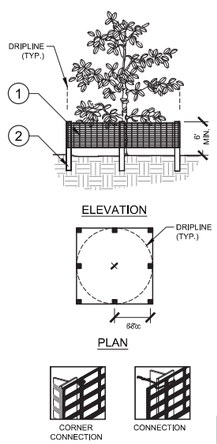
NOTES:

A. THIS DETAIL SHALL BE IMPLEMENTED WHERE PERCOLATION RATES ARE 2" PER HOUR OR LESS.

B. CONTRACTOR TO PERFORM PERCOLATION TEST AS REQUIRED, AND NOTIFY OWNER/LANDSCAPE ARCHITECT.

C. SEE TYPICAL TREE PLANTING DETAIL THIS SHEET FOR PLANT STAKING.

9 L1.50 POOR DRAINAGE CONDITION — SECTION / PLAN — NTS




1. 6'H "PERIMETER PLUS" CONSTRUCTION FENCE BY CONWED PLASTICS OR OWNER'S REPRESENTATIVE APPROVED EQUAL. SUBMIT PRODUCT INFORMATION FOR APPROVAL PRIOR TO INSTALLATION.
2. 8' TALL METAL "T" POSTS OR 2" x 2" X 6' PRESSURE TREATED WOOD POSTS WITH 24" BURIAL BELOW GRADE.

INSTALLATION NOTES:

A. POST SELECTION SHOULD BE BASED ON EXPECTED STRENGTH NEEDS AND THE LENGTH OF TIME FENCE WILL BE IN PLACE. FLEXIBLE FIBERGLASS ROD POSTS ARE RECOMMENDED FOR PARKS, ATHLETIC EVENTS AND CROWD CONTROL INSTALLATIONS. METAL "T" POSTS OR TREATED WOOD POSTS ARE TYPICALLY USED FOR CONSTRUCTION AND OTHER APPLICATIONS.

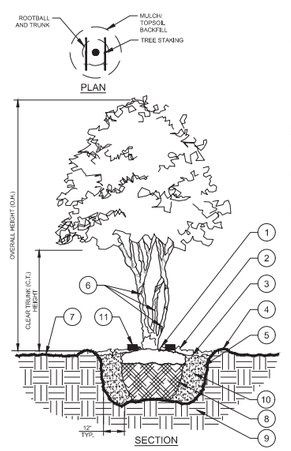
B. POSTS SHOULD BE DRIVEN INTO THE GROUND TO A DEPTH OF 1/3 OF THE HEIGHT OF THE POST. FOR EXAMPLE, A 6' POST SHOULD BE SET AT LEAST 2' INTO THE GROUND.

C. SPACE POSTS EVERY 6' (MIN.) TO 8' (MAX.).

D. SECURE FENCING TO POST WITH NYLON CABLE TIES (AVAILABLE FROM CONWED PLASTICS). WOOD STRIPS MAY BE ALSO BE USED TO PROVIDE ADDITIONAL SUPPORT AND PROTECTION BETWEEN TIES AND POSTS.

NOTE: IF WIRE TIES ARE USED, AVOID DIRECT CONTACT WITH FENCE. WIRE MAY DAMAGE FENCE OVER TIME.

10 L1.50 TREE PROTECTION FENCING — ELEVATION / PLAN — NTS




1. BASE OF TREE SHALL BE PLANTED SLIGHTLY ABOVE (1" MIN.) ADJACENT FINISH GRADE. REMOVE ALL TWINE & STRAPS & CUT BURLAP FROM TOP 1/3 OF ROOT BALL. NO SYNTHETIC BURLAP WILL BE ACCEPTED.
2. 4" SHREDDED HARDWOOD MULCH OR APPROVED EQUAL.
3. DIAMETER OF TREE PIT TO BE TWICE THE DIAMETER OF ROOT BALL-ROUGHEN SIDES OF TREE PIT.
4. 3" HIGH SOIL BERM TO HOLD WATER.
5. TOPSOIL MIX BACKFILL.
6. TREE WRAP.
7. 4" MIN. OF TOPSOIL TO BRING TO FINISHED GRADE (SEE GRADING PLAN).
8. ROOT BALLS GREATER THAN 24" DIAMETER SHALL BE PLACED ON MOUND OF UNDISTURBED SOIL TO PREVENT SETTLING ROOT BALLS SMALLER THAN 24" IN DIA. MAY SIT ON COMPACTED EARTH.
9. UNDISTURBED SUBSOIL.
10. PREPARE PLANTING SOIL AS SPECIFIED.
11. **Tree Frog® RBK40pt** FOR UP TO 4" TREE CALIPER OR **Tree Frog® RBK60pt** FOR GREATER THAN 4" AND UP TO 6" TREE CALIPER, REFER TO SITEWORK SPECIFICATIONS FOR APPROVED MATERIALS AND INSTALLATION REQUIREMENTS.

NOTES:

A. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.

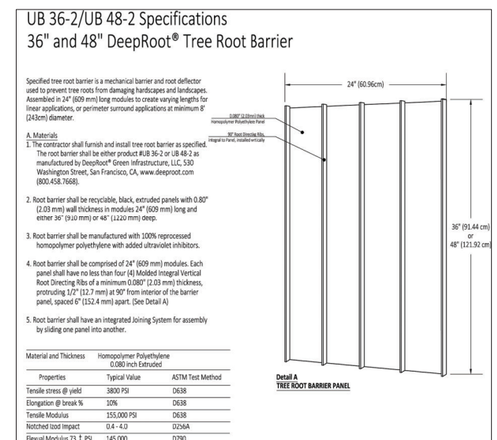
B. SET TREE AT ORIGINAL DEPTH. REMOVE BURLAP, WIRE AND STRAPS (ANYTHING THAT COULD GIRDLE TREE OR RESTRICT ROOT GROWTH) ON UPPER 1/3 OF ROOTBALL.

C. SEE LANDSCAPE NOTES FOR THE TYPE OF MULCH MATERIAL TO USE.

D. PRUNE TREE AS DIRECTED BY LANDSCAPE ARCHITECT

E. ASSURE PERCOLATION OF ALL PLANTING PITS

11 L1.50 MULTI-TRUNK TREE PLANTING — SECTION/PLAN — NTS




12 L1.50 TREE ROOT BARRIER — NTS

| No. | REVISIONS | DATE | BY |
|---|---|---|---|

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Edwin M Linquist

KHA PROJECT 147864008
DATE 12/19/2024
SCALE AS SHOWN
DESIGNED BY KDG
DRAWN BY KDG
CHECKED BY EML

# LANDSCAPE DETAILS

WYLD OAKS ONX DEVELOPMENT
PREPARED FOR
DOUBLE D DEVELOPMENT
CITY OF APOPKA FLORIDA

SHEET NUMBER
L-150

Plotted By:Galdz, Kathy Sheet Set:Wyld Oaks Onx Development Layout:L-150 LANDSCAPE DETAILS December 19, 2024 04:03:17pm K:\ORL_LA\VERO BEACH\Kelly Park 200 AC (Seminist)\CAD\PLANSHEETS\ONX DEVELOPMENT\L-100 LANDSCAPE PLAN.dwg
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Plotted By:Galaz, Kathy Sheet Set:Wyld Oaks Onx Development Layout:L-151 LANDSCAPE NOTES December 19, 2024 04:03:19pm K:\ORL_LA\VERO BEACH\Kelly Park 200 AC (Beninati)\CAD\PLANSHEETS\ONX DEVELOPMENT\L-100 LANDSCAPE PLAN.dwg
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## GENERAL LANDSCAPE SPECIFICATIONS AND NOTES

A. SCOPE OF WORK

1. THE WORK CONSISTS OF: FURNISHING ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, TRANSPORTATION, AND ANY OTHER APPURTENANCES NECESSARY FOR THE COMPLETION OF THIS PROJECT AS SHOWN ON THE DRAWINGS, AS INCLUDED IN THE PLANT LIST, AND AS SPECIFIED HEREIN.
2. WORK SHALL INCLUDE MAINTENANCE AND WATERING OF ALL CONTRACT PLANTING AREAS UNTIL CERTIFICATION OF ACCEPTANCE BY THE OWNER.

B. PROTECTION OF EXISTING STRUCTURES

1. ALL EXISTING BUILDINGS, WALKS, WALLS, PAVING, PIPING, OTHER SITE CONSTRUCTION ITEMS, AND PLANTING ALREADY COMPLETED OR ESTABLISHED AND DESIGNATED TO REMAIN SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR UNLESS OTHERWISE SPECIFIED. ALL DAMAGE RESULTING FROM NEGLIGENCE SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER, AT NO COST TO THE OWNER.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL NECESSARY BMP DEVICES ACCORDING TO ALL REGULATORY AGENCY'S STANDARDS THROUGH THE DURATION OF ALL CONSTRUCTION ACTIVITIES.
3. THE CONTRACTOR SHALL SUBMIT A DETAILED PROJECT SPECIFIC WORK ZONE TRAFFIC CONTROL PLAN UNLESS THE WORK REQUIRES NOTHING MORE THAN A DIRECT APPLICATION OF FDOT DESIGN STANDARDS, INDEX 600, IF A DIRECT APPLICATION OF INDEX 600 IS PROPOSED, THE CONTRACTOR SHALL SUBMIT IN WRITING A STATEMENT INDICATING THE STANDARD INDEX AND PAGE NUMBER NO LESS THAN 10 BUSINESS DAYS PRIOR TO START OF CONSTRUCTION. WHEN A DIRECT APPLICATION OF FDOT STANDARD INDEX 600 IS NOT ACCEPTABLE A PROJECT SPECIFIC WORK ZONE TRAFFIC CONTROL PLAN SHALL BE PREPARED BY A FLORIDA PROFESSIONAL ENGINEER WHO HAS SUCCESSFULLY COMPLETED ADVANCED TRAINING IN MAINTENANCE OF TRAFFIC, AS DEFINED BY FDOT FOR APPROVAL BY THE COUNTY ENGINEER'S REPRESENTATIVE.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITIES, WHETHER PUBLIC OR PRIVATE, PRIOR TO EXCAVATION. THE INFORMATION AND DATA SHOWN WITH RESPECT TO EXISTING UNDERGROUND FACILITIES AT OR CONTIGUOUS TO THE SITE IS APPROXIMATE AND BASED ON INFORMATION FURNISHED BY THE OWNER OF SUCH UNDERGROUND FACILITIES OR ON PHYSICAL APPURTENANCES OBSERVED IN THE FIELD, THE OWNER AND DESIGN PROFESSIONAL SHALL NOT BE RESPONSIBLE FOR THE ACCURACY AND COMPLETENESS OF ANY SUCH INFORMATION OR DATA, THE CONTRACTOR SHALL HAVE FULL RESPONSIBILITY FOR: REVIEWING AND CHECKING ALL SUCH INFORMATION AND DATA; LOCATING ALL UNDERGROUND FACILITIES DURING CONSTRUCTION; THE SAFETY AND PROTECTION THEREOF; REPAIRING ANY DAMAGE THERETO RESULTING FROM THE WORK. THE COST OF ALL WILL BE CONSIDERED AS HAVING BEEN INCLUDED IN THE CONTRACT PRICE. THE CONTRACTOR SHALL NOTIFY ANY AFFECTED UTILITY COMPANIES OR AGENCIES IN WRITING AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.

C. PROTECTION OF EXISTING PLANT MATERIALS

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UNAUTHORIZED CUTTING OR DAMAGE TO TREES AND SHRUBS EXISTING OR OTHERWISE, CAUSED BY CARELESS EQUIPMENT OPERATION, MATERIAL STOCKPILING, ETC.,. THIS SHALL INCLUDE COMPACTION BY DRIVING OR PARKING INSIDE THE DRIP-LINE AND SPILLING OIL, GASOLINE, OR OTHER DELETERIOUS MATERIALS WITHIN THE DRIP-LINE. NO MATERIALS SHALL BE BURNED ON SITE. EXISTING TREES KILLED OR DAMAGED SO THAT THEY ARE MISSHAPEN AND/OR UNSIGHTLY SHALL BE REPLACED AT THE COST TO THE CONTRACTOR OF THREE HUNDRED DOLLARS ($300) PER CALIPER INCH ON AN ESCALATING SCALE WHICH ADDS AN ADDITIONAL TWENTY (20) PERCENT PER INCH OVER FOUR (4) INCHES CALIPER AS FIXED AND AGREED LIQUIDATED DAMAGES. CALIPER SHALL BE MEASURED SIX (6) INCHES ABOVE GROUND LEVEL FOR TREES UP TO AND INCLUDING FOUR (4) INCHES IN CALIPER AND TWELVE (12) INCHES ABOVE GROUND LEVEL FOR TREES OVER FOUR (4) INCHES IN CALIPER.
2. SEE TREE MITIGATION PLAN AND NOTES, IF APPLICABLE.

D. MATERIALS

1. GENERAL

   MATERIAL SAMPLES LISTED BELOW SHALL BE SUBMITTED FOR APPROVAL, ON SITE OR AS DETERMINED BY THE OWNER, UPON APPROVAL, DELIVERY OF MATERIALS MAY COMMENCE.

| MATERIAL | SAMPLE SIZE |
|---|---|
| MULCH | ONE (1) CUBIC FOOT |
| TOPSOIL MIX | ONE (1) CUBIC FOOT |
| PLANTS | ONE (1) OF EACH VARIETY (OR TAGGED IN NURSERY) |

2. PLANT MATERIALS

   a. PLANT SPECIES AND SIZE SHALL CONFORM TO THOSE INDICATED ON THE DRAWINGS. ALL NURSERY STOCK SHALL BE IN ACCORDANCE WITH GRADES AND STANDARDS FOR NURSERY PLANTS, LATEST EDITION, PUBLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES. ALL PLANTS SHALL BE FLORIDA GRADE NO. 1 OR BETTER AS DETERMINED BY THE FLORIDA DIVISION OF PLANT INDUSTRY. ALL PLANTS SHALL BE HEALTHY, VIGOROUS, SOUND, WELL-BRANCHED, AND FREE OF DISEASE AND INSECTS, INSECT EGGS AND LARVAE AND SHALL HAVE ADEQUATE ROOT SYSTEMS. TREES FOR PLANTING IN ROWS SHALL BE UNIFORM IN SIZE AND SHAPE. ALL MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE OWNER. WHERE ANY REQUIREMENTS ARE OMITTED FROM THE PLANT LIST, THE PLANTS FURNISHED SHALL BE NORMAL FOR THE VARIETY. PLANTS SHALL BE PRUNED PRIOR TO DELIVERY ONLY WITH APPROVAL FROM OWNER OR OWNER'S REPRESENTATIVE. NO SUBSTITUTIONS SHALL BE MADE WITHOUT WRITTEN PERMISSION FROM THE OWNER'S REPRESENTATIVE.
   b. MEASUREMENTS: THE HEIGHT AND/OR WIDTH OF TREES SHALL BE MEASURED FROM THE GROUND OR ACROSS THE NORMAL SPREAD OF BRANCHES WITH THE PLANTS IN THEIR NORMAL POSITION. THIS MEASUREMENT SHALL NOT INCLUDE THE IMMEDIATE TERMINAL GROWTH. PLANTS LARGER IN SIZE THAN THOSE SPECIFIED IN THE PLANT LIST MAY BE USED IF APPROVED BY THE OWNER. IF THE USE OF LARGER PLANTS IS APPROVED, THE BALL OF EARTH OR SPREAD OF ROOTS SHALL BE INCREASED IN PROPORTION TO THE SIZE OF THE PLANT.
   c. INSPECTION: PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL AT THE PLACE OF GROWTH, OR UPON DELIVERY TO THE SITE, AS DETERMINED BY THE OWNER, FOR QUALITY, SIZE, AND VARIETY. SUCH APPROVAL SHALL NOT IMPAIR THE RIGHT OF INSPECTION AND REJECTION AT THE SITE DURING PROGRESS OF THE WORK OR AFTER COMPLETION FOR SIZE AND CONDITION OF ROOT BALLS OR ROOTS, LATENT DEFECTS OR INJURIES, REJECTED PLANTS SHALL BE REMOVED IMMEDIATELY FROM THE SITE. NOTICE REQUESTING INSPECTION SHALL BE SUBMITTED IN WRITING BY THE CONTRACTOR AT LEAST ONE (1) WEEK PRIOR TO ANTICIPATED DATE.

E. SOIL MIXTURE (PLANTING MEDIUM, PLANTING MIX, TOPSOIL MIX)

1. CONTRACTOR SHALL TEST EXISTING SOIL AND AMEND AS NECESSARY IN ACCORDANCE WITH THE GUIDELINES BELOW:
2. SOIL MIXTURE (PLANTING MEDIUM FOR PLANT PITS) SHALL CONSIST OF TWO PARTS OF TOPSOIL AND ONE PART SAND, AS DESCRIBED BELOW. CONTRACTOR TO SUBMIT SAMPLES AND PH TESTING RESULTS OF SOIL MIXTURE FOR OWNER'S REPRESENTATIVE APPROVAL PRIOR TO PLANT INSTALLATION OPERATIONS COMMENCE.
   a. TOPSOIL FOR USE IN PREPARING SOIL MIXTURE FOR BACKFILLING PLANT PITS SHALL BE FERTILE, FRIABLE, AND OF A LOAMY CHARACTER; REASONABLY FREE OF SUBSOIL, CLAY LUMPS, BRUSH WEEDS AND OTHER LITTER; FREE OF ROOTS, STUMPS, STONES LARGER THAN 2" IN ANY DIRECTION, AND OTHER EXTRANEOUS OR TOXIC MATTER HARMFUL TO PLANT GROWTH. IT SHALL CONTAIN THREE (3) TO FIVE (5) PERCENT DECOMPOSED ORGANIC MATTER AND HAVE A PH BETWEEN 5.5 AND 7.0.
   b. SAND SHALL BE COARSE, CLEAN, WELL-DRAINING, NATIVE SAND.
   c. SOIL AMENDMENT (IF NEEDED PER SOIL TESTING) THE CONTRACTOR SHALL FURNISH AND INSTALL A 3" LAYER OF AMENDED PLANTING SOIL IN ALL PLANTING BEDS, EXCLUDING SOD AREAS. THE AMENDED PLANTING SOIL SHALL BE COMPOSED OF 35% FERTICOMP 20% FLORIDA PEAT 45% SANDY LOAM. THE AMENDED PLANTING SOIL SHALL BE MIXED INTO THE BEDS UPON PLANTING.
2. TREES SHALL BE PLANTED IN THE EXISTING NATIVE SOIL ON SITE, UNLESS DETERMINED TO BE UNSUITABLE - AT WHICH POINT THE CONTRACTOR SHALL CONTACT OWNER'S REPRESENTATIVE TO DISCUSS ALTERNATE RECOMMENDATION PRIOR TO PLANTING (SUBMIT SOIL TESTING RESULTS AFTER INCORPORATING AMENDMENTS TO DEMINSTRATE COMPLIANCE WITH SOIL QUALITY REQUIREMENTS .

F. WATER

1. WATER NECESSARY FOR PLANTING AND MAINTENANCE SHALL BE OF SATISFACTORY QUALITY TO SUSTAIN ADEQUATE PLANT GROWTH AND SHALL NOT CONTAIN HARMFUL, NATURAL OR MAN-MADE ELEMENTS DETRIMENTAL TO PLANTS. WATER MEETING THE ABOVE STANDARD SHALL BE OBTAINED ON THE SITE FROM THE OWNER. IF AVAILABLE, AND THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE ARRANGEMENTS FOR ITS USE BY HIS TANKS, HOSES, SPRINKLERS, ETC.... IF SUCH WATER IS NOT AVAILABLE AT THE SITE. THE CONTRACTOR SHALL PROVIDE SATISFACTORY WATER FROM SOURCES OFF THE SITE AT NO ADDITIONAL COST TO THE OWNER.

   * WATERING/IRRIGATION RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.

G. FERTILIZER

CONTRACTOR SHALL PROVIDE FERTILIZER APPLICATION SCHEDULE TO OWNER, AS APPLICABLE TO SOIL TYPE, PLANT INSTALLATION TYPE, AND SITE'S PROPOSED USE. SUGGESTED FERTILIZER TYPES SHALL BE ORGANIC OR OTHERWISE NATURALLY-DERIVED.

* FERTILIZER RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.

H. MULCH

1. MULCH MATERIAL SHALL BE MOISTENED AT THE TIME OF APPLICATION TO PREVENT WIND DISPLACEMENT, AND APPLIED AT A DEPTH OF THREE (3) INCHES, CLEAR MULCH FROM EACH PLANT'S CROWN (BASE), MULCH SHALL BE "FLORIMULCH," EUCALYPTUS MULCH, OR SIMILAR SUSTAINABLY HARVESTED MULCH UNLESS SPECIFIED OTHERWISE.
2. PROVIDE A THREE (3) INCH MINIMUM LAYER OF SPECIFIED MULCH OVER THE ENTIRE AREA OF EACH SHRUB BED, GROUND COVER, VINE BED, AND TREE PIT (6' MINIMUM) PLANTED UNDER THIS CONTRACT.

I. DIGGING AND HANDLING

1. PROTECT ROOTS OR ROOT BALLS OF PLANTS AT ALL TIMES FROM SUN, DRYING WINDS, WATER AND FREEZING, AS NECESSARY UNTIL PLANTING. PLANT MATERIALS SHALL BE ADEQUATELY PACKED TO PREVENT DAMAGE DURING TRANSIT. TREES TRANSPORTED MORE THAN TEN (10) MILES OR WHICH ARE NOT PLANTED WITHIN THREE (3) DAYS OF DELIVERY TO THE SITE SHALL BE SPRAYED WITH AN ANTITRANSPIRANT PRODUCT ("WILTPRUF" OR EQUAL) TO MINIMIZE TRANSPIRATIONAL WATER LOSS.
2. BALLED AND BURLAPPED (B&B), AND FIELD GROWN (FG) PLANTS SHALL BE DUG WITH FIRM, NATURAL BALLS OF SOIL OF SUFFICIENT SIZE TO ENCOMPASS THE FIBROUS AND FEEDING ROOTS OF THE PLANTS. NO PLANTS MOVED WITH A ROOT BALL SHALL BE PLANTED IF THE BALL IS CRACKED OR BROKEN. PLANTS SHALL NOT BE HANDLED BY STEMS.
3. PLANTS MARKED "BR" IN THE PLANT LIST SHALL BE DUG WITH BARE ROOTS. CARE SHALL BE EXERCISED THAT THE ROOTS DO NOT DRY OUT DURING TRANSPORTATION AND PRIOR TO PLANTING.
4. PROTECTION OF PALMS: ONLY A MINIMUM OF FRONDS SHALL BE REMOVED FROM THE CROWN OF THE PALM TREES TO FACILITATE MOVING AND HANDLING. CLEAR TRUNK (CT) SHALL BE AS SPECIFIED AFTER THE MINIMUM OF FRONDS HAVE BEEN REMOVED. ALL PALMS SHALL BE BRACED PER PALM PLANTING DETAIL.
5. EXCAVATION OF TREE PITS SHALL BE PERFORMED USING EXTREME CARE TO AVOID DAMAGE TO SURFACE AND SUBSURFACE ELEMENTS SUCH AS UTILITIES OR HARDSCAPE ELEMENTS, FOOTERS AND PREPARED SUB-BASES.

J. CONTAINER GROWN STOCK

1. ALL CONTAINER GROWN MATERIAL SHALL BE HEALTHY, VIGOROUS, WELL-ROOTED PLANTS ESTABLISHED IN THE CONTAINER IN WHICH THEY ARE SOLD. THE PLANTS SHALL HAVE TOPS WHICH ARE OF GOOD QUALITY AND ARE IN A HEALTHY GROWING CONDITION.
2. AN ESTABLISHED CONTAINER GROWN PLANT SHALL BE TRANSPLANTED INTO A CONTAINER AND GROWN IN THAT CONTAINER SUFFICIENTLY LONG ENOUGH FOR THE NEW FIBROUS ROOTS TO HAVE DEVELOPED SO THAT THE ROOT MASS WILL RETAIN ITS SHAPE AND HOLD TOGETHER WHEN REMOVED FROM THE CONTAINER. CONTAINER GROWN STOCK SHALL NOT BE HANDLED BY THEIR STEMS.
3. ROOT BOUND PLANTS ARE NOT ACCEPTABLE AND WILL BE REJECTED.
4. RPG= "ROOTS PLUS GROWER" CONTAINER PRODUCTS SHALL BE USED WHERE SPECIFIED.

K. COLLECTED STOCK

WHEN THE USE OF COLLECTED STOCK IS PERMITTED AS INDICATED BY THE OWNER OR OWNER'S REPRESENTATIVE, THE MINIMUM SIZES OF ROOTBALLS SHALL BE EQUAL TO THAT SPECIFIED FOR THE NEXT LARGER SIZE OF NURSERY GROWN STOCK OF THE SAME VARIETY.

L. NATIVE STOCK

PLANTS COLLECTED FROM WILD OR NATIVE STANDS SHALL BE CONSIDERED NURSERY GROWN WHEN THEY HAVE BEEN SUCCESSFULLY RE-ESTABLISHED IN A NURSERY ROW AND GROWN UNDER REGULAR NURSERY CULTURAL PRACTICES FOR A MINIMUM OF TWO (2) GROWING SEASONS AND HAVE ATTAINED ADEQUATE ROOT AND TOP GROWTH TO INDICATE FULL RECOVERY FROM TRANSPLANTING INTO THE NURSERY ROW.

M. MATERIALS LIST

QUANTITIES NECESSARY TO COMPLETE THE WORK ON THE DRAWINGS SHALL BE FURNISHED BY THE CONTRACTOR, QUANTITY ESTIMATES HAVE BEEN MADE CAREFULLY, BUT THE LANDSCAPE ARCHITECT OR OWNER ASSUMES NO LIABILITY FOR OMISSIONS OR ERRORS. SHOULD A DISCREPANCY OCCUR BETWEEN THE PLANS AND THE PLANT LIST QUANTITY, THE OWNER'S REPRESENTATIVE SHALL BE NOTIFIED FOR CLARIFICATION PRIOR TO BIDDING OR INSTALLATION. ALL DIMENSIONS AND/OR SIZES SPECIFIED SHALL BE THE MINIMUM ACCEPTABLE SIZE.

N. FINE GRADING

1. FINE GRADING UNDER THIS CONTRACT SHALL CONSIST OF FINAL FINISHED GRADING OF LAWN AND PLANTING AREAS THAT HAVE BEEN ROUGH GRADED BY OTHERS. BERMING AS SHOWN ON THE DRAWINGS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, UNLESS OTHERWISE NOTED.
2. THE CONTRACTOR SHALL FINE GRADE THE LAWN AND PLANTING AREAS TO BRING THE ROUGH GRADE UP TO FINAL FINISHED GRADE ALLOWING FOR THICKNESS OF SOD AND/OR MULCH DEPTH. CONTRACTOR SHALL FINE GRADE BY HAND AND/OR WITH ALL EQUIPMENT NECESSARY INCLUDING A GRADING TRACTOR WITH FRONT-END LOADER FOR TRANSPORTING SOIL WITHIN THE SITE.
3. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED FOR POSITIVE DRAINAGE TO SURFACE/SUBSURFACE STORM DRAIN SYSTEMS. AREAS ADJACENT TO BUILDINGS SHALL SLOPE AWAY FROM THE BUILDINGS, REFER TO CIVIL ENGINEER'S PLANS FOR FINAL GRADES, IF APPLICABLE.

O. PLANTING PROCEDURES

1. CLEANING UP BEFORE COMMENCING WORK: THE CONTRACTOR SHALL CLEAN WORK AND SURROUNDING AREAS OF ALL RUBBISH OR OBJECTIONABLE MATTER DAILY. ALL MORTAR, CEMENT, AND TOXIC MATERIAL SHALL BE REMOVED FROM THE SURFACE OF ALL PLANT BEDS. THESE MATERIALS SHALL NOT BE MIXED WITH THE SOIL. SHOULD THE CONTRACTOR FIND SUCH SOIL CONDITIONS BENEATH THE SOIL WHICH WILL IN ANY WAY ADVERSELY AFFECT THE PLANT GROWTH, HE SHALL IMMEDIATELY CALL IT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE. FAILURE TO DO SO BEFORE PLANTING SHALL MAKE THE CORRECTIVE MEASURES THE RESPONSIBILITY OF THE CONTRACTOR.
2. VERIFY LOCATIONS OF ALL UTILITIES, CONDUITS, SUPPLY LINES AND CABLES, INCLUDING BUT NOT LIMITED TO: ELECTRIC, GAS (LINES AND TANKS), WATER, SANITARY SEWER, STORMWATER SYSTEMS, CABLE, AND TELEPHONE. PROPERLY MAINTAIN AND PROTECT EXISTING UTILITIES. CALL SUNSHINE STATE ONE CALL OF FLORIDA, INC., (811) TO LOCATE UTILITIES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.
3. SUBGRADE EXCAVATION: CONTRACTOR IS RESPONSIBLE TO REMOVE ALL EXISTING AND IMPORTED LIMEROCK AND LIMEROCK SUB-BASE FROM ALL LANDSCAPE PLANTING AREAS TO A MINIMUM DEPTH OF 36" OR TO NATIVE SOIL. CONTRACTOR IS RESPONSIBLE TO BACKFILL THESE PLANTING AREAS TO ROUGH FINISHED GRADE WITH CLEAN TOPSOIL FROM AN ON-SITE SOURCE OR AN IMPORTED SOURCE, IF LIMEROCK OR OTHER ADVERSE CONDITIONS OCCUR IN PLANTED AREAS AFTER 36" DEEP EXCAVATION BY THE CONTRACTOR, AND POSITIVE DRAINAGE CAN NOT BE ACHIEVED, CONTRACTOR SHALL UTILIZE POOR DRAINAGE CONDITION PLANTING DETAIL.
4. FURNISH NURSERY'S CERTIFICATE OF COMPLIANCE WITH ALL REQUIREMENTS AS SPECIFIED HEREIN. INSPECT AND SELECT PLANT MATERIALS BEFORE PLANTS ARE DUG AT NURSERY OR GROWING SITE.
5. COMPLY WITH APPLICABLE FEDERAL, STATE, COUNTY, AND LOCAL REGULATIONS GOVERNING LANDSCAPE MATERIALS AND WORK. CONFORM TO ACCEPTED HORTICULTURAL PRACTICES AS USED IN THE TRADE. UPON ARRIVAL AT THE SITE, PLANTS SHALL BE THOROUGHLY WATERED AND PROPERLY MAINTAINED UNTIL PLANTED. PLANTS STORED ONSITE SHALL NOT REMAIN UNPLANTED OR APPROPRIATELY HEALED IN FOR A PERIOD EXCEEDING TWENTY-FOUR (24) HOURS. AT ALL TIMES WORKMANLIKE METHODS CUSTOMARY IN GOOD HORTICULTURAL PRACTICES SHALL BE EXERCISED.
6. THE WORK SHALL BE COORDINATED WITH OTHER TRADES TO PREVENT CONFLICTS. COORDINATE PLANTING WITH IRRIGATION WORK TO ASSURE AVAILABILITY OF WATER AND PROPER LOCATION OF IRRIGATION APPURTENANCES AND PLANTS.
7. ALL PLANTING PITS SHALL BE EXCAVATED TO SIZE AND DEPTH IN ACCORDANCE WITH THE USA STANDARD FOR NURSERY STOCK 260.1, UNLESS SHOWN OTHERWISE ON THE DRAWINGS, AND BACK FILLED WITH THE PREPARED PLANTING SOIL MIXTURE AS SPECIFIED IN SECTION E. TEST ALL TREE PITS WITH WATER BEFORE PLANTING TO ASSURE PROPER DRAINAGE PERCOLATION IS AVAILABLE, NO ALLOWANCE WILL BE MADE FOR LOST PLANTS DUE TO IMPROPER DRAINAGE. IF POOR DRAINAGE EXISTS, UTILIZE "POOR DRAINAGE CONDITION" PLANTING DETAIL. TREES SHALL BE SET PLUMB AND HELD IN POSITION UNTIL THE PLANTING MIXTURE HAS BEEN FLUSHED INTO PLACE WITH A SLOW, FULL HOSE STREAM. ALL PLANTING SHALL BE PERFORMED BY PERSONNEL FAMILIAR WITH PLANTING PROCEDURES AND UNDER THE SUPERVISION OF A QUALIFIED LANDSCAPE FOREMAN. PROPER "JETTING IN" SHALL BE ASSURED TO ELIMINATE AIR POCKETS AROUND THE ROOTS. "JET STICK" OR EQUAL IS RECOMMENDED.
8. TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO BUILDINGS AND BUILDING STRUCTURES WHILE INSTALLING TREES.
9. SOIL MIXTURE SHALL BE AS SPECIFIED IN SECTION E OF THESE SPECIFICATIONS.
10. TREES AND SHRUBS SHALL BE SET STRAIGHT AT AN ELEVATION THAT, AFTER SETTLEMENT, THE PLANT CROWN WILL STAND ONE (1) TO TWO (2) INCHES ABOVE GRADE. EACH PLANT SHALL BE SET IN THE CENTER OF THE PIT. PLANTING SOIL MIXTURE SHALL BE BACK FILLED, THOROUGHLY TAMPED AROUND THE BALL, AND SETTLED BY WATER (AFTER TAMPING).
11. AMEND PINE AND OAK PLANT PITS WITH ECTOMYCORRHIZAL SOIL APPLICATION PER MANUFACTURER'S RECOMMENDATION. ALL OTHER PLANT PITS SHALL BE AMENDED WITH ENDOMYCORRHIZAL SOIL APPLICATION PER MANUFACTURER'S RECOMMENDATION. PROVIDE PRODUCT INFORMATION SUBMITTAL PRIOR TO INOCULATION.
12. FILL HOLE WITH SOIL MIXTURE, MAKING CERTAIN ALL SOIL IS SATURATED. TO DO THIS, FILL HOLE WITH WATER AND ALLOW TO SOAK MINIMUM TWENTY (20) MINUTES. STIRRING IF NECESSARY TO GET SOIL THOROUGHLY WET. PACK LIGHTLY WITH FEET, ADD MORE WET SOIL MIXTURE. DO NOT COVER TOP OF BALL WITH SOIL MIXTURE. ALL BURLAP, ROPE, WIRES, BASKETS, ETC.,. SHALL BE REMOVED FROM THE SIDES AND TOPS OF BALLS, BUT NO BURLAP SHALL BE PULLED FROM UNDERNEATH.
13. TREES SHALL BE PRUNED, AT THE DIRECTION OF THE OWNER OR OWNER'S REPRESENTATIVE, TO PRESERVE THE NATURAL CHARACTER OF THE PLANT. ALL SOFT WOOD OR SUCKER GROWTH AND ALL BROKEN OR BADLY DAMAGED BRANCHES SHALL BE REMOVED WITH A CLEAN CUT. ALL PRUNING TO BE PERFORMED BY CERTIFIED ARBORIST, IN ACCORDANCE WITH ANSI A-300.
14. SHRUBS AND GROUND COVER PLANTS SHALL BE EVENLY SPACED IN ACCORDANCE WITH THE DRAWINGS AND AS INDICATED ON THE PLANT LIST. MATERIALS INSTALLED SHALL MEET MINIMUM SPECIMEN REQUIREMENTS OR QUANTITIES SHOW ON PLANS, WHICHEVER IS GREATER. CULTIVATE ALL PLANTING AREAS TO A MINIMUM DEPTH OF 6", REMOVE AND DISPOSE ALL DEBRIS. MIX TOP 4" THE PLANTING SOIL MIXTURE AS SPECIFIED IN SECTION E. THOROUGHLY WATER ALL PLANTS AFTER INSTALLATION.
15. TREE GUYING AND BRACING SHALL BE INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH THE PLANS TO INSURE STABILITY AND MAINTAIN TREES IN AN UPRIGHT POSITION. IF THE CONTRACTOR AND OWNER DECIDE TO WAIVE THE TREE GUYING AND BRACING, THE OWNER SHALL NOTIFY THE PROJECT LANDSCAPE ARCHITECT IN WRITING AND AGREE TO INDEMNIFY AND HOLD HARMLESS THE PROJECT LANDSCAPE ARCHITECT IN THE EVENT UNSUPPORTED TREES PLANTED UNDER THIS CONTRACT FALL AND DAMAGE PERSON OR PROPERTY.
16. ALL PLANT BEDS SHALL BE KEPT FREE OF NOXIOUS WEEDS UNTIL FINAL ACCEPTANCE OF WORK. IF DIRECTED BY THE OWNER, "ROUND-UP" SHALL BE APPLIED FOR WEED CONTROL BY QUALIFIED PERSONNEL TO ALL PLANTING AREAS IN SPOT APPLICATIONS PER MANUFACTURER'S PRECAUTIONS AND SPECIFICATIONS, PRIOR TO FINAL INSPECTION. TREAT ALL PLANTING BEDS WITH AN APPROVED PRE-EMERGENT HERBICIDE AT AN APPLICATION RATE RECOMMENDED BY THE MANUFACTURER. (AS ALLOWED BY JURISDICTIONAL AUTHORITY)

P. LAWN SODDING

1. THE WORK CONSISTS OF LAWN BED PREPARATION, SOIL PREPARATION, AND SODDING COMPLETE, IN STRICT ACCORDANCE WITH THE SPECIFICATIONS AND THE APPLICABLE DRAWINGS TO PRODUCE A TURF GRASS LAWN ACCEPTABLE TO THE OWNER.
2. ALL AREAS THAT ARE TO BE SODDED SHALL BE CLEARED OF ANY ROUGH GRASS, WEEDS, AND DEBRIS BY MEANS OF A SOD CUTTER TO A DEPTH OF THREE (3) INCHES, AND THE GROUND BROUGHT TO AN EVEN GRADE. THE ENTIRE SURFACE SHALL BE ROLLED WITH A ROLLER WEIGHING NOT MORE THAN ONE-HUNDRED (100) POUNDS PER FOOT OF WIDTH, DURING THE ROLLING, ALL DEPRESSIONS CAUSED BY SETTLEMENT SHALL BE FILLED WITH ADDITIONAL SOIL, AND THE SURFACE SHALL BE REGRADED AND ROLLED UNTIL PRESENTING A SMOOTH AND EVEN FINISH TO THE REQUIRED GRADE.
3. PREPARE LOOSE BED FOUR (4) INCHES DEEP. HAND RAKE UNTIL ALL BUMPS AND DEPRESSIONS ARE REMOVED. WET PREPARED AREA THOROUGHLY.
4. SODDING
   a. THE CONTRACTOR SHALL SOD ALL AREAS THAT ARE NOT PAVED OR PLANTED AS DESIGNATED ON THE DRAWINGS WITHIN THE CONTRACT LIMITS, UNLESS SPECIFICALLY NOTED OTHERWISE.
   b. THE SOD SHALL BE CERTIFIED TO MEET FLORIDA STATE PLANT BOARD SPECIFICATIONS, ABSOLUTELY TRUE TO VARIETAL TYPE, AND FREE FROM WEEDS, FUNGUS, INSECTS AND DISEASE OF ANY KIND,
   c. SOD PANELS SHALL BE LAID TIGHTLY TOGETHER SO AS TO MAKE A SOLID SODDED LAWN AREA. SOD SHALL BE LAID UNIFORMLY AGAINST THE EDGES OF ALL CURBS AND OTHER HARDSCAPE ELEMENTS, PAVED AND PLANTED AREAS, ADJACENT TO BUILDINGS. A 24 INCH STONE MULCH STRIP SHALL BE PROVIDED, IMMEDIATELY FOLLOWING SOD LAYING, THE LAWN AREAS SHALL BE ROLLED WITH A LAWN ROLLER CUSTOMARILY USED FOR SUCH PURPOSES, AND THEN THOROUGHLY IRRIGATED, IF, IN THE OPINION OF THE OWNER, TOP-DRESSING IS NECESSARY AFTER ROLLING TO FILL THE VOIDS BETWEEN THE SOD PANELS AND TO EVEN OUT INCONSISTENCIES IN THE SOD, CLEAN SAND, AS APPROVED BY THE OWNER'S REPRESENTATIVE, SHALL BE UNIFORMLY SPREAD OVER THE ENTIRE SURFACE OF THE SOD AND THOROUGHLY WATERED IN. FERTILIZE INSTALLED SOD AS ALLOWED BY PROPERTY'S JURISDICTIONAL AUTHORITY.
5. DURING DELIVERY, PRIOR TO, AND DURING THE PLANTING OF THE LAWN AREAS, THE SOD PANELS SHALL AT ALL TIMES BE PROTECTED FROM EXCESSIVE DRYING AND UNNECESSARY EXPOSURE OF THE ROOTS TO THE SUN. ALL SOD SHALL BE STACKED SO AS NOT TO BE DAMAGED BY SWEATING OR EXCESSIVE HEAT AND MOISTURE.
6. LAWN MAINTENANCE
   a. WITHIN THE CONTRACT LIMITS, THE CONTRACTOR SHALL PRODUCE A DENSE, WELL ESTABLISHED LAWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND RE-SODDING OF ALL ERODED, SUNKEN OR BARE SPOTS (LARGER THAN 12"X12") UNTIL CERTIFICATION OF ACCEPTANCE BY THE OWNER'S REPRESENTATIVE. REPAIRED SODDING SHALL BE ACCOMPLISHED AS IN THE ORIGINAL WORK (INCLUDING REGRADING IF NECESSARY).
   b. CONTRACTOR RESPONSIBLE FOR ESTABLISHING AND MAINTAINING SOD/LAWN UNTIL ACCEPTANCE BY THE OWNER'S REPRESENTATIVE, PRIOR TO AND UPON ACCEPTANCE, CONTRACTOR TO PROVIDE WATERING/IRRIGATION SCHEDULE TO OWNER. OBSERVE ALL APPLICABLE WATERING RESTRICTIONS AS SET FORTH BY THE PROPERTY'S JURISDICTIONAL AUTHORITY.

Q. CLEANUP

UPON COMPLETION OF ALL PLANTING WORK AND BEFORE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL MATERIAL, EQUIPMENT, AND DEBRIS RESULTING FROM HIS WORK. ALL PAVED AREAS SHALL BE CLEANED AND THE SITE LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER'S REPRESENTATIVE.

R. PLANT MATERIAL MAINTENANCE

ALL PLANTS AND PLANTING INCLUDED UNDER THIS CONTRACT SHALL BE MAINTAINED BY WATERING, CULTIVATING, SPRAYING, AND ALL OTHER OPERATIONS (SUCH AS RE-STAKING OR REPAIRING GUY SUPPORTS) NECESSARY TO INSURE A HEALTHY PLANT CONDITION BY THE CONTRACTOR UNTIL CERTIFICATION OF ACCEPTANCE BY THE OWNER'S REPRESENTATIVE.

S. FINAL INSPECTION AND ACCEPTANCE OF WORK

FINAL INSPECTION AT THE END OF THE WARRANTY PERIOD SHALL BE ON PLANTING, CONSTRUCTION AND ALL OTHER INCIDENTAL WORK PERTAINING TO THIS CONTRACT, ANY REPLACEMENT AT THIS TIME SHALL BE SUBJECT TO THE SAME ONE (1) YEAR WARRANTY (OR AS SPECIFIED BY THE LANDSCAPE ARCHITECT OR OWNER IN WRITING) BEGINNING WITH THE TIME OF REPLACEMENT AND ENDING WITH THE SAME INSPECTION AND ACCEPTANCE HEREIN DESCRIBED.

T. WARRANTY

1. THE LIFE AND SATISFACTORY CONDITION OF ALL PLANT MATERIA

# City of Apopka
# PLANNING COMMISSION STAFF REPORT

**Section:** SITE PLANS
**Item #:** 2.
**Meeting Date:** March 11, 2025
**Department:** Community Development

**SUBJECT:**
Eden Crest Phase 1 - Plat

**REQUEST:**
Recommend approval of the Eden Crest Phase 1 – Plat

**SUMMARY:**
Owner(s): Apopka Project I LLC
Applicant: Ovidio S. Sanchez
Parcel Identification Number(s): 07-21-28-0000-00-016, 07-21-28-0000-00-021, 07-21-28-0000-00-044, 18-21-28-0000-00-018, 18-21-28-0000-00-019, 18-21-28-0000-00-020, 18-21-28-0000-00-023, 18-21-28-0000-00-038, 18-21-28-0000-00-054, 18-21-28-0000-00-056, 18-21-28-0000-00-071
Location: East of S Binion Road and North of Boy Scout Road
Future Land Use: Residential Low
Zoning District: PD (Planned Development)
Tract Size: 85.16 +/- acres

| Direction | Future Land Use | Zoning | Present Use |
|---|---|---|---|
| **North** | Low Density Residential (City), Rural (County) | RTF (Residential Two-Family), A-1 (County Citrus Rural District) | Single-Family Subdivision and Single-Family Homes |
| **East** | Low Density Residential | RTF (Residential Two-Family), and PD (Planned Development) | Vacant |
| **South** | Low Density Residential (City), Rural (County) | RSF-1A (Residential Single-Family – Estate), T (Transitional), and A-1 (County Citrus Rural District) | Single-Family homes |
| **West** | Low Density Residential (City), Rural (County) | RTF (Residential Two Family), A-1 (County Citrus Rural District) | Single Family Subdivision and Single-Family Homes |

**PROJECT SUMMARY:**
The applicant has submitted the Eden Crest Phase 1 – Plat for consideration of a Single-Family/Townhome subdivision development that comprises of 184 lots, Right of Way (Tract A), Stormwater (Tract C), Open Space (Tract Z, Tract AA, Tract BB, Tract CC, and Tract JJ), Landscape Buffer (Tract F, Tract G, Tract H, Tract J, Tract K, Tract U, Tract W, Tract X, and Tract Y), and Lift Station (Tract FF). The Plat is consistent with the Construction Site Plan approved by the Development Review Committee on January 10, 2024.

**ACCESS:**
The access to the development is on S. Binion Road and Johns Road.

**PUBLIC HEARING SCHEDULE:**

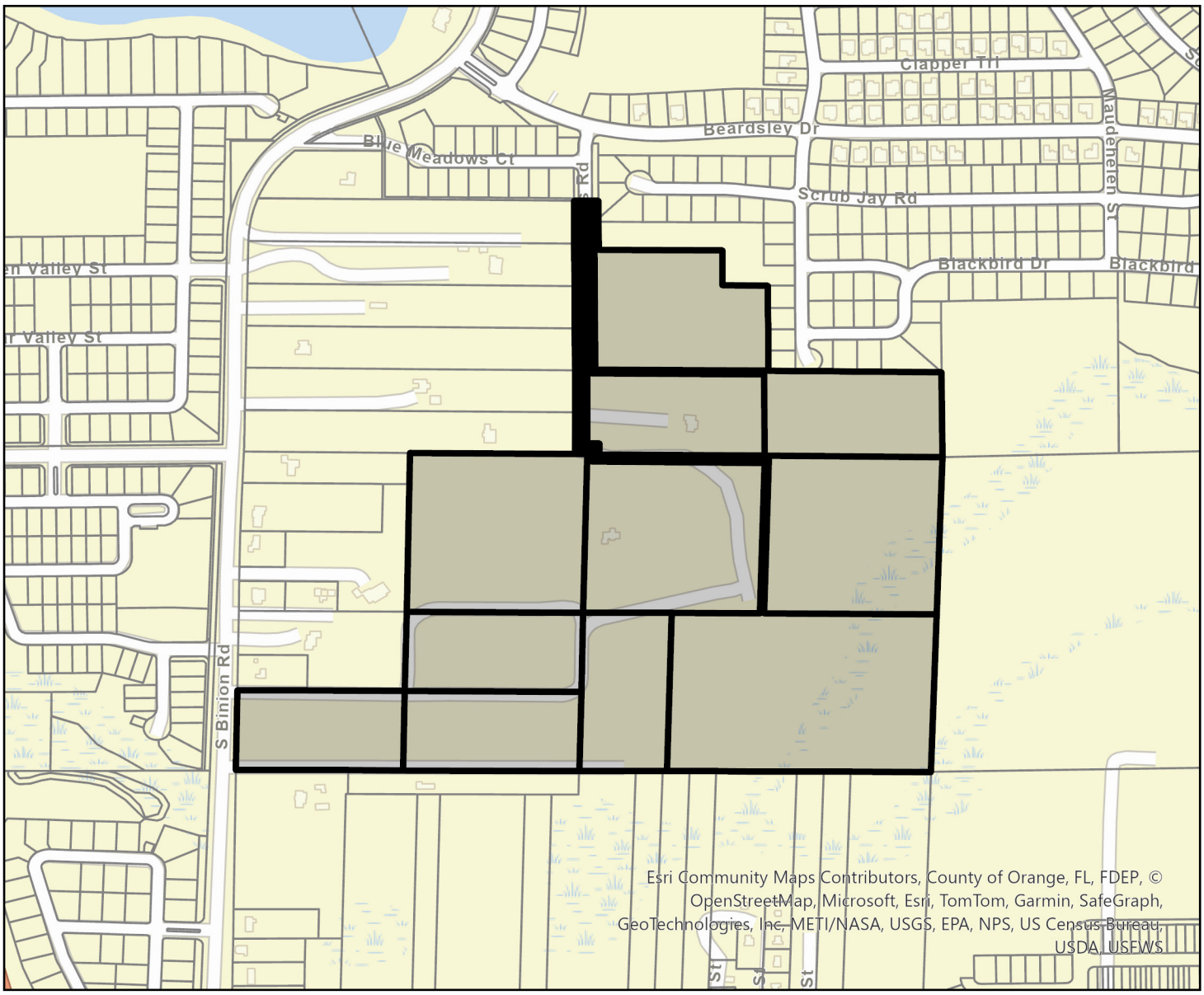
March 11, 2025 - Planning Commission (5:30 pm)
April 2, 2024 - City Council (1:30 pm)

**FUNDING SOURCE:**
N/A

**RECOMMENDED MOTION:**
**Development Review Committee (DRC):**
Recommends approval of the Eden Crest Phase 1 – Plat.

**Recommended Motion – Planning Commission:**
Recommend approval of the Eden Crest Phase 1 – Plat, subject to the reviews of the City Engineer and City Surveyor.

**ATTACHMENTS:**
1. Eden Crest Phase 1 Maps
2. 20230651 Eden Crest Ph 1 Plat

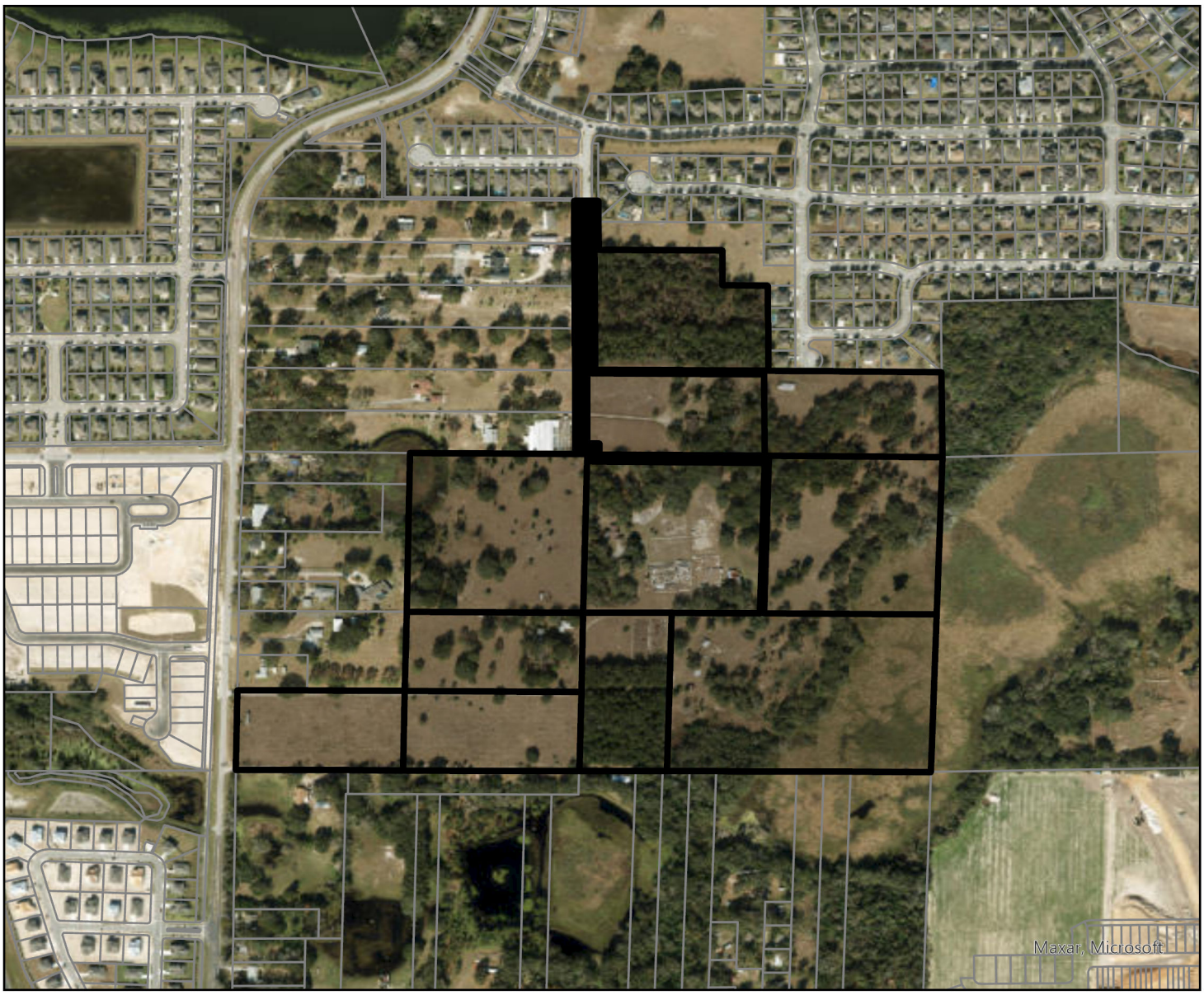



Parcel

Eden Crest Phase 1

0 0.1 0.2 0.39 Miles

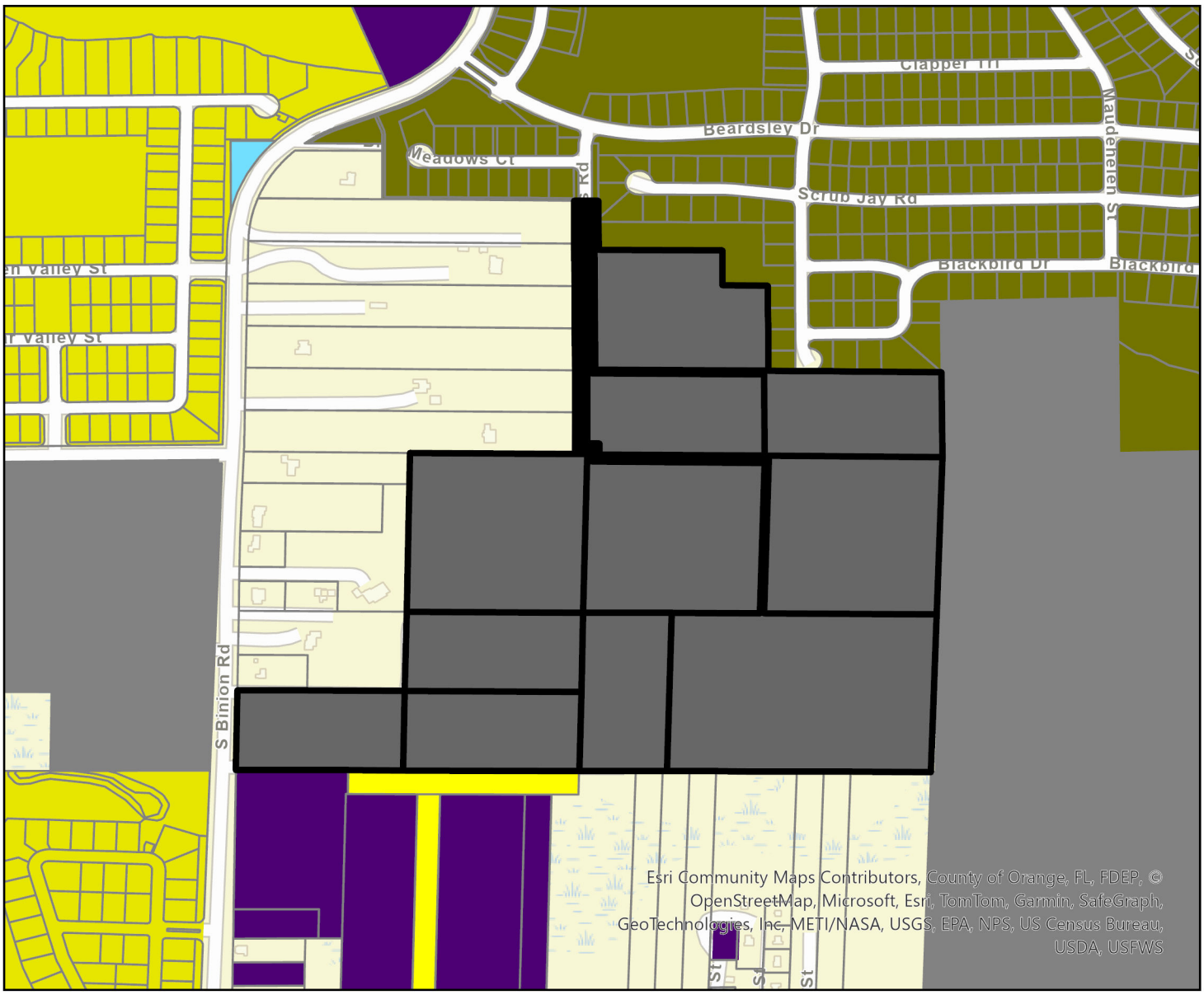
N




Parcel
Eden Crest Phase 1

0 0.1 0.2 0.39 Miles

N



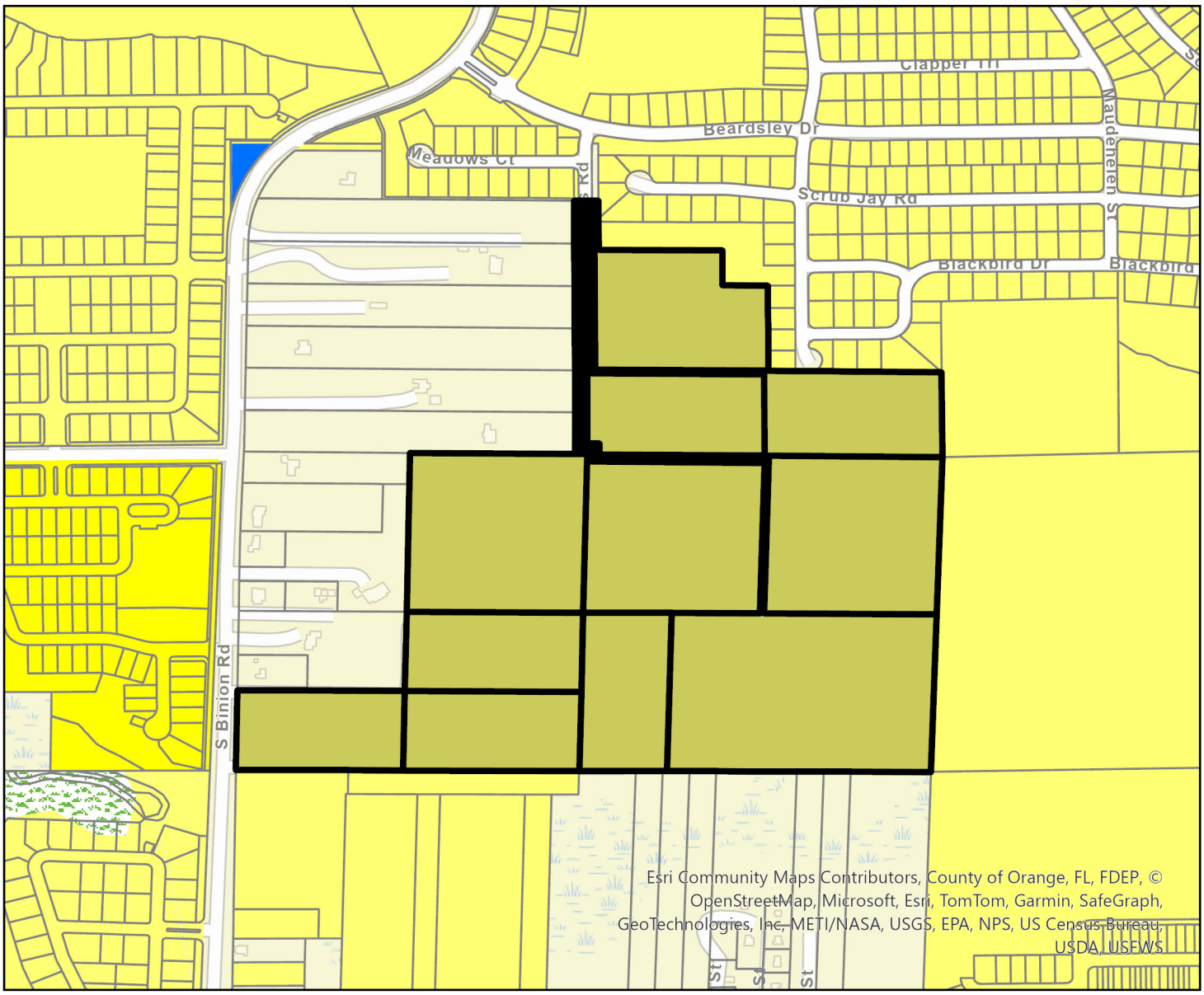

Parcel

## Apopka Zoning

- AG
- AIR
- C-C
- C-COR
- C-N
- C-R
- I-H
- I-L
- INST
- MHP
- MU-D
- MU-ES-GT
- MU-INT
- MU-MED
- MU-N
- MU-T
- MU-VC
- O
- PD
- PR
- RCE
- RMF
- RSF-1A
- RSF-1B
- RTF
- T
- Eden Crest Phase 1

0 0.1 0.2 0.39 Miles

N




Parcel

Apopka Future Land Use

- AG
- AG-E
- AG-HOME
- COMM
- CONSV
- FLU-IP
- HDR-25
- IND
- INST_PU
- MU
- OFF
- PR
- RE
- RH
- RL
- RLS
- RM
- RML
- RS
- RVLS
- Eden Crest Phase 1

0 0.1 0.2 0.39 Miles

N

# EDEN CREST PHASE 1

SHEET 1 OF 8

## A PARCEL OF LAND LYING IN SECTIONS 7 & 18, TOWNSHIP 21 SOUTH, RANGE 28 EAST, CITY OF APOPKA, ORANGE COUNTY, FLORIDA

**LEGAL DESCRIPTION:**

A PARCEL OF LAND LYING IN SECTIONS 7 & 18, TOWNSHIP 21 SOUTH, RANGE 28 EAST, ORANGE COUNTY FLORIDA. MORE PARTICULARLY DESCRIBED AS FOLLOWS:

**BEGIN** AT THE SOUTHEAST CORNER OF TRACT 33, MAUDEHELEN SUBDIVISION PHASE 4, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 91, PAGES 53 THROUGH 55 OF THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA, ALSO BEING A POINT ON THE WESTERLY LINE OF MAUDEHELEN SUBDIVISION PHASE 2, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 70, PAGES 50 THROUGH 52 OF SAID PUBLIC RECORDS; THENCE RUN SOUTH 00°00'39" EAST ALONG SAID WESTERLY LINE FOR A DISTANCE OF 205.75 FEET TO THE SOUTHERLY LINE OF SAID MAUDEHELEN SUBDIVISION PHASE 2; THENCE RUN SOUTH 89°22'06" EAST ALONG SAID SOUTHERLY LINE FOR A DISTANCE OF 301.46 FEET; THENCE DEPARTING SAID SOUTHERLY LINE RUN SOUTH 00° 37' 54" WEST FOR A DISTANCE OF 130.00 FEET; THENCE RUN SOUTH 89° 22' 06" EAST FOR A DISTANCE OF 15.81 FEET; THENCE RUN SOUTH 00° 37' 54" WEST FOR A DISTANCE OF 55.00 FEET TO A POINT ON A NON TANGENT CURVE, CONCAVE SOUTHEASTERLY HAVING A RADIUS OF 15.00 FEET, WITH A CHORD BEARING OF SOUTH 45° 18' 38" WEST, AND A CHORD DISTANCE OF 21.33 FEET; THENCE RUN SOUTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 90° 38' 33" FOR A DISTANCE OF 23.73 FEET TO A POINT OF TANGENCY; THENCE RUN SOUTH 00° 00' 39" EAST FOR A DISTANCE OF 436.83 FEET TO THE POINT OF CURVATURE OF A CURVE, CONCAVE NORTHEASTERLY HAVING A RADIUS OF 15.00 FEET, WITH A CHORD BEARING OF SOUTH 44° 39' 08" EAST, AND A CHORD DISTANCE OF 21.08 FEET; THENCE RUN EASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 89° 16' 59" FOR A DISTANCE OF 23.37 FEET TO A POINT OF TANGENCY; THENCE RUN SOUTH 89° 17' 38" EAST FOR A DISTANCE OF 3.13 FEET; THENCE RUN SOUTH 00° 42' 22" WEST FOR A DISTANCE OF 55.00 FEET; THENCE RUN NORTH 89° 17' 38" WEST FOR A DISTANCE OF 2.07 FEET TO THE POINT OF CURVATURE OF A CURVE, CONCAVE SOUTHEASTERLY HAVING A RADIUS OF 15.00 FEET, WITH A CHORD BEARING OF SOUTH 45° 20' 54" WEST, AND A CHORD DISTANCE OF 21.35 FEET; THENCE RUN SOUTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 90° 42' 57" FOR A DISTANCE OF 23.75 FEET TO A NON TANGENT LINE; THENCE RUN SOUTH 00° 00' 39" EAST FOR A DISTANCE OF 488.39 FEET TO THE POINT OF CURVATURE OF A CURVE, CONCAVE EASTERLY HAVING A RADIUS OF 15.00 FEET, WITH A CHORD BEARING OF SOUTH 09° 28' 13" EAST, AND A CHORD DISTANCE OF 4.93 FEET; THENCE RUN SOUTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 18° 55' 08" FOR A DISTANCE OF 4.95 FEET TO A NON TANGENT LINE; THENCE RUN SOUTH 89° 27' 30" EAST FOR A DISTANCE OF 111.42 FEET TO A POINT ON A NON TANGENT CURVE, CONCAVE WESTERLY HAVING A RADIUS OF 20.00 FEET, WITH A CHORD BEARING OF NORTH 15° 15' 55" EAST, AND A CHORD DISTANCE OF 10.54 FEET; THENCE RUN NORTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 30° 33' 08" FOR A DISTANCE OF 10.66 FEET TO A NON TANGENT LINE; THENCE RUN SOUTH 89° 05' 25" EAST FOR A DISTANCE OF 60.01 FEET TO A POINT ON A NON TANGENT CURVE, CONCAVE EASTERLY HAVING A RADIUS OF 20.00 FEET, WITH A CHORD BEARING OF SOUTH 14° 44' 05" EAST, AND A CHORD DISTANCE OF 10.17 FEET; THENCE RUN SOUTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 29° 26' 52" FOR A DISTANCE OF 10.28 FEET TO A NON TANGENT LINE; THENCE RUN SOUTH 89° 27' 30" EAST FOR A DISTANCE OF 111.51 FEET TO A POINT ON A NON TANGENT CURVE, CONCAVE WESTERLY HAVING A RADIUS OF 15.00 FEET, WITH A CHORD BEARING OF NORTH 10° 00' 04" EAST, AND A CHORD DISTANCE OF 5.22 FEET; THENCE RUN NORTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 20° 01' 25" FOR A DISTANCE OF 5.24 FEET TO A NON TANGENT LINE; THENCE RUN SOUTH 88° 37' 48" EAST FOR A DISTANCE OF 20.01 FEET TO A POINT ON A NON TANGENT CURVE, CONCAVE EASTERLY HAVING A RADIUS OF 15.00 FEET, WITH A CHORD BEARING OF SOUTH 09° 28' 13" EAST, AND A CHORD DISTANCE OF 4.93 FEET; THENCE RUN SOUTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 18° 55' 08" FOR A DISTANCE OF 4.95 FEET TO A NON TANGENT LINE; THENCE RUN SOUTH 89° 27' 30" EAST FOR A DISTANCE OF 111.42 FEET TO A POINT ON A NON TANGENT CURVE, CONCAVE WESTERLY HAVING A RADIUS OF 20.00 FEET, WITH A CHORD BEARING OF NORTH 15° 15' 55" EAST, AND A CHORD DISTANCE OF 10.54 FEET; THENCE RUN NORTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 30° 33' 08" FOR A DISTANCE OF 10.66 FEET TO A NON TANGENT LINE; THENCE RUN NORTH 89° 59' 21" EAST FOR A DISTANCE OF 55.00 FEET TO A POINT ON A NON TANGENT CURVE, CONCAVE EASTERLY HAVING A RADIUS OF 75.00 FEET, WITH A CHORD BEARING OF SOUTH 01° 59' 23" WEST, AND A CHORD DISTANCE OF 5.24 FEET; THENCE RUN SOUTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 04° 00' 04" FOR A DISTANCE OF 5.24 FEET TO A NON TANGENT LINE; THENCE RUN NORTH 89° 59' 21" EAST FOR A DISTANCE OF 125.18 FEET; THENCE RUN SOUTH 45° 00' 55" EAST FOR A DISTANCE OF 101.22 FEET; THENCE RUN NORTH 45° 24' 56" EAST FOR A DISTANCE OF 59.60 FEET; THENCE RUN NORTH 66° 19' 13" EAST FOR A DISTANCE OF 49.92 FEET; THENCE RUN NORTH 68° 06' 06" EAST FOR A DISTANCE OF 74.56 FEET; THENCE RUN NORTH 29° 04' 54" EAST FOR A DISTANCE OF 23.44 FEET; THENCE RUN NORTH 69° 01' 48" EAST FOR A DISTANCE OF 49.89 FEET; THENCE RUN NORTH 38° 32' 43" EAST FOR A DISTANCE OF 125.55 FEET TO THE EAST LINE OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SAID SECTION 18; THENCE RUN SOUTH 02° 03' 11" WEST ALONG SAID EAST LINE FOR A DISTANCE OF 1150.99 FEET TO THE SOUTHEAST CORNER OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SAID SECTION 18; THENCE RUN NORTH 89°33'56" WEST ALONG THE SOUTH LINE OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SAID SECTION 18 FOR A DISTANCE OF 1311.51 FEET TO THE SOUTHWEST CORNER OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SAID SECTION 18; THENCE RUN NORTH 89°32'20" WEST ALONG THE SOUTH LINE OF THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF SAID SECTION 18 FOR A DISTANCE OF 1311.50 FEET TO THE EAST RIGHT OF WAY LINE OF SOUTH BINION ROAD ACCORDING TO ROAD PLAT BOOK 1, PAGES 40 THROUGH 43 OF SAID PUBLIC RECORDS; THENCE RUN NORTH 01°09'43" EAST ALONG SAID EAST RIGHT OF WAY LINE FOR A DISTANCE OF 336.48 FEET TO THE NORTH LINE OF THE SOUTH 1/4 OF THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF SAID SECTION 18; THENCE DEPARTING SAID EAST RIGHT OF WAY LINE RUN SOUTH 89°27'30" EAST ALONG SAID NORTH LINE FOR A DISTANCE OF 657.03 FEET TO THE WEST LINE OF THE EAST 1/2 OF THE NORTHEAST 1/4 OF SAID SECTION 18; THENCE RUN NORTH 01°22'58" EAST ALONG SAID WEST LINE FOR A DISTANCE OF 1006.73 FEET TO THE SOUTH LINE OF SAID SECTION 7; THENCE RUN SOUTH 89°13'08" EAST ALONG SAID SOUTH LINE FOR A DISTANCE OF 615.89 FEET TO THE WEST LINE OF THE WEST 15.00 FEET OF THE EAST 45.00 FEET OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION 7; THENCE RUN NORTH 00°00'39" WEST ALONG SAID WEST LINE FOR A DISTANCE OF 1071.42 FEET TO THE SOUTHERLY LINE OF SAID MAUDEHELEN SUBDIVISION PHASE 4; THENCE RUN SOUTH 89°13'07" EAST ALONG SAID SOUTHERLY LINE FOR A DISTANCE OF 90.01 FEET TO THE **POINT OF BEGINNING**.

CONTAINING 66.39 ACRES, MORE OR LESS.

**SURVEYOR'S NOTES:**

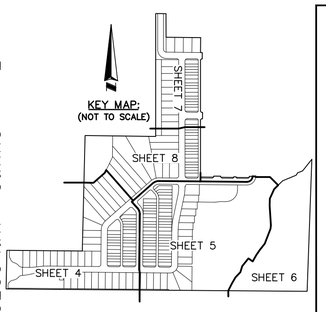
1. BEARINGS SHOWN HEREON ARE ASSUMED AND ARE BASED ON THE SOUTH LINE OF SECTION 7, AS BEING NORTH 89°13'08" WEST (FOR ANGULAR DESIGNATION ONLY).
2. ALL LOT LINES INTERSECTING CURVES ARE RADIAL, UNLESS OTHERWISE NOTED NON-RADIAL (N.R.).
3. ALL PLATTED UTILITY EASEMENTS SHALL ALSO BE EASEMENTS FOR THE 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.
4. TRACTS C AND D ARE STORMWATER TRACTS AND SHALL BE OWNED AND MAINTAINED BY THE EDEN CREST HOMEOWNERS ASSOCIATION, INC, ("THE ASSOCIATION"). AN EMERGENCY ACCESS EASEMENT TO THE PRIVATE STORM DRAINAGE SYSTEM OVER SAID STORMWATER TRACTS AND ALL DRAINAGE EASEMENTS SHOWN ON THIS PLAT IS HEREBY DEDICATED TO THE CITY OF APOPKA FOR EMERGENCY MAINTENANCE PURPOSES IN THE EVENT INADEQUATE MAINTENANCE OF THE STORM DRAINAGE SYSTEM CREATES A HAZARD TO THE PUBLIC HEALTH, SAFETY, AND GENERAL WELFARE. THE EMERGENCY ACCESS EASEMENT GRANTED ABOVE DOES NOT IMPOSE ANY OBLIGATION, BURDEN, RESPONSIBILITY OR LIABILITY UPON THE CITY OF APOPKA TO ENTER UPON THE SUBJECT PROPERTY AND TAKE ANY ACTION TO REPAIR OR MAINTAIN THE PRIVATE DRAINAGE SYSTEM. A NON-EXCLUSIVE EASEMENT THROUGH, OVER, UNDER AND ACROSS THE COMMON AREA AND ALL NOTED UTILITY EASEMENTS IS HEREBY DEDICATED FOR USE BY ALL PUBLIC UTILITIES FOR THE PURPOSE OF CONSTRUCTING, MAINTAINING AND REPLACING THEIR RESPECTIVE FACILITIES SERVICING THE LANDS ENCOMPASSED BY THIS PLAT.
5. TRACTS F, G, H, I, J, K, L, M, Q, R, U, V, W, AND X (LANDSCAPE BUFFER) SHALL BE OWNED AND MAINTAINED BY THE ASSOCIATION.
6. TRACTS Y, Z, AA, BB, CC AND JJ (OPEN SPACE) SHALL BE OWNED AND MAINTAINED BY THE ASSOCIATION.
7. TRACT EE (AMENITY) SHALL BE OWNED AND MAINTAINED BY THE ASSOCIATION.
8. TRACT FF (LIFT STATION) SHALL BE OWNED AND MAINTAINED BY THE CITY OF APOPKA.
9. TRACT II (CONSERVATION) SHALL BE OWNED BY THE ASSOCIATION WITH DEVELOPMENTS 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/OR ALL 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.
10. TRACT KK (ACCESS) SHALL BE OWNED AND MAINTAINED BY THE ASSOCIATION.
11. TRACTS MM, NN, OO AND QQ (PRIVATE ALLEY) SHALL BE OWNED AND MAINTAINED BY THE ASSOCIATION.
12. THE DRAINAGE EASEMENTS SHOWN HEREON ARE PRIVATE AND ARE DEDICATED TO THE ASSOCIATION. THE DRAINAGE EASEMENTS WILL BE MAINTAINED ACCORDING TO DECLARATION OF COVENANTS, CONDITIONS, EASEMENTS, AND RESTRICTIONS FOR EDEN CREST ("THE DECLARATION").
13. A NON-EXCLUSIVE EASEMENT THROUGH, OVER, UNDER AND ACROSS TRACT A AND ALL UTILITY EASEMENTS SHOWN HEREON IS HEREBY DEDICATED FOR THE USE BY ALL PUBLIC UTILITIES FOR THE PURPOSE OF CONSTRUCTION, MAINTAINING AND REPLACING THEIR RESPECTIVE FACILITIES SERVICING THE LANDS ENCOMPASSED BY THIS PLAT.
14. A DRAINAGE EASEMENT OVER TRACT C (STORMWATER) IS DEDICATED TO ORANGE COUNTY, FLORIDA.
15. THIS PLAT IS PART OF A PHASED DEVELOPMENT. LOT NUMBERS SHOWN HEREON ARE AS PER THE APPROVED PLANS. MISSING LOT NUMBERS WILL BE INCLUDED ON FUTURE PHASES.
16. THE WALL MAINTENANCE EASEMENT (W.M.E.) SHOWN HEREON IS DEDICATED TO AND MAINTAINED BY THE ASSOCIATION.
17. SEPARATE MORTGAGEE CONSENT AND JOINDERS TO THE PLAT HAVE BEEN EXECUTED BY THE PARTIES THAT, AT TIME OF RECORDING, ARE THE MORTGAGEES OF THE LANDS SHOWN HEREON AND MAY BE FOUND IN THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.

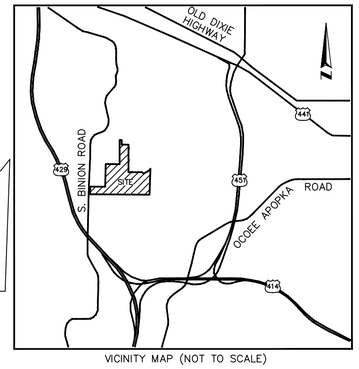
**PROPERTY INFORMATION REPORT PREPARED BY FIRST AMERICAN TITLE INSURANCE COMPANY, FATIC FILE NUMBER: 110465256, DATED NOVEMBER 25, 2024.**

**UNDERLYING RIGHTS OF WAY, EASEMENTS OR PLATS AFFECTING SAID PROPERTY ARE AS FOLLOWS:**

1. GRANT OF EASEMENT GRANTED TO BRUCE HUGGINS AND WIFE, FLOSSIE L. HUGGINS BY INSTRUMENT RECORDED IN BOOK 2787, PAGE 889.

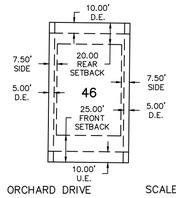
**AFFECTS SUBJECT PROPERTY (TRACT KK) AS SHOWN HEREON.**



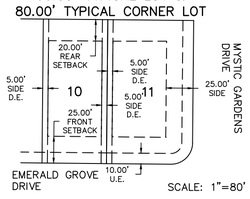

VICINITY MAP (NOT TO SCALE)

**75.00' TYPICAL LOT**



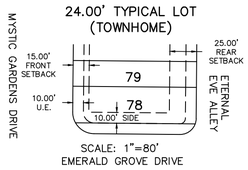

ORCHARD DRIVE SCALE: 1"=80'

**60.00' TYPICAL LOT & 80.00' TYPICAL CORNER LOT**




EMERALD GROVE DRIVE SCALE: 1"=80'

**24.00' TYPICAL LOT (TOWNHOME)**




SCALE: 1"=80'
EMERALD GROVE DRIVE

**SHEET INDEX**

SHEET 1 OF 8 – LEGAL DESCRIPTION, NOTES, LEGEND & DEDICATION
SHEETS 2-3 OF 8 – BOUNDARY
SHEETS 4-8 OF 8 – LOT GEOMETRY

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**SYMBOL AND ABBREVIATION LEGEND:**

| | | | |
|---|---|---|---|
| ℄ | CENTER LINE | U.E. | UTILITY EASEMENT |
| R/W | RIGHT OF WAY | D.E. | DRAINAGE EASEMENT |
| P.I. | POINT OF INTERSECTION | W.M.E. | WALL MAINTENANCE EASEMENT |
| P.C. | POINT OF CURVATURE | P.S.M. | PROFESSIONAL SURVEYOR AND MAPPER |
| P.T. | POINT OF TANGENCY | LB | LICENSED BUSINESS |
| N.T. | NOT TANGENT | P.B. | PLAT BOOK |
| (OA) | OVERALL LENGTH | ORB | OFFICIAL RECORD BOOK |
| (N.R.) | NON-RADIAL | PG(S). | PAGE(S) |
| N | NORTH/NORTHING | N.T.S. | NOT TO SCALE |
| E | EAST/EASTING | ■ | SET 4"x4" CONCRETE MONUMENT LB #6723 PERMANENT REFERENCE MONUMENT (PRM) |
| W.E. | WALL EASEMENT | ◉ | SET NAIL & DISK LB #6723 PERMANENT CONTROL POINT (PCP) |
| CCR | CERTIFIED CORNER RECORD | | |
| ◎ | SET NAIL & DISK, LB #6723 PERMANENT REFERENCE MONUMENT (PRM) | | |

**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: Edwin Munoz, Jr., P.S.M.
Registration Number 7288

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.

**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 _____ 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 STATURES; 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, LLC
LICENSED BUSINESS #8627
16 EAST PLANT STREET
WINTER GARDEN, FLORIDA 34787

PLAT BOOK ____ PG. ____

**EDEN CREST PHASE 1**

**DEDICATION**

THIS IS TO CERTIFY THAT THE UNDERSIGNED, APOPKA PROJECT I, LLC, A DELAWARE LIMITED LIABILITY COMPANY, BEING THE OWNER IN FEE SIMPLE OF ALL 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 THE UTILITY EASEMENTS TO THE PERPETUAL USE OF THE PUBLIC.

TRACT B (ADDITIONAL RIGHT-OF-WAY), AND TRACT A (RIGHT-OF-WAY) ARE HEREBY DEDICATED IN FEE SIMPLE TO THE PERPETUAL USE OF THE PUBLIC, WITHOUT ANY RESTRICTION WHATSOEVER.

TRACT FF (LIFT STATION) IS HEREBY DEDICATED IN FEE SIMPLE TO THE CITY OF APOPKA, FLORIDA. OWNERSHIP OF THIS TRACT AND ANY IMPROVEMENTS THEREON VESTS UPON APPROVAL OF THIS PLAT BY THE CITY OF APOPKA, FLORIDA. RECORDING OF THIS PLAT SHALL ACT AS CONVEYANCE TO THE CITY AND NO FURTHER INSTRUMENT SHALL BE NECESSARY TO VEST FEE SIMPLE TITLE IN THE CITY AS AFOREMENTIONED.

IN WITNESS WHEREOF, APOPKA PROJECT 1, LLC, A DELAWARE LIMITED LIABILITY COMPANY, HAS CAUSED THESE PRESENTS TO BE EXECUTED AND ACKNOWLEDGED BY ITS UNDERSIGNED OFFICER THEREUNTO DULY AUTHORIZED ON THIS _____ DAY OF _____2024.

APOPKA PROJECT 1, LLC, A DELAWARE LIMITED LIABILITY COMPANY

BY: LEGACY 5 MANAGEMENT, LLC, AN OHIO LIMITED LIABILITY COMPANY, ITS SOLE MANAGER

BY: _____

PRINTED NAME: AARON R. MATSON
TITLE: MANAGER

_____
SIGNATURE OF WITNESS

_____
PRINTED NAME OF WITNESS

_____
SIGNATURE OF WITNESS

_____
PRINTED NAME OF WITNESS

STATE OF _____,
COUNTY OF _____ COUNTY

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME, BY MEANS OF [ ] PHYSICAL PRESENCE OR [ ] ONLINE NOTARIZATION, THIS ___ DAY OF _____, 2024, BY AARON R. MATSON, AS MANAGER OF LEGACY 5 MANAGEMENT, LLC, AN OHIO LIMITED LIABILITY COMPANY, AS SOLE MANAGER OF APOPKA PROJECT 1, LLC, A DELAWARE LIMITED LIABILITY COMPANY, FOR AND ON BEHALF OF SAID LIMITED LIABILITY COMPANY. SUCH PERSON [ ] IS PERSONALLY KNOWN TO ME OR [ ] HAS PRODUCED _____ AS IDENTIFICATION.

_____
SIGNATURE OF PERSON TAKING ACKNOWLEDGEMENT

NOTARY PUBLIC

PRINTED NAME: _____

COMMISSION NO: _____

MY COMMISSION EXPIRES: _____

**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

_____
Bryan Nelson, Mayor

Attest: _____
Susan M. Bone, City Clerk

**CERTIFICATE OF COUNTY COMPTROLLER**

I HEREBY CERTIFY, that the foregoing plat was recorded in the Orange County Official Records

on _____ as Doc.# _____

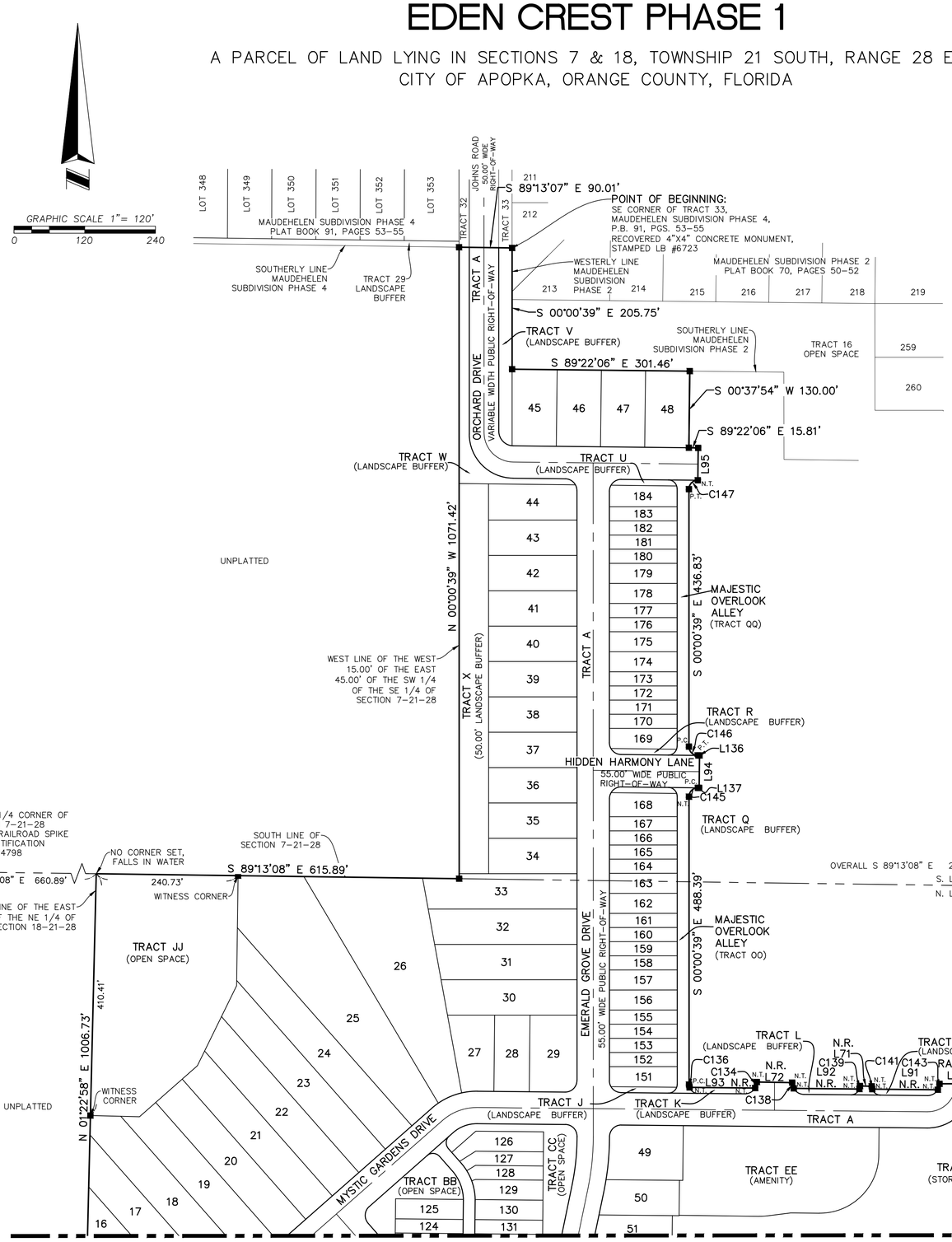
County Comptroller in and for Orange County, Florida.

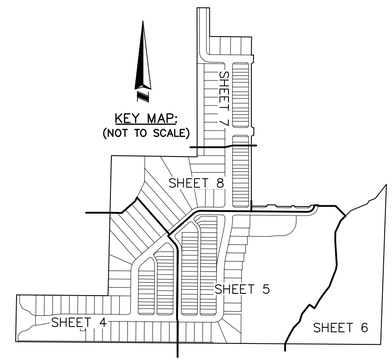
By_____

PLAT BOOK ___ PG. ___

# EDEN CREST PHASE 1

A PARCEL OF LAND LYING IN SECTIONS 7 & 18, TOWNSHIP 21 SOUTH, RANGE 28 EAST,
CITY OF APOPKA, ORANGE COUNTY, FLORIDA




MATCHLINE SHEET 3

| LINE TABLE | | |
|---|---|---|
| LINE | BEARING | LENGTH |
| L45 | N89°59'21"E | 125.18' |
| L46 | S45°00'55"E | 101.22' |
| L47 | N45°24'56"E | 59.60' |
| L48 | N66°19'13"E | 49.92' |
| L49 | N68°06'06"E | 74.56' |
| L50 | N29°04'54"E | 23.44' |
| L51 | N69°01'48"E | 49.89' |
| L52 | N38°32'43"E | 125.55' |
| L70 | N89°59'21"E | 55.00' |
| L71 | S88°37'48"E | 20.01' |
| L72 | S89°05'25"E | 60.01' |
| L91 | S89°27'30"E | 111.42' |
| L92 | S89°27'30"E | 111.51' |
| L93 | S89°27'30"E | 111.42' |
| L94 | S00°42'22"W | 55.00' |
| L95 | S00°37'54"W | 55.00' |
| L136 | S89°17'38"E | 3.13' |
| L137 | N89°17'38"W | 2.07' |

| CURVE TABLE | | | | | |
|---|---|---|---|---|---|
| CURVE | RADIUS | CHORD BEARING | CHORD | DELTA | LENGTH |
| C91 | 75.00' | S01°59'23"W | 5.24' | 004°00'04" | 5.24' |
| C134 | 20.00' | N15°15'55"E | 10.54' | 030°33'08" | 10.66' |
| C136 | 15.00' | S09°28'13"E | 4.93' | 018°55'08" | 4.95' |
| C138 | 20.00' | S14°44'05"E | 10.17' | 029°26'52" | 10.28' |
| C139 | 15.00' | N10°00'04"E | 5.22' | 020°01'25" | 5.24' |
| C141 | 15.00' | S09°28'13"E | 4.93' | 018°55'08" | 4.95' |
| C143 | 20.00' | N15°15'55"E | 10.54' | 030°33'08" | 10.66' |
| C145 | 15.00' | S45°20'54"W | 21.35' | 090°42'57" | 23.75' |
| C146 | 15.00' | S44°39'08"E | 21.08' | 089°16'59" | 23.37' |
| C147 | 15.00' | S45°18'38"W | 21.33' | 090°38'33" | 23.73' |

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PLAT BOOK ___ PG. ___

# EDEN CREST PHASE 1

A PARCEL OF LAND LYING IN SECTIONS 7 & 18, TOWNSHIP 21 SOUTH, RANGE 28 EAST,
CITY OF APOPKA, ORANGE COUNTY, FLORIDA

GRAPHIC SCALE 1"= 120'
0 120 240

MATCHLINE SHEET 2

SOUTH 1/4 CORNER OF SECTION 7-21-28 FOUND RAILROAD SPIKE NO IDENTIFICATION CCR# 114798

WEST LINE OF THE EAST 1/2 OF THE NE 1/4 OF SECTION 18-21-28

WEST LINE OF THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 18-21-28

NORTH LINE OF THE SOUTH 1/4 OF THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 18-21-28

1009.45'

N 01°22'58" E 1006.73'

S 89°27'30" E 657.03'

N 01°09'43" E 336.48'

UNPLATTED

TRACT B (RIGHT-OF-WAY DEDICATION)

TRACT Y (OPEN SPACE)

TRACT C (STORMWATER)

TRACT FF (LIFT STATION)

TRACT KK 7.50' ACCESS TRACT (ORB 2787, PG. 889)

TRACT Z (OPEN SPACE)

TRACT AA (OPEN SPACE)

TRACT A

MYSTIC GARDENS DRIVE 55.00' WIDE PUBLIC RIGHT-OF-WAY

ETERNAL EVE ALLEY (TRACT MM)

BLISSFUL GARDENS WAY 60.00' WIDE PUBLIC RIGHT-OF-WAY

FIG LEAF ALLEY (TRACT NN)

EMERALD GROVE DRIVE 55.00' PUBLIC RIGHT-OF-WAY WIDTH (LANDSCAPE BUFFER)

TRACT I (LANDSCAPE BUFFER)

TRACT F (LANDSCAPE BUFFER)

TRACT G (LANDSCAPE BUFFER)

TRACT H (LANDSCAPE BUFFER)

EMERALD GROVE DRIVE 50.00' WIDE PUBLIC RIGHT-OF-WAY

TRACT D (STORMWATER)

TRACT II (CONSERVATION)

EAST LINE OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 18-21-28

S 02°03'11" W 1150.99'

UNPLATTED

SOUTH LINE OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 18-21-28

803.43'

N 89°33'56" W 1311.51'

NO CORNER SET, FALLS IN WATER

SOUTHEAST CORNER OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 18-21-28

N 89°32'20" W 1311.50'

SOUTH LINE OF THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 18-21-28

SOUTHWEST CORNER OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 18-21-28

WITNESS CORNER

UNPLATTED

S. BINION ROAD
80.00' RIGHT OF WAY PER ROAD PLAT BOOK 1, PAGES. 40-43

EAST RIGHT OF WAY LINE

1345.93'

SOUTHWEST CORNER OF THE NORTHEAST 1/4 OF SECTION 18-21-28 FOUND 1/2" IRON ROD, NO ID CCR# 82634

N 02°03'11" E 1330.96'

SOUTHEAST CORNER OF THE NORTHEAST 1/4 OF SECTION 18-21-28 FOUND NAIL AND DISK, LB #024 CCR# 82631

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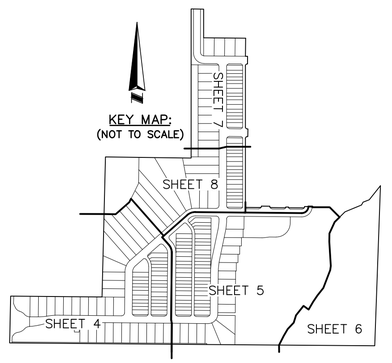
KEY MAP:
(NOT TO SCALE)



PLAT BOOK ___ PG. ___

# EDEN CREST PHASE 1

A PARCEL OF LAND LYING IN SECTIONS 7 & 18, TOWNSHIP 21 SOUTH, RANGE 28 EAST,
CITY OF APOPKA, ORANGE COUNTY, FLORIDA

GRAPHIC SCALE 1"=60'
0 60' 120'

| LINE TABLE | | |
|---|---|---|
| LINE | BEARING | LENGTH |
| L1 | N01°09'43"E | 42.72' |
| L5 | N41°22'41"W | 0.49' |
| L6 | N01°09'43"E | 55.70' |
| L9 | N76°27'14"E | 51.97' |
| L53 | S48°37'19"W | 38.01' |
| L54 | S57°03'08"W | 18.91' |
| L55 | S68°17'52"W | 7.64' |
| L56 | N41°22'41"W | 0.49' |
| L57 | S81°39'19"W | 1.15' |
| L58 | S41°22'41"E | 25.17' |
| L68 | S00°27'35"W | 70.68' |
| L69 | N41°22'41"W | 72.67' |
| L74 | S88°37'02"E | 83.32' |
| L75 | N48°37'19"E | 130.85' |
| L76 | N26°07'19"E | 151.23' |
| L78 | N00°32'30"E | 45.00' |
| L79 | S89°27'30"E | 15.00' |
| L80 | N00°32'30"E | 25.00' |
| L81 | S00°32'30"W | 25.00' |
| L82 | S00°32'30"W | 45.00' |
| L83 | N89°27'30"W | 35.00' |
| L114 | N88°16'48"W | 5.70' |
| L115 | S76°27'14"W | 12.59' |
| L117 | S00°27'40"W | 7.00' |
| L118 | N89°33'30"W | 51.01' |
| L119 | S00°32'30"W | 6.98' |
| L129 | N89°32'20"W | 141.07' |
| L130 | N89°32'20"W | 398.93' |
| L131 | N89°32'20"W | 216.81' |
| L133 | N89°32'25"W | 84.12' |
| L135 | N89°32'25"W | 2.67' |
| L138 | S89°27'30"E | 5.00' |

| CURVE TABLE | | | | | |
|---|---|---|---|---|---|
| CURVE | RADIUS | CHORD BEARING | CHORD | DELTA | LENGTH |
| C1 | 217.00' | S27°00'38"E | 67.76' | 017°57'52" | 68.04' |
| C2 | 78.00' | S48°26'54"E | 12.43' | 009°08'35" | 12.45' |
| C3 | 62.00' | S66°42'31"E | 48.12' | 045°39'48" | 49.41' |
| C5 | 300.00' | N79°34'56"E | 3.67' | 000°42'03" | 3.67' |
| C7 | 20.00' | S45°32'30"W | 28.28' | 090°00'00" | 31.42' |
| C8 | 115.00' | S24°34'54"W | 93.70' | 048°04'49" | 96.50' |
| C13 | 20.00' | S44°27'30"E | 28.28' | 090°00'00" | 31.42' |
| C14 | 15.00' | N45°32'30"E | 21.21' | 090°00'00" | 23.56' |
| C15 | 75.00' | N20°25'06"W | 53.66' | 041°55'11" | 54.87' |
| C16 | 15.00' | N86°22'41"W | 21.21' | 090°00'00" | 23.56' |
| C17 | 60.00' | S24°34'54"W | 48.89' | 048°04'49" | 50.35' |
| C18 | 15.00' | N25°06'02"E | 12.17' | 047°52'38" | 12.53' |
| C19 | 78.00' | N58°03'41"E | 37.28' | 027°39'03" | 37.64' |
| C20 | 62.00' | N67°07'16"E | 48.22' | 045°46'13" | 49.53' |
| C21 | 373.57' | N83°11'30"E | 88.67' | 013°37'52" | 88.88' |
| C22 | 337.00' | N83°29'52"E | 82.65' | 014°05'15" | 82.86' |
| C23 | 62.00' | N60°27'46"E | 24.56' | 022°50'52" | 24.72' |
| C31 | 20.00' | S86°22'41"E | 28.28' | 090°00'00" | 31.42' |
| C33 | 55.00' | S20°25'06"E | 39.35' | 041°55'11" | 40.24' |
| C35 | 20.00' | S45°32'30"W | 28.28' | 090°00'00" | 31.42' |
| C36 | 15.00' | N44°27'30"W | 21.21' | 090°00'00" | 23.56' |
| C37 | 95.00' | N20°25'06"W | 67.97' | 041°55'11" | 69.51' |
| C38 | 15.00' | N03°37'19"E | 21.21' | 090°00'00" | 23.56' |
| C64 | 87.50' | N24°34'54"E | 71.29' | 048°04'49" | 73.43' |
| C69 | 85.00' | N20°25'06"W | 60.81' | 041°55'11" | 62.19' |
| C81 | 15.00' | S08°26'00"E | 5.00' | 019°11'25" | 5.02' |
| C83 | 385.00' | S83°27'52"W | 56.83' | 008°27'55" | 56.88' |
| C84 | 385.00' | S89°07'09"W | 19.11' | 002°50'40" | 19.11' |

| CURVE TABLE | | | | | |
|---|---|---|---|---|---|
| CURVE | RADIUS | CHORD BEARING | CHORD | DELTA | LENGTH |
| C85 | 20.00' | S59°27'30"E | 20.00' | 060°00'00" | 20.94' |
| C86 | 20.00' | S14°27'30"E | 10.35' | 030°00'00" | 10.47' |
| C87 | 15.00' | N55°16'38"E | 17.32' | 070°31'44" | 18.46' |
| C88 | 15.00' | N10°16'38"E | 5.07' | 019°28'16" | 5.10' |
| C93 | 20.00' | N60°32'30"E | 20.00' | 060°00'00" | 20.94' |
| C94 | 20.00' | N15°32'04"E | 10.36' | 030°00'52" | 10.48' |
| C95 | 15.00' | S54°11'38"E | 17.32' | 070°31'44" | 18.46' |
| C96 | 15.00' | S09°11'38"E | 5.07' | 019°28'16" | 5.10' |
| C97 | 95.00' | N03°54'06"W | 14.72' | 008°53'11" | 14.73' |
| C98 | 95.00' | N15°01'25"W | 22.10' | 013°21'27" | 22.15' |
| C99 | 95.00' | N27°19'30"W | 18.62' | 011°14'44" | 18.65' |
| C100 | 95.00' | N37°09'47"W | 13.97' | 008°25'50" | 13.98' |
| C101 | 15.00' | S19°59'24"W | 14.38' | 057°15'49" | 14.99' |
| C102 | 15.00' | S25°00'36"E | 8.45' | 032°44'11" | 8.57' |
| C103 | 115.00' | S12°00'04"W | 45.70' | 022°55'08" | 46.00' |
| C104 | 115.00' | S34°44'08"W | 44.97' | 022°33'00" | 45.26' |
| C105 | 115.00' | S47°18'58"W | 5.24' | 002°36'41" | 5.24' |
| C123 | 373.57' | N83°01'20"E | 86.47' | 013°17'32" | 86.67' |
| C169 | 362.00' | S83°29'52"W | 88.78' | 014°05'15" | 89.01' |
| C170 | 62.00' | S44°30'23"E | 18.36' | 017°01'38" | 18.43' |
| C171 | 385.00' | N84°53'12"E | 75.87' | 011°18'35" | 76.00' |
| C172 | 300.00' | N85°11'46"E | 55.04' | 010°31'38" | 55.12' |
| C173 | 373.57' | N89°50'16"E | 2.21' | 000°20'20" | 2.21' |
| C174 | 425.00' | N84°05'13"E | 112.90' | 015°15'58" | 113.24' |
| C175 | 300.00' | S84°50'45"W | 58.70' | 011°13'41" | 58.79' |

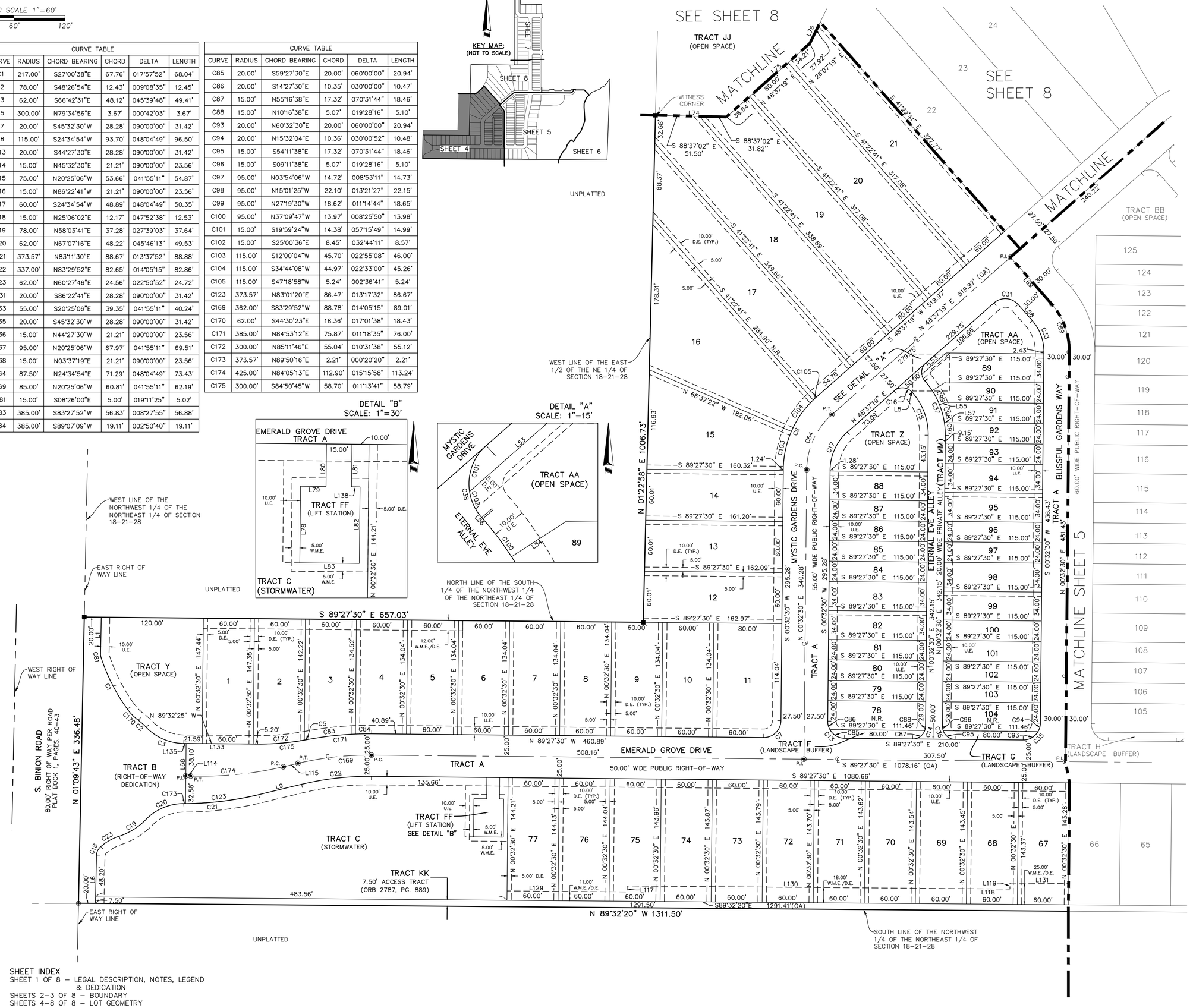
KEY MAP:
(NOT TO SCALE)







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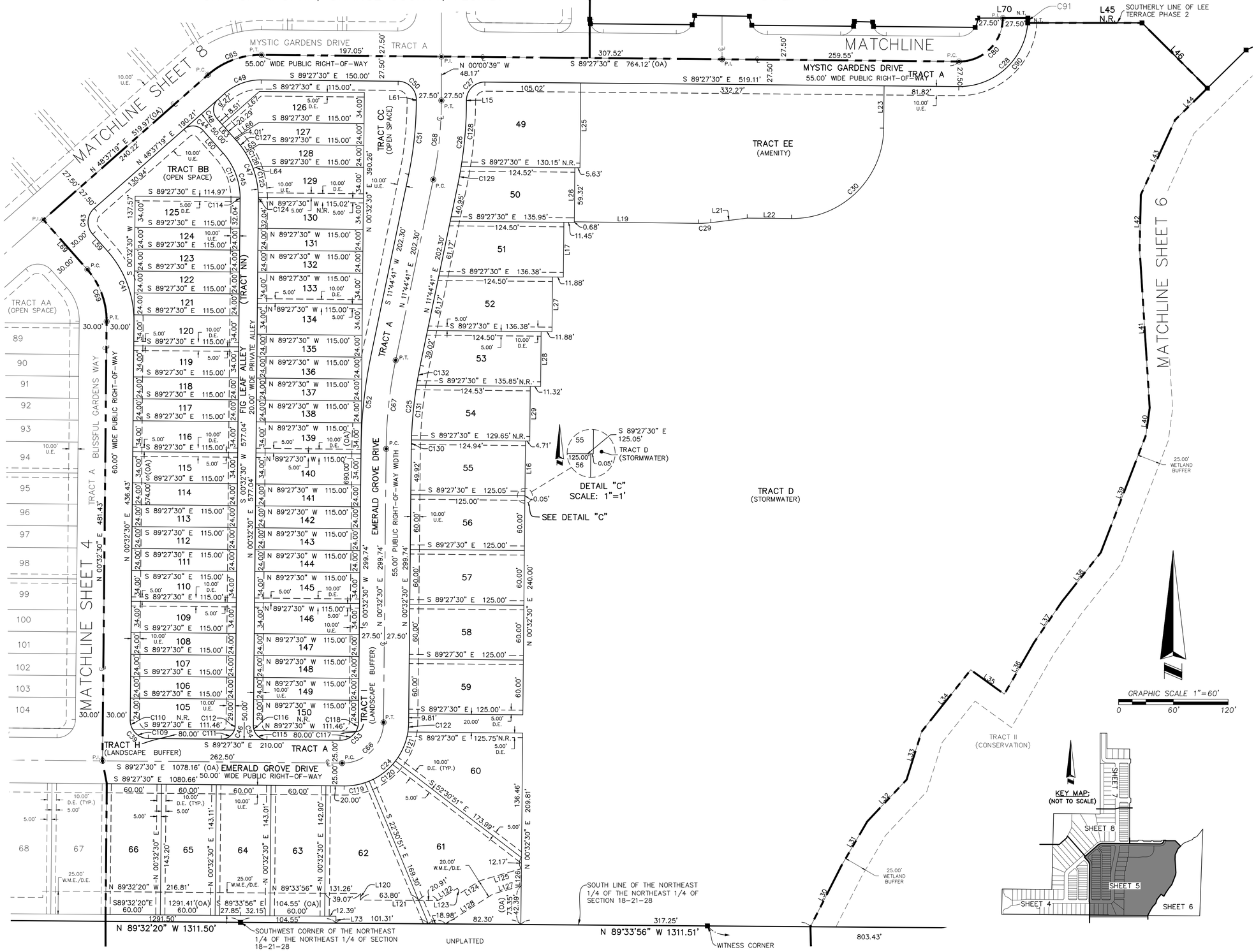
SHEET INDEX
SHEET 1 OF 8 – LEGAL DESCRIPTION, NOTES, LEGEND & DEDICATION
SHEETS 2–3 OF 8 – BOUNDARY
SHEETS 4–8 OF 8 – LOT GEOMETRY

PLAT BOOK ___ PG. ___

# EDEN CREST PHASE 1

A PARCEL OF LAND LYING IN SECTIONS 7 & 18, TOWNSHIP 21 SOUTH, RANGE 28 EAST,
CITY OF APOPKA, ORANGE COUNTY, FLORIDA

SHEET INDEX
SHEET 1 OF 8 – LEGAL DESCRIPTION, NOTES, LEGEND & DEDICATION
SHEETS 2–3 OF 8 – BOUNDARY
SHEETS 4–8 OF 8 – LOT GEOMETRY




| LINE TABLE | | |
|---|---|---|
| LINE | BEARING | LENGTH |
| L15 | N00°00'39"W | 0.21' |
| L16 | S00°32'30"W | 60.00' |
| L17 | N00°32'30"E | 60.00' |
| L19 | S89°16'31"E | 135.88' |
| L21 | N82°52'49"E | 40.21' |
| L22 | S89°27'30"E | 48.51' |
| L23 | N00°32'30"E | 46.35' |
| L25 | S00°32'30"W | 92.85' |
| L26 | N00°32'30"E | 60.00' |
| L27 | N00°32'30"E | 60.00' |
| L28 | S00°32'30"W | 60.00' |
| L29 | S00°32'30"W | 60.00' |
| L30 | N26°55'28"E | 74.59' |
| L31 | N30°13'28"E | 56.43' |
| L32 | N43°17'16"E | 62.77' |
| L33 | N17°25'59"E | 55.41' |
| L34 | N38°28'04"E | 86.37' |
| L35 | S54°04'27"E | 45.41' |
| L36 | N29°56'27"E | 65.52' |
| L37 | N34°18'46"E | 54.31' |
| L38 | N38°22'08"E | 68.31' |
| L39 | N21°02'38"E | 137.93' |
| L40 | N07°42'13"E | 30.04' |
| L41 | N03°37'01"W | 174.69' |
| L42 | N01°19'39"E | 59.36' |
| L43 | N24°35'29"E | 89.88' |
| L44 | N45°24'56"E | 49.73' |
| L45 | N89°59'21"E | 125.18' |
| L46 | S45°00'55"E | 101.22' |
| L47 | N45°24'56"E | 59.60' |
| L59 | N41°22'41"W | 25.17' |
| L60 | S41°22'41"E | 32.81' |
| L61 | S00°00'39"E | 1.13' |
| L63 | N41°22'41"W | 32.81' |
| L64 | N69°48'40"E | 6.58' |
| L65 | N58°17'07"E | 17.34' |
| L66 | N57°34'32"E | 32.17' |
| L67 | N48°37'19"E | 54.49' |
| L69 | N41°22'41"W | 72.67' |
| L70 | N89°59'21"E | 55.00' |
| L73 | S00°26'04"W | 7.50' |
| L120 | N00°28'54"E | 7.00' |
| L121 | N89°33'56"W | 84.71' |
| L122 | S57°37'58"W | 25.38' |
| L123 | N32°22'02"W | 6.24' |
| L124 | S57°37'58"W | 25.29' |
| L125 | S73°52'10"W | 47.28' |
| L126 | N00°32'30"E | 18.79' |
| L127 | N73°52'10"E | 32.17' |
| L128 | N57°37'58"E | 61.33' |

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| CURVE TABLE | | | | | |
|---|---|---|---|---|---|
| CURVE | RADIUS | CHORD BEARING | CHORD | DELTA | LENGTH |
| C24 | 70.00' | N45°32'30"E | 98.99' | 090°00'00" | 109.96' |
| C25 | 472.50' | N06°08'35"E | 92.24' | 011°12'11" | 92.39' |
| C26 | 452.50' | N05°52'01"E | 92.68' | 011°45'19" | 92.84' |
| C27 | 20.00' | N45°15'55"E | 28.42' | 090°33'08" | 31.61' |
| C28 | 75.00' | N45°15'55"E | 106.58' | 090°33'08" | 118.53' |
| C29 | 100.00' | N86°48'09"E | 13.68' | 007°50'39" | 13.69' |
| C30 | 100.00' | N45°32'30"E | 141.42' | 090°00'00" | 157.08' |
| C39 | 20.00' | N44°27'30"W | 28.28' | 090°00'00" | 31.42' |
| C41 | 115.00' | N20°25'06"W | 82.27' | 041°55'11" | 84.14' |

| CURVE TABLE | | | | | |
|---|---|---|---|---|---|
| CURVE | RADIUS | CHORD BEARING | CHORD | DELTA | LENGTH |
| C43 | 20.00' | N03°37'19"E | 28.28' | 090°00'00" | 31.42' |
| C44 | 15.00' | S86°22'41"E | 21.21' | 090°00'00" | 23.56' |
| C45 | 75.00' | S20°25'06"E | 53.66' | 041°55'11" | 54.87' |
| C46 | 15.00' | S45°32'30"W | 21.21' | 090°00'00" | 23.56' |
| C47 | 95.00' | N20°25'06"W | 67.97' | 041°55'11" | 69.51' |
| C48 | 15.00' | N03°37'19"E | 21.21' | 090°00'00" | 23.56' |
| C49 | 60.00' | N69°34'54"E | 42.93' | 041°55'11" | 43.90' |
| C50 | 20.00' | S44°44'05"E | 28.15' | 089°26'52" | 31.22' |
| C51 | 397.50' | S05°52'01"W | 81.41' | 011°45'19" | 81.56' |

| CURVE TABLE | | | | | |
|---|---|---|---|---|---|
| CURVE | RADIUS | CHORD BEARING | CHORD | DELTA | LENGTH |
| C52 | 527.50' | S06°08'35"W | 102.98' | 011°12'11" | 103.14' |
| C53 | 20.00' | S45°32'30"W | 28.28' | 090°00'00" | 31.42' |
| C54 | 15.00' | N44°27'30"W | 21.21' | 090°00'00" | 23.56' |
| C65 | 87.50' | N69°34'54"E | 62.60' | 041°55'11" | 64.02' |
| C66 | 45.00' | N45°32'30"E | 63.64' | 090°00'00" | 70.69' |
| C67 | 500.00' | S06°08'35"W | 97.61' | 011°12'11" | 97.76' |
| C68 | 425.00' | N05°52'01"E | 87.04' | 011°45'19" | 87.20' |
| C69 | 85.00' | N20°25'06"W | 60.81' | 041°55'11" | 62.19' |
| C80 | 47.50' | N45°15'55"E | 67.50' | 090°33'08" | 75.07' |

| CURVE TABLE | | | | | |
|---|---|---|---|---|---|
| CURVE | RADIUS | CHORD BEARING | CHORD | DELTA | LENGTH |
| C90 | 75.00' | N47°15'57"E | 102.83' | 086°33'05" | 113.30' |
| C91 | 75.00' | S01°59'23"W | 5.24' | 004°00'04" | 5.24' |
| C109 | 20.00' | S59°27'30"E | 20.00' | 060°00'00" | 20.94' |
| C110 | 20.00' | S14°27'30"E | 10.35' | 030°00'00" | 10.47' |
| C111 | 15.00' | N55°16'38"E | 17.32' | 070°31'44" | 18.46' |
| C112 | 15.00' | N10°16'38"E | 5.07' | 019°28'16" | 5.10' |
| C113 | 75.00' | N21°09'55"W | 51.83' | 040°25'34" | 52.92' |
| C114 | 75.00' | N00°12'19"W | 1.96' | 001°29'38" | 1.96' |
| C115 | 15.00' | S54°11'38"E | 17.32' | 070°31'44" | 18.46' |

| CURVE TABLE | | | | | |
|---|---|---|---|---|---|
| CURVE | RADIUS | CHORD BEARING | CHORD | DELTA | LENGTH |
| C116 | 15.00' | S09°11'38"E | 5.07' | 019°28'16" | 5.10' |
| C117 | 20.00' | N60°32'30"E | 20.00' | 060°00'00" | 20.94' |
| C118 | 20.00' | N15°32'30"E | 10.35' | 030°00'00" | 10.47' |
| C119 | 70.00' | N79°00'50"E | 27.98' | 023°03'20" | 28.17' |
| C120 | 70.00' | N52°29'09"E | 36.23' | 030°00'01" | 36.65' |
| C121 | 70.00' | N23°11'51"E | 34.55' | 028°34'36" | 34.91' |
| C122 | 70.00' | N04°43'31"E | 10.21' | 008°22'03" | 10.22' |
| C124 | 95.00' | N00°02'53"W | 1.96' | 001°10'45" | 1.96' |
| C125 | 95.00' | N10°24'48"W | 32.26' | 019°33'04" | 32.42' |

| CURVE TABLE | | | | | |
|---|---|---|---|---|---|
| CURVE | RADIUS | CHORD BEARING | CHORD | DELTA | LENGTH |
| C126 | 95.00' | N25°57'06"W | 19.08' | 011°31'33" | 19.11' |
| C127 | 95.00' | N36°32'47"W | 16.00' | 009°39'49" | 16.02' |
| C128 | 452.50' | N04°35'32"E | 72.63' | 009°12'22" | 72.71' |
| C129 | 452.50' | N10°28'12"E | 20.13' | 002°32'57" | 20.13' |
| C130 | 472.50' | S01°09'09"W | 10.08' | 001°13'19" | 10.08' |
| C131 | 472.50' | S05°25'01"W | 60.22' | 007°18'25" | 60.26' |
| C132 | 472.50' | S10°24'27"W | 22.05' | 002°40'27" | 22.05' |

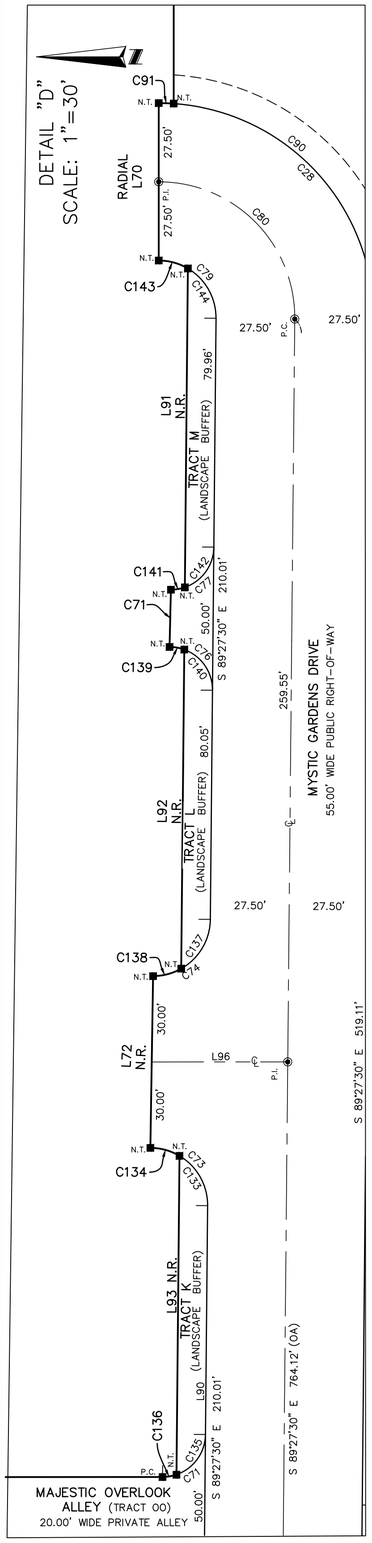
PLAT BOOK ___ PG. ___

# EDEN CREST PHASE 1

A PARCEL OF LAND LYING IN SECTIONS 7 & 18, TOWNSHIP 21 SOUTH, RANGE 28 EAST,
CITY OF APOPKA, ORANGE COUNTY, FLORIDA

GRAPHIC SCALE 1"=60'
0 60' 120'

DETAIL "D"
SCALE: 1"=30'




SEE SHEET 8 MATCHLINE

UNPLATTED

TRACT K (LANDSCAPE BUFFER)
TRACT L (LANDSCAPE BUFFER)
TRACT M (LANDSCAPE BUFFER)
SEE DETAIL "D"
C136 P.C.
L93 N.R.
C134
L72 N.R.
C138
L92 N.R.
C139
L71
C141
L91 N.R.
C143
RADIAL L70
27.50'
27.50'
C91
L45 N.R.
210.01'
307.52'
259.55'
S 89°27'30" E 764.12' (OA)
P.I.
P.C.
MYSTIC GARDENS DRIVE
55.00' WIDE PUBLIC RIGHT-OF-WAY
TRACT A
27.50'
10.00' U.E.
TRACT EE (AMENITY)
MATCHLINE

L46 L47 L48 L49 L50 L51 L52
25.00' WETLAND BUFFER
UNPLATTED

SEE SHEET 5

L44 L43 L42 L41 L40 L39 L38 L37 L36 L35 L34 L33 L32 L31 L30
25.00' WETLAND BUFFER
MATCHLINE
TRACT II (CONSERVATION)
TRACT D (STORMWATER)

1150.99'
S 02°03'11" W 1150.99'
EAST LINE OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 18-21-28

27.93'
803.43'
N 89°33'56" W 1311.51'
659.18'
SOUTH LINE OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 18-21-28
UNPLATTED
NO CORNER SET, FALLS IN WATER
SOUTHEAST CORNER OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 18-21-28

| LINE TABLE | | |
|---|---|---|
| LINE | BEARING | LENGTH |
| L30 | N26°55'28"E | 74.59' |
| L31 | N30°13'28"E | 56.43' |
| L32 | N43°17'16"E | 62.77' |
| L33 | N17°25'59"E | 55.41' |
| L34 | N38°28'04"E | 86.37' |
| L35 | S54°04'27"E | 45.41' |
| L36 | N29°56'27"E | 65.52' |
| L37 | N34°18'46"E | 54.31' |
| L38 | N38°22'08"E | 68.31' |
| L39 | N21°02'38"E | 137.93' |
| L40 | N07°42'13"E | 30.04' |
| L41 | N03°37'01"W | 174.69' |
| L42 | N01°19'39"E | 59.36' |
| L43 | N24°35'29"E | 89.88' |
| L44 | N45°24'56"E | 49.73' |
| L45 | N89°59'21"E | 125.18' |
| L46 | S45°00'55"E | 101.22' |
| L47 | N45°24'56"E | 59.60' |
| L48 | N66°19'13"E | 49.92' |
| L49 | N68°06'06"E | 74.56' |
| L50 | N29°04'54"E | 23.44' |
| L51 | N69°01'48"E | 49.89' |
| L52 | N38°32'43"E | 125.55' |
| L70 | N89°59'21"E | 55.00' |
| L71 | S88°37'48"E | 20.01' |
| L72 | S89°05'25"E | 60.01' |
| L91 | S89°27'30"E | 111.42' |
| L92 | S89°27'30"E | 111.51' |
| L93 | S89°27'30"E | 111.42' |
| L96 | S00°00'39"E | 47.50' |

| CURVE TABLE | | | | | |
|---|---|---|---|---|---|
| CURVE | RADIUS | CHORD BEARING | CHORD | DELTA | LENGTH |
| C28 | 75.00' | N45°15'55"E | 106.58' | 090°33'08" | 118.53' |
| C71 | 15.00' | S44°44'05"E | 21.11' | 089°26'52" | 23.42' |
| C73 | 20.00' | N45°15'55"E | 28.42' | 090°33'08" | 31.61' |
| C74 | 20.00' | S44°44'05"E | 28.15' | 089°26'52" | 31.22' |
| C76 | 15.00' | N45°15'55"E | 21.32' | 090°33'08" | 23.71' |
| C77 | 15.00' | S44°44'05"E | 21.11' | 089°26'52" | 23.42' |
| C79 | 20.00' | N45°15'55"E | 28.42' | 090°33'08" | 31.61' |
| C80 | 47.50' | N45°15'55"E | 67.50' | 090°33'08" | 75.07' |
| C90 | 75.00' | N47°15'57"E | 102.83' | 086°33'05" | 113.30' |
| C91 | 75.00' | S01°59'23"W | 5.24' | 004°00'04" | 5.24' |
| C133 | 20.00' | N60°32'30"E | 20.00' | 060°00'00" | 20.94' |
| C134 | 20.00' | N15°15'55"E | 10.54' | 030°33'08" | 10.66' |
| C135 | 15.00' | S54°11'38"E | 17.32' | 070°31'44" | 18.46' |
| C136 | 15.00' | S09°28'13"E | 4.93' | 018°55'08" | 4.95' |
| C137 | 20.00' | S59°27'30"E | 20.00' | 060°00'00" | 20.94' |
| C138 | 20.00' | S14°44'05"E | 10.17' | 029°26'52" | 10.28' |
| C139 | 15.00' | N10°00'04"E | 5.22' | 020°01'25" | 5.24' |
| C140 | 15.00' | N55°16'38"E | 17.32' | 070°31'44" | 18.46' |
| C141 | 15.00' | S09°28'13"E | 4.93' | 018°55'08" | 4.95' |
| C142 | 15.00' | S54°11'38"E | 17.32' | 070°31'44" | 18.46' |
| C143 | 20.00' | N15°15'55"E | 10.54' | 030°33'08" | 10.66' |
| C144 | 20.00' | N60°32'30"E | 20.00' | 060°00'00" | 20.94' |

SHEET INDEX
SHEET 1 OF 8 – LEGAL DESCRIPTION, NOTES, LEGEND & DEDICATION
SHEETS 2–3 OF 8 – BOUNDARY
SHEETS 4–8 OF 8 – LOT GEOMETRY

KEY MAP:
(NOT TO SCALE)
SHEET 7
SHEET 8
SHEET 5
SHEET 4
SHEET 6

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PLAT BOOK ___ PG. ___

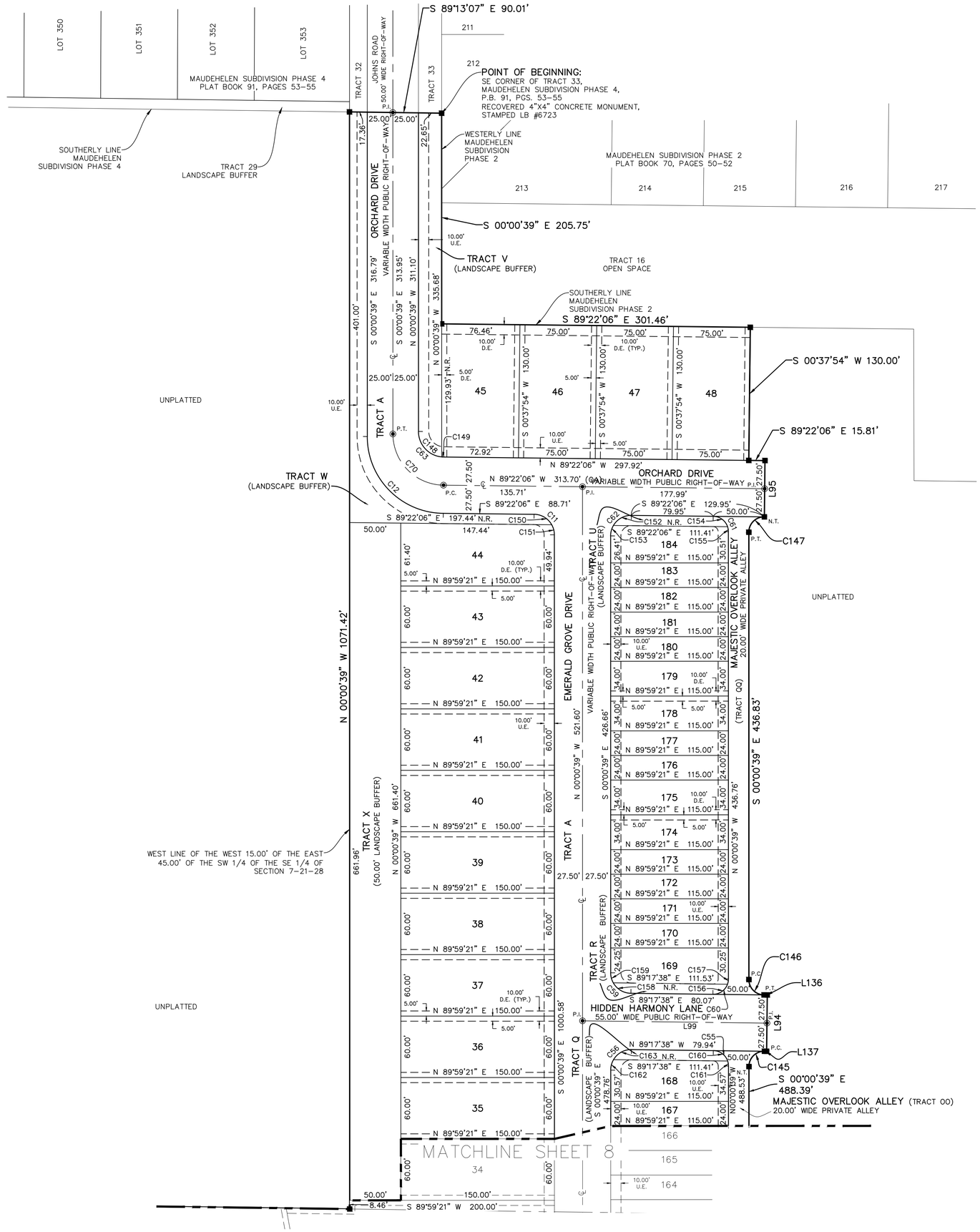
# EDEN CREST PHASE 1

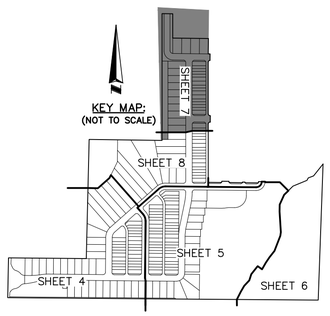
A PARCEL OF LAND LYING IN SECTIONS 7 & 18, TOWNSHIP 21 SOUTH, RANGE 28 EAST,
CITY OF APOPKA, ORANGE COUNTY, FLORIDA

GRAPHIC SCALE 1"=60'
0 60' 120'

| LINE TABLE | | |
|---|---|---|
| LINE | BEARING | LENGTH |
| L99 | N89°17'38"W | 180.11' |
| L136 | S89°17'38"E | 3.13' |
| L137 | N89°17'38"W | 2.07' |

| CURVE TABLE | | | | | |
|---|---|---|---|---|---|
| CURVE | RADIUS | CHORD BEARING | CHORD | DELTA | LENGTH |
| C11 | 20.00' | S44°41'22"E | 28.13' | 089°21'27" | 31.19' |
| C12 | 75.00' | S44°41'22"E | 105.47' | 089°21'27" | 116.97' |
| C55 | 15.00' | N44°39'08"W | 21.08' | 089°16'59" | 23.37' |
| C56 | 20.00' | S45°20'52"W | 28.46' | 090°43'01" | 31.67' |
| C59 | 20.00' | S44°39'08"E | 28.11' | 089°16'59" | 31.17' |
| C60 | 15.00' | N45°20'52"E | 21.35' | 090°43'01" | 23.75' |
| C61 | 15.00' | N44°41'22"W | 21.09' | 089°21'27" | 23.39' |
| C62 | 20.00' | S45°18'38"W | 28.44' | 090°38'33" | 31.64' |
| C63 | 25.00' | N44°41'22"W | 35.16' | 089°21'27" | 38.99' |
| C70 | 50.00' | S44°41'22"E | 70.31' | 089°21'27" | 77.98' |
| C145 | 15.00' | S45°20'54"W | 21.35' | 090°42'57" | 23.75' |
| C146 | 15.00' | S44°39'08"E | 21.08' | 089°16'59" | 23.37' |
| C147 | 15.00' | S45°18'38"W | 21.33' | 090°38'33" | 23.73' |
| C148 | 25.00' | S42°18'08"E | 33.65' | 084°34'59" | 36.91' |
| C149 | 25.00' | S86°58'52"E | 2.08' | 004°46'28" | 2.08' |
| C150 | 20.00' | N59°22'06"W | 20.00' | 060°00'00" | 20.94' |
| C151 | 20.00' | N14°41'22"W | 10.14' | 029°21'27" | 10.25' |
| C152 | 20.00' | S60°37'54"W | 20.00' | 060°00'00" | 20.94' |
| C153 | 20.00' | S15°18'38"W | 10.57' | 030°38'33" | 10.70' |
| C154 | 15.00' | N54°06'14"W | 17.32' | 070°31'44" | 18.46' |
| C155 | 15.00' | N09°25'31"W | 4.91' | 018°49'44" | 4.93' |
| C156 | 15.00' | N55°26'30"E | 17.32' | 070°31'44" | 18.46' |
| C157 | 15.00' | N10°05'00"E | 5.26' | 020°11'17" | 5.29' |
| C158 | 20.00' | S59°17'38"E | 20.00' | 060°00'00" | 20.94' |
| C159 | 15.00' | S14°39'08"E | 10.11' | 029°16'59" | 10.22' |
| C160 | 15.00' | N54°01'46"W | 17.32' | 070°31'44" | 18.46' |
| C161 | 15.00' | N09°23'16"W | 4.89' | 018°45'15" | 4.91' |
| C162 | 20.00' | S15°20'52"W | 10.59' | 030°43'01" | 10.72' |
| C163 | 20.00' | S60°42'22"W | 20.00' | 060°00'00" | 20.94' |




SHEET INDEX
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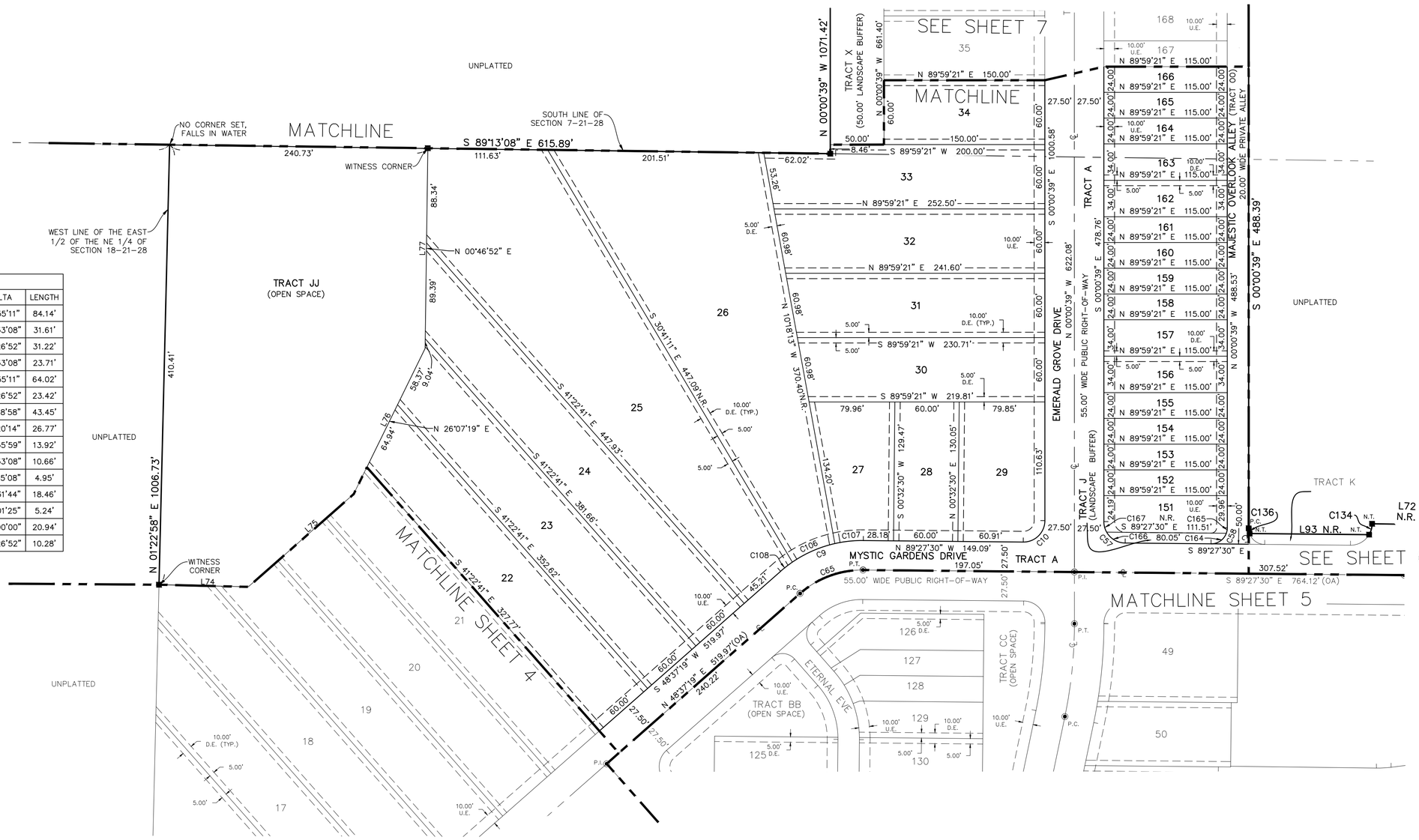
A PARCEL OF LAND LYING IN SECTIONS 7 & 18, TOWNSHIP 21 SOUTH, RANGE 28 EAST,
CITY OF APOPKA, ORANGE COUNTY, FLORIDA

GRAPHIC SCALE 1"=60'
0 60' 120'

| LINE TABLE | | |
|---|---|---|
| LINE | BEARING | LENGTH |
| L74 | S88°37'02"E | 83.32' |
| L75 | N48°37'19"E | 130.85' |
| L76 | N26°07'19"E | 151.23' |
| L77 | N00°46'52"E | 186.77' |
| L93 | S89°27'30"E | 111.42' |

| CURVE TABLE | | | | | |
|---|---|---|---|---|---|
| CURVE | RADIUS | CHORD BEARING | CHORD | DELTA | LENGTH |
| C9 | 115.00' | S69°34'54"W | 82.27' | 041°55'11" | 84.14' |
| C10 | 20.00' | S45°15'55"W | 28.42' | 090°33'08" | 31.61' |
| C57 | 20.00' | S44°44'05"E | 28.15' | 089°26'52" | 31.22' |
| C58 | 15.00' | N45°15'55"E | 21.32' | 090°33'08" | 23.71' |
| C65 | 87.50' | N69°34'54"E | 62.60' | 041°55'11" | 64.02' |
| C71 | 15.00' | S44°44'05"E | 21.11' | 089°26'52" | 23.42' |
| C106 | 115.00' | S66°22'47"W | 43.20' | 021°38'58" | 43.45' |
| C107 | 115.00' | S83°52'23"W | 26.71' | 013°20'14" | 26.77' |
| C108 | 115.00' | S52°05'18"W | 13.91' | 006°55'59" | 13.92' |
| C134 | 20.00' | N15°15'55"E | 10.54' | 030°33'08" | 10.66' |
| C136 | 15.00' | S09°28'13"E | 4.93' | 018°55'08" | 4.95' |
| C164 | 15.00' | N55°16'38"E | 17.32' | 070°31'44" | 18.46' |
| C165 | 15.00' | N10°00'04"E | 5.22' | 020°01'25" | 5.24' |
| C166 | 20.00' | S59°27'30"E | 20.00' | 060°00'00" | 20.94' |
| C167 | 20.00' | S14°44'05"E | 10.17' | 029°26'52" | 10.28' |

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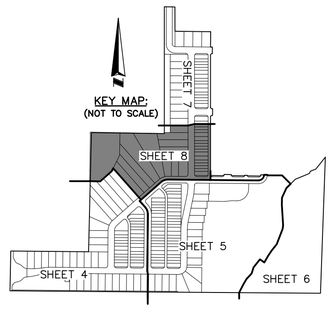

# City of Apopka
# PLANNING COMMISSION STAFF REPORT

**Section:** SITE PLANS
**Item #:** 3.
**Meeting Date:** March 11, 2025
**Department:** Community Development

**SUBJECT:**
Willow Run - Plat

**REQUEST:**
Recommend approval of the Willow Run - Plat

**SUMMARY:**
Owner(s): M/I Homes of Orlando, LLC
Applicant(s): Luke M. Classon, P.E.
Location: Southeast corner of Plymouth Sorrento Road and Appy Lane
Tract Size: 56.67 +/- acres
Parcel Identification Number(s): 19-20-28-0000-00-050, 19-20-28-0000-00-002
Future Land Use: Residential Very Low Suburban
Zoning: RSF-1A (Residential Single-Family Estate)
Project Manager: Jean Sanchez

## Zoning Report:

| Direction | Future Land Use | Zoning | Present Use |
|---|---|---|---|
| North | Residential Very Low Suburban | T (Transitional) and RSF-1A (Residential Single-Family Estate) | Single-family residences |
| South | Residential Very Low Suburban and County Rural | T (Transitional), RSF-1A and County A-1 (Citrus Rural) | Single-family residences and agricultural facility |
| East | Residential Very Low Suburban | O (Office) | Northwest Recreation Complex |
| West | County Rural | RSF-1A, AG (Agriculture) and County A-1 | Single-family residences |

## PROJECT SUMMARY:

Florida Statutes Section 177.031 defines Plat or replat as "a map or delineated representation of the subdivision of lands, being a complete exact representation of the subdivision and other information in compliance with the requirements of all applicable sections of this part and of any local ordinances". The Land Development Code

describes platting as the division of land (whether improved or unimproved) into three or more lots, parcels, tracts, tiers, blocks, sites, units, or any other division of land. As such, the applicant has submitted the Willow Run – Plat to create 110 single-family lots, two stormwater tracts, four landscape buffer traits, three open space tracts, as well as, six maintenance and access easements. Tract A, a 30-foot-wide strip along Plymouth Sorrento Road, is reserved as a right-of-way dedication for future road widening. The Plat is consistent with the Shoppes at East Shore - Major Development Plan (MDP) approved by the City Council and the Construction Site Plan (CSP) approved by the Development Review Committee (DRC) on June 1, 2022, and July 26, 2024, respectively. According to the approved plans, the subdivision is approved with a front yard setback of 25-feet; rear yard setback of 25-feet; side yard setback of 10-feet and corner yard setback of 25-feet.

The Development Review Committee (DRC) has found that the applicant demonstrates there is competent substantial evidence in the record that all of the following standards are met:

- The plat and its general layout and design comply with all applicable standards in Article 5: Development Standards, and Article 6: Environmental Standards;
- The plat complies with all conditions of approval in any development approval or permit to which it is subject;
- The plat conforms to the requirements of Chapter 177, Florida Statutes before recordation and per the review and determination of the City Surveyor;
- The plat conforms to any development plan (major or minor) to which it is a part; and
- The plat complies with all other applicable standards in this LDC and all other City regulations.

# ACCESS:

The access points are on Plymouth Sorrento Road and Appy Lane.

# PUBLIC HEARING SCHEDULE:

March 11, 2025 - Planning Commission (5:30 P.M.)
April 2, 2025 - City Council (1:30 P.M.)

**FUNDING SOURCE:**
Not applicable.

**RECOMMENDED MOTION:**
## Development Review Committee (DRC):

Recommends approval of the Willow Run – Plat

## Recommended Motion - Planning Commission:

Reccomend approval of the Willow Run – Plat, based on the staff report and exhibits.

**ATTACHMENTS:**
1. Willow Run - Plat
2. Maps
3. Willow Run MDP - Approved Plans (for reference)
4. Willow Run CSP - Approved Plans (for reference)

# WILLOW RUN

## A TRACT OF LAND LYING IN SECTION 19, TOWNSHIP 20 SOUTH, RANGE 28 EAST, CITY OF APOPKA, ORANGE COUNTY, FLORIDA

### SURVEYOR'S NOTES:

1. BEARINGS SHOWN HEREON ARE ASSUMED AND BASED ON THE NORTH LINE OF THE NORTHWEST 1/4 OF SECTION 19, TOWNSHIP 20 SOUTH, RANGE 28 EAST AS BEING N85°38'24"E FOR ANGULAR DESIGNATION ONLY.
2. 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.
3. ALL LOT LINES INTERSECTING CURVES ARE RADIAL, UNLESS OTHERWISE NOTED NON–RADIAL (N.R.).
4. THE FOLLOWING TRACTS AND EASEMENTS COMPRISE THE COMMON AREAS AS MORE PARTICULARLY DEFINED IN THE COMMUNITY DECLARATION FOR WILLOW RUN AND ANY AMENDMENTS AND/OR SUPPLEMENTS THERETO THE ("DECLARATION") AND SHALL BE DEDICATED TO AND MAINTAINED BY THE WILLOW RUN COMMUNITY ASSOCIATION, INC. ("ASSOCIATION"):
   TRACT 'B' (PRIVATE RIGHT–OF–WAY)
   TRACTS 'C' AND 'D' (STORMWATER)
   TRACTS 'E', 'G', 'J' AND 'L' (LANDSCAPE BUFFER)
   TRACTS 'F' AND 'I' (LANDSCAPE/WALL BUFFER)
   TRACT 'K' (LANDSCAPE/WALL/BUFFER/UTILITY)
   TRACT 'H' (LANDSCAPE/FENCE BUFFER)
   TRACT M (POCKET PARK/DOG PARK/WALKING PATH/MAILBOX KIOSKS)
   TRACTS 'N' AND 'O' (OPEN SPACE)
   FENCE MAINTENANCE EASEMENT (F.M.E.)
   WALL/FENCE MAINTENANCE EASEMENT (W/F.M.E.)
   PRIVATE DRAINAGE EASEMENT (P.D.E.)
   PRIVATE PEDESTRIAN TRAIL ACCESS EASEMENT (P.T.A.E.)
   WALL EASEMENT (W.E.)
   FENCE MAINTENANCE EASEMENT (F.M.E.)
5. THE OWNERS OF LOTS 1, 2, 3, 4, 5, 6, 7, 19, 20, 21, 22, 23, 24, 25, 26, 27, 36, 37, 38, 39, 40, 41, 42, 43, 44, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67 AND 68 ARE SUBJECT TO A WALL EASEMENT (W.E.), AS DEFINED IN THE SUPPLEMENTAL DECLARATION TO THE COMMUNITY DECLARATION FOR WILLOW RUN. RECORDED IN THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.
6. RETAINING WALLS WITHIN TRACT M SHALL BE MAINTAINED BY THE ASSOCIATION.

### LEGAL DESCRIPTION:

A TRACT OF LAND LYING IN SECTION 19, TOWNSHIP 20 SOUTH, RANGE 28 EAST, CITY OF APOPKA, ORANGE COUNTY, FLORIDA, DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF THE NORTHWEST QUARTER OF SAID SECTION 19 FOR A POINT OF REFERENCE; THENCE RUN NORTH 85°38'24" EAST, ALONG THE NORTH LINE OF THE NORTHWEST QUARTER OF SAID SECTION 19, FOR A DISTANCE OF 742.00 FEET TO THE WEST LINE OF THE EAST HALF OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SAID SECTION 19; THENCE RUN SOUTH 00°00'04" EAST, ALONG SAID WEST LINE, FOR A DISTANCE OF 60.24 FEET TO A POINT ON THE SOUTH RIGHT–OF–WAY LINE OF APPY LANE, ACCORDING TO OFFICIAL RECORDS BOOK 9701, PAGE 2389 OF THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA AND THE POINT OF BEGINNING; THENCE RUN NORTH 85°38'18" EAST, ALONG SAID SOUTH RIGHT–OF–WAY LINE, FOR A DISTANCE OF 1575.43 FEET; THENCE DEPARTING SAID SOUTH RIGHT–OF–WAY LINE, RUN SOUTH 00°24'08" EAST, PARALLEL WITH AND 600.00 FEET WEST OF (PERPENDICULAR MEASURE) OF THE EAST LINE OF THE NORTHWEST QUARTER OF SAID SECTION 19, FOR A DISTANCE OF 1288.74 FEET TO THE NORTH RIGHT–OF–WAY LINE OF LENT ROAD, ACCORDING TO RIGHT–OF–WAY AGREEMENT, RECORDED IN OFFICIAL RECORDS BOOK 4, PAGES 13 AND 14 OF SAID PUBLIC RECORDS; THENCE RUN SOUTH 86°34'19" WEST, ALONG SAID NORTH RIGHT–OF–WAY LINE, FOR A DISTANCE OF 2294.73 FEET TO THE EAST RIGHT–OF–WAY LINE OF PLYMOUTH–SORRENTO ROAD, ACCORDING TO DEED BOOK 402, PAGE 68 AND ROAD BOOK 3, PAGE 43 OF SAID PUBLIC RECORDS; THENCE RUN NORTH 00°02'10" EAST, ALONG SAID EAST RIGHT–OF–WAY LINE, FOR A DISTANCE OF 641.04 FEET TO THE SOUTH LINE OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SAID SECTION 19; THENCE DEPARTING SAID EAST RIGHT–OF–WAY LINE RUN NORTH 86°06'20" EAST, ALONG SAID SOUTH LINE, FOR A DISTANCE OF 711.96 FEET TO THE AFORESAID WEST LINE OF THE EAST HALF OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SAID SECTION 19; THENCE RUN NORTH 00°00'04" WEST, ALONG SAID WEST LINE, FOR A DISTANCE OF 616.71 FEET TO THE POINT OF BEGINNING.

CONTAINS: 56.67 ACRES, MORE OR LESS.

SHEET INDEX

SHEET 1 of 10 – legal description, dedication, Surveyor's notes & legend

SHEET 2 of 10 – boundary information

SHEETS 3 through 10 of 10 – lot and tract geometry

**LEGEND:**

| | | | |
|---|---|---|---|
| P.S.M. | PROFESSIONAL SURVEYOR & MAPPER | ■ | SET 4" X 4" CONCRETE MONUMENT LB 6723 PERMANENT REFERENCE MONUMENT (P.R.M.) |
| LB | LICENSED BUSINESS | ⊡ | FOUND 4" X 4" CONCRETE MONUMENT AS NOTED |
| LLC | LIMITED LIABILITY COMPANY | ◉ | SET NAIL & DISK LB 6723 PERMANENT CONTROL POINT (P.C.P.) |
| ℄ | CENTERLINE | ○ | FOUND IRON ROD OR PIPE AS NOTED |
| CCR# | CERTIFIED CORNER RECORD NUMBER | R/W | RIGHT OF WAY |
| U.E. | UTILITY EASEMENT | P.T.A.E. | PEDESTRIAN TRAIL ACCESS EASEMENT |
| P.D.E. | PRIVATE DRAINAGE EASEMENT | | |
| W/F.M.E. | WALL FENCE MAINTENANCE EASEMENT | | |
| F.M.E. | FENCE MAINTENANCE EASEMENT | | |
| W.E. | WALL EASEMENT | | |

| | | | |
|---|---|---|---|
| P.I. | POINT OF INTERSECTION | | |
| P.C. | POINT OF CURVATURE | | |
| P.T. | POINT OF TANGENCY | | |
| N.R. | NON–RADIAL | | |
| ⌐ | CHANGE IN DIRECTION | | |

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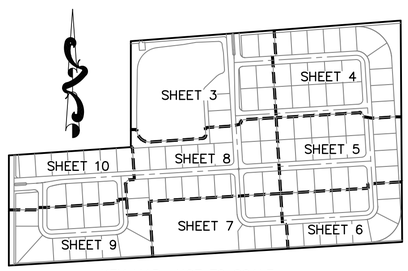
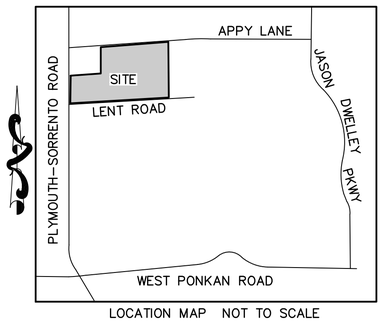


KEY MAP NOT TO SCALE



LOCATION MAP NOT TO SCALE

"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 APPROVAL BY APOPKA PLANNING COMMISSION

Examined and Approved _____
Chairman Date

### CERTIFICATE OF APPROVAL BY MUNICIPALITY

THIS IS TO CERTIFY, that on_____ the foregoing plat was approved by the Municipality

_____
Bryan Nelson, Mayor

Attest: _____
Susan M. Bone, City Clerk

### 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 _____ 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, LLC
Licensed Business # 8627
16 East Plant Street
Winter Garden, Florida 34787

PLAT BOOK_____ PAGE _____

WILLOW RUN

### D E D I C A T I O N

THIS is to certify that the undersigned, M/I HOMES OF ORLANDO, LLC, a Florida limited liability company 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. No part of said lands, except as noted on the face of this plat, is dedicated to the City of Apopka or to the public. None of the property designated "Common Area" on this plat is required for public use: and such "Common Area" is not and will not be a part of the County system of public roads. Said "Common Area" is instead part of the "Common Area" created by this plat and will be subject to the declaration of covenants. conditions, and restrictions for Willow Run Community Association, Inc. as recorded in Official Records Book_____, Page_____ (herein after referred to as the "Declaration"). Said "Common Area" shall remain private and the sole and exclusive property of Owner its successors and assigns. Owner does hereby grant to the present and future owners of lots (1 through 110) and their guests, invitees, domestic help, and to delivery, pick–up and fire protection services, police and other authorities of law, United States mail carriers, representatives of utilities, holders of mortgage liens on such lands, and such other persons as owner, its successor and assigns, may from time to time designate the non–exclusive and perpetual right of ingress and egress over and across the roads and sidewalks, as they may from time to time be constructed on Tract 'B' of the "Common Area". The Owner, in recording this plat has created the Common Area" shown hereon, which common area is a portion of the "Common Area" described in the declaration. Said "Common Area" is not dedicated to the use and enjoyment of the general public, but its use is reserved for the common use and enjoyment of the property owners of Willow Run. The nature and extent of, and the reservations and restrictions on such common use and enjoyment are more fully set forth in the Declaration. Tract 'B' is subject to a dedicated utility easement to the City of Apopka for maintaining water, sewer and reclaim water lines.

NOTWITHSTANDING the foregoing: An emergency access easement to the private storm drainage system over Tract 'B' (Right–of–Way), Tracts C and D (Stormwater) and over all drainage easements shown on this plat is hereby dedicated to the City of Apopka for emergency maintenance purposes in the event inadequate maintenance of the storm drainage system creates a hazard to the public health, safety, and general welfare. The emergency access easement granted above does not impose any obligation, burden, responsibility or liability upon the City of Apopka to enter upon the subject property and take any action to repair or maintain the private drainage system. A non–exclusive easement through, over, under and across the common area and all noted utility easements is hereby dedicated for use by all public utilities for the purpose of constructing, maintaining and replacing their respective facilities servicing the lands encompassed by this plat. The utility easements shown hereon are dedicated to the perpetual use of the public.

Tract A (Right of Way Dedication) is dedicated to the City of Apopka for the perpetual use of the public.

Tract P (Lift Station Tract) is dedicated in fee simple to The City of Apopka without any restriction whatsoever upon the City. City ownership of this tract and any improvements thereon vests upon approval of this plat. Recording of this plat shall act as a conveyance to the City and no further instrument shall be necessary to vest fee simple title in the City as aforementioned.

IN WITNESS WHEREOF, the undersigned, M/I HOMES OF ORLANDO, LLC a Florida limited liability company, has caused these presents to be executed and acknowledged by its undersigned Officer thereunto duly authorized on this ___ day of _____ 2025.

WITNESSES:

_____
_____
Printed Name of Witness

_____
_____
Printed Name of Witness

By: M/I HOMES OF ORLANDO, LLC, a Florida limited liability company

By: _____
Daniel Kaiser, Vice President
Printed name Title

STATE OF

COUNTY OF

The foregoing instrument was acknowledged before me, by means of [ ] physical presence or [ ] online notarization, this ___ day of _____, 2025, by Daniel Kaiser who is [ ] personally known to me or [ ] has produced _____, as identification.

SIGNATURE OF NOTARY PUBLIC _____

PRINTED NAME OF NOTARY PUBLIC _____

### 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: Edwin Munoz Jr.
Registration Number 7288

### CERTIFICATE OF COUNTY COMPTROLLER

I HEREBY CERTIFY, that the foregoing plat was recorded in the Orange County Official Records

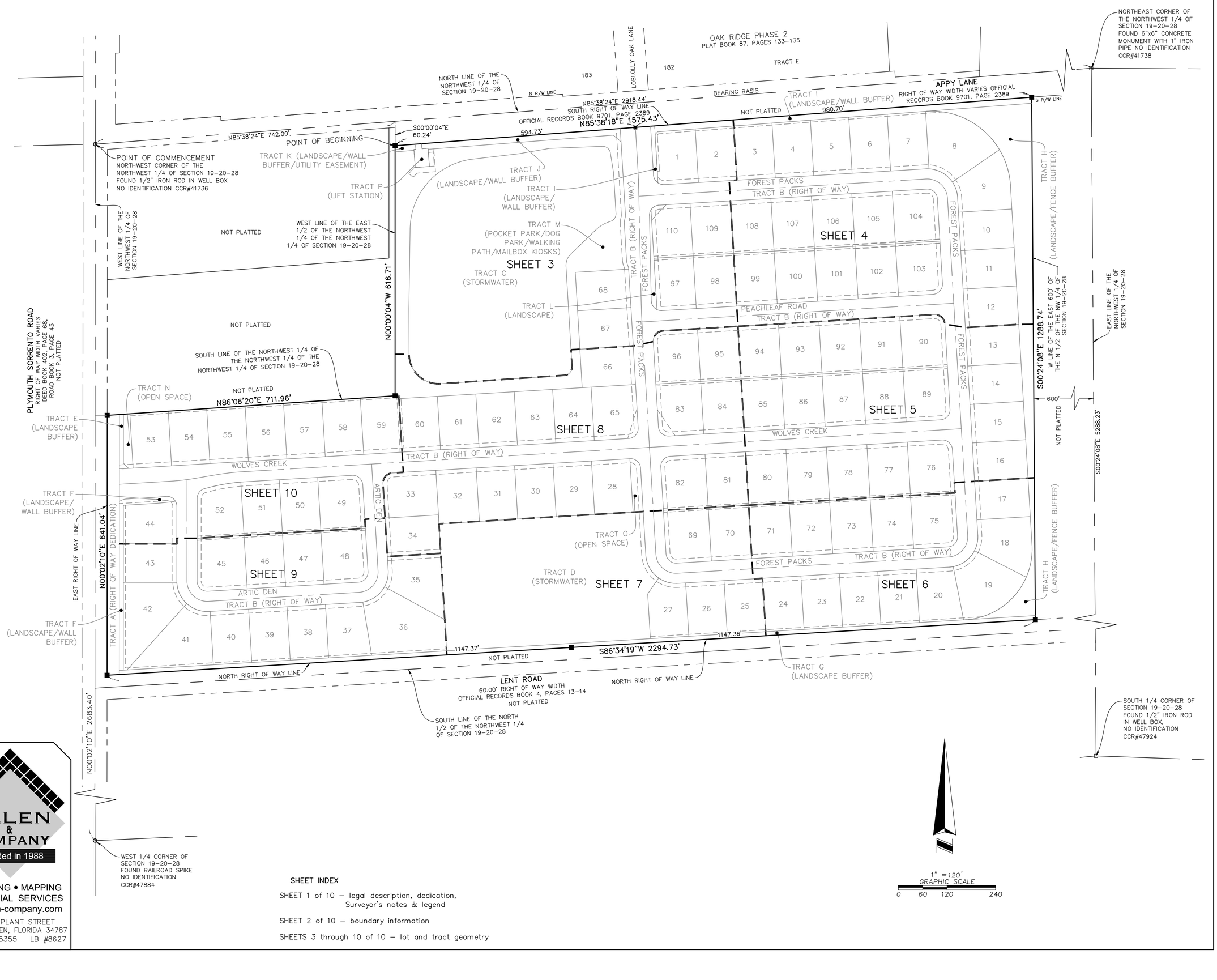
on _____ as Doc.# _____

County Comptroller in and for Orange County, Florida.

