



CITY OF DELAND
REGULAR MEETING OF THE PLANNING BOARD
AUGUST 14, 2024 AT 5:00 PM
CITY HALL, COMMISSION CHAMBERS
120 SOUTH FLORIDA AVENUE

AGENDA

CALL TO ORDER

PLEDGE OF ALLEGIANCE

ROLL CALL

VERBAL REPORT ON CITY COMMISSION MEETINGS

MINUTES

1. Approval of the July 17, 2024 meeting minutes.

VARIANCE OLD BUSINESS

VARIANCE NEW BUSINESS

PUBLIC PARTICIPATION PROCEEDINGS

PLANNING - OLD BUSINESS

1. Applicant: Mark Watts – Cobb Cole
Project Number: Z24-081 – Planned Development Amendment for DeLand Tech Park
Project Location: South side of Cassadaga Road, west of Interstate 4
Project Description: PD amendment to add 3.73 acres of property to the existing DeLand Tech Park development plan and allow for off-site Tree Protection Areas
Project Planner: Kendall Story
2. Applicant: Cody Bogart – Newkirk Engineering, Inc.
Project Number: Z24-129 – Rezoning
Project Location: 1338 W Plymouth Ave
Project Description: Rezoning of ±9.51 acres of property from Volusia County A-3 to City of DeLand Single-Family Dwelling (R-1A)
Project Planner: Emily Kunkel

PLANNING - NEW BUSINESS

1. Applicant Name: Cody Bogart, Newkirk Engineering, Inc
Project Number: SE24-130 – Special Exception
Location: 1338 W. Plymouth Ave.
Project Description: Special exception to allow church use and allow for all on-site overflow parking areas and associated access drives to be unpaved and stabilized
Project Planner: Emily Kunkel

2. Applicant Name: Sean Fortier – Kelly, Collins & Gentry, Inc.
Project Number: PSB24-090 – Preliminary Plat for Taylor Ridge
Project Location: S Blue Lake and Taylor Ave
Project Description: 65 single-family lot subdivision
Project Planner: Kendall Story

OTHER BUSINESS

ADJOURNMENT



**CITY OF DELAND
PLANNING BOARD REGULAR MEETING**

MINUTES

WEDNESDAY, JULY 17, 2024 - 5:00 P.M.

CITY HALL

CALL TO ORDER

The meeting began at 5:01 p.m.

PLEDGE OF ALLEGIANCE

Pledge of Allegiance – Mr. Owens, Chairperson

ROLL CALL

Henry Thiry	Present
Nora Lewis	Present
Albert Neumann	Present
Don Liska	Absent
Troy Baumgartner	Present
Harper Hill, <i>Vice Chairperson</i>	Present
Jeremy Owens, <i>Chairperson</i>	Present

Quorum: Yes

Present – Carol Kuhn, Planning Director; Rick Werbiskis, Community Development Director; Aerial A. McCann, Assistant City Attorney; Deborah Glick, Development Services Manager; Belinda Williams-Collins, Senior Planner; Tyler Figenscher, Planning Intern; Vivian Ford, Administrative Coordinator; applicants; and members of the public.

MINUTES

1. Mr. Thiry moved to approve the June 12, 2024 Meeting Minutes. Mr. Hill seconded the motion. The board unanimously voted to approve the minutes.
2. Ms. Lewis moved to approve the June 27, 2024 Special Meeting Minutes. Mr. Thiry seconded the motion. The board unanimously voted to approve the minutes.

PRESENTATIONS

1. Past member recognition plaque was presented to Virginia Comella.
2. Growth and Development Projections Report was presented by Mr. Figenscher.

VARIANCE OLD BUSINESS

None.

VARIANCE NEW BUSINESS

None.

PUBLIC PARTICIPATION PROCEEDINGS

Mr. Owens read the Public Participation procedures.

PLANNING – OLD BUSINESS

3. Applicant Name: Jack Straw
Project Number: Z24-030 – Cloisters Planned Development Amendment
Project Location: ±1.56 acres located at 400 E Howry Ave
Project Description: PD Amendment to add a parcel, reduce required parking, and amend uses
Staff Planner: Belinda Williams-Collins

Public Participation: Jack Straw, Applicant, made a presentation and answered questions from the board.

Public Concerns: Lee Simmons spoke against due to parking concerns, specifically handicap parking, and safety should parking be required at the additional lot. Richard Bernier spoke against due to safety concerns, vandalism that has already occurred in the parking areas, lack of parking, including handicap parking, noise level, elevator, dogs, and additional parking demand from nearby church. David Horndasch spoke against due to the already existing parking shortage, including handicap parking, speeding. Tina Horndasch spoke against the project, stating that these concerns were what they were trying to avoid when moving into a 55+ community.

Applicant responded by stating that the additional lot would be built to have safety measures in place, including lighting.

Mr. Thiry stated he is in favor of the project, as affordable housing is a more pressing need than parking being near the units. Ms. Lewis stated she was in favor of, because most of the residents' concerns can be addressed with the owner and are not City matters, and that the applicant is agreeable to meet with residents to discuss their concerns. Mr. Hill stated he is against because of the parking shortage. Mr. Neumann is against due to the parking deficit.

Ms. Lewis moved to approve the request, pending staff comments be addressed and that applicant bring data to the City Commission meeting. Mr. Thiry seconded the motion. The motion to approve was split, and will continue to City Commission.

Ms. Lewis requested that information as to any additional incidents, noise complaints or incidents from the newer under 55 residents be available for the City Commission meeting.

4. Applicant Name: Mark Watts, Cobb Cole
Project Number: AN24-111 – Annexation Petition for DeLand Tech Park
Project Location: South side of Cassadaga Road, west of Interstate 4
Project Description: Annexation of ±0.99 acres of property into the City of DeLand
Project Planner: Kendall Story

Public Participation: Mike Woods, Esq. of Cobb Cole, on behalf of Applicant, spoke and answered questions from the board.

Mr. Hill moved to approve the request. Ms. Lewis seconded the motion. The motion to approve passed unanimously.

5. Applicant Name: Mark Watts, Cobb Cole
Project Number: SMLU24-112 - Comprehensive Land Use Amendment
Project Location: Project Location: South side of Cassadaga Road, west of Interstate 4
Project Description: Land Use Change of ±0.99 acres of property from Volusia County Urban Low Intensity (ULI) to City of DeLand Commerce (COM)
Project Planner: Kendall Story

Public Participation: Mike Woods, Esq. of Cobb Cole, on behalf of Applicant, spoke and answered questions from the board.

Ms. Lewis moved to approve the request. Mr. Thiry seconded the motion. The motion to approve passed unanimously.

6. Applicant: Mark Watts, Cobb Cole
Project Number: Z24-081 – Planned Development Amendment for DeLand Tech Park
Project Location: South side of Cassadaga Road, west of Interstate 4
Project Description: PD amendment to add one (1) new parcel to existing PD
Project Planner: Kendall Story

Public Participation: Mike Woods, Esq. of Cobb Cole, on behalf of Applicant, requested a continuance to the August 14, 2024 meeting

Ms. Lewis moved to continue the request to the August 14, 2024 meeting. Mr. Thiry seconded the motion. The motion to continue passed unanimously.

PLANNING – NEW BUSINESS

1. Applicant Name: Mark Watts, Esq. – Cobb Cole
Project Name: SE24-031 – Special Exception
Project Location: ±1.467 acres located at S. Amelia Ave.
Description: Special Exception to allow a vehicle rental company
Project Manager: Belinda Williams-Collins

Public Participation: Mike Woods, Esq. of Cobb Cole, on behalf of Applicant, spoke and answered questions from the board.

Mr. Hill moved to approve the request. Ms. Lewis seconded the motion. The motion to approve passed unanimously.

2. Applicant Name: Michael Woods, Esq. – Cobb Cole
Project Number: Z24-089 – Orange Camp DeLand Planned Development (PD)
Project Location: ±9.02 acres located at 1600 Orange Camp Rd.
Project Description: Amend I-4 Automall PD to Orange Camp Deland PD
Project Planner: Belinda Williams-Collins

Public Participation: Mike Woods, Esq. of Cobb Cole, on behalf of Applicant, spoke and answered questions from the board.

Public: James Whittet spoke against due to increased lights, noise, and traffic from potential future businesses, and their effects on the ecological system and the neighborhood property values. Thomas Totin spoke against, due to concerns of the impact of a gas station to the neighboring residential area. He would like a 20' wall to buffer lighting and noise. He is also concerned about the impact to the property values.

Mr. Neumann recused himself due to a conflict – Form 8B has been filed.

Ms. Lewis moved to approve the request. Mr. Thiry seconded the motion. The motion to approve passed unanimously.

3. Applicant: Cody Bogart – Newkirk Engineering, Inc.
Project Number: Z24-129 – Rezoning
Project Location: 1338 W Plymouth Ave
Project Description: Rezoning of ±9.51 acres of property from Volusia County A-3 to City of DeLand Single-Family Dwelling (R-1A)
Project Planner: Emily Kunkel

Public Participation: The applicant submitted a request to have the application continued.

Ms Lewis moved to continue the request to the August 14, 2024 meeting. Mr. Hill seconded the motion. The motion to continue passed unanimously.

OTHER BUSINESS

1. Applicant Name: City of DeLand
Project Location: City-wide
Project Description: Tiny Home Discussion
Project Planner: Carol Kuhn

No vote was required on this item.

ADJOURNMENT

The meeting ended at 8:59 p.m.

**PLANNING DEPARTMENT STAFF REPORT
TO
PLANNING BOARD**

August 14, 2024

Continued from July 17, 2024

APPLICATION NO.: Z24-081

APPLICANT: Mark Watts, CobbCole

REQUEST: Amend the existing zoning designation from Volusia County's R-4 (Urban Single-Family) and DeLand Tech Park Planned Development to First Amendment to DeLand Tech Park Planned Development

APPLICABLE REGULATIONS:

Article IV	OVERLAY AND FLOATING ZONES
	Sec. 33-32 – Planned Development District.
Article XII	ADMINISTRATION AND ENFORCEMENT
	Sec. 33-135 – Procedure for text amendments & rezoning.

A. SITE FACTORS:

Location:	Northwest quadrant of SR 472 and Interstate 4
Parcel Size:	± 3.73 being added to original PD
Land Use:	Southwest Activity Center (Commerce District/West Central District)
Existing Zoning:	Volusia County R-4, Tech Park Planned Development
Existing Use:	Mostly undeveloped

	SURROUNDING USE:	SURROUNDING ZONING:
North:	VC: ULI; SWAC Community	Kirk DeLand PD (Canopy Terrace); R-4
South:	Orange City	Orange City
East:	VC: ULI	VC: RR
West:	VC: Unincorporated	VC: Unincorporated

B. ANALYSIS:

The applicant is requesting to amend the Planned Development Agreement for the DeLand Tech Park Planned Development, which was approved by the City Commission on October 3, 2022, originally consisting of 143.24 acres. The purpose of the amendment is to incorporate additional property into the existing Planned Development, update the expiration date of the Planned Development and to allow for off-site Tree Protection Area (TPA). The additional property will add 3.73 acres of property to DeLand Tech Park, with a grand total of 146.97 acres. Additionally, the amendment provides the option to utilize adjacent property for off-site Tree Protection Area through an easement dedicated to the City of DeLand. The easement agreement will ensure that the city has access to inspect the property, however, all maintenance will be the responsibility of the owner/owner's association.

Additionally, the amended agreement requires that when the city determines that it is legally permissible to annex an offsite TPA in the DeLand Tech Park PD, the applicant shall submit an application to once again amend the PD agreement to formally include the offsite TPA within twelve (12) months from the date notice is provided to the city. At that point, once annexed into the city, the offsite TPA will be incorporated into the DeLand Tech Park PD, via an amendment to the PD agreement.

The subject property lies within the Southwest Activity Center (SWAC) and shall comply with the policies identified within the Local Plan as “Commerce” and “West Central”. According to the vision of the SWAC, the ultimate goal is to develop a key employment area for the City of DeLand and the rest of southwest Volusia County. As described in the original Planned Development, the applicant seeks to develop the eastern side of the subject property as industrial space and the western side of the property as commercial/neighborhood retail.

None of the development standards from the original DeLand Tech Park Planned Development agreement are being changed and the developer will need to follow the requirements that were previously outlined in the original Planned Development Agreement such as maximum impervious area and all landscaping standards.

Section 33-135 of the Land Development Regulations provides the following criteria, which the City Commission shall utilize in reviewing a rezoning request:

1. Is the proposed rezoning consistent with the Comprehensive Land Use Plan, the land use, zoning pattern and character of the surrounding area?

The proposed zoning classification of Planned Development is consistent with the Comprehensive Land Use Plan and the existing Commerce/West Central District Future Land Use Designations.

2. Will the proposed rezoning have an impact upon the environment or natural resources?

The site is heavily wooded and the proposed development would reduce this tree coverage significantly. However, the Planned Development Agreement and associated plan ensures that tree preservation areas, buffering and other tree requirements meet the minimum standards of the Land Development Regulations. The proposed development should not have any other negative impacts on environmental or natural resources on the site or the surrounding area. The developer will be required to conduct an environmental study of the property prior to site plan approval.

3. Will the proposed rezoning have an impact upon the economy of the affected area?

The subject site is currently vacant. The proposed rezoning would allow for development of commercial and industrial uses, which would lead to additional jobs and tax revenue for the City.

4. Will the proposed rezoning have an impact upon governmental services?

Governmental services such as potable water, sewer, code enforcement, police, and fire are available for the subject property.

The Southwest Activity Center (SWAC) has trip allowances based on the uses and the district (Commerce/West Central/Community). According to the SWAC plan, the maximum allowable trips for the Commerce district is 13,700 average daily trips; for the West Central District the allowable trips totals to 19,600 average daily trips; and for the Community district, the maximum allowable average daily trips per day is 4,700 trips.

In a Trip Comparison Memo provided by the applicant dated May 27, 2022, the three land use categories for the SWAC are compared. In this memo, trip data for upcoming projects within the SWAC are compared with the maximum trip threshold for the entirety of the SWAC, if fully developed. The comparison includes not only the DeLand Tech Park Planned Development, but it also includes data from the proposed DeLand CTC development, Canopy Terrace and a trip projection for the Advent Health parcel. The provided trip comparison demonstrates how the proposed DeLand Tech Park Planned Development will not cause the maximum number of trips allotted in the SWAC plan to be exceeded.

The applicant also submitted a Traffic Impact Analysis dated July 2023 which was reviewed by staff. The additional acreage being added as part of this amendment to DeLand Tech Park is not anticipated to have any affect on the original study.

5. Are there changes in the circumstances or conditions affecting the area since the original assignment of zoning that will support the proposed zoning?

There have not been any changes in the area surrounding DeLand Tech Park since its original approval in 2022.

6. Was there a mistake in the original classification?

There was no mistake in the original classification.

7. Will the proposed rezoning have any effect upon the use or value of the affected area?

The proposed project will be developed for industrial, neighborhood commercial and retail uses, all of which will positively contribute to the jobs in the area. The proposed rezoning will not have an effect on the use or negatively affect the value of the area, as the proposed development is in line with the City's long-range plans.

Additionally, the development will provide a road connecting the north end of the development to the south end, lessening congestion on nearby thoroughfares.

8. Will the proposed rezoning have an impact upon public health, safety and welfare?

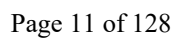
Impacts upon public health, safety and welfare will generally be positive impacts, as the development will reduce traffic congestion from roads by providing alternate routes for drivers. The approval of the amendment should have no additional impacts, as the property being added into the Planned Development totals less than one acre.

C. CONCLUSION:

The original Southwest Activity Center (SWAC) designation was designed for high intensity uses including office, commercial, industrial and recreational uses. With this application, the applicant is proposing a rezoning from Volusia County's R-4 to the First Amendment to DeLand Tech Park Planned Development in order to develop the subject property, to include the additional acreage, allow for off-site Tree Protection Area, and to modify the expiration date.

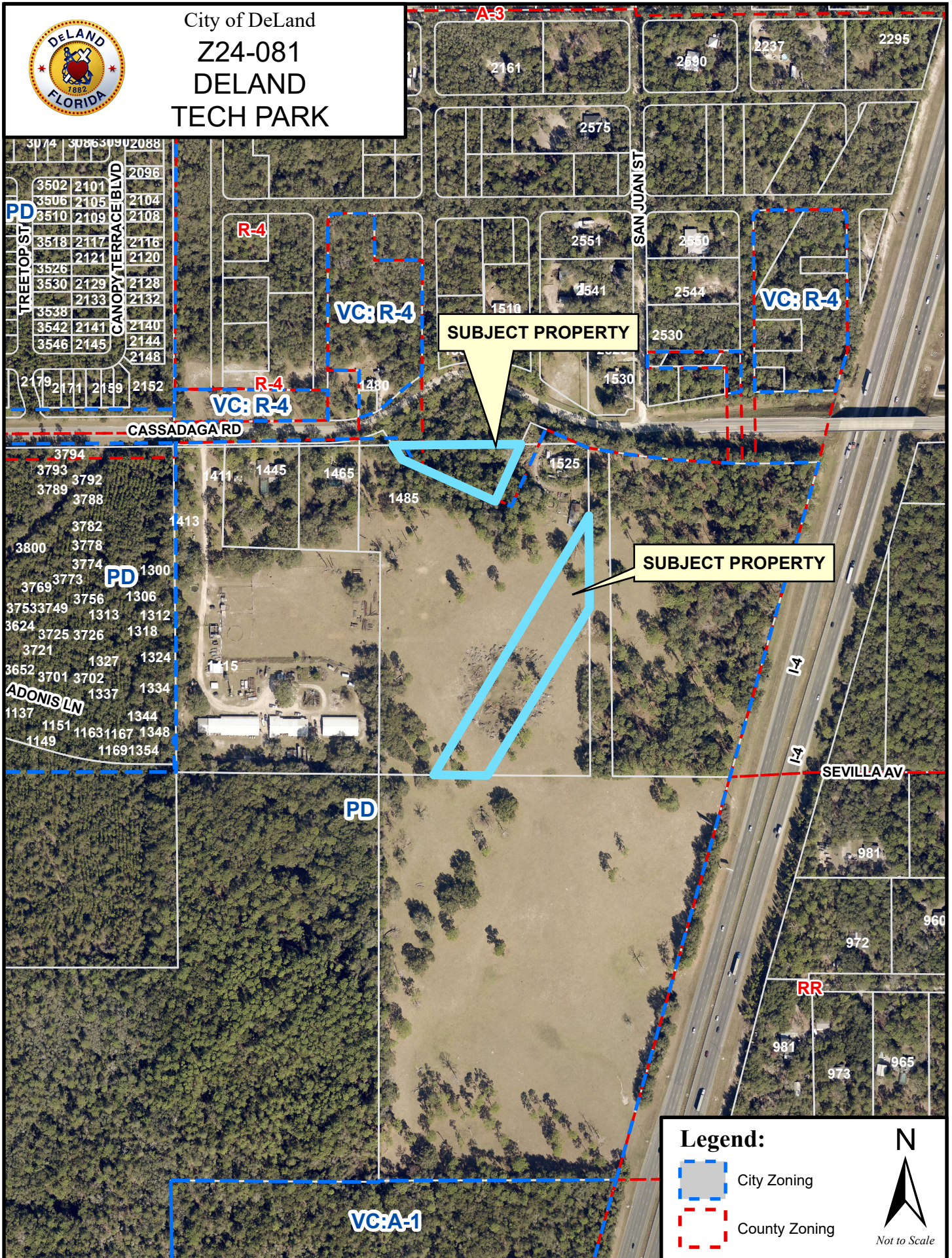
D. STAFF RECOMMENDATION:

Staff recommends that the Planning Board forward to the requested amendment to City Commission recommending approval for the rezoning request.





City of DeLand
Z24-081
DELAND
TECH PARK



FIRST AMENDMENT TO DELAND TECH PARK
PLANNED DEVELOPMENT AGREEMENT

This First Amendment to the Planned Development Agreement (the "First Amendment") is made this ____ day of _____, 2024, between the **CITY OF DELAND**, a Florida municipal corporation (hereafter, the "City"), whose mailing address is 120 S. Florida Avenue, DeLand, FL 32720, and **LONGLEAF FOUR, LLC**, a limited liability company, whose mailing address is 320 N. Meridian St., Ste 700, Indianapolis, IN 46204 (hereafter, "Applicant").

WHEREAS, the City and Applicant previously entered into that certain Planned Development Agreement (the "PD Agreement") dated on or about **Month XX, 2024**, and recorded in Official Records Book **XXXX, Page XXXX** of the Public Records of Volusia County, Florida in connection with the rezoning of ± 143.24 acres known as the "DeLand Tech Park PD"; and

WHEREAS, the Applicant wishes to amend the DeLand Tech Park PD to incorporate an additional + 3.73 acres of property, more specifically described in Exhibit "A-1", for a total of ± 146.97 acres of property, and to revise the reverter provision; and

WHEREAS, the application to amend the DeLand Tech Park PD was duly and properly filed with the City on April 10, 2024, and the application was reviewed by the City's Community Development Department and determined to be consistent with the City's Comprehensive Plan; and

WHEREAS, public hearings on this First Amendment to the DeLand Tech Park Planned Development Agreement were held by the City of DeLand's Planning Board on August 14, 2024, and the City Commission on August 19, 2024, and **Month XX, XXXX**, after due public notice was provided in accordance with the City's Land Development Regulations Ordinance No. 2013-11, as amended.

WHEREAS, the owners of the properties: Longleaf Four, LLC, Stonekirk Ventures, LLC, J. Scott Kirk, and W.L. Kirk, Jr., are in agreement with the provisions of this Amendment.

NOW THEREFORE, the City and Applicant acknowledge and agree that the DeLand Tech Park PD is hereby amended to reflect the following changes, revisions and amendments to the DeLand Tech Park Planned Development Agreement and amended Planned Development Plan:

1. Exhibit A-1 is added to the Development Agreement as an addendum to Exhibit A – Legal Description to incorporate the additional 3.73 acres of property into the PD.

See attached Exhibit “A-1”

2. Exhibit B is amended to replace the existing Planned Development Plan of the Development Agreement to incorporate additional acreage.

See attached Exhibit “B”.

3. Subparagraph F(2)(g) is added as follows:

- f. Option for Off-site TPA. At the Applicant’s option, TPA areas shown on the Planned Development Plan may be replaced, in whole or in part, through the dedication of one or more areas of land located within the City’s incorporated area and adjacent to the Property (including across any public right of way) as TPA (“Offsite TPA”). If Offsite TPA is provided, the Applicant shall provide an easement dedicating the Offsite TPA area to the City in a form acceptable to the City Attorney during subdivision or final site plan review. [The Offsite TPA easement shall provide the City with the right to access and inspect the Offsite TPA area, but shall not obligate the City to perform any ongoing maintenance in the Offsite TPA area.](#) Offsite TPA area dedicated in accordance with this section may also count toward the required open space for the development of the Property. [When the City determines that it is legally permissible to annex](#)

an offsite TPA area in the DeLand Tech Park PD, the Applicant shall submit an application to amend the DeLand Tech Park PD to formally include the Offsite TPA within twelve (12) months from the date notice is provided by the City.

4. Paragraph L – Reverter Provision is amended to replace the paragraph in its entirety with the Expiration condition as follows (changes shown in ~~striketrough~~/underline format):

~~L. Reverter Provision: The City Commission may rezone any portion of the project which has not secured a final development order on or before 7 years from the effective date of this ordinance as may be necessary or appropriate to protect adjoining properties or the public health, safety and welfare, unless the City Commission, for good cause shown, shall extend the time period indicated in this paragraph.~~

L. Expiration: The terms of this Development Agreement shall be vested upon issuance of a final plat development order for the development issued within five (5) years from the effective date of the ordinance which adopts the Planned Development Plan unless the City Commission, for good cause shown, extends the time period indicated in this paragraph. If not vested by said date, the Planned Development Plan shall expire and will be of no further force or effect and no development shall occur on the subject property until it is rezoned. The City Commission may rezone the subject property as may be necessary or appropriate to protect adjoining properties or the public health, safety and welfare if the Planned Development Plan expires.

IN WITNESS WHEREOF, the City and the Applicant have caused this First Amendment to the DeLand Tech Park Planned Development Agreement to be duly executed by their authorized representatives as of the last date entered below.

(Signatures on Following Pages)

ATTEST:

City Commission of DeLand Florida

Michael Pleus
City Manager

Christopher M. Cloudman
Mayor

STATE OF FLORIDA

CITY OF DELAND

The foregoing instrument was acknowledged before me by means of ☐ physical presence or ☐ online notarization this _____ day of _____ (mo/yr), by Michael Pleus and Christopher M. Cloudman, as City Manager and Mayor, City of DeLand, respectively, on behalf of the City of DeLand, and who are personally known to me.

NOTARY PUBLIC, STATE OF FLORIDA

Type or Print Name:

Commission No.: _____

My Commission Expires: _____

WITNESSES

LONGLEAF FOUR, LLC

Print Name

Sign Name

Print Name

Sign Name

By: _____

Print: Harry F McNaught

Title: Manager

Date: _____

STATE OF _____

COUNTY OF _____

The foregoing instrument was acknowledged before me by means of ☐ physical presence or ☐ online notarization this ____ day of _____, 2024, by Harry F. McNaught, as Manager of **LONGLEAF FOUR, LLC**, who is personally known to me or has produced _____ as identification.

Seal

Notary Public

Type or Print Name: _____

Commission No. _____

My Commission Expires: _____

WITNESSES

STONEKIRK VENTURES, LLC

Print Name

Sign Name

Print Name

Sign Name

By: _____

Print: _____

Title: _____

Date: _____

STATE OF _____

COUNTY OF _____

The foregoing instrument was acknowledged before me by means of ☐ physical presence or ☐ online notarization this ____ day of _____, 2024, by _____, as _____ for and on behalf of **STONEKIRK VENTURES, LLC**, who is personally known to me or has produced _____ as identification.

Seal

Notary Public

Type or Print Name: _____

Commission No. _____

My Commission Expires: _____

WITNESSES

W. L. Kirk Jr. Trustees and J. Scott Kirk

Print Name

Sign Name

Print Name

Sign Name

By: _____

Print: _____

Title: _____

Date: _____

STATE OF _____

COUNTY OF _____

The foregoing instrument was acknowledged before me by means of ☐ physical presence
or ☐ online notarization this ____ day of _____, 2024, by _____, as
_____, who is personally known to me or has produced _____
as identification.

Seal

Notary Public

Type or Print Name: _____

Commission No. _____

My Commission Expires: _____

WITNESSES

W. L. Kirk, Jr.

Print Name

Sign Name

Print Name

Sign Name

By: _____

Print: _____

Title: _____

Date: _____

STATE OF _____

COUNTY OF _____

The foregoing instrument was acknowledged before me by means of ☐ physical presence
or ☐ online notarization this ____ day of _____, 2024, by _____, as
_____, who is personally known to me or has produced _____
as identification.

Seal

Notary Public

Type or Print Name: _____

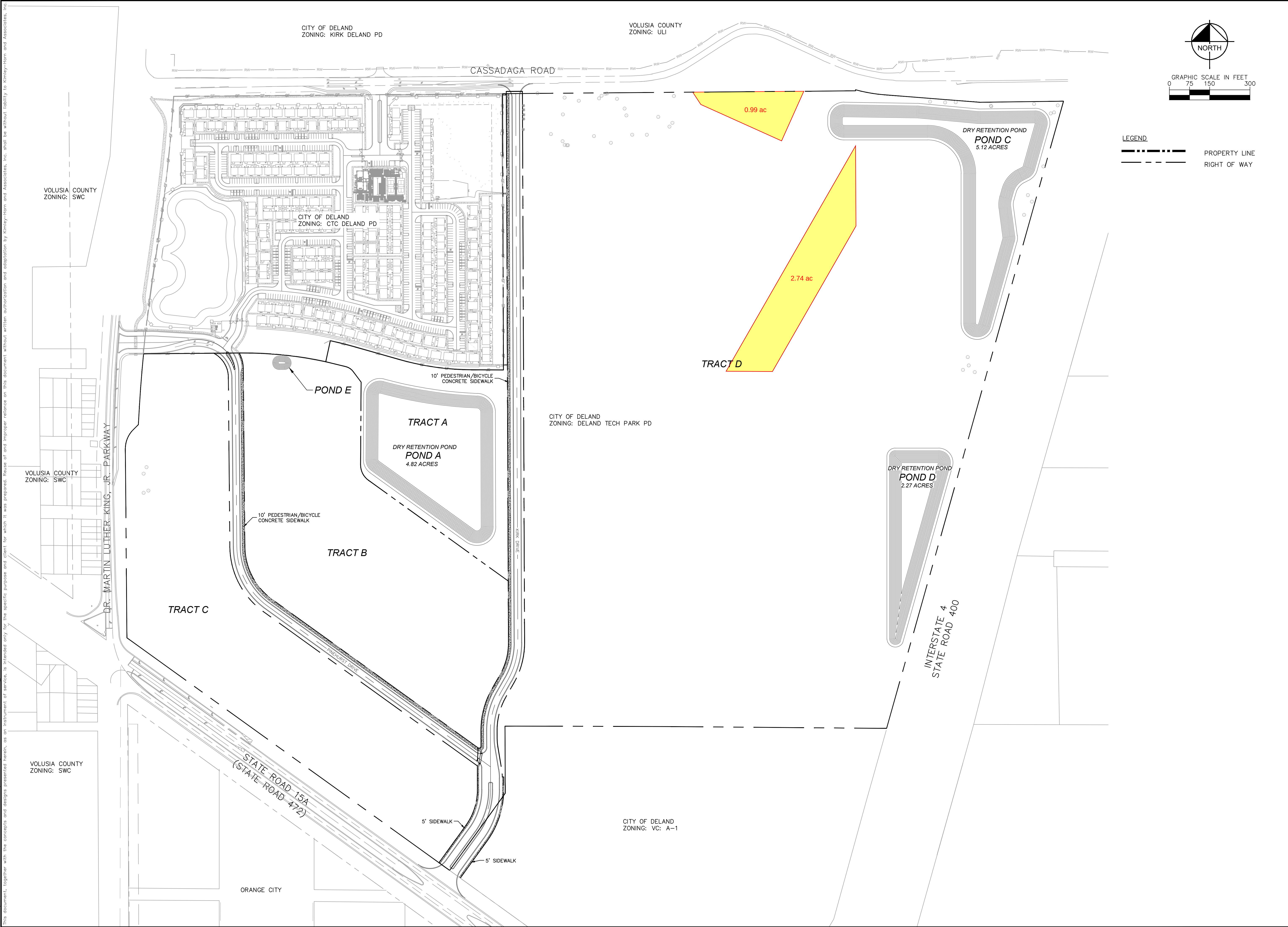
Commission No. _____

My Commission Expires: _____

Attachment A-1
Addendum to Legal Description

Exhibit B
Amended PD Plan

Plotted By: Ramirez, Joan Sheet Set: DELAND TECH PARK Layout: PG August 05, 2024 04:31:45pm K:\ORL_Civil\2418000-Deland Tech Park\CAADD\CONST\PlanSheets\C4.0-SITE.dwg
This document, together with the concepts and designs presented herein, 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.



DELAND TECH PARK	CITY OF DELAND	FLORIDA	OVERALL SITE PLAN	KHA PROJECT 249418000 DATE 7/15/2024 SCALE AS SHOWN DESIGNED BY DRAWN BY CHECKED BY	JEFFREY R. SWISHER, P.E. FLORIDA LICENSE NUMBER 60275	Kimley»Horn © 2024 KIMLEY-HORN AND ASSOCIATES, INC. 200 S. ORANGE AVENUE, SUITE 600, ORLANDO, FL 32801 WWW.KIMLEY-HORN.COM CA-00000696	REVISIONS		BY	DATE
							No.			



225 E. Robinson Street
Suite 300
Orlando, FL 32801
407.839.4006
Certificate of Authorization
Number FL #7932

DESIGN NARRATIVE

THE LANDSCAPE DESIGN GOAL FOR THE DELAND TECH PARK IS TO CREATE A UNIFYING LANDSCAPE CHARACTER AND SETTING WITH THE SURROUNDING ENVIRONMENT THAT IS INVITING, SAFE, AND COMPLEMENTS THE EXISTING LANDSCAPE. CONSISTENCY IN LANDSCAPE MATERIALS, FORM, AND ORGANIZATION WILL COLLECTIVELY RESULT IN A COHERENT HIGH-QUALITY ENVIRONMENT ENCOURAGING CONSISTENT SITE DESIGNS FOR FUTURE BUILDING EXPANSIONS IN THIS PLANNED DEVELOPMENT AS WELL AS CREATE A STRONG "SENSE OF PLACE".