By _____

# WILLOW RUN

## A TRACT OF LAND LYING IN SECTION 19, TOWNSHIP 20 SOUTH, RANGE 28 EAST, CITY OF APOPKA, ORANGE COUNTY, FLORIDA




SHEET INDEX

SHEET 1 of 10 – legal description, dedication, Surveyor's notes & legend

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# WILLOW RUN

## A TRACT OF LAND LYING IN SECTION 19, TOWNSHIP 20 SOUTH, RANGE 28 EAST, CITY OF APOPKA, ORANGE COUNTY, FLORIDA

POINT OF COMMENCEMENT
NORTHWEST CORNER OF THE
NORTHWEST 1/4 OF SECTION 19-20-28

N85°38'24"E 742.00'

NORTH LINE OF THE NORTHWEST 1/4 OF SECTION 19-20-28

N85°38'24"E 2918.44'

POINT OF BEGINNING

S00°00'04"E 60.24'

SOUTH RIGHT OF WAY LINE
OFFICIAL RECORDS BOOK 9701, PAGE 2389

APPY LANE
RIGHT OF WAY WIDTH VARIES OFFICIAL
RECORDS BOOK 9701, PAGE 2389

NOT PLATTED

N85°38'18"E 1575.43'

TRACT K (LANDSCAPE/WALL BUFFER/UTILITY EASEMENT)

TRACT J (LANDSCAPE/WALL BUFFER)

N85°38'18"E 458.42'

594.73'

491.65'

50.58' U.E.

15.04' N85°38'18"E 46.72'

2.50'

42.50'

34.81'

7.69'

14.00' W.E.

12.18' U.E.

15.00'

TRACT P
(LIFT STATION)

TRACT M

NOT PLATTED

N83°18'00"E 114.35'

N80°10'30"E 77.12'

N87°43'52"E 129.66'

S09°13'59"E 48.82'

S03°25'54"E 100.29'

S46°07'49"W 85.90'

N58°02'26"W 26.99' (TIE LINE)

N86°34'19"E 132.00'

S03°25'41"E 247.57'

N03°25'41"W 285.02'

N03°25'41"W 304.75'

S86°34'19"W 669.78'

N86°34'19"E 770.78'

N86°34'19"E 670.78'

MATCHLINE

SEE SHEET 8

SEE SHEET 5

TRACT C
(STORMWATER)

TRACT M
(POCKET PARK/
DOG PARK/
WALKING PATH/
MAILBOX KIOSKS)

S86°06'20"W 306.21'

MATCHLINE

SEE SHEET 8

NOT PLATTED

WEST LINE OF THE EAST 1/2 OF THE
NORTHWEST 1/4 OF THE NORTHWEST
1/4 OF SECTION 19-20-28

N00°00'04"W 616.71'

601.67'

N00°51'39"E 197.55'

N00°11'47"W 112.64'

TRACT I (LANDSCAPE/WALL BUFFER)

943.20'

980.70'

95.01'

93.30'

91.14'

5.00' W/F.M.E.

15.00'

10.00' U.E.

N03°25'41"W 105.63'

N03°25'41"W 120.57'

N03°25'41"W 99.13'

N03°25'41"W 89.22'

S03°25'41"E 132.36'

S03°25'41"E 133.90'

5.50' W/F.M.E.

TRACT I
(LANDSCAPE/
WALL BUFFER)

84.60'

S86°34'19"W 645.78'

95.00'

TRACT B
(RIGHT OF WAY)

FOREST PACKS

N86°34'19"E 709.82'

50.00' RIGHT OF WAY WIDTH

N86°34'19"E 661.68'

100.00'

58.99'

76.68'

17.69'

P.D.E.

25.70'

N43°00'59"E 52.45'

119.56'

93.86'

N01°13'14"W 266.05'

N01°13'14"W 210.16'

N03°25'41"W 130.00'

N86°34'19"E 707.00'

97.00'

5.00'

10.00' F.M.E.

N03°25'41"W 246.37' N.R.

126.81'

TRACT L
(LANDSCAPE)

84.78'

100.00'

FOREST PACKS
RIGHT OF WAY WIDTH VARIES

TRACT B (RIGHT OF WAY)

TRACT M
(POCKET PARK/
DOG PARK/
WALKING PATH/
MAILBOX KIOSKS)

68

67

66

22.00'

95.00'

VARIED

N03°25'41"W 392.02'

N03°25'41"W 315.73'

5.73'

25.00'

50.00' RIGHT OF WAY WIDTH

1

2

3

108

110

109

99

98

97

96

95

94

| CURVE TABLE | | | | | |
|---|---|---|---|---|---|
| CURVE | RADIUS | CHORD BEARING | CHORD | DELTA | LENGTH |
| C1 | 175.00' | S42°04'50"W | 230.63' | 082°26'20" | 251.80' |
| C2 | 20.00' | N50°45'04"W | 26.51' | 083°02'09" | 28.98' |
| C3 | 20.00' | N35°05'17"E | 24.91' | 077°02'20" | 26.89' |
| C4 | 85.00' | S59°52'08"W | 40.37' | 027°28'38" | 40.76' |
| C5 | 40.00' | S21°21'04"W | 33.53' | 049°33'30" | 34.60' |
| C6 | 20.00' | N41°20'19"E | 28.17' | 089°32'02" | 31.25' |
| C7 | 73.00' | S47°02'43"E | 106.51' | 093°41'53" | 119.38' |
| C12 | 1260.00' | N02°19'39"W | 48.41' | 002°12'05" | 48.41' |
| C16 | 25.00' | S48°25'41"E | 35.36' | 090°00'00" | 39.27' |
| C17 | 25.00' | S74°28'16"E | 16.24' | 037°54'52" | 16.54' |
| C18 | 25.00' | S29°28'16"E | 21.95' | 052°05'08" | 22.73' |
| C19 | 25.00' | S42°40'33"W | 34.67' | 087°47'32" | 38.31' |
| C20 | 25.00' | S15°29'24"W | 14.38' | 033°25'16" | 14.58' |
| C21 | 25.00' | S59°23'10"W | 22.84' | 054°22'16" | 23.72' |
| C29 | 25.00' | S47°19'27"E | 36.03' | 092°12'28" | 40.23' |
| C30 | 25.00' | S78°47'30"E | 12.63' | 029°16'24" | 12.77' |
| C31 | 25.00' | S32°41'16"E | 26.10' | 062°56'04" | 27.46' |
| C32 | 1000.00' | S02°19'39"E | 38.42' | 002°12'05" | 38.42' |
| C35 | 25.00' | S41°34'19"W | 35.36' | 090°00'00" | 39.27' |
| C93 | 547.50' | N02°23'11"W | 19.91' | 002°05'02" | 19.91' |
| C96 | 25.00' | N04°20'34"E | 6.76' | 015°32'31" | 6.78' |
| C97 | 30.00' | S04°20'34"W | 8.11' | 015°32'31" | 8.14' |
| C98 | 30.00' | S11°11'57"E | 8.11' | 015°32'31" | 8.14' |
| C99 | 25.00' | N11°11'57"W | 6.76' | 015°32'31" | 6.78' |

| LINE TABLE | | |
|---|---|---|
| LINE | BEARING | LENGTH |
| L1 | N04°21'42"W | 12.50' |
| L2 | S85°38'18"W | 15.00' |
| L3 | N04°21'42"W | 45.00' |
| L4 | N85°38'18"E | 35.00' |
| L5 | S04°21'42"E | 45.00' |
| L6 | S85°38'18"W | 5.00' |
| L7 | S04°21'42"E | 12.50' |
| L8 | S49°21'42"E | 25.02' |
| L27 | N40°38'18"E | 4.27' |
| L33 | N03°25'41"W | 8.40' |
| L34 | S85°38'18"W | 14.00' |
| L35 | N04°21'42"W | 48.81' |
| L36 | N85°38'18"E | 46.51' |
| L37 | N40°38'18"E | 13.51' |
| L38 | S49°21'42"E | 14.00' |
| L39 | S40°38'18"W | 19.31' |
| L40 | S85°38'18"W | 38.31' |
| L41 | S40°38'18"W | 9.08' |
| L44 | N12°06'50"E | 7.42' |
| L45 | N03°25'41"W | 90.90' |
| L46 | N18°58'13"W | 7.42' |

SHEET INDEX

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NOT TO SCALE

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SHEET 7
SHEET 8
SHEET 9
SHEET 10

1" = 40'
GRAPHIC SCALE
0 20 40 80

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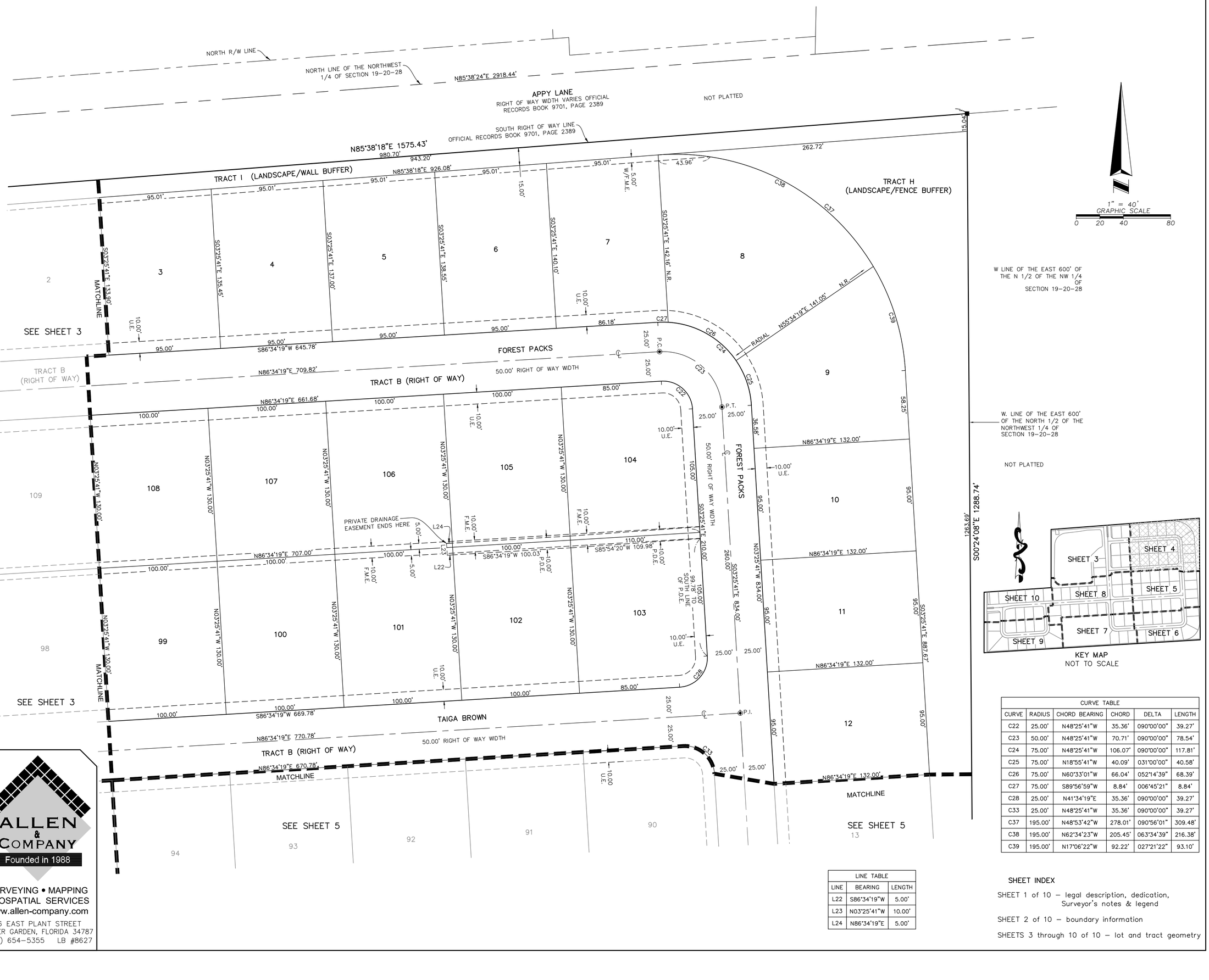
# WILLOW RUN

## A TRACT OF LAND LYING IN SECTION 19, TOWNSHIP 20 SOUTH, RANGE 28 EAST, CITY OF APOPKA, ORANGE COUNTY, FLORIDA




| CURVE TABLE | | | | | |
|---|---|---|---|---|---|
| CURVE | RADIUS | CHORD BEARING | CHORD | DELTA | LENGTH |
| C22 | 25.00' | N48°25'41"W | 35.36' | 090°00'00" | 39.27' |
| C23 | 50.00' | N48°25'41"W | 70.71' | 090°00'00" | 78.54' |
| C24 | 75.00' | N48°25'41"W | 106.07' | 090°00'00" | 117.81' |
| C25 | 75.00' | N18°55'41"W | 40.09' | 031°00'00" | 40.58' |
| C26 | 75.00' | N60°33'01"W | 66.04' | 052°14'39" | 68.39' |
| C27 | 75.00' | S89°56'59"W | 8.84' | 006°45'21" | 8.84' |
| C28 | 25.00' | N41°34'19"E | 35.36' | 090°00'00" | 39.27' |
| C33 | 25.00' | N48°25'41"W | 35.36' | 090°00'00" | 39.27' |
| C37 | 195.00' | N48°53'42"W | 278.01' | 090°56'01" | 309.48' |
| C38 | 195.00' | N62°34'23"W | 205.45' | 063°34'39" | 216.38' |
| C39 | 195.00' | N17°06'22"W | 92.22' | 027°21'22" | 93.10' |

| LINE TABLE | | |
|---|---|---|
| LINE | BEARING | LENGTH |
| L22 | S86°34'19"W | 5.00' |
| L23 | N03°25'41"W | 10.00' |
| L24 | N86°34'19"E | 5.00' |

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# WILLOW RUN

## A TRACT OF LAND LYING IN SECTION 19, TOWNSHIP 20 SOUTH, RANGE 28 EAST, CITY OF APOPKA, ORANGE COUNTY, FLORIDA

1" = 40' GRAPHIC SCALE
0 20 40 80

| CURVE TABLE | | | | | |
|---|---|---|---|---|---|
| CURVE | RADIUS | CHORD BEARING | CHORD | DELTA | LENGTH |
| C33 | 25.00' | N48°25'41"W | 35.36' | 090°00'00" | 39.27' |
| C34 | 25.00' | N41°34'19"E | 35.36' | 090°00'00" | 39.27' |
| C54 | 25.00' | N48°25'41"W | 35.36' | 090°00'00" | 39.27' |

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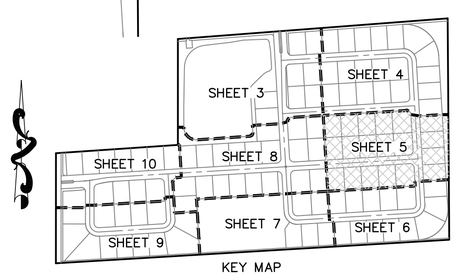


KEY MAP
NOT TO SCALE

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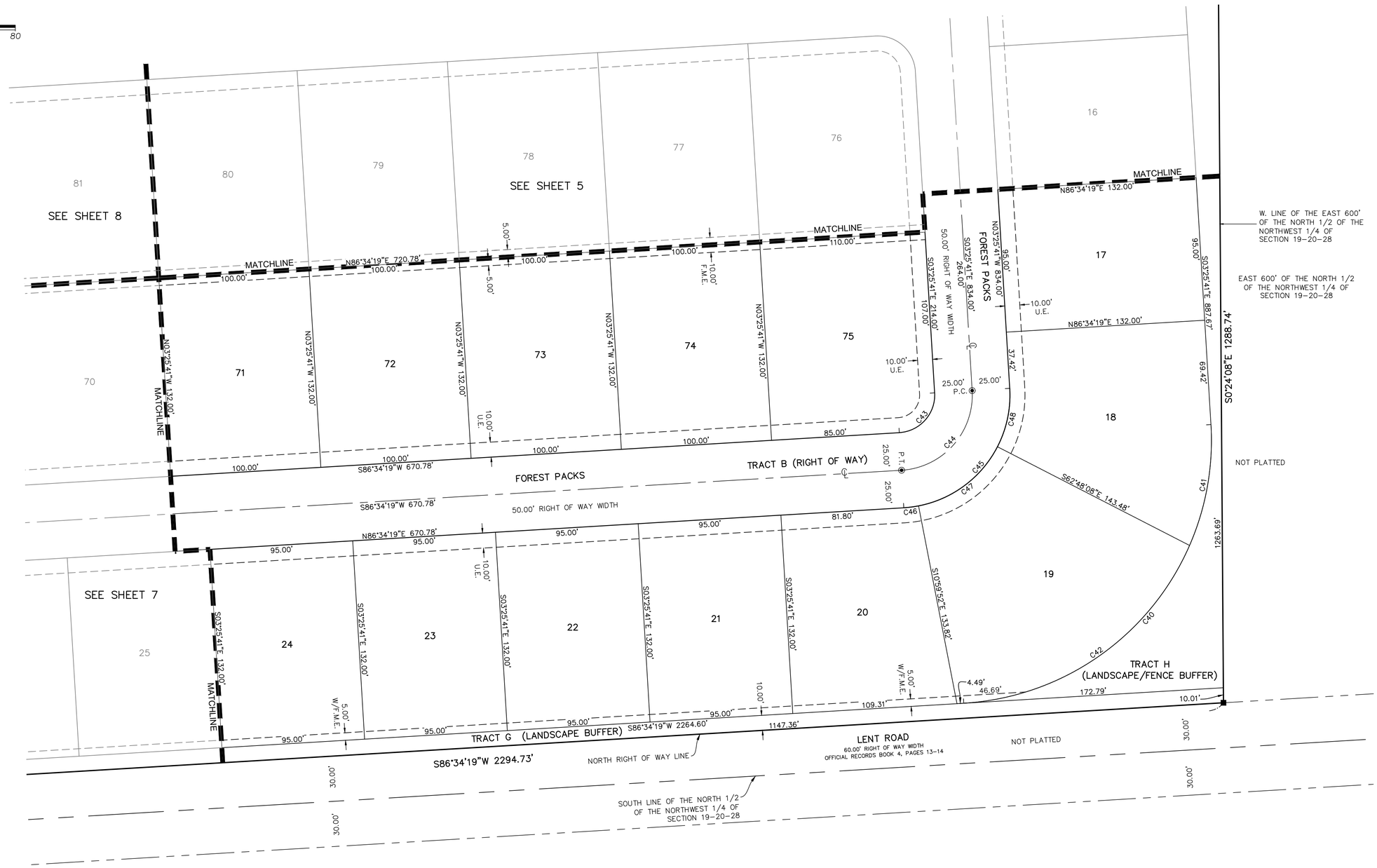
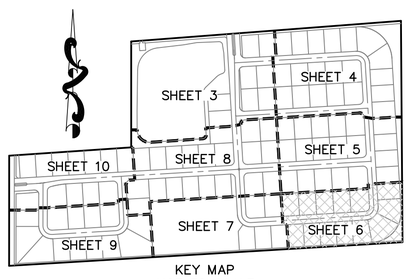
0 20 40 80




| CURVE TABLE | | | | | |
|---|---|---|---|---|---|
| CURVE | RADIUS | CHORD BEARING | CHORD | DELTA | LENGTH |
| C40 | 175.00' | N41°34'19"E | 247.49' | 090°00'00" | 274.89' |
| C41 | 175.00' | N10°02'40"E | 81.54' | 026°56'43" | 82.30' |
| C42 | 175.00' | N55°02'40"E | 183.02' | 063°03'17" | 192.59' |
| C43 | 25.00' | N41°34'19"E | 35.36' | 090°00'00" | 39.27' |
| C44 | 50.00' | N41°34'19"E | 70.71' | 090°00'00" | 78.54' |
| C45 | 75.00' | N41°34'19"E | 106.07' | 090°00'00" | 117.81' |
| C46 | 75.00' | N82°47'13"E | 9.90' | 007°34'11" | 9.91' |
| C47 | 75.00' | N53°06'00"E | 65.53' | 051°48'15" | 67.81' |
| C48 | 75.00' | N11°53'06"E | 39.61' | 030°37'34" | 40.09' |

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1" = 40'
GRAPHIC SCALE
0 20 40 80

33 32 31 30 29 28

SEE SHEET 8

TRACT O
(OPEN SPACE)

82 81 80

SEE SHEET 8

SEE SHEET 5

MATCHLINE

N86°34'19"E 504.78'

N86°34'19"E 720.78'

5.00'

110.78'

100.00'

10.00' F.M.E.

5.00'

10.00' U.E.

TRACT B (RIGHT OF WAY)

S03°25'41"E 214.00'

107.00'

N03°25'41"W 264.00'

258.73'

N03°25'41"W 214.00'

107.00'

25.00'

25.00'

P.T.

69 70 71

N03°25'41"W 132.00'

N03°25'41"W 132.00'

MATCHLINE

SEE SHEET 6

10.00' U.E.

10.00' U.E.

C49

85.78'

100.00'

S86°34'19"W 670.78'

FOREST PACKS

C50

P.C.

25.00'

S86°34'19"W 670.78'

50.00' RIGHT OF WAY WIDTH

C51

25.00'

N86°34'19"E 670.78'

95.00'

C52

C53

18.98'

95.00'

S34°47'33"W

47.88'

10.00' U.E.

34

73.00'

MATCHLINE

S03°25'41"E 314.00'

TRACT D
(STORMWATER)

35

TRACT D
(STORMWATER)

27 26 25

S03°25'41"E 110.46'

S03°25'41"E 132.00'

S03°25'41"E 132.00'

S03°25'41"E 132.00'

MATCHLINE

24

SEE SHEET 9

36

SEE SHEET 6

5.00' W/F.M.E.

95.00'

95.00'

95.00'

10.00'

503.76'

S86°34'19"W 2264.60'

TRACT G (LANDSCAPE BUFFER)

1147.36'

S86°34'19"W 2294.73'

NORTH RIGHT OF WAY LINE

30.00'

30.00'

1117.32'

NOT PLATTED

LENT ROAD
60.00' RIGHT OF WAY WIDTH
OFFICIAL RECORDS BOOK 4, PAGES 13-14

30.00'

30.00'

SOUTH LINE OF THE NORTH 1/2 OF THE NORTHWEST 1/4 OF SECTION 19-20-28

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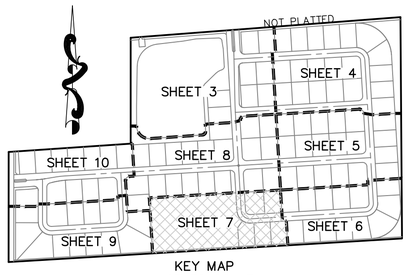
| CURVE TABLE | | | | | |
|---|---|---|---|---|---|
| CURVE | RADIUS | CHORD BEARING | CHORD | DELTA | LENGTH |
| C49 | 25.00' | S48°25'41"E | 35.36' | 090°00'00" | 39.27' |
| C50 | 50.00' | S48°25'41"E | 70.71' | 090°00'00" | 78.54' |
| C51 | 75.00' | S48°25'41"E | 106.07' | 090°00'00" | 117.81' |
| C52 | 75.00' | S29°19'04"E | 65.50' | 051°46'45" | 67.78' |
| C53 | 75.00' | S74°19'04"E | 49.11' | 038°13'15" | 50.03' |




KEY MAP
NOT TO SCALE

SHEET INDEX

SHEET 1 of 10 – legal description, dedication, Surveyor's notes & legend

SHEET 2 of 10 – boundary information

SHEETS 3 through 10 of 10 – lot and tract geometry

# WILLOW RUN

## A TRACT OF LAND LYING IN SECTION 19, TOWNSHIP 20 SOUTH, RANGE 28 EAST, CITY OF APOPKA, ORANGE COUNTY, FLORIDA

1" = 40' GRAPHIC SCALE
0 20 40 80

TRACT C (STORMWATER)

SEE SHEET 3

TAIGA BROWN

TRACT B (RIGHT OF WAY)

SEE SHEET 4

50.00' RIGHT OF WAY WIDTH

MATCHLINE

N86°34'19"E 670.78'

N86°34'19"E 132.00'

S03°25'41"E 247.57'

N03°25'41"W 285.02'

TRACT M (POCKET PARK/ DOG PARK/ WALKING PATH/ MAILBOX KIOSKS)

NOT PLATTED

N00°00'04"W 616.71'

N86°06'20"E 711.96'

N86°06'20"E 9.02'

S86°06'20"W 306.21'

N86°34'19"E 453.00'

N86°34'19"E 132.00'

N86°34'19"E 110.00'

N03°25'41"W 315.73'

FOREST PACKS

N03°25'41"W 210.00'

N86°34'19"E 720.78'

N03°25'41"W 130.00'

SEE SHEET 5

S03°25'41"E 139.73'

S03°25'41"E 132.00'

S86°34'19"W 1248.61'

S17°13'48"W 77.57'

S34°31'22"E 77.55'

S86°34'19"W 670.78'

WOLVES CREEK

N86°34'19"E 770.78'

765.53'

SEE SHEET 10

N86°34'19"E 1011.78'

681.53'

N86°34'19"E 586.78'

SEE SHEET 5

ARTIC DEN

TRACT O (OPEN SPACE)

N03°25'41"W 214.00'

N03°25'41"W 264.00'

N86°34'19"E 504.78'

SEE SHEET 7

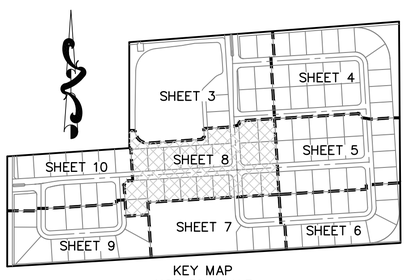
SEE SHEET 6

SEE SHEET 9

TRACT D (STORMWATER)

59 60 61 62 63 64 65 66 67 94 95 96 83 84 85 33 32 31 30 29 28 82 81 80 34 69 70 71

| CURVE TABLE | | | | | |
|---|---|---|---|---|---|
| CURVE | RADIUS | CHORD BEARING | CHORD | DELTA | LENGTH |
| C6 | 20.00' | N41°20'19"E | 28.17' | 089°32'02" | 31.25' |
| C7 | 73.00' | S47°02'43"E | 106.51' | 093°41'53" | 119.38' |
| C35 | 25.00' | S41°34'19"W | 35.36' | 090°00'00" | 39.27' |
| C36 | 25.00' | S48°25'41"E | 35.36' | 090°00'00" | 39.27' |
| C55 | 25.00' | S41°34'19"W | 35.36' | 090°00'00" | 39.27' |
| C56 | 25.00' | N48°25'41"W | 35.36' | 090°00'00" | 39.27' |
| C57 | 25.00' | N41°34'19"E | 35.36' | 090°00'00" | 39.27' |
| C58 | 25.00' | S41°34'19"W | 35.36' | 090°00'00" | 39.27' |




KEY MAP
NOT TO SCALE

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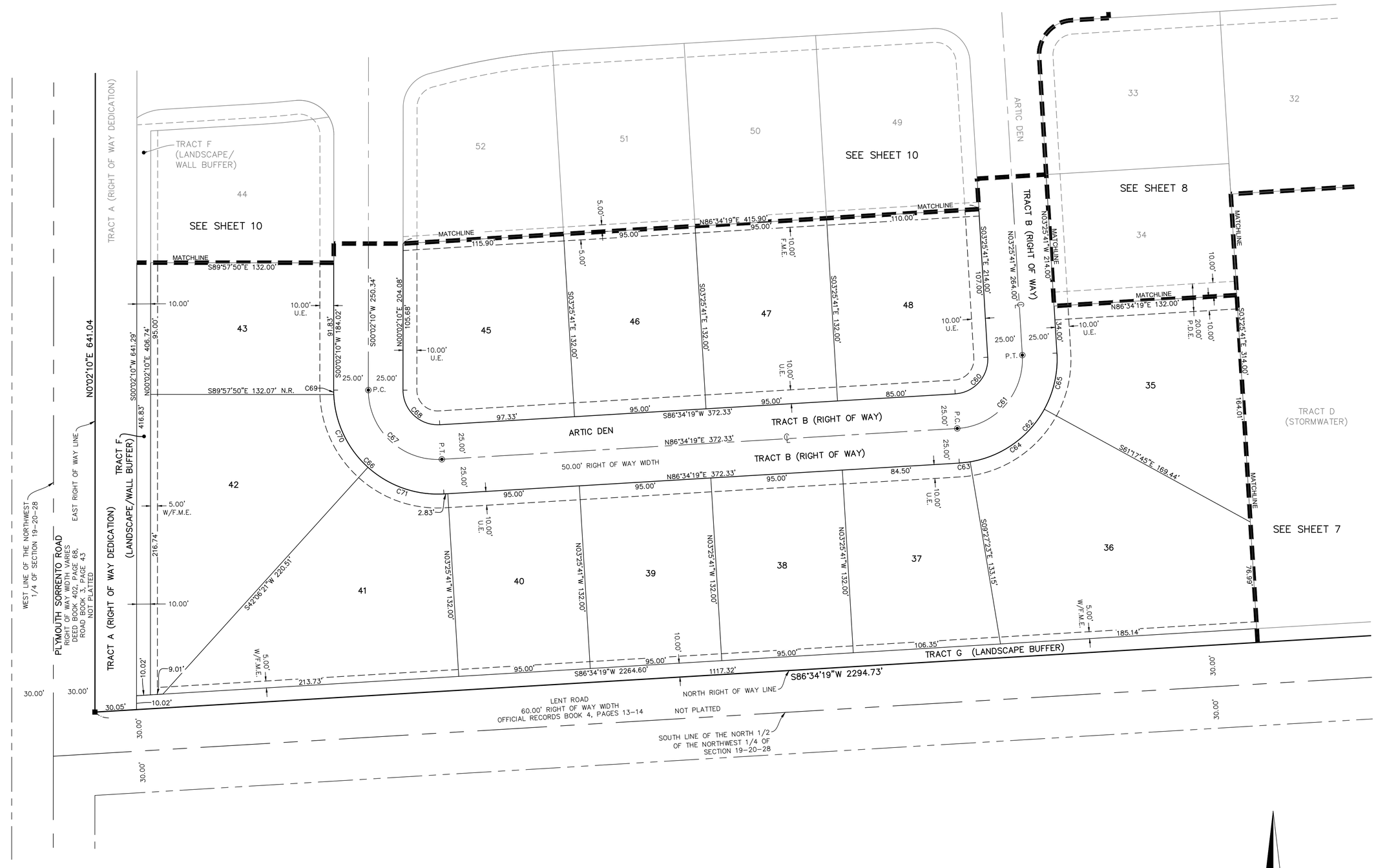
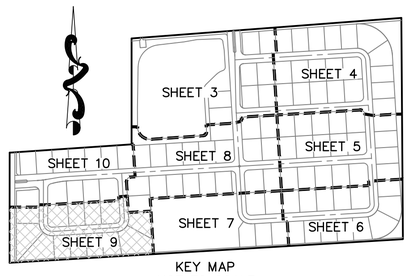
WINTER GARDEN, FLORIDA 34787
(407) 654-5355 LB #8627

# WILLOW RUN

## A TRACT OF LAND LYING IN SECTION 19, TOWNSHIP 20 SOUTH, RANGE 28 EAST, CITY OF APOPKA, ORANGE COUNTY, FLORIDA




| CURVE TABLE | | | | | |
|---|---|---|---|---|---|
| CURVE | RADIUS | CHORD BEARING | CHORD | DELTA | LENGTH |
| C60 | 25.00' | N41°34'19"E | 35.36' | 090°00'00" | 39.27' |
| C61 | 50.00' | N41°34'19"E | 70.71' | 090°00'00" | 78.54' |
| C62 | 75.00' | N41°34'19"E | 106.07' | 090°00'00" | 117.81' |
| C63 | 75.00' | N83°33'28"E | 7.89' | 006°01'41" | 7.89' |
| C64 | 75.00' | N54°37'26"E | 65.57' | 051°50'22" | 67.86' |
| C65 | 75.00' | N12°38'17"E | 41.51' | 032°07'57" | 42.06' |
| C66 | 75.00' | S46°41'46"E | 109.22' | 093°27'51" | 122.34' |
| C67 | 50.00' | S46°41'46"E | 72.82' | 093°27'51" | 81.56' |
| C68 | 25.00' | S46°41'46"E | 36.41' | 093°27'51" | 40.78' |
| C69 | 75.00' | S01°10'26"E | 3.17' | 002°25'11" | 3.17' |
| C70 | 75.00' | S25°08'20"E | 58.02' | 045°30'37" | 59.57' |
| C71 | 75.00' | S70°39'40"E | 58.05' | 045°32'02" | 59.60' |




KEY MAP
NOT TO SCALE

1" = 40'
GRAPHIC SCALE
0 20 40 80

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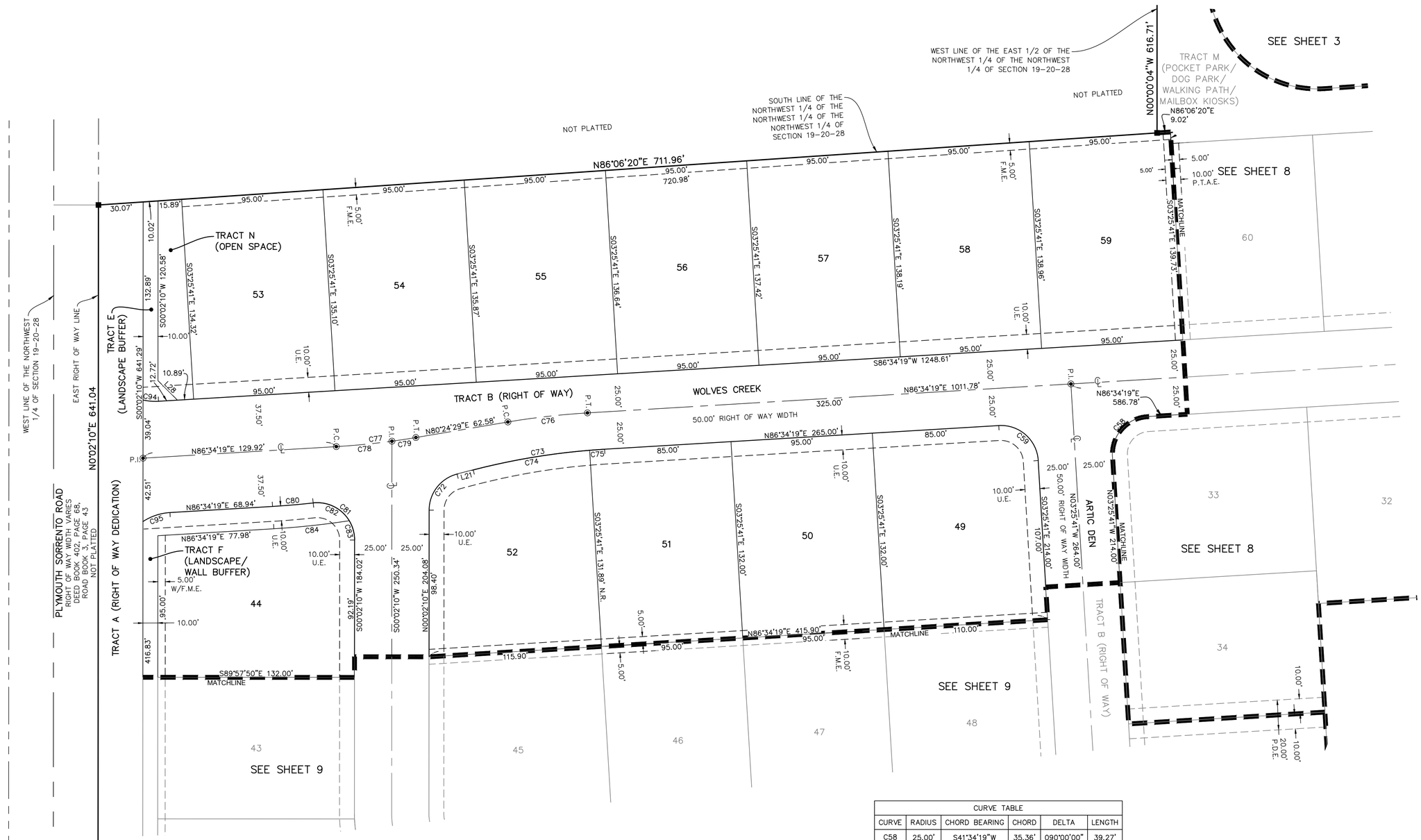
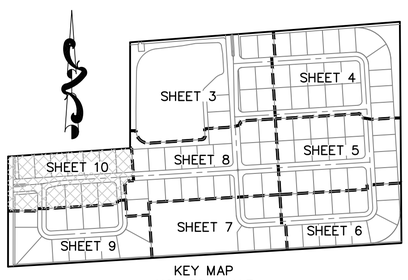
# WILLOW RUN

## A TRACT OF LAND LYING IN SECTION 19, TOWNSHIP 20 SOUTH, RANGE 28 EAST, CITY OF APOPKA, ORANGE COUNTY, FLORIDA




| CURVE TABLE | | | | | |
|---|---|---|---|---|---|
| CURVE | RADIUS | CHORD BEARING | CHORD | DELTA | LENGTH |
| C58 | 25.00' | S41°34'19"W | 35.36' | 090°00'00" | 39.27' |
| C59 | 25.00' | N48°25'41"W | 35.36' | 090°00'00" | 39.27' |
| C72 | 25.00' | S37°46'04"W | 30.60' | 075°27'48" | 32.93' |
| C73 | 462.50' | S81°02'08"W | 89.24' | 011°04'21" | 89.38' |
| C74 | 462.50' | S80°24'58"W | 79.28' | 009°50'00" | 79.38' |
| C75 | 462.50' | S85°57'09"W | 10.00' | 001°14'20" | 10.00' |
| C76 | 500.00' | S83°29'24"W | 53.76' | 006°09'50" | 53.79' |
| C77 | 500.00' | N83°29'24"E | 53.76' | 006°09'50" | 53.79' |
| C78 | 500.00' | N84°25'21"E | 37.50' | 004°17'54" | 37.51' |
| C79 | 500.00' | N81°20'26"E | 16.28' | 001°51'56" | 16.28' |
| C80 | 537.50' | N85°06'43"E | 27.39' | 002°55'11" | 27.39' |
| C81 | 25.00' | N48°09'21"W | 37.27' | 096°23'02" | 42.06' |
| C82 | 25.00' | N63°43'23"W | 26.96' | 065°14'58" | 28.47' |
| C83 | 25.00' | N15°31'52"W | 13.42' | 031°08'04" | 13.58' |
| C84 | 552.50' | N83°56'04"E | 50.85' | 005°16'30" | 50.87' |
| C94 | 37.00' | S85°20'32"E | 10.41' | 016°10'18" | 10.44' |
| C95 | 37.00' | S71°36'50"W | 19.10' | 029°54'57" | 19.32' |

| LINE TABLE | | |
|---|---|---|
| LINE | BEARING | LENGTH |
| L21 | S75°29'58"W | 11.18' |
| L28 | S44°57'50"E | 18.49' |




KEY MAP
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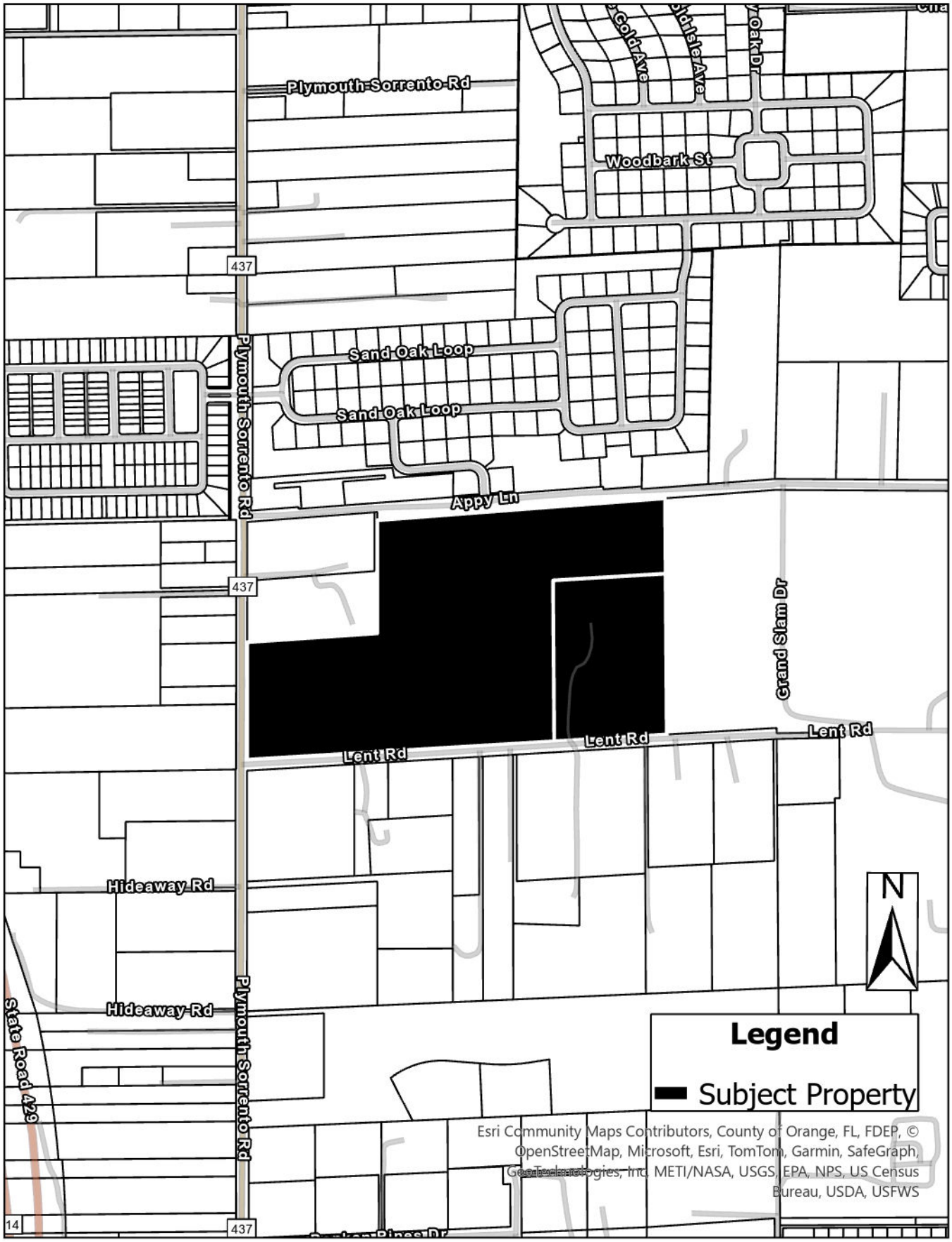
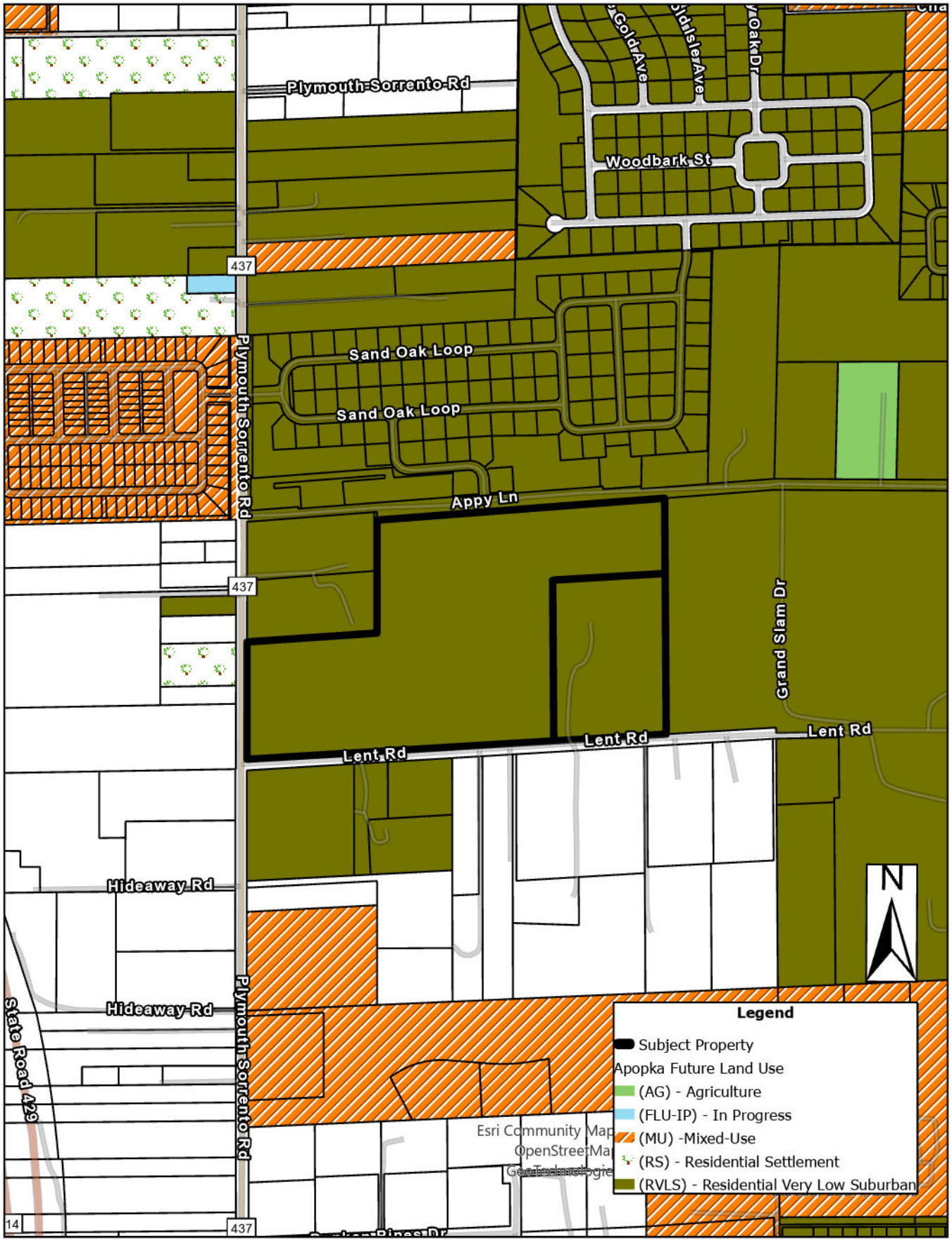
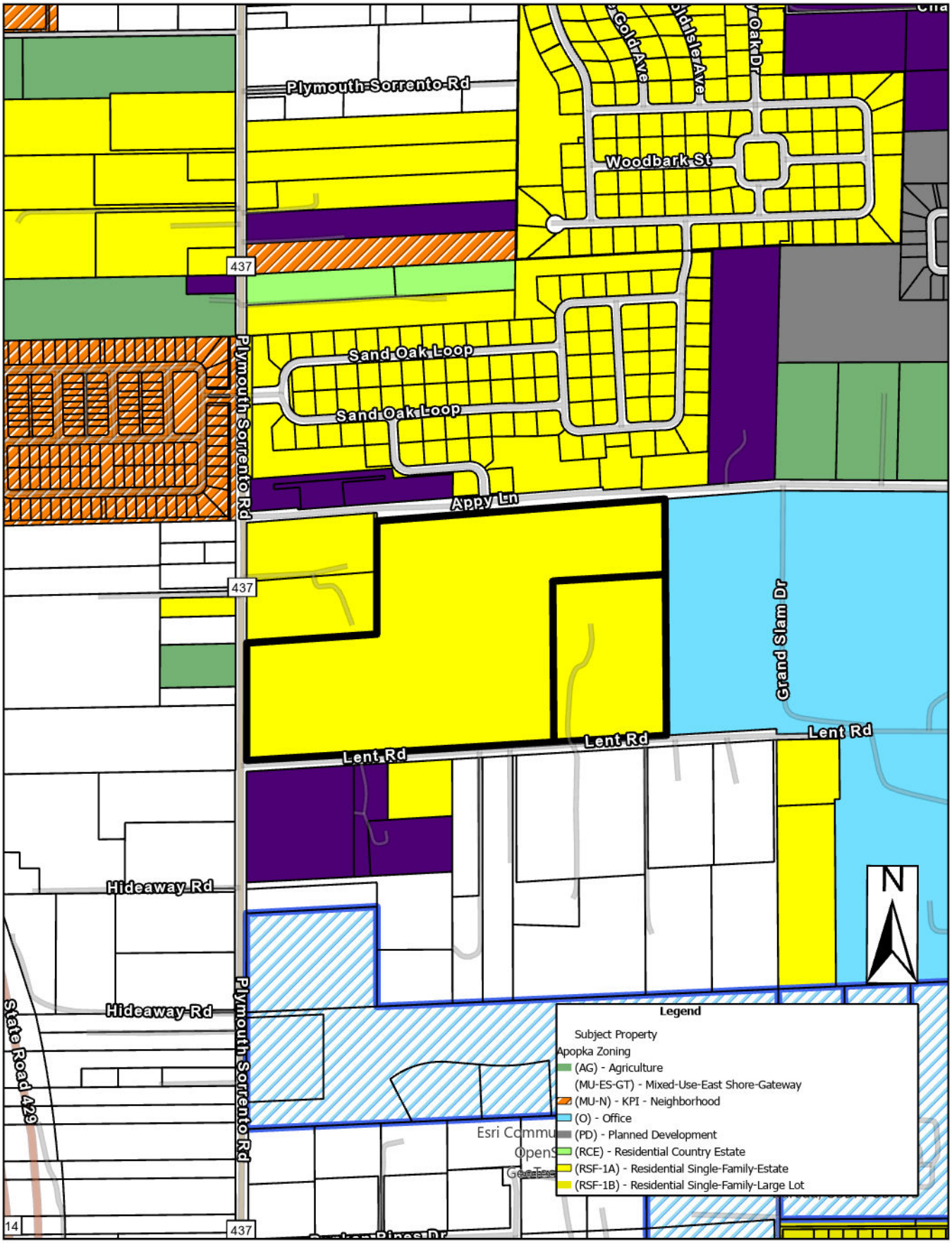
# Vicinity


Plymouth-Sorrento-Rd
Woodbark St
437
Sand Oak Loop
Sand Oak Loop
Plymouth Sorrento Rd
Appy Ln
437
Grand Slam Dr
Lent Rd
Lent Rd
Lent Rd
Hideaway Rd
Hideaway Rd
Plymouth Sorrento Rd
State Road 429
14
437
N
Legend
Subject Property
Esri Community Maps Contributors, County of Orange, FL, FDEP, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS

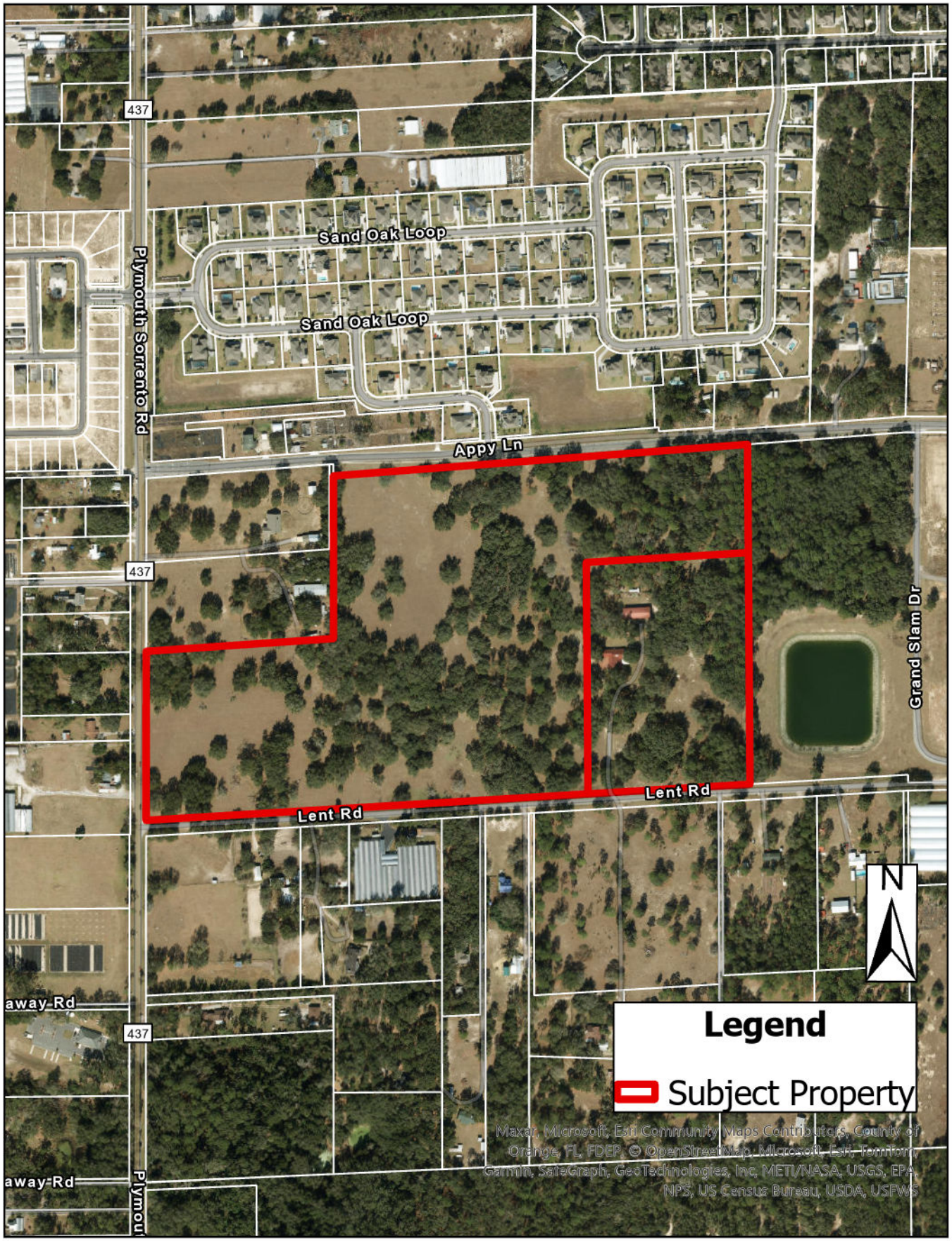
# Future Land Use



# Zoning


Plymouth-Sorrento-Rd
Woodbark St
437
Sand Oak Loop
Sand Oak Loop
Plymouth Sorrento Rd
Appy Ln
437
Grand Slam Dr
Lent Rd
Lent Rd
Lent Rd
Hideaway Rd
Hideaway Rd
Plymouth Sorrento Rd
State Road 429
14
437
N
Legend
Subject Property
Apopka Zoning
(AG) - Agriculture
(MU-ES-GT) - Mixed-Use-East Shore-Gateway
(MU-N) - KPI - Neighborhood
(O) - Office
(PD) - Planned Development
(RCE) - Residential Country Estate
(RSF-1A) - Residential Single-Family-Estate
(RSF-1B) - Residential Single-Family-Large Lot

# Aerial


437
Sand Oak Loop
Sand Oak Loop
Plymouth Sorrento Rd
Appy Ln
437
Grand Slam Dr
Lent Rd
Lent Rd
N
away Rd
437
away Rd
Legend
Subject Property
Maxar, Microsoft, Esri Community Maps Contributors, County of Orange, FL, FDEP, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS

# MAJOR DEVELOPMENT PLAN
## FOR
# WILLOW RUN
## (f.k.a. PLYMOUTH SORRENTO AND APPY LANE)
# CITY OF APOPKA, FLORIDA

OCPA PARCEL ID:19-20-28-0000-00-002 & 19-20-28-0000-00-050

**LEGAL DESCRIPTION PER ALLEN & COMPANY PROFESSIONAL SURVEYORS & MAPPERS**
**DATED: MARCH 8, 2021**

LEGAL DESCRIPTION:

A TRACT OF LAND LYING IN SECTION 19, TOWNSHIP 20 SOUTH, RANGE 28 EAST, DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF THE NORTHWEST QUARTER OF SAID SECTION 19 FOR A POINT OF REFERENCE; THENCE RUN NORTH 85°38'18" EAST, ALONG THE NORTH LINE OF THE NORTHWEST QUARTER OF SAID SECTION 19, A DISTANCE OF 729.62 FEET TO THE WEST LINE OF THE EAST HALF OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SAID SECTION 19; THENCE RUN SOUTH 00°04'35" EAST, ALONG SAID WEST LINE, 60.17 FEET TO THE A POINT ON THE SOUTH RIGHT-OF-WAY LINE OF APPY LANE, ACCORDING TO OFFICIAL RECORDS BOOK 9701, PAGE 2389 OF THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA AND THE POINT OF BEGINNING; THENCE RUN NORTH 85°38'18" EAST, ALONG SAID SOUTH RIGHT-OF-WAY LINE, 1587.77 FEET; THENCE DEPARTING SAID SOUTH RIGHT-OF-WAY LINE, RUN SOUTH 00°24'08" EAST, PARALLEL WITH AND 600.00 FEET WEST OF (PERPENDICULAR MEASURE) OF THE EAST LINE OF THE NORTHWEST QUARTER OF SAID SECTION 19, A DISTANCE OF 1288.73 FEET TO THE NORTH RIGHT-OF-WAY LINE OF LENT ROAD, ACCORDING TO RIGHT-OF-WAY AGREEMENT, RECORDED IN OFFICIAL RECORDS BOOK 4, PAGES 13 AND 14 OF SAID PUBLIC RECORDS; THENCE RUN SOUTH 86°34'19" WEST, ALONG SAID NORTH RIGHT-OF-WAY LINE, 2294.73 FEET TO THE EAST RIGHT-OF-WAY LINE OF PLYMOUTH-SORRENTO ROAD, ACCORDING TO DEED BOOK 402, PAGE 68 AND ROAD BOND BOOK 3, PAGE 43 OF SAID PUBLIC RECORDS; THENCE RUN NORTH 00°02'10" EAST, ALONG SAID EAST RIGHT-OF-WAY LINE, 641.04 FEET TO THE SOUTH LINE OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SAID SECTION 19; THENCE RUN NORTH 86°00'20" EAST, ALONG SAID SOUTH LINE, 700.45 FEET TO THE AFORESAID TO THE WEST LINE OF THE EAST HALF OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SAID SECTION 19; THENCE RUN NORTH 00°04'35" WEST, ALONG SAID WEST LINE, 616.56 FEET TO THE POINT OF BEGINNING.

THE ABOVE DESCRIBED PARCEL OF LAND LIES IN THE CITY OF APOPKA, ORANGE COUNTY. FLORIDA AND CONTAINS 56.83 ACRES MORE OR LESS.

## NARRATIVE:

**THE PROPERTY IS MADE UP OF TWO PARCELS THAT ARE LOCATED ALONG THE EAST SIDE OF PLYMOUTH SORRENTO ROAD, SOUTH OF APPY LANE AND EAST OF STATE ROAD 429. THE ADDRESS IS 2601 LENT ROAD IN APOPKA, FLORIDA 32712, IN THE CITY OF APOPKA. THE SUBJECT PROPERTY HAS A TOTAL AREA OF 56.83 AC. THE SUBJECT PARCELS ARE CURRENTLY BEING USED AS LOW DENSITY RESIDENTIAL AND AGRICULTURE/HORTICULTURE. THE PROPOSED DEVELOPMENT IS A RESIDENTIAL SUBDIVISION WITH 110 INDIVIDUAL SINGLE FAMILY LOTS, ASSOCIATED ROADWAYS AND RETENTION/DETENTION AREAS. THE POTABLE WATER, AND WASTEWATER WILL BE PROVIDED BY CITY OF APOPKA. A FEE SIMPLE OWNERSHIP, SUCH AS A HOME OWNERS ASSOCIATION, WILL BE CREATED FOR ALL LANDS EXCLUSIVE OF THE INDIVIDUAL LOTS TO CONTROL AND MAINTAIN ALL COMMON AREAS.**

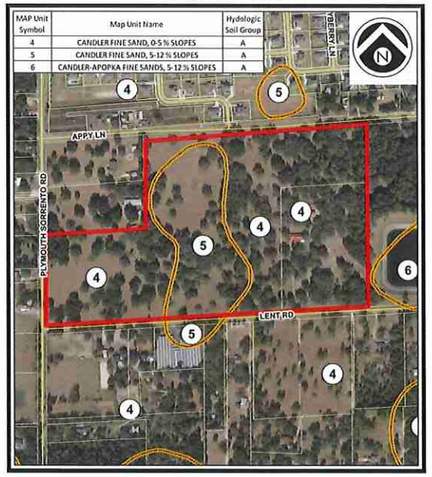
## UTILITY PROVIDERS

| | |
|---|---|
| **WATER/RECLAIMED:**<br>CITY OF APOPKA<br>748 E. CLEVELAND STREET<br>ORLANDO, FL 32703<br>CONTACT: VLADIMIR SIMONOVSKI, P.E.<br>PHONE: (407) 703-1731 | **TELEPHONE/FIBER:**<br>CENTURYLINK<br>33 NORTH MAIN STREET, ROOM 144<br>WINTER GARDEN, FL 34787<br>CONTACT: BILLY HAGER<br>PHONE: (407) 814-5329 |
| **SOLID WASTE COLLECTION:**<br>CITY OF APOPKA<br>748 E. CLEVELAND STREET<br>WINTER PARK, FL 32703<br>CONTACT: VLADIMIR SIMONOVSKI, P.E.<br>PHONE: (407) 703-1731 | **CHARTER COMMUNICATION:**<br>(A.K.A. SPECTRUM)<br>3767 ALL AMERICAN BOULEVARD<br>ORLANDO, FLORIDA 32810<br>CONTACT: TRACEY DOMOSTOY<br>PHONE: (407) 532-8509 |
| **NATURAL GAS:**<br>LAKE APOPKA NATURAL GAS DISTRICT<br>1320 WINTER GARDEN VINELAND<br>WINTER PARK, FLORIDA 34787<br>CONTACT:PATRICK NGUYEN<br>PHONE: (407) 656-2734 | **POWER:**<br>DUKE ENERGY<br>3250 BONNETT CREEK ROAD<br>LAKE BUENA VISTA, FLORIDA 32830<br>CONTACT: JENNIFER NAZARIAN<br>PHONE: (407) 938-6611 |

**PROJECT QUALIFIES FOR AN EXEMPTION TO THE GREEN BUILDING STANDARDS REQUIRED BY LDC SECTION 5.11.2. THIS EXEMPTION IS GRANTED BASED ON THE PROJECT'S USING HERS "FOR ALL PROPOSED RESIDENTIAL LOTS", A CERTIFICATION PROGRAM SIMILAR TO LEED REQUIREMENTS.**

**VICINITY MAP**
*SCALE: 1" = 2000'*

**AERIAL MAP**
*SCALE: 1" = 500'*




| MAP Unit Symbol | Map Unit Name | Hydrologic Soil Group |
|---|---|---|
| 4 | CANDLER FINE SAND, 0-5 % SLOPES | A |
| 5 | CANDLER FINE SAND, 5-12 % SLOPES | A |
| 6 | CANDLER-APOPKA FINE SANDS, 5-12 % SLOPES | A |

**SOILS MAP**
*SCALE: 1" = 500'*

**FEMA FLOOD MAP**
*SCALE: 1" = 700'*

## PROJECT TEAM:

**PROPERTY OWNER**
TESTAMENTARY TRUST FBO
AMANDA P FARRELL
2601 LEND ROAD APOPKA, FL 32703

**LENT ROAD PROPERTIES LLC**
2601 LEND ROAD APOPKA, FL 32703

**DEVELOPER**
ASHTON ORLANDO RESIDENTIAL, LLC
CONTACT: ANDON CALHOUN
1064 GREENWOOD BLVD, SUITE 124
LAKE MARY, FL 32746
PHONE: (407) 708-0192
EMAIL: ANDON.CALHOUN@ASHTONWOODS.COM

**ENGINEER**
APPIAN ENGINEERING, LLC
ENGINEER: OVIDIO S. SANCHEZ, P.E.
2221 LEE RD, SUITE 27
WINTER PARK, FL 32789
PHONE: (407) 960-5868
EMAIL: OSANCHEZ@APPIANFL.COM

**SURVEYOR**
ALLEN & COMPANY, INC.
ENGINEER: JAMES DICKMAN, P.S.M.
1170 EAST 1ST STREET
WINTER GARDEN, FL 34787
PHONE: (407) 654-5355
EMAIL: JAD@ALLENCOMPANY.COM

**LANDSCAPE ARCHITECT**
LANDSCAPE DESIGNS, LLC
ARCHITECT: CARL J. KELLY JR., RLA
4463 TIFFANY WOODS CIR OVIEDO, FLORIDA 32765
PHONE: (407) 484-3414
EMAIL: CKELLY1@CFL.RR.COM

**ENVIRONMENTAL CONSULTANT**
BIO-TECH CONSULTING, INC
ENVIRONMENTALIST: JAY BAKER, DIRECTOR
3025 EAST SOUTH STREET
ORLANDO, FL 32803
PHONE: (407) 894-5969
EMAIL: JAY@BIO-TECHCONSULTING.COM

**GEOTECHNICAL ENGINEER**
GEO-TECHNOLOGY ASSOCIATES, INC.
ENGINEER: GAUTHAM S. PILLAPPA, P.E.
4617 PARKBREEZE COURT
ORLANDO, FLORIDA 32808
PHONE: (321) 442-4239
EMAIL: GPILLAPPA@GTAENG.COM

**TRAFFIC ENGINEER**
TRAFFIC & MOBILITY CONSULTANTS, LLC
ENGINEER: MOHAMMED ABDALLAH, P.E.
3101 MAGUIRE BOULEVARD, SUITE 265
ORLANDO, FLORIDA 32803
PHONE: (407) 531-5332
EMAIL: MNA@TRAFFICMOBILITY.COM

CITY OF APOPKA
DEVELOPMENT REVIEW COMMITTEE
Compliance Review Per Land Development Code

| DEPARTMENT | NAME | DATE |
|---|---|---|
| ENGINEERING | | 4-4-22 |
| FIRE | | 3/4/22 |
| BUILDING | | 4-4-22 |
| PLANNING/ZONING | | 4/20/2022 |
| POLICE | | 4/21/2022 |
| PUBLIC SERVICES/ UTILITIES | | 5-4-2022 |

| REVIEW/APPROVAL(S) REQUIRED | | | DATE |
|---|---|---|---|
| Development Review Committee | Yes ☑ | No ☐ | 4/18/2022 |
| Planning Commission | Yes ☑ | No ☐ | 5/10/2022 |
| City Council | Yes ☑ | No ☐ | 6/1/2022 |

THIS REVIEW / APPROVAL DOES NOT GRANT PERMISSION TO VIOLATE OR WAIVE ANY APPLICABLE CITY CODE.

THIS PLAN MUST BE KEPT ON JOB SITE.

## SHEET INDEX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|---|---|---|
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| 2 | C1.0 | ABBREVIATIONS & SYMBOLS |
| 3 | C2.0 | EXISTING CONDITIONS - OVERALL |
| 4 | C2.1 | EXISTING CONDITIONS - NORTHWEST |
| 5 | C2.2 | EXISTING CONDITIONS - NORTHEAST |
| 6 | C2.3 | EXISTING CONDITIONS - SOUTHWEST |
| 7 | C2.4 | EXISTING CONDITIONS - SOUTHEAST |
| 8 | C3.0 | GEOMETRY PLAN - OVERALL |
| 9 | C3.1 | GEOMETRY PLAN - NORTHWEST |
| 10 | C3.2 | GEOMETRY PLAN - NORTHEAST |
| 11 | C3.3 | GEOMETRY PLAN - SOUTHWEST |
| 12 | C3.4 | GEOMETRY PLAN - SOUTHEAST |
| 13 | C3.5 | CROSS SECTIONS |
| 14 | C3.6 | LOT DATA TABLE |
| 15 | C3.7 | OFFSITE IMPROVEMENTS - APPY LANE |
| 16 | C4.0 | UTILITY NOTE |
| 17 | C4.1 | UTILITY AND DRAINAGE PLAN - OVERALL |
| 18 | C4.2 | UTILITY AND DRAINAGE PLAN - NORTHWEST |
| 19 | C4.3 | UTILITY AND DRAINAGE PLAN - NORTHEAST |
| 20 | C4.4 | UTILITY AND DRAINAGE PLAN - SOUTHWEST |
| 21 | C4.5 | UTILITY AND DRAINAGE PLAN - SOUTHEAST |
| 22 | C4.6 | FIRE TRUCK ROUTE PLAN |
| 23 | C4.7 | FIRE TRUCK ROUTE DETAIL |
| 24 | C4.8 | LIGHTING PLAN |
| 25 | C5.0 | PAVING AND GRADING PLAN - OVERALL |
| 26 | C5.1 | PAVING AND GRADING PLAN - NORTHWEST |
| 27 | C5.2 | PAVING AND GRADING PLAN - NORTHEAST |
| 28 | C5.4 | PAVING AND GRADING PLAN - SOUTHWEST |
| 29 | C5.4 | PAVING AND GRADING PLAN - SOUTHEAST |
| 30 | LS-01 | OVERALL LANDSCAPE SITE PLAN |
| 31 | LS-02 | TREE SURVEY CHART |
| 32 | LS-03 | TREE PRESERVATION PLAN |
| 33 | LS-04 | TREE PRESERVATION PLAN |
| 34 | LS-05 | TREE PRESERVATION PLAN |
| 35 | LS-06 | LANDSCAPE SITE PLAN |
| 36 | LS-07 | LANDSCAPE SITE PLAN |
| 37 | LS-08 | LANDSCAPE SITE PLAN |
| 38 | HS-01 | HARDSCAPE SITE PLAN |
| 39 | HS-02 | HARDSCAPE SITE PLAN |
| 40 | HS-03 | HARDSCAPE SITE PLAN |
| 41 | IR-01 | IRRIGATION SITE PLAN |
| 42 | IR-02 | IRRIGATION SITE PLAN |
| 43 | IR-03 | IRRIGATION SITE PLAN |
| 44 | IR-04 | IRRIGATION SITE PLAN |
| 45 | IR-05 | IRRIGATION SITE PLAN |
| | | BOUNDARY SURVEY |


OVIDIO SALVADOR SANCHEZ LICENSE NO. 69492 STATE OF FLORIDA PROFESSIONAL ENGINEER

SHEET 1 OF 45
NOT FOR CONSTRUCTION


APPIAN ENGINEERING
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BOARD OF PROFESSIONAL ENGINEERING CERTIFICATE NO. 32174


PERMITS REQUIRED

| AGENCY | PERMIT TYPE | DATE APPLIED | DATE APPROVED | APPROVAL NO. |
|---|---|---|---|---|
| CITY OF APOPKA | MAJOR DEVELOPMENT PLAN (MDP) | 01/13/2022 | | |

| REV. | DATE | DESCRIPTION |
|---|---|---|
| 1 | 01/24/2022 | CITY OF APOPKA COMMENTS DATED 01/24/2022 |
| 2 | 03/14/2022 | CITY OF APOPKA COMMENTS DATED 03/14/2022 |

P:_project drawings\ash-012 plymouth sorrento and lent road\Drawings\cad civil\3d\Layouts\03 PSP\COVER SHEET.dwg Plotted:4/5/2022 By:ideiaresa

# ABBREVIATIONS

| | |
|---|---|
| **A** | |
| A | AREA |
| AB | ANCHOR BOLT |
| ABD | ABANDON(ED) |
| AC | ACRE(S) |
| AC-FT | ACRE FOOT/FEET |
| ACP | ASBESTOS CEMENT PIPE |
| ADDL | ADDITIONAL |
| ADT | AVERAGE DAILY TRAFFIC |
| AL | ALUMINUM |
| ALT | ALTERNATE |
| AM | BEFORE NOON |
| AMP | AMPERE(S) |
| APPROX | APPROXIMATE |
| ARV | AIR RELEASE VALVE |
| ARVV | AIR RELEASE VACUUM VALVE |
| ASPH | ASPHALT |
| ASSY | ASSEMBLY |
| AVE | AVENUE |
| AVG | AVERAGE |
| AZ | AZIMUTH |
| **B** | |
| BFP | BACKFLOW PREVENTER |
| BL | BASELINE |
| BLDG | BUILDING |
| BLVD | BOULEVARD |
| BM | BENCH MARK |
| BND | BOUNDARY |
| BO | BLOWOFF |
| BOC | BACK OF CURB |
| BOT | BOTTOM |
| BRG | BEARING |
| BS | BOTTOM OF SLOPE |
| BV | BUTTERFLY VALVE |
| **C** | |
| CAP | CAPACITY |
| CB | CATCH BASIN |
| CC | CENTER TO CENTER |
| CEM | CEMENT |
| CF | CUBIC FEET |
| CFM | CUBIC FEET PER MINUTE |
| CFS | CUBIC FEET PER SECOND |
| C&G | CURB AND GUTTER |
| CI | CAST IRON |
| CIP | CAST IRON PIPE |
| CJ | CONSTRUCTION JOINT |
| C/L | CENTER LINE |
| CLP | CONCRETE LIGHT POLE |
| CLR | CLEAR/CLEARANCE |
| CLS | CLASS |
| CM | CONCRETE MONUMENT |
| CMP | CORRUGATED METAL PIPE |
| CMPA | CORRUGATED METAL PIPE ARCH |
| CND | CONDUIT |
| CO. | COUNTY |
| CO | CLEANOUT |
| COL | COLUMN |
| COMP | COMPLETE |
| CONC | CONCRETE |
| CONN | CONNECTION |
| CONST | CONSTRUCT(ION) |
| CONT | CONTINUOUS |
| COORD | COORDINATE(S) |
| COR | CORNER |
| CPLG | COUPLING |
| CPP | CONCRETE POWER POLE |
| CS | CONTROL STRUCTURE |
| CTG | COATING |
| CTR | CENTER |
| CTV | CABLE TELEVISION |
| CULV | CULVERT |
| CY | CUBIC YARD |
| CYL | CYLINDER |
| **D** | |
| DBL | DOUBLE |
| DEG OR ° | DEGREE |
| DEFL | DEFLECT(ION) |
| DEPT | DEPARTMENT |
| DET | DETAIL |
| DHWL | DESIGN HIGH WATER LEVEL |
| DI | DUCTILE IRON |
| DIA | DIAMETER |
| DIAG | DIAGONAL |
| DIM | DIMENSION |
| DIP | DUCTILE IRON PIPE |
| DISCH | DISCHARGE |
| DIST | DISTANCE |
| DMH | DROP MANHOLE |
| DN | DOWN |
| DRN | DRAIN |
| DWG | DRAWING |
| DWY | DRIVEWAY |
| **E** | |
| E | EAST |
| EA | EACH |
| EC | EDGE OF CONCRETE |
| ED | ENERGY DISSIPATOR |
| EF | EACH FACE |
| EFF | EFFLUENT |
| EG | EXISTING GRADE |
| E/L | EASEMENT LINE |
| ELB | ELBOW |
| ELEC | ELECTRIC |
| ELEV | ELEVATION |
| ELLIP | ELLIPSE/ELLIPTICAL |
| ENC | ENCASEMENT |
| ENG | ENGINEER(ING) |
| EOP | EDGE OF PAVEMENT |
| EQ | EQUAL/EQUATION |
| EQUIP | EQUIPMENT |
| EQUIV | EQUIVALENT |
| ESMT | EASEMENT |
| EST | ESTIMATE |
| EW | EACH WAY |
| EWL | ENDWALL |
| EXC | EXCAVATE/EXCAVATION |
| EXIST | EXISTING |
| EXP | EXPAND/EXPANSION |
| EXT | EXTEND/EXTENSION |

| | |
|---|---|
| **F** | |
| F&C | FRAME AND COVER |
| FD | FLOOR DRAIN |
| FDC | FIRE DEPARTMENT CONNECTION |
| FDN | FOUNDATION |
| FDOT | FLORIDA DEPARTMENT OF TRANSPORTATION |
| FF | FINISHED FLOOR |
| FG | FINISHED GRADE |
| FH | FIRE HYDRANT |
| F&I | FURNISH AND INSTALL |
| FIG | FIGURE |
| FIN | FINISHED |
| FIT | FITTING |
| FL | FENCE LINE |
| FLR | FLOOR |
| FLEX | FLEXIBLE |
| FLG | FLANGE |
| FM | FORCE MAIN |
| FND | FOUND |
| FPH | FEET PER HOUR |
| FPM | FEET PER MINUTE |
| FPS | FEET PER SECOND |
| FT | FEET/FOOT |
| FTG | FOOTING |
| **G** | |
| GA | GAUGE |
| GAL | GALLON |
| GALV | GALVANIZED |
| GM | GAS MAIN |
| GPD | GALLONS PER DAY |
| GPH | GALLONS PER HOUR |
| GPM | GALLONS PER MINUTE |
| GPS | GALLONS PER SECOND |
| GR | GUARD RAIL |
| GRD | GROUND/GRADE |
| GSP | GALVANIZED STEEL PIPE |
| GV | GATE VALVE |
| GV&B | GATE VALVE AND BOX |
| GW | GUY WIRE |
| GWT | GROUND WATER TABLE |
| **H** | |
| HB | HOSE BIBB |
| HDW | HARDWARE |
| HORIZ | HORIZONTAL |
| HP | HORSEPOWER |
| HR | HOUR |
| HT | HEIGHT |
| HW | HEADWALL |
| HWL | HIGH WATER LEVEL |
| HWY | HIGHWAY |
| HYD | HYDRAULIC |
| **I** | |
| I-4 | INTERSTATE HIGHWAY |
| IA | INTERSECTION ANGLE |
| ID | INSIDE DIAMETER |
| IF | INSIDE FACE |
| IN | INCHES |
| INL | INLET |
| INS | INSERT |
| INST | INSTALL |
| IP | IRON PIPE |
| IR | IRON ROD |
| INT | INTERSECT/INTERSECTION |
| INV | INVERT |
| **J** | |
| JB | JUNCTION BOX |
| JCT | JUNCTION |
| JST | JOIST |
| JT | JOINT |
| **L** | |
| L | LENGTH |
| LAT | LATITUDE |
| LATL | LATERAL |
| LB | POUND |
| LF | LINEAR FEET/FOOT |
| LG | LONG |
| LIM | LIMIT(S) |
| LP | LIGHT POLE |
| LONG | LONG |
| LT | LEFT |
| LWL | LOW WATER LEVEL |
| **M** | |
| MAINT | MAINTENANCE |
| MATL | MATERIAL |
| MAX | MAXIMUM |
| MECH | MECHANICAL |
| ME | MITERED END |
| MFR | MANUFACTURER |
| MGD | MILLION GALLONS PER DAY |
| MH | MANHOLE |
| MHC | MANHOLE COVER |
| MHWL | MEAN HIGH WATER LEVEL |
| MIN | MINIMUM |
| MISC | MISCELLANEOUS |
| MJ | MECHANICAL JOINT |
| MLP | METAL LIGHT POLE |
| MLWL | MEAN LOW WATER LEVEL |
| MON | MONUMENT |
| MPH | MILES PER HOUR |
| MSL | MEAN SEA LEVEL |
| MTG | MOUNTING |
| **N** | |
| N | NORTH |
| NA | NOT APPLICABLE |
| N&C | NAIL AND CAP |
| NE | NORTHEAST |
| NG | NATURAL GROUND |
| NIC | NOT IN CONTRACT |
| NO OR # | NUMBER |
| NOM | NOMINAL |
| NTP | NOTICE TO PROCEED |
| NTS | NOT TO SCALE |
| NW | NORTHWEST |
| NWL | NORMAL WATER LEVEL |
| **O** | |
| OC | ON CENTER |
| OD | OUTSIDE DIAMETER |
| OE | OR EQUAL |
| OPNG | OPENING |
| OPP | OPPOSITE |
| ORCP | OVAL REINFORCED CONCRETE PIPE |
| OS | OUTFALL STRUCTURE |
| OVFL | OVERFLOW |
| OVHD | OVERHEAD |

| | |
|---|---|
| **P** | |
| PC | POINT OF CURVATURE |
| PCC | POINT OF COMPOUND CURVATURE |
| PEP | POLYETHYLENE PIPE |
| PI | POINT OF INTERSECTION |
| PIV | POST INDICATOR VALVE |
| P/L | PROPERTY LINE |
| POB | POINT OF BEGINNING |
| POJ | PUSH ON JOINT |
| POS | POINT OF SERVICE |
| PP | POWER POLE |
| PR | PHONE RISER |
| PRC | POINT OF REVERSE CURVATURE |
| PRESS | PRESSURE |
| PROJ | PROJECT |
| PROP | PROPOSED |
| PRVC | POINT OF REVERSE VERTICAL CURVE |
| PSF | POUNDS PER SQUARE FOOT |
| PSI | POUNDS PER SQUARE INCH |
| PT | POINT OF TANGENCY |
| PVC | POLYVINYL CHLORIDE |
| PVMT | PAVEMENT |
| PWR | POWER |
| **Q** | |
| Q | FLOW RATE |
| **R** | |
| R | RADIUS |
| RCP | REINFORCED CONCRETE PIPE |
| RCPA | REINFORCED CONCRETE PIPE ARCH |
| RD | ROAD |
| RDY | ROADWAY |
| RED | REDUCER |
| REF | REFERENCE |
| REINF | REINFORCE(D) |
| REQD | REQUIRED |
| REV | REVISE/REVISION |
| RPM | REVOLUTIONS PER MINUTE |
| RR | RAILROAD |
| RT | RIGHT |
| RV | RELIEF VALVE |
| R/W | RIGHT-OF-WAY |
| RWM | REUSE WATER MAIN |
| **S** | |
| S | SOUTH |
| SAN | SANITARY SEWER |
| SB | SPLASH BLOCK |
| SCH | SCHEDULE |
| SD | SIDE DRAIN |
| SDN | SHELF DRAIN |
| SE | SOUTHEAST |
| SEC | SECONDS |
| SECT | SECTION |
| SH | SHEET |
| SHGWT | SEASONAL HIGH GROUND WATER TABLE |
| SIM | SIMILAR |
| S/L | SETBACK LINE |
| SL | SLOPE |
| SM | SHEET METAL |
| SPEC | SPECIFICATION(S) |
| SQ | SQUARE |
| SQ IN | SQUARE INCH(ES) |
| SQ FT | SQUARE FOOT/FEET |
| SQ YD | SQUARE YARD(S) |
| SR | STATE ROAD |
| SS | STAINLESS STEEL |
| ST | STREET |
| STA | STATION |
| STD | STANDARD |
| STL | STEEL |
| STR | STRUCTURE |
| STS | STORM SEWER |
| SUP | SUPPORT |
| SUSP | SUSPEND/SUSPENSION |
| SVC | SERVICE |
| SW | SOUTHWEST |
| SWK | SIDEWALK |
| SYM | SYMBOL(S) |
| SYMM | SYMMETRICAL |
| SYS | SYSTEM |
| **T** | |
| T | TANGENT |
| TB | TURFBLOCK |
| T&B | TOP AND BOTTOM |
| TBM | TEMPORARY BENCH MARK |
| TC | TIME OF CONCENTRATION |
| TD | TRENCH DRAIN |
| TDH | TOTAL DYNAMIC HEAD |
| TECH | TECHNICIAN/TECHNICAL |
| TEMP | TEMPORARY |
| TL | TERMINAL LAMPHOLE |
| TOB | TOP OF BANK |
| TOC | TOP OF CURB |
| TOS | TOE OF SLOPE |
| TOT | TOTAL |
| TS | TOP OF SLOPE |
| TWP | TOWNSHIP |
| TYP | TYPICAL |
| **U** | |
| UD | UNDERDRAIN |
| UG | UNDERGROUND |
| UON | UNLESS OTHERWISE NOTED |
| UTC | UNDERGROUND TELEPHONE CABLE |
| **V** | |
| VB | VALVE BOX |
| VC | VERTICAL CURVE |
| VCP | VITRIFIED CLAY PIPE |
| VERT | VERTICAL |
| VPC | VERTICAL POINT OF CURVE |
| VPI | VERTICAL POINT OF INTERSECTION |
| VPT | VERTICAL POINT OF TANGENCY |
| **W** | |
| W | WEST |
| W/ | WITH |
| WM | WATER MAIN |
| W/O | WITHOUT |
| WP | WATER/WEATHER PROOF |
| WPP | WOOD POWER POLE |
| WS | WATER SURFACE |
| WSWT | WET SEASON WATER TABLE |
| WT | WEIGHT |
| WV | WATER VALVE |
| WWF | WELDED WIRE FABRIC |
| WWM | WELDED WIRE MESH |
| **Y** | |
| YD | YARD |
| YR | YEAR |
| **MISC** | |
| & | AND |
| @ | AT |
| Δ | DELTA |

# EXISTING SYMBOLS

## LINES

- CENTER LINE
- CHAIN LINK FENCE
- CONTOUR
- EASEMENT
- FENCE
- GUARDRAIL
- EXISTING PLATS
- RETAINING WALL
- RIGHT-OF-WAY LINE
- SHORELINE
- SWALE
- SOIL BOUNDARY

## SANITARY SEWER

- SANITARY SEWER LINE
- CLEANOUT
- FORCE MAIN
- MANHOLE

## POTABLE WATER

- WATER MAIN
- EXISTING VALVE
- FIRE HYDRANT
- WATER METER

## STORM DRAIN

- STORM SEWER
- CURB INLET
- MANHOLE
- MITERED END
- STORM INLET
- SPOT ELEVATION
- FDOT TYPE 1 INLET
- FDOT TYPE 2 INLET
- FDOT TYPE 3 INLET
- FDOT TYPE 4 INLET
- FDOT TYPE 5 INLET
- FDOT TYPE 6 INLET

## HIGHWAY & UTILITIES

- BENCHMARK
- BOUND CORNER
- CONCRETE
- COUNTY ROADS
- INTERSTATE ROADS
- LIGHT POLE
- SIGN
- EDGE OF PAVEMENT W/O CURB
- STATE ROADS
- GUY POLE
- UTILITY POLE
- YARD LIGHT
- GAS MAIN
- OVER HEAD WIRE
- ELECTRIC CABLE OR CONDUIT, BURIED
- UNDERGROUND TELEPHONE CABLE
- EDGE OF PAVEMENT W/CURB

# PROPOSED SYMBOLS

## LINES

- PROPERTY BOUNDARY
- LOT LINE
- CENTER LINE
- EASEMENT
- BUILDING SETBACK LINE
- WETLAND LINE
- WETLAND BUFFER LINE
- FENCE
- SILT FENCE
- GUARDRAIL
- ENTRY WALL
- RETAINING WALL
- SWALE
- CONTOUR

## SANITARY SEWER

100 LF OF 8" PVC @ 0.40%

- SANITARY PIPE
- CLEANOUT
- SINGLE SANITARY SERVICE
- DOUBLE SANITARY SERVICE
- MANHOLE
- FORCE MAIN
- PLUG VALVE

## POTABLE WATER

- WATER MAIN
- FIRE MAIN
- SINGLE WATER SERVICE
- DOUBLE WATER SERVICE
- FIRE HYDRANT ASSEMBLY
- FIRE DEPARTMENT CONNECTION
- METER
- SAMPLE POINT

## RECLAIMED WATER

- RECLAIMED WATER MAIN
- SINGLE WATER SERVICE
- DOUBLE WATER SERVICE

## GENERIC UTILITIES

- 11 1/4° BEND
- 22 1/2° BEND
- 45° BEND
- 90° BEND
- TEE
- CROSS
- GATE VALVE
- REDUCER

## STORM

100 LF OF 24" RCP @ 0.20%

- STORM PIPE
- DRAINAGE FLOW DIRECTION
- FDOT INLET TYPE 1
- FDOT INLET TYPE 2
- FDOT INLET TYPE 3
- FDOT INLET TYPE 4
- FDOT INLET TYPE 5
- FDOT INLET TYPE 6
- MANHOLE
- MITERED END SECTION
- STORM INLET

## ROADWAY & GRADING

- CONCRETE
- PAVEMENT
- MULCH TRAIL
- OPEN SPACE
- BLDG OR STRUCTURE
- TYPE F CURB & GUTTER
- MIAMI CURB
- DETAIL REFERENCE (10 / C1.0)
- SPOT ELEVATION (×100.00)
- FINISHED FLOOR ELEVATION W/ FHA LOT TYPE (LOT TYPE 'A' FFE=100.00)
- HANDICAP PARKING
- INTERSTATE ROADS (95)
- LIGHT POLE
- STATE ROADS (50)
- SIGN
- TRAFFIC FLOW PAVEMENT MARKING
- UTILITY POLE
- CROSS SECTION DETAIL (A — A)

NOTES:
1. TREE TYPES SHALL BE REFERENCED BY LEGEND ON APPLICABLE DRAWING SHEETS.
2. EXISTING CONSTRUCTION FEATURES MAY BE SCREENED ON DRAWING SHEETS TO PROVIDE CLARITY.

**SHEET 2 OF 45**
**NOT FOR CONSTRUCTION**

| BY | DESCRIPTION | DATE | REV. |
|---|---|---|---|
| ID | CITY OF APOPKA COMMENTS DATED 03/14/2022 | 03/14/2022 | 1 |
| ID | CITY OF APOPKA COMMENTS DATED 01/24/2022 | 01/24/2022 | 0 |


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STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32574


ABBREVIATIONS & SYMBOLS
WILLOW RUN
CITY OF APOPKA, FLORIDA

| DRAWN: | DESIGNED: | CHECKED: | DATE: |
|---|---|---|---|
| I. DELAROSA | O. SANCHEZ | O. SANCHEZ | 4/5/22 |

| SCALE | PROJECT | SHEET |
|---|---|---|
| N.T.S. | ASH-012 | C1.0 |


OVIDIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
4/5/22
PROFESSIONAL ENGINEER



This item has been digitally signed and sealed by Ovidio S. Sanchez, PE on the date adjacent to the seal.
Printed copies of this document are not considered signed and sealed and the digital signature must be verified on any electronic copies.


P:_project drawings\ash-012 plymouth sorrento and lent road\Drawings\cad civil3d\Layouts\03 PSP\ABBREVIATIONS & SYMBOLS.dwg Modified: 4/5/2022 By: idelarosa

P:_project drawings\ash-012 plymouth sorrento and lent road\Drawings\cad civil3d\Layouts\03 PSP\EXISTING CONDITIONS.dwg Modified: 3/21/2022 By: osanchez

SURVEYOR'S NOTES:

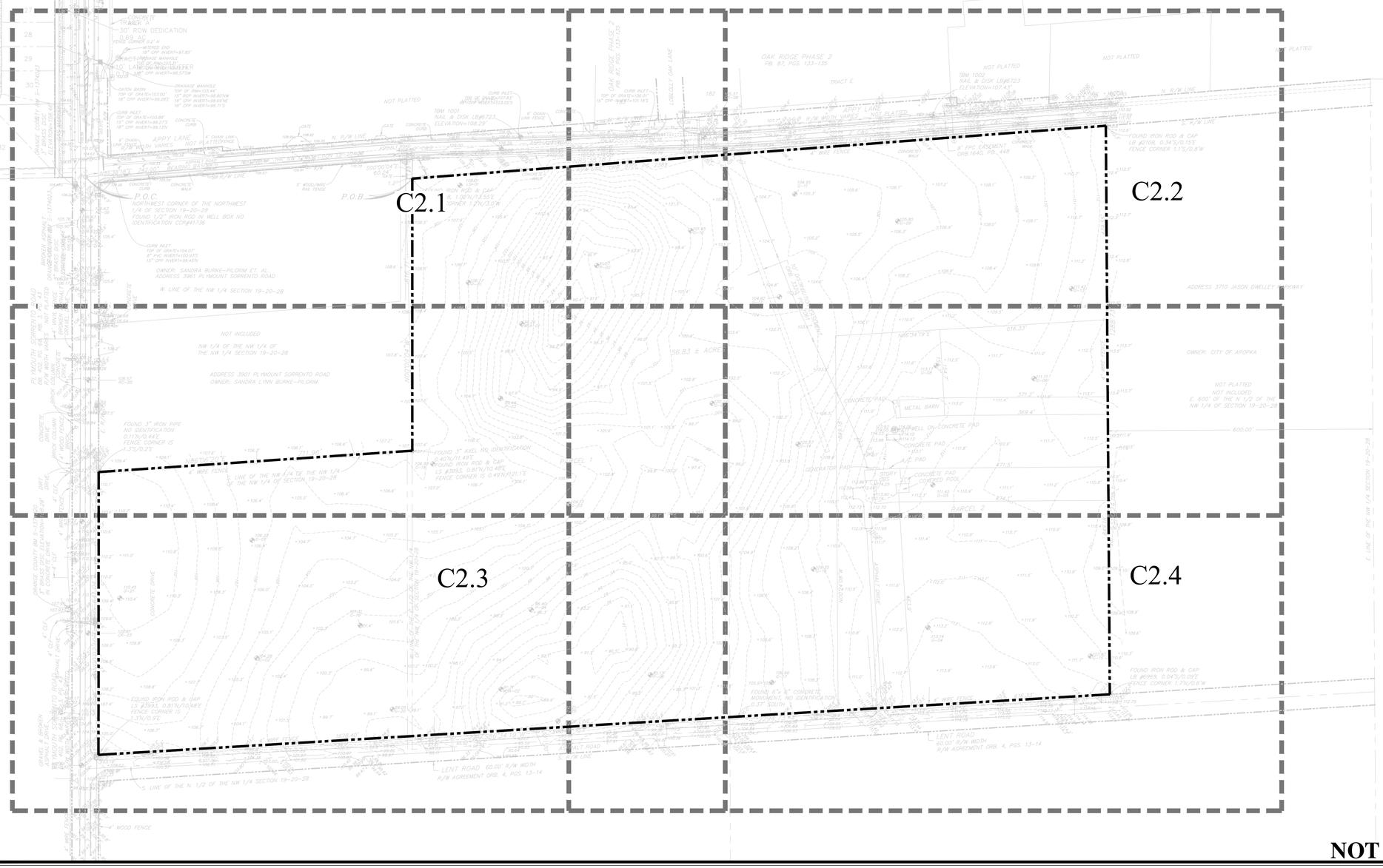
1. BEARINGS SHOWN HEREON ARE ASSUMED AND RELATIVE TO THE NORTH LINE OF THE NORTHWEST QUARTER OF SECTION 19, TOWNSHIP 20 SOUTH, RANGE 28 EAST, BEING NORTH 8538'18" EAST.
2. THE "LEGAL DESCRIPTION" HEREON AND THE LANDS SURVEYED ARE PARCELS 1 AND 2 AS PROVIDED IN THE COMMITMENT TO INSURE TITLE, COMMITMENT NO. 1088876-2, PREPARED BY OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY. THE ALSO DESCRIBED AS LEGAL DESCRIPTION WAS PREPARED BY THE SURVEYOR AT THE CLIENT'S REQUEST.
3. 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.
4. 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.
5. THIS SURVEY IS NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
6. UNLESS OTHERWISE NOTED OR SHOWN HEREON, APPARENT AND/OR VISIBLE, UNOBSTRUCTED, VISIBLE ABOVE GROUND IMPROVEMENTS WERE LOCATED. UNDERGROUND UTILITIES, FOUNDATIONS AND IMPROVEMENTS WERE NOT LOCATED, UNLESS SHOWN HEREON.
7. 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.
8. THE LANDS SHOWN HEREON LIE IN ZONE "X", DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, ACCORDING TO FLOOD INSURANCE RATE MAP (FIRM) COMMUNITY PANEL NO. 12018O0011OH, MAP NO. 12095C0110H, MAP REVISED SEPTEMBER 24, 2021.
   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.
9. THERE WAS NO VISUAL EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION, OR BUILDING ADDITIONS OBSERVED IN THE PROCESS OF CONDUCTING THE FIELD WITHIN THE SURVEYED LANDS.
10. WHILE CONDUCTING THE SURVEY, THERE WAS NO OBSERVED EVIDENCE OF WETLANDS WITHIN THE SURVEYED LANDS.
11. ADJOINING PARCEL OWNER AND RECORDING INFORMATION DELINEATED HEREON WAS OBTAINED FROM THE ORANGE COUNTY PROPERTY APPRAISER'S PUBLIC ACCESS SYSTEM.
12. THE SUBJECT PROPERTY IS ZONED RSF-1A. THE SURVEYOR WAS NOT PROVIDED A ZONING REPORT CONTAINING SETBACK, HEIGHT RESTRICTIONS, ETC. OR OTHER INFORMATION REGARDING ZONING RESTRICTIONS.
13. THE SUBJECT PROPERTY IS IMPROVED AND PARTIALLY WOODED.
14. THERE WAS NO VISUAL EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS OBSERVED IN THE PROCESS OF CONDUCTING THE FIELD WITHIN THE SURVEYED LANDS. THE SURVEYOR IS UNAWARE OF ANY PROPOSED CHANGES IN THE RIGHT-OF-WAY.
15. THE SUBJECT PROPERTY HAS ACCESS TO PUBLIC UTILITIES FROM THE PUBLIC STREETS ADJACENT TO THE SUBJECT PROPERTY.
16. THE SUBJECT PROPERTY ABUTS, WITHOUT GAPS GORES OR STRIPS, AND HAS VEHICULAR AND PEDESTRIAN INGRESS TO AND EGRESS FROM APPY LANE, PLYMOUTH-SORRENTO ROAD AND LENT ROAD, WHICH IS COMPLETED, DEDICATED AND ACCEPTED PUBLIC RIGHT OF WAY.
17. EXCEPT AS SHOWN ON THE SURVEY, THE SUBJECT PROPERTY DOES NOT APPEAR TO SERVE ANY ADJOINING PROPERTY FOR UTILITIES, DRAINAGE, STRUCTURAL SUPPORT OR INGRESS OR EGRESS.
18. THERE IS NO OBSERVED EVIDENCE OF THE SITE BEING USED AS A SOLID WASTE DUMP, SUMP OR SANITARY LANDFILL.
19. THE ELEVATIONS SHOWN HEREON ARE BASED ON THE ORANGE COUNTY ENGINEERING DEPARTMENT OF SURVEY VERTICAL DATUM, BENCHMARK S-1374023, ELEVATION 106.46' NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
20. THERE ARE SEVERAL FENCES INTERIOR TO THE SUBJECT PROPERTY BEING USED FOR LIVE STOCK THAT WERE NOT LOCATED.
21. PARCEL 1 AND PARCEL 2, WHERE THEY SHARE A COMMON LINE, ARE CONTIGUOUS WITH NO GAPS, GORES, HIATUS OR OVERLAPS.
22. WE HAVE EXAMINED THE FURNISHED COMMITMENT TO INSURE TITLE, COMMITMENT NO. 1088876-2, PREPARED BY OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY, EFFECTIVE DATE AUGUST 8, 2021. THOSE INSTRUMENTS INCLUDED IN SCHEDULE B-II, OF THE COMMITMENT HAVE BEEN EXAMINED AND ARE REFLECTED HEREON TO THE EXTENT THEY AFFECT THE LANDS SURVEYED.

   EXCEPTIONS AS THEY APPEAR IN THE TITLE COMMITMENT:

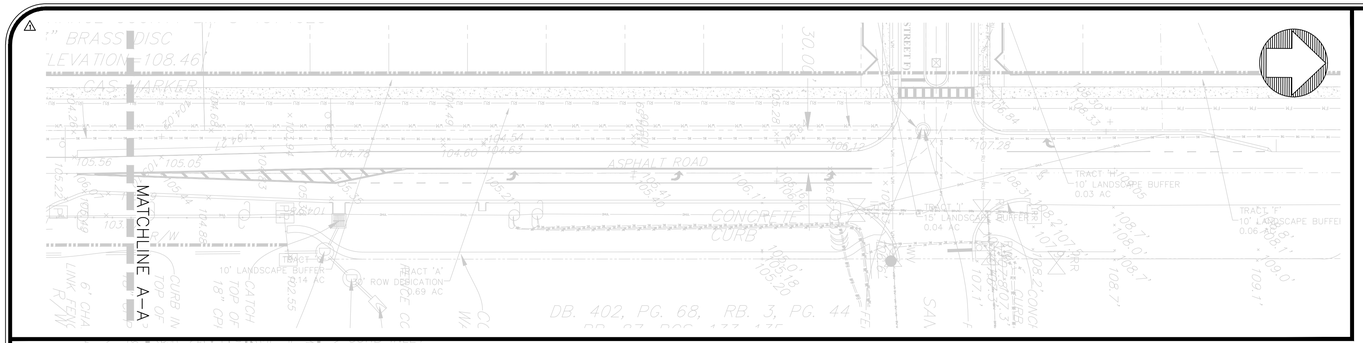
   6. EASEMENT IN FAVOR OF FLORIDA POWER CORPORATION RECORDED IN O.R. BOOK 1640, PAGE 448, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA. DOES NOT AFFECT THE SUBJECT PROPERTY BUT IS SHOWN HEREON.
   7. DISTRIBUTION EASEMENT IN FAVOR OF FLORIDA POWER CORPORATION RECORDED IN O.R. BOOK 3320, PAGE 1061, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA. AFFECTS THE SUBJECT PROPERTY AND IS SHOWN HEREON.

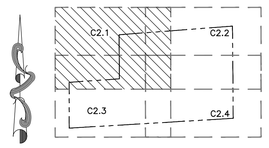
LEGEND

| | |
|---|---|
| P.O.C. | POINT OF COMMENCEMENT |
| P.O.B. | POINT OF BEGINNING |
| R/W | RIGHT-OF-WAY |
| PB | PLAT BOOK |
| RB | ROAD BOND |
| DB | DEED BOOK |
| PG.(S) | PAGE(S) |
| ORB | OFFOCIAL RECORDS BOOK |
| CCR | CERTIFIED CORNER RECORD |
| OHUL | OVERHEAD UTILITY LINE |
| C&G | CURB & GUTTER |
| CBS | CONCRETE BLOCK STRUCTURE |
| CI | CURB INLET |
| ×100.0' | SPOT ELEVATION |
| | POWER POLE |
| | GUY ANCHOR |
| | SIGN |
| RWV | RECLAIM WATER VALVE |
| GV | GAS VALVE |
| | TELEPHONE SERVICE |
| W | WELL |

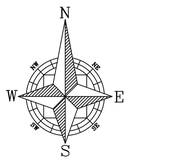

C2.1
C2.2
C2.3
C2.4
P.O.C. NORTHWEST CORNER OF THE NORTHWEST 1/4 OF SECTION 19-20-28. FOUND 1/2" IRON ROD IN WELL BOX NO IDENTIFICATION
P.O.B.
OWNER: SANDRA BURKE-PILGRIM ET. AL. ADDRESS 3961 PLYMOUNT SORRENTO ROAD
W. LINE OF THE NW 1/4 SECTION 19-20-28
NOT INCLUDED NW 1/4 OF THE NW 1/4 OF THE NW 1/4 SECTION 19-20-28
ADDRESS 3901 PLYMOUNT SORRENTO ROAD OWNER: SANDRA LYNN BURKE-PILGRIM
E. LINE OF THE NW 1/4 OF THE NW 1/4 OF THE NW 1/4 OF SECTION 19-20-28
S. LINE OF THE N. 1/2 OF THE NW 1/4 SECTION 19-20-28
LENT ROAD 60.00' R/W WIDTH R/W AGREEMENT ORB. 4, PGS. 13-14
OWNER: CITY OF APOPKA
NOT PLATTED NOT INCLUDED E. 600' OF THE N. 1/2 OF THE NW 1/4 OF SECTION 19-20-28
ADDRESS 3710 JASON D'KELLEY PARKWAY
OAK RIDGE PHASE 2 PB. 67, PGS. 133-135
APPY LANE NOT PLATTED
TRACT E
TRACT 'A' 30' ROW DEDICATION 0.69 AC
TRACT 'B' AMENITY PARK 1.02 AC
TRACT 'C' LANDSCAPE BUFFER 0.06 AC
TRACT 'D' LANDSCAPE BUFFER
TRACT 'N' LANDSCAPED MEDIAN 0.04 AC
TRACT 'O' LANDSCAPE BUFFER
TRACT 'P' LANDSCAPE BUFFER
TRACT 'Q' LANDSCAPE BUFFER
TRACT 'R' LANDSCAPE BUFFER
TRACT 'S' LANDSCAPE BUFFER
TRACT 'T' LANDSCAPE BUFFER
TRACT 'U' LANDSCAPE BUFFER
TRACT 'V' LANDSCAPE BUFFER
TRACT 'W' LANDSCAPE BUFFER
TRACT 'X' LANDSCAPE BUFFER
TRACT 'Y' LANDSCAPE BUFFER
TRACT 'Z' LANDSCAPE BUFFER
PARCEL 1 56.83 ± ACRES
PARCEL 2 2.74 ± ACRES
TBM 1001 NAIL & DISK LB#6723 ELEVATION=108.29'
TBM 1002 NAIL & DISK LB#6723 ELEVATION=107.43'
FOUND 3" AXEL NO IDENTIFICATION 0.40'N/1.49'E FOUND IRON ROD & CAP LS #3993, 0.81'N/0.48'E FENCE CORNER IS 0.49'S/31.1'E
FOUND 3" IRON PIPE NO IDENTIFICATION 0.17'N/0.44'E FENCE CORNER IS 1.3'S/0.2'E
EQUIND IRON ROD & CAP LS #3993, 0.81'N/0.96'E FENCE CORNER IS 1.3'N/0.9'E
FOUND IRON ROD & CAP LB #2108, 0.34'S/0.15'E FENCE CORNER 1.1'S/0.8'W
FOUND IRON ROD & CAP LB #6969, 0.04'S/0.09'E FENCE CORNER 1.7'N/0.6'W
FOUND 6"x 6" CONCRETE MONUMENT, NO IDENTIFICATION 0.17' SOUTH
METAL BARN
CONCRETE PAD
WELL ON CONCRETE PAD
CONCRETE POOL
GENERATOR PAD
2 STORY
SHED
BARCEL 2
N. R/W LINE
S. R/W LINE
APPY LANE 60' NORTH VARIES
PLYMOUTH SORRENTO ROAD (PUBLIC ROAD) 60' R/W WIDTH
CONCRETE DRIVE
CONCRETE WALK
6' CHAIN LINK FENCE
4' CHAIN LINK FENCE
5' WOOD/WIRE RAIL FENCE
4' WOOD FENCE
4' WIRE FENCE
BROKEN ASPHALT
GRAVEL
BRICK PAVERS
CURB INLET TOP OF GRATE=104.07' 8" PVC INVERT=100.93'S 15" CPP INVERT=99.45'S
CURB INLET TOP OF GRATE=103.66' 15" CPP INVERT=99.37'S 18" CPP INVERT=99.03'S
CATCH BASIN TOP OF GRATE=103.00' 18" CPP INVERT=99.28'E 18" CPP INVERT=99.16'S
DRAINAGE MANHOLE TOP OF RIM=103.44' 18" CPP INVERT=98.85'W 18" CPP INVERT=98.69'E 18" CPP INVERT=98.75'S
CURB INLET TOP OF GRATE=107.87 15" CPP INVERT=101.18'S
CURB INLET TOP OF GRATE=107.83 15" CPP INVERT=101.18'S
CURB INLET TOP OF GRATE=107.83 15" CPP INVERT=101.18'S
DRAINAGE MANHOLE TOP OF RIM=107.83 INVERT=93.83'E

P:_project drawings\ash-012 plymouth sorrento and tent road\Drawings\cad civil3d\Layouts\03 PSP\EXISTING CONDITIONS.dwg Modified:3/21/2022 By:osanchez




KEY MAP




GRAPHIC SCALE

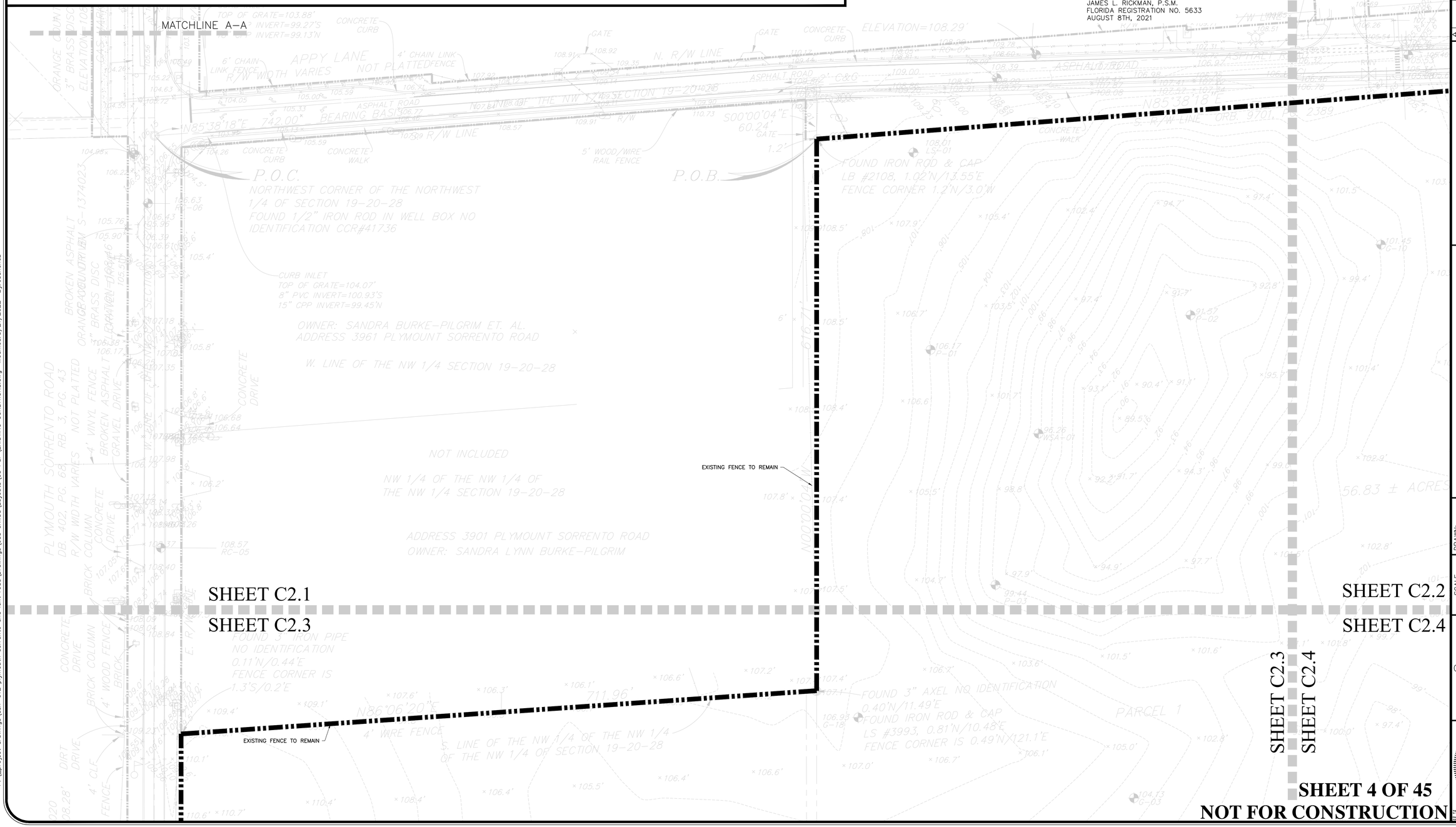
50 0 25 50 100

( IN FEET )
1 inch = 50 ft.

EXISTING CONDITIONS PLAN BASED ON SURVEY PROVIDED BY:

ALLEN & COMPANY, INC
JAMES L. RICKMAN, P.S.M.
FLORIDA REGISTRATION NO. 5633
AUGUST 8TH, 2021

SHEET C2.1
SHEET C2.2




**SHEET 4 OF 45**

**NOT FOR CONSTRUCTION**

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 1 | 03/14/2022 | CITY OF APOPKA COMMENTS DATED 03/14/2022 | ID |
| 2 | 01/24/2022 | CITY OF APOPKA COMMENTS DATED 01/24/2022 | ID |

CIVIL ENGINEERING | LAND PLANNING

**APPIAN ENGINEERING LLC.**

APPIANFL.COM • 407.960.5868

2231 Lee Road, Suite 27, Winter Park, Florida 32789

STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32574

EXISTING CONDITIONS – NORTHWEST

WILLOW RUN
CITY OF APOPKA, FLORIDA

| DRAWN: | DESIGNED: | CHECKED: | DATE: |
|---|---|---|---|
| I. DELAROSA | O. SANCHEZ | O. SANCHEZ | 4/5/22 |

| SCALE | PROJECT | SHEET |
|---|---|---|
| 1" = 50' | ASH-012 | C2.1 |

APPIAN ENGINEERING LLC

ISIDRO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
PROFESSIONAL ENGINEER
4/5/22

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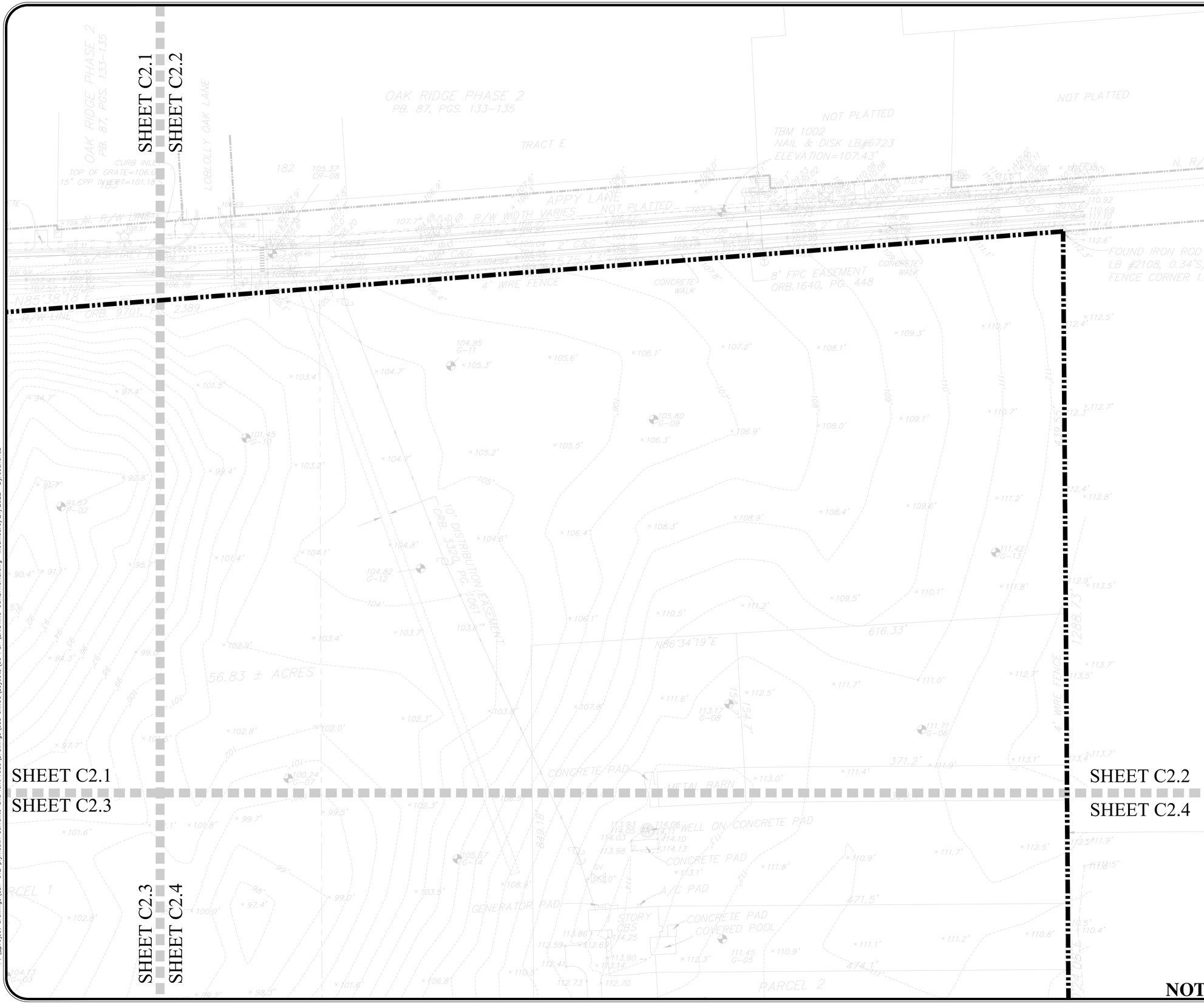
P:_project drawings\ash-012 plymouth sorrento and lent road\Drawings\cad civil3d\Layouts\03 PSP\EXISTING CONDITIONS.dwg Modified:3/21/2022 By:osanchez

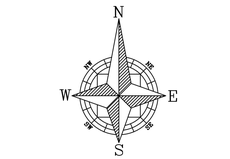
SHEET C2.1
SHEET C2.2

SHEET C2.1
SHEET C2.3

SHEET C2.2
SHEET C2.4

SHEET C2.3
SHEET C2.4



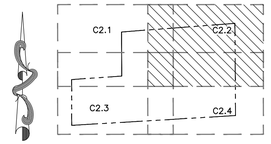

GRAPHIC SCALE

50 0 25 50 100

( IN FEET )
1 inch = 50 ft.

EXISTING CONDITIONS PLAN BASED ON SURVEY PROVIDED BY:

ALLEN & COMPANY, INC
JAMES L. RICKMAN, P.S.M.
FLORIDA REGISTRATION NO. 5633
AUGUST 8TH, 2021




KEY MAP

LEGEND
P.O.C.....POINT OF COMMENCEMENT
P.O.B.....POINT OF BEGINNING
R/W.....RIGHT-OF-WAY
PB.....PLAT BOOK
RB.....ROAD BOND
DB.....DEED BOOK
PG.(S).....PAGE(S)
ORB.....OFFOCIAL RECORDS BOOK
CCR.....CERTIFIED CORNER RECORD
OHUL.....OVERHEAD UTILITY LINE
C&G.....CURB & GUTTER
CBS.....CONCRETE BLOCK STRUCTURE
CI.....CURB INLET
×100.0'.....SPOT ELEVATION
.....POWER POLE
.....GUY ANCHOR
.....SIGN
RWV.....RECLAIM WATER VALVE
GV.....GAS VALVE
T.....TELEPHONE SERVICE
W.....WELL

| BY | DESCRIPTION | DATE | REV. |
|---|---|---|---|
| IO | CITY OF APOPKA COMMENTS DATED 03/14/2022 | 03/14/2022 | 1 |
| IO | CITY OF APOPKA COMMENTS DATED 01/24/2022 | 01/24/2022 | 2 |

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APPIAN ENGINEERING LLC.
APPIANFL.COM • 407.960.5868
2221 Lee Road, Suite 27, Winter Park, Florida 32789
STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32374

EXISTING CONDITIONS – NORTHEAST

WILLOW RUN
CITY OF APOPKA, FLORIDA

| DRAWN: | DESIGNED: | CHECKED: | DATE: |
|---|---|---|---|
| I. DELAROSA | O. SANCHEZ | O. SANCHEZ | 4/5/22 |

| SCALE | PROJECT | SHEET |
|---|---|---|
| 1" = 50' | ASH-012 | C2.2 |

APPIAN ENGINEERING

OSVALDO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
4/5/22
PROFESSIONAL ENGINEER

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**SHEET 5 OF 45**
**NOT FOR CONSTRUCTION**

P:_project drawings\ash-012 plymouth sorrento and lent road\Drawings\cad civil3d\Layouts\03 PSP\EXISTING CONDITIONS.dwg Modified: 3/21/2022 By: osanchez




KEY MAP




EXISTING CONDITIONS PLAN BASED ON SURVEY PROVIDED BY:

ALLEN & COMPANY, INC
JAMES L. RICKMAN, P.S.M.
FLORIDA REGISTRATION NO. 5633
AUGUST 8TH, 2021

LEGEND
P.O.C. ..... POINT OF COMMENCEMENT
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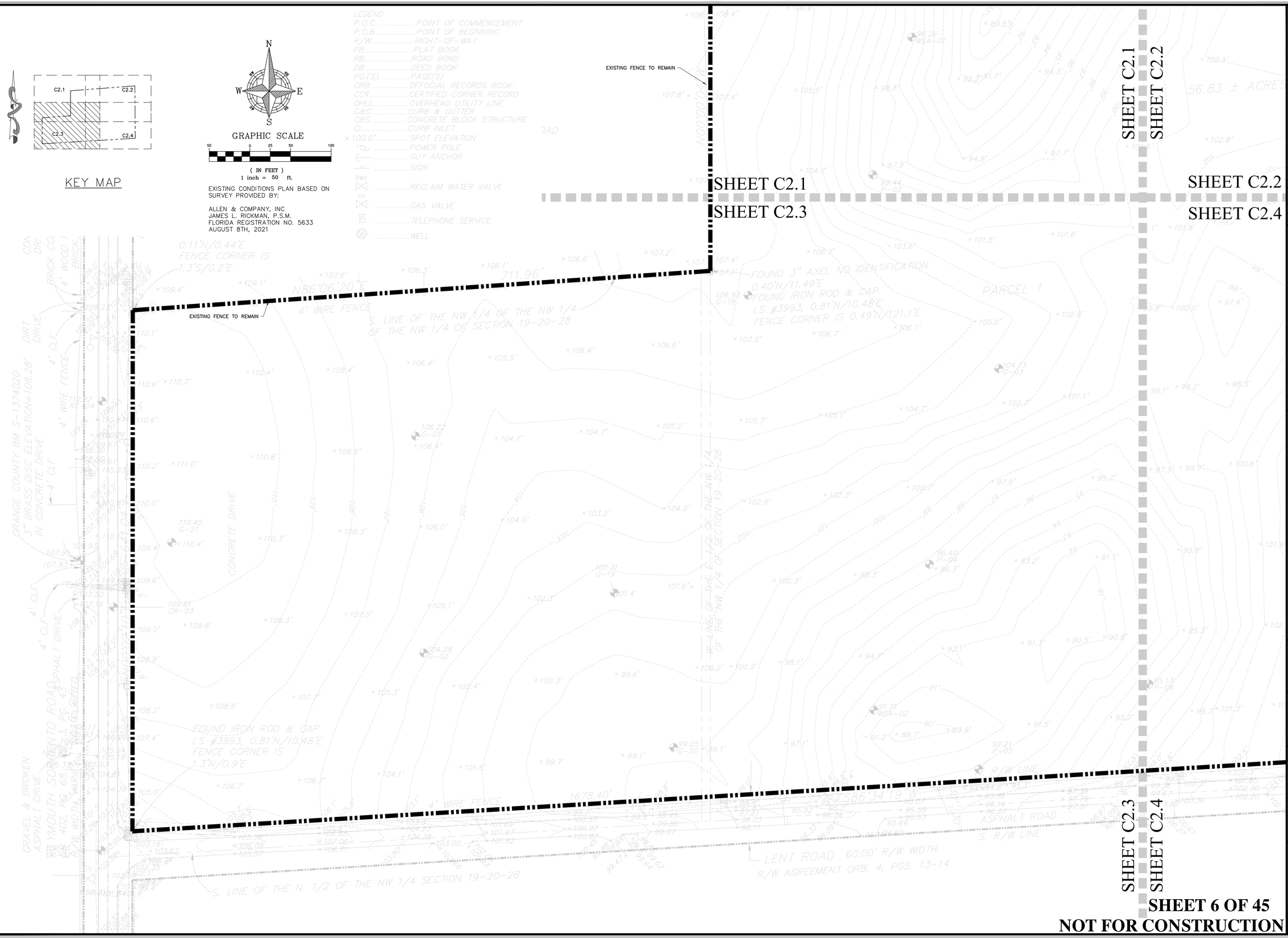


**SHEET 6 OF 45**

**NOT FOR CONSTRUCTION**

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 1 | 03/14/2022 | CITY OF APOPKA COMMENTS DATED 03/14/2022 | ID |
| 2 | 01/24/2022 | CITY OF APOPKA COMMENTS DATED 01/24/2022 | ID |

CIVIL ENGINEERING | LAND PLANNING

**APPIAN ENGINEERING LLC.**

APPIANFL.COM • 407.960.5868

2221 Lee Road, Suite 27, Winter Park, Florida 32789

STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32574

# EXISTING CONDITIONS – SOUTHWEST

## WILLOW RUN

CITY OF APOPKA, FLORIDA

| | | | |
|---|---|---|---|
| SCALE | 1" = 50' | DRAWN: I. DELAROSA | |
| PROJECT | ASH-012 | DESIGNED: O. SANCHEZ | |
| SHEET | C2.3 | CHECKED: O. SANCHEZ | |
| | | DATE: 4/5/22 | |

OSVALDO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
4/5/22
PROFESSIONAL ENGINEER

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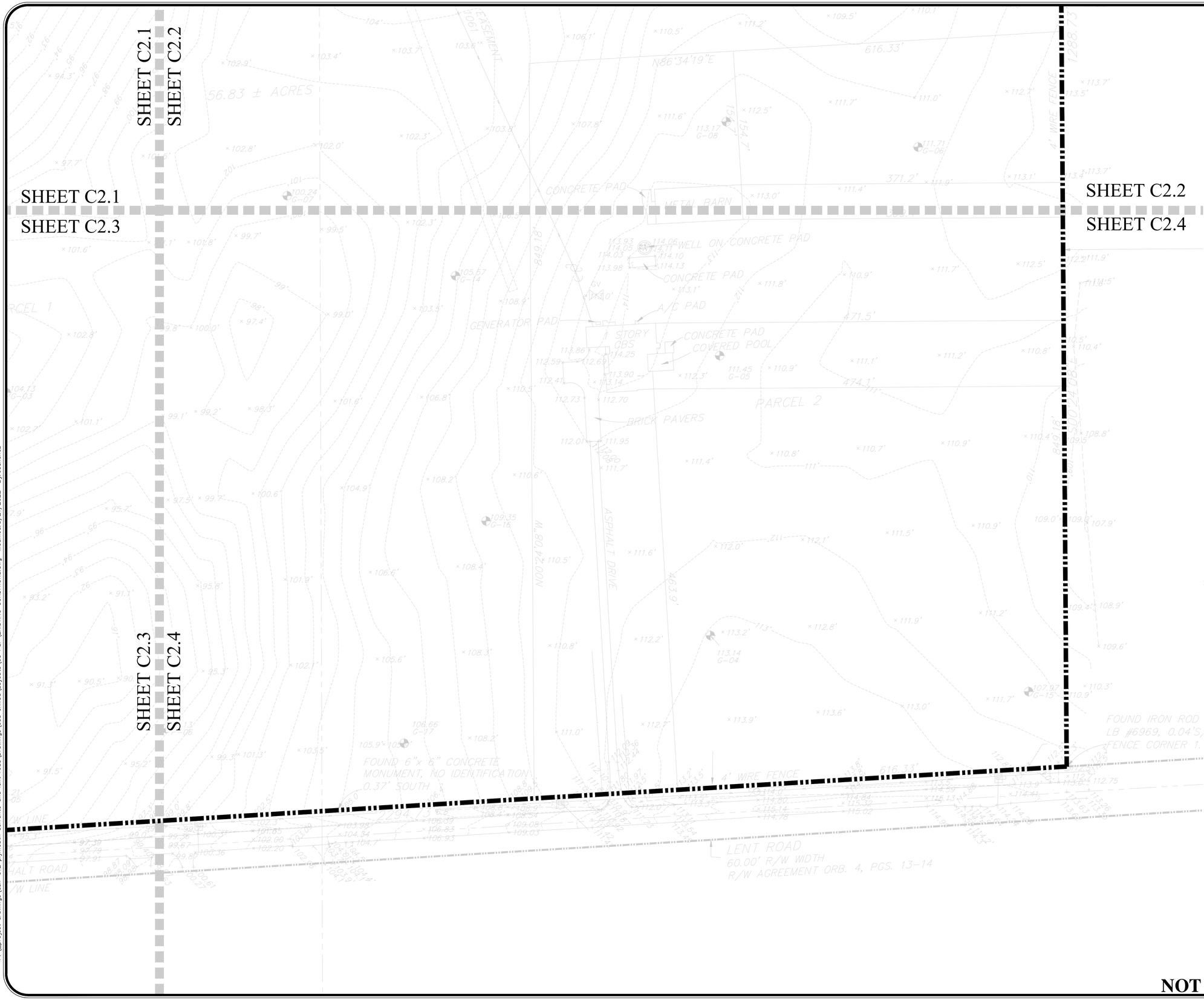
P:_project drawings\ash-012 plymouth sorrento and lent road\Drawings\cad civil3d\Layouts\03 PSP\EXISTING CONDITIONS.dwg Modified: 3/21/2022 By: osanchez

SHEET C2.1
SHEET C2.2
SHEET C2.3
SHEET C2.4




N
W E
S

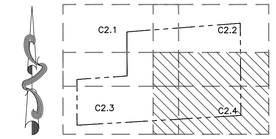
GRAPHIC SCALE

50 0 25 50 100

( IN FEET )
1 inch = 50 ft.

EXISTING CONDITIONS PLAN BASED ON SURVEY PROVIDED BY:

ALLEN & COMPANY, INC
JAMES L. RICKMAN, P.S.M.
FLORIDA REGISTRATION NO. 5633
AUGUST 8TH, 2021




KEY MAP

LEGEND
P.O.C.....POINT OF COMMENCEMENT
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| REV. | DATE | DESCRIPTION | BY |
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STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32574

EXISTING CONDITIONS – SOUTHEAST

WILLOW RUN
CITY OF APOPKA, FLORIDA

| | |
|---|---|
| SCALE | 1" = 50' |
| PROJECT | ASH-012 |
| SHEET | C2.4 |
| DRAWN: I. DELAROSA | |
| DESIGNED: O. SANCHEZ | |
| CHECKED: O. SANCHEZ | |
| DATE: 4/5/22 | |

OVIDIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
4/5/22
PROFESSIONAL ENGINEER

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**SHEET 7 OF 45**
**NOT FOR CONSTRUCTION**

| TRACT DATA | | | | | | |
|---|---|---|---|---|---|---|
| TRACT / LOT | DESCRIPTION | AREA (AC) | | AREA (SF) | | OWNERS |
| TRACT 'A' | 30' DEDICATED RIGHT-OF-WAY | 0.44 | AC | 19,234.88 | SF | COUNTY |
| TRACT 'B' | PUBLIC RIGHT-OF-WAY | 8.48 | AC | 369,576.03 | SF | CITY |
| TRACT 'C' | NORTH POND | 5.43 | AC | 236,727.19 | SF | HOA |
| TRACT 'D' | SOUTH POND | 3.66 | AC | 159,416.03 | SF | HOA |
| TRACT 'E' | 10' LANDSCAPE BUFFER | 0.03 | AC | 1,404.86 | SF | HOA |
| TRACT 'F' | 10' LANDSCAPE BUFFER | 0.14 | AC | 6,041.36 | SF | HOA |
| TRACT 'G' | 10' LANDSCAPE BUFFER | 0.52 | AC | 22,646.37 | SF | HOA |
| TRACT 'H' | LANDSCAPE BUFFER | 1.25 | AC | 54,312.94 | SF | HOA |
| TRACT 'I' | 15' LANDSCAPE BUFFER | 0.35 | AC | 15,335.77 | SF | HOA |
| TRACT 'J' | 15' LANDSCAPE BUFFER | 0.17 | AC | 7,396.58 | SF | HOA |
| TRACT 'K' | 15' LANDSCAPE BUFFER | 0.02 | AC | 763.76 | SF | HOA |
| TRACT 'L' | LANDSCAPE BUFFER | 0.05 | AC | 2,081.00 | SF | HOA |
| TRACT 'M' | POCKETPARK/DOG PARK/WALKING PATH | 1.77 | AC | 77,095.57 | SF | HOA |
| TRACT 'N' | LANDSCAPE ISLAND | 0.04 | AC | 1,760.56 | SF | HOA |
| TRACT 'O' | LANDSCAPE ISLAND | 0.02 | AC | 989.28 | SF | HOA |
| TRACT 'P' | OPEN SPACE | 0.06 | AC | 2,614.36 | SF | HOA |
| TRACT 'Q' | MAIL KIOSK | 0.07 | AC | 3,165.87 | SF | HOA |
| TRACT 'R' | LIFT STATION | 0.00 | AC | 1,739.49 | SF | CITY |
| TRACT 'S' | TRAFFIC ISLAND | 0.00 | AC | 86.59 | SF | HOA |

# SITE DATA

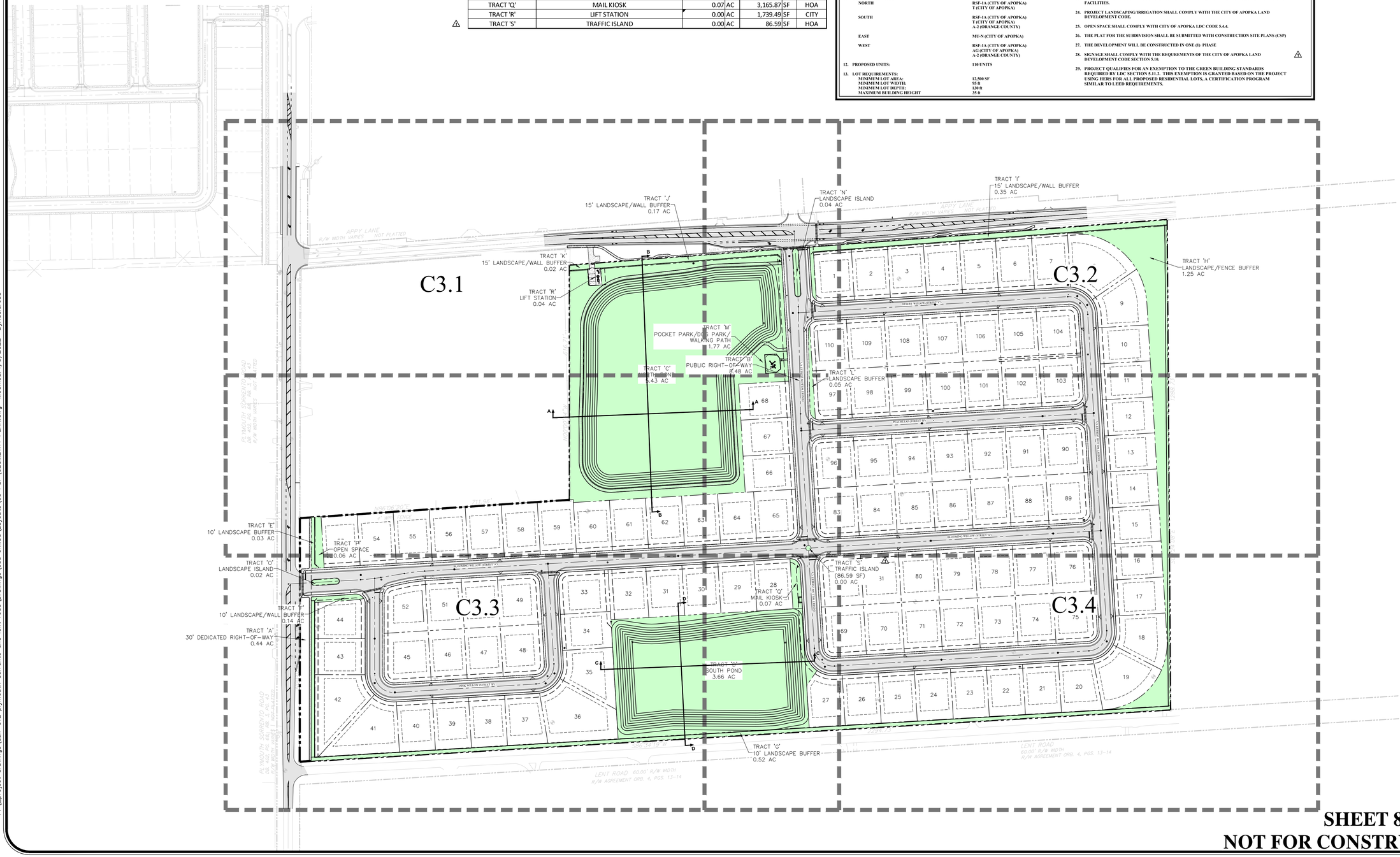
1. OCPA - PARCEL ID #'S: 19-20-28-0000-00-002 & 19-20-28-0000-00-050
2. PROPERTY LOCATION: 2601 LENT ROAD APOPKA, FL 32712
3. TOTAL PROPERTY AREA: 56.67 AC.
4. PLYMOUTH SORRENTO ROAD RIGHT-OF-WAY DEDICATION: 0.44 AC.
5. NET DEVELOPABLE AREA: 56.23 AC.
6. ALLOWABLE DENSITY: 2.00 AC.
7. PROPOSED DENSITY: 1.96 AC.
8. EXISTING FUTURE LAND USE: RVLS
9. EXISTING ZONING: RSF-1A
10. ADJACENT FUTURE LAND USE:
    - NORTH: RVLS (CITY OF APOPKA)
    - SOUTH: RVLS (CITY OF APOPKA) R (ORANGE COUNTY)
    - EAST: RVLS (CITY OF APOPKA)
    - WEST: RVLS (CITY OF APOPKA) RS (CITY OF APOPKA) R (ORANGE COUNTY)
11. ADJACENT ZONING:
    - NORTH: RSF-1A (CITY OF APOPKA) T (CITY OF APOPKA)
    - SOUTH: RSF-1A (CITY OF APOPKA) T (CITY OF APOPKA) A-2 (ORANGE COUNTY)
    - EAST: MU-N (CITY OF APOPKA)
    - WEST: RSF-1A (CITY OF APOPKA) AG (CITY OF APOPKA) A-2 (ORANGE COUNTY)
12. PROPOSED UNITS: 110 UNITS
13. LOT REQUIREMENTS:
    - MINIMUM LOT AREA: 12,500 SF
    - MINIMUM LOT WIDTH: 95 ft
    - MINIMUM LOT DEPTH: 130 ft
    - MAXIMUM BUILDING HEIGHT 35 ft
14. SINGLE-FAMILY DETACHED SETBACKS:
    - FRONT YARD: 25 ft
    - REAR YARD: 25 ft
    - SIDE YARD: 10 ft
    - CORNER YARD: 25 ft
15. REQUIRED OPEN SPACE: (56.23 AC.) x (20%) = 11.25 AC.
    *PER CITY OF APOPKA LAND DEVELOPMENT CODE 5.4.4.
16. PROPOSED OPEN SPACE:
    - LANDSCAPE BUFFERS: 2.52 AC.
    - LANDSCAPE ISLANDS: 0.07 AC.
    - MAIL KIOSK: 0.07 AC.
    - OPEN SPACE: 0.06 AC.
    - POCKET PARK/DOG PARK: 1.77 AC.
    - STORMWATER PONDS (75% MAX): 6.82 AC.
    - TOTAL: 11.31 AC.(20.1%)
17. WATER SERVICE PROVIDED BY CITY OF APOPKA.
18. RECLAIMED WATER SERVICE PROVIDED BY CITY OF APOPKA.
19. SANITARY SEWER SERVICE PROVIDED BY CITY OF APOPKA.
20. STORMWATER SYSTEM WILL BE PROVIDED AND DESIGNED TO MEET CITY OF APOPKA AND SJRWMD DRAINAGE REQUIREMENTS.
21. ALL UTILITY LINES SHALL BE DESIGNED TO MEET FDEP AND CITY OF APOPKA REQUIREMENTS.
22. UTILITY EASEMENTS DEDICATED TO CITY OF APOPKA UTILITY SHALL BE PROVIDED OVER ALL WATER AND SEWER MAINS LOCATED OUTSIDE THE PUBLIC RIGHT OF WAY.
23. AN HOA SHALL BE CREATED TO PROVIDE FOR THE MANAGEMENT OF ALL COMMON AREA AND FACILITIES.
24. PROJECT LANDSCAPING/IRRIGATION SHALL COMPLY WITH THE CITY OF APOPKA LAND DEVELOPMENT CODE.
25. OPEN SPACE SHALL COMPLY WITH CITY OF APOPKA LDC CODE 5.4.4.
26. THE PLAT FOR THE SUBDIVISION SHALL BE SUBMITTED WITH CONSTRUCTION SITE PLANS (CSP)
27. THE DEVELOPMENT WILL BE CONSTRUCTED IN ONE (1) PHASE
28. SIGNAGE SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF APOPKA LAND DEVELOPMENT CODE SECTION 5.10.
29. PROJECT QUALIFIES FOR AN EXEMPTION TO THE GREEN BUILDING STANDARDS REQUIRED BY LDC SECTION 5.11.2. THIS EXEMPTION IS GRANTED BASED ON THE PROJECT USING HERS FOR ALL PROPOSED RESIDENTIAL LOTS, A CERTIFICATION PROGRAM SIMILAR TO LEED REQUIREMENTS.

N / W / E / S

GRAPHIC SCALE

120 0 60 120 240

( IN FEET )
1 inch = 120 ft.




**SHEET 8 OF 45**

**NOT FOR CONSTRUCTION**

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 1 | 03/14/2022 | CITY OF APOPKA COMMENTS DATED 03/14/2022 | ID |
| 2 | 01/24/2022 | CITY OF APOPKA COMMENTS DATED 01/24/2022 | ID |

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STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32374

GEOMETRY PLAN – OVERALL

WILLOW RUN
CITY OF APOPKA, FLORIDA

DRAWN: I. DELAROSA
DESIGNED: O. SANCHEZ
CHECKED: O. SANCHEZ
DATE: 4/5/22

SCALE: 1" = 120'
PROJECT: ASH-012
SHEET: C3.0

OSCAR SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
4/5/22
PROFESSIONAL ENGINEER

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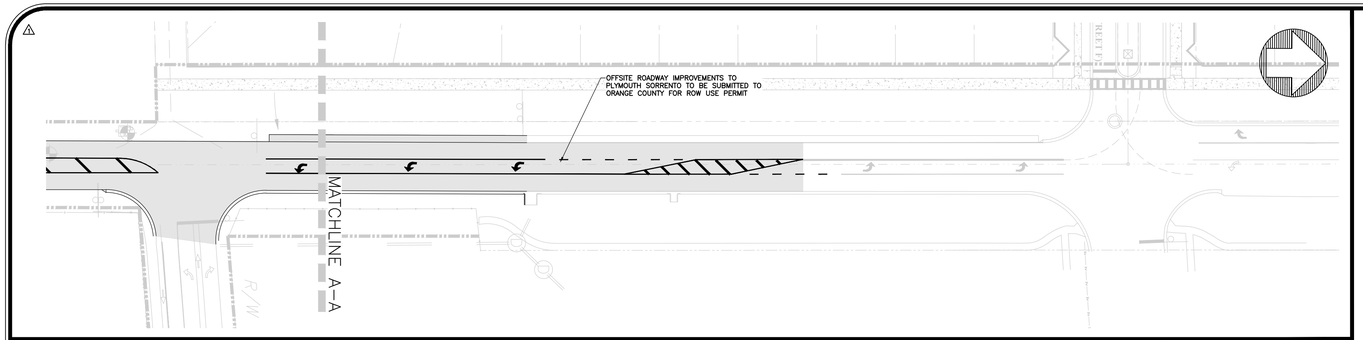
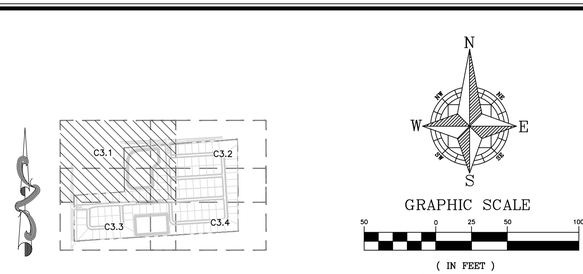
P:_project drawings\ash-012 plymouth sorrento and lent road\Drawings\cad civil3d\Layouts\03 PSP\GEOMETRY PLAN.dwg Modified: 4/5/2022 By: Idelarosa




KEY MAP




SHEET C3.1
SHEET C3.2

MATCHLINE A–A

APPY LANE
R/W WIDTH VARIES NOT PLATTED

PLYMOUTH SORRENTO ROAD
DB. 402, PG. 68, RB. 3, PG. 43
R/W WIDTH VARIES NOT PLATTED

OFFSITE ROADWAY IMPROVEMENTS TO PLYMOUTH SORRENTO TO BE SUBMITTED TO ORANGE COUNTY FOR ROW USE PERMIT

TRACT 'J'
15' LANDSCAPE/WALL BUFFER
0.17 AC

PLEASE REFER TO SHEET C3.7
FOR OFFSITE IMPROVEMENTS

TRACT 'N'
LANDSCAPE ISLA
0.04 AC

TRACT 'K'
15' LANDSCAPE/WALL BUFFER
0.02 AC

BEGIN RANCH STYLE SCREEN WALL

END RANCH STYLE SCREEN WALL

TRACT 'R'
LIFT STATION
0.04 AC

TRACT 'M'
POCKET PARK/DOG PARK/
WALKING PATH
1.77 AC

PLAYGROUND (BY OTHERS)

TRACT 'B'
PUBLIC RIGHT-OF-WAY
8.48 AC

TRACT 'C'
NORTH POND
5.43 AC

PLEASE REFER TO SHEET C3.5
FOR CROSS SECTION (TYP.)

8' MULCH PATH

10' UTILITY EASEMENT (TYP.)

DESERT WILLOW STREET SIDEWALK (TYP.)

TRACT 'E'
10' LANDSCAPE BUFFER
0.03 AC

5' SIDEWALK (TYP.)

TRACT 'P'
OPEN SPACE
0.06 AC

EXISTING FENCE TO REMAIN

4' WIRE FENCE

TYPE 'F' CURB (TYP.)

SHEET C3.1
SHEET C3.3

SHEET C3.2
SHEET C3.4

SHEET C3.3
SHEET C3.4

SHEET 9 OF 45

NOT FOR CONSTRUCTION

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|---|---|---|---|
| 1 | 03/14/2022 | CITY OF APOPKA COMMENTS DATED 03/14/2022 | ID |
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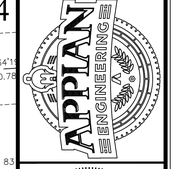
STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32574

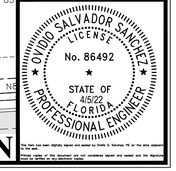

GEOMETRY PLAN – NORTHWEST

WILLOW RUN
CITY OF APOPKA, FLORIDA

| DRAWN: | DESIGNED: | CHECKED: | DATE: |
|---|---|---|---|
| I. DELAROSA | O. SANCHEZ | O. SANCHEZ | 4/5/22 |

| SCALE | PROJECT | SHEET |
|---|---|---|
| 1" = 50' | ASH-012 | C3.1 |





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P:_project drawings\ash-012 plymouth sorrento and lent road\Drawings\cad civil3d\Layouts\03 PSP\GEOMETRY PLAN.dwg Modified: 4/5/2022 By: idelarosa

SHEET C3.1
SHEET C3.2

SHEET C3.1
SHEET C3.3

SHEET C3.3
SHEET C3.4

SHEET C3.2
SHEET C3.4

N
W E
S

GRAPHIC SCALE

50 0 25 50 100

( IN FEET )
1 inch = 50 ft.

C3.1 C3.2 C3.3 C3.4

KEY MAP

PLEASE REFER TO SHEET C3.7 FOR OFFSITE IMPROVEMENTS

TRACT 'N' LANDSCAPE ISLAND 0.04 AC

TRACT 'I' 15' LANDSCAPE/WALL BUFFER 0.35 AC

APPY LANE
R/W WIDTH VARIES NOT PLATTED

N85°38'18"E 943.19'

N85°38'18"E 94.61'

N85°38'18"E 262.71'

S0°24'08"E 15.04'

BEGIN RANCH STYLE SCREEN WALL

END 6' WALL/FENCE

TRACT 'H' LANDSCAPE/FENCE BUFFER 1.25 AC

N85°38'18"E 25.04'

N3°25'41"W 24.64'

END RANCH STYLE SCREEN WALL

S49°21'42"E 13.63'

N87°43'52"E 129.66'

N3°25'41"W 150.67'

N1°13'36"W 15.94'

6' WALL/MAINTENANCE EASEMENT

END RANCH STYLE SCREEN WALL

10' UTILITY EASEMENT (TYP.)

DESERT WILLOW (STREET 'C')

5' SIDEWALK (TYP.)

TYPE 'F' CURB (TYP.)

N86°34'19"E 709.82'

C=70.71' R=50.00'

TRACT 'M' ET PARK/DOG PARK/ WALKING PATH 1.77 AC

PLAYGROUND (BY OTHERS)

TRACT 'B' PUBLIC RIGHT-OF-WAY 8.48 AC

8' MULCH PATH

TRACT 'L' LANDSCAPE BUFFER 0.05 AC

DESERT WILLOW (STREET 'B') 5' SIDEWALK (TYP.)

C=36.42' R=1000.00'

10' UTILITY EASEMENT (TYP.)

TYPE 'F' CURB (TYP.)

10' DRAINAGE EASEMENT

PEACHLEAF (STREET 'D') 5' SIDEWALK (TYP.)

TYPE 'F' CURB (TYP.)

N86°34'19"E 770.78'

10' UTILITY EASEMENT (TYP.)

DESERT WILLOW (STREET 'C')

BLOOMING WILLOW (STREET 'A') 5' SIDEWALK (TYP.)

TYPE 'F' CURB (TYP.)

MODIFIED TYPE 'A' CURB

10' UTILITY EASEMENT (TYP.)

SHEET 10 OF 45
NOT FOR CONSTRUCTION

| BY | DESCRIPTION | DATE | REV. |
|---|---|---|---|
| ID | CITY OF APOPKA COMMENTS DATED 03/14/2022 | 03/14/2022 | 2 |
| ID | CITY OF APOPKA COMMENTS DATED 01/24/2022 | 01/24/2022 | 1 |

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GEOMETRY PLAN – NORTHEAST

WILLOW RUN
CITY OF APOPKA, FLORIDA

| | |
|---|---|
| DRAWN: | I. DELAROSA |
| DESIGNED: | O. SANCHEZ |
| CHECKED: | O. SANCHEZ |
| DATE: | 4/5/22 |
| SCALE | 1" = 50' |
| PROJECT | ASH-012 |
| SHEET | C3.2 |

OLVIDIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
4/5/22
PROFESSIONAL ENGINEER

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Plotted: 4/5/2022 By: ldelarosa
P:_project drawings\ash-012 plymouth sorrento and lent road\Drawings\cad civil3d\Layouts\03 PSP\GEOMETRY PLAN.dwg Modified: 4/5/2022

P:_project drawings\ash-012 plymouth sorrento and lent road\Drawings\cad civil3d\Layouts\03 PSP\GEOMETRY PLAN.dwg Modified: 4/5/2022 By: ldelarosa

OFFSITE ROADWAY IMPROVEMENTS TO PLYMOUTH SORRENTO TO BE SUBMITTED TO ORANGE COUNTY FOR ROW USE PERMIT

KEY MAP

GRAPHIC SCALE
( IN FEET )
1 inch = 50 ft.

SHEET C3.1
SHEET C3.3

SHEET C2.1
SHEET C2.2

SHEET C3.2
SHEET C3.4

PLEASE REFER TO SHEET C3.5 FOR CROSS SECTION (TYP.)

EXISTING FENCE TO REMAIN

BEGIN RANCH STYLE SCREEN WALL

END RANCH STYLE SCREEN WALL

5' SIDEWALK (TYP.)

10' UTILITY EASEMENT (TYP.)

TRACT 'E'
10' LANDSCAPE BUFFER
0.03 AC

TRACT 'P'
OPEN SPACE
0.06 AC

TRACT 'O'
LANDSCAPE ISLAND
0.02 AC

TRACT 'F'
10' LANDSCAPE/WALL BUFFER
0.14 AC

TRACT 'A'
30' DEDICATED RIGHT-OF-WAY
0.44 AC

8' WALL/MAINTENANCE EASEMENT

BLOOMING WILLOW (STREET 'A')

TYPE 'F' CURB (TYP.)

MODIFIED TYPE 'A' CURB

PINK WILLOW (STREET 'B')

DESERT WILLOW (STREET 'C')

8' MULCH PATH

10' UTILITY

TRACT 'O'
MAIL KIOSK
0.07 AC

PROPOSED MAIL BOX CLUSTERS

20' DRAINAGE EASEMENT

TRACT 'D'
SOUTH POND
3.66 AC

CONTINUE 6' PVC/WOOD FENCE

BEGIN 6' PVC/WOOD FENCE

PLYMOUTH SORRENTO ROAD
DB. 402, PG. 68, RB. 3, PG 43
R/W WIDTH VARIES - NOT PLATTED

LENT ROAD 60.00' R/W WIDTH
R/W AGREEMENT ORB. 4, PGS. 13-14

SHEET C3.3
SHEET C3.4

**SHEET 11 OF 45**

**NOT FOR CONSTRUCTION**

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 1 | 03/14/2022 | CITY OF APOPKA, COMMENTS DATED 03/14/2022 | ID |
| 2 | 01/24/2022 | CITY OF APOPKA, COMMENTS DATED 01/24/2022 | ID |

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STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32574

GEOMETRY PLAN – SOUTHWEST

WILLOW RUN
CITY OF APOPKA, FLORIDA

| DRAWN: | DESIGNED: | CHECKED: | DATE: |
|---|---|---|---|
| I. DELAROSA | O. SANCHEZ | O. SANCHEZ | 4/5/22 |

| SCALE | PROJECT | SHEET |
|---|---|---|
| 1" = 50' | ASH-012 | C3.3 |

OVIDIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
4/5/22
PROFESSIONAL ENGINEER

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SHEET C3.1
SHEET C3.3
SHEET C3.2
SHEET C3.4
SHEET C3.3
SHEET C3.4

PEACHLEAF (STREET 'D')
BLOOMING WILLOW (STREET 'A')
DESERT WILLOW (STREET 'C')
LENT ROAD
60.00' R/W WIDTH
R/W AGREEMENT ORB. 4, PGS. 13–14

TYPE 'F' CURB (TYP.)
5' SIDEWALK (TYP.)
10' UTILITY EASEMENT (TYP.)
MODIFIED TYPE 'A' CURB
8' MULCH PATH
TRACT 'S' TRAFFIC ISLAND (86.59 SF) 0.00 AC
TRACT 'O' MAIL KIOSK 0.07 AC
PROPOSED MAIL BOX CLUSTERS
TRACT 'D' SOUTH POND 3.66 AC
TRACT 'G' 10' LANDSCAPE BUFFER 0.52 AC
CONTINUE 6' PVC/WOOD FENCE
BEGIN 6' WALL/FENCE
END 6' PVC/WOOD FENCE

GRAPHIC SCALE
50 0 25 50 100
( IN FEET )
1 inch = 50 ft.

KEY MAP

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 1 | 03/14/2022 | CITY OF APOPKA COMMENTS DATED 03/14/2022 | ID |
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GEOMETRY PLAN – SOUTHEAST
WILLOW RUN
CITY OF APOPKA, FLORIDA

DRAWN: I. DELAROSA
DESIGNED: O. SANCHEZ
CHECKED: O. SANCHEZ
DATE: 4/5/22
SCALE: 1" = 50'
PROJECT: ASH-012
SHEET: C3.4

OLVIDIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
4/5/22
PROFESSIONAL ENGINEER

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**SHEET 12 OF 45**
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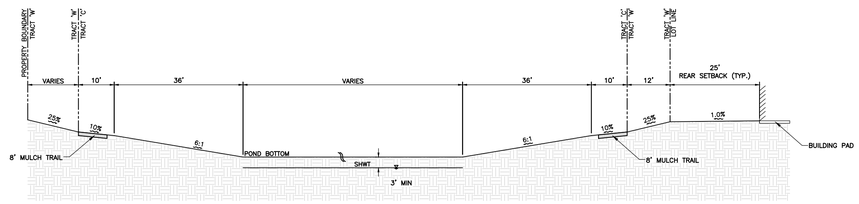
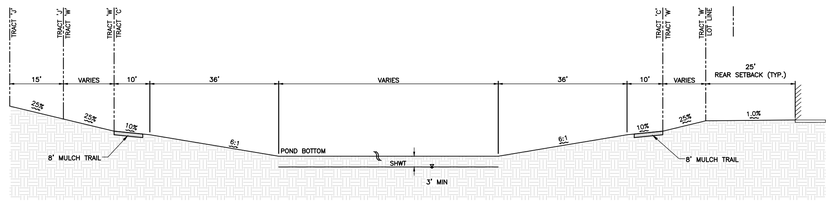


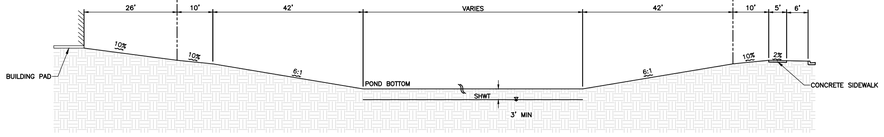

## CROSS SECTION A-A

N.T.S.



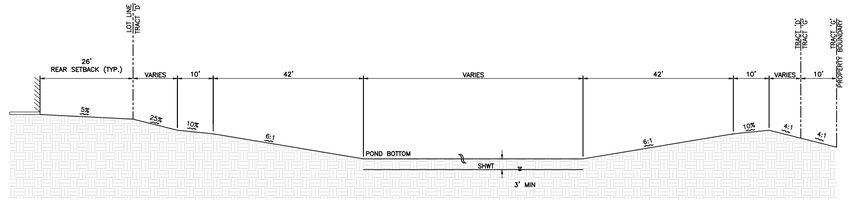

## CROSS SECTION B-B

N.T.S.



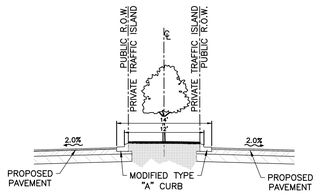

## CROSS SECTION C-C

N.T.S.



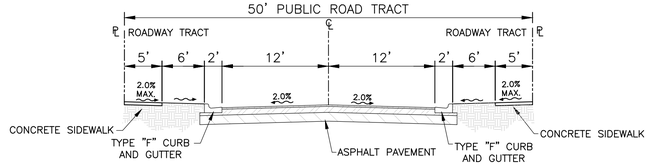

## CROSS SECTION D-D

N.T.S.



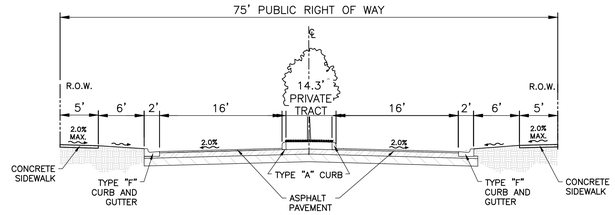

## TRAFFIC ISLAND CROSS SECTION

N.T.S.




## TYPICAL 50' ROW

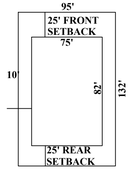
N.T.S.



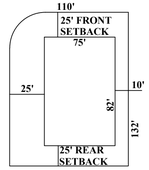

## ENTRANCE 75' ROW

N.T.S.