LANDSCAPE DESIGN OBJECTIVES

- ENHANCE PEDESTRIAN CONNECTIONS- REINFORCING LINKS FROM OUTSIDE THE PLANNED DEVELOPMENT TO THE COMMERCIAL AND INDUSTRIAL DEVELOPMENT.
- MAINTAIN VIEWS INTO THE PLANNED DEVELOPMENT.
- MAXIMIZE OPPORTUNITIES TO INTEGRATE THE EXISTING CANOPY TREES.
- CELEBRATE BUILDING FORMS AND SPACES THAT IS AN INVITING, SOFT GATHERING AREA SURROUNDED BY GREEN SPACE, SEATING AND ACCENT PAVING.
- MAXIMIZE THE USE OF CANOPY TREES TO CREATE SHADE AND FRAME WALKWAY EDGES, PARKING AND OPEN SPACES. REPLACE LOST CANOPY WITH NEW SHADE TREES WITHIN LANDSCAPE APPROVED PALETTE.
- USE PEDESTRIAN PAVEMENTS THAT MEET THE RECOMMENDED STANDARDS AND FIND WAYS TO REINFORCE BUILDING ENTRANCES WITH DECORATIVE PAVEMENT MATERIALS OR PATTERNS.
- MAXIMIZE HIGH-EFFICIENCY IRRIGATION AND WATER REUSE TO MEET THE LEED GREENWATER CLASSIFICATION.
- PLAN FOR HIGH-EFFICIENCY IRRIGATION USING RECLAIMED WATER AS POSSIBLE TO REDUCE POTABLE WATER CONSUMPTION.
- DESIGN UTILIZING WATER EFFICIENT LANDSCAPING TO HELP SATISFY LEED REQUIREMENTS

LANDSCAPE VISION STANDARDS

LANDSCAPE ARCHITECTURAL DEVELOPMENT MUST CONFORM TO CITY OF DELAND'S REGULATIONS. KEY CONSIDERATIONS INCLUDE:

PLANTINGS

- PRESERVE EXISTING MAJOR CANOPY TREES WHERE POSSIBLE AND INCORPORATE INTO PLANTING DESIGN.
- MAINTAIN EXISTING MAJOR CANOPY TREES WHERE POSSIBLE AND INCORPORATE INTO PLANTING DESIGN.
- PATHWAYS, PLANTINGS ALSO PROVIDE DISTINCT VISUAL IDENTITY AT ENTRIES AND CREATE AN ATMOSPHERE CONDUCTIVE TO ITS USERS.
- APPROPRIATELY SCALED TREE, SHRUB, AND HEDGE PLANTINGS ENHANCE THE USE AND MICROCLIMATE OF THE SITE. NATIVE PLANTS WITHIN NATURAL COMMUNITY ASSOCIATIONS ARE THE HIGHEST PLANTING PRIORITY.
- PROVIDE ATTRACTIVE AND SUSTAINABLE PLANTINGS.
- FRIENDLY NONNATIVES - SPECIES THAT ARE NON-INVASIVE, DROUGHT TOLERANT AND HISTORICALLY ASSOCIATED WITH A FLORIDA LANDSCAPE.
- COLORFUL ORNAMENTAL TREES AND PALMS IN A SIMPLE GROUNDCOVER, MULCHED OR NATIVE LANDSCAPE "TERRACE" MAKES UP THE BUILDING FOUNDATION PLANTINGS. PLANT MATERIALS AT ENTRANCES WILL BE SELECTED FOR YEAR-ROUND ATTRACTIVENESS.

WALKWAYS

- WALKWAYS SHOULD BE CONSTRUCTED OF LIGHT-COLORED PAVEMENTS WITH ACCENT PAVING AT NODES AS WANDERING ELEMENTS AND SHOULD BE CONSISTENT THROUGHOUT THE DEVELOPMENT.
- WALKWAY SIZE SHOULD ACCOMMODATE PEDESTRIAN AND BICYCLE FLOWS.
- PEDESTRIAN WALKWAYS SHOULD BE A MINIMUM WIDTH OF TWELVE FEET.
- COMBINED PEDESTRIAN/BICYCLE WALKS SHOULD HAVE A MINIMUM WIDTH OF TWELVE FEET.

SITE FURNISHINGS

- BICYCLE RACKS - BICYCLE PARKING SHOULD BE LOCATED NEAR BUILDING ENTRANCES WITH GOOD VISIBILITY ON PAVED AREAS AND CONFIGURED TO THE LANDSCAPE WITH SUFFICIENT RACKS PROPORTIONAL TO WHAT IS REQUIRED BY THE CITY OF DELAND. BICYCLE RACKS SHOULD BE PLACED NEAR SEATING.
- SEATING - BENCHES AT ENTRIES AND NODES ARE TO HAVE RAISED BACK AND SEAT STYLES TO MEET THE ESTABLISHED CAMPUS STANDARD. SEAT WALLS MAY BE USED WHERE APPROPRIATE AND ARE TO COMPLEMENT BUILDING MATERIALS AND FINISHES.

LIGHTING

- PRIMARY WALKWAYS ARE TO BE ILLUMINATED BY VISIBLE SOURCE LED LIGHT FIXTURES INSTALLED ON PEDESTRIAN LIGHT POLES, 12 TO 15 FEET IN HEIGHT WITH SPACING TO MEET THE RECOMMENDED FOOT CANDLE REQUIREMENT.
- SPECIALTY LIGHTING SHOULD BE PROVIDED FOR BUILDING FACADES AND PLAZA ENTRY SPACE. EXTERIOR LIGHTING OF BUILDINGS COMPLEMENTS WALKWAY FIXTURES.

IRRIGATION

THE DESIGN INTENT OF THE LANDSCAPE IRRIGATION SYSTEM(S) IS TO CREATE THE MOST EFFICIENT IRRIGATION SYSTEM POSSIBLE WHILE MAINTAINING FLEXIBILITY TO ADAPT TO A NUMBER OF SEASONAL AND REGULATORY REQUIREMENTS. THE IRRIGATION SYSTEM IS DESIGNED USING VARIOUS HYDRO-ZONES WITH PLANT MATERIALS OF SIMILAR WATERING REQUIREMENTS TO REDUCE THE AMOUNT OF WATER REQUIRED. IT SHOULD ALSO HAVE THE ABILITY TO DRAW FROM SEVERAL WATER SOURCES (POTABLE, RECLAIMED AND/OR RECYCLED WATER) DEPENDENT ON WATER AVAILABILITY TO ENSURE THAT ADEQUATE WATER IS AVAILABLE AT ALL TIMES WHILE REDUCING POTABLE WATER USE.

THE DESIGN OBJECTIVES FOR THE IRRIGATION SYSTEM ARE AS FOLLOWS:

- IRRIGATION SYSTEMS MUST BE DESIGNED TO CONFORM TO CITY OF DELAND'S LAND DEVELOPMENT REGULATIONS AND MEET VOLUSIA COUNTY'S WATERWISE LANDSCAPE IRRIGATION ORDINANCE REQUIREMENTS AND THE POTENTIAL FOR WATER AVAILABILITY AND STRICT WATER RESTRICTIONS AND ACCOMMODATE FOR BOTH.
- DESIGN A SYSTEM THAT HAS THE ABILITY OF WATERING TWICE PER WEEK AT A RATE OF 1-1/2" (UP TO 1/2" OF WATER PER IRRIGATION ZONE CAN BE APPLIED ON THE DESIGNATED DAY), AND IS CAPABLE ENOUGH TO WATER THAT SAME AMOUNT 1X PER WEEK WHEN TIGHT WATER RESTRICTIONS ARE IN EFFECT.
- IMPLEMENTATION OF MICRO ZONE AREAS THAT REQUIRE LITTLE TO NO WATER FROM AREAS REQUIRING AVERAGE AMOUNTS OF WATER.
- UTILIZE DRIP AND SPRAY HEAD IRRIGATION FOR SHRUBS AND GROUNDCOVERS AND BUBBLERS FOR TREES LARGER THAN 3-1/2" CALIPER.
- UTILIZE SPRAY HEADS FOR ALL SMALL TURF GRASS AREAS AND BIO-SWALES.
- UTILIZE ROTOR HEADS FOR LARGE TURF AREAS.
- IRRIGATION SYSTEM SHOULD INCLUDE CENTRAL CONTROLLER TECHNOLOGY FOR MONITORING AND MANAGEMENT OF THE IRRIGATION SYSTEM, ALLOWING SPRAY HEADS TO BE TURNED OFF OR DOWN WHEN NOT NEEDED.
- PROVIDE A FLEXIBLE SYSTEM, ALLOWING SPRAY HEADS TO BE TURNED OFF OR DOWN WHEN NOT NEEDED, PARTICULARLY WITHIN BIO-SWALES.

EXHIBIT E

DeLand Tech Park PD

City of Deland, Florida

Project Name	City of Deland, Florida
Project Number	
Project Location	
Project Date	
Project Status	
Project Manager	
Project Engineer	
Project Designer	
Project Checker	
Project Approver	
Project Date	March 21, 2022

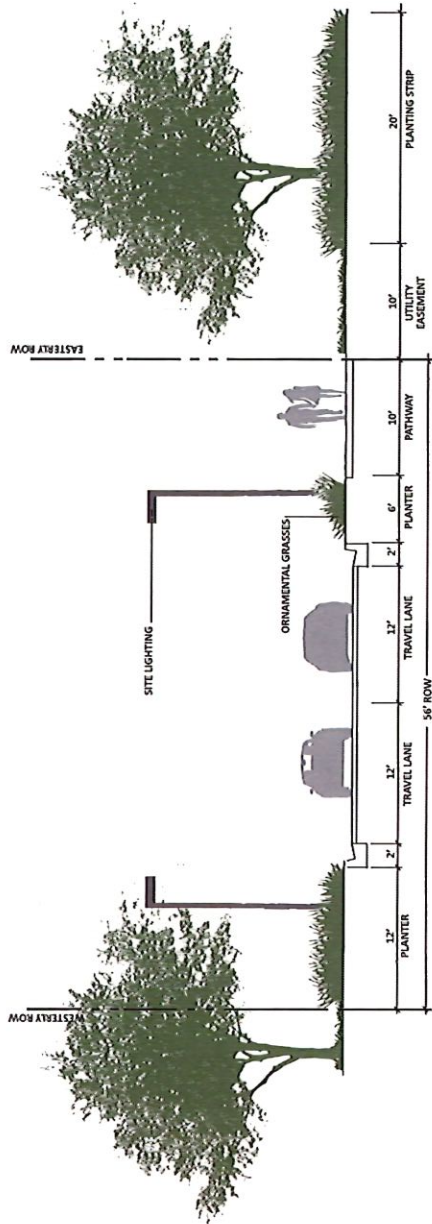
Vertical Datum NAVD 1988

Design Intent
Narrative

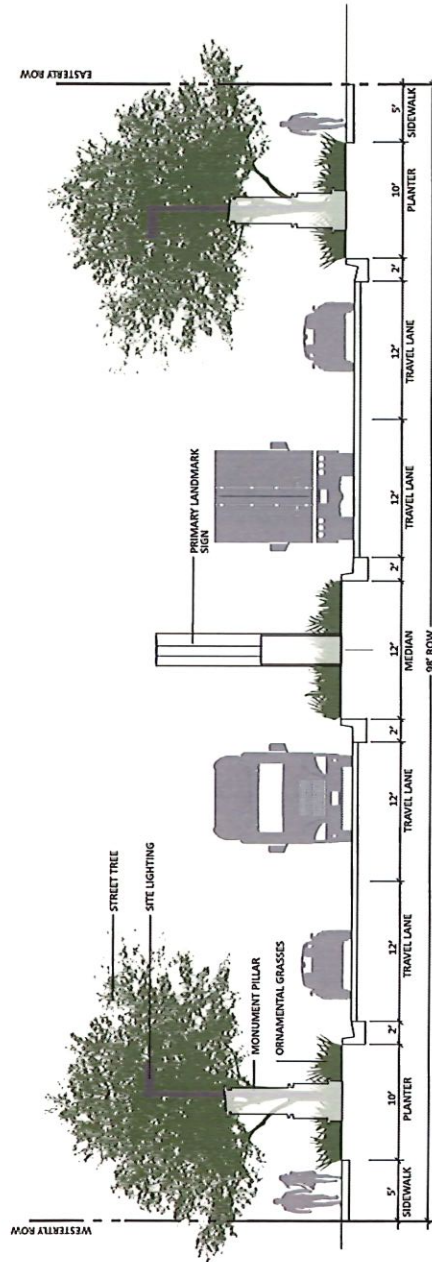
L1.00

DATE: Sept. 29, 2022 640564-00

TYPICAL ROADWAY CROSS-SECTIONS



PINEHURST DRIVE TYPICAL ROAD SECTION FROM KIRK DR TO EW CONNECTOR TO MLK BELTWAY (A)



KIRK DRIVE TYPICAL ROAD SECTION - SOUTH OF PINEHURST DRIVE TO SR 472 (B)

DeLand Tech Park PD

City of DeLand, Florida

Project No. _____

Sheet No. _____

Scale _____

Revision _____

Drawn By _____

Check By _____

Date _____

March 21, 2022

Vertical Datum NAVD 1988

Typical Roadway

Cross-Sections

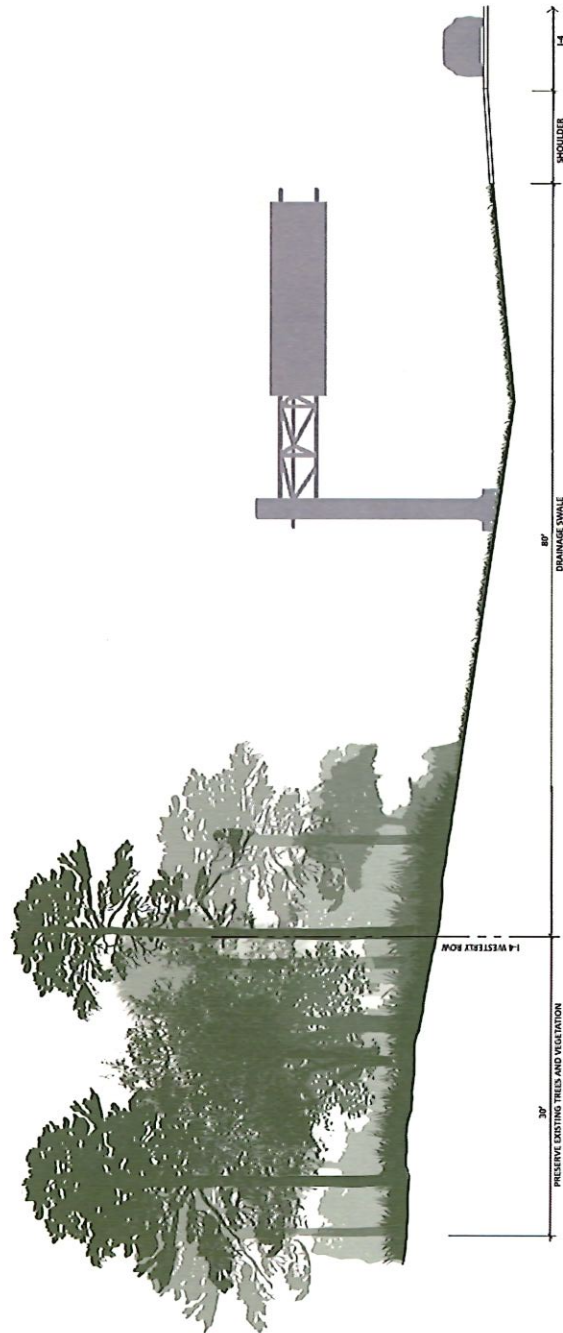
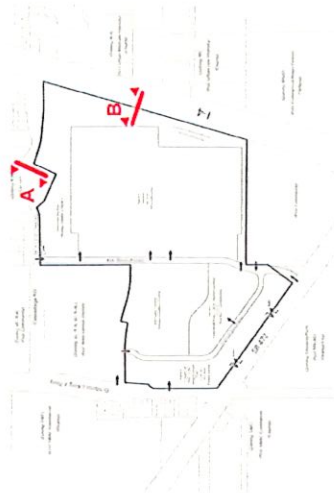
L1.01

DATE: Sept. 20, 2022

64054.00

A cross-section diagram of a proposed road improvement project. The diagram shows a road with a 30' wide 'PRESERVE EXISTING TREES AND VEGETATION' zone on the left, a 'GRASS SHOULDER' on the right, and 'CASSADAGA ROAD' at the top. A '30' W' dimension line spans the width of the road and shoulder area.

TYPICAL SECTION FOR TREE PROTECTION AREA ALONG CASSADAGA ROAD (A)



TYPICAL SECTION FOR TREE PROTECTION AREA ALONG I-4 (B)

DeLand Tech Park PD

City of DeLand, Florida

[illegible]

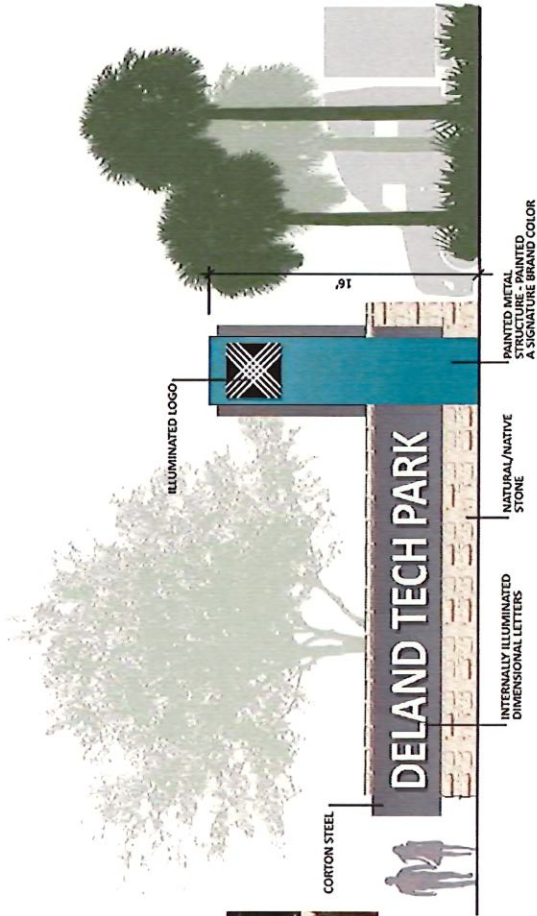
Vertical Datum NAVD 1988

Typical Tree Protection Cross-Sections

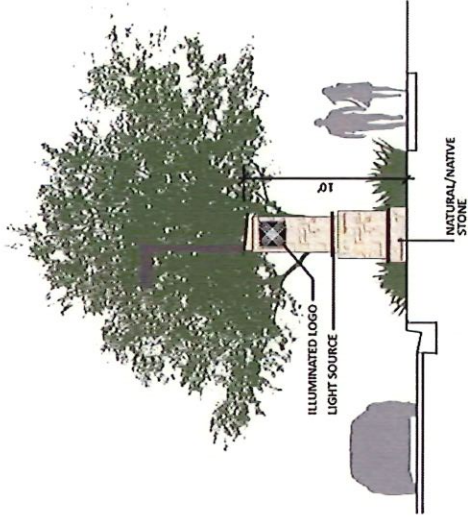
L1.03

DATE Sept. 29, 2022

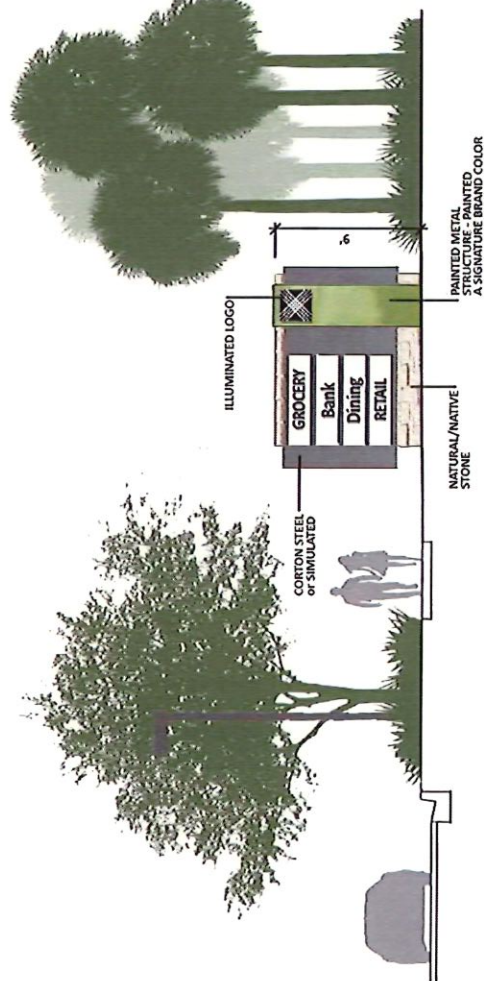
CONCEPTUAL SIGN ELEVATIONS -- OPTION 2



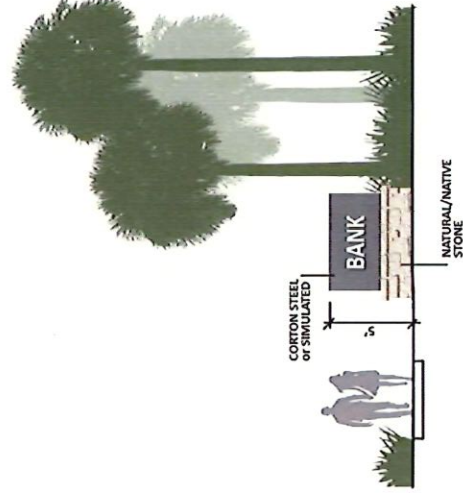
PRIMARY LANDMARK SIGN



MONUMENT PILLAR



COMMERCIAL MULTI-TENANT SIGN



COMMERCIAL SINGLE TENANT SIGN

DeLand Tech Park PD

City of DeLand, Florida

Project No. 2022-001

Project Name

Project Location

Project Date

Project Status

Project Manager

Project Engineer

Project Designer

Project Checker

Project Approver

Project Date

Project Status

Project Manager

Project Engineer

Project Designer

Project Checker

Project Approver

Project Date

Project Status

Project Manager

Project Engineer

Project Designer

Project Checker

Project Approver

Project Date

Project Status

Project Manager

Project Engineer

Project Designer

Project Checker

Project Approver

Project Date

Project Status

Project Manager

Project Engineer

Project Designer

Project Checker

Project Approver

L1.06

DATE: Sept. 29, 2022

64054.00

- LIGHTING**
- PRIMARY WALKWAYS ARE TO BE ILLUMINATED BY VISIBLE SOURCE LED LIGHT FIXTURES INSTALLED ON PEDESTRIAN SCALE 12' TO 15' TALL POLES. THE LIGHTING IS TO MEET THE REQUIREMENTS OF THE IESNA AND THE CITY OF ORLANDO. THE LIGHTING IS TO BE PROVIDED FOR BUILDING FACADES AND PLAZA ENTRY SPACE. EXTERIOR LIGHTING OF BUILDINGS COMPLEMENTS WALKWAY FIXTURES.



PEDESTRIAN LIGHT BOLLARD - MILLENIA



PEDESTRIAN LIGHTING - MILLENIA



SITE LIGHTING - MILLENIA FIXTURE



PEDESTRIAN LIGHT BOLLARD - SOLANA



PEDESTRIAN LIGHTING - SOLANA



SITE LIGHTING - SOLANA FIXTURE

SOLAR PANELS



- SOLAR PANELS**
- SOLAR PANELS USED TO OFFSET ENERGY COSTS
 - REDUCES CARBON FOOTPRINT AND IMPROVES PUBLIC HEALTH
 - RENEWABLE ENERGY ALSO IMPROVES PUBLIC HEALTH

DeLand Tech Park PD

City of DeLand, Florida

Project Name	DeLand Tech Park PD
Location	City of DeLand, Florida
Client	City of DeLand, Florida
Architect	Vertical Datum NWD 1988
Engineer	Typical Light Fixtures
Date	March 21, 2022

Vertical Datum NWD 1988

Typical Light Fixtures

L1.10

DATE: Sept. 20, 2022 64054.00



FLORIDA NATIVE PLANT MATERIAL

WAX MYRTLE

SABAL PALM

SLASH PINE

SOUTHERN MAGNOLIA

LIVE OAK

STYCAMORE

FIREBUSH

HOLLY FERN

WALTER VIBURNUM

CORDGRASS

RUSTY LYONIA

BLANKET FLOWER

MUHLY GRASS

YARROW HOLLY

COONTIE FERN

SAW PALMETTO

SWORD FERN

FAKANATCHEE GRASS

DeLand Tech Park PD

[illegible]

- PLANTINGS
 - APPROPRIATELY SCALED TREE, SHRUB, AND HEDGE PLANTINGS ENHANCE THE USE AND MICROCLIMATE OF THE SITE. NATIVE PLANTS WITHIN NATURAL AREAS SHOULD BE MAINTAINED TO PROMOTE PLANTING PRIORITY, PROVIDING ATTRACTIVE AND SUSTAINABLE PLANTINGS.
 - IN MORE FORMAL ENTRY AREAS, THE PLANTINGS SHOULD BE MIXED WITH COLORFUL, FLORIDA FRIENDLY, NON-INVASIVE SPECIES THAT ARE DROUGHT-TOLERANT AND HISTORICALLY ASSOCIATED WITH A COLONIAL OR ORNAMENTAL TREES AND PALMS IN A SIMPLE GROUND COVER, MULCHED OR NATIVE LANDSCAPE "TERRACE" MAKES UP THE BUILDING FOUNDATION PLANTINGS. PLANT SPECIES SHOULD BE SELECTED FOR YEAR-ROUND ATTRACTIVENESS.

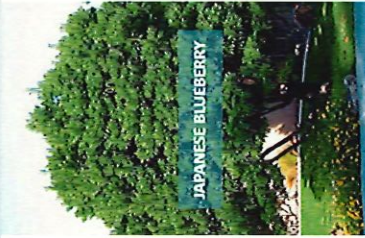
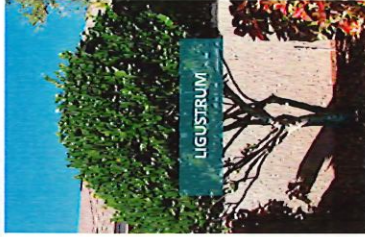
FLORIDA-FRIENDLY PLANT MATERIAL

FLORIDA FRIENDLY PLANT LIST	
BOTANICAL NAME	COMMON NAME
CANOPY TREE	
Quercus nuttallii	Nuttall Oak
SMALL TREE	
Callistemon viminalis	Boleynush
Elaeagnus argentea	Japanese Silverberry
Erubodrys japonica	Leopard
Lagerströmia indica	Crape Myrtle
Quercus japonica	Japanese Oak
Salix purpurea	Willow
Tabebuia caribaea	Silver Trumpet Tree
Tabebuia imbricaria	Purple Trumpet Tree
Tabebuia umbellata	Yellow Trumpet Tree
Ulmus parvifolia	Chinese Elm
PALM TREES	
Arenga engelmannii	Sugar Palm
Bismarckia nobilis	'Silver Select'
Chorizanthe indica	Chinese Fan Palm
Phoenix chinensis	Chinese Palm
Phoenix dactyloides	King of Date Palm
Phoenix roebelenii	Medford Date Palm
Phoenix roebelenii	Pilgrimage Palm
SHRUBS	
Agave americana	Blue Lily of the Nile
Allamanda cathartica	'Yellow Allamanda'
Alseodaphne indica	Shell Ginger
Abutilon	Scarlet Hibiscus
Abutilon	'Tricolor'
Alseodaphne indica	Cat Claw Plant
Alseodaphne indica	Cat Claw Plant
Dianella laurifolia	Variegated Flax Lily
Ficus religiosa	Ficus religiosa
Calceolaria	Calceolaria

DeLand Tech Park PD

[illegible]

- PLANTING:
 - APPROPRIATELY SCALED TREE, SHRUB, AND HERB PLANTINGS ENHANCE THE USE AND MICROCLIMATE OF THE SITE. NATIVE PLANTS WITH NATURAL STYLING ARE PREFERRED FOR THE HIGHEST PLANTING PRIORITY PROVIDING ATTRACTIVE AND SUSTAINABLE PLANTINGS.
 - IN MORE FORMAL ENTRY AREAS, THE NATIVE PLANT PALETTE IS AUGMENTED WITH NON-NATIVE SPECIES THAT ARE NON-INVASIVE, DROUGHT TOLERANT AND HISTORICALLY ASSOCIATED WITH A FLORIDA LANDSCAPE.
 - NATIVE TREES AND PALMS IN A SIMPLE GROUNDCOVER MULCHED OR NATIVE LANDSCAPE "TERRACE" MAKES UP THE BUILDING FOUNDATION PLANTINGS. PLANT SELECTION IS DONE WITH CARE TO BE SELECTED FOR YEAR-ROUND ATTRACTIVENESS.



AMENDED LEGAL DESCRIPTION

LONGLEAF FOUR, LLC/DELAND TECH PARK

All that tract or parcel of land situate in Section 6, Township 18 South, Range 31 East, Volusia County, Florida, being more particularly described as follows:

Commence at the Northwest corner of said Section 6, thence proceed North 89°53'22" East, along said Northerly line, a distance of 312.84' to the Southwest corner of Section 36 of Township 17 South, Range 31 East; thence continue along said Northerly line, North 89°54'31" East, a distance of 1088.49'; thence departing said Northerly line, South 00°14'12" East, a distance of 1392.56' to the Southerly monumented Right of Way line of Cassadaga Road (County Road 4139) and the **Point of Beginning**; thence North 89°19'39" East, along said Southerly Right of Way line, a distance of 527.85' to the beginning of a curve concave to the Northwest, having a Radius of 300.00', a Central Angle of 25°44'19", a Chord Bearing of North 76°27'29" East, a Chord Distance of 133.64', and an Arc Length of 134.77' to a Point of Cusp of said curve; thence departing said curve, continue along said monumented Southerly Right of Way line, South 42°48'57" East, a distance of 117.98'; thence continue, South 65°48'52" East, a distance of 328.72'; thence continue, North 24°09'13" East, a distance of 279.20'; thence continue, South 72°13'09" East, a distance of 170.39' to the Point of Curvature of a curve concave to the Northeast, having a Radius of 763.41', a Central Angle of 12°48'53", a Chord Bearing of South 78°37'35" East, a Chord Distance of 170.39', and an Arc Length of 170.74' to the Point of Tangency; thence continue, South 85°02'02" East, a distance of 296.20'; thence continue North 89°17'02" East, a distance of 313.15' to the intersection of said monumented southerly Right of Way line of said Cassadaga Road and the Westerly Limited Access Right of Way line of Interstate 4 (State Road 400) as shown on Florida Department of Transportation Right of Way Map, Section 79110, Financial Project 242655-1; thence departing said Southerly Right of Way line, thence South 15°45'27" West, along said Westerly limited Access Right of Way line, a distance of 2,426.29' to the intersection of said Westerly Limited access Right of Way line and the Southerly line of the North one-half of Government Lot 7 of said Section 6; thence departing said Westerly Limited Access Right of Way line, North 89°30'27" West, along said southerly lines of said Government Lot 7 and Government Lot 6, a distance of 802.87' to the Southeast corner of Lot 19 of Yourlando Farms and Groves, according to the Map of Plat recorded in Map Book 10, Pages 227-228, Public Records of Volusia County, Florida; thence North 89°50'30" West, along the South lines of Lots 19 and 20 of said Plat, a distance of 617.69 feet to the Southwest corner of said Lot 20, also being the Northeast corner of Lot 27 of said Plat; thence South 00°14'50" East, along the Easterly line of Lot 27, a distance of 250.09' thence departing said Easterly line, South 35°50'28" West, a distance of 354.28' to the Northerly Right of Way line of State Road 472, as shown on said Florida Department of Transportation Right of Way Map, thence North 54°12'12" West, along said Northerly Right of Way line, a distance of 1,481.04' to the intersection of said Northerly Right of Way line, and the Easterly Right of Way line of Dr. Martin Luther King, Jr Beltway as shown on Volusia County, Florida Right of Way Map, Project 1113-3; thence departing said Northerly Right of Way line, North 00°27'52" West, along said Easterly Right of Way line, a distance of 703.97' to the Point of Curvature of a curve concave to the Southeast, having a Radius of 98.00', a Central Angle of 45°56'03", a Chord Bearing of North 22°30'10" East, a Chord Distance of 76.55' and an Arc length of 78.64' to the Point of Tangency; thence continue North 45°28'12" East, a distance of 26.79' to a Point of Cusp on a curve concave to the East, having a Radius of 5,629.58', a Central Angle of 02°41'25", a Chord Bearing of North 04°08'35" East, a Chord Distance of 264.31' and an Arc Length of 264.33'; thence departing said curve and said Easterly Right of Way, North 89°29'37" East, a distance of 361.47' to the Point of Curvature of a curve concave to the South, having a Radius of 1,440.00', a Central Angle of 12°42'11", a Chord Bearing of South 84°07'35" East, a Chord distance of 318.61', and an Arc Length of 319.26' to the end of said Curve; thence North 12°13'31" East, a distance of 80.00' to the beginning of a non-tangent curve concave to the Southwest, having a Radius of 1520.00', a Central Angle of 03°39'55", a Chord Bearing of South 75°56'32" East, a Chord Distance of 97.22', and an Arc Length of 97.24' to the end of said curve; thence South 74°06'34" East, a distance of 169.10' to the Point of Curvature of a curve concave to the North, having a Radius of 1,000.00', a Central Angle of 15°36'56", a Chord Bearing of South 81°55'02" East, a Chord Distance of 271.70', and an Arc Length of 272.54 feet to the Point of Tangency being on Southerly line of said Government Lot 4;

thence South 89°43'30" East, along said Southerly line, a distance of 118.80' to the Northwest corner of said Lot 17, also being the Southeast corner of said Government Lot 4; thence North 00°14'21" West, along the Easterly line of said Government Lot 4, a distance of 1,036.68' to the **Point of Beginning**.