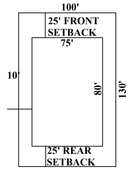
TYPICAL 95' LOT SIZE/PROPOSED BUILDING PAD



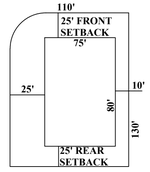

CORNER LOT SIZE/ BUILDING PAD FOR LOTS



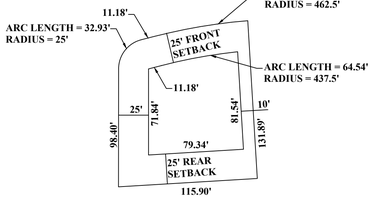

TYPICAL 100' LOT SIZE/PROPOSED BUILDING PAD




CORNER LOT SIZE/ BUILDING PAD FOR LOTS




LOT 52 SIZE/ PRPOSED BUILDING PAD




| Curve Table | | | |
|---|---|---|---|
| Curve # | Chord Length | Chord Direction | Radius |
| C1 | 35.36' | N41°34'19"E | 25.00' |
| C2 | 21.95' | S29°28'16"E | 25.00' |
| C3 | 16.24' | S74°28'16"E | 25.00' |
| C4 | 9.24' | S89°53'46"E | 75.00' |
| C5 | 65.68' | S60°23'46"E | 75.00' |
| C6 | 40.09' | S18°55'41"E | 75.00' |
| C7 | 39.61' | S11°53'06"W | 75.00' |
| C8 | 65.53' | S53°06'00"W | 75.00' |
| C9 | 9.90' | S82°47'13"W | 75.00' |
| C10 | 49.11' | N74°19'04"W | 75.00' |
| C11 | 65.50' | N29°19'04"W | 75.00' |
| C12 | 35.36' | N48°25'41"W | 25.00' |
| C13 | 35.36' | S41°34'19"W | 25.00' |
| C14 | 41.51' | S12°38'17"W | 75.00' |
| C15 | 65.57' | S54°37'26"W | 75.00' |
| C16 | 7.89' | S83°33'28"W | 75.00' |
| C17 | 58.05' | N70°39'40"W | 75.00' |
| C18 | 58.02' | N25°08'20"W | 75.00' |
| C19 | 3.17' | N1°10'26"W | 75.00' |
| C20 | 13.42' | N15°31'52"W | 25.00' |
| C21 | 26.96' | N63°43'23"W | 25.00' |
| C22 | 27.39' | S85°06'43"W | 537.50' |
| C23 | 35.36' | N48°25'41"W | 25.00' |

| Curve Table | | | |
|---|---|---|---|
| Curve # | Chord Length | Chord Direction | Radius |
| C24 | 35.36' | S41°34'19"W | 25.00' |
| C25 | 35.36' | S48°25'41"E | 25.00' |
| C26 | 35.36' | N41°34'19"E | 25.00' |
| C27 | 35.36' | S48°25'41"E | 25.00' |
| C28 | 35.36' | N41°34'19"E | 25.00' |
| C29 | 35.36' | N48°25'41"W | 25.00' |
| C30 | 35.36' | S41°34'19"W | 25.00' |
| C31 | 10.14' | N41°34'19"E | 7.17' |
| C32 | 10.22' | N48°53'42"W | 7.17' |
| C33 | 10.05' | S41°06'18"W | 7.17' |
| C34 | 10.14' | S48°25'41"E | 7.17' |
| C35 | 10.14' | N41°34'19"E | 7.17' |
| C36 | 10.14' | N48°25'41"W | 7.17' |
| C37 | 9.82' | S43°18'14"W | 7.17' |
| C38 | 10.44' | S46°41'46"E | 7.17' |
| C39 | 30.60' | S37°46'04"W | 25.00' |
| C40 | 36.41' | S46°41'46"E | 25.00' |
| C41 | 35.36' | N41°34'19"E | 25.00' |
| C42 | 35.36' | N48°25'41"W | 25.00' |
| C43 | 10.00' | S85°57'09"W | 462.50' |
| C44 | 79.28' | S80°24'58"W | 462.50' |
| C45 | 35.36' | N41°34'19"E | 25.00' |
| C46 | 35.36' | N48°25'41"W | 25.00' |

| Curve Table | | | |
|---|---|---|---|
| Curve # | Chord Length | Chord Direction | Radius |
| C47 | 22.84' | S59°23'10"W | 25.00' |
| C48 | 14.38' | S15°29'24"W | 25.00' |
| C49 | 26.10' | S32°41'16"E | 25.00' |
| C50 | 12.63' | S78°47'30"E | 25.00' |
| C51 | 26.51' | S50°45'04"E | 20.00' |
| C52 | 24.91' | S35°05'17"W | 20.00' |
| C53 | 40.37' | S59°52'08"W | 85.00' |
| C54 | 33.53' | S21°21'04"W | 40.00' |
| C55 | 28.17' | S41°20'19"W | 20.00' |
| C56 | 106.51' | N47°02'43"W | 73.00' |
| C57 | 171.33' | N42°04'50"E | 130.00' |
| C58 | 50.85' | S83°56'04"W | 552.50' |
| C59 | 0.40' | S85°41'50"W | 195.00' |
| C60 | 183.02' | N55°02'40"E | 175.00' |
| C61 | 81.54' | N10°02'40"E | 175.00' |
| C62 | 92.22' | N17°06'22"W | 195.00' |
| C63 | 205.11' | N62°30'51"W | 195.00' |
| C64 | 19.91' | S2°23'11"E | 547.50' |
| C65 | 10.50' | N86°34'19"E | 5.25' |
| C66 | 10.50' | N86°34'19"E | 5.25' |

**SHEET 13 OF 45**
**NOT FOR CONSTRUCTION**

| BY | DESCRIPTION | DATE | REV. |
|---|---|---|---|
| ID | CITY OF APOPKA COMMENTS DATED 03/14/2022 | 03/14/2022 | 2 |
| ID | CITY OF APOPKA COMMENTS DATED 01/24/2022 | 01/24/2022 | 1 |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CROSS SECTIONS

WILLOW RUN
CITY OF APOPKA, FLORIDA

| DRAWN: | DESIGNED: | CHECKED: | DATE: |
|---|---|---|---|
| I. DELAROSA | O. SANCHEZ | O. SANCHEZ | 4/5/22 |

| SCALE | PROJECT | SHEET |
|---|---|---|
| N.T.S. | ASH-012 | C3.5 |


OVIDIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
4/5/22
PROFESSIONAL ENGINEER



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P:_project drawings\ash-012 plymouth sorrento and lent road\Drawings\cad civil3d\Layouts\03 PSP\GEOMETRY PLAN.dwg Modified: 4/5/2022 By: idelarosa

| LOT DATA | | | | | |
|---|---|---|---|---|---|
| TRACT / LOT | DESCRIPTION | AREA | *BUILDABLE AREA | LOT FRONTAGE | OWNER |
| LOT 1 | - | 0.30 AC | 6,119 SF | 124.27 LF | PRIVATE |
| LOT 2 | - | 0.29 AC | 6,235 SF | 95.00 LF | PRIVATE |
| LOT 3 | - | 0.29 AC | 6,351 SF | 95.00 LF | PRIVATE |
| LOT 4 | - | 0.30 AC | 6,467 SF | 95.00 LF | PRIVATE |
| LOT 5 | - | 0.30 AC | 6,583 SF | 95.00 LF | PRIVATE |
| LOT 6 | - | 0.30 AC | 6,699 SF | 95.00 LF | PRIVATE |
| LOT 7 | - | 0.31 AC | 6,815 SF | 95.02 LF | PRIVATE |
| LOT 8 | - | 0.47 AC | 11,451 SF | 67.98 LF | PRIVATE |
| LOT 9 | - | 0.35 AC | 7,961 SF | 77.16 LF | PRIVATE |
| LOT 10 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 11 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 12 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 13 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 14 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 15 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 16 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 17 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 18 | - | 0.36 AC | 8,040 SF | 77.51 LF | PRIVATE |
| LOT 19 | - | 0.43 AC | 10,395 SF | 67.81 LF | PRIVATE |
| LOT 20 | - | 0.30 AC | 6,597 SF | 91.71 LF | PRIVATE |
| LOT 21 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 22 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 23 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 24 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 25 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 26 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 27 | - | 0.29 AC | 6,517 SF | 69.01 LF | PRIVATE |
| LOT 28 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 29 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 30 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 31 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 32 | - | 0.30 AC | 6,150 SF | 99.78 LF | PRIVATE |
| LOT 33 | - | 0.33 AC | 6,150 SF | 124.27 LF | PRIVATE |
| LOT 34 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 35 | - | 0.38 AC | 8,447 SF | 76.06 LF | PRIVATE |
| LOT 36 | - | 0.56 AC | 14,429 SF | 67.86 LF | PRIVATE |
| LOT 37 | - | 0.30 AC | 6,505 SF | 92.39 LF | PRIVATE |
| LOT 38 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 39 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 40 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 41 | - | 0.46 AC | 10,763 SF | 62.44 LF | PRIVATE |
| LOT 42 | - | 0.48 AC | 11,420 SF | 59.57 LF | PRIVATE |
| LOT 43 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 44 | - | 0.30 AC | 6,483 SF | 105.78 LF | PRIVATE |
| LOT 45 | - | 0.36 AC | 6,957 SF | 138.11 LF | PRIVATE |
| LOT 46 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 47 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 48 | - | 0.33 AC | 6,150 SF | 124.27 LF | PRIVATE |
| LOT 49 | - | 0.33 AC | 6,150 SF | 124.27 LF | PRIVATE |
| LOT 50 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 51 | - | 0.29 AC | 6,150 SF | 94.99 LF | PRIVATE |
| LOT 52 | - | 0.32 AC | 5,980 SF | 123.49 LF | PRIVATE |
| LOT 53 | - | 0.29 AC | 6,353 SF | 95.00 LF | PRIVATE |
| LOT 54 | - | 0.30 AC | 6,411 SF | 95.00 LF | PRIVATE |
| LOT 55 | - | 0.30 AC | 6,469 SF | 95.00 LF | PRIVATE |

| LOT DATA | | | | | |
|---|---|---|---|---|---|
| TRACT / LOT | DESCRIPTION | AREA | *BUILDABLE AREA | LOT FRONTAGE | OWNER |
| LOT 56 | - | 0.30 AC | 6,527 SF | 95.00 LF | PRIVATE |
| LOT 57 | - | 0.30 AC | 6,585 SF | 95.00 LF | PRIVATE |
| LOT 58 | - | 0.30 AC | 6,643 SF | 95.00 LF | PRIVATE |
| LOT 59 | - | 0.30 AC | 6,701 SF | 95.00 LF | PRIVATE |
| LOT 60 | - | 0.29 AC | 6,759 SF | 95.00 LF | PRIVATE |
| LOT 61 | - | 0.29 AC | 6,817 SF | 95.00 LF | PRIVATE |
| LOT 62 | - | 0.29 AC | 6,875 SF | 95.00 LF | PRIVATE |
| LOT 63 | - | 0.29 AC | 6,933 SF | 95.00 LF | PRIVATE |
| LOT 64 | - | 0.29 AC | 6,991 SF | 95.00 LF | PRIVATE |
| LOT 65 | - | 0.33 AC | 7,049 SF | 124.27 LF | PRIVATE |
| LOT 66 | - | 0.29 AC | 6,123 SF | 95.02 LF | PRIVATE |
| LOT 67 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 68 | - | 0.33 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 69 | - | 0.30 AC | 6,214 SF | 125.05 LF | PRIVATE |
| LOT 70 | - | 0.30 AC | 6,560 SF | 100.00 LF | PRIVATE |
| LOT 71 | - | 0.30 AC | 6,560 SF | 100.00 LF | PRIVATE |
| LOT 72 | - | 0.30 AC | 6,560 SF | 100.00 LF | PRIVATE |
| LOT 73 | - | 0.30 AC | 6,560 SF | 100.00 LF | PRIVATE |
| LOT 74 | - | 0.30 AC | 6,560 SF | 100.00 LF | PRIVATE |
| LOT 75 | - | 0.33 AC | 6,150 SF | 124.27 LF | PRIVATE |
| LOT 76 | - | 0.33 AC | 6,150 SF | 124.27 LF | PRIVATE |
| LOT 77 | - | 0.30 AC | 6,560 SF | 100.00 LF | PRIVATE |
| LOT 78 | - | 0.30 AC | 6,560 SF | 100.00 LF | PRIVATE |
| LOT 79 | - | 0.30 AC | 6,560 SF | 100.00 LF | PRIVATE |
| LOT 80 | - | 0.30 AC | 6,560 SF | 100.00 LF | PRIVATE |
| LOT 81 | - | 0.30 AC | 6,560 SF | 100.00 LF | PRIVATE |
| LOT 82 | - | 0.33 AC | 6,214 SF | 125.05 LF | PRIVATE |
| LOT 83 | - | 0.33 AC | 6,062 SF | 125.05 LF | PRIVATE |
| LOT 84 | - | 0.30 AC | 6,400 SF | 100.00 LF | PRIVATE |
| LOT 85 | - | 0.30 AC | 6,400 SF | 100.00 LF | PRIVATE |
| LOT 86 | - | 0.30 AC | 6,400 SF | 100.00 LF | PRIVATE |
| LOT 87 | - | 0.30 AC | 6,400 SF | 100.00 LF | PRIVATE |
| LOT 88 | - | 0.30 AC | 6,400 SF | 100.00 LF | PRIVATE |
| LOT 89 | - | 0.33 AC | 6,000 SF | 124.27 LF | PRIVATE |
| LOT 90 | - | 0.33 AC | 6,000 SF | 124.27 LF | PRIVATE |
| LOT 91 | - | 0.30 AC | 6,400 SF | 100.00 LF | PRIVATE |
| LOT 92 | - | 0.30 AC | 6,400 SF | 100.00 LF | PRIVATE |
| LOT 93 | - | 0.30 AC | 6,400 SF | 100.00 LF | PRIVATE |
| LOT 94 | - | 0.30 AC | 6,400 SF | 100.00 LF | PRIVATE |
| LOT 95 | - | 0.30 AC | 6,400 SF | 100.00 LF | PRIVATE |
| LOT 96 | - | 0.33 AC | 6,062 SF | 125.05 LF | PRIVATE |
| LOT 97 | - | 0.29 AC | 6,160 SF | 97.58 LF | PRIVATE |
| LOT 98 | - | 0.30 AC | 6,400 SF | 100.00 LF | PRIVATE |
| LOT 99 | - | 0.30 AC | 6,400 SF | 100.00 LF | PRIVATE |
| LOT 100 | - | 0.30 AC | 6,400 SF | 100.00 LF | PRIVATE |
| LOT 101 | - | 0.30 AC | 6,400 SF | 100.00 LF | PRIVATE |
| LOT 102 | - | 0.30 AC | 6,400 SF | 100.00 LF | PRIVATE |
| LOT 103 | - | 0.33 AC | 6,000 SF | 124.27 LF | PRIVATE |
| LOT 104 | - | 0.33 AC | 6,400 SF | 124.87 LF | PRIVATE |
| LOT 105 | - | 0.30 AC | 6,400 SF | 100.00 LF | PRIVATE |
| LOT 106 | - | 0.30 AC | 6,400 SF | 100.00 LF | PRIVATE |
| LOT 107 | - | 0.30 AC | 6,400 SF | 100.00 LF | PRIVATE |
| LOT 108 | - | 0.30 AC | 6,400 SF | 100.00 LF | PRIVATE |
| LOT 109 | - | 0.30 AC | 6,400 SF | 100.00 LF | PRIVATE |
| LOT 110 | - | 0.29 AC | 6,160 SF | 100.40 LF | PRIVATE |

**SHEET 14 OF 45**
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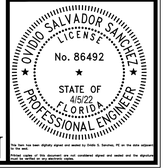
| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 3 | 05/14/2022 | CITY OF APOPKA COMMENTS DATED 03/14/2022 | ID |
| 2 | 01/24/2022 | CITY OF APOPKA COMMENTS DATED 01/24/2022 | ID |
| 1 | | | |

LOT DATA TABLE

WILLOW RUN
CITY OF APOPKA, FLORIDA

| | | | |
|---|---|---|---|
| DRAWN: I. DELAROSA | DESIGNED: O. SANCHEZ | CHECKED: O. SANCHEZ | DATE: 4/5/22 |
| SCALE: N.T.S. | PROJECT: ASH-012 | SHEET: C3.6 | |

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P:_project drawings\ash-012 plymouth sorrento and lent road\Drawings\cad civil3d\Layouts\03 PSP\APPY LANE OFFSITE IMPROVEMENTS.dwg Modified:4/5/2022 By:idelarosa

## ROADWAY NOTES

1. RIGHT SIDE WIDENING WITHIN APPY LANE HAS A POSTED SPEED OF 35 MPH

N
W E
S

GRAPHIC SCALE

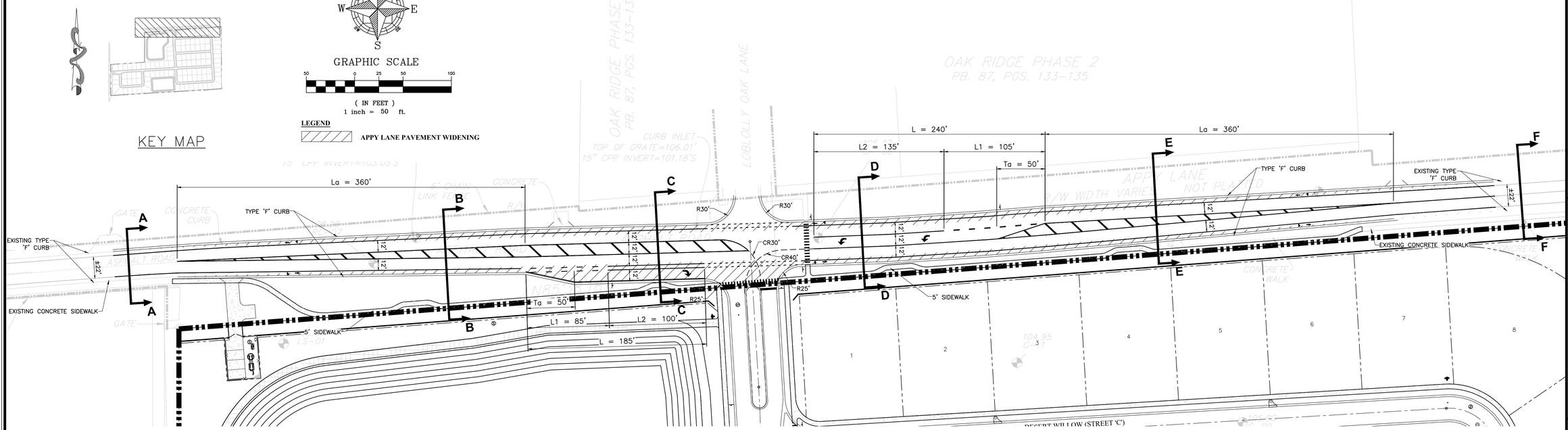
50 0 25 50 100

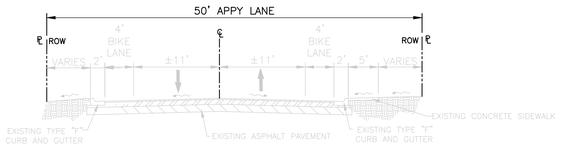
( IN FEET )
1 inch = 50 ft.

**LEGEND**

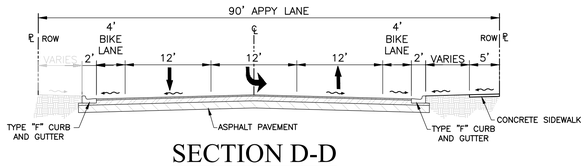
APPY LANE PAVEMENT WIDENING

KEY MAP




SECTION A-A
N.T.S.

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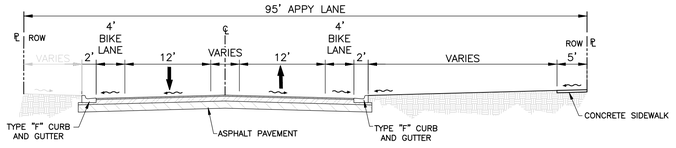
N.T.S.




SECTION B-B
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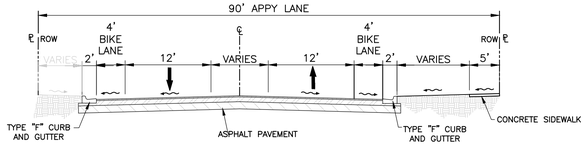


SECTION E-E
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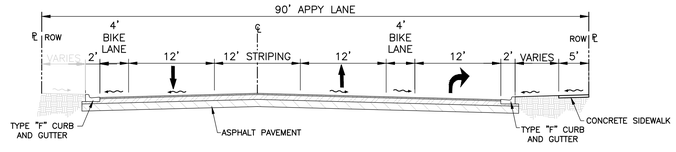
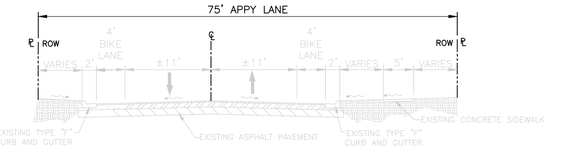



SECTION C-C
N.T.S.




SECTION F-F
N.T.S.

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 1 | 03/14/2022 | CITY OF APOPKA COMMENTS DATED 03/14/2022 | ID |
| 2 | 01/24/2022 | CITY OF APOPKA COMMENTS DATED 01/24/2022 | ID |

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STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32574

OFFSITE IMPROVEMENTS – APPY LANE

WILLOW RUN
CITY OF APOPKA, FLORIDA

| DRAWN: | DESIGNED: | CHECKED: | DATE: |
|---|---|---|---|
| I. DELAROSA | O. SANCHEZ | O. SANCHEZ | 4/5/22 |

| SCALE | PROJECT | SHEET |
|---|---|---|
| 1" = 50' | ASH-012 | C3.7 |

APPIAN ENGINEERING

GUIDO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
4/5/22
PROFESSIONAL ENGINEER

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**SHEET 15 OF 45**
**NOT FOR CONSTRUCTION**

## GENERAL UTILITY NOTES:

1. BACTERIOLOGICAL TESTS WITH CHLORINE RESIDUALS INDICATED (TAKEN ON TWO CONSECUTIVE DAYS) SHALL BE CONDUCTED AT EACH POTABLE WATER METER FOR EVERY BUILDING, AT EVERY WET–TAP CONNECTION AND EVERY LOCATION INDICATED WITHIN THESE PLANS. RESULTS OF THE BACTERIOLOGICAL TESTS SHALL BE PROVIDED TO THE ENGINEER OF RECORD IMMEDIATELY UPON COMPLETION. BACTERIOLOGICAL TEST RESULTS SHALL BE CONSIDERED UNACCEPTABLE IF THE TESTS WERE COMPLETED MORE THAN 30 DAYS BEFORE THE ENGINEER RECEIVED THE RESULTS.

2. ALL WATERMAINS SHALL BE INSTALLED A MINIMUM OF 36" BELOW FINISHED GRADE.

3. ALL WATERMAINS AND FIRELINES PIPES SHALL BE RESTRAINED VIA MECHANICAL JOINTS.

4. WATER MAIN PVC PIPES LESS THAN 4 INCHES MUST CONFORM TO THE SPECIFICATIONS OF ASTM 1785 (SCHEDULE 40, 80, 120) OR ASTM 2241 SDR21 AND MUST BEAR THE NSF LOGO ON EACH INSTALLED LENGTH.

5. UNDERGROUND MARKING TAPE FOR ALL SANITARY FORCEMAINS SHALL BE INSTALLED 4 TO 8 INCHES BELOW THE FINISHED GRADE SURFACE DIRECTLY OVER THE PIPELINE. MARKER TAPE SHALL BE MADE OF AN INERT POLYETHYLENE MATERIAL HAVING A MINIMUM THICKNESS OF 4 MILS AND BE COLOR CODED "SAFETY GREEN".

6. CONTRACTOR SHALL CONDUCT AND PROVIDE RESULTS IMMEDIATELY TO THE ENGINEER OF RECORD FOR PRESSURE AND LEAKAGE TESTS ON THE FORCE MAIN TRUNK LINE ONCE THE PRESSURE SEWER HAS BEEN INSTALLED AND PARTLY BACKFILLED. FINAL BACKFILL AND COMPACTION SHALL NOT COMMENCE UNTIL APPROVAL OF THE PRESSURE AND LEAKAGE TESTS HAS BEEN PROVIDED BY THE ENGINEER OF RECORD.

7. FOLLOWING SATISFACTORY PRESSURE TEST RESULTS, THE CONTRACTOR SHALL DISINFECT ALL SECTIONS OF THE WATER DISTRIBUTION SYSTEM, AND RECEIVE APPROVAL THEREOF FROM APPROPRIATE AGENCIES PRIOR TO PLACING THE SYSTEM INTO SERVICE.

8. FIRE HYDRANTS SHALL BE PLACED A MINIMUM OF 3 FT. AND A MAXIMUM OF 5 FT. FROM THE CURB OR PAVED ROAD SURFACE UNLESS OTHERWISE APPROVED. NO FENCE, TREE, POST, SHRUB, OR OTHER OBJECT WHICH COULD BLOCK THE HYDRANT FROM NORMAL VIEW OR OBSTRUCT THE HYDRANT'S USE SHALL BE LOCATED WITHIN FOUR (4) FEET OF THE HYDRANT. THE FOUR–AND–ONE–HALF INCH (4–1/2") LARGE VOLUME CONNECTION SHALL FACE THE NEAREST ROADWAY. THE CENTER OF THE STEAMER PORT SHALL BE 18 INCHES MINIMUM AND 24 INCHES MAXIMUM ABOVE FINISHED GRADE.

9. ALL FIRE HYDRANT LEADS SHALL HAVE AN INSIDE DIAMETER OF AT LEAST SIX INCHES AND INCLUDE AUXILARY VALVES.

10. WHEN NECESSARY, DEWATERING SHALL BE PROVIDED TO KEEP THE GROUNDWATER ELEVATION A MINIMUM OF 6 INCHES BELOW MAIN BEING LAID.

11. ALL UTILITIES SHALL BE LAID ON A FIRM FOUNDATION WITH ALL UNSUITABLE MATERIAL (MUCK, ROCK, COQUINA, ETC.) REMOVED AND REPLACED WITH CLEAN GRANULAR MATERIAL.

12. TRENCHES SHALL BE BACKFILLED WITH MATERIAL ACCEPTABLE TO CITY OF APOPKA WITH A MINIMUM COMPACTION OF 98% IN PAVED AREAS AND 95% IN UNPAVED AREAS IN ACCORDANCE WITH AASHTO T–180 MODIFIED PROCTOR TEST.

13. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT TRENCH COMPACTION TESTS BE PROVIDED AT POINTS 12 INCHES ABOVE THE PIPE AND AT 12 INCHES VERTICAL INTERVALS TO FINISH GRADE, AT A MINIMUM SPACING OF EVERY 300 FEET.

14. ALL WATER SERVICE ENDINGS SHALL BE MARKED WITH A 2" X 4" LUMBER (PRESSURE TREATED) EXTENDING 4 FEET ABOVE GRADE, WITH WATER SERVICES SECURED 12" MAXIMUM ABOVE THE GROUND.

15. ALL WATER VALVES, INCLUDING CONCRETE COLLAR (WITH DEBRIS CAP), SHALL BE ADJUSTED TO FINISHED GRADE AND THE VALVE BOX LID, PAINTED BLUE TO MAKE THEM PLAINLY VISIBLE.

16. UPON FINAL ACCEPTANCE OF NEW WATER SYSTEMS, WATER VALVES SHALL BE COMPLETELY OPENED BY PUBLIC UTILITIES PERSONNEL. AT NO TIME SHALL CONTRACTOR OPERATE ANY EXISTING VALVES WITHOUT CITY OF APOPKA INSPECTOR PRESENT.

17. ALL WATER MAINS SHALL BE NSF–APPROVED FOR POTABLE WATER USE.

18. PIPE USED IN WATER DISTRIBUTION SYSTEMS SHALL BE EITHER POLYVINYL CHLORIDE (PVC), OR DUCTILE IRON PIPE (DIP).

    (a) ALL PVC PIPE OF NOMINAL DIAMETER FOUR (4) INCHES THROUGH TWELVE (12) INCHES SHALL BE MANUFACTURED IN ACCORDANCE WITH AWWA STANDARD C900, LATEST EDITION. THE PVC PIPE SHALL HAVE A MINIMUM WORKING PRESSURE RATING OF 150PSI AND SHALL HAVE A DIMENSION RATIO (DR) OF 18.
    (b) ALL DUCTILE IRON PIPE SHALL BE MANUFACTURED IN ACCORDANCE WITH ANSI/AWWA A21.51/C151 AND HAVE A MINIMUM 350 PRESSURE CLASS RATING

19. PIPE USED IN GRAVITY SEWER CONSTRUCTION SHALL BE POLYVINYL CHLORIDE (PVC) OR DUCTILE IRON PIPE (DIP). WHERE REFERENCE IS MADE TO AN ASTM, ANSI, OR AASHTO DESIGNATION, IT SHALL BE THE LATEST REVISION.

    (a) PVC GRAVITY SEWER PIPE (4 INCH – 15 INCH), ASTM D3034, SDR 35 – UNIFORM MINIMUM "PIPE STIFFNESS" AT FIVE (5) PERCENT DEFLECTION SHALL BE 46PSI. THE JOINTS SHALL BE INTEGRAL BELL ELASTOMERIC GASKET JOINTS MANUFACTURED IN ACCORDANCE WITH ASTM D3212 AND ASTM F477. APPLICABLE UNI–BELL PLASTIC PIPE ASSOCIATION STANDARD IS UNI–B–4. ALL PVC PIPE SHALL BEAR THE NSF–DW SEAL AND BE GREEN IN OVERALL COLOR. THE MINIMUM STANDARD LENGTH OF PIPE SHALL BE THIRTEEN (13) FEET.
    (b) DUCTILE IRON PIPE SHALL CONFORM TO ANSI/AWWA A21.51/C151, CLASS THICKNESS DESIGNED PER ANSI/AWWA A21.50/C150, WITH MECHANICAL OR PUSH ON JOINTS. AN INTERIOR PROTECTIVE LINING OF COAL TAR EPOXY SHALL BE PROVIDED WITH A MINIMUM DRY THICKNESS OF 30 MILS. DUCTILE IRON GRAVITY SEWERS, WHERE REQUIRED BY CITY OF APOPKA BASED ON GEOTECHNICAL INVESTIGATIONS, SHALL BE WRAPPED WITH POLYETHYLENE FILM, AWWA C105. SEE APPENDIX C. THE MINIMUM STANDARD LENGTH OF PIPE SHALL BE EIGHTEEN (18) FEET.

## WATER SYSTEM TESTING REQUIREMENTS:

1. THE CONTRACTOR SHALL PERFORM HYDROSTATIC TESTING OF ALL WATER DISTRIBUTION SYSTEMS, AS SET FORTH IN THE FOLLOWING AND SHALL CONDUCT SAID TESTS IN THE PRESENCE OF REPRESENTATIVES FROM CITY OF APOPKA AND/OR OTHER AUTHORIZED AGENCIES. THE CONTRACTOR SHALL PROVIDE 48 HOURS ADVANCED NOTICE PRIOR TO TESTING OF THE WATER DISTRIBUTION SYSTEM.

2. ALL TESTING REQUIRED BY CITY OF APOPKA SHALL BE PAID FOR BY THE DEVELOPER / CONTRACTOR.

3. ALL PROPOSED WATER MAINS SHALL BE TESTED AND CLEARED FOR SERVICE IN ACCORDANCE WITH THE LATEST AWWA STANDARDS AND THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION REQUIREMENTS.

4. PRIOR TO HYDROSTATIC TESTING A PRELIMINARY FLUSHING SHALL BE REQUIRED THROUGH FULL DIAMETER FLUSHING OR SWABBING. PRELIMINARY FLUSHING/SWABBING SHALL BE PERFORMED PER AWWA C651 STANDARD – "DISINFECTING WATER MAINS". ALL PIPING SHALL BE THOROUGHLY CLEANED AND FLUSHED PRIOR TO TESTING TO CLEAR THE LINES OF ALL FOREIGN MATTER. WHILE THE PIPING IS BEING FILLED WITH WATER, CARE SHALL BE EXERCISED TO PERMIT THE ESCAPE OF AIR FROM EXTREMITIES ALONG THE TEST SECTION.

5. HYDROSTATIC TESTING SHALL CONSIST OF PRESSURE TEST AND LEAKAGE TEST. PIPING AND APPURTENANCES TO BE TESTED SHALL BE WITHIN SECTIONS BETWEEN VALVES, NOT EXCEEDING 2,000 FEET, UNLESS ALTERNATE METHODS HAVE RECEIVED PRIOR APPROVAL FROM CITY OF APOPKA. TESTING SHALL NOT PROCEED UNTIL CONCRETE THRUST BLOCKS ARE IN PLACE AND CURED, OR OTHER RESTRAINING DEVICES INSTALLED.

6. HYDROSTATIC TESTING SHALL BE PERFORMED AT 150 POUNDS PER SQUARE INCH PRESSURE, UNLESS OTHERWISE APPROVED BY CITY OF APOPKA, FOR A PERIOD OF NOT LESS THAN TWO (2) HOURS.

7. THE ALLOWABLE RATE OF LEAKAGE SHALL BE LESS THAN THE NUMBER OF GALLONS PER HOUR DETERMINED BY THE FOLLOWING FORMULA:

$$L = \frac{SD\sqrt{P}}{148{,}000}$$

WHERE:
L = ALLOWABLE LEAKAGE, IN GALLONS PER HOUR
S = LENGTH OF PIPE TESTED, IN FEET
D = NOMINAL DIAMETER OF PIPE, IN INCHES
P = AVERAGE TEST PRESSURE DURING THE LEAKAGE TEST, IN POUNDS PER SQUARE INCH (GAUGE)

8. SHOULD THE TEST FAIL, NECESSARY REPAIRS SHALL BE ACCOMPLISHED BY THE CONTRACTOR AND THE TEST REPEATED UNTIL WITHIN PASSING LIMITS. THE CONTRACTOR SHALL FURNISH ALL THE NECESSARY LABOR, PUMPS, GAUGES AND ALL OTHER ITEMS NECESSARY TO CONDUCT THE REQUIRED WATER DISTRIBUTION SYSTEM TESTING AND PERFORM NECESSARY REPAIRS.

## SEWER SYSTEM TESTING REQUIREMENTS:

1. THE CONTRACTOR SHALL PERFORM TESTING OF ALL SANITARY SEWAGE GRAVITY COLLECTION SYSTEMS, AS SET FORTH IN THE FOLLOWING AND SHALL CONDUCT SAID TESTS IN THE PRESENCE OF REPRESENTATIVES FROM CITY OF APOPKA AND/OR OTHER AUTHORIZED AGENCIES. THE CONTRACTOR SHALL PROVIDE 48 HOURS ADVANCED NOTICE PRIOR TO TESTING OF THE WASTEWATER DISTRIBUTION SYSTEM.

2. ALL TESTING REQUIRED BY CITY OF APOPKA SHALL BE PAID FOR BY THE DEVELOPER / CONTRACTOR.

3. GRAVITY MAINS SHALL BE INSPECTED WITH CCTV FOR ALIGNMENT, GRADE VARIATIONS, SEPARATED PIPES, LEAKS, DEFLECTION, CRACKED, BROKEN OR OTHERWISE DEFECTIVE PIPE TO ENSURE OVERALL PIPE INTEGRITY. THE APPROVED CCTV INSPECTION CONTRACTOR SHALL SUBMIT THE REPORT TO THE UTILITIES DEPARTMENT AS REQUIRED.

4. LEAKAGE TESTING FOR GRAVITY MAINS SHALL BE BY LOW–PRESSURE AIR TEST. LEAKAGE TESTING SHALL BE CONDUCTED IN ACCORDANCE WITH THE PROCEDURE FOR "RECOMMENDED PRACTICE FOR LOW PRESSURE AIR TESTING OF INSTALLED SEWER PIPE" AS ESTABLISHED BY THE UNI–BELL PVC PIPE ASSOCIATION.

5. EACH GRAVITY MAIN LEAKAGE TEST SECTION SHALL NOT EXCEED 400 FEET IN LENGTH AND SHALL BE TESTED BETWEEN ADJACENT MANHOLES.

**LOCATION OF PUBLIC WATER SYSYEM MAINS IN ACCORDANCE WITH F.A.C. RULE 62-555.314**

| Other Pipe | Horizontal Separation | Crossings (1) | Joint Spacing @ Crossings (Full Joint Centered) |
|---|---|---|---|
| **Storm Sewer, Stormwater Force Main, Reclaimed Water (2)** | Water Main<br>3 ft. minimum | Water Main<br>12 inches is the minimum, except for storm sewer, then 6 inches is the minimum and 12 inches is preferred | Alternate 3 ft. minimum<br>Water Main |
| **Vacuum Sanitary Sewer** | Water Main<br>10 ft. preferred<br>3 ft. minimum | Water Main<br>12 inches preferred<br>6 inches minimum | Alternate 3 ft. minimum<br>Water Main |
| **Gravity or Pressure Sanitary Sewer, Sanitary Sewer Force Main, Reclaimed Water (4)** | Water Main<br>10 ft. preferred<br>6 ft. minimum (3) | Water Main<br>12 inches is the minimum, except for gravity sewer, then 6 inches is the minimum and 12 inches is preferred | Alternate 6 ft. minimum<br>Water Main |
| **On-Site Sewage Treatment & Disposal System** | 10 ft. minimum | --- | --- |

(1) Water main should cross above other pipe. When water main must be below other pipe, the minimum separation is 12 inches.
(2) Reclaimed water regulated under Part III of Chapter 62-610, F.A.C.
(3) 3 ft. for gravity sanitary sewer where the bottom of the water main is laid at least 6 inches above the top of the gravity sanitary sewer.
(4) Reclaimed water not regulated under Part III of Chapter 62-610, F.A.C.

**Disclaimer – This document is provided for your convenience only. Please refer to F.A.C. Rule 62-555.314 for additional construction requirements.**

## FDEP UTILITY CONSTRUCTION NOTES:

1. NOTE TO THE UTILITY: PURSUANT TO 62–555.345; DO NOT PROVIDE WATER SERVICE TO THIS PROJECT (OTHER THAN FLUSHING/TESTING) UNTIL THE DEPARTMENT OF ENVIRONMENTAL PROTECTION HAS ISSUED A LETTER OF CLEARANCE OR THE UTILITY SHALL BE SUBJECT TO ENFORCEMENT ACTION.

2. THE PERMITTEE WILL PROMPTLY NOTIFY THE DEPARTMENT UPON SALE OR LEGAL TRANSFER OF THE PERMITTED FACILITY

3. ALL WATER MAINS AND APPURTENANCES SHALL BE DISINFECTED AND BACTERIOLOGICALLY EVALUATED IN ACCORDANCE WITH RULE 62–555.340, F.A.C.

4. ALL WATER MAIN PIPE, INCLUDING FITTINGS SHALL BE COLOR CODED OR MARKED USING BLUE AS A PREDOMINANT COLOR TO DIFFERENTIATE DRINKING WATER FROM RECLAIMED OR OTHER WATER. UNDERGROUND PLASTIC PIPE SHALL BE SOLID–WALL BLUE PIPE, SHALL HAVE A CO–EXTRUDED BLUE EXTERNAL SKIN, OR SHALL BE WHITE OR BLACK PIPE WITH BLUE STRIPES INCORPORATED INTO, OR APPLIED TO, THE PIPE WALL; AND UNDERGROUND METAL OR CONCRETE PIPE SHALL HAVE BLUE STRIPES APPLIED TO THE PIPE WALL. PIPE STRIPED DURING MANUFACTURING OF THE PIPE SHALL HAVE CONTINUOUS STRIPES THAT RUN PARALLEL TO THE AXIS OF THE PIPE, THAT ARE LOCATED AT NO GREATER THAN 90–DEGREE INTERVALS AROUND THE PIPE, AND THAT WILL REMAIN INTACT DURING AND AFTER INSTALLATION OF THE PIPE. IF TAPE OR PAINT IS USED TO STRIPE PIPE DURING INSTALLATION OF THE PIPE, THE TAPE OR PAINT SHALL BE APPLIED IN A CONTINUOUS LINE THAT RUNS PARALLEL TO THE AXIS OF THE PIPE AND THAT IS LOCATED ALONG THE TOP OF THE PIPE; FOR PIPES WITH AN INTERNAL DIAMETER OF 24 INCHES OR GREATER, TAPE OR PAINT SHALL BE APPLIED IN CONTINUOUS LINES ALONG EACH SIDE OF THE PIPE AS WELL AS ALONG THE TOP OF THE PIPE.

## FDEP UTILITY SEPARATION REQUIREMENTS

(62–555.314, F.A.C. LOCATION OF PUBLIC WATER SYSTEM MAINS)

FOR THE PURPOSE OF THIS SECTION, THE PHRASE "WATER MAINS" SHALL MEAN MAINS, INCLUDING TREATMENT PLANT PROCESS PIPING, CONVEYING EITHER RAW, PARTIALLY TREATED, OR FINISHED DRINKING WATER; FIRE HYDRANT LEADS; AND SERVICE LINES THAT ARE UNDER THE CONTROL OF A PUBLIC WATER SYSTEM AND THAT HAVE AN INSIDE DIAMETER OF THREE INCHES OR GREATER.

(1) HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON–SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS.

   (a) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THEOUTSIDE 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) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM–TYPE SANITARY SEWER.
   (c) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN 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 FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER.
   (d) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON–SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E–6.002, F.A.C.

(2) VERTICAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, AND RECLAIMED WATER PIPELINES.

   (a) NEW OR RELOCATED, UNDERGROUND 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 SIX INCHES, AND PREFERABLY 12 INCHES, ABOVE OR AT LEAST 12 INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
   (b) NEW OR RELOCATED, UNDERGROUND 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 12 INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE 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 FEET FROM ALL JOINTS IN VACUUM–TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62–610, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY– OR PRESSURE–TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62–610, F.A.C.

(3) SEPARATION BETWEEN WATER MAINS AND SANITARY OR STORM SEWER MANHOLES.

   (a) NO WATER MAIN SHALL PASS THROUGH, OR COME INTO CONTACT WITH, ANY PART OF A SANITARY SEWER MANHOLE.
   (b) EFFECTIVE AUGUST 28, 2003, WATER MAINS SHALL NOT BE CONSTRUCTED OR ALTERED TO PASS THROUGH, OR COME INTO CONTACT WITH, ANY PART OF A STORM SEWER MANHOLE OR INLET STRUCTURE.

(4) SEPARATION BETWEEN FIRE HYDRANT DRAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON–SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS. NEW OR RELOCATED FIRE HYDRANTS WITH UNDERGROUND DRAINS SHALL BE LOCATED SO THAT THE DRAINS ARE AT LEAST THREE FEET FROM 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.; AT LEAST THREE FEET, AND PREFERABLY TEN FEET, FROM ANY EXISTING OR PROPOSED VACUUM–TYPE SANITARY SEWER; AT LEAST SIX FEET, AND PREFERABLY TEN FEET, FROM 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.; AND AT LEAST TEN FEET FROM ANY EXISTING OR PROPOSED "ON–SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E–6.002, F.A.C.

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 3 | 03/14/2022 | CITY OF APOPKA COMMENTS DATED 03/14/2022 | ID |
| 2 | 01/24/2022 | CITY OF APOPKA COMMENTS DATED 01/24/2022 | ID |

CIVIL ENGINEERING | LAND PLANNING

**APPIAN ENGINEERING LLC.**

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2221 LEE ROAD, SUITE 27, WINTER PARK, FLORIDA 32789

STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32574

UTILITY NOTES

WILLOW RUN
CITY OF APOPKA, FLORIDA

DRAWN: I. DELAROSA
DESIGNED: O. SANCHEZ
CHECKED: O. SANCHEZ
DATE: 4/5/22

SCALE: N.T.S.
PROJECT: ASH–012
SHEET: C4.0

OVIDIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
PROFESSIONAL ENGINEER
4/5/22

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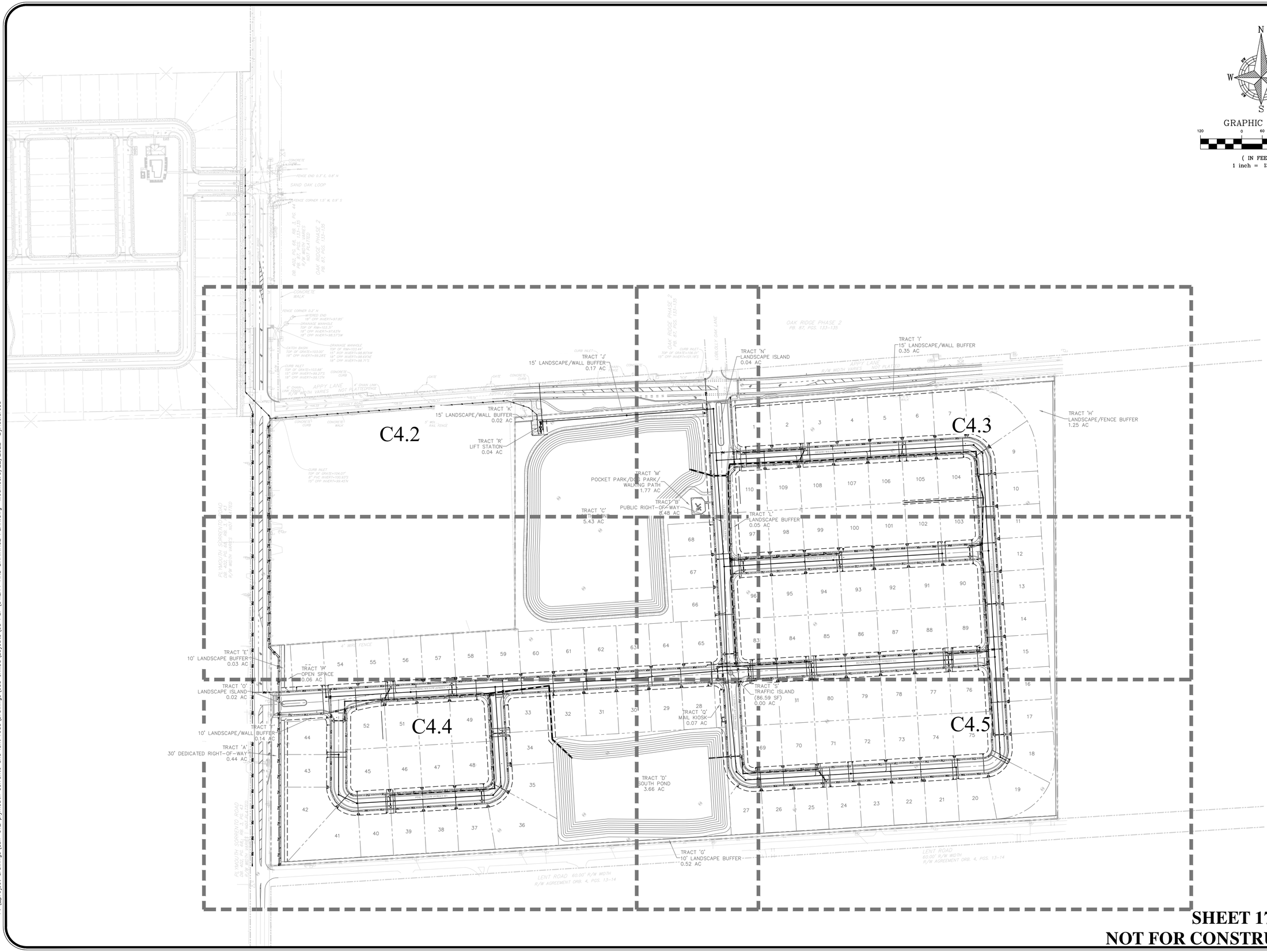
**SHEET 16 OF 45**
**NOT FOR CONSTRUCTION**

P:_project drawings\ash–012 plymouth sorrento and lent road\Drawings\cad civil3d\Layouts\03 PSP\UTILITY NOTES.dwg Modified:12/8/2021 By:osanchez

P:_project drawings\ash-012 plymouth sorrento and lent road\Drawings\cad civil3d\Layouts\03 PSP\UTILITY AND DRAINAGE PLAN.dwg Modified:3/22/2022 By:idelarosa




N

W E

S

GRAPHIC SCALE

120 0 60 120 240

( IN FEET )
1 inch = 120 ft.

| REV. | DATE | DESCRIPTION | BY |
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2231 Lee Road, Suite 27, Winter Park, Florida 32789

STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32574

# UTILITY AND DRAINAGE PLAN – OVERALL

WILLOW RUN
CITY OF APOPKA, FLORIDA

| | |
|---|---|
| DRAWN: | I. DELAROSA |
| DESIGNED: | O. SANCHEZ |
| CHECKED: | O. SANCHEZ |
| DATE: | 4/5/22 |
| SCALE | 1" = 120' |
| PROJECT | ASH-012 |
| SHEET | C4.1 |

OVIDIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
PROFESSIONAL ENGINEER
4/5/22

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**SHEET 17 OF 45**

**NOT FOR CONSTRUCTION**

P:_project drawings\ash-012 plymouth sorrento and tent road\Drawings\cad civil3d\Layouts\03 PSP\UTILITY AND DRAINAGE PLAN.dwg Modified: 3/22/2022 By: Idelarosa

PROPOSED 16" FORCE MAIN

PROPOSED PRIMARY POINT OF CONNECTION TO EXISTING 16" FORCE MAIN

EXISTING 16" FORCE MAIN

EXISTING 8" WATER MAIN

MATCHLINE A-A

CASEY PARKER

ASPHALT ROAD

CONCRETE CURB

DB. 402, PG. 68, RB. 3, PG. 44

SAN MH- 25

KEY MAP

C4.2 C4.3 C4.4 C4.5

N W E S

GRAPHIC SCALE

50 0 25 50 100

( IN FEET )
1 inch = 50 ft.

SHEET C4.2
SHEET C4.3

MATCHLINE A-A

TOP OF GRATE=103.88'
8" PVC INVERT=99.27'S
15" CPP INVERT=99.13'N

CONCRETE CURB

6' CHAIN LINK FENCE

APPY LANE
NOT PLATTED
R/W WIDTH VARIES

4' CHAIN LINK FENCE

GATE

EXISTING 6" RECLAIMED WATER MAIN

EXISTING 8" WATER MAIN

EXISTING 8" WATER MAIN

PROPOSED PRIMARY POINT OF CONNECTION TO EXISTING 8" WATER MAIN

PROPOSED FORCE MAIN

PROPOSED RECLAIMED WATER MAIN STUB OUT FOR FUTURE CONNECTIONS

PROPOSED 16" POTABLE WATER MAIN

CONCRETE WALK

5' WOOD/WIRE RAIL FENCE

TRACT 'K'
15' LANDSCAPE/WALL BUFFER
0.02 AC

TRACT 'R'
LIFT STATION
0.04 AC

SAN MH- 1

LIFT STATION

SAN MH- 2

SAN MH- 3

HYDRANT #1

D- 19

SAN MH- 4

M.E.S.- 1

C- 6

C- 5

C- 4

TRACT 'M'
POCKET PARK/DOG PARK/
WALKING PATH
1.77 AC

TRACT 'B'
PUBLIC RIGHT-OF-WAY
8.48 AC

TRACT 'C'
NORTH POND
5.43 AC

DESERT WILLOW (STREET 'C')

TRACT 'N'
LANDSCAPE ISLA
0.04 AC

PROPOSED POINT OF CONNECTION TO EXISTING 12" RECLAIMED WATER MAIN

PROPOSED POINT OF CONNECTION TO EXISTING 12" WATER MAIN

CURB INLET
TOP OF GRATE=104.07'
8" PVC INVERT=100.93'S
15" CPP INVERT=99.45'N

PLYMOUTH SORRENTO ROAD
DB. 402, PG. 68, RB. 3, PG. 43
R/W WIDTH VARIES NOT PLATTED

PROPOSED 16" FORCE MAIN

PROPOSED 20" RECLAIMED WATER MAIN

SHEET C4.2
SHEET C4.4

SHEET C4.3
SHEET C4.5

SHEET C4.4
SHEET C4.5

4' WIRE FENCE

TRACT 'E'
10' LANDSCAPE BUFFER
0.03 AC

TRACT 'P'
OPEN SPACE
0.06 AC

SINGLE RECLAIMED WATER SERVICE (TYP)

DOUBLE RECLAIMED WATER SERVICE (TYP)

SAN MH- 24

SAN MH- 23

A- 2

A- 4

PROPOSED WATER MAIN

SAN MH- 22

DOUBLE POTABLE WATER SERVICE (TYP)

SAN MH- 21

SAN MH- 18

C- 3

E- 2

E- 1

C- 2

C- 1

A- 11

A- 10

SHEET 18 OF 45

NOT FOR CONSTRUCTION

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|---|---|---|---|
| 1 | 03/14/2022 | CITY OF APOPKA COMMENTS DATED 03/14/2022 | ID |
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2221 Lee Road, Suite 27, Winter Park, Florida 32789

STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32574

UTILITY AND DRAINAGE PLAN - NORTHWEST

WILLOW RUN
CITY OF APOPKA, FLORIDA

DRAWN: I. DELAROSA
DESIGNED: O. SANCHEZ
CHECKED: O. SANCHEZ
DATE: 4/5/22

SCALE 1" = 50'
PROJECT ASH-012
SHEET C4.2

OVIDIO SALVADOR SANCHEZ LICENSE No. 86492 STATE OF FLORIDA PROFESSIONAL ENGINEER
4/5/22

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SHEET C4.2
SHEET C4.3

OAK RIDGE PHASE 2
PB. 87, PGS. 133–135

OAK RIDGE PHASE 2
PB. 87, PGS. 133–135

CURB INLET
TOP OF GRATE
15" CPP INVERT

APPY LANE
R/W WIDTH VARIES
NOT PLATTED

ASPHALT PAVEMENT

(CONCRETE)
WALK

PROPOSED POINT OF CONNECTION TO EXISTING 12" RECLAIMED WATER MAIN

PROPOSED POINT OF CONNECTION TO EXISTING 12" WATER MAIN

TRACT 'N'
LANDSCAPE ISLAND
0.04 AC

TRACT 'I'
15' LANDSCAPE/WALL BUFFER
0.35 AC

EXISTING 12" WATER MAIN

EXISTING 12" RECLAIMED WATER MAIN

HYDRANT #1

SAN MH– 2

SAN MH– 3

SAN MH– 4

SAN MH– 5

SAN MH– 6

SAN MH– 7

SAN MH– 8

SAN MH– 18

SAN MH– 19

SAN MH– 20

SAN MH– 16

SAN MH– 17

D– 19

D– 17

D– 15

D– 16

D– 18

D– 14

D– 12

D– 13

D– 11

D– 10

D– 9

D– 8

D–20

C– 6

C– 5

C– 4

C– 3

C– 2

C– 1

E– 4

E– 2

E– 1

E– 3

E– 6

E– 5

A– 17

A– 15

A– 11

A– 13

A– 10

A– 16

YD–1

YD–2

M.E.S.– 1

10' UTILITY EASEMENT (TYP)

SINGLE RECLAIMED WATER SERVICE (TYP)

DOUBLE RECLAIMED WATER SERVICE (TYP)

PROPOSED WATER MAIN

PROPOSED RECLAIMED WATER MAIN

DOUBLE SANITARY SEWER LATERAL (TYP)

SINGLE SANITARY SEWER LATERAL (TYP)

DOUBLE POTABLE WATER SERVICE (TYP)

SINGLE POTABLE WATER SERVICE (TYP)

DOUBLE RECLAIMED WATER SERVICE (TYP)

10' DRAINAGE EASEMENT

HYDRANT #2

HYDRANT #3

HYDRANT #4

TRACT 'H'
LANDSCAPE/FENCE BUFFER
1.25 AC

TRACT 'M'
PET PARK/DOG PARK/
WALKING PATH
1.77 AC

TRACT 'B'
PUBLIC RIGHT–OF–WAY
8.48 AC

TRACT 'L'
LANDSCAPE BUFFER
0.05 AC

DESERT WILLOW (STREET 'C')

DESERT WILLOW (STREET 'C')

DESERT WILLOW (STREET 'C')

PEACHLEAF (STREET 'D')

BLOOMING WILLOW (STREET 'A')

SHEET C4.2
SHEET C4.4

SHEET C4.4
SHEET C4.5

SHEET C4.3
SHEET C4.5

N
W
E
S

GRAPHIC SCALE

50 0 25 50 100

( IN FEET )
1 inch = 50 ft.

C4.2 C4.3 C4.4 C4.5

KEY MAP

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 1 | 03/14/2022 | CITY OF APOPKA COMMENTS DATED 03/14/2022 | ID |
| 2 | 01/24/2022 | CITY OF APOPKA COMMENTS DATED 01/24/2022 | ID |

CIVIL ENGINEERING I LAND PLANNING

**APPIAN ENGINEERING LLC.**

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STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32574

# UTILITY AND DRAINAGE PLAN – NORTHEAST

WILLOW RUN
CITY OF APOPKA, FLORIDA

| | | | |
|---|---|---|---|
| DRAWN: I. DELAROSA | DESIGNED: O. SANCHEZ | CHECKED: O. SANCHEZ | DATE: 4/5/22 |
| SCALE: 1" = 50' | PROJECT: ASH–012 | SHEET: C4.3 | |

OVIDIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
4/5/22
PROFESSIONAL ENGINEER

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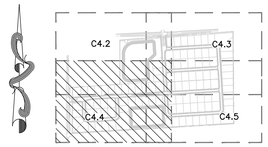
**SHEET 19 OF 45**
**NOT FOR CONSTRUCTION**

P:_project drawings\ash–012 plymouth sorrento and lent road\Drawings\cad civil3d\Layouts\03 PSP\UTILITY AND DRAINAGE PLAN.dwg Modified:3/22/2022 By:ldelarosa

P:_project drawings\ash-012 plymouth sorrento and lent road\Drawings\cad civil3d\Layouts\03 PSP\UTILITY AND DRAINAGE PLAN.dwg Modified: 3/22/2022 By: idelarosa




KEY MAP

GRAPHIC SCALE

50 0 25 50 100

( IN FEET )
1 inch = 50 ft.

SHEET C4.2
SHEET C4.3
SHEET C4.4
SHEET C4.5

5.43 AC

4' WIRE FENCE

TRACT 'E'
10' LANDSCAPE BUFFER
0.03 AC

TRACT 'P'
OPEN SPACE
0.06 AC

TRACT 'O'
LANDSCAPE ISLAND
0.02 AC

TRACT 'F'
10' LANDSCAPE/WALL BUFFER
0.14 AC

TRACT 'A'
30' DEDICATED RIGHT-OF-WAY
0.44 AC

BLOOMING WILLOW (STREET 'A')

PINK WILLOW (STREET 'B')

DESERT WILLOW (STREET 'C')

TRACT 'D'
SOUTH POND
3.66 AC

TRACT 'Q'
MAIL KIOSK
0.07 AC

SINGLE RECLAIMED WATER SERVICE (TYP)
DOUBLE RECLAIMED WATER SERVICE (TYP)
PROPOSED WATER MAIN
DOUBLE POTABLE WATER SERVICE (TYP)
SINGLE SANITARY SEWER LATERAL (TYP)
PROPOSED RECLAIMED WATER MAIN
DOUBLE SANITARY SEWER LATERAL (TYP)
10' UTILITY EASEMENT (TYP)
20' DRAINAGE EASEMENT
HYDRANT #6
HYDRANT #7
HYDRANT #8
SAN MH- 18
SAN MH- 21
SAN MH- 22
SAN MH- 23
SAN MH- 24
SAN MH- 25
SAN MH- 26
SAN MH- 27
SAN MH- 28
SAN MH- 29
M.E.S.- 2
M.E.S.- 3
DOUBLE RECLAIMED WATER SERVICE (TYP)
SINGLE RECLAIMED WATER SERVICE (TYP)
PROPOSED 16" POTABLE WATER MAIN
PROPOSED 20" RECLAIMED WATER MAIN
PROPOSED 16" FORCE MAIN
PROPOSED FORCE MAIN STUB OUT FOR FUTURE CONNECTIONS
PROPOSED RECLAIMED WATER MAIN STUB OUT FOR FUTURE CONNECTIONS
PROPOSED WATER MAIN STUB OUT FOR FUTURE CONNECTIONS

PLYMOUTH SORRENTO ROAD
DB 402, PG. 68, RB. 3, PG. 43
R/W WIDTH VARIES - NOT PLATTED

LENT ROAD 60.00' R/W WIDTH
R/W AGREEMENT ORB. 4, PGS. 13-14

SHEET C4.4
SHEET C4.5

**SHEET 20 OF 45**

**NOT FOR CONSTRUCTION**

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 1 | 03/14/2022 | CITY OF APOPKA COMMENTS DATED 03/14/2022 | ID |
| 2 | 01/24/2022 | CITY OF APOPKA COMMENTS DATED 01/24/2022 | ID |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STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32574


UTILITY AND DRAINAGE PLAN – SOUTHWEST

WILLOW RUN
CITY OF APOPKA, FLORIDA

DRAWN: I. DELAROSA
DESIGNED: O. SANCHEZ
CHECKED: O. SANCHEZ
DATE: 4/5/22

SCALE 1" = 50'
PROJECT ASH-012
SHEET C4.4

OVIDIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
4/5/22
PROFESSIONAL ENGINEER

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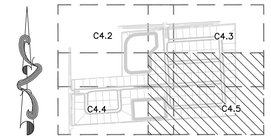
SHEET C4.2
SHEET C4.3
SHEET C4.2
SHEET C4.4
SHEET C4.3
SHEET C4.5
SHEET C4.4
SHEET C4.5

DESERT WILLOW (STREET 'S')
LANDSCAPE BUFFER
0.05 AC
PEACHLEAF (STREET 'D')
DESERT WILLOW (STREET 'C')
BLOOMING WILLOW (STREET 'A')
TRACT 'S'
TRAFFIC ISLAND
(86.59 SF)
0.00 AC
TRACT 'Q'
MAIL KIOSK
0.07 AC
TRACT 'D'
SOUTH POND
3.66 AC
TRACT 'G'
10' LANDSCAPE BUFFER
0.52 AC
LENT ROAD
60.00' R/W WIDTH
R/W AGREEMENT ORB. 4, PGS. 13-14

PROPOSED WATER MAIN
PROPOSED RECLAIMED WATER MAIN
SINGLE POTABLE WATER SERVICE (TYP)
DOUBLE POTABLE WATER SERVICE (TYP)
DOUBLE RECLAIMED WATER SERVICE (TYP)
SINGLE RECLAIMED WATER SERVICE (TYP)
SINGLE SANITARY SEWER LATERAL (TYP)
DOUBLE SANITARY SEWER LATERAL (TYP)
10' UTILITY EASEMENT (TYP)
HYDRANT #3
HYDRANT #4
HYDRANT #5
HYDRANT #6
SAN MH- 8
SAN MH- 9
SAN MH- 10
SAN MH- 11
SAN MH- 12
SAN MH- 13
SAN MH- 14
SAN MH- 15
SAN MH- 16
SAN MH- 17
SAN MH- 18
SAN MH- 19
SAN MH- 20
M.E.S.- 3

N
W
E
S

GRAPHIC SCALE
50 0 25 50 100
( IN FEET )
1 inch = 50 ft.




KEY MAP

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
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STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32574

UTILITY AND DRAINAGE PLAN - SOUTHEAST
WILLOW RUN
CITY OF APOPKA, FLORIDA

DRAWN: I. DELAROSA
DESIGNED: O. SANCHEZ
CHECKED: O. SANCHEZ
DATE: 4/5/22

SCALE 1" = 50'
PROJECT ASH-012
SHEET C4.5

OVIDIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
4/5/22
PROFESSIONAL ENGINEER

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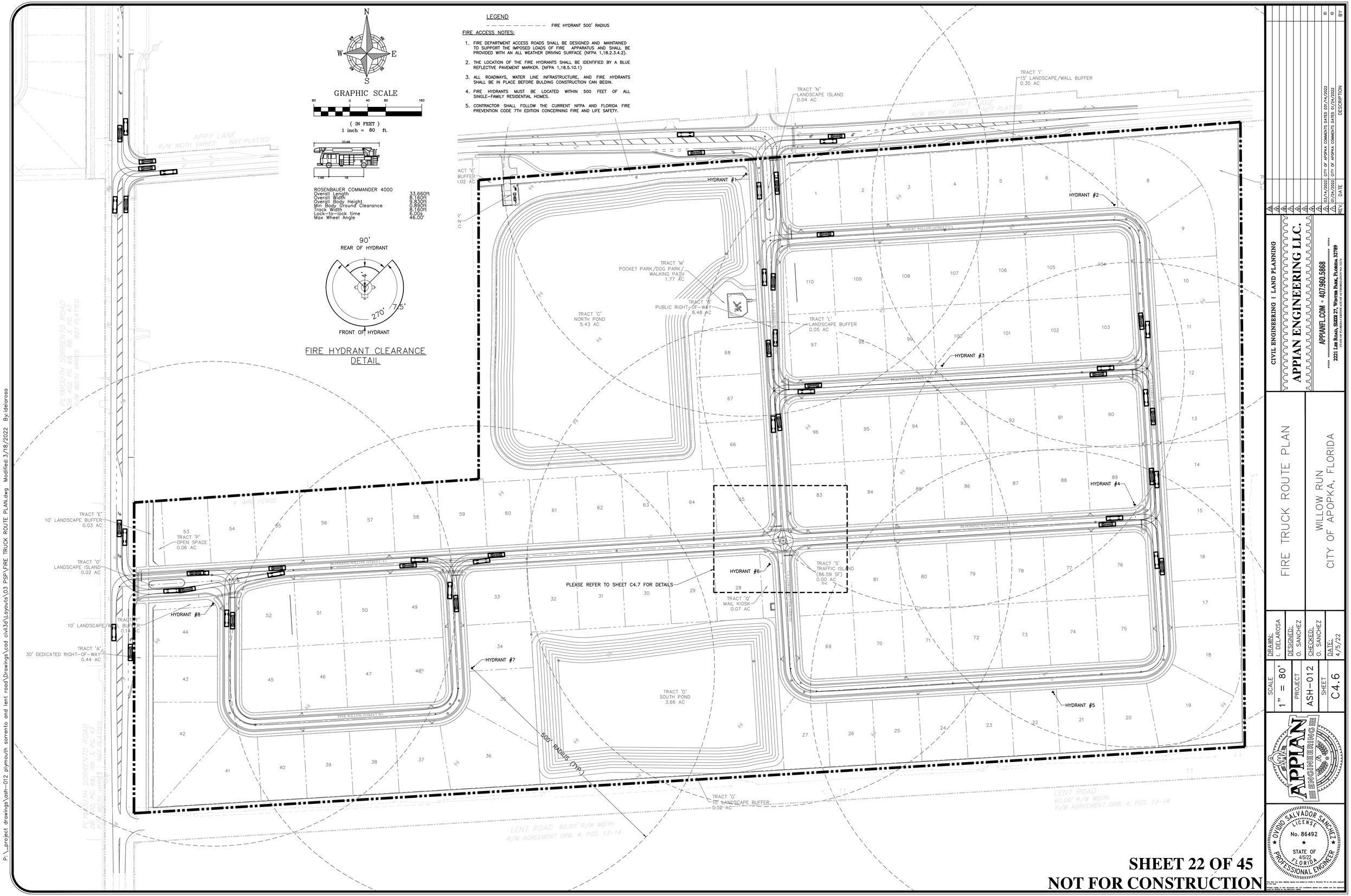
**SHEET 21 OF 45**
**NOT FOR CONSTRUCTION**

P:_project drawings\ash-012 plymouth sorrento and lent road\Drawings\cad civil3d\Layouts\03 PSP\UTILITY AND DRAINAGE PLAN.dwg Modified: 3/22/2022 By: idelarosa




| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 3 | 03/14/2022 | CITY OF APOPKA COMMENTS DATED 03/14/2022 | ID |
| 2 | 01/24/2022 | CITY OF APOPKA COMMENTS DATED 01/24/2022 | ID |
| 1 | | | |

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STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32574

# FIRE TRUCK ROUTE PLAN

WILLOW RUN
CITY OF APOPKA, FLORIDA

| DRAWN: | DESIGNED: | CHECKED: | DATE: |
|---|---|---|---|
| I. DELAROSA | O. SANCHEZ | O. SANCHEZ | 4/5/22 |

| SCALE | PROJECT | SHEET |
|---|---|---|
| 1" = 80' | ASH-012 | C4.6 |

OVIDIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
4/5/22
PROFESSIONAL ENGINEER

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**SHEET 22 OF 45**
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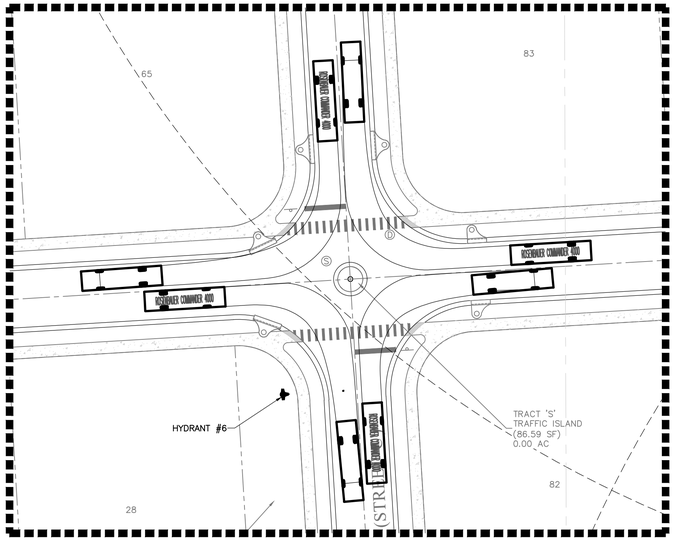
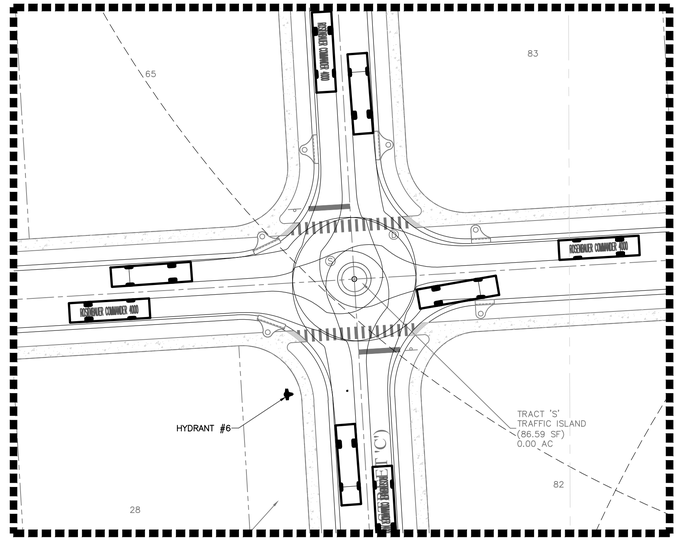



FIRE TRUCK TRAFFIC ISLAND DETAIL #1.A




FIRE TRUCK TRAFFIC ISLAND DETAIL #1.B

**SHEET 23 OF 45**
**NOT FOR CONSTRUCTION**

| BY | DESCRIPTION | DATE | REV. |
|---|---|---|---|
| ID | CITY OF APOPKA COMMENTS DATED 03/14/2022 | 03/14/2022 | 1 |
| ID | CITY OF APOPKA COMMENTS DATED 01/24/2022 | 01/24/2022 | 2 |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FIRE TRUCK ROUTE DETAIL

WILLOW RUN
CITY OF APOPKA, FLORIDA

| | |
|---|---|
| SCALE | N.T.S. |
| PROJECT | ASH-012 |
| SHEET | C4.7 |
| DRAWN: | I. DELAROSA |
| DESIGNED: | O. SANCHEZ |
| CHECKED: | O. SANCHEZ |
| DATE: | 4/5/22 |


QUIDIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
4/5/22
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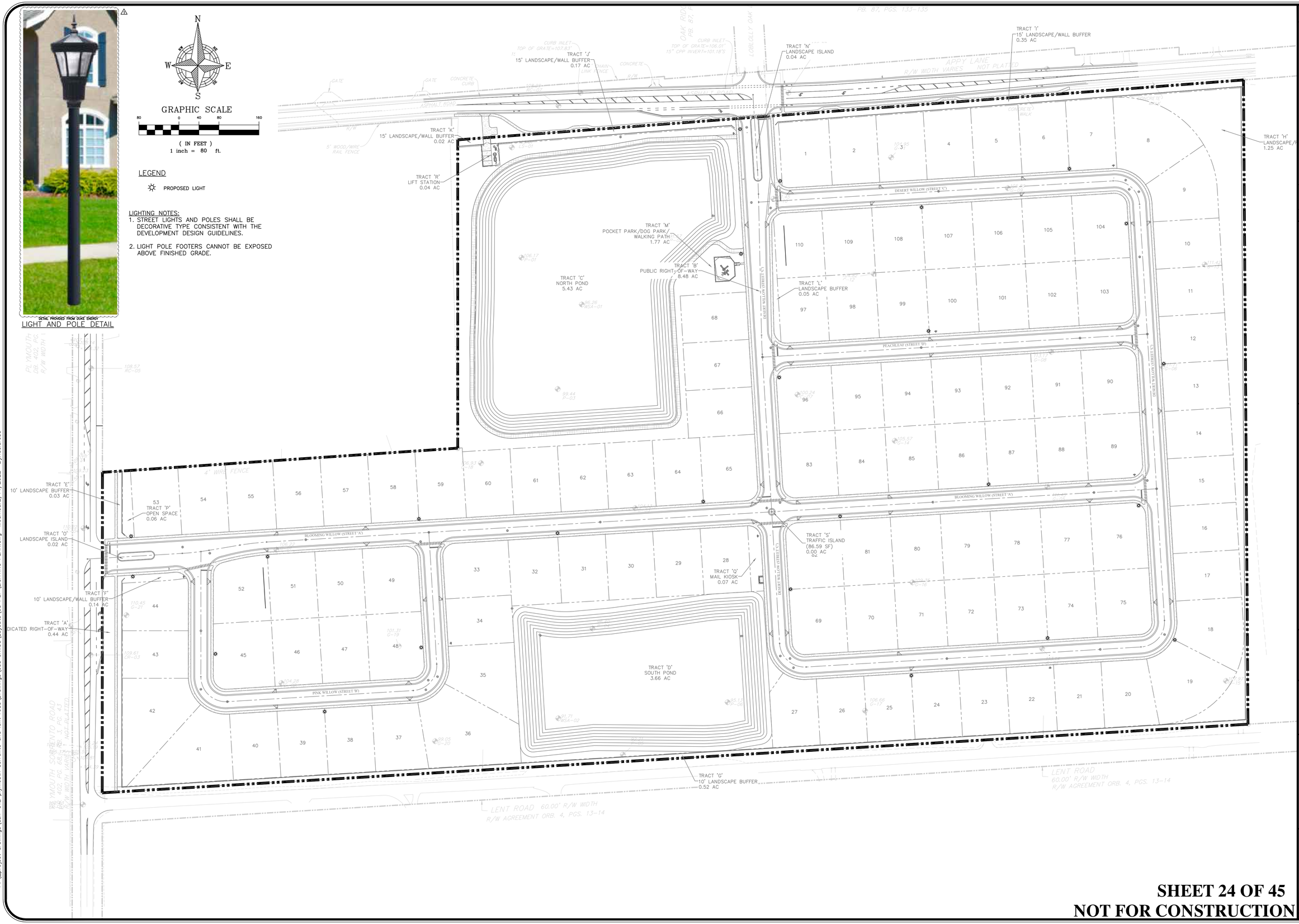
LIGHT AND POLE DETAIL




**SHEET 24 OF 45**
**NOT FOR CONSTRUCTION**

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 1 | 03/14/2022 | CITY OF APOPKA COMMENTS DATED 03/14/2022 | ID |
| 2 | 01/24/2022 | CITY OF APOPKA COMMENTS DATED 01/24/2022 | ID |

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STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32574

LIGHTING PLAN

WILLOW RUN
CITY OF APOPKA, FLORIDA

| DRAWN: | DESIGNED: | CHECKED: | DATE: |
|---|---|---|---|
| I. DELAROSA | O. SANCHEZ | O. SANCHEZ | 4/5/22 |

| SCALE | PROJECT | SHEET |
|---|---|---|
| 1" = 80' | ASH-012 | C4.8 |

OVIDIO SALVADOR SANCHEZ LICENSE No. 86492 STATE OF FLORIDA PROFESSIONAL ENGINEER 4/5/22

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P:_project drawings\ash-012 plymouth sorrento and lent road\Drawings\cad civil3d\Layouts\03 PSP\LIGHTING PLAN.dwg Modified:2/14/2022 By:idelarosa

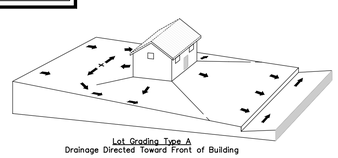
P:_project drawings\ash-012 plymouth sorrento and lent road\Drawings\cad civil3d\Layouts\03 PSP\PAVING AND GRADING PLAN.dwg Modified: 4/5/2022 By:idelarosa

**SOILS LEGEND:**

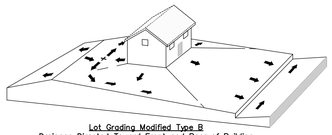
- SOILS LINE
- 4 — CANDLER FINE SAND, 0 TO 5% SLOPES (HYD: A)
- 5 — CANDLER FINE SAND, 5 TO 12% SLOPES (HYD: A)

GRADING NOTES:

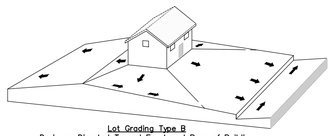
1. FINISHED FLOOR TO BE SET 18" ABOVE THE ELEVATION OF 100 YEAR FLOOD FOR THOSE SITE LOCATED IN SPECIAL FLOOD HAZARD AREA.
2. ALL GRADING LOTS SHALL PROVIDE A MNIMUM OF 2.0% SLOPE AWAY FROM THE HOUSE FOR A MINIMUM OF 5 FEET ON ALL SIDES.
3. FINISH FLOOR TO BE SET 1' ABOVE THE DESIGN HIGH WATER ELEVATION OF ADJACENT STORMWATER RETENTION/DETENTION PONDS.
4. PER CITY OF APOPKA DESIGN GUIDELINES, NO LOTS SHALL BE ALLOWED TO DRAIN ACROSS ADACENT LOTS.



Lot Grading Type A
Drainage Directed Toward Front of Building

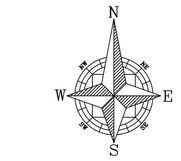


Lot Grading Modified Type B
Drainage Directed Toward Front and Rear of Building with Grade Break Near Rear of Lot



Lot Grading Type B
Drainage Directed Toward Front and Rear of Building

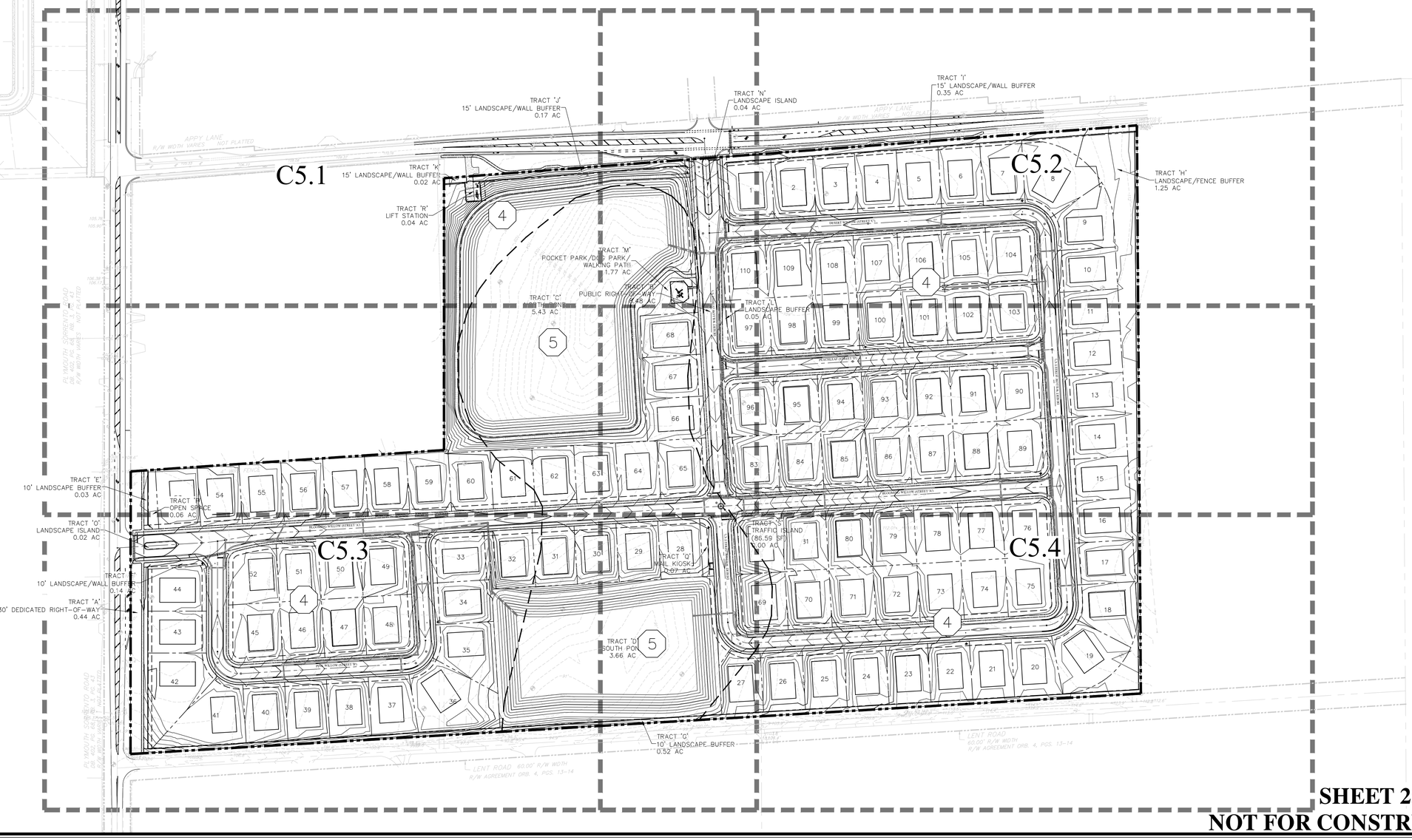
Lot Grading Modified Type B
Drainage Directed Toward Rear of Building with Grade Break at Front Setback




GRAPHIC SCALE

120 0 60 120 240

( IN FEET )
1 inch = 120 ft.




**SHEET 25 OF 45**
**NOT FOR CONSTRUCTION**

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 1 | 03/14/2022 | CITY OF APOPKA COMMENTS DATED 03/14/2022 | ID |
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PAVING AND GRADING PLAN – OVERALL

WILLOW RUN
CITY OF APOPKA, FLORIDA

| | |
|---|---|
| DRAWN: | I. DELAROSA |
| DESIGNED: | O. SANCHEZ |
| CHECKED: | O. SANCHEZ |
| DATE: | 4/5/22 |
| SCALE | 1" = 120' |
| PROJECT | ASH-012 |
| SHEET | C5.0 |

APPIAN ENGINEERING LLC

OVIDIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
4/5/22
PROFESSIONAL ENGINEER


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P:\...project drawings\ash-012 plymouth sorrento and lent road\Drawings\cad civil3d\Layouts\03 PSP\PAVING AND GRADING PLAN.dwg Modified: 4/5/2022 By: idelarosa

MATCHLINE A-A

KEY MAP

GRAPHIC SCALE
50 0 25 50 100
( IN FEET )
1 inch = 50 ft.

SHEET C5.1
SHEET C5.2
SHEET C5.3
SHEET C5.4

APPY LANE
NOT PLATTED
R/W WIDTH VARIES

PLYMOUTH SORRENTO ROAD
DB. 402, PG. 68, RB. 3, PG. 43
R/W WIDTH VARIES NOT PLATTED

TRACT 'N'
LANDSCAPE ISLA
0.04 AC

TRACT 'A'
15' LANDSCAPE/WALL BUFFER
0.02 AC

TRACT 'R'
LIFT STATION
0.04 AC

TRACT 'M'
POCKET PARK/DOG PARK/
WALKING PATH
1.77 AC

TRACT 'B'
PUBLIC RIGHT-OF-WAY
8.48 AC

TRACT 'C'
NORTH POND
5.43 AC

TRACT 'E'
10' LANDSCAPE BUFFER
0.03 AC

OFFSITE ROADWAY IMPROVEMENTS TO PLYMOUTH SORRENTO TO BE SUBMITTED TO ORANGE COUNTY FOR ROW USE PERMIT

4' WHITE FENCE

DESERT WILLOW (STP-1 C)

LOT TYPE 'A' FFE=112.68
LOT TYPE 'B' MOD FFE=111.41
LOT TYPE 'B' MOD FFE=109.78
LOT TYPE 'B' MOD FFE=108.19
LOT TYPE 'A' FFE=106.60
LOT TYPE 'A' FFE=106.59
LOT TYPE 'A' FFE=107.10
LOT TYPE 'B' MOD FFE=107.10
LOT TYPE 'B' MOD FFE=106.18
LOT TYPE 'B' MOD FFE=106.18
LOT TYPE 'B' MOD FFE=105.37
LOT TYPE 'B' MOD FFE=103.60
LOT TYPE 'B' MOD FFE=103.7
LOT TYPE 'A' FFE=104.85
LOT TYPE 'A' FFE=105.20
LOT TYPE 'B' MOD FFE=104.22
LOT TYPE 'B' MOD FFE=104.22

SHEET 26 OF 45
NOT FOR CONSTRUCTION

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 1 | 03/14/2022 | CITY OF APOPKA COMMENTS DATED 03/14/2022 | ID |
| 2 | 01/24/2022 | CITY OF APOPKA COMMENTS DATED 01/24/2022 | ID |

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STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32574

PAVING AND GRADING PLAN – NORTHWEST
WILLOW RUN
CITY OF APOPKA, FLORIDA

| DRAWN: | DESIGNED: | CHECKED: | DATE: |
|---|---|---|---|
| I. DELAROSA | O. SANCHEZ | O. SANCHEZ | 4/5/22 |

| SCALE | PROJECT | SHEET |
|---|---|---|
| 1" = 50' | ASH-012 | C5.1 |

EDWIN SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
4/5/22
PROFESSIONAL ENGINEER

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SHEET C5.1
SHEET C5.2

TRACT 'N'
LANDSCAPE ISLAND
0.04 AC

OFFSITE GRADING FOR APPY LANE SHALL BE DETERMINED AT CONSTRUCTION SITE PLAN

TRACT 'I'
15' LANDSCAPE/WALL BUFFER
0.35 AC

APPY LANE
P/W WIDTH VARIES - NOT PLATTED -

TRACT 'H'
LANDSCAPE/FENCE BUFFER
1.25 AC

DESERT WILLOW (STREET 'C')

PEACHLEAF (STREET 'D')

BLOOMING WILLOW (STREET 'A')

TRACT 'M'
PARK/DOG PARK/
WALKING PATH
1.77 AC

TRACT 'B'
PUBLIC RIGHT-OF-WAY
8.48 AC

TRACT 'L'
LANDSCAPE BUFFER
0.05 AC

LOT TYPE 'A' FFE=105.19 — 1
LOT TYPE 'A' FFE=106.85 — 2
LOT TYPE 'A' FFE=107.86 — 3
LOT TYPE 'A' FFE=108.33 — 4
LOT TYPE 'A' FFE=108.81 — 5
LOT TYPE 'A' FFE=109.28 — 6
LOT TYPE 'A' FFE=109.94 — 7
LOT TYPE 'A' FFE=110.68 — 8
LOT TYPE 'A' FFE=111.25 — 9
LOT TYPE 'A' FFE=112.40 — 10
LOT TYPE 'A' FFE=113.43 — 11
LOT TYPE 'A' FFE=113.43 — 12
LOT TYPE 'A' FFE=113.29 — 13
LOT TYPE 'A' FFE=113.42 — 14
LOT TYPE 'A' FFE=113.55 — 15
LOT TYPE 'A' FFE=104.85 — 110
LOT TYPE 'A' FFE=106.60 — 109
LOT TYPE 'A' FFE=107.86 — 108
LOT TYPE 'A' FFE=108.36 — 107
LOT TYPE 'A' FFE=108.86 — 106
LOT TYPE 'A' FFE=109.36 — 105
LOT TYPE 'A' FFE=109.36 — 104
LOT TYPE 'B' MOD FFE=113.31 — 103
LOT TYPE 'B' MOD FFE=113.93 — 102
LOT TYPE 'B' MOD FFE=113.93 — 101
LOT TYPE 'A' FFE=111.73 — 100
LOT TYPE 'A' FFE=107.88 — 99
LOT TYPE 'A' FFE=106.08 — 98
LOT TYPE 'A' FFE=105.20 — 97
LOT TYPE 'B' MOD FFE=104.22 — 68
LOT TYPE 'B' MOD FFE=104.22 — 67
LOT TYPE 'B' MOD FFE=103.72 — 66
LOT TYPE 'B' MOD FFE=103.60 — 64
LOT TYPE 'A' FFE=105.38 — 83
LOT TYPE 'A' FFE=108.23 — 84
LOT TYPE 'A' FFE=111.08 — 85
LOT TYPE 'A' FFE=113.27 — 86
LOT TYPE 'A' FFE=113.27 — 87
LOT TYPE 'A' FFE=112.87 — 88
LOT TYPE 'B' MOD FFE=112.44 — 89
LOT TYPE 'A' FFE=113.91 — 91
LOT TYPE 'A' FFE=113.91 — 92
LOT TYPE 'A' FFE=107.89 — 94
LOT TYPE 'A' FFE=105.98 — 95
LOT TYPE 'B' MOD FFE=105.13 — 96
LOT TYPE 'B' MOD FFE=113.35 — 90
LOT TYPE 'A' FFE=111.68 — 93

SHEET C5.1
SHEET C5.3
SHEET C5.2
SHEET C5.4

SHEET C5.3
SHEET C5.4

**SHEET 27 OF 45**
**NOT FOR CONSTRUCTION**

N
W E
S

GRAPHIC SCALE
50 0 25 50 100
( IN FEET )
1 inch = 50 ft.

KEY MAP
C5.1 C5.2 C5.3 C5.4

| BY | DESCRIPTION | DATE | REV. |
|---|---|---|---|
| ID | CITY OF APOPKA COMMENTS DATED 03/14/2022 | 03/14/2022 | 1 |
| ID | CITY OF APOPKA COMMENTS DATED 01/24/2022 | 01/24/2022 | 2 |

CIVIL ENGINEERING | LAND PLANNING
**APPIAN ENGINEERING LLC.**
APPIANFL.COM • 407.960.5868
2221 Lee Road, Suite 27, Winter Park, Florida 32789
STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32574

PAVING AND GRADING PLAN – NORTHEAST
WILLOW RUN
CITY OF APOPKA, FLORIDA

| DRAWN: | DESIGNED: | CHECKED: | DATE: |
|---|---|---|---|
| I. DELAROSA | O. SANCHEZ | O. SANCHEZ | 4/5/22 |

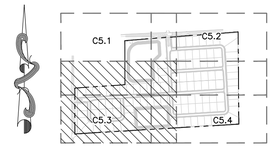
| SCALE | PROJECT | SHEET |
|---|---|---|
| 1" = 50' | ASH-012 | C5.2 |

OVIDIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
PROFESSIONAL ENGINEER
4/5/22

This item has been digitally signed and sealed by Ovidio S. Sanchez, PE on the date adjacent to the seal.
Printed copies of this document are not considered signed and sealed and the electronic signature must be verified on any electronic copies.

P:__project drawings\ash-012 plymouth sorrento and tent road\Drawings\cad civil3d\Layouts\03 PSP\PAVING AND GRADING PLAN.dwg Modified: 4/5/2022 By: idelarosa

P:_project drawings\ash-012 plymouth sorrento and lent road\Drawings\cad civil3d\Layouts\03 PSP\PAVING AND GRADING PLAN.dwg Modified: 4/5/2022 By: idelarosa




KEY MAP

GRAPHIC SCALE

50 0 25 50 100

( IN FEET )
1 inch = 50 ft.

SHEET C5.1
SHEET C5.3

SHEET C5.1
SHEET C5.2

SHEET C5.2
SHEET C5.4

SHEET C5.3
SHEET C5.4

OFFSITE ROADWAY IMPROVEMENTS TO PLYMOUTH SORRENTO TO BE SUBMITTED TO ORANGE COUNTY FOR ROW USE PERMIT

TRACT 'E'
10' LANDSCAPE BUFFER
0.03 AC

TRACT 'G'
LANDSCAPE ISLAND
0.02 AC

TRACT 'F'
10' LANDSCAPE/WALL BUFFER
0.1 AC

TRACT 'A'
30' DEDICATED RIGHT-OF-WAY
0.44 AC

TRACT 'B'
OPEN SPACE
0.06 AC

TRACT 'D'
SOUTH POND
3.66 AC

TRACT 'C'
10' LANDSCAPE BUFFER
0.52 AC

MAIL KIOSK
0.07 AC

BLOOMING WILLOW (STREET 'A')

PLUMWILLOW (STREET 'B')

DESERT WILLOW (STREET 'C')

LOT TYPE 'A' FFE=109.78
LOT TYPE 'B' MOD FFE=112.68
LOT TYPE 'B' MOD FFE=111.41
LOT TYPE 'B' MOD FFE=108.19
LOT TYPE 'A' FFE=106.60
LOT TYPE 'A' FFE=106.59
LOT TYPE 'A' FFE=107.10
LOT TYPE 'B' MOD FFE=107.10
LOT TYPE 'B' MOD FFE=106.18
LOT TYPE 'B' MOD FFE=106.18
LOT TYPE 'B' MOD FFE=105.37
LOT TYPE 'B' MOD FFE=103.60
LOT TYPE 'B' MOD FFE=103.20
LOT TYPE 'B' MOD FFE=103.72
LOT TYPE 'A' FFE=105.26
LOT TYPE 'B' MOD FFE=104.22
LOT TYPE 'A' FFE=110.57
LOT TYPE 'A' FFE=110.76
LOT TYPE 'B' MOD FFE=110.76
LOT TYPE 'B' MOD FFE=109.03
LOT TYPE 'A' FFE=109.63
LOT TYPE 'A' FFE=108.68
LOT TYPE 'A' FFE=107.84
LOT TYPE 'A' FFE=106.99
LOT TYPE 'A' FFE=105.92
LOT TYPE 'A' FFE=104.11
LOT TYPE 'B' MOD FFE=106.21
LOT TYPE 'B' MOD FFE=104.18
LOT TYPE 'B' MOD FFE=104.03
LOT TYPE 'B' MOD FFE=103.23
LOT TYPE 'B' MOD FFE=103.58
LOT TYPE 'B' MOD FFE=103.65
LOT TYPE 'B' MOD FFE=105.58
LOT TYPE 'B' MOD FFE=107.48
LOT TYPE 'B' MOD FFE=109.40
LOT TYPE 'B' MOD FFE=110.68
LOT TYPE 'B' MOD FFE=107.01
LOT TYPE 'B' MOD FFE=106.31
LOT TYPE 'B' MOD FFE=104.62
LOT TYPE 'B' MOD FFE=102.60'
LOT TYPE 'A' FFE=103.23

PLYMOUTH SORRENTO ROAD 80' R/W WIDTH DB. 402, PG. 68, RB. 3, PG 43 R/W WIDTH VARIES NOT PLATTED

LENT ROAD 60.00' R/W WIDTH R/W AGREEMENT ORB. 4, PGS. 13-14

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 1 | 03/14/2022 | CITY OF APOPKA COMMENTS DATED 03/14/2022 | ID |
| 0 | 01/24/2022 | CITY OF APOPKA COMMENTS DATED 01/24/2022 | ID |

CIVIL ENGINEERING | LAND PLANNING

**APPIAN ENGINEERING LLC.**

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2221 Lee Road, Suite 27, Winter Park, Florida 32789

STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32574

PAVING AND GRADING PLAN – SOUTHWEST

WILLOW RUN
CITY OF APOPKA, FLORIDA

| DRAWN: | DESIGNED: | CHECKED: | DATE: |
|---|---|---|---|
| I. DELAROSA | O. SANCHEZ | O. SANCHEZ | 4/5/22 |

| SCALE | PROJECT | SHEET |
|---|---|---|
| 1" = 50' | ASH-012 | C5.3 |

APPIAN ENGINEERING LLC

OVIDIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
4/5/22
PROFESSIONAL ENGINEER

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**SHEET 28 OF 45**
**NOT FOR CONSTRUCTION**

SHEET C5.1
SHEET C5.2
SHEET C5.1
SHEET C5.3
SHEET C5.2
SHEET C5.4
SHEET C5.3
SHEET C5.4

DESERT WILLOW (STREET 'C')
PEACHLEAF (STREET 'D')
BLOOMING WILLOW (STREET 'A')
DESERT WILLOW (STREET 'C')
DESERT WILLOW (STREET 'C')

TRACT 'S'
TRAFFIC ISLAND
(86.59 SF)
0.00 AC

TRACT 'D'
SOUTH POND
3.66 AC

TRACT 'G'
10' LANDSCAPE BUFFER
0.52 AC

LENT ROAD
60.00' R/W WIDTH
R/W AGREEMENT ORB. 4, PGS. 13-14

GRAPHIC SCALE
50 0 25 50 100
( IN FEET )
1 inch = 50 ft.

KEY MAP
C5.1 C5.2 C5.3 C5.4

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 1 | 03/14/2022 | CITY OF APOPKA COMMENTS DATED 03/14/2022 | ID |
| 2 | 01/24/2022 | CITY OF APOPKA COMMENTS DATED 01/24/2022 | ID |

CIVIL ENGINEERING | LAND PLANNING
**APPIAN ENGINEERING LLC.**
APPIANFL.COM • 407.960.5868
2231 Lee Road, Suite 27, Winter Park, Florida 32789
STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32574

PAVING AND GRADING PLAN – SOUTHEAST
WILLOW RUN
CITY OF APOPKA, FLORIDA

DRAWN: I. DELAROSA
DESIGNED: O. SANCHEZ
CHECKED: O. SANCHEZ
DATE: 4/5/22
SCALE: 1" = 50'
PROJECT: ASH-012
SHEET: C5.4

OVIDIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
4/5/22
PROFESSIONAL ENGINEER

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P:_project drawings\ash-012 plymouth sorrento and tent road\Drawings\cad civil3d\Layouts\03 PSP\PAVING AND GRADING PLAN.dwg Modified: 4/5/2022 By: idelarosa

**SHEET 29 OF 45**
**NOT FOR CONSTRUCTION**

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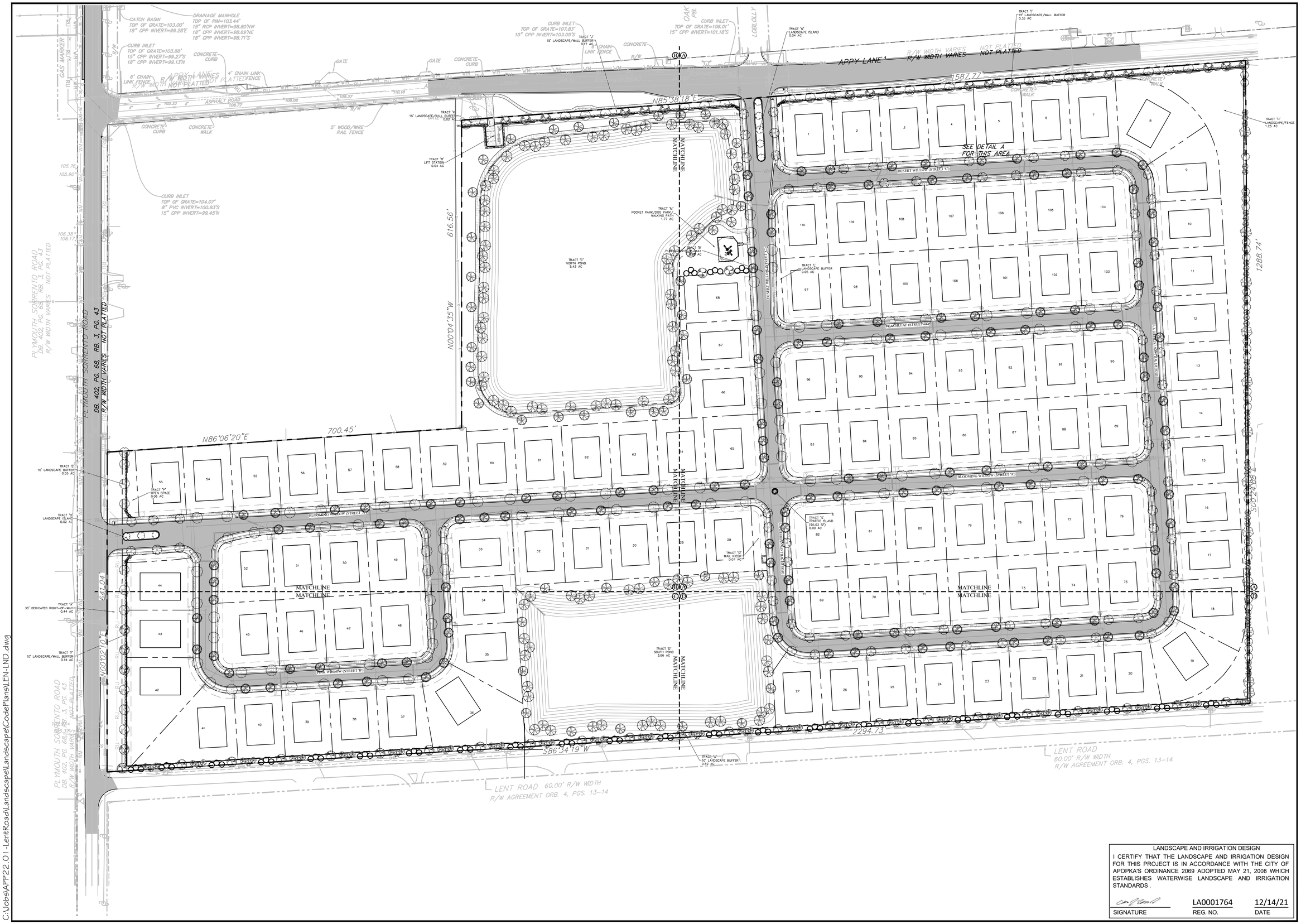



# Landscape Designs, LLC

- Landscape Architecture
- Site Planning

4663 Tiffany Woods Cir
Oviedo, FL 32765
PH: (407) 484-3414


PROJECT AND OWNER

WILLOW RUN

City of Apopka
Florida


Appian Engineering, LLC
2221 Lee Road, Suite 17
Winter Park, FL 32789
PH: (407) 960-5856


CONSULTANTS

**LANDSCAPE ARCHITECT**
CARL J. KELLY JR.. RLA

DocuSigned by:
D96C07E49FDC41C...

REG.#: 0001764

| | |
|---|---|
| PROJECT NO. | APP22.01 |
| DESIGNED BY | CJK |
| DRAWN BY | CJK |
| CHECKED BY | CJK |
| DATE | 12/14/21 |

ISSUED FOR:

- 01/30/22 City Comments
- 02/22/22 Site Changes
- 04/04/22 Tree Survey

DRAWING SCALE

0 FT 40' 80' North

SCALE: 1"=80'-0"

DRAWING TITLE

**OVERALL LANDSCAPE SITE PLAN**

DRAWING NUMBER

LS-01

SHEET 30 OF 45

LANDSCAPE AND IRRIGATION DESIGN

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 .

| SIGNATURE | REG. NO. | DATE |
|---|---|---|
| | LA0001764 | 12/14/21 |

C:\Jobs\APP22.01-LentRoad\Landscape\Landscape\CodePlans\LEN-LND.dwg

DocuSign Envelope ID: 460A761B-DB0B-4EC8-B6E4-D649C6510155

| TREE TABLE | |
|---|---|
| POINT NUMBER | TREE |
| 6068 | 17" PINE |
| 6069 | 18" OAK |
| 6070 | 22" OAK |
| 6071 | 28" OAK |
| 6072 | 36" OAK |
| 6073 | 22" OAK |
| 6074 | 18" OAK |
| 6075 | 18" OAK |
| 6076 | 22" OAK |
| 6077 | 18" OAK |
| 6078 | 8" OAK |
| 6079 | 13" OAK |
| 6080 | 16" OAK |
| 6081 | 7" CAMPHOR |
| 6082 | 14" OAK |
| 6083 | 18" OAK |
| 6084 | 18" OAK |
| 6085 | 4" OAK |
| 6086 | 17" OAK |
| 6087 | 22" OAK |
| 6088 | 7" OAK |
| 6089 | 18" OAK |
| 6090 | 12" OAK |
| 6091 | 24" OAK |
| 6092 | 24" OAK |
| 6093 | 18" OAK |
| 6094 | 25" OAK |
| 6095 | 24" OAK |
| 6096 | 24" OAK |
| 6097 | 20" OAK |
| 6098 | 20" OAK |
| 6099 | 20" OAK |
| 6100 | 11" OAK |
| 6101 | 28" OAK |
| 6102 | 17" OAK |
| 6103 | 20" OAK |
| 6104 | 8" OAK |
| 6105 | 15" OAK |
| 6106 | 18" OAK |
| 6107 | 20" OAK |
| 6108 | 13" CAMPHOR |
| 6109 | 18" OAK |
| 6110 | 16" OAK |
| 6111 | 14" OAK |
| 6112 | 12" OAK |
| 6113 | 15" OAK |
| 6114 | 8" OAK |
| 6115 | 12" OAK |
| 6116 | 14" OAK |
| 6117 | 12" OAK |
| 6118 | 10" OAK |
| 6119 | 12" PINE |
| 6120 | 22" OAK |
| 6121 | 24" OAK |
| 6122 | 26" OAK |
| 6123 | 14" OAK |
| 6124 | 28" OAK |
| 6125 | 26" OAK |
| 6126 | 26" OAK |
| 6127 | 24" OAK |
| 6128 | 24" OAK |
| 6129 | 28" OAK |
| 6130 | 24" OAK |
| 6131 | 24" OAK |
| 6132 | 32" OAK |
| 6133 | 15" OAK |
| 6134 | 24" OAK |
| 6135 | 24" OAK |
| 6136 | 30" OAK |
| 6137 | 28" OAK |
| 6138 | 30" OAK |
| 6139 | 18" OAK |
| 6140 | 8" OAK |
| 6141 | 26" OAK |
| 6142 | 14" OAK |
| 6143 | 24" OAK |
| 6144 | 24" OAK |
| 6145 | 12" OAK |
| 6146 | 24" OAK |
| 6147 | 12" OAK |
| 6148 | 16" OAK |
| 6149 | 24" OAK |
| 6150 | 26" OAK |
| 6151 | 18" OAK |
| 6152 | 24" OAK |
| 6153 | 34" OAK |
| 6154 | 24" OAK |
| 6155 | 10" OAK |
| 6156 | 18" OAK |
| 6157 | 8" OAK |
| 6158 | 22" OAK |
| 6159 | 15" OAK |
| 6160 | 14" OAK |
| 6161 | 12" OAK |
| 6162 | 12" OAK |
| 6163 | 8" OAK |
| 6164 | 16" OAK |
| 6165 | 16" OAK |
| 6166 | 14" OAK |
| 6167 | 16" OAK |
| 6168 | 18" OAK |
| 6169 | 8" OAK |
| 6170 | 12" OAK |
| 6171 | 18" OAK |
| 6172 | 8" OAK |
| 6173 | 22" OAK |
| 6174 | 16" OAK |
| 6175 | 22" OAK |
| 6176 | 13" OAK |
| 6177 | 18" OAK |
| 6178 | 10" OAK |
| 6179 | 12" OAK |
| 6180 | 12" OAK |
| 6181 | 15" OAK |
| 6182 | 18" OAK |
| 6183 | 20" OAK |
| 6184 | 18" OAK |
| 6185 | 9" OAK |
| 6186 | 16" OAK |
| 6187 | 10" OAK |
| 6188 | 18" OAK |
| 6189 | 22" OAK |
| 6190 | 10" OAK |
| 6191 | 11" OAK |
| 6192 | 12" OAK |
| 6193 | 12" OAK |
| 6194 | 12" OAK |
| 6195 | 16" OAK |
| 6196 | 14" OAK |
| 6197 | 12" OAK |
| 6198 | 10" OAK |
| 6199 | 10" OAK |
| 6200 | 15" OAK |
| 6201 | 15" OAK |
| 6202 | 15" OAK |
| 6203 | 16" OAK |
| 6204 | 16" OAK |
| 6205 | 18" OAK |

| TREE TABLE | |
|---|---|
| POINT NUMBER | TREE |
| 6206 | 18" OAK |
| 6207 | 20" OAK |
| 6208 | 20" OAK |
| 6209 | 20" OAK |
| 6210 | 7" OAK |
| 6211 | 7" OAK |
| 6212 | 8" OAK |
| 6213 | 7" OAK |
| 6214 | 11" OAK |
| 6215 | 9" OAK |
| 6216 | 8" OAK |
| 6217 | 12" OAK |
| 6218 | 12" OAK |
| 6219 | 12" OAK |
| 6220 | 15" OAK |
| 6221 | 6" OAK |
| 6222 | 10" OAK |
| 6223 | 11" OAK |
| 6224 | 19" OAK |
| 6225 | 13" OAK |
| 6226 | 9" OAK |
| 6227 | 6" OAK |
| 6228 | 9" OAK |
| 6229 | 12" OAK |
| 6230 | 15" OAK |
| 6231 | 16" OAK |
| 6232 | 20" OAK |
| 6233 | 14" OAK |
| 6234 | 17" OAK |
| 6235 | 12" OAK |
| 6236 | 15" OAK |
| 6237 | 15" OAK |
| 6238 | 11" OAK |
| 6239 | 14" OAK |
| 6240 | 8" OAK |
| 6241 | 13" OAK |
| 6242 | 13" OAK |
| 6243 | 4" CAMPHOR |
| 6244 | 10" OAK |
| 6245 | 11" OAK |
| 6246 | 12" OAK |
| 6247 | 14" OAK |
| 6248 | 16" OAK |
| 6249 | 14" OAK |
| 6250 | 10" CHERRY |
| 6251 | 19" OAK |
| 6252 | 16" OAK |
| 6253 | 12" OAK |
| 6254 | 8" OAK |
| 6255 | 12" OAK |
| 6256 | 17" OAK |
| 6257 | 12" OAK |
| 6258 | 16" OAK |
| 6259 | 10" OAK |
| 6260 | 10" OAK |
| 6261 | 14" OAK |
| 6262 | 11" OAK |
| 6263 | 9" OAK |
| 6264 | 8" OAK |
| 6265 | 15" OAK |
| 6266 | 10" OAK |
| 6267 | 15" OAK |
| 6268 | 11" OAK |
| 6269 | 10" OAK |
| 6270 | 17" OAK |
| 6271 | 16" OAK |
| 6272 | 17" OAK |
| 6273 | 16" OAK |
| 6274 | 12" OAK |
| 6275 | 12" OAK |
| 6276 | 10" OAK |
| 6277 | 16" OAK |
| 6278 | 12" OAK |
| 6279 | 13" OAK |
| 6280 | 19" OAK |
| 6281 | 16" OAK |
| 6282 | 16" OAK |
| 6283 | 12" OAK |
| 6284 | 11" OAK |
| 6285 | 12" OAK |
| 6286 | 12" OAK |
| 6287 | 12" OAK |
| 6288 | 12" OAK |
| 6289 | 12" OAK |
| 6290 | 5" OAK |
| 6291 | 12" OAK |
| 6292 | 13" OAK |
| 6293 | 10" OAK |
| 6294 | 20" OAK |
| 6295 | 11" OAK |
| 6296 | 10" OAK |
| 6297 | 11" OAK |
| 6298 | 13" OAK |
| 6299 | 18" OAK |
| 6300 | 12" OAK |
| 6301 | 9" OAK |
| 6302 | 11" OAK |
| 6303 | 14" OAK |
| 6304 | 14" OAK |
| 6305 | 9" OAK |
| 6306 | 6" OAK |
| 6307 | 9" OAK |
| 6308 | 10" OAK |
| 6309 | 24" OAK |
| 6310 | 20" OAK |
| 6311 | 28" OAK |
| 6312 | 13" OAK |
| 631.3 | 12" CHERRY |
| 6314 | 6" OAK |
| 6315 | 12" OAK |
| 6316 | 14" OAK |
| 6317 | 13" OAK |
| 6318 | 17" OAK |
| 6319 | 20" OAK |
| 6320 | 22" CHERRY |
| 6321 | 22" OAK |
| 6322 | 30" OAK |
| 6323 | 16" PINE |
| 6324 | 11" OAK |
| 6325 | 22" PINE |
| 6326 | 18" OAK |
| 6327 | 30" OAK |
| 6328 | 17" OAK |
| 6329 | 18" OAK |
| 6330 | 16" OAK |
| 6331 | 18" OAK |
| 6332 | 12" OAK |
| 6333 | 22" OAK |
| 6334 | 10" OAK |
| 6335 | 14" OAK |
| 6336 | 10" OAK |
| 6337 | 6" OAK |
| 6338 | 17" OAK |
| 6339 | 12" OAK |
| 6340 | 10" OAK |
| 6341 | 18" OAK |
| 6342 | 18" OAK |
| 6343 | 18" OAK |

| TREE TABLE | |
|---|---|
| POINT NUMBER | TREE |
| 6344 | 18" OAK |
| 6345 | 20" OAK |
| 6346 | 20" OAK |
| 6347 | 8" PINE |
| 6348 | 12" PINE |
| 6349 | 12" PINE |
| 6350 | 19" PINE |
| 6351 | 10" OAK |
| 6352 | 17" OAK |
| 6353 | 11" OAK |
| 6354 | 16" OAK |
| 6355 | 12" OAK |
| 6356 | 12" OAK |
| 6357 | 16" OAK |
| 6358 | 11" OAK |
| 6359 | 12" OAK |
| 6360 | 15" OAK |
| 6361 | 18" OAK |
| 6362 | 11" OAK |
| 6363 | 18" OAK |
| 6364 | 15" OAK |
| 6365 | 8" OAK |
| 6366 | 14" OAK |
| 6367 | 20" OAK |
| 6368 | 12" OAK |
| 6369 | 12" OAK |
| 6370 | 11" OAK |
| 6371 | 14" OAK |
| 6372 | 12" OAK |
| 6373 | 14" OAK |
| 6374 | 15" OAK |
| 6375 | 18" OAK |
| 6376 | 12" OAK |
| 6377 | 5" OAK |
| 6378 | 12" OAK |
| 6379 | 16" OAK |
| 6380 | 7" OAK |
| 6381 | 11" OAK |
| 6382 | 11" OAK |
| 6383 | 12" OAK |
| 6384 | 12" OAK |
| 6385 | 16" OAK |
| 6386 | 19" PINE |
| 6387 | 11" PINE |
| 6388 | 24" OAK |
| 6389 | 6" OAK |
| 6390 | 16" PINE |
| 6391 | 13" OAK |
| 6392 | 10" PINE |
| 6393 | 14" PINE |
| 6394 | 7" OAK |
| 6395 | 16" PINE |
| 6396 | 24" OAK |
| 6397 | 13" PINE |
| 6398 | 24" OAK |
| 6399 | 7" OAK |
| 6400 | 11" OAK |
| 6401 | 7" OAK |
| 6402 | 10" OAK |
| 6403 | 14" PINE |
| 6404 | 10" OAK |
| 6405 | 17" PINE |
| 6406 | 18" OAK |
| 6407 | 15" OAK |
| 6408 | 20" OAK |
| 6409 | 16" OAK |
| 6410 | 18" OAK |
| 6411 | 18" OAK |
| 6412 | 18" OAK |
| 6413 | 18" OAK |
| 6414 | 18" OAK |
| 6415 | 16" OAK |
| 6416 | 16" OAK |
| 6417 | 24" OAK |
| 6418 | 10" PINE |
| 6419 | 14" PINE |
| 6420 | 15" PINE |
| 6421 | 22" OAK |
| 6422 | 32" OAK |
| 6423 | 18" OAK |
| 6424 | 18" OAK |
| 6425 | 18" OAK |
| 6426 | 24" OAK |
| 6427 | 24" OAK |
| 6428 | 22" OAK |
| 6429 | 26" OAK |
| 6430 | 22" PINE |
| 6431 | 5" OAK |
| 6432 | 18" OAK |
| 6433 | 10" OAK |
| 6434 | 18" OAK |
| 6435 | 12" OAK |
| 6436 | 16" OAK |
| 6437 | 22" OAK |
| 6438 | 22" OAK |
| 6439 | 28" OAK |
| 6440 | 18" OAK |
| 6441 | 20" OAK |
| 6442 | 12" OAK |
| 6443 | 8" OAK |
| 6444 | 15" OAK |
| 6445 | 26" OAK |
| 6446 | 18" OAK |
| 6447 | 24" OAK |
| 6448 | 18" OAK |
| 6449 | 33" OAK |
| 6450 | 29" OAK |
| 6451 | 24" OAK |
| 6452 | 12" OAK |
| 6453 | 13" OAK |
| 6454 | 14" OAK |
| 6455 | 12" OAK |
| 6456 | 12" OAK |
| 6457 | 14" OAK |
| 6458 | 18" OAK |
| 6459 | 11" OAK |
| 6460 | 18" OAK |
| 6461 | 11" OAK |
| 6462 | 7" OAK |
| 6463 | 24" OAK |
| 6464 | 15" OAK |
| 6465 | 26" OAK |
| 6466 | 20" OAK |
| 6467 | 8" OAK |
| 6468 | 16" OAK |
| 6469 | 20" OAK |
| 6470 | 12" OAK |
| 6471 | 14" OAK |
| 6472 | 24" OAK |
| 6473 | 14" 12" CHERRY |
| 6474 | 5" OAK |
| 6475 | 26" OAK |
| 6476 | 26" OAK |
| 6477 | 30" OAK |
| 6478 | 26" OAK |
| 6479 | 24" OAK |
| 6480 | 15" OAK |
| 6481 | 12" CHERRY |

| TREE TABLE | |
|---|---|
| POINT NUMBER | TREE |
| 6482 | 12" OAK |
| 6483 | 20" OAK |
| 6484 | 20" OAK |
| 6485 | 36" OAK |
| 6486 | 40" OAK |
| 6487 | 30" OAK |
| 6488 | 22" OAK |
| 6489 | 9" OAK |
| 6490 | 26" OAK |
| 6491 | 14" OAK |
| 6492 | 28" OAK |
| 6493 | 28" OAK |
| 6494 | 22" OAK |
| 6495 | 19" CHERRY |
| 6496 | 12" OAK |
| 6497 | 26" OAK |
| 6498 | 24" OAK |
| 6499 | 26" OAK |
| 6500 | 18" OAK |
| 6501 | 18" OAK |
| 6502 | 30" OAK |
| 6503 | 20" OAK |
| 6504 | 33" OAK |
| 6505 | 33" OAK |
| 6506 | 24" OAK |
| 6507 | 18" OAK |
| 6508 | 44" OAK |
| 6509 | 50" OAK |
| 6510 | 10" OAK |
| 6511 | 36" OAK |
| 6512 | 34" OAK |
| 6513 | 13" OAK |
| 6514 | 28" OAK |
| 6515 | 11" 7" CHERRY |
| 6516 | 26" OAK |
| 6517 | 26" OAK |
| 6518 | 18" OAK |
| 6519 | 22" OAK |
| 6520 | 15" OAK |
| 6521 | 24" OAK |
| 6522 | 16" OAK |
| 6523 | 20" OAK |
| 6524 | 22" OAK |
| 6525 | 24" OAK |
| 6526 | 22" OAK |
| 6527 | 13" OAK |
| 6528 | 26" OAK |
| 6529 | 12" OAK |
| 6530 | 26" OAK |
| 6531 | 13" OAK |
| 6532 | 38" OAK |
| 6533 | 20" OAK |
| 6534 | 15" OAK |
| 6535 | 6" OAK |
| 6536 | 17" OAK |
| 6537 | 18" OAK |
| 6538 | 12" OAK |
| 6539 | 16" OAK |
| 6540 | 34" OAK |
| 6541 | 8" CHERRY |
| 6542 | 18" OAK |
| 6543 | 26" OAK |
| 6544 | 31" OAK |
| 6545 | 20" OAK |
| 6546 | 15" OAK |
| 6547 | 12" OAK |
| 6548 | 18" OAK |
| 6549 | 24" OAK |
| 6550 | 26" OAK |
| 6551 | 32" OAK |
| 6552 | 40" OAK |
| 6553 | 24" OAK |
| 6554 | 32" OAK |
| 6555 | 26" OAK |
| 6556 | 24" OAK |
| 6557 | 24" OAK |
| 6558 | 42" OAK |
| 6559 | 24" OAK |
| 6560 | 40" OAK |
| 6561 | 18" OAK |
| 6562 | 30" OAK |
| 6563 | 22" OAK |
| 6564 | 20" OAK |
| 6565 | 26" OAK |
| 6566 | 30" OAK |
| 6567 | 18" OAK |
| 6568 | 58" OAK |
| 6569 | 24" OAK |
| 6570 | 34" OAK |
| 6571 | 32" OAK |
| 6572 | 20" OAK |
| 6573 | 8" 5" CHERRY |
| 6574 | 10" OAK |
| 6575 | 10" CAMPHOR |
| 6576 | 34" OAK |
| 6577 | 32" OAK |
| 6578 | 22" OAK |
| 6579 | 38" OAK |
| 6580 | 40" OAK |
| 6581 | 24" OAK |
| 6582 | 54" OAK |
| 6583 | 36" OAK |
| 6584 | 36" OAK |
| 6585 | 34" OAK |
| 6586 | 14" OAK |
| 6587 | 34" OAK |
| 6588 | 5" OAK |
| 6589 | 12" OAK |
| 6590 | 12" OAK |
| 6591 | 24" OAK |
| 6592 | 24" OAK |
| 6593 | 16" OAK |
| 6594 | 28" OAK |
| 6595 | 36" OAK |
| 6596 | 46" OAK |
| 6597 | 30" OAK |
| 6598 | 30" OAK |
| 6599 | 30" OAK |
| 6600 | 30" OAK |
| 6601 | 48" OAK |
| 6602 | 13" 13" CHERRY |
| 6603 | 34" OAK |
| 6604 | 24" OAK |
| 6605 | 30" OAK |
| 6606 | 44" OAK |
| 6607 | 17" OAK |
| 6608 | 26" OAK |
| 6609 | 24" OAK |
| 6610 | 32" OAK |
| 6611 | 15" OAK |
| 6612 | 32" OAK |
| 6613 | 34" OAK |
| 6614 | 24" OAK |
| 6615 | 18" OAK |
| 6616 | 12" OAK |
| 6617 | 24" OAK |
| 6618 | 38" OAK |
| 6619 | 40" OAK |

| TREE TABLE | |
|---|---|
| POINT NUMBER | TREE |
| 6620 | 40" OAK |
| 6621 | 40" OAK |
| 6622 | 42" OAK |
| 6623 | 32" CAMPHOR |
| 6624 | 12" CHERRY |
| 6625 | 37" CAMPHOR |
| 6626 | 38" OAK |
| 6627 | 14" OAK |
| 6628 | 18" OAK |
| 6629 | 14" OAK |
| 6630 | 9" OAK |
| 6631 | 42" OAK |
| 6632 | 24" OAK |
| 6633 | 2" OAK |
| 6634 | 24" OAK |
| 6635 | 42" OAK |
| 6636 | 34" OAK |
| 6637 | 32" OAK |
| 6638 | 24" OAK |
| 6639 | 7" OAK |
| 6640 | 40" OAK |
| 6641 | 28" OAK |
| 6642 | 40" OAK |
| 6643 | 20" OAK |
| 6644 | 36" OAK |
| 6645 | 26" OAK |
| 6646 | 30" OAK |
| 6647 | 36" OAK |
| 6648 | 37" OAK |
| 6649 | 18" OAK |
| 6650 | 40" OAK |
| 6651 | 22" OAK |
| 6652 | 24" OAK |
| 6653 | 24" OAK |
| 6654 | 19" OAK |
| 6655 | 4" CAMPHOR |
| 6656 | 18" OAK |
| 6657 | 8" OAK |
| 6658 | 6" OAK |
| 6659 | 9" OAK |
| 6660 | 15" OAK |
| 6661 | 19" OAK |
| 6662 | 22" OAK |
| 6663 | 10" OAK |
| 6664 | 7" OAK |
| 6665 | 6" OAK |
| 6666 | 16" OAK |
| 6667 | 16" OAK |
| 6668 | 11" OAK |
| 6669 | 9" OAK |
| 6670 | 9" OAK |
| 6671 | 15" OAK |
| 6672 | 14" OAK |
| 6673 | 13" OAK |
| 6674 | 20" OAK |
| 6675 | 14" OAK |
| 6676 | 17" OAK |
| 6677 | 14" OAK |
| 6678 | 9" OAK |
| 6679 | 16" OAK |
| 6680 | 14" OAK |
| 6681 | 22" OAK |
| 6682 | 14" OAK |
| 6683 | 18" OAK |
| 6684 | 18" OAK |
| 6685 | 12" OAK |
| 6686 | 12" OAK |
| 6687 | 17" OAK |
| 6688 | 20" OAK |
| 6689 | 12" OAK |
| 6690 | 11" OAK |
| 6691 | 13" OAK |
| 6692 | 8" OAK |
| 6693 | 12" OAK |
| 6694 | 10" OAK |
| 6695 | 12" OAK |
| 6696 | 8" OAK |
| 6697 | 12" OAK |
| 6698 | 12" OAK |

| TREE TABLE | |
|---|---|
| POINT NUMBER | TREE |
| 6758 | 15" OAK |
| 6759 | 15" OAK |
| 6760 | 14" PINE |
| 6761 | 12" OAK |
| 6762 | 19" PINE |
| 6763 | 15" OAK |
| 6764 | 17" OAK |
| 6765 | 8" OAK |
| 6766 | 12" OAK |
| 6767 | 6" OAK |
| 6768 | 13" OAK |
| 6769 | 13" OAK |
| 6770 | 11" OAK |
| 6771 | 8" OAK |
| 6772 | 12" OAK |
| 6773 | 10" OAK |
| 6774 | 6" OAK |
| 6775 | 12" OAK |
| 6776 | 13" OAK |
| 6777 | 6" OAK |
| 6778 | 10" OAK |
| 6779 | 10" OAK |
| 6780 | 10" OAK |
| 6781 | 5" OAK |
| 6782 | 13" OAK |
| 6783 | 12" OAK |
| 6784 | 12" OAK |
| 6785 | 8" OAK |
| 6786 | 8" OAK |
| 6787 | 10" OAK |
| 6788 | 9" OAK |
| 6789 | 14" OAK |
| 6790 | 36" OAK |
| 6791 | 22" OAK |
| 6792 | 9" PALM |
| 6793 | 24" OAK |
| 6794 | 20" OAK |
| 6795 | 10" OAK |
| 6796 | 6" OAK |
| 6797 | 5" OAK |
| 6798 | 18" OAK |
| 6799 | 8" OAK |
| 6800 | 16" OAK |
| 6801 | 17" OAK |
| 6802 | 20" OAK |
| 6803 | 22" OAK |
| 6804 | 22" PINE |
| 6805 | 8" OAK |
| 6806 | 9" OAK |
| 6807 | 5" OAK |
| 6808 | 5" OAK |
| 6809 | 8" OAK |
| 6810 | 10" PINE |
| 6811 | 8" OAK |
| 6812 | 12" OAK |
| 6813 | 9" OAK |
| 6814 | 12" OAK |
| 6815 | 12" OAK |
| 6816 | 8" OAK |
| 6817 | 7" OAK |
| 6818 | 9" OAK |
| 6819 | 11" OAK |
| 6820 | 9" OAK |
| 6821 | 9" OAK |
| 6822 | 13" OAK |
| 6823 | 14" OAK |
| 6824 | 17" OAK |
| 6825 | 19" PINE |
| 6826 | 13" PINE |
| 6827 | 5" OAK |
| 6828 | 21" OAK |
| 6829 | 13" OAK |
| 6830 | 12" OAK |
| 6831 | 7" OAK |
| 6832 | 8" OAK |
| 6833 | 12" OAK |
| 6834 | 14" OAK |
| 6835 | 16" OAK |
| 6836 | 17" OAK |

| TREE TABLE | |
|---|---|
| POINT NUMBER | TREE |
| 6896 | 28" OAK |
| 6897 | 20" PINE |
| 6898 | 9" OAK |
| 6899 | 24" OAK |
| 6900 | 14" OAK |
| 6901 | 14" OAK |
| 6902 | 12" OAK |
| 6903 | 21" OAK |
| 6904 | 15" PINE |
| 6905 | 10" PINE |
| 6906 | 12" OAK |
| 6907 | 24" PINE |
| 6908 | 7" OAK |
| 6909 | 16" OAK |
| 6910 | 9" OAK |
| 6911 | 16" OAK |
| 6912 | 13" OAK |
| 6913 | 7" OAK |
| 6914 | 12" OAK |
| 6915 | 16" OAK |
| 6916 | 8" OAK |
| 6917 | 24" OAK |
| 6918 | 11" OAK |
| 6919 | 22" OAK |
| 6920 | 15" OAK |
| 6921 | 16" OAK |
| 6922 | 14" OAK |
| 6923 | 16" OAK |
| 6924 | 15" OAK |
| 6925 | 13" OAK |
| 6926 | 15" OAK |
| 6927 | 16" OAK |
| 6928 | 26" OAK |
| 6929 | 9" OAK |
| 6930 | 14" OAK |
| 6931 | 10" OAK |
| 6932 | 6" OAK |
| 6933 | 14" OAK |
| 6934 | 13" OAK |
| 6935 | 19" OAK |
| 6936 | 13" OAK |
| 6937 | 14" OAK |
| 6938 | 12" OAK |
| 6939 | 18" OAK |
| 6940 | 15" OAK |
| 6941 | 19" OAK |
| 6942 | 10" OAK |
| 6943 | 10" OAK |
| 6944 | 12" OAK |
| 6945 | 9" OAK |
| 6946 | 10" OAK |
| 6947 | 18" PINE |
| 6948 | 17" PINE |
| 6949 | 11" PINE |
| 6950 | 18" OAK |
| 6951 | 17" OAK |
| 6952 | 20" PINE |
| 6953 | 6" OAK |
| 6954 | 14" OAK |
| 6955 | 12" OAK |
| 6956 | 10" OAK |
| 6957 | 11" OAK |
| 6958 | 11" OAK |
| 6959 | 6" OAK |
| 6960 | 22" PINE |
| 6961 | 28" OAK |
| 6962 | 32" OAK |
| 6963 | 24" OAK |
| 6964 | 16" OAK |
| 6965 | 13" OAK |
| 6966 | 8" OAK |
| 6967 | 12" OAK |
| 6968 | 12" OAK |
| 6969 | 16" OAK |
| 6970 | 12" OAK |
| 6971 | 13" OAK |
| 6972 | 12" OAK |
| 6973 | 10" OAK |
| 6974 | 11" OAK |
| 6975 | 16" OAK |
| 6976 | 10" OAK |
| 6977 | 9" OAK |
| 6978 | 22" OAK |
| 6979 | 16" OAK |
| 6980 | 6" OAK |
| 6981 | 30" OAK |
| 6982 | 10" OAK |
| 6983 | 18" OAK |
| 6984 | 14" OAK |
| 6985 | 24" OAK |
| 6986 | 13" OAK |
| 6987 | 8" OAK |
| 6988 | 15" PINE |
| 6989 | 15" PINE |
| 6990 | 18" PINE |
| 6991 | 15" OAK |
| 6992 | 6" OAK |
| 6993 | 16" OAK |
| 6994 | 10" OAK |
| 6995 | 16" OAK |
| 6996 | 15" OAK |
| 6997 | 8" OAK |
| 6998 | 6" OAK |
| 6999 | 7" OAK |
| 7000 | 7" OAK |
| 7001 | 14" OAK |
| 7002 | 14" OAK |
| 7003 | 4" OAK |
| 7004 | 18" PINE |
| 7005 | 14" PINE |
| 7006 | 7" OAK |
| 7007 | 12" PINE |
| 7008 | 15" OAK |
| 7009 | 17" PINE |
| 7010 | 8" OAK |
| 7011 | 8" OAK |
| 7012 | 13" PINE |
| 7013 | 17" PINE |
| 7014 | 9" OAK |
| 7015 | 17" PINE |
| 7016 | 13" OAK |
| 7017 | 17" PINE |
| 7018 | 11" OAK |
| 7019 | 8" OAK |
| 7020 | 14" OAK |
| 7021 | 9" OAK |
| 7022 | 10" PINE |
| 7023 | 15" PINE |
| 7024 | 12" OAK |
| 7025 | 13" OAK |
| 7026 | 9" OAK |
| 7027 | 17" PINE |
| 7028 | 14" PINE |
| 7029 | 14" PINE |
| 7030 | 12" PINE |
| 7031 | 13" CHERRY |
| 7032 | 11" PINE |
| 7033 | 7" OAK |

| TREE TABLE | |
|---|---|
| POINT NUMBER | TREE |
| 7034 | 17" PINE |
| 7035 | 13" OAK |
| 7036 | 12" PINE |
| 7037 | 10" OAK |
| 7038 | 19" OAK |
| 7039 | 4" OAK |
| 7040 | 14" PINE |
| 7041 | 12" OAK |
| 7042 | 15" PINE |
| 7043 | 12" PINE |
| 7044 | 10" PINE |
| 7045 | 6" OAK |
| 7046 | 13" PINE |
| 7047 | 16" OAK |
| 7048 | 15" PINE |
| 7049 | 15" PINE |
| 7050 | 11" PINE |
| 7051 | 15" PINE |
| 7052 | 16" PINE |
| 7053 | 12" OAK |
| 7054 | 14" PINE |
| 7055 | 6" OAK |
| 7056 | 12" PINE |
| 7057 | 24" PINE |
| 7058 | 12" OAK |
| 7059 | 7" OAK |
| 7060 | 12" OAK |
| 7061 | 9" OAK |
| 7062 | 11" PINE |
| 7063 | 8" PINE |
| 7064 | 13" PINE |
| 7065 | 16" OAK |
| 7066 | 15" PINE |
| 7067 | 18" OAK |
| 7068 | 24" OAK |
| 7069 | 20" OAK |
| 7070 | 10" OAK |
| 7071 | 20" PINE |
| 7072 | 9" OAK |
| 7073 | 11" PINE |
| 7074 | 6" OAK |
| 7075 | 18" PINE |
| 7076 | 13" PINE |
| 7077 | 7" OAK |
| 7078 | 6" OAK |
| 7079 | 7" OAK |
| 7080 | 9" OAK |
| 7081 | 16" PINE |
| 7082 | 18" PINE |
| 7083 | 9" OAK |
| 7084 | 12" OAK |
| 7085 | 13" OAK |
| 7086 | 9" OAK |
| 7087 | 11" OAK |
| 7088 | 22" OAK |
| 7089 | 8" OAK |
| 7090 | 14" OAK |
| 7091 | 10" OAK |
| 7092 | 19" OAK |
| 7093 | 8" OAK |
| 7094 | 5" OAK |
| 7095 | 12" OAK |
| 7096 | 10" OAK |
| 7097 | 11" OAK |
| 7098 | 12" OAK |
| 7099 | 19" OAK |
| 7100 | 12" OAK |
| 7101 | 9" OAK |
| 7102 | 10" OAK |
| 7103 | 12" OAK |
| 7104 | 5" OAK |
| 7105 | 15" PINE |
| 7106 | 18" PINE |
| 7107 | 4" OAK |
| 7108 | 16" OAK |
| 7109 | 13" PINE |
| 7110 | 13" OAK |
| 7111 | 13" OAK |
| 7112 | 19" OAK |

| TREE TABLE | |
|---|---|
| POINT NUMBER | TREE |
| 7172 | 36" OAK |
| 7173 | 22" OAK |
| 7174 | 18" PINE |
| 7175 | 22" PINE |
| 7176 | 24" OAK |
| 7177 | 7" OAK |
| 7178 | 7" OAK |
| 7179 | 14" OAK |
| 7180 | 22" OAK |
| 7181 | 5" OAK |
| 7182 | 12" OAK |
| 7183 | 7" OAK |
| 7184 | 13" OAK |
| 7185 | 11" OAK |
| 7186 | 6" OAK |
| 7187 | 7" OAK |
| 7188 | 15" OAK |
| 7189 | 8" OAK |
| 7190 | 15" OAK |
| 7191 | 9" OAK |
| 7192 | 13" OAK |
| 7193 | 15" OAK |
| 7194 | 20" OAK |
| 7195 | 18" OAK |
| 7196 | 7" OAK |
| 7197 | 7" OAK |
| 7198 | 7" OAK |
| 7199 | 20" OAK |
| 7200 | 12" OAK |
| 7201 | 18" OAK |
| 7202 | 15" PINE |
| 7203 | 18" PINE |
| 7204 | 17" PINE |
| 7205 | 12" OAK |
| 7206 | 12" OAK |
| 7207 | 10" OAK |
| 7208 | 10" OAK |
| 7209 | 7" OAK |
| 7210 | 12" OAK |
| 7211 | 14" PINE |
| 7212 | 17" PINE |
| 7213 | 7" OAK |
| 7214 | 9" OAK |
| 7215 | 12" OAK |
| 7216 | 11" OAK |
| 7217 | 9" OAK |
| 7218 | 10" OAK |
| 7219 | 8" OAK |
| 7220 | 15" OAK |
| 7221 | 8" OAK |
| 7222 | 22" OAK |
| 7223 | 20" OAK |
| 7224 | 6" OAK |
| 7225 | 9" OAK |
| 7226 | 13" OAK |
| 7227 | 9" OAK |
| 7228 | 18" OAK |
| 7229 | 6" OAK |
| 7230 | 18" PINE |
| 7231 | 18" OAK |
| 7232 | 6" OAK |
| 7233 | 18" PINE |
| 7234 | 20" PINE |
| 7237 | 18" OAK |
| 7238 | 18" OAK |
| 7239 | 12" OAK |
| 7240 | 12" OAK |
| 7241 | 16" PINE |
| 7242 | 6" OAK |
| 7243 | 7" OAK |
| 7245 | 16" PINE |
| 7246 | 20" OAK |
| 7247 | 6" OAK |
| 7248 | 13" OAK |
| 7249 | 15" OAK |
| 7250 | 15" OAK |
| 7251 | 10" OAK |
| 7252 | 12" OAK |
| 7253 | 7" OAK |
| 7254 | 14" OAK |
| 7255 | 5" OAK |
| 7256 | 9" OAK |
| 7257 | 12" OAK |
| 7258 | 16" OAK |
| 7259 | 10" OAK |
| 7260 | 16" OAK |
| 7261 | 20" OAK |
| 7262 | 16" OAK |
| 7263 | 13" OAK |
| 7264 | 20" OAK |
| 7265 | 18" OAK |
| 7266 | 7" OAK |
| 7267 | 10" OAK |
| 7268 | 13" OAK |
| 7269 | 20" OAK |
| 7270 | 10" OAK |
| 7271 | 6" OAK |
| 7272 | 6" OAK |
| 7273 | 14" OAK |
| 7274 | 14" OAK |
| 7275 | 13" OAK |
| 7276 | 14" OAK |
| 7277 | 12" OAK |
| 7278 | 12" OAK |
| 7279 | 8" OAK |
| 7280 | 11" OAK |
| 7281 | 20" OAK |
| 7282 | 13" OAK |
| 7283 | 17" OAK |
| 7284 | 16" OAK |
| 7285 | 32" OAK |
| 7286 | 11" OAK |
| 7287 | 7" OAK |
| 7288 | 9" OAK |
| 7289 | 9" OAK |
| 7290 | 11" OAK |
| 7291 | 11" OAK |
| 7292 | 14" OAK |
| 7293 | 15" OAK |
| 7294 | 13" OAK |
| 7295 | 6" OAK |
| 7296 | 10" OAK |
| 7297 | 10" OAK |
| 7298 | 16" OAK |
| 7299 | 7" OAK |
| 7300 | 12" OAK |
| 7301 | 8" OAK |
| 7302 | 12" OAK |
| 7303 | 12" OAK |
| 7304 | 7" OAK |
| 7305 | 6" OAK |
| 7306 | 8" OAK |
| 7307 | 9" OAK |
| 7308 | 7" OAK |
| 7309 | 8" OAK |
| 7310 | 15" OAK |
| 7311 | 12" OAK |
| 7312 | 12" OAK |

| TREE TABLE | |
|---|---|
| POINT NUMBER | TREE |
| 7313 | 7" OAK |
| 7314 | 6" OAK |
| 7315 | 4" OAK |
| 7316 | 13" OAK |
| 7317 | 12" OAK |
| 7318 | 13" OAK |
| 7319 | 15" OAK |
| 7320 | 15" OAK |
| 7321 | 14" OAK |
| 7322 | 20" OAK |
| 7323 | 18" OAK |
| 7324 | 14" OAK |
| 7325 | 13" OAK |
| 7326 | 13" OAK |
| 7327 | 13" OAK |
| 7328 | 36" OAK |
| 7329 | 32" OAK |
| 7330 | 24" OAK |
| 7331 | 20" OAK |
| 7332 | 18" OAK |
| 7333 | 17" OAK |
| 7334 | 15" OAK |
| 7335 | 20" PINE |
| 7336 | 15" OAK |
| 7337 | 20" OAK |
| 7338 | 18" OAK |
| 7339 | 16" OAK |
| 7340 | 6" OAK |
| 7341 | 13" OAK |
| 7342 | 12" OAK |
| 7343 | 14" OAK |
| 7344 | 14" OAK |
| 7345 | 15" OAK |
| 7346 | 20" OAK |
| 7347 | 9" OAK |
| 7348 | 11" OAK |
| 7349 | 12" OAK |
| 7350 | 10" OAK |
| 7351 | 22" PINE |
| 7352 | 14" OAK |
| 7353 | 18" OAK |
| 7354 | 18" OAK |
| 7355 | 12" OAK |
| 7356 | 12" OAK |
| 7357 | 12" OAK |
| 7358 | 10" OAK

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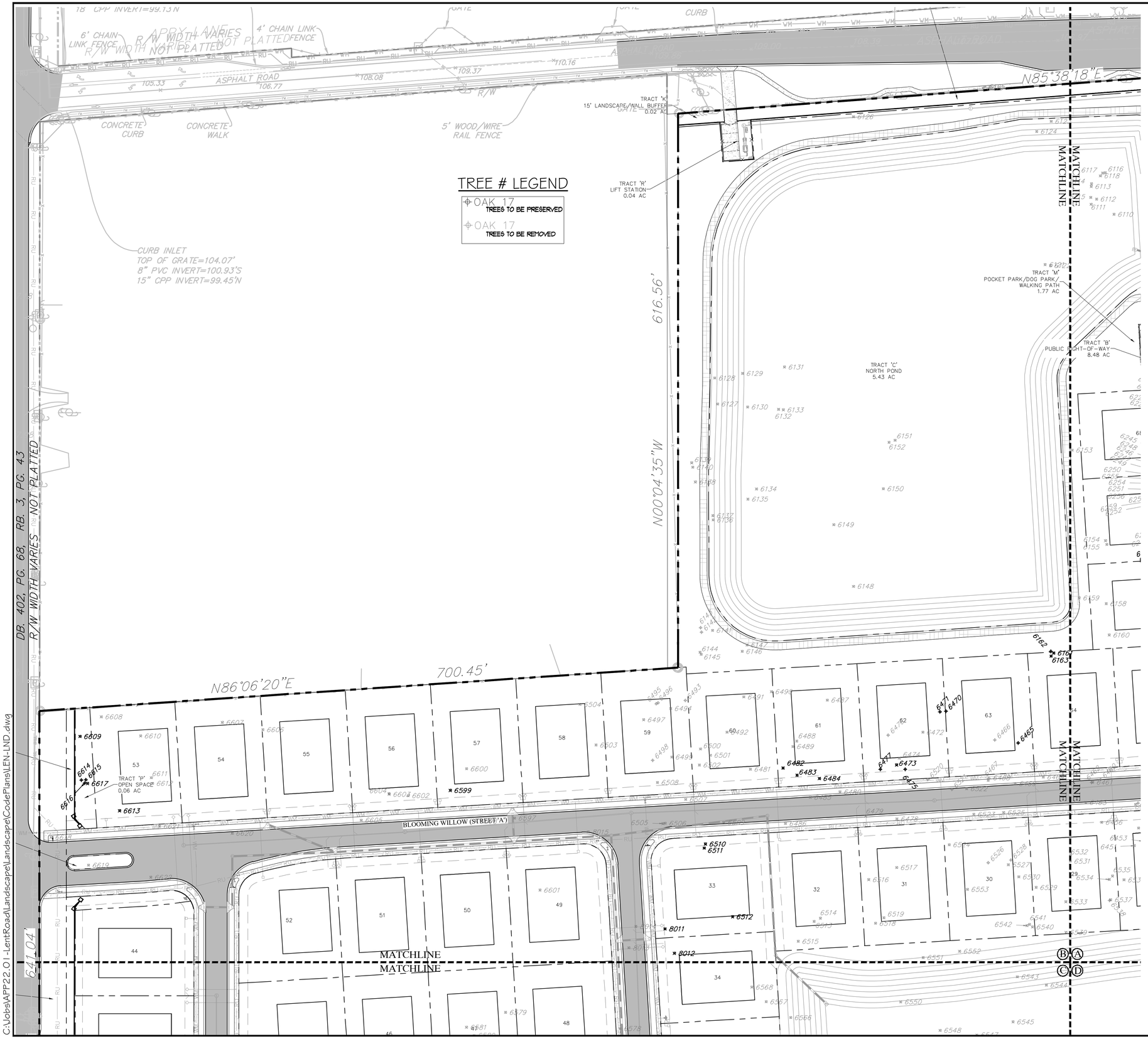


CITY NOTES:

1. STREET TREES SHALL BE INSTALLED WITH THE DEVELOPMENT OF EACH INDIVIDUAL LOT.
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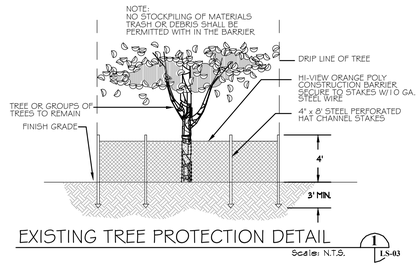


EXISTING TREE PROTECTION DETAIL (1/LS-03)
Scale: N.T.S.

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| SIGNATURE | REG. NO. | DATE |
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| | LA0001764 | 12/14/21 |

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■ Site Planning
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PH: (407) 484-3414

PROJECT AND OWNER

WILLOW RUN

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Florida

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LANDSCAPE ARCHITECT
CARL J. KELLY JR., RLA

LANDSCAPE ARCHITECTURE LICENSED LA0001764 STATE OF FLORIDA

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ISSUED FOR:
01/30/22 City Comments
02/22/22 Site Changes
04/04/22 Tree Survey

DRAWING SCALE
0 FT 25' 50' North
SCALE: 1"=50'-0"

DRAWING TITLE
TREE PRESERVATION PLAN

DRAWING NUMBER
LS-03

SHEET 32 OF 45

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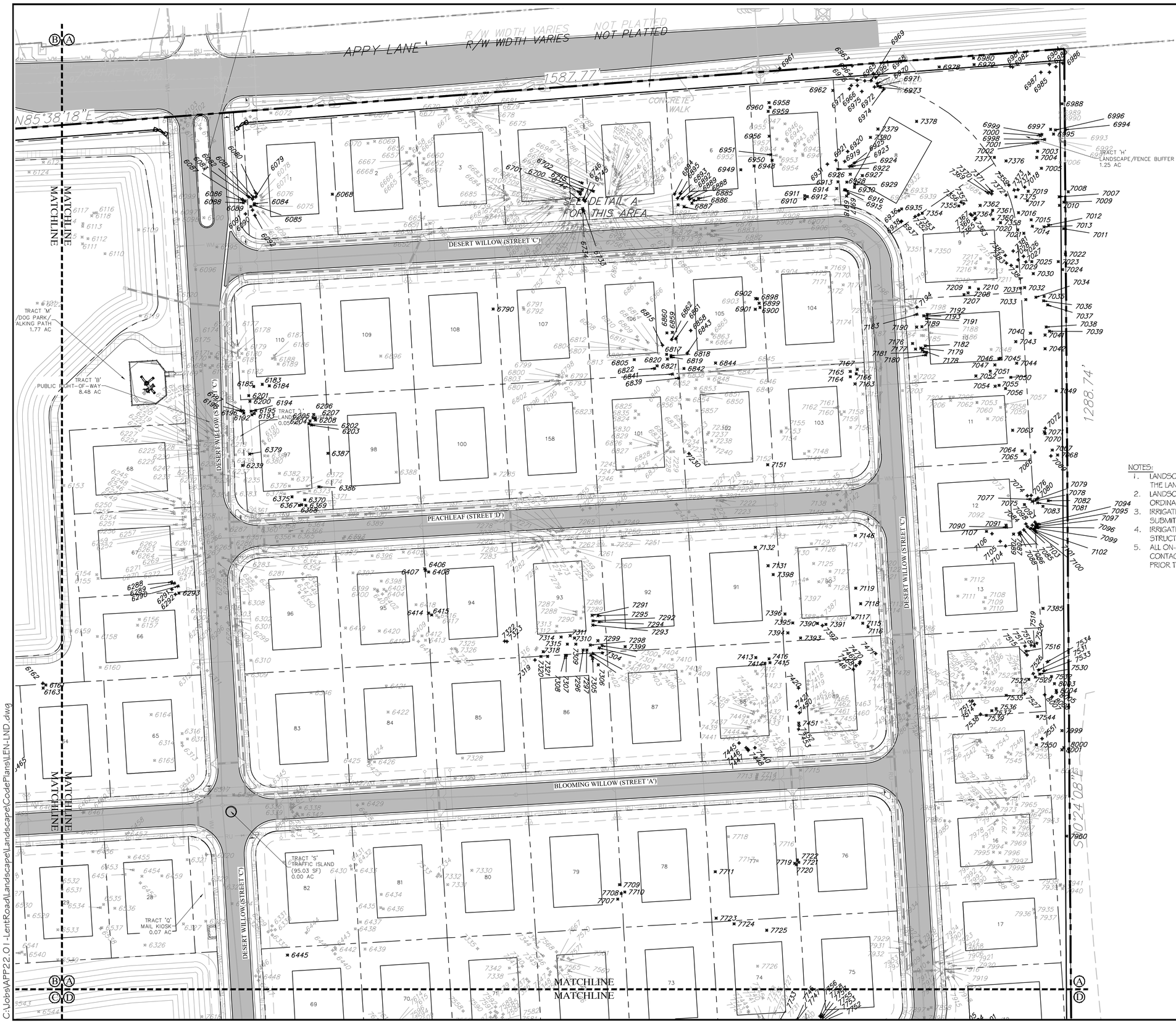


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## TREE # LEGEND

OAK 17 — TREES TO BE PRESERVED

OAK 17 — TREES TO BE REMOVED

NOTES:

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CARL J. KELLY JR., RLA

STATE OF FLORIDA — CARL J. KELLY JR. — LICENSED LANDSCAPE ARCHITECT — LA0001764

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DRAWING SCALE

0 FT 25' 50' North

SCALE: 1"=50'-0"

DRAWING TITLE

**TREE PRESERVATION PLAN**

DRAWING NUMBER

**LS-04**

SHEET 33 OF 45

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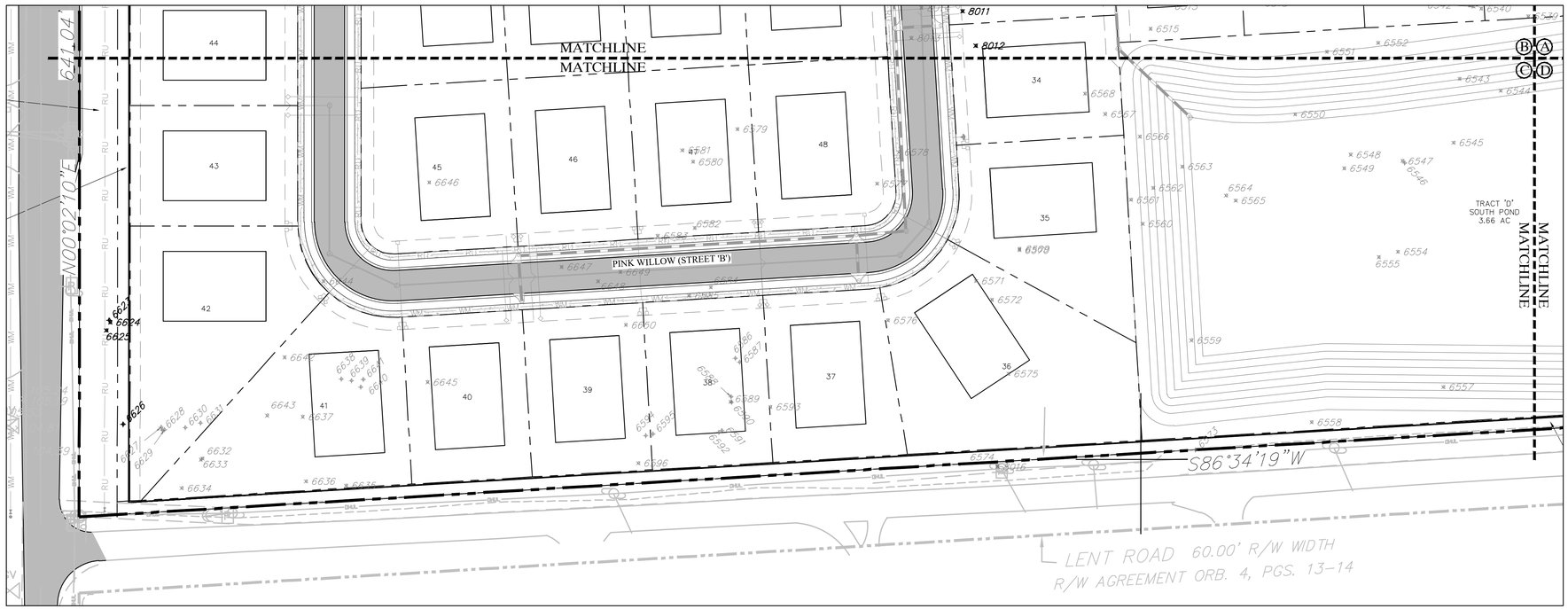


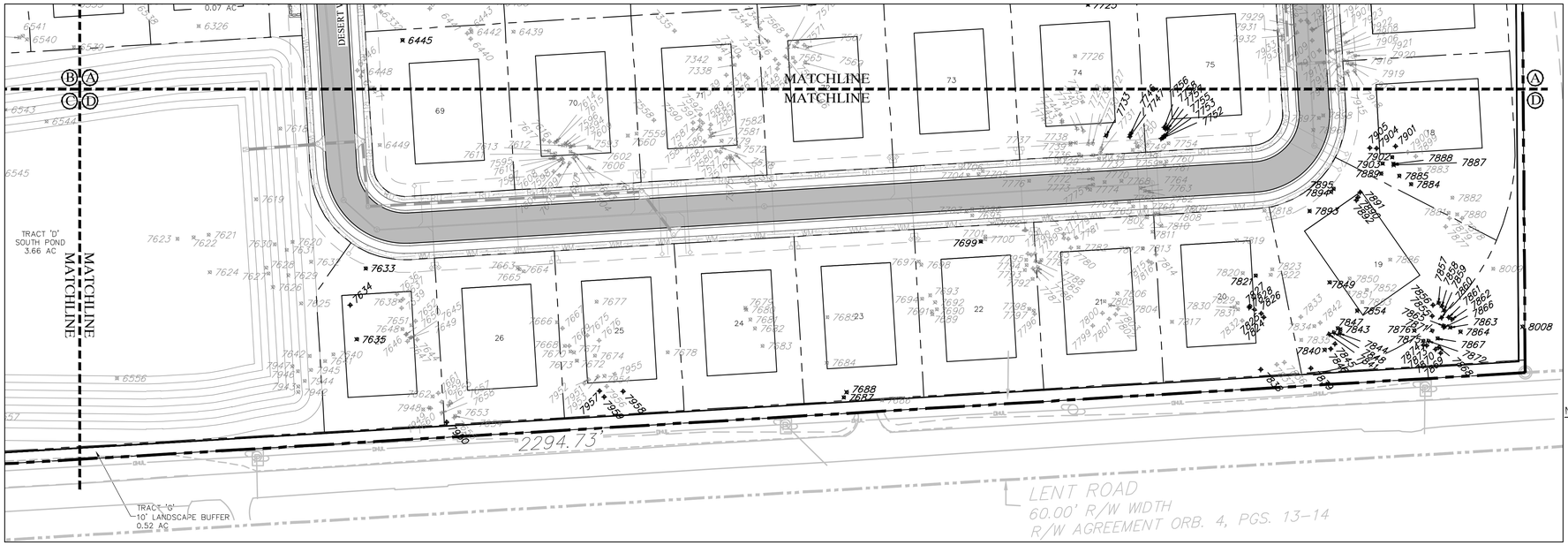


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## TREE MITIGATION

REPLACEMENT/ REMOVAL TABLE:

| | |
|---|---|
| Total inches on current, non-altered site: | 28,907" dbh |
| Total number of specimen trees: | 231 Trees |
| Total Non Invasive inches removed: | 51" dbh |
| Total inches retained: | 7,288" dbh |
| Total Specimen inches retained: | 891" dbh |
| Total inches required: | 21,483" dbh |
| Total inches replaced: | 2,239" dbh |
| Total inches post development: | 10,517" dbh |
| Maximum tree stock formula calculations: | 9,903" dbh Specimen Trees<br>6,932" dbh Non-Specimen Trees |
| Site clearing area in square feet and acres: | 1,980,566 SF/ 45.47 AC |
| Total site area in square feet and acres: | 2,475,708 SF/ 56.83 AC |
| Existing canopy area: | 80% (1,932 non invasive trees) |
| Min. required % of retained canopy required: | 24% (464 trees) |
| Min. required % of retained canopy provided: | 532 trees |

## LANDSCAPE NOTES:

1. LANDSCAPE AND IRRIGATION PLANS SHALL MEET THE REQUIREMENTS OF ORD. 2069, AND SHALL BE PREPARED BY A LICENSED LANDSCAPE ARCHITECT.
2. ALL PLANT MATERIAL SHALL BE FLORIDA GRADE NO. 1 OR BETTER AS SPECIFIED IN "GRADES AND STANDARDS FOR NURSERY PLANTS", "PARTS 1 AND 2, BY DIVISION OF PLANT INDUSTRY, FLORIDA", DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES, AND SHALL CONFORM TO CURRENT AMERICAN ASSOCIATION OF NURSERYMEN 'STANDARDS FOR NURSERY STOCK', LATEST EDITION.
3. ALL PLANTING BEDS SHALL RECEIVE A 3" LAYER (1" OVER ROOTBALL) OF MINNIE PINE BARK NUGGET MULCH.
4. ALL PROPOSED TREES AND PLANTING BEDS SHALL BE IRRIGATED. SYSTEM WILL BE EQUIPPED WITH AN AUTOMATIC RAIN CUT-OFF SWITCH. RISERS ARE NOT ALLOWED.
5. ALL DISTURBED AREAS SHALL BE SODED WITH BAHIA SOD.

## INDIVIDUAL LOT TREES

LOT TREES REQUIRED:

| | |
|---|---|
| TOTAL NUMBER OF LOTS: | 110 |
| TREE INCHES REQUIRED PER LOT: | 9" dbh |
| TOTAL TREE INCHES REQUIRED: | 990" dbh |

INDIVIDUAL LOT TREES SHALL CONSIST OF TWO CANOPY TREES AND ONE UNDERSTORY TREE.
INDIVIDUAL LOT TREES SHALL BE INSTALLED WHEN THE LOT IS DEVELOPED.

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## TREE # LEGEND

OAK 17
TREES TO BE PRESERVED

OAK 17
TREES TO BE REMOVED

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DRAWING TITLE
**TREE PRESERVATION PLAN**

DRAWING NUMBER
**LS-05**

SHEET 34 OF 45

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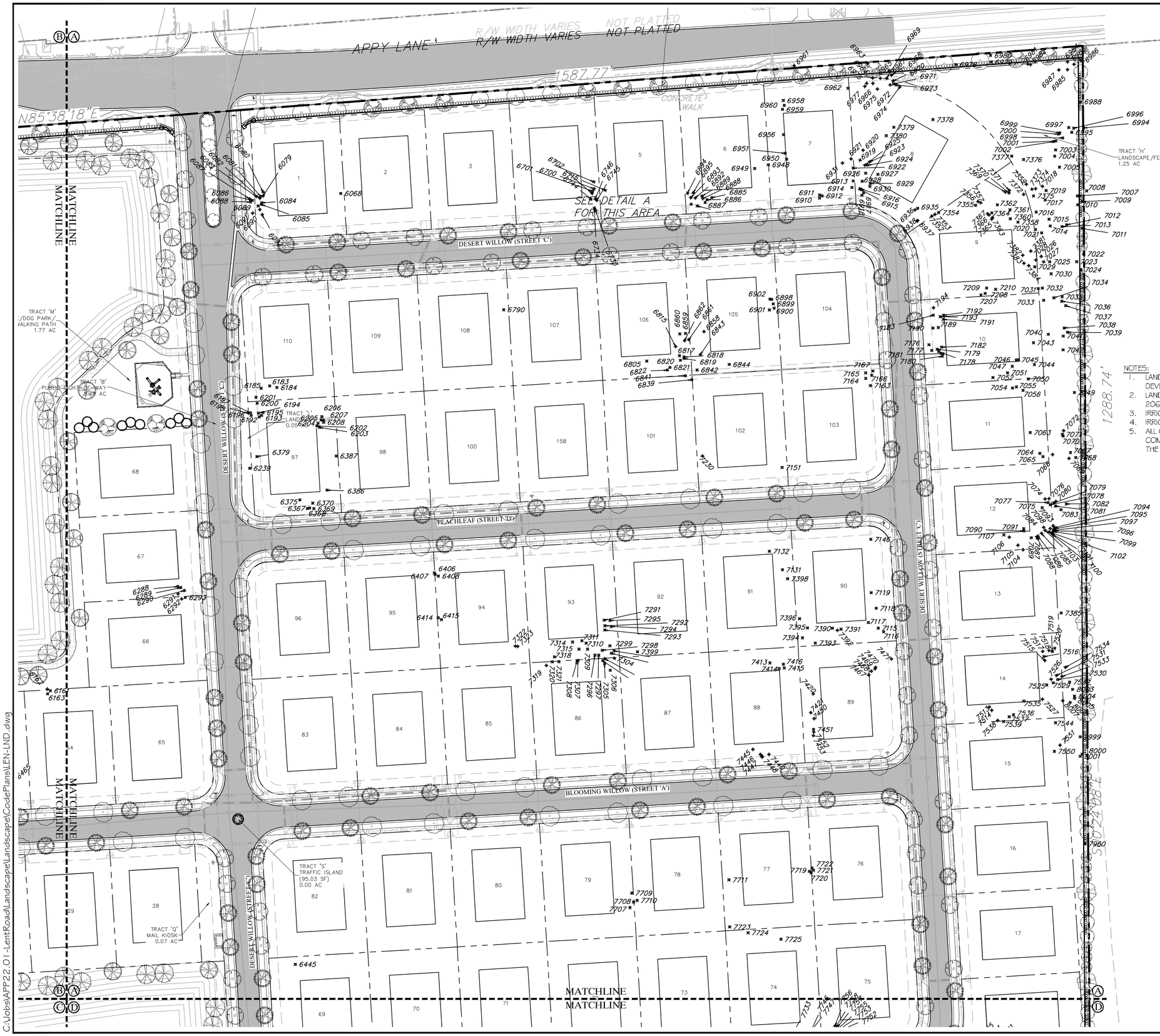


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DRAWING NUMBER

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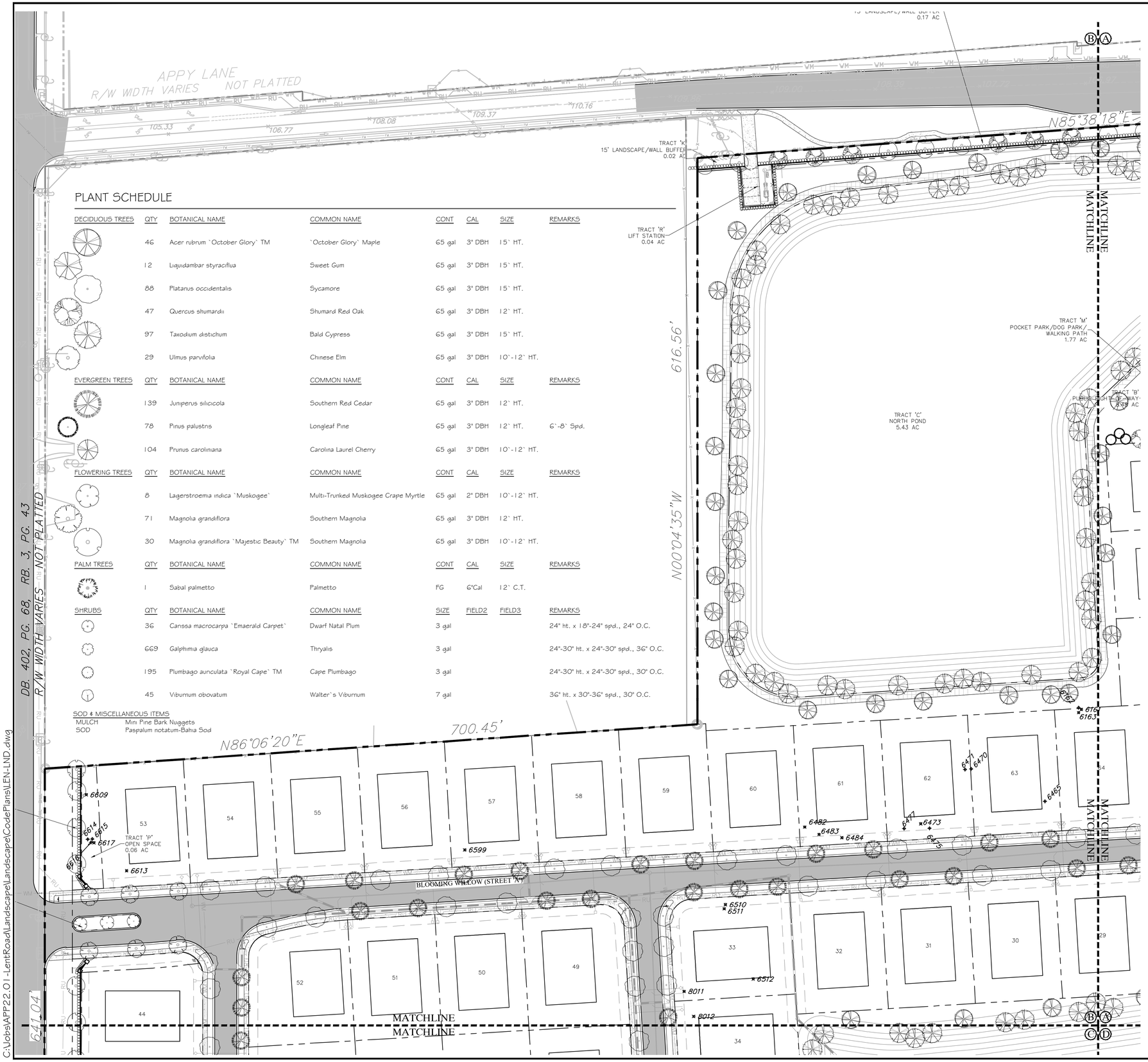


## PLANT SCHEDULE

| DECIDUOUS TREES | QTY | BOTANICAL NAME | COMMON NAME | CONT | CAL | SIZE | REMARKS |
|---|---|---|---|---|---|---|---|
| | 46 | Acer rubrum `October Glory` TM | `October Glory` Maple | 65 gal | 3" DBH | 15` HT. | |
| | 12 | Liquidambar styraciflua | Sweet Gum | 65 gal | 3" DBH | 15` HT. | |
| | 88 | Platanus occidentalis | Sycamore | 65 gal | 3" DBH | 15` HT. | |
| | 47 | Quercus shumardii | Shumard Red Oak | 65 gal | 3" DBH | 12` HT. | |
| | 97 | Taxodium distichum | Bald Cypress | 65 gal | 3" DBH | 15` HT. | |
| | 29 | Ulmus parvifolia | Chinese Elm | 65 gal | 3" DBH | 10`-12` HT. | |
| **EVERGREEN TREES** | **QTY** | **BOTANICAL NAME** | **COMMON NAME** | **CONT** | **CAL** | **SIZE** | **REMARKS** |
| | 139 | Juniperus silicicola | Southern Red Cedar | 65 gal | 3" DBH | 12` HT. | |
| | 78 | Pinus palustris | Longleaf Pine | 65 gal | 3" DBH | 12` HT. | 6`-8` Spd. |
| | 104 | Prunus caroliniana | Carolina Laurel Cherry | 65 gal | 3" DBH | 10`-12` HT. | |
| **FLOWERING TREES** | **QTY** | **BOTANICAL NAME** | **COMMON NAME** | **CONT** | **CAL** | **SIZE** | **REMARKS** |
| | 8 | Lagerstroemia indica `Muskogee` | Multi-Trunked Muskogee Crape Myrtle | 65 gal | 2" DBH | 10`-12` HT. | |
| | 71 | Magnolia grandiflora | Southern Magnolia | 65 gal | 3" DBH | 12` HT. | |
| | 30 | Magnolia grandiflora `Majestic Beauty` TM | Southern Magnolia | 65 gal | 3" DBH | 10`-12` HT. | |
| **PALM TREES** | **QTY** | **BOTANICAL NAME** | **COMMON NAME** | **CONT** | **CAL** | **SIZE** | **REMARKS** |
| | 1 | Sabal palmetto | Palmetto | FG | 6"Cal | 12` C.T. | |
| **SHRUBS** | **QTY** | **BOTANICAL NAME** | **COMMON NAME** | **SIZE** | **FIELD2** | **FIELD3** | **REMARKS** |
| | 36 | Carissa macrocarpa `Emaerald Carpet` | Dwarf Natal Plum | 3 gal | | | 24" ht. x 18"-24" spd., 24" O.C. |
| | 669 | Galphimia glauca | Thryalis | 3 gal | | | 24"-30" ht. x 24"-30" spd., 36" O.C. |
| | 195 | Plumbago auriculata `Royal Cape` TM | Cape Plumbago | 3 gal | | | 24"-30" ht. x 24"-30" spd., 30" O.C. |
| | 45 | Viburnum obovatum | Walter`s Viburnum | 7 gal | | | 36" ht. x 30"-36" spd., 30" O.C. |

**SOD & MISCELLANEOUS ITEMS**

| | |
|---|---|
| MULCH | Mini Pine Bark Nuggets |
| SOD | Paspalum notatum-Bahia Sod |

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4. IRRIGATION PLANS SHALL BE PROVIDED AT CONSTRUCTION SITE PLAN.
5. IRRIGATION DISTRIBUTION EQUIPMENT SHALL BE 24" FROM VERTICAL STRUCTURES.
6. ALL ON-SITE LANDSCAPING AND AMENITIES REQUIRE A FINAL INSPECTION. CONTACT THE COMMUNITY DEVELOPMENT DEPARTMENT AT LEAST 7 DAYS PRIOR TO THE INSPECTION. THE SITE SUPERINTENDENT MUST BE ON SITE.
7. FOR ANY TREES THAT ARE REQUIRED BETWEEN THE CURB AND SIDEWALK, ROOT BARRIERS WILL BE INSTALLED TO ELIMINATE DAMAGE TO THE UTILITIES, CURB AND SIDEWALK. AT THE TIME OF THE CONSTRUCTION SITE PLAN SUBMITTAL, THE HOA DOCUMENT WILL ENTRUST MAINTENANCE FOR ALL "STREET TREES" TO THE HOA. A NOTE WAS ADDED TO THE DEVELOPMENT STANDARDS, UNDER E. BUFFERS AND LANDSCAPING, NOTE 7, WHICH STATES "NO 'STREET TREES' WILL BE PROPOSED BETWEEN THE CURB AND SIDEWALK UNLESS SPECIFICALLY REQUESTED BY PLANNING AND ZONING DEPARTMENT. IF NECESSARY, ANY PROPOSED TREES, LOCATED BETWEEN THE CURB AND THE SIDEWALK, CANNOT BE ROOT AGGRESSIVE OR THEY MUST HAVE ROOT BARRIERS INSTALLED TO PREVENT DAMAGE TO THE UTILITIES, CURB AND SIDEWALK."

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## LANDSCAPE NOTES:

1. ALL PLANT MATERIAL SHALL BE FLORIDA GRADE NO. 1 OR BETTER AS SPECIFIED IN 'GRADES AND STANDARDS FOR NURSERY PLANTS', 'PARTS 1 AND 2, BY DIVISION OF PLANT INDUSTRY, FLORIDA', DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES, AND SHALL CONFORM TO CURRENT AMERICAN ASSOCIATION OF NURSERYMEN 'STANDARDS FOR NURSERY STOCK', LATEST EDITION.
2. IT IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR OR OWNER'S REPRESENTATIVE, NOT THE LANDSCAPE ARCHITECT, FOR THE NURSERY SELECTION OF PLANT MATERIAL AND TO ENSURE THE HEALTH AND SAFETY OF ALL PLANTS SELECTED.
3. CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE BUILDING CODES, ORDINANCES AND LOCAL REGULATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS TO PERFORM THE WORK.
4. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR INSPECTION OF EXISTING CONDITIONS AND PROMPTLY REPORTING ALL DISCREPANCIES AND IMPROPER CONDITIONS (WETNESS, MUCK, DEBRIS, ETC) TO LANDSCAPE ARCHITECT PRIOR TO BIDDING. CONTRACTOR IS RESPONSIBLE FOR SOIL ANALYSIS PRIOR TO INSTALLATION OF PLANTINGS, AND IS RESPONSIBLE FOR ALL SOIL AMENDMENTS TO CONFORM TO SPECIFICATIONS.
5. ALL TREES ON SITE SHOULD BE INSPECTED ANNUALLY AND AFTER ALL STORM EVENTS TO ENSURE THE HEALTH AND SAFETY OF ALL TREES.
6. THE LANDSCAPE CONTRACTOR SHALL ACQUAINT HIMSELF WITH ALL CIVIL DRAWING AS THEY RELATE TO PAVING SITE GRADING, AND ALL UTILITIES, (INCLUDING WATER, SEWER AND ELECTRICAL SUPPLY) TO PRECLUDE ANY MISUNDERSTANDING AND ENSURE TROUBLE FREE INSTALLATION. THE EXACT LOCATION OF ALL EXISTING STRUCTURES, UNDERGROUND UTILITIES, EXISTING UNDERGROUND SPRINKLERS AND PIPE MAY NOT BE INDICATED ON DRAWINGS. THE CONTRACTOR SHALL CONDUCT HIS WORK IN A MANNER TO PREVENT INTERRUPTION OR DAMAGE TO EXISTING SYSTEMS WHICH MUST REMAIN OPERATIONAL. THE CONTRACTOR SHALL PROTECT UTILITY SERVICES WHICH MUST REMAIN OPERATIONAL AND SHALL BE RESPONSIBLE FOR THERE REPLACEMENT IF DAMAGED BY HIM.
7. ALL PLANTING BEDS SHALL RECEIVE A 3" LAYER (1" OVER ROOTBALL) OF MINNIE PINE BARK NUGGET MULCH.
8. IN THE EVENT OF A CONFLICT BETWEEN QUANTITIES ON THE PLANT LIST AND THE PLANS, THE PLAN SHALL TAKE PRECEDENT.

LANDSCAPE AND IRRIGATION DESIGN

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 .

| SIGNATURE | LA0001764 | 12/14/21 |
|---|---|---|
| | REG. NO. | DATE |

**Landscape Designs, LLC**

- Landscape Architecture
- Site Planning

4663 Tiffany Woods Cir
Oviedo, FL 32765
PH: (407) 484-3414

PROJECT AND OWNER

WILLOW RUN

City of Apopka
Florida

Appian Engineering, LLC
2221 Lee Road, Suite 17
Winter Park, FL 32789
PH: (407) 960-5856

CONSULTANTS

**LANDSCAPE ARCHITECT**

CARL J. KELLY JR., RLA

LICENSED LANDSCAPE ARCHITECT
CARL J. KELLY JR.
LA0001764
STATE OF FLORIDA

DocuSigned by:
D96C07E49FDC41C...

REG.#: 0001764

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| PROJECT NO. | APP22.01 |
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| DRAWN BY | CJK |
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| DATE | 12/14/21 |

ISSUED FOR:

01/30/22 City Comments
02/22/22 Site Changes
04/04/22 Tree Survey

DRAWING SCALE

0 FT 25' 50' North

SCALE: 1"=50'-0"

DRAWING TITLE

**LANDSCAPE SITE PLAN**

DRAWING NUMBER

LS-07

SHEET 36 OF 45

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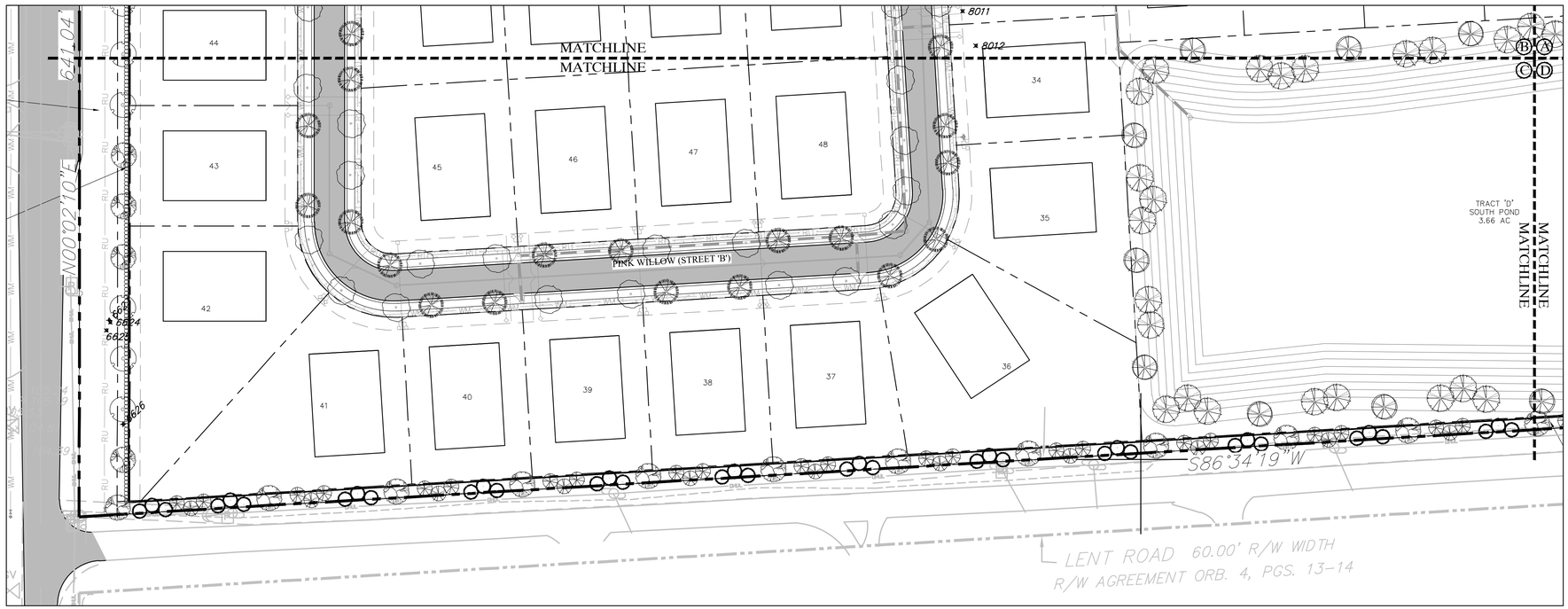


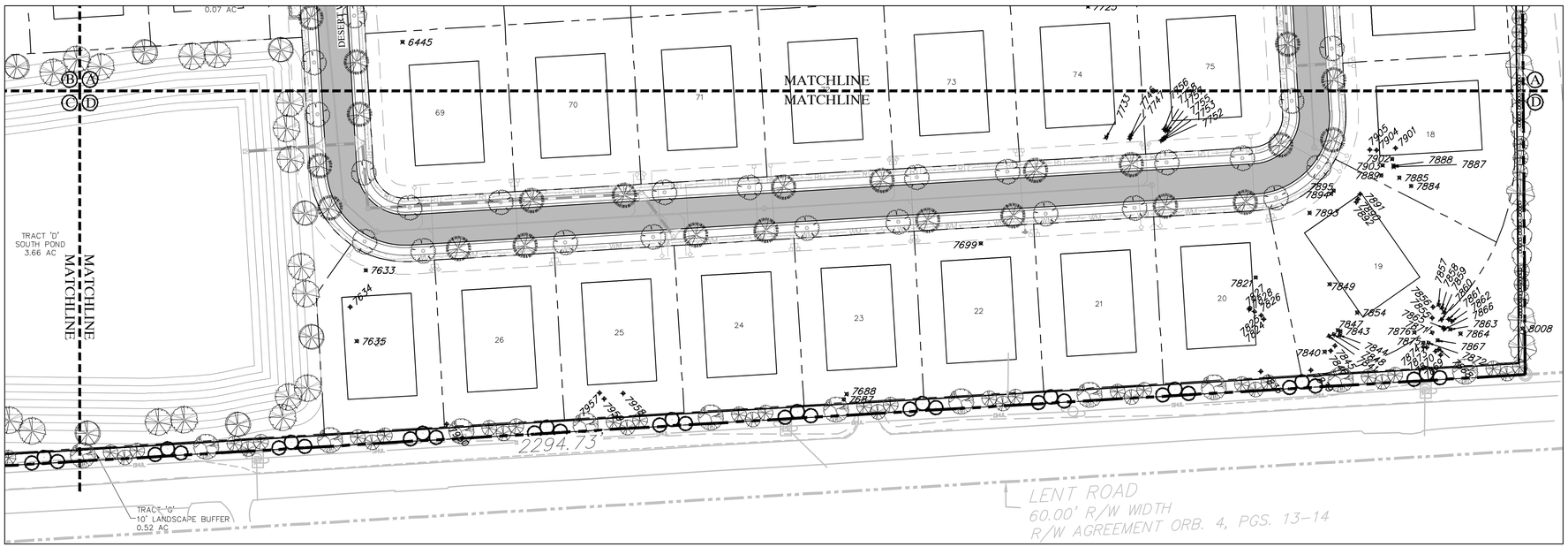


CITY NOTES:

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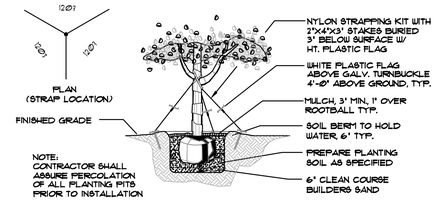
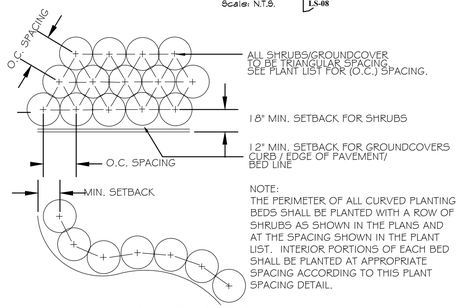
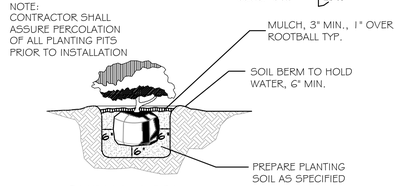



LARGE TREE DETAIL 1 LS-08
Scale: N.T.S.




PLANT SPACING DETAIL 2 LS-08
Scale: N.T.S.




SHRUB DETAIL 3 LS-08
Scale: N.T.S.

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SCALE: 1"=50'-0"

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LANDSCAPE SITE PLAN

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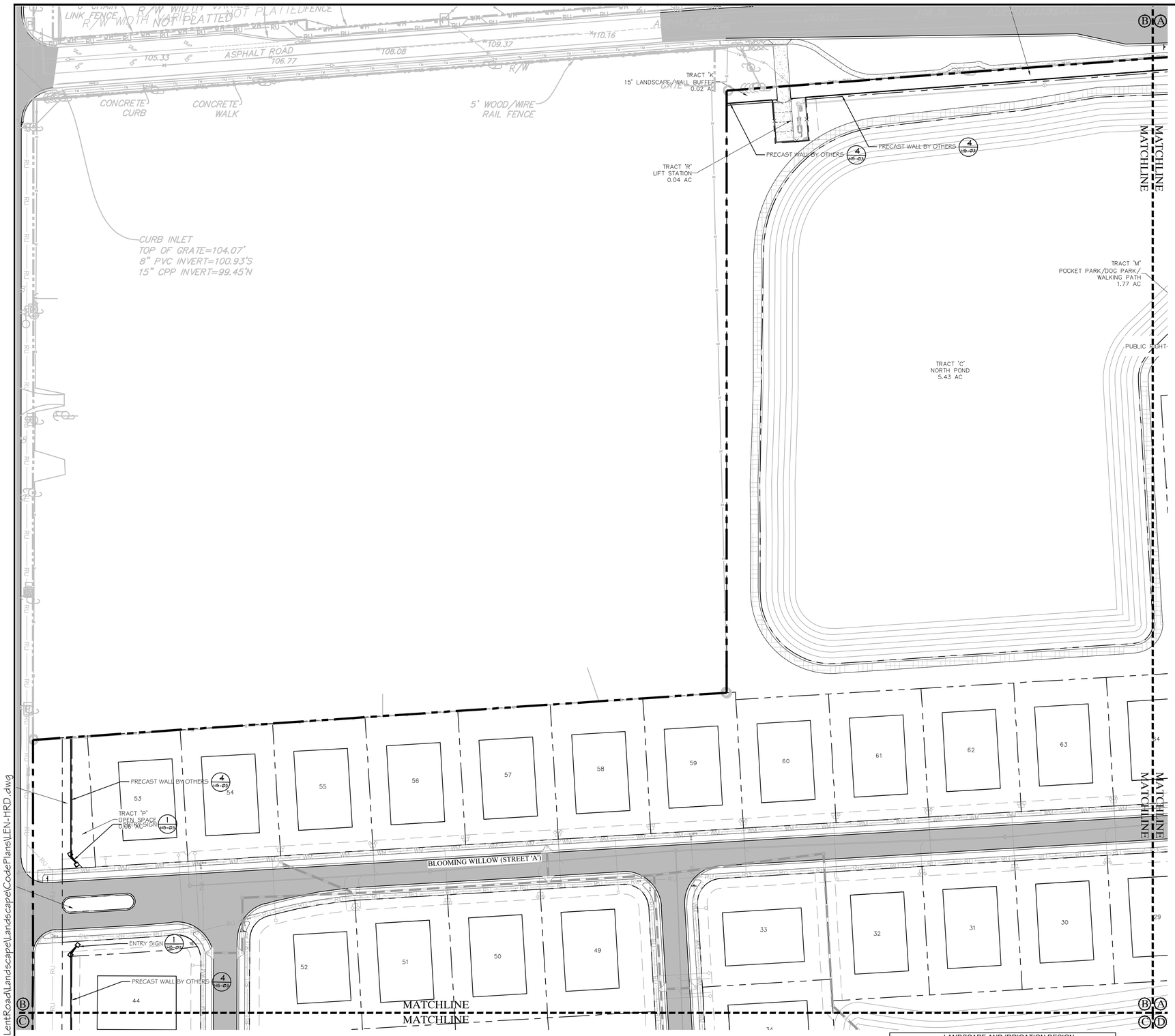


## STRUCTURAL DESIGN CRITERIA:

A. STRUCTURAL DESIGN IS IN ACCORDANCE WITH THE GOVERNING PROVISIONS OF THE FOLLOWING CODES, STANDARDS AND SPECIFICATIONS.
   1. FLORIDA BUILDING CODE - 2020 EDITION
   2. ASCE 7-02 MIN. DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES.
   3. ACI 318-02, BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE.
   4. ACI 530-99, BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES
   5. AISC SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, A.S.D., NINTH EDITION.
   6. AWS D1.1 STRUCTURAL WELDING CODE - STEEL.
   7. SPECIFICATIONS FOR ALUMINUM STRUCTURES, FOURTH EDITION.
   8. AWS D1.2 STRUCTURAL WELDING CODE - ALUMINUM

B. SUPERIMPOSED DESIGN LOADS:
   LIVE LOADS (MIN.): GENERAL: 20 PSF
   DEAD LOADS: DEAD WEIGHT
   WIND LOADS: DESIGN WIND SPEED: 140 MPH
   MEAN ROOF HEIGHT: ≤15 FEET
   EXPOSURE = B
   STRUCTURE: SIGN, CF=1.2, G=.85
   DESIGN WIND PRESSURE: 22 PSF

C. FOUNDATIONS.
   1. ASSUMED SAFE BEARING PRESSURE = 2,000 PSF.
   2. ALL UNSUITABLE SOIL SHALL BE REMOVED AND REPLACED WITH CLEAN STRUCTURAL FILL PLACED IN LOOSE LAYERS NOT EXCEEDING EIGHT (8") INCHES AND COMPACTED TO 95% (ASTM D698 - STANDARD PROCTOR) OF MAX. DRY DENSITY.
   3. CONTRACTOR SHALL PREPARE THE SUBSURFACE SOILS PER THE GEOTECHNICAL REQUIREMENTS STIPULATED IN GEOTECHNICAL REPORT.

### GENERAL:

A. ALL DIMENSIONS AND PLACEMENTS SPECIFIED WITHIN THIS DRAWING ARE TO BE VERIFIED BY OWNER PRIOR TO INSTALLATION.
B. ALL ELEVATIONS ARE REFERENCED TO FINISHED GRADE EL. 000.00' = 0'-0". ALL ELEVATIONS SHOWN ON PLANS ARE REFERENCED TO THIS DATUM UNLESS NOTED.
C. THE GENERAL CONTRACTOR SHALL FIELD MEASURE ALL DIMENSIONS MARKED (V.I.F.) PRIOR TO FABRICATION OR START OF CONSTRUCTION.
D. NO STRUCTURAL MEMBER SHALL BE CUT, NOTCHED OR OTHERWISE REDUCED IN STRENGTH WITHOUT THE PRIOR NOTIFICATION OF THE STRUCTURAL ENGINEER.
E. THE GENERAL CONTRACTOR SHALL COORDINATE ALL OTHER DISCIPLINES FOR ANY ITEMS WHICH EFFECT THE STRUCTURAL DRAWINGS.
F. TEMPORARY BRACING, GUY WIRES, ETC., SHALL BE USED WHERE NECESSARY TO ADEQUATELY RESIST ALL CONSTRUCTION LOADS.
G. INSURE POSITIVE DRAINAGE IN ALL AREAS.
H. CONTRACTOR TO VERIFY ALL UTILITIES PRIOR TO CONSTRUCTION. NOTIFY LANDSCAPE ARCHITECT OF ANY CONFLICTS BETWEEN PROPOSED WALLS/COLUMNS AND EXISTING UTILITIES.

### CAST-IN-PLACE REINFORCED CONCRETE:

A. ALL CONCRETE WORK SHALL CONFORM TO ACI STANDARD BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318-02/318R-02).
B. ALL CONCRETE WORK SHALL ALSO CONFORM TO ALL APPLICABLE SECTIONS OF THE F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
C. MINIMUM 28 DAY COMPRESSIVE STRENGTH:
   - CONCRETE WALKS, SIDEWALK BANDING, BENCH FOUNDATIONS AND HANDICAP RAMPS: CLASS I
   - CONCRETE SIDEWALKS SUBSLABS AND INTEGRAL BANDING: CLASS I
   - CONCRETE CURB, CURB AND GUTTER, 6' DRIVEWAY BANDING, HEADER CURB AND VALLEY GUTTER: CLASS II
   - CONCRETE STREET LIGHT POLE AND TRAFFIC POLE BASES, AND TREE GRATE COLLARS: CLASS II
D. SLUMPS PER F.D.O.T. STANDARD SPECIFICATIONS.
E. REINFORCING STEEL SHALL CONFORM TO ASTM A-615 GRADE 60. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185 (6"X6", 2.1 W.W.F.)
F. TERMINATE ALL DISCONTINUED TOP BARS WITH 180 DEGREE STANDARD HOOK UNLESS OTHERWISE NOTED.
G. AT CHANGES IN DIRECTION OF CONCRETE WALLS, STRIP FOOTINGS AND BOND BEAMS, PROVIDE CORNER BARS AT SAME SIZE AND SPACING AS HORIZONTAL STEEL.
H. METAL EXPANSION CAPS: TO BE FURNISHED WITH ONE END OF EACH DOWEL BAR IN EXPANSION JOINTS. CAPS TO BE A MINIMUM OF 3" IN LENGTH, WITH ONE END CLOSED, TO ALLOW BAR MOVEMENT OF NOT LESS THAN 1 INCH, UNLESS OTHERWISE INDICATED. PLASTIC COATED DOWEL BARS MAY BE USED IF APPROVED BY ENGINEER.
I. JOINT MATERIAL: JOINT SEALER IS TO BE GRAY SONOLASTIC SL 1 MANUFACTURED BY REXNORD CHEMICAL PRODUCTS, INC., MINNEAPOLIS, MN. OR APPROVED EQUAL.
J. CONTRACTION JOINTS: TO BE PROVIDE TO A DEPTH 1/4 OF CONCRETE THICKNESS, AS FOLLOWED.
   1. TOOLED JOINTS:
   2. SAWED JOINTS IF REQUIRED, TO BE CUT INTO HARDENED CONCRETE AS SOON AS SURFACE WILL NOT BE TORN, ABRASED, OR OTHERWISE DAMAGED BY CUTTING ACTION.
   3. CONTRACTION JOINTS ARE TO BE PLACED AT INTERVALS EQUAL TO THE WIDTH OF THE SLAB FOR WALKS, INTERVALS NOT TO EXCEED 10 FEET.
   4. CONTRACTION JOINTS FOR CONCRETE BANDING IN THE STREET AND SIDEWALK SHALL BE AT 10 FOOT INTERVALS (MAX).
K. CONSTRUCTION JOINTS:
   WHERE PLACEMENT OPERATIONS ARE STOPPED FOR A PERIOD OF MORE THAN 1/2 HOUR, EXCEPT WHERE SUCH POURS TERMINATE AT EXPANSION JOINTS.
L. EXPANSION JOINTS:
   1. PROVIDE EXPANSION JOINTS BETWEEN ABUTTING CONCRETE CURBS, WALKS, WALLS COLUMNS, AND OTHER NON YIELDING MATERIALS, UNLESS OHTERWISE INDICATED ON HARDSCAPE DETAILS.
   2. FOR CURB AND GUTTER WORK EXPANSION JOINTS SHALL BE PLACED AT EVERY ONE HUNDRED LINEAR FEET.
   3. ALL EXPOSED EXPANSION JOINT MATERIALS SHALL BE RECESSED 1/4 INCH AND SEALED WITH THE JOINT SEALER AS SPECIFIED.
M. CONCRETE FINISHES:
   1. AFTER STRIKING OFF AND CONSOLIDATING CONCRETE, SMOOTH THE SURFACE BY SCREEDING AND FLOATING. USE HAND METHODS ONLY WHERE MECHANICAL FLOATING IS NOT POSSIBLE. ADJUST THE FLOATING TO COMPACT THE SURFACE AND PRODUCE A UNIFORM TEXTURE. THE USE OF ADDITIONAL WATER WILL BE PROHIBITED IN ALL PHASES OF THE FINISHING.
   2. AFTER FLOATING, TEST SURFACE FOR TRUENESS WITH A 10 FOOT STRAIGHTEDGE. DISTRIBUTE CONCRETE AS REQUIRED TO REMOVE SURFACE IRREGULARITIES, AND REFLOAT REPAIRED AREAS TO PROVIDE A CONTINUOUS SMOOTH FINISH.
   3. WORK EDGES OF GUTTERS, BACK TOP EDGE OF CURB, SCORE LINES AND FORMED JOINTS WITH AN EDGEING TOOL AND ROUND TO 1/2" RADIUS, UNLESS OTHERWISE INDICATED ON HARDSCAPE DETAILING. ELIMINATE ANY TOOL MARKS ON CONCRETE SURFACE.
   4. AFTER COMPLETION OF FLOATING, AND WHEN EXCESS MOISTURE OR SURFACE SHEEN HAS DISAPPEARED, COMPLETE SURFACE FINISHING AS SPECIFIED ON DETAIL(S).
   5. DO NOT REMOVE FORMS FOR 24 HOURS AFTER CONCRETE HAS BEEN PLACED. AFTER FORM REMOVAL, CLEAN ENDS OF JOINTS AND POINT-UP ANY MINOR HONEYCOMBED AREAS. REMOVE AND REPLACE AREAS OR SECTIONS WITH MAJOR DEFECTS.
N. GENERAL: CONSTRUCT EXPANSION JOINTS AT THE END OF ALL CURBS AND AT LOCATIONS PERPENDICULAR TO SURFACE OF CONCRETE, UNLESS OTHERWISE INDICATED ON HARDSCAPE DETAILS. CONSTRUCT TRANSVERSE JOINTS AT RIGHT ANGLES TO THE CENTERLINE, UNLESS OTHERWISE INDICATED.

### CONCRETE MASONRY

A. DESIGN CRITERIA: ACI 530-99/ASCE 5-99, ACI 530.1-99/ASCE 6-99.
B. HOLLOW UNITS: MIN. 4,000 PSI @ 28 DAYS, MIN. 45% SOLID, ASTM C 90, GRADE N, HIGH STRENGTH BLOCK. NORMAL WEIGHT. f'm=2,500 PSI.
C. MORTAR: ASTM C 270, TYPE S, MIN. 1800 PSI @ 28 DAYS, 3/8" FULL BEDDING, REMOVE MORTAR PROTRUDING INTO CELL CAVITIES TO BE REINFORCED AND GROUTED.
D. GROUT: ASTM C 476, MIN. 2500 PSI @ 28 DAYS, 3/8" AGGREGATE MAX., 8"-10" SLUMP.
E. REINFORCEMENT:
   1. HORIZONTAL JOINTS: STD. DUR-O-WALL @ 16" O.C., USE PREFABRICATED CORNERS AND TEES @ WALL INTERSECTIONS, OVERLAP DISCONTINUED ENDS AND EXTEND INTO COLUMNS 12" MIN.
   2. VERTICAL AND HORIZONTAL REINFORCEMENT: ASTM 615, GRADE 60, TYP. @ WALL INTERSECTIONS, EACH SIDE OF OPENINGS, AND @ WALL ENDS, HOOK TOP OF ALL DISCONTINUED BARS, LAP CONT. REINF. 48 BAR DIA. U.N.O.
   3. USE BAR SPACERS IN EVERY 4TH COURSE WHERE CELLS ARE TO BE GROUTED.
F. PROVIDE CLEANOUT OPENINGS FOR EACH GROUTED CELL. G. HIGH LIFT GROUTING SHALL BE USED WITH A MAXIMUM POUR OF 12'-0" IN 4' MAX. LIFTS WITH ONE HOUR BETWEEN LIFTS. VIBRATE EACH LIFT AND RECONSOLIDATE PREVIOUS LIFT AFTER PLACING NEXT LIFT. VERTICAL CORES TO BE FILLED WITH GROUT SHALL HAVE A MINIMUM CLEAR DIMENSION OF 3"x3". H. WHERE EXPANSION ANCHOR BOLTS ARE SET IN MASONRY WALLS, FILL BLOCK CELLS WITH GROUT FOR BOLTED COURSE AND TWO COURSES BELOW ANCHOR ELEVATION.

LANDSCAPE AND IRRIGATION DESIGN

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DRAWING SCALE
0 FT 25' 50' North
SCALE: 1"=50'-0"

DRAWING TITLE
HARDSCAPE SITE PLAN

DRAWING NUMBER
HS-02
SHEET 39 OF 45

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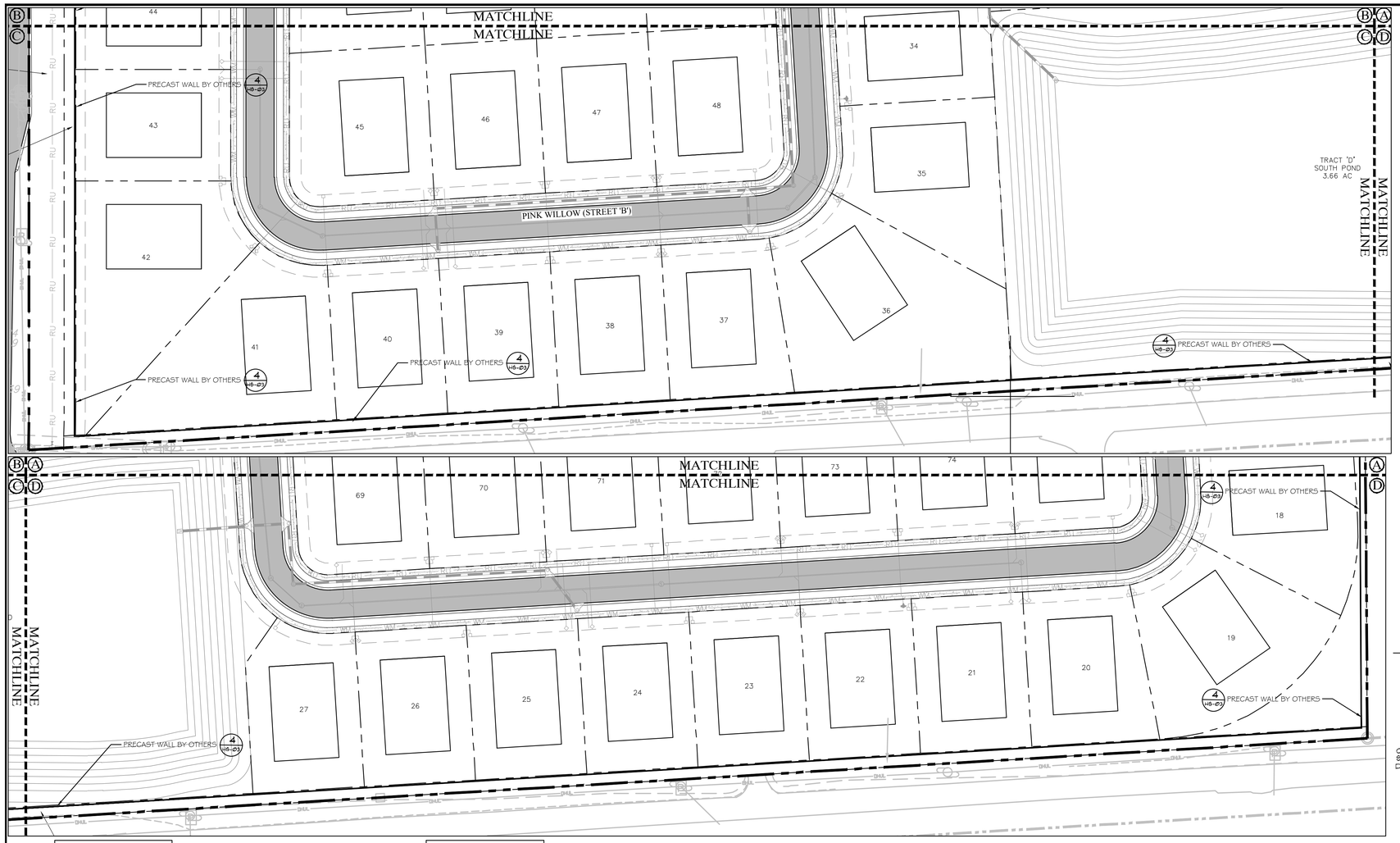
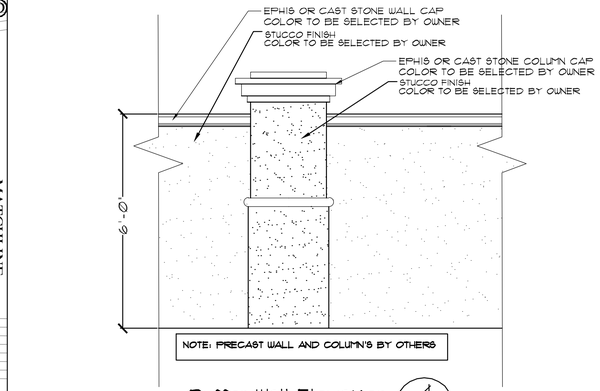
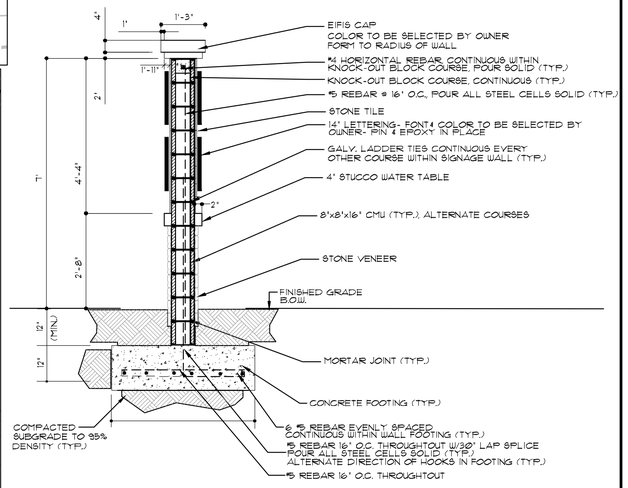
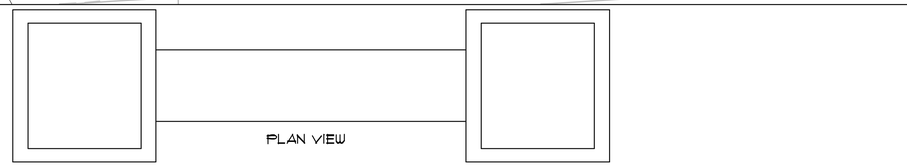


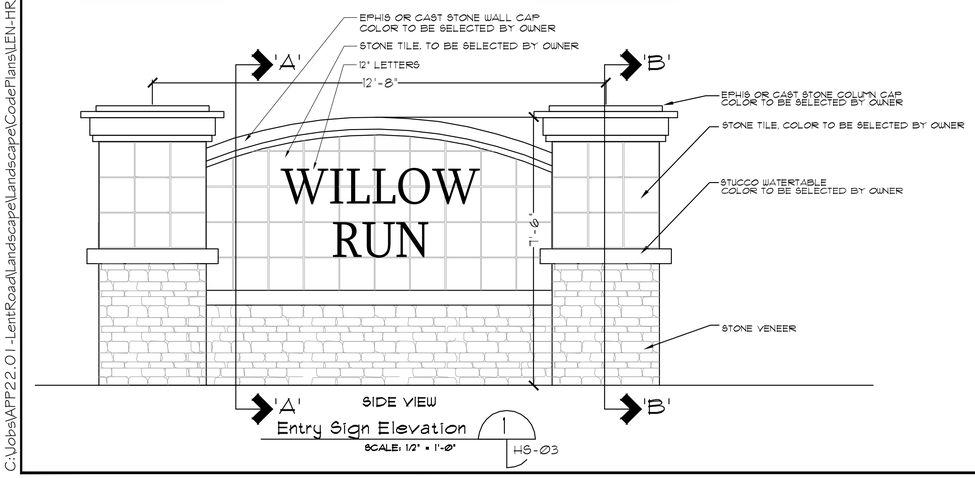




Buffer Wall Elevation 4 HS-03
Scale: 1/2"=1'-0"

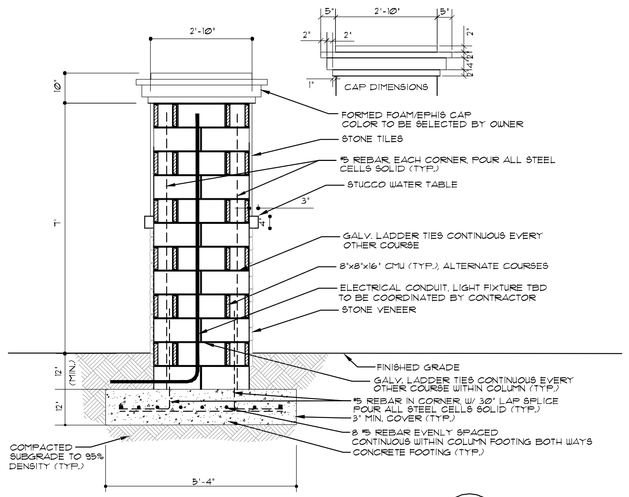



Entry Sign (Section'A'-'A') 3 HS-03
SCALE: 1/2" = 1'-0"




Entry Sign Elevation 1 HS-03
SCALE: 1/2" = 1'-0"




Decorative Column (Section 'B-B') 2 HS-03
Scale: 1/2"=1'-0"

LANDSCAPE AND IRRIGATION DESIGN

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| SIGNATURE | REG. NO. | DATE |
|---|---|---|
| | LA0001764 | 12/14/21 |

Landscape Designs, LLC
■ Landscape Architecture
■ Site Planning
4663 Tiffany Woods Cir
Oviedo, FL 32765
PH: (407) 484-3414

PROJECT AND OWNER

WILLOW RUN

City of Apopka
Florida

Appian Engineering, LLC
2221 Lee Road, Suite 17
Winter Park, FL 32789
PH: (407) 960-5856

CONSULTANTS

LANDSCAPE ARCHITECT
CARL J. KELLY JR., RLA

DocuSigned by:
D96C07E49FDC41C...

REG.#: 0001764

| | |
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| DESIGNED BY | CJK |
| DRAWN BY | CJK |
| CHECKED BY | CJK |
| DATE | 12/14/21 |

ISSUED FOR:
01/30/22 City Comments
02/22/22 Site Changes

DRAWING SCALE
0 FT 25' 50' North
SCALE: 1"=50'-0"

DRAWING TITLE
HARDSCAPE SITE PLAN

DRAWING NUMBER
HS-03

SHEET 40 OF 45

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N85°38'18"E

616.56'

N00°04'35"W

TRACT 'M'
POCKET PARK/DOG PARK/
WALKING PATH
1.77 AC

TRACT 'B'
PUBLIC RIGHT-OF-WAY
5.48 AC

TRACT 'C'
NORTH POND
5.43 AC

TRACT 'L'
LANDSCAPE BUFFER
0.05 AC

DESERT WILLOW (STREET 'C')

MATCHLINE

68
67
66
97
96
110
1
10

CITY NOTES:

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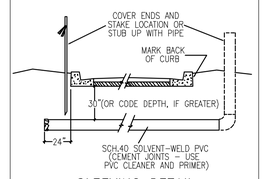
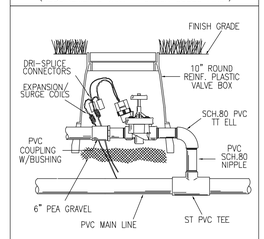
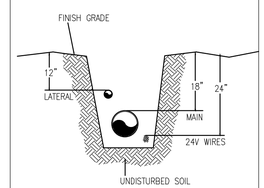
NOTE: ALTERNATIVE MATERIALS, SUCH AS C-900 PVC, HDPE, OR DUCTILE IRON PIPE WILL ALSO BE CONSIDERED, IF PROPERLY SUBMITTED FOR APPROVAL.




SLEEVING DETAIL
(REQUIREMENTS VARY - CHECK CODES FIRST)




ELECTRIC CONTROL VALVE




TRENCHING DETAIL
(USE CODE DEPTHS, IF GREATER)

LANDSCAPE AND IRRIGATION DESIGN

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WILLOW RUN

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CARL J. KELLY JR., RLA

REG.#: 0001764

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| DATE | 12/14/21 |

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01/30/22 City Comments
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04/04/22 Tree Survey

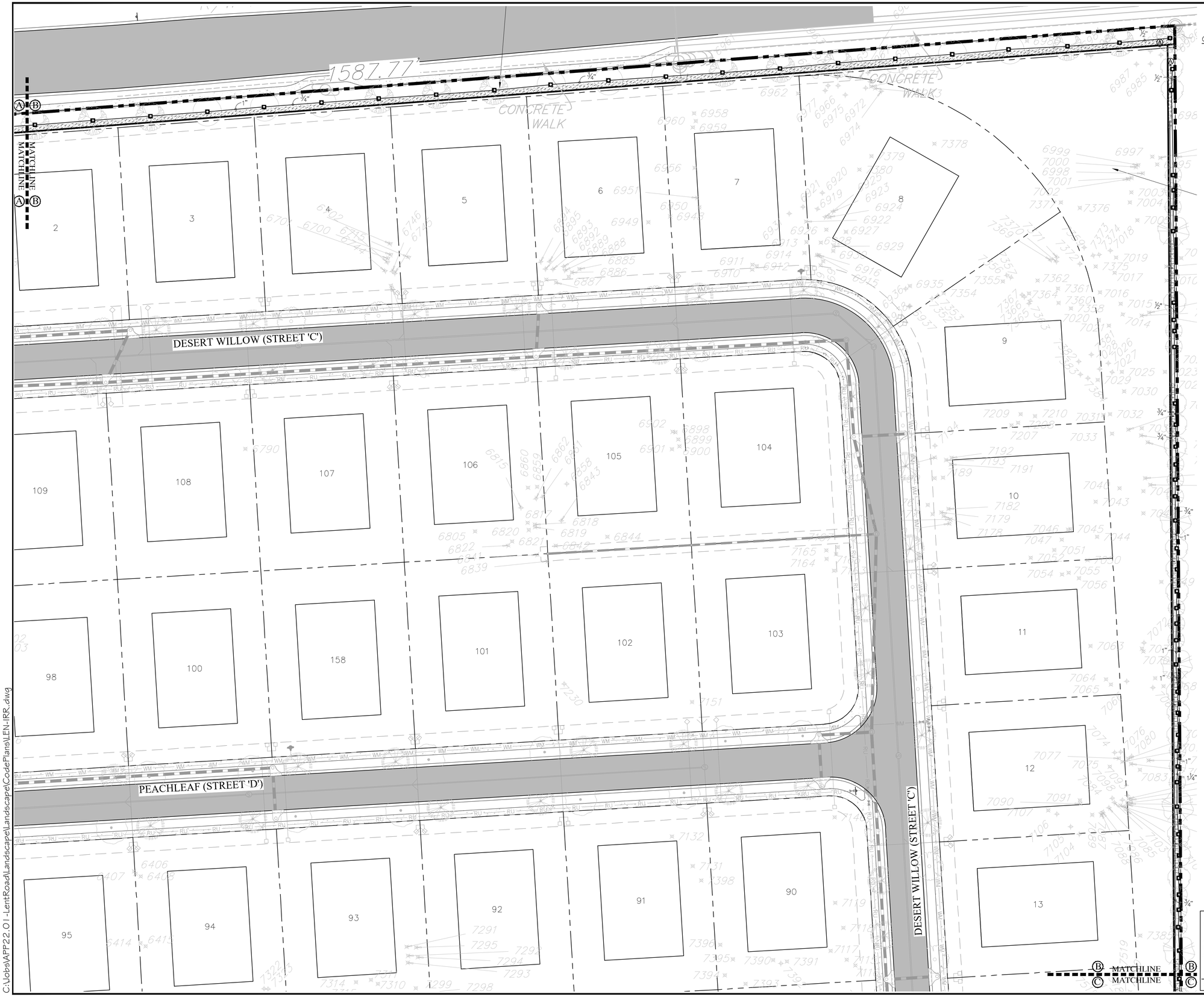
DRAWING SCALE
0 FT 15' 30' North
SCALE: 1"=30'-0"

DRAWING TITLE
IRRIGATION SITE PLAN

DRAWING NUMBER
IR-01

SHEET 41 OF 45

DocuSign Envelope ID: 07DF03C7-753C-4D1B-A4F9-4E15EDE0B90F

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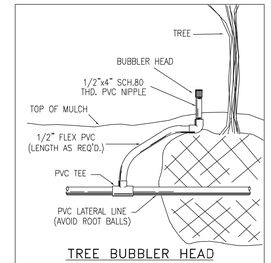
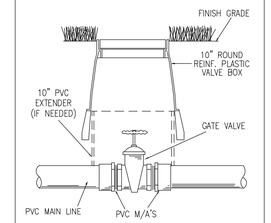
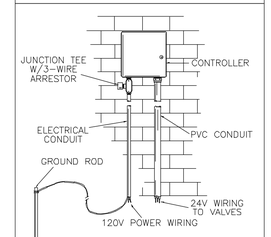



TREE BUBBLER HEAD




ISOLATION GATE VALVE




WALL-MOUNT CONTROLLER
(ALL WIRING SHALL CONFORM TO ELECTRICAL CODES)

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LANDSCAPE ARCHITECT
CARL J. KELLY JR.. RLA

LANDSCAPE ARCHITECT LA0001764 STATE OF FLORIDA CARL JOSEPH KELLY, JR.

DocuSigned by:
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REG.#: 0001764

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ISSUED FOR:
01/30/22 City Comments
02/22/22 Site Changes
04/04/22 Tree Survey

DRAWING SCALE

0 FT 15' 30' North

SCALE: 1"=30'-0"

DRAWING TITLE

IRRIGATION SITE PLAN

DRAWING NUMBER

IR-02

SHEET 42 OF 45

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LA0001764
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REG.#: 0001764

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01/30/22 City Comments
02/22/22 Site Changes
04/04/22 Tree Survey

DRAWING SCALE

0 FT 15' 30' North

SCALE: 1"=30'-0"

DRAWING TITLE

IRRIGATION SITE PLAN

DRAWING NUMBER

IR-03

SHEET 43 OF 45

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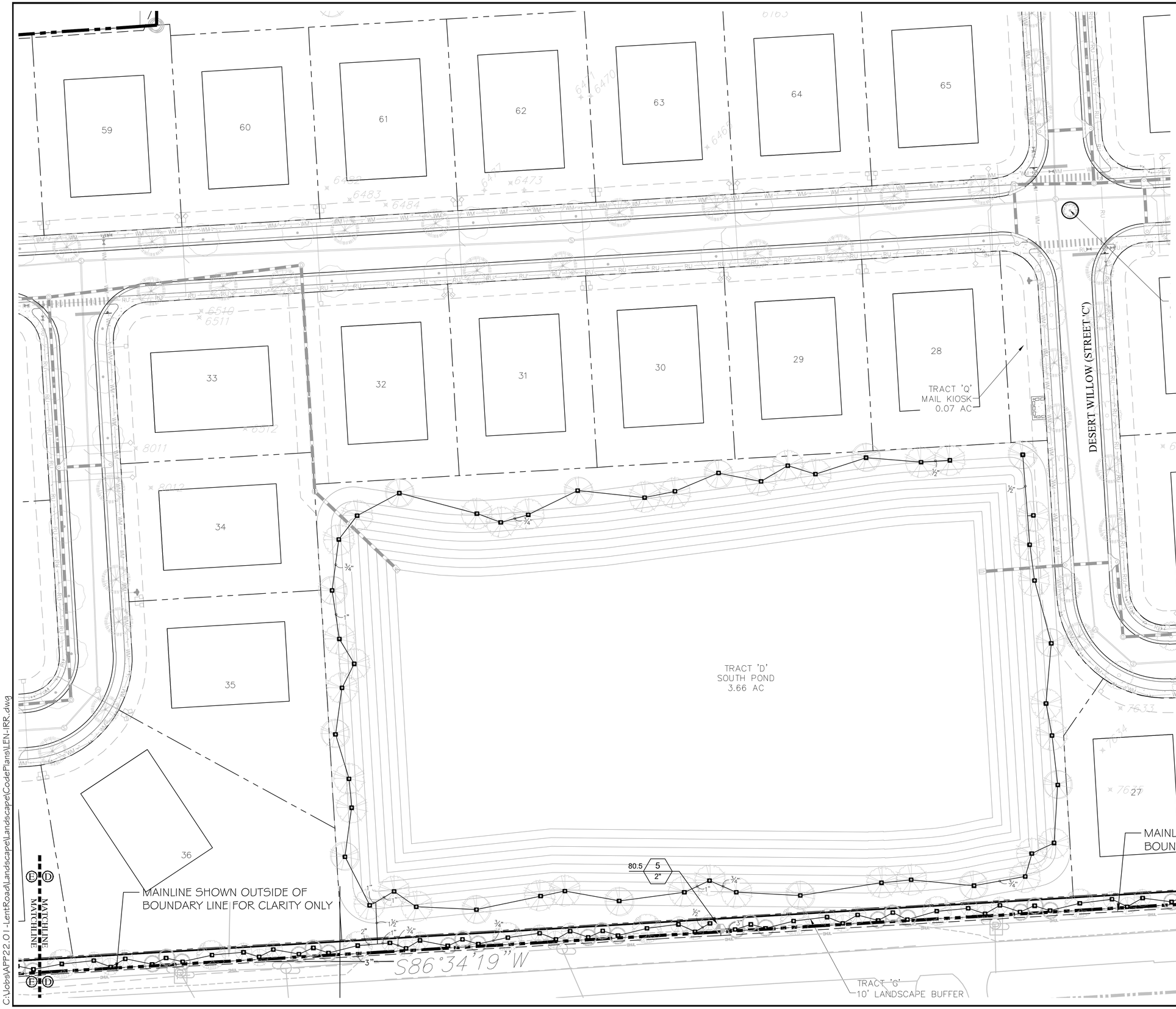


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0 FT 15' 30' North

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IRRIGATION SITE PLAN

DRAWING NUMBER

IR-04

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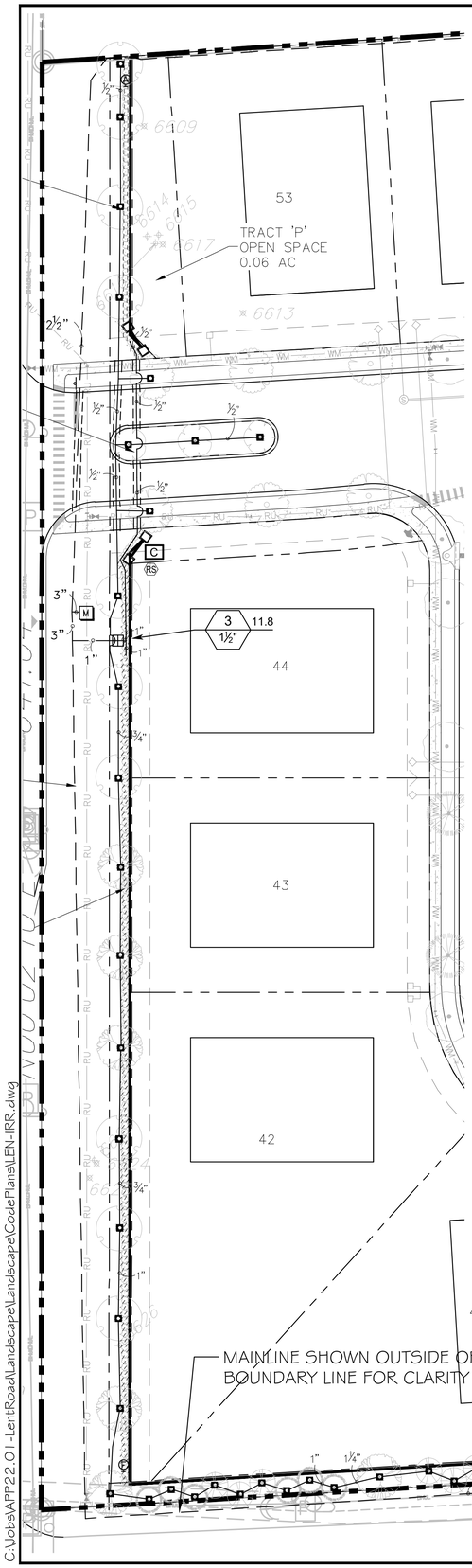



## IRRIGATION SCHEDULE

| SYMBOL | MANUFACTURER/MODEL/DESCRIPTION | QTY | PSI | DETAIL |
|---|---|---|---|---|
| 1402 1428 / 1401 1404 | Rain Bird 1800-1400 Flood<br>Flood Bubbler | 456 | 30 | |

| SYMBOL | MANUFACTURER/MODEL/DESCRIPTION | QTY |
|---|---|---|
| | Rain Bird XCZ-150-COM<br>High flow control zone kit with 1-1/2" PESB valve, two 1" filters and two 40psi pressure regulators. | 3 |
| | Rain Bird MDCFPCAP<br>Dripline Flush Valve purple cap in compression fitting coupler. | 3 |
| | Rain Bird AR Valve Kit<br>1" Air Relief Valve kit with 6" drip valve box. | 3 |
| | Area to Receive Dripline<br>Rain Bird LD-06-24<br>Landscape Dripline with 0.61 gph emitters at 24" o.c.<br>Dripline laterals spaced at 24" apart, with emitters offset for triangular pattern. | 10,410 s.f. |

| SYMBOL | MANUFACTURER/MODEL/DESCRIPTION | QTY |
|---|---|---|
| | Rain Bird PESB-PRS-D<br>1", 1-1/2", 2" Plastic Industrial Valves. Low Flow Operating Capability, Globe Configuration, With Pressure Regulating Module, and Scrubber Technology for Reliable Performance in Dirty Water Irrigation Applications. | 3 |
| C | Rain Bird ESP-LXME (2)<br>Plastic wall mount controller with 8 to 48 stations adjusted modularly in four station increments, with SM4, SM8, and SM12 station modules. Supply number of stations as required for project at one station per valve. | 1 |
| RS | Rain Bird RSD-BEx (2)<br>Rain Sensor, with bracket, extension wire | 1 |
| M | Water Meter 2"<br>RE-USE METER | 1 |
| | Irrigation Lateral Line: PVC Class 160 SDR 26 | 12,512 l.f. |
| | Irrigation Mainline: PVC Class 200 SDR 21-NP | 4,297 l.f. |
| | Pipe Sleeve: PVC Schedule 40 | 285.4 l.f. |

Valve Callout
Valve Number
Valve Flow
Valve Size

NOTES:
1. ALL PIPE SIZES SHALL NOT EXCEED A VELOCITY OF 5' SEC.
2. ALL HEADS SHALL BE MIN. 4" FROM PAVED SURFACES
3. USE PRESSURE COMPENSATING SCREENS TO ADJUST NOZZLE RADIUS WERE NECESSARY

## GENERAL NOTES

1) THE DRAWINGS ARE TO BE CONSIDERED DIAGRAMMATIC, AS IT MAY NOT BE POSSIBLE TO ACCURATELY DEPICT THE EXACT LOCATIONS FOR ALL MATERIAL, OR ANTICIPATE THOSE IN-FIELD VARIATIONS WHICH MAY REQUIRE ADJUSTMENT ON SITE. THE INSTALLER SHALL BE EXPECTED TO MAKE MINOR MODIFICATIONS WHICH MAY BE NECESSARY TO MAINTAIN COMPLETE AND ACCURATE COVERAGE, WITHOUT DEVIATION FROM THE DESIGN CONCEPTS OR INTENT. THE FINAL LOCATIONS OF ALL MAJOR EQUIPMENT, SUCH AS CONTROLLERS, VALVES, SUPPLY CONNECTIONS, MAINLINES, ETC. SHALL BE DETERMINED IN THE FIELD, USING THE DRAWINGS AS A GUIDE, AND APPROVED PRIOR TO INSTALLATION.

2) ALL WORK SHALL BE DONE IN ACCORDANCE WITH PREVAILING CODES AND REGULATIONS. ALTHOUGH DUE DILIGENCE HAS BEEN EXERCISED IN THE PREPARATION OF THE DOCUMENTS TO AVOID CONFLICTS, THE RESPONSIBILITY FOR VERIFICATION AND CONFORMANCE TO THE PARTICULAR CODES FOR THIS LOCATION SHALL REMAIN SOLELY THAT OF THE INSTALLER. THE INSTALLER SHALL OBTAIN ANY NECESSARY LOCATES, PERMITS AND INSPECTIONS.

3) ALL WORK SHALL BE CLOSELY COORDINATED WITH THAT OF OTHER TRADES, IN ORDER TO AVOID CONFLICTS. THE INSTALLATION SHALL BE COORDINATED WITH ALL NEW AND EXISTING IMPROVEMENTS, AND WITH THE ACTUAL BEDLINES, SOD LIMITS AND PLANT LOCATIONS.

4) ALL MATERIAL AND LABOR REQUIRED TO PROVIDE A COMPLETE, OPERATIONAL, AND FULLY GUARANTEED SYSTEM SHALL BE CONSIDERED PART OF THE WORK, WHETHER OR NOT THEY ARE SPECIFICALLY INDICATED IN THE DOCUMENTS.

5) UNLESS SPECIFICALLY STATED IN THE DOCUMENTS, ALL MAINLINE PIPING AND WIRING PASSING UNDER PAVED SURFACES SHALL BE SLEEVED WITH SCH. 40 PVC, SIZED TWO SIZES LARGER THAN THE CONTAINED PIPE, OR 1" OR LARGER AS NEEDED FOR CONTROL WIRING. LATERAL PIPING PASSING UNDER TRAFFIC-BEARING PAVEMENT OF ANY WIDTH, OR UNDER SIDEWALKS 5' IN WIDTH OR GREATER, SHALL BE SLEEVED IN A SIMILAR MANNER. IT SHALL BE ASSUMED THAT ALL SLEEVING IS TO BE PART OF THIS WORK, UNLESS SPECIFICALLY EXCEPTED IN THE DOCUMENTS. ANY NEEDED SLEEVES WHICH ARE UNUSABLE OR CANNOT BE FOUND SHALL BE REPORTED IMMEDIATELY TO THE PROJECT MANAGER. ROADWAY/DRIVEWAY SLEEVES ARE SHOWN ON THIS DRAWING. SIDEWALK SLEEVES ARE NOT SHOWN, BUT ARE UNDERSTOOD.

6) CONTROL WIRING SHALL BE ROUTED WITH THE MAINLINE WHEREVER POSSIBLE. LOW-VOLTAGE WIRING SHALL BE UF#14-1 PVC JACKETED, SINGLE CONDUCTOR CABLE, COLORED RED FOR 'HOT' WIRES, WHITE FOR VALVE COMMON, AND BLUE FOR SPARES, A MINIMUM OF TWO OF WHICH SHALL BE RUN FROM THE CONTROLLER LOCATION TO THE FARTHEST ZONE VALVE IN EACH DIRECTION. WIRES SHALL BE INSTALLED WITH ADEQUATE SLACK AND SURGE/EXPANSION LOOPS, AND SHALL BE SPLICED ONLY IN VALVE BOXES, USING SPEARS "DRI-SPLICE" WIRE CONNECTORS AND SEALANT, OR OTHER WATERPROOF TYPE, IF PRIOR APPROVAL IS OBTAINED.

7) ALL HEADS SHALL BE OF THE PROPER TYPE FOR THE PLANT MATERIAL WHERE LOCATED, AND SHALL BE INSTALLED IN THE PRESCRIBED MANNER, PLUMB, AND WITH THE PROPER HEIGHT WITH RESPECT TO GRADE AND PLANT HEIGHT. ALL HEADS AND OTHER EQUIPMENT SHALL BE INSTALLED WITH ADEQUATE AND UNIFORM CLEARANCES FROM ALL PAVING, CURBS, SIDEWALKS, WALLS, AND OTHER OBSTACLES, SO THAT DAMAGE TO EQUIPMENT DOES NOT OCCUR DURING LANDSCAPE MAINTENANCE OPERATIONS. ALL SPRINKLERS SHALL BE ADJUSTED TO OBTAIN MAXIMUM COVERAGE OF PLANT MATERIAL, WHILE MINIMIZING OVERSPRAY ONTO WINDOWS OR WALLS, OR OTHER IMPERVIOUS SURFACES, PARTICULARLY WOODWORK AND/OR TRIM. THE INSTALLER SHALL UTILIZE SUITABLE PRESSURE-COMPENSATING SCREENS OR ADJUSTABLE-ARC NOZZLES WHERE REQUIRED TO ACHIEVE MAXIMUM COVERAGE CONTROL.

8) EACH CONTROLLER SHALL REQUIRE A STANDARD 120-VAC POWER FEED, WHICH SHALL BE COORDINATED AND HOOKED UP BY THE INSTALLER OR HIS DESIGNATED ELECTRICIAN. A 3-WIRE POWER INPUT SURGE ARRESTOR SHALL BE PROVIDED ON THE POWER FEED, AND A DEDICATED GROUND ROD OR RODS SHALL BE INSTALLED, WHICH PROVIDE A RESISTANCE OF NO GREATER THAN 10 OHMS TO EARTH.

9) EACH CONTROLLER SHALL BE EQUIPPED WITH A PROPERLY LOCATED AND INSTALLED RAIN SHUTOFF DEVICE (MINI-CLIK II), WHICH SHALL BE LOCATED IN SUCH A MANNER SO THAT IT IS UNOBSTRUCTED AND DIRECTLY EXPOSED TO NATURAL RAINFALL AND SUNLIGHT FROM ALL DIRECTIONS, BUT NOT TO RUNOFF WATER FROM ROOFS, ETC.

10) THE MINIMUM SUPPLY REQUIREMENT FOR THE SYSTEM AS DESIGNED IS 85 GPM AT 65 PSI

11) SIXTY FIVE (65) PSI WATER PRESSURE IS REQUIRED FOR THE EFFICIENT OPERATION OF THE IRRIGATION SYSTEM AS DESIGNED. VERIFY 65 PSI WATER PRESSURE IS AVAILABLE AT EACH POC LOCATION PRIOR TO BEGINNING THE IRRIGATION INSTALLATION. NOTIFY THE OWNER IF THE MINIMUM WATER PRESSURE IS NOT AVAILABLE PRIOR TO STARTING THE IRRIGATION INSTALLATION.

12) THE INSTALLER SHALL BE EXPECTED TO BE FAMILIAR WITH AND FOLLOW THE INSTRUCTIONS CONTAINED HEREIN, ON THE DRAWINGS, IN THE CONSTRUCTION DETAILS, AND IN THE WRITTEN SPECIFICATIONS. SHOULD A CONFLICT BE DISCOVERED WITHIN THE DOCUMENTS, HE SHALL IMMEDIATELY NOTIFY THE PROJECT MANAGER AND REQUEST CLARIFICATION.

13) THIS INSTALLATION SHALL BE SUPPLIED BY RECLAIMED WATER. THE WORK SHALL INCLUDE ANY AND ALL MATERIALS AND METHODS REQUIRED FOR THE APPROVED INSTALLATION THEREOF, WHETHER OR NOT SPECIFICALLY INDICATED WHETHER OR NOT SPECIFICALLY INDICATED IN THE DOCUMENTS, INCLUDING THE INSTALLATION OF ANY REQUIRED WARNING SIGNAGE.

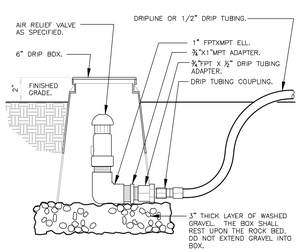
## WATERING SCHEDULE

| NUMBER | MODEL | TYPE | PRECIP | IN./WEEK | MIN./WEEK | GAL./WEEK | GAL./DAY |
|---|---|---|---|---|---|---|---|
| 1 | Rain Bird XCZ-150-COM | Area for Dripline | 0.54 in/h | 1.80 | 201 | 7,076 | 2,359 |
| 2 | Rain Bird PESB-PRS-D | Bubbler | 15.32 in/h | 2 | 8 | 600 | 200 |
| 3 | Rain Bird XCZ-150-COM | Area for Dripline | 0.54 in/h | 1.80 | 201 | 2,372 | 790.7 |
| 4 | Rain Bird PESB-PRS-D | Bubbler | 15.32 in/h | 2 | 8 | 580 | 193.3 |
| 5 | Rain Bird PESB-PRS-D | Bubbler | 15.32 in/h | 2 | 8 | 644 | 214.7 |
| 6 | Rain Bird XCZ-150-COM | Area for Dripline | 0.54 in/h | 1.80 | 201 | 2,269 | 756.4 |
| | | TOTALS: | | | 627 | 13,542 | 4,514 |

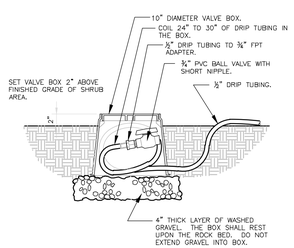
## VALVE SCHEDULE

| NUMBER | MODEL | SIZE | TYPE | GPM | WIRE | PSI | PSI @ POC | PRECIP |
|---|---|---|---|---|---|---|---|---|
| 1 | Rain Bird XCZ-150-COM | 1-1/2" | Area for Dripline | 35.21 | 1,581 | 51.59 | 70.53 | 0.54 in/h |
| 2 | Rain Bird PESB-PRS-D | 2" | Bubbler | 75.00 | 1,043 | 65.74 | 84.47 | 15.32 in/h |
| 3 | Rain Bird XCZ-150-COM | 1-1/2" | Area for Dripline | 11.80 | 81.7 | 31.89 | 32.72 | 0.54 in/h |
| 4 | Rain Bird PESB-PRS-D | 2" | Bubbler | 72.50 | 795.1 | 53.52 | 61.50 | 15.32 in/h |
| 5 | Rain Bird PESB-PRS-D | 2" | Bubbler | 80.50 | 1,536 | 61.90 | | 15.32 in/h |
| 6 | Rain Bird XCZ-150-COM | 1-1/2" | Area for Dripline | 11.29 | 2,777 | 49.86 | | 0.54 in/h |
| | Common Wire | | | | 4,297 | | | |

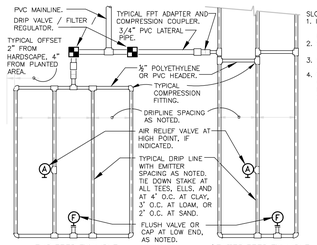
CITY NOTES:
1. STREET TREES SHALL BE INSTALLED WITH THE DEVELOPMENT OF EACH INDIVIDUAL LOT.
2. LANDSCAPING AND IRRIGATION SHALL BE CONSISTENT WITH SECTION 5.01 OF THE LAND DEVELOPMENT CODE.
3. LANDSCAPING AND IRRIGATION SHALL BE IN COMPLIANCE WITH WATER WISE ORDINANCE 2069.
4. IRRIGATION PLANS SHALL BE PROVIDED AT CONSTRUCTION SITE PLAN.
5. IRRIGATION DISTRIBUTION EQUIPMENT SHALL BE 24" FROM VERTICAL STRUCTURES.
6. ALL ON-SITE LANDSCAPING AND AMENITIES REQUIRE A FINAL INSPECTION. CONTACT THE COMMUNITY DEVELOPMENT DEPARTMENT AT LEAST 7 DAYS PRIOR TO THE INSPECTION. THE SITE SUPERINTENDENT MUST BE ON SITE.
7. FOR ANY TREES THAT ARE REQUIRED BETWEEN THE CURB AND SIDEWALK, ROOT BARRIERS WILL BE INSTALLED TO ELIMINATE DAMAGE TO THE UTILITIES, CURB AND SIDEWALK. AT THE TIME OF THE CONSTRUCTION SITE PLAN SUBMITTAL, THE HOA DOCUMENT WILL ENTRUST MAINTENANCE FOR ALL "STREET TREES" TO THE HOA. A NOTE WAS ADDED TO THE DEVELOPMENT STANDARDS, UNDER E. BUFFERS AND LANDSCAPING, NOTE 7, WHICH STATES "NO 'STREET TREES' WILL BE PROPOSED BETWEEN THE CURB AND SIDEWALK UNLESS SPECIFICALLY REQUESTED BY PLANNING AND ZONING DEPARTMENT. IF NECESSARY, ANY PROPOSED TREES, LOCATED BETWEEN THE CURB AND THE SIDEWALK, CANNOT BE ROOT AGGRESSIVE OR THEY MUST HAVE ROOT BARRIERS INSTALLED TO PREVENT DAMAGE TO THE UTILITIES, CURB AND SIDEWALK."




1 DRIP AIR RELIEF VALVE IN BOX
N.T.S. DETAIL-FILE




2 DRIP FLUSH VALVE
N.T.S. DETAIL-FILE




SLOPED CONDITION NOTE:
1. INSTALL AIR RELIEF VALVE AT HIGHEST POINT.
2. SPACING AS NOTED ON TOP ⅔ OF SLOPE.
3. SPACING AT BOTTOM ⅓ AS NOTED PLUS 25%.
4. WHEN ELEVATION CHANGE IS 10 FT OR MORE, ZONE BOTTOM ⅓ SEPARATELY.

MAXIMUM LATERAL LENGTH (FEET)

| | EMITTER FLOW RATE GPH | | | | | |
|---|---|---|---|---|---|---|
| | 12" SPACING | | 18" SPACING | | 24" SPACING | |
| PSI | 0.6 | 0.9 | 0.6 | 0.9 | 0.6 | 0.9 |
| 10 | 125 | 96 | 175 | 135 | 218 | 171 |
| 20 | 249 | 191 | 350 | 171 | 442 | 340 |
| 30 | 307 | 236 | 434 | 333 | 550 | 422 |
| 40 | 350 | 268 | 495 | 380 | 627 | 171 |
| 50 | 125 | 96 | 175 | 135 | 218 | 171 |
| 60 | 125 | 96 | 175 | 135 | 218 | 171 |

GRID PRECIPITATION RATES (IN/HR)

| EMITTER SPACING | LATERAL SPACING | EMITTER FLOW RATE 0.6 | EMITTER FLOW RATE 0.9 |
|---|---|---|---|
| 12 | 12 | 0.96 | 1.44 |
| 18 | 18 | 0.69 | 1.03 |
| 24 | 24 | 0.28 | 0.41 |

LATERAL FLOW PER 100 FT (GPM)

| EMITTER FLOW | 12" SPACING | 18" SPACING | 24" SPACING |
|---|---|---|---|
| 0.6 GPH | 1.0 GPM | 0.67 GPM | 0.50 GPM |
| 0.9 GPH | 1.5 GPM | 1.0 GPM | 0.75 GPM |

MAXIMUM FLOW PER ZONE

| | MAX GPM | PSI LOSS |
|---|---|---|
| SCHEDULE 40 PVC HEADER SIZE | | |
| 1/2" | 4.7 GPM | 7.7 PSI |
| 3/4" | 8.3 GPM | 5.6 PSI |
| 1" | 13.5 GPM | 4.2 PSI |
| 1-1/2" | 33.9 GPM | 2.9 PSI |
| 2" | 52.4 GPM | 1.9 PSI |
| POLY PIPE HEADER SIZE | | |
| 1/2" | 4.7 GPM | 8.8 PSI |
| 3/4" | 8.3 GPM | 6.3 PSI |
| 1" | 13.5 GPM | 4.8 PSI |
| 1-1/2" | 31.8 GPM | 2.9 PSI |
| 2" | 52.4 GPM | 2.2 PSI |

3 TYPICAL DRIPLINE LAYOUT REQUIREMENTS
N.T.S. DETAIL-FILE

LANDSCAPE AND IRRIGATION DESIGN

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 .

| SIGNATURE | REG. NO. | DATE |
|---|---|---|
| | LA0001764 | 12/14/21 |

Landscape Designs, LLC
■ Landscape Architecture
■ Site Planning
4663 Tiffany Woods Cir
Oviedo, FL 32765
PH: (407) 484-3414

PROJECT AND OWNER

WILLOW RUN

City of Apopka
Florida

Appian Engineering, LLC
2221 Lee Road, Suite 17
Winter Park, FL 32789
PH: (407) 960-5856

CONSULTANTS

LANDSCAPE ARCHITECT
CARL J. KELLY JR., RLA

REGISTERED LANDSCAPE ARCHITECT LA0001764 STATE OF FLORIDA

DocuSigned By:
D96C07E49FDC41C...

REG.#: 0001764

| | |
|---|---|
| PROJECT NO. | APP22.01 |
| DESIGNED BY | CJK |
| DRAWN BY | CJK |
| CHECKED BY | CJK |
| DATE | 12/14/21 |

ISSUED FOR:
01/30/22 City Comments
02/22/22 Site Changes
04/04/22 Tree Survey

DRAWING SCALE
0 FT 15' 30' North
SCALE: 1"=30'-0"

DRAWING TITLE
IRRIGATION SITE PLAN

DRAWING NUMBER
IR-05

SHEET 45 OF 45

C:\Jobs\APP22.01-LentRoad\Landscape\Landscape\CodePlans\LEN-IRR.dwg

# BRICKELL

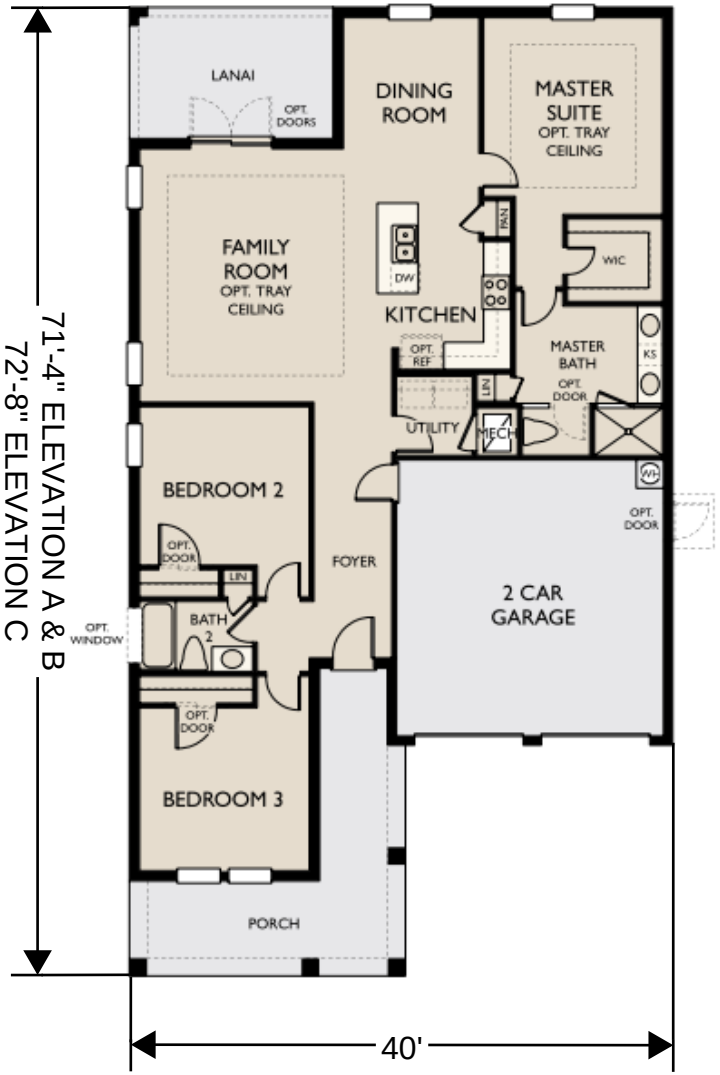
Elevation A

Elevation B

Elevation C

# BRICKELL

1,709 SQUARE FOOTAGE



# DOUGLAS

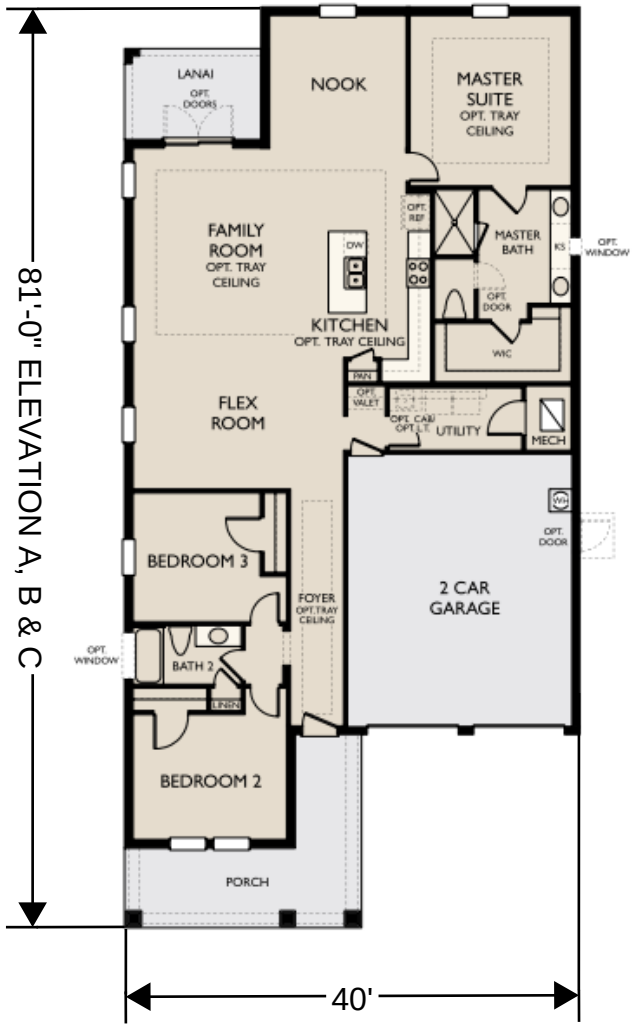
Elevation A

Elevation B

Elevation C

# DOUGLAS

2,066 SQUARE FOOTAGE



# PLANT

Elevation A

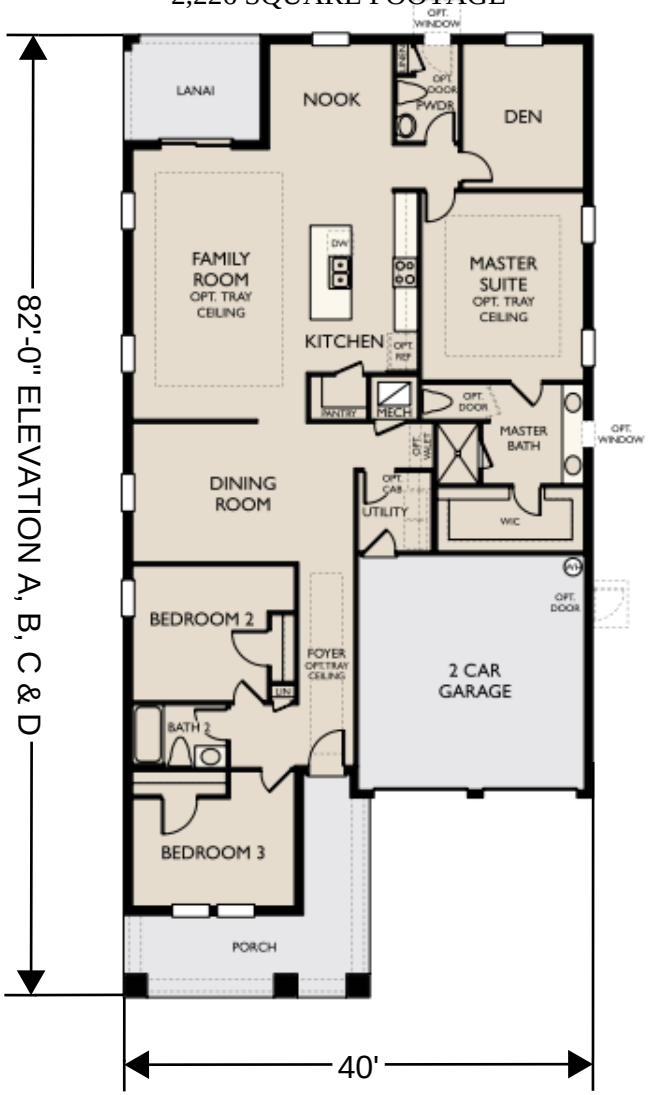
Elevation B

Elevation C

Elevation D

# PLANT

2,226 SQUARE FOOTAGE



# TUTTLE

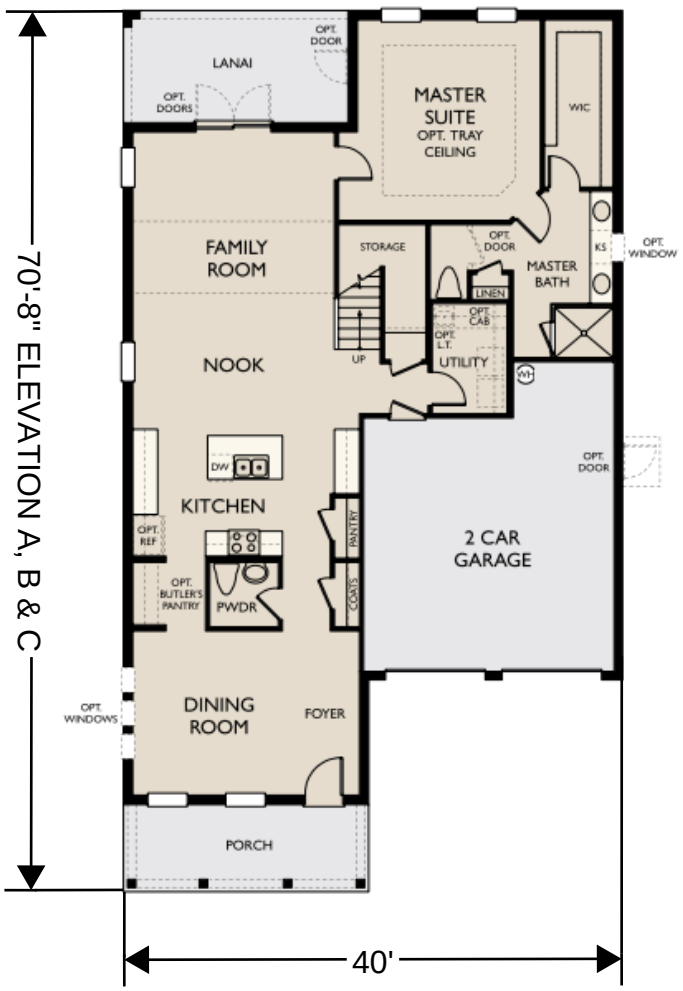
Elevation A

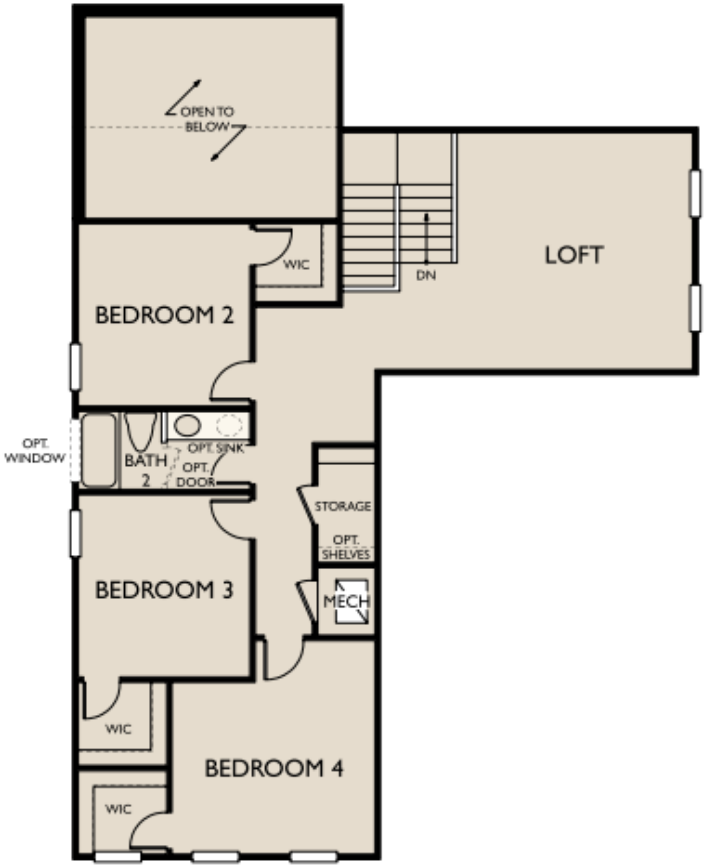
Elevation B

Elevation C

# TUTTLE

2,783 SQUARE FOOTAGE




SECOND FLOOR

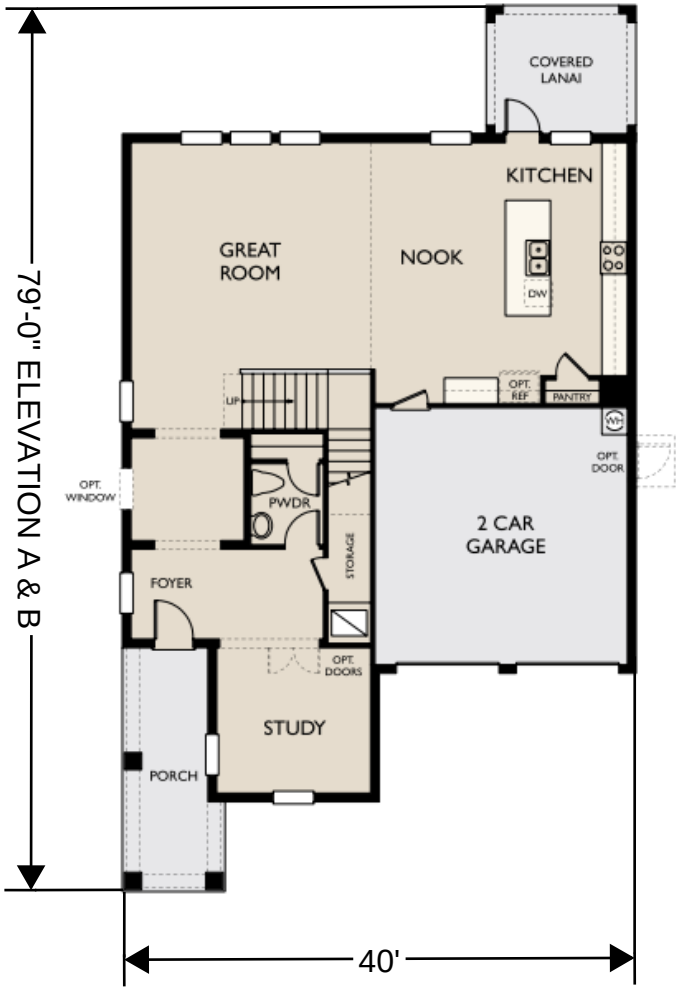
# MOSELEY

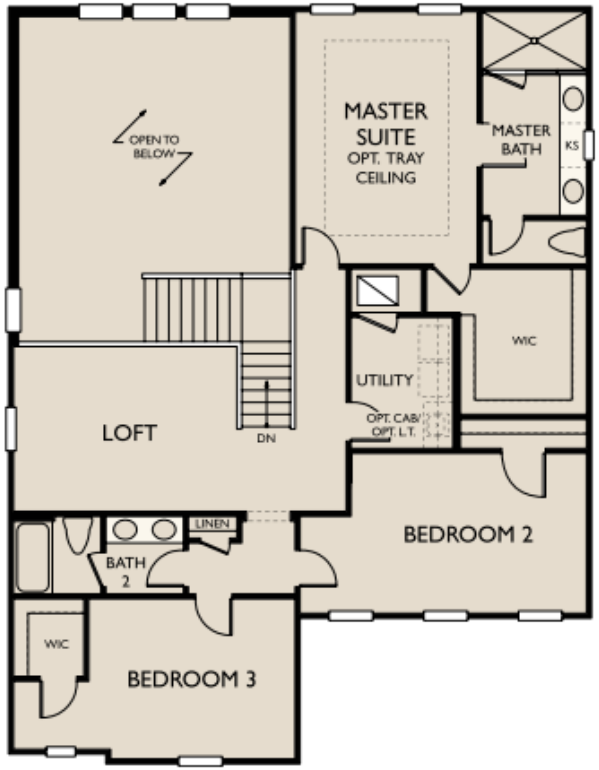
Elevation A

Elevation B

# MOSELEY

2,791SQUARE FOOTAGE




SECOND FLOOR

# GRIFFIN

Elevation A

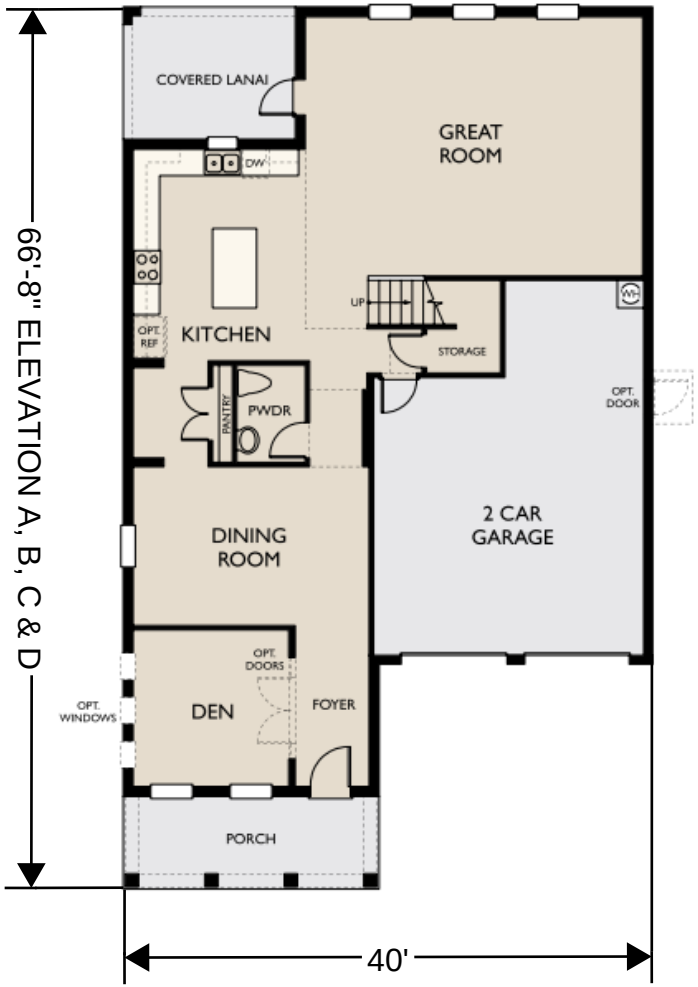
Elevation B

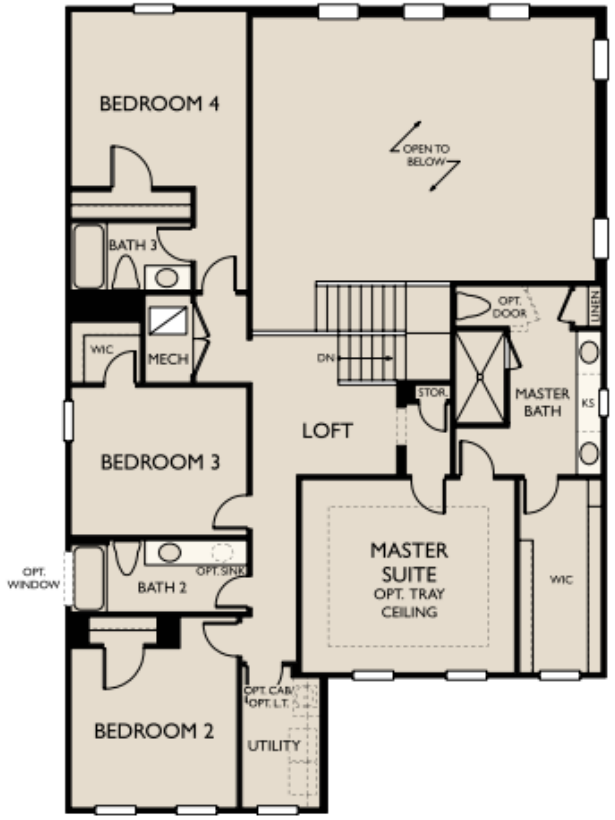
Elevation C

Elevation D

# GRIFFIN

3,074 SQUARE FOOTAGE




SECOND FLOOR

# DUVAL

Elevation A

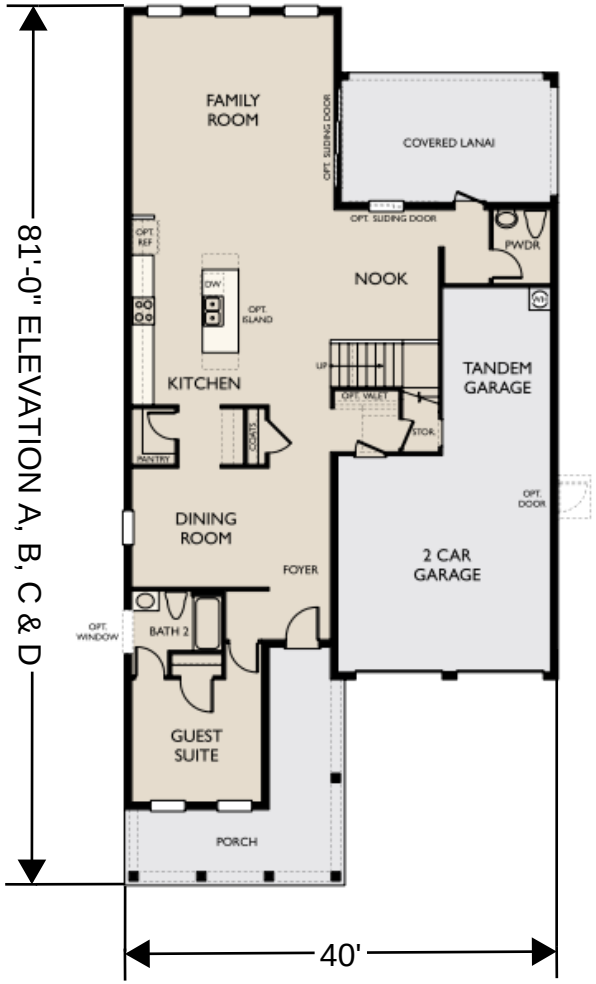
Elevation B

Elevation C

Elevation D

# DUVAL

3,542 SQUARE FOOTAGE



SECOND FLOOR

PARCEL 1:

THE NORTH 1/2 OF THE NORTHWEST 1/4 OF SECTION 19, TOWNSHIP 20 SOUTH, RANGE 28 EAST, ORANGE COUNTY, FLORIDA (LESS THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 AND LESS THE SOUTH 30 FEET AND THE NORTH 60 FEET AND THE WEST 30 FEET FOR ROAD PURPOSES AND LESS THE SOUTH 878 FEET OF THE EAST 1215.47 FEET AND THE EAST 600 FEET THEREOF.)

PARCEL2:

THE SOUTH 878 FEET OF THE EAST 1215.47 FEET OF THE NORTH 1/2 OF THE NORTHWEST 1/4 OF SECTION 19, TOWNSHIP 20 SOUTH, RANGE 28 EAST, ORANGE COUNTY, FLORIDA (LESS THE SOUTH 30 FEET FOR ROAD PURPOSES AND LESS THE EAST 600 FEET THEREOF.)

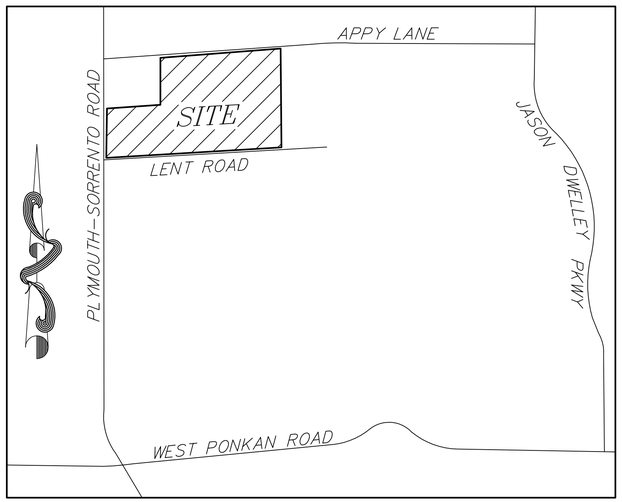
ALSO DESCRIBED AS FOLLOWS:

LEGAL DESCRIPTION:

A TRACT OF LAND LYING IN SECTION 19, TOWNSHIP 20 SOUTH, RANGE 28 EAST, DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF THE NORTHWEST QUARTER OF SAID SECTION 19 FOR A POINT OF REFERENCE; THENCE RUN NORTH 85°38'18" EAST, ALONG THE NORTH LINE OF THE NORTHWEST QUARTER OF SAID SECTION 19, A DISTANCE OF 742.00 FEET TO THE WEST LINE OF THE EAST HALF OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SAID SECTION 19; THENCE RUN SOUTH 00°00'04" EAST, ALONG SAID WEST LINE, 60.24 FEET TO THE A POINT ON THE SOUTH RIGHT-OF-WAY LINE OF APPY LANE, ACCORDING TO OFFICIAL RECORDS BOOK 9701, PAGE 2389 OF THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA AND THE POINT OF BEGINNING; THENCE RUN NORTH 85°38'18" EAST, ALONG SAID SOUTH RIGHT-OF-WAY LINE, 1575.43 FEET; THENCE DEPARTING SAID SOUTH RIGHT-OF-WAY LINE, RUN SOUTH 00°24'08" EAST, PARALLEL WITH AND 600.00 FEET WEST OF (PERPENDICULAR MEASURE) OF THE EAST LINE OF THE NORTHWEST QUARTER OF SAID SECTION 19, A DISTANCE OF 1288.73 FEET TO THE NORTH RIGHT-OF-WAY LINE OF LENT ROAD, ACCORDING TO RIGHT-OF-WAY AGREEMENT, RECORDED IN OFFICIAL RECORDS BOOK 4, PAGES 13 AND 14 OF SAID PUBLIC RECORDS; THENCE RUN SOUTH 86°34'19" WEST, ALONG SAID NORTH RIGHT-OF-WAY LINE, 2294.73 FEET TO THE EAST RIGHT-OF-WAY LINE OF PLYMOUTH-SORRENTO ROAD, ACCORDING TO DEED BOOK 402, PAGE 68 AND ROAD BOND BOOK 3, PAGE 43 OF SAID PUBLIC RECORDS; THENCE RUN NORTH 00°02'10" EAST, ALONG SAID EAST RIGHT-OF-WAY LINE, 641.04 FEET TO THE SOUTH LINE OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SAID SECTION 19; THENCE RUN NORTH 86°06'20" EAST, ALONG SAID SOUTH LINE, 711.96 FEET TO THE AFORESAID TO THE WEST LINE OF THE EAST HALF OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SAID SECTION 19; THENCE RUN NORTH 00°00'04" WEST, ALONG SAID WEST LINE, 616.71 FEET TO THE POINT OF BEGINNING.

THE ABOVE DESCRIBED PARCEL OF LAND LIES IN THE CITY OF APOPKA, ORANGE COUNTY. FLORIDA AND CONTAINS 56.67 ACRES MORE OR LESS.




SURVEYOR'S NOTES:

1. BEARINGS SHOWN HEREON ARE ASSUMED AND RELATIVE TO THE NORTH LINE OF THE NORTHWEST QUARTER OF SECTION 19, TOWNSHIP 20 SOUTH, RANGE 28 EAST, BEING NORTH 85°38'18" EAST.
2. THE "LEGAL DESCRIPTION" HEREON AND THE LANDS SURVEYED ARE PARCELS 1 AND 2 AS PROVIDED IN THE COMMITMENT TO INSURE TITLE, COMMITMENT NO. 1088876-2, PREPARED BY OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY. THE ALSO DESCRIBED AS LEGAL DESCRIPTION WAS PREPARED BY THE SURVEYOR AT THE CLIENT'S REQUEST.
3. 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.
4. 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.
5. THIS SURVEY IS NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
6. UNLESS OTHERWISE NOTED OR SHOWN HEREON, APPARENT AND/OR VISIBLE, UNOBSTRUCTED, VISIBLE ABOVE GROUND IMPROVEMENTS WERE LOCATED. UNDERGROUND UTILITIES, FOUNDATIONS AND IMPROVEMENTS WERE NOT LOCATED, UNLESS SHOWN HEREON.
7. 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.
8. THE LANDS SHOWN HEREON LIE IN ZONE "X", DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, ACCORDING TO FLOOD INSURANCE RATE MAP (FIRM) COMMUNITY PANEL NO. 12018O0110H, MAP NO. 12095C0110H, MAP REVISED SEPTEMBER 24, 2021.
   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.
9. THERE WAS NO VISUAL EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION, OR BUILDING ADDITIONS OBSERVED IN THE PROCESS OF CONDUCTING THE FIELD WITHIN THE SURVEYED LANDS.
10. WHILE CONDUCTING THE SURVEY, THERE WAS NO OBSERVED EVIDENCE OF WETLANDS WITHIN THE SURVEYED LANDS.
11. ADJOINING PARCEL OWNER AND RECORDING INFORMATION DELINEATED HEREON WAS OBTAINED FROM THE ORANGE COUNTY PROPERTY APPRAISER'S PUBLIC ACCESS SYSTEM.
12. THE SUBJECT PROPERTY IS ZONED RSF-1A. THE SURVEYOR WAS NOT PROVIDED A ZONING REPORT CONTAINING SETBACK, HEIGHT RESTRICTIONS, ETC. OR OTHER INFORMATION REGARDING ZONING RESTRICTIONS.
13. THE SUBJECT PROPERTY IS IMPROVED AND PARTIALLY WOODED,
14. THERE WAS NO VISUAL EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS OBSERVED IN THE PROCESS OF CONDUCTING THE FIELD WITHIN THE SURVEYED LANDS. THE SURVEYOR IS UNAWARE OF ANY PROPOSED CHANGES IN THE RIGHT-OF-WAY.
15. THE SUBJECT PROPERTY HAS ACCESS TO PUBLIC UTILITIES FROM THE PUBLIC STREETS ADJACENT TO THE SUBJECT PROPERTY.
16. THE SUBJECT PROPERTY ABUTS, WITHOUT GAPS GORES OR STRIPS, AND HAS VEHICULAR AND PEDESTRIAN INGRESS TO AND EGRESS FROM APPY LANE, PLYMOUTH-SORRENTO ROAD AND LENT ROAD, WHICH IS COMPLETED, DEDICATED AND ACCEPTED PUBLIC RIGHT OF WAY.
17. EXCEPT AS SHOWN ON THE SURVEY, THE SUBJECT PROPERTY DOES NOT APPEAR TO SERVE ANY ADJOINING PROPERTY FOR UTILITIES, DRAINAGE, STRUCTURAL SUPPORT OR INGRESS OR EGRESS.
18. THERE IS NO OBSERVED EVIDENCE OF THE SITE BEING USED AS A SOLID WASTE DUMP, SUMP OR SANITARY LANDFILL.
19. THE ELEVATIONS SHOWN HEREON ARE BASED ON THE ORANGE COUNTY ENGINEERING DEPARTMENT OF SURVEY VERTICAL DATUM, BENCHMARK S-137402.3, ELEVATION 106.46' NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
20. THERE ARE SEVERAL FENCES INTERIOR TO THE SUBJECT PROPERTY BEING USED FOR LIVE STOCK THAT WERE NOT LOCATED.
21. PARCEL 1 AND PARCEL 2, WHERE THEY SHARE A COMMON LINE, ARE CONTIGUOUS WITH NO GAPS, GORES, HIATUS OR OVERLAPS.
22. WE HAVE EXAMINED THE FURNISHED COMMITMENT TO INSURE TITLE, COMMITMENT NO. 1088876-2, PREPARED BY OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY, EFFECTIVE DATE AUGUST 8, 2021. THOSE INSTRUMENTS INCLUDED IN SCHEDULE B-II, OF THE COMMITMENT HAVE BEEN EXAMINED AND ARE REFLECTED HEREON TO THE EXTENT THEY AFFECT THE LANDS SURVEYED.

    EXCEPTIONS AS THEY APPEAR IN THE TITLE COMMITMENT:

    6. EASEMENT IN FAVOR OF FLORIDA POWER CORPORATION RECORDED IN O.R. BOOK 1640, PAGE 448, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA. DOES NOT AFFECT THE SUBJECT PROPERTY BUT IS SHOWN HEREON.
    7. DISTRIBUTION EASEMENT IN FAVOR OF FLORIDA POWER CORPORATION RECORDED IN O.R. BOOK 3320, PAGE 1061, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA. AFFECTS THE SUBJECT PROPERTY AND IS SHOWN HEREON.

CERTIFIED TO: ASHTON ORLANDO RESIDENTIAL, LLC, A NEVADA LIMITED LIABILITY COMPANY, LENT ROAD PROPERTIES, LLC, A FLORIDA LIMITED LIABILITY COMPANY (AS TO PARCEL 1), AMANDA P. FARRELL, AS TRUSTEE OF THE TESTAMENTARY TRUST FOR THE BENEFIT OF AMANDA P. FARRELL CREATED UNDER THE RICHARD W. ROGERS REVOCABLE TRUST NO. 1 DATED APRIL 15, 1996, AS AMENDED (AS TO PARCEL 2), SHUFFIELD, LOWMAN & WILSON, P.A., BEAMAN & CLARK LAW FIRM, P.A., AND OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY.

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 5, 8, 11, 13, 16, OF TABLE A THEREOF.

ALLEN & COMPANY
Professional Surveyors & Mappers
16 EAST PLANT STREET
WINTER GARDEN, FLORIDA 34787
407 654-5355 *FAX 407 654-5356
admin@allen-company.com

# ALTA/NSPS LAND TITLE BOUNDARY, TOPOGRAPHIC AND TREE SURVEY
OF
# LENT ROAD
SECTION 19, TOWNSHIP 20 SOUTH, RANGE 28 EAST
CITY OF APOPKA, ORANGE COUNTY, FLORIDA

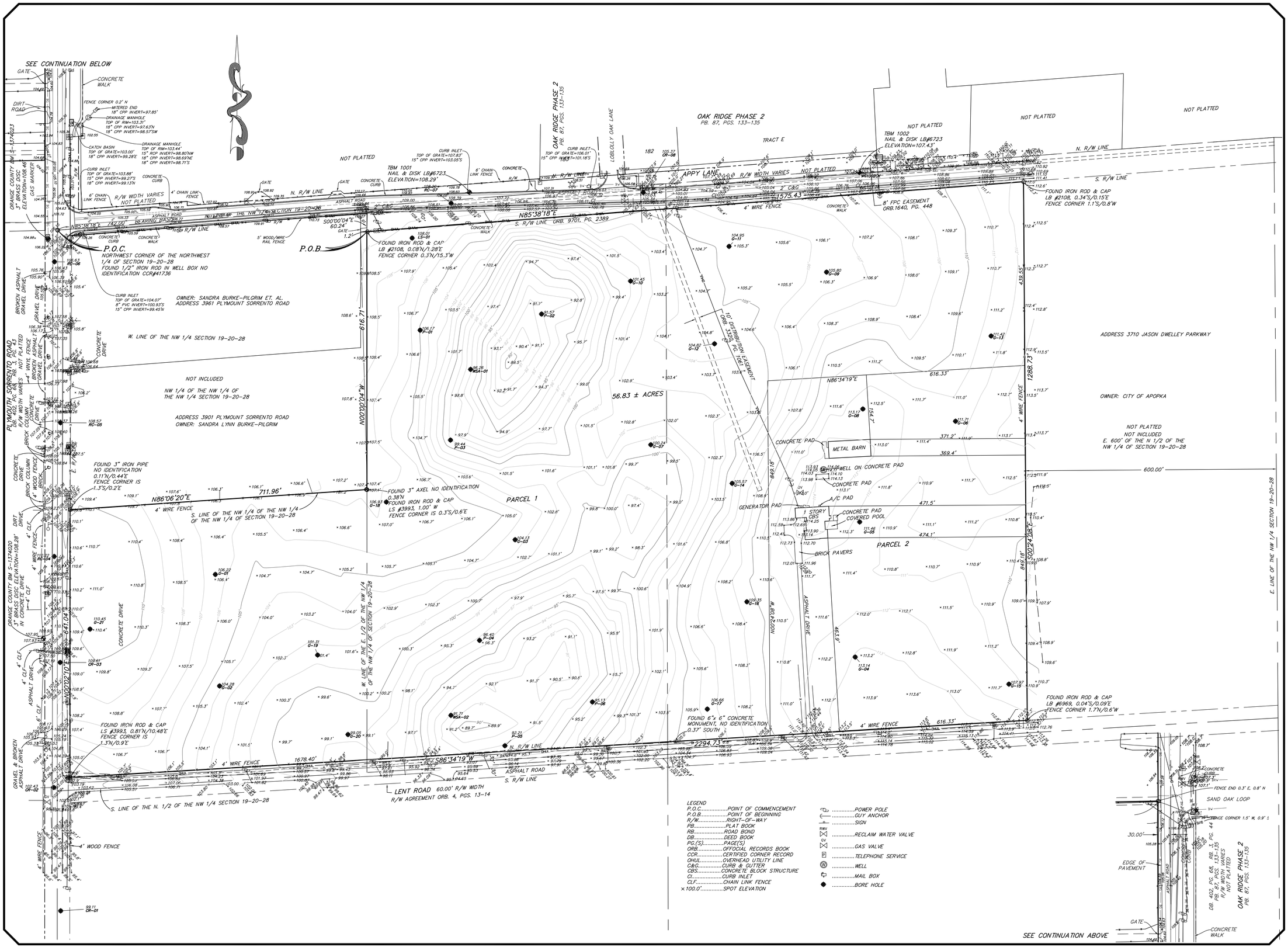
FOR: ASHTON WOODS

| DATE | REVISIONS |
|---|---|
| 1-31-22 | BOUNDARY/LEGAL |

JOB # 20210699
DATE: 10-29-21
SCALE: 1"=100'
CALC BY: JLR
FIELD BY: JS
DRAWN BY: SEJ
CHECKED BY: JLR

SHEET 1 OF 4

Drawing name: L:\Data\20210699\Dwg\20210699 ALTA.dwg SHEET 1

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admin@allen-company.com

# ALTA/NSPS LAND TITLE BOUNDARY, TOPOGRAPHIC AND TREE SURVEY

OF

# LENT ROAD

SECTION 19, TOWNSHIP 20 SOUTH, RANGE 28 EAST

CITY OF APOPKA, ORANGE COUNTY, FLORIDA

FOR: ASHTON WOODS

| DATE | REVISIONS |
|---|---|

JOB # 20210699
DATE: 10-29-21
SCALE: 1"=100'
CALC BY: JLR
FIELD BY: JS
DRAWN BY: SEJ
CHECKED BY: JLR

SHEET 2 OF 4

Drawing name: L:\Data\20210699\dwg\20210699 ALTA.dwg SHEET 2

# CONSTRUCTION SITE PLAN

FOR

# WILLOW RUN

# CITY OF APOPKA, FLORIDA

OCPA PARCEL ID:19-20-28-0000-00-002 & 19-20-28-0000-00-050

**LEGAL DESCRIPTION PER ALLEN & COMPANY PROFESSIONAL SURVEYORS & MAPPERS DATED: NOVEMBER 8, 2023**

LEGAL DESCRIPTION:

PARCEL 1:

THE NORTH 1/2 OF THE NORTHWEST 1/4 OF SECTION 19, TOWNSHIP 20 SOUTH, RANGE 28 EAST, ORANGE COUNTY, FLORIDA (LESS THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 AND LESS THE SOUTH 30 FEET AND THE NORTH 60 FEET AND THE WEST 30 FEET FOR ROAD PURPOSES AND LESS THE SOUTH 878 FEET OF THE EAST 1215.47 FEET AND THE EAST 600 FEET THEREOF.)

PARCEL 2:

THE SOUTH 878 FEET OF THE EAST 1215.47 FEET OF THE NORTH 1/2 OF THE NORTHWEST 1/4 OF SECTION 19, TOWNSHIP 20 SOUTH, RANGE 28 EAST, ORANGE COUNTY, FLORIDA (LESS THE SOUTH 30 FEET FOR ROAD PURPOSES AND LESS THE EAST 600 FEET THEREOF.)

ALSO DESCRIBED AS FOLLOWS:

A TRACT OF LAND LYING IN SECTION 19, TOWNSHIP 20 SOUTH, RANGE 28 EAST, DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF THE NORTHWEST QUARTER OF SAID SECTION 19 FOR A POINT OF REFERENCE; THENCE RUN NORTH 85°38'18" EAST, ALONG THE NORTH LINE OF THE NORTHWEST QUARTER OF SAID SECTION 19, A DISTANCE OF 729.62 FEET TO THE WEST LINE OF THE EAST HALF OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SAID SECTION 19; THENCE RUN SOUTH 00°04'35" EAST, ALONG SAID WEST LINE, 60.17 FEET TO THE A POINT ON THE SOUTH RIGHT-OF-WAY LINE OF APPY LANE ACCORDING TO OFFICIAL RECORDS BOOK 9701, PAGE 2389 OF THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA AND THE POINT OF BEGINNING; THENCE RUN NORTH 85°38'18" EAST, ALONG SAID SOUTH RIGHT-OF-WAY LINE, 1587.77 FEET; THENCE DEPARTING SAID SOUTH RIGHT-OF-WAY LINE, RUN SOUTH 00°24'08" EAST, PARALLEL WITH AND 600.00 FEET WEST OF (PERPENDICULAR MEASURE) OF THE EAST LINE OF THE NORTHWEST QUARTER OF SAID SECTION 19, A DISTANCE OF 1288.73 FEET TO THE NORTH RIGHT-OF-WAY LINE OF LENT ROAD, ACCORDING TO RIGHT-OF-WAY AGREEMENT, RECORDED IN OFFICIAL RECORDS BOOK 4, PAGES 13 AND 14 OF SAID PUBLIC RECORDS; THENCE RUN SOUTH 86°34'19" WEST, ALONG SAID NORTH RIGHT-OF-WAY LINE, 2294.73 FEET TO THE EAST RIGHT-OF-WAY LINE OF PLYMOUTH-SORRENTO ROAD, ACCORDING TO DEED BOOK 402, PAGE 68 AND ROAD BIND BOOK 3, PAGE 43 OF SAID PUBLIC RECORDS; THENCE RUN NORTH 00°02'10" EAST, ALONG SAID EAST RIGHT-OF-WAY LINE, 641.04 FEET TO THE SOUTH LINE OF THE NORTHWEST QUARTER FO THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SAID SECTION 19; THENCE RUN NORTH 86°06'20" EAST, ALONG SAID SOUTH LINE, 700.45 FEET TO THE AFORESAID TO THE WEST LIEN FO THE EAAST HALF OF NORTHWEST QUARTER OF SAID SECTION 19; THENCE RUN NORTH 00°0404'35" WEST, ALONG SAID WEST LINE, 616.56 FEET TO THE POINT OF BEGINNING.

## PROJECT TEAM:

PROPERTY OWNER
TESTAMENTARY TRUST FBO
AMANDA P FARRELL
2601 LEND ROAD APOPKA, FL 32703

LENT ROAD PROPERTIES LLC
2601 LEND ROAD APOPKA, FL 32703

DEVELOPER
M/I HOMES OF ORLANDO, LLC
CONTACT: ROBERT REYNOLDS
400 INTERNATIONAL PARKWAY, STE 470
LAKE MARY, FL 32746
PHONE: (407) 531-5122
EMAIL: RREYNOLDS@MIHOMES.COM

ENGINEER
APPIAN ENGINEERING, LLC
ENGINEER: OVIDIO S. SANCHEZ, P.E.
2221 LEE RD, SUITE 27
WINTER PARK, FL 32789
PHONE: (407) 960-5868
EMAIL: OSANCHEZ@APPIANFL.COM

SURVEYOR
ALLEN & COMPANY, INC.
SURVEYOR: JAMES L. RICKMAN, P.S.M.
16 EAST PLANT STREET
WINTER GARDEN, FL 34787
PHONE: (407) 654-5355
EMAIL: JIM@ALLEN-COMPANY.COM

LANDSCAPE ARCHITECT
LANDSCAPE DESIGNS, LLC
ARCHITECT: CARL J. KELLY JR., RLA
4463 TIFFANY WOODS CIR OVIEDO, FLORIDA 32765
PHONE: (407) 484-3414
EMAIL: CKELLY1@CFL.RR.COM

ENVIRONMENTAL CONSULTANT
BIO-TECH CONSULTING, INC.
ENVIRONMENTALIST: JAY BAKER, INSPECTOR
3025 EAST SOUTH STREET
ORLANDO, FL 32803
PHONE: (407) 894-5969
EMAIL:JAY@BIO-TECHCONSULTING.COM

GEOTECHNICAL ENGINEER
GEO-TECHNOLOGY ASSOCIATES, INC.
ENGINEER: GAUTHAM S. PILLAPPA, P.E.
4617 PARKBREEZE COURT
ORLANDO, FLORIDA 32808
PHONE: (321) 482-4239
EMAIL: GPILLAPPA@GTAENG.COM

TRAFFIC ENGINEER
TRAFFIC & MOBILITY CONSULTANTS, LLC
ENGINEER: AYMAN H. AS-ASADI, P.E.
3101 MAGUIRE BOULEVARD, SUITE 265
ORLANDO, FLORIDA 32803
PHONE: (407) 730-1473
EMAIL: AHA@TRAFFICMOBILITY.COM

## UTILITY PROVIDERS

WATER/RECLAIMED:
CITY OF APOPKA
748 E. CLEVELAND STREET
ORLANDO, FL 32703
CONTACT: RICHARD W EARP, P.E./CFM
PHONE: (407) 703-1632

SOLID WASTE COLLECTION:
CITY OF APOPKA
748 E. CLEVELAND STREET
WINTER PARK, FL 32703
CONTACT: RICHARD W EARP, P.E./CFM
PHONE: (407) 703-1632

NATURAL GAS:
LAKE APOPKA NATURAL GAS DISTRICT
1320 WINTER GARDEN VINELAND
WINTER PARK, FLORIDA 34787
CONTACT:PATRICK NGUYEN
PHONE: (407) 656-2734

TELEPHONE/FIBER:
CENTURYLINK
33 NORTH MAIN STREET, ROOM 144
WINTER GARDEN, FL 34787
CONTACT: BILLY HAGER
PHONE: (407) 814-5329

CHARTER COMMUNICATION:
(A.K.A. SPECTRUM)
3767 ALL AMERICAN BOULEVARD
ORLANDO, FLORIDA 32810
CONTACT: TRACEY DOMOSTOY
PHONE: (407) 532-8509

POWER:
DUKE ENERGY
3250 BONNETT CREEK ROAD
LAKE BUENA VISTA, FLORIDA 32830
CONTACT: JENNIFER NAZARIAN
PHONE: (407) 938-6611

**PROJECT QUALIFIES FOR AN EXEMPTION TO THE GREEN BUILDING STANDARDS REQUIRED BY LDC SECTION 5.11.2. THIS EXEMPTION IS GRANTED BASED ON THE PROJECT'S USING HOME ENERGY RATING SYSTEM (H.E.R.S.) "FOR ALL PROPOSED RESIDENTIAL LOTS", A CERTIFICATION PROGRAM SIMILAR TO LEED REQUIREMENTS.**

**PROPOSED GREEN BUILDING STANDARDS:**

| | |
|---|---|
| *VEGETATION* | |
| - PRESERVE 5+ LARGE, NON-EXOTIC TREES ON SITE | 1.00 pt. |
| *TRANSPORTATION* | |
| -PROVIDE MORE BICYCLE PARKING THAN REQUIRED BY SEC. 5.1.11 | 1.00 pt. |
| *ENERGY CONSERVATION* | |
| -USE VEGETATION OR VEGETATED STRUCTURES TO SHADE HVAC UNITS | 0.25 pt. |
| *RESILIENCY TO NATURAL HAZARDS* | |
| - ELEVATE NEW AND/OR EXISTING STRUCTURES MORE THAN 3 FEET ABOVE BASE FLOOD ELEVATION | 2.00 pt. |
| TOTAL | 4.25 pt. |

Mike McKinley
Digitally signed by Mike McKinley
DN: C=US, E=mmckinley@apopka.net, O=Apopka Police Department, OU=Chief's Office, CN=Mike McKinley
Reason: I have reviewed this document
Date: 2024.08.14 12:02:52-04'00'

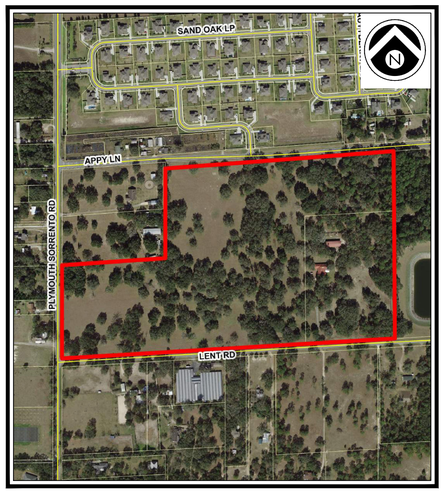
John L. Hanson
Digitally signed by John L. Hanson
DN: C=US, E=jhanson@apopka.net, O=City of Apopka, OU=Building Official, CN=John L. Hanson
Reason: I have reviewed this document
Date: 2024.08.14 09:08:54-04'00'

Jean Sanchez
Digitally signed by Jean Sanchez
DN: C=US, E=jesanchez@apopka.net, O=City of Apopka, OU=Planning and Zoning, CN=Jean Sanchez
Reason: I agree to the terms defined by the placement of my signature on this document
Contact Info: DRC Approved 7.26.2024
Date: 2024.08.14 08:49:32-04'00'

Jeremy Holderfield
Digitally signed by Jeremy Holderfield
DN: C=US, E=jholderfield@apopka.net, O=City of Apopka, OU=Fire Marshal, CN=Jeremy Holderfield
Date: 2024.08.14 10:05:40-04'00'

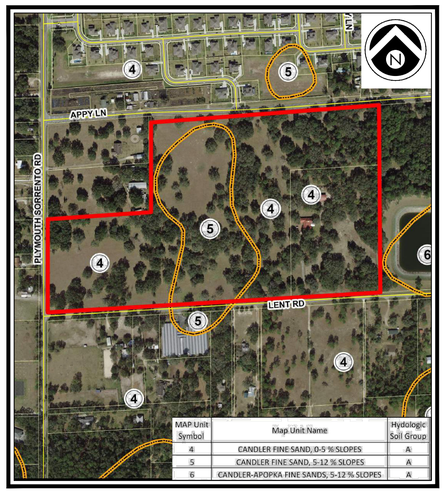
## VICINITY MAP

SCALE: 1" = 2000'




## AERIAL MAP

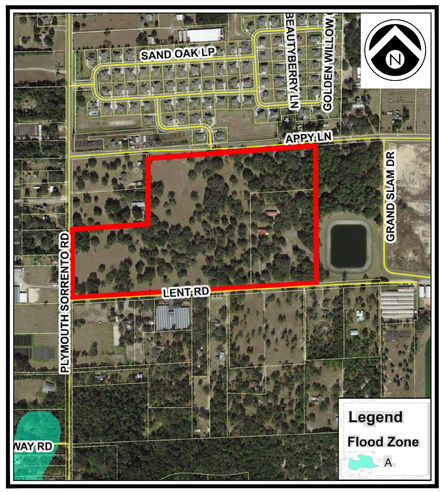
SCALE: 1" = 500'




| MAP Unit Symbol | Map Unit Name | Hydrologic Soil Group |
|---|---|---|
| 4 | CANDLER FINE SAND, 0-5 % SLOPES | A |
| 5 | CANDLER FINE SAND, 5-12 % SLOPES | A |
| 6 | CANDLER-APOPKA FINE SANDS, 5-12 % SLOPES | A |

## SOILS MAP

SCALE: 1" = 500'




## FEMA FLOOD MAP

SCALE: 1" = 700'

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| | | BOUNDARY, TOPOGRAPHIC AND TREE SURVEY |


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**SHEET 1 OF 82**

APPIAN ENGINEERING
2221 LEE ROAD, SUITE 27
WINTER PARK, FLORIDA 32789
(407) 960-5868

BOARD OF PROFESSIONAL ENGINEERING CERTIFICATE NO. 32174

PERMITS REQUIRED

| AGENCY | PERMIT TYPE | DATE APPLIED | DATE APPROVED | APPROVAL NO. |
|---|---|---|---|---|
| CITY OF APOPKA | CONSTRUCTION SITE PLAN (CSP) | 04/04/2024 | | |
| CITY OF APOPKA | ARBOR MITIGATION PERMIT | | | |
| ORANGE COUNTY | ROW IMPROVEMENT PLAN | 02/02/2024 | | 24-E-024 |
| S.J.R.W.M.D. | ENV. RESOURCE PERMIT (ERP) | 02/15/2024 | | 215319-1 |
| F.D.E.P. | WATER | | | |
| F.D.E.P. | WASTEWATER | | | |
| F.D.E.P. | NPDES | | | |

| REV. | DATE | DESCRIPTION |
|---|---|---|
| 1 | 04/30/2024 | CITY OF APOPKA COMMENTS DATED 04/30/2024 |
| 2 | 04/30/2024 | SJRWMD COMMENTS (APPLICATION NO. 215319-1) DATED 03/15/2024 |

OVIDIO SALVADOR SANCHEZ LICENSE No. 86492 STATE OF FLORIDA PROFESSIONAL ENGINEER 6/11/24

This item has been digitally signed and sealed by Ovidio S. Sanchez, PE on the date adjacent to the seal.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

\\appian-file\Projects_PROJECT DRAWINGS\MII-005 Wolf Lake Run Subdivision\Drawings\CAD Civil\3D\Layouts\04 Final Engineering\COVER SHEET.dwg Plotted:6/11/2024 By:osanchez

\\appian-file\Projects_PROJECT DRAWINGS\MIH-005 Wolf Lake Run Subdivision\Drawings\CAD Civil3D\Layouts\04 Final Engineering\GENERAL NOTES.dwg Modified:5/1/2024 By:tmoore

# GENERAL NOTES

1. UNLESS OTHERWISE SPECIFIED, ALL WORK SHALL BE PERFORMED CONSISTENT WITH THE FOLLOWING SPECIFICATIONS:
   - CITY OF APOPKA, FLORIDA
   - ORANGE COUNTY, FLORIDA
   - ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
   - FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
   - NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
2. THE GEOTECHNICAL REPORT SHALL BE REVIEWED BY THE CONTRACTOR, AND THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE SITE, INCLUDING ALL SURFACE AND SUBSURFACE CONDITIONS, THE WORK REQUIRED, AND ALL OTHER CONDITIONS THAT MAY AFFECT THE SUCCESSFUL COMPLETION OF THE JOB PRIOR TO COMMENCEMENT OF WORK.
3. THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND PERMIT CONDITIONS BEARING ON THE CONDUCT OF THE WORK, AS DRAWN AND SPECIFIED. IF THE CONTRACTOR OBSERVES THAT THE DRAWINGS AND SPECIFICATIONS ARE AT VARIANCE THEREWITH, HE SHALL PROMPTLY NOTIFY THE ENGINEER, IN WRITING, AND ANY NECESSARY CHANGES SHALL BE ADJUSTED, AS PROVIDED IN THE AGREEMENT FOR CHANGES IN THE WORK.
4. THE CONTRACTOR SHALL BE RESPONSIBLE TO THE OWNER AND THE ENGINEER FOR THE ACTS AND OMISSIONS OF CONTRACTOR'S EMPLOYEES AND ALL HIS SUBCONTRACTORS AND THEIR AGENTS AND EMPLOYEES AND OTHER PERSONS PERFORMING ANY OF THE WORK UNDER A CONTRACT WITH THE CONTRACTOR.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING ALL NECESSARY ARRANGEMENTS WITH GOVERNMENTAL DEPARTMENTS, PUBLIC UTILITIES, PUBLIC CARRIERS, SERVICE COMPANIES, AND CORPORATIONS OWNING OR CONTROLLING ROADWAYS, RAILWAYS, WATER, SEWER, GAS, ELECTRICAL, TELEPHONE, AND TELEGRAPH FACILITIES SUCH AS PAVEMENTS, TRACKS, PIPING, WIRES, CABLES, CONDUITS, POLES, GUYS, OR OTHER SIMILAR FACILITIES, INCLUDING INCIDENTAL STRUCTURES CONNECTED THEREWITH THAT ARE ENCOUNTERED IN THE WORK IN ORDER THAT SUCH ITEMS MAY BE PROPERLY SUPPORTED, PROTECTED OR LOCATED.
6. UNLESS OTHERWISE SPECIFIED IN THE GENERAL CONDITIONS, ALL CONSTRUCTION IS TO BE GOVERNED BY THE PLANS, APPLICABLE PERMITS, AND SPECIFICATIONS HEREIN, AND ALL APPLICABLE FEDERAL, STATE AND LOCAL BUILDING AND SAFETY CODES, LAWS AND ORDINANCES.
7. PRIOR TO PERFORMING ANY WORK WITHIN ANY PUBLIC OR UTILITY RIGHT-OF-WAY, CONTRACTOR SHALL OBTAIN AUTHORIZATION AND PERMIT FROM JURISDICTION RESPONSIBLE FOR SUCH RIGHT-OF-WAY. IN ADDITION, CONTRACTOR SHALL OBTAIN GAS I.D. NUMBER FROM LOCAL GAS COMPANY AND NOTIFY SUNSHINE STATE ONE-CALL UTILITY NOTIFICATION CENTER AT 1-800-432-4770 AT LEAST 48 HOURS PRIOR TO START OF WORK.
8. PRIOR TO PERFORMING ANY WORK WITHIN ANY PUBLIC RIGHT-OF-WAY, CONTRACTOR SHALL DEVELOP AND IMPLEMENT A TRAFFIC CONTROL PLAN CONSISTENT WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" PUBLISHED BY THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION, AND SUBMIT TO THE COUNTY ENGINEER FOR APPROVAL.
9. IN THE EVENT THE CONTRACTOR DISCOVERS ANY ERRORS OR OMISSIONS IN THE PLANS HE SHALL IMMEDIATELY NOTIFY THE ENGINEER AND/OR OWNER OR OWNER'S AGENT.
10. CONTRACTOR SHALL PRESERVE AND PROTECT ALL PERMANENT REFERENCE MONUMENTS, PERMANENT CONTROL POINTS, PERMANENT BENCH MARKS AND PROPERTY CORNERS. IN THE EVENT THE MONUMENTS, POINTS OR MARKERS ARE DISTURBED THE CONTRACTOR SHALL EMPLOY A FLORIDA REGISTERED LAND SURVEYOR TO RESET OR REPLACE THEM.
11. THE OWNER, OWNER'S AGENT AND INSPECTORS OF APPLICABLE GOVERNMENT JURISDICTIONS, SHALL AT ALL TIMES HAVE ACCESS TO THE WORK WHEREVER AND WHENEVER IT IS IN PREPARATION OR PROGRESS; AND THE CONTRACTOR SHALL PROVIDE PROPER FACILITIES FOR SUCH ACCESS AND FOR THE INSPECTION.
12. IT IS THE CONTRACTOR'S RESPONSIBILITY TO TAKE ALL REASONABLE AND PRUDENT PRECAUTIONS TO INSURE THAT ALL COMPLETED WORK, MATERIALS AND EQUIPMENT STORED ON SITE ARE SAFE AND SECURED FROM UNAUTHORIZED ACCESS, USE, THEFT, OR VANDALISM. SUCH PRECAUTIONS MAY INCLUDE INSTALLATION OF SIGNS, FENCES, OR POSTING OF SECURITY GUARDS.
13. CONTRACTOR SHALL, AT ALL TIMES, UTILIZE ALL NORMALLY ACCEPTED AND REASONABLY EXPECTED SAFETY PRACTICES AND COMPLY WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS, ORDINANCES AND GUIDELINES PERTAINING TO SAFE UTILIZATION OF EQUIPMENT OR MATERIALS AS PUBLISHED BY THEIR MANUFACTURER'S.
14. PRIOR TO INITIATING ANY EXCAVATION (INCLUDING BUT NOT LIMITED TO TUNNELS, DITCHES, STORM WATER PONDS, CANALS, ARTIFICIAL LAKES) CONTRACTOR SHALL INSTALL FENCES AND/OR TAKE ALL OTHER REASONABLE AND PRUDENT STEPS TO INSURE THAT ACCESS TO EXCAVATION BY UNAUTHORIZED PERSONNEL IS PREVENTED.
15. CONTRACTOR SHALL COMPLY IN EVERY RESPECT WITH THE PROVISIONS OF THE FLORIDA STATE TRENCH SAFETY ACT.
16. THE CONTRACTOR SHALL TAKE ALL REASONABLE PRECAUTIONS FOR THE SAFETY OF, AND SHALL PROVIDE ALL REASONABLE PROTECTION TO PREVENT DAMAGE, INJURY OR LOSS TO:
    A. ALL EMPLOYEES ON THE WORK AND ALL OTHER PERSONS WHO MAY BE AFFECTED THEREBY;
    B. ALL THE WORK AND ALL MATERIALS AND EQUIPMENT TO BE INCORPORATED THEREIN, WHETHER IN STORAGE ON OR OFF THE SITE, UNDER THE CARE, CUSTODY OR CONTROL OF THE CONTRACTOR OR ANY OF ITS SUBCONTRACTORS;
    C. OTHER PROPERTY AT THE SITE OR ADJACENT THERETO, INCLUDING TREES, SHRUBS, LAWNS, WALKS, PAVEMENTS, ROADWAY, STRUCTURES AND UTILITIES NOT DESIGNATED FOR DEMOLITION IN THE COURSE OF CONSTRUCTION.
17. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE SAFETY CODES AND WITH ALL APPLICABLE LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC, QUASI PUBLIC OR OTHER AUTHORITY HAVING JURISDICTION FOR THE SAFETY OF PERSONS OR PROPERTY OR FOR THEIR PROTECTION AGAINST DAMAGE, INJURY OR LOSS, OR DESIGNED TO PROTECT THE ENVIRONMENT. THE CONTRACTOR SHALL ERECT AND MAINTAIN, AS REQUIRED BY EXISTING CONDITIONS AND PROGRESS OF THE WORK, ALL REASONABLE SAFEGUARDS FOR SAFETY AND PROTECTION, INCLUDING POSTING DANGER SIGNS AND OTHER WARNINGS AGAINST HAZARDS, PROMULGATING SAFETY REGULATIONS AND NOTIFYING OWNERS AND USERS OF ADJACENT UTILITIES OF THE EXISTENCE OF HAZARDS AND OF THE SAFETY REGULATIONS.
18. ALL DAMAGE OR LOSS TO ANY PROPERTY CAUSED IN WHOLE OR IN PART BY THE CONTRACTOR, A SUBCONTRACTOR, OR BY ANYONE FOR WHOSE ACTS ANY OF THEM MAY BE LIABLE, SHALL BE REMEDIED BY THE CONTRACTOR, EXCEPT DAMAGE OR LOSS PROPERLY ATTRIBUTABLE SOLELY TO THE ACTS OR OMISSIONS OF THE OWNER, OR THE ENGINEER OR ANYONE EMPLOYED BY THEM, OR FOR WHOSE ACTS ANY OF THEM MAY BE LIABLE, AND NOT PROPERLY ATTRIBUTABLE IN WHOLE OR IN PART, TO THE FAULT OR NEGLIGENCE OF THE CONTRACTOR.
19. THOSE PARTS OF WORK IN PLACE WHICH ARE SUBJECT TO DAMAGE BECAUSE OF OPERATIONS BEING CARRIED ON ADJACENT THERETO SHALL BE COVERED, BOARDED UP OR SUBSTANTIALLY ENCLOSED WITH ADEQUATE PROTECTION BY THE CONTRACTOR AT CONTRACTOR'S EXPENSE.
20. UNTIL FINAL ACCEPTANCE OF THE WORK BY OWNER, THE CONTRACTOR SHALL HAVE THE CHARGE AND CARE OF AND SHALL BEAR THE RISK OF INJURY OR DAMAGE, LOSS OR EXPENSE TO ANY PART THEREOF, OR TO ANY MATERIALS STORED ON SITE, BY THE ACTION OF THE ELEMENTS OR FROM ANY OTHER CAUSE WHETHER ARISING FROM THE EXECUTION OR NON-EXECUTION OF THE WORK. THE CONTRACTOR SHALL REBUILD, REPAIR, RESTORE AND MAKE GOOD ALL INJURIES OR DAMAGES TO ANY PORTION OF THE WORK OCCASIONED BY ANY OF THE ABOVE CAUSES BEFORE FINAL ACCEPTANCE AND SHALL BEAR THE EXPENSES THEREOF.
21. ADEQUATE TRAFFIC CONTROL, BARRICADES AND FLAGMAN SERVICES SHALL BE FURNISHED AND MAINTAINED BY THE CONTRACTOR AT ALL POINTS WHERE CONVEYING EQUIPMENT ENGAGED ON THE WORK REGULARLY ENTERS ONTO OR CROSSES TRAFFIC-CARRYING ROADS.
22. THE CONTRACTOR SHALL COMPLY IN EVERY RESPECT WITH THE FEDERAL OCCUPATIONAL HEALTH AND SAFETY ACT OF 1970 AND ALL RULES AND REGULATIONS NOW OR HEREAFTER IN EFFECT UNDER SAID ACT, AND THE CONTRACTOR FURTHER AGREES TO COMPLY WITH ANY AND ALL APPLICABLE STATE LAWS AND REGULATIONS PERTAINING TO JOB SAFETY AND HEALTH.
23. CONTRACTOR AND ITS SUBCONTRACTORS SHALL USE, HANDLE, TRANSPORT, AND DISPOSE OF ALL MATERIALS (HAZARDOUS OR OTHERWISE) IN COMPLIANCE WITH ALL PRESENT FEDERAL, STATE AND LOCAL ENVIRONMENTAL, HEALTH OR SAFETY LAW, INCLUDING, BUT NOT LIMITED TO, ALL SUCH STATUTES, REGULATIONS, RULES, ORDINANCES, CODES, AND RULES OF COMMON LAW.
24. CONTRACTOR FURTHER AGREES THAT CONTRACTOR AND ITS SUBCONTRACTORS SHALL NOT CAUSE THE DISCHARGE, RELEASE OR DISPOSAL OF ANY HAZARDOUS MATERIAL CREATED BY ITS WORK ON OR ABOUT THE JOB SITE. IN THE EVENT OF ANY SPILL, RELEASE OR ANY OTHER REPORTABLE OCCURRENCE, CONTRACTOR SHALL NOTIFY THE APPROPRIATE GOVERNMENTAL AGENCY AND SHALL TAKE SUCH ACTION AS MAY BE NECESSARY TO MINIMIZE THE DELETERIOUS EFFECT OF SUCH SPILL ON PERSONS OR PROPERTY.
25. THE CONTRACTOR SHALL PROTECT AND KEEP OWNER (INCLUDING THEIR AGENTS AND EMPLOYEES) FREE AND HARMLESS FROM ANY AND ALL LIABILITY, PUBLIC OR PRIVATE, PENALTIES, CONTRACTUAL OR OTHERWISE, LOSSES, DAMAGES, COSTS, ATTORNEY'S FEES, EXPENSES, CAUSES OF ACTION, CLAIMS OR JUDGMENTS RESULTING FROM THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AS AMENDED OR ANY RULE OR REGULATION PROMULGATED THEREUNDER OR OF ANY STATE LAWS OR REGULATIONS PERTAINING TO JOB SAFETY AND HEALTH ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE PERFORMANCE OF WORK OR WORK TO BE PERFORMED UNDER THIS CONTRACT, AND CONTRACTOR SHALL INDEMNIFY OWNER FROM ANY SUCH CLAIMS, PENALTIES, SUITS OR ACTIONS, PUBLIC OR PRIVATE, ADMINISTRATIVE OR JUDICIAL, INCLUDING ATTORNEY'S FEES PAID OR INCURRED BY OR ON BEHALF OF OWNER, JOINTLY OR SEVERALLY, AND/OR THEIR AGENTS AND EMPLOYEES. THE CONTRACTOR FURTHER AGREES, IN THE EVENT OF A CLAIMED VIOLATION OF ANY FEDERAL OR STATE SAFETY AND HEALTH LAW OR REGULATION ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE PERFORMANCE OF WORK OR WORK TO BE PERFORMED UNDER THIS CONTRACT, OWNER MAY IMMEDIATELY TAKE WHATEVER ACTION IS DEEMED NECESSARY BY OWNER TO REMEDY THE CLAIMED VIOLATION. ANY AND ALL COSTS OR EXPENSES PAID OR INCURRED BY OWNER IN TAKING SUCH ACTION SHALL BE BORNE BY CONTRACTOR, AND CONTRACTOR AGREES TO PROTECT, HOLD HARMLESS AND INDEMNIFY OWNER AGAINST ANY AND ALL SUCH COSTS OR EXPENSES.
26. CONTRACTOR AND ITS SUBCONTRACTORS SHALL, UPON COMPLETION OF PERFORMANCE OF ALL DUTIES UNDER THIS CONTRACT, REMOVE ALL SUPPLIES, MATERIALS, AND WASTE CONTAINING AND HAZARDOUS MATERIAL FROM THE JOB SITE. CONTRACTOR SHALL BEAR FULL FINANCIAL RESPONSIBILITY, AS BETWEEN THE PARTIES OF THIS CONTRACT, FOR THE COMPLIANCE OF CONTRACTOR AND ITS SUBCONTRACTORS WITH THE PROVISIONS OF THIS CONTRACT.
27. CONTRACTOR AGREES TO INDEMNIFY, DEFEND, PROTECT AND HOLD THE OWNER HARMLESS FROM AND AGAINST ANY CLAIMS INCLUDING, WITHOUT LIMITATION, ACTUAL ATTORNEY'S FEES AND ANY COSTS OF INVESTIGATION, SOILS TESTING, GOVERNMENTAL APPROVALS, REMEDIATION AND CLEANUP ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE FAILURE OF CONTRACTOR OR ITS SUBCONTRACTORS, OR THEIR AGENTS, EMPLOYEES, OFFICERS, OR REPRESENTATIVES, TO COMPLY WITH THE TERMS OF THESE CONSTRUCTION DOCUMENTS.
28. SHOULD CONTRACTOR OR ITS SUBCONTRACTORS DISCHARGE, RELEASE OR DISPOSE OF ANY HAZARDOUS MATERIAL ON OR ABOUT THE JOB SITE IN VIOLATION OF THESE CONSTRUCTION DOCUMENTS, CONTRACTOR SHALL IMMEDIATELY SO INFORM OWNER & ENGINEER IN WRITING. IN THE EVENT OF ANY SPILL, RELEASE OR ANY OTHER REPORTABLE OCCURRENCE, CONTRACTOR SHALL NOTIFY THE APPROPRIATE GOVERNMENTAL AGENCY, OWNER & ENGINEER AND SHALL TAKE SUCH ACTION AS MAY BE NECESSARY TO MINIMIZE THE DELETERIOUS EFFECT OF SUCH SPILL ON PERSONS OR PROPERTY.
29. IN THE EVENT CONTRACTOR OR ITS SUBCONTRACTORS ENCOUNTER ON THE PREMISES ANY PIPELINE, UNDERGROUND STORAGE TANK OR OTHER CONTAINER, OF ANY KIND, THAT MAY CONTAIN A HAZARDOUS MATERIAL, OR ENCOUNTER MATERIAL REASONABLY BELIEVED TO BE A HAZARDOUS MATERIAL, CONTRACTOR SHALL IMMEDIATELY STOP WORK IN THE AREA AFFECTED AND REPORT THE CONDITION TO OWNER AND/OR ENGINEER IN WRITING.
30. "HAZARDOUS MATERIAL" MEANS ANY SUBSTANCE: (A) THE PRESENCE OF WHICH REQUIRES INVESTIGATION OR REMEDIATION UNDER ANY PRESENT FEDERAL, STATE OR LOCAL STATUTE, REGULATION, ORDINANCE, RULE, CODE, ORDER, ACTION, POLICY OR COMMON LAW, OR (B) WHICH IS OR BECOMES DEFINED AS A "HAZARDOUS WASTE," "HAZARDOUS SUBSTANCE," POLLUTANT OR CONTAMINANT UNDER ANY PRESENT FEDERAL, STATE OR LOCAL STATUTE, REGULATION, RULE OR ORDINANCE OR AMENDMENTS THERETO INCLUDING, WITHOUT LIMITATION, THE COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (42 U.S.C. SECTIONS 9601 ET SEQ.) AND/OR THE RESOURCE CONSERVATION AND RECOVERY ACT (42 U.S.C. SECTIONS 6901 ET SEQ.), OR (C) WHICH IS TOXIC, EXPLOSIVE, CORROSIVE, FLAMMABLE, INFECTIOUS, RADIOACTIVE, CARCINOGENIC, MUTAGENIC, OR OTHERWISE HAZARDOUS AND IS REGULATED BY ANY GOVERNMENTAL AUTHORITY, AGENCY, DEPARTMENT, COMMISSION, BOARD, AGENCY OR INSTRUMENTALITY OF THE UNITED STATES, THE STATE IN WHICH THE PREMISES ARE LOCATED OR ANY POLITICAL SUBDIVISION THEREOF, OR (D) THE PRESENCE OF WHICH ON THE PREMISES CAUSES OR THREATENS TO CAUSE A NUISANCE UPON THE PREMISES OR TO ADJACENT PROPERTIES OR POSES OR THREATENS TO POSE A HAZARD TO THE HEALTH OR SAFETY OF PERSONS ON OR ABOUT THE PREMISES, OR (E) WHICH CONTAINS GASOLINE, DIESEL FUEL OR OTHER PETROLEUM HYDROCARBONS, OR (F) WHICH CONTAINS POLYCHLORINATED BIPHENYLS (PCBS), ASBESTOS, LEAD OR UREA FORMALDEHYDE FOAM INSULATION.
31. THE CONTRACTOR SHALL FIELD LOCATE ALL EXISTING UTILITIES AS TO SIZE, LOCATION, AND ELEVATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY AND ALL CONFLICTS, DEVIATIONS OR OMISSIONS TO THESE CONSTRUCTION DRAWINGS PRIOR TO BEGINNING CONSTRUCTION.
32. IF ANY TESTING, INSPECTION OR APPROVAL REVEAL DEFECTIVE WORK, CONTRACTOR SHALL NOT BE ALLOWED TO RECEIVE ANY ASSOCIATED COSTS AND THE OWNER SHALL BE ENTITLED TO DEDUCT FROM THE CONTRACT PRICE, BY ISSUING A CHANGE ORDER, OWNER'S COSTS ARISING OUT OF THE DEFECTIVE WORK, INCLUDING COSTS OF REPEATED PROCEDURES, COMPENSATION FOR ENGINEER'S AND DESIGN ENGINEER'S SERVICES AND ALL OTHER RELATED COSTS.