Said tract or parcel contains **143.24 Acres**, More or Less.

TOGETHER WITH

That portion of the South 1/2 of the East 1/2 of Government Lot 3, Section 6, Township 18 South, Range 31 East, Volusia County, Florida, lying within 75 feet of the centerline of the Interstate 4 frontage Road as shown on the Volusia County Right of Way Maps, Project No.4 738-1, being more particularly described as follows:

Commencing at the Southwest Corner of Government Lot 4, Section 6, Township 18 South, Range 31 East, Volusia County, Florida, being a 4" x 4" Concrete Monument stamped "VOL. CO. N/W GOV. LOT 5"; run thence South 89°42'30" East, along the South line of said Government Lot 4, and the South Line of aforesaid Government Lot 3, a distance of 2336.77 feet to a point on the Centerline of the Interstate 4 Frontage Road at Station 122+68.96, and the POINT OF BEGINNING; thence North 89°42'30" West, along said South Line of Government Lot 3, a distance of 86.25 to a point on the Westerly Right of Way line of the Interstate 4 Frontage Road; thence North 29°52'47" East, along said Right of Way line, a distance of 967.86 feet to a point on the East Line of aforesaid Government Lot 3; thence South 00°16'04" East, along said East line, a distance of 149.33 feet to a point on the aforesaid centerline at Station 130+65.10; thence continue South 00°16'04" East, along said East line, a distance of 149.33 feet to a point on the Easterly Right of Way line of the Interstate 4 Frontage Road; thence South 29°52'47" West, along said Right of Way line, a distance of 624.42 feet to a point on the South line of aforesaid Government Lot 3; thence North 89°42'30" West, along said South line, a distance of 86.25 feet to the POINT OF BEGINNING;

The Property Appraiser's Parcel Identification Number of the Property is: 8106-00-00-0071

The above-described parcel contains **2.74 Acres**, More or Less.

TOGETHER WITH

LEGAL DESCRIPTION (POND PARCEL TO LONGLEAF FOUR, LLC):

A PORTION OF THE SOUTH ½ OF GOVERNMENT LOT 3, SECTION 6, TOWNSHIP 18 SOUTH, RANGE 31 EAST, VOLUSIA COUNTY FLORIDA BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHEAST CORNER OF THE CANOPY TERRACE SUBDIVISION AS RECORDED IN MAP BOOK 63, PAGES 139 THROUGH 143 OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, SAID CORNER ALSO BEING THE NORTHWEST CORNER OF AFORESAID GOVERNMENT LOT 3; THENCE RUNS 00°14'47" E {S 00°14'44" E, PLAT), ALONG THE EAST LINE OF SAID CANOPY TERRACE SUBDIVISION AND THE WEST LINE OF SAID GOVERNMENT LOT), A DISTANCE OF 1300.54 FEET {1300.63', PLAT) TO A POINT ON THE NORTH RIGHT-OF-WAY LINE OF CASSADAGA ROAD AS DESCRIBED IN OFFICIAL RECORDS BOOK 3779, PAGE 3818 OF THE AFORESAID PUBLIC RECORDS; THENCE CONTINUE, S 00°14'47" E, ALONG THE WEST LINE OF SAID GOVERNMENT LOT 3, A DISTANCE OF 100.00 FEET TO ITS INTERSECT/ON SOUTH RIGHT-OF-WAY LINE OF SAID CASSADAGA ROAD; THENCE, DEPARTING THE WEST LINE OF SAID GOVERNMENT LOT 3, RUN N 89°31'01" E, ALONG THE EASTERLY EXTENSION OF THE SOUTH RIGHT-OF-WAY LINE OF CASSADAGA ROAD AS DESCRIBED IN SAID OFFICIAL RECORDS BOOK 3779, PAGE 3818, A DISTANCE OF 707.66 FEET TO ITS INTERSECT/ON WITH THE WESTERLY BOUNDARY LINE OF THOSE LANDS DEEDED TO THE COUNTY OF VOLUSIA IN OFFICIAL RECORDS BOOK 5243, PAGE 4423 OF THE AFORESAID

PUBLIC RECORDS AND THE POINT OF BEGINNING: THENCE CONTINUE N 89°31'01" E, A DISTANCE OF 414.52 FEET TO A POINT ON THE EASTERLY BOUNDARY LINE OF THOSE AFORESAID LANDS DEEDED TO COUNTY OF VOLUSIA IN OFFICIAL RECORDS BOOK 5243, PAGE 4423; THENCE, DEPARTING THE SAID EASTERLY EXTENSION, RUN ALONG THE BOUNDARY OF THOSE LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 5243, PAGE 4423 THE FOLLOWING THREE (3) COURSES, S 24°14'52" W {S 24°02'55" W, DEED), A DISTANCE OF 202.81 FEET; THENCE N 65°45'10" W (N 65°56'05" W, DEED), A DISTANCE OF 330.00 FEET; THENCE N 33°27'08" W, {N 33°38'05" W, DEED), A DISTANCE OF 55.02 FEET TO ITS INTERSECTION WITH THE AFORESAID EASTERLY EXTENSION OF THE SOUTH RIGHT-OF-WAY LINE OF CASSADAGA ROAD AND THE POINT OF BEGINNING.

THE ABOVE-DESCRIBED PARCEL CONTAINS 43,031 SQUARE FEET **(0.99 ACRES)** MORE OR LESS.

TOTAL ACREAGE: 146.97 acres, more or less

**PLANNING DEPARTMENT STAFF REPORT
TO
THE CITY OF DELAND PLANNING BOARD**

August 14, 2024

A. APPLICATION NO.: Z24-129

PLANNER: Emily Kunkel

APPLICANT: Cody Bogart, PE, *Newkirk Engineering, Inc.*

REQUEST: Change of zoning for +/- 9.51 acres from Volusia County A-3 (Transitional Agricultural) to City of DeLand R-1A (Single-Family Dwelling)

APPLICABLE REGULATIONS:

Sec. 33-135.02. Rezoning property or changing use categories

SITE FACTORS:

Location: 1338 West Plymouth Ave.
Parcel ID: 700700000050, 700700000051, & 700700000052
Size: +/- 9.51 acres
Existing Zoning: Volusia County: A-3 (Transitional Agricultural)
Existing Land Use: Low Density Residential (LDR)

	SURROUNDING USE:	SURROUNDING ZONING:
North:	VC: Urban Low Intensity	VC: A-3
South:	City: Low Density Residential	City: R-1AA
East:	VC: Urban Low Intensity	VC: A-3
West:	VC: Urban Low Intensity	VC: A-3

B. ANALYSIS:

The 9.51-acre site is located at 1338 West Plymouth Avenue and abuts undeveloped properties and existing residential dwellings. In September 2005, a request was made for an annexation (AN-05-11) and Future Land Use Amendment, from Volusia County Urban Low Intensity to City Low Density Residential (SMLU-05-06), and rezoning, from Volusia County A-3 to City of DeLand R-1AA (Z-05-15). The annexation (Ord. No. 2006-06) and Future Land Use Amendment (Ord. No. 2006-07) requests were approved by City Commission in February 2006, but the zoning change request (Z-05-15) was withdrawn by the applicant prior to City Commission. As a result, the property has been annexed into the City and has City of DeLand land use (Low Density Residential), but retained the Volusia County zoning (A-3).

Following the February 2006 approval, in July 2006, a rezoning request from Volusia County A-3 to City Planned Development (PD) (Z-06-13) was reviewed, but was continued to the September 2006 Planning Board meeting, and was ultimately withdrawn by the applicant prior to Planning Board review. Therefore, the property still retains the Volusia County zoning (A-3) and City of DeLand land use (Low Density Residential).

The applicant intends to develop the site into a church, which the City of DeLand zoning district, R-1A allows, but will require a special exception for the proposed church use, as well as an approved site plan. All requirements would need to be met at the time of site plan.

C. LAND DEVELOPMENT REGULATIONS:

Section 33-135 of the Land Development Regulations provides the following criteria, which the City Commission shall utilize in reviewing a rezoning request:

1. Is the proposed rezoning consistent with the Comprehensive Land Use Plan, the land use, zoning pattern and character of the surrounding area?

The rezoning is consistent with the Comprehensive Plan with an underlying land use designation of Low Density Residential (LDR) which is characterized by detached single-family dwelling units, and both agricultural and conservation land uses.

The proposed R-1A zoning designation is consistent with the Low Density Residential future land use and maintains the same general character of the surrounding area. There is also an existing church use across the street of this property.

2. Will the proposed rezoning have an impact upon the environment or natural resources?

The rezoning of this property should not impact any environment or natural resources. It is currently vacant, with minimal trees on the property. Any future development would be analyzed for environmental impacts at the time of the site plan request.

3. Will the proposed rezoning have an impact upon the economy of the affected area?

The proposed rezoning from an agricultural zoning to a residential zone district is not expected to have a negative impact on the economy of the affected area. Residential zone districts permit a variety of uses, including residential dwellings and institutional uses. At this time the site is anticipated to be developed as an institutional use which would be tax exempt. The applicant is providing adequate buffers and landscaping surrounding the property to mitigate offsite impacts.

4. Will the proposed rezoning have an impact upon governmental services?

The proposed rezoning is anticipated to have little to no impact on governmental services, as existing services, such as police and fire, are already available. Utilities and stormwater will be required to be brought into the site at the cost of the applicant, and any impacts will be analyzed at the time of the site plan request.

5. Are there changes in the circumstances or conditions affecting the area since the original assignment of zoning that will support the proposed zoning?

Since the original rezoning application in 2006, there have been no changes to property. The site has remained undeveloped. This site was previously orange groves/farmland and has continued to be vacant, and the surrounding area has remained as rural and existing uses.

6. Was there a mistake in the original classification?

Since 2006, the annexed site has been vacant with City of DeLand Land Use Designation (Low Density Residential), and Volusia County zoning (A-3). This rezoning will allow for this site to be consistent with the surrounding zoning districts and land uses.

7. Will the proposed rezoning have any effect upon the use or value of the affected area?

The subject property is located on thoroughfare that includes an existing mix of residential, vacant and commercial uses. The R-1A zoning request is appropriate for its location and is supported by both the underlying land use of Low Density Residential, as well as the City's Future Land Use Map. This property is abutting vacant land and a residential development to the south, across the street is also a church use.

If developed, all applicable development regulations will apply, including the architectural standards stated in Sec. 33-94, Community Design Standards.

8. Will the proposed rezoning have an impact upon public health, safety and welfare?

It is not anticipated that there will be any adverse impacts upon public health, safety, or welfare as a result of this zoning change, and this rezoning would be consistent with the surrounding land uses. Public services are available to serve the site and necessary improvements will be made by the developer.

D. STAFF RECOMMENDATION:

Staff recommends that the Planning Board forward the application to the City Commission with a recommendation of approval of zoning change from Volusia County A-3 (Transitional Agricultural) to City of DeLand R-1A (Single-Family Dwelling).

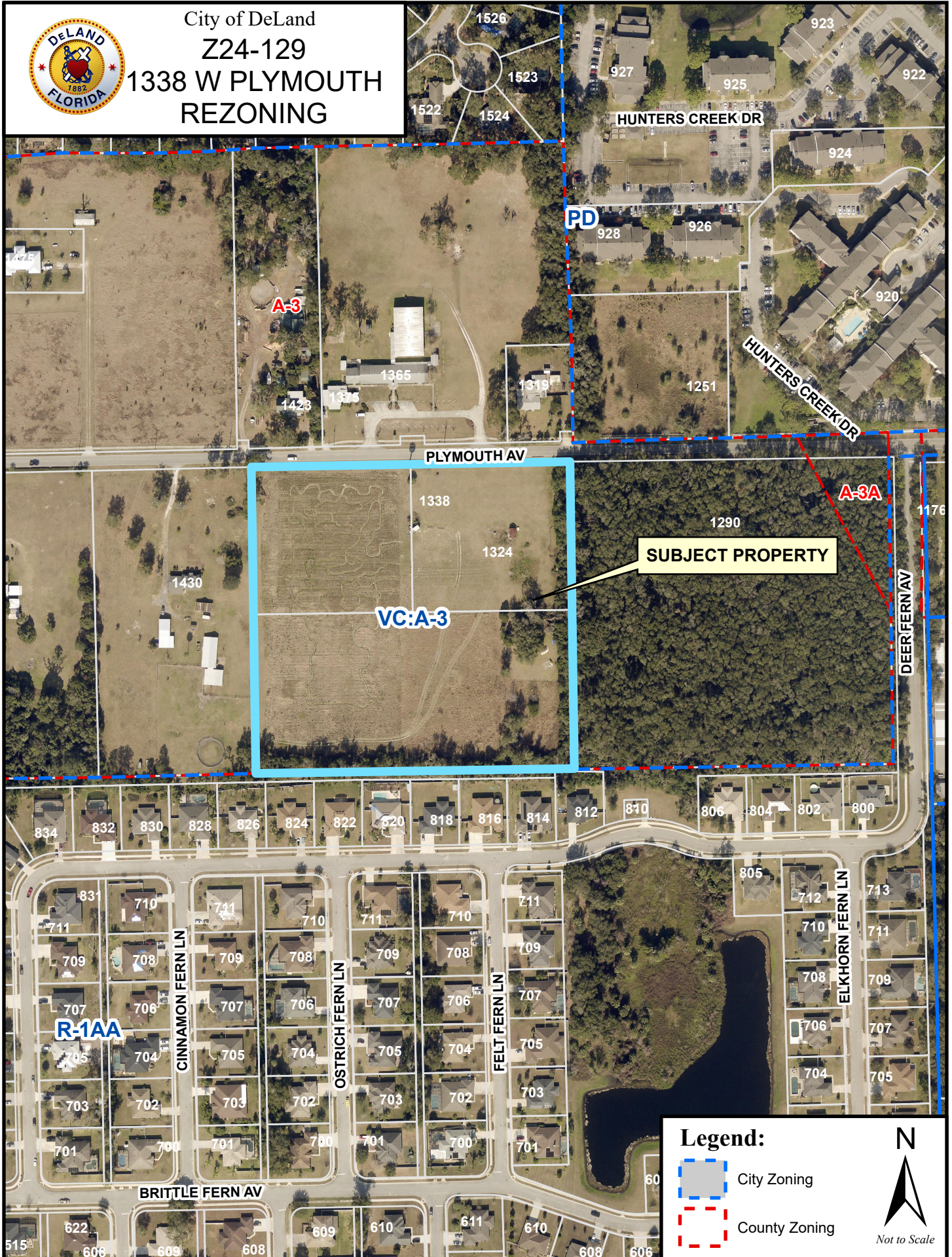


City of DeLand
Z24-129
1338 W PLYMOUTH
REZONING





City of DeLand
Z24-129
1338 W PLYMOUTH
REZONING



LEGAL DESCRIPTION

DESCRIPTION: (PER O.R. BOOK 8222, PG 386)

PARCEL 1

THE S. 1/2 OF THE NE 1/4 OF THE NW 1/4 OF THE NE 1/4, IN SECTION 7, TOWNSHIP 17 SOUTH, RANGE 30 EAST, VOLUSIA COUNTY, FLORIDA.

CONTAINING 221,480 SQUARE FEET OR 5.085 ACRES, MORE OR LESS

PARCEL 2

THE NW 1/4 OF THE NE 1/4 OF THE NW 1/4 OF THE NE 1/4, OF SECTION 7, TOWNSHIP 17 SOUTH, RANGE 30 EAST, VOLUSIA COUNTY, FLORIDA.