# ADDITIONAL NOTES

1. BEARINGS SHOWN HEREON ARE ASSUMED AND RELATIVE TO THE NORTH LINE OF THE NORTHWEST QUARTER OF SECTION 19, TOWNSHIP 20 SOUTH, RANGE 28 EAST, BEING NORTH 85°38'18" EAST.
2. SUBJECT PROPERTY SHOWN HEREON LIE IN ZONE X, DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, ACCORDING TO FLOOD INSURANCE RATE MAP (FIRM) COMMUNITY PANEL NO. 1201800110H, MAP NO. 12095C0110H, MAP REVISED 9/24/2021.
3. THE ELEVATIONS SHOWN HEREON ARE BASED ON ORANGE COUNTY ENGINEERING DEPARTMENT OF SURVEY VERTICAL DATUM, BENCHMARK S-137403, ELEVATION 106.46' NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

# HANDICAP ACCESSIBILITY NOTES:

1. ALL CONSTRUCTION MUST MEET OR EXCEED ALL REQUIREMENTS AS OUTLINED IN THE AMERICANS WITH DISABILITIES ACT (ADA) AND THE FLORIDA ACCESSIBILITY CODE, MOST RECENT EDITIONS. BOTTOM OF CURB RAMP ELEVATION (B.O. RAMP) IS RELATIVE TO EACH CURB RAMP CONDITION. ACTUAL ELEVATIONS SHALL BE BASED ON EXISTING GRADE OF CURB FLOW LINE AT THE B.O. RAMPS.
2. TOP OF CURB ELEVATION ADJACENT TO B.O. RAMP = 0.50 FT. MAX. UNLESS OTHERWISE NOTED.
3. ADA REQUIREMENTS SUPERSEDE SPOT GRADES AT LOT LINES. CONTRACTOR TO CUT BACK SLOPE AT 3:1 OR FLATTER AS NEEDED FOR RAMP AND SIDEWALK CONNECTION.
4. REFER TO PLAN SHEETS AND SECTIONS FOR LOCATIONS AND SIDEWALK WIDTHS.
5. THE DETECTABLE WARNING STRIP SHALL CONSIST OF A 24 INCH WIDE TACTILE PATTERN OF RAISED TRUNCATED DOMES (ALIGNED PATTERN). DOMES SHALL HAVE A DIAMETER OF 0.9 INCH, A HEIGHT OF 0.2 INCH, AND A CENTER TO CENTER SPACING OF 2.35 INCHES. THE RAMP DETECTABLE WARNING STRIP SHALL BE CONTRASTING IN COLOR. THE MATERIAL USED TO PROVIDE CONTRAST SHALL CONTRAST BY AT LEAST 70%.
6. THE CROSS SLOPE OF RAMP SURFACES AND ADJACENT STREET GRADES SHALL BE NO MORE THAN 1:50 OR 2% MAXIMUM.
7. CURB RAMPS CONSTRUCTED BY THE CONTRACTOR SHALL MEET ALL CURRENT APPLICABLE A.D.A. REQUIREMENTS AND SHALL HAVE DETECTABLE WARNING COMPLYING WITH A.D.A. REQUIREMENTS. ACCESSIBILITY ROUTES SHALL MEET ALL APPLICABLE A.D.A. REQUIREMENTS.
8. CONTRACTOR TO REFER TO MUNICIPALITY DETAILS AS NEEDED.
9. DRIVEWAY/ROADWAY CROSS SLOPES AT CROSSWALKS SHALL BE MAXIMUM 2% PER ADA REQUIREMENTS.
10. SIDEWALK CROSS SLOPES SHALL BE MAXIMUM 2% PER ADA REQUIREMENTS.
11. CURB RAMP FLARES & LANDINGS SHALL MEET ADA REQUIREMENTS.
12. ACCESSIBLE ROUTE WITH RUNNING SLOPES GREATER THAN 1:20 IS A RAMP AND SHALL COMPLY WITH ADA RAMP REQUIREMENTS.
13. IT IS THE CONTRACTORS SOLE RESPONSIBILITY TO MEET ALL CURRENT ADA STANDARDS. CONTRACTOR SHALL REFER TO FDOT STANDARDS. (INDEX 304, MOST CURRENT EDITION)

# RECORD DRAWING AS-BUILT REQUIREMENTS:

AS-BUILT DRAWINGS SHALL BE PREPARED BY AND CERTIFIED (SIGNED AND SEALED) BY A REGISTERED SURVEYOR, AND SHALL BE PROVIDED TO THE ENGINEER OF RECORD UPON COMPLETION OF THE PROJECT SITE IMPROVEMENTS A MINIMUM OF 1 WEEK PRIOR TO CONTRACTORS ATTEMPT FOR FINAL CERTIFICATE OF OCCUPANCY (CO). AS-BUILT DRAWINGS SHALL REFLECT ANY CHANGES TO THE IMPROVEMENTS MADE DURING CONSTRUCTION AND MUST MEET THE MINIMUM REQUIREMENTS OF ALL REGULATORY AGENCIES HAVING JURISDICTION AS WELL AS THE CRITERIA OUTLINED BELOW. BOTH THE ORIGINAL DESIGN AND REVISED AS-BUILT DATA, AS APPLICABLE, MUST BE CLEARLY SHOWN. THE AS-BUILT DRAWINGS MUST BE CLEARLY LABELED AS AS-BUILT OR RECORD DRAWING. THE FOLLOWING INFORMATION, AT A MINIMUM, SHALL BE CERTIFIED ON THE AS-BUILT DRAWINGS:

WATER DISTRIBUTION SYSTEM:

A. LOCATION AND DIMENSIONS OF PIPES, VALVES, FITTINGS, CHANGE OF DIRECTION, AND OTHER ASSOCIATED FACILITIES.

WASTEWATER COLLECTION/TRANSMISSION SYSTEM:

A. LOCATION, DIMENSION, AND INVERT ELEVATIONS OF PIPES, MANHOLES (INCLUDING RIM ELEVATION), LIFTSTATION, FORCEMAIN, FITTINGS, CHANGE IN DIRECTION AND OTHER ASSOCIATED FACILITIES.

PAVING AND DRAINAGE SYSTEM:

A. DIMENSIONS AND ELEVATIONS OF ALL DISCHARGE STRUCTURES INCLUDING ALL WEIRS, SLOTS, GATES, PIPES, AND SKIMMERS;
B. LOCATIONS, DIMENSIONS, AND ELEVATIONS OF ALL FILTER, EXFILTRATION, OR UNDERDRAIN SYSTEMS INCLUDING CLEANOUTS, PIPES, CONNECTIONS TO CONTROL STRUCTURES, AND POINTS OF DISCHARGE TO THE RECEIVING WATERS;
C. DIMENSIONS, ELEVATIONS, CONTOURS, OR CROSS-SECTIONS OF ALL STORMWATER TREATMENT POND STORAGE AREAS SUFFICIENT TO DETERMINE STAGE-STORAGE RELATIONSHIPS OF THE STORAGE AREA, AND THE POND DEPTH AND VOLUME BELOW THE CONTROL WATER ELEVATION FOR NORMALLY WET SYSTEMS;
D. DIMENSIONS, ELEVATIONS, CONTOURS, FINAL GRADES, OR CROSS-SECTIONS OF THE DRAINAGE SYSTEM IMPROVEMENTS TO DETERMINE FLOW DIRECTIONS AND CONVEYANCE OF RUNOFF TO THE TREATMENT SYSTEM;
E. DIMENSIONS, ELEVATIONS, CONTOURS, FINAL GRADES, OR CROSS-SECTIONS OF ALL CONVEYANCE SYSTEMS UTILIZED TO CONVEY OFF-SITE RUNOFF AROUND THE SYSTEM;
F. EXISTING WATER ELEVATION OF SURFACE WATERS AND THE DATE DETERMINED;
G. ELEVATION AND LOCATION OF BENCHMARK'S FOR THE SURVEY.

ADA FACILITIES:

A. ELEVATIONS AT THE FOUR CORNERS OF ALL HANDICAP PARKING SPACES AND ADJACENT LOADING AISLES.
B. ELEVATIONS AND LOCATIONS FOR ALL ACCESSIBLE RAMPS WHICH ADEQUATELY REFLECT THE BUILT SLOPES.
C. ELEVATIONS AND LOCATIONS ALONG THE PATHS OF CONVEYANCE FOR PEDESTRIAN TRAFFIC AND ALL ADA ACCESSIBLE ROUTES EVERY 25 FT. WHICH ADEQUATELY REFLECT THE SLOPE AND CROSS SLOPE.

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**SHEET 2 OF 82**

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 1 | 04/30/2024 | SJRWMD COMMENTS (APPLICATION NO. 215319-1) DATED 03/15/2024 | OSS |
| 2 | 04/30/2024 | CITY OF APOPKA COMMENTS DATED 04/30/2024 | OSS |

CIVIL ENGINEERING | LAND PLANNING
APPIAN ENGINEERING LLC.
APPIANFL.COM • 407.960.5868
2221 Lee Road, Suite 27, Winter Park, Florida 32789
STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32674

GENERAL NOTES
CONSTRUCTION SITE PLAN
WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

DRAWN: B. KILLELA | DESIGNED: O. SANCHEZ | CHECKED: O. SANCHEZ | DATE: 6/11/24
SCALE: N.T.S. | PROJECT: MIH-005 | SHEET: C1.0

APPIAN ENGINEERING LLC

OSCAR SALVADOR SANCHEZ LICENSE No. 86492 STATE OF FLORIDA 6/11/24 PROFESSIONAL ENGINEER

The Seal and Text shown hereon are created by Orlando E. Sanchez, PE on this date pursuant to Florida Statutes and the signature must be verified on any electronic copies.

# ABBREVIATIONS

| | |
|---|---|
| **A** | |
| A | AREA |
| AB | ANCHOR BOLT |
| ABD | ABANDON(ED) |
| AC | ACRE(S) |
| AC-FT | ACRE FOOT/FEET |
| ACP | ASBESTOS CEMENT PIPE |
| ADDL | ADDITIONAL |
| ADT | AVERAGE DAILY TRAFFIC |
| AL | ALUMINUM |
| ALT | ALTERNATE |
| AM | BEFORE NOON |
| AMP | AMPERE(S) |
| APPROX | APPROXIMATE |
| ARV | AIR RELEASE VALVE |
| ARVV | AIR RELEASE VACUUM VALVE |
| ASPH | ASPHALT |
| ASSY | ASSEMBLY |
| AVE | AVENUE |
| AVG | AVERAGE |
| AZ | AZIMUTH |
| **B** | |
| BFP | BACKFLOW PREVENTER |
| BL | BASELINE |
| BLDG | BUILDING |
| BLVD | BOULEVARD |
| BM | BENCH MARK |
| BND | BOUNDARY |
| BO | BLOWOFF |
| BOC | BACK OF CURB |
| BOT | BOTTOM |
| BRG | BEARING |
| BS | BOTTOM OF SLOPE |
| BV | BUTTERFLY VALVE |
| **C** | |
| CAP | CAPACITY |
| CB | CATCH BASIN |
| CC | CENTER TO CENTER |
| CEM | CEMENT |
| CF | CUBIC FEET |
| CFM | CUBIC FEET PER MINUTE |
| CFS | CUBIC FEET PER SECOND |
| C&G | CURB AND GUTTER |
| CI | CAST IRON |
| CIP | CAST IRON PIPE |
| CJ | CONSTRUCTION JOINT |
| C/L | CENTER LINE |
| CLP | CONCRETE LIGHT POLE |
| CLR | CLEAR/CLEARANCE |
| CLS | CLASS |
| CM | CONCRETE MONUMENT |
| CMP | CORRUGATED METAL PIPE |
| CMPA | CORRUGATED METAL PIPE ARCH |
| CND | CONDUIT |
| CO. | COUNTY |
| CO | CLEANOUT |
| COL | COLUMN |
| COMP | COMPLETE |
| CONC | CONCRETE |
| CONN | CONNECTION |
| CONST | CONSTRUCT(ION) |
| CONT | CONTINUOUS |
| COORD | COORDINATE(S) |
| COR | CORNER |
| CPLG | COUPLING |
| CPP | CONCRETE POWER POLE |
| CS | CONTROL STRUCTURE |
| CTG | COATING |
| CTR | CENTER |
| CTV | CABLE TELEVISION |
| CULV | CULVERT |
| CY | CUBIC YARD |
| CYL | CYLINDER |
| **D** | |
| DBL | DOUBLE |
| DEG OR ° | DEGREE |
| DEFL | DEFLECT(ION) |
| DEPT | DEPARTMENT |
| DET | DETAIL |
| DHWL | DESIGN HIGH WATER LEVEL |
| DI | DUCTILE IRON |
| DIA | DIAMETER |
| DIAG | DIAGONAL |
| DIM | DIMENSION |
| DIP | DUCTILE IRON PIPE |
| DISCH | DISCHARGE |
| DIST | DISTANCE |
| DMH | DROP MANHOLE |
| DN | DOWN |
| DRN | DRAIN |
| DWG | DRAWING |
| DWY | DRIVEWAY |
| **E** | |
| E | EAST |
| EA | EACH |
| EC | EDGE OF CONCRETE |
| ED | ENERGY DISSIPATOR |
| EF | EACH FACE |
| EFF | EFFLUENT |
| EG | EXISTING GRADE |
| E/L | EASEMENT LINE |
| ELB | ELBOW |
| ELEC | ELECTRIC |
| ELEV | ELEVATION |
| ELLIP | ELLIPSE/ELLIPTICAL |
| ENC | ENCASEMENT |
| ENG | ENGINEER(ING) |
| EOP | EDGE OF PAVEMENT |
| EQ | EQUAL/EQUATION |
| EQUIP | EQUIPMENT |
| EQUIV | EQUIVALENT |
| ESMT | EASEMENT |
| EST | ESTIMATE |
| EW | EACH WAY |
| EWL | ENDWALL |
| EXC | EXCAVATE/EXCAVATION |
| EXIST | EXISTING |
| EXP | EXPAND/EXPANSION |
| EXT | EXTEND/EXTENSION |

| | |
|---|---|
| **F** | |
| F&C | FRAME AND COVER |
| FD | FLOOR DRAIN |
| FDC | FIRE DEPARTMENT CONNECTION |
| FDN | FOUNDATION |
| FDOT | FLORIDA DEPARTMENT OF TRANSPORTATION |
| FF | FINISHED FLOOR |
| FG | FINISHED GRADE |
| FH | FIRE HYDRANT |
| F&I | FURNISH AND INSTALL |
| FIG | FIGURE |
| FIN | FINISHED |
| FIT | FITTING |
| FL | FENCE LINE |
| FLR | FLOOR |
| FLEX | FLEXIBLE |
| FLG | FLANGE |
| FM | FORCE MAIN |
| FND | FOUND |
| FPH | FEET PER HOUR |
| FPM | FEET PER MINUTE |
| FPS | FEET PER SECOND |
| FT | FEET/FOOT |
| FTG | FOOTING |
| **G** | |
| GA | GAUGE |
| GAL | GALLON |
| GALV | GALVANIZED |
| GM | GAS MAIN |
| GPD | GALLONS PER DAY |
| GPH | GALLONS PER HOUR |
| GPM | GALLONS PER MINUTE |
| GPS | GALLONS PER SECOND |
| GR | GUARD RAIL |
| GRD | GROUND/GRADE |
| GSP | GALVANIZED STEEL PIPE |
| GV | GATE VALVE |
| GV&B | GATE VALVE AND BOX |
| GW | GUY WIRE |
| GWT | GROUND WATER TABLE |
| **H** | |
| HB | HOSE BIBB |
| HDW | HARDWARE |
| HORIZ | HORIZONTAL |
| HP | HORSEPOWER |
| HR | HOUR |
| HT | HEIGHT |
| HW | HEADWALL |
| HWL | HIGH WATER LEVEL |
| HWY | HIGHWAY |
| HYD | HYDRAULIC |
| **I** | |
| I-4 | INTERSTATE HIGHWAY |
| IA | INTERSECTION ANGLE |
| ID | INSIDE DIAMETER |
| IF | INSIDE FACE |
| IN | INCHES |
| INL | INLET |
| INS | INSERT |
| INST | INSTALL |
| IP | IRON PIPE |
| IR | IRON ROD |
| INT | INTERSECT/INTERSECTION |
| INV | INVERT |
| **J** | |
| JB | JUNCTION BOX |
| JCT | JUNCTION |
| JST | JOIST |
| JT | JOINT |
| **L** | |
| L | LENGTH |
| LAT | LATITUDE |
| LATL | LATERAL |
| LB | POUND |
| LF | LINEAR FEET/FOOT |
| LG | LONG |
| LIM | LIMIT(S) |
| LP | LIGHT POLE |
| LONG | LONG |
| LT | LEFT |
| LWL | LOW WATER LEVEL |
| **M** | |
| MAINT | MAINTENANCE |
| MATL | MATERIAL |
| MAX | MAXIMUM |
| MECH | MECHANICAL |
| ME | MITERED END |
| MFR | MANUFACTURER |
| MGD | MILLION GALLONS PER DAY |
| MH | MANHOLE |
| MHC | MANHOLE COVER |
| MHWL | MEAN HIGH WATER LEVEL |
| MIN | MINIMUM |
| MISC | MISCELLANEOUS |
| MJ | MECHANICAL JOINT |
| MLP | METAL LIGHT POLE |
| MLWL | MEAN LOW WATER LEVEL |
| MON | MONUMENT |
| MPH | MILES PER HOUR |
| MSL | MEAN SEA LEVEL |
| MTG | MOUNTING |
| **N** | |
| N | NORTH |
| NA | NOT APPLICABLE |
| N&C | NAIL AND CAP |
| NE | NORTHEAST |
| NG | NATURAL GROUND |
| NIC | NOT IN CONTRACT |
| NO OR # | NUMBER |
| NOM | NOMINAL |
| NTP | NOTICE TO PROCEED |
| NTS | NOT TO SCALE |
| NW | NORTHWEST |
| NWL | NORMAL WATER LEVEL |
| **O** | |
| OC | ON CENTER |
| OD | OUTSIDE DIAMETER |
| OE | OR EQUAL |
| OPNG | OPENING |
| OPP | OPPOSITE |
| ORCP | OVAL REINFORCED CONCRETE PIPE |
| OS | OUTFALL STRUCTURE |
| OVFL | OVERFLOW |
| OVHD | OVERHEAD |

| | |
|---|---|
| **P** | |
| PC | POINT OF CURVATURE |
| PCC | POINT OF COMPOUND CURVATURE |
| PEP | POLYETHYLENE PIPE |
| PI | POINT OF INTERSECTION |
| PIV | POST INDICATOR VALVE |
| P/L | PROPERTY LINE |
| POB | POINT OF BEGINNING |
| POJ | PUSH ON JOINT |
| POS | POINT OF SERVICE |
| PP | POWER POLE |
| PR | PHONE RISER |
| PRC | POINT OF REVERSE CURVATURE |
| PRESS | PRESSURE |
| PROJ | PROJECT |
| PROP | PROPOSED |
| PRVC | POINT OF REVERSE VERTICAL CURVE |
| PSF | POUNDS PER SQUARE FOOT |
| PSI | POUNDS PER SQUARE INCH |
| PT | POINT OF TANGENCY |
| PVC | POLYVINYL CHLORIDE |
| PVMT | PAVEMENT |
| PWR | POWER |
| **Q** | |
| Q | FLOW RATE |
| **R** | |
| R | RADIUS |
| RCP | REINFORCED CONCRETE PIPE |
| RCPA | REINFORCED CONCRETE PIPE ARCH |
| RD | ROAD |
| RDY | ROADWAY |
| RED | REDUCER |
| REF | REFERENCE |
| REINF | REINFORCE(D) |
| REQD | REQUIRED |
| REV | REVISE/REVISION |
| RPM | REVOLUTIONS PER MINUTE |
| RR | RAILROAD |
| RT | RIGHT |
| RV | RELIEF VALVE |
| R/W | RIGHT-OF-WAY |
| RWM | REUSE WATER MAIN |
| **S** | |
| S | SOUTH |
| SAN | SANITARY SEWER |
| SB | SPLASH BLOCK |
| SCH | SCHEDULE |
| SD | SIDE DRAIN |
| SDN | SHELF DRAIN |
| SE | SOUTHEAST |
| SEC | SECONDS |
| SECT | SECTION |
| SH | SHEET |
| SHGWT | SEASONAL HIGH GROUND WATER TABLE |
| SIM | SIMILAR |
| S/L | SETBACK LINE |
| SL | SLOPE |
| SM | SHEET METAL |
| SPEC | SPECIFICATION(S) |
| SQ | SQUARE |
| SQ IN | SQUARE INCH(ES) |
| SQ FT | SQUARE FOOT/FEET |
| SQ YD | SQUARE YARD(S) |
| SR | STATE ROAD |
| SS | STAINLESS STEEL |
| ST | STREET |
| STA | STATION |
| STD | STANDARD |
| STL | STEEL |
| STR | STRUCTURE |
| STS | STORM SEWER |
| SUP | SUPPORT |
| SUSP | SUSPEND/SUSPENSION |
| SVC | SERVICE |
| SW | SOUTHWEST |
| SWK | SIDEWALK |
| SYM | SYMBOL(S) |
| SYMM | SYMMETRICAL |
| SYS | SYSTEM |
| **T** | |
| T | TANGENT |
| TB | TURFBLOCK |
| T&B | TOP AND BOTTOM |
| TBM | TEMPORARY BENCH MARK |
| TC | TIME OF CONCENTRATION |
| TD | TRENCH DRAIN |
| TDH | TOTAL DYNAMIC HEAD |
| TECH | TECHNICIAN/TECHNICAL |
| TEMP | TEMPORARY |
| TL | TERMINAL LAMPHOLE |
| TOB | TOP OF BANK |
| TOC | TOP OF CURB |
| TOS | TOE OF SLOPE |
| TOT | TOTAL |
| TS | TOP OF SLOPE |
| TWP | TOWNSHIP |
| TYP | TYPICAL |
| **U** | |
| UD | UNDERDRAIN |
| UG | UNDERGROUND |
| UON | UNLESS OTHERWISE NOTED |
| UTC | UNDERGROUND TELEPHONE CABLE |
| **V** | |
| VB | VALVE BOX |
| VC | VERTICAL CURVE |
| VCP | VITRIFIED CLAY PIPE |
| VERT | VERTICAL |
| VPC | VERTICAL POINT OF CURVE |
| VPI | VERTICAL POINT OF INTERSECTION |
| VPT | VERTICAL POINT OF TANGENCY |
| **W** | |
| W | WEST |
| W/ | WITH |
| WM | WATER MAIN |
| W/O | WITHOUT |
| WP | WATER/WEATHER PROOF |
| WPP | WOOD POWER POLE |
| WS | WATER SURFACE |
| WSWT | WET SEASON WATER TABLE |
| WT | WEIGHT |
| WV | WATER VALVE |
| WWF | WELDED WIRE FABRIC |
| WWM | WELDED WIRE MESH |
| **Y** | |
| YD | YARD |
| YR | YEAR |
| **MISC** | |
| & | AND |
| @ | AT |
| Δ | DELTA |

NOTES:
1. TREE TYPES SHALL BE REFERENCED BY LEGEND ON APPLICABLE DRAWING SHEETS.
2. EXISTING CONSTRUCTION FEATURES MAY BE SCREENED ON DRAWING SHEETS TO PROVIDE CLARITY.

# EXISTING SYMBOLS

## LINES

- CENTER LINE
- CHAIN LINK FENCE
- CONTOUR
- EASEMENT
- FENCE
- GUARDRAIL
- EXISTING PLATS
- RETAINING WALL
- RIGHT-OF-WAY LINE
- SHORELINE
- SWALE
- SOIL BOUNDARY

## SANITARY SEWER

- SANITARY SEWER LINE
- CLEANOUT
- FORCE MAIN
- MANHOLE

## POTABLE WATER

- WATER MAIN
- EXISTING VALVE
- FIRE HYDRANT
- WATER METER

## STORM DRAIN

- STORM SEWER
- CURB INLET
- MANHOLE
- MITERED END
- STORM INLET
- SPOT ELEVATION ×100.00
- FDOT TYPE 1 INLET
- FDOT TYPE 2 INLET
- FDOT TYPE 3 INLET
- FDOT TYPE 4 INLET
- FDOT TYPE 5 INLET
- FDOT TYPE 6 INLET

## HIGHWAY & UTILITIES

- BENCHMARK
- BOUND CORNER
- CONCRETE
- COUNTY ROADS (520)
- INTERSTATE ROADS (95)
- LIGHT POLE
- SIGN
- EDGE OF PAVEMENT W/O CURB
- STATE ROADS (50)
- GUY POLE
- UTILITY POLE
- YARD LIGHT
- GAS MAIN
- OVER HEAD WIRE
- ELECTRIC CABLE OR CONDUIT, BURIED
- UNDERGROUND TELEPHONE CABLE
- EDGE OF PAVEMENT W/CURB

# PROPOSED SYMBOLS

## LINES

- PROPERTY BOUNDARY
- LOT LINE
- CENTER LINE
- EASEMENT
- BUILDING SETBACK LINE
- WETLAND LINE
- WETLAND BUFFER LINE
- FENCE
- SILT FENCE
- GUARDRAIL
- ENTRY WALL
- RETAINING WALL
- SWALE
- CONTOUR
- SEASONAL HIGH GROUND WATER

## SANITARY SEWER

- 100 LF OF 8" PVC @ 0.40%
- SANITARY PIPE
- CLEANOUT
- SINGLE SANITARY SERVICE
- DOUBLE SANITARY SERVICE
- MANHOLE
- FORCE MAIN
- PLUG VALVE

## POTABLE WATER

- WATER MAIN
- FIRE MAIN
- SINGLE WATER SERVICE
- DOUBLE WATER SERVICE
- FIRE HYDRANT ASSEMBLY
- FIRE DEPARTMENT CONNECTION
- METER
- SAMPLE POINT

## RECLAIMED WATER

- RECLAIMED WATER MAIN
- SINGLE WATER SERVICE
- DOUBLE WATER SERVICE

## GENERIC UTILITIES

- 11 1/4° BEND
- 22 1/2° BEND
- 45° BEND
- 90° BEND
- TEE
- CROSS
- GATE VALVE
- REDUCER

## STORM

- 100 LF OF 24" RCP @ 0.20%
- STORM PIPE
- DRAINAGE FLOW DIRECTION
- FDOT INLET TYPE 1
- FDOT INLET TYPE 2
- FDOT INLET TYPE 3
- FDOT INLET TYPE 4
- FDOT INLET TYPE 5
- FDOT INLET TYPE 6
- MANHOLE
- MITERED END SECTION
- STORM INLET

## ROADWAY & GRADING

- CONCRETE
- PAVEMENT
- MULCH TRAIL
- OPEN SPACE
- BLDG OR STRUCTURE
- TYPE F CURB & GUTTER
- MIAMI CURB
- DETAIL REFERENCE (10 / C1.0)
- SPOT ELEVATION ×100.00
- FINISHED FLOOR ELEVATION W/ FHA LOT TYPE (LOT TYPE 'A' FFE=100.00)
- HANDICAP PARKING
- INTERSTATE ROADS (95)
- LIGHT POLE
- STATE ROADS (50)
- SIGN
- TRAFFIC FLOW PAVEMENT MARKING
- UTILITY POLE
- CROSS SECTION DETAIL (A A)

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**SHEET 3 OF 82**

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 1 | 04/30/2024 | SJRWMD COMMENTS (APPLICATION NO. 215319-1) DATED 03/15/2024 | OSS |
| 2 | 04/30/2024 | CITY OF APOPKA COMMENTS DATED 04/29/2024 | OSS |


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STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32674


ABBREVIATIONS & SYMBOLS
CONSTRUCTION SITE PLAN
WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

| DRAWN: | DESIGNED: | CHECKED: | DATE: |
|---|---|---|---|
| B. KILLELA | O. SANCHEZ | O. SANCHEZ | 6/11/24 |

| SCALE | PROJECT | SHEET |
|---|---|---|
| N.T.S. | MIH-005 | C1.1 |


OLIVIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
6/11/24
PROFESSIONAL ENGINEER



This item has been digitally signed and sealed by Olivio S. Sanchez, PE on the date adjacent to the seal.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.



\\appian-file\Projects_PROJECT DRAWINGS\MIH-005 Wolf Lake Run Subdivision\Drawings\CAD Civil3D\Layouts\04 Final Engineering\ABBREVIATIONS & SYMBOLS.dwg Modified:3/18/2024 By:olopez

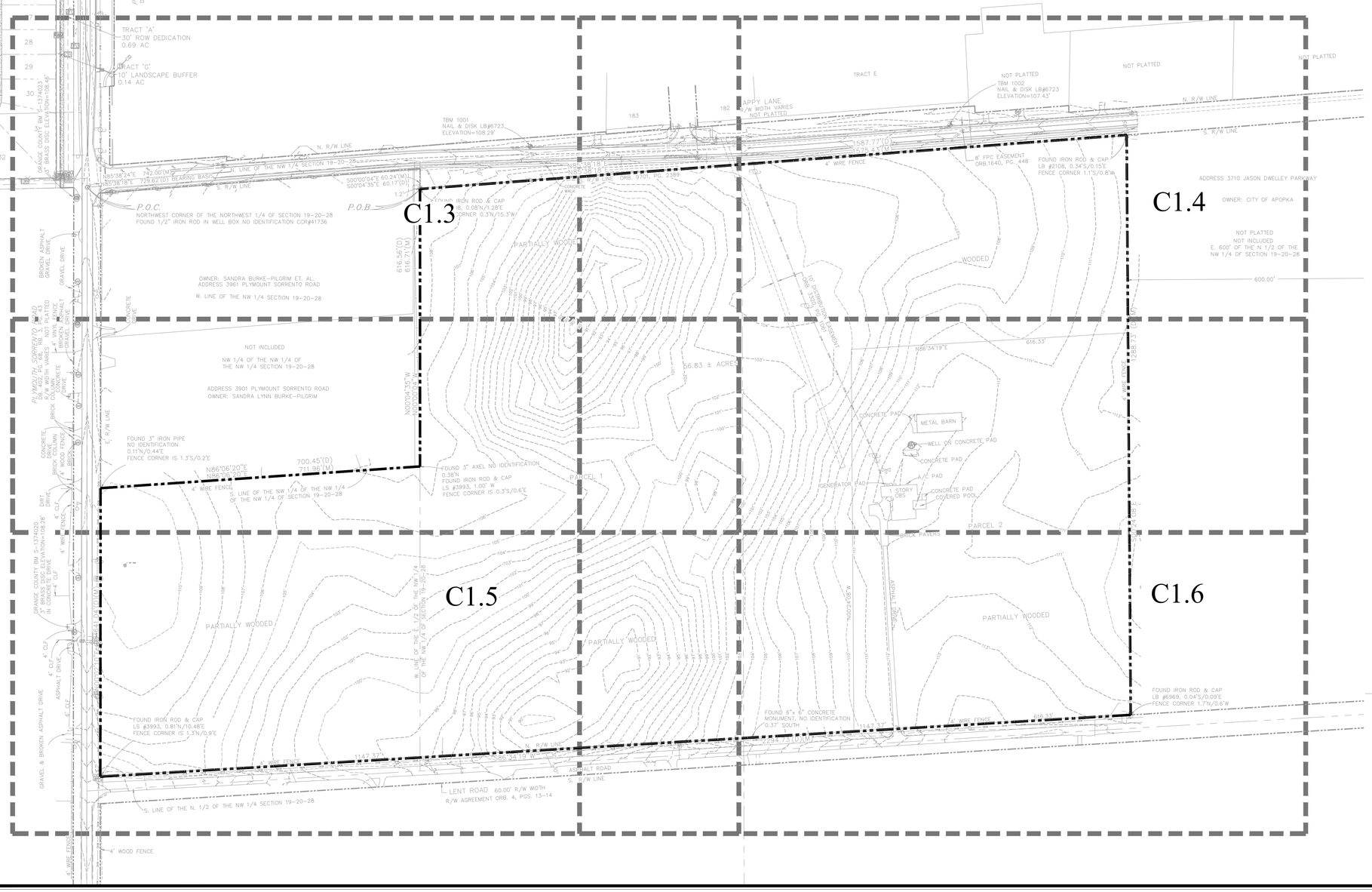
\\appian-file\Projects_PROJECT DRAWINGS\MIH-005 Wolf Lake Run Subdivision\Drawings\CAD Civil3D\Layouts\04 Final Engineering\EXISTING CONDITIONS.dwg Modified:2/15/2024 By:osanchez

## SURVEYOR'S NOTES:

1. BEARINGS SHOWN HEREON ARE ASSUMED AND RELATIVE TO THE NORTH LINE OF THE NORTHWEST QUARTER OF SECTION 19, TOWNSHIP 20 SOUTH, RANGE 28 EAST, BEING NORTH 85°38'18" EAST.
2. THE "LEGAL DESCRIPTION" HEREON AND THE LANDS SURVEYED ARE PARCELS 1 AND 2 AS PROVIDED IN THE COMMITMENT TO INSURE TITLE, COMMITMENT NO. 1088876-2, PREPARED BY OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY. THE ALSO DESCRIBED AS LEGAL DESCRIPTION WAS PREPARED BY THE SURVEYOR AT THE CLIENT'S REQUEST.
3. 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.
4. 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.
5. THIS SURVEY IS NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
6. UNLESS OTHERWISE NOTED OR SHOWN HEREON, APPARENT AND/OR VISIBLE, UNOBSTRUCTED, VISIBLE ABOVE GROUND IMPROVEMENTS WERE LOCATED. UNDERGROUND UTILITIES, FOUNDATIONS AND IMPROVEMENTS WERE NOT LOCATED, UNLESS SHOWN HEREON.
7. 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.
8. THE LANDS SHOWN HEREON LIE IN ZONE "X", DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, ACCORDING TO FLOOD INSURANCE RATE MAP (FIRM) COMMUNITY PANEL NO. 12095C0110H, MAP NO. 12095C0110H, MAP REVISED SEPTEMBER 24, 2021.
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.
9. THERE WAS NO VISUAL EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION, OR BUILDING ADDITIONS OBSERVED IN THE PROCESS OF CONDUCTING THE FIELD WITHIN THE SURVEYED LANDS.
10. WHILE CONDUCTING THE SURVEY, THERE WAS NO OBSERVED EVIDENCE OF WETLANDS WITHIN THE SURVEYED LANDS.
11. ADJOINING PARCEL OWNER AND RECORDING INFORMATION DELINEATED HEREON WAS OBTAINED FROM THE ORANGE COUNTY PROPERTY APPRAISER'S PUBLIC ACCESS SYSTEM.
12. THE SUBJECT PROPERTY IS ZONED RSF-1A. THE SURVEYOR WAS NOT PROVIDED A ZONING REPORT CONTAINING SETBACK, HEIGHT RESTRICTIONS, ETC. OR OTHER INFORMATION REGARDING ZONING RESTRICTIONS.
13. THE SUBJECT PROPERTY IS IMPROVED AND PARTIALLY WOODED.
14. THERE WAS NO VISUAL EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS OBSERVED IN THE PROCESS OF CONDUCTING THE FIELD WITHIN THE SURVEYED LANDS. THE SURVEYOR IS UNAWARE OF ANY PROPOSED CHANGES IN THE RIGHT-OF-WAY.
15. THE SUBJECT PROPERTY HAS ACCESS TO PUBLIC UTILITIES FROM THE PUBLIC STREETS ADJACENT TO THE SUBJECT PROPERTY.
16. THE SUBJECT PROPERTY ABUTS, WITHOUT GAPS GORES OR STRIPS, AND HAS VEHICULAR AND PEDESTRIAN INGRESS TO AND EGRESS FROM APPY LANE, PLYMOUTH-SORRENTO ROAD AND LENT ROAD, WHICH IS COMPLETED, DEDICATED AND ACCEPTED PUBLIC RIGHT OF WAY.
17. EXCEPT AS SHOWN ON THE SURVEY, THE SUBJECT PROPERTY DOES NOT APPEAR TO SERVE ANY ADJOINING PROPERTY FOR UTILITIES, DRAINAGE, STRUCTURAL SUPPORT OR INGRESS OR EGRESS.
18. THERE IS NO OBSERVED EVIDENCE OF THE SITE BEING USED AS A SOLID WASTE DUMP, SUMP OR SANITARY LANDFILL.
19. THE ELEVATIONS SHOWN HEREON ARE BASED ON THE ORANGE COUNTY ENGINEERING DEPARTMENT OF SURVEY VERTICAL DATUM, BENCHMARK S-1374023, ELEVATION 106.46' NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
20. THERE ARE SEVERAL FENCES INTERIOR TO THE SUBJECT PROPERTY BEING USED FOR LIVE STOCK THAT WERE NOT LOCATED.
21. PARCEL 1 AND PARCEL 2, WHERE THEY SHARE A COMMON LINE, ARE CONTIGUOUS WITH NO GAPS, GORES, HIATUS OR OVERLAPS.
22. WE HAVE EXAMINED THE FURNISHED COMMITMENT TO INSURE TITLE, COMMITMENT NO. 1088876-2, PREPARED BY OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY, EFFECTIVE DATE AUGUST 8, 2021. THOSE INSTRUMENTS INCLUDED IN SCHEDULE B-II, OF THE COMMITMENT HAVE BEEN EXAMINED AND ARE REFLECTED HEREON TO THE EXTENT THEY AFFECT THE LANDS SURVEYED.

EXCEPTIONS AS THEY APPEAR IN THE TITLE COMMITMENT:

6. EASEMENT IN FAVOR OF FLORIDA POWER CORPORATION RECORDED IN O.R. BOOK 1640, PAGE 448, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA. DOES NOT AFFECT THE SUBJECT PROPERTY BUT IS SHOWN HEREON.
7. DISTRIBUTION EASEMENT IN FAVOR OF FLORIDA POWER CORPORATION RECORDED IN O.R. BOOK 3320, PAGE 1061, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA. AFFECTS THE SUBJECT PROPERTY AND IS SHOWN HEREON.




N
W E
S

GRAPHIC SCALE

120 0 60 120 240

( IN FEET )
1 inch = 120 ft.

EXISTING CONDITIONS PLAN BASED ON SURVEY PROVIDED BY:

ALLEN & COMPANY, INC
JAMES L. RICKMAN, P.S.M.
FLORIDA REGISTRATION NO. 5633
JANUARY 3, 2024

LEGEND
P.O.C. ..... POINT OF COMMENCEMENT
P.O.B. ..... POINT OF BEGINNING
R/W ..... RIGHT-OF-WAY
PB ..... PLAT BOOK
RB ..... ROAD BOND
DB ..... DEED BOOK
PG.(S) ..... PAGE(S)
ORB ..... OFFICIAL RECORDS BOOK
CCR ..... CERTIFIED CORNER RECORD
CBS ..... CONCRETE BLOCK STRUCTURE
C ..... CURB INLET
CLF ..... CHAIN LINK FENCE
LB ..... LICENSED BUSINESS
PSM ..... PROFESSIONAL SURVEYOR & MAPPER
(D) ..... DESCRIBED
(M) ..... MEASURED
CPP ..... CORRUGATED PLASTIC PIPE
INV. ..... INVERT
ELEV. ..... ELEVATION
SGN ..... SIGN
TBM ..... TEMPORARY BENCHMARK
RCP ..... REINFORCED CONCRETE PIPE
PVC ..... POLYVINYL CHLORIDE

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| A | 04/29/2024 | SJRWMD COMMENTS (APPLICATION NO. 215319-1) DATED 03/15/2024 | OSS |
| A | 04/30/2024 | CITY OF APOPKA COMMENTS DATED 04/29/2024 | OSS |

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EXISTING CONDITIONS – OVERALL CONSTRUCTION SITE PLAN

WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

| DRAWN: | DESIGNED: | CHECKED: | DATE: |
|---|---|---|---|
| B. KILLELA | O. SANCHEZ | O. SANCHEZ | 6/11/24 |

| SCALE | PROJECT | SHEET |
|---|---|---|
| 1" = 120' | MIH-005 | C1.2 |

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STATE OF FLORIDA
6/11/24
PROFESSIONAL ENGINEER

The seal appearing on this document was authorized by Orlando S. Sanchez, PE on the date adjacent to the seal.
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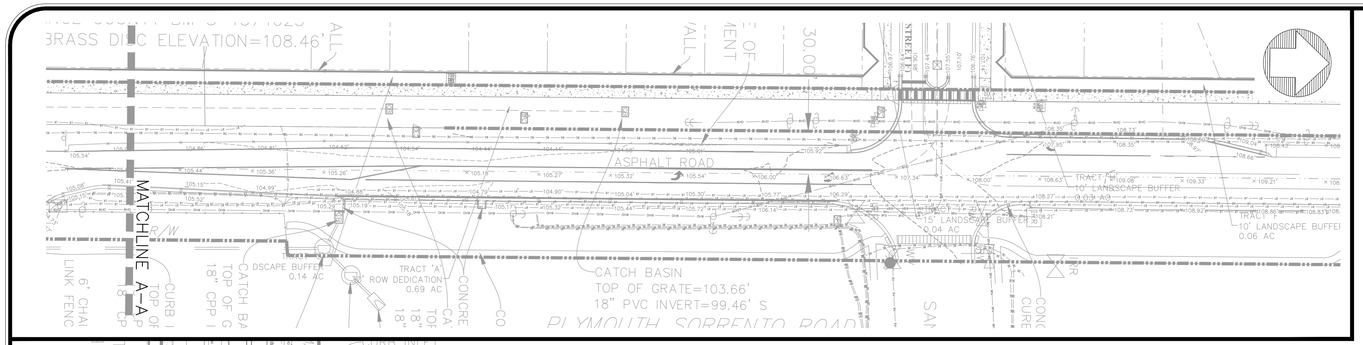
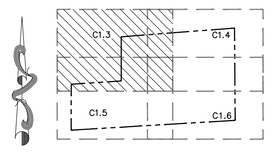
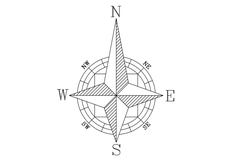
**SHEET 4 OF 82**

\\appian-file\Projects_PROJECT DRAWINGS\MIH-005 Wolf Lake Run Subdivision\Drawings\CAD Civil3D\Layouts\04 Final Engineering\EXISTING CONDITIONS.dwg Modified:2/15/2024 By:osanchez




KEY MAP




GRAPHIC SCALE

50 0 25 50 100

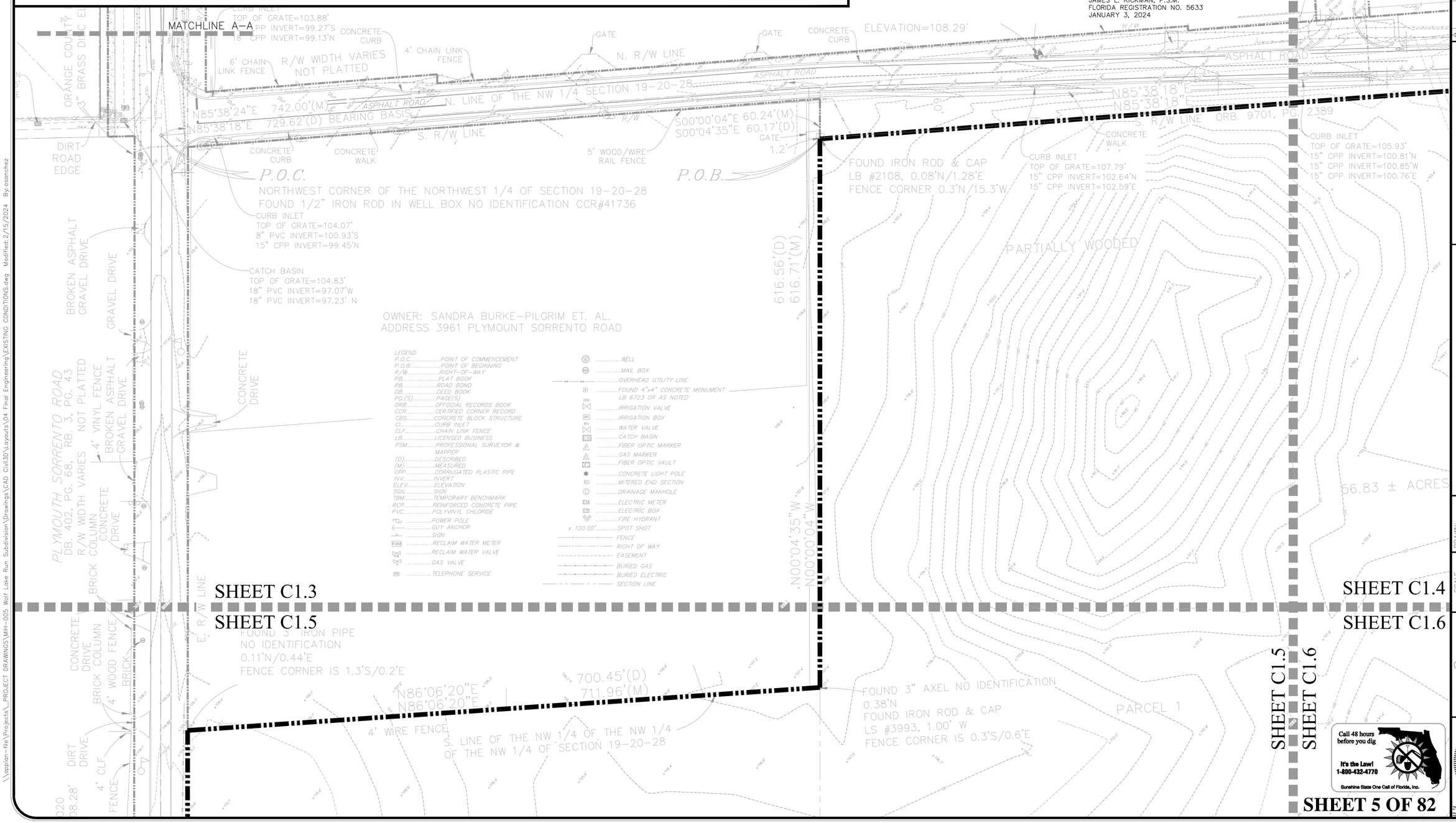
( IN FEET )
1 inch = 50 ft.

EXISTING CONDITIONS PLAN BASED ON SURVEY PROVIDED BY:

ALLEN & COMPANY, INC
JAMES L. RICKMAN, P.S.M.
FLORIDA REGISTRATION NO. 5633
JANUARY 3, 2024

SHEET C1.3

SHEET C1.5




LEGEND

| | |
|---|---|
| P.O.C. | POINT OF COMMENCEMENT |
| P.O.B. | POINT OF BEGINNING |
| R/W | RIGHT-OF-WAY |
| PB | PLAT BOOK |
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| CPP | CORRUGATED PLASTIC PIPE |
| INV | INVERT |
| ELEV | ELEVATION |
| SGN | SIGN |
| TBM | TEMPORARY BENCHMARK |
| RCP | REINFORCED CONCRETE PIPE |
| PVC | POLYVINYL CHLORIDE |
| | POWER POLE |
| | GUY ANCHOR |
| | SIGN |
| RWM | RECLAIM WATER METER |
| | RECLAIM WATER VALVE |
| | GAS VALVE |
| FB | TELEPHONE SERVICE |
| W | WELL |
| MB | MAIL BOX |
| | OVERHEAD UTILITY LINE |
| | FOUND 4"x4" CONCRETE MONUMENT LB 6723 OR AS NOTED |
| IRR | IRRIGATION VALVE |
| IRR | IRRIGATION BOX |
| WV | WATER VALVE |
| CB | CATCH BASIN |
| | FIBER OPTIC MARKER |
| | GAS MARKER |
| FOV | FIBER OPTIC VAULT |
| | CONCRETE LIGHT POLE |
| | MITERED END SECTION |
| | DRAINAGE MANHOLE |
| EM | ELECTRIC METER |
| EB | ELECTRIC BOX |
| | FIRE HYDRANT |
| x 100.00' | SPOT SHOT |
| | FENCE |
| | RIGHT OF WAY |
| | EASEMENT |
| | BURIED GAS |
| | BURIED ELECTRIC |
| | SECTION LINE |

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 1 | 04/30/2024 | SJRWMD COMMENTS (APPLICATION NO. 215319-1) DATED 03/15/2024 | OSS |
| 2 | 04/30/2024 | CITY OF APOPKA COMMENTS DATED 04/30/2024 | OSS |

CIVIL ENGINEERING | LAND PLANNING

**APPIAN ENGINEERING LLC.**

APPIANFL.COM • 407.960.5868

2221 Lee Road, Suite 27, Winter Park, Florida 32789

STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32274

EXISTING CONDITIONS – NORTHWEST CONSTRUCTION SITE PLAN

WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

| | | | |
|---|---|---|---|
| DRAWN: B. KILLELA | DESIGNED: O. SANCHEZ | CHECKED: O. SANCHEZ | DATE: 8/11/24 |
| SCALE: 1" = 50' | PROJECT: MIH-005 | SHEET: C1.3 | |

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Sunshine State One Call of Florida, Inc.

SHEET 5 OF 82

\\appian-file\Projects_PROJECT DRAWINGS\MIH-005 Wolf Lake Run Subdivision\Drawings\CAD Civil3D\Layouts\04 Final Engineering\EXISTING CONDITIONS.dwg Modified:2/15/2024 By:osanchez

SHEET C1.3
SHEET C1.4
SHEET C1.5
SHEET C1.6

OAK RIDGE PHASE 2
PB. 87, PGS. 133–135

TRACT E

LOBLOLLY OAK LANE

APPY LANE
R/W WIDTH VARIES
NOT PLATTED

182

183

NOT PLATTED

TBM 1002
NAIL & DISK LB#6723
ELEVATION=107.43'

CURB INLET
TOP OF GRATE=106.01'
15" CPP INVERT=101.18'S

CURB INLET
GRATE ELEV. = 104.30'
15" CPP INVERT=99.28'N
15" CPP INVERT=99.31'S

CURB INLET
GRATE ELEV. = 107.01'
15" CPP INVERT=102.37'S

CONCRETE

CURB INLET
GRATE ELEV. = 110.56'
15" CPP INVERT=105.78'

N. R/

ASPHALT ROAD

1587.77'(D)
1575.43'(M)

S. R/W LINE ORB. 9701, PG. 2389

4' WIRE FENCE

CONCRETE WALK

8' FPC EASEMENT
ORB.1640, PG. 448

FOUND IRON ROD & CAP
LB #2108, 0.34'S/0.15'E
FENCE CORNER 1.1'S/0.8'W

CURB INLET
GRATE ELEV. = 104.37'
15" CPP INVERT=99.02'N
15" CPP INVERT=99.12'W
24" CPP INVERT=98.55'E

CURB INLET
GRATE ELEV. = 106.96'
15" CPP INVERT=101.91'N
24" CPP INVERT=97.56'W
24" CPP INVERT=97.49'E

CURB INLET
TOP OF GRATE=105.93'
15" CPP INVERT=100.81'N
15" CPP INVERT=100.85'W
15" CPP INVERT=100.76'E

CURB INLET
GRATE ELEV. =
15" CPP INVERT=
24" CPP INVERT=
24" CPP INVERT=

WOODED

10' DISTRIBUTION EASEMENT
ORB. 3320, PG. 1061

56.83 ± ACRES

N86°34'19"E 616.33'

1288.73'(D)(M)

4' WIRE FENCE

CONCRETE PAD

METAL BARN

WELL ON CONCRETE PAD

CONCRETE PAD

A/C PAD

GENERATOR PAD

1 STORY
CBS

CONCRETE PAD
COVERED POOL

PARCEL 1

PARCEL 2

S24°08'E

SHEET C1.3
SHEET C1.5

SHEET C1.4
SHEET C1.6

SHEET C1.5
SHEET C1.6

N

W E

S

GRAPHIC SCALE

50 0 25 50 100

( IN FEET )
1 inch = 50 ft.

EXISTING CONDITIONS PLAN BASED ON SURVEY PROVIDED BY:

ALLEN & COMPANY, INC
JAMES L. RICKMAN, P.S.M.
FLORIDA REGISTRATION NO. 5633
JANUARY 3, 2024

KEY MAP

LEGEND
P.O.C. ..... POINT OF COMMENCEMENT
P.O.B. ..... POINT OF BEGINNING
R/W ..... RIGHT-OF-WAY
PB. ..... PLAT BOOK
RB. ..... ROAD BOND
DB. ..... DEED BOOK
PG.(S) ..... PAGE(S)
ORB. ..... OFFICIAL RECORDS BOOK
CCR. ..... CERTIFIED CORNER RECORD
CBS. ..... CONCRETE BLOCK STRUCTURE
CI ..... CURB INLET
CLF. ..... CHAIN LINK FENCE
LB. ..... LICENSED BUSINESS
PSM. ..... PROFESSIONAL SURVEYOR & MAPPER
(D) ..... DESCRIBED
(M) ..... MEASURED
CPP. ..... CORRUGATED PLASTIC PIPE
INV. ..... INVERT
ELEV. ..... ELEVATION
SGN. ..... SIGN
TBM. ..... TEMPORARY BENCHMARK
RCP. ..... REINFORCED CONCRETE PIPE
PVC. ..... POLYVINYL CHLORIDE
..... POWER POLE
..... GUY ANCHOR
..... SIGN
RWM ..... RECLAIM WATER METER
..... RECLAIM WATER VALVE
..... GAS VALVE
..... TELEPHONE SERVICE
W ..... WELL
MB ..... MAIL BOX
..... OVERHEAD UTILITY LINE
..... FOUND 4"x4" CONCRETE MONUMENT LB 6723 OR AS NOTED
..... IRRIGATION VALVE
..... IRRIGATION BOX
..... WATER VALVE
CB ..... CATCH BASIN
..... FIBER OPTIC MARKER
..... GAS MARKER
..... FIBER OPTIC VAULT
..... CONCRETE LIGHT POLE
..... MITERED END SECTION
..... DRAINAGE MANHOLE
..... ELECTRIC METER
..... ELECTRIC BOX
..... FIRE HYDRANT
x 100.00' ..... SPOT SHOT
..... FENCE
..... RIGHT OF WAY
..... EASEMENT
..... BURIED GAS
..... BURIED ELECTRIC
..... SECTION LINE

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SHEET 6 OF 82

| BY | DESCRIPTION | DATE |
|---|---|---|
| OSS | SJRWMD COMMENTS (APPLICATION NO. 215319-1) DATED 03/15/2024 | 04/30/2024 |
| OSS | CITY OF APOPKA COMMENTS DATED 04/29/2024 | 04/30/2024 |

CIVIL ENGINEERING | LAND PLANNING
APPIAN ENGINEERING LLC.
APPIANFL.COM • 407.960.5868
2221 Lee Road, Suite 27, Winter Park, Florida 32789
STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32374

EXISTING CONDITIONS – NORTHEAST
CONSTRUCTION SITE PLAN

WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

| DRAWN: | DESIGNED: | CHECKED: | DATE: |
|---|---|---|---|
| B. KILLELA | O. SANCHEZ | O. SANCHEZ | 6/11/24 |

| SCALE | PROJECT | SHEET |
|---|---|---|
| 1" = 50' | MIH-005 | C1.4 |

OVIDIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
6/11/24
PROFESSIONAL ENGINEER

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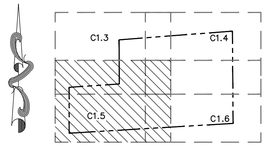
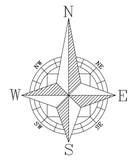



KEY MAP




GRAPHIC SCALE

50 0 25 50 100

( IN FEET )
1 inch = 50 ft.

EXISTING CONDITIONS PLAN BASED ON SURVEY PROVIDED BY:

ALLEN & COMPANY, INC
JAMES L. RICKMAN, P.S.M.
FLORIDA REGISTRATION NO. 5633
JANUARY 3, 2024

LEGEND

| | |
|---|---|
| P.O.C. | POINT OF COMMENCEMENT |
| P.O.B. | POINT OF BEGINNING |
| R/W | RIGHT-OF-WAY |
| PB | PLAT BOOK |
| RB | ROAD BOND |
| DB | DEED BOOK |
| PG.(S) | PAGE(S) |
| ORB | OFFOCIAL RECORDS BOOK |
| CCR | CERTIFIED CORNER RECORD |
| CBS | CONCRETE BLOCK STRUCTURE |
| CI | CURB INLET |
| CLF | CHAIN LINK FENCE |
| LB | LICENSED BUSINESS |
| PSM | PROFESSIONAL SURVEYOR & MAPPER |
| (D) | DESCRIBED |
| (M) | MEASURED |
| CPP | CORRUGATED PLASTIC PIPE |
| INV | INVERT |
| ELEV | ELEVATION |
| SGN | SIGN |
| TBM | TEMPORARY BENCHMARK |
| RCP | REINFORCED CONCRETE PIPE |
| PVC | POLYVINYL CHLORIDE |
| | POWER POLE |
| | GUY ANCHOR |
| | SIGN |
| RWM | RECLAIM WATER METER |
| | RECLAIM WATER VALVE |
| | GAS VALVE |
| | TELEPHONE SERVICE |
| | WELL |
| | MAIL BOX |
| | OVERHEAD UTILITY LINE |
| | FOUND 4"x4" CONCRETE MONUMENT LB 6723 OR AS NOTED |
| IRR | IRRIGATION VALVE |
| | IRRIGATION BOX |
| WV | WATER VALVE |
| CB | CATCH BASIN |
| | FIBER OPTIC MARKER |
| | GAS MARKER |
| FOV | FIBER OPTIC VAULT |
| | CONCRETE LIGHT POLE |
| | MITERED END SECTION |
| | DRAINAGE MANHOLE |
| EM | ELECTRIC METER |
| EB | ELECTRIC BOX |
| | FIRE HYDRANT |
| x 100.00' | SPOT SHOT |
| | FENCE |
| | RIGHT OF WAY |
| | EASEMENT |
| | BURIED GAS |
| | BURIED ELECTRIC |
| | SECTION LINE |

SHEET C1.3
SHEET C1.4
SHEET C1.5
SHEET C1.6

56.83 ± ACRES

PARCEL 1

PARTIALLY WOODED

PARTIALLY WOODED

0.11'N/0.44'E
FENCE CORNER IS 1.3'S/0.2'E

N86°06'20"E
700.45'(D)
N86°06'20"E
711.96'(M)

4' WIRE FENCE

S. LINE OF THE NW 1/4 OF THE NW 1/4 OF SECTION 19-20-28

FOUND 3" AXEL NO IDENTIFICATION
0.38'N
FOUND IRON ROD & CAP
LS #3993, 1.00' W
FENCE CORNER IS 0.3'S/0.6'E

N00°04'35"W
N00°00'04"W

W. LINE OF THE E. 1/2 OF THE NW 1/4 OF THE NW 1/4 OF SECTION 19-20-28

ORANGE COUNTY BM S-1374020
3" BRASS DISC ELEVATION=108.28'
IN CONCRETE DRIVE

N00°02'10"E 641.04'(D)(M)

4' CLF
4' CLF
4' CLF
6' CLF
4' WIRE FENCE
ASPHALT DRIVE
GRAVEL & BROKEN ASPHALT DRIVE
DIRT DRIVE
BRICK COL
4' WOOD F
BRICK
CONC DRIV

FOUND IRON ROD & CAP
LS #3993, 0.81'N/10.48'E
FENCE CORNER IS 1.3'N/0.9'E

N. R/W LINE
S86°34'19"W 1147.77'
4' WIRE FENCE
ASPHALT ROAD
S. R/W LINE

LENT ROAD 60.00' R/W WIDTH
R/W AGREEMENT ORB. 4, PGS. 13-14

S. LINE OF THE N. 1/2 OF THE NW 1/4 SECTION 19-20-28

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**SHEET 7 OF 82**

| REV. | DATE | BY |
|---|---|---|
| 1 | 04/30/2024 | SJ/MO COMMENTS (APPLICATION NO. 215319-10) DATED 03/15/2024 | OSS |
| 2 | 04/30/2024 | CITY OF APOPKA COMMENTS DATED 04/30/2024 | OSS |

DESCRIPTION

CIVIL ENGINEERING | LAND PLANNING
**APPIAN ENGINEERING LLC.**
APPIANFL.COM • 407.960.5868
2221 Lee Road, Suite 27, Winter Park, Florida 32789
STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32374

EXISTING CONDITIONS – SOUTHWEST
CONSTRUCTION SITE PLAN

WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

| | | | |
|---|---|---|---|
| SCALE: 1" = 50' | PROJECT: MIH-005 | SHEET: C1.5 | DRAWN: B. KILLELA |
| | | | DESIGNED: O. SANCHEZ |
| | | | CHECKED: O. SANCHEZ |
| | | | DATE: 6/11/24 |

FLORIDA SALVADOR SANCHEZ LICENSE No. 86492 STATE OF FLORIDA 6/11/24 PROFESSIONAL ENGINEER

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\\appian-file\Projects_PROJECT DRAWINGS\MIH-005 Wolf Lake Run Subdivision\Drawings\CAD Civil3D\Layouts\04 Final Engineering\EXISTING CONDITIONS.dwg Modified:2/15/2024 By:osanchez

\\appian-file\Projects_PROJECT DRAWINGS\MIH-005 Wolf Lake Run Subdivision\Drawings\CAD Civil3D\Layouts\04 Final Engineering\EXISTING CONDITIONS.dwg Modified:2/15/2024 By:osanchez

SHEET C1.3
SHEET C1.4
SHEET C1.5
SHEET C1.6

56.83 ± ACRES

EASEMENT 1061

N86°34'19"E 616.33'

4' WIRE FENCE

1288.73' (D)

S00°24'08"E

CONCRETE PAD
METAL BARN
WELL ON CONCRETE PAD
CONCRETE PAD
A/C PAD
GENERATOR PAD
1 STORY CBS
CONCRETE PAD
COVERED POOL
BRICK PAVERS

PARCEL 1
PARCEL 2

ASPHALT DRIVE

N00°24'08"W

PARTIALLY WOODED

PARTIALLY WOODED

FOUND IRON ROD
LB #6969, 0.04'S
FENCE CORNER 1.

FOUND 6"x 6" CONCRETE
MONUMENT, NO IDENTIFICATION
0.37' SOUTH

4' WIRE FENCE 616.33'

2294.73' (D)(M)

HALT ROAD
R/W LINE

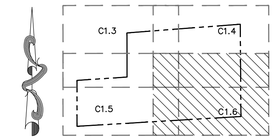
GRAPHIC SCALE

50 0 25 50 100

( IN FEET )
1 inch = 50 ft.

EXISTING CONDITIONS PLAN BASED ON SURVEY PROVIDED BY:

ALLEN & COMPANY, INC
JAMES L. RICKMAN, P.S.M.
FLORIDA REGISTRATION NO. 5633
JANUARY 3, 2024




KEY MAP

LEGEND
P.O.C. ..... POINT OF COMMENCEMENT
P.O.B. ..... POINT OF BEGINNING
R/W ..... RIGHT-OF-WAY
PB ..... PLAT BOOK
RB ..... ROAD BOND
DB ..... DEED BOOK
PG.(S) ..... PAGE(S)
ORB ..... OFFICIAL RECORDS BOOK
CCR ..... CERTIFIED CORNER RECORD
CBS ..... CONCRETE BLOCK STRUCTURE
CI ..... CURB INLET
CLF ..... CHAIN LINK FENCE
LB ..... LICENSED BUSINESS
PSM ..... PROFESSIONAL SURVEYOR & MAPPER
(D) ..... DESCRIBED
(M) ..... MEASURED
CPP ..... CORRUGATED PLASTIC PIPE
INV ..... INVERT
ELEV ..... ELEVATION
SGN ..... SIGN
TBM ..... TEMPORARY BENCHMARK
RCP ..... REINFORCED CONCRETE PIPE
PVC ..... POLYVINYL CHLORIDE
..... POWER POLE
..... GUY ANCHOR
..... SIGN
RWM ..... RECLAIM WATER METER
..... RECLAIM WATER VALVE
..... GAS VALVE
..... TELEPHONE SERVICE
W ..... WELL
..... MAIL BOX
..... OVERHEAD UTILITY LINE
..... FOUND 4"x4" CONCRETE MONUMENT LB 6723 OR AS NOTED
..... IRRIGATION VALVE
..... IRRIGATION BOX
..... WATER VALVE
..... CATCH BASIN
..... FIBER OPTIC MARKER
..... GAS MARKER
..... FIBER OPTIC VAULT
..... CONCRETE LIGHT POLE
..... MITERED END SECTION
..... DRAINAGE MANHOLE
..... ELECTRIC METER
..... ELECTRIC BOX
..... FIRE HYDRANT
x 100.00' ..... SPOT SHOT
..... FENCE
..... RIGHT OF WAY
..... EASEMENT
..... BURIED GAS
..... BURIED ELECTRIC
..... SECTION LINE

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Sunshine State One Call of Florida, Inc.

**SHEET 8 OF 82**

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 1 | 04/30/2024 | SJRWMD COMMENTS (APPLICATION NO. 215319-10) DATED 03/15/2024 | OSS |
| 2 | 04/30/2024 | CITY OF APOPKA COMMENTS DATED 04/30/2024 | OSS |

CIVIL ENGINEERING | LAND PLANNING

**APPIAN ENGINEERING LLC.**

APPIANFL.COM • 407.960.5868

2221 Lee Road, Suite 27, Winter Park, Florida 32789

STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32374

EXISTING CONDITIONS – SOUTHEAST CONSTRUCTION SITE PLAN

WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

| DRAWN: | DESIGNED: | CHECKED: | DATE: |
|---|---|---|---|
| B. KILLELA | O. SANCHEZ | O. SANCHEZ | 6/11/24 |

| SCALE: | PROJECT | SHEET |
|---|---|---|
| 1" = 50' | MIH-005 | C1.6 |

APPIAN ENGINEERING FLA.

OSVALDO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
PROFESSIONAL ENGINEER
6/11/24

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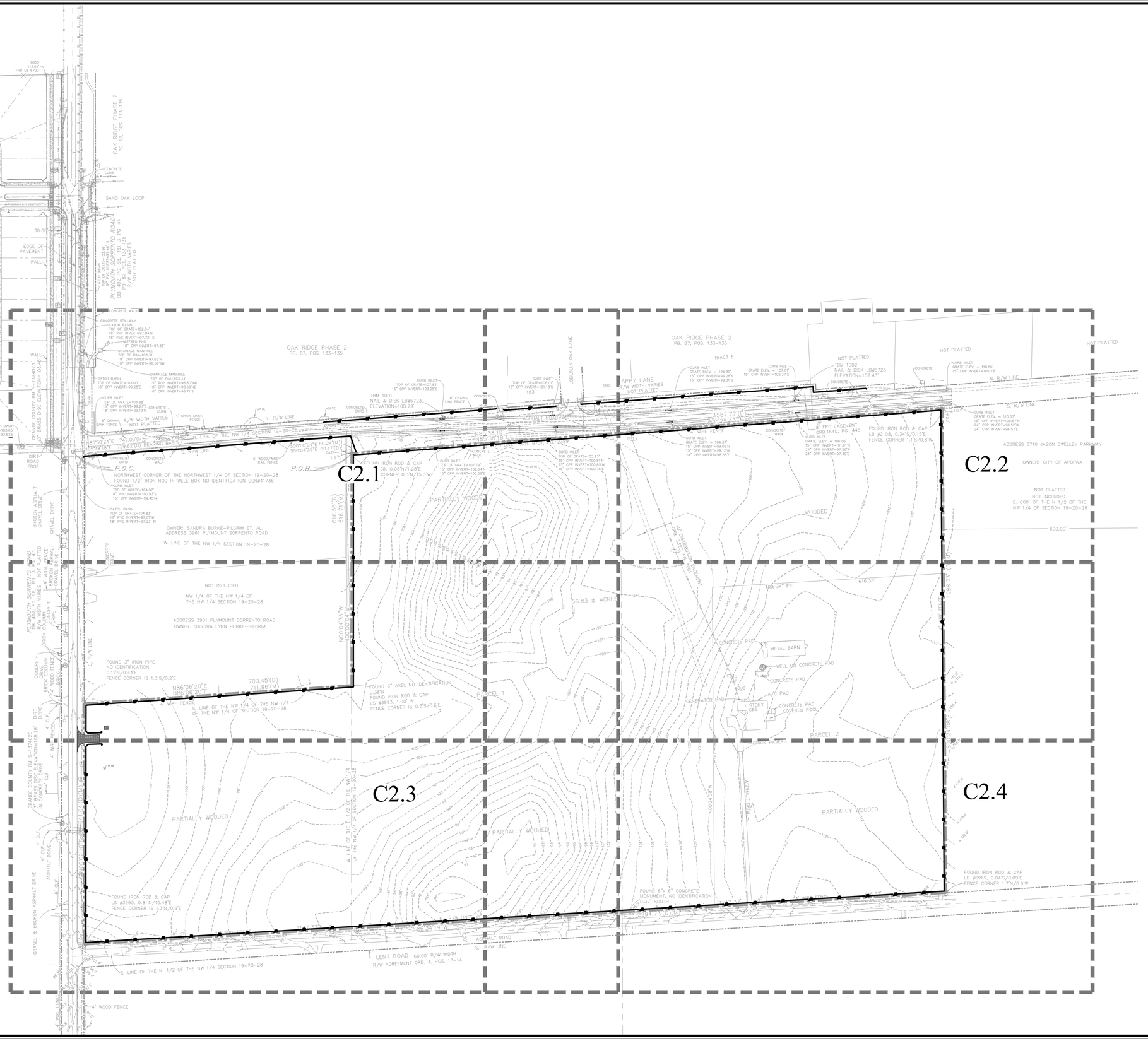

C2.1
C2.2
C2.3
C2.4
P.O.C.
NORTHWEST CORNER OF THE NORTHWEST 1/4 OF SECTION 19-20-28
FOUND 1/2" IRON ROD IN WELL BOX NO IDENTIFICATION CCR#41736
P.O.B.
FOUND IRON ROD & CAP LB #3993, 0.08'N/1.28'E
CORNER 0.3'N/15.3'W
S. LINE OF THE N. 1/2 OF THE NW 1/4 SECTION 19-20-28
N. LINE OF THE S. 1/2 OF THE NW 1/4 OF SECTION 19-20-28
W. LINE OF THE NW 1/4 OF SECTION 19-20-28
OAK RIDGE PHASE 2
PB. 87, PGS. 133-135
OWNER: SANDRA BURKE-PILGRIM ET. AL.
ADDRESS 3961 PLYMOUNT SORRENTO ROAD
W. LINE OF THE NW 1/4 SECTION 19-20-28
NOT INCLUDED
NW 1/4 OF THE NW 1/4 OF
THE NW 1/4 SECTION 19-20-28
ADDRESS 3901 PLYMOUNT SORRENTO ROAD
OWNER: SANDRA LYNN BURKE-PILGRIM
56.83 ± ACRES
PARCEL 1
PARCEL 2
PARTIALLY WOODED
WOODED
SAND OAK LOOP
PLYMOUTH SORRENTO ROAD
PB. 87, PGS. 133-135
R/W WIDTH VARIES
NOT PLATTED
EDGE OF PAVEMENT
WALL
CONCRETE CURB
CONCRETE WALK
CONCRETE SPILLWAY
CATCH BASIN
TOP OF GRATE=102.04'
18" PVC INVERT=97.84'N
18" PVC INVERT=97.72' S
MITERED END
18" CPP INVERT=97.85'
DRAINAGE MANHOLE
TOP OF RIM=103.31'
18" CPP INVERT=97.63'N
18" CPP INVERT=98.573'W
DRAINAGE MANHOLE
TOP OF RIM=103.44'
15" RCP INVERT=98.807'W
18" CPP INVERT=98.69'NE
18" CPP INVERT=98.71'S
CATCH BASIN
TOP OF GRATE=103.00'
18" CPP INVERT=99.28'E
CURB INLET
TOP OF GRATE=103.88'
15" CPP INVERT=99.27'S
18" CPP INVERT=99.13'N
6' CHAIN LINK FENCE W/ 1' BARBED WIRE
4' CHAIN LINK FENCE
GATE
CONCRETE CURB
N. R/W LINE
NOT PLATTED
TBM 1001
NAIL & DISK LB@6723
ELEVATION=108.29'
TBM 1002
NAIL & DISK LB@6723
ELEVATION=107.43'
CURB INLET
TOP OF GRATE=107.83
15" CPP INVERT=103.05'S
CURB INLET
TOP OF GRATE=106.07'
15" CPP INVERT=101.18'S
LOBLOLLY OAK LANE
APPY LANE
R/W WIDTH VARIES
NOT PLATTED
TRACT E
CURB INLET
GRATE ELEV. = 104.30'
15" CPP INVERT=99.26'N
15" CPP INVERT=99.31'S
CURB INLET
GRATE ELEV. = 107.01'
15" CPP INVERT=102.37'S
CONCRETE WALK
CURB INLET
GRATE ELEV. = 110.56'
15" CPP INVERT=105.78'
CURB INLET
GRATE ELEV. = 110.57'
15" CPP INVERT=105.07'N
24" CPP INVERT=96.52'N
24" CPP INVERT=96.57'E
S. R/W LINE
742.00'(M) PRIMARY ROAD
S89°58'24"E 742.00'(M)
S89°58'18"E 742.00'(M)
S00°04'35"E 60.17'(M)
S00°04'35"E 60.24'(M)
N89°58'24"W 700.45'(M)
N89°58'18"W 700.45'(M)
N00°04'35"W 616.56'(M)
616.71'(M)
616.56'(D)
616.71'(M)
N89°34'19"E
616.33'
N00°04'35"W
1258.73'
600.00'
S89°34'19"W
LENT ROAD 60.00' R/W WIDTH
R/W AGREEMENT ORB. 4, PGS. 13-14
S. R/W LINE
ASPHALT ROAD
FOUND 3" IRON PIPE
NO IDENTIFICATION
0.11'N/0.44'E
FENCE CORNER IS 1.3'S/0.2'E
FOUND 3" AXEL NO IDENTIFICATION
0.38'N
FOUND IRON ROD & CAP
LS #3993, 1.00' W
FENCE CORNER IS 0.3'S/0.6'E
N86°06'20"E
N86°06'20"E
700.45'(D)
711.96'(M)
FOUND IRON ROD & CAP
LS #3993, 0.81'N/10.48'E
FENCE CORNER IS 1.3'N/0.9'E
FOUND 6"x 6" CONCRETE
MONUMENT, NO IDENTIFICATION
0.31' SOUTH
FOUND IRON ROD & CAP
LB #6969, 0.04'S/0.09'E
FENCE CORNER 1.7'N/0.6'W
FOUND IRON ROD & CAP
LB #2108, 0.34'S/0.15'E
FENCE CORNER 1.1'S/0.8'W
ADDRESS 3710 JASON DWELLEY PARKWAY
OWNER: CITY OF APOPKA
NOT PLATTED
NOT INCLUDED
E. 600' OF THE N 1/2 OF THE
NW 1/4 OF SECTION 19-20-28
METAL BARN
WELL ON CONCRETE PAD
CONCRETE PAD
A/C PAD
CONCRETE PAD
COVERED POOL
GENERATOR PAD
MASONRY CBS
BRICK PAVERS
CONCRETE PAD
POOL
SCREEN ENCLOSURE
ROOF OVERHANG
ROOF OVERHANG
10' DRAINAGE EASEMENT
ORB 3520, PG 1
S. FPC EASEMENT
ORB.1640, PG. 448
CONCRETE WALK
CONCRETE
WOOD FENCE
WIRE FENCE
CHAIN LINK FENCE
5' WOOD/WIRE RAIL FENCE
4' WOOD FENCE
6' WOOD FENCE
BROKEN ASPHALT
GRAVEL DRIVE
ASPHALT DRIVE
DIRT ROAD EDGE
BRICK COLUMN
CONCRETE DRIVE
ORANGE COUNTY BM S-1374023
BRASS DISC ELEVATION=108.46'
ORANGE COUNTY BM S-1372020
3" BRASS DISC ELEVATION=108.28'
IN CONCRETE DRIVE
CATCH BASIN
TOP OF GRATE=103.65'
18" PVC INVERT=97.62'E
CATCH BASIN
TOP OF GRATE=104.07'
8" PVC INVERT=100.93'S
15" CPP INVERT=99.45'N
CATCH BASIN
TOP OF GRATE=104.83'
18" PVC INVERT=97.07'W
18" PVC INVERT=97.23' N
CURB INLET
TOP OF GRATE=105.93'
15" CPP INVERT=100.81'N
15" CPP INVERT=100.76'E
CURB INLET
TOP OF GRATE=107.79'
15" CPP INVERT=102.64'N
15" CPP INVERT=102.59'S
CURB INLET
GRATE ELEV. = 104.37'
15" CPP INVERT=99.02'N
15" CPP INVERT=99.12'W
24" CPP INVERT=98.55'E
CURB INLET
GRATE ELEV. = 106.96'
15" CPP INVERT=101.91'N
24" CPP INVERT=97.56'W
24" CPP INVERT=97.49'E
PLYMOUTH SORRENTO ROAD
DB 402, PG 68, SR 441 RELOCATED
BRICK COLUMN WITH MARKER
4" VINYL FENCE
4' WOOD FENCE
4' WIRE FENCE
4' CLF
4' CLF
4' CLF
4' WIRE FENCE
4' WOOD FENCE
4' WIRE FENCE
4' WOOD FENCE
4' WIRE FENCE
4' WOOD FENCE

\\appian-file\Projects_PROJECT DRAWINGS\MIH-005 Wolf Lake Run Subdivision\Drawings\CAD Civil3D\Layouts\04 Final Engineering\EROSION CONTROL PLAN.dwg Modified:6/3/2024 By:osanchez

INGE COUNTY BM S-1374025
BRASS DISC ELEVATION=108.46'

MATCHLINE A–A

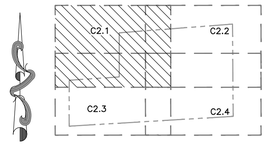
PLEASE REFER TO ORANGE COUNTY RIGHT–OF–WAY IMPROVEMENT PLANS FOR OFFSITE EROSION CONTROL AND DEMO PLAN

CATCH BASIN
TOP OF GRATE=103.66'
18" PVC INVERT=99.46' S

ASPHALT ROAD

PLYMOUTH SORRENTO ROAD

KEY MAP




GRAPHIC SCALE
50 0 25 50 100
( IN FEET )
1 inch = 50 ft.

LEGEND
MAINTENANCE OF TRAFFIC

SHEET C2.1
SHEET C2.2

TBM 1001
NAIL & DISK LB#6723
ELEVATION=108.29'

MATCHLINE A–A

TOP OF GRATE=103.88'
18" CPP INVERT=99.27'S
18" CPP INVERT=99.13'N

ORANGE COUNTY 3" BRASS DISC ELEV.

6' CHAIN LINK FENCE

R/W WIDTH VARIES
NOT PLATTED

4' CHAIN LINK FENCE

GATE

CONCRETE CURB

CONCRETE WALK

N. R/W LINE

S. R/W LINE

N85°38'24"E 742.00'(M)
N85°38'18"E 729.62'(D) BEARING BASIS

N LINE OF THE NW 1/4 SECTION 19–20–28

ASPHALT ROAD

5' WOOD/WIRE RAIL FENCE

1.2'

DIRT ROAD EDGE

BEGIN 760 LF OF SILT FENCE (1/C2.5)

P.O.C.
NORTHWEST CORNER OF THE NORTHWEST 1/4 OF SECTION 19–20–28
FOUND 1/2" IRON ROD IN WELL BOX NO IDENTIFICATION CCR#41736

CURB INLET
TOP OF GRATE=104.07'
8" PVC INVERT=100.93'S
15" CPP INVERT=99.45'N

CATCH BASIN
TOP OF GRATE=104.83'
18" PVC INVERT=97.07'W
18" PVC INVERT=97.23' N

OWNER: SANDRA BURKE–PILGRIM ET. AL.
ADDRESS 3961 PLYMOUNT SORRENTO ROAD

W. LINE OF THE NW 1/4 SECTION 19–20–28

NOT INCLUDED

NW 1/4 OF THE NW 1/4 OF
THE NW 1/4 SECTION 19–20–28

ADDRESS 3901 PLYMOUNT SORRENTO ROAD
OWNER: SANDRA LYNN BURKE–PILGRIM

PLEASE REFER TO ORANGE COUNTY RIGHT–OF–WAY IMPROVEMENT PLANS FOR OFFSITE EROSION CONTROL AND DEMO PLAN

PLYMOUTH SORRENTO ROAD
DB. 402, PG. 68, RB. 3, PG. 43
R/W WIDTH VARIES NOT PLATTED

BRICK COLUMN
4' VINYL FENCE
CONCRETE DRIVE
BROKEN ASPHALT GRAVEL DRIVE

CONCRETE DRIVE
BRICK COLUMN
4' WOOD FENCE
BRICK

DIRT DRIVE
4' CLF FENCE

E. R/W LINE

FOUND 3" IRON PIPE
NO IDENTIFICATION
0.11'N/0.44'E
FENCE CORNER IS 1.3'S/0.2'E

N86°06'20"E
700.45'(D)
711.96'(M)
N86°06'20"E
4' WIRE FENCE

S. LINE OF THE NW 1/4 OF THE NW 1/4
OF THE NW 1/4 OF SECTION 19–20–28

EXISTING FENCE TO REMAIN

START DEMO EXISTING FENCE

10 X 10 CONCRETE WASHOUT (3/C2.5)

END OF 7,144 LF SILT FENCE (1/C2.5)

SHEET C2.1
SHEET C2.3

BEGIN 465 LF OF SILT FENCE (1/C2.5)

CONTRACTOR TO PROVIDE M.O.T. FOR WORK ON SHOULDER AND WITHIN TRAVEL LANE (6/C2.6)

CONTRACTOR TO DEMO 665 LF OF EXISTING CURB

CONTRACTOR TO DEMO 1,257 LF OF EXISTING CURB

CONTRACTOR TO DEMO 1,228 LF OF EXISTING CONCRETE SIDEWALK

END 760 LF OF SILT FENCE (1/C2.5)

END DEMO EXISTING FENCE

P.O.B.

4 INLET PROTECTION (4/C2.5)

FOUND IRON ROD & CAP
LB #2108, 0.08'N/1.28'E
FENCE CORNER 0.3'N/15.3'W

CONTINUATION OF 7,144 LF SILT FENCE (1/C2.5)

EXISTING FENCE TO REMAIN

REFER TO LANDSCAPE PLANS FOR TREE REMOVAL/TREE PROTECTION PLANS (TYP.)

FOUND 3" AXEL NO IDENTIFICATION
0.38'N
FOUND IRON ROD & CAP
LS #3993, 1.00' W
FENCE CORNER IS 0.3'S/0.6'E

PARCEL 1

SHEET C2.2
SHEET C2.4

END 465 LF OF SILT FENCE (1/C2.5)

BEGIN 145 LF OF SILT FENCE (1/C2.5)

END 145 LF OF SILT FENCE (1/C2.5)

CURB INLET
O DEMO 665 LF CURB
INVERT=101.18'S

CONCRETE CURB

CONTRACTOR TO DEMO 781 LF OF EXISTING CURB

BEGIN 780 LF OF SILT FENCE (1/C2.5)

LIMITS OF OPEN CUT FOR MAIN CONNECTION (REFER

LOBLOLLY OAK LANE

ASPHALT ROAD

N85°38'18"E
N85°38'18"E 389'

DEMO EXISTING FENCE

4 INLET PROTECTION (4/C2.5)

CURB INLET
TOP OF GRATE=107.79'
15" CPP INVERT=102.64'N
15" CPP INVERT=102.59'E

CONTINUATION OF 7,144 LF SILT FENCE (1/C2.5)

CURB INLET
TOP OF GRATE=107.79'
15" CPP INVERT=100.85'W
15" CPP INVERT=100.76'E

56.83 ± ACRES

SHEET C2.3
SHEET C2.4

SHEET C2.1
SHEET C2.2

SHEET 10 OF 82

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 1 | 04/30/2024 | SJRWMD COMMENTS (APPLICATION NO. 215319-10) DATED 03/15/2024 | OSS |
| 2 | 04/30/2024 | CITY OF APOPKA COMMENTS DATED 04/29/2024 | OSS |

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STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32574

EROSION CONTROL, M.O.T. & DEMO PLAN – NORTHWEST CONSTRUCTION SITE PLAN

WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

DRAWN: B. KILLELA
DESIGNED: O. SANCHEZ
CHECKED: O. SANCHEZ
DATE: 6/11/24

SCALE: 1" = 50'
PROJECT: MIH-005
SHEET: C2.1

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Sunshine State One Call of Florida, Inc.

OSCAR SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
6/11/24
PROFESSIONAL ENGINEER

This item has been digitally signed and sealed by Oscar S. Sanchez, PE on the date adjacent to the seal.
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SHEET C2.1
SHEET C2.2
SHEET C2.3
SHEET C2.4

OAK RIDGE PHASE 2
PB. 87, PGS. 133–135
TRACT E
LOBLOLLY OAK LANE
APPY LANE
R/W WIDTH VARIES
NOT PLATTED
NOT PLATTED
TBM 1002
NAIL & DISK LB#6723
ELEVATION=107.43'
CONCRETE
N. R/
ASPHALT ROAD
CURB INLET
GRATE ELEV. = 104.30'
15" CPP INVERT=99.28'N
15" CPP INVERT=99.31'S
CURB INLET
GRATE ELEV. = 107.01'
15" CPP INVERT=102.37'S
CURB INLET
GRATE ELEV. = 110.56'
15" CPP INVERT=105.78'
CURB INLET
GRATE ELEV. =
15" CPP INVERT=
24" CPP INVERT=
24" CPP INVERT=
CURB INLET
TOP OF GRATE ELEV. = 104.37'
15" CPP INVERT=100.85'W
15" CPP INVERT=100.76'E
CURB INLET
GRATE ELEV. = 106.96'
15" CPP INVERT=101.91'N
24" CPP INVERT=97.56'W
24" CPP INVERT=97.49'E
CONCRETE
4" WIRE FENCE
8' FPC EASEMENT
ORB.1640, PG. 448
FOUND IRO
FENCE CORNER 1.1'S/0.8'W
1587.77'(D)
1588.43'(M)
38°18'
38°18'E
ORB. 9901, PG 2389
WOODED
10' DRAINAGE EASEMENT
ORB. 3320, PG. 1061
(TO BE VACATED)
56.83 ± ACRES
N86°34'19"E
616.33'
1288.73'(D)(M)
6' WIRE FENCE
PARCEL 1
PARCEL 2
METAL BARN
CONCRETE PAD
WELL ON CONCRETE PAD
CONCRETE PAD
A/C PAD
GENERATOR PAD
1 STORY CBS
CONCRETE PAD
COVERED POOL

CONTRACTOR TO DEMO 665 LF OF EXISTING CURB
1/C2.5 END 145 LF OF SILT FENCE
BEGIN 145 LF OF 1/C2.5 SILT FENCE
CONTRACTOR TO DEMO 781 LF OF EXISTING CURB
BEGIN 780 LF OF 1/C2.5 SILT FENCE
CONTRACTOR TO PROVIDE M.O.T. FOR WORK ON AND SHOULDER AND WITHIN TRAVEL LANE 5,6/C2.6
END 780 LF OF 1/C2.5 SILT FENCE
CONTRACTOR TO DEMO 781 LF OF EXISTING CURB
LIMITS OF OPEN CUT FOR POTABLE WATER MAIN CONNECTION (REFER TO SHEET C4.2)
4/C2.5 INLET PROTECTION
DEMO EXISTING FENCE
1/C2.5 CONTINUATION OF 7,144 LF SILT FENCE
CONTRACTOR TO COORDINATE WITH DUKE ENERGY PRIOR TO DEMO POWER POLES & OVERHEAD POWER LINES (TYP.)
4/C2.5 CONCRETE INLET PROTECTION
CONTRACTOR TO DEMO 1,257 LF OF EXISTING CURB
DEMO EXISTING FENCE
1/C2.5 CONTINUATION OF 7,144 LF SILT FENCE
DEMO EXISTING FENCE
1/C2.5 CONTINUATION OF 7,144 LF SILT FENCE
DEMO METAL BARN & CONCRETE PAD
CONTRACTOR TO ABANDON/CAP WELLS PER SJRWMD & FDEP REGULATIONS (TYP.)
CONTRACTOR TO COORDINATE WITH DUKE ENERGY PRIOR TO DEMO POWER POLES & OVERHEAD POWER LINES (TYP.)
DEMO METAL BARN & CONCRETE PAD
DEMO ONE STORY HOUSE, CONCRETE & POOL
CONTRACTOR TO LOCATE SEPTIC TANK AND COORDINATE WITH ORANGE COUNTY HEALTH DEPARTMENT AND/OR FDEP TO OBTAIN ANY NECESSARY PERMITS TO REMOVE THE EXISTING SEPTIC TANK AND DRAIN FIELD
DEMO BRICK PAVERS
CAPE PLANS
AL/TREE
S (TYP.)

SHEET C2.1
SHEET C2.3
SHEET C2.2
SHEET C2.4

N
W
E
S
GRAPHIC SCALE
50 0 25 50 100
( IN FEET )
1 inch = 50 ft.

LEGEND
MAINTENANCE OF TRAFFIC

C2.1 C2.2 C2.3 C2.4
KEY MAP

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 1 | 04/30/2024 | SJRWMD COMMENTS (APPLICATION NO. 215319-10) DATED 03/15/2024 | OSS |
| 2 | 04/30/2024 | CITY OF APOPKA COMMENTS DATED 04/29/2024 | OSS |

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STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32574

EROSION CONTROL, M.O.T. & DEMO PLAN – NORTHEAST CONSTRUCTION SITE PLAN
WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

DRAWN: B. KILLELA
DESIGNED: O. SANCHEZ
CHECKED: O. SANCHEZ
DATE: 6/11/24
SCALE: 1" = 50'
PROJECT: MIH-005
SHEET: C2.2

APPIAN ENGINEERING

OSCAR SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
6/11/24
PROFESSIONAL ENGINEER

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SHEET 11 OF 82

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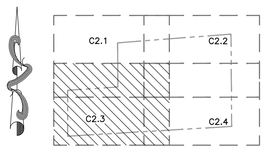
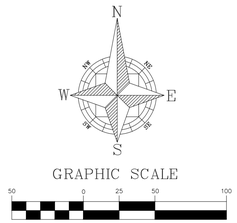
\\appian-file\Projects_PROJECT DRAWINGS\MIH-005 Wolf Lake Run Subdivision\Drawings\CAD Civil3D\Layouts\04 Final Engineering\EROSION CONTROL PLAN.dwg Modified:6/3/2024 By:osanchez




KEY MAP




SHEET C2.1
SHEET C2.3
SHEET C2.2
SHEET C2.4

EXISTING FENCE TO REMAIN

N00°04'35"W
N00°00'04"W

REFER TO LANDSCAPE PLANS FOR TREE REMOVAL/TREE PROTECTION PLANS (TYP.)

56.83 ± ACRES

PARCEL 1

FOUND 3" AXEL NO IDENTIFICATION
0.38'N
FOUND IRON ROD & CAP
LS #3993, 1.00' W
FENCE CORNER IS 0.3'S/0.6'E

0.11'N/0.44'E
FENCE CORNER IS 1.3'S/0.2'E

700.45'(D)
711.96'(M)
N86°06'20"E
N86°06'20"E

4' WIRE FENCE

S. LINE OF THE NW 1/4 OF THE NW 1/4
OF THE NW 1/4 OF SECTION 19-20-28

EXISTING FENCE TO REMAIN

START DEMO EXISTING FENCE

10 X 10 CONCRETE WASHOUT (3/C2.5)

END OF 7,144 LF SILT FENCE (1/C2.5)

CONSTRUCTION ENTRANCE (2/C2.5)

BEGIN 7,144 LF OF SILT FENCE (1/C2.5)

ORANGE COUNTY BM S-1374020
3" BRASS DISC ELEVATION=108.28'
IN CONCRETE DRIVE

4' CLF
4' WOOD
BRICK
BRICK
CONC
DRIVE
DIRT
DRIVE
4' WIRE FENCE
4' CLF
4' CLF
6' CLF
ASPHALT DRIVE
GRAVEL & BROKEN ASPHALT DRIVE

40" OAK

PARTIALLY WOODED

N00°02'10"E 641.04'(D)(M)

PLEASE REFER TO ORANGE COUNTY RIGHT-OF-WAY IMPROVEMENT PLANS FOR OFFSITE EROSION CONTROL AND DEMO PLAN

FOUND IRON ROD & CAP
LS #3993, 0.81'N/10.48'E
FENCE CORNER IS 1.3'N/0.9'E

W. LINE OF THE E. 1/2 OF THE NW 1/4
OF THE NW 1/4 OF SECTION 19-20-28

DEMO EXISTING FENCE

4' WIRE FENCE

S86°34'19"W 1320.97'

N. R/W LINE
ASPHALT ROAD
S. R/W LINE

CONTINUATION OF 7,144 LF SILT FENCE (1/C2.5)

CONTINUATION OF 7,144 LF SILT FENCE (1/C2.5)

DEMO EXISTING FENCE

LENT ROAD 60.00' R/W WIDTH
R/W AGREEMENT ORB. 4, PGS. 13-14

S. LINE OF THE N. 1/2 OF THE NW 1/4 SECTION 19-20-28

SHEET C2.3
SHEET C2.4

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SHEET 12 OF 82

| REV. | DATE | DESCRIPTION | BY |
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| 1 | 04/30/2024 | SJRWMD COMMENTS (APPLICATION NO. 215319-10) DATED 03/15/2024 | OSS |
| 2 | 04/30/2024 | CITY OF APOPKA COMMENTS DATED 04/29/2024 | OSS |

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STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32374

EROSION CONTROL, M.O.T. & DEMO PLAN – SOUTHWEST
CONSTRUCTION SITE PLAN

WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

DRAWN: B. KILLELA
DESIGNED: O. SANCHEZ
CHECKED: O. SANCHEZ
DATE: 6/11/24

SCALE: 1" = 50'
PROJECT: MIH-005
SHEET: C2.3

APPIAN ENGINEERING

FLORIDA SALVADOR SANCHEZ LICENSE No. 86492 STATE OF FLORIDA 6/11/24 PROFESSIONAL ENGINEER

This item has been digitally signed and sealed by Omar J. Sanchez, PE on the date adjacent to the seal.
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SHEET C2.1
SHEET C2.2
SHEET C2.3
SHEET C2.4

56.83 ± ACRES

EASEMENT 1061

N86°34'19"E 616.33'

1 C2.5 CONTINUATION OF 7,144 LF SILT FENCE

DEMO EXISTING FENCE

288.73'(D)

4' WIRE FENCE

S00°24'08"E

1 C2.5 CONTINUATION OF 7,144 LF SILT FENCE

DEMO METAL BARN & CONCRETE PAD

CONCRETE PAD

METAL BARN

CONTRACTOR TO ABANDON/CAP WELLS PER SJRWMD & FDEP REGULATIONS (TYP.)

WELL ON CONCRETE PAD

CONTRACTOR TO COORDINATE WITH DUKE ENERGY PRIOR TO DEMO POWER POLES & OVERHEAD POWER LINES (TYP.)

CONCRETE PAD

DEMO METAL BARN & CONCRETE PAD

DEMO ONE STORY HOUSE, CONCRETE & POOL

A/C PAD

GENERATOR PAD

CONTRACTOR TO LOCATE SEPTIC TANK AND COORDINATE WITH ORANGE COUNTY HEALTH DEPARTMENT AND/OR FDEP TO OBTAIN ANY NECESSARY PERMITS TO REMOVE THE EXISTING SEPTIC TANK AND DRAIN FIELD

1 STORY CBS

CONCRETE PAD

COVERED POOL

DEMO BRICK PAVERS

BRICK PAVERS

PARCEL 1

PARCEL 2

ASPHALT DRIVE

N00°24'08"W

PARTIALLY WOODED

REFER TO LANDSCAPE PLANS FOR TREE REMOVAL/TREE PROTECTION PLANS (TYP.)

DEMO ASPHALT DRIVE

DEMO GATE

START DEMO EXISTING FENCE

END DEMO EXISTING FENCE

FOUND IRON ROD LB #6969, 0.04'S FENCE CORNER 1.

FOUND 6"x 6" CONCRETE MONUMENT, NO I.D. 0.37' SOUTH

4' WIRE FENCE

616.33'

2294.73'(D)(M)

CONTINUATION OF 7,144 LF SILT FENCE

1 C2.5

DEMO EXISTING FENCE

CONTRACTOR TO SAW CUT EXISTING ASPHALT DRIVEWAY ON LENT ROAD AND DEMO

CONTINUATION OF 7,144 LF SILT FENCE

1 C2.5

HALT ROAD
/W LINE

N
W E
S

GRAPHIC SCALE

50 0 25 50 100

( IN FEET )
1 inch = 50 ft.

KEY MAP

C2.1 C2.2 C2.3 C2.4

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
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STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32274

# EROSION CONTROL, M.O.T. & DEMO PLAN – SOUTHEAST CONSTRUCTION SITE PLAN

WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

| DRAWN: | DESIGNED: | CHECKED: | DATE: |
|---|---|---|---|
| B. KILLELA | O. SANCHEZ | O. SANCHEZ | 6/11/24 |

| SCALE | PROJECT | SHEET |
|---|---|---|
| 1" = 50' | MIH-005 | C2.4 |

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**SHEET 13 OF 82**

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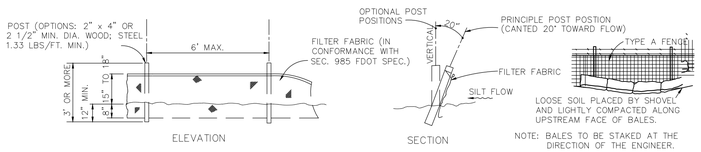
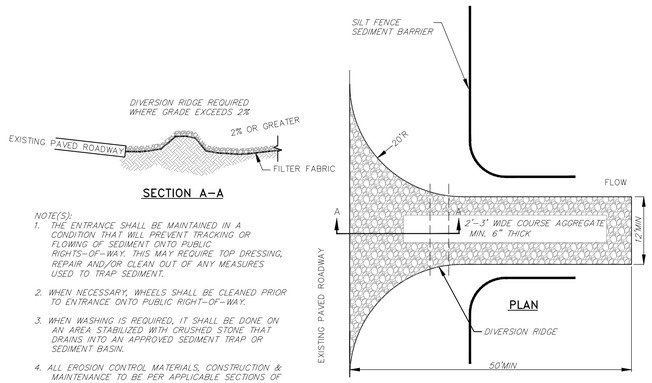


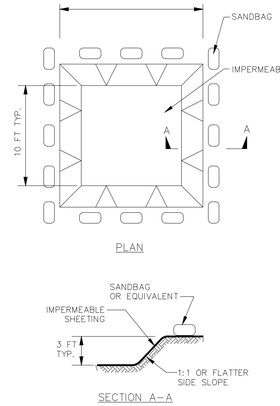

NOTE

SILT FENCE TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR STAKED SILT FENCE (LF)

## 1 TYPE III SILT FENCE DETAIL
N.T.S.




## 2 TEMPORARY CONSTRUCTION ENTRANCE DETAIL
N.T.S.




EXCAVATED WASHOUT STRUCTURE

NOTES:

1. LOCATE WASHOUT STRUCTURE A MINIMUM OF 50 FEET AWAY FROM OPEN CHANNELS, STORM DRAIN INLETS, SENSITIVE AREAS, WETLANDS, BUFFERS AND WATER COURSES AND AWAY FROM CONSTRUCTION TRAFFIC.
2. SIZE WASHOUT STRUCTURE FOR VOLUME NECESSARY TO CONTAIN WASH WATER AND SOLIDS AND MAINTAIN AT LEAST 4 INCHES OF FREEBOARD. TYPICAL DIMENSIONS ARE 10 FEET X 10 FEET X 3 FEET DEEP.
3. PREPARE SOIL BASE FREE OF ROCKS OR OTHER DEBRIS THAT MAY CAUSE TEARS OR HOLES IN THE LINER. FOR LINER, USE 10 MIL OR THICKER UV-RESISTANT, IMPERMEABLE SHEETING, FREE OF HOLES AND TEARS OR OTHER DEFECTS THAT COMPROMISE IMPERMEABILITY OF THE MATERIAL.
4. PROVIDE A SIGN FOR THE WASHOUT IN CLOSE PROXIMITY TO THE FACILITY.
5. KEEP CONCRETE WASHOUT STRUCTURE WATER TIGHT. REPLACE IMPERMEABLE LINER IF DAMAGED (E.G., RIPPED OR PUNCTURED). EMPTY OR REPLACE WASHOUT STRUCTURE THAT IS 75 PERCENT FULL, AND DISPOSE OF ACCUMULATED MATERIAL PROPERLY. DO NOT REUSE PLASTIC LINER. WET-VACUUM STORED LIQUIDS THAT HAVE NOT EVAPORATED AND DISPOSE OF IN AN APPROVED MANNER. PRIOR TO FORECASTED RAINSTORMS, REMOVE LIQUIDS OR COVER STRUCTURE TO PREVENT OVERFLOWS. REMOVE HARDENED SOLIDS, WHOLE OR BROKEN UP, FOR DISPOSAL OR RECYCLING. MAINTAIN RUNOFF DIVERSION AROUND EXCAVATED WASHOUT STRUCTURE UNTIL STRUCTURE IS REMOVED.

## 3 CONCRETE WASH OUT
N.T.S.



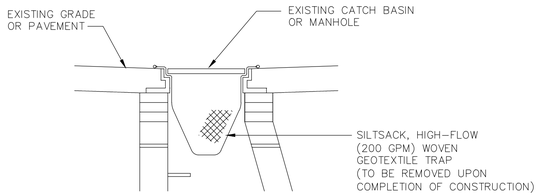

ISOMETRIC




NOTES:

1. EROSION CONTROL LOG CONTAINMENT MESH SHALL BE 100% BIODEGRADABLE, PHOTODEGRADABLE OR RECYCLABLE; AND FILL MATERIAL SHALL CONSIST OF MULCH, ASPEN EXCELSIOR FIBERS, CHIPPED SITE VEGETATION, COCONUT FIBERS, 100% RECYCLABLE FIBERS, OR ANY OTHER ACCEPTABLE MATERIAL EXCLUDING STRAW AND HAY.
2. DAILY INSPECTION SHALL BE MADE BY THE CONTRACTOR AND SILT ACCUMULATION MUST BE REMOVED WHEN DEPTH REACHES 2".
3. CONTRACTOR SHALL MONITOR THE PERFORMANCE OF INLET PROTECTION DURING EACH RAINFALL EVENT AND IMMEDIATELY REMOVE THE INLET PROTECTIONS IF THE STORM WATER BEGINS TO OVERTOP THE CURB.
4. INLET PROTECTIONS SHALL BE REMOVED AS SOON AS THE SOURCE OF SEDIMENT IS STABILIZED.

## 4 EROSION CONTROL LOG DETAIL
N.T.S.




## 4A INLET TRAP AND FILTER
N.T.S.

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STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32574

EROSION CONTROL & M.O.T. DETAILS
CONSTRUCTION SITE PLAN

WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

| DRAWN: | DESIGNED: | CHECKED: | DATE: |
|---|---|---|---|
| B. KILLELA | O. SANCHEZ | O. SANCHEZ | 6/11/24 |

| SCALE | PROJECT | SHEET |
|---|---|---|
| N.T.S. | MIH-005 | C2.5 |

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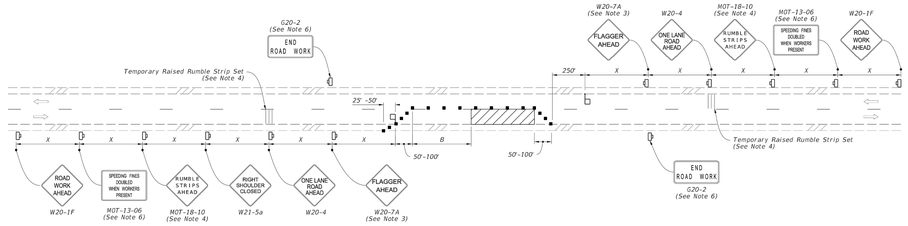
SHEET 14 OF 82

\\appian-file\Projects_PROJECT DRAWINGS\MIH-005 Wolf Lake Run Subdivision\Drawings\CAD Civil3D\Layouts\04 Final Engineering\EROSION CONTROL DETAILS.dwg Modified: 3/18/2024 By:olopez



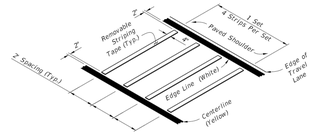

### NOTES:

1. This Index applies to Two-Lane, Two-Way Roadways with work within the traveled way.
2. L = Taper Length
   B = Buffer Length
   X = Work Zone Sign Spacing
   See Index 102-600 for "L", "B", "X" and channelizing device spacing values.
3. Optionally, use "Flagger Ahead" sign with symbol (W20-7) instead of "Flagger Ahead" sign with text (W20-7A).
4. Use temporary raised rumble strips when the existing posted speed is 55 mph or greater and the work duration is greater than 60 minutes. If temporary raised rumble strips are not used, omit "Rumble Strips Ahead" signs (MOT-18-10) and associated work zone sign spacing.
5. Additional one-way control may be provided by the following means:
   a. Flag-carrying vehicle
   b. Official vehicles
   c. Pilot vehicles
   d. Traffic signals

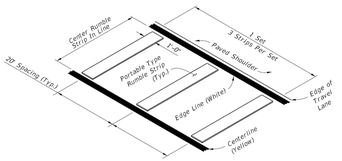
   When flaggers are the sole means of one-way control, the flaggers must be in sight of each other or in direct communication at all times.
6. The "Speeding Fines Doubled When Workers Present" signs (MOT-13-06) and "End Road Work" signs (G20-2), along with associated work zone sign spacing, may be omitted when the work operation will be in place for 24 hours or less.
7. Automated Flagger Assistance Devices (AFADs) may be used in accordance with Specification Sections 102, 990 and the APL vendor drawings.
8. Railroad Crossings:
   a. If an active railroad crossing is located closer to the Work Area than the queue length plus 300 feet, extend the Buffer Space as shown on Sheet 2.
   b. If the queuing of vehicles across an active railroad crossing cannot be avoided, provide a uniformed traffic control officer or flagger at the highway-rail grade crossing to prevent vehicles from stopping within the highway-rail grade crossing, even if automatic train warning devices are in place.

### SYMBOLS:

- Work Area
- Channelizing Device (See Index 102-600)
- Work Zone Sign
- Flagger
- Lane Identification and Direction of Traffic



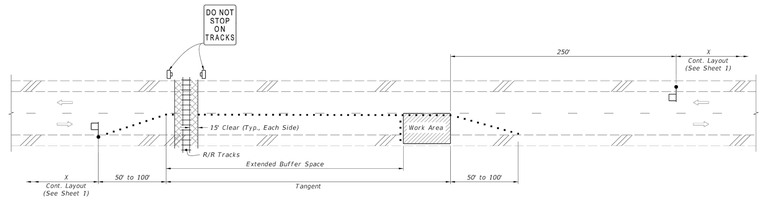

OPTION - 1
REMOVABLE STRIPING TYPE



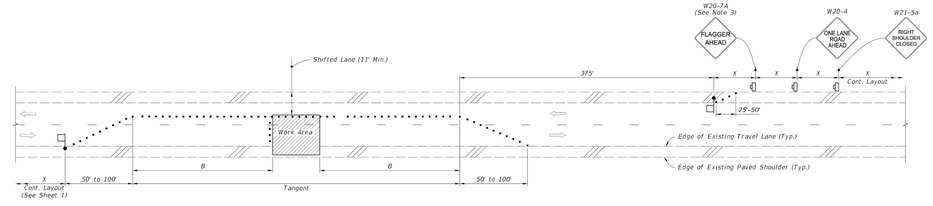

OPTION - 2
PORTABLE TYPE

RUMBLE STRIP SETS

| LAST REVISION | REVISION | DESCRIPTION: | FDOT | FY 2023-24 STANDARD PLANS | TWO-LANE, TWO-WAY WORK WITHIN THE TRAVEL WAY | INDEX | SHEET |
|---|---|---|---|---|---|---|---|
| 11/01/21 | | | | | | 102-603 | 1 of 2 |




TEMPORARY RAILROAD CROSSING BUFFER SPACE EXTENSION




TEMPORARY LANE SHIFT TO SHOULDER WHEN WORK AREA ENCROACHES ON THE CENTERLINE
(For Work Operations In place 24 Hours or Less)

### SYMBOLS:

- Work Area
- Channelizing Device (See Index 102-600)
- Work Zone Sign
- Flagger
- Lane Identification and Direction of Traffic

SPECIAL CONDITIONS

| LAST REVISION | REVISION | DESCRIPTION: | FDOT | FY 2023-24 STANDARD PLANS | TWO-LANE, TWO-WAY WORK WITHIN THE TRAVEL WAY | INDEX | SHEET |
|---|---|---|---|---|---|---|---|
| 11/01/21 | | | | | | 102-603 | 2 of 2 |

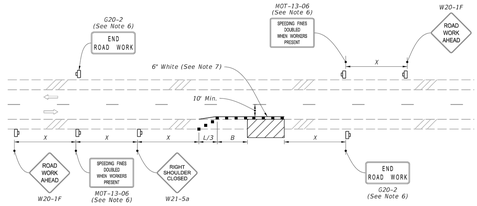
## 5 FDOT M.O.T. DETAIL – WORK WITHIN TRAVEL WAY
N.T.S.

### NOTE:

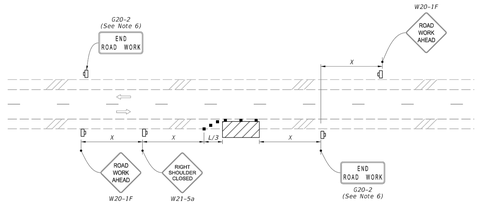
1. This Index applies to Two-Lane, Two-Way and Multilane Roadways, including Medians of divided roadways, with work on the shoulder.
2. L = Taper Length
   X = Work Zone Sign Spacing
   B = Buffer Length
   See Index 102-600 for "L", "X", "B", and channelizing device spacing values.
3. Where work activities are between 2' and 15' from the edge of traveled way, the Engineer may omit signs and channelizing devices for work operations 60 minutes or less.
4. When four or more work vehicles enter the through traffic lanes in a one hour period (excluding establishing and terminating the work area), use a flagger or lane closure to accommodate work vehicle ingress and egress.
5. For work less than 2' from the traveled way and work zone speed is greater than 45 MPH, use a lane closure.
6. The "Speeding Fines Doubled When Workers Present" signs (MOT-13-06) and "End Road Work" Signs (G20-2) along with the associated work zone sign spacing distances may be omitted when the work operation is in place for 24 hours or less.
7. Temporary pavement markings may be omitted when the work operation is in place for 3 days or less.
8. Omit "Shoulder Closed" signs (W21-5a) along with associated work zone sign spacing distances for work on the median.
9. When there is no paved shoulder, the "Worker" sign (W21-1) may be used instead of the "Shoulder Closed" sign (W21-5a).

### SYMBOLS:

- Work Area
- Channelizing Device (See Index 102-600)
- Work Zone Sign
- Lane Identification and Direction of Traffic




TWO-LANE ROADWAY
SHOULDER WORK LESS THAN 2' FROM THE TRAVELED WAY
WITH WORK ZONE SPEED OF 45 MPH OR LESS




TWO-LANE ROADWAY
SHOULDER WORK BETWEEN 2' AND 15' FROM THE TRAVELED WAY

| LAST REVISION | REVISION | DESCRIPTION: | FDOT | FY 2023-24 STANDARD PLANS | TWO-LANE AND MULTILANE, WORK ON SHOULDER | INDEX | SHEET |
|---|---|---|---|---|---|---|---|
| 11/01/21 | | | | | | 102-602 | 1 of 2 |

## 6 MAINTENANCE OF TRAFFIC – WORK ON SHOULDER
N.T.S.

| REV. | DATE | BY |
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DESCRIPTION


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EROSION CONTROL & M.O.T. DETAILS
CONSTRUCTION SITE PLAN
WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

| DRAWN: | DESIGNED: | CHECKED: | DATE: |
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| SCALE | PROJECT | SHEET |
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| N.T.S. | MIH-005 | C2.6 |


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SHEET 15 OF 82




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| TRACT DATA | | | | |
|---|---|---|---|---|
| TRACT / LOT | DESCRIPTION | AREA (AC) | AREA (SF) | OWNERS |
| TRACT 'A' | 30' DEDICATED RIGHT-OF-WAY | 0.44 AC | 19,235.05 SF | COUNTY |
| TRACT 'B' | PRIVATE RIGHT-OF-WAY | 8.56 AC | 372,806.60 SF | HOA |
| TRACT 'C' | NORTH POND | 5.39 AC | 234,577.59 SF | HOA |
| TRACT 'D' | SOUTH POND | 3.66 AC | 159,416.03 SF | HOA |
| TRACT 'E' | 10' LANDSCAPE BUFFER | 0.03 AC | 1,434.61 SF | HOA |
| TRACT 'F' | 10' LANDSCAPE BUFFER | 0.14 AC | 6,041.21 SF | HOA |
| TRACT 'G' | 10' LANDSCAPE BUFFER | 0.52 AC | 22,646.37 SF | HOA |
| TRACT 'H' | LANDSCAPE BUFFER | 1.25 AC | 54,312.94 SF | HOA |
| TRACT 'I' | 15' LANDSCAPE BUFFER | 0.35 AC | 15,356.05 SF | HOA |
| TRACT 'J' | 15' LANDSCAPE BUFFER | 0.17 AC | 7,494.47 SF | HOA |
| TRACT 'K' | 15' LANDSCAPE BUFFER | 0.02 AC | 754.76 SF | HOA |
| TRACT 'L' | LANDSCAPE BUFFER | 0.05 AC | 2,081.00 SF | HOA |
| TRACT 'M' | POCKET PARK/EXERCIES TRAIL | 1.81 AC | 78,679.83 SF | HOA |
| TRACT 'N' | OPEN SPACE | 0.06 AC | 2,584.61 SF | HOA |
| TRACT 'O' | OPEN SPACE | 0.07 AC | 3,165.87 SF | HOA |
| TRACT 'P' | LIFT STATION | 0.04 AC | 1,762.50 SF | HOA |

GATE NOTES:

1. ACCESS GATES WILL BE REQUIRED TO HAVE 3 FORMS OF ACCESS: KNOX KEY SWITCH, A NUMERIC KEY PAD, AND SOS SIREN ACTIVATION.

# SITE DATA

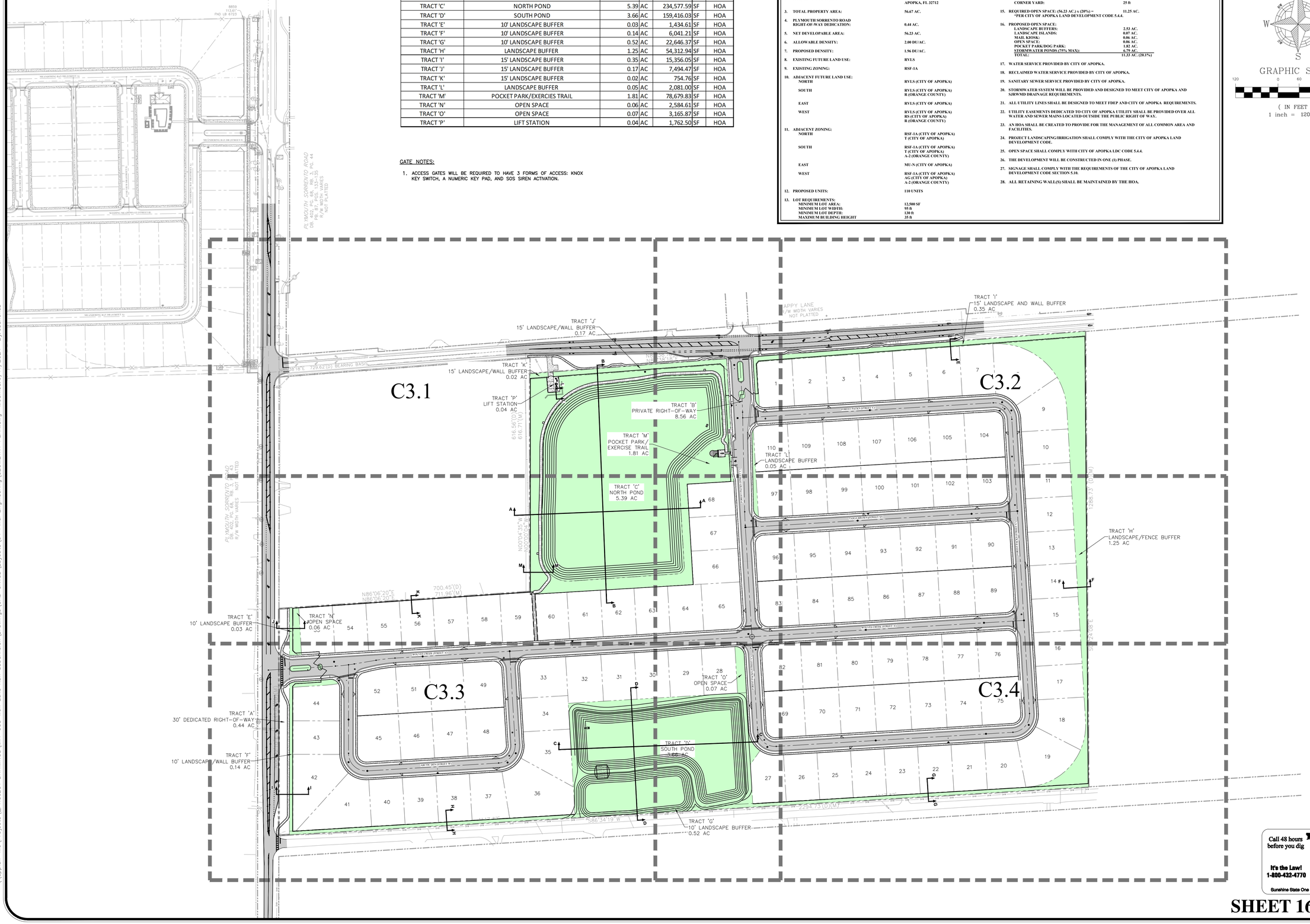
1. OCPA - PARCEL ID #'S: 19-20-28-0000-00-002; 19-20-28-0000-00-050
2. PROPERTY LOCATION: 2601 LENT ROAD APOPKA, FL 32712
3. TOTAL PROPERTY AREA: 56.67 AC.
4. PLYMOUTH SORRENTO ROAD RIGHT-OF-WAY DEDICATION: 0.44 AC.
5. NET DEVELOPABLE AREA: 56.23 AC.
6. ALLOWABLE DENSITY: 2.00 DUAC.
7. PROPOSED DENSITY: 1.96 DUAC.
8. EXISTING FUTURE LAND USE: RVLS
9. EXISTING ZONING: RSF-1A
10. ADJACENT FUTURE LAND USE:
    - NORTH: RVLS (CITY OF APOPKA)
    - SOUTH: RVLS (CITY OF APOPKA); R (ORANGE COUNTY)
    - EAST: RVLS (CITY OF APOPKA)
    - WEST: RVLS (CITY OF APOPKA); RS (CITY OF APOPKA); R (ORANGE COUNTY)
11. ADJACENT ZONING:
    - NORTH: RSF-1A (CITY OF APOPKA); T (CITY OF APOPKA)
    - SOUTH: RSF-1A (CITY OF APOPKA); T (CITY OF APOPKA); A-2 (ORANGE COUNTY)
    - EAST: MU-N (CITY OF APOPKA)
    - WEST: RSF-1A (CITY OF APOPKA); AG (CITY OF APOPKA); A-2 (ORANGE COUNTY)
12. PROPOSED UNITS: 110 UNITS
13. LOT REQUIREMENTS:
    - MINIMUM LOT AREA: 12,500 SF
    - MINIMUM LOT WIDTH: 95 ft
    - MINIMUM LOT DEPTH: 130 ft
    - MAXIMUM BUILDING HEIGHT: 35 ft
14. SINGLE-FAMILY DETACHED SETBACKS:
    - FRONT YARD: 25 ft
    - REAR YARD: 20 ft
    - SIDE YARD: 10 ft
    - CORNER YARD: 25 ft
15. REQUIRED OPEN SPACE: (56.23 AC.) x (20%) = 11.25 AC. *PER CITY OF APOPKA LAND DEVELOPMENT CODE 5.4.4.
16. PROPOSED OPEN SPACE:
    - LANDSCAPE BUFFERS: 2.53 AC.
    - LANDSCAPE ISLANDS: 0.07 AC.
    - MAIL KIOSK: 0.06 AC.
    - OPEN SPACE: 0.06 AC.
    - POCKET PARK/DOG PARK: 1.82 AC.
    - STORMWATER PONDS (35% MAX): 6.79 AC.
    - TOTAL: 11.33 AC. (20.15%)
17. WATER SERVICE PROVIDED BY CITY OF APOPKA.
18. RECLAIMED WATER SERVICE PROVIDED BY CITY OF APOPKA.
19. SANITARY SEWER SERVICE PROVIDED BY CITY OF APOPKA.
20. STORMWATER SYSTEM WILL BE PROVIDED AND DESIGNED TO MEET CITY OF APOPKA AND SJRWMD DRAINAGE REQUIREMENTS.
21. ALL UTILITY LINES SHALL BE DESIGNED TO MEET FDEP AND CITY OF APOPKA REQUIREMENTS.
22. UTILITY EASEMENTS DEDICATED TO CITY OF APOPKA UTILITY SHALL BE PROVIDED OVER ALL WATER AND SEWER MAINS LOCATED OUTSIDE THE PUBLIC RIGHT OF WAY.
23. AN HOA SHALL BE CREATED TO PROVIDE FOR THE MANAGEMENT OF ALL COMMON AREA AND FACILITIES.
24. PROJECT LANDSCAPING/IRRIGATION SHALL COMPLY WITH THE CITY OF APOPKA LAND DEVELOPMENT CODE.
25. OPEN SPACE SHALL COMPLY WITH CITY OF APOPKA LDC CODE 5.4.4.
26. THE DEVELOPMENT WILL BE CONSTRUCTED IN ONE (1) PHASE.
27. SIGNAGE SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF APOPKA LAND DEVELOPMENT CODE SECTION 5.10.
28. ALL RETAINING WALL(S) SHALL BE MAINTAINED BY THE HOA.

N
NE
E
SE
S
SW
W
NW

GRAPHIC SCALE

120 0 60 120 240

( IN FEET )
1 inch = 120 ft.

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GEOMETRY PLAN – OVERALL
CONSTRUCTION SITE PLAN

WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

| DRAWN: | DESIGNED: | CHECKED: | DATE: |
|---|---|---|---|
| B. KILLELA | O. SANCHEZ | O. SANCHEZ | 6/11/24 |

| SCALE | PROJECT | SHEET |
|---|---|---|
| 1" = 120' | MIH-005 | C3.0 |

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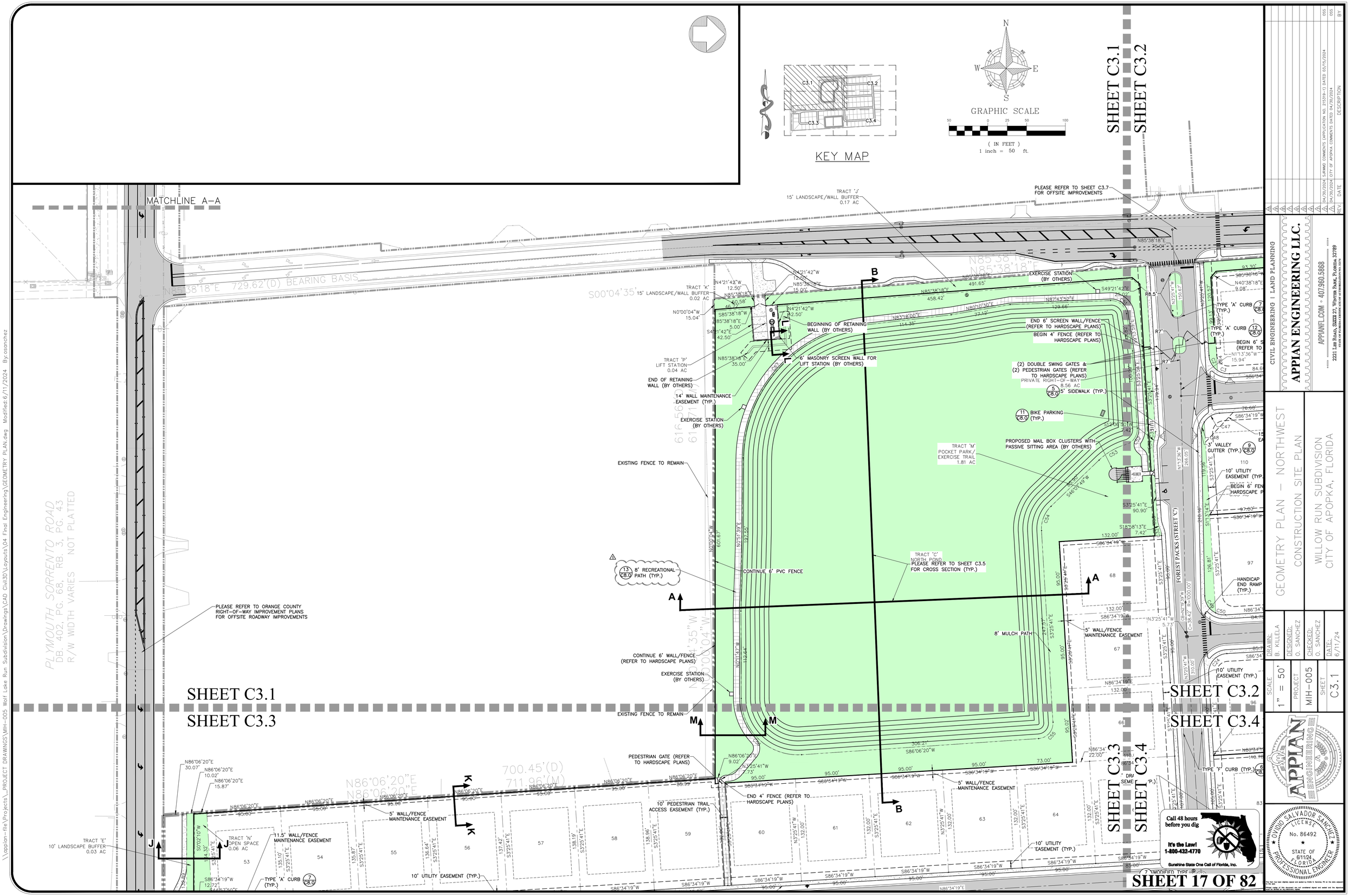





KEY MAP

GRAPHIC SCALE
50 0 25 50 100
( IN FEET )
1 inch = 50 ft.

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GEOMETRY PLAN – NORTHWEST
CONSTRUCTION SITE PLAN
WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

| DRAWN: | DESIGNED: | CHECKED: | DATE: |
|---|---|---|---|
| B. KILLELA | O. SANCHEZ | O. SANCHEZ | 6/11/24 |

| SCALE | PROJECT | SHEET |
|---|---|---|
| 1" = 50' | MIH-005 | C3.1 |

VLADIMIR SALVADOR SANCHEZ
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6/11/24
PROFESSIONAL ENGINEER

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SHEET C3.1
SHEET C3.2

APPY LANE
R/W WIDTH VARIES
NOT PLATTED

TRACT 'I'
15' LANDSCAPE AND WALL BUFFER
0.35 AC

PLEASE REFER TO SHEET C3.7
FOR OFFSITE IMPROVEMENTS

EXERCISE STATION
(BY OTHERS)

END 6' SCREEN WALL/FENCE
(REFER TO HARDSCAPE PLANS)
BEGIN 4' FENCE (REFER TO
HARDSCAPE PLANS)

(2) DOUBLE SWING GATES &
(2) PEDESTRIAN GATES (REFER
TO HARDSCAPE PLANS)
PRIVATE RIGHT-OF-WAY
8.56 AC

5' SIDEWALK (TYP.)

BIKE PARKING
(TYP.)

PROPOSED MAIL BOX CLUSTERS WITH
PASSIVE SITTING AREA (BY OTHERS)

TYPE 'A' CURB
(TYP.)

BEGIN 6' SCREEN WALL/FENCE
(REFER TO HARDSCAPE PLANS)

5' WALL/FENCE
MAINTENANCE EASEMENT

10' UTILITY EASEMENT
(TYP.)

FOREST PACKS (STREET 'C')

TYPE 'F' CURB (TYP.)

15' DRAINAGE
EASEMENT (TYP.)

3' VALLEY
GUTTER (TYP.)

BEGIN 6' FENCE (REFER TO
HARDSCAPE PLANS)

10' FENCE MAINTENANCE EASEMENT

END 6' FENCE (REFER TO
HARDSCAPE PLANS)

HANDICAP
END RAMP
(TYP.)

TAIGA BROWN (STREET 'D')

WOLVES CREEK (STREET 'A')

MODIFIED TYPE
'A' CURB

8' MULCH PATH

TRACT 'H'
LANDSCAPE/FENCE BUFFER
1.25 AC

PLEASE REFER TO SHEET C3.5
FOR CROSS SECTION (TYP.)

CONTINUE 6' WALL/FENCE FENCE
(REFER TO HARDSCAPE PLANS)

SHEET C3.1
SHEET C3.3
SHEET C3.2
SHEET C3.4
SHEET C3.3
SHEET C3.4

GRAPHIC SCALE
50 0 25 50 100
( IN FEET )
1 inch = 50 ft.

KEY MAP
C3.1 C3.2 C3.3 C3.4

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SHEET 18 OF 82

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 1 | 04/30/2024 | SJRWMD COMMENTS (APPLICATION NO. 215319-10) DATED 03/15/2024 | OSS |
| 2 | 04/30/2024 | CITY OF APOPKA COMMENTS DATED 04/29/2024 | OSS |

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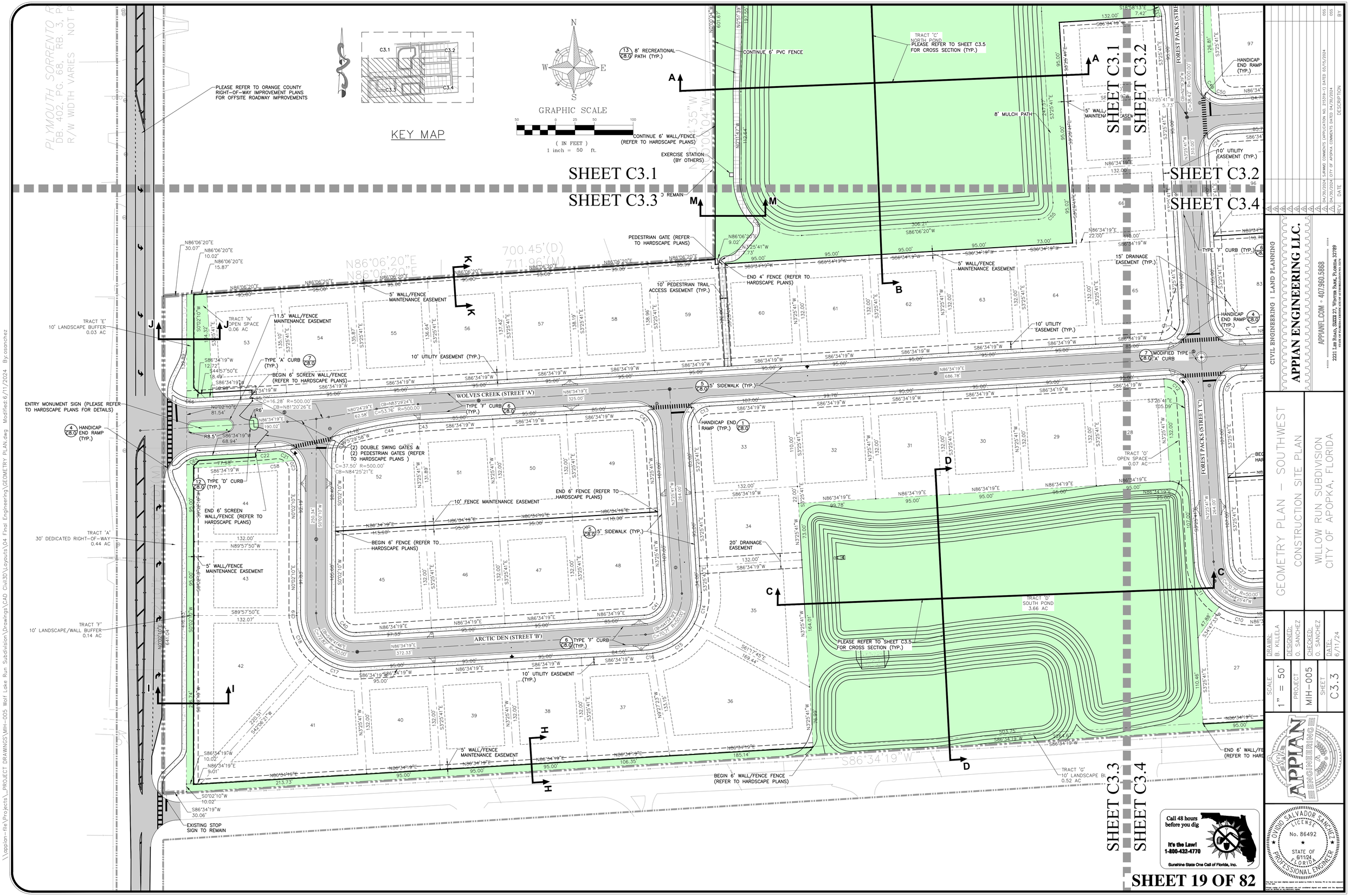
GEOMETRY PLAN – NORTHEAST
CONSTRUCTION SITE PLAN
WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

DRAWN: B. KILLELA
DESIGNED: O. SANCHEZ
CHECKED: O. SANCHEZ
DATE: 6/11/24
SCALE: 1" = 50'
PROJECT: MIH-005
SHEET: C3.2

APPIAN ENGINEERING

NICHOLAS SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
6/11/24
PROFESSIONAL ENGINEER

\\appian-file\Projects_PROJECT DRAWINGS\MIH-005 Wolf Lake Run Subdivision\Drawings\CAD Civil3D\Layouts\04 Final Engineering\GEOMETRY PLAN.dwg Modified: 6/11/2024 By: osanchez




| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 3 | 04/30/2024 | SJRWMD COMMENTS (APPLICATION NO. 215319-1) DATED 03/15/2024 | OSS |
| 2 | 04/30/2024 | CITY OF APOPKA COMMENTS DATED 04/30/2024 | OSS |
| 1 | 04/30/2024 | | |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GEOMETRY PLAN – SOUTHWEST
CONSTRUCTION SITE PLAN
WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

| DRAWN: | DESIGNED: | CHECKED: | DATE: |
|---|---|---|---|
| B. KILLELA | O. SANCHEZ | O. SANCHEZ | 6/11/24 |

| SCALE | PROJECT | SHEET |
|---|---|---|
| 1" = 50' | MIH-005 | C3.3 |


OVIDIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
PROFESSIONAL ENGINEER



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SHEET C3.1
SHEET C3.2
SHEET C3.3
SHEET C3.4

TAIGA BROWN (STREET 'D')
WOLVES CREEK (STREET 'A')
FOREST PACKS (STREET 'C')

HANDICAP END RAMP (TYP.) 4 C8.0
5' SIDEWALK (TYP.) 5 C8.0
TYPE 'F' CURB (TYP.) 6 C8.0
MODIFIED TYPE 'A' CURB 7 C8.0

5' WALL/ MAINTENANCE EASEMENT
8' MULCH PATH
10' UTILITY EASEMENT (TYP.)
15' DRAINAGE EASEMENT (TYP.)
10' FENCE MAINTENANCE EASEMENT
BEGIN 6' FENCE (REFER TO HARDSCAPE PLANS)
END 6' FENCE (REFER TO HARDSCAPE PLANS)
5' WALL/FENCE MAINTENANCE EASEMENT
END 6' WALL/FENCE FENCE (REFER TO HARDSCAPE PLANS)

TRACT 'C' 10' LANDSCAPE BUFFER 0.52 AC
TRACT 'D' SOUTH POND 3.66 AC
TRACT 'O' OPEN SPACE 0.07 AC
TRACT 'H' LANDSCAPE/FENCE BUFFER 1.25 AC

PLEASE REFER TO SHEET C3.5 FOR CROSS SECTION (TYP.)
CONTINUE 6' WALL/FENCE FENCE (REFER TO HARDSCAPE PLANS)

GRAPHIC SCALE
50 0 25 50 100
( IN FEET )
1 inch = 50 ft.

KEY MAP

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SHEET 20 OF 82

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 1 | 04/30/2024 | SJRWMD COMMENTS (APPLICATION NO. 215319-10) DATED 03/15/2024 | OSS |
| 2 | 04/30/2024 | CITY OF APOPKA COMMENTS DATED 04/30/2024 | OSS |

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GEOMETRY PLAN – SOUTHEAST
CONSTRUCTION SITE PLAN
WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

DRAWN: B. KILLELA
DESIGNED: O. SANCHEZ
CHECKED: O. SANCHEZ
DATE: 6/11/24
SCALE: 1" = 50'
PROJECT: MIH-005
SHEET: C3.4

OVIDIO SALVADOR SANCHEZ LICENSE No. 86492 STATE OF FLORIDA 6/11/24 PROFESSIONAL ENGINEER

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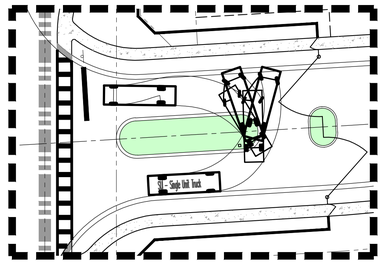
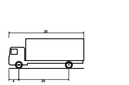
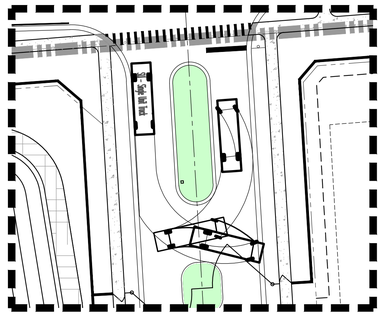
Modified: 6/11/2024 By: osanchez
\\appian-file\Projects_PROJECT DRAWINGS\MIH-005 Wolf Lake Run Subdivision\Drawings\CAD Civil3D\Layouts\04 Final Engineering\GEOMETRY PLAN.dwg Modified: 6/11/2024



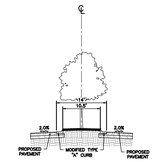



## BOX TRUCK TURN AROUND DETAIL - WESTERN ENTRANCE

SCALE 1" = 30'

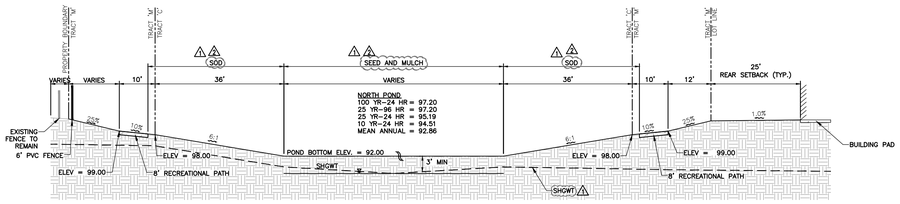
## BOX TRUCK TURN AROUND DETAIL - NORTHERN ENTRANCE

SCALE 1" = 30'



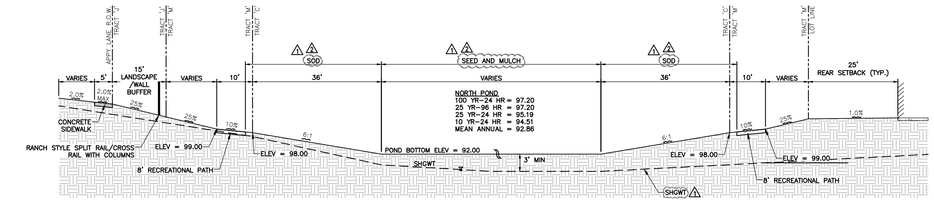

## TRAFFIC ISLAND CROSS SECTION

N.T.S.




## CROSS SECTION A-A

N.T.S.




## CROSS SECTION B-B

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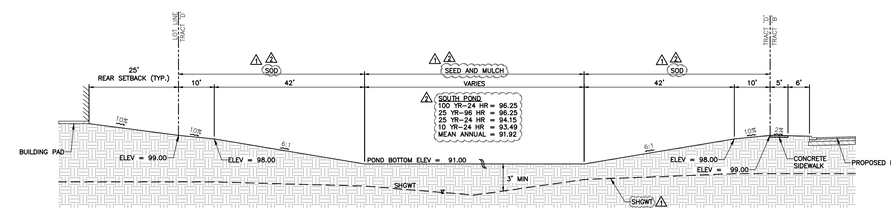
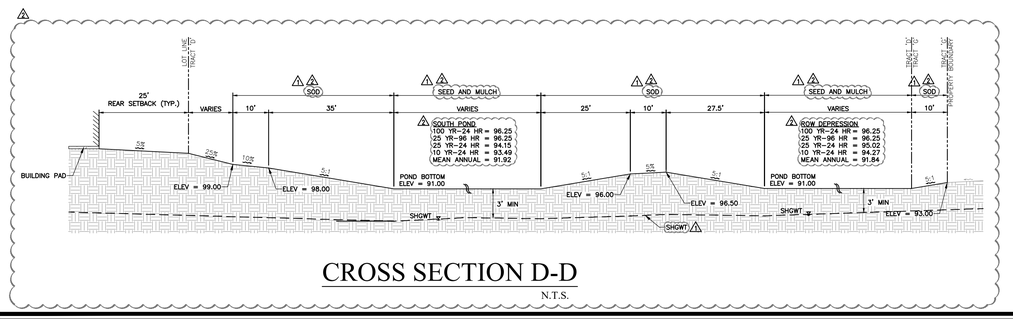



## CROSS SECTION C-C

N.T.S.



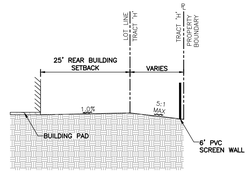

## CROSS SECTION D-D

N.T.S.




## SECTION E-E

N.T.S.




## SECTION F-F

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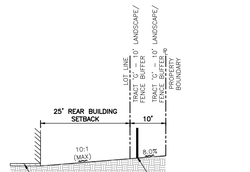


## SECTION G-G

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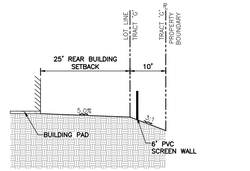
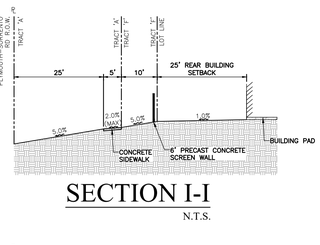


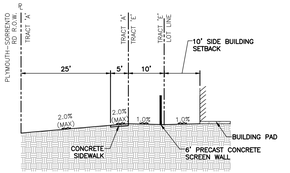

## SECTION H-H

N.T.S.



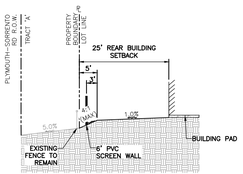

## SECTION I-I

N.T.S.




## SECTION J-J

N.T.S.

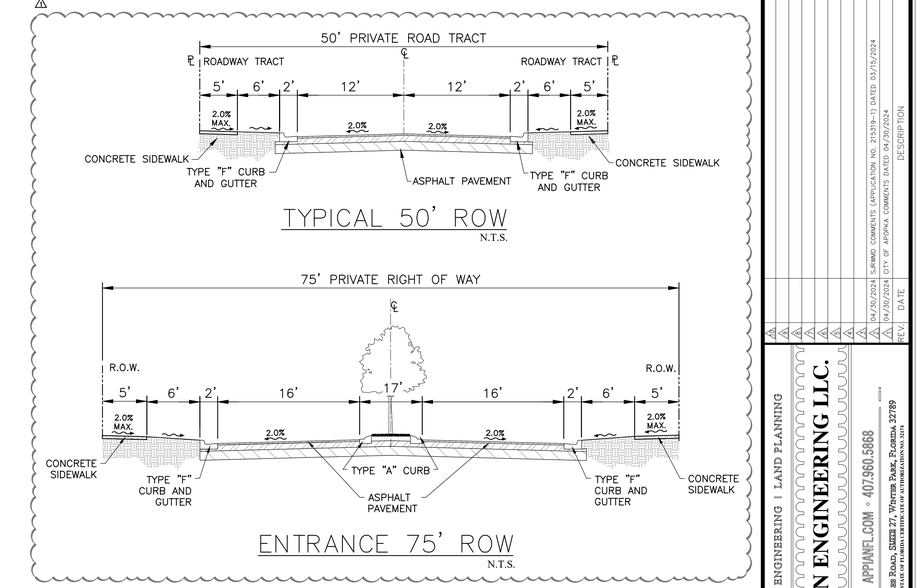



## SECTION K-K

N.T.S.

## SECTION L-L

N.T.S.




## TYPICAL 50' ROW

N.T.S.




## ENTRANCE 75' ROW

N.T.S.

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 1 | 04/30/2024 | SJRWMD COMMENTS (APPLICATION NO. 215319-10) DATED 03/15/2024 | OSS |
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CROSS SECTIONS
CONSTRUCTION SITE PLAN
WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

| | | | |
|---|---|---|---|
| DRAWN: B. KILLELA | DESIGNED: O. SANCHEZ | CHECKED: O. SANCHEZ | DATE: 6/11/24 |
| SCALE: N.T.S. | PROJECT MIH-005 | SHEET C3.5 | |


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**SHEET 21 OF 82**


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| LOT DATA | | | | | |
|---|---|---|---|---|---|
| TRACT / LOT | DESCRIPTION | AREA | *BUILDABLE AREA | LOT FRONTAGE | OWNER |
| LOT 1 | - | 0.30 AC | 6,119 SF | 124.27 LF | PRIVATE |
| LOT 2 | - | 0.29 AC | 6,235 SF | 95.00 LF | PRIVATE |
| LOT 3 | - | 0.29 AC | 6,351 SF | 95.00 LF | PRIVATE |
| LOT 4 | - | 0.30 AC | 6,467 SF | 95.00 LF | PRIVATE |
| LOT 5 | - | 0.30 AC | 6,583 SF | 95.00 LF | PRIVATE |
| LOT 6 | - | 0.30 AC | 6,699 SF | 95.00 LF | PRIVATE |
| LOT 7 | - | 0.31 AC | 6,815 SF | 95.02 LF | PRIVATE |
| LOT 8 | - | 0.47 AC | 11,451 SF | 67.98 LF | PRIVATE |
| LOT 9 | - | 0.35 AC | 7,961 SF | 77.16 LF | PRIVATE |
| LOT 10 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 11 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 12 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 13 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 14 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 15 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 16 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 17 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 18 | - | 0.36 AC | 8,040 SF | 77.51 LF | PRIVATE |
| LOT 19 | - | 0.43 AC | 10,395 SF | 67.81 LF | PRIVATE |
| LOT 20 | - | 0.30 AC | 6,597 SF | 91.71 LF | PRIVATE |
| LOT 21 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 22 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 23 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 24 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 25 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 26 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 27 | - | 0.29 AC | 6,517 SF | 69.01 LF | PRIVATE |
| LOT 28 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 29 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 30 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 31 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 32 | - | 0.30 AC | 6,150 SF | 99.78 LF | PRIVATE |
| LOT 33 | - | 0.33 AC | 6,150 SF | 124.27 LF | PRIVATE |
| LOT 34 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 35 | - | 0.38 AC | 8,447 SF | 76.06 LF | PRIVATE |
| LOT 36 | - | 0.56 AC | 14,429 SF | 67.86 LF | PRIVATE |
| LOT 37 | - | 0.30 AC | 6,505 SF | 92.39 LF | PRIVATE |
| LOT 38 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 39 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 40 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 41 | - | 0.46 AC | 10,763 SF | 62.44 LF | PRIVATE |
| LOT 42 | - | 0.48 AC | 11,420 SF | 59.57 LF | PRIVATE |
| LOT 43 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 44 | - | 0.30 AC | 6,483 SF | 105.78 LF | PRIVATE |
| LOT 45 | - | 0.36 AC | 6,957 SF | 138.11 LF | PRIVATE |
| LOT 46 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 47 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 48 | - | 0.33 AC | 6,150 SF | 124.27 LF | PRIVATE |
| LOT 49 | - | 0.33 AC | 6,150 SF | 124.27 LF | PRIVATE |
| LOT 50 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 51 | - | 0.29 AC | 6,150 SF | 94.99 LF | PRIVATE |
| LOT 52 | - | 0.32 AC | 5,980 SF | 123.49 LF | PRIVATE |
| LOT 53 | - | 0.29 AC | 6,353 SF | 95.00 LF | PRIVATE |
| LOT 54 | - | 0.30 AC | 6,411 SF | 95.00 LF | PRIVATE |
| LOT 55 | - | 0.30 AC | 6,469 SF | 95.00 LF | PRIVATE |

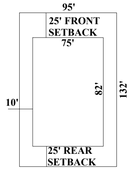
| LOT DATA | | | | | |
|---|---|---|---|---|---|
| TRACT / LOT | DESCRIPTION | AREA | *BUILDABLE AREA | LOT FRONTAGE | OWNER |
| LOT 56 | - | 0.30 AC | 6,527 SF | 95.00 LF | PRIVATE |
| LOT 57 | - | 0.30 AC | 6,585 SF | 95.00 LF | PRIVATE |
| LOT 58 | - | 0.30 AC | 6,643 SF | 95.00 LF | PRIVATE |
| LOT 59 | - | 0.30 AC | 6,701 SF | 95.00 LF | PRIVATE |
| LOT 60 | - | 0.29 AC | 6,759 SF | 95.00 LF | PRIVATE |
| LOT 61 | - | 0.29 AC | 6,817 SF | 95.00 LF | PRIVATE |
| LOT 62 | - | 0.29 AC | 6,875 SF | 95.00 LF | PRIVATE |
| LOT 63 | - | 0.29 AC | 6,933 SF | 95.00 LF | PRIVATE |
| LOT 64 | - | 0.29 AC | 6,991 SF | 95.00 LF | PRIVATE |
| LOT 65 | - | 0.33 AC | 7,049 SF | 124.27 LF | PRIVATE |
| LOT 66 | - | 0.29 AC | 6,123 SF | 95.02 LF | PRIVATE |
| LOT 67 | - | 0.29 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 68 | - | 0.33 AC | 6,150 SF | 95.00 LF | PRIVATE |
| LOT 69 | - | 0.30 AC | 6,214 SF | 125.05 LF | PRIVATE |
| LOT 70 | - | 0.30 AC | 6,560 SF | 100.00 LF | PRIVATE |
| LOT 71 | - | 0.30 AC | 6,560 SF | 100.00 LF | PRIVATE |
| LOT 72 | - | 0.30 AC | 6,560 SF | 100.00 LF | PRIVATE |
| LOT 73 | - | 0.30 AC | 6,560 SF | 100.00 LF | PRIVATE |
| LOT 74 | - | 0.30 AC | 6,560 SF | 100.00 LF | PRIVATE |
| LOT 75 | - | 0.33 AC | 6,150 SF | 124.27 LF | PRIVATE |
| LOT 76 | - | 0.33 AC | 6,150 SF | 124.27 LF | PRIVATE |
| LOT 77 | - | 0.30 AC | 6,560 SF | 100.00 LF | PRIVATE |
| LOT 78 | - | 0.30 AC | 6,560 SF | 100.00 LF | PRIVATE |
| LOT 79 | - | 0.30 AC | 6,560 SF | 100.00 LF | PRIVATE |
| LOT 80 | - | 0.30 AC | 6,560 SF | 100.00 LF | PRIVATE |
| LOT 81 | - | 0.30 AC | 6,560 SF | 100.00 LF | PRIVATE |
| LOT 82 | - | 0.33 AC | 6,214 SF | 125.05 LF | PRIVATE |
| LOT 83 | - | 0.33 AC | 6,062 SF | 125.05 LF | PRIVATE |
| LOT 84 | - | 0.30 AC | 6,400 SF | 100.00 LF | PRIVATE |
| LOT 85 | - | 0.30 AC | 6,400 SF | 100.00 LF | PRIVATE |
| LOT 86 | - | 0.30 AC | 6,400 SF | 100.00 LF | PRIVATE |
| LOT 87 | - | 0.30 AC | 6,400 SF | 100.00 LF | PRIVATE |
| LOT 88 | - | 0.30 AC | 6,400 SF | 100.00 LF | PRIVATE |
| LOT 89 | - | 0.33 AC | 6,000 SF | 124.27 LF | PRIVATE |
| LOT 90 | - | 0.33 AC | 6,000 SF | 124.27 LF | PRIVATE |
| LOT 91 | - | 0.30 AC | 6,400 SF | 100.00 LF | PRIVATE |
| LOT 92 | - | 0.30 AC | 6,400 SF | 100.00 LF | PRIVATE |
| LOT 93 | - | 0.30 AC | 6,400 SF | 100.00 LF | PRIVATE |
| LOT 94 | - | 0.30 AC | 6,400 SF | 100.00 LF | PRIVATE |
| LOT 95 | - | 0.30 AC | 6,400 SF | 100.00 LF | PRIVATE |
| LOT 96 | - | 0.33 AC | 6,062 SF | 125.05 LF | PRIVATE |
| LOT 97 | - | 0.29 AC | 6,160 SF | 97.58 LF | PRIVATE |
| LOT 98 | - | 0.30 AC | 6,400 SF | 100.00 LF | PRIVATE |
| LOT 99 | - | 0.30 AC | 6,400 SF | 100.00 LF | PRIVATE |
| LOT 100 | - | 0.30 AC | 6,400 SF | 100.00 LF | PRIVATE |
| LOT 101 | - | 0.30 AC | 6,400 SF | 100.00 LF | PRIVATE |
| LOT 102 | - | 0.30 AC | 6,400 SF | 100.00 LF | PRIVATE |
| LOT 103 | - | 0.33 AC | 6,000 SF | 124.27 LF | PRIVATE |
| LOT 104 | - | 0.33 AC | 6,400 SF | 124.87 LF | PRIVATE |
| LOT 105 | - | 0.30 AC | 6,400 SF | 100.00 LF | PRIVATE |
| LOT 106 | - | 0.30 AC | 6,400 SF | 100.00 LF | PRIVATE |
| LOT 107 | - | 0.30 AC | 6,400 SF | 100.00 LF | PRIVATE |
| LOT 108 | - | 0.30 AC | 6,400 SF | 100.00 LF | PRIVATE |
| LOT 109 | - | 0.30 AC | 6,400 SF | 100.00 LF | PRIVATE |
| LOT 110 | - | 0.29 AC | 6,160 SF | 100.40 LF | PRIVATE |

| Curve Table | | | |
|---|---|---|---|
| Curve # | Chord Length | Chord Direction | Radius |
| C1 | 35.36' | S41°34'19"W | 25.00' |
| C2 | 21.95' | N29°28'16"W | 25.00' |
| C3 | 16.24' | N74°28'16"W | 25.00' |
| C4 | 8.84' | S89°56'59"W | 75.00' |
| C5 | 66.04' | N60°33'01"W | 75.00' |
| C6 | 40.09' | N18°55'41"W | 75.00' |
| C7 | 39.61' | N11°53'06"E | 75.00' |
| C8 | 65.53' | N53°06'00"E | 75.00' |
| C9 | 9.90' | N82°47'13"E | 75.00' |
| C10 | 49.11' | S74°19'04"E | 75.00' |
| C11 | 65.50' | S29°19'04"E | 75.00' |
| C12 | 35.36' | S48°25'41"E | 25.00' |
| C13 | 35.36' | S41°34'19"W | 25.00' |
| C14 | 41.51' | S12°38'17"W | 75.00' |
| C15 | 65.57' | S54°37'26"W | 75.00' |
| C16 | 7.89' | S83°33'28"W | 75.00' |
| C17 | 58.05' | N70°39'40"W | 75.00' |
| C18 | 58.02' | N25°08'20"W | 75.00' |
| C19 | 3.17' | N1°10'26"W | 75.00' |
| C20 | 13.42' | N15°31'52"W | 25.00' |
| C21 | 26.96' | N63°43'23"W | 25.00' |
| C22 | 27.39' | S85°06'43"W | 537.50' |
| C23 | 35.36' | N48°25'41"W | 25.00' |

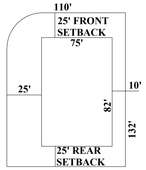
| Curve Table | | | |
|---|---|---|---|
| Curve # | Chord Length | Chord Direction | Radius |
| C24 | 35.36' | S41°34'19"W | 25.00' |
| C25 | 35.36' | S48°25'41"E | 25.00' |
| C26 | 35.36' | N41°34'19"E | 25.00' |
| C27 | 35.36' | S48°25'41"E | 25.00' |
| C28 | 35.36' | N41°34'19"E | 25.00' |
| C29 | 35.36' | N48°25'41"W | 25.00' |
| C30 | 35.36' | S41°34'19"W | 25.00' |
| C32 | 6.76' | S11°11'57"E | 25.00' |
| C33 | 8.11' | S11°11'57"E | 30.00' |
| C34 | 8.11' | S4°20'34"W | 30.00' |
| C35 | 6.76' | S4°20'34"W | 25.00' |
| C39 | 30.60' | S37°46'04"W | 25.00' |
| C40 | 36.41' | S46°41'46"E | 25.00' |
| C41 | 35.36' | N41°34'19"E | 25.00' |
| C42 | 35.36' | N48°25'41"W | 25.00' |
| C43 | 10.00' | S85°57'09"W | 462.50' |
| C44 | 79.28' | S80°24'58"W | 462.50' |
| C45 | 35.36' | N41°34'19"E | 25.00' |
| C46 | 35.36' | N48°25'41"W | 25.00' |
| C47 | 22.84' | S59°23'10"W | 25.00' |
| C48 | 14.38' | S15°29'24"W | 25.00' |
| C49 | 26.10' | S32°41'16"E | 25.00' |
| C50 | 12.63' | S78°47'30"E | 25.00' |

| Curve Table | | | |
|---|---|---|---|
| Curve # | Chord Length | Chord Direction | Radius |
| C51 | 26.51' | S50°45'04"E | 20.00' |
| C52 | 24.91' | S35°05'17"W | 20.00' |
| C53 | 40.37' | S59°52'08"W | 85.00' |
| C54 | 33.53' | S21°21'04"W | 40.00' |
| C55 | 28.17' | S41°20'19"W | 20.00' |
| C56 | 106.51' | N47°02'43"W | 73.00' |
| C57 | 230.63' | N42°04'50"E | 175.00' |
| C58 | 50.85' | S83°56'04"W | 552.50' |
| C60 | 183.02' | N55°02'40"E | 175.00' |
| C61 | 81.54' | N10°02'40"E | 175.00' |
| C62 | 92.22' | N17°06'22"W | 195.00' |
| C63 | 205.45' | N62°34'23"W | 195.00' |
| C64 | 19.91' | N2°23'11"W | 547.50' |
| C65 | 19.10' | S71°36'50"W | 37.00' |
| C66 | 10.41' | N85°20'32"W | 37.00' |

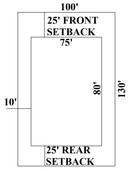
TYPICAL 95' LOT SIZE/PROPOSED BUILDING PAD



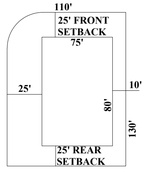

CORNER LOT SIZE/ BUILDING PAD FOR LOTS



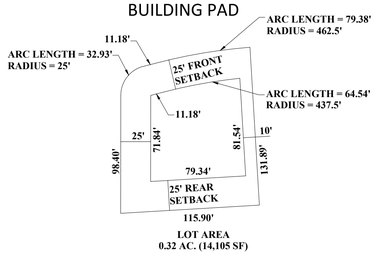

TYPICAL 100' LOT SIZE/PROPOSED BUILDING PAD




CORNER LOT SIZE/ BUILDING PAD FOR LOTS




LOT 52 SIZE/ PROPOSED BUILDING PAD




LOT AREA
0.32 AC. (14,105 SF)

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STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32174

LOT DATA TABLE
CONSTRUCTION SITE PLAN

WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

| DRAWN: | DESIGNED: | CHECKED: | DATE: |
|---|---|---|---|
| B. KILLELA | O. SANCHEZ | O. SANCHEZ | 6/11/24 |

| SCALE | PROJECT | SHEET |
|---|---|---|
| N.T.S. | MIH-005 | C3.6 |

OSCAR SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
6/11/24
PROFESSIONAL ENGINEER

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\\appian-file\Projects_PROJECT DRAWINGS\MIH-005 Wolf Lake Run Subdivision\Drawings\CAD Civil3D\Layouts\04 Final Engineering\APPY LANE OFFSITE IMPROVEMENTS.dwg Modified:6/7/2024 By:osanchez

## ROADWAY NOTES

1. RIGHT SIDE WIDENING WITHIN APPY LANE HAS A POSTED SPEED OF 35 MPH

GRAPHIC SCALE

50 0 25 50 100

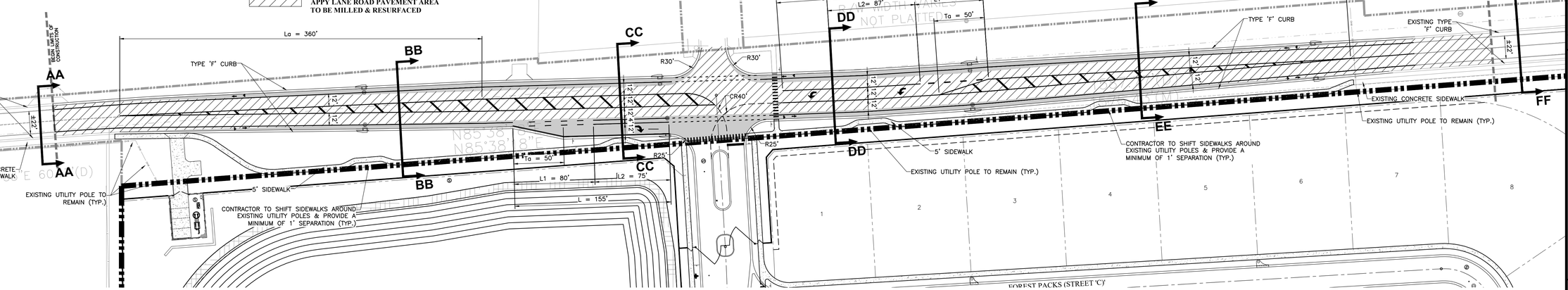
( IN FEET )
1 inch = 50 ft.

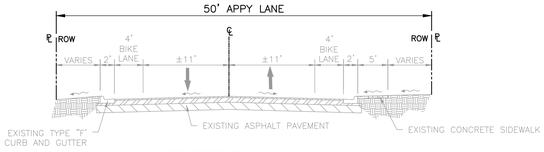
**LEGEND**

APPY LANE PAVEMENT WIDENING

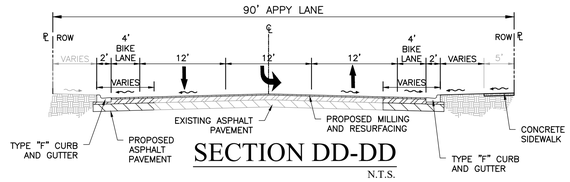
APPY LANE ROAD PAVEMENT AREA TO BE MILLED & RESURFACED

KEY MAP




## SECTION AA-AA
N.T.S.

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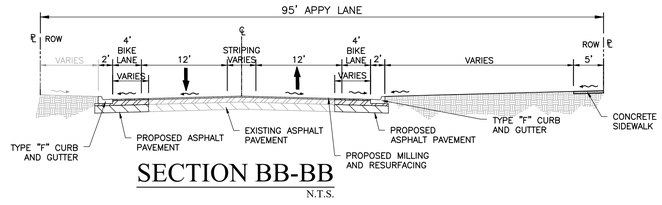


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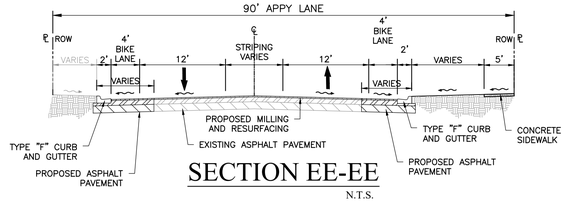


## SECTION EE-EE
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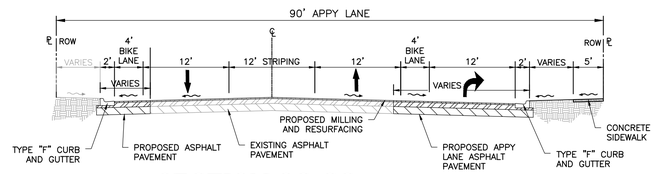


## SECTION CC-CC
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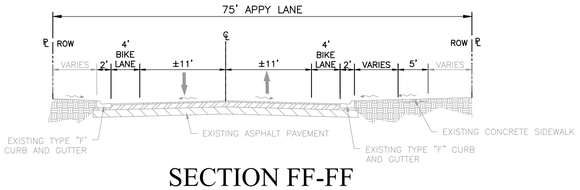


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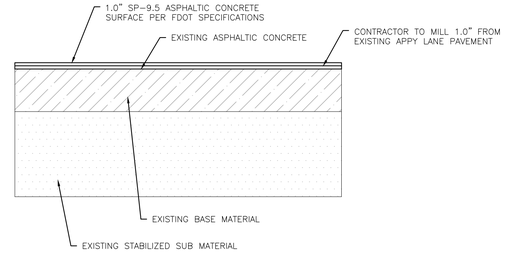
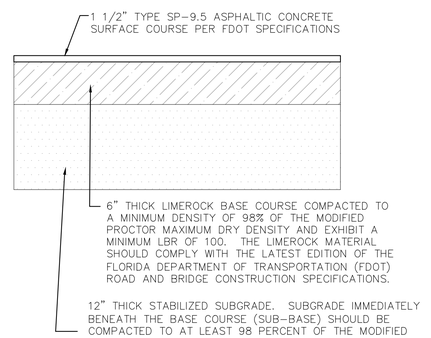



## 1 APPY LANE ROAD PAVEMENT AREA TO BE MILLED AND RESURFACED




## 2 APPY LANE ROAD PAVEMENT WIDENING SECTION

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**SHEET 23 OF 82**

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| 2 | 04/30/2024 | CITY OF APOPKA COMMENTS DATED 04/29/2024 | OSS |

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STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32574

OFFSITE GEOMETRY PLAN – APPY LANE CONSTRUCTION SITE PLAN

WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

| | | | |
|---|---|---|---|
| DRAWN: B. KILLELA | DESIGNED: O. SANCHEZ | CHECKED: O. SANCHEZ | DATE: 6/11/24 |
| SCALE: 1" = 50' | PROJECT: MIH-005 | SHEET: C3.7 | |

OVIDIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
6/11/24
PROFESSIONAL ENGINEER

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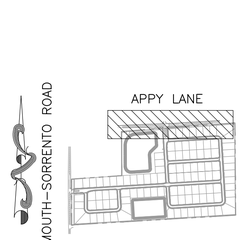
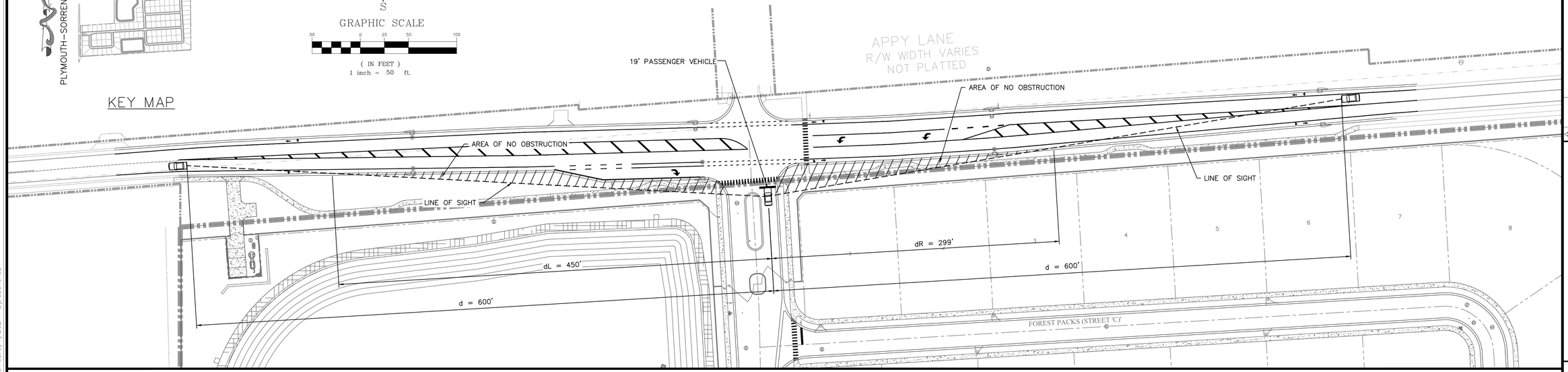
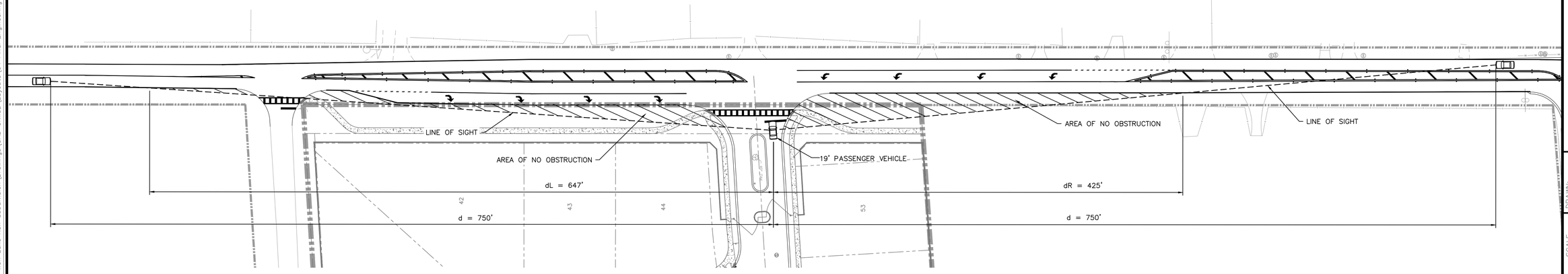
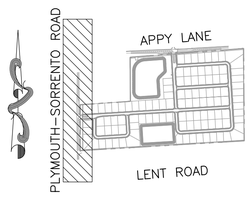


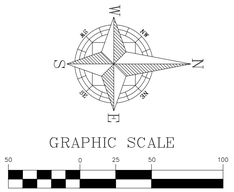

KEY MAP




KEY MAP

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STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32374

# SIGHT TRIANGLE PLAN
## CONSTRUCTION SITE PLAN

## WILLOW RUN SUBDIVISION
## CITY OF APOPKA, FLORIDA

| DRAWN: | DESIGNED: | CHECKED: | DATE: |
|---|---|---|---|
| B. KILLELA | O. SANCHEZ | O. SANCHEZ | 6/11/24 |

| SCALE | PROJECT | SHEET |
|---|---|---|
| 1" = 50' | MIH-005 | C3.8 |

OVIDIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
6/11/24
PROFESSIONAL ENGINEER

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**SHEET 24 OF 82**

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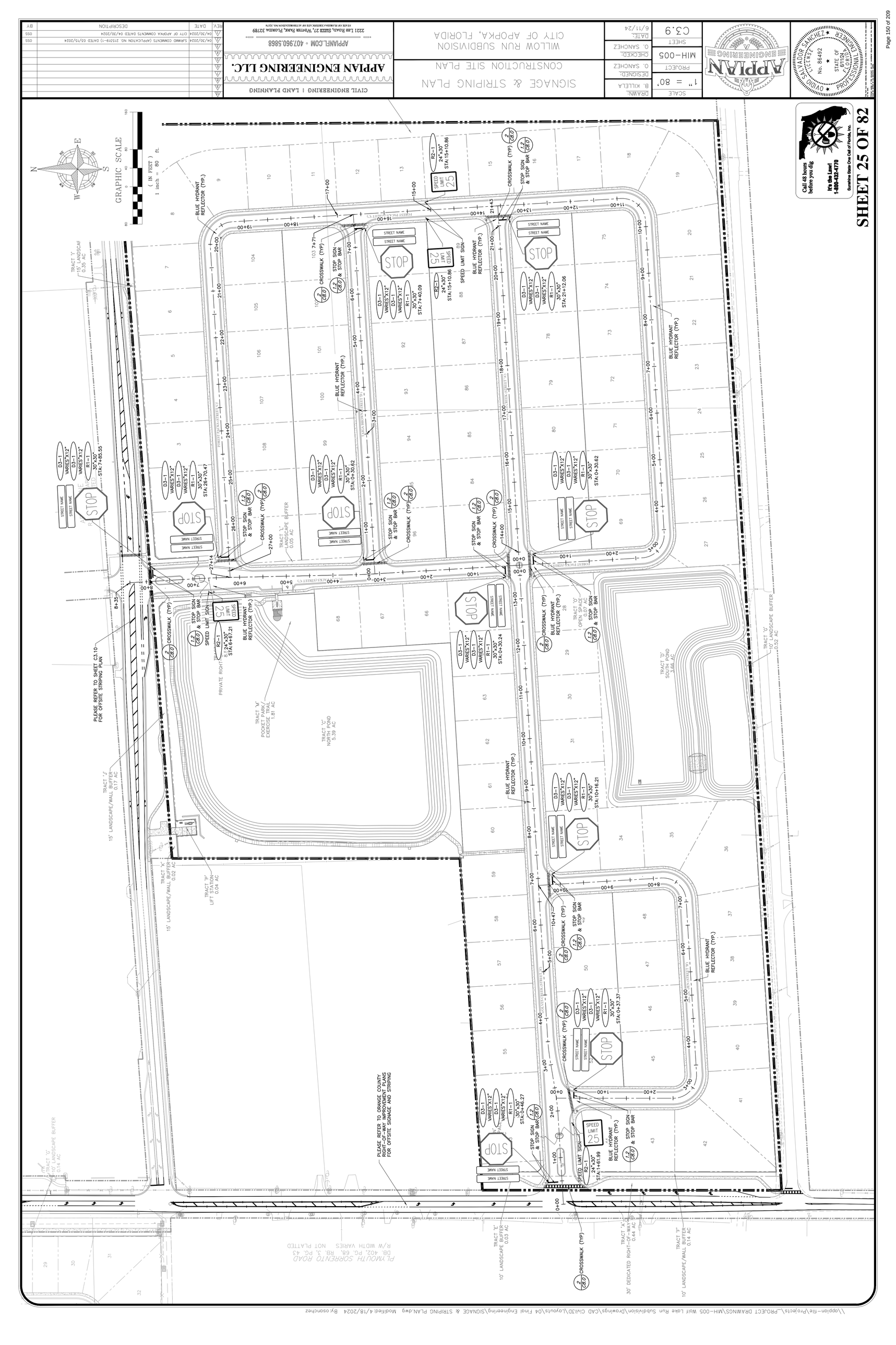
SIGNAGE & STRIPING PLAN
CONSTRUCTION SITE PLAN
WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA
APPIAN ENGINEERING
CIVIL ENGINEERING | LAND PLANNING
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APPIANFL.COM • 407.960.5868
SCALE 1" = 80'
DRAWN: R. KILELEA
DESIGNED: O. SANCHEZ
CHECKED: O. SANCHEZ
PROJECT MIN-005
SHEET C3.9
DATE: 6/11/24
GRAPHIC SCALE ( IN FEET ) 1 inch = 80 ft.
SHEET 25 OF 82
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PLEASE REFER TO SHEET C3.10 FOR OFFSITE STRIPING PLAN
PLEASE REFER TO ORANGE COUNTY MINOR ARTERIAL ROADWAY PLANS FOR OFFSITE SIGNAGE AND STRIPING
PLYMOUTH SORRENTO ROAD
R/W WIDTH VARIES NOT PLATTED
DB. 402, PG. 68, RB. 3, PG. 43
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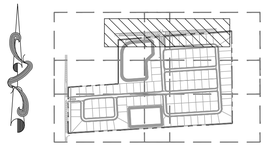
Page 150 of 209

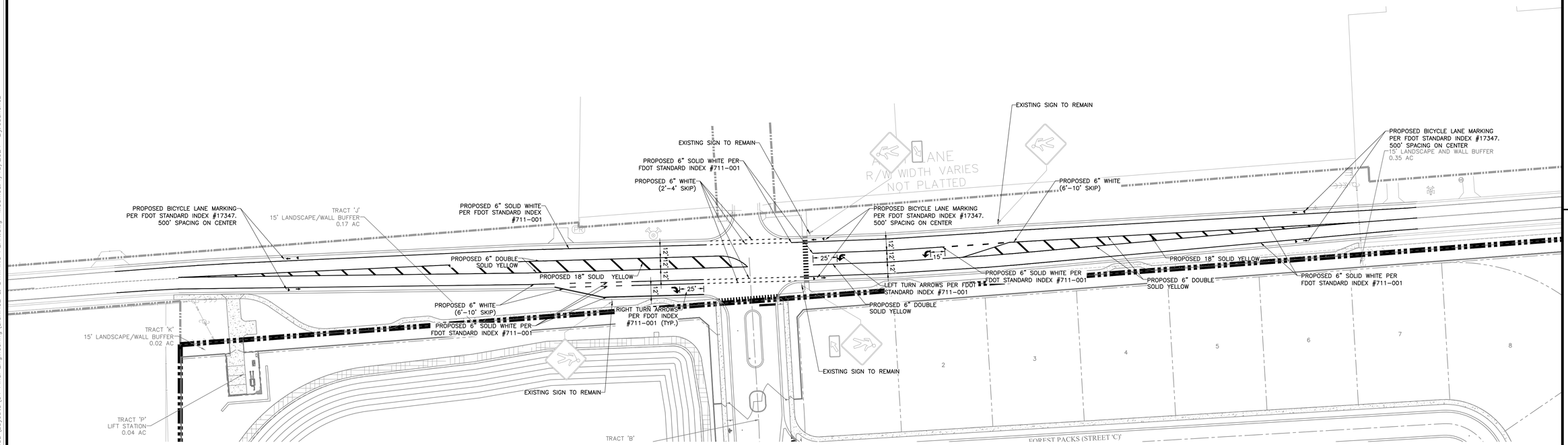


KEY MAP

GRAPHIC SCALE

50 0 25 50 100

( IN FEET )
1 inch = 50 ft.

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|---|---|---|---|---|
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| 2 | 04/30/2024 | | CITY OF APOPKA COMMENTS DATED 04/30/2024 | OSS |


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STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32374

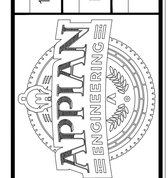

OFFSITE SIGNAGE & STRIPING PLAN

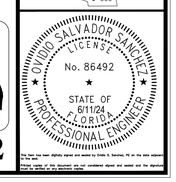
CONSTRUCTION SITE PLAN

WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

| DRAWN: | DESIGNED: | CHECKED: | DATE: |
|---|---|---|---|
| B. KILLELA | O. SANCHEZ | O. SANCHEZ | 6/11/24 |

| SCALE: | PROJECT | SHEET |
|---|---|---|
| 1" = 50' | MIH-005 | C3.10 |

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\\appian-file\Projects_PROJECT DRAWINGS\MIH-005 Wolf Lake Run Subdivision\Drawings\CAD Civil3D\Layouts\04 Final Engineering\UTILITY NOTES.dwg Modified: 3/18/2024 By: olopez

## GENERAL UTILITY NOTES:

1. BACTERIOLOGICAL TESTS WITH CHLORINE RESIDUALS INDICATED (TAKEN ON TWO CONSECUTIVE DAYS) SHALL BE CONDUCTED AT EACH POTABLE WATER METER FOR EVERY BUILDING, AT EVERY WET-TAP CONNECTION AND EVERY LOCATION INDICATED WITHIN THESE PLANS. RESULTS OF THE BACTERIOLOGICAL TESTS SHALL BE PROVIDED TO THE ENGINEER OF RECORD IMMEDIATELY UPON COMPLETION. BACTERIOLOGICAL TEST RESULTS SHALL BE CONSIDERED UNACCEPTABLE IF THE TESTS WERE COMPLETED MORE THAN 30 DAYS BEFORE THE ENGINEER RECEIVED THE RESULTS.

2. ALL WATERMAINS SHALL BE INSTALLED A MINIMUM OF 36" BELOW FINISHED GRADE.

3. ALL WATERMAINS AND FIRELINES PIPES SHALL BE RESTRAINED VIA MECHANICAL JOINTS.

4. WATER MAIN PVC PIPES LESS THAN 4 INCHES MUST CONFORM TO THE SPECIFICATIONS OF ASTM 1785 (SCHEDULE 40, 80, 120) OR ASTM 2241 SDR21 AND MUST BEAR THE NSF LOGO ON EACH INSTALLED LENGTH.

5. UNDERGROUND MARKING TAPE FOR ALL SANITARY FORCEMAINS SHALL BE INSTALLED 4 TO 8 INCHES BELOW THE FINISHED GRADE SURFACE DIRECTLY OVER THE PIPELINE. MARKER TAPE SHALL BE MADE OF AN INERT POLYETHYLENE MATERIAL HAVING A MINIMUM THICKNESS OF 4 MILS AND BE COLOR CODED "SAFETY GREEN".

6. CONTRACTOR SHALL CONDUCT AND PROVIDE RESULTS IMMEDIATELY TO THE ENGINEER OF RECORD FOR PRESSURE AND LEAKAGE TESTS ON THE FORCE MAIN TRUNK LINE ONCE THE PRESSURE SEWER HAS BEEN INSTALLED AND PARTLY BACKFILLED. FINAL BACKFILL AND COMPACTION SHALL NOT COMMENCE UNTIL APPROVAL OF THE PRESSURE AND LEAKAGE TESTS HAS BEEN PROVIDED BY THE ENGINEER OF RECORD.

7. FOLLOWING SATISFACTORY PRESSURE TEST RESULTS, THE CONTRACTOR SHALL DISINFECT ALL SECTIONS OF THE WATER DISTRIBUTION SYSTEM, AND RECEIVE APPROVAL THEREOF FROM APPROPRIATE AGENCIES PRIOR TO PLACING THE SYSTEM INTO SERVICE.

8. FIRE HYDRANTS SHALL BE PLACED A MINIMUM OF 3 FT. AND A MAXIMUM OF 5 FT. FROM THE CURB OR PAVED ROAD SURFACE UNLESS OTHERWISE APPROVED. NO FENCE, TREE, POST, SHRUB, OR OTHER OBJECT WHICH COULD BLOCK THE HYDRANT FROM NORMAL VIEW OR OBSTRUCT THE HYDRANT'S USE SHALL BE LOCATED WITHIN FOUR (4) FEET OF THE HYDRANT. THE FOUR-AND-ONE-HALF INCH (4-1/2") LARGE VOLUME CONNECTION SHALL FACE THE NEAREST ROADWAY. THE CENTER OF THE STEAMER PORT SHALL BE 18 INCHES MINIMUM AND 24 INCHES MAXIMUM ABOVE FINISHED GRADE.

9. ALL FIRE HYDRANT LEADS SHALL HAVE AN INSIDE DIAMETER OF AT LEAST SIX INCHES AND INCLUDE AUXILARY VALVES.

10. WHEN NECESSARY, DEWATERING SHALL BE PROVIDED TO KEEP THE GROUNDWATER ELEVATION A MINIMUM OF 6 INCHES BELOW MAIN BEING LAID.

11. ALL UTILITIES SHALL BE LAID ON A FIRM FOUNDATION WITH ALL UNSUITABLE MATERIAL (MUCK, ROCK, COQUINA, ETC.) REMOVED AND REPLACED WITH CLEAN GRANULAR MATERIAL.

12. TRENCHES SHALL BE BACKFILLED WITH MATERIAL ACCEPTABLE TO CITY OF APOPKA WITH A MINIMUM COMPACTION OF 98% IN PAVED AREAS AND 95% IN UNPAVED AREAS IN ACCORDANCE WITH AASHTO T-180 MODIFIED PROCTOR TEST.

13. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT TRENCH COMPACTION TESTS BE PROVIDED AT POINTS 12 INCHES ABOVE THE PIPE AND AT 12 INCHES VERTICAL INTERVALS TO FINISH GRADE, AT A MINIMUM SPACING OF EVERY 300 FEET.

14. ALL WATER SERVICE ENDINGS SHALL BE MARKED WITH A 2" X 4" LUMBER (PRESSURE TREATED) EXTENDING 4 FEET ABOVE GRADE, WITH WATER SERVICES SECURED 12" MAXIMUM ABOVE THE GROUND.

15. ALL WATER VALVES, INCLUDING CONCRETE COLLAR (WITH DEBRIS CAP), SHALL BE ADJUSTED TO FINISHED GRADE AND THE VALVE BOX LID, PAINTED BLUE TO MAKE THEM PLAINLY VISIBLE.

16. UPON FINAL ACCEPTANCE OF NEW WATER SYSTEMS, WATER VALVES SHALL BE COMPLETELY OPENED BY PUBLIC UTILITIES PERSONNEL. AT NO TIME SHALL CONTRACTOR OPERATE ANY EXISTING VALVES WITHOUT CITY OF APOPKA INSPECTOR PRESENT.

17. ALL WATER MAINS SHALL BE NSF-APPROVED FOR POTABLE WATER USE.

18. PIPE USED IN WATER DISTRIBUTION SYSTEMS SHALL BE EITHER POLYVINYL CHLORIDE (PVC), OR DUCTILE IRON PIPE (DIP).

    (a) ALL PVC PIPE OF NOMINAL DIAMETER FOUR (4) INCHES THROUGH TWELVE (12) INCHES SHALL BE MANUFACTURED IN ACCORDANCE WITH AWWA STANDARD C900, LATEST EDITION. THE PVC PIPE SHALL HAVE A MINIMUM WORKING PRESSURE RATING OF 150PSI AND SHALL HAVE A DIMENSION RATIO (DR) OF 18.
    (b) ALL DUCTILE IRON PIPE SHALL BE MANUFACTURED IN ACCORDANCE WITH ANSI/AWWA A21.51/C151 AND HAVE A MINIMUM 350 PRESSURE CLASS RATING

19. PIPE USED IN GRAVITY SEWER CONSTRUCTION SHALL BE POLYVINYL CHLORIDE (PVC) OR DUCTILE IRON PIPE (DIP). WHERE REFERENCE IS MADE TO AN ASTM, ANSI, OR AASHTO DESIGNATION, IT SHALL BE THE LATEST REVISION.

    (a) PVC GRAVITY SEWER PIPE (4 INCH – 15 INCH), ASTM D3034, SDR 35 – UNIFORM MINIMUM "PIPE STIFFNESS" AT FIVE (5) PERCENT DEFLECTION SHALL BE 46PSI. THE JOINTS SHALL BE INTEGRAL BELL ELASTOMERIC GASKET JOINTS MANUFACTURED IN ACCORDANCE WITH ASTM D3212 AND ASTM F477. APPLICABLE UNI-BELL PLASTIC PIPE ASSOCIATION STANDARD IS UNI-B-4. ALL PVC PIPE SHALL BEAR THE NSF-DW SEAL AND BE GREEN IN OVERALL COLOR. THE MINIMUM STANDARD LENGTH OF PIPE SHALL BE THIRTEEN (13) FEET.
    (b) DUCTILE IRON PIPE SHALL CONFORM TO ANSI/AWWA A21.51/C151, CLASS THICKNESS DESIGNED PER ANSI/AWWA A21.50/C150, WITH MECHANICAL OR PUSH ON JOINTS. AN INTERIOR PROTECTIVE LINING OF COAL TAR EPOXY SHALL BE PROVIDED WITH A MINIMUM DRY THICKNESS OF 30 MILS. DUCTILE IRON GRAVITY SEWERS, WHERE REQUIRED BY CITY OF APOPKA BASED ON GEOTECHNICAL INVESTIGATIONS, SHALL BE WRAPPED WITH POLYETHYLENE FILM, AWWA C105. SEE APPENDIX C. THE MINIMUM STANDARD LENGTH OF PIPE SHALL BE EIGHTEEN (18) FEET.

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## WATER SYSTEM TESTING REQUIREMENTS:

1. THE CONTRACTOR SHALL PERFORM HYDROSTATIC TESTING OF ALL WATER DISTRIBUTION SYSTEMS, AS SET FORTH IN THE FOLLOWING AND SHALL CONDUCT SAID TESTS IN THE PRESENCE OF REPRESENTATIVES FROM CITY OF APOPKA AND/OR OTHER AUTHORIZED AGENCIES. THE CONTRACTOR SHALL PROVIDE 48 HOURS ADVANCED NOTICE PRIOR TO TESTING OF THE WATER DISTRIBUTION SYSTEM.

2. ALL TESTING REQUIRED BY CITY OF APOPKA SHALL BE PAID FOR BY THE DEVELOPER / CONTRACTOR.

3. ALL PROPOSED WATER MAINS SHALL BE TESTED AND CLEARED FOR SERVICE IN ACCORDANCE WITH THE LATEST AWWA STANDARDS AND THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION REQUIREMENTS.

4. PRIOR TO HYDROSTATIC TESTING A PRELIMINARY FLUSHING SHALL BE REQUIRED THROUGH FULL DIAMETER FLUSHING OR SWABBING. PRELIMINARY FLUSHING/SWABBING SHALL BE PERFORMED PER AWWA C651 STANDARD – "DISINFECTING WATER MAINS". ALL PIPING SHALL BE THOROUGHLY CLEANED AND FLUSHED PRIOR TO TESTING TO CLEAR THE LINES OF ALL FOREIGN MATTER. WHILE THE PIPING IS BEING FILLED WITH WATER, CARE SHALL BE EXERCISED TO PERMIT THE ESCAPE OF AIR FROM EXTREMITIES ALONG THE TEST SECTION.

5. HYDROSTATIC TESTING SHALL CONSIST OF PRESSURE TEST AND LEAKAGE TEST. PIPING AND APPURTENANCES TO BE TESTED SHALL BE WITHIN SECTIONS BETWEEN VALVES, NOT EXCEEDING 2,000 FEET, UNLESS ALTERNATE METHODS HAVE RECEIVED PRIOR APPROVAL FROM CITY OF APOPKA. TESTING SHALL NOT PROCEED UNTIL CONCRETE THRUST BLOCKS ARE IN PLACE AND CURED, OR OTHER RESTRAINING DEVICES INSTALLED.

6. HYDROSTATIC TESTING SHALL BE PERFORMED AT 150 POUNDS PER SQUARE INCH PRESSURE, UNLESS OTHERWISE APPROVED BY CITY OF APOPKA, FOR A PERIOD OF NOT LESS THAN TWO (2) HOURS.

7. THE ALLOWABLE RATE OF LEAKAGE SHALL BE LESS THAN THE NUMBER OF GALLONS PER HOUR DETERMINED BY THE FOLLOWING FORMULA:

$$L = \frac{SD\sqrt{P}}{148{,}000}$$

WHERE:
L = ALLOWABLE LEAKAGE, IN GALLONS PER HOUR
S = LENGTH OF PIPE TESTED, IN FEET
D = NOMINAL DIAMETER OF PIPE, IN INCHES
P = AVERAGE TEST PRESSURE DURING THE LEAKAGE TEST, IN POUNDS PER SQUARE INCH (GAUGE)

8. SHOULD THE TEST FAIL, NECESSARY REPAIRS SHALL BE ACCOMPLISHED BY THE CONTRACTOR AND THE TEST REPEATED UNTIL WITHIN PASSING LIMITS. THE CONTRACTOR SHALL FURNISH ALL THE NECESSARY LABOR, PUMPS, GAUGES AND ALL OTHER ITEMS NECESSARY TO CONDUCT THE REQUIRED WATER DISTRIBUTION SYSTEM TESTING AND PERFORM NECESSARY REPAIRS.

## SEWER SYSTEM TESTING REQUIREMENTS:

1. THE CONTRACTOR SHALL PERFORM TESTING OF ALL SANITARY SEWAGE GRAVITY COLLECTION SYSTEMS, AS SET FORTH IN THE FOLLOWING AND SHALL CONDUCT SAID TESTS IN THE PRESENCE OF REPRESENTATIVES FROM CITY OF APOPKA AND/OR OTHER AUTHORIZED AGENCIES. THE CONTRACTOR SHALL PROVIDE 48 HOURS ADVANCED NOTICE PRIOR TO TESTING OF THE WASTEWATER DISTRIBUTION SYSTEM.

2. ALL TESTING REQUIRED BY CITY OF APOPKA SHALL BE PAID FOR BY THE DEVELOPER / CONTRACTOR.

3. GRAVITY MAINS SHALL BE INSPECTED WITH CCTV FOR ALIGNMENT, GRADE VARIATIONS, SEPARATED PIPES, LEAKS, DEFLECTION, CRACKED, BROKEN OR OTHERWISE DEFECTIVE PIPE TO ENSURE OVERALL PIPE INTEGRITY. THE APPROVED CCTV INSPECTION CONTRACTOR SHALL SUBMIT THE REPORT TO THE UTILITIES DEPARTMENT AS REQUIRED.

4. LEAKAGE TESTING FOR GRAVITY MAINS SHALL BE BY LOW-PRESSURE AIR TEST. LEAKAGE TESTING SHALL BE CONDUCTED IN ACCORDANCE WITH THE PROCEDURE FOR "RECOMMENDED PRACTICE FOR LOW PRESSURE AIR TESTING OF INSTALLED SEWER PIPE" AS ESTABLISHED BY THE UNI-BELL PVC PIPE ASSOCIATION.

5. EACH GRAVITY MAIN LEAKAGE TEST SECTION SHALL NOT EXCEED 400 FEET IN LENGTH AND SHALL BE TESTED BETWEEN ADJACENT MANHOLES.

**LOCATION OF PUBLIC WATER SYSYEM MAINS IN ACCORDANCE WITH F.A.C. RULE 62-555.314**

| Other Pipe | Horizontal Separation | Crossings (1) | Joint Spacing @ Crossings (Full Joint Centered) |
|---|---|---|---|
| **Storm Sewer, Stormwater Force Main, Reclaimed Water (2)** | Water Main<br>3 ft. minimum | Water Main<br>12 inches is the minimum, except for storm sewer, then 6 inches is the minimum and 12 inches is preferred | Alternate 3 ft. minimum<br>Water Main |
| **Vacuum Sanitary Sewer** | Water Main<br>10 ft. preferred<br>3 ft. minimum | Water Main<br>12 inches preferred<br>6 inches minimum | Alternate 3 ft. minimum<br>Water Main |
| **Gravity or Pressure Sanitary Sewer, Sanitary Sewer Force Main, Reclaimed Water (4)** | Water Main<br>10 ft. preferred<br>6 ft. minimum (3) | Water Main<br>12 inches is the minimum, except for gravity sewer, then 6 inches is the minimum and 12 inches is preferred | Alternate 6 ft. minimum<br>Water Main |
| **On-Site Sewage Treatment & Disposal System** | 10 ft. minimum | --- | --- |

(1) Water main should cross above other pipe. When water main must be below other pipe, the minimum separation is 12 inches.
(2) Reclaimed water regulated under Part III of Chapter 62-610, F.A.C.
(3) 3 ft. for gravity sanitary sewer where the bottom of the water main is laid at least 6 inches above the top of the gravity sanitary sewer.
(4) Reclaimed water not regulated under Part III of Chapter 62-610, F.A.C.

**Disclaimer – This document is provided for your convenience only. Please refer to F.A.C. Rule 62-555.314 for additional construction requirements.**

## FDEP UTILITY CONSTRUCTION NOTES:

1. NOTE TO THE UTILITY: PURSUANT TO 62-555.345; DO NOT PROVIDE WATER SERVICE TO THIS PROJECT (OTHER THAN FLUSHING/TESTING) UNTIL THE DEPARTMENT OF ENVIRONMENTAL PROTECTION HAS ISSUED A LETTER OF CLEARANCE OR THE UTILITY SHALL BE SUBJECT TO ENFORCEMENT ACTION.

2. THE PERMITTEE WILL PROMPTLY NOTIFY THE DEPARTMENT UPON SALE OR LEGAL TRANSFER OF THE PERMITTED FACILITY

3. ALL WATER MAINS AND APPURTENANCES SHALL BE DISINFECTED AND BACTERIOLOGICALLY EVALUATED IN ACCORDANCE WITH RULE 62-555.340, F.A.C.

4. ALL WATER MAIN PIPE, INCLUDING FITTINGS SHALL BE COLOR CODED OR MARKED USING BLUE AS A PREDOMINANT COLOR TO DIFFERENTIATE DRINKING WATER FROM RECLAIMED OR OTHER WATER. UNDERGROUND PLASTIC PIPE SHALL BE SOLID-WALL BLUE PIPE, SHALL HAVE A CO-EXTRUDED BLUE EXTERNAL SKIN, OR SHALL BE WHITE OR BLACK PIPE WITH BLUE STRIPES INCORPORATED INTO, OR APPLIED TO, THE PIPE WALL; AND UNDERGROUND METAL OR CONCRETE PIPE SHALL HAVE BLUE STRIPES APPLIED TO THE PIPE WALL. PIPE STRIPED DURING MANUFACTURING OF THE PIPE SHALL HAVE CONTINUOUS STRIPES THAT RUN PARALLEL TO THE AXIS OF THE PIPE, THAT ARE LOCATED AT NO GREATER THAN 90-DEGREE INTERVALS AROUND THE PIPE, AND THAT WILL REMAIN INTACT DURING AND AFTER INSTALLATION OF THE PIPE. IF TAPE OR PAINT IS USED TO STRIPE PIPE DURING INSTALLATION OF THE PIPE, THE TAPE OR PAINT SHALL BE APPLIED IN A CONTINUOUS LINE THAT RUNS PARALLEL TO THE AXIS OF THE PIPE AND THAT IS LOCATED ALONG THE TOP OF THE PIPE; FOR PIPES WITH AN INTERNAL DIAMETER OF 24 INCHES OR GREATER, TAPE OR PAINT SHALL BE APPLIED IN CONTINUOUS LINES ALONG EACH SIDE OF THE PIPE AS WELL AS ALONG THE TOP OF THE PIPE.

## FDEP UTILITY SEPARATION REQUIREMENTS

(62-555.314, F.A.C. LOCATION OF PUBLIC WATER SYSTEM MAINS)

FOR THE PURPOSE OF THIS SECTION, THE PHRASE "WATER MAINS" SHALL MEAN MAINS, INCLUDING TREATMENT PLANT PROCESS PIPING, CONVEYING EITHER RAW, PARTIALLY TREATED, OR FINISHED DRINKING WATER; FIRE HYDRANT LEADS; AND SERVICE LINES THAT ARE UNDER THE CONTROL OF A PUBLIC WATER SYSTEM AND THAT HAVE AN INSIDE DIAMETER OF THREE INCHES OR GREATER.

(1) HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS.

   (a) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THEOUTSIDE 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) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER.
   (c) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN 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 FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER.
   (d) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E-6.002, F.A.C.

(2) VERTICAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, AND RECLAIMED WATER PIPELINES.

   (a) NEW OR RELOCATED, UNDERGROUND 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 SIX INCHES, AND PREFERABLY 12 INCHES, ABOVE OR AT LEAST 12 INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
   (b) NEW OR RELOCATED, UNDERGROUND 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 12 INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE 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 FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY- OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

(3) SEPARATION BETWEEN WATER MAINS AND SANITARY OR STORM SEWER MANHOLES.

   (a) NO WATER MAIN SHALL PASS THROUGH, OR COME INTO CONTACT WITH, ANY PART OF A SANITARY SEWER MANHOLE.
   (b) EFFECTIVE AUGUST 28, 2003, WATER MAINS SHALL NOT BE CONSTRUCTED OR ALTERED TO PASS THROUGH, OR COME INTO CONTACT WITH, ANY PART OF A STORM SEWER MANHOLE OR INLET STRUCTURE.

(4) SEPARATION BETWEEN FIRE HYDRANT DRAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS. NEW OR RELOCATED FIRE HYDRANTS WITH UNDERGROUND DRAINS SHALL BE LOCATED SO THAT THE DRAINS ARE AT LEAST THREE FEET FROM 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.; AT LEAST THREE FEET, AND PREFERABLY TEN FEET, FROM ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER; AT LEAST SIX FEET, AND PREFERABLY TEN FEET, FROM 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.; AND AT LEAST TEN FEET FROM ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E-6.002, F.A.C.

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 1 | 04/30/2024 | SJRWMD COMMENTS (APPLICATION NO. 215319-10) DATED 03/15/2024 | OSS |
| 2 | 04/30/2024 | CITY OF APOPKA COMMENTS DATED 04/30/2024 | OSS |

CIVIL ENGINEERING | LAND PLANNING
APPIAN ENGINEERING LLC.
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2221 Lee Road, Suite 27, Winter Park, Florida 32789
STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32674

UTILITY NOTES
CONSTRUCTION SITE PLAN
WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

DRAWN: B. KILLELA
DESIGNED: O. SANCHEZ
CHECKED: O. SANCHEZ
DATE: 6/11/24
SCALE: N.T.S.
PROJECT: MIH-005
SHEET: C4.0

OLIVIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
6/11/24
PROFESSIONAL ENGINEER

This item has been digitally signed and sealed by Olivio S. Sanchez, PE on the date adjacent to the seal.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

**SHEET 27 OF 82**

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## UTILITY NOTES:

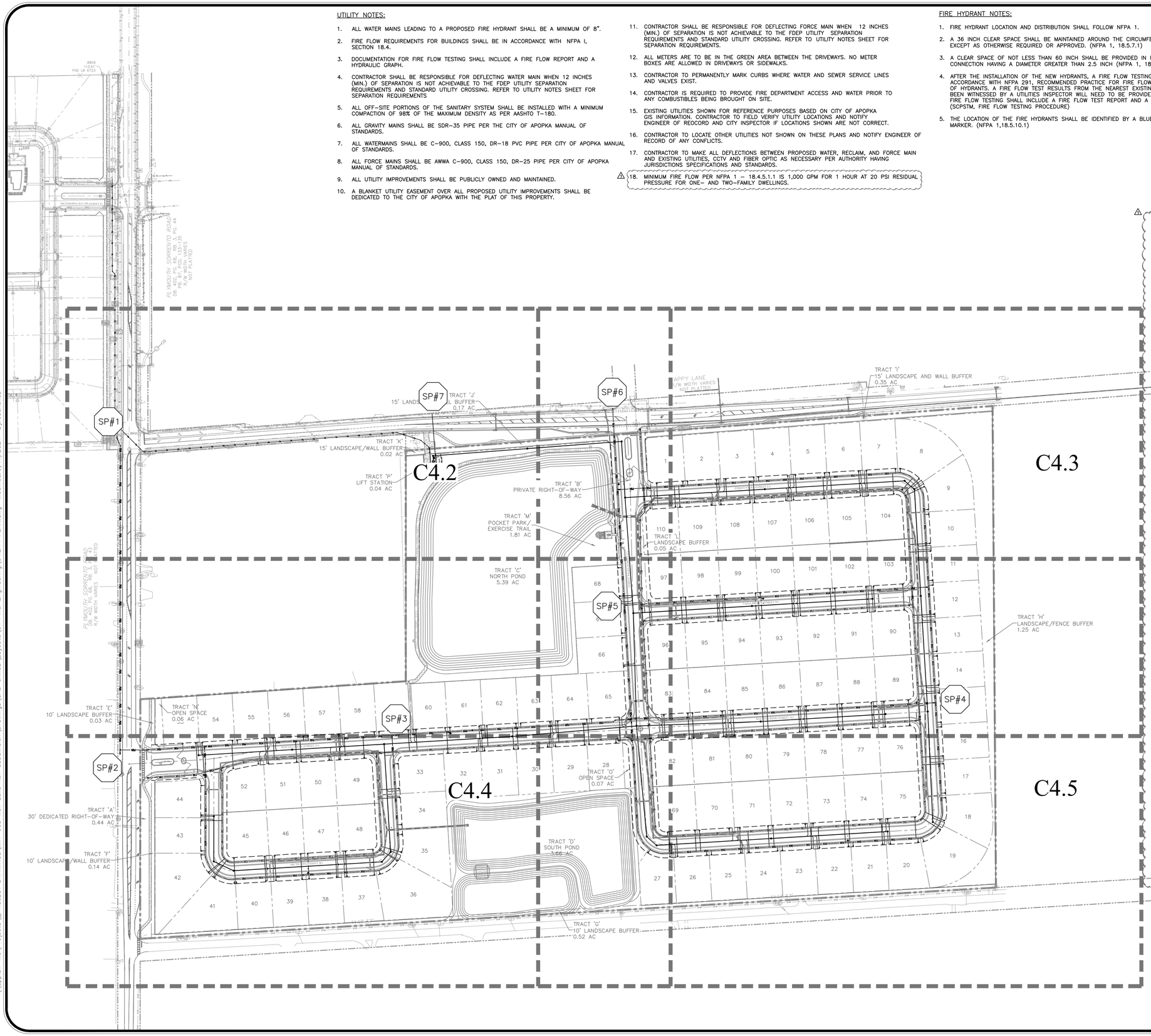
1. ALL WATER MAINS LEADING TO A PROPOSED FIRE HYDRANT SHALL BE A MINIMUM OF 8".
2. FIRE FLOW REQUIREMENTS FOR BUILDINGS SHALL BE IN ACCORDANCE WITH NFPA I, SECTION 18.4.
3. DOCUMENTATION FOR FIRE FLOW TESTING SHALL INCLUDE A FIRE FLOW REPORT AND A HYDRAULIC GRAPH.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR DEFLECTING WATER MAIN WHEN 12 INCHES (MIN.) OF SEPARATION IS NOT ACHIEVABLE TO THE FDEP UTILITY SEPARATION REQUIREMENTS AND STANDARD UTILITY CROSSING. REFER TO UTILITY NOTES SHEET FOR SEPARATION REQUIREMENTS
5. ALL OFF-SITE PORTIONS OF THE SANITARY SYSTEM SHALL BE INSTALLED WITH A MINIMUM COMPACTION OF 98% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
6. ALL GRAVITY MAINS SHALL BE SDR-35 PIPE PER THE CITY OF APOPKA MANUAL OF STANDARDS.
7. ALL WATERMAINS SHALL BE C-900, CLASS 150, DR-18 PVC PIPE PER CITY OF APOPKA MANUAL OF STANDARDS.
8. ALL FORCE MAINS SHALL BE AWWA C-900, CLASS 150, DR-25 PIPE PER CITY OF APOPKA MANUAL OF STANDARDS.
9. ALL UTILITY IMPROVEMENTS SHALL BE PUBLICLY OWNED AND MAINTAINED.
10. A BLANKET UTILITY EASEMENT OVER ALL PROPOSED UTILITY IMPROVEMENTS SHALL BE DEDICATED TO THE CITY OF APOPKA WITH THE PLAT OF THIS PROPERTY.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR DEFLECTING FORCE MAIN WHEN 12 INCHES (MIN.) OF SEPARATION IS NOT ACHIEVABLE TO THE FDEP UTILITY SEPARATION REQUIREMENTS AND STANDARD UTILITY CROSSING. REFER TO UTILITY NOTES SHEET FOR SEPARATION REQUIREMENTS.
12. ALL METERS ARE TO BE IN THE GREEN AREA BETWEEN THE DRIVEWAYS. NO METER BOXES ARE ALLOWED IN DRIVEWAYS OR SIDEWALKS.
13. CONTRACTOR TO PERMANENTLY MARK CURBS WHERE WATER AND SEWER SERVICE LINES AND VALVES EXIST.
14. CONTRACTOR IS REQUIRED TO PROVIDE FIRE DEPARTMENT ACCESS AND WATER PRIOR TO ANY COMBUSTIBLES BEING BROUGHT ON SITE.
15. EXISTING UTILITIES SHOWN FOR REFERENCE PURPOSES BASED ON CITY OF APOPKA GIS INFORMATION. CONTRACTOR TO FIELD VERIFY UTILITY LOCATIONS AND NOTIFY ENGINEER OF REOCORD AND CITY INSPECTOR IF LOCATIONS SHOWN ARE NOT CORRECT.
16. CONTRACTOR TO LOCATE OTHER UTILITIES NOT SHOWN ON THESE PLANS AND NOTIFY ENGINEER OF RECORD OF ANY CONFLICTS.
17. CONTRACTOR TO MAKE ALL DEFLECTIONS BETWEEN PROPOSED WATER, RECLAIM, AND FORCE MAIN AND EXISTING UTILITIES, CCTV AND FIBER OPTIC AS NECESSARY PER AUTHORITY HAVING JURISDICTIONS SPECIFICATIONS AND STANDARDS.

⚠ 18. MINIMUM FIRE FLOW PER NFPA 1 – 18.4.5.1.1 IS 1,000 GPM FOR 1 HOUR AT 20 PSI RESIDUAL PRESSURE FOR ONE- AND TWO-FAMILY DWELLINGS.

## FIRE HYDRANT NOTES:

1. FIRE HYDRANT LOCATION AND DISTRIBUTION SHALL FOLLOW NFPA 1.
2. A 36 INCH CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF FIRE HYDRANTS EXCEPT AS OTHERWISE REQUIRED OR APPROVED. (NFPA 1, 18.5.7.1)
3. A CLEAR SPACE OF NOT LESS THAN 60 INCH SHALL BE PROVIDED IN FRONT OF EACH HYDRANT CONNECTION HAVING A DIAMETER GREATER THAN 2.5 INCH (NFPA 1, 18.5.7.2)
4. AFTER THE INSTALLATION OF THE NEW HYDRANTS, A FIRE FLOW TESTING SHALL BE PERFORMED IN ACCORDANCE WITH NFPA 291, RECOMMENDED PRACTICE FOR FIRE FLOW TESTING AND MARKING OF HYDRANTS. A FIRE FLOW TEST RESULTS FROM THE NEAREST EXISTING HYDRANT THAT HAS BEEN WITNESSED BY A UTILITIES INSPECTOR WILL NEED TO BE PROVIDED. DOCUMENTATION FOR FIRE FLOW TESTING SHALL INCLUDE A FIRE FLOW TEST REPORT AND A HYDRAULIC GRAPH. (SCPSTM, FIRE FLOW TESTING PROCEDURE)
5. THE LOCATION OF THE FIRE HYDRANTS SHALL BE IDENTIFIED BY A BLUE REFLECTIVE PAVEMENT MARKER. (NFPA 1,18.5.10.1)

GRAPHIC SCALE
120 0 60 120 240
( IN FEET )
1 inch = 120 ft.




⚠ UTILITY CROSSING TABLE

| NUMBER | TOP PIPE TYPE | TOP PIPE BOTTOM OF PIPE ELEVATION (FT) | BOTTOM PIPE TYPE | BOTTOM PIPE TOP OF PIPE ELVATION (FT) | DIFFRENCE (FT) |
|---|---|---|---|---|---|
| 1 | SANITARY SEWER | 92.86 | STORM | 91.76 | 1.10 |
| 2 | STORM | 95.60 | SANITARY SEWER | 93.67 | 1.93 |
| 3 | STORM | 98.69 | SANITARY SEWER | 94.18 | 4.50 |
| 4 | STORM | 100.64 | SANITARY SEWER | 97.03 | 3.61 |
| 5 | STORM | 103.05 | SANITARY SEWER | 101.95 | 1.10 |
| 6 | SANITARY SEWER | 96.16 | STORM | 93.40 | 2.76 |
| 7 | SANITARY SEWER | 96.55 | STORM | 95.52 | 1.03 |
| 8 | STORM | 99.67 | SANITARY SEWER | 98.66 | 1.00 |
| 9 | STORM | 104.57 | SANITARY SEWER | 103.56 | 1.01 |
| 10 | SANITARY SEWER | 100.65 | STORM | 99.55 | 1.10 |
| 11 | STORM | 104.17 | SANITARY SEWER | 103.14 | 1.03 |
| 12 | SANITARY SEWER | 105.76 | STORM | 104.76 | 1.00 |
| 13 | SANITARY SEWER | 95.36 | STORM | 94.28 | 1.08 |
| 14 | SANITARY SEWER | 94.87 | STORM | 93.86 | 1.01 |
| 15 | STORM | 99.97 | SANITARY SEWER | 98.96 | 1.01 |
| 16 | SANITARY SEWER | 95.97 | STORM | 94.96 | 1.01 |
| 17 | SANITARY SEWER | 94.45 | STORM | 93.45 | 1.00 |
| 18 | SANITARY SEWER | 94.84 | STORM | 93.66 | 1.18 |
| 19 | SANITARY SEWER | 97.39 | STORM | 96.31 | 1.07 |
| 20 | SANITARY SEWER | 97.67 | STORM | 96.13 | 1.54 |
| 21 | SANITARY SEWER | 98.52 | STORM | 96.22 | 2.30 |
| 22 | SANITARY SEWER | 101.60 | STORM | 100.52 | 1.08 |
| 23 | SANITARY SEWER | 101.71 | STORM | 100.64 | 1.07 |
| 24 | SANITARY SEWER | 100.06 | STORM | 98.98 | 1.09 |
| 25 | NOT USED | | | | |
| 26 | NOT USED | | | | |
| 27 | SANITARY SEWER | 104.75 | WATER MAIN | 103.25 | 1.50 |
| 28 | WATER MAIN | 104.66 | RECLAIM MAIN | 103.66 | 1.00 |
| 29 | STORM | 101.69 | RECLAIM MAIN | 100.69 | 1.00 |
| 30 | WATER MAIN | 99.06 | STORM | 96.02 | 3.04 |
| 31 | RECLAIM MAIN | 100.37 | STORM | 96.86 | 3.51 |
| 32 | RECLAIM MAIN | 100.57 | SANITARY SEWER | 97.77 | 2.80 |
| 33 | WATER MAIN | 100.84 | SANITARY SEWER | 97.54 | 3.30 |
| 34 | WATER MAIN | 100.41 | RECLAIM MAIN | 99.41 | 1.00 |
| 35 | WATER MAIN | 95.82 | STORM | 94.19 | 1.63 |
| 36 | SANITARY SEWER | 94.79 | WATER MAIN | 93.29 | 1.50 |
| 37 | WATER MAIN | 95.65 | STORM | 90.17 | 5.48 |
| 38 | WATER MAIN | 95.68 | RECLAIM MAIN | 94.68 | 1.00 |
| 39 | WATER MAIN | 95.71 | SANITARY SEWER | 94.71 | 1.00 |
| 40 | SANITARY SEWER | 94.86 | RECLAIM MAIN | 93.86 | 1.00 |
| 41 | WATER MAIN | 95.87 | STORM | 93.93 | 1.94 |
| 42 | RECLAIM MAIN | 96.03 | STORM | 94.79 | 1.24 |
| 43 | WATER MAIN | 95.91 | RECLAIM MAIN | 94.91 | 1.00 |
| 44 | WATER MAIN | 97.07 | STORM | 94.88 | 2.19 |
| 45 | WATER MAIN | 106.51 | RECLAIM MAIN | 105.51 | 1.00 |
| 46 | WATER MAIN | 106.93 | STORM | 104.58 | 2.35 |
| 47 | WATER MAIN | 107.06 | SANITARY SEWER | 104.39 | 2.67 |
| 48 | RECLAIM MAIN | 106.73 | STORM | 104.69 | 2.05 |
| 49 | STORM | 104.37 | RECLAIM MAIN | 103.37 | 1.00 |
| 50 | WATER MAIN | 106.57 | RECLAIM MAIN | 103.37 | 3.20 |
| 51 | WATER MAIN | 106.94 | STORM | 104.49 | 2.45 |
| 52 | WATER MAIN | 107.06 | SANITARY SEWER | 102.42 | 4.64 |
| 53 | RECLAIM MAIN | 106.13 | STORM | 104.94 | 1.19 |
| 54 | WATER MAIN | 97.44 | RECLAIM MAIN | 96.44 | 1.00 |
| 55 | RECLAIM MAIN | 96.44 | SANITARY SEWER | 93.59 | 2.85 |
| 56 | STORM | 93.38 | RECLAIM MAIN | 91.76 | 1.62 |
| 57 | STORM | 93.26 | RECLAIM MAIN | 91.76 | 1.50 |
| 58 | WATER MAIN | 97.17 | SANITARY SEWER | 93.27 | 3.90 |
| 59 | WATER MAIN | 100.98 | SANITARY SEWER | 92.73 | 8.25 |
| 60 | WATER MAIN | 96.59 | STORM | 92.52 | 4.07 |
| 61 | WATER MAIN | 98.74 | SANITARY SEWER | 94.30 | 4.44 |
| 62 | WATER MAIN | 98.34 | STORM | 93.35 | 4.99 |
| 63 | WATER MAIN | 98.23 | RECLAIM MAIN | 97.23 | 1.00 |
| 64 | RECLAIM MAIN | 97.23 | STORM | 95.24 | 1.99 |
| 65 | RECLAIM MAIN | 98.60 | SANITARY SEWER | 96.91 | 1.69 |
| 66 | SANITARY SEWER | 95.60 | RECLAIM MAIN | 94.60 | 1.00 |

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**SHEET 28 OF 82**

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 1 | 04/30/2024 | SJRWMD COMMENTS (APPLICATION NO. 215319-1) DATED 03/15/2024 | OSS |
| 2 | 04/30/2024 | CITY OF APOPKA COMMENTS DATED 04/30/2024 | OSS |

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2221 Lee Road, Suite 27, Winter Park, Florida 32789
STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32574

UTILITY PLAN – OVERALL
CONSTRUCTION SITE PLAN

WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

DRAWN: B. KILLELA
DESIGNED: O. SANCHEZ
CHECKED: O. SANCHEZ
DATE: 6/11/24
SCALE: 1" = 120'
PROJECT: MIH-005
SHEET: C4.1

APPIAN ENGINEERING LLC

OVIDIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
6/11/24
PROFESSIONAL ENGINEER

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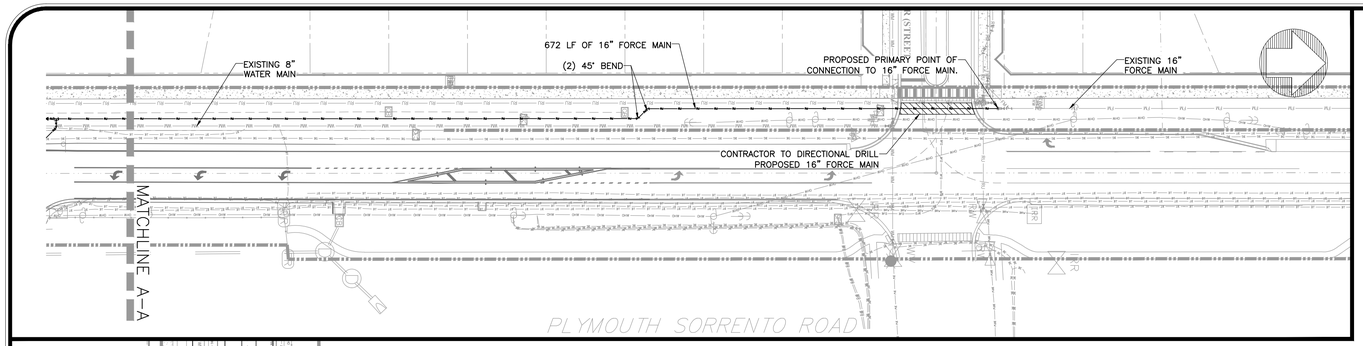
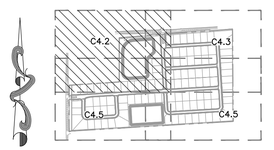
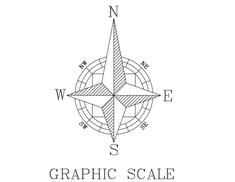
Printed copies of this document are not considered signed and sealed and the digital signature must be verified on any electronic copies.

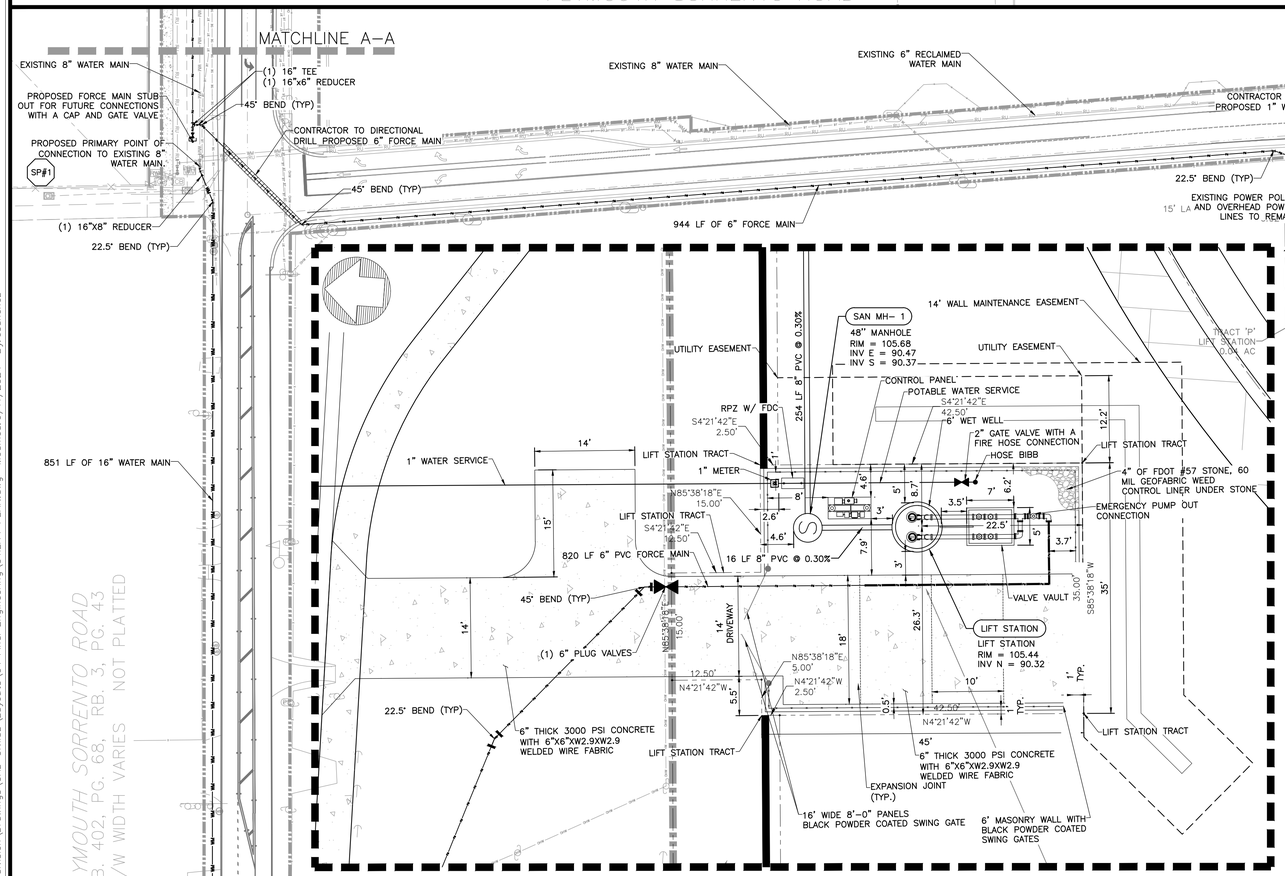



KEY MAP

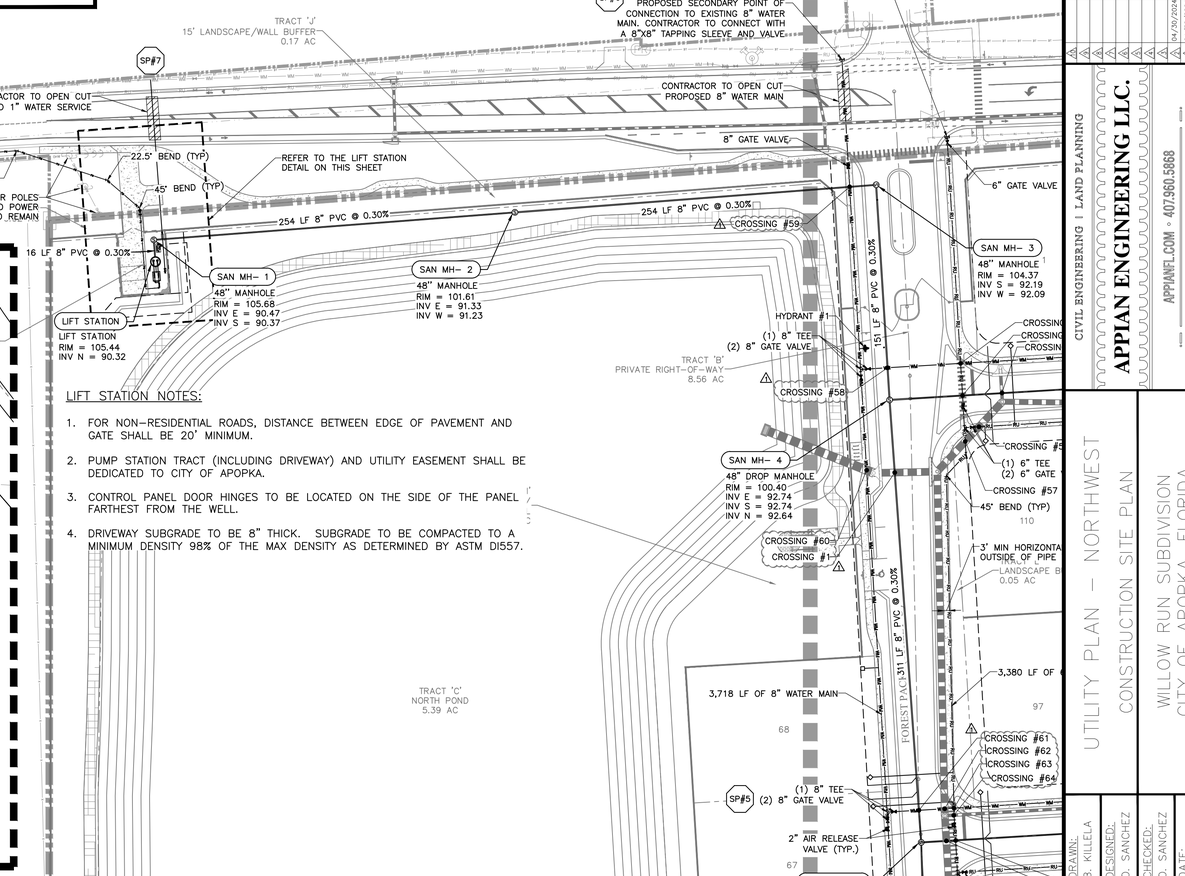



SHEET C4.2
SHEET C4.3




LIFT STATION DETAIL

SCALE: 1" = 10'







SHEET 29 OF 82

| NO. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 1 | 04/30/2024 | SJRWMD COMMENTS (APPLICATION NO. 215319–10) DATED 03/15/2024 | OSS |
| 2 | 04/30/2024 | CITY OF APOPKA COMMENTS DATED 04/30/2024 | OSS |

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2221 Lee Road, Suite 27, Winter Park, Florida 32789

STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32374

UTILITY PLAN – NORTHWEST
CONSTRUCTION SITE PLAN

WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

| | |
|---|---|
| DRAWN: | B. KILLELA |
| DESIGNED: | O. SANCHEZ |
| CHECKED: | O. SANCHEZ |
| DATE: | 6/11/24 |
| SCALE | 1" = 50' |
| PROJECT | MIH–005 |
| SHEET | C4.2 |

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OSCAR SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
PROFESSIONAL ENGINEER

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\\appian-file\Projects_PROJECT DRAWINGS\MIH–005 Wolf Lake Run Subdivision\Drawings\CAD Civil3D\Layouts\04 Final Engineering\UTILITY PLAN.dwg Modified: 6/11/2024 By: osanchez

SHEET C4.2
SHEET C4.3

PROPOSED PRIMARY POINT OF CONNECTION TO EXISTING 12" RECLAIMED WATER MAIN. CONTRACTOR TO CONNECT WITH A 12"x6" TAPPING SLEEVE AND VALVE

SP#6 PROPOSED SECONDARY POINT OF CONNECTION TO EXISTING 8" WATER MAIN. CONTRACTOR TO CONNECT WITH A 8"X8" TAPPING SLEEVE AND VALVE

CONTRACTOR TO OPEN CUT PROPOSED 8" WATER MAIN

8" GATE VALVE

6" GATE VALVE

EXISTING 12" RECLAIMED WATER MAIN

APPY LANE
R/W WIDTH VARIES
NOT PLATTED

TRACT 'I'
15' LANDSCAPE AND WALL BUFFER
0.35 AC

254 LF 8" PVC @ 0.30%
CROSSING #59

SAN MH- 3
48" MANHOLE
RIM = 104.37
INV S = 92.19
INV W = 92.09

151 LF 8" PVC @ 0.30%

HYDRANT #1
(1) 8" TEE
(2) 8" GATE VALVE

TRACT 'B'
PRIVATE RIGHT-OF-WAY
8.56 AC

CROSSING #58

SAN MH- 4
48" DROP MANHOLE
RIM = 100.40
INV E = 92.74
INV S = 92.74
INV N = 92.64

CROSSING #60
CROSSING #1

CROSSING #54
CROSSING #55
CROSSING #2

SINGLE RECLAIMED WATER SERVICE (TYP)

SAN MH- 5
48" MANHOLE
RIM = 105.35
INV E = 95.50
INV W = 93.86

10' UTILITY EASEMENT (TYP)

3,718 LF OF 8" WATER MAIN

SINGLE RECLAIMED WATER SERVICE (TYP)

SAN MH- 6
48" DROP MANHOLE
RIM = 107.40
INV SE = 100.73
INV W = 97.41

CROSSING #4

22.5° BEND (TYP)

36 LF 8" PVC @ 0.30%

SAN MH- 7
48" MANHOLE
RIM = 107.77
INV S = 100.94
INV NW = 100.84

FOREST PACKS (STREET 'C')

375 LF 8" PVC @ 0.51%

375 LF 8" PVC @ 0.30%

CROSSING #3

HYDRANT #2

SINGLE POTABLE WATER SERVICE (TYP)

3,380 LF OF 6" RECLAIMED WATER MAIN

SINGLE SANITARY SEWER LATERAL (TYP)

CROSSING #56
(1) 6" TEE
(2) 6" GATE VALVE

SINGLE POTABLE WATER SERVICE (TYP)

CROSSING #57
45° BEND (TYP)

3' MIN HORIZONTAL SEPARATION FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE

LANDSCAPE BUFFER
0.05 AC

CROSSING #5

3,380 LF OF 6" RECLAIMED WATER MAIN

CROSSING #53

3,718 LF OF 8" WATER MAIN

10' UTILITY EASEMENT (TYP)

SINGLE SANITARY SEWER LATERAL (TYP)

286 LF 8" PVC @ 0.30%

CROSSING #50
CROSSING #49
CROSSING #51
CROSSING #52

(1) 8" TEE
(2) 8" GATE VALVE

2" AIR RELEASE VALVE (TYP.)

SAN MH- 8
48" MANHOLE
RIM = 110.83
INV S = 101.89
INV N = 101.79

3,718 LF OF 8" WATER MAIN

TRACT 'H'
LANDSCAPE/FENCE BUFFER
1.25 AC

3,718 LF OF 8" WATER MAIN

FOREST PACKS (STREET 'C')

311 LF 8" PVC @ 0.30%

CROSSING #61
CROSSING #62
CROSSING #63
CROSSING #64

SINGLE POTABLE WATER SERVICE (TYP)

CROSSING #8

HYDRANT #3

816 LF OF 8" WATER MAIN

SINGLE POTABLE WATER SERVICE (TYP)

SP#5 (1) 8" TEE
(2) 8" GATE VALVE

2" AIR RELEASE VALVE (TYP.)

TAIGA BROWN (STREET 'D')

324 LF 8" PVC @ 2.68%

318 LF 8" PVC @ 0.40%

SAN MH- 18
48" DROP MANHOLE
RIM = 102.45
INV S = 93.77
INV N = 93.67
INV E = 96.12

CROSSING #7
CROSSING #65
CROSSING #6

SINGLE RECLAIMED WATER SERVICE (TYP)

SAN MH- 19
48" MANHOLE
RIM = 104.67
INV E = 97.49
INV W = 97.39

726 LF OF 6" RECLAIMED WATER MAIN

2" AIR RELEASE VALVE (TYP.)

SAN MH- 20
48" MANHOLE
RIM = 110.18
INV W = 106.15
INV N = 106.25
INV S = 106.25

(1) 6" TEE
(2) 6" GATE VALVE

(1) 6" TEE
(2) 6" GATE VALVE

311 LF 8" PVC @ 0.83%

CROSSING #9

3,380 LF OF 6" RECLAIMED WATER MAIN

3,380 LF OF 6" RECLAIMED WATER MAIN

SHEET C4.2
SHEET C4.4
SHEET C4.3
SHEET C4.5

SAN MH- 15
48" MANHOLE
RIM = 99.67
INV W = 94.78
INV S = 94.78
INV E = 95.24
INV N = 94.68

303 LF 8" PVC @ 0.30%

CROSSING #17
CROSSING #41

(1) 8" CROSS
(3) 8" GATE VALVE

CROSSING #35
CROSSING #36
CROSSING #18

CROSSING #42
CROSSING #39
CROSSING #43
CROSSING #44

SINGLE POTABLE WATER SERVICE (TYP)

SINGLE RECLAIMED WATER SERVICE (TYP)

SAN MH- 16
48" MANHOLE
RIM = 108.01
INV E = 99.43
INV W = 99.33

10' UTILITY EASEMENT (TYP)

2,191 LF OF 8" WATER MAIN

2" AIR RELEASE VALVE (TYP.)

SAN MH- 17
48" MANHOLE
RIM = 109.74
INV W = 102.54
INV N = 105.74
INV S = 105.74

SINGLE POTABLE WATER SERVICE (TYP)

HYDRANT #4

CROSSING #45
CROSSING #48
CROSSING #46
CROSSING #47

(1) 8" TEE
(2) 8" GATE VALVE

SP#4

45° BEND (TYP)

WOLVES CREEK (STREET 'A')

335 LF 8" PVC @ 0.93%

334 LF 8" PVC @ 0.30%

333 LF 8" PVC @ 1.23%

2" AIR RELEASE VALVE (TYP.)

CROSSING #1

(1) 6" TEE
(2) 6" GATE VALVE

SAN MH- 9
48" MANHOLE
RIM = 110.90
INV S = 105.11
INV N = 103.84

SHEET C4.2
SHEET C4.4
SHEET C4.3
SHEET C4.5

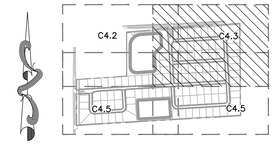
N
W E
S

GRAPHIC SCALE

50 0 25 50 100

( IN FEET )
1 inch = 50 ft.

KEY MAP




| BY | DESCRIPTION | DATE | REV. |
|---|---|---|---|
| OSS | SJRWMD COMMENTS (APPLICATION NO. 215319-10) DATED 03/15/2024 | 04/30/2024 | 1 |
| OSS | CITY OF APOPKA COMMENTS DATED 04/30/2024 | 04/30/2024 | 2 |

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STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32274

UTILITY PLAN – NORTHEAST
CONSTRUCTION SITE PLAN

WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

| DRAWN: | DESIGNED: | CHECKED: | DATE: |
|---|---|---|---|
| B. KILLELA | O. SANCHEZ | O. SANCHEZ | 6/11/24 |

| SCALE: | PROJECT | SHEET |
|---|---|---|
| 1" = 50' | MIH-005 | C4.3 |

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OSVALDO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
PROFESSIONAL ENGINEER

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**SHEET 30 OF 82**

\\appian-file\Projects_PROJECT DRAWINGS\MIH-005 Wolf Lake Run Subdivision\Drawings\CAD Civil3D\Layouts\04 Final Engineering\UTILITY PLAN.dwg Modified: 6/11/2024 By: osanchez

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2221 Lee Road, Suite 27, Winter Park, Florida 32789
STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32374


| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 1 | 04/30/2024 | SJRWMD COMMENTS (APPLICATION NO. 215319-10) DATED 03/15/2024 | OSS |
| 2 | 04/30/2024 | CITY OF APOPKA COMMENTS DATED 04/29/2024 | OSS |

UTILITY PLAN - SOUTHWEST
CONSTRUCTION SITE PLAN

WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

DRAWN: B. KILLELA
DESIGNED: O. SANCHEZ
CHECKED: O. SANCHEZ
DATE: 6/11/24

SCALE 1" = 50'
PROJECT MIH-005
SHEET C4.4

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LICENSE
No. 86492
STATE OF FLORIDA
6/11/24
PROFESSIONAL ENGINEER

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SHEET C4.4
SHEET C4.5

**SHEET 31 OF 82**



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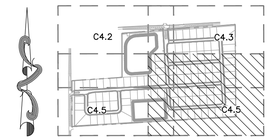
SHEET C4.2
SHEET C4.3
SHEET C4.4
SHEET C4.5

3,718 LF OF TER
3,380 LF OF 6" RECLAIMED WATER MAIN
FOREST PACE (311 LF 8
CROSSING #61
CROSSING #62
CROSSING #63
CROSSING #64
SINGLE POTABLE WATER SERVICE (TYP)
CROSSING #8
HYDRANT #3
816 LF OF 8" WATER MAIN
SINGLE POTABLE WATER SERVICE (TYP)
CROSSING #50
CROSSING #49
CROSSING #51
CROSSING #52
(1) 8" TEE
(2) 8" GATE VALVE
2" AIR RELEASE VALVE (TYP.)
SP#5
(2)
2" AIR RELEASE VALVE (TYP.)
TAIGA BROWN (STREET 'D')
324 LF 8" PVC @ 2.68%
SAN MH- 8
48" MANHOLE
RIM = 110.83
INV S = 101.89
INV N = 101.79
318 LF 8" PVC @ 0.40%
SAN MH- 18
48" DROP MANHOLE
RIM = 102.45
INV S = 93.77
INV N = 93.67
INV E = 96.12
CROSSING #7
CROSSING #65
CROSSING #6
SINGLE RECLAIMED WATER SERVICE (TYP)
SAN MH- 19
48" MANHOLE
RIM = 104.67
INV E = 97.49
INV W = 97.39
726 LF OF 6" RECLAIMED WATER MAIN
SAN MH- 20
48" MANHOLE
RIM = 110.18
INV W = 106.15
INV N = 106.25
INV S = 106.25
(1) 6" TEE
(2) 6" GATE VALVE
(1) 6" TEE
(2) 6" GATE VALVE
3,718 LF OF 8" WATER MAIN
TRACT 'H'
LANDSCAPE/FENCE BUFFER
1.25 AC
CROSSING #9
311 LF 8" PVC @ 0.83%
3,380 LF OF 6" RECLAIMED WATER MAIN
303 LF 8" PVC @ 0.30%
3,380 LF OF 6" RECLAIMED WATER MAIN
SAN MH- 15
48" MANHOLE
RIM = 99.67
INV W = 94.78
INV S = 94.78
INV E = 95.24
INV N = 94.68
CROSSING #17
CROSSING #41
(1) 8" CROSS
(3) 8" GATE VALVE
CROSSING #42
CROSSING #39
CROSSING #43
CROSSING #44
SINGLE POTABLE WATER SERVICE (TYP)
SINGLE RECLAIMED WATER SERVICE (TYP)
SAN MH- 16
48" MANHOLE
RIM = 108.01
INV E = 99.43
INV W = 99.33
10' UTILITY EASEMENT (TYP)
2,191 LF OF 8" WATER MAIN
2" AIR RELEASE VALVE (TYP.)
SAN MH- 17
48" MANHOLE
RIM = 109.74
INV W = 102.54
INV N = 105.74
INV S = 105.74
SINGLE POTABLE WATER SERVICE (TYP)
HYDRANT #4
CROSSING #45
CROSSING #48
CROSSING #46
CROSSING #47
(1) 8" TEE
(2) 8" GATE VALVE
SP#4
CROSSING #35
CROSSING #36
CROSSING #18
45° BEND (TYP)
45° BEND (TYP)
335 LF 8" PVC @ 0.93%
WOLVES CREEK (STREET 'A')
334 LF 8" PVC @ 0.30%
333 LF 8" PVC @ 1.23%
SAN MH- 9
48" MANHOLE
RIM = 110.90
INV S = 105.11
INV N = 103.84
CROSSING #11
(1) 6" TEE
(2) 6" GATE VALVE
2" AIR RELEASE VALVE (TYP.)
45° BEND (TYP)
CROSSING #15
SINGLE SANITARY SEWER LATERAL (TYP)
2,078 LF OF 6"RECLAIMED WATER MAIN
CROSSING #37
CROSSING #38
CROSSING #16
CROSSING #66
HYDRANT #6
(1) 6" CROSS
(3) 6" GATE VALVE
CROSSING #40
CROSSING #14
3,718 LF OF 8" WATER MAIN
OPEN SPACE
0.07 AC
3,380 LF OF 6" RECLAIMED WATER MAIN
297 LF 8" PVC @ 0.30%
CROSSING #12
3,718 LF OF 8" WATER MAIN
298 LF 8" PVC @ 0.30%
CROSSING #13
SAN MH- 12
48" MANHOLE
RIM = 106.86
INV W = 102.46
INV E = 102.56
SAN MH- 11
48" MANHOLE
RIM = 110.73
INV W = 106.76
INV S = 106.86
SAN MH- 10
48" MANHOLE
RIM = 109.99
INV SE = 106.07
INV N = 106.00
3,380 LF OF 6" RECLAIMED WATER MAIN
CROSSING #10
SINGLE RECLAIMED WATER SERVICE (TYP)
22.5° BEND (TYP)
22.5° BEND (TYP)
SAN MH- 14
48" MANHOLE
RIM = 99.56
INV N = 95.67
INV SE = 95.77
313 LF 8" PVC @ 1.34%
308 LF 8" PVC @ 2.11%
22.5° BEND (TYP)
TRACT 'D'
SOUTH POND
3.66 AC
36 LF 8" PVC @ 0.30%
2" AIR RELEASE VALVE (TYP.)
SINGLE SANITARY SEWER LATERAL (TYP)
SINGLE POTABLE WATER SERVICE (TYP)
SINGLE POTABLE WATER SERVICE (TYP)
3,718 LF OF 8" WATER MAIN
HYDRANT #5
10' UTILITY EASEMENT (TYP)
SAN MH- 13
48" MANHOLE
RIM = 100.22
INV NW = 95.87
INV E = 95.97
TRACT 'G'
10' LANDSCAPE BUFFER
0.52 AC

SHEET C4.2
SHEET C4.3
SHEET C4.4
SHEET C4.5

N
W
E
S
GRAPHIC SCALE
50 0 25 50 100
( IN FEET )
1 inch = 50 ft.



KEY MAP

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 1 | 04/30/2024 | SJRWMD COMMENTS (APPLICATION NO. 215319-10) DATED 03/15/2024 | OSS |
| 2 | 04/30/2024 | CITY OF APOPKA COMMENTS DATED 04/30/2024 | OSS |

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STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32374

UTILITY PLAN – SOUTHEAST
CONSTRUCTION SITE PLAN
WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

DRAWN: B. KILLELA
DESIGNED: O. SANCHEZ
CHECKED: O. SANCHEZ
DATE: 6/11/24
SCALE: 1" = 50'
PROJECT: MIH-005
SHEET: C4.5

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Sunshine State One Call of Florida, Inc.

OLVIDIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
6/11/24
PROFESSIONAL ENGINEER

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**SHEET 32 OF 82**

\\appian-file\Projects_PROJECT DRAWINGS\MIH-005 Wolf Lake Run Subdivision\Drawings\CAD Civil3D\Layouts\04 Final Engineering\UTILITY PLAN.dwg Modified: 6/11/2024 By: osanchez

\\appian-file\Projects_PROJECT DRAWINGS\MIH-005 Wolf Lake Run Subdivision\Drawings\CAD Civil3D\Layouts\04 Final Engineering\FIRE TRUCK ROUTE PLAN.dwg Modified:6/11/2024 By:osanchez

PLEASE REFER TO SHEET C4.7 FOR DETAILS

N
W E
S

GRAPHIC SCALE
80 0 40 80 160
( IN FEET )
1 inch = 80 ft.

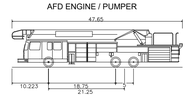
LEGEND

FIRE HYDRANT 500' RADIUS

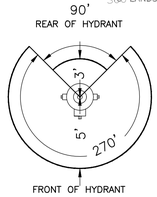
FIRE ACCESS NOTES:

1. FIRE DEPARTMENT ACCESS ROADS SHALL BE DESIGNED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF FIRE APPARATUS AND SHALL BE PROVIDED WITH AN ALL WEATHER DRIVING SURFACE (NFPA 1,18.2.3.4.2).
2. THE LOCATION OF THE FIRE HYDRANTS SHALL BE IDENTIFIED BY A BLUE REFLECTIVE PAVEMENT MARKER. (NFPA 1,18.5.10.1)
3. ALL ROADWAYS, WATER LINE INFRASTRUCTURE, AND FIRE HYDRANTS SHALL BE IN PLACE BEFORE BULDING CONSTRUCTION CAN BEGIN.
4. FIRE HYDRANTS MUST BE LOCATED WITHIN 500 FEET OF ALL SINGLE-FAMILY RESIDENTIAL HOMES.
5. CONTRACTOR SHALL FOLLOW THE CURRENT NFPA AND FLORIDA FIRE PREVENTION CODE 7TH EDITION CONCERNING FIRE AND LIFE SAFETY.

AFD ENGINE / PUMPER




| Rosenbauer 100 ft MM Cobra | |
|---|---|
| Overall Length | 47.650ft |
| Overall Width | 8.160ft |
| Overall Body Height | 10.460ft |
| Min Body Ground Clearance | 0.890ft |
| Track Width | 8.160ft |
| Lock-to-lock time | 6.00s |
| Max Wheel Angle | 46.00° |




FIRE HYDRANT CLEARANCE DETAIL

APPY LANE
R/W WIDTH VARIES
NOT PLATTED

PLYMOUTH SORRENTO ROAD
DEDICATED PER PLAT
R/W WIDTH VARIES NOT PLATTED

TRACT 'I'
15' LANDSCAPE AND WALL BUFFER
0.35 AC

15' LANDSCAPE/WALL BUFFER
0.17 AC

TRACT 'K'
15' LANDSCAPE/WALL BUFFER
0.02 AC

TRACT 'P'
LIFT STATION
0.04 AC

TRACT 'B'
PRIVATE RIGHT-OF-WAY
8.56 AC

TRACT 'M'
POCKET PARK/
EXERCISE TRAIL
1.81 AC

TRACT 'L'
LANDSCAPE BUFFER
0.05 AC

TRACT 'C'
NORTH POND
5.39 AC

TRACT 'N'
OPEN SPACE
0.06 AC

TRACT 'E'
10' LANDSCAPE BUFFER
0.03 AC

TRACT 'A'
30' DEDICATED RIGHT-OF-WAY
0.44 AC

TRACT 'F'
10' LANDSCAPE/WALL BUFFER
0.14 AC

TRACT 'O'
OPEN SPACE
0.07 AC

TRACT 'D'
SOUTH POND
3.66 AC

TRACT 'G'
10' LANDSCAPE BUFFER
0.63 AC

HYDRANT #1
HYDRANT #2
HYDRANT #3
HYDRANT #4
HYDRANT #5
HYDRANT #6
HYDRANT #7
HYDRANT #8
HYDRANT #9

500' RADIUS (TYP.)

N85°38'18"E 616.56'(D)
N86°06'20"E 700.45'(D)
N00°04'35"W 1147.37'
S00°04'35"E 1147.37'

FOREST PACKS STREET 'A'
FOREST PACKS STREET 'D'
WOLVES CREEK STREET 'A'
ARCTIC BEN STREET 'B'

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FIRE TRUCK ROUTE PLAN
CONSTRUCTION SITE PLAN

WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

| DRAWN: | DESIGNED: | CHECKED: | DATE: |
|---|---|---|---|
| B. KILLELA | O. SANCHEZ | O. SANCHEZ | 6/11/24 |

| SCALE | PROJECT | SHEET |
|---|---|---|
| 1" = 80' | MIH-005 | C4.6 |

OVIDIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
6/11/24
PROFESSIONAL ENGINEER

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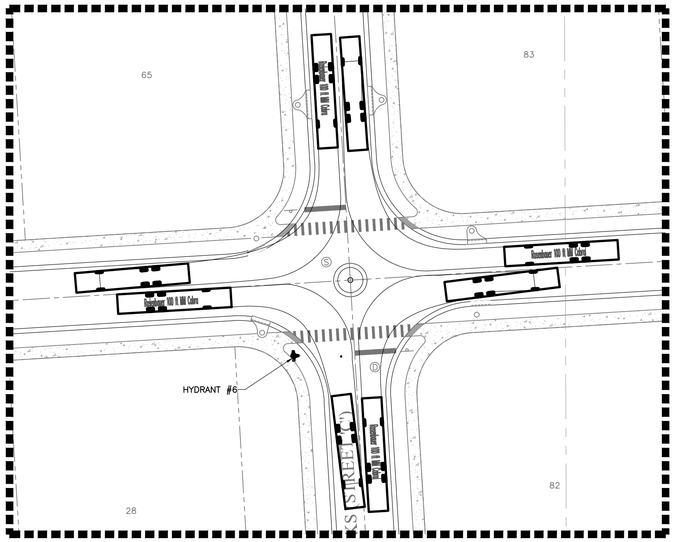
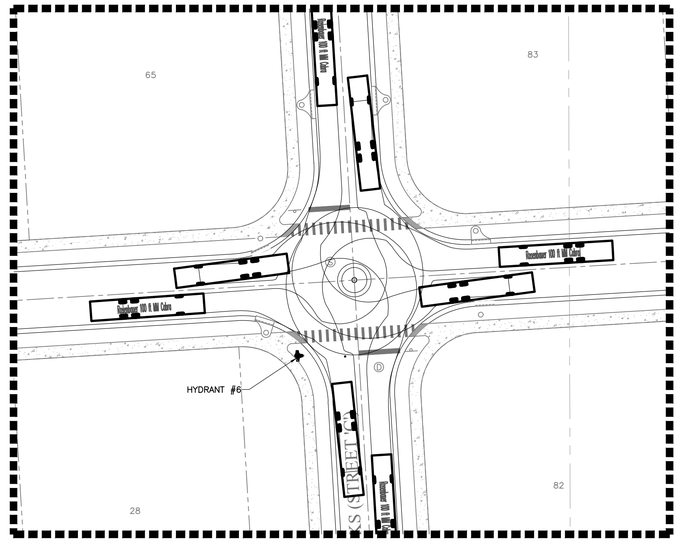
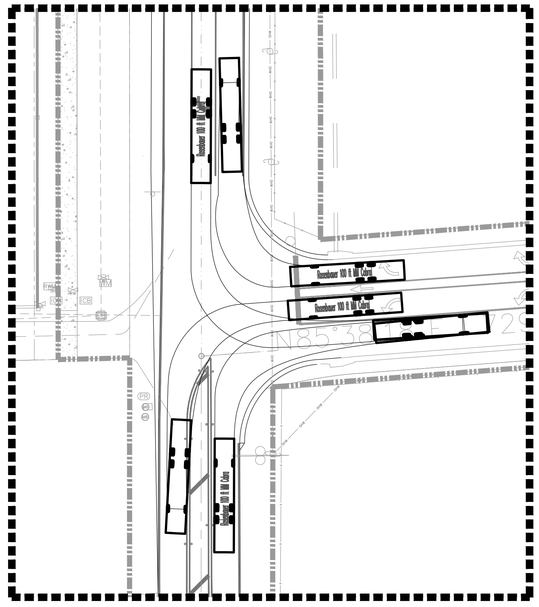



FIRE TRUCK TRAFFIC ISLAND DETAIL #1.A – RIGHT TURNS




FIRE TRUCK TRAFFIC ISLAND DETAIL #1.B – LEFT TURNS




FIRE TRUCK TRAFFIC PLYMOUTH SORRENTO ROAD & APPY LANE DETAIL

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|---|---|---|---|
| 1 | 04/30/2024 | SJRWMD COMMENTS (APPLICATION NO. 215319-10) DATED 03/15/2024 | OSS |
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FIRE TRUCK ROUTE DETAIL
CONSTRUCTION SITE PLAN

WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

| DRAWN: | DESIGNED: | CHECKED: | DATE: |
|---|---|---|---|
| B. KILLELA | O. SANCHEZ | O. SANCHEZ | 6/11/24 |

| SCALE | PROJECT | SHEET |
|---|---|---|
| N.T.S. | MIH-005 | C4.7 |

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**SHEET 34 OF 82**

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## SOILS LEGEND:

- SOILS LINE
- 4 — CANDLER FINE SAND, 0 TO 5% SLOPES (HYD: A)
- 5 — CANDLER FINE SAND, 5 TO 12% SLOPES (HYD: A)



Lot Grading Type A
Drainage Directed Toward Front of Building



Lot Grading Modified Type A
Drainage Directed Toward Front and Rear of Building with Grade Break Near Rear of Lot



Lot Grading Type B
Drainage Directed Toward Front and Rear of Building



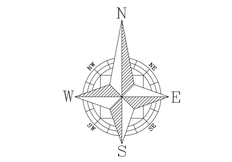
Lot Grading Modified Type B
Drainage Directed Toward Rear of Building with Grade Break at Front Setback

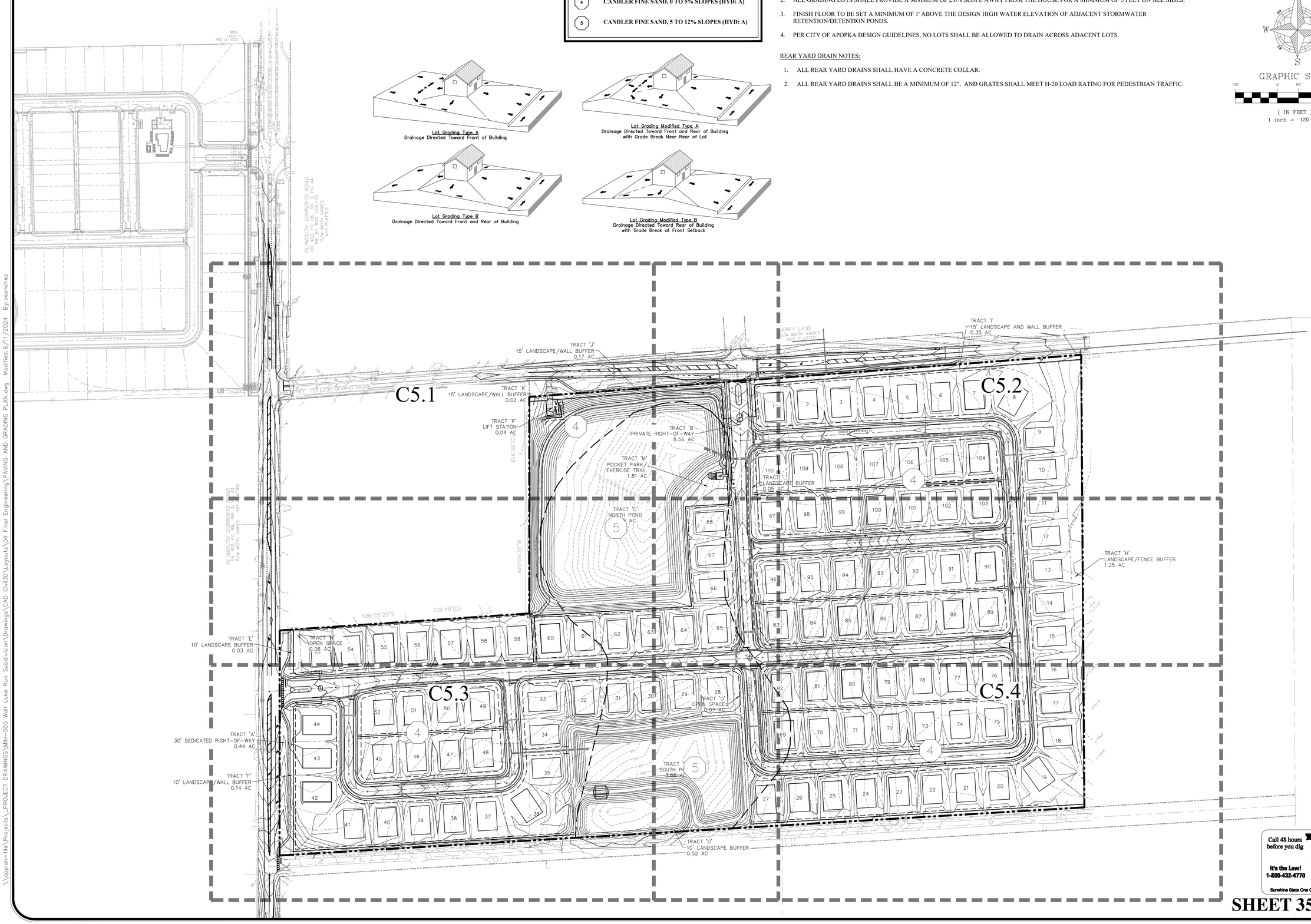
GRADING NOTES:

1. FINISHED FLOOR TO BE SET 18" ABOVE THE ELEVATION OF 100 YEAR FLOOD FOR THOSE SITE LOCATED IN SPECIAL FLOOD HAZARD AREA.
2. ALL GRADING LOTS SHALL PROVIDE A MNIMUM OF 2.0% SLOPE AWAY FROM THE HOUSE FOR A MINIMUM OF 5 FEET ON ALL SIDES.
3. FINISH FLOOR TO BE SET A MINIMUM OF 1' ABOVE THE DESIGN HIGH WATER ELEVATION OF ADJACENT STORMWATER RETENTION/DETENTION PONDS.
4. PER CITY OF APOPKA DESIGN GUIDELINES, NO LOTS SHALL BE ALLOWED TO DRAIN ACROSS ADACENT LOTS.

REAR YARD DRAIN NOTES:

1. ALL REAR YARD DRAINS SHALL HAVE A CONCRETE COLLAR.
2. ALL REAR YARD DRAINS SHALL BE A MINIMUM OF 12", AND GRATES SHALL MEET H-20 LOAD RATING FOR PEDESTRIAN TRAFFIC.

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STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32374

PAVING AND GRADING PLAN – OVERALL CONSTRUCTION SITE PLAN

WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

| DRAWN: | DESIGNED: | CHECKED: | DATE: |
|---|---|---|---|
| B. KILLELA | O. SANCHEZ | O. SANCHEZ | 6/11/24 |

| SCALE | PROJECT | SHEET |
|---|---|---|
| 1" = 120' | MIH-005 | C5.0 |

OLDIS SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
6/11/24
P.E.
PROFESSIONAL ENGINEER

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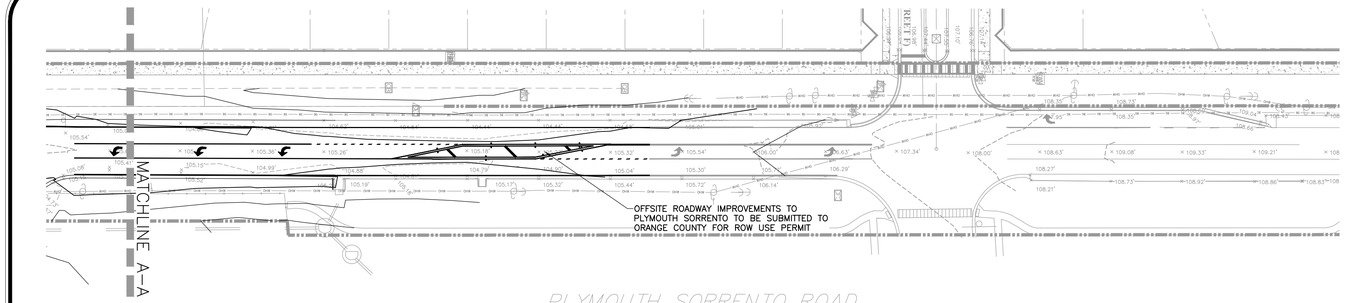
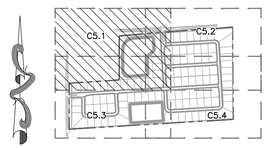
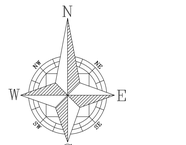



KEY MAP




GRAPHIC SCALE

50 0 25 50 100

( IN FEET )
1 inch = 50 ft.

SHEET C5.1
SHEET C5.2

MATCHLINE A-A

PLYMOUTH SORRENTO ROAD
DB. 402, PG. 68, RB. 3, PG. 43
R/W WIDTH VARIES NOT PLATTED

N85°32'18"E 729.62'(D) BEARING BASIS

S00°04'35"E 616.56'(D)

N00°04'35"W

N86°06'20"E 700.45'(D)

TRACT 'J'
15' LANDSCAPE/WALL BUFFER
0.17 AC

REFER TO SHEET C5.5 FOR OFFSITE GRADING ALONG APPY LANE

REFER TO THE LIFT STATION GRADING DETAIL ON THIS SHEET

TRACT 'K'
15' LANDSCAPE/WALL BUFFER
0.02 AC

TRACT 'P'
STATION
0.04 AC

TRACT 'B'
PRIVATE RIGHT-OF-WAY
8.56 AC

REFER TO ACCESSIBLE PARKING GRADING DETAIL ON SHEET C5.4

TRACT 'M'
POCKET PARK/
EXERCISE TRAIL
1.81 AC

TRACT 'C'
NORTH POND
5.39 AC

FOREST PACKS (REF.)

TRACT 'E'
10' LANDSCAPE BUFFER
0.03 AC

TRACT 'N'
OPEN SPACE
0.06 AC

OFFSITE ROADWAY IMPROVEMENTS TO PLYMOUTH SORRENTO ROAD TO BE SUBMITTED TO ORANGE COUNTY FOR ROW USE PERMIT

BEGINNING OF RETAINING WALL (BY OTHERS)

14' WALL MAINTENANCE EASEMENT (TYP.)

END OF RETAINING WALL (BY OTHERS)

LIFT STATION GRADING DETAIL

SCALE: 1" = 10'

SHEET C5.1
SHEET C5.3

SHEET C5.2
SHEET C5.4

SHEET C5.3
SHEET C5.4

SHEET 36 OF 82

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STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32574

PAVING AND GRADING PLAN –
NORTHWEST
CONSTRUCTION SITE PLAN

WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

DRAWN: B. KILLELA
DESIGNED: O. SANCHEZ
CHECKED: O. SANCHEZ
DATE: 6/11/24

SCALE: 1" = 50'
PROJECT: MIH-005
SHEET: C5.1

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OSCAR SALVADOR SANCHEZ
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No. 86492
STATE OF
6/11/24
FLORIDA
PROFESSIONAL ENGINEER

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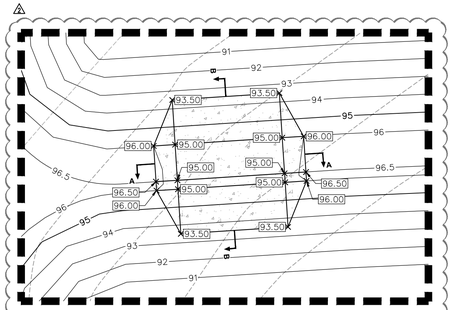
SHEET C5.1
SHEET C5.2

KEY MAP

GRAPHIC SCALE

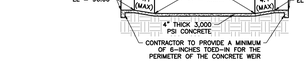
50 0 25 50 100

( IN FEET )
1 inch = 50 ft.



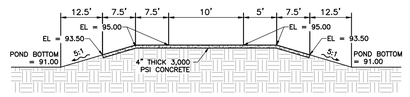

## SOUTH POND CONCRETE WEIR GRADING DETAIL

SCALE: 1" = 20'




## WEIR SECTION A-A

N.T.S.




## WEIR SECTION B-B

N.T.S.

| NO. | DATE | DESCRIPTION | BY |
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| 2 | 04/30/2024 | CITY OF APOPKA COMMENTS DATED 04/30/2024 | OSS |

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PAVING AND GRADING PLAN – NORTHEAST CONSTRUCTION SITE PLAN

WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

| DRAWN: | DESIGNED: | CHECKED: | DATE: |
|---|---|---|---|
| B. KILLELA | O. SANCHEZ | O. SANCHEZ | 6/11/24 |

| SCALE | PROJECT | SHEET |
|---|---|---|
| 1" = 50' | MIH-005 | C5.2 |

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OVIDIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
6/11/24
PROFESSIONAL ENGINEER

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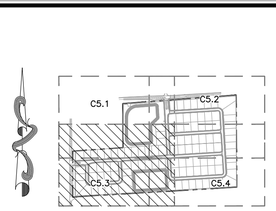


KEY MAP

GRAPHIC SCALE

50 0 25 50 100

( IN FEET )
1 inch = 50 ft.

SHEET C5.1
SHEET C5.3

SHEET C5.1
SHEET C5.2

SHEET C5.2
SHEET C5.4

SHEET C5.3
SHEET C5.4

PLYMOUTH SORRENTO RD
DB. 402, PG. 68, RB. 3, PG.
R/W WIDTH VARIES NOT P

OFFSITE ROADWAY IMPROVEMENTS TO PLYMOUTH SORRENTO ROAD TO BE SUBMITTED TO ORANGE COUNTY FOR ROW USE PERMIT

TRACT 'E'
10' LANDSCAPE BUFFER
0.03 AC

TRACT 'A'
30' DEDICATED RIGHT-OF-WAY
0.44 AC

TRACT 'F'
10' LANDSCAPE/WALL BUFFER
0.14 AC

TRACT 'N'
OPEN SPACE
0.06 AC

TRACT 'C'
NORTH POND
5.39 AC

TRACT 'D'
SOUTH POND
3.66 AC

TRACT 'G'
10' LANDSCAPE BUFFER
0.52 AC

N86°06'20"E 700.45'(D)

N00°04'35"W

WOLVES CREEK (STREET 'A')

TIC DEN (STREET 'B')

FOREST PACKS (STREET 'C')

PLEASE REFER TO SOUTH POND CONCRETE WEIR GRADING DETAIL ON SHEET C5.2

OPEN SPACE 0.07 AC

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SHEET 38 OF 82

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 1 | 04/30/2024 | SJRWMD COMMENTS (APPLICATION NO. 215319-1) DATED 03/15/2024 | OSS |
| 2 | 04/30/2024 | CITY OF APOPKA COMMENTS DATED 04/29/2024 | OSS |

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STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32574

PAVING AND GRADING PLAN
SOUTHWEST
CONSTRUCTION SITE PLAN
WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

| DRAWN: | DESIGNED: | CHECKED: | DATE: |
|---|---|---|---|
| B. KILLELA | O. SANCHEZ | O. SANCHEZ | 6/11/24 |

| SCALE | PROJECT | SHEET |
|---|---|---|
| 1" = 50' | MIH-005 | C5.3 |

OCTAVIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
6/11/24
PROFESSIONAL ENGINEER

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SHEET C5.1
SHEET C5.3
SHEET C5.2
SHEET C5.4

TRACT 'H'
LANDSCAPE/FENCE BUFFER
1.25 AC

TRACT 'D'
SOUTH POND
3.66 AC

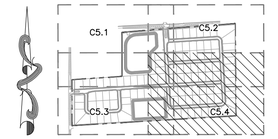
TRACT 'G'
10' LANDSCAPE BUFFER
0.52 AC

OPEN SPACE
0.07 AC

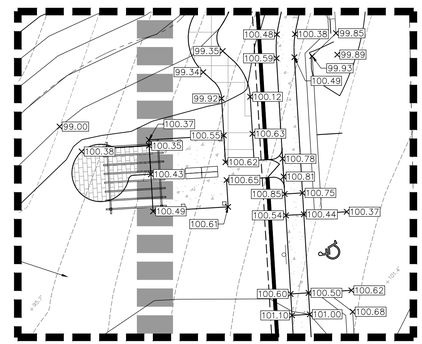
TAIGA BROWNSTS (STREET 'D')
WOLVES CREEK (STREET 'A')
FOREST PACKS (STREET 'C')

N
W E
S

GRAPHIC SCALE
50 0 25 50 100
( IN FEET )
1 inch = 50 ft.




KEY MAP



# ACCESSIBLE PARKING GRADING DETAIL

SCALE: 1" = 20'

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**SHEET 39 OF 82**

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 1 | 04/30/2024 | SJRWMD COMMENTS (APPLICATION NO. 215319-1) DATED 03/15/2024 | OSS |
| 2 | 04/30/2024 | CITY OF APOPKA COMMENTS DATED 04/30/2024 | OSS |

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STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32674

PAVING AND GRADING PLAN –
SOUTHEAST
CONSTRUCTION SITE PLAN

WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

DRAWN: B. KILLELA
DESIGNED: O. SANCHEZ
CHECKED: O. SANCHEZ
DATE: 6/11/24
SCALE: 1" = 50'
PROJECT: MIH-005
SHEET: C5.4

OSVALDO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
6/11/24
PROFESSIONAL ENGINEER

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| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 1 | 04/30/2024 | SJRWMD COMMENTS (APPLICATION NO. 215319-10) DATED 03/15/2024 | OSS |
| 2 | 04/30/2024 | CITY OF APOPKA COMMENTS DATED 04/29/2024 | OSS |

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STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32374

OFFSITE PAVING AND GRADING PLAN
– APPY LANE
CONSTRUCTION SITE PLAN

WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

DRAWN: B. KILLELA
DESIGNED: O. SANCHEZ
CHECKED: O. SANCHEZ
DATE: 6/11/24

SCALE: 1" = 50'
PROJECT: MIH-005
SHEET: C5.5

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ODDIS SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
6/11/24
PROFESSIONAL ENGINEER

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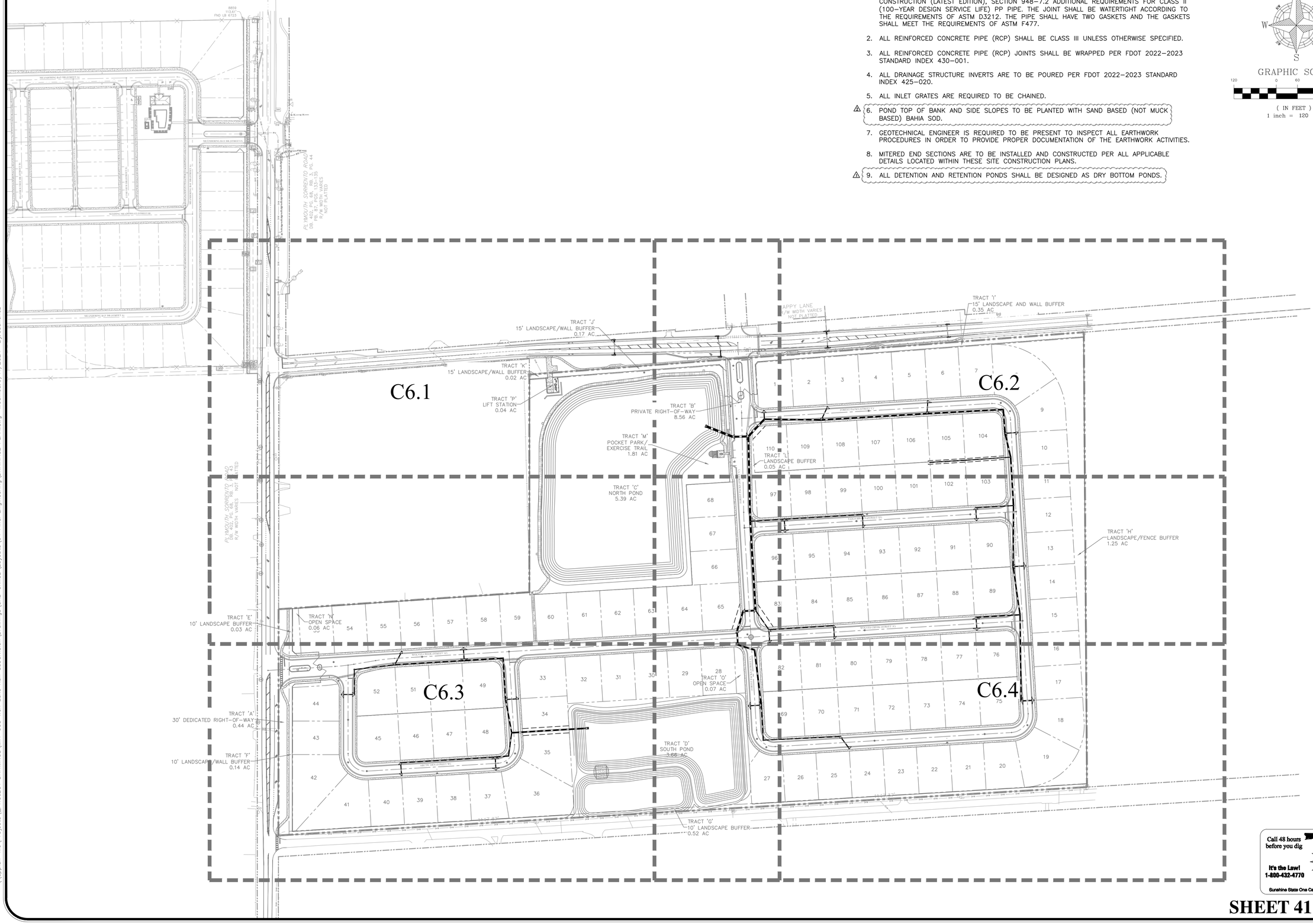
DRAINAGE NOTES:

1. ALL STORM PIPE SHALL BE ADS–HP UNLESS OTHERWISE SPECIFIED. POLYPROPYLENE PIPE SHALL MEET ALL REQUIREMENTS OF FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION), SECTION 948–7.2 ADDITIONAL REQUIREMENTS FOR CLASS II (100–YEAR DESIGN SERVICE LIFE) PP PIPE. THE JOINT SHALL BE WATERTIGHT ACCORDING TO THE REQUIREMENTS OF ASTM D3212. THE PIPE SHALL HAVE TWO GASKETS AND THE GASKETS SHALL MEET THE REQUIREMENTS OF ASTM F477.
2. ALL REINFORCED CONCRETE PIPE (RCP) SHALL BE CLASS III UNLESS OTHERWISE SPECIFIED.
3. ALL REINFORCED CONCRETE PIPE (RCP) JOINTS SHALL BE WRAPPED PER FDOT 2022–2023 STANDARD INDEX 430–001.
4. ALL DRAINAGE STRUCTURE INVERTS ARE TO BE POURED PER FDOT 2022–2023 STANDARD INDEX 425–020.
5. ALL INLET GRATES ARE REQUIRED TO BE CHAINED.
6. POND TOP OF BANK AND SIDE SLOPES TO BE PLANTED WITH SAND BASED (NOT MUCK BASED) BAHIA SOD.
7. GEOTECHNICAL ENGINEER IS REQUIRED TO BE PRESENT TO INSPECT ALL EARTHWORK PROCEDURES IN ORDER TO PROVIDE PROPER DOCUMENTATION OF THE EARTHWORK ACTIVITIES.
8. MITERED END SECTIONS ARE TO BE INSTALLED AND CONSTRUCTED PER ALL APPLICABLE DETAILS LOCATED WITHIN THESE SITE CONSTRUCTION PLANS.
9. ALL DETENTION AND RETENTION PONDS SHALL BE DESIGNED AS DRY BOTTOM PONDS.

GRAPHIC SCALE

120 0 60 120 240

( IN FEET )
1 inch = 120 ft.

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| REV. | DATE | DESCRIPTION | BY |
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2221 Lee Road, Suite 27, Winter Park, Florida 32789

STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32174

DRAINAGE PLAN – OVERALL
CONSTRUCTION SITE PLAN

WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

| DRAWN: | DESIGNED: | CHECKED: | DATE: |
|---|---|---|---|
| B. KILLELA | O. SANCHEZ | O. SANCHEZ | 6/11/24 |

| SCALE | PROJECT | SHEET |
|---|---|---|
| 1" = 120' | MIH-005 | C6.0 |

APPIAN ENGINEERING LLC

OVIDIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
6/11/24
PROFESSIONAL ENGINEER

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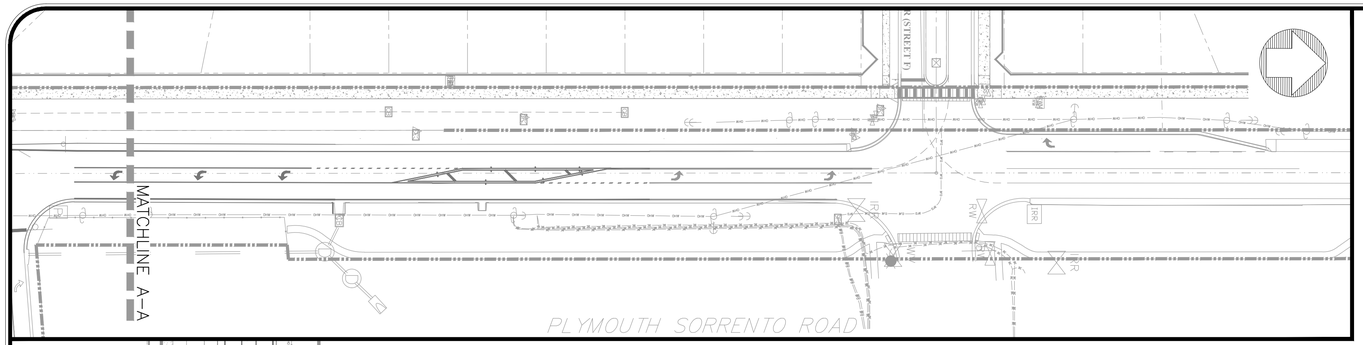


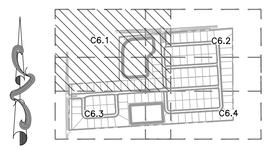


KEY MAP

GRAPHIC SCALE

50 0 25 50 100

( IN FEET )
1 inch = 50 ft.

SHEET C6.1
SHEET C6.2

MATCHLINE A–A

PLYMOUTH SORRENTO ROAD
DB. 402, PG. 68, RB. 3, PG. 43
R/W WIDTH VARIES NOT PLATTED

TRACT 'J'
15' LANDSCAPE/WALL BUFFER
0.17 AC

TRACT 'K'
15' LANDSCAPE/WALL BUFFER
0.02 AC

TRACT 'P'
LIFT STATION
0.04 AC

TRACT 'B'
PRIVATE ROAD (STREET 'A')

PLEASE REFER TO ST BU-1 MODIFIED TYPE-H INLET DETAIL ON SHEET C9.1

67 LF 48" ADS HP @ 0.68%

45 LF 48" ADS HP @ 0.50%

ST BU – 1
TYPE H INLET
RIM = 92.00
INV E = 83.50

82 LF 60" ADS HP @ 4.64%

TRACT 'M'
POCKET PARK/
EXERCISE TRAIL
1.81 AC

15' DRAINAGE EASEMENT (TYP.)

C– 4
TYPE 4 INLET
RIM = 100.23
INV E = 87.27
INV W = 87.27

C– 5
TYPE 2 INLET
RIM = 100.41
INV W = 87.49
INV NE = 93.48
INV S = 88.46

D– 20
TYPE 4
RIM = 1
INV S =

241 LF 48" ADS HP @ 0.20%

FOREST PACKS (STREET 'C')

TRACT 'C'
NORTH POND
5.39 AC

97 LF 18" ADS HP @ 0.20%

C– 3
72" DIA MANHOLE
RIM = 102.10
INV S = 88.94
INV N = 88.94
INV E = 93.60

E– 1
TYPE 2 INLET
RIM = 101.93

SHEET C6.1
SHEET C6.3

SHEET C6.2
SHEET C6.4

SHEET C6.3
SHEET C6.4

OFFSITE ROADWAY IMPROVEMENTS TO PLYMOUTH SORRENTO ROAD TO BE SUBMITTED TO ORANGE COUNTY FOR ROW USE PERMIT

TRACT 'E'
10' LANDSCAPE BUFFER
0.03 AC

TRACT 'N'
OPEN SPACE
0.06 AC

A– 2
TYPE 3L INLET
RIM = 106.06
INV SW = 99.11

A– 4
TYPE 2 INLET
RIM = 104.07
INV S = 97.43

36 LF 42" AD

C– 2
TYPE 4
RIM =
INV W
INV N
INV SE

C– 1
TYPE 4 INLET
RIM = 99.48
INV E = 89.62
INV S = 89.98

59 LF 42" ADS HP @ 0.50%

A– 8
TYPE 3L INLET
RIM = 99.61
INV S =
INV N =

40 LF 36" ADS HP @ 0.00%

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SHEET 42 OF 82

| REV. | DATE | DESCRIPTION | BY |
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2221 Lee Road, Suite 27, Winter Park, Florida 32789

STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32174

DRAINAGE PLAN – NORTHWEST
CONSTRUCTION SITE PLAN

WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

DRAWN: B. KILLELA
DESIGNED: O. SANCHEZ
CHECKED: O. SANCHEZ
DATE: 6/11/24

SCALE: 1" = 50'
PROJECT: MIH–005
SHEET: C6.1

OVIDIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
6/11/24
PROFESSIONAL ENGINEER

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SHEET C6.1
SHEET C6.2

APPY LANE
R/W WIDTH VARIES
NOT PLATTED

REFER TO SHEET C6.5 FOR OFFSITE DRAINAGE ALONG APPY LANE

TRACT 'I'
15' LANDSCAPE AND WALL BUFFER
0.35 AC

TRACT 'B'
FOR MITIGATION
PLEASE REFER TO ST BU-1 MODIFIED
TYPE-H INLET DETAIL ON SHEET C9.1

ST BU - 1
TYPE H INLET
RIM = 92.00
INV E = 83.50

82 LF 60" ADS HP @ 4.64%

67 LF 48" ADS HP @ 0.68%

45 LF 48" ADS HP @ 0.50%

C- 4
TYPE 4 INLET
RIM = 100.23
INV E = 87.27
INV W = 87.27

C- 5
TYPE 2 INLET
RIM = 100.41
INV W = 87.49
INV NE = 93.48
INV S = 88.46

15' DRAINAGE EASEMENT (TYP.)

D- 20
TYPE 4 INLET
RIM = 101.32
INV S = 95.82

41 LF 18" ADS HP @ 0.50%

24 LF 18" ADS HP @ 0.50%

D- 18
TYPE 3R INLET
RIM = 104.42
INV SW = 98.92

FOREST PACKS (STREET 'C')

162 LF 36" ADS HP @ 0.75%

301 LF 36" ADS HP @ 0.75%

C- 6
72" DIA MANHOLE
RIM = 101.03
INV E = 93.98
INV SW = 93.03
INV N = 95.70

D- 19
TYPE 3L INLET
RIM = 104.09
INV NE = 98.72
INV E = 97.09
INV W = 95.19

D- 16
TYPE 1R INLET
RIM = 106.36
INV S = 100.86

36 LF 18" ADS HP @ 0.50%

D- 17
TYPE 3L INLET
RIM = 106.34
INV N = 100.68
INV E = 99.34
INV W = 99.34

D- 15
84" DIA MANHOLE
RIM = 107.59
INV S = 100.59
INV W = 100.59

217 LF 36" ADS HP @ 0.58%

68 LF 36" ADS HP @ 1.74%

36 LF 18" ADS HP @ 0.50%

D- 13
TYPE 3R INLET
RIM = 108.77
INV W = 103.27

D- 14
TYPE 3L INLET
RIM = 108.77
INV E = 103.09
INV S = 101.77
INV N = 101.77

70 LF 36" ADS HP @ 0.42%

D- 21
60" DIA MANHOLE
RIM = 109.30
INV S = 102.06
INV N = 102.06
INV W = 103.76

101 LF 12" ADS HP @ 0.50%

130 LF 12" ADS HP @ 0.50%

10' DRAINAGE EASEMENT

YD-1
12" YARD DRAIN
WITH CONCRETE COLLAR
RIM = 110.04
INV E = 104.90

YD-2
12" YARD DRAIN
WITH CONCRETE COLLAR
RIM = 109.90
INV W = 104.40
INV E = 104.40

241 LF 48" ADS HP @ 0.20%

FOREST PACKS (STREET 'C')

E- 6
TYPE 4 INLET
RIM = 110.32
INV S = 104.68
INV E = 104.68

138 LF 36" ADS HP @ 0.20%

D- 12
60" DIA MANHOLE
RIM = 110.69
INV S = 102.34
INV N = 102.34
INV W = 104.47

108 LF 18" ADS HP @ 0.20%

E- 2
TYPE 2 INLET
RIM = 101.93
INV S = 93.79
INV E = 93.79
INV W = 93.79

E- 4
TYPE 3R INLET
RIM = 105.39
INV S = 99.71
INV W = 94.90

97 LF 18" ADS HP @ 0.20%

36 LF 18" ADS HP @ 0.50%

222 LF 18" ADS HP @ 0.50%

TAIGA BROWN (STREET 'D')

36 LF 18" ADS HP @ 0.50%

36 LF 18" ADS HP @ 0.50%

E- 5
TYPE 4 INLET
RIM = 110.32
INV N = 104.86

C- 3
72" DIA MANHOLE
RIM = 102.10
INV S = 88.94
INV N = 88.94
INV E = 93.60

E- 1
TYPE 2 INLET
RIM = 101.93
INV N = 93.97

E- 3
TYPE 3L INLET
RIM = 105.39
INV N = 99.89

253 LF 48" ADS HP @ 0.20%

FOREST PACKS (STREET 'C')

173 LF 30" ADS HP @ 0.20%

TRACT 'H'
LANDSCAPE/FENCE BUFFER
1.25 AC

36 LF 18" ADS HP @ 0.50%

SHEET C6.1
SHEET C6.3

SHEET C6.2
SHEET C6.4

36 LF 42" ADS HP @ 0.50%

C- 2
TYPE 4 INLET
RIM = 99.48
INV W = 89.44
INV N = 89.44
INV SE = 93.14

67 LF 18" ADS HP @ 0.20%

C- 1
TYPE 4 INLET
RIM = 99.48
INV E = 89.62
INV S = 89.98

59 LF 42" ADS HP @ 0.50%

A- 10
TYPE 3R INLET
RIM = 100.74
INV S = 93.27
INV E = 95.01
INV NW = 93.27

184 LF 18" ADS HP @ 2.35%

A- 12
TYPE 3R INLET
RIM = 105.71
INV S = 100.02
INV W = 99.32

A- 8
TYPE 3L INLET
RIM = 99.61
INV S = 90.27
INV N = 90.27

15' DRAINAGE EASEMENT (TYP.)

WOLVES CREEK (STREET 'A')

36 LF 18" ADS HP @ 0.50%

36 LF 18" ADS HP @ 0.50%

40 LF 36" ADS HP @ 0.50%

36 LF 18" ADS HP @ 0.50%

A- 14
TYPE 2 INLET
RIM = 109.89
INV S = 104.21
INV E = 103.21

138 LF 30" ADS HP @ 0.20%

125 LF 24" ADS HP @ 0.20%

D- 11
TYPE 4 INLET
RIM = 110.29
INV E = 104.61
INV S = 102.69
INV N = 102.68

D- 10
TYPE 2 INLET
RIM = 110.29
INV W = 104.79

D- 9
60" DIA MANHOLE
RIM = 110.69
INV S = 102.96
INV N = 102.96
INV W = 102.96

A- 13
TYPE 2 INLET
RIM = 109.89
INV N = 104.39

N
W E
S

GRAPHIC SCALE
50 0 25 50 100
( IN FEET )
1 inch = 50 ft.

C6.1 C6.2
C6.3 C6.4
KEY MAP

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SHEET 43 OF 82

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
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STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32374

DRAINAGE PLAN – NORTHEAST
CONSTRUCTION SITE PLAN
WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

DRAWN: B. KILLELA
DESIGNED: O. SANCHEZ
CHECKED: O. SANCHEZ
DATE: 6/11/24
SCALE: 1" = 50'
PROJECT: MIH-005
SHEET: C6.2

APPIAN ENGINEERING LLC
OLIVIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
6/11/24
PROFESSIONAL ENGINEER

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PLYMOUTH SORRENTO RD
DB. 402, PG. 68, RB. 3, P.
R/W WIDTH VARIES NOT P

KEY MAP

GRAPHIC SCALE
( IN FEET )
1 inch = 50 ft.

SHEET C6.1
SHEET C6.2
SHEET C6.3
SHEET C6.4

OFFSITE ROADWAY IMPROVEMENTS TO PLYMOUTH SORRENTO ROAD TO BE SUBMITTED TO ORANGE COUNTY FOR ROW USE PERMIT

TRACT 'C'
NORTH POND
5.39 AC

TRACT 'E'
10' LANDSCAPE BUFFER
0.03 AC

TRACT 'N'
OPEN SPACE
0.06 AC

TRACT 'A'
30' DEDICATED RIGHT-OF-WAY
0.44 AC

TRACT 'F'
10' LANDSCAPE/WALL BUFFER
0.14 AC

TRACT 'D'
SOUTH POND
3.66 AC

TRACT 'G'
10' LANDSCAPE BU
0.52 AC

TRACT 'O'
OPEN SPACE
0.07

WOLVES CREEK (STREET 'A')

ARCTIC DEN (STREET 'B')

FOREST PACKS (STREET 'C')

A- 1
48" DIA MANHOLE
RIM = 107.98
INV S = 101.80
INV E = 101.80

A- 2
TYPE 3L INLET
RIM = 106.06
INV SW = 99.11

A- 3
TYPE 3R INLET
RIM = 106.43
INV NE = 98.90
INV W = 100.93
INV E = 98.90

A- 4
TYPE 2 INLET
RIM = 104.07
INV S = 97.43

A- 5
TYPE 2 INLET
RIM = 104.07
INV N = 97.25
INV W = 97.70
INV E = 97.25

A- 6
72" DIA MANHOLE
RIM = 104.02
INV W = 97.03
INV S = 97.03

A- 7
TYPE 3R INLET
RIM = 99.64
INV N = 90.47
INV E = 90.47

A- 8
TYPE 3L INLET
RIM = 99.61
INV S = 90.27
INV N = 90.27

B- 1
TYPE 2 INLET
RIM = 108.08
INV E = 102.12

B- 2
TYPE 4 INLET
RIM = 108.08
INV W = 101.94
INV N = 101.94

B- 3
TYPE 3R INLET
RIM = 105.21
INV N = 98.98

B- 4
TYPE 3L INLET
RIM = 105.22
INV S = 98.80
INV E = 98.80

B- 5
TYPE 2 INLET
RIM = 101.86
INV N = 94.67

B- 6
TYPE 2 INLET
RIM = 101.86
INV S = 94.49
INV W = 94.92
INV E = 94.49

B- 7
60" DIA MANHOLE
RIM = 101.83
INV W = 94.42
INV N = 94.42

B- 8
72" DIA MANHOLE
RIM = 102.40
INV S = 94.28
INV N = 94.40
INV E = 92.93

B- 9
TYPE 3L INLET
RIM = 103.43
INV W = 94.77

B- 10
TYPE 3R INLET
RIM = 103.43
INV E = 94.59
INV S = 94.59
INV N = 96.80

C- 1
TYPE 4 INLET
RIM = 99.48
INV E = 89.62
INV S = 89.98

C- 2
TYPE 4
RIM =
INV W
INV N
INV SE

C- 3
72" DIA MANHOLE
RIM = 102.10
INV S = 88.94
INV N = 88.94
INV E = 93.60

D- 2
TYPE 2 INLET
RIM = 98.98
INV E = 92.72

D- 4
60" DIA MANHOLE
RIM = 99.83
INV E = 94.33
INV N = 93.83

E- 1
TYPE 2 INLET
RIM = 101.93
INV N = 93.97

42 LF 18" ADS HP @ 0.50%
116 LF 18" ADS HP @ 0.76%
197 LF 24" ADS HP @ 0.61%
111 LF 30" ADS HP @ 0.20%
36 LF 18" ADS HP @ 0.50%
71 LF 18" ADS HP @ 0.20%
118 LF 30" ADS HP @ 0.20%
36 LF 18" ADS HP @ 0.51%
36 LF 18" ADS HP @ 0.50%
269 LF 18" ADS HP @ 1.45%
36 LF 18" ADS HP @ 0.50%
36 LF 18" ADS HP @ 0.51%
38 LF 24" ADS HP @ 0.20%
67 LF 24" ADS HP @ 0.20%
205 LF 36" ADS HP @ 0.46%
59 LF 42" ADS HP @ 0.50%
40 LF 36" ADS HP @ 0.50%
158 LF 36" ADS HP @ 0.20%
100 LF 24" ADS HP @ 0.85%
97 LF 18" ADS HP @ 0.20%
241 LF 48" ADS
36 LF 42" AD
36 LF 18" AD

20' DRAINAGE EASEMENT

ENERGY DISSIPATOR. PLEASE REFER TO DETAIL #6 ON SHEET C9.1

M.E.S.- 2
36" MES
INV W = 92.00

15' DRAINAGE EASEMENT (TYP.)

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SHEET 44 OF 82

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 1 | 04/30/2024 | SJRWMD COMMENTS (APPLICATION NO. 215319-10) DATED 03/15/2024 | OSS |
| 2 | 04/30/2024 | CITY OF APOPKA COMMENTS DATED 04/29/2024 | OSS |

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2221 Lee Road, Suite 27, Winter Park, Florida 32789

STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32374

DRAINAGE PLAN – SOUTHWEST
CONSTRUCTION SITE PLAN

WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

| DRAWN: | DESIGNED: | CHECKED: | DATE: |
|---|---|---|---|
| B. KILLELA | O. SANCHEZ | O. SANCHEZ | 6/11/24 |

| SCALE | PROJECT | SHEET |
|---|---|---|
| 1" = 50' | MIH-005 | C6.3 |

APPIAN ENGINEERING LLC

OVIDIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
6/11/24
PROFESSIONAL ENGINEER

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SHEET C6.1
SHEET C6.2
SHEET C6.3
SHEET C6.4

E- 1
TYPE 2 INLET
RIM = 101.93
INV N = 93.97

E- 2
TYPE 2 INLET
RIM = 101.93
INV S = 93.79
INV E = 93.79
INV W = 93.79

E- 3
TYPE 3L INLET
RIM = 105.39
INV N = 99.89

E- 4
TYPE 3R INLET
RIM = 105.39
INV S = 99.71
INV W = 94.90

E- 5
TYPE 4 INLET
RIM = 110.32
INV N = 104.86

E- 6
TYPE 4 INLET
RIM = 110.32
INV S = 104.68
INV E = 104.68

C- 1
TYPE 4 INLET
RIM = 99.48
INV E = 89.62
INV S = 89.98

C- 2
TYPE 4 INLET
RIM = 99.48
INV W = 89.44
INV N = 89.44
INV SE = 93.14

C- 3
72" DIA MANHOLE
RIM = 102.10
INV S = 88.94
INV N = 88.94
INV E = 93.60

A- 7
TYPE 3R INLET
RIM = 99.64
INV N = 90.47
INV E = 90.47

A- 8
TYPE 3L INLET
RIM = 99.61
INV S = 90.27
INV N = 90.27

A- 9
TYPE 3L INLET
RIM = 100.74
INV N = 93.45

A- 10
TYPE 3R INLET
RIM = 100.74
INV S = 93.27
INV E = 95.01
INV NW = 93.27

A- 11
TYPE 3L INLET
RIM = 105.70
INV N = 100.20

A- 12
TYPE 3R INLET
RIM = 105.71
INV S = 100.02
INV W = 99.32

A- 13
TYPE 2 INLET
RIM = 109.89
INV N = 104.39

A- 14
TYPE 2 INLET
RIM = 109.89
INV S = 104.21
INV E = 103.21

D- 1
TYPE 2 INLET
RIM = 98.98
INV E = 92.72

D- 2
TYPE 2 INLET
RIM = 98.98
INV E = 92.72

D- 3
TYPE 2 INLET
RIM = 98.98
INV W = 92.54
INV N = 91.91
INV S = 92.98

D- 4
60" DIA MANHOLE
RIM = 99.83
INV E = 94.33
INV N = 93.83

D- 5
TYPE 3L INLET
RIM = 105.47
INV NW = 98.02

D- 6
TYPE 3R INLET
RIM = 104.98
INV SE = 97.81
INV W = 97.81

D- 7
TYPE 2 INLET
RIM = 109.94
INV W = 103.62

D- 8
TYPE 2 INLET
RIM = 109.94
INV E = 103.44
INV N = 103.44

D- 9
60" DIA MANHOLE
RIM = 110.69
INV S = 102.96
INV N = 102.96
INV W = 102.96

D- 10
TYPE 2 INLET
RIM = 110.29
INV W = 104.79

D- 11
TYPE 4 INLET
RIM = 110.29
INV E = 104.61
INV S = 102.69
INV N = 102.68

D- 12
60" DIA MANHOLE
RIM = 110.69
INV S = 102.34
INV N = 102.34
INV W = 104.47

241 LF 48" ADS HP @ 0.20%
97 LF 18" ADS HP @ 0.20%
222 LF 18" ADS HP @ 0.50%
36 LF 18" ADS HP @ 0.50%
36 LF 18" ADS HP @ 0.50%
108 LF 18" ADS HP @ 0.20%
138 LF 36" ADS HP @ 0.20%
173 LF 30" ADS HP @ 0.20%
36 LF 18" ADS HP @ 0.50%
253 LF 48" ADS HP @ 0.20%
36 LF 42" ADS HP @ 0.50%
67 LF 18" ADS HP @ 0.20%
59 LF 42" ADS HP @ 0.50%
184 LF 18" ADS HP @ 2.35%
36 LF 18" ADS HP @ 0.50%
36 LF 18" ADS HP @ 0.50%
36 LF 18" ADS HP @ 0.50%
125 LF 24" ADS HP @ 0.20%
138 LF 30" ADS HP @ 0.20%
40 LF 36" ADS HP @ 0.50%
158 LF 36" ADS HP @ 0.20%
36 LF 18" ADS HP @ 0.51%
246 LF 30" ADS HP @ 0.20%
100 LF 24" ADS HP @ 0.85%
219 LF 18" ADS HP @ 1.59%
43 LF 18" ADS HP @ 0.50%
36 LF 14" X 23" ERCP @ 0.50%

FOREST PACKS (STREET 'C')
TAIGA BROWN (STREET 'D')
WOLVES CREEK (STREET 'A')
15' DRAINAGE EASEMENT (TYP.)

TRACT 'H'
LANDSCAPE/FENCE BUFFER
1.25 AC

TRACT 'D'
SOUTH POND
3.66 AC

TRACT 'O'
OPEN SPACE
0.07 AC

TRACT 'O'
10' LANDSCAPE BUFFER
0.52 AC

GRAPHIC SCALE
50 0 25 50 100
( IN FEET )
1 inch = 50 ft.

KEY MAP
C6.1 C6.2 C6.3 C6.4

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 1 | 04/30/2024 | SJRWMD COMMENTS (APPLICATION NO. 215319-10) DATED 03/15/2024 | OSS |
| 2 | 04/30/2024 | CITY OF APOPKA COMMENTS DATED 04/30/2024 | OSS |

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STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32374

DRAINAGE PLAN – SOUTHEAST
CONSTRUCTION SITE PLAN
WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

DRAWN: B. KILLELA
DESIGNED: O. SANCHEZ
CHECKED: O. SANCHEZ
DATE: 6/11/24
SCALE: 1" = 50'
PROJECT: MIH-005
SHEET: C6.4

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OVIDIO SALVADOR SANCHEZ LICENSE No. 86492 STATE OF FLORIDA 6/11/24 PROFESSIONAL ENGINEER

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SHEET 45 OF 82

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KEY MAP

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OFFSITE DRAINAGE PLAN
CONSTRUCTION SITE PLAN

WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

| DRAWN: | DESIGNED: | CHECKED: | DATE: |
|---|---|---|---|
| B. KILLELA | O. SANCHEZ | O. SANCHEZ | 6/11/24 |

| SCALE | PROJECT | SHEET |
|---|---|---|
| 1" = 50' | MIH-005 | C6.5 |







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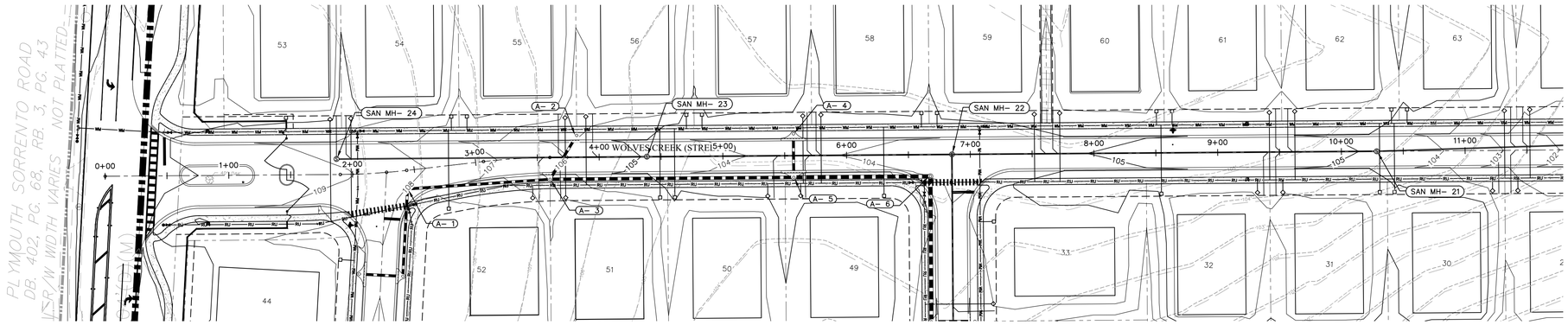
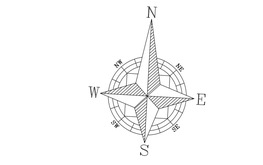
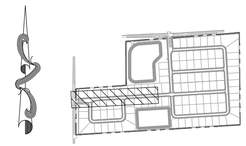



GRAPHIC SCALE

50 0 25 50 100

( IN FEET )
1 inch = 50 ft.



KEY MAP

## PRESSURE PIPE NOTES PER F.A.C. RULE 62-55.314

(1) HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS.

(a) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THEOUTSIDE 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) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER.

(c) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN 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 FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX I NCHES ABOVE THE TOP OF THE SEWER.

(d) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E-6.002, F.A.C.

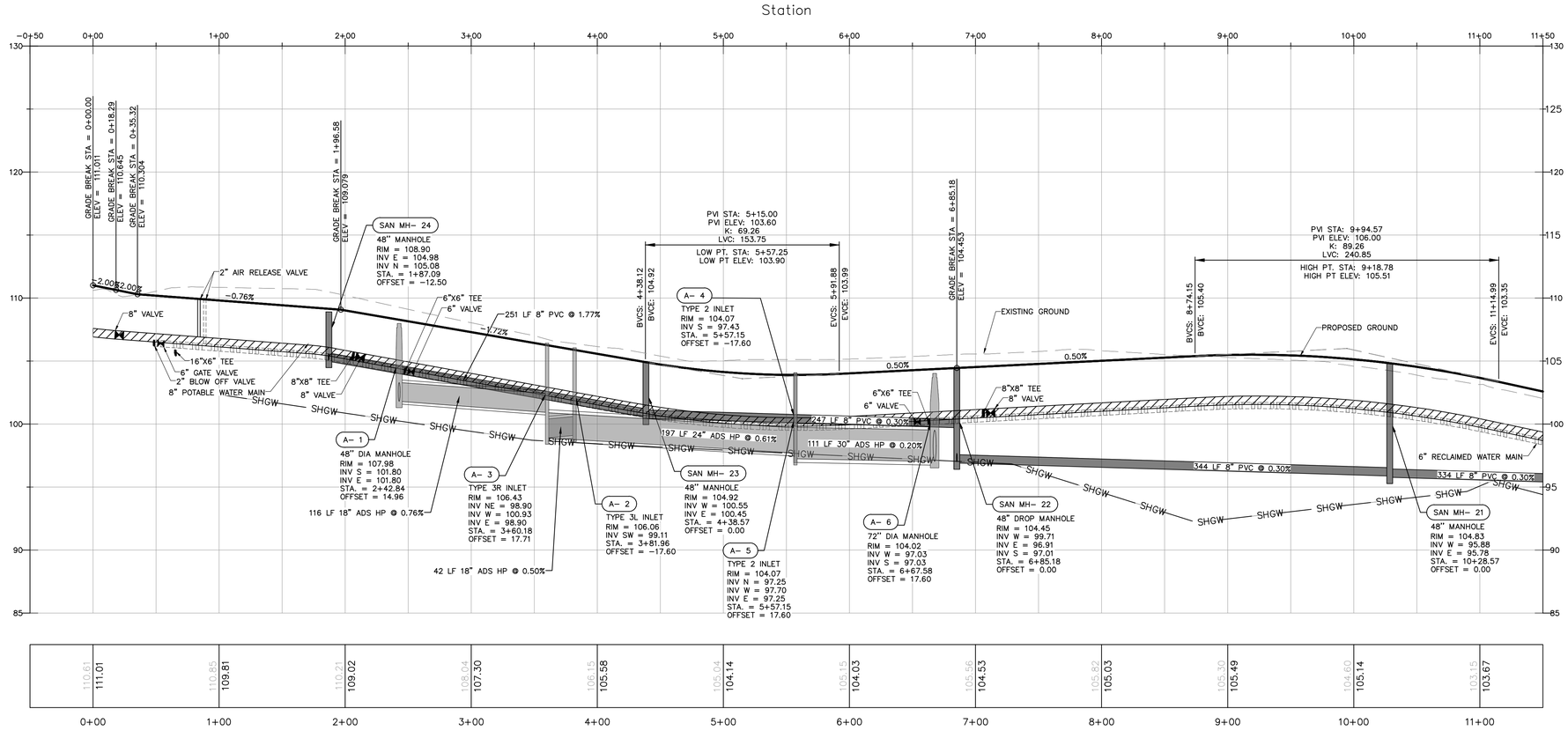
(2) VERTICAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, AND RECLAIMED WATER PIPELINES.

(a) NEW OR RELOCATED, UNDERGROUND 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 SIX INCHES, AND PREFERABLY 12 INCHES, ABOVE OR AT LEAST 12 INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.

(b) NEW OR RELOCATED, UNDERGROUND 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 12 INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE 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 FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY- OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

Station




VERTICAL SCALE: 1" = 5'
HORIZONTAL SCALE: 1" = 50'

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STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32574

PLAN & PROFILE - STREET A - STA. 0+00 TO STA. 11+00
CONSTRUCTION SITE PLAN

WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

| DRAWN: | DESIGNED: | CHECKED: | DATE: |
|---|---|---|---|
| B. KILLELA | O. SANCHEZ | O. SANCHEZ | 6/11/24 |

| SCALE | PROJECT | SHEET |
|---|---|---|
| 1" = 50' | MIH-005 | C7.0 |

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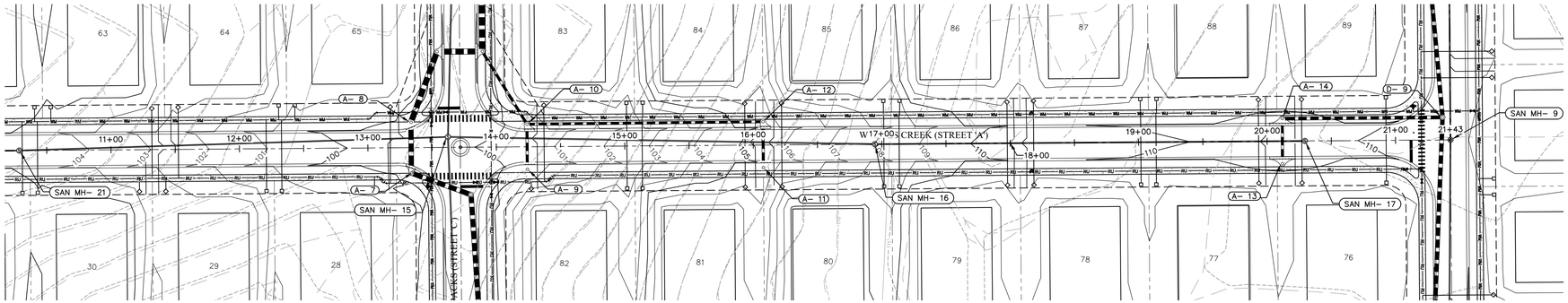
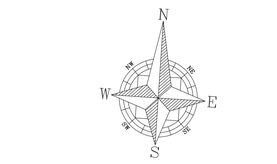
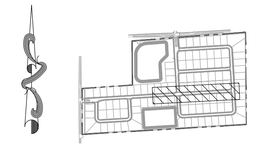
\\appian-file\Projects_PROJECT DRAWINGS\MIH-005 Wolf Lake Run Subdivision\Drawings\CAD Civil3D\Layouts\04 Final Engineering\PLAN & PROFILE - STREET A.dwg Modified:6/11/2024 By:osanchez



KEY MAP

PRESSURE PIPE NOTES PER F.A.C. RULE 62–55.314

(1) HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON–SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS.

(a) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THEOUTSIDE 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) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM–TYPE SANITARY SEWER.

(c) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN 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 FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX I NCHES ABOVE THE TOP OF THE SEWER.

(d) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON–SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E–6.002, F.A.C.

(2) VERTICAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, AND RECLAIMED WATER PIPELINES.

(a) NEW OR RELOCATED, UNDERGROUND 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 SIX INCHES, AND PREFERABLY 12 INCHES, ABOVE OR AT LEAST 12 INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.

(b) NEW OR RELOCATED, UNDERGROUND 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 12 INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.

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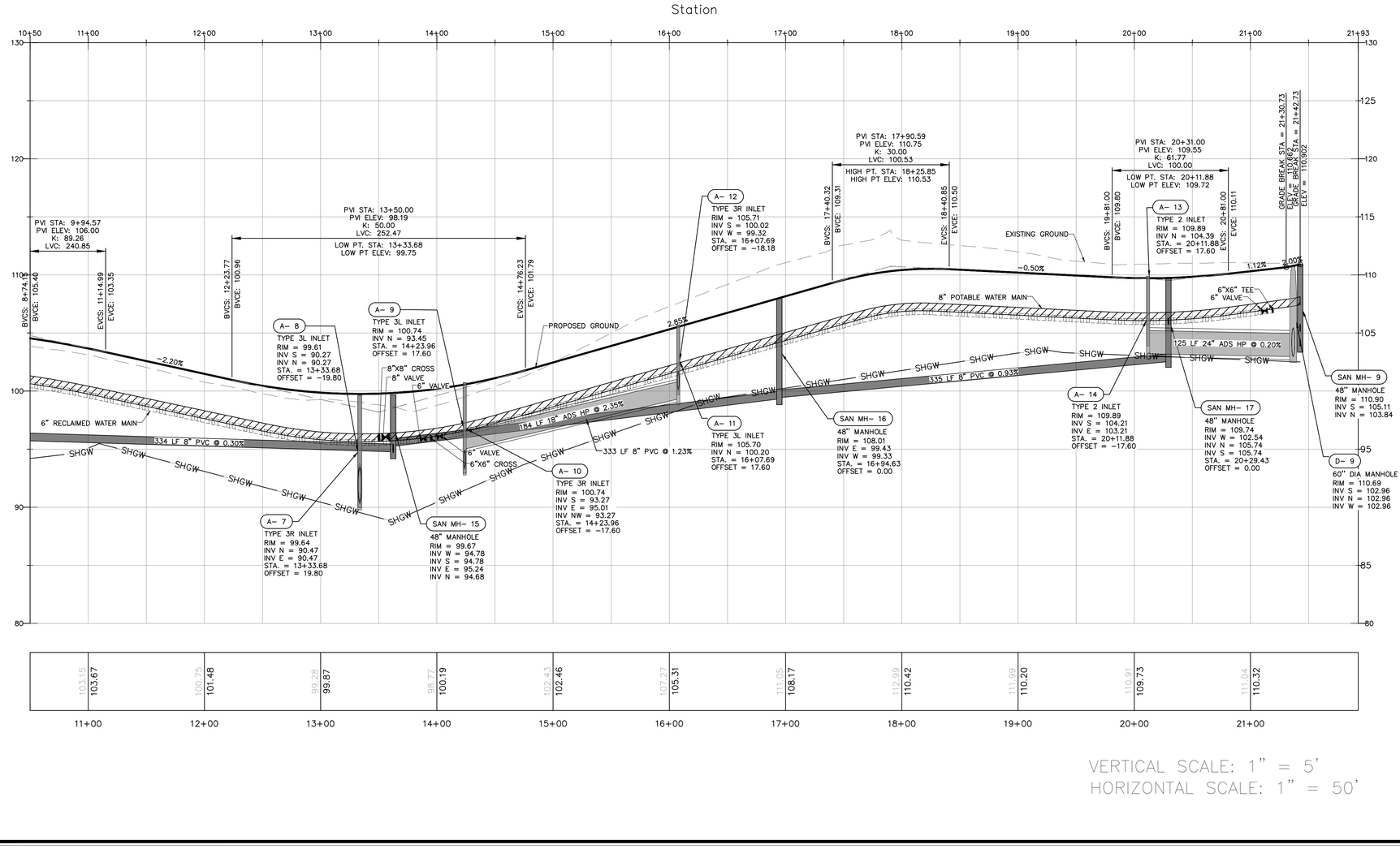


VERTICAL SCALE: 1" = 5'
HORIZONTAL SCALE: 1" = 50'

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PLAN & PROFILE – STREET A – STA. 11+00 TO SAT. 21+43

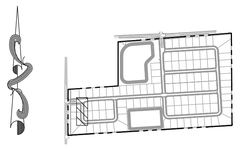
CONSTRUCTION SITE PLAN

WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

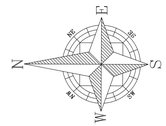
| DRAWN: | DESIGNED: | CHECKED: | D.A.T.E. |
|---|---|---|---|
| B. KILLELA | O. SANCHEZ | O. SANCHEZ | 6/11/24 |

| SCALE | PROJECT | SHEET |
|---|---|---|
| 1" = 50' | MH–005 | C7.1 |

\\appian-file\Projects_PROJECT DRAWINGS\MH-005 Wolf Lake Run Subdivision\Drawings\CAD Civil3D\Layouts\04 Final Engineering\PLAN & PROFILE – STREET A.dwg Modified: 6/11/2024 By: osanchez



KEY MAP




GRAPHIC SCALE

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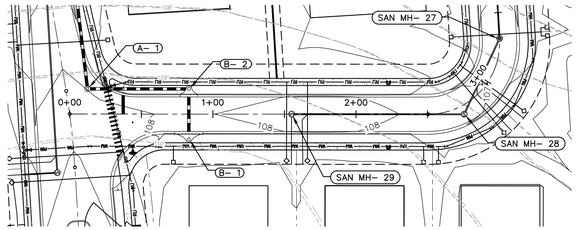
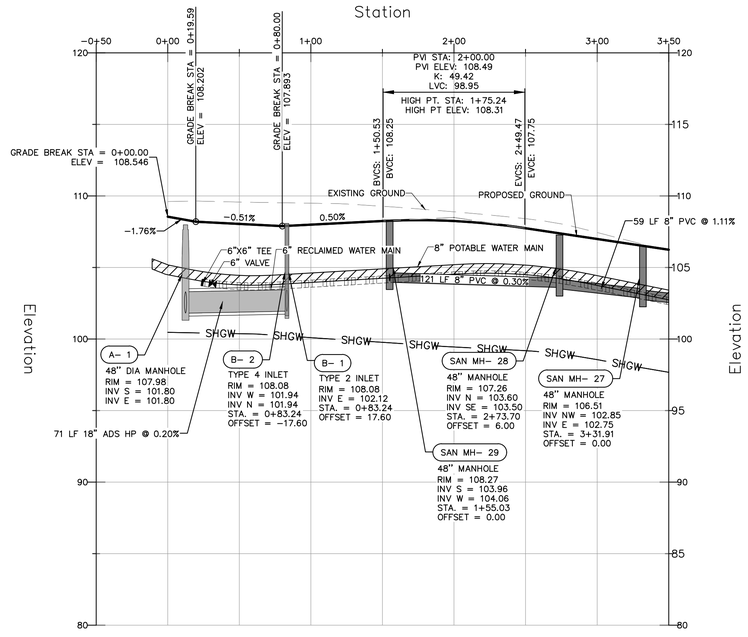
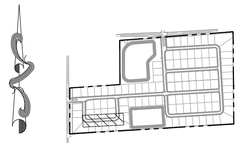
( IN FEET )
1 inch = 50 ft.