CONTAINING 96,587 SQUARE FEET OR 2.217 ACRES, MORE OR LESS

PARCEL 3

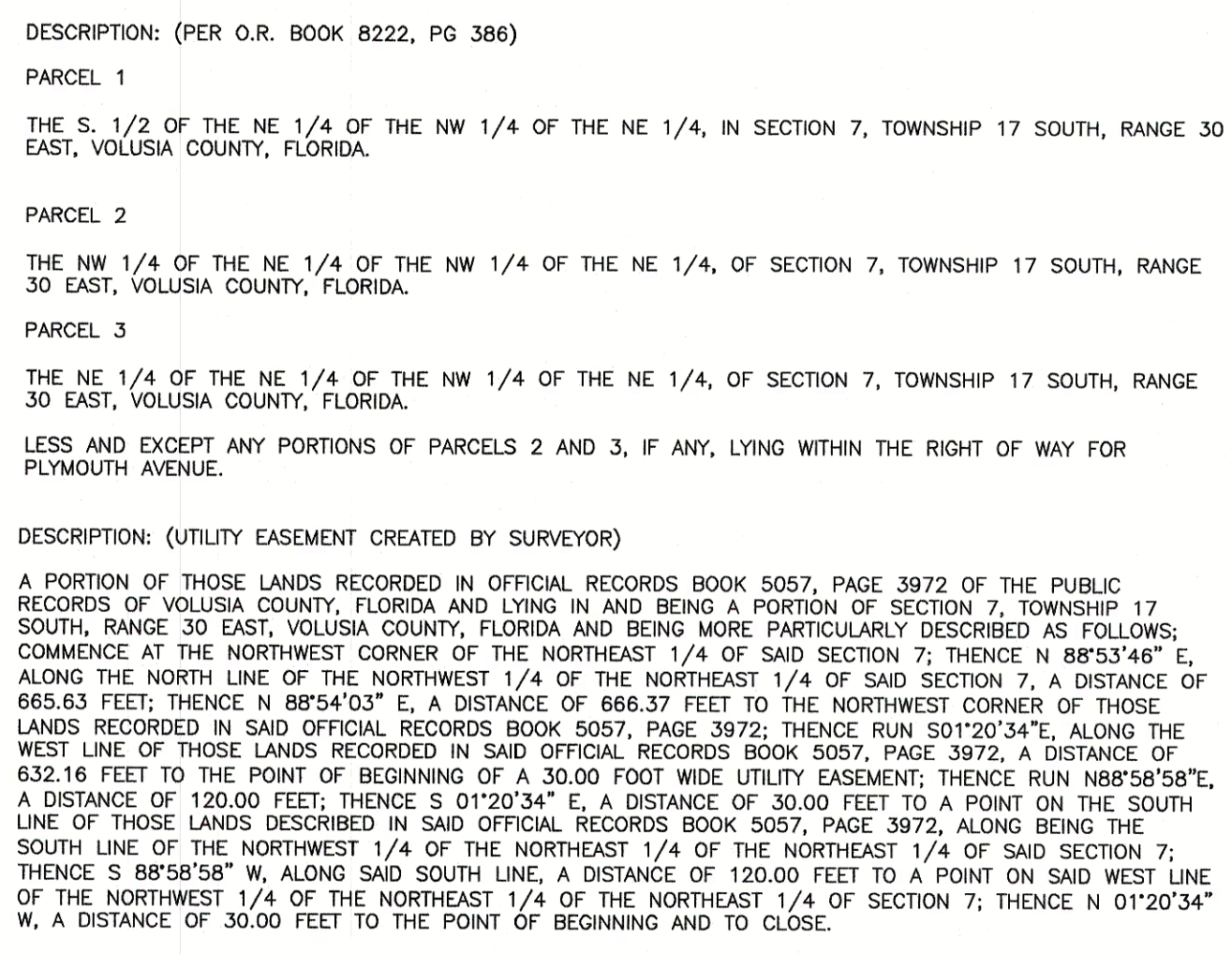
THE NE 1/4 OF THE NE 1/4 OF THE NW 1/4 OF THE NE 1/4, OF SECTION 7, TOWNSHIP 17 SOUTH, RANGE 30 EAST, VOLUSIA COUNTY, FLORIDA.

LESS AND EXCEPT ANY PORTIONS OF PARCELS 2 AND 3, IF ANY, LYING WITHIN THE RIGHT OF WAY FOR PLYMOUTH AVENUE.

CONTAINING 96,136 SQUARE FEET OR 2.207 ACRES, MORE OR LESS

TOGETHER CONTAINING 414,203 SQUARE FEET OR 9.509 ACRES, MORE OR LESS

DeLAND
VOLUSIA COUNTY, FLORIDA



NOTE:

THIS PLAT AND/OR SKETCH OF SURVEY IS CERTIFIED TO AND PREPARED FOR THE SOLE AND EXCLUSIVE BENEFIT OF THE ENTITIES AND/OR INDIVIDUALS SHOWN HEREON, ON THE MOST CURRENT DATE SHOWN, AND SHALL NOT BE RELIED UPON BY ANY OTHER ENTITY OR INDIVIDUAL. FURTHERMORE, THERE MAY BE ADDITIONAL RESTRICTIONS AND/OR OTHER MATTERS THAT ARE NOT SHOWN HEREON THAT MAY BE FOUND IN THE PUBLIC RECORDS OF THE COUNTY. THIS SURVEY /SKETCH IS PREPARED WITHOUT BENEFIT OF ABSTRACT OR TITLE SEARCH UNLESS OTHERWISE NOTED. ADDITIONS OR DELETIONS TO SURVEY MAPS OR REPORTS BY OTHER THAN THE SIGNING PARTY OR PARTIES IS PROHIBITED WITHOUT WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES. THIS SURVEY DRAWING IS THE PROFESSIONAL OPINION OF THIS SURVEYOR AND MAPPER AND THE FIRM, WHICH WAS PREPARED UTILIZING THE BEST AVAILABLE INFORMATION, AND AS SUCH DOES NOT CONSTITUTE A GUARANTEE OR WARRANTY, EITHER EXPRESSED OR IMPLIED. FURTHERMORE, THIS SURVEYOR AND FIRM DOES NOT ASSUME RESPONSIBILITY AND SHALL NOT BE HELD LIABLE FOR ANY DAMAGE OR LOSS OF INFORMATION FURNISHED TO THE SURVEYOR, WHICH WAS USED AS A BASIS IN THE PREPARATION OF THIS SURVEY DRAWING.

NOTES:

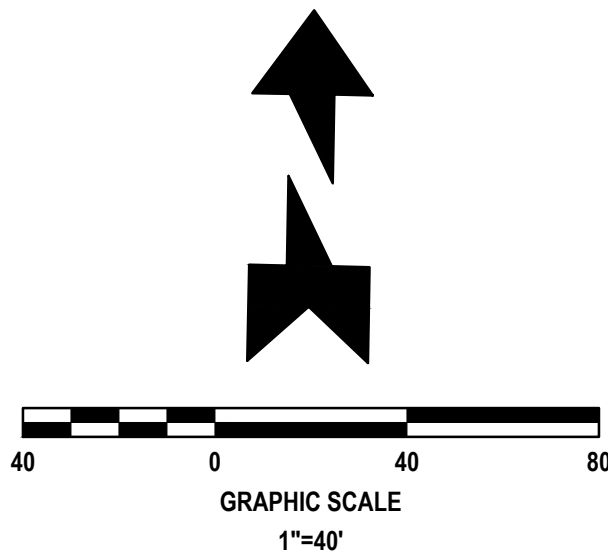
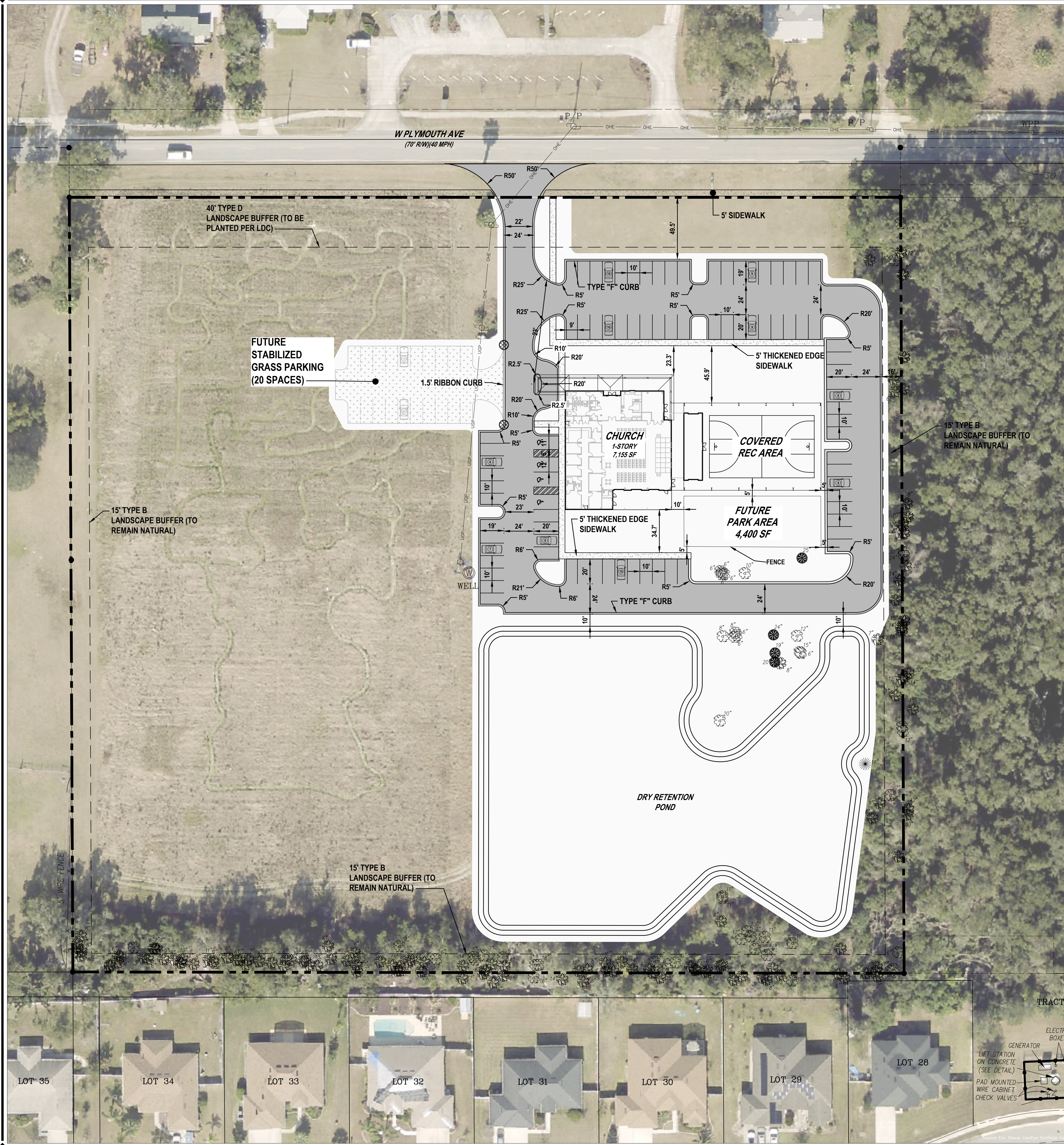
1. NO INSTRUMENTS OF RECORD REFLECTING EASEMENTS, RIGHT OF WAY AND/OR OWNERSHIP WERE FURNISHED TO THIS SURVEYOR EXCEPT AS SHOWN.
2. NOT VALID WITHIN THE SIGNATURE AND TRAIL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
3. NO UNDERGROUND IMPROVEMENTS OR INSTALLATIONS OR OTHER INTERIOR IMPROVEMENTS HAVE BEEN LOCATED, EXCEPT AS SHOWN, AS PER THE REQUEST OF THE CLIENT.
4. UNLESS NOTED, LEGAL DESCRIPTION FURNISHED BY CLIENT.
5. FEATURES SHOWN BY SYMBOL AS INDICATED IN THE LEGEND ARE NOT TO SCALE.
6. THIS SURVEY WAS PERFORMED WITHOUT BENEFIT OF A TITLE SEARCH, A TITLE SEARCH MAY REVEAL INFORMATION AFFECTING THE PARCEL.
7. WHERE APPLICABLE, MONUMENT DIAMETERS, ETC., AND/OR ILS OR LB NUMBERS ARE SHOWN NEAR RESPECTIVE SYMBOL ABOVE, UNLESS SHOWN IN LEGEND.
8. BEARINGS ASSUMED FROM PLAT, DEED, LEGAL DESCRIPTION.
9. UNLESS SHOWN, OR THOSE VISIBLE FEATURES IN THE IMMEDIATE VICINITY OF THE ABOVE DESCRIBED PARCEL BOUNDARY HAVE BEEN LOCATED.
10. SUBJECT PROPERTY LIES WITHIN ZONE "X", AREAS DETERMINED TO BE ABOUT 500 YEAR FLOOD PLAIN AND SHOWN ON FEMA EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP VOLUSIA COUNTY UNINCORPORATED COMMUNITY #12155, PLAT #1272-0045H, D DATED FEBRUARY 19, 2014. THIS FLOOD INSURANCE RATE MAP IS NOT A SURVEY AND NO RESPONSIBILITY IS TAKEN FOR THE ACCURACY OF SAID MAP.
11. ELEVATIONS SHOWN HEREON ARE BASED ON NAVD 1988 DATUM.

REVISED 9/26/2023 TO SHOW UPDATED SURVEY AND CREATE UTILITY EASEMENT	REVISED 3/20/2024 TO SHOW UPDATED SURVEY TREES AND TOPO
--	---

THIS SURVEY IS CERTIFIED TO AND PREPARED FOR THE SOLE AND
EXCLUSIVE BENEFIT OF THE ENTITIES AND/OR INDIVIDUALS SHOWN HEREON, ON THE MOST CURRENT
DATE SHOWN, AND SHALL NOT BE RELIED UPON BY ANY OTHER ENTITY OR INDIVIDUAL WHOMSOEVER

<u>ABBREVIATIONS:</u>			
A/C = AIR CONDITIONER (C) = CALCULATED CL = CENTERLINE CH = CHAIN LINK FENCE CONC. = CONCRETE CONC. CRSL = CONCRETE CRACK CM = CONCRETE MOUNTMENT (D) = DEED OR DESCRIPTION D/U = DRAINAGE/UTILITY EASEMENT EAST = EAST E/P = EDGE OF PAVEMENT ESM.T. = EASEMENT	ELEV. = ELEVATION F.F. = FINISHED FLOOR FD = FOUND (FM) = FIELD MEASURED F.D. = IDENTIFICATION IP = IRON PIPE IR = IRON ROD IR/C = IRON ROD AND CAP LB = LICENSED SURVEYOR L = LICENSED SURVEY BUSINESS N = NORTH N/D = NAIL AND DISK	N/W = NAIL AND WASHER GR. = OFFICIAL RECORDS O/H = OVERHANG (P) = OVERHEAD ELECTRIC LINE PAGE = PAGE D/E = PLAT (MAP) DIMENSION P/P = POWER POLE P.C. = POINT OF CURVATURE F.F. = FINISHED FLOOR P.B. = POINT OF BEGINNING P/L = PROPERTY LINE R/W = RIGHT-OF-WAY	S = SOUTH S/T = SLOPE FANK S/F = SQUARE FEET T/F = TYPICAL W/P = WOOD PENCE W/M = WATER METER Δ = DELTA R = RADIUS R.A. = RADIUS OF CURVE R = RADIUS T = TANGENT DISTANCE CHORD BEARING CH. = CHORD DISTANCE

EFIRD SURVEYING GROUP, INC.		
475 S. BLUE LAKE AVENUE DELAND, FLORIDA 32724		
PHONE: (386) 740-4144	FAX (386) 740-4155	WEBSITE: www.efirdsurveying.com e-mail: larry@efirdsurveying.com
Certificate Of Authorization Licensed Business Number 7230		
Boundary, Topographic & Tree Survey		
Survey Date: 1/14/2022	Drawing Number: 22-0009-B	Scale: 1"=60' Drawn By: JM/BE/JM
For: BOB KELLOGG & BECKY KELLOGG TRINITY UNITED METHODIST CHURCH, DELAND, FLORIDA. c/k/a TRINITY UNITED METHODIST CHURCH OF FLORIDA OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY LANDS GRAHAM FRENCH, LLC ATTORNEYS' TITLE FUND SERVICES, LLC xxxx W. PLYMOUTH AVE., DELAND		
I HEREBY CERTIFY THIS SURVEY DRAWING TO BE CORRECT, TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND COMPLIES IN FIRM WITH THE STANDARDS OF PRACTICE AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 13-17, F.A.C. PURSUANT TO SECTION 47.009, FLORIDA STATUTES. LARRY R. EFIRD JR. Professional Surveyor & Mapper No. 5829		