VERTICAL SCALE: 1" = 5'
HORIZONTAL SCALE: 1" = 50'



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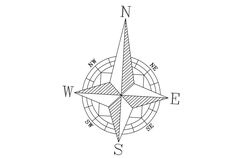


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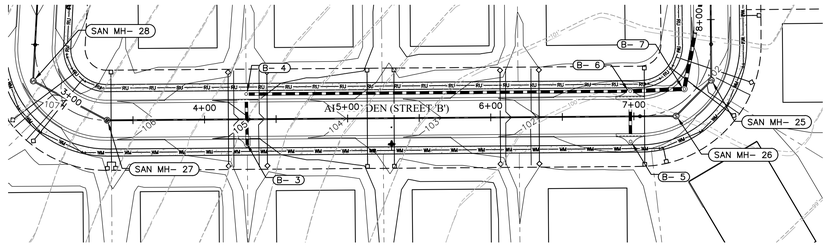


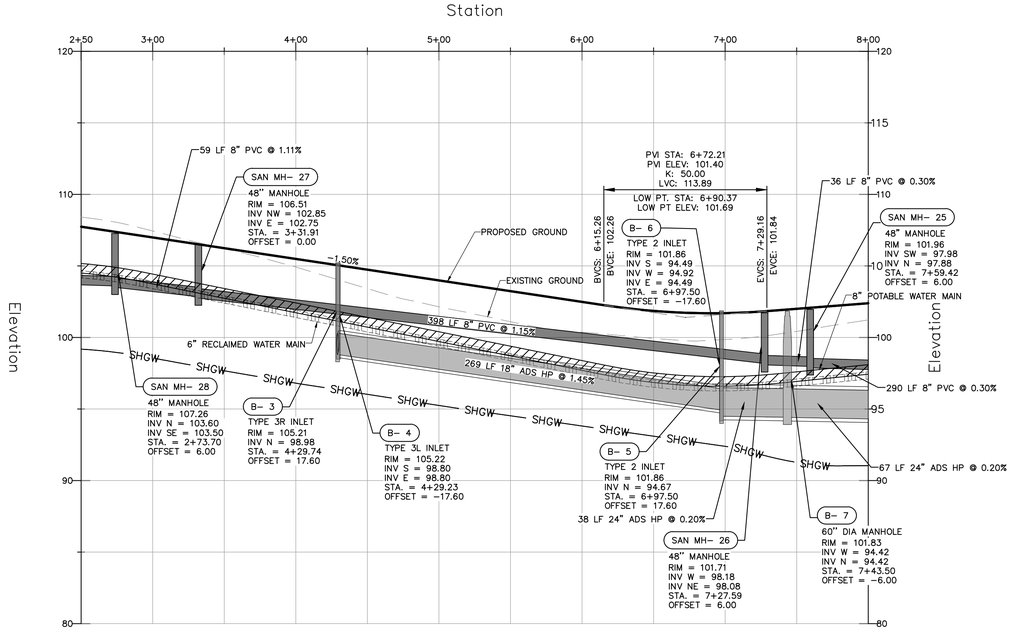


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PLAN & PROFILE - STREET B - STA. 0+00 TO STA. 7+50
CONSTRUCTION SITE PLAN

WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

| | | | |
|---|---|---|---|
| DRAWN: B. KILLELA | DESIGNED: O. SANCHEZ | CHECKED: O. SANCHEZ | DATE: 6/11/24 |
| SCALE: 1" = 50' | PROJECT: MIH-005 | SHEET: C7.2 | |


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No. 86492
STATE OF FLORIDA
PROFESSIONAL ENGINEER
6/11/24



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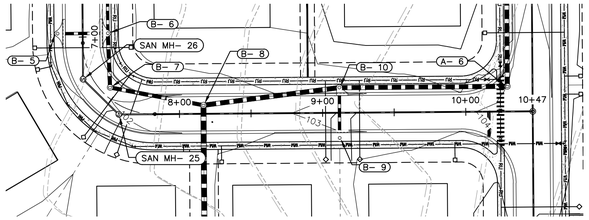
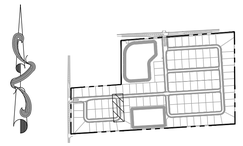
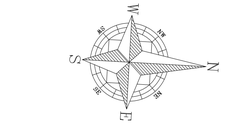


KEY MAP




GRAPHIC SCALE

50 0 25 50 100

( IN FEET )
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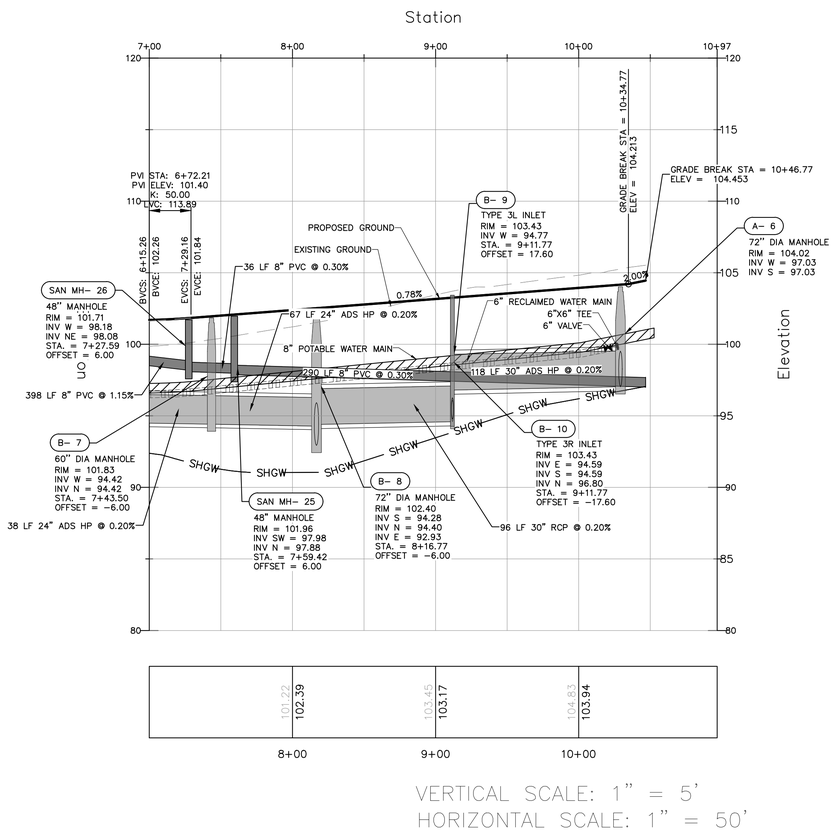


VERTICAL SCALE: 1" = 5'
HORIZONTAL SCALE: 1" = 50'

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PLAN & PROFILE – STREET B –
STA. 7+50 TO STA. 10+47
CONSTRUCTION SITE PLAN

WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

| DRAWN: | DESIGNED: | CHECKED: | DATE: |
|---|---|---|---|
| B. KILLELA | O. SANCHEZ | O. SANCHEZ | 6/11/24 |

| SCALE: | PROJECT | SHEET |
|---|---|---|
| 1" = 50' | MIH–005 | C7.3 |


OLVIDIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
PROFESSIONAL ENGINEER



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**SHEET 50 OF 82**


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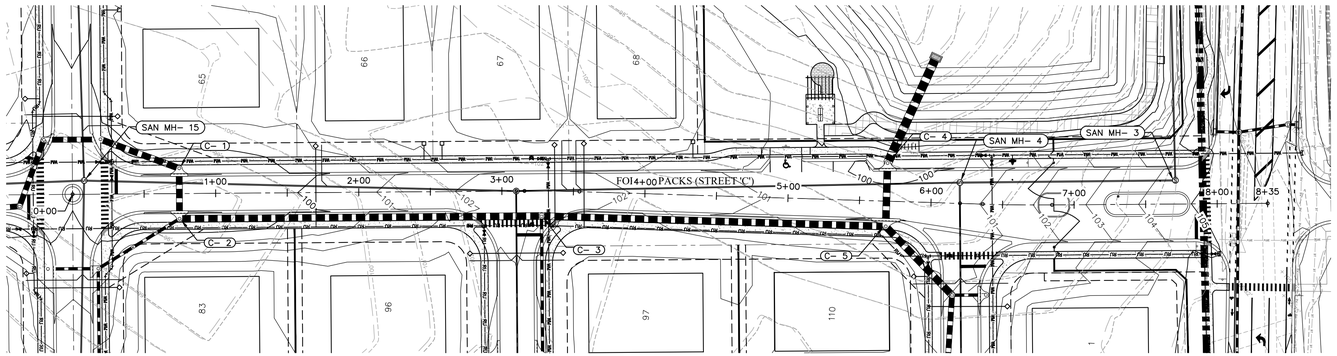


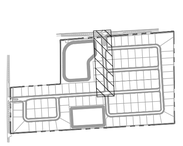

KEY MAP

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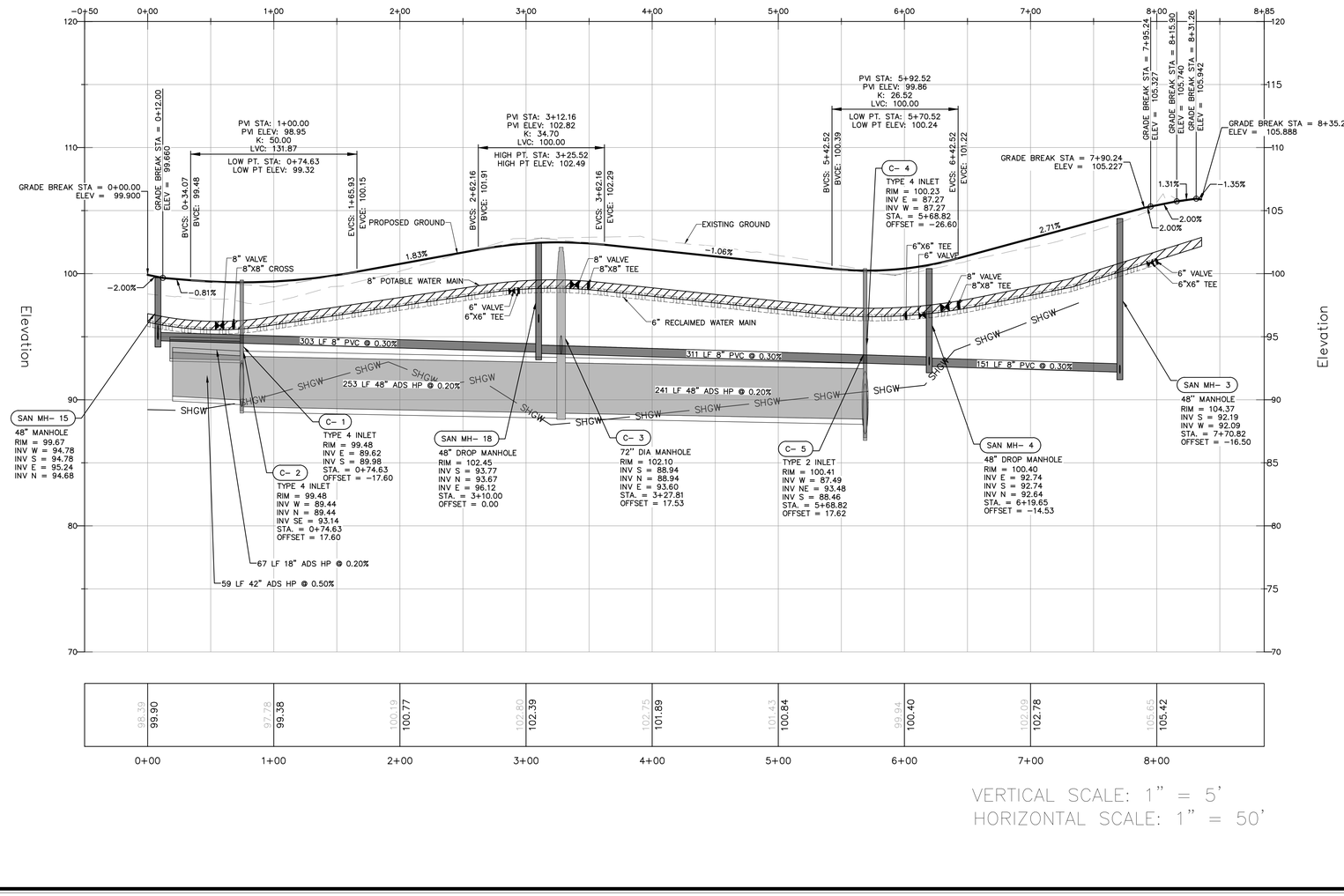
Station




VERTICAL SCALE: 1" = 5'
HORIZONTAL SCALE: 1" = 50'

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**SHEET 51 OF 82**

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| 2 | 04/30/2024 | CITY OF APOPKA COMMENTS DATED 04/30/2024 | OSS |

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# PLAN & PROFILE - STREET C - STA. 0+00 TO STA. 8+36
CONSTRUCTION SITE PLAN

WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

DRAWN: B. KILLELA
DESIGNED: O. SANCHEZ
CHECKED: O. SANCHEZ
DATE: 6/11/24

SCALE: 1" = 50'
PROJECT: MIH-005
SHEET: C7.4

OSVALDO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
6/11/24
PROFESSIONAL ENGINEER

This item has been digitally signed and sealed by Osvaldo S. Sanchez, PE on the date adjacent to the seal.
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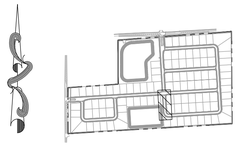

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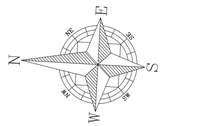


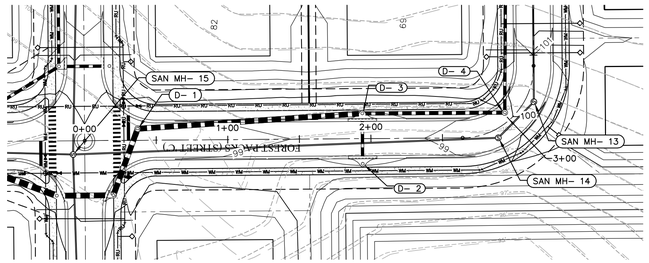


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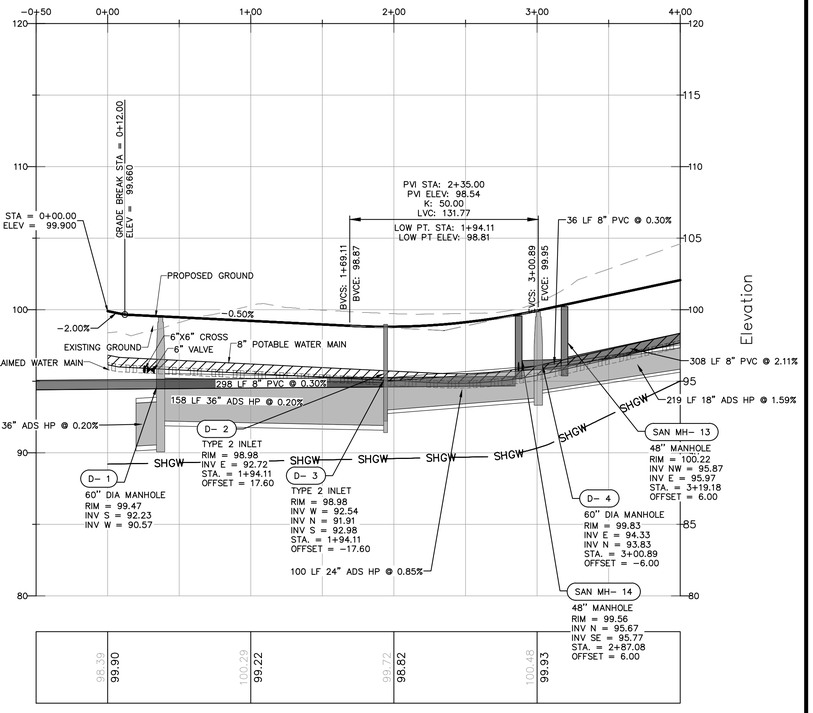
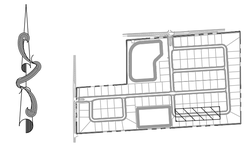



VERTICAL SCALE: 1" = 5'
HORIZONTAL SCALE: 1" = 50'



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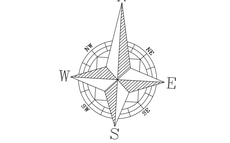


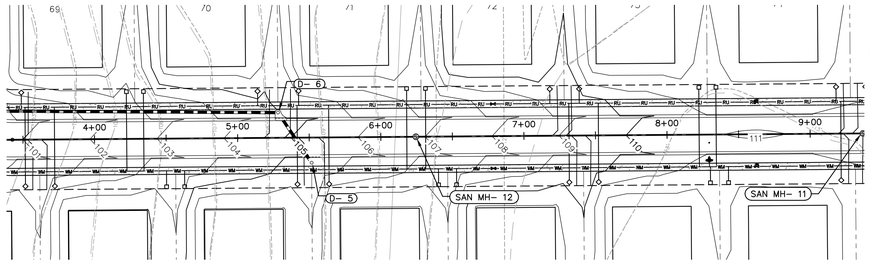


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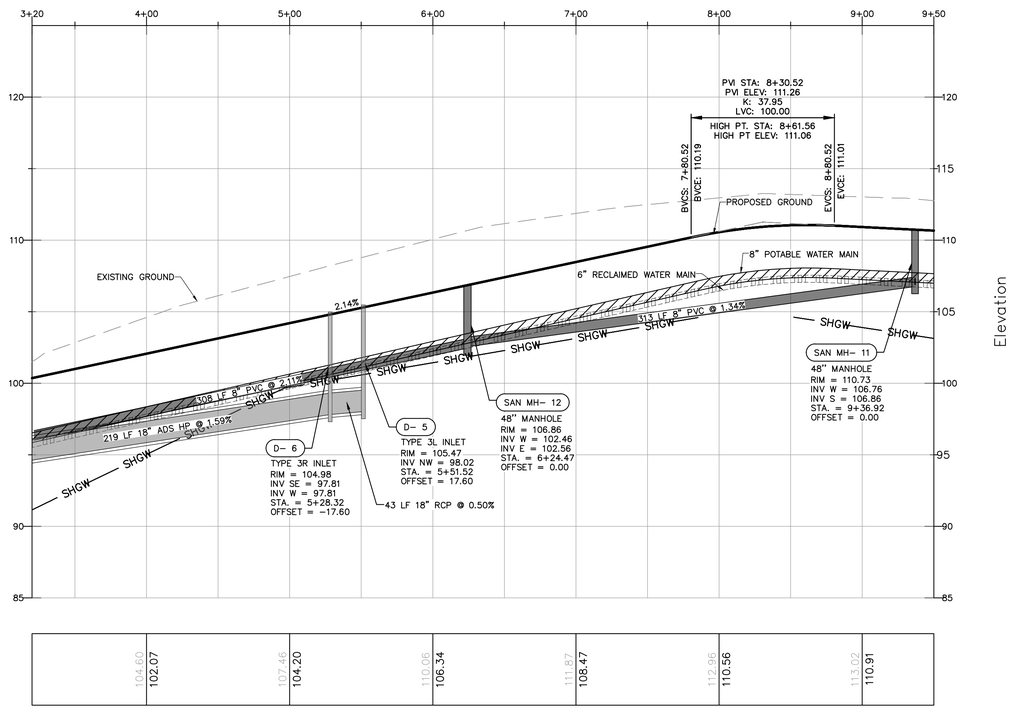


VERTICAL SCALE: 1" = 5'
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PLAN & PROFILE - STREET D - STA. 0+00 TO STA. 9+00
CONSTRUCTION SITE PLAN

WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

| DRAWN: | DESIGNED: | CHECKED: | DATE: |
|---|---|---|---|
| B. KILLELA | O. SANCHEZ | O. SANCHEZ | 6/11/24 |

| SCALE | PROJECT | SHEET |
|---|---|---|
| 1" = 50' | MH-005 | C7.5 |

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PROFESSIONAL ENGINEER

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**SHEET 52 OF 82**


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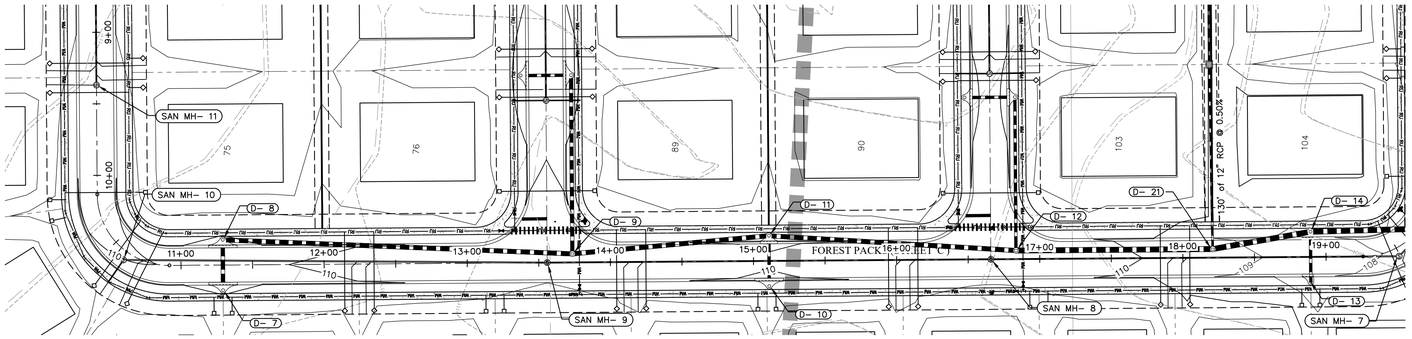


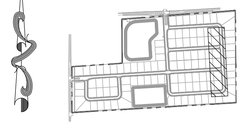

KEY MAP

GRAPHIC SCALE

50 0 25 50 100

( IN FEET )
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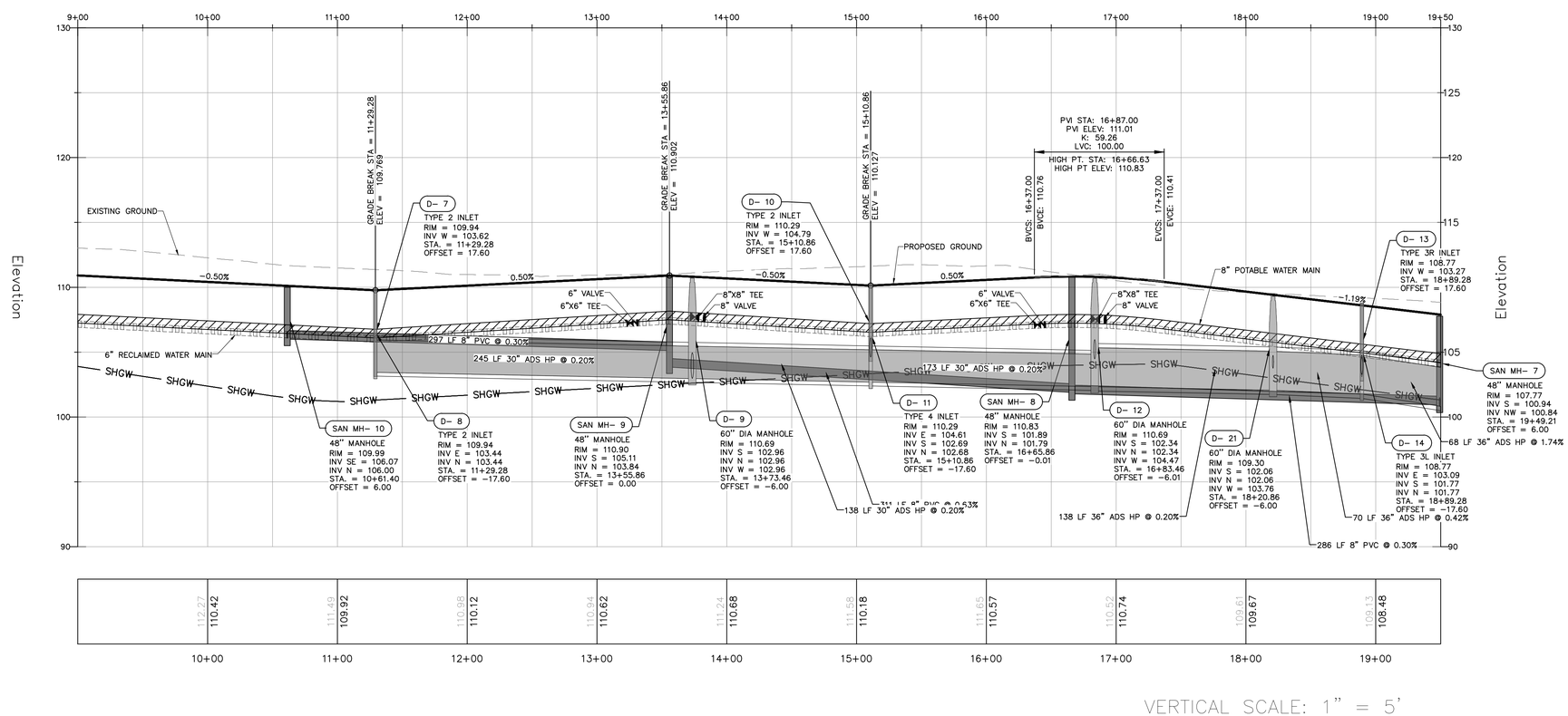


VERTICAL SCALE: 1" = 5'
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# PLAN & PROFILE - STREET D - STA. 9+00 TO STA. 19+00 CONSTRUCTION SITE PLAN

WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

| DRAWN: | DESIGNED: | CHECKED: | DATE: |
|---|---|---|---|
| B. KILLELA | O. SANCHEZ | O. SANCHEZ | 6/11/24 |

| SCALE | PROJECT | SHEET |
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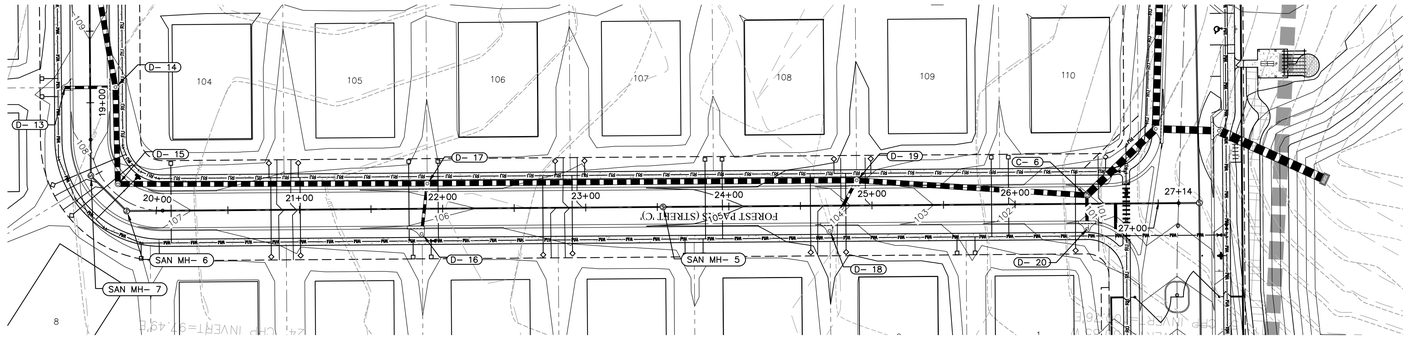
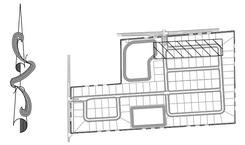
**SHEET 53 OF 82**



\\appian-file\Projects_PROJECT DRAWINGS\MIH-005 Wolf Lake Run Subdivision\Drawings\CAD Civil3D\Layouts\04 Final Engineering\PLAN & PROFILE - STREET D.dwg Modified:6/11/2024 By:osanchez



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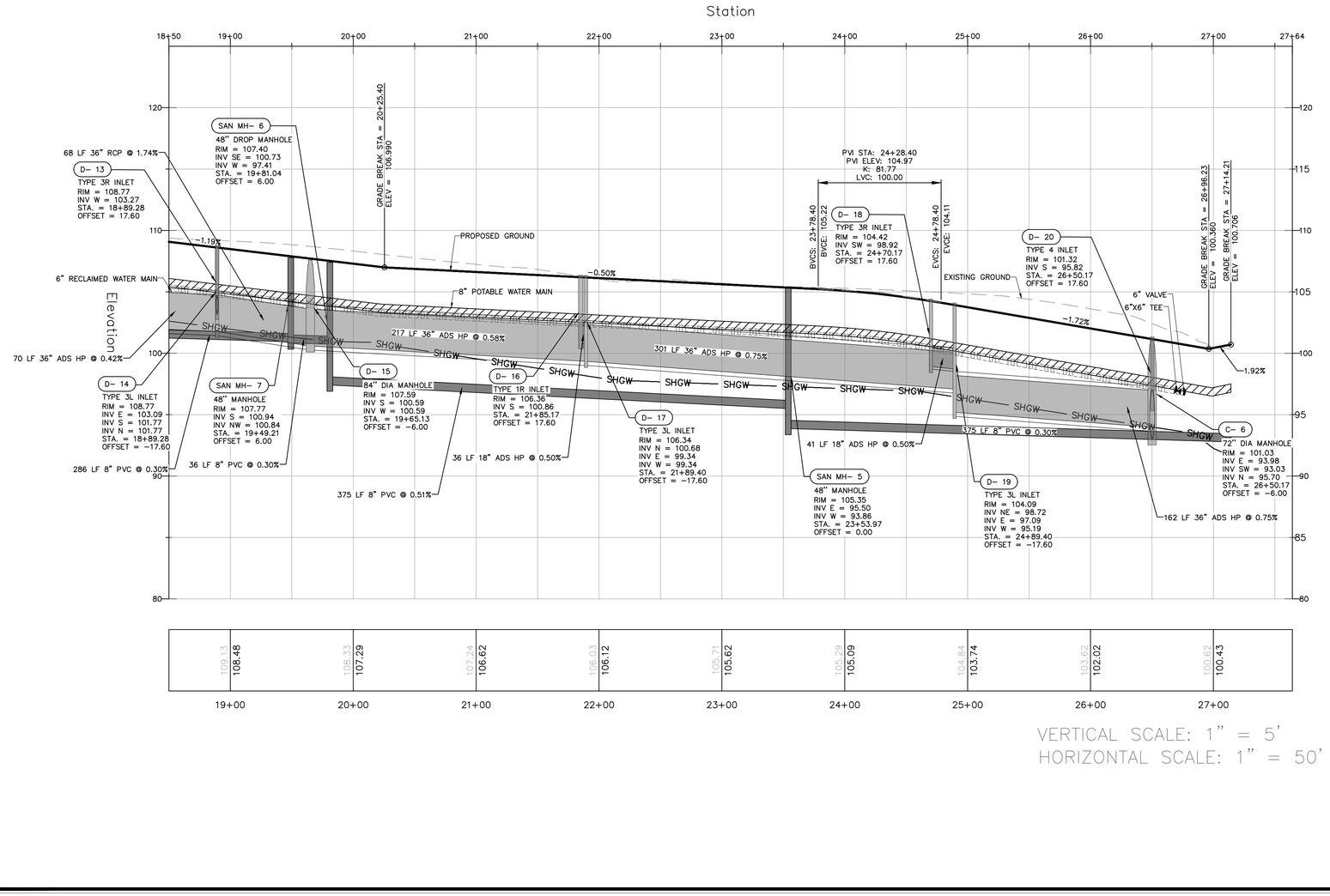


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PLAN & PROFILE – STREET D –
STA. 19+00 TO SAT. 27+14
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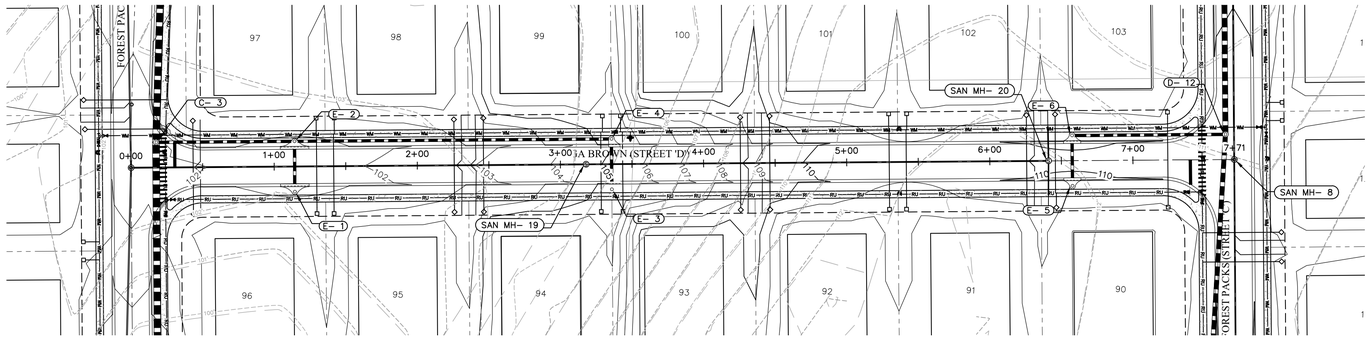
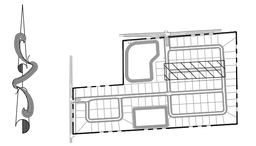
**SHEET 54 OF 82**

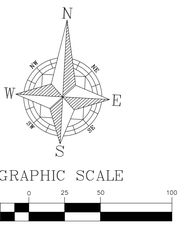



\\appian-file\Projects_PROJECT DRAWINGS\MIH-005 Wolf Lake Run Subdivision\Drawings\CAD Civil3D\Layouts\04 Final Engineering\PLAN & PROFILE - STREET D.dwg Modified:6/11/2024 By:osanchez



KEY MAP




## PRESSURE PIPE NOTES PER F.A.C. RULE 62-55.314

(1) HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS.

(a) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THEOUTSIDE 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) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER.

(c) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN 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 FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX I NCHES ABOVE THE TOP OF THE SEWER.

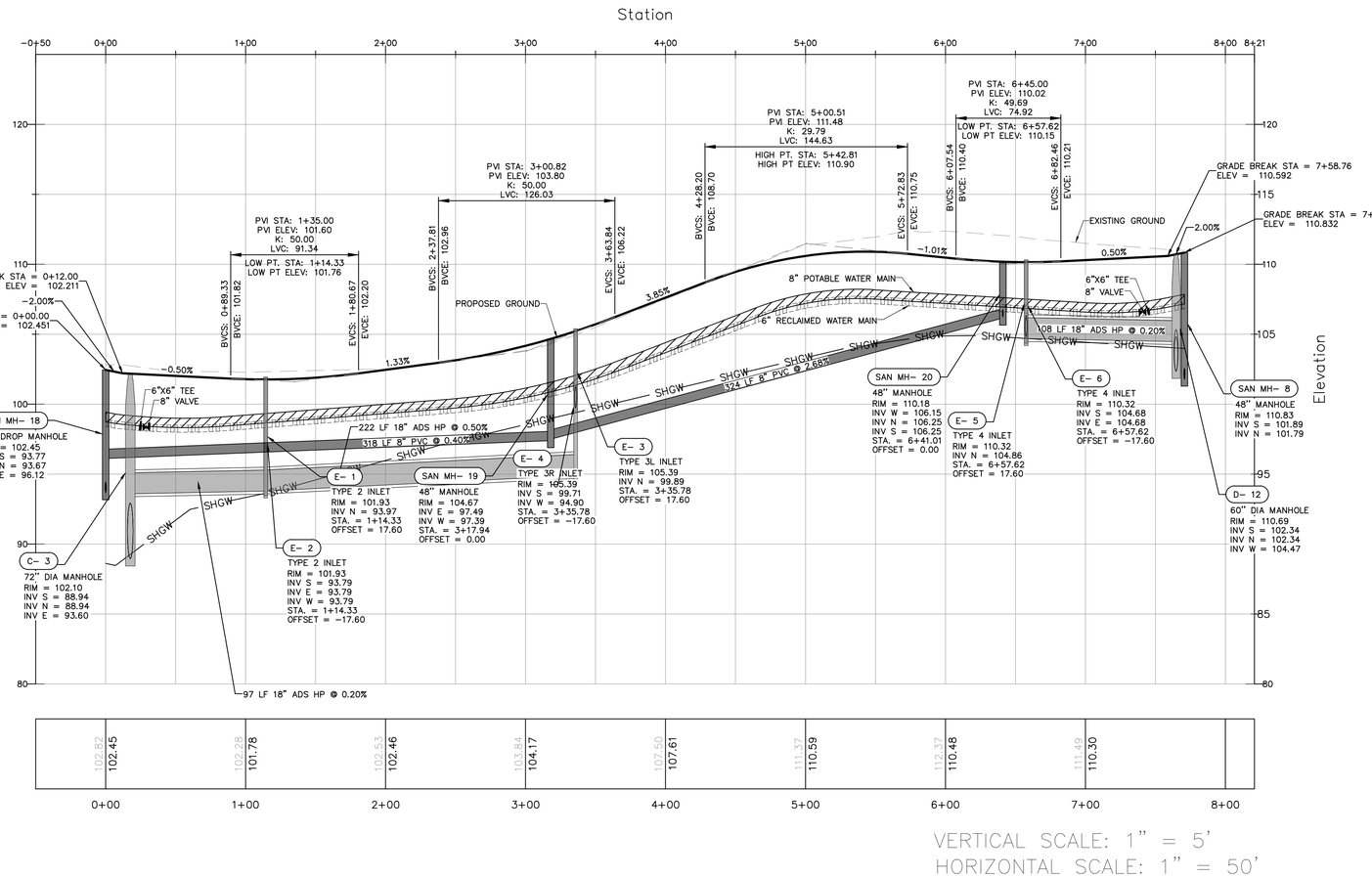
(d) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E-6.002, F.A.C.

(2) VERTICAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, AND RECLAIMED WATER PIPELINES.

(a) NEW OR RELOCATED, UNDERGROUND 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 SIX INCHES, AND PREFERABLY 12 INCHES, ABOVE OR AT LEAST 12 INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.

(b) NEW OR RELOCATED, UNDERGROUND 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 12 INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE 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 FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY- OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.




VERTICAL SCALE: 1" = 5'
HORIZONTAL SCALE: 1" = 50'

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**SHEET 55 OF 82**

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 1 | 04/30/2024 | SJRWMD COMMENTS (APPLICATION NO. 215319-10) DATED 03/15/2024 | OSS |
| 2 | 04/30/2024 | CITY OF APOPKA COMMENTS DATED 04/30/2024 | OSS |

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2221 Lee Road, Suite 27, Winter Park, Florida 32789

STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32374

PLAN & PROFILE - STREET E - STA. 0+00 TO STA. 7+71
CONSTRUCTION SITE PLAN

WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

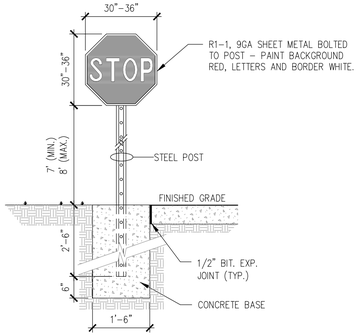
DRAWN: B. KILLELA
DESIGNED: O. SANCHEZ
CHECKED: O. SANCHEZ
DATE: 6/11/24

SCALE: 1" = 50'
PROJECT: MIH-005
SHEET: C7.8

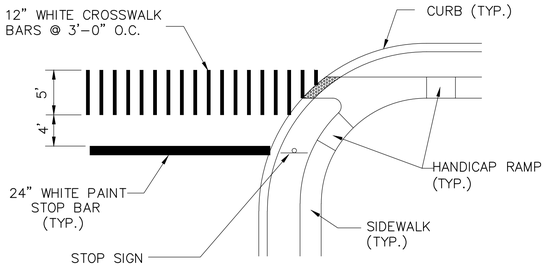
OVIDIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
6/11/24
PROFESSIONAL ENGINEER

This item has been digitally signed and sealed by Ovidio S. Sanchez, PE on the date adjacent to the seal.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

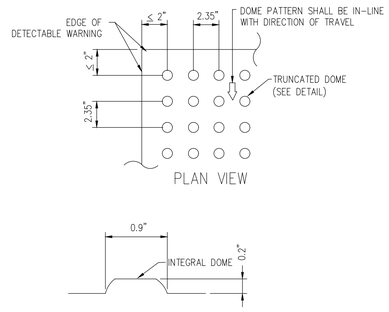
\\appian-file\Projects_PROJECT DRAWINGS\MIH-005 Wolf Lake Run Subdivision\Drawings\CAD Civil3D\Layouts\04 Final Engineering\PLAN & PROFILE - STREET E.dwg Modified:6/11/2024 By:osanchez




1 STOP SIGN
N.T.S.




2 INTERSECTION CROSSWALK/ STOP BAR DETAIL
N.T.S.




3 DETECTABLE WARNING
N.T.S.

**NOTE:**

1. CURB RAMP RUNNING SLOPES SHALL NOT BE STEEPER THAN 1:12 AND CROSS SLOPE SHALL BE 0.02 OR FLATTER.

2. DETECTABLE WARNING SURFACES SHALL BE CONSTRUCTED BY TEXTURING OR APPLYING A TRUNCATED DOME MATERIAL IN CONFORMANCE WITH THE U.S. DEPARTMENT OF JUSTICE A.D.A. STANDARDS FOR ACCESSIBLE DESIGN, A.D.A. ACCESSIBILITY GUIDELINES, SECTION 4.29.2. TRANSITION SLOPES ARE NOT TO HAVE DETECTABLE WARNINGS.

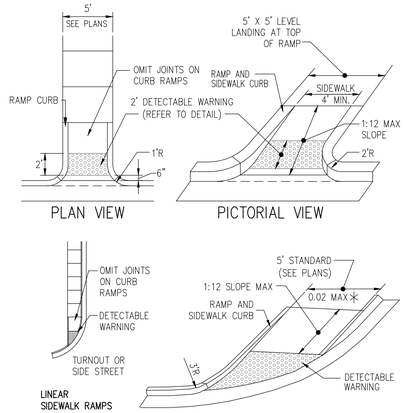
3. WHERE A CURB RAMP IS CONSTRUCTED WITHIN AN EXISTING CURB, CURB AND GUTTER AND/OR SIDEWALK, THE EXISTING CURB OR CURB AND GUTTER SHALL BE REMOVED TO THE NEAREST JOINT BEYOND THE CURB TRANSITIONS OR TO THE EXTENT THAT NO REMAINING SECTION OF CURB OR CURB AND GUTTER IS LESS THAN 5' LONG, THE EXISTING SIDEWALK SHALL BE REMOVED TO THE NEAREST JOINT BEYOND THE TRANSITION SLOPE WALK AROUND OR TO THE EXTENT THAT NO REMAINING SECTION OF SIDEWALK IS LESS THAN 5'.

4. WHERE ADJACENT WALKING SURFACES ARE COLORED OR ARE CONSTRUCTED WITH MATERIALS OTHER THAN STANDARD CLASS I PORTLAND CEMENT CONCRETE IN ACCORDANCE WITH SECTION 522 OF THE SPECIFICATIONS, THE PLAN MUST PROVIDE FOR DETECTABLE WARNING SURFACE COLORS OR MATERIALS THAT PROVIDE THE NECESSARY CONTRAST, EITHER DARK-ON-LIGHT OR LIGHT-ON-DARK. (SAFETY YELLOW OR BRICK RED)

5. RECOMMENDED MANUFACTURER: ENGINEERED PLASTICS, INC. (ARMOR TILE) OLYMPIC TOWERS, 300 PEARL STREET, SUITE 200, BUFFALO, NY 14202. PHONE: (800) 682-2525

**NOTE 1:**
REFERENCE FDOT INDEX 304, PAGE 1, GENERAL AND DESIGN NOTES FOR RAMPS IN R.O.W.

**NOTE 2:**
CONSTRUCT RAMP TO LEAST POSSIBLE SLOPE (MAX = 1:12). CROSS SLOPE OF RAMP AND LANDING SHALL NOT EXCEED 1:50.



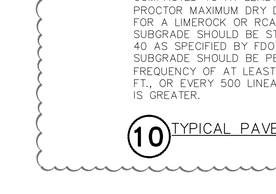

4 HANDICAP END RAMP
3000 PSI (MIN.) CONCRETE N.T.S.




NOTE:
EXPANSION JOINTS SHALL BE LOCATED AT ALL CONCRETE WALK INTERSECTIONS, AT ALL DOOR OPENINGS AND AT 12' O.C. MAXIMUM.

EXPANSION JOINT (1/4" PREMOLDED ASPHALT STRIP) SHALL BE SET 1/8" BELOW TOP OF WALK. SCORE MARK (1" DEPTH) SHALL BE 4' (MAX.) O.C.

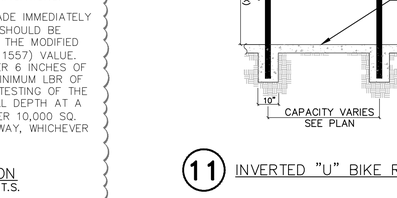
5 CONCRETE WALK
N.T.S.




PLAN SYMBOL

NOTE:
WHEN USED ON HIGH SIDE OF ROADWAYS, THE CROSS SLOPE OF THE GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT AND THE THICKNESS OF THE LIP SHALL BE 6", UNLESS OTHERWISE SHOWN ON PLANS.

6 TYPE "F" CURB AND GUTTER
N.T.S.



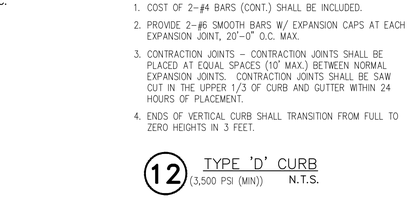

PLAN SYMBOL

NOTES

1. CONSTRUCTION JOINTS SHALL BE PLACED AT EQUAL SPACES (10' MAX.) BETWEEN NORMAL EXPANSION JOINTS. CONSTRUCTION JOINTS SHALL BE SAW CUT WITHIN 24 HRS. OF PLACEMENT.

2. FOR CURB & GUTTER CONSTRUCTED ADJCENT TO CONCRETE PAVEMENT. 1/2" EXPANSION JOINT MATERIALS SHALL BE PLACED BETWEEN THE EDGE OF GUTTER AND EDGE OF PAVEMENT.

7 TYPE 'A' CURB
(3,500 PSI (MIN.)) N.T.S.




PLAN SYMBOL

NOTES

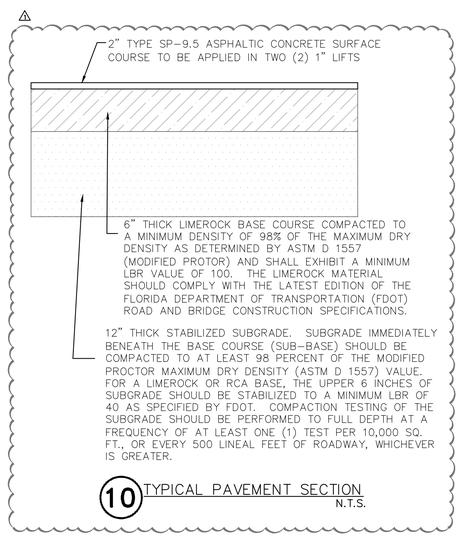
1. CONSTRUCTION JOINTS SHALL BE PLACED AT EQUAL SPACES (10' MAX.) BETWEEN NORMAL EXPANSION JOINTS. CONSTRUCTION JOINTS SHALL BE SAW CUT WITHIN 24 HRS. OF PLACEMENT.

2. FOR CURB & GUTTER CONSTRUCTED ADJCENT TO CONCRETE PAVEMENT. 1/2" EXPANSION JOINT MATERIALS SHALL BE PLACED BETWEEN THE EDGE OF GUTTER AND EDGE OF PAVEMENT.

8 MODIFIED TYPE 'A' CURB
(3,500 PSI (MIN.)) N.T.S.




9 VALLEY GUTTER N.T.S.
(REFER TO F.D.O.T. INDEX 300)




10 TYPICAL PAVEMENT SECTION
N.T.S.




11 INVERTED "U" BIKE RACK
N.T.S.




NOTES:

1. COST OF 2-#4 BARS (CONT.) SHALL BE INCLUDED.
2. PROVIDE 2-#6 SMOOTH BARS W/ EXPANSION CAPS AT EACH EXPANSION JOINT, 20'-0" O.C. MAX.
3. CONTRACTION JOINTS - CONTRACTION JOINTS SHALL BE PLACED AT EQUAL SPACES (10' MAX.) BETWEEN NORMAL EXPANSION JOINTS. CONTRACTION JOINTS SHALL BE SAW CUT IN THE UPPER 1/3 OF CURB AND GUTTER WITHIN 24 HOURS OF PLACEMENT.
4. ENDS OF VERTICAL CURB SHALL TRANSITION FROM FULL TO ZERO HEIGHTS IN 3 FEET.

12 TYPE 'D' CURB
(3,500 PSI (MIN)) N.T.S.




13 RECREATIONAL PATH
N.T.S.

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**SHEET 56 OF 82**

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 1 | 04/30/2024 | SJRWMD COMMENTS (APPLICATION NO. 215319-1) DATED 03/15/2024 | OSS |
| 2 | 04/30/2024 | CITY OF APOPKA COMMENTS DATED 04/30/2024 | OSS |

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STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32374

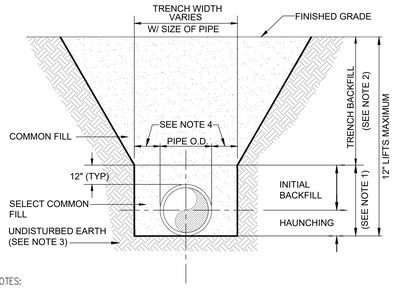
CIVIL DETAILS
CONSTRUCTION SITE PLAN
WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

DRAWN: B. KILLELA
DESIGNED: O. SANCHEZ
CHECKED: O. SANCHEZ
DATE: 6/11/24
SCALE: N.T.S.
PROJECT: MIH-005
SHEET: C8.0

OLVIDIO SALVADOR SANCHEZ LICENSE No. 86492 STATE OF FLORIDA 6/11/24 PROFESSIONAL ENGINEER

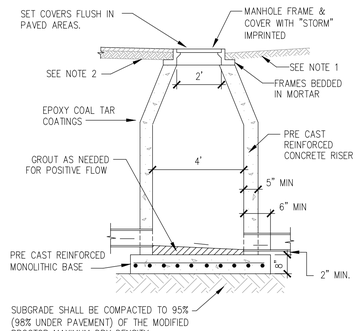
This item has been digitally signed and sealed by Olvidio S. Sanchez, PE on the date adjacent to the seal.
Printed copies of this document are not considered signed and sealed and the digital signature must be verified on any electronic copies.

\\appian-file\Projects_PROJECT DRAWINGS\MIH-005 Wolf Lake Run Subdivision\Drawings\CAD Civil3D\Layouts\04 Final Engineering\CIVIL DETAILS.dwg Modified: 6/7/2024 By: osanchez




NOTES:
1. INITIAL BACKFILL AND HAUNCHING: SELECT COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. PIPE BEDDING SHALL BE COMPACTED TO 95% (MIN) OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY. BEDDING ROCK CAN BE USED FOR BEDDING IF SUBGRADE SOILS ARE TOO WET TO COMPACT, OR AS DIRECTED BY THE ENGINEER.
4. 15" MAX. (12" MIN.) FOR PIPE DIAMETER LESS THAN 24" AND 24" MAX (12" MIN) 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.

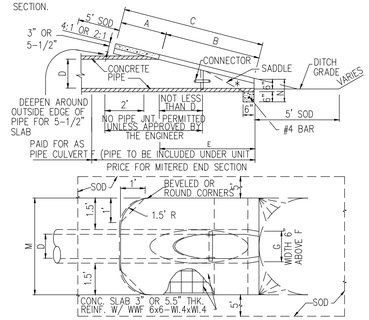
1 TRENCH DETAIL
N.T.S.




NOTE:
1. IN UNPAVED AREAS TOP OF FRAME SHALL BE 2" ABOVE FINISHED GRADE
2. ALL INPAVEMENT STRUCTURES MUST CONFORM TO H20 LOADING STANDARDS
3. 12 INCHES OF STONE BEDDING (FDOT #57 STONE, NON-CALCAREOUS) CAN BE USED FOR BEDDING IF SUBGRADE SOILS ARE TOO WET TO COMPACT.

2 MANHOLE
N.T.S.

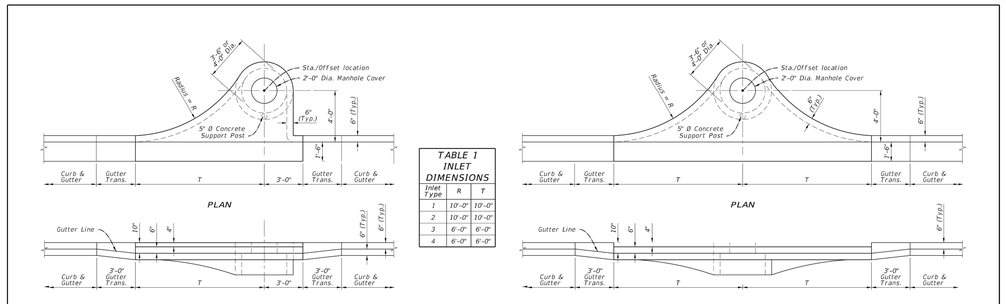
STORM SEWER PIPE LENGTHS NOTED IN THE DRAWINGS REFLECT ONLY THE PIPE ITSELF. WHERE A MITERED END SECTION IS INSTALLED ON SAID PIPE, ITS ADDITIONAL PIPE LENGTH SHALL BE INCLUDED IN THE COST OF THE MITERED END SECTION.




| | DIMENSIONS AND QUANTITIES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | M | | | |
| | D | A | B | C | E | F | G | SINGLE PIPE | DOUBLE PIPE | TRIPLE PIPE | QUAD. PIPE |
| 2:1 SLOPE | 15" | 1.92' | 2.18' | 4.10' | 2.06' | 5' | 1.22' | 4.63' | 7.21' | 9.79' | 12.37' |
| | 18" | 1.97' | 2.74' | 4.71' | 2.56' | 6' | 1.41' | 4.92' | 7.75' | 10.58' | 13.42' |
| | 24" | 2.06' | 3.85' | 5.91' | 3.56' | 7' | 1.73' | 5.50' | 8.92' | 12.33' | 15.75' |
| | 30" | 2.15' | 4.95' | 7.10' | 4.56' | 8' | 2.00' | 6.08' | 10.33' | 14.58' | 18.83' |
| | 36" | 2.25' | 6.08' | 8.33' | 5.56' | 9' | 2.24' | 6.67' | 11.75' | 16.83' | 21.92' |
| | 42" | 2.34' | 7.21' | 9.55' | 6.56' | 10' | 2.45' | 7.25' | 13.25' | 19.25' | 25.25' |
| | 48" | 2.43' | 8.33' | 10.76' | 7.56' | 11' | 2.65' | 7.83' | 14.58' | 21.33' | 28.08' |
| | 54" | 2.52' | 9.44' | 11.96' | 8.56' | 12' | 2.83' | 8.42' | 16.08' | 23.75' | 31.42' |
| | 60" | 2.62' | 10.56' | 13.18' | 9.56' | 14' | 3.00' | 9.00' | 17.50' | 26.00' | 34.50' |
| | 66" | 2.71' | 11.68' | 14.39' | 10.56' | 15' | 3.18' | 9.58' | 18.75' | 27.92' | 37.08' |
| | 72" | 2.80' | 12.80' | 15.60' | 11.56' | 16' | 3.30' | 10.16' | 20.16' | 30.16' | 40.16' |
| 4:1 SLOPE | 15" | 2.27' | 4.09' | 6.36' | 4.03' | 8' | 1.22' | 4.63' | 7.21' | 9.79' | 12.37' |
| | 18" | 2.36' | 5.12' | 7.48' | 5.03' | 9' | 1.41' | 4.92' | 7.75' | 10.58' | 13.42' |
| | 24" | 2.53' | 7.18' | 9.71' | 7.03' | 11' | 1.73' | 5.50' | 8.92' | 12.33' | 15.75' |
| | 30" | 2.70' | 9.25' | 11.95' | 9.03' | 13' | 2.00' | 6.08' | 10.33' | 14.58' | 18.83' |
| | 36" | 2.87' | 11.31' | 14.18' | 11.03' | 15' | 2.24' | 6.67' | 11.75' | 16.83' | 21.92' |
| | 42" | 3.05' | 13.37' | 16.42' | 13.03' | 17' | 2.45' | 7.25' | 13.25' | 19.25' | 25.25' |
| | 48" | 3.22' | 15.43' | 18.65' | 15.03' | 19' | 2.65' | 7.83' | 14.58' | 21.33' | 28.08' |
| | 54" | 3.39' | 17.49' | 20.88' | 17.03' | 21' | 2.83' | 8.42' | 16.08' | 23.75' | 31.42' |
| | 60" | 3.56' | 19.55' | 23.11' | 19.03' | 23' | 3.00' | 9.00' | 17.50' | 26.00' | 34.50' |
| | 66" | 3.73' | 21.62' | 25.35' | 21.03' | 25' | 3.18' | 9.58' | 18.75' | 27.92' | 37.08' |
| | 72" | 3.91' | 22.68' | 26.59' | 23.03' | 27' | 3.30' | 10.16' | 20.16' | 30.16' | 40.16' |

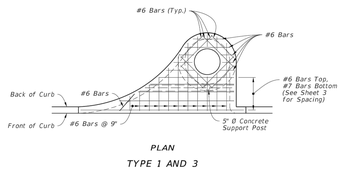
* SLOPE- 4:1 MITER - TO C PIPE FOR PIPES 18" AND SMALLER
2:1 FOR PIPES 24" AND LARGER
2:1 MITER - TO C PIPE FOR PIPES 18" AND SMALLER
1:1 FOR PIPES 24" AND LARGER

3 MITERED END SECTION (RCP)
FDOT STD. INDEX 430-021 N.T.S.

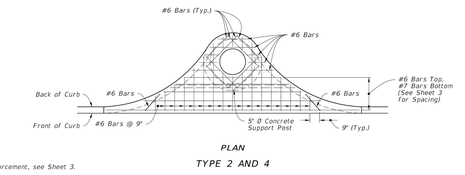



| TABLE 1 INLET DIMENSIONS | | |
|---|---|---|
| Inlet Type | R | T |
| 1 | 10'-0" | 10'-0" |
| 2 | 10'-0" | 10'-0" |
| 3 | 6'-0" | 6'-0" |
| 4 | 6'-0" | 6'-0" |

TOP DIMENSIONAL DETAILS



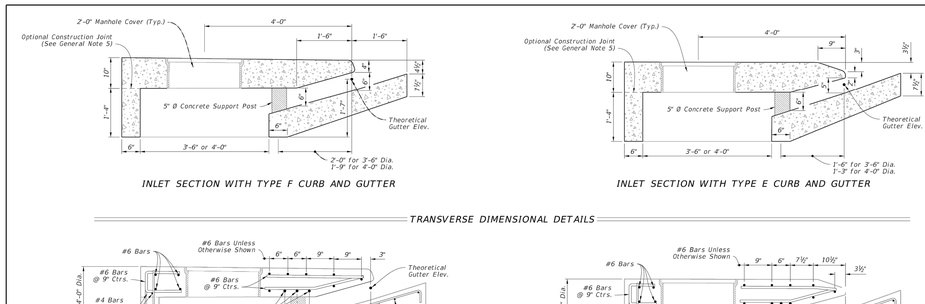

NOTE:
For transverse section reinforcement, see Sheet 3.



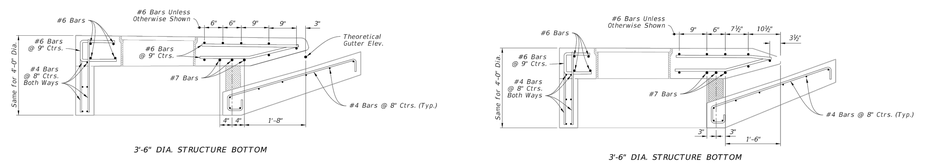

TOP REINFORCING DETAILS

TOP DIMENSIONAL AND TOP REINFORCING DETAILS

| LAST REVISION 11/01/20 | DESCRIPTION: | FDOT FY 2022-23 STANDARD PLANS | CURB INLET TOP TYPES 1, 2, 3, AND 4 | INDEX 425-020 | SHEET 2 of 3 |
|---|---|---|---|---|---|




TRANSVERSE DIMENSIONAL DETAILS



TRANSVERSE REINFORCING DETAILS

TRANSVERSE DIMENSIONAL AND REINFORCING DETAILS

| LAST REVISION 11/01/20 | DESCRIPTION: | FDOT FY 2022-23 STANDARD PLANS | CURB INLET TOP TYPES 1, 2, 3, AND 4 | INDEX 425-020 | SHEET 3 of 3 |
|---|---|---|---|---|---|

4 TYPE 1, 2, 3, AND 4 INLETS
N.T.S.

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 1 | 04/30/2024 | SJRWMD COMMENTS (APPLICATION NO. 215319-1) DATED 03/15/2024 | OSS |
| 2 | 04/30/2024 | CITY OF APOPKA COMMENTS DATED 04/30/2024 | OSS |

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STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32574

DRAWN: B. KILLELA
DESIGNED: O. SANCHEZ
CHECKED: O. SANCHEZ
DATE: 6/11/24
SCALE: N.T.S.
PROJECT: MIH-005
SHEET: C9.0

DRAINAGE DETAILS
CONSTRUCTION SITE PLAN
WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

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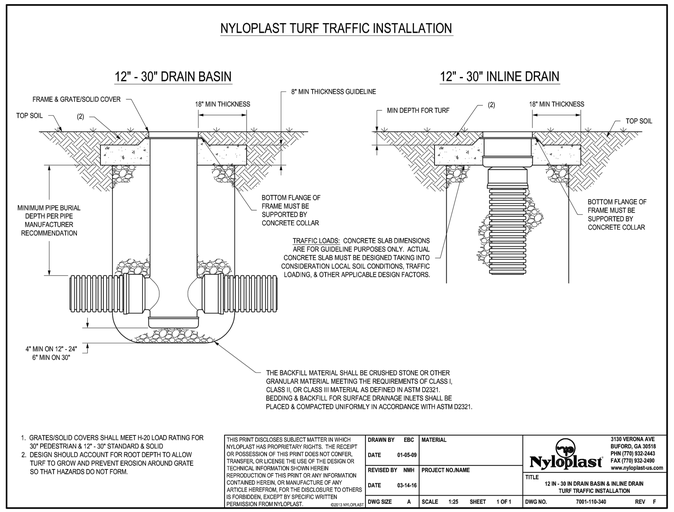
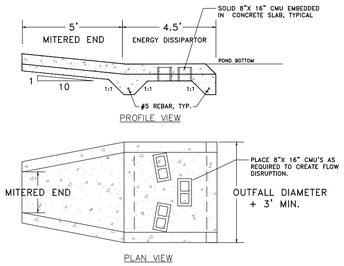
SHEET 57 OF 82



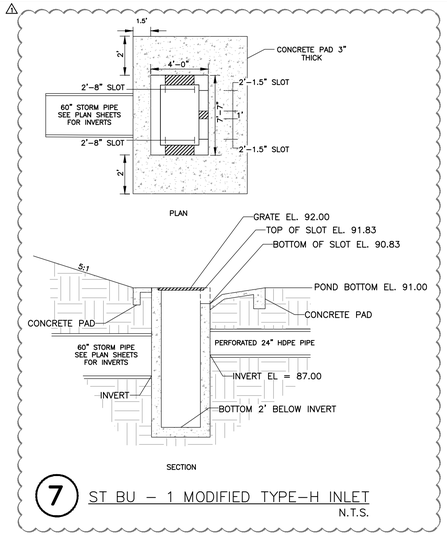
\\appian-file\Projects_PROJECT DRAWINGS\MIH-005 Wolf Lake Run Subdivision\Drawings\CAD Civil3D\Layouts\04 Final Engineering\DRAINAGE DETAILS.dwg Modified: 6/11/2024 By: osanchez



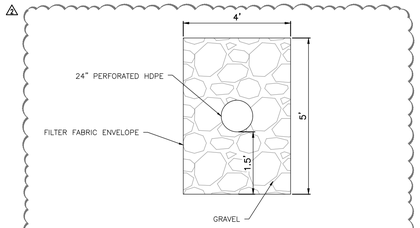

5 CONCRETE COLLAR
N.T.S.




6 ENERGY DISSIPATOR DETAIL
N.T.S.




7 ST BU – 1 MODIFIED TYPE–H INLET
N.T.S.




NOTES:
1. GRAVEL SHALL BE GRADES 56 OR 57 AND SHALL MEET THE REQUIREMENTS OF FDOT SECTIONS 01–2 OR 901–3.
2. FILTER FABRIC SHALL BE TYPE D–3 (SEE FDOT INDEX NO. 199).
3. EXFILTRATION PIPE SHALL BE 24" DIAMETER TUBING MEETING AASHTO M252 AND ASTM F405.62A WITH POLYESTER KNITTED FILTER SOCK MEETING ASTM D3887 AND ASTM D1682.

8 EXILTRATION PIPE
N.T.S.

| REV. | DATE | BY |
|---|---|---|
| 1 | 04/30/2024 | SJ/MG COMMENTS (APPLICATION NO. 215319-10) DATED 03/15/2024 | OSS |
| 2 | 04/30/2024 | CITY OF APOPKA COMMENTS DATED 04/29/2024 | OSS |

DESCRIPTION

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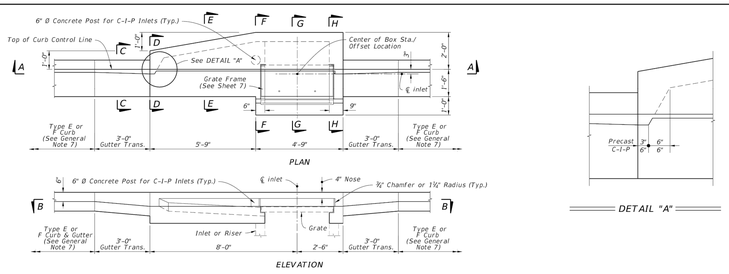
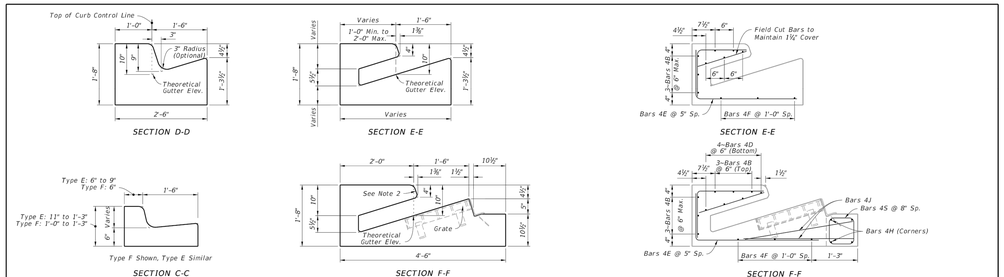
**APPIAN ENGINEERING LLC.**
APPIANFL.COM • 407.960.5868
2221 Lee Road, Suite 27, Winter Park, Florida 32789
STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32374

DRAWN: B. KILLELA
DESIGNED: O. SANCHEZ
CHECKED: O. SANCHEZ
DATE: 6/11/24
SCALE: N.T.S.
PROJECT: MIH–005
SHEET: C9.1

DRAINAGE DETAILS
CONSTRUCTION SITE PLAN
WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA




TYPE 5 AND 6 DIMENSIONAL DETAILS

| LAST REVISION | DESCRIPTION: | FDOT | FY 2022-23 STANDARD PLANS | CURB INLET TOP TYPES 5 AND 6 | INDEX | SHEET |
|---|---|---|---|---|---|---|
| 11/01/20 | | | | | 425-021 | 2 of 7 |

PRECAST DIMENSIONAL AND REINFORCING DETAILS

| LAST REVISION | DESCRIPTION: | FDOT | FY 2022-23 STANDARD PLANS | CURB INLET TOP TYPES 5 AND 6 | INDEX | SHEET |
|---|---|---|---|---|---|---|
| 11/01/20 | | | | | 425-021 | 4 of 7 |

9 TYPE 5 AND 6 INLETS
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STATE OF FLORIDA
6/11/24
PROFESSIONAL ENGINEER

This item has been digitally signed and sealed by Ovidio S. Sanchez, PE on the date adjacent to the seal.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

**SHEET 58 OF 82**



\\appian-file\Projects_PROJECT DRAWINGS\MIH-005 Wolf Lake Run Subdivision\Drawings\CAD Civil3D\Layouts\04 Final Engineering\DRAINAGE DETAILS.dwg Modified: 6/11/2024 By: osanchez

## GENERAL NOTES

1. Governing standards and specifications on this project are considered the Florida Department of Transportation (FDOT) Design Standards (2013 Edition), FDOT Standard Specifications for Road and Bridge Construction (2013 Edition), and City of Apopka Utilities Design and Construction Standards Manual (2014 Edition).
2. All personal property, except mail boxes located within the public right-of-way (not relocated by the property owner), shall be removed by the Contractor as necessary to construct the project in accordance with the Construction Plans. Mail boxes shall be relocated by the Contractor in accordance with FDOT Index No. 532.
3. The disposal of excess earthwork materials shall be the responsibility of the Contractor. Approval of disposal sites shall be obtained from the City of Apopka prior to disposal.
4. All existing trees and stumps within the right-of-way and limit of the project are to be removed as clearing and grubbing unless otherwise directed.
5. Seed and mulch all disturbed areas not covered by sod unless otherwise directed.
6. All pavement offsets shown are to the proposed centerline of construction, as where radius dimensions are to the edge of pavement, unless otherwise noted.
7. Turnout locations and widths shown in the Construction Plans are approximate and may be adjusted as necessary or as directed by the Engineer. All turnouts shall be constructed in accordance with FDOT Index No. 515.
8. The various permits included in the bid specifications payment are included in the bid price for Section 104. The Contractor shall perform his work in accordance with the requirements of ..... Control, and Abatement of Erosion and Water ..... excluding any fulfillment of the intent of the Contract Documents. By entering the bidding process the specified elsewhere. Environmental controls shall be used at locations designated in the plans and/or designated by the Engineer.
9. The information shown on these drawings concerning type and location of underground and other utilities are based on available records and surveys, but is not guaranteed to be accurate or all inclusive. The Contractor shall make his own determination as to the type and location of utilities as may be necessary to avoid damage there to, and is responsible for coordinating utility relocation.
10. Prior to ordering drainage structures, the Contractor shall determine if drainage utility conflicts exist. Information about possible conflicts shall be submitted to the Engineer as soon as possible after discovery of such for resolution.
11. The Contractor shall notify all gas utility companies a minimum of two working days prior to excavation as required by Chapter 77-153 of the Florida Statutes.
12. All inlet/manhole - pipe joints shall be filled with non-shrink grout, covered with an asphaltic mastic coating, and wrapped with a filter fabric material per Section 13.03.03 of the Orange County Road Construction Specifications.
13. All curb inlets, ditch bottom inlets, and manholes shall have traffic bearing frames and covers or grates meeting AASHTO-20 loading requirements.
14. Changes of pipe inverts not exceeding plus or minus one foot will not be considered as a basis for additional compensation for the pertinent pipe bid item or for modification of precast structures.
15. All benchmarks (irons and monuments) shown in the Construction Plans, or found, shall be preserved. Those shown in proposed pavement shall be protected with a cast iron valve box.
16. Public land corners within the limits of construction shall be protected. If a corner monument is in danger of being destroyed or disturbed, the Contractor shall notify the Engineer, without delay, by telephone. The Contractor shall provide written follow up confirmation within 48-hours of telephone notification.
17. Prior to beginning of any construction, the Contractor shall submit to the Engineer a set of field notes verifying the benchmark elevations and the reference point connections on the plan and profile view sheets, and/or a set of field notes for all additional benchmark and reference point connections proposed to be used in constructing the project with their location, description and elevation, based on North American Vertical Datum (NAVD88). All submittals shall be signed and sealed by a Professional Land Surveyor registered in the State of Florida.
18. Within 21 calendar days after notice to proceed, the Contractor shall stake the public right-of-way at 50 foot intervals and the right-of-way breaks with corresponding stations shown on the stakes. No invoice for payment for mobilization (Pay Item No. 101-1) will be processed until the right-of-way has been staked to the satisfaction of the Engineer.
19. Any United States Code (USC) and National Geodetic Survey (NGS) monuments within the limits of construction shall be protected. If in danger of damage, the Contractor shall notify the Engineer, and both shall notify:
    State Geodetic Advisor, NOAA
    3900 Commonwealth Blvd - MS105
    Tallahassee, FL Phone (850) 245-2606
20. It shall be the responsibility of the Contractor to acquire all necessary right-of-way and maintenance of traffic permits. The City will waive all permits required for construction activities within the limits of public right-of-way owned and maintained by the City of Apopka. For construction activity within the limits of public right-of-way maintained by the City but owned by Orange County or the State of Florida, the Contractor shall acquire the required permits from the agencies. It shall be the responsibility of the Contractor to insure that all required permits are obtained and in-hand before beginning any construction.
21. The location of all existing utilities, storm drainage systems, and topographic features shown on the plans have been determined from the best available information and are provided for the convenience of the Contractor. The Engineer assumes no responsibility for their inaccuracy. Should a discrepancy arise between these plans and actual field conditions, which would appreciably affect the execution of these plans, the Contractor shall halt construction and notify the Engineer immediately.
22. The Contractor shall be responsible for notifying the City within 48 hours before any inspections. Also, the Contractor shall be responsible for meeting all inspection criteria, schedules and signing said inspections.
23. The Contractor shall not excavate, remove or otherwise disturb any material, structure or part of a structure which is located outside the lines, grades or grading section, established for this project, except where such excavations or removal is provided or in the Contract Construction Plans or Technical Specifications.
24. All work and all materials furnished shall be in conformity with the lines, grades, grading sections, cross sections, dimensions, material requirements, and testing requirements that are specified in the Contract Construction Plans or Technical Specifications.
25. All work shall be accomplished in strict accordance with all applicable federal, state and local codes, ordinances and regulations.
26. Apparent errors, discrepancies or omissions in the Construction Plans shall be brought to the Engineer's attention before bidding.
27. After completion of construction, the Contractor shall provide to the City a completed as-built plan one week prior to the final inspection. Before the final acceptance it shall be the Contractor's responsibility to perform a site cleanup for the removal of trash, debris, excess materials, and equipment to the project site clean and in good order.
28. No extra payments shall be allowed for any work required due to misunderstanding of job or site conditions affecting the work as described in the Technical Specifications or shown on the Construction Plans. The Contractor shall not take advantage of any apparent error or omission in the Construction Plans or Technical Specifications and the Engineer shall be permitted to make corrections and interpretation as may be deemed necessary for the bidders acknowledge acceptance of these conditions.
29. The Contractor shall submit four (4) sets of detailed shop drawings of all major items proposed for this project to the Engineer prior to ordering any of the equipment or material. Two (2) copies of the shop drawings will be returned to the Contractor. Upon the Contractor's receipt of approved shop drawings from the Engineer, the Contractor may proceed with the work.
30. The Contractor shall comply with the legal load restrictions in hauling of materials in public roads beyond the limits of construction work. A special permit will not relieve the Contractor of liability for damage which may result from the moving of material and equipment.
31. During construction, no direct discharge of water to downstream receiving waters will be allowed. The Contractor is responsible for maintaining water quality and route discharge water in such a manner as to adequately remove silt prior to runoff from the site.
32. Connection to existing lines to which utility pipe of the Contract must connect, the following work shall be performed:
    A. Expose buried lines to confirm or determine end connection, pipe material and diameter.
    B. Furnishing and installing piping and making proper connections.

CITY OF APOPKA
DESIGN ENGINEERING DIVISION | JANUARY 2014 | FIG. GN

| PROPOSED UTILITY | HORIZONTAL & VERTICAL SEPARATION REQUIREMENTS | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | POTABLE WATER | | RECLAIMED WATER* | | SANITARY SEWER FORCE MAIN | | SANITARY SEWER GRAVITY MAIN | | STORM SEWER | |
| | HORIZ. | VERT. | HORIZ. | VERT. | HORIZ. | VERT. | HORIZ. | VERT. | HORIZ. | VERT. |
| POTABLE WATER | – | – | 3' | 12" | 6' | 12" | 6' | 6" ABOVE 12" BELOW | 3' | 6" |
| RECLAIMED* WATER | 3' | 12" | – | – | 3' | 12" | 3' | 12" | – | – |
| SANITARY SEWER FORCE MAIN | 6' | 12" | 3' | 12" | – | – | – | – | – | – |
| SANITARY SEWER GRAVITY MAIN | 6' | 6" ABOVE 12" BELOW | 3' | 12" | – | – | – | – | – | – |

GENERAL NOTES:

1. THE TABLE REPRESENTS THE MINIMUM SEPARATION REQUIREMENTS AS DESCRIBED IN F.D.E.P. RULES OF THE FLORIDA ADMINISTRATION CODE (F.A.C.). THESE SEPARATION REQUIREMENTS SHALL APPLY BETWEEN NEWLY PROPOSED UTILITY LINES AND EXISTING OR PROPOSED UTILITY LINES.
2. FOR THE PURPOSE OF THIS TABLE, RECLAIMED WATER SHALL MEAN UNRESTRICTED PUBLIC ACCESS REUSE WATER AS DEFINED BY F.A.C. 17-610. OTHER TYPES OF RECLAIMED WATER ARE CONSIDERED RAW SEWAGE AND SEPARATIONS LISTED FOR SANITARY SEWER SHALL APPLY.
3. ALL SEPARATION DISTANCES ARE FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE UNLESS OTHERWISE SPECIFIED. CRITERION PRODUCING GREATER CLEARANCE SHALL BE USED.

   C/C – DENOTES CENTER OF PIPE TO CENTER OF PIPE.

   O/O – DENOTES OUTSIDE OF PIPE TO OUTSIDE OF PIPE.
4. ACCEPTABLE VARIANCES:
   A. WHERE HORIZONTAL SEPARATION IS NOT ATTAINABLE, PVC-C-900 SDR-14 OR CONCRETE ENCASEMENT MUST BE USED FOR THE SANITARY SEWER LINE FOR AT LEAST ONE OF THE PIPES. PVC-C-900 SDR 14 OR CONCRETE ENCASEMENT MUST BE USED UNTIL MINIMUM CLEARANCE IS REGAINED.
   B. WHERE 18 INCH VERTICAL SEPARATION IS NOT ATTAINABLE AT CROSSINGS, USE ONE FULL LENGTH OF PVC-C-900 SDR-14 FOR SANITARY SEWERS OR ENCASED PIPE CENTERED AT THE POINT OF CROSSING SPECIAL SUPPORT MAY BE REQUIRED.
5. NO WATER PIPE SHALL PASS THROUGH OR COME IN CONTACT WITH ANY PART OF A SANITARY OR STORM WATER MANHOLE OR STRUCTURE.
6. CONCRETE ENCASEMENT SHALL NOT BE USED UNLESS APPROVED BY PUBLIC SERVICES DIRECTOR OR HIS DESIGNEE.

## HORIZONTAL & VERTICAL SEPARATION REQUIREMENTS

CITY OF APOPKA
DESIGN ENGINEERING DIVISION | JANUARY 2014 | FIG. 104

| MINIMUM LENGTH (FT) TO BE RESTRAINED ON EACH SIDE OF FITTING(S). * | 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 | | | | | | | |

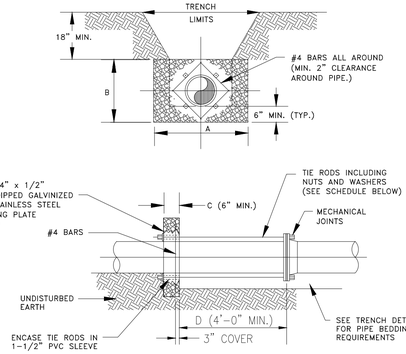
* ONLY RESTRAIN BRANCH PIPE FOR TEES. ONLY RESTRAIN LARGER PIPE FOR REDUCERS
** LENGTH ALONG RUN ASSUMED TO BE 18'

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.** ** FM = 100 P.S.I. / WM OR RWM = 150 P.S.I.
   SOIL DESIGNATION: SM(SAND SILT)
   LAYING CONDITIONS: 3
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.

## RESTRAINED PIPE TABLE (PVC)

CITY OF APOPKA
DESIGN ENGINEERING DIVISION | JANUARY 2014 | FIG. 105




NOTES:

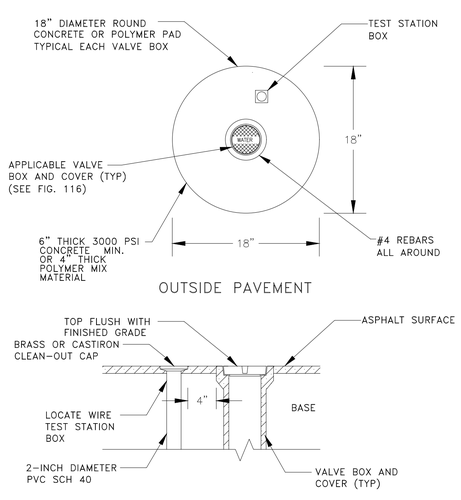
1. ADDITIONAL REINFORCEMENTS SHALL BE AS SPECIFIED BY THE ENGINEER.
2. MINIMUM COMPRESSIVE STRENGTH FOR CONCRETE SHALL BE 2500 P.S.I.
3. BEDDING, BACKFILL AND COMPACTION SHALL BE AS SPECIFIED ELSEWHERE IN THE STANDARD DRAWINGS.
4. ALL FORM BOARDS SHALL BE REMOVED PRIOR TO BACKFILL.
5. NO ALLOWANCE SHALL BE MADE FOR FRICTION BETWEEN THE PIPE WALL AND THE THRUST COLLAR.
6. DESIGN PRESSURE: 150 P.S.I.

| SCHEDULE OF DIMENSIONS AND MATERIALS * | | | | | | |
|---|---|---|---|---|---|---|
| PIPE SIZE (INCHES) | DIMENSIONS (FT.) | | | | TIE RODS REQ'D | |
| | A | B | C | D | DIA. | NO. |
| 6 | 2.0 | 2.0 | 1.0 | | 3/4 | 2 |
| 8 | 2.5 | 2.5 | 1.0 | | 3/4 | 2 |
| 10 | 3.5 | 3.0 | 1.0 | | 3/4 | 4 |
| 12 | 5.0 | 3.0 | 1.0 | | 3/4 | 4 |
| 16 | 6.0 | 4.0 | 1.5 | | 3/4 | 4 |
| 20 | 8.0 | 5.0 | 1.5 | | 3/4 | 6 |
| 24 | 9.0 | 6.0 | 1.5 | | 3/4 | 8 |
| | | | | | | |
| | | | | | | |
| | | | | | | |

NOTE: THRUST BLOCK AREAS TO BE COMPUTED ON BASIS OF 2,000 LBS. PER SQ. FT. SOIL RESTRAINT BEARING. (1,500 MIN) SEE NOTE 5
* TO BE COMPLETED BY ENGINEER.

## WATER MAIN THRUST COLLAR DETAIL

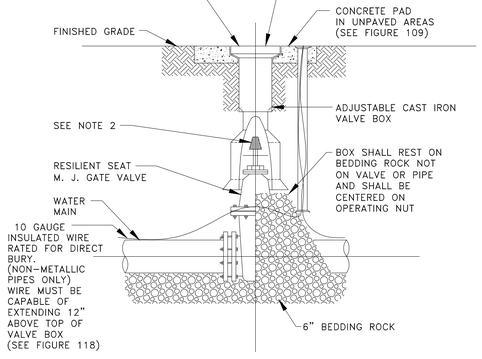
CITY OF APOPKA
DESIGN ENGINEERING DIVISION | JANUARY 2014 | FIG. 107




VALVE IDENTIFICATION TAG
TO BE INSTALLED BY CITY
& PAID FOR BY DEVELOPER

## VALVE BOX

CITY OF APOPKA
DESIGN ENGINEERING DIVISION | JANUARY 2014 | FIG. 109

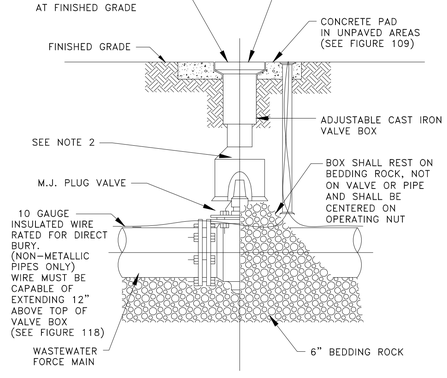



NOTES:

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

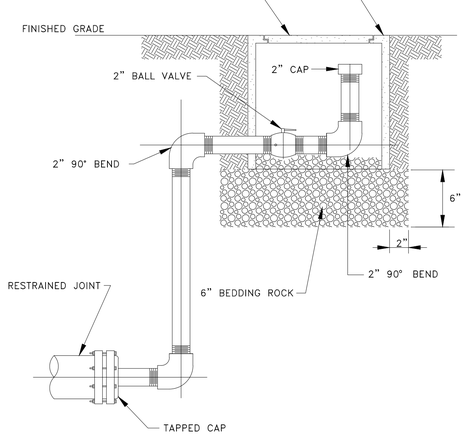



NOTES:

1. PVC EXTENSIONS MAY BE USED ON VALVE BOX INSTALLATION.
2. THE ACTUATING NUT FOR DEEPER VALVES SHALL BE EXTENDED TO WITHIN 3 FEET BELOW FINISHED GRADE.

## PLUG VALVE AND BOX DETAIL

CITY OF APOPKA
DESIGN ENGINEERING DIVISION | JANUARY 2014 | FIG. 400 A




NOTES:

1. ALL 2 INCH PIPE AND FITTINGS SHALL BE SCHEDULE 40 GALVANIZED STEEL OR BRASS WITH THREADED (NPT) JOINTS. USE TEFLON TAPE ON JOINTS.
2. COLOR SHALL BE APPROPRIATE FOR USE.

## BLOWOFF VALVE DETAIL

CITY OF APOPKA
DESIGN ENGINEERING DIVISION | JANUARY 2014 | FIG. 403

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UTILITY DETAILS
CONSTRUCTION SITE PLAN
WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

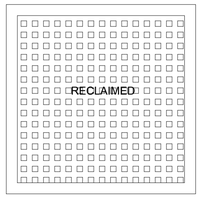
| DRAWN: | DESIGNED: | CHECKED: | DATE: |
|---|---|---|---|
| B. KILLELA | O. SANCHEZ | O. SANCHEZ | 6/11/24 |

| SCALE | PROJECT | SHEET |
|---|---|---|
| N.T.S. | MIH-005 | C10.0 |

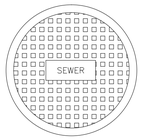
OSCAR SALVADOR SANCHEZ LICENSE No. 86492 STATE OF FLORIDA PROFESSIONAL ENGINEER 6/11/24

This item has been digitally signed and sealed by Oscar S. Sanchez, PE on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the digital signature must be verified on any electronic copies.

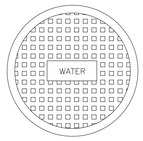
\\appian-file\Projects_PROJECT DRAWINGS\MIH-005 Wolf Lake Run Subdivision\Drawings\CAD Civil3D\Layouts\04 Final Engineering\UTILITY DETAILS.dwg Modified: 6/3/2024 By:osanchez




RECLAIMED WATER



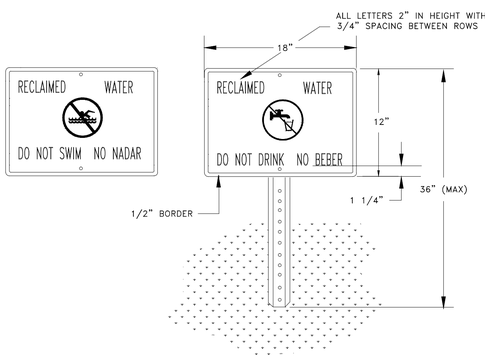

SEWER




POTABLE WATER

## TYPICAL VALVE BOX COVER DETAILS

| CITY OF APOPKA<br>DESIGN ENGINEERING DIVISION | JANUARY 2014 | FIG. 116 |
|---|---|---|

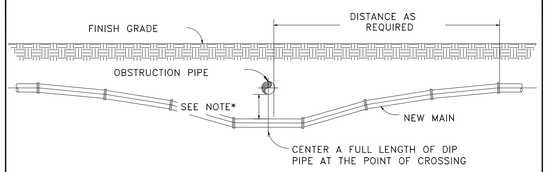



NOTES:

1. HEIGHT OF SIGN WILL DEPEND ON LOCATION AND SURROUNDING LANDSCAPE PLANT TYPES. IN ALL CASES, THE SIGN SHALL BE VISIBLE TO THE PUBLIC.
2. BACKGROUND SHALL BE WHITE. LETTERS AND FIGURES SHALL BE BLACK. PROHIBITIVE SYMBOL SHALL BE RED.
3. ENGINEERING GRADE REFLECTIVE MATERIALS SHALL BE USED.
4. POST SHALL BE U CHANNEL 12 FT. 2 LB. HOT ROLLED HIGH TENSILE RAIL OR BILLET STEEL, HOT DIP GALVANIZED PER ASTM A-123.
5. MOUNTING HARDWARE SHALL BE STAINLESS STEEL.
6. SIGNS SHALL BE PLACED BY THE CONTRACTOR IN ACCORDANCE WITH THE CITY APPROVED ENGINEERING PLANS AND/OR AS APPROVED BY PUBLIC SERVICES DEPARTMENT.

## RECLAIMED WATER ADVISORY SIGN

| CITY OF APOPKA<br>DESIGN ENGINEERING DIVISION | JANUARY 2014 | FIG. 115 |
|---|---|---|



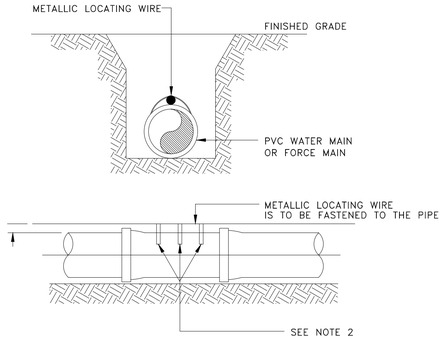

NOTES:

1. 18" MINIMUM CLEARANCE FOR WATER, SEWER AND RECLAIMED WATER MAIN CROSSINGS
2. 12" MINIMUM CLEARANCE REQUIRED FOR OTHER TYPE UTILITY CROSSINGS.
3. SEE ENCASEMENT DETAIL IF MINIMUM CLEARANCE CANNOT BE OBTAINED.

* CONSTRUCT UNIFORM PIPE DEFLECTION NOT TO EXCEED 75% OF MANUFACTURER RECOMMENDED MAXIMUM DEFLECTION PER PIPE JOINT

## UTILITY CROSSING PIPE DEFLECTION DETAIL

| CITY OF APOPKA<br>DESIGN ENGINEERING DIVISION | JANUARY 2014 | FIG. 117 |
|---|---|---|

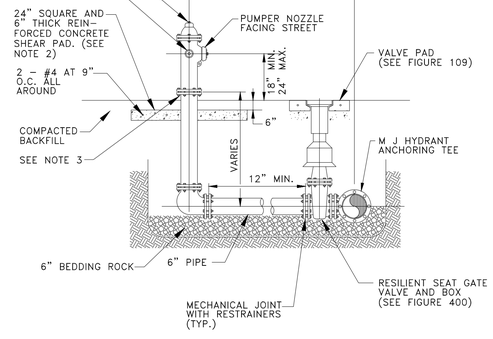



NOTES:

1. PVC PIPE SHALL REQUIRE INSULATED METALLIC LOCATING WIRE (10 AWG-SOLID CCS REINFORCED TRACER WIRE-INSULATED 30 MIL HDPE - 30 VOLT MFG. BY COPPERHEAD INDUSTRIES, LLC OR EQUAL) CAPABLE OF DETECTION BY A CABLE LOCATOR.
2. SHALL BE BURIED DIRECTLY ABOVE THE CENTERLINE OF THE PIPE AND ATTACHED WITH DUCT TAPE OR NYLON STRAPS AT 3 LOCATIONS PER JOINT. LOCATING WIRE SHALL TERMINATE AT THE TEST STATION BOX AS SHOWN IN FIG. 109.
3. BE CAPABLE OF EXTENDING 12" ABOVE TOP OF TEST STATION BOX IN SUCH A MANNER SO AS NOT TO INTERFERE WITH VALVE OPERATION.
4. SPLICES SHOULD BE MADE USING STANDARDS AND PRODUCTS DESIGNED FOR DIRECT BURIAL CONDUCTORS.
5. WIRE INSULATION SHALL BE COLOR CODED FOR THE TYPE OF PIPE BEING INSTALLED.

## PVC PIPE LOCATING WIRE DETAIL

| CITY OF APOPKA<br>DESIGN ENGINEERING DIVISION | JANUARY 2014 | FIG. 118 |
|---|---|---|

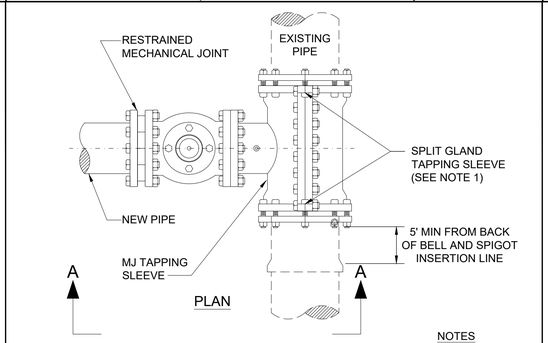



NOTES:

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 UTILITIES DESIGN CONSTRUCTION STANDARDS MANUAL.

## FIRE HYDRANT ASSEMBLY DETAIL

| CITY OF APOPKA<br>DESIGN ENGINEERING DIVISION | JANUARY 2014 | FIG. 402 |
|---|---|---|

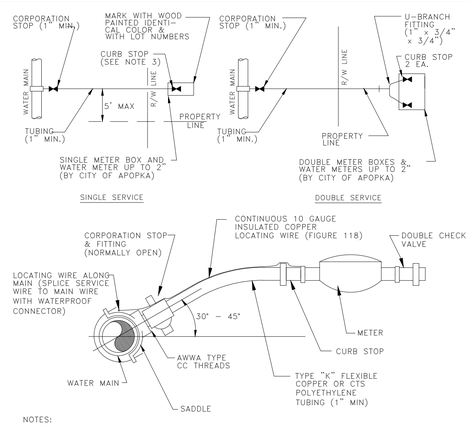



NOTES

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.

## WATER AND RECLAIMED WATER MAINS WET TAP TIE-IN DETAIL

| CITY OF APOPKA<br>DESIGN ENGINEERING DIVISION | JANUARY 2014 | FIG. 406 |
|---|---|---|

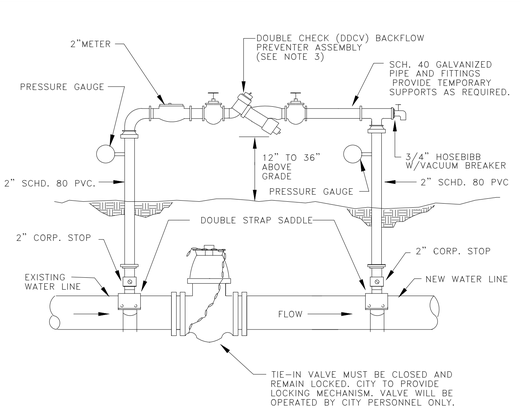



NOTES:

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" BELOW FINAL GRADE AND SHALL BE CLEARLY MARKED WITH A 2" x 2" x 18" STAKE WITH THE TOP PAINTED BLUE FOR POTABLE WATER AND PURPLE FOR RECLAIMED WATER, AND MARKED WITH THE NUMBER OF THE LOT(S) TO BE SERVED.
4. RECLAIMED WATER SERVICES SHALL USE PURPLE COLORED CTS POLYETHYLENE TUBING.
5. POTABLE WATER SERVICES SHALL USE BLUE COLORED CTS POLYETHYLENE TUBING.
6. ALL SERVICE UNDER EXISTING OR PROPOSED PAVEMENT SHALL BE INSTALLED IN A MINIMUM 2" PVC SLEEVE.

## WATER SERVICE CONNECTION DETAIL

| CITY OF APOPKA<br>DESIGN ENGINEERING DIVISION | JANUARY 2014 | FIG. 405 |
|---|---|---|




NOTE:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MATERIALS, ASSEMBLY, AND THE INSTALLATION OF THE DEVICE.
2. SEE FIGURE 504C FOR PROCEDURES.
3. DDCV IS MINIMUM PROTECTION REQUIRED. A RPZ DEVICE MAY BE REQUIRED DEPENDING ON PROJECT. PROVIDE COPY OF LATEST CERTIFICATION TEST RESULTS.

## TEMPORARY JUMPER CONNECTION

| CITY OF APOPKA<br>DESIGN ENGINEERING DIVISION | JANUARY 2014 | FIG. 504 A |
|---|---|---|

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UTILITY DETAILS

CONSTRUCTION SITE PLAN

WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

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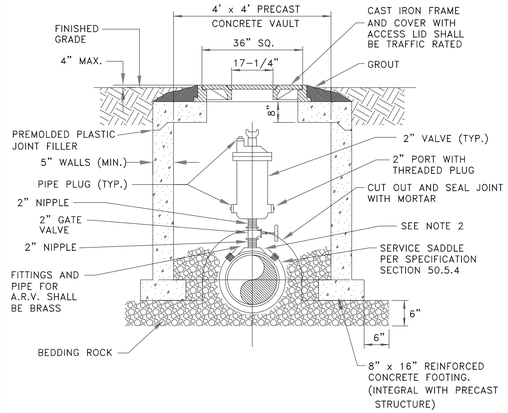
TEMPORARY JUMPER CONNECTION NOTES:

1. A temporary jumper connection is required at all connections between existing active water mains and proposed new water main improvements.
2. Figures 504 A and 504 B to be used for filling any new water main of any size from existing active water mains and for flushing of new mains up to 8 inches in diameter (2.5 FPS minimum velocity) and for pulling bacteriological samples from any new water main of any size. The jumper connection shall be maintained until after filling, flushing testing and disinfection of the new main has been successfully completed and cleared for use from the Florida Department of Environmental Protection (FDEP) and other pertinent agencies have been received. The jumper connection shall also be used to maintain a minimum pressure of 20 psi in the new mains after disinfection and until the FDEP clearance letter is obtained. Thrust blocking and/or restraints shall be provided temporarily, as required. Pipe and fittings used for connecting the new pipe to the existing pipe shall be disinfected prior to installation in accordance with AWWA C651, 2005 edition. The tapping sleeve and the exterior of the main to be tapped shall be disinfected by spraying or swabbing per section II of AWWA C651-05.
3. Flushing of 10 inches in diameter and larger water mains may be done through the tie-in valve under very controlled conditions. The following procedures shall be followed:
   A. The tie-in valves shall be operated and pressure tested in the presence of the City engineer to verify water tightness prior to tie-in. Valves which are not water tight shall be replaced with a new valve installed immediately adjacent to the leaking valve.
   B. The temporary jumper connection shall be constructed as detailed. The jumper connection shall be used to fill the new water main and for providing water for bac-teriological sampling of the new main as required by the FDEP permit.
   * Flushing shall not be attempted during peak demand hours of the existing water mains.
   * All downstream valves in the system must be open prior to opening the tie-in valve.
   * Provide for and monitor the pressure in the tie-in point. The pressure in the existing main must not drop below 35 psi.
   * The tie-in valve shall be opened a few turns only, ensuring a pressure drop across the valve is greater than 10 psi.
   C. The tie-in valve shall be locked closed by the City personel until flushing begins.
   D. The tie-in valve shall be opened only for flushing of the new main. The procedure shall be directed by the City and observed by the engineer.
   E. After flushing, the tie-in valve shall be closed and locked in the closed position by the City personel.
4. The contractor shall provide documentation demonstrating that the double check backflow prevention device has been tested and is in good working order at the time of installation.
5. Except as required to flush lines of greater than 8 inches in diameter, the tie-in valve shall remain closed and shall be locked in the closed position by the City. The tie-in valve shall remain locked closed until the new system has been cleared for use by FDEP and all other pertinent agencies.
6. Upon receipt of clearance for use from FDEP and all other pertinent agencies, the contractor shall remove the temporary jumper connection. The corporation stops are to be closed and plugged with 2 inch brass plugs.
7. All installation and maintenance of the temporary jumper connection and associated backflow prevention device, fittings, valve, etc. shall be the responsibility of the contractor.

## PROCEDURES FOR TEMPORARY JUMPER CONNECTION

| CITY OF APOPKA DESIGN ENGINEERING DIVISION | JANUARY 2014 | FIG. 504 C |
|---|---|---|

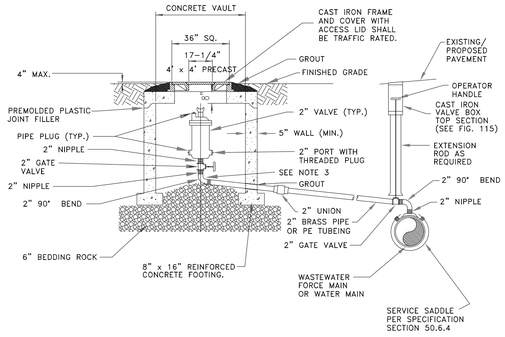



NOTES:

1. 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 DETER-MINED BY THE ENGINEER AND APPROVED BY THE CITY PRIOR TO INSTALLATION.
2. THE MINIMUM DIMENSION FROM TOP OF PIPE TO FINISHED GRADE SHALL BE 4.0 FEET.
3. 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 |
|---|---|---|

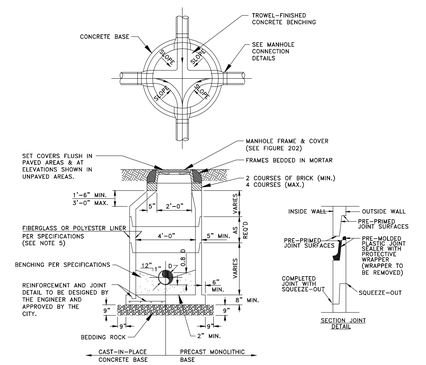



NOTES:

1. 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.
2. THE MINIMUM DIMENSION FROM ELBOW INVERT TO FINISHED GRADE SHALL BE 4.0 FEET.
3. THE AIR RELEASE VALVE SHALL BE ADEQUATELY SUPPORTED.
4. ALL FITTINGS ARE TO BE BRASS.

## OFFSET AIR OR COMBINATION AIR/VACUUM RELEASE VALVE DETAIL - UNDERGROUND

| CITY OF APOPKA DESIGN ENGINEERING DIVISION | JANUARY 2014 | FIG. 120 |
|---|---|---|




FORCE MAIN MANHOLE LINER*

| DIAMETER (INCHES) | THICKNESS (INCHES) HEIGHT (FEET) 3-6 | 7-12 | 13-17 | MATERIAL | MANUFACTURER |
|---|---|---|---|---|---|
| 48 | | | | | |
| 60 | | | | | |
| 72 | | | | | |

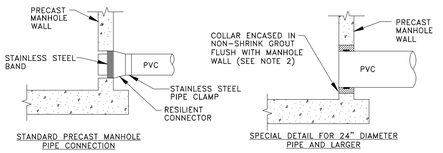
* TO BE COMPLETED BY THE ENGINEER

NOTES:

1. MANHOLE SHOWN IS FOR SEWER SIZE 8" THRU 24". SEE SECTION 20.4 OF THE MANUAL FOR MANHOLE DIAMETER FOR SEWERS LARGER THAN 24".
2. DROP CONNECTIONS ARE REQUIRED WHENEVER INVERT OF INFLUENT SEWER IS 24" OR MORE ABOVE THE INVERT OF THE MANHOLE. SEE MANHOLE CONNECTION DETAILS.
3. THE THICKNESS OF THE LINER SHALL BE 3/8" MINIMUM.
4. EACH BENCH WALL SHALL BE A MINIMUM OF 18 INCHES LONG FROM THE WALL OF THE MANHOLE TOWARD THE CENTER.
5. SANITARY SEWER MANHOLES MAY BE REQUIRED TO BE LINED IN ACCORDANCE WITH THE CITY OF APOPKA LIST OF APPROVED MATERIALS AND PRODUCTS AS DIRECTED BY THE CITY.

## TYPICAL MANHOLE

| CITY OF APOPKA DESIGN ENGINEERING DIVISION | JANUARY 2015 | FIG. 200 |
|---|---|---|




INSIDE DROP CONNECTION

NOTES:

1. ALL INSIDE DROP CONNECTIONS FOR SERVICES AND COLLECTOR SEWERS SHALL USE THE DROP BOWL AS PRODUCED BY:
   RELINER-DURAN, INC.
   53 MT. ARCHER RD.
   LYME, CT 06371
   (860)434-0277 FAX: (860)434-3195 OR EQUAL.
2. SECURE DROP PIPE TO MANHOLE WALL WITH RELINER-DURAN, INC STAINLESS STEEL ADJUSTABLE CLAMPING BRACKETS.
3. FORCE MAIN RECEIVING MANHOLES MAY BE REQUIRED TO BE LINED IN ACCORDANCE WITH THE CITY OF APOPKA LIST OF APPROVED MATERIALS AND PRODUCTS AS DIRECTED BY THE CITY.




STANDARD PRECAST MANHOLE PIPE CONNECTION

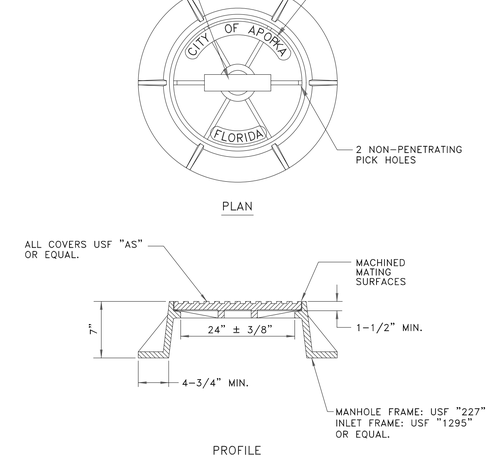
SPECIAL DETAIL FOR 24" DIAMETER PIPE AND LARGER

NOTES:

1. DROP PIPE AND FITTINGS SHALL BE OF EQUAL SIZE AND MATERIAL AS THE INFLUENT SEWER.
2. THE CITY MAY APPROVE ALTERNATE WATERTIGHT CONNECTION DETAILS FOR CONNECTION OF 24" DIAMETER PIPES AND LARGER.
3. AN INSIDE DROP CONNECTION SHALL BE REQUIRED FOR ALL INFLUENT WHICH HAVE AN INVERT 24" OR MORE ABOVE THE OUTFLOW PIPE INVERT.
4. CONCRETE TO BE MINIMUM OF 3000 PSI.

## MANHOLE CONNECTION DETAILS

| CITY OF APOPKA DESIGN ENGINEERING DIVISION | JANUARY 2015 | FIG. 201 |
|---|---|---|




PLAN



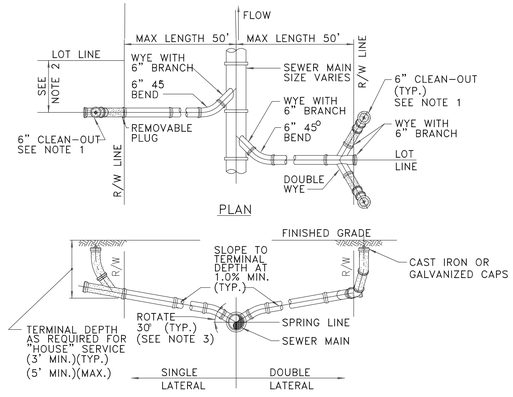

PROFILE

NOTES:

1. MANHOLE FRAME AND COVER ARE TO BE TRAFIC 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 |
|---|---|---|




PLAN



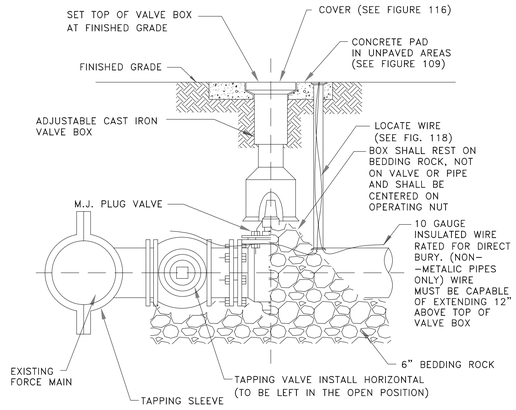

PROFILE

NOTES:

1. CLEAN-OUT (SHOWN SHADED) SHALL BE INSTALLED BY THE BUILDER IN ACCORDANCE WITH STANDARD PLUMBING CODE.
2. LOCATE SINGLE LATERAL AS CLOSE TO LOT LINE AS POSSIBLE.
3. INVERT OF SERVICE LATERAL SHALL NOT ENTER SEWER MAIN BELOW SPRING LINE.
4. RESIDENTIAL SERVICES SHALL BE 4 INCHES & NON-RESIDENTIAL SERVICES SHALL BE 6 INCHES IN DIAMETER AS A MINIMUM.
5. GALVANIZED OR CAST IRON CLEAN-OUT CAP SHALL BE USED ON THE STUBOUT FOR EACH SERVICE.
6. 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 |
|---|---|---|




## FORCE MAIN WET TAP TIE-IN DETAIL

| CITY OF APOPKA DESIGN ENGINEERING DIVISION | JANUARY 2014 | FIG. 206 |
|---|---|---|

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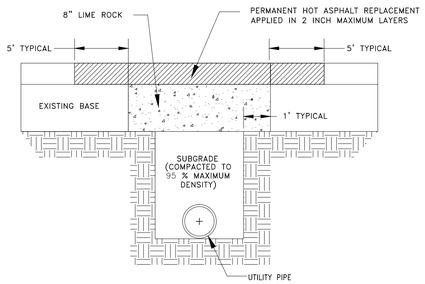
**SHEET 61 OF 82**



\\appian-file\Projects_PROJECT DRAWINGS\MIH-005 Wolf Lake Run Subdivision\Drawings\CAD Civil3D\Layouts\04 Final Engineering\UTILITY DETAILS.dwg Modified: 6/3/2024 By: osanchez

NOTE:

SUB-GRADE TO BE COMPACTED TO 95% MAX. DENSITY AS DETERMINED BY AASTHO T-180 CUT TO BE REPLACED WITH 8" LIME ROCK AND COMPACTED TO 98% MAX. DENSITY TO TOP OF EXISTING BASE. CUT AREA TO BE PLATED OR PROTECTED ON THE DAY OF POUR. EXISTING SURFACE TO BE SAW CUT TO AN AREA OF FIVE FEET (5') BEYOND BASE CUT.




GENERAL NOTES:

1. BASE REPLACEMENT SHALL BE 8" LIME ROCK COMPACTED TO 98% MAX. DENSITY.
2. ASPHALTIC CONCRETE SURFACE MATERIAL SHALL BE REPLACED WITH THE SAME TYPE OF MATERIAL AT THE TIME OF REMOVAL.
3. MINIMUM ASPHALTIC CONCRETE SURFACE OVERLAY THICKNESS SHALL BE ONE (1) INCH.
4. ALL JOINT CUTS SHALL BE MECHANICALLY SAW CUT.

PAVEMENT RESTORATION:

1. LONGITUDINAL CUTS MAY REQUIRE OVERLAY/RESURFACING OF THE COMPLETE WIDTH OF THE TRAVELED WAY.
2. CUTS AT INTERSECTIONS OF STREETS GENERALLY MAY REQUIRE A COMPLETE OVERLAY/RESURFACING TO THE END OF ALL RETURN RADII. AND ALSO TO A POINT TEN FEET (10') BEYOND THE CUT WHICHEVER IS GREATER.
3. ACTUAL REQUIREMENTS WILL BE AS STATED ON THE APPROVED PERMIT.

LIME ROCK

HOT PATCH

## OPEN-CUT CROSS SECTION DETAIL

| CITY OF APOPKA<br>DESIGN ENGINEERING DIVISION | JANUARY 2015 | FIG. 702 |
|---|---|---|

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 1 | 04/30/2024 | SJRWMD COMMENTS (APPLICATION NO. 215319-1) DATED 03/15/2024 | OSS |
| 2 | 04/30/2024 | CITY OF APOPKA COMMENTS DATED 04/30/2024 | OSS |

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**APPIAN ENGINEERING LLC.**

APPIANFL.COM • 407.960.5868

2221 Lee Road, Suite 27, Winter Park, Florida 32789

STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32374

UTILITY DETAILS

CONSTRUCTION SITE PLAN

WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

| DRAWN: | DESIGNED: | CHECKED: | DATE: |
|---|---|---|---|
| B. KILLELA | O. SANCHEZ | O. SANCHEZ | 6/11/24 |

| SCALE | PROJECT | SHEET |
|---|---|---|
| N.T.S. | MIH-005 | C10.3 |

ODDIS SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
6/11/24
PROFESSIONAL ENGINEER

This item has been digitally signed and sealed by Oddis S. Sanchez, PE on the date adjacent to the seal.
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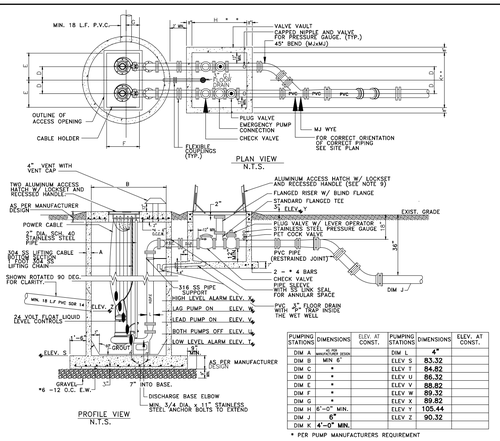
**SHEET 62 OF 82**

\\appian-file\Projects_PROJECT DRAWINGS\MIH-005 Wolf Lake Run Subdivision\Drawings\CAD Civil3D\Layouts\04 Final Engineering\UTILITY DETAILS.dwg Modified: 6/3/2024 By: osanchez



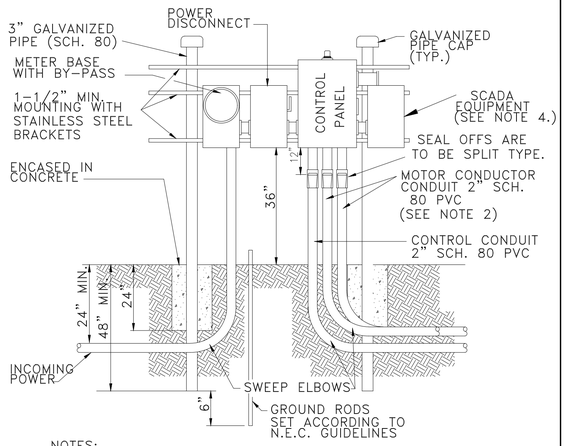

| PUMPING STATIONS | DIMENSIONS | ELEV. AT CONST. | PUMPING STATIONS | DIMENSIONS | ELEV. AT CONST. |
|---|---|---|---|---|---|
| DIM A | 4'-0" MIN. TO CLOSE DOOR | | DIM L | 4" | |
| DIM B | MIN 4" | | ELEV S | 83.32 | |
| DIM C | * | | ELEV T | 84.82 | |
| DIM D | * | | ELEV U | 86.32 | |
| DIM E | * | | ELEV V | 88.82 | |
| DIM F | * | | ELEV W | 89.32 | |
| DIM G | * | | ELEV X | 89.82 | |
| DIM H | 6'-0" MIN. | | ELEV Y | 105.44 | |
| DIM J | 6" | | ELEV Z | 90.32 | |
| DIM K | 4'-0" MIN. | | | | |

* PER PUMP MANUFACTURERS REQUIREMENT

GENERAL NOTES:
1. VALVE VAULT AND WET WELL LIDS SHALL BE COATED WITH 1 COAT OF TNEMEC SERIES 66, COLOR EN03, (2-3 MILS), FOLLOWED BY TOP COAT OF TNEMEC SERIES 73, COLOR EN05, (2-3 MILS) OR EQUAL.
2.A THE WET WELL SHALL BE CONSTRUCTED OF FIBERGLASS REINFORCED POLYESTER (RFP) AND MANUFACTURED FROM COMMERCIAL GRADE POLYESTER RESIN OR VINYL ESTER RESIN, WITH FIBERGLASS REINFORCEMENTS. THE WET WELL SHALL BE A ONE PIECE UNIT AND MANUFACTURED BY L.F. MANUFACTURE, INC. OR EQUAL.
2.B OR CONCRETE. THE WET WELL MAY BE CONSTRUCTED OF PRECAST CONCRETE HAVING A MINIMUM WALL THICKNESS OF 8 INCHES. THE INTERIOR WALLS SHALL BE LINED USING A HIGH DENSITY POLYETHYLENE PRODUCT AS MANUFACTURED BY AGRU SURE GRIP, OR EQUAL.
3. PIPING IN THE WET WELL TO BE HOPE WITH FUSED 45 DEGREES FITTINGS FROM WET WELL TO VALVE VAULT.
4. INTERIOR OF THE VALVE VAULT AND PIPING IN THE VALVE VAULT WITH ConSeal CS-55 (OR EQUAL), TWO COATS, 4 MILS EACH. PIPING SHALL BE COATED AFTER INSTALLATION.
5. VALVE VAULT SHALL BE SIZED TO PERMIT EASY REMOVAL OF CHECK VALVE SPINDLES WITH MINIMUM CLEARANCES AS SHOWN FOR 6" DIAMETER PIPE AND SMALLER. CLEARANCES SHALL INCREASE AS REQUIRED FOR LARGER PIPE SIZES.
6. VALVE VAULT SHALL HAVE SEALED FLOOR AND DRAIN.
7. ALL LOCATIONS WHERE PIPES ENTER OR LEAVE THE WET WELL OR VALVE VAULT SHALL BE MADE WATERTIGHT WITH WALL SLEEVE AND STAINLESS STEEL LINK SEALS.
8. THERE SHALL BE NO VALVES OR ELECTRICAL JUNCTION BOXES IN WET WELL.
9. WET WELL AND VALVE VAULT COVERS SHALL BE ALUMINUM WITH 316 S.S. HARDWARE LOCK BRACKET. SIZE AS REQUIRED BY PUMP MANUFACTURER AND APPROVED BY THE CITY.
10. FLEXIBLE COUPLING SHALL BE SLEEVE TYPE, EPOXY COATED.
11. PUMPS SHALL BE: NP3127 HS4 — MANUFACTURER: FLYGT; MODEL: ADAPTIVE 248; DIA: 155 MM; SPEED: 3600; DISCHARGE SIZE: 3.00 IN.; VOLTAGE: 460; HZ.: 60; PHASE: 3; H.P.: 12; MIN. SOLID SIZE: 1.4 IN.
12. OPERATING CONDITIONS SHALL BE 230 GPM AT 108 FEET TDH.
13. ALL HARDWARE IN WET WELL AND VALVE BOX TO BE 316 STAINLESS STEEL.
14. "P" TRAP TO BE INSTALLED IN WET WELL.
15. ALL PUBLIC LIFT STATIONS SHALL BE EQUIPPED WITH SCADA SYSTEM.THE DEVELOPER SHALL PAY THE CITY COST OF THE UNIT.THE CITY WILL BE RESPONSIBLE FOR INSTALLATION.
16. ALL LIFT STATIONS SHALL BE FENCED WITH DECORATIVE STONE OR BRICK OR AS DIRECTED BY THE CITY.
17. ALL LIFT STATIONS SHALL HAVE A 10 FEET WIDE CONCRETE ACCESS DRIVEWAY, 35' LONG FROM EDGE OF WET WELL TO BACK OF CURB.
18. ENGINEER SHALL PROVIDE A SCALED (1" = 20' MIN.) SITE SPECIFIC DETAIL.

LIFT STATION DETAIL

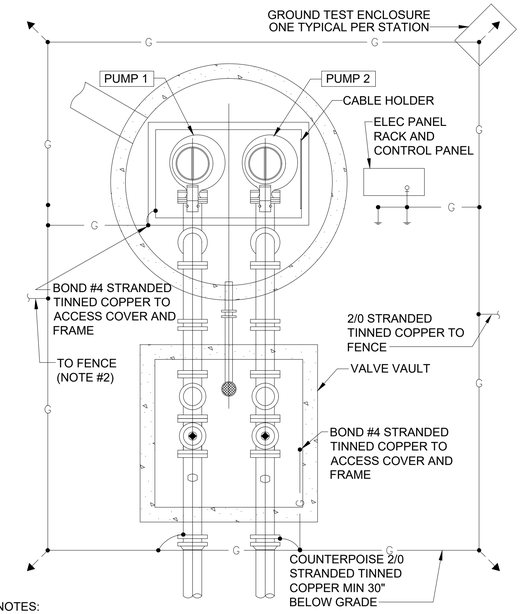
| CITY OF APOPKA DESIGN ENGINEERING DIVISION | JANUARY 2014 | FIG. 301 |
|---|---|---|




NOTES:
1. DRAWING IS SHOWN FOR 230 VOLT POWER SUPPLY. THE LOCATION OF METER AND MAIN POWER DISCONNECT SHALL BE REVERSED FOR 480 VOLT SUPPLY.
2. WHEN TWO (2) SEPARATE CONDUCTOR-TYPE MOTORS ARE USED, CONDUIT SHALL BE INCREASED TO THREE (3) INCH.
3. POWER SUPPLY SHALL BE UNDERGROUND TO THE PUMP STATION AND SHALL BE THREE (3) PHASE FROM A THREE (3) PHASE SOURCE ONLY.
4. STUB OUT UNISTRUT LONG ENOUGH TO ACCOMODATE A 24"x24" SCADA EQUIPMENT CABINET. CITY TO INSTALL SCADA EQUIPMENT CABINET.

DUPLEX PUMP STATION CONTROL PANEL INSTALLATION DETAIL

| CITY OF APOPKA DESIGN ENGINEERING DIVISION | JANUARY 2014 | FIG. 302 |
|---|---|---|



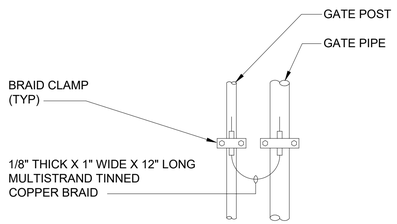

NOTES:
1. DETAIL IS GENERIC. SPECIFIC LOCATIONS OF EQUIPMENT MAY VARY.
2. TIE TO FENCE, MINIMUM 2 LOCATIONS. NOT REQUIRED WHERE PVC COATED OR BLOCK FENCE IS INSTALLED.
3. PROVIDE EXOTHERMIC WELDS UNLESS NOTED OTHERWISE.

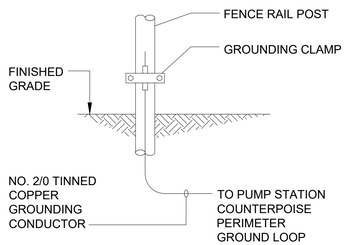
PUMP STATION GROUNDING (TYPICAL)

| CITY OF APOPKA DESIGN ENGINEERING DIVISION | JANUARY 2014 | FIG. 307 |
|---|---|---|

***LIFT STATION MANUFACTURER IS REQUIRED TO PROVIDE SIGNED AND SEALED DRAWINGS FROM AN ELECTRICAL ENGINEER FOR CONTROL PANEL AND ELECTRICAL SPECIFICATIONS. PRIVATE LIFT STATION DESIGNED BY MESSINA & ASSOCIATES. THE ENGINEER OF RECORD'S SIGNATURE AND SEAL ON THIS SHEET IS ONLY FOR THE CIVIL ENGINEERING PORTION.***

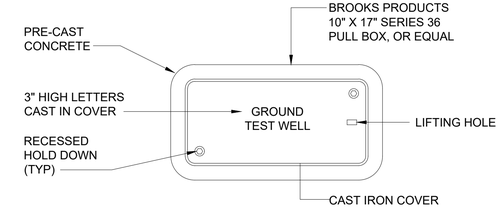
***NOTES:***
***1. CONTRACTOR TO GRADE LIFT STATION SITE SUCH THAT WET WELL AND VALVE VAULT ARE A MIN OF 3" ABOVE SURROUNDING GRADE ELEVATION. ALSO, DRAINAGE IS SLOPED AWAY FROM THESE STRUCTURES.***
***2. THE ELECTRICAL DETAILS ARE SHOWN FOR CONCEPTUAL PURPOSES ONLY AND THE SUPPLIER SHALL PROVIDE FINAL SIGNED & SEALED DRAWINGS FOR ALL ELECTRICAL WORK.***
***3. CONTRACTOR TO VERIFY ELECTRICAL SERVICE PHASE, CURRENT AND VOLTAGE AVAILABILITY AND INCLUDE VERIFICATION OF SUCH IN SHOP DRAWING SUBMITTAL PRIOR TO PURCHASE AND/OR INSTALLATION OF PUMP AND CORRELATED ELECTRICAL LIFT STATION COMPONENTS.***

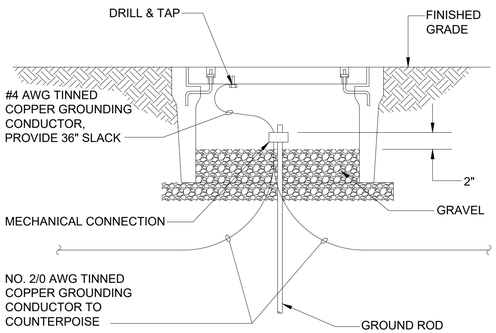



FENCE POST GROUNDING (TYPICAL)

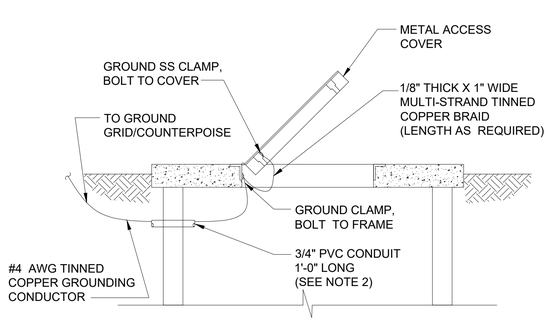
| CITY OF APOPKA DESIGN ENGINEERING DIVISION | JANUARY 2014 | FIG. 307 A |
|---|---|---|




GROUND TEST WELL

| CITY OF APOPKA DESIGN ENGINEERING DIVISION | JANUARY 2014 | FIG. 307 B |
|---|---|---|




NOTES:
1. ON COVERS WITH MULTIPLE DOORS, PROVIDE BRAID FROM FRAME TO DOOR ON EACH DOOR. PROVIDE WATERPROOF CAULKING WHERE GROUND CABLE AND CONDUIT PENETRATES WETWELL TO PREVENT INTRUSION OF GROUNDWATER AND ESCAPE OF VAPORS FROM WETWELL.
2. INSTALL GROUND WIRE SO THAT IT WILL NOT CROSS CLEAR OPENING OR PREVENT OR IMPEDE NORMAL METHOD OF REMOVING FLOATS OR PUMPS.

COVER AND DOOR GROUNDING

| CITY OF APOPKA DESIGN ENGINEERING DIVISION | JANUARY 2014 | FIG. 307 C |
|---|---|---|

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 1 | 04/30/2024 | SJRWMD COMMENTS (APPLICATION NO. 215319-1) DATED 03/15/2024 | OSS |
| 2 | 04/30/2024 | CITY OF APOPKA COMMENTS DATED 04/30/2024 | OSS |

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STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32574

LIFT STATION DETAILS
CONSTRUCTION SITE PLAN
WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

DRAWN: B. KILLELA
DESIGNED: O. SANCHEZ
CHECKED: O. SANCHEZ
DATE: 6/11/24
SCALE: N.T.S.
PROJECT: MIH-005
SHEET: C10.4

OSCAR SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
6/11/24
PROFESSIONAL ENGINEER

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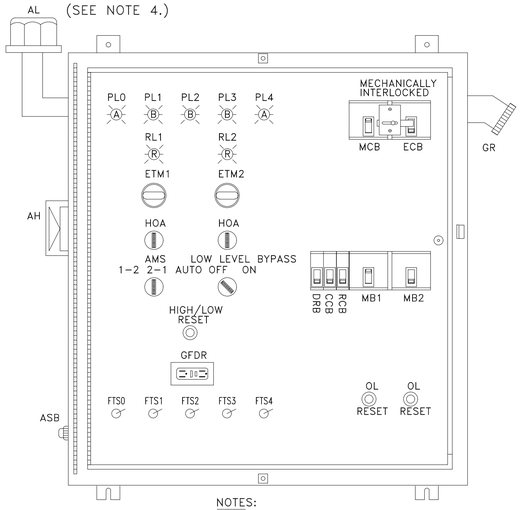
**SHEET 63 OF 82**

\\appian-file\Projects_PROJECT DRAWINGS\MIH-005 Wolf Lake Run Subdivision\Drawings\CAD Civil3D\Layouts\04 Final Engineering\CITY OF APOPKA LIFT STATION DETAILS.dwg Modified:6/10/2024 By:osanchez

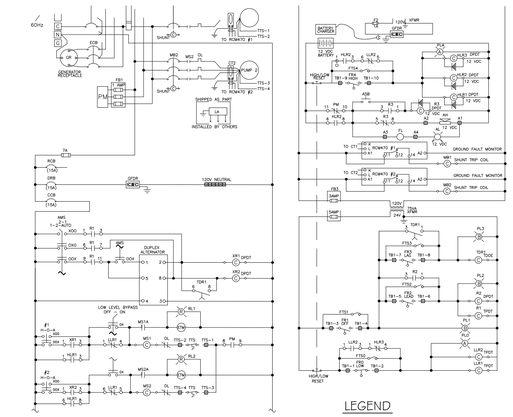



NOTES:

1. OUTER DOOR REMOVED TO SHOW DEADFRONT LAYOUT NEMA TYPE 3R 304 S.S. ENCL. WITH CONTINUOUS HINGE ALL HARDWARE STAINLESS STEEL TYPICAL, ACTUAL LAYOUT MAY VARY WITH HORSEPOWER
2. SERIES 3 (Q-FRAME) CIRCUIT BREAKERS
3. GENERATOR OUTLET FOR 230V – PYLE NATIONAL MODEL JRE4100/460V – CROUSE HINDS MODEL AR 2042.
4. THE HEIGHT OF THE ALARM LIGHT WILL NEED TO BE MADE VISIBLE FROM OUTSIDE THE LIFT STATION.

# DUPLEX PUMP STATION CONTROL PANEL FRONT LAYOUT

| CITY OF APOPKA DESIGN ENGINEERING DIVISION | JANUARY 2014 | FIG. 303 |
|---|---|---|




LEGEND

| | | | |
|---|---|---|---|
| AB = ALARM BELL | | MB = MOTOR BREAKER | |
| ACFL = AIR COMPRESSOR FAIL LIGHT | | MCB = MAIN CIRCUIT BREAKER | |
| ACR = AIR COMPRESSOR RESET | | MD = MOISTURE DETECTOR | |
| ACTS = AIR COMPRESSOR TERMINAL STRIP | | MS = MOTOR STARTER | |
| AH = ALARM HORN | | NC = NORMALLY CLOSED | |
| AL = ALARM LIGHT | | NO = NORMALLY OPEN | |
| ALT = ALTERNATOR | | OL = OVERLOAD | |
| AMS = ALTERNATOR MODE SWITCH | | PB = POWER BLOCK | |
| ASB = ALARM SILENCE BUTTON | | PCU = PUMP CONTROL UNIT | |
| ATS = ALTERNATOR TEST SWITCH | | PFL = PUMP FAIL LIGHT | |
| AV = AIR VENT | | PFT = PUMP FAIL TIMER | |
| CCB = CONTROL CIRCUIT BREAKER | | PL = PILOT LIGHT | |
| CT = CURRENT TRANSFORMER | | POL = POWER ON LIGHT | |
| CVLS = CHECK VALVE LIMIT SWITCH | | PM = PHASE MONITOR | |
| DPDT = DOUBLE POLE DOUBLE THROW | | PS = PRESSURE SWITCH | |
| DR = DISABLE RELAY | | R = RELAY | |
| DRB = DUPLEX RECEPTACLE BREAKER | | RCB = RTU CIRCUIT BREAKER | |
| DS = DOOR SWITCH | | RL = RUNNING LIGHT | |
| ECB = EMERGENCY CIRCUIT BREAKER | | RTU = REMOTE TELEMETRY UNIT | |
| ETM = ELAPSED TIME METER | | SC = SURGE CAPACITOR | |
| F = FUSE | | SDR = STATION DISABLE RELAY | |
| FB = FUSE BLOCK | | SMC = SMART MOTOR CONTROLLER | |
| FL = FLASHER | | SPM = SINGLE PHASE MODULE | |
| FR = FLOAT REGULATOR | | SS = SAFETY SWITCH | |
| FS = FLOW SWITCH | | SSOL = SOLID-STATE OVERLOAD | |
| FTS = FLOAT TEST SWITCH | | T = TERMINAL | |
| GFDR = GROUND FAULT DUPLEX RECEPTACLE | | TB = TERMINAL BLOCK | |
| GND = EARTH GROUND | | TD = TIME DELAY | |
| GR = GENERATOR RECEPTACLE | | TDODE = TIME DELAY ON DE-ENERGIZE | |
| HLA = HIGH LEVEL ALARM | | TDOE = TIME DELAY ON ENERGIZE | |
| HLR = HIGH LEVEL RESET | | TDR = TIME DELAY RELAY | |
| HOA = HAND-OFF-AUTO SELECTOR SWITCH | | TL = TROUBLE LIGHT | |
| ISR = INTRINSICALLY SAFE RELAY | | TLS = TROUBLE LIGHT SWITCH | |
| LA = LIGHTNING ARRESTOR | | TPDT = TRIPLE-POLE, DOUBLE-THROW | |
| LLR = LOW LEVEL RESET | | TTS = THERMAL TERMINAL STRIP | |
| LTB = LAMP TEST BUTTON | | XFMR = TRANSFORMER | |

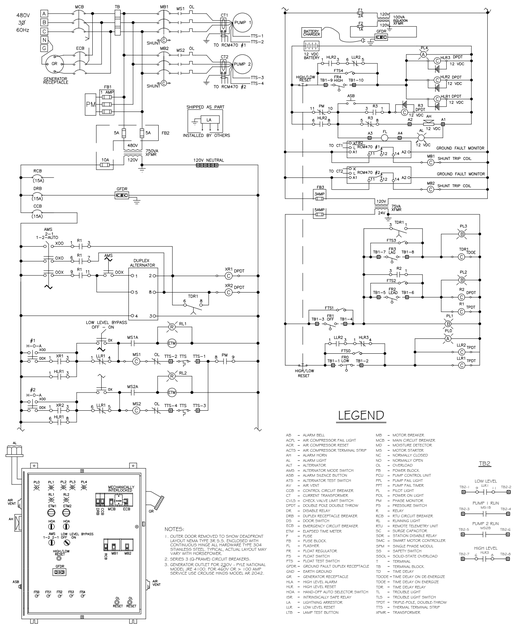
NOTES:
1. OUTER DOOR REMOVED TO SHOW DEADFRONT LAYOUT NEMA TYPE 3R 304 S.S. ENCL. WITH CONTINUOUS HINGE ALL HARDWARE TYPE 304 STAINLESS SITES, TYPICAL, ACTUAL LAYOUT MAY VARY WITH HORSEPOWER
2. GENERATOR OUTLET FOR 230V – PYLE NATIONAL MODEL JRE4100/460V – CROUSE HINDS MODEL AR 2042.

TB2
LOW LEVEL
PUMP 1 RUN
PUMP 2 RUN
HIGH LEVEL

# DUPLEX PUMP CONTROL PANEL GENERAL LAYOUT & SCHEMATIC

(230V–3PH)
WITH GENERATOR RECEPTACLE

| CITY OF APOPKA DESIGN ENGINEERING DIVISION | JANUARY 2014 | FIG. 305 A |
|---|---|---|




LEGEND

| | | | |
|---|---|---|---|
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| CT = CURRENT TRANSFORMER | | POL = POWER ON LIGHT | |
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| ECB = EMERGENCY CIRCUIT BREAKER | | RTU = REMOTE TELEMETRY UNIT | |
| ETM = ELAPSED TIME METER | | SC = SURGE CAPACITOR | |
| F = FUSE | | SDR = STATION DISABLE RELAY | |
| FB = FUSE BLOCK | | SMC = SMART MOTOR CONTROLLER | |
| FL = FLASHER | | SPM = SINGLE PHASE MODULE | |
| FR = FLOAT REGULATOR | | SS = SAFETY SWITCH | |
| FS = FLOW SWITCH | | SSOL = SOLID-STATE OVERLOAD | |
| FTS = FLOAT TEST SWITCH | | T = TERMINAL | |
| GFDR = GROUND FAULT DUPLEX RECEPTACLE | | TB = TERMINAL BLOCK | |
| GND = EARTH GROUND | | TD = TIME DELAY | |
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| LA = LIGHTNING ARRESTOR | | TPDT = TRIPLE-POLE, DOUBLE-THROW | |
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| LTB = LAMP TEST BUTTON | | XFMR = TRANSFORMER | |

NOTES:
1. OUTER DOOR REMOVED TO SHOW DEADFRONT LAYOUT NEMA TYPE 3R 304 S.S. ENCL. WITH CONTINUOUS HINGE ALL HARDWARE TYPE 304 STAINLESS SITES, TYPICAL, ACTUAL LAYOUT MAY VARY WITH HORSEPOWER
2. SERIES 3 (Q-FRAME) CIRCUIT BREAKERS.
3. GENERATOR OUTLET FOR 230V – PYLE NATIONAL MODEL JRE4100/460V – CROUSE HINDS MODEL AR 2042.

TB2
LOW LEVEL
PUMP 1 RUN
PUMP 2 RUN
HIGH LEVEL

# DUPLEX PUMP CONTROL PANEL GENERAL LAYOUT & SCHEMATIC

(480V–3PH)
WITH GENERATOR RECEPTACLE

| CITY OF APOPKA DESIGN ENGINEERING DIVISION | JANUARY 2014 | FIG. 305 C |
|---|---|---|

| | | | |
|---|---|---|---|
| AB = ALARM BELL | | MB = MOTOR BREAKER | |
| ACFL = AIR COMPRESSOR FAIL LIGHT | | MCB = MAIN CIRCUIT BREAKER | |
| ACR = AIR COMPRESSOR RESET | | MD = MOISTURE DETECTOR | |
| ACTS = AIR COMPRESSOR TERMINAL STRIP | | MS = MOTOR STARTER | |
| AH = ALARM HORN | | NC = NORMALLY CLOSED | |
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| AMS = ALTERNATOR MODE SWITCH | | PB = POWER BLOCK | |
| ASB = ALARM SILENCE BUTTON | | PCU = PUMP CONTROL UNIT | |
| ATS = ALTERNATOR TEST SWITCH | | PFL = PUMP FAIL LIGHT | |
| AV = AIR VENT | | PFT = PUMP FAIL TIMER | |
| CCB = CONTROL CIRCUIT BREAKER | | PL = PILOT LIGHT | |
| CT = CURRENT TRANSFORMER | | POL = POWER ON LIGHT | |
| CVLS = CHECK VALVE LIMIT SWITCH | | PM = PHASE MONITOR | |
| DPDT = DOUBLE POLE DOUBLE THROW | | PS = PRESSURE SWITCH | |
| DR = DISABLE RELAY | | R = RELAY | |
| DRB = DUPLEX RECEPTACLE BREAKER | | RCB = RTU CIRCUIT BREAKER | |
| DS = DOOR SWITCH | | RL = RUNNING LIGHT | |
| ECB = EMERGENCY CIRCUIT BREAKER | | RTU = REMOTE TELEMETRY UNIT | |
| ETM = ELAPSED TIME METER | | SC = SURGE CAPACITOR | |
| F = FUSE | | SDR = STATION DISABLE RELAY | |
| FB = FUSE BLOCK | | SMC = SMART MOTOR CONTROLLER | |
| FL = FLASHER | | SPM = SINGLE PHASE MODULE | |
| FR = FLOAT REGULATOR | | SS = SAFETY SWITCH | |
| FS = FLOW SWITCH | | SSOL = SOLID-STATE OVERLOAD | |
| FTS = FLOAT TEST SWITCH | | T = TERMINAL | |
| GFDR = GROUND FAULT DUPLEX RECEPTACLE | | TB = TERMINAL BLOCK | |
| GND = EARTH GROUND | | TD = TIME DELAY | |
| GR = GENERATOR RECEPTACLE | | TDODE = TIME DELAY ON DE-ENERGIZE | |
| HLA = HIGH LEVEL ALARM | | TDOE = TIME DELAY ON ENERGIZE | |
| HLR = HIGH LEVEL RESET | | TDR = TIME DELAY RELAY | |
| HOA = HAND-OFF-AUTO SELECTOR SWITCH | | TL = TROUBLE LIGHT | |
| ISR = INTRINSICALLY SAFE RELAY | | TLS = TROUBLE LIGHT SWITCH | |
| LA = LIGHTNING ARRESTOR | | TPDT = TRIPLE-POLE, DOUBLE-THROW | |
| LLR = LOW LEVEL RESET | | TTS = THERMAL TERMINAL STRIP | |
| LTB = LAMP TEST BUTTON | | XFMR = TRANSFORMER | |

# COMPONENT LEGEND

| CITY OF APOPKA DESIGN ENGINEERING DIVISION | JANUARY 2014 | FIG. 306 |
|---|---|---|

***CONTROL PANEL AND ELECTRICAL INFORMATION IS FOR CONCEPTUAL PURPOSES. LIFT STATION MANUFACTURER IS REQUIRED TO PROVIDE SIGNED AND SEALED DRAWINGS FROM AND ELECTRICAL ENGINEER FOR CONTROL PANEL AND ELECTRICAL SPECIFICATIONS. THE ENGINEER OF RECORD'S SIGNATURE AND SEAL ON THIS SHEET IS ONLY FOR THE CIVIL ENGINEERING PORTION.***

***NOTES:***
***1. CONTRACTOR TO GRADE LIFT STATION SITE SUCH THAT WET WELL AND VALVE VAULT ARE A MIN OF 3" ABOVE SURROUNDING GRADE ELEVATION. ALSO, DRAINAGE IS SLOPED AWAY FROM THESE STRUCTURES.***
***2. THE ELECTRICAL DETAILS ARE SHOWN FOR CONCEPTUAL PURPOSES ONLY AND THE SUPPLIER SHALL PROVIDE FINAL SIGNED & SEALED DRAWINGS FOR ALL ELECTRICAL WORK.***
***3. CONTRACTOR TO VERIFY ELECTRICAL SERVICE PHASE, CURRENT AND VOLTAGE AVAILABILITY AND INCLUDE VERIFICATION OF SUCH IN SHOP DRAWING SUBMITTAL PRIOR TO PURCHASE AND/OR INSTALLATION OF PUMP AND CORRELATED ELECTRICAL LIFT STATION COMPONENTS.***

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| BY | DESCRIPTION | DATE | REV. |
|---|---|---|---|
| OSS | SJRWMD COMMENTS (APPLICATION NO. 215319-10) DATED 03/15/2024 | 04/30/2024 | 3 |
| OSS | CITY OF APOPKA COMMENTS DATED 04/29/2024 | 04/30/2024 | 4 |

CIVIL ENGINEERING | LAND PLANNING
APPLIAN ENGINEERING LLC.
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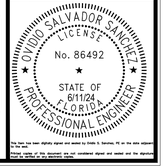
2221 Lee Road, Suite 27, Winter Park, Florida 32789
STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32674

LIFT STATION DETAILS
CONSTRUCTION SITE PLAN

WILLOW RUN SUBDIVISION
CITY OF APOPKA, FLORIDA

| DRAWN: | DESIGNED: | CHECKED: | DATE: |
|---|---|---|---|
| B. KILLELA | O. SANCHEZ | O. SANCHEZ | 6/11/24 |

| SCALE | PROJECT | SHEET |
|---|---|---|
| N.T.S. | MIH-005 | C10.5 |




This item has been digitally signed and sealed by Olvido S. Sanchez, PE on the date adjacent to the seal.
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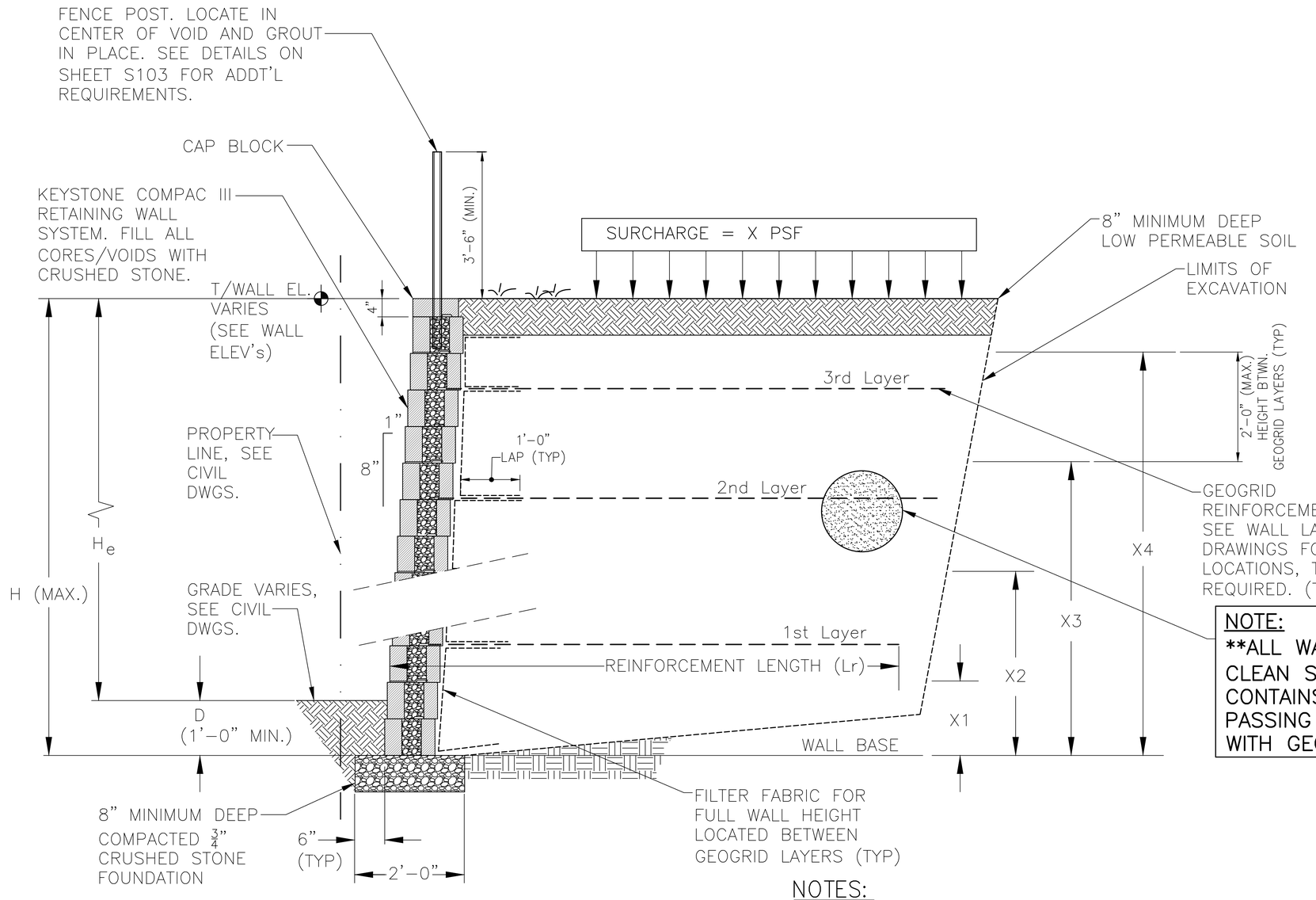
\\appian-file\Projects_PROJECT DRAWINGS\MIH-005 Wolf Lake Run Subdivision\Drawings\CAD Civil3D\Layouts\04 Final Engineering\CITY OF APOPKA LIFT STATION DETAILS.dwg Modified:6/10/2024 By:osanchez




NOTE:
**ALL WALLS SHALL HAVE 'FREE DRAINING CLEAN SANDS'–'SP' BACKFILL WHICH CONTAINS LESS THAN 5% MATERIAL PASSING No.200 SIEVE. COORDINATE WITH GEOTECHNICAL ENGINEER.

## WALLS 1–4 SECTION (1 / S101)

NTS

NOTES:

1. NO EXTERIOR WALL HOUSE FOUNDATIONS SHALL BE WITHIN A DISTANCE LESS THAN THAT SHOWN ABOVE.
2. NO VEHICULAR TRAFFIC WITHIN 2 FEET OF WALL
3. WHERE POSSIBLE GRADE AT BASE OF WALL SHALL BE A MAXIMUM SLOPE OF 5% FOR THE FIRST 4 FEET FROM THE WALL.
4. SEE WALL LAYOUT DRAWING S200 FOR TOP AND BOTTOM OF WALL ELEVATIONS & GEOGRID REINFORCEMENT.
5. WALL DESIGN IS BASED ON THE LEVELING PAD BEING ABOVE THE SEASONAL HIGH WATER TABLE. THIS SHALL BE CONFIRMED BY THE CONTRACTOR PRIOR TO CONSTRUCTION AND COORDINATED WITH THE GEOTECHNICAL ENGINEER
6. BACKFILL SHALL BE PER KEYSTONE WALL SPECIFICATION SECTION 2.06, SEE SHEET S102.
7. COMPACTION & REINFORCED BACKFILL PLACEMENT SHALL BE PER KEYSTONE WALL SPECIFICATION 3.05, SEE SHEET S102.

his item has been electronically signed and sealed by Timothy G. Frazier II,PE using a Digital Signature and date. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

2436
SJR STRUCTURAL ENGINEERING, LLC
1085 Durbin Parke Dr., St. Johns, FL 32259. (904) 510 5605
CERTIFICATE OF AUTHORIZATION No 28679

WILLOW RUN SUBDIVISION
APOPKA, FL

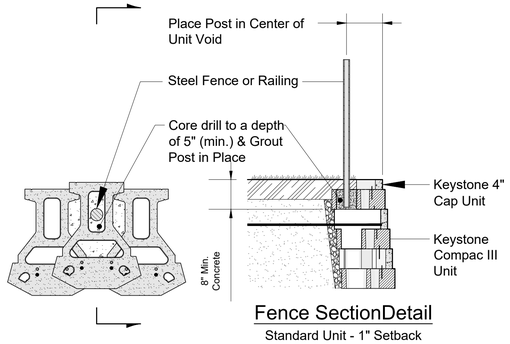
# KEYSTONE WALL SECTIONS

TIMOTHY GRAY FRAZIER II LICENSE No 59321 STATE OF FLORIDA PROFESSIONAL ENGINEER
TIMOTHY G. FRAZIER II, P.E
FL PE# 59321

Revisions:

Date: FEBRUARY 1, 2024
Job number: 24–JR–04
Drawn/Checked by: TGF II

Sheet Number: S101




Fence Plan Detail

Fence SectionDetail

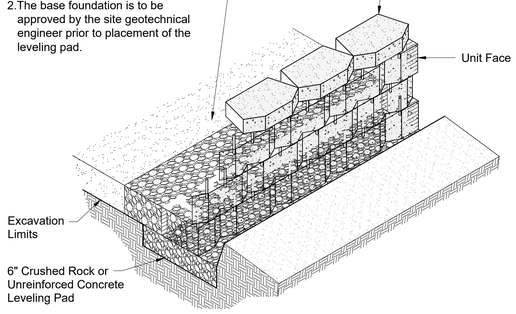
Standard Unit - 1" Setback

## Base Leveling Pad Notes:

1. The leveling pad is to be constructed of crushed stone or 2,000 psi± unreinforced concrete
2. The base foundation is to be approved by the site geotechnical engineer prior to placement of the leveling pad.

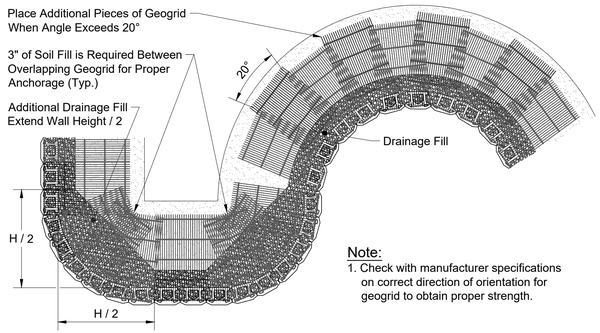
| Compac III Unit | |
|---|---|
| Width: | 18" |
| *Depth: | 12" |
| Height: | 8" |
| *Weight: | 71 lbs |

| Cap Unit | |
|---|---|
| Width: | 18" |
| *Depth: | 10 1/2" |
| Height: | 4" |
| *Weight: | 45 lbs |




Compac III Unit/Base Pad Isometric Section View

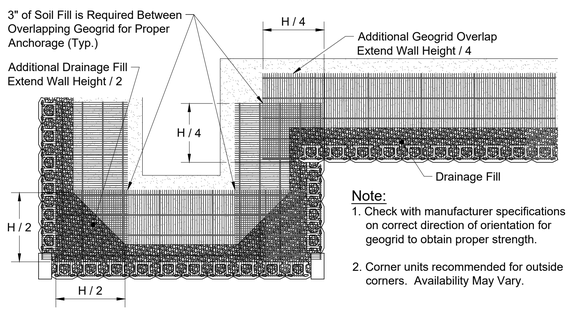
* Dimensions & Weight May Vary by Region




Note:

1. Check with manufacturer specifications on correct direction of orientation for geogrid to obtain proper strength.

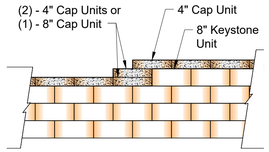
Geogrid Installation on Curves




Note:

1. Check with manufacturer specifications on correct direction of orientation for geogrid to obtain proper strength.
2. Corner units recommended for outside corners. Availability May Vary.

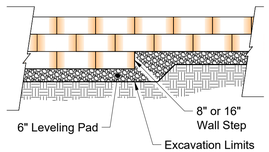
Geogrid Installation at Corners




Note:

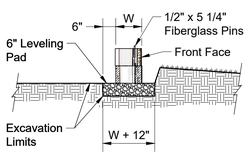
1. Secure all cap units with Keystone Kapseal or equal.

Top of Wall Steps



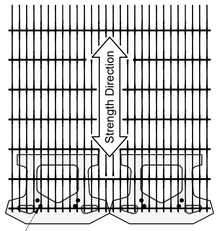

Note:

1. The leveling pad is to be constructed of crushed stone or 2000 psi ± unreinforced concrete.



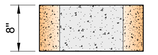

Section

Leveling Pad Detail

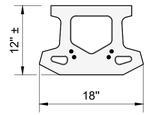



Geogrid is to be Placed on Level Backfill and Extended Over the Fiberglass Pins. Place Next Unit. Pull Grid Taught and Backfill. Stake as required.

Grid & Pin Connection



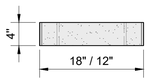

Compac III Elevation



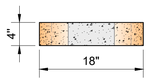

Compac III Plan

Compac III Unit

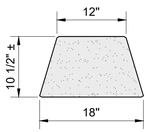
* Dimensions May Vary by Region




Cap Unit Elevation



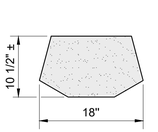

Cap Unit Elevation




Cap Unit Plan

Universal Cap Unit Option

* Dimensions & Availability Will Vary by Region




Cap Unit Plan

3-Plane Split Cap Unit Option

* Dimensions & Availability Will Vary by Region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CERTIFICATE OF AUTHORIZATION No 28679


WILLOW RUN SUBDIVISION
APOPKA, FL

# KEYSTONE COMPAC III STANDARD DETAILS

TIMOTHY GRAY FRAZIER II LICENSE No 59321 STATE OF FLORIDA PROFESSIONAL ENGINEER

TIMOTHY G. FRAZIER II, P.E.
FL. PE# 59321

Revisions:

| | |
|---|---|
| | |
| | |
| | |
| | |

Date: FEBRUARY 1, 2024

Job number: 24-JR-04

Drawn/Checked by: TGF II

Sheet Number:

S103

his item has been electronically signed and sealed by Timothy G. Frazier II,PE using a Digital Signature and date. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

# KEYSTONE CONCRETE RETAINING WALL SPECIFICATIONS

PART 1:GENERAL

1.01 Description

A. Work shall consist of designing, furnishing and construction of a KEYSTONE Compac III & Standard 21 Unit Retaining Wall System in accordance with these specifications and in reasonably close conformity with the lines, grades, design, and dimensions shown on the plans. No alternate wall systems will be considered.

B. Work includes preparing foundation soil, furnishing and installing leveling pad, unit drainage fill and backfill to the lines and grades shown on the construction drawings.

C. Work includes furnishing and installing geogrid soil reinforcement of the type, size, location, and lengths designated on the construction drawings.

1.02 Related Sections

A. Section 31 00 00 – Earthwork

1.03 Reference Documents

A. American Society for Testing and Materials (ASTM)

1. ASTM C140 Sampling and Testing Concrete Masonry Units
1. ASTM C1372 Specification for Dry–Cast Segmental Retaining Wall Units
2. ASTM D422 Particle–Size Analysis of Soils
3. ASTM D698 Laboratory Compaction Characteristics of Soil –Standard Effort
4. ASTM D1557 Laboratory Compaction Characteristics of Soil –Modified Effort
5. ASTM D3034 Polyvinyl Chloride Pipe (PVC)
6. ASTM D4318 Liquid Limit, Plastic Limit and Plasticity Index of Soils
7. ASTM D4475 Horizontal Shear Strength of Pultruded Reinforced Plastic Rods
8. ASTM D4476 Flexural Properties of Fiber Reinforced Pultruded Plastic Rods
9. ASTM D4595 Tensile Properties of Geotextiles – Wide Width Strip
10. ASTM D5262 Unconfined Tension Creep Behavior of Geosynthetics
11. ASTM D5818 Evaluate Installation Damage of Geosynthetics
12. ASTM D6637 Tensile Properties of Geogrids – Single or Multi–Rib
13. ASTM D6638 Connection Strength – Reinforcement/Segmental Units
14. ASTM D6706 Geosynthetic Pullout Resistance in Soil
15. ASTM D6916 Shear Strength Between Segmental Concrete Units

B. American Association of State Highway and Transportation Officials (AASHTO)

1. AASHTO M 252 Corrugated Polyethylene Drainage Pipe
2. AASHTO M 288 Geotextile Specification for Highway Applications

C. National Concrete Masonry Association (NCMA)

1. NCMA SRWU–1 Test Method for Determining Connection Strength of SRW
2. NCMA SRWU–2 Test Method for Determining Shear Strength of SRW

1.04 Submittals/Certification

A. Contractor shall submit a Manufacturer's certification, prior to start of work, that the retaining wall system components meet the requirements of this specification and the structure design.

B. Contractor shall submit construction drawings and design calculations for the retaining wall system prepared and stamped by a Professional Engineer registered in the state of the project. The engineering designs, techniques, and material evaluations shall be in accordance with the Keystone Design Manual.

1.05 Quality Assurance

A. Contractor shall submit a list of five (5) previously constructed projects of similar size and magnitude by the wall installer where the Compac retaining wall system has been constructed successfully. Contact names and telephone numbers shall be listed for each project.

B. Contractor shall provide evidence that the design engineer has a minimum of five years of documental experience in the design for reinforced soil structures. The design engineer shall provide proof of current professional liability insurance with an aggregate coverage limit of not less than $2,000,000.

C. Owner shall/may provide soil testing and quality assurance inspection during earthwork and wall construction operations. Contractor shall provide all quality control testing or inspection not provided by the Owner. Owner's quality assurance program does not relieve the contractor of responsibility for quality control and wall performance.

1.06 Delivery, Storage and Handling

A. Contractor shall check all materials upon delivery to assure that the proper type, grade, color, and certification have been received.

B. Contractor shall protect all materials from damage due to jobsite conditions and in accordance with manufacturer's recommendations. Damaged materials shall not be incorporated into the work.

PART 2:PRODUCTS

2.01 Definitions

A. Compac III & Standard 21 Units – a concrete retaining wall element machine made from Portland cement, water, and aggregates, manufactured by a licensed manufacturer of Keystone.

B. Structural Geogrid – a structural element formed by a regular network of integrally connected tensile elements with apertures of sufficient size to allow interlocking with surrounding soil, rock, or earth and function primarily as reinforcement.

C. Unit Drainage Fill – drainage aggregate that is placed within and immediately behind the Keystone concrete units.

D. Reinforced Backfill – compacted soil that is placed within the reinforced soil volume as outlined on the plans.

2.02 Keystone Concrete Retaining Wall Units

A. Keystone concrete units shall conform to the following architectural requirements:

1. Face color – concrete gray, unless otherwise specified. The Owner may specify standard manufacturers' color.
2. Face finish – hard split in angular tri–plane or straight face configuration. Other face finishes will not be allowed without written approval of Owner.
3. Bond configuration – running with bonds nominally located at midpoint vertically adjacent units, in both straight and curved alignments.
4. Exposed surfaces of units shall be free of chips, cracks or other imperfections when viewed from a distance of 10 feet (3 m) under diffused lighting.

B. Keystone concrete materials shall conform to the requirements of ASTM C1372 – Standard Specifications for Segmental Retaining Wall Units.

C. Keystone concrete units shall conform to the following structural and geometric requirements measured in accordance with ASTM C140 Sampling and Testing Concrete Masonry Units:

1. Compressive strength: 3000 psi (21 MPa);
2. Absorption: 8 % for standard weight aggregates;
3. Dimensional tolerances: ± 1/8" (3 mm) from nominal unit dimensions not including rough split face;
4. Unit size: 8" (203 mm) (H) x 18" (457 mm)(W) x 12" (304 mm)(D) minimum;
5. Unit weight: 67 –lbs/unit (30 kg/unit) minimum for standard weight aggregates.

D. Keystone concrete units shall conform to the following performance testing:

1. Inter–unit shear strength in accordance with ASTM D6916 (NCMA SRWU–2): 600–plf (8 kN/m) minimum at 2–psi (13 kPa) normal pressure;
2. Geogrid/unit peak connection strength in accordance with ASTM D6638 (NCMA SRWU–1): 500–plf (7 kN/m) minimum at 2–psi (13 kPa) normal force.

E. Keystone concrete units shall conform to the following constructability requirements:

1. Vertical setback: 1/8" (3 mm) ± per course (near vertical) or 1" (25 mm) + per course per the design;
2. Alignment and grid positioning mechanism – fiberglass pins, two per unit;
3. Maximum horizontal gap between erected units shall be 1/2 inch (13 mm).

2.03 Shear and Reinforcement Pin Connectors

A. Shear and reinforcement pin connectors shall be 1/2–inch (12 mm) diameter thermoset isopthalic polyester resin–pultruded fiberglass reinforcement rods to provide connection between vertically and horizontally adjacent units and geosynthetic reinforcement, with the following requirements:

1. Flexural Strength in accordance with ASTM D4476: 128,000 psi (882 MPa) minimum;
2. Short Beam Shear in accordance with ASTM D4475: 6,400 psi (44 MPa) minimum.

B. Shear and reinforcement pin connectors shall be capable of holding the geogrid in the proper design position during grid pre–tensioning and backfilling.

2.04 Base Leveling Pad Material

A. Material shall consist of a compacted crushed stone base or non–reinforced concrete as shown on the construction drawings.

2.05 Unit Drainage Fill

A. Unit drainage fill shall consist of clean 1" (25 mm) minus crushed stone or crushed gravel meeting the following gradation tested in accordance with ASTM D–422:

Sieve Size Percent Passing
1 inch (25 mm) 100
3/4–inch (19 mm) 75–100
No. 4 (4.75mm) 0 – 10
No. 50 (300um) 0 – 5

B. Drainage fill shall be placed within the cores of, between, and behind the units as indicated on the design drawings. Not less than 1.3 cubic foot (0.036 m3), of drainage fill shall be used for each square foot (0.093 m2) of wall face unless otherwise specified.

2.06 Reinforced Backfill

A. Reinforced backfill shall be free of debris and meet the following gradation tested in accordance with ASTM D–422:

Sieve Size Percent Passing
2 inch (50 mm) 100
3/4–inch (19 mm) 100–75
No. 40 (425um) 0–60
No. 200 (75um) 0–35

Plasticity Index (PI) <15 and Liquid Limit <40 per ASTM D–4318.

B. The maximum aggregate size shall be limited to 3/4 inch (19 mm) unless installation damage tests have been performed to evaluate potential strength reductions to the geogrid design due to damage during construction.

C. Material can be site–excavated soils where the above requirements can be met. Unsuitable soils for backfill (high plastic clays or organic soils) shall not be used in the backfill or in the reinforced soil mass.

D. Contractor shall submit reinforced fill sample and laboratory test results to the Architect/Engineer for approval prior to the use of any proposed reinforced fill material.

2.07 NO FINES CONCRETE BACKFILL

A. TARGET IN–PLACE NET WEIGHT = 115 PCF
WATER–CEMENT RATIO (W/C) = 0.3 to 0.5
AGGREGATE–CEMENT RATIO (A/C) = 4.5:1 to 6:1
PERCENT AIR VOIDS = 15% to 25%
PERCENT TYPE 1 PORTLAND CEMENT = 50% MIN.
NOMINAL AGGREGATE SIZE = 3/8" to 3/4"
AASHTO #6, #8, OR #57 AGGREGATE
MINIMUM 28–DAY COMPRESSIVE STRENGTH = 1100 PSI

B. Pour lifts shall not exceed 24". Each lift shall be poured to fill all cores of block and spaces inbetween and to depth shown on details.

2.08 Geogrid Soil Reinforcement

A. Geosynthetic reinforcement shall consist of geogrids manufactured specifically for soil reinforcement applications and shall be manufactured from high tenacity polyester yarn or high density polyethylene. Polyester geogrid shall be made from high tenacity polyester filament yarn with a molecular weight exceeding 25,000 g/m and a carboxyl end group values less than 30. Polyester geogrid shall be coated with an impregnated PVC coating that resists peeling, cracking, and stripping.

B. Ta, Long Term Allowable Tensile Design Load, of the geogrid material shall be determined as follows:

Ta = Tult / (RFcr*RFd*RFid*FS)
Ta shall be evaluated based on a 75–year design life.

1. Tult, Short Term Ultimate Tensile Strength shall be determined in accordance with ASTM D4595 or ASTM D6637.
Tult is based on the minimum average roll values (MARV).