PROPERTY INFORMATION	
EXISTING ZONING	A-3 TRANSITIONAL AGRICULTURE
PROPOSED ZONING	R-1A
FLOODZONE	X
BUILDING USES	CHURCH

PERIMETER BUFFER			
	MIN. REQ.		TYPE
NORTH (W PLYMOUTH ROAD)	40	FEET	D
SOUTH	15	FEET	B
EAST	15	FEET	B
WEST	15	FEET	B

LOT SETBACKS		
	MIN. REQ.	
FRONT (NORTH)	40	FEET
REAR (SOUTH)	25	FEET
SIDE (EAST)	15	FEET
SIDE (WEST)	15	FEET

SITE REQUIREMENTS	
	REQUIRED
MAX. BUILDING HEIGHT	35 FT
MAX. IMPERVIOUS SURFACE	40%
MIN. LOT WIDTH	75 FT
MIN. LOT AREA	8250 SF
MIN. TREE PROTECTION	15%

PROPOSED SITE COVERAGE			
AREA TYPE	SF	ACRE	% OF SITE
BUILDING AREA IMP. *	17,748	0.407	4.3%
ASPHALT	45,338	1.041	10.9%
CONCRETE	2,643	0.061	0.6%
DRY POND	64,302	1.476	0.0%
GREEN SPACE	348,474	8.000	84.1%
TOTAL SITE	414,203	9.509	100.0%
TOTAL IMPERVIOUS	65,729	1.509	15.9%
TOTAL OPEN SPACE	348,474	9.476	99.7%

PARKING REQUIREMENTS				
BUILDING USE	A SF	B. SPACES	C. PER SF	D. REQ. SPACES
CHURCH ASSEMBLY	3,011	1	45	67
OFFICE AREA	2,090	1	200	11
TOTAL REQUIRED SPACES				78

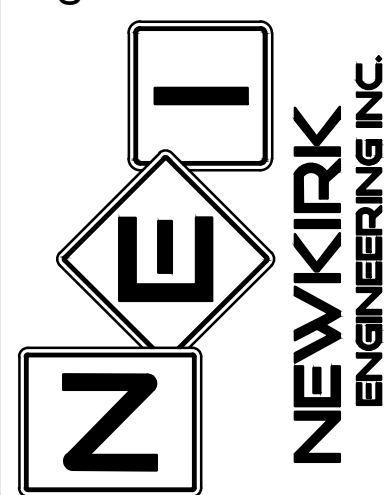
SPECIALTY PARKING REQUIREMENTS	
	REQ. SPACES
ADA SPACES	4

PROVIDED PARKING		
	%	PROV. SPACES
STANDARD PAVED SPACES	77.1%	81
STANDARD GRASS SPACES (INCL. FUTURE)	19.0%	20
ADA SPACES	3.8%	4
TOTAL PROVIDED SPACES		105

REVISIONS

DATE	DESCRIPTION

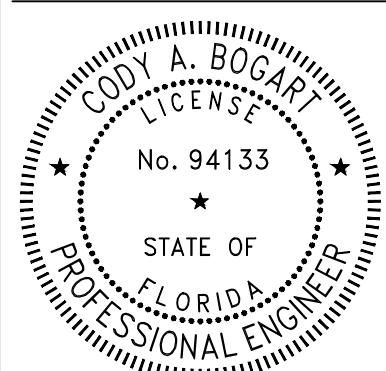
1230 North US1, Suite 3
Ormond Beach, Florida 32174
Phone (386) 872-7794
www.Newkirk-Engineering.com
C.A. # 30209
L.C. # 2600584
C 2013
Civil Engineering,
Transportation, CEI &
Landscape Architecture



SITE LAYOUT PLAN
TRINITY UMC
1338 WEST PLYMOUTH AVENUE
DELAND, FL 32720

THIS DRAWING IS THE PROPERTY OF NEWKIRK ENGINEERING. ANY USE OR REPRODUCTION IN WHOLE OR PART IS PROHIBITED WITHOUT THE EXPRESSED WRITTEN CONSENT OF NEWKIRK ENGINEERING. COPYRIGHT 2013 ALL RIGHTS RESERVED.

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY
CODY A. BOGART, PE # 94133 ON



PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

PROJECT No: 2024-54
DATE: JUNE 2024
DESIGN BY: CAB
DRAWN BY: CAB
CHECKED BY: HHN
SCALE: 1"=40'
DRAWING NUMBER

EX-A



NEWKIRK ENGINEERING, INC.

CIVIL ENGINEERING - TRANSPORTATION - CEI - LANDSCAPE ARCHITECTURE

1230 N US HWY 1, SUITE 3, ORMOND BEACH, FLORIDA 32174 386-872-7794

June 17, 2024

Ms. Deborah Glick

Planning and Zoning

120 S. Florida Ave

Deland, FL 32720

RE: Trinity UMC – Trip Generation Memo

1338 W Plymouth Ave, Deland, FL

Parcel IDs: 70-07-00-00-0050, 70-07-00-00-0051, 70-07-00-00-0052

Dear Ms. Glick,

Submitted is a traffic trip generation calculation for the above referenced project:

The trip generation calculations for the proposed church development were performed with the 11th Edition of the ITE trip generation calculator. Attached is the ITE trip generation report and input data for church use. The ITE Code used in the chart, **(560) Church**, was used for existing, proposed, and current land use to provide results that consider the highest levels of possible traffic. A maximum 35% building area was used for calculating the maximum trip demand from peak use.

ZONING		Description / ITE Code		ITE Vehicle Trip Generation Rates										
	Land Use		UNIT	DAILY	AM	AM In	AM Out	PM	PM In	PM Out	SAT	SAT PEAK	SUN	SUN PEAK
DEL - R-1A	LDR	Low Density Residential (CHURCH 560)	KSF	7.6	0.32	62%	38%	0.49	44%	56%	4.9	2.7	31.46	10.36
VC - A-3	ULI	Urban Low Intensity (CHURCH 560)	KSF	7.6	0.32	62%	38%	0.49	44%	56%	4.9	2.7	31.46	10.36
ACTUAL USE	LDR	Urban Low Intensity (CHURCH 560)	KSF	7.6	0.32	62%	38%	0.49	44%	56%	4.9	2.7	31.46	10.36

		Maximum Proposed Zoning	Unit	Total Distribution of Generated Trips										
		(35% MAX building area)												
		Description (ITE Code)		Daily	AM Hour	AM In	AM Out	PM Hour	PM In	PM Out	SAT	SAT PEAK	SUN	SUN PEAK
DEL - R-1A	LDR	Low Density Residential (CHURCH 560)	144.97	1102	46	29	18	71	31	40	710	391	4561	1502
		Total Proposed	144.97	1102	46	29	18	71	31	40	710	391	4561	1502

		Maximum Existing Use (35% MAX building area)	Unit	Total Distribution of Generated Trips										
		Description (ITE Code)		Daily	AM Hour	AM In	AM Out	PM Hour	PM In	PM Out	SAT	SAT PEAK	SUN	SUN PEAK
VC - A-3	ULI	Urban Low Intensity (CHURCH 560)	144.97	1102	46	29	18	71	31	40	710	391	4561	1502
		Total Existing	144.97	1102	46	29	18	71	31	40	710	391	4561	1502

		Proposed Actual Conditions	Unit	Total Distribution of Generated Trips											
		(17.2% building area)													
		Description (ITE Code)		Daily	AM Hour	AM In	AM Out	PM Hour	PM In	PM Out	SAT	SAT PEAK	SUN	SUN PEAK	
VC - A-3	LDR	Urban Low Intensity (CHURCH 560)	7.16	54	2	1	1	4	2	2	35	19	225	74	
		Total Actual	7.16	54	2	1	1	4	2	2	35	19	225	74	

Proposed Max Use (LDR, Church): 1102 daily trips, 46 peak AM, 71 peak PM (weekend provided in table)

Existing Max Use (ULI, Church): 1102 daily trips, 46 peak AM, 71 peak PM (weekend provided in table)

Proposed Actual Use (LDR, Church): 54 daily trips, 2 peak AM, 4 peak PM (weekend provided in table)

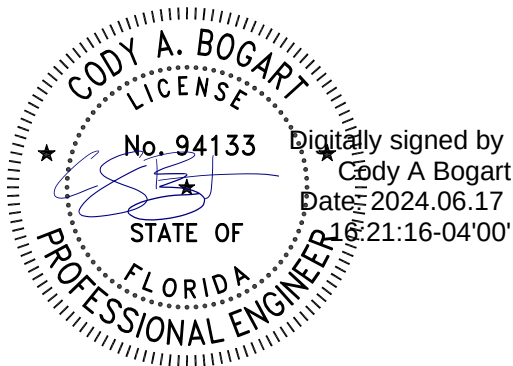
If proposed expansion of building area or change in use amounts to 1,000 daily trips or more, a TIA will be required to be done and submitted to the County.

Based on the 11th generation Trip Generation the current number of daily trips does not exceed the County's or City's threshold requirement of 1000 daily trips and therefore this application does not constitute a full TIA study to be conducted, at this time.

If you have any questions or need additional information, please feel free to call or email me at cody@Newkirk-Engineering.com.

Sincerely,
Cody A. Bogart, PE

NEWKIRK ENGINEERING, INC.



This report has been digitally signed and sealed by Cody A. Bogart, PE #94133 on

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Name:	Cody Bogart,
PE License No:	94133
Address:	1230 North US Highway 1 Suite 3 Ormond Beach, FL 32174

AM PEAK HOUR GENERATION

DATA STATISTICS

Land Use:

Church (560) [Click for Description and Data Plots](#)

Independent Variable:

1000 Sq. Ft. GFA

Time Period:

Weekday

Peak Hour of Adjacent Street Traffic

One Hour Between 7 and 9 a.m.

Setting/Location:

General Urban/Suburban

Trip Type:

Vehicle

Number of Studies:

6

Avg. 1000 Sq. Ft. GFA:

40

Average Rate:

0.32

Range of Rates:

0.08 - 0.94

Standard Deviation:

0.24

Fitted Curve Equation:

$T = 0.37(X) - 1.84$

R²:

0.81

Directional Distribution:

62% entering, 38% exiting

Calculated Trip Ends:

Average Rate: 5 (Total), 3 (Entry), 2 (Exit)

Fitted Curve: 4 (Total), 2 (Entry), 2 (Exit)

DATA SOURCE:

Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE:

560



LAND USE GROUP:

(500-599) Institutional

LAND USE :

560 - Church

LAND USE SUBCATEGORY:

All Sites

SETTING/LOCATION:

General Urban/Suburban

INDEPENDENT VARIABLE (IV):

1000 Sq. Ft. GFA

TIME PERIOD:

Weekday, Peak Hour of Adjacent Street Traffic

TRIP TYPE:

Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:

15.37

Calculate

PM PEAK HOUR GENERATION

DATA STATISTICS

Land Use:

Church (560) [Click for Description and Data Plots](#)

Independent Variable:

1000 Sq. Ft. GFA

Time Period:

Weekday

Peak Hour of Adjacent Street Traffic

One Hour Between 4 and 6 p.m.

Setting/Location:

General Urban/Suburban

Trip Type:

Vehicle

Number of Studies:

11

Avg. 1000 Sq. Ft. GFA:

35

Average Rate:

0.49

Range of Rates:

0.21 - 2.10

Standard Deviation:

0.41

Fitted Curve Equation:

$T = 0.36(X) + 4.70$

R²:

0.64

Directional Distribution:

44% entering, 56% exiting

Calculated Trip Ends:

Average Rate: 8 (Total), 3 (Entry), 5 (Exit)

Fitted Curve: 10 (Total), 5 (Entry), 5 (Exit)

DATA SOURCE:

Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE:

560

**LAND USE GROUP:**

(500-599) Institutional

LAND USE :

560 - Church

LAND USE SUBCATEGORY:

All Sites

SETTING/LOCATION:

General Urban/Suburban

INDEPENDENT VARIABLE (IV):

1000 Sq. Ft. GFA

TIME PERIOD:

Weekday, Peak Hour of Adjacent Street Traffic

TRIP TYPE:

Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:

15.37

Calculate

SUNDAY PEAK HOUR GENERATION

DATA STATISTICS

Land Use:

Church (560) [Click for Description and Data Plots](#)

Independent Variable:

1000 Sq. Ft. GFA

Time Period:

Sunday

Peak Hour of Generator

Setting/Location:

General Urban/Suburban

Trip Type:

Vehicle

Number of Studies:

16

Avg. 1000 Sq. Ft. GFA:

38

Average Rate:

10.36

Range of Rates:

3.36 - 51.31

Standard Deviation:

7.83

Fitted Curve Equation:

$T = 7.87(X) + 93.13$

R²:

0.56

Directional Distribution:

48% entering, 52% exiting

Calculated Trip Ends:

Average Rate: 159 (Total), 76 (Entry), 83 (Exit)

Fitted Curve: 214 (Total), 103 (Entry), 111 (Exit)

DATA SOURCE:

Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE:

560

**LAND USE GROUP:**

(500-599) Institutional

LAND USE :

560 - Church

LAND USE SUBCATEGORY:

All Sites

SETTING/LOCATION:

General Urban/Suburban

INDEPENDENT VARIABLE (IV):

1000 Sq. Ft. GFA

TIME PERIOD:

Sunday, Peak Hour of Generator

TRIP TYPE:

Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:

15.37

Calculate

DAILY TOTAL TRIP GENERATION

DATA STATISTICS

Land Use:

Church (560) [Click for Description and Data Plots](#)

Independent Variable:

1000 Sq. Ft. GFA

Time Period:

Weekday

Setting/Location:

General Urban/Suburban

Trip Type:

Vehicle

Number of Studies:

5

Avg. 1000 Sq. Ft. GFA:

23

Average Rate:

7.60

Range of Rates:

4.35 - 13.14

Standard Deviation:

3.01

Fitted Curve Equation:

$T = 5.40(X) + 50.83$

R²:

0.69

Directional Distribution:

50% entering, 50% exiting

Calculated Trip Ends:

Average Rate: 117 (Total), 58 (Entry), 59 (Exit)

Fitted Curve: 134 (Total), 67 (Entry), 67 (Exit)

DATA SOURCE:

Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE:

560

**LAND USE GROUP:**

(500-599) Institutional

LAND USE :

560 - Church

LAND USE SUBCATEGORY:

All Sites

SETTING/LOCATION:

General Urban/Suburban

INDEPENDENT VARIABLE (IV):

1000 Sq. Ft. GFA

TIME PERIOD:

Weekday

TRIP TYPE:

Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:

15.37

Calculate

**PLANNING DEPARTMENT STAFF REPORT
TO
THE CITY OF DELAND PLANNING BOARD**

August 14, 2024

- A. APPLICATION #:** SE24-130, Trinity United Methodist Church
- APPLICANT:** Cody Bogart, *Newkirk Engineering, Inc.*
- REQUEST:** Special Exception to allow for a church use and allow for all on-site overflow parking areas and associated access drives to be unpaved and stabilized.

APPLICABLE REGULATIONS:

Section 33-18(5) - Special exceptions, Sec. 33-134 - Procedures for obtaining a special exception

SITE FACTORS

Location: 1338 West Plymouth Ave.
Parcel ID: 700700000050, 700700000051, & 700700000052
Size: +/- 9.51 acres
Existing Zoning: Volusia County: A-3 (Transitional Agricultural)
Existing Land Use: Low Density Residential (LDR)

	SURROUNDING USE:	SURROUNDING ZONING:
North:	VC: Urban Low Intensity	VC: A-3
South:	City: Low Density Residential	City: R-1AA
East:	VC: Urban Low Intensity	VC: A-3
West:	VC: Urban Low Intensity	VC: A-3

B. ANALYSIS:

The applicant is seeking approval of a Special Exception to allow the operation of a church use on property that is currently zoned Volusia County A-3 (Transitional Agricultural). The applicant has applied for a rezoning to City of DeLand R-1A (Single-Family Dwelling District), a church use is allowed within this zoning district, but a special exception is required. Therefore, this special exception application is contingent on the rezoning being approved, so the applications are being reviewed concurrently.

The surrounding area is primarily rural urban low intensity, with a church use and apartment complex to the north, across W. Plymouth and a single-family residential subdivision to the south. This site was previously orange groves/farmland and has continued to be vacant, and the surrounding area has remained as rural and existing uses.

In the R-1A zoning district, a church use is allowed, but it requires a special exception, subject to the following regulations (Sec. 33-18(5)): *Churches shall have at least a Class B landscape buffer between adjacent land uses. Churches may be a maximum of 65 feet in height; however, for every*

one foot of height at the roof line in excess of 35 feet, there shall be an additional one foot of side and rear yard setbacks.

The applicant is proposing to develop a one-story (24-ft height), 7,155 square foot church with a covered pavilion (20-ft height) recreation area, and dry retention pond. A site plan that complies with the special exception criteria and all Land Development Regulations will be required.