2. RFcr, Reduction Factor for Long Term Tension Creep
RFcr shall be determined from 10,000–hour creep testing performed in accordance with ASTM D5262. Reduction value = 1.45 minimum.

3. RFd, Reduction Factor for Durability
RFd shall be determined from polymer specific durability testing covering the range of expected soil environments. RFd = 1.10 minimum.

4. RFid, Reduction Factor for Installation Damage
RFid shall be determined from product specific construction damage testing performed in accordance with ASTM D5818. Test results shall be provided for each product to be used with project specific or more severe soil type. RFid = 1.05 minimum.

5. FS, Overall Design Factor of Safety
FS shall be 1.5 unless otherwise noted for the maximum allowable working stress calculation.

C. The maximum design tensile load of the geogrid shall not exceed the laboratory tested ultimate strength of the geogrid/facing unit connection divided by a factor of safety of 1.5. The connection strength testing and computation procedures shall be in accordance with ASTM D6638 Connection Strength between Geosynthetic Reinforcement and Segmental Concrete Units (NCMA SRWU–1).

D. Soil Interaction Coefficient, Ci
Ci values shall be determined per ASTM D6706 at a maximum 0.75–inch (19 mm) displacement.

E. Manufacturing Quality Control
The geogrid manufacturer shall have a manufacturing quality control program that includes QC testing by an independent laboratory.
The QC testing shall include:
Tensile Strength Testing
Melt Flow Index (HDPE)
Molecular Weight (Polyester)

2.09 Drainage Pipe

A. If required, the drainage pipe shall be perforated or slotted PVC pipe manufactured in accordance with ASTM D–3034 or corrugated HDPE pipe manufactured in accordance with AASHTO M252.

2.10 Geotextile Filter Fabric

A. When required, geotextile filter fabric shall be a needlepunched, nonwoven fabric that meets the requirements of AASHTO M288.

PART 3:EXECUTION

3.01 Excavation

A. Contractor shall excavate to the lines and grades shown on the construction drawings. Owner's or Contractors QA/QC representative shall inspect the excavation and approve prior to placement of leveling material or fill soils. Proof roll foundation area as directed to determine if remedial work is required.

B. Over–excavation and replacement of unsuitable foundation soils and replacement with approved compacted fill will be compensated as agreed upon with the Owner.

3.02 Base Leveling Pad

A. Leveling pad material shall be placed to the lines and grades shown on the construction drawings, to a minimum thickness of 6 inches (150 mm) and extend laterally a minimum of 6" (150 mm) in front and behind the Keystone wall unit.

B. Soil leveling pad materials shall be compacted to a minimum of 95 % Standard Proctor density per ASTM D–698 or 92% Modified Proctor Density per ASTM D1557.

C. Leveling pad shall be prepared to insure full contact to the base surface of the concrete units.

3.03 Keystone Unit Installation

A. First course of units shall be placed on the leveling pad at the appropriate line and grade. Alignment and level shall be checked in all directions and insure that all units are in full contact with the base and properly seated.

B. Place the front of units side–by–side. Do not leave gaps between adjacent units. Layout of corners and curves shall be in accordance with manufacturer's recommendations.

C. Install shear/connecting devices per manufacturer's recommendations.

D. Place and compact drainage fill within and behind wall units. Place and compact backfill soil behind drainage fill. Follow wall erection and drainage fill closely with structure backfill.

E. Maximum stacked vertical height of wall units, prior to unit drainage fill and backfill placement and compaction, shall not exceed two courses.

3.04 Structural Geogrid Installation

A. Geogrid shall be oriented with the highest strength axis perpendicular to the wall alignment.

B. Geogrid reinforcement shall be placed at the strengths, lengths, and elevations shown on the construction design drawings or as directed by the Engineer.

C. The geogrid shall be laid horizontally on compacted backfill and attached to the Keystone wall pins and within 1 inch of the face of the units. Place the next course of Keystone concrete units over the geogrid. The geogrid shall be pulled taut, and anchored prior to backfill placement on the geogrid.

D. Geogrid reinforcements shall be continuous throughout their embedment lengths and placed side–by–side to provide 100% coverage at each level. Spliced connections between shorter pieces of geogrid or gaps greater than 2 inches between adjacent pieces of geogrid are not permitted.

3.05 Reinforced Backfill Placement

A. Reinforced backfill shall be placed, spread, and compacted in such a manner that minimizes the development of slack in the geogrid and installation damage.

B. Reinforced backfill shall be placed and compacted in lifts not to exceed 6 inches (150 mm) where hand compaction is used, or 8 – 10 inches (200 to 250 mm) where heavy compaction equipment is used. Lift thickness shall be decreased to achieve the required density as required.

C. Reinforced backfill shall be compacted to a minimum of 95 % Standard Proctor density per ASTM D–698 or 92% Modified Proctor Density per ASTM D1557. The moisture content of the backfill material prior to and during compaction shall be uniformly distributed throughout each layer and shall be dry of optimum, + 0%, – 3%.

D. Only lightweight hand–operated equipment shall be allowed within 3 feet (1 m) from the tail of the Keystone concrete unit.

E. Tracked construction equipment shall not be operated directly upon the geogrid reinforcement. A minimum fill thickness of 6 inches (150 mm) is required prior to operation of tracked vehicles over the geogrid. Tracked vehicle turning should be kept to a minimum to prevent tracks from displacing the fill and damaging the geogrid.

F. Rubber tired equipment may pass over geogrid reinforcement at slow speeds, less than 10 MPH (15 KPH). Sudden braking and sharp turning shall be avoided.

G. At the end of each day's operation, the Contractor shall slope the last lift of reinforced backfill away from the wall units to direct runoff away from wall face. The Contractor shall not allow surface runoff from adjacent areas to enter the wall construction site.

3.06 Cap Installation

A. Cap units shall be glued to underlying units with an all–weather concrete construction adhesive.

3.07 As–built Construction Tolerances

A. Vertical alignment: ± 1.5" (40 mm) over any 10' (3 m) distance.

B. Wall Batter: within 2 degrees of design batter.

C. Horizontal alignment: ± 1.5" (40 mm) over any 10' (3 m) distance.
Corners, bends & curves: ± 1 foot (300 mm) to theoretical location.

D. Maximum horizontal gap between erected units shall be 1/2 inch (13 mm).

3.08 Field Quality Control

A. Quality Assurance – The Owner shall/may engage inspection and testing services, including independent laboratories, to provide quality assurance and testing services during construction. This does not relieve the Contractor from securing the necessary construction quality control testing.

B. Quality Assurance should include foundation soil inspection. Verification of geotechnical design parameters, and verification that the contractor's quality control testing is adequate as a minimum. Quality assurance shall also include observation of construction for general compliance with design drawings and project specifications. (Quality Assurance is usually best performed by the site geotechnical engineer.)

C. Quality Control – The Contractor shall engage inspection and testing services to perform the minimum quality control testing described in the retaining wall design plans and specifications. Only qualified and experienced technicians and engineers shall perform testing and inspection services.

D. Quality Control testing shall include soil and backfill testing to verify soil types and compaction and verification that the retaining wall is being constructed in accordance with the design plans and project specifications.

his item has been electronically signed and sealed by Timothy G. Frazier II,PE using a Digital Signature and date. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.


2436

SUR STRUCTURAL ENGINEERING, LLC
1085 Durbin Parke Dr., St. Johns, FL 32259. (904) 510 5605
CERTIFICATE OF AUTHORIZATION No 28679


WILLOW RUN SUBDIVISION
APOPKA, FL

KEYSTONE WALL SPECIFICATIONS

TIMOTHY GRAY FRAZIER II
LICENSE
No 59321
STATE OF FLORIDA
PROFESSIONAL ENGINEER

TIMOTHY G. FRAZIER II, P.E
FL PE# 59321

Revisions:

| | |
|---|---|
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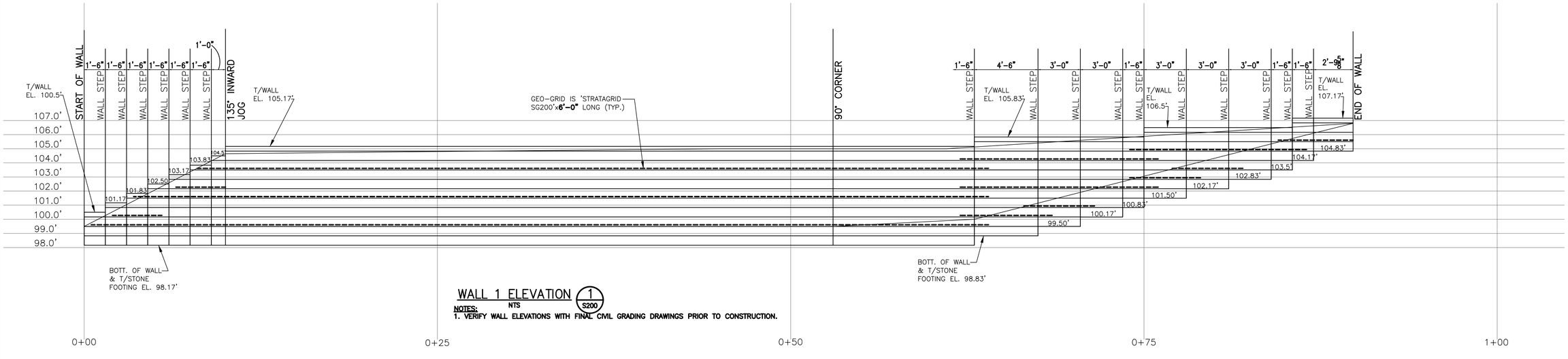
| | |

Date:
FEBRUARY 1, 2024

Job number:
24–JR–04

Drawn/Checked by:
TGF II

Sheet Number:
S102




## WALL 1 ELEVATION (1 / S200)

NTS

**NOTES:**
1. VERIFY WALL ELEVATIONS WITH FINAL CIVIL GRADING DRAWINGS PRIOR TO CONSTRUCTION.


2436

SJR STRUCTURAL ENGINEERING, LLC
1085 Durbin Parke Dr., St. Johns, FL 32259. (904) 510 5605
CERTIFICATE OF AUTHORIZATION No 28679


WILLOW RUN SUBDIVISION
APOPKA, FL

# WALL ELEVATIONS

TIMOTHY GRAY FRAZIER II LICENSE No 59321 STATE OF FLORIDA PROFESSIONAL ENGINEER

TIMOTHY G. FRAZIER II, P.E.
FL PE# 59321

*Revisions:*

| | |
|---|---|
| | |
| | |
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| | |

Date: FEBRUARY 1, 2024
Job number: 24-JR-04
Drawn/Checked by: TGF II

*Sheet Number:*

S200

his item has been electronically signed and sealed by Timothy G. Frazier II,PE using a Digital Signature and date. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

DocuSign Envelope ID: E5C7A81A-289D-49B6-9C25-5C7D22F72601

Landscape Designs, LLC
■ Landscape Architecture
■ Site Planning
4663 Tiffany Woods Cir
Oviedo, FL 32765
PH: (407) 484-3414

PROJECT AND OWNER

WILLOW RUN

City of Apopka
Florida

Appian Engineering, LLC
2221 Lee Road, Suite 17
Winter Park, FL 32789
PH: (407) 960-5856

CONSULTANTS

LANDSCAPE ARCHITECT
CARL J. KELLY JR.. RLA

DocuSigned by:
D96C07E49FDC41C...

REG.#: 0001764

| | |
|---|---|
| PROJECT NO. | APP22.01 |
| DESIGNED BY | CJK |
| DRAWN BY | CJK |
| CHECKED BY | CJK |
| DATE | 12/14/21 |

ISSUED FOR:

- 01/30/22 City Comments
- 02/22/22 Site Changes
- 04/04/22 Tree Survey
- 06/20/22 Site Changes
- 04/01/24 Site Changes
- 05/06/24 City Comments

DRAWING SCALE

0 FT 40' 80' North

SCALE: 1"=80'-0"

DRAWING TITLE

OVERALL LANDSCAPE SITE PLAN

DRAWING NUMBER

LS-01

SHEET 30 OF

LANDSCAPE AND IRRIGATION DESIGN

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 .

| SIGNATURE | REG. NO. | DATE |
|---|---|---|
| | LA0001764 | 12/14/21 |

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DocuSign Envelope ID: E5C7A81A-289D-49B6-9C25-5C7D22F72601

| TREE TABLE | |
|---|---|
| POINT NUMBER | TREE |
| 6068 | 17" PINE |
| 6069 | 18" OAK |
| 6070 | 22" OAK |
| 6071 | 28" OAK |
| 6072 | 36" OAK |
| 6073 | 22" OAK |
| 6074 | 18" OAK |
| 6075 | 18" OAK |
| 6076 | 22" OAK |
| 6077 | 18" OAK |
| 6078 | 8" OAK |
| 6079 | 13" OAK |
| 6080 | 16" OAK |
| 6081 | 7" CAMPHOR |
| 6082 | 14" OAK |
| 6083 | 18" OAK |
| 6084 | 18" OAK |
| 6085 | 4" OAK |
| 6086 | 17" OAK |
| 6087 | 22" OAK |
| 6088 | 7" OAK |
| 6089 | 18" OAK |
| 6090 | 12" OAK |
| 6091 | 24" OAK |
| 6092 | 24" OAK |
| 6093 | 18" OAK |
| 6094 | 25" OAK |
| 6095 | 24" OAK |
| 6096 | 24" OAK |
| 6097 | 20" OAK |
| 6098 | 20" OAK |
| 6099 | 20" OAK |
| 6100 | 20" OAK |
| 6101 | 28" OAK |
| 6102 | 17" OAK |
| 6103 | 20" OAK |
| 6104 | 8" OAK |
| 6105 | 15" OAK |
| 6106 | 18" OAK |
| 6107 | 20" OAK |
| 6108 | 13" CAMPHOR |
| 6109 | 18" OAK |
| 6110 | 16" OAK |
| 6111 | 14" 20" OAK |
| 6112 | 12" OAK |
| 6113 | 15" OAK |
| 6114 | 8" OAK |
| 6115 | 12" OAK |
| 6116 | 14" OAK |
| 6117 | 12" OAK |
| 6118 | 10" OAK |
| 6119 | 12" PINE |
| 6120 | 22" OAK |
| 6121 | 24" OAK |
| 6122 | 28" OAK |
| 6123 | 14" OAK |
| 6124 | 28" OAK |
| 6125 | 26" OAK |
| 6126 | 24" OAK |
| 6127 | 24" OAK |
| 6128 | 24" OAK |
| 6129 | 28" OAK |
| 6130 | 24" OAK |
| 6131 | 24" OAK |
| 6132 | 32" OAK |
| 6133 | 15" OAK |
| 6134 | 12" OAK |
| 6135 | 24" OAK |
| 6136 | 30" OAK |
| 6137 | 12" OAK |
| 6138 | 30" OAK |
| 6139 | 18" OAK |
| 6140 | 8" OAK |
| 6141 | 26" OAK |
| 6142 | 14" OAK |
| 6143 | 24" OAK |
| 6144 | 24" OAK |
| 6145 | 12" OAK |
| 6146 | 24" OAK |
| 6147 | 12" OAK |
| 6148 | 16" OAK |
| 6149 | 24" OAK |
| 6150 | 26" OAK |
| 6151 | 12" OAK |
| 6152 | 24" OAK |
| 6153 | 34" OAK |
| 6154 | 24" OAK |
| 6155 | 10" OAK |
| 6156 | 18" OAK |
| 6157 | 8" OAK |
| 6158 | 22" OAK |
| 6159 | 15" OAK |
| 6160 | 14" OAK |
| 6161 | 12" OAK |
| 6162 | 12" OAK |
| 6163 | 8" OAK |
| 6164 | 16" OAK |
| 6165 | 16" OAK |
| 6166 | 20" OAK |
| 6167 | 16" OAK |
| 6168 | 18" OAK |
| 6169 | 8" OAK |
| 6170 | 12" OAK |
| 6171 | 18" OAK |
| 6172 | 8" OAK |
| 6173 | 10" OAK |
| 6174 | 16" OAK |
| 6175 | 22" OAK |
| 6176 | 13" OAK |
| 6177 | 18" OAK |
| 6178 | 10" OAK |
| 6179 | 12" OAK |
| 6180 | 12" OAK |
| 6181 | 15" OAK |
| 6182 | 18" OAK |
| 6183 | 20" OAK |
| 6184 | 18" OAK |
| 6185 | 9" OAK |
| 6186 | 16" OAK |
| 6187 | 10" OAK |
| 6188 | 18" OAK |
| 6189 | 22" OAK |
| 6190 | 10" OAK |
| 6191 | 11" OAK |
| 6192 | 12" OAK |
| 6193 | 12" OAK |
| 6194 | 12" OAK |
| 6195 | 16" OAK |
| 6196 | 14" OAK |
| 6197 | 12" OAK |
| 6198 | 10" OAK |
| 6199 | 10" OAK |
| 6200 | 15" OAK |
| 6201 | 15" OAK |
| 6202 | 15" OAK |
| 6203 | 16" OAK |
| 6204 | 16" OAK |
| 6205 | 18" OAK |

| TREE TABLE | |
|---|---|
| POINT NUMBER | TREE |
| 6206 | 18" OAK |
| 6207 | 20" OAK |
| 6208 | 20" OAK |
| 6209 | 10" OAK |
| 6210 | 7" OAK |
| 6211 | 7" OAK |
| 6212 | 8" OAK |
| 6213 | 7" OAK |
| 6214 | 11" OAK |
| 6215 | 9" OAK |
| 6216 | 8" OAK |
| 6217 | 12" OAK |
| 6218 | 12" OAK |
| 6219 | 12" OAK |
| 6220 | 15" OAK |
| 6221 | 6" OAK |
| 6222 | 10" OAK |
| 6223 | 11" OAK |
| 6224 | 19" OAK |
| 6225 | 13" OAK |
| 6226 | 9" OAK |
| 6227 | 6" OAK |
| 6228 | 9" OAK |
| 6229 | 12" OAK |
| 6230 | 15" OAK |
| 6231 | 16" OAK |
| 6232 | 20" OAK |
| 6233 | 14" OAK |
| 6234 | 17" OAK |
| 6235 | 12" OAK |
| 6236 | 15" OAK |
| 6237 | 15" OAK |
| 6238 | 11" OAK |
| 6239 | 14" OAK |
| 6240 | 8" OAK |
| 6241 | 13" OAK |
| 6242 | 13" OAK |
| 6243 | 4" CAMPHOR |
| 6244 | 10" OAK |
| 6245 | 11" OAK |
| 6246 | 12" OAK |
| 6247 | 14" OAK |
| 6248 | 16" OAK |
| 6249 | 14" 20" OAK |
| 6250 | 10" CHERRY |
| 6251 | 19" OAK |
| 6252 | 16" OAK |
| 6253 | 12" OAK |
| 6254 | 8" OAK |
| 6255 | 12" OAK |
| 6256 | 17" OAK |
| 6257 | 12" PINE |
| 6258 | 16" OAK |
| 6259 | 10" OAK |
| 6260 | 10" OAK |
| 6261 | 14" OAK |
| 6262 | 11" OAK |
| 6263 | 9" OAK |
| 6264 | 8" OAK |
| 6265 | 15" OAK |
| 6266 | 10" OAK |
| 6267 | 15" OAK |
| 6268 | 11" OAK |
| 6269 | 10" OAK |
| 6270 | 17" OAK |
| 6271 | 16" OAK |
| 6272 | 17" OAK |
| 6273 | 16" OAK |
| 6274 | 12" OAK |
| 6275 | 12" OAK |
| 6276 | 10" OAK |
| 6277 | 16" OAK |
| 6278 | 12" OAK |
| 6279 | 13" OAK |
| 6280 | 19" OAK |
| 6281 | 16" OAK |
| 6282 | 16" OAK |
| 6283 | 12" OAK |
| 6284 | 11" OAK |
| 6285 | 12" OAK |
| 6286 | 12" OAK |
| 6287 | 12" OAK |
| 6288 | 12" OAK |
| 6289 | 12" OAK |
| 6290 | 5" OAK |
| 6291 | 12" OAK |
| 6292 | 13" OAK |
| 6293 | 10" OAK |
| 6294 | 20" OAK |
| 6295 | 11" OAK |
| 6296 | 10" OAK |
| 6297 | 11" OAK |
| 6298 | 13" OAK |
| 6299 | 18" OAK |
| 6300 | 12" OAK |
| 6301 | 9" OAK |
| 6302 | 11" OAK |
| 6303 | 10" OAK |
| 6304 | 14" OAK |
| 6305 | 9" OAK |
| 6306 | 6" OAK |
| 6307 | 9" OAK |
| 6308 | 10" OAK |
| 6309 | 24" OAK |
| 6310 | 20" OAK |
| 6311 | 28" OAK |
| 6312 | 13" OAK |
| 631.3 | 12" CHERRY |
| 6314 | 6" OAK |
| 6315 | 12" OAK |
| 6316 | 14" OAK |
| 6317 | 13" OAK |
| 6318 | 17" OAK |
| 6319 | 20" OAK |
| 6320 | 22" CHERRY |
| 6321 | 22" OAK |
| 6322 | 30" OAK |
| 6323 | 16" PINE |
| 6324 | 11" OAK |
| 6325 | 22" PINE |
| 6326 | 18" OAK |
| 6327 | 30" OAK |
| 6328 | 17" OAK |
| 6329 | 18" OAK |
| 6330 | 16" OAK |
| 6331 | 18" OAK |
| 6332 | 12" OAK |
| 6333 | 22" OAK |
| 6334 | 10" OAK |
| 6335 | 14" OAK |
| 6336 | 10" OAK |
| 6337 | 6" OAK |
| 6338 | 17" OAK |
| 6339 | 12" OAK |
| 6340 | 10" OAK |
| 6341 | 18" OAK |
| 6342 | 18" OAK |
| 6343 | 18" OAK |

| TREE TABLE | |
|---|---|
| POINT NUMBER | TREE |
| 6344 | 18" OAK |
| 6345 | 20" OAK |
| 6346 | 20" OAK |
| 6347 | 8" PINE |
| 6348 | 12" PINE |
| 6349 | 12" PINE |
| 6350 | 19" PINE |
| 6351 | 10" OAK |
| 6352 | 17" OAK |
| 6353 | 11" OAK |
| 6354 | 16" OAK |
| 6355 | 12" OAK |
| 6356 | 12" OAK |
| 6357 | 16" OAK |
| 6358 | 11" OAK |
| 6359 | 12" OAK |
| 6360 | 15" OAK |
| 6361 | 18" OAK |
| 6362 | 11" OAK |
| 6363 | 18" OAK |
| 6364 | 15" OAK |
| 6365 | 8" OAK |
| 6366 | 14" OAK |
| 6367 | 20" OAK |
| 6368 | 12" OAK |
| 6369 | 12" OAK |
| 6370 | 11" OAK |
| 6371 | 14" OAK |
| 6372 | 12" OAK |
| 6373 | 14" OAK |
| 6374 | 15" OAK |
| 6375 | 18" OAK |
| 6376 | 12" OAK |
| 6377 | 5" OAK |
| 6378 | 12" OAK |
| 6379 | 16" OAK |
| 6380 | 7" OAK |
| 6381 | 11" OAK |
| 6382 | 11" OAK |
| 6383 | 12" OAK |
| 6384 | 12" OAK |
| 6385 | 16" OAK |
| 6386 | 19" PINE |
| 6387 | 11" PINE |
| 6388 | 24" OAK |
| 6389 | 6" OAK |
| 6390 | 16" PINE |
| 6391 | 13" OAK |
| 6392 | 10" PINE |
| 6393 | 14" PINE |
| 6394 | 7" OAK |
| 6395 | 16" PINE |
| 6396 | 24" OAK |
| 6397 | 13" PINE |
| 6398 | 24" OAK |
| 6399 | 7" OAK |
| 6400 | 11" OAK |
| 6401 | 7" OAK |
| 6402 | 10" OAK |
| 6403 | 14" PINE |
| 6404 | 10" OAK |
| 6405 | 17" PINE |
| 6406 | 18" OAK |
| 6407 | 15" OAK |
| 6408 | 20" OAK |
| 6409 | 16" OAK |
| 6410 | 18" OAK |
| 6411 | 18" OAK |
| 6412 | 18" OAK |
| 6413 | 18" OAK |
| 6414 | 18" OAK |
| 6415 | 16" OAK |
| 6416 | 16" OAK |
| 6417 | 24" OAK |
| 6418 | 10" PINE |
| 6419 | 14" PINE |
| 6420 | 15" PINE |
| 6421 | 22" OAK |
| 6422 | 32" OAK |
| 6423 | 18" OAK |
| 6424 | 18" OAK |
| 6425 | 18" OAK |
| 6426 | 24" OAK |
| 6427 | 24" OAK |
| 6428 | 22" OAK |
| 6429 | 26" OAK |
| 6430 | 20" PINE |
| 6431 | 5" OAK |
| 6432 | 18" OAK |
| 6433 | 10" OAK |
| 6434 | 18" OAK |
| 6435 | 12" OAK |
| 6436 | 16" OAK |
| 6437 | 22" OAK |
| 6438 | 22" OAK |
| 6439 | 28" OAK |
| 6440 | 18" OAK |
| 6441 | 20" OAK |
| 6442 | 12" OAK |
| 6443 | 8" OAK |
| 6444 | 15" OAK |
| 6445 | 26" OAK |
| 6446 | 18" OAK |
| 6447 | 24" OAK |
| 6448 | 18" OAK |
| 6449 | 33" OAK |
| 6450 | 29" OAK |
| 6451 | 24" OAK |
| 6452 | 12" OAK |
| 6453 | 13" OAK |
| 6454 | 14" OAK |
| 6455 | 12" OAK |
| 6456 | 12" OAK |
| 6457 | 14" OAK |
| 6458 | 18" OAK |
| 6459 | 11" OAK |
| 6460 | 18" OAK |
| 6461 | 11" OAK |
| 6462 | 7" OAK |
| 6463 | 24" OAK |
| 6464 | 15" OAK |
| 6465 | 26" OAK |
| 6466 | 20" OAK |
| 6467 | 8" OAK |
| 6468 | 16" OAK |
| 6469 | 20" OAK |
| 6470 | 12" OAK |
| 6471 | 14" OAK |
| 6472 | 24" OAK |
| 6473 | 14" 12" CHERRY |
| 6474 | 5" OAK |
| 6475 | 26" OAK |
| 6476 | 26" OAK |
| 6477 | 30" OAK |
| 6478 | 26" OAK |
| 6479 | 24" OAK |
| 6480 | 15" OAK |
| 6481 | 12" CHERRY |

| TREE TABLE | |
|---|---|
| POINT NUMBER | TREE |
| 6482 | 12" OAK |
| 6483 | 20" OAK |
| 6484 | 20" OAK |
| 6485 | 36" OAK |
| 6486 | 40" OAK |
| 6487 | 30" OAK |
| 6488 | 22" OAK |
| 6489 | 9" OAK |
| 6490 | 26" OAK |
| 6491 | 14" OAK |
| 6492 | 28" OAK |
| 6493 | 28" OAK |
| 6494 | 22" OAK |
| 6495 | 19" CHERRY |
| 6496 | 12" OAK |
| 6497 | 26" OAK |
| 6498 | 24" OAK |
| 6499 | 26" OAK |
| 6500 | 18" OAK |
| 6501 | 18" OAK |
| 6502 | 30" OAK |
| 6503 | 20" OAK |
| 6504 | 33" OAK |
| 6505 | 33" OAK |
| 6506 | 24" OAK |
| 6507 | 18" OAK |
| 6508 | 44" OAK |
| 6509 | 50" OAK |
| 6510 | 10" OAK |
| 6511 | 36" OAK |
| 6512 | 34" OAK |
| 6513 | 13" OAK |
| 6514 | 28" OAK |
| 6515 | 11" 7" CHERRY |
| 6516 | 26" OAK |
| 6517 | 26" OAK |
| 6518 | 18" OAK |
| 6519 | 22" OAK |
| 6520 | 15" OAK |
| 6521 | 24" OAK |
| 6522 | 16" OAK |
| 6523 | 20" OAK |
| 6524 | 22" OAK |
| 6525 | 24" OAK |
| 6526 | 22" OAK |
| 6527 | 13" OAK |
| 6528 | 26" OAK |
| 6529 | 12" OAK |
| 6530 | 26" OAK |
| 6531 | 13" OAK |
| 6532 | 38" OAK |
| 6533 | 20" OAK |
| 6534 | 15" OAK |
| 6535 | 6" OAK |
| 6536 | 17" OAK |
| 6537 | 18" OAK |
| 6538 | 12" OAK |
| 6539 | 16" OAK |
| 6540 | 34" OAK |
| 6541 | 8" CHERRY |
| 6542 | 18" OAK |
| 6543 | 26" OAK |
| 6544 | 31" OAK |
| 6545 | 20" OAK |
| 6546 | 15" OAK |
| 6547 | 12" OAK |
| 6548 | 12" OAK |
| 6549 | 24" OAK |
| 6550 | 26" OAK |
| 6551 | 32" OAK |
| 6552 | 40" OAK |
| 6553 | 24" OAK |
| 6554 | 32" OAK |
| 6555 | 26" OAK |
| 6556 | 24" OAK |
| 6557 | 24" OAK |
| 6558 | 42" OAK |
| 6559 | 24" OAK |
| 6560 | 40" OAK |
| 6561 | 18" OAK |
| 6562 | 30" OAK |
| 6563 | 22" OAK |
| 6564 | 20" OAK |
| 6565 | 28" OAK |
| 6566 | 30" OAK |
| 6567 | 18" OAK |
| 6568 | 58" OAK |
| 6569 | 24" OAK |
| 6570 | 34" OAK |
| 6571 | 32" OAK |
| 6572 | 20" OAK |
| 6573 | 8" 5" CHERRY |
| 6574 | 10" OAK |
| 6575 | 10" CAMPHOR |
| 6576 | 34" OAK |
| 6577 | 32" OAK |
| 6578 | 22" OAK |
| 6579 | 38" OAK |
| 6580 | 40" OAK |
| 6581 | 24" OAK |
| 6582 | 54" OAK |
| 6583 | 36" OAK |
| 6584 | 36" OAK |
| 6585 | 34" OAK |
| 6586 | 14" OAK |
| 6587 | 34" OAK |
| 6588 | 5" OAK |
| 6589 | 12" OAK |
| 6590 | 12" OAK |
| 6591 | 24" OAK |
| 6592 | 24" OAK |
| 6593 | 16" OAK |
| 6594 | 28" OAK |
| 6595 | 36" OAK |
| 6596 | 46" OAK |
| 6597 | 30" OAK |
| 6598 | 30" OAK |
| 6599 | 30" OAK |
| 6600 | 30" OAK |
| 6601 | 48" OAK |
| 6602 | 13" 13" CHERRY |
| 6603 | 34" OAK |
| 6604 | 24" OAK |
| 6605 | 30" OAK |
| 6606 | 44" OAK |
| 6607 | 17" OAK |
| 6608 | 26" OAK |
| 6609 | 24" OAK |
| 6610 | 32" OAK |
| 6611 | 15" OAK |
| 6612 | 32" OAK |
| 6613 | 34" OAK |
| 6614 | 24" OAK |
| 6615 | 18" OAK |
| 6616 | 12" OAK |
| 6617 | 24" OAK |
| 6618 | 38" OAK |
| 6619 | 40" OAK |

| TREE TABLE | |
|---|---|
| POINT NUMBER | TREE |
| 6620 | 40" OAK |
| 6621 | 40" OAK |
| 6622 | 42" OAK |
| 6623 | 32" CAMPHOR |
| 6624 | 12" CHERRY |
| 6625 | 37" CAMPHOR |
| 6626 | 38" OAK |
| 6627 | 14" OAK |
| 6628 | 18" OAK |
| 6629 | 14" OAK |
| 6630 | 9" OAK |
| 6631 | 42" OAK |
| 6632 | 24" OAK |
| 6633 | 2" OAK |
| 6634 | 24" OAK |
| 6635 | 42" OAK |
| 6636 | 34" OAK |
| 6637 | 32" OAK |
| 6638 | 24" OAK |
| 6639 | 7" OAK |
| 6640 | 40" OAK |
| 6641 | 28" OAK |
| 6642 | 40" OAK |
| 6643 | 20" OAK |
| 6644 | 36" OAK |
| 6645 | 26" OAK |
| 6646 | 30" OAK |
| 6647 | 36" OAK |
| 6648 | 32" OAK |
| 6649 | 18" OAK |
| 6650 | 40" OAK |
| 6651 | 22" OAK |
| 6652 | 24" OAK |
| 6653 | 24" OAK |
| 6654 | 19" OAK |
| 6655 | 4" CAMPHOR |
| 6656 | 18" OAK |
| 6657 | 8" OAK |
| 6658 | 6" OAK |
| 6659 | 9" OAK |
| 6660 | 15" OAK |
| 6661 | 19" OAK |
| 6662 | 22" OAK |
| 6663 | 10" OAK |
| 6664 | 7" OAK |
| 6665 | 6" OAK |
| 6666 | 16" OAK |
| 6667 | 16" OAK |
| 6668 | 11" OAK |
| 6669 | 9" OAK |
| 6670 | 9" OAK |
| 6671 | 15" OAK |
| 6672 | 14" OAK |
| 6673 | 13" OAK |
| 6674 | 20" OAK |
| 6675 | 14" OAK |
| 6676 | 17" OAK |
| 6677 | 14" OAK |
| 6678 | 9" OAK |
| 6679 | 16" OAK |
| 6680 | 14" OAK |
| 6681 | 22" OAK |
| 6682 | 14" OAK |
| 6683 | 18" OAK |
| 6684 | 18" OAK |
| 6685 | 12" OAK |
| 6686 | 32" OAK |
| 6687 | 17" OAK |
| 6688 | 20" OAK |
| 6689 | 32" OAK |
| 6690 | 11" OAK |
| 6691 | 13" OAK |
| 6692 | 8" OAK |
| 6693 | 12" OAK |
| 6694 | 10" OAK |
| 6695 | 12" OAK |
| 6696 | 8" OAK |
| 6697 | 12" OAK |
| 6698 | 12" OAK |

| TREE TABLE | |
|---|---|
| POINT NUMBER | TREE |
| 6758 | 15" OAK |
| 6759 | 15" OAK |
| 6760 | 14" PINE |
| 6761 | 12" OAK |
| 6762 | 19" PINE |
| 6763 | 15" OAK |
| 6764 | 17" OAK |
| 6765 | 8" OAK |
| 6766 | 12" OAK |
| 6767 | 6" OAK |
| 6768 | 13" OAK |
| 6769 | 13" OAK |
| 6770 | 11" OAK |
| 6771 | 8" OAK |
| 6772 | 12" OAK |
| 6773 | 10" OAK |
| 6774 | 6" OAK |
| 6775 | 12" OAK |
| 6776 | 13" OAK |
| 6777 | 6" OAK |
| 6778 | 10" OAK |
| 6779 | 10" OAK |
| 6780 | 10" OAK |
| 6781 | 5" OAK |
| 6782 | 13" OAK |
| 6783 | 12" OAK |
| 6784 | 12" OAK |
| 6785 | 8" OAK |
| 6786 | 8" OAK |
| 6787 | 10" OAK |
| 6788 | 9" OAK |
| 6789 | 14" OAK |
| 6790 | 36" OAK |
| 6791 | 22" OAK |
| 6792 | 9" PALM |
| 6793 | 24" OAK |
| 6794 | 20" OAK |
| 6795 | 10" OAK |
| 6796 | 6" OAK |
| 6797 | 5" OAK |
| 6798 | 18" OAK |
| 6799 | 8" OAK |
| 6800 | 16" OAK |
| 6801 | 17" OAK |
| 6802 | 20" OAK |
| 6803 | 22" OAK |
| 6804 | 22" PINE |
| 6805 | 8" OAK |
| 6806 | 9" OAK |
| 6807 | 5" OAK |
| 6808 | 5" OAK |
| 6809 | 8" OAK |
| 6810 | 10" PINE |
| 6811 | 8" OAK |
| 6812 | 12" OAK |
| 6813 | 9" OAK |
| 6814 | 12" OAK |
| 6815 | 12" OAK |
| 6816 | 8" OAK |
| 6817 | 7" OAK |
| 6818 | 9" OAK |
| 6819 | 11" OAK |
| 6820 | 9" OAK |
| 6821 | 9" OAK |
| 6822 | 13" OAK |
| 6823 | 14" OAK |
| 6824 | 17" OAK |
| 6825 | 19" PINE |
| 6826 | 13" PINE |
| 6827 | 5" OAK |
| 6828 | 21" OAK |
| 6829 | 13" OAK |
| 6830 | 12" OAK |
| 6831 | 7" OAK |
| 6832 | 8" OAK |
| 6833 | 12" OAK |
| 6834 | 14" OAK |
| 6835 | 16" OAK |
| 6836 | 17" OAK |

| TREE TABLE | |
|---|---|
| POINT NUMBER | TREE |
| 6896 | 28" OAK |
| 6897 | 20" PINE |
| 6898 | 9" OAK |
| 6899 | 24" OAK |
| 6900 | 14" OAK |
| 6901 | 14" OAK |
| 6902 | 12" OAK |
| 6903 | 21" OAK |
| 6904 | 15" PINE |
| 6905 | 10" PINE |
| 6906 | 12" OAK |
| 6907 | 24" PINE |
| 6908 | 7" OAK |
| 6909 | 16" OAK |
| 6910 | 9" OAK |
| 6911 | 16" OAK |
| 6912 | 13" OAK |
| 6913 | 7" OAK |
| 6914 | 12" OAK |
| 6915 | 16" OAK |
| 6916 | 8" OAK |
| 6917 | 24" OAK |
| 6918 | 11" OAK |
| 6919 | 22" OAK |
| 6920 | 15" OAK |
| 6921 | 16" OAK |
| 6922 | 14" OAK |
| 6923 | 16" OAK |
| 6924 | 15" OAK |
| 6925 | 13" OAK |
| 6926 | 15" OAK |
| 6927 | 16" OAK |
| 6928 | 28" OAK |
| 6929 | 9" OAK |
| 6930 | 14" OAK |
| 6931 | 10" OAK |
| 6932 | 6" OAK |
| 6933 | 14" OAK |
| 6934 | 13" OAK |
| 6935 | 13" OAK |
| 6936 | 13" OAK |
| 6937 | 14" OAK |
| 6938 | 12" OAK |
| 6939 | 18" OAK |
| 6940 | 15" OAK |
| 6941 | 19" OAK |
| 6942 | 10" OAK |
| 6943 | 10" OAK |
| 6944 | 12" OAK |
| 6945 | 9" OAK |
| 6946 | 10" OAK |
| 6947 | 18" PINE |
| 6948 | 17" PINE |
| 6949 | 11" PINE |
| 6950 | 18" OAK |
| 6951 | 17" OAK |
| 6952 | 20" PINE |
| 6953 | 6" OAK |
| 6954 | 14" OAK |
| 6955 | 12" OAK |
| 6956 | 10" OAK |
| 6957 | 11" OAK |
| 6958 | 11" OAK |
| 6959 | 6" OAK |
| 6960 | 22" PINE |
| 6961 | 28" OAK |
| 6962 | 32" OAK |
| 6963 | 24" OAK |
| 6964 | 16" OAK |
| 6965 | 13" OAK |
| 6966 | 8" OAK |
| 6967 | 12" OAK |
| 6968 | 12" OAK |
| 6969 | 16" OAK |
| 6970 | 12" OAK |
| 6971 | 13" OAK |
| 6972 | 12" OAK |
| 6973 | 10" OAK |
| 6974 | 11" OAK |
| 6975 | 16" OAK |
| 6976 | 10" OAK |
| 6977 | 9" OAK |
| 6978 | 22" OAK |
| 6979 | 16" OAK |
| 6980 | 6" OAK |
| 6981 | 30" OAK |
| 6982 | 10" OAK |
| 6983 | 18" OAK |
| 6984 | 14" OAK |
| 6985 | 24" OAK |
| 6986 | 13" OAK |
| 6987 | 8" OAK |
| 6988 | 15" PINE |
| 6989 | 15" PINE |
| 6990 | 18" PINE |
| 6991 | 15" OAK |
| 6992 | 6" OAK |
| 6993 | 11" OAK |
| 6994 | 10" OAK |
| 6995 | 16" OAK |
| 6996 | 15" OAK |
| 6997 | 8" OAK |
| 6998 | 6" OAK |
| 6999 | 7" OAK |
| 7000 | 7" OAK |
| 7001 | 14" OAK |
| 7002 | 14" OAK |
| 7003 | 4" OAK |
| 7004 | 18" PINE |
| 7005 | 14" PINE |
| 7006 | 7" OAK |
| 7007 | 12" PINE |
| 7008 | 15" OAK |
| 7009 | 17" PINE |
| 7010 | 8" OAK |
| 7011 | 8" OAK |
| 7012 | 13" PINE |
| 7013 | 17" PINE |
| 7014 | 9" OAK |
| 7015 | 17" PINE |
| 7016 | 13" OAK |
| 7017 | 17" PINE |
| 7018 | 11" OAK |
| 7019 | 8" OAK |
| 7020 | 14" OAK |
| 7021 | 9" OAK |
| 7022 | 10" PINE |
| 7023 | 15" PINE |
| 7024 | 12" OAK |
| 7025 | 13" OAK |
| 7026 | 9" OAK |
| 7027 | 17" PINE |
| 7028 | 14" PINE |
| 7029 | 14" PINE |
| 7030 | 12" PINE |
| 7031 | 13" CHERRY |
| 7032 | 11" PINE |
| 7033 | 7" OAK |

| TREE TABLE | |
|---|---|
| POINT NUMBER | TREE |
| 7034 | 17" PINE |
| 7035 | 13" OAK |
| 7036 | 12" PINE |
| 7037 | 10" OAK |
| 7038 | 19" OAK |
| 7039 | 4" OAK |
| 7040 | 14" PINE |
| 7041 | 12" OAK |
| 7042 | 15" PINE |
| 7043 | 12" PINE |
| 7044 | 10" PINE |
| 7045 | 6" OAK |
| 7046 | 13" PINE |
| 7047 | 16" OAK |
| 7048 | 15" PINE |
| 7049 | 15" PINE |
| 7050 | 11" PINE |
| 7051 | 15" PINE |
| 7052 | 16" PINE |
| 7053 | 12" OAK |
| 7054 | 14" PINE |
| 7055 | 6" OAK |
| 7056 | 12" PINE |
| 7057 | 24" PINE |
| 7058 | 12" OAK |
| 7059 | 7" OAK |
| 7060 | 12" OAK |
| 7061 | 9" OAK |
| 7062 | 11" PINE |
| 7063 | 8" PINE |
| 7064 | 13" PINE |
| 7065 | 16" OAK |
| 7066 | 15" PINE |
| 7067 | 18" OAK |
| 7068 | 24" OAK |
| 7069 | 20" OAK |
| 7070 | 10" OAK |
| 7071 | 20" PINE |
| 7072 | 9" OAK |
| 7073 | 11" PINE |
| 7074 | 6" OAK |
| 7075 | 18" PINE |
| 7076 | 13" PINE |
| 7077 | 7" OAK |
| 7078 | 6" OAK |
| 7079 | 7" OAK |
| 7080 | 9" OAK |
| 7081 | 16" PINE |
| 7082 | 18" PINE |
| 7083 | 9" OAK |
| 7084 | 12" OAK |
| 7085 | 13" OAK |
| 7086 | 9" OAK |
| 7087 | 11" OAK |
| 7088 | 22" OAK |
| 7089 | 8" OAK |
| 7090 | 14" OAK |
| 7091 | 10" OAK |
| 7092 | 19" OAK |
| 7093 | 8" OAK |
| 7094 | 5" OAK |
| 7095 | 12" OAK |
| 7096 | 10" OAK |
| 7097 | 11" OAK |
| 7098 | 12" OAK |
| 7099 | 19" OAK |
| 7100 | 13" OAK |
| 7101 | 9" OAK |
| 7102 | 10" OAK |
| 7103 | 12" OAK |
| 7104 | 5" OAK |
| 7105 | 15" PINE |
| 7106 | 18" PINE |
| 7107 | 4" OAK |
| 7108 | 16" OAK |
| 7109 | 13" PINE |
| 7110 | 13" OAK |
| 7111 | 13" OAK |
| 7112 | 19" OAK |
| 7113 | 22" OAK |
| 7114 | 26" OAK |
| 7115 | 6" OAK |
| 7116 | 7" OAK |
| 7117 | 7" OAK |
| 7118 | 12" OAK |
| 7119 | 16" OAK |
| 7120 | 15" PINE |
| 7121 | 9" OAK |
| 7122 | 12" OAK |
| 7123 | 13" OAK |
| 7124 | 24" OAK |
| 7125 | 15" OAK |
| 7126 | 15" OAK |
| 7127 | 15" OAK |
| 7128 | 9" OAK |
| 7129 | 10" OAK |
| 7130 | 5" OAK |
| 7131 | 18" OAK |
| 7132 | 10" CHERRY |
| 7133 | 12" OAK |
| 7134 | 28" OAK |
| 7135 | 14" OAK |
| 7136 | 20" OAK |
| 7137 | 12" OAK |
| 7138 | 6" OAK |
| 7139 | 16" PINE |
| 7140 | 14" OAK |
| 7141 | 16" OAK |
| 7142 | 9" OAK |
| 7143 | 13" OAK |
| 7144 | 22" OAK |
| 7145 | 10" OAK |
| 7146 | 4" OAK |
| 7147 | 20" OAK |
| 7148 | 10" OAK |
| 7149 | 16" OAK |
| 7150 | 12" CHERRY |
| 7151 | 13" OAK |
| 7152 | 20" OAK |
| 7153 | 16" OAK |
| 7154 | 7" OAK |
| 7155 | 19" OAK |
| 7156 | 24" PINE |
| 7157 | 5" OAK |
| 7158 | 6" OAK |
| 7159 | 14" OAK |
| 7160 | 6" OAK |
| 7161 | 20" PINE |
| 7162 | 13" CHERRY |
| 7163 | 14" OAK |
| 7164 | 16" OAK |
| 7165 | 22" OAK |
| 7166 | 22" OAK |
| 7167 | 14" OAK |
| 7168 | 12" OAK |
| 7169 | 18" OAK |
| 7170 | " OAK |
| 7171 | 7" OAK |

| TREE TABLE | |
|---|---|
| POINT NUMBER | TREE |
| 7172 | 36" OAK |
| 7173 | 22" OAK |
| 7174 | 18" PINE |
| 7175 | 22" PINE |
| 7176 | 24" OAK |
| 7177 | 7" OAK |
| 7178 | 7" OAK |
| 7179 | 14" OAK |
| 7180 | 22" OAK |
| 7181 | 5" OAK |
| 7182 | 12" OAK |
| 7183 | 7" OAK |
| 7184 | 13" OAK |
| 7185 | 11" OAK |
| 7186 | 6" OAK |
| 7187 | 7" OAK |
| 7188 | 15" OAK |
| 7189 | 8" OAK |
| 7190 | 15" OAK |
| 7191 | 9" OAK |
| 7192 | 13" OAK |
| 7193 | 15" OAK |
| 7194 | 20" OAK |
| 7195 | 18" OAK |
| 7196 | 7" OAK |
| 7197 | 7" OAK |
| 7198 | 7" OAK |
| 7199 | 20" OAK |
| 7200 | 12" OAK |
| 7201 | 18" OAK |
| 7202 | 15" PINE |
| 7203 | 18" PINE |
| 7204 | 17" PINE |
| 7205 | 12" OAK |
| 7206 | 12" OAK |
| 7207 | 10" OAK |
| 7208 | 10" OAK |
| 7209 | 7" OAK |
| 7210 | 12" OAK |
| 7211 | 14" PINE |
| 7212 | 17" PINE |
| 7213 | 7" OAK |
| 7214 | 9" OAK |
| 7215 | 12" OAK |
| 7216 | 11" OAK |
| 7217 | 9" OAK |
| 7218 | 10" OAK |
| 7219 | 8" OAK |
| 7220 | 15" OAK |
| 7221 | 8" OAK |
| 7222 | 22" OAK |
| 7223 | 20" OAK |
| 7224 | 6" OAK |
| 7225 | 9" OAK |
| 7226 | 13" OAK |
| 7227 | 8" OAK |
| 7228 | 18" OAK |
| 7229 | 6" OAK |
| 7230 | 18" PINE |
| 7231 | 18" OAK |
| 7232 | 6" OAK |
| 7233 | 18" PINE |
| 7234 | 18" OAK |
| 7235 | 6" OAK |
| 7236 | 20" PINE |
| 7237 | 18" OAK |
| 7238 | 18" OAK |
| 7239 | 12" OAK |
| 7240 | 12" OAK |
| 7241 | 16" PINE |
| 7242 | 6" OAK |
| 7243 | 18" PINE |
| 7244 | 16" PINE |
| 7245 | 7" OAK |
| 7246 | 20" OAK |
| 7247 | 6" OAK |
| 7248 | 13" OAK |
| 7249 | 15" OAK |
| 7250 | 15" OAK |
| 7251 | 10" OAK |
| 7252 | 12" OAK |
| 7253 | 7" OAK |
| 7254 | 14" OAK |
| 7255 | 5" OAK |
| 7256 | 9" OAK |
| 7257 | 12" OAK |
| 7258 | 16" OAK |
| 7259 | 10" OAK |
| 7260 | 16" OAK |
| 7261 | 20" OAK |
| 7262 | 16" OAK |
| 7263 | 13" OAK |
| 7264 | 20" OAK |
| 7265 | 18" OAK |
| 7266 | 7" OAK |
| 7267 | 10" OAK |
| 7268 | 13" OAK |
| 7269 | 20" OAK |
| 7270 | 10" OAK |
| 7271 | 6" OAK |
| 7272 | 6" OAK |
| 7273 | 14" OAK |
| 7274 | 14" OAK |
| 7275 | 13" OAK |
| 7276 | 14" OAK |
| 7277 | 12" OAK |
| 7278 | 12" OAK |
| 7279 | 8" OAK |
| 7280 | 11" OAK |
| 7281 | 20" OAK |
| 7282 | 13" OAK |
| 7283 | 17" OAK |
| 7284 | 16" OAK |
| 7285 | 32" OAK |
| 7286 | 11" OAK |
| 7287 | 7" OAK |
| 7288 | 9" OAK |
| 7289 | 9" OAK |
| 7290 | 11" OAK |
| 7291 | 17" OAK |
| 7292 | 14" OAK |
| 7293 | 15" OAK |
| 7294 | 13" OAK |
| 7295 | 6" OAK |
| 7296 | 10" OAK |
| 7297 | 10" OAK |
| 7298 |

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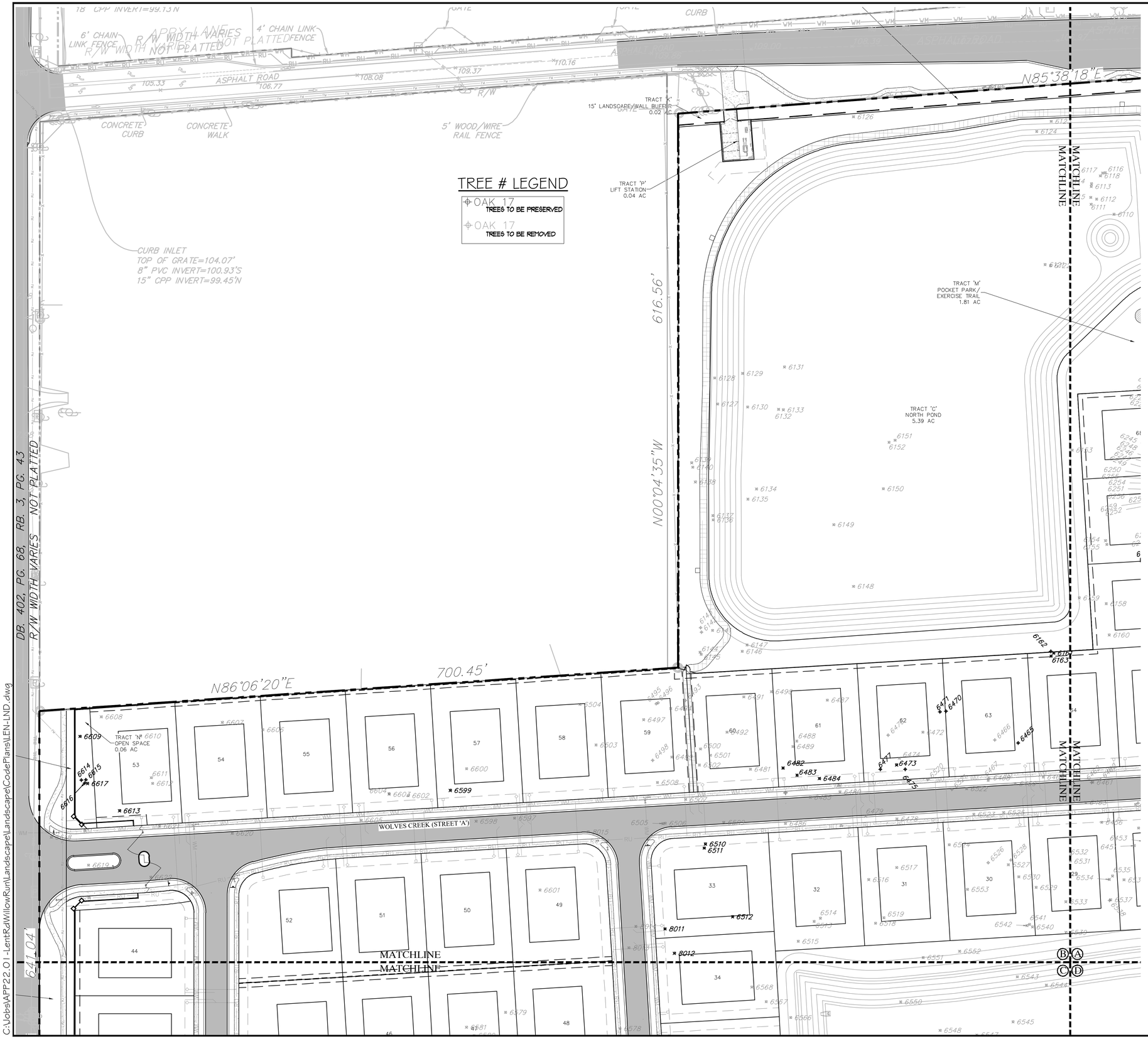
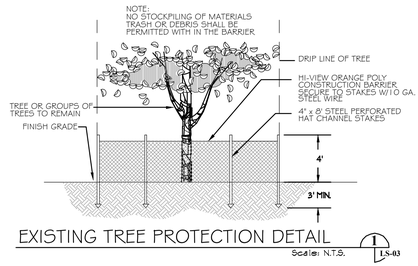



CITY NOTES:

1. STREET TREES SHALL BE INSTALLED WITH THE DEVELOPMENT OF EACH INDIVIDUAL LOT.
2. LANDSCAPING AND IRRIGATION SHALL BE CONSISTENT WITH SECTION 5.01 OF THE LAND DEVELOPMENT CODE.
3. LANDSCAPING AND IRRIGATION SHALL BE IN COMPLIANCE WITH WATER WISE ORDINANCE 2069.
4. IRRIGATION PLANS SHALL BE PROVIDED AT CONSTRUCTION SITE PLAN.
5. IRRIGATION DISTRIBUTION EQUIPMENT SHALL BE 24" FROM VERTICAL STRUCTURES.
6. ALL ON-SITE LANDSCAPING AND AMENITIES REQUIRE A FINAL INSPECTION. CONTACT THE COMMUNITY DEVELOPMENT DEPARTMENT AT LEAST 7 DAYS PRIOR TO THE INSPECTION. THE SITE SUPERINTENDENT MUST BE ON SITE.
7. FOR ANY TREES THAT ARE REQUIRED BETWEEN THE CURB AND SIDEWALK, ROOT BARRIERS WILL BE INSTALLED TO ELIMINATE DAMAGE TO THE UTILITIES, CURB AND SIDEWALK. AT THE TIME OF THE CONSTRUCTION SITE PLAN SUBMITTAL, THE HOA DOCUMENT WILL ENTRUST MAINTENANCE FOR ALL "STREET TREES" TO THE HOA. A NOTE WAS ADDED TO THE DEVELOPMENT STANDARDS, UNDER E. BUFFERS AND LANDSCAPING, NOTE 7, WHICH STATES "NO 'STREET TREES' WILL BE PROPOSED BETWEEN THE CURB AND SIDEWALK UNLESS SPECIFICALLY REQUESTED BY PLANNING AND ZONING DEPARTMENT. IF NECESSARY, ANY PROPOSED TREES, LOCATED BETWEEN THE CURB AND THE SIDEWALK, CANNOT BE ROOT AGGRESSIVE OR THEY MUST HAVE ROOT BARRIERS INSTALLED TO PREVENT DAMAGE TO THE UTILITIES, CURB AND SIDEWALK."
8. CANOPY TREES PROPOSED WITHIN LANDSCAPE OR BUFFER STRIPS LESS THAN EIGHT FEET WIDE OR 200 FEET IN AREA MUST HAVE ROOT BARRIERS.
9. THE BUFFER/ SCREEN WALL SHALL BE MAINTAINED BY THE HOA.




EXISTING TREE PROTECTION DETAIL (1 / LS-03)
Scale: N.T.S.

NOTES:

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LANDSCAPE AND IRRIGATION DESIGN

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| | LA0001764 | 12/14/21 |

**Landscape Designs, LLC**
- Landscape Architecture
- Site Planning

4663 Tiffany Woods Cir
Oviedo, FL 32765
PH: (407) 484-3414

PROJECT AND OWNER

WILLOW RUN

City of Apopka
Florida

Appian Engineering, LLC
2221 Lee Road, Suite 17
Winter Park, FL 32789
PH: (407) 960-5856

CONSULTANTS

LANDSCAPE ARCHITECT
CARL J. KELLY JR., RLA

REG.#: 0001764

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| DESIGNED BY | CJK |
| DRAWN BY | CJK |
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DRAWING SCALE
0 FT 25' 50' North
SCALE: 1"=50'-0"

DRAWING TITLE
TREE PRESERVATION PLAN

DRAWING NUMBER
LS-03

SHEET 32 OF

C:\Jobs\APP22.01-LentRdWillowRun\Landscape\Landscape\CodePlans\LEN-LND.dwg

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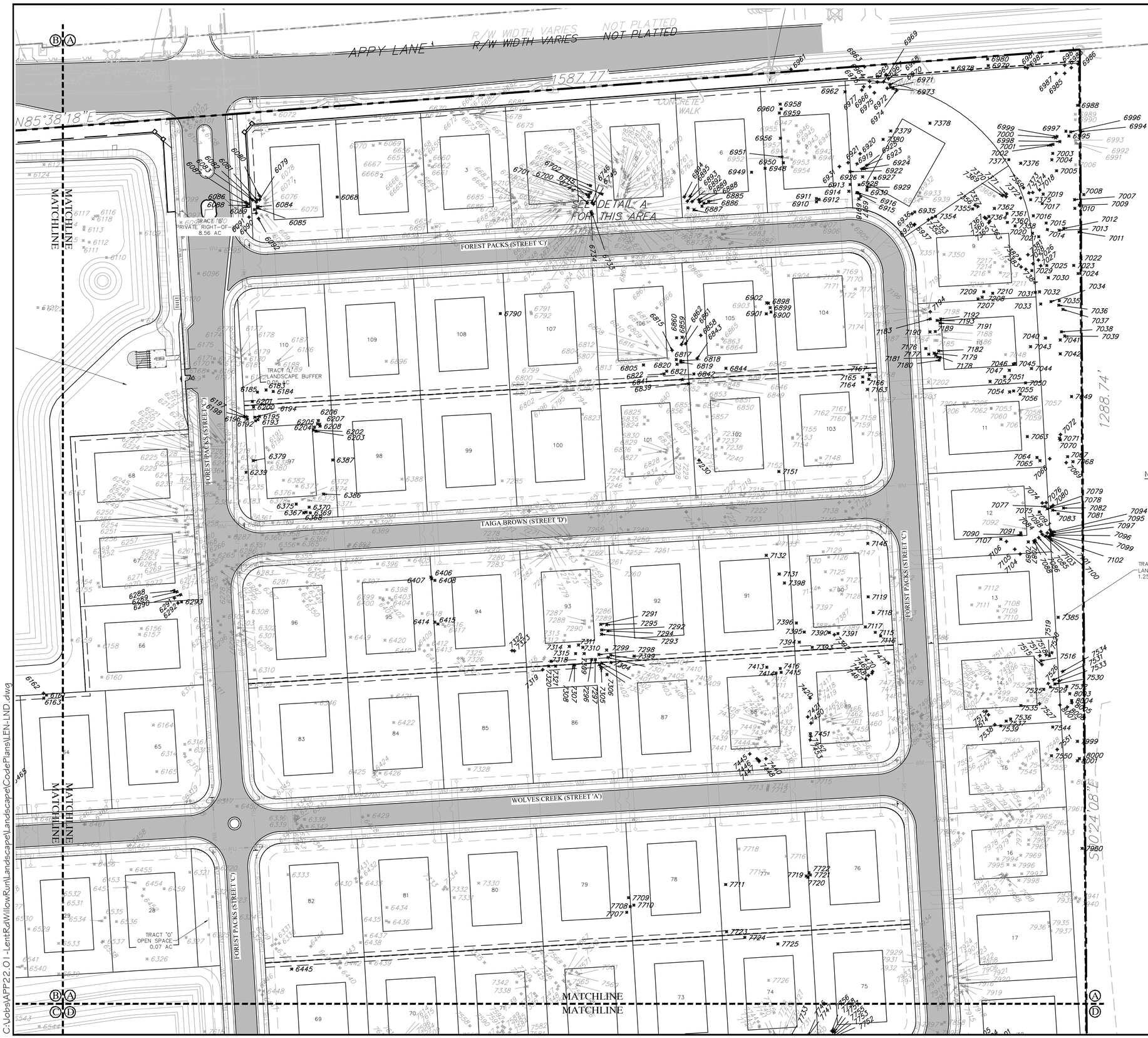


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TREE # LEGEND

- OAK 17 — TREES TO BE PRESERVED
- OAK 17 — TREES TO BE REMOVED

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DRAWING TITLE

TREE PRESERVATION PLAN

DRAWING NUMBER

LS-04

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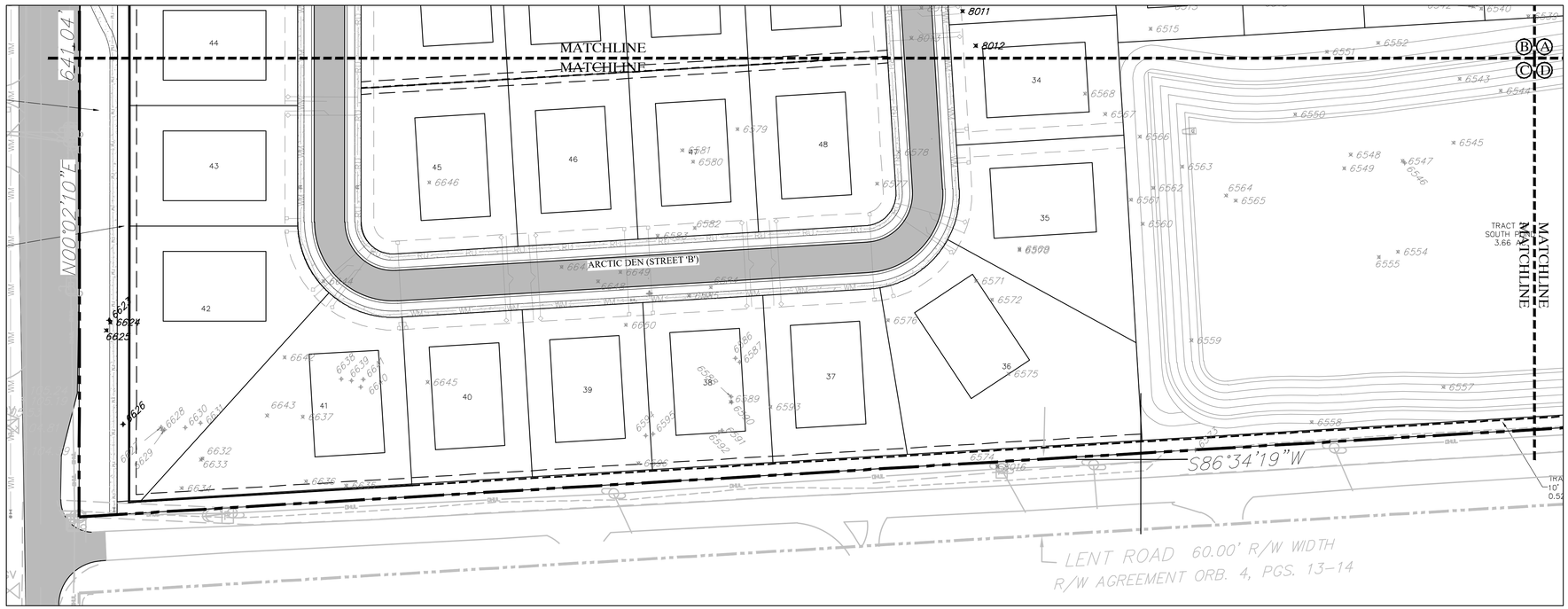


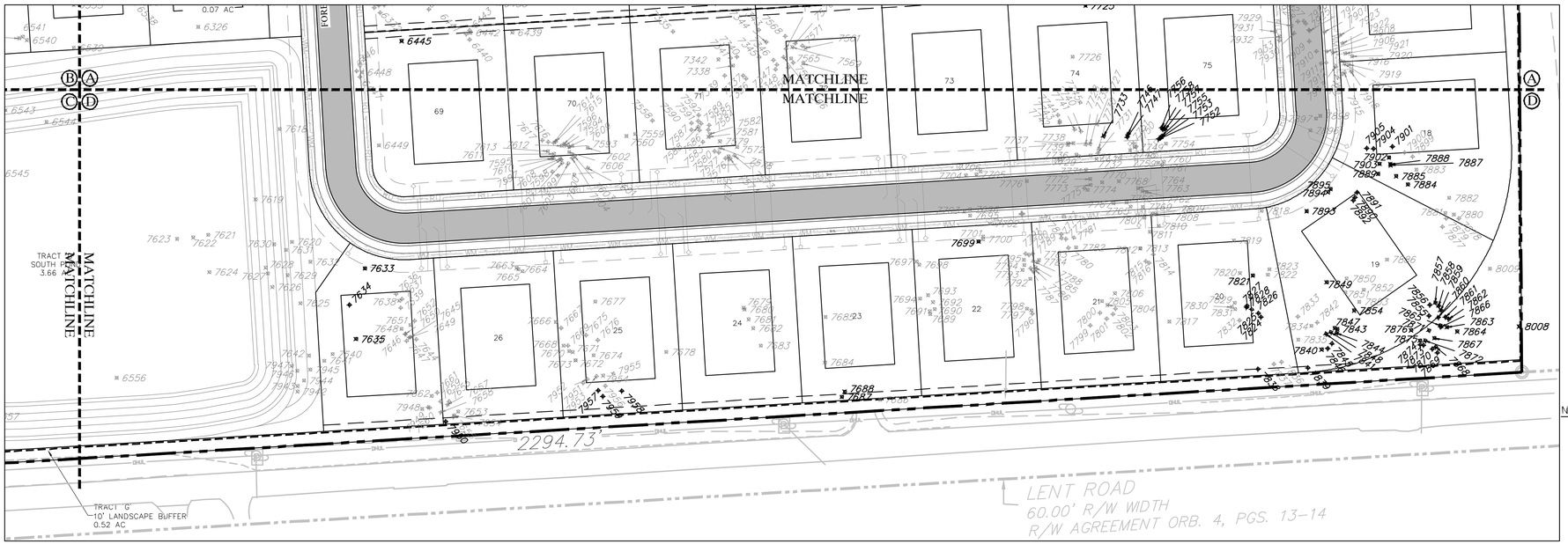


## TREE # LEGEND

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OAK 17
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## TREE MITIGATION

REPLACEMENT/ REMOVAL TABLE:

| | |
|---|---|
| Total OAK inches on current, non-altered site: | 24,047" dbh |
| Total inches removed: | 21,053" dbh |
| Total inches retained: | 2,994" dbh |
| Total Specimen inches retained: | 340" dbh |
| Total inches required: | 21,053" dbh |
| Total inches replaced: | 2,239" dbh |
| Total inches post development: | 6,223" dbh |
| Site cleanng area in square feet and acres: | 1,980,566 SF/ 45.47 AC |

## LANDSCAPE NOTES:

1. LANDSCAPE AND IRRIGATION PLANS SHALL MEET THE REQUIREMENTS OF ORD. 2069, AND SHALL BE PREPARED BY A LICENSED LANDSCAPE ARCHITECT.
2. ALL PLANT MATERIAL SHALL BE FLORIDA GRADE NO. 1 OR BETTER AS SPECIFIED IN "GRADES AND STANDARDS FOR NURSERY PLANTS", "PARTS 1 AND 2, BY DIVISION OF PLANT INDUSTRY, FLORIDA", DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES, AND SHALL CONFORM TO CURRENT AMERICAN ASSOCIATION OF NURSERYMEN 'STANDARDS FOR NURSERY STOCK', LATEST EDITION.
3. ALL PLANTING BEDS SHALL RECEIVE A 3" LAYER (1" OVER ROOTBALL) OF MINNIE PINE BARK NUGGET MULCH.
4. ALL PROPOSED TREES AND PLANTING BEDS SHALL BE IRRIGATED. SYSTEM WILL BE EQUIPPED WITH AN AUTOMATIC RAIN CUT-OFF SWITCH. RISERS ARE NOT ALLOWED.
5. ALL DISTURBED AREAS SHALL BE SODED WITH BAHIA SOD.

## INDIVIDUAL LOT TREES

LOT TREES REQUIRED:

| | |
|---|---|
| TOTAL NUMBER OF LOTS: | 110 |
| TREE INCHES REQUIRED PER LOT: | 9" dbh |
| TOTAL TREE INCHES REQUIRED: | 990" dbh |

INDIVIDUAL LOT TREES SHALL CONSIST OF TWO CANOPY TREES AND ONE UNDERSTORY TREE.
INDIVIDUAL LOT TREES SHALL BE INSTALLED WHEN THE LOT IS DEVELOPED.

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SCALE: 1"=50'-0"

DRAWING TITLE

**TREE PRESERVATION PLAN**

DRAWING NUMBER

LS-05

SHEET 34 OF

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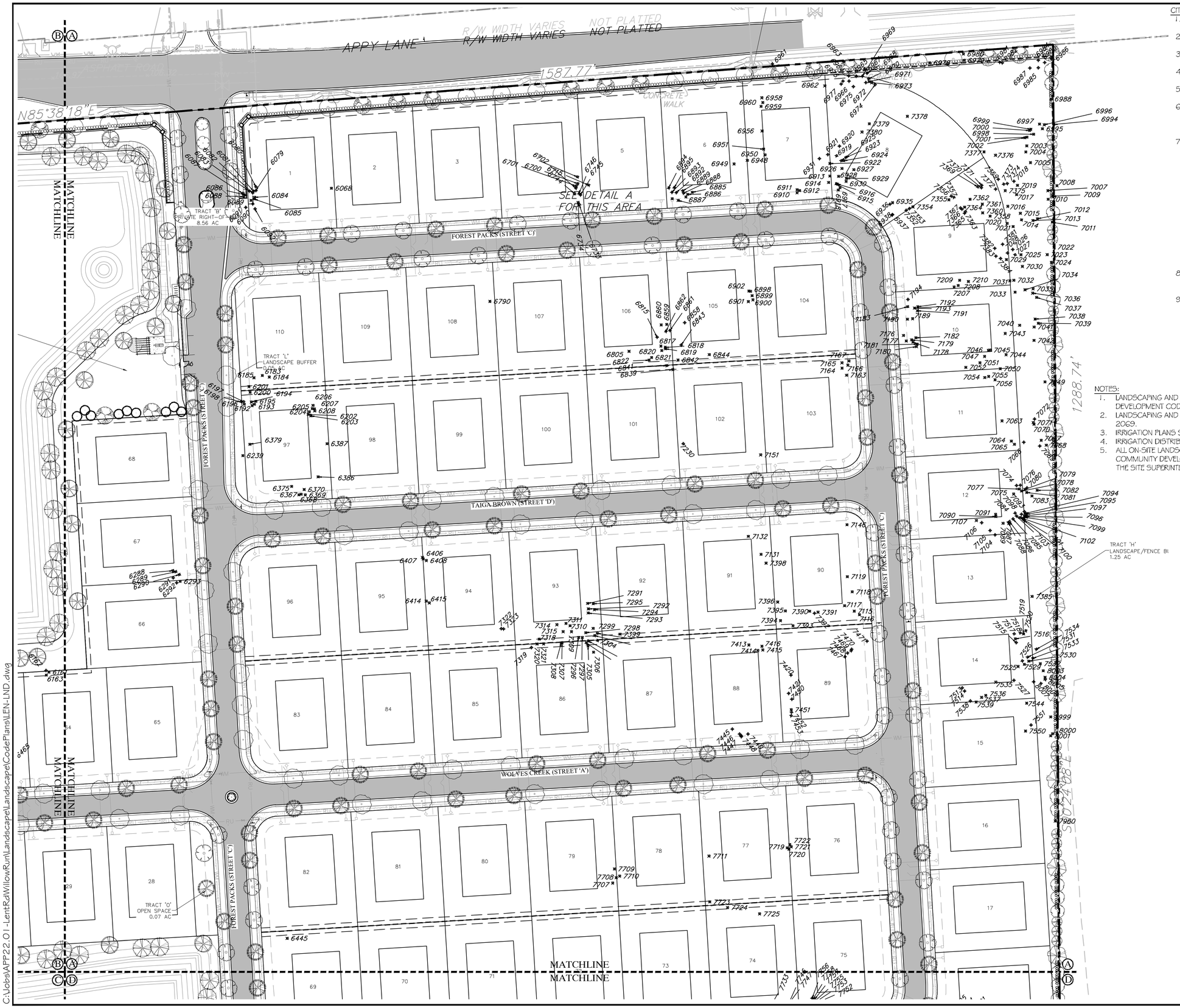


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DRAWING SCALE

0 FT 25' 50' North

SCALE: 1"=50'-0"

DRAWING TITLE

**LANDSCAPE SITE PLAN**

DRAWING NUMBER

LS-06

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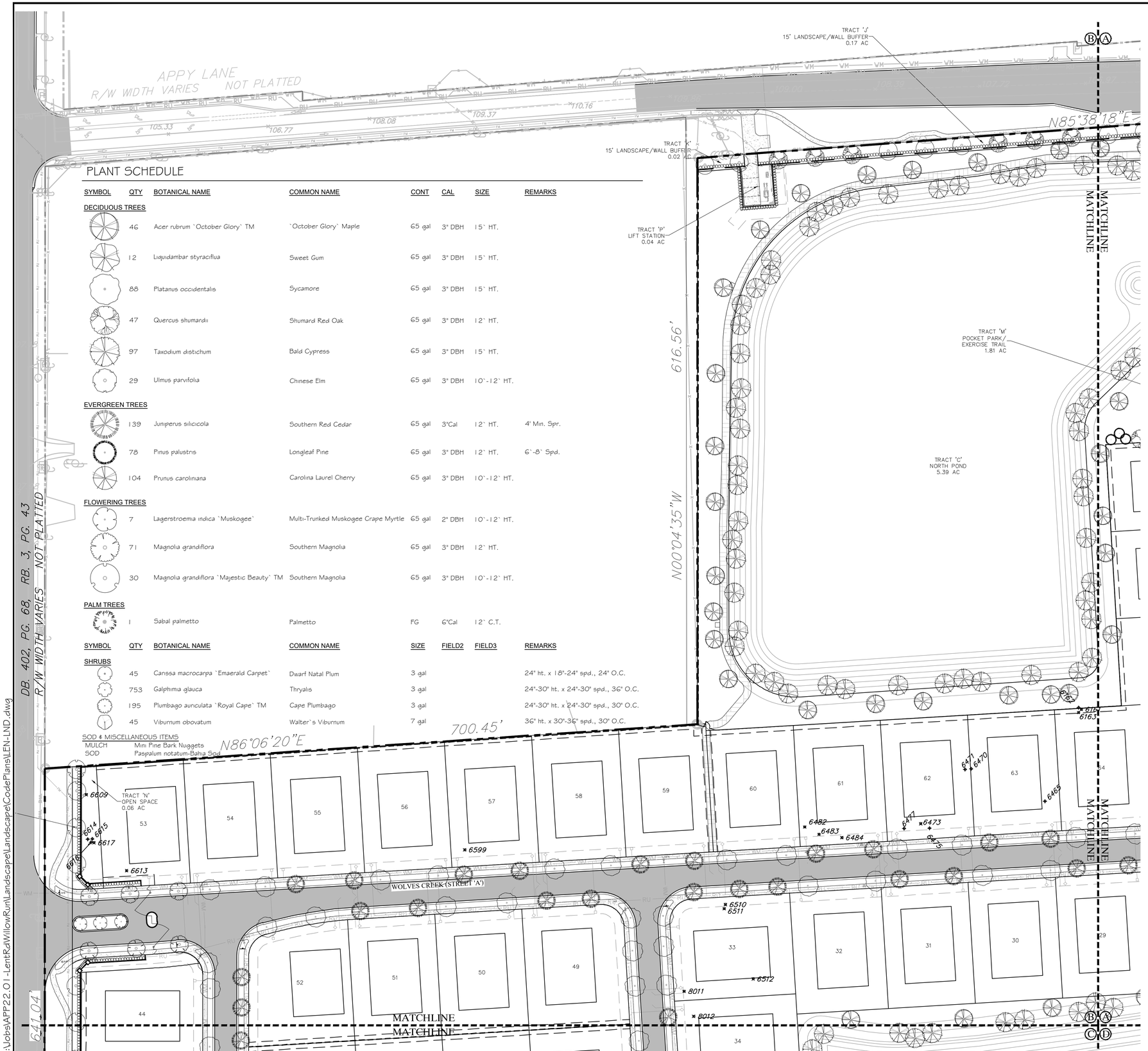


## PLANT SCHEDULE

| SYMBOL | QTY | BOTANICAL NAME | COMMON NAME | CONT | CAL | SIZE | REMARKS |
|---|---|---|---|---|---|---|---|
| **DECIDUOUS TREES** | | | | | | | |
| | 46 | Acer rubrum `October Glory` TM | `October Glory` Maple | 65 gal | 3" DBH | 15` HT. | |
| | 12 | Liquidambar styraciflua | Sweet Gum | 65 gal | 3" DBH | 15` HT. | |
| | 88 | Platanus occidentalis | Sycamore | 65 gal | 3" DBH | 15` HT. | |
| | 47 | Quercus shumardii | Shumard Red Oak | 65 gal | 3" DBH | 12` HT. | |
| | 97 | Taxodium distichum | Bald Cypress | 65 gal | 3" DBH | 15` HT. | |
| | 29 | Ulmus parvifolia | Chinese Elm | 65 gal | 3" DBH | 10`-12` HT. | |
| **EVERGREEN TREES** | | | | | | | |
| | 139 | Juniperus silicicola | Southern Red Cedar | 65 gal | 3"Cal | 12` HT. | 4' Min. Spr. |
| | 78 | Pinus palustris | Longleaf Pine | 65 gal | 3" DBH | 12` HT. | 6`-8` Spd. |
| | 104 | Prunus caroliniana | Carolina Laurel Cherry | 65 gal | 3" DBH | 10`-12` HT. | |
| **FLOWERING TREES** | | | | | | | |
| | 7 | Lagerstroemia indica `Muskogee` | Multi-Trunked Muskogee Crape Myrtle | 65 gal | 2" DBH | 10`-12` HT. | |
| | 71 | Magnolia grandiflora | Southern Magnolia | 65 gal | 3" DBH | 12` HT. | |
| | 30 | Magnolia grandiflora `Majestic Beauty` TM | Southern Magnolia | 65 gal | 3" DBH | 10`-12` HT. | |
| **PALM TREES** | | | | | | | |
| | 1 | Sabal palmetto | Palmetto | FG | 6'Cal | 12` C.T. | |

| SYMBOL | QTY | BOTANICAL NAME | COMMON NAME | SIZE | FIELD2 | FIELD3 | REMARKS |
|---|---|---|---|---|---|---|---|
| **SHRUBS** | | | | | | | |
| | 45 | Carissa macrocarpa `Emaerald Carpet` | Dwarf Natal Plum | 3 gal | | | 24" ht. x 18"-24" spd., 24" O.C. |
| | 753 | Galphimia glauca | Thryalis | 3 gal | | | 24"-30" ht. x 24"-30" spd., 36" O.C. |
| | 195 | Plumbago auriculata `Royal Cape` TM | Cape Plumbago | 3 gal | | | 24"-30" ht. x 24"-30" spd., 30" O.C. |
| | 45 | Viburnum obovatum | Walter`s Viburnum | 7 gal | | | 36" ht. x 30"-36" spd., 30" O.C. |

**SOD & MISCELLANEOUS ITEMS**

| | |
|---|---|
| MULCH | Mini Pine Bark Nuggets |
| SOD | Paspalum notatum-Bahia Sod |

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## LANDSCAPE NOTES:

1. ALL PLANT MATERIAL SHALL BE FLORIDA GRADE NO. 1 OR BETTER AS SPECIFIED IN 'GRADES AND STANDARDS FOR NURSERY PLANTS', 'PARTS 1 AND 2, BY DIVISION OF PLANT INDUSTRY, FLORIDA', DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES, AND SHALL CONFORM TO CURRENT AMERICAN ASSOCIATION OF NURSERYMEN 'STANDARDS FOR NURSERY STOCK', LATEST EDITION.
2. IT IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR OR OWNER'S REPRESENTATIVE, NOT THE LANDSCAPE ARCHITECT, FOR THE NURSERY SELECTION OF PLANT MATERIAL AND TO ENSURE THE HEALTH AND SAFETY OF ALL PLANTS SELECTED.
3. CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE BUILDING CODES, ORDINANCES AND LOCAL REGULATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS TO PERFORM THE WORK.
4. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR INSPECTION OF EXISTING CONDITIONS AND PROMPTLY REPORTING ALL DISCREPANCIES AND IMPROPER CONDITIONS (WETNESS, MUCK, DEBRIS, ETC) TO LANDSCAPE ARCHITECT PRIOR TO BIDDING. CONTRACTOR IS RESPONSIBLE FOR SOIL ANALYSIS PRIOR TO INSTALLATION OF PLANTINGS, AND IS RESPONSIBLE FOR ALL SOIL AMENDMENTS TO CONFORM TO SPECIFICATIONS.
5. ALL TREES ON SITE SHOULD BE INSPECTED ANNUALLY AND AFTER ALL STORM EVENTS TO ENSURE THE HEALTH AND SAFETY OF ALL TREES.
6. THE LANDSCAPE CONTRACTOR SHALL ACQUAINT HIMSELF WITH ALL CIVIL DRAWING AS THEY RELATE TO PAVING SITE GRADING, AND ALL UTILITIES, (INCLUDING WATER, SEWER AND ELECTRICAL SUPPLY) TO PRECLUDE ANY MISUNDERSTANDING AND ENSURE TROUBLE FREE INSTALLATION. THE EXACT LOCATION OF ALL EXISTING STRUCTURES, UNDERGROUND UTILITIES, EXISTING UNDERGROUND SPRINKLERS AND PIPE MAY NOT BE INDICATED ON DRAWINGS. THE CONTRACTOR SHALL CONDUCT HIS WORK IN A MANNER TO PREVENT INTERRUPTION OR DAMAGE TO EXISTING SYSTEMS WHICH MUST REMAIN OPERATIONAL. THE CONTRACTOR SHALL PROTECT UTILITY SERVICES WHICH MUST REMAIN OPERATIONAL AND SHALL BE RESPONSIBLE FOR THERE REPLACEMENT IF DAMAGED BY HIM.
7. ALL PLANTING BEDS SHALL RECEIVE A 3" LAYER (1" OVER ROOTBALL) OF MINNIE PINE BARK NUGGET MULCH.
8. IN THE EVENT OF A CONFLICT BETWEEN QUANTITIES ON THE PLANT LIST AND THE PLANS, THE PLAN SHALL TAKE PRECEDENT.

LANDSCAPE AND IRRIGATION DESIGN

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 .

| SIGNATURE | LA0001764 | 12/14/21 |
|---|---|---|
| | REG. NO. | DATE |

**Landscape Designs, LLC**
- Landscape Architecture
- Site Planning

4663 Tiffany Woods Cir
Oviedo, FL 32765
PH: (407) 484-3414

PROJECT AND OWNER

WILLOW RUN

City of Apopka
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2221 Lee Road, Suite 17
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CONSULTANTS

LANDSCAPE ARCHITECT
CARL J. KELLY JR., RLA

LICENSED LANDSCAPE ARCHITECT LA0001764 STATE OF FLORIDA

DocuSigned by:
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REG.#: 0001764

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| PROJECT NO. | APP22.01 |
| DESIGNED BY | CJK |
| DRAWN BY | CJK |
| CHECKED BY | CJK |
| DATE | 12/14/21 |

ISSUED FOR:
- 01/30/22 City Comments
- 02/22/22 Site Changes
- 04/04/22 Tree Survey
- 06/20/22 Site Changes
- 04/01/24 Site Changes
- 05/06/24 City Comments

DRAWING SCALE

0 FT 25' 50' North

SCALE: 1"=50'-0"

DRAWING TITLE

LANDSCAPE SITE PLAN

DRAWING NUMBER

LS-07

SHEET 36 OF

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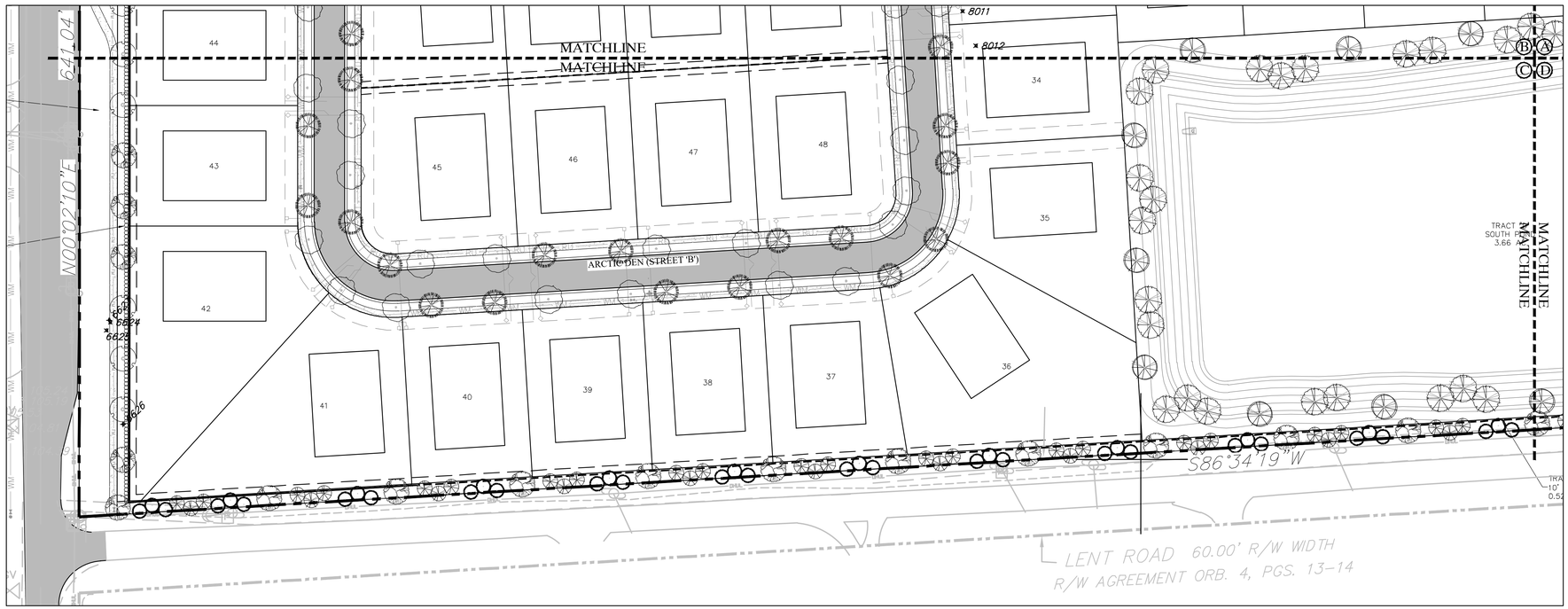
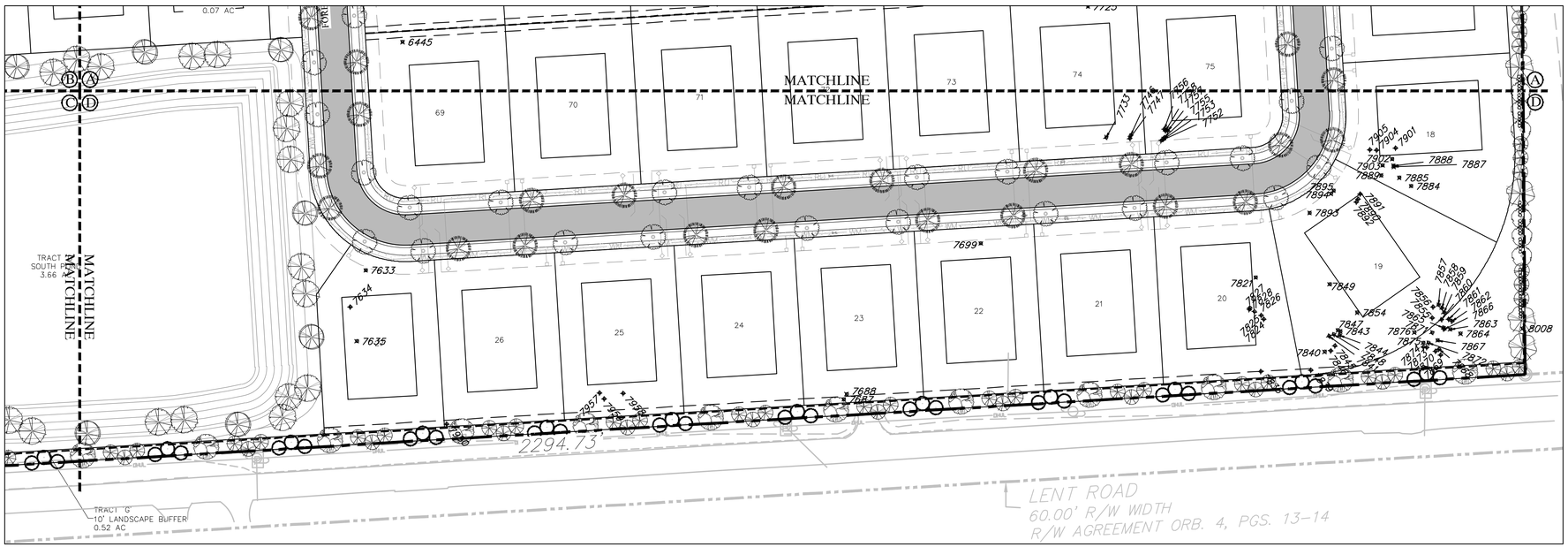


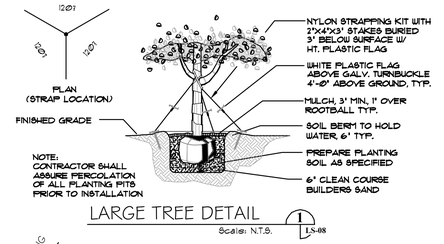




CITY NOTES:

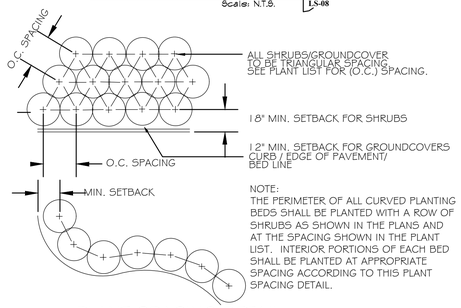
1. STREET TREES SHALL BE INSTALLED WITH THE DEVELOPMENT OF EACH INDIVIDUAL LOT.
2. LANDSCAPING AND IRRIGATION SHALL BE CONSISTENT WITH SECTION 5.01 OF THE LAND DEVELOPMENT CODE.
3. LANDSCAPING AND IRRIGATION SHALL BE IN COMPLIANCE WITH WATER WISE ORDINANCE 2069.
4. IRRIGATION PLANS SHALL BE PROVIDED AT CONSTRUCTION SITE PLAN.
5. IRRIGATION DISTRIBUTION EQUIPMENT SHALL BE 24" FROM VERTICAL STRUCTURES.
6. ALL ON-SITE LANDSCAPING AND AMENITIES REQUIRE A FINAL INSPECTION. CONTACT THE COMMUNITY DEVELOPMENT DEPARTMENT AT LEAST 7 DAYS PRIOR TO THE INSPECTION. THE SITE SUPERINTENDENT MUST BE ON SITE.
7. FOR ANY TREES THAT ARE REQUIRED BETWEEN THE CURB AND SIDEWALK, ROOT BARRIERS WILL BE INSTALLED TO ELIMINATE DAMAGE TO THE UTILITIES, CURB AND SIDEWALK. AT THE TIME OF THE CONSTRUCTION SITE PLAN SUBMITTAL, THE HOA DOCUMENT WILL ENTRUST MAINTENANCE FOR ALL "STREET TREES" TO THE HOA. A NOTE WAS ADDED TO THE DEVELOPMENT STANDARDS, UNDER E. BUFFERS AND LANDSCAPING, NOTE 7, WHICH STATES "NO 'STREET TREES' WILL BE PROPOSED BETWEEN THE CURB AND SIDEWALK UNLESS SPECIFICALLY REQUESTED BY PLANNING AND ZONING DEPARTMENT. IF NECESSARY, ANY PROPOSED TREES, LOCATED BETWEEN THE CURB AND THE SIDEWALK, CANNOT BE ROOT AGGRESSIVE OR THEY MUST HAVE ROOT BARRIERS INSTALLED TO PREVENT DAMAGE TO THE UTILITIES, CURB AND SIDEWALK."
8. CANOPY TREES PROPOSED WITHIN LANDSCAPE OR BUFFER STRIPS LESS THAN EIGHT FEET WIDE OR 200 FEET IN AREA MUST HAVE ROOT BARRIERS.
9. THE BUFFER/ SCREEN WALL SHALL BE MAINTAINED BY THE HOA.

NOTES:

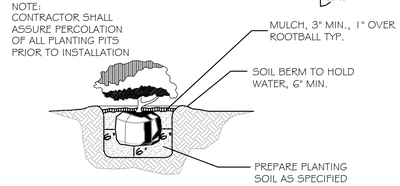
1. LANDSCAPING AND IRRIGATION SHALL BE CONSISTENT WITH SECTION 5.01 OF THE LAND DEVELOPMENT CODE.
2. LANDSCAPING AND IRRIGATION SHALL BE IN COMPLIANCE WITH WATER WISE ORDINANCE 2069.
3. IRRIGATION PLANS SHALL BE PROVIDED AT FINAL DEVELOPMENT PLAN SUBMITTAL.
4. IRRIGATION DISTRIBUTION EQUIPMENT SHALL BE 24" FROM VERTICAL STRUCTURES.
5. ALL ON-SITE LANDSCAPING AND AMENITIES REQUIRE A FINAL INSPECTION. CONTACT THE COMMUNITY DEVELOPMENT DEPARTMENT AT LEAST 7 DAYS PRIOR TO THE INSPECTION. THE SITE SUPERINTENDENT MUST BE ON SITE.




LARGE TREE DETAIL 1 LS-08
Scale: N.T.S.




PLANT SPACING DETAIL 2 LS-08
Scale: N.T.S.




SHRUB DETAIL 3 LS-08
Scale: N.T.S.

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DRAWING SCALE

0 FT 25' 50' North

SCALE: 1"=50'-0"

DRAWING TITLE

LANDSCAPE SITE PLAN

DRAWING NUMBER

LS-08

SHEET 37 OF

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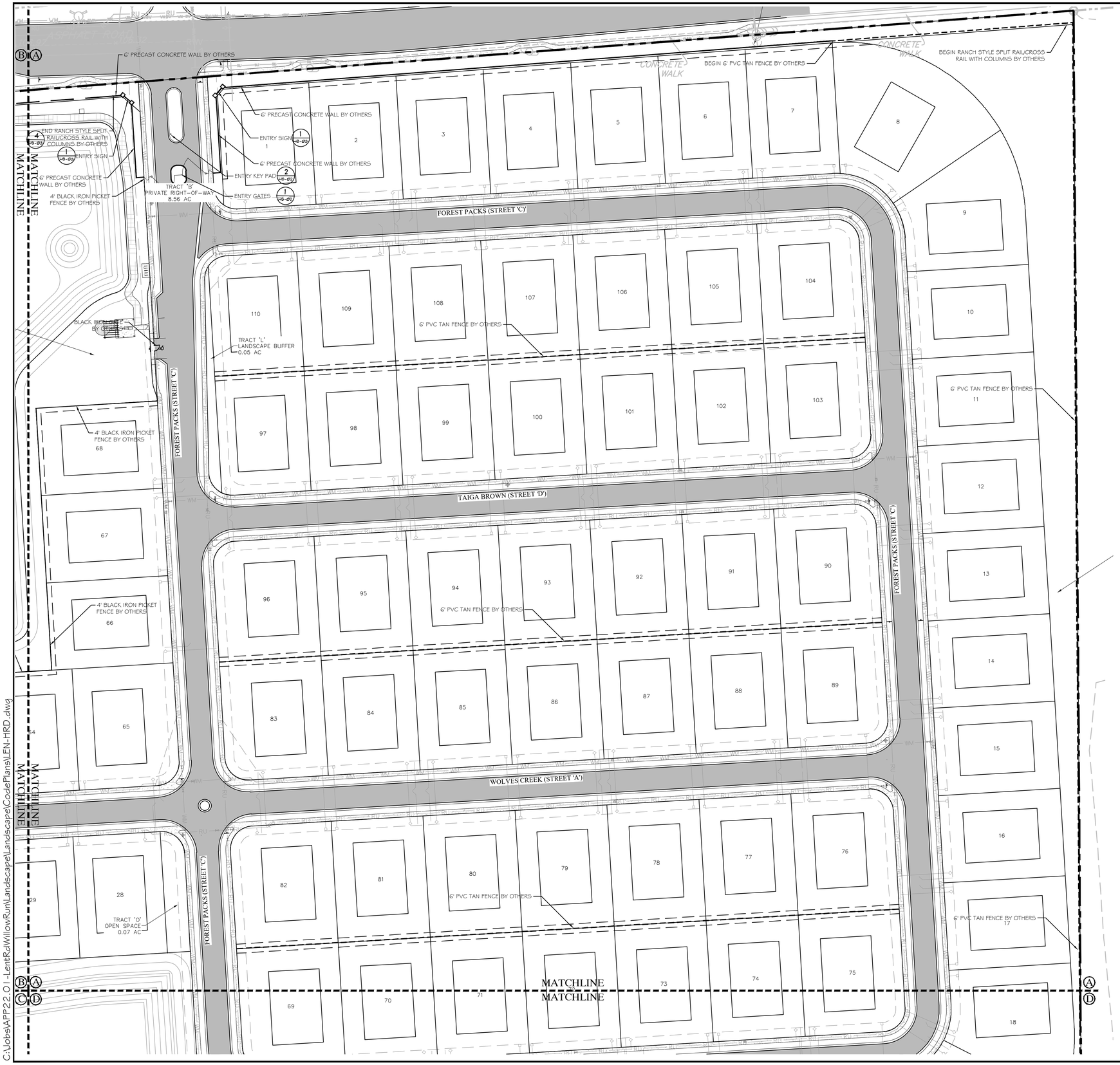


NOTES:

1. THE BUFFER/ SCREEN WALL SHALL BE MAINTAINED BY THE HOA.

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REGISTERED LANDSCAPE ARCHITECT
LA0001764
STATE OF FLORIDA

DocuSigned by:
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DRAWING SCALE

0 FT 25' 50' North

SCALE: 1"=50'-0"

DRAWING TITLE

HARDSCAPE SITE PLAN

DRAWING NUMBER

HS-01

SHEET 38 OF

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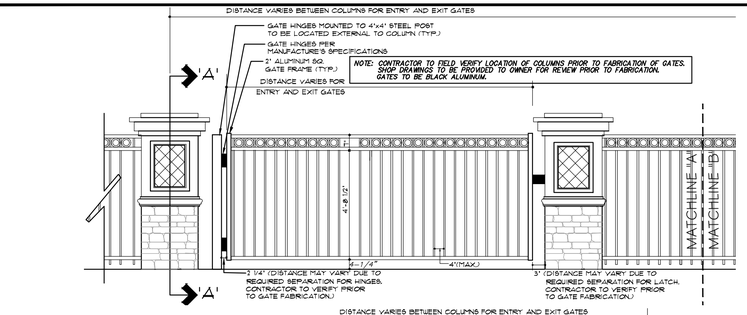
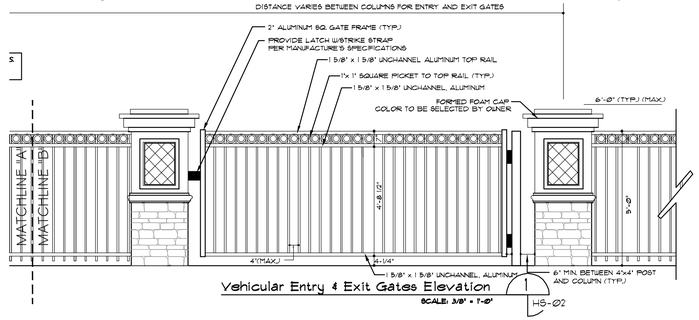
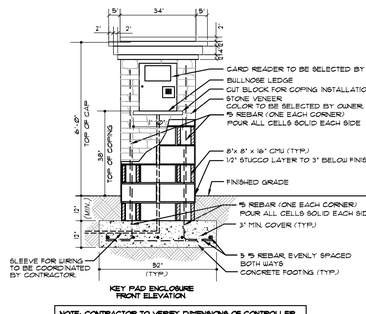


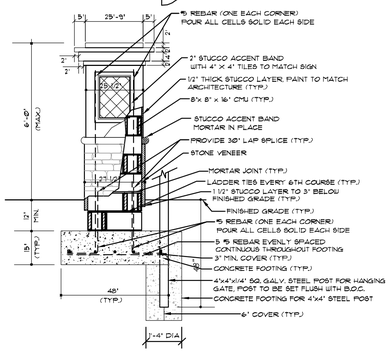

Vehicular Entry & Exit Gates Elevation 1
SCALE: 3/8" = 1'-0"




KEY PAD ENCLOSURE FRONT ELEVATION

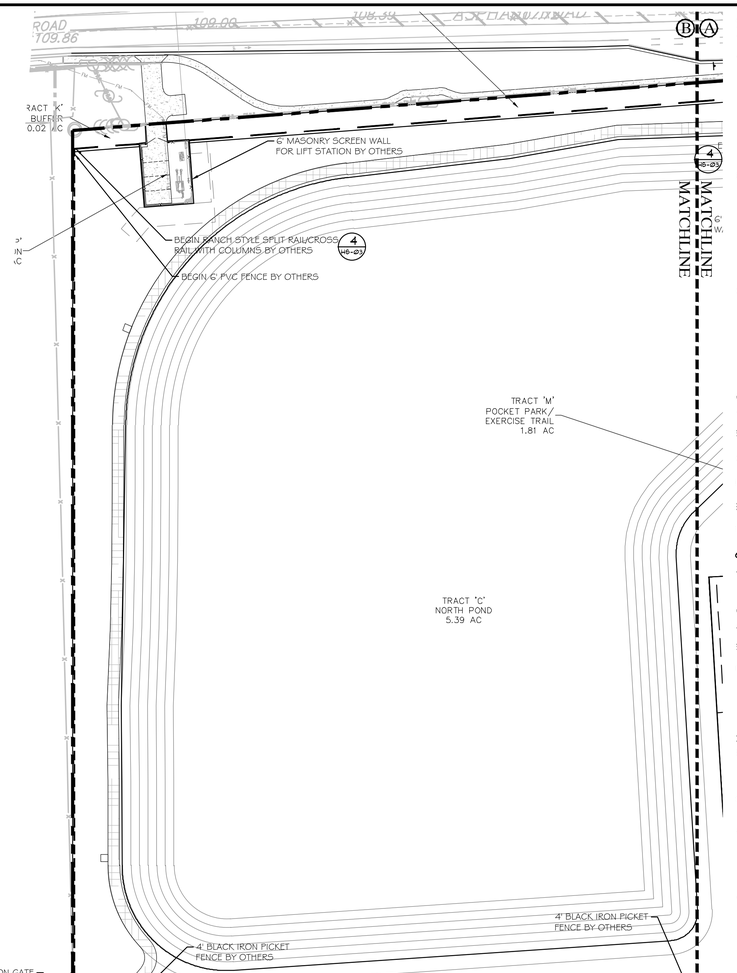
NOTE: CONTRACTOR TO VERIFY DIMENSIONS OF CONTROLLER PRIOR TO ENCLOSURE CONSTRUCTION. CONTROLLER TO BE WIRED BY A FLORIDA LICENSED ELECTRIC CONTRACTOR AND INSTALLED PER LOCAL CODES.

Entry Key Pad Column Detail 2
SCALE: 3/8" = 1'-0" HS-02




Vehicular Entry/Exit Gate Column Section 'A'-'A' 3
SCALE: 3/8" = 1'-0" HS-02

NOTES:
1. THE BUFFER/ SCREEN WALL SHALL BE MAINTAINED BY THE HOA.




LANDSCAPE AND IRRIGATION DESIGN

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## STRUCTURAL DESIGN CRITERIA:

A. STRUCTURAL DESIGN IS IN ACCORDANCE WITH THE GOVERNING PROVISIONS OF THE FOLLOWING CODES, STANDARDS AND SPECIFICATIONS.
1. FLORIDA BUILDING CODE - 2020 EDITION
2. ASCE 7-02 MIN. DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES.
3. ACI 318-02, BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE.
4. ACI 530-99, BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES
5. AISC SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, A.S.D., NINTH EDITION.
6. AWS D1.1 STRUCTURAL WELDING CODE - STEEL.
7. SPECIFICATIONS FOR ALUMINUM STRUCTURES, FOURTH EDITION.
8. AWS D1.2 STRUCTURAL WELDING CODE - ALUMINUM

B. SUPERIMPOSED DESIGN LOADS:
LIVE LOADS (MIN.): DEAD LOADS:
GENERAL: 20 PSF DEAD WEIGHT

WIND LOADS: DESIGN WIND SPEED: 140 MPH
MEAN ROOF HEIGHT: =15 FEET
EXPOSURE = B
STRUCTURE: SIGN, CF=1.2, G=.85

DESIGN WIND PRESSURE: 22 PSF

C. FOUNDATIONS:
1. ASSUMED SAFE BEARING PRESSURE = 2,000 PSF.
2. ALL UNSUITABLE SOIL SHALL BE REMOVED AND REPLACED WITH CLEAN STRUCTURAL FILL PLACED IN LOOSE LAYERS NOT EXCEEDING EIGHT (8") INCHES AND COMPACTED TO 98% (ASTM D698 - STANDARD PROCTOR) OF MAX. DRY DENSITY.
3. CONTRACTOR SHALL PREPARE THE SUBSURFACE SOILS PER THE GEOTECHNICAL REQUIREMENTS STIPULATED IN GEOTECHNICAL REPORT.

### GENERAL:

A. ALL DIMENSIONS AND PLACEMENTS SPECIFIED WITHIN THIS DRAWING ARE TO BE VERIFIED BY OWNER PRIOR TO INSTALLATION.
B. ALL ELEVATIONS ARE REFERENCED TO FINISHED GRADE EL. 000.00' = 0'-0". ALL ELEVATIONS SHOWN ON PLANS ARE REFERENCED TO THIS DATUM UNLESS NOTED.
C. THE GENERAL CONTRACTOR SHALL FIELD MEASURE ALL DIMENSIONS MARKED (V.I.F.) PRIOR TO FABRICATION OR START OF CONSTRUCTION.
D. NO STRUCTURAL MEMBER SHALL BE CUT, NOTCHED OR OTHERWISE REDUCED IN STRENGTH WITHOUT THE PRIOR NOTIFICATION OF THE STRUCTURAL ENGINEER.
E. THE GENERAL CONTRACTOR SHALL COORDINATE ALL OTHER DISCIPLINES FOR ANY ITEMS WHICH EFFECT THE STRUCTURAL DRAWINGS.
F. TEMPORARY BRACING, GUY WIRES, ETC. SHALL BE USED WHERE NECESSARY TO ADEQUATELY RESIST ALL CONSTRUCTION LOADS.
G. INSURE POSITIVE DRAINAGE IN ALL AREAS.
H. CONTRACTOR TO VERIFY ALL UTILITIES PRIOR TO CONSTRUCTION. NOTIFY LANDSCAPE ARCHITECT OF ANY CONFLICTS BETWEEN PROPOSED WALLS/COLUMNS AND EXISTING UTILITIES.

### CAST-IN-PLACE REINFORCED CONCRETE:

A. ALL CONCRETE WORK SHALL CONFORM TO ACI STANDARD BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318-02/318R-02).
B. ALL CONCRETE WORK SHALL ALSO CONFORM TO ALL APPLICABLE SECTIONS OF THE F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
C. MINIMUM 28 DAY COMPRESSIVE STRENGTH.
- CONCRETE WALKS, SIDEWALK BANDING, BENCH FOUNDATIONS AND HANDICAP RAMPS: CLASS I
- CONCRETE SIDEWALKS SUBSLABS AND INTEGRAL BANDING: CLASS I
- CONCRETE CURB, CURB AND GUTTER, 6' DRIVEWAY BANDING, HEADER CURB AND VALLEY GUTTER: CLASS II
- CONCRETE STREET LIGHT POLE AND TRAFFIC POLE BASES, AND TREE GRATE COLLARS: CLASS II

D. SLUMPS PER F.D.O.T. STANDARD SPECIFICATIONS.
E. REINFORCING STEEL SHALL CONFORM TO ASTM A-615 GRADE 60. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185 (6"x6", 2.1 W.W.F.)
F. TERMINATE ALL DISCONTINUED TOP BARS WITH 180 DEGREE STANDARD HOOK UNLESS OTHERWISE NOTED.
G. AT CHANGES IN DIRECTION OF CONCRETE WALLS, STRIP FOOTINGS AND BOND BEAMS, PROVIDE CORNER BARS AT SAME SIZE AND SPACING AS HORIZONTAL STEEL.
H. METAL EXPANSION CAPS: TO BE FURNISHED WITH ONE END OF EACH DOWEL BAR IN EXPANSION JOINTS. CAPS TO BE A MINIMUM OF 3" IN LENGTH, WITH ONE END CLOSED, TO ALLOW BAR MOVEMENT OF NOT LESS THAN 1 INCH, UNLESS OTHERWISE INDICATED. PLASTIC COATED DOWEL BARS MAY BE USED IF APPROVED BY ENGINEER.
I. JOINT MATERIAL: JOINT SEALER IS TO BE GRAY SONOLASTIC SL1, MANUFACTURED BY REXNORD CHEMICAL PRODUCTS, INC., MINNEAPOLIS, MN, OR APPROVED EQUAL.
J. CONTRACTION JOINTS: TO BE PROVIDE TO A DEPTH 1/4 OF CONCRETE THICKNESS, AS FOLLOWED.
1. TOOLED JOINTS:
2. SAWED JOINTS IF REQUIRED, TO BE CUT INTO HARDENED CONCRETE AS SOON AS SURFACE WILL NOT BE TORN, ABRASED, OR OTHERWISE DAMAGED BY CUTTING ACTION.
3. CONTRACTION JOINTS ARE TO BE PLACED AT INTERVALS EQUAL TO THE WIDTH OF THE SLAB FOR WALKS, INTERVALS NOT TO EXCEED 10 FEET.
4. CONTRACTION JOINTS FOR CONCRETE BANDING IN THE STREET AND SIDEWALK SHALL BE AT 10 FOOT INTERVALS (MAX.).

K. CONSTRUCTION JOINTS:
WHERE PLACEMENT OPERATIONS ARE STOPPED FOR A PERIOD OF MORE THAN 1/2 HOUR, EXCEPT WHERE SUCH POURS TERMINATE AT EXPANSION JOINTS.

L. EXPANSION JOINTS:
1. PROVIDE EXPANSION JOINTS BETWEEN ABUTTING CONCRETE CURBS, WALKS, WALLS COLUMNS, AND OTHER NON YIELDING MATERIALS, UNLESS OTHERWISE INDICATED ON HARDSCAPE DETAILS.
2. FOR CURB AND GUTTER WORK EXPANSION JOINTS SHALL BE PLACED AT EVERY ONE HUNDRED LINEAR FEET.
3. ALL EXPOSED EXPANSION JOINT MATERIALS SHALL BE RECESSED 1/4 INCH AND SEALED WITH THE JOINT SEALER AS SPECIFIED.

M. CONCRETE FINISHES:
1. AFTER STRIKING OFF AND CONSOLIDATING CONCRETE, SMOOTH THE SURFACE BY SCREEDING AND FLOATING. USE HAND METHODS ONLY WHERE MECHANICAL FLOATING IS NOT FOSSIBLE. ADJUST THE FLOATING TO COMPACT THE SURFACE AND PRODUCE A UNIFORM TEXTURE. THE USE OF ADDITIONAL WATER WILL BE PROHIBITED IN ALL PHASES OF THE FINISHING.
2. AFTER FLOATING, TEST SURFACE FOR TRUENESS WITH A 10 FOOT STRAIGHTEDGE. DISTRIBUTE CONCRETE AS REQUIRED TO REMOVE SURFACE IRREGULARITIES, AND REFLOAT REPAIRED AREAS TO PROVIDE A CONTINUOUS SMOOTH FINISH.
3. WORK EDGES OF GUTTERS, BACK TOP EDGE OF CURB, SCORE LINES AND FORMED JOINTS WITH AN EDGING TOOL AND ROUND TO 1/2" RADIUS, UNLESS OTHERWISE INDICATED ON HARDSCAPE DETAILING. ELIMINATE ANY TOOL MARKS ON CONCRETE SURFACE.
4. AFTER COMPLETION OF FLOATING, AND WHEN EXCESS MOISTURE OR SURFACE SHEEN HAS DISAPPEARED, COMPLETE SURFACE FINISHING AS SPECIFIED ON DETAIL(S).
5. DO NOT REMOVE FORMS FOR 24 HOURS AFTER CONCRETE HAS BEEN PLACED. AFTER FORM REMOVAL, CLEAN ENDS OF JOINTS AND POINT-UP ANY MINOR HONEYCOMBED AREAS. REMOVE AND REPLACE AREAS OR SECTIONS WITH MAJOR DEFECTS.

N. GENERAL: CONSTRUCT EXPANSION JOINTS AT THE END OF ALL RADII AND AT LOCATIONS PERPENDICULAR TO SURFACE OF CONCRETE, UNLESS OTHERWISE INDICATED ON HARDSCAPE DETAILS. CONSTRUCT TRANSVERSE JOINTS AT RIGHT ANGLES TO THE CENTERLINE, UNLESS OTHERWISE INDICATED. PLACE CONSTRUCTION JOINTS AT THE END OF ALL RADII AND AT LOCATIONS WHERE CONSTRUCTION MUST BE STOPPED. CONSTRUCT EXPANSION JOINTS AT THE BACK-OF-CURB WITH FACE

### CONCRETE MASONRY

A. DESIGN CRITERIA: ACI 530-99/ASCE 5-99, ACI 530.1-99/ASCE 6-99.
B. HOLLOW UNITS: MIN. 4000 PSI @ 28 DAYS, MIN. 45% SOLID, ASTM C 90, GRADE N, HIGH STRENGTH BLOCK. NORMAL WEIGHT. f'm=2000 PSI.
C. MORTAR: ASTM C 270, TYPE S, MIN. 1800 PSI @ 28 DAYS, 3/8" FULL BEDDING, REMOVE MORTAR PROTRUDING INTO CELL CAVITIES TO BE REINFORCED AND GROUTED.
D. GROUT: ASTM C 476, MIN. 2500 PSI @ 28 DAYS, 3/8" AGGREGATE MAX., 8"-10" SLUMP.
E. REINFORCEMENT:
1. HORIZONTAL JOINTS: STD. DUR-O-WALL @ 16" O.C., USE PREFABRICATED CORNERS AND TEES @ WALL INTERSECTIONS, OVERLAP DISCONTINUED ENDS AND EXTEND INTO COLUMNS 12" MIN.
2. VERTICAL AND HORIZONTAL REINFORCEMENT: ASTM 615, GRADE 60, TYP. @ WALL INTERSECTIONS, EACH SIDE OF OPENINGS, AND @ WALL ENDS, HOOK TOP OF ALL DISCONTINUED BARS, LAP CONT. REINF. 48 BAR DIA UNO.
3. USE BAR SPACERS IN EVERY 4TH COURSE WHERE CELLS ARE TO BE GROUTED.

F. PROVIDE CLEANOUT OPENINGS FOR EACH GROUTED CELL. G. HIGH LIFT GROUTING SHALL BE USED WITH A MAXIMUM POUR OF 12'-0" IN 4' MAX. LIFTS WITH ONE HOUR BETWEEN LIFTS. VIBRATE EACH LIFT AND RECONSOLIDATE PREVIOUS LIFT AFTER PLACING NEXT LIFT. VERTICAL CORES TO BE FILLED WITH GROUT SHALL HAVE A MINIMUM CLEAR DIMENSION OF 3"x3". H. WHERE EXPANSION ANCHOR BOLTS ARE SET IN MASONRY WALLS, FILL BLOCK CELLS WITH GROUT FOR BOLTED COURSE AND TWO COURSES BELOW ANCHOR ELEVATION.

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4663 Tiffany Woods Cir
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PH: (407) 484-3414

PROJECT AND OWNER

WILLOW RUN

City of Apopka
Florida

Appian Engineering, LLC
2221 Lee Road, Suite 17
Winter Park, FL 32789
PH: (407) 960-5856

CONSULTANTS

LANDSCAPE ARCHITECT
CARL J. KELLY JR., RLA

LA0001764
DocuSigned by:
D96C07E45FDC410...
REG.#: 0001764

| | |
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| PROJECT NO. | APP22.01 |
| DESIGNED BY | CJK |
| DRAWN BY | CJK |
| CHECKED BY | CJK |
| DATE | 12/14/21 |

ISSUED FOR:
01/30/22 City Comments
02/22/22 Site Changes
06/20/22 Site Changes
04/01/24 Site Changes
05/06/24 City Comments

DRAWING SCALE
0 FT 25' 50' North
SCALE: 1"=50'-0"

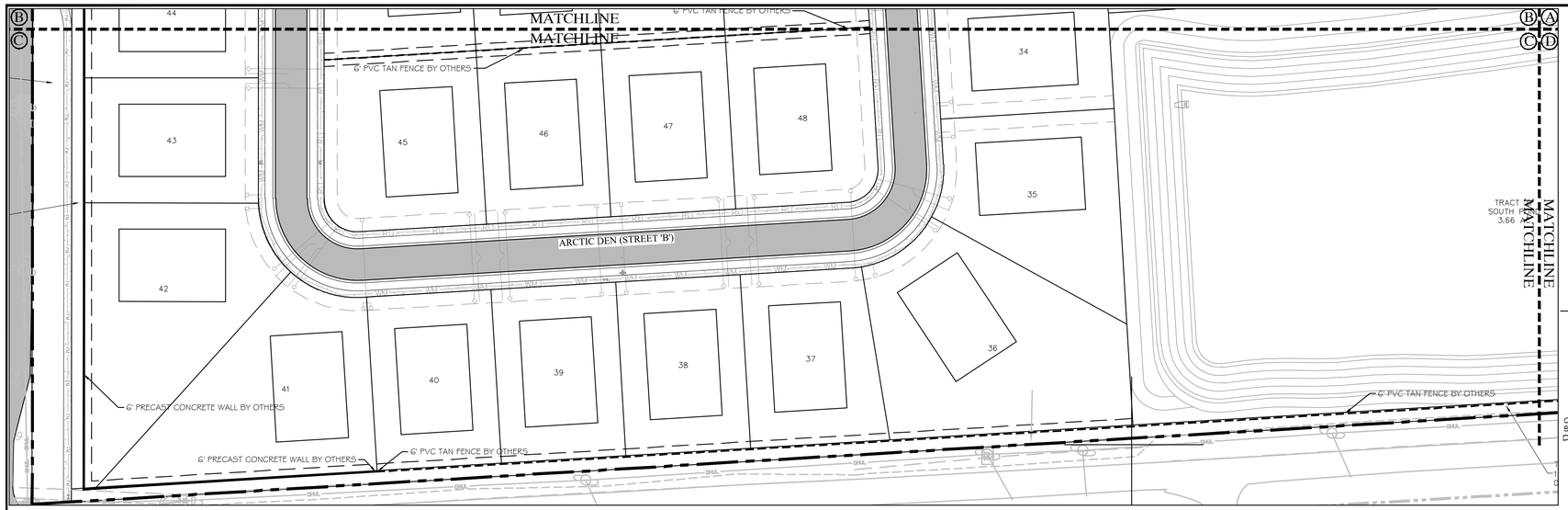
DRAWING TITLE
HARDSCAPE SITE PLAN

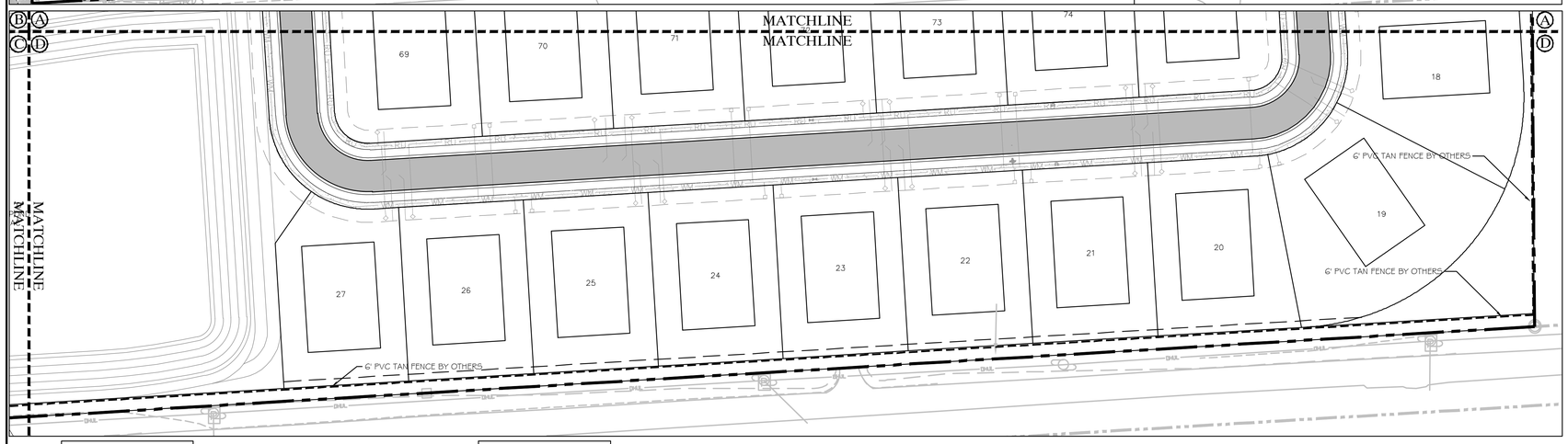
DRAWING NUMBER
HS-02

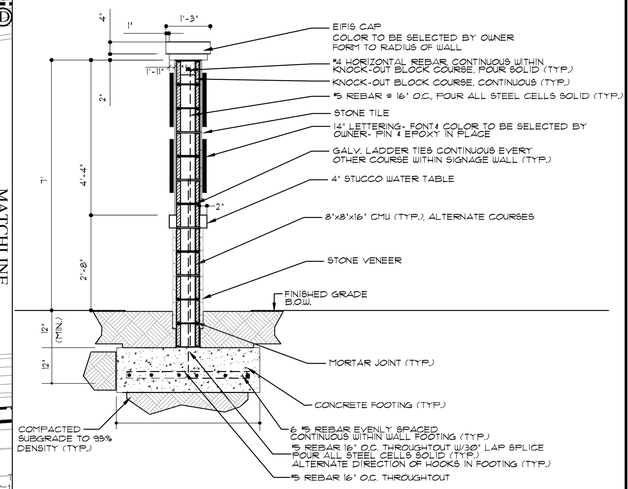
SHEET 39 OF

C:\Jobs\APP22.01-LentRd\WillowRun\Landscape\Landscape\CodePlans\LEN-HRD.dwg

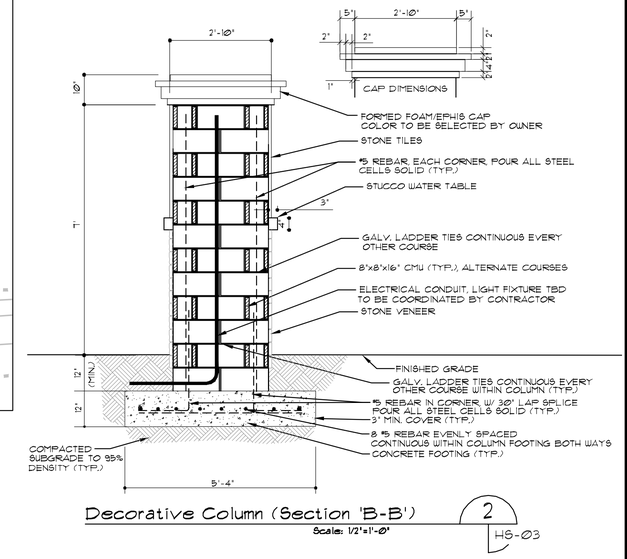
DocuSign Envelope ID: EFE2DA93-5C23-4010-8A1B-0BF907193C9C



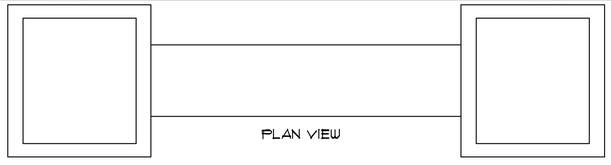



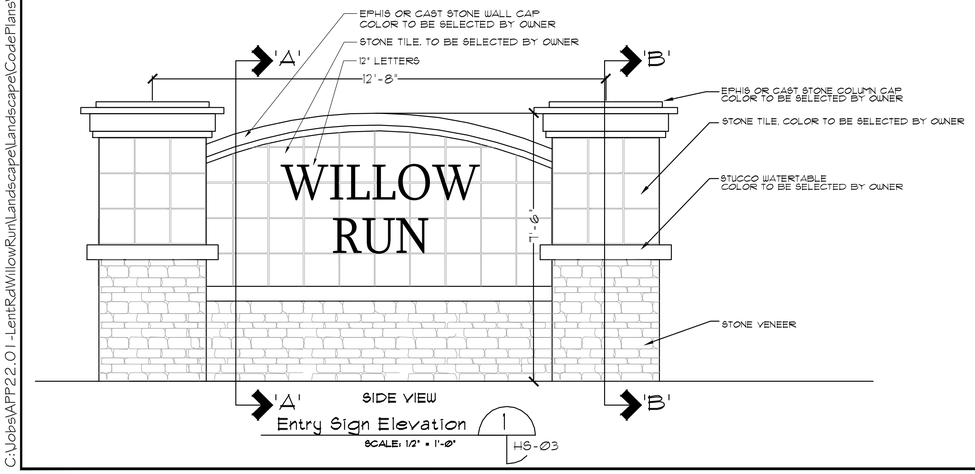

Entry Sign (Section 'A'-'A') — 3 — HS-03
SCALE: 1/2" = 1'-0"



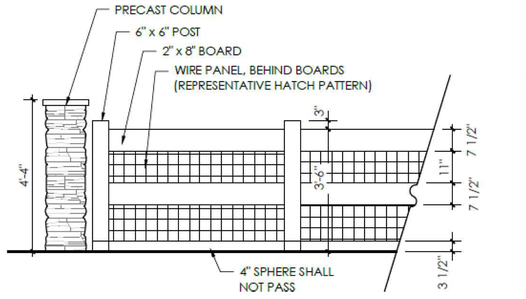

Decorative Column (Section 'B-B') — 2 — HS-03
Scale: 1/2"=1'-0"

NOTES:
1. THE BUFFER/ SCREEN WALL SHALL BE MAINTAINED BY THE HOA.

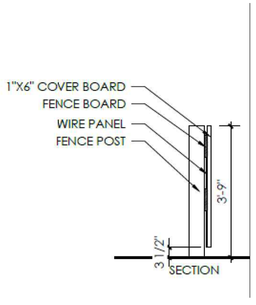



Entry Sign Elevation — 1 — HS-03
SCALE: 1/2" = 1'-0"




Split Rail Fence Detail — 4 — HS-03
Scale: N.T.S.




LANDSCAPE AND IRRIGATION DESIGN

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 .

| SIGNATURE | REG. NO. | DATE |
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| | LA0001764 | 12/14/21 |


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- Landscape Architecture
- Site Planning

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CARL J. KELLY JR., RLA

REGISTERED LANDSCAPE ARCHITECT — LA0001764 — STATE OF FLORIDA

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DRAWING SCALE

0 FT 25' 50' North

SCALE: 1"=50'-0"

DRAWING TITLE

HARDSCAPE SITE PLAN

DRAWING NUMBER

HS-03

SHEET 40 OF

C:\Jobs\APP22.01-LentRd\WillowRun\Landscape\Landscape\CodePlans\LEN-HRD.dwg

DocuSign Envelope ID: EFE2DA93-5C23-4010-8A1B-0BF907193C9C

N85°38'18"E

616.56'

N00°04'35"W

TRACT 'K'
BUFFER
0.02 AC

TRACT 'M'
POCKET PARK/
EXERCISE TRAIL
1.81 AC

TRACT 'C'
NORTH POND
5.39 AC

TRACT 'B'
PRIVATE RIGHT-OF-WAY
8.56 AC

TRACT 'L'
LANDSCAPE BUFFER
0.05 AC

FOREST PACKS (STREET 'C')

MATCHLINE

CITY NOTES:

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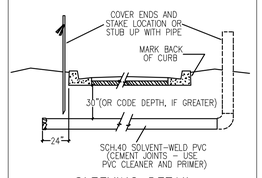
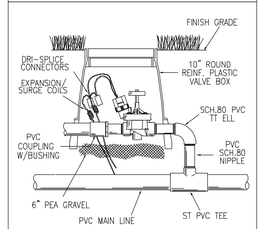
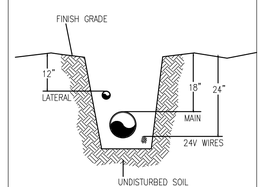
NOTE: ALTERNATIVE MATERIALS, SUCH AS C-900 PVC, HDPE, OR DUCTILE IRON PIPE WILL ALSO BE CONSIDERED, IF PROPERLY SUBMITTED FOR APPROVAL.




SLEEVING DETAIL
(REQUIREMENTS VARY - CHECK CODES FIRST)




ELECTRIC CONTROL VALVE




TRENCHING DETAIL
(USE CODE DEPTHS, IF GREATER)

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WILLOW RUN

City of Apopka
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REG.#: 0001764

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DRAWING SCALE

0 FT 15' 30' North

SCALE: 1"=30'-0"

DRAWING TITLE

IRRIGATION SITE PLAN

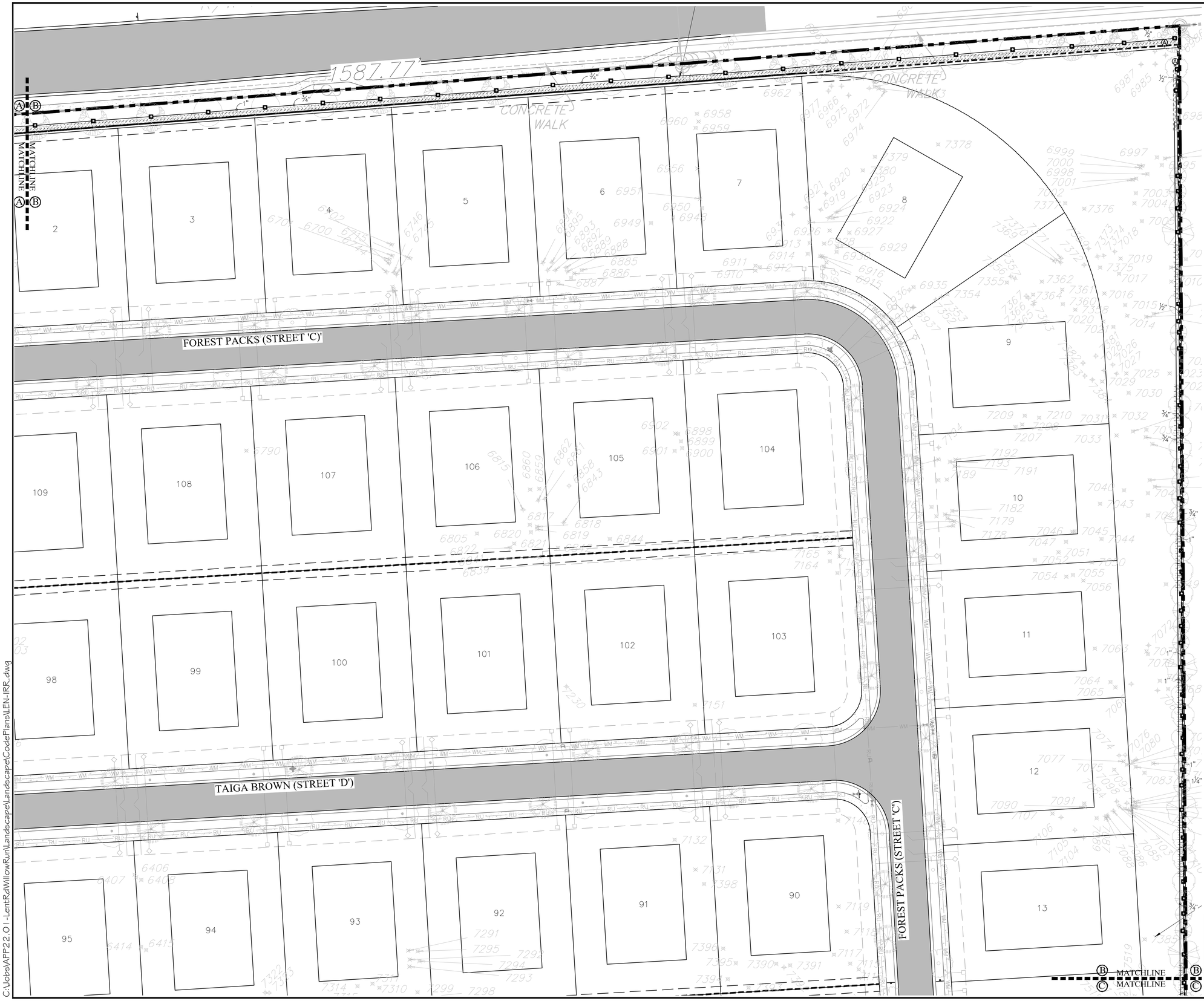
DRAWING NUMBER

IR-01

SHEET 41 OF

C:\Jobs\APP22.01-LentRdWillowRun\Landscape\Landscape\CodePlans\LEN-IRR.dwg

DocuSign Envelope ID: EFE2DA93-5C23-4010-8A1B-0BF907193C9C

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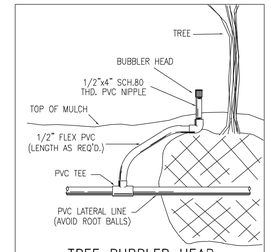
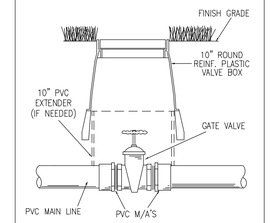
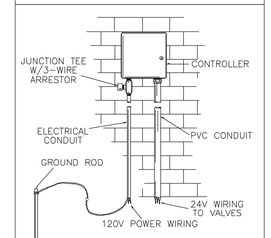



TREE BUBBLER HEAD




ISOLATION GATE VALVE




WALL-MOUNT CONTROLLER
(ALL WIRING SHALL CONFORM TO ELECTRICAL CODES)

LANDSCAPE AND IRRIGATION DESIGN

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LANDSCAPE ARCHITECT LA0001764 STATE OF FLORIDA

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DRAWING SCALE

0 FT 15' 30' North

SCALE: 1"=30'-0"

DRAWING TITLE

**IRRIGATION SITE PLAN**

DRAWING NUMBER

IR-02

SHEET 42 OF

C:\Jobs\APP22.01-LentRd\WillowRun\Landscape\Landscape\CodePlans\LEN-IRR..dwg

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DRAWING SCALE

0 FT 15' 30' North

SCALE: 1"=30'-0"

DRAWING TITLE

IRRIGATION SITE PLAN

DRAWING NUMBER

IR-03

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FOREST PACKS (STREET 'C')

TRACT 'O'
OPEN SPACE
0.07 AC

TRACT 'D'
SOUTH POND
3.66 AC

TRACT 'G'
10' LANDSCAPE BUFFER

MAINLINE SHOWN OUTSIDE OF BOUNDARY LINE FOR CLARITY ONLY

MATCHLINE

S86°34'19"W

2294.73

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SCALE: 1"=30'-0"

DRAWING TITLE

**IRRIGATION SITE PLAN**

DRAWING NUMBER

**IR-04**

SHEET 44 OF

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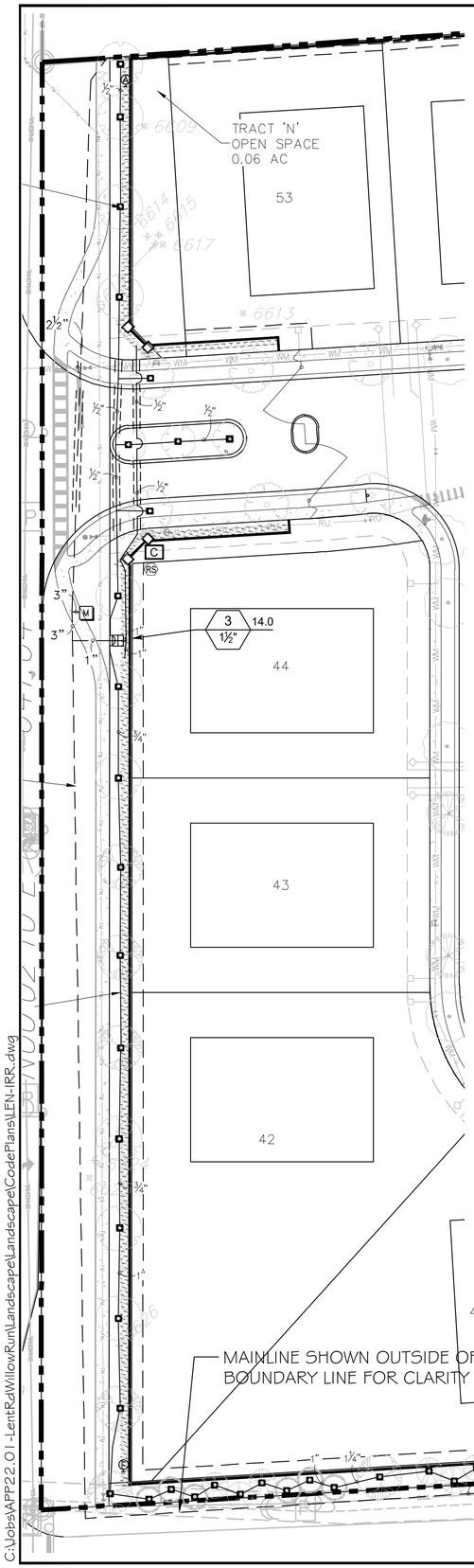



## IRRIGATION SCHEDULE

| SYMBOL | MANUFACTURER/MODEL/DESCRIPTION | QTY | PSI | DETAIL |
|---|---|---|---|---|
| 1482 1428 / 1481 1484 | Rain Bird 1800-1400 Flood<br>Flood Bubbler | 460 | 30 | |

| SYMBOL | MANUFACTURER/MODEL/DESCRIPTION | QTY |
|---|---|---|
| | Rain Bird XCZ-150-COM<br>High flow control zone kit with 1-1/2" PESB valve, two 1" filters and two 40psi pressure regulators. | 3 |
| P | Rain Bird MDCFPCAP<br>Dripline Flush Valve purple cap in compression fitting coupler. | 3 |
| A | Rain Bird AR Valve Kit<br>1" Air Relief Valve kit with 6" dnp valve box. | 3 |
| | Area to Receive Dripline<br>Rain Bird LD-06-24<br>Landscape Dripline with 0.61 gph emitters at 24" o.c.<br>Dripline laterals spaced at 24" apart, with emitters offset for triangular pattern. | 11,058 s.f. |

| SYMBOL | MANUFACTURER/MODEL/DESCRIPTION | QTY |
|---|---|---|
| | Rain Bird PESB-PRS-D<br>1", 1-1/2", 2" Plastic Industrial Valves. Low Flow Operating Capability, Globe Configuration. With Pressure Regulating Module, and Scrubber Technology for Reliable Performance in Dirty Water Irrigation Applications. | 3 |
| C | Rain Bird ESP-LXME (2)<br>Plastic wall mount controller with 8 to 48 stations adjusted modularly in four station increments, with SM4, SM8, and SM12 station modules. Supply number of stations as required for project at one station per valve. | 1 |
| RS | Rain Bird RSD-BEx (2)<br>Rain Sensor, with bracket, extension wire | 1 |
| M | Water Meter 2"<br>REUSE METER | 1 |
| | Irrigation Lateral Line: PVC Class 160 SDR 26 | 12,728 l.f. |
| | Irrigation Mainline: PVC Class 200 SDR 21-NP | 4,297 l.f. |
| | Pipe Sleeve: PVC Schedule 40 | 406.6 l.f. |

Valve Callout
Valve Number
Valve Flow
Valve Size

NOTES:
1. ALL PIPE SIZES SHALL NOT EXCEED A VELOCITY OF 5' SEC.
2. ALL HEADS SHALL BE MIN. 4" FROM PAVED SURFACES
3. USE PRESSURE COMPENSATING SCREENS TO ADJUST NOZZLE RADIUS WERE NECESSARY

## GENERAL NOTES

1) THE DRAWINGS ARE TO BE CONSIDERED DIAGRAMMATIC, AS IT MAY NOT BE POSSIBLE TO ACCURATELY DEPICT THE EXACT LOCATIONS FOR ALL MATERIAL, OR ANTICIPATE THOSE IN-FIELD VARIATIONS WHICH MAY REQUIRE ADJUSTMENT ON SITE. THE INSTALLER SHALL BE EXPECTED TO MAKE MINOR MODIFICATIONS WHICH MAY BE NECESSARY TO MAINTAIN COMPLETE AND ACCURATE COVERAGE, WITHOUT DEVIATION FROM THE DESIGN CONCEPTS OR INTENT. THE FINAL LOCATIONS OF ALL MAJOR EQUIPMENT, SUCH AS CONTROLLERS, VALVES, SUPPLY CONNECTIONS, MAINLINES, ETC. SHALL BE DETERMINED IN THE FIELD, USING THE DRAWINGS AS A GUIDE, AND APPROVED PRIOR TO INSTALLATION.

2) ALL WORK SHALL BE DONE IN ACCORDANCE WITH PREVAILING CODES AND REGULATIONS. ALTHOUGH DUE DILIGENCE HAS BEEN EXERCISED IN THE PREPARATION OF THE DOCUMENTS TO AVOID CONFLICTS, THE RESPONSIBILITY FOR VERIFICATION AND CONFORMANCE TO THE PARTICULAR CODES FOR THIS LOCATION SHALL REMAIN SOLELY THAT OF THE INSTALLER. THE INSTALLER SHALL OBTAIN ANY NECESSARY LOCATES, PERMITS AND INSPECTIONS.

3) ALL WORK SHALL BE CLOSELY COORDINATED WITH THAT OF OTHER TRADES, IN ORDER TO AVOID CONFLICTS. THE INSTALLATION SHALL BE COORDINATED WITH ALL NEW AND EXISTING IMPROVEMENTS, AND WITH THE ACTUAL BEDLINES, SOD LIMITS AND PLANT LOCATIONS.

4) ALL MATERIAL AND LABOR REQUIRED TO PROVIDE A COMPLETE, OPERATIONAL, AND FULLY GUARANTEED SYSTEM SHALL BE CONSIDERED PART OF THE WORK, WHETHER OR NOT THEY ARE SPECIFICALLY INDICATED IN THE DOCUMENTS.

5) UNLESS SPECIFICALLY STATED IN THE DOCUMENTS, ALL MAINLINE PIPING AND WIRING PASSING UNDER PAVED SURFACES SHALL BE SLEEVED WITH SCH. 40 PVC, SIZED TWO SIZES LARGER THAN THE CONTAINED PIPE, OR 1|" OR LARGER AS NEEDED FOR CONTROL WIRING. LATERAL PIPING PASSING UNDER TRAFFIC-BEARING PAVEMENT OF ANY WIDTH, OR UNDER SIDEWALKS 5' IN WIDTH OR GREATER, SHALL BE SLEEVED IN A SIMILAR MANNER. IT SHALL BE ASSUMED THAT ALL SLEEVING IS TO BE PART OF THIS WORK, UNLESS SPECIFICALLY EXCEPTED IN THE DOCUMENTS. ANY NEEDED SLEEVES WHICH ARE UNUSABLE OR CANNOT BE FOUND SHALL BE REPORTED IMMEDIATELY TO THE PROJECT MANAGER. ROADWAY/DRIVEWAY SLEEVES ARE SHOWN ON THIS DRAWING. SIDEWALK SLEEVES ARE NOT SHOWN, BUT ARE UNDERSTOOD.

6) CONTROL WIRING SHALL BE ROUTED WITH THE MAINLINE WHEREVER POSSIBLE. LOW-VOLTAGE WIRING SHALL BE U#14-1 PVC JACKETED, SINGLE CONDUCTOR CABLE, COLORED RED FOR 'HOT' WIRES, WHITE FOR VALVE COMMON, AND BLUE FOR SPARES, A MINIMUM OF TWO OF WHICH SHALL BE RUN FROM THE CONTROLLER LOCATION TO THE FARTHEST ZONE VALVE IN EACH DIRECTION. WIRES SHALL BE INSTALLED WITH ADEQUATE SLACK AND SURGE/EXPANSION LOOPS, AND SHALL BE SPLICED ONLY IN VALVE BOXES, USING SPEARS "DRI-SPLICE" WIRE CONNECTORS AND SEALANT, OR OTHER WATERPROOF TYPE, IF PRIOR APPROVAL IS OBTAINED.

7) ALL HEADS SHALL BE OF THE PROPER TYPE FOR THE PLANT MATERIAL WHERE LOCATED, AND SHALL BE INSTALLED IN THE PRESCRIBED MANNER, PLUMB, AND WITH THE PROPER HEIGHT WITH RESPECT TO GRADE AND PLANT HEIGHT. ALL HEADS AND OTHER EQUIPMENT SHALL BE INSTALLED WITH ADEQUATE AND UNIFORM CLEARANCES FROM ALL PAVING, CURBS, SIDEWALKS, WALLS, AND OTHER OBSTACLES, SO THAT DAMAGE TO EQUIPMENT DOES NOT OCCUR DURING LANDSCAPE MAINTENANCE OPERATIONS. ALL SPRINKLERS SHALL BE ADJUSTED TO OBTAIN MAXIMUM COVERAGE OF PLANT MATERIAL WHILE MINIMIZING OVERSPRAY ONTO WINDOWS OR WALLS, OR OTHER IMPERVIOUS SURFACES, PARTICULARLY WOODWORK AND/OR TRIM. THE INSTALLER SHALL UTILIZE SUITABLE PRESSURE-COMPENSATING SCREENS OR ADJUSTABLE-ARC NOZZLES WHERE REQUIRED TO ACHIEVE MAXIMUM COVERAGE CONTROL.

8) EACH CONTROLLER SHALL REQUIRE A STANDARD 120-VAC POWER FEED, WHICH SHALL BE COORDINATED AND HOOKED UP BY THE INSTALLER OR HIS DESIGNATED ELECTRICIAN. A 3-WIRE POWER INPUT SURGE ARRESTOR SHALL BE PROVIDED ON THE POWER FEED, AND A DEDICATED GROUND ROD OR RODS SHALL BE INSTALLED, WHICH PROVIDE A RESISTANCE OF NO GREATER THAN 10 OHMS TO EARTH.

9) EACH CONTROLLER SHALL BE EQUIPPED WITH A PROPERLY LOCATED AND INSTALLED RAIN SHUTOFF DEVICE (MINI-CLIK II), WHICH SHALL BE LOCATED IN SUCH A MANNER SO THAT IT IS UNOBSTRUCTED AND DIRECTLY EXPOSED TO NATURAL RAINFALL AND SUNLIGHT FROM ALL DIRECTIONS, BUT NOT TO RUNOFF WATER FROM ROOFS, ETC.

10) THE MINIMUM SUPPLY REQUIREMENT FOR THE SYSTEM AS DESIGNED IS 85 GPM AT 65 PSI

11) SIXTY FIVE (65) PSI WATER PRESSURE IS REQUIRED FOR THE EFFICIENT OPERATION OF THE IRRIGATION SYSTEM AS DESIGNED. VERIFY 65 PSI WATER PRESSURE IS AVAILABLE AT EACH POC LOCATION PRIOR TO BEGINNING THE IRRIGATION INSTALLATION. NOTIFY THE OWNER IF THE MINIMUM WATER PRESSURE IS NOT AVAILABLE PRIOR TO STARTING THE IRRIGATION INSTALLATION.

12) THE INSTALLER SHALL BE EXPECTED TO BE FAMILIAR WITH AND FOLLOW THE INSTRUCTIONS CONTAINED HEREIN, ON THE DRAWINGS, IN THE CONSTRUCTION DETAILS, AND IN THE WRITTEN SPECIFICATIONS. SHOULD A CONFLICT BE DISCOVERED WITHIN THE DOCUMENTS, HE SHALL IMMEDIATELY NOTIFY THE PROJECT MANAGER AND REQUEST CLARIFICATION.

13) THIS INSTALLATION SHALL BE SUPPLIED BY RECLAIMED WATER. THE WORK SHALL INCLUDE ANY AND ALL MATERIALS AND METHODS REQUIRED FOR THE APPROVED INSTALLATION THEREOF, WHETHER OR NOT SPECIFICALLY INDICATED WHETHER OR NOT SPECIFICALLY INDICATED IN THE DOCUMENTS, INCLUDING THE INSTALLATION OF ANY REQUIRED WARNING SIGNAGE.

## CITY NOTES:

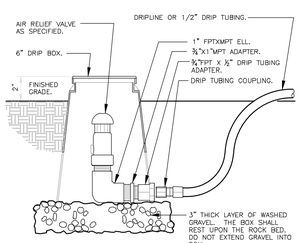
1. STREET TREES SHALL BE INSTALLED WITH THE DEVELOPMENT OF EACH INDIVIDUAL LOT.
2. LANDSCAPING AND IRRIGATION SHALL BE CONSISTENT WITH SECTION 5.01 OF THE LAND DEVELOPMENT CODE.
3. LANDSCAPING AND IRRIGATION SHALL BE IN COMPLIANCE WITH WATER WISE ORDINANCE 2069.
4. IRRIGATION PLANS SHALL BE PROVIDED AT CONSTRUCTION SITE PLAN.
5. IRRIGATION DISTRIBUTION EQUIPMENT SHALL BE 24" FROM VERTICAL STRUCTURES.
6. ALL ON-SITE LANDSCAPING AND AMENITIES REQUIRE A FINAL INSPECTION. CONTACT THE COMMUNITY DEVELOPMENT DEPARTMENT AT LEAST 7 DAYS PRIOR TO THE INSPECTION. THE SITE SUPERINTENDENT MUST BE ON SITE.
7. FOR ANY TREES THAT ARE REQUIRED BETWEEN THE CURB AND SIDEWALK, ROOT BARRIERS WILL BE INSTALLED TO ELIMINATE DAMAGE TO THE UTILITIES, CURB AND SIDEWALK. AT THE TIME OF THE CONSTRUCTION SITE PLAN SUBMITTAL, THE HOA DOCUMENT WILL ENTRUST MAINTENANCE FOR ALL "STREET TREES" TO THE HOA. A NOTE WAS ADDED TO THE DEVELOPMENT STANDARDS, UNDER E. BUFFERS AND LANDSCAPING, NOTE 7, WHICH STATES "NO 'STREET TREES' WILL BE PROPOSED BETWEEN THE CURB AND SIDEWALK UNLESS SPECIFICALLY REQUESTED BY PLANNING AND ZONING DEPARTMENT. IF NECESSARY, ANY PROPOSED TREES, LOCATED BETWEEN THE CURB AND THE SIDEWALK, CANNOT BE ROOT AGGRESSIVE OR THEY MUST HAVE ROOT BARRIERS INSTALLED TO PREVENT DAMAGE TO THE UTILITIES, CURB AND SIDEWALK."
8. CANOPY TREES PROPOSED WITHIN LANDSCAPE OR BUFFER STRIPS LESS THAN EIGHT FEET WIDE OR 200 FEET IN AREA MUST HAVE ROOT BARRIERS.
9. THE BUFFER/ SCREEN WALL SHALL BE MAINTAINED BY THE HOA.

## WATERING SCHEDULE

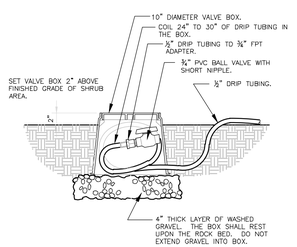
| NUMBER | MODEL | TYPE | PRECIP | IN./WEEK | MIN./WEEK | GAL./WEEK | GAL./DAY |
|---|---|---|---|---|---|---|---|
| 1 | Rain Bird XCZ-150-COM | Area for Dripline | 0.54 in/h | 1.8 | 201 | 7,368 | 2,456 |
| 2 | Rain Bird PESB-PRS-D | Bubbler | 15.32 in/h | 2 | 8 | 612 | 204 |
| 3 | Rain Bird XCZ-150-COM | Area for Dripline | 0.54 in/h | 1.8 | 201 | 2,810 | 937 |
| 4 | Rain Bird PESB-PRS-D | Bubbler | 15.32 in/h | 2 | 8 | 580 | 193 |
| 5 | Rain Bird PESB-PRS-D | Bubbler | 15.32 in/h | 2 | 8 | 644 | 215 |
| 6 | Rain Bird XCZ-150-COM | Area for Dripline | 0.54 in/h | 1.8 | 201 | 2,269 | 756 |
| | | TOTALS: | | | 627 | 14,283 | 4,761 |

## VALVE SCHEDULE

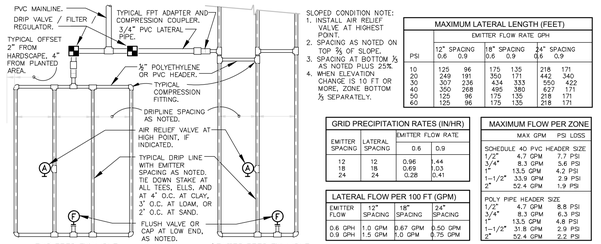
| NUMBER | MODEL | SIZE | TYPE | GPM | WIRE | PSI | PSI @ POC | PRECIP |
|---|---|---|---|---|---|---|---|---|
| 1 | Rain Bird XCZ-150-COM | 1-1/2" | Area for Dripline | 36.66 | 1,581 | 53.0 | | 0.54 in/h |
| 2 | Rain Bird PESB-PRS-D | 2" | Bubbler | 76.5 | 1,043 | 66.8 | | 15.32 in/h |
| 3 | Rain Bird XCZ-150-COM | 1-1/2" | Area for Dripline | 13.98 | 81.7 | 33.5 | | 0.54 in/h |
| 4 | Rain Bird PESB-PRS-D | 2" | Bubbler | 72.5 | 795.1 | 53.5 | 61.5 | 15.32 in/h |
| 5 | Rain Bird PESB-PRS-D | 2" | Bubbler | 80.5 | 1,536 | 61.9 | | 15.32 in/h |
| 6 | Rain Bird XCZ-150-COM | 1-1/2" | Area for Dripline | 11.29 | 2,777 | 49.9 | | 0.54 in/h |
| | Common Wire | | | | 4,297 | | | |




1 DRIP AIR RELIEF VALVE IN BOX — N.T.S. — DETAIL-FILE




2 DRIP FLUSH VALVE — N.T.S. — DETAIL-FILE




SLOPED CONDITION NOTE:
1. INSTALL AIR RELIEF VALVE AT HIGHEST POINT.
2. SPACING AS NOTED ON TOP 1/3 OF SLOPE.
3. SPACING AT BOTTOM 1/3 AS NOTED PLUS 25%.
4. WHEN ELEVATION CHANGE IS 10 FT OR MORE, ZONE BOTTOM 1/3 SEPARATELY.

MAXIMUM LATERAL LENGTH (FEET)

| | DMITER FLOW RATE GPH | | | | | |
|---|---|---|---|---|---|---|
| | 12" SPACING | | 18" SPACING | | 24" SPACING | |
| PSI | 0.6 | 0.9 | 0.6 | 0.9 | 0.6 | 0.9 |
| 10 | 125 | 96 | 175 | 135 | 218 | 171 |
| 20 | 249 | 191 | 350 | 171 | 442 | 340 |
| 30 | 307 | 236 | 434 | 333 | 550 | 422 |
| 40 | 350 | 268 | 495 | 380 | 627 | 171 |
| 50 | 125 | 96 | 175 | 135 | 218 | 171 |
| 60 | 125 | 96 | 175 | 135 | 218 | 171 |

GRID PRECIPITATION RATES (IN/HR)

| EMITTER SPACING | LATERAL SPACING | EMITTER FLOW RATE 0.6 | 0.9 |
|---|---|---|---|
| 12 | 12 | 0.96 | 1.44 |
| 18 | 18 | 0.69 | 1.03 |
| 24 | 24 | 0.28 | 0.41 |

LATERAL FLOW PER 100 FT (GPM)

| EMITTER FLOW | 12" SPACING | 18" SPACING | 24" SPACING |
|---|---|---|---|
| 0.6 GPH | 1.0 GPM | 0.67 GPM | 0.50 GPM |
| 0.9 GPH | 1.5 GPM | 1.0 GPM | 0.75 GPM |

MAXIMUM FLOW PER ZONE

| | MAX GPM | PSI LOSS |
|---|---|---|
| SCHEDULE 40 PVC HEADER SIZE | | |
| 1/2" | 4.7 GPM | 7.7 PSI |
| 3/4" | 8.3 GPM | 5.6 PSI |
| 1" | 13.5 GPM | 4.2 PSI |
| 1-1/2" | 33.9 GPM | 2.9 PSI |
| 2" | 52.4 GPM | 1.9 PSI |
| POLY PIPE HEADER SIZE | | |
| 1/2" | 4.7 GPM | 8.8 PSI |
| 3/4" | 8.3 GPM | 6.3 PSI |
| 1" | 13.5 GPM | 4.8 PSI |
| 1-1/2" | 31.8 GPM | 2.9 PSI |
| 2" | 52.4 GPM | 2.2 PSI |

3 TYPICAL DRIPLINE LAYOUT REQUIREMENTS — N.T.S. — DETAIL-FILE

LANDSCAPE AND IRRIGATION DESIGN

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.

| SIGNATURE | REG. NO. | DATE |
|---|---|---|
| | LA0001764 | 12/14/21 |

Landscape Designs, LLC
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■ Site Planning
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PROJECT AND OWNER
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CONSULTANTS

LANDSCAPE ARCHITECT
CARL J. KELLY JR., RLA
LA0001764
DocuSigned by:
D96C07E49FDC41C...
REG.#: 0001764

| | |
|---|---|
| PROJECT NO. | APP22.01 |
| DESIGNED BY | CJK |
| DRAWN BY | CJK |
| CHECKED BY | CJK |
| DATE | 12/14/21 |

ISSUED FOR:
01/30/22 City Comments
02/22/22 Site Changes
04/04/22 Tree Survey
06/20/22 Site Changes
04/01/24 Site Changes
05/06/24 City Comments

DRAWING SCALE
0 FT 15' 30' North
SCALE: 1"=30'-0"

DRAWING TITLE
IRRIGATION SITE PLAN

DRAWING NUMBER
IR-05

SHEET 45 OF

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