The applicant has provided 15-foot buffers on the west, south, and east perimeters, and a 40-ft buffer along W. Plymouth Ave as required by Land Development Regulations Section 33-92. Plymouth Avenue is classified as an arterial road; therefore, landscaped buffers are required along street frontages where developments are proposed, a buffer standard of “D” is required for this church use. At the site plan phase, the applicant will need to increase the southern landscape buffer to at least 20-ft, a buffer standard of “C” due to this church use abutting a residential use.

The applicant is proposing 82 on-site paved parking spaces and a future phase of a 20 stabilized grass parking spaces for overflow parking. In addition to the request to allow for the church use, the applicant is requesting to allow for all the on-site overflow parking areas and access drives to be unpaved and stabilized as permitted in Land Development Regulations Sec. 33-91.06(d)(3b); *For all churches and places of public assembly, those spaces in excess of the sum of handicapped spaces and those spaces needed on a Monday-through-Friday basis may be unpaved.*

The applicant will be required to obtain approval of the rezoning from Volusia County A-3 zoning to City of DeLand R-1A zoning, that will be subject to review by the Planning Board, City Commission, and a Class II site plan that will be subject to review by the Technical Review Committee.

C. CRITERIA FOR SPECIAL EXCEPTIONS: LDR Sec. 33-134.08(a)

i. It is consistent with the findings and intent of this chapter.

This special exception request is consistent with the findings and intent of this chapter.

ii. It is consistent with any element of the Comprehensive Plan.

This special exception request is consistent with the findings and intent of this chapter.

iii. It will not adversely affect the public interest.

This special exception request will not adversely affect the overall public interest.

iv. It meets the requirements of the applicable special exception regulations.

This special exception request meets the buffer and height requirement criteria as outlined within Sec. 33-15(5) and Sec. 33-91.06(d)(3b) as shown in the concept plan.

v. The applicant is able to meet all requirements imposed by federal, state or local government or by the city commission.

A site plan application will be required prior to construction of the church, and at that time is when all federal, state, or local requirements will be reviewed further. At this time, this special exception requests adheres to the criteria outlined within Sec. 33-15(5) and Sec. 33-91.06(d)(3b) as it meets the additional buffer requirements and height standards.

- vi. *It will not generate a volume or frequency of traffic, which will substantially interfere with or disrupt the use or enjoyment of properties within 1,000 feet of the use.*

The applicant proposes to limit off-site effects by creating additional overflow parking on-site to accommodate the on-site parking concerns. This use should not generate a high volume of traffic for the majority of weekdays; most traffic is expected to be on Sunday, with Sunday max trips of 46 peak AM trips and 71 peak PM trips, as provided in the attached Traffic Memo.

- vii. *It will not create a hazard, a public nuisance or be dangerous to individuals or the public.*

As there is an existing church use across the street, this request is not anticipated to create a hazard, a public nuisance or be dangerous to individuals or the public.

- viii. *The proposed use is compatible with the predominant use of the surrounding property or will materially alter, disrupt or decrease the character or value of the neighborhood.*

The proposed use is compatible with the predominant uses of the surrounding neighborhood as churches are allowed in most of the City of DeLand zone districts.

- ix. *It will not adversely affect the natural environment, natural resources or scenic beauty, or cause excessive pollution.*

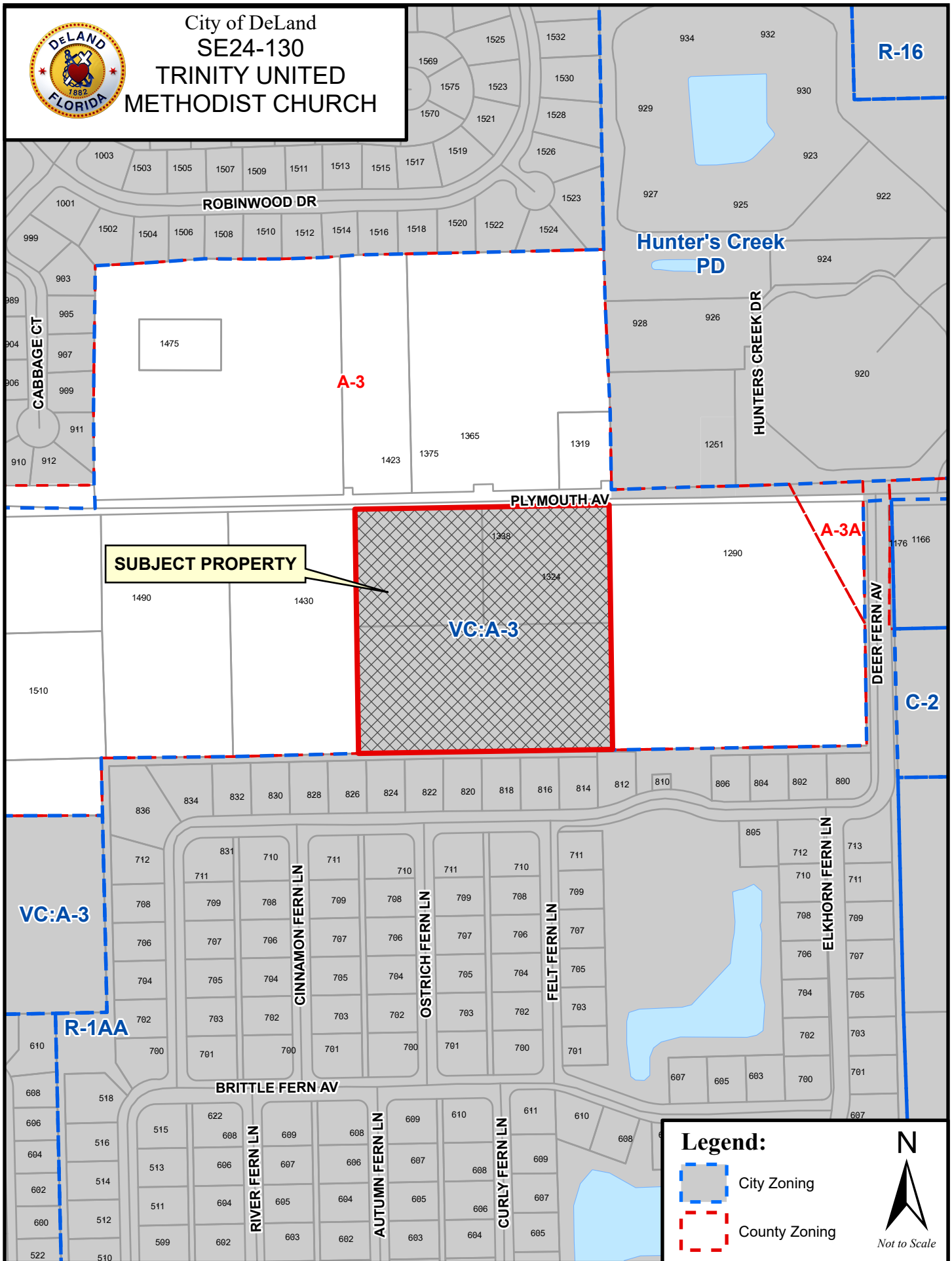
The use will not adversely affect the natural environment, natural resources, scenic beauty, or cause excessive pollution. The applicant is proposing drainage on site and additional buffers as shown in the concept plan.

D. STAFF RECOMMENDATION:

Staff recommends approval of the Special Exception for a church use located at 1338 West Plymouth Avenue and to allow for all on-site overflow parking areas and associated access drives to be unpaved and stabilized, and recommends that the Planning Board forward the application to the City Commission with a recommendation of approval for the special exception to permit a church use. Provided the rezoning request is approved.



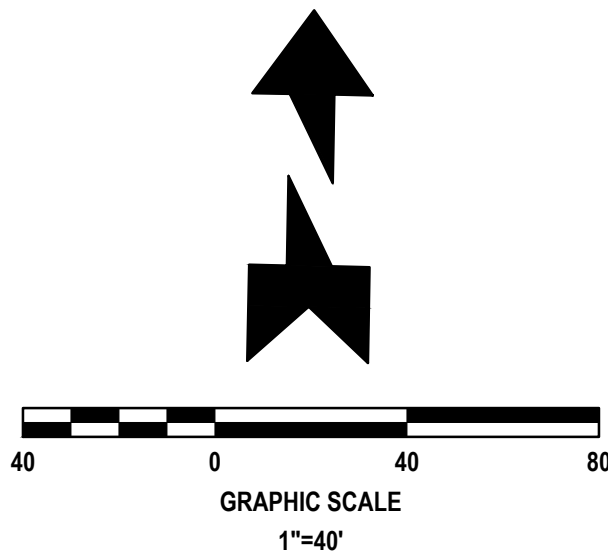
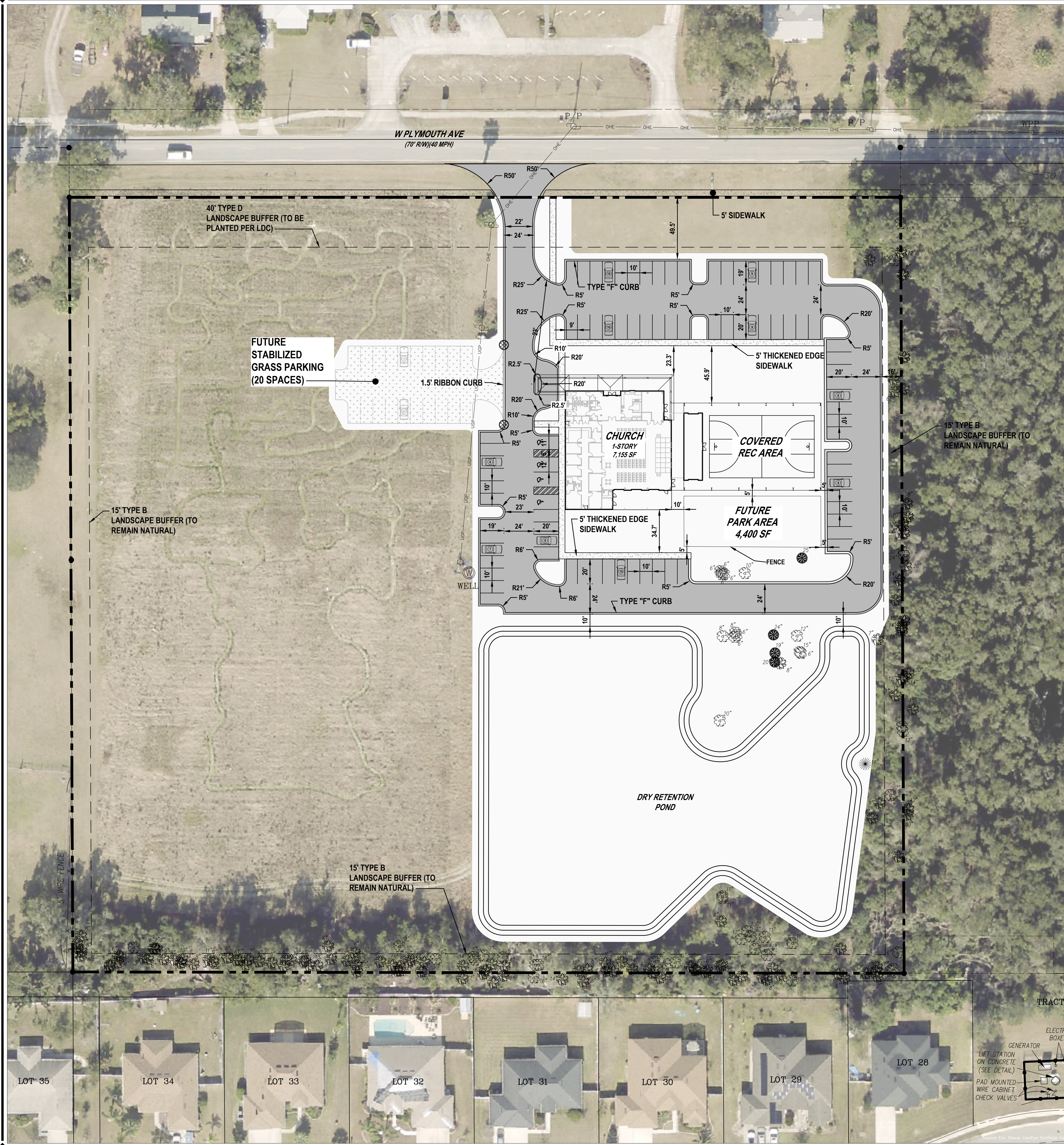
City of DeLand
SE24-130
TRINITY UNITED
METHODIST CHURCH





City of DeLand
SE24-130
TRINITY UNITED
METHODIST CHURCH





PROPERTY INFORMATION	
EXISTING ZONING	A-3 TRANSITIONAL AGRICULTURE
PROPOSED ZONING	R-1A
FLOODZONE	X
BUILDING USES	CHURCH

PERIMETER BUFFER			
	MIN. REQ.		TYPE
NORTH (W PLYMOUTH ROAD)	40	FEET	D
SOUTH	15	FEET	B
EAST	15	FEET	B
WEST	15	FEET	B

LOT SETBACKS		
	MIN. REQ.	
FRONT (NORTH)	40	FEET
REAR (SOUTH)	25	FEET
SIDE (EAST)	15	FEET
SIDE (WEST)	15	FEET

SITE REQUIREMENTS	
	REQUIRED
MAX. BUILDING HEIGHT	35 FT
MAX. IMPERVIOUS SURFACE	40%
MIN. LOT WIDTH	75 FT
MIN. LOT AREA	8250 SF
MIN. TREE PROTECTION	15%

PROPOSED SITE COVERAGE			
AREA TYPE	SF	ACRE	% OF SITE
BUILDING AREA IMP. *	17,748	0.407	4.3%
ASPHALT	45,338	1.041	10.9%
CONCRETE	2,643	0.061	0.6%
DRY POND	64,302	1.476	0.0%
GREEN SPACE	348,474	8.000	84.1%
TOTAL SITE	414,203	9.509	100.0%
TOTAL IMPERVIOUS	65,729	1.509	15.9%
TOTAL OPEN SPACE	348,474	9.476	99.7%

PARKING REQUIREMENTS				
BUILDING USE	A. SF	B. SPACES	C. PER SF	D. REQ. SPACES
CHURCH ASSEMBLY	3,011	1	45	67
OFFICE AREA	2,090	1	200	11
TOTAL REQUIRED SPACES				78

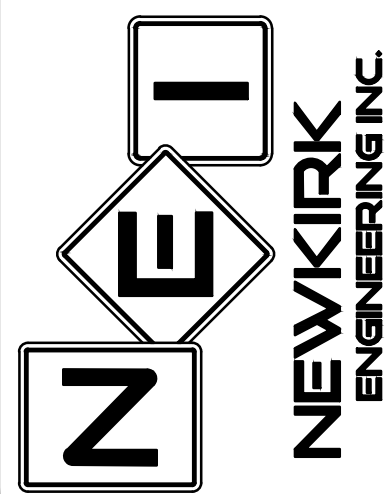
SPECIALTY PARKING REQUIREMENTS	
	REQ. SPACES
ADA SPACES	4

PROVIDED PARKING		
	%	PROV. SPACES
STANDARD PAVED SPACES	77.1%	81
STANDARD GRASS SPACES (INCL. FUTURE)	19.0%	20
ADA SPACES	3.8%	4
TOTAL PROVIDED SPACES		105

REVISIONS

DATE	DESCRIPTION

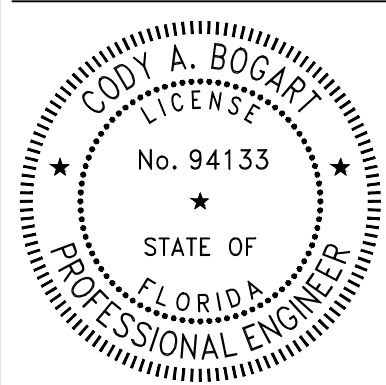
1230 North US1, Suite 3
Ormond Beach, Florida 32174
Phone (386) 872-7794
www.Newkirk-Engineering.com
C.A. # 30209
L.C. # 2600584
C 2013
Civil Engineering,
Transportation, CEI &
Landscape Architecture



SITE LAYOUT PLAN
TRINITY UMC
1338 WEST PLYMOUTH AVENUE
DELAND, FL 32720

THIS DRAWING IS THE PROPERTY OF NEWKIRK ENGINEERING. ANY USE OR REPRODUCTION IN WHOLE OR PART IS PROHIBITED WITHOUT THE EXPRESSED WRITTEN CONSENT OF NEWKIRK ENGINEERING. COPYRIGHT 2013 ALL RIGHTS RESERVED.

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY
CODY A. BOGART, PE # 94133 ON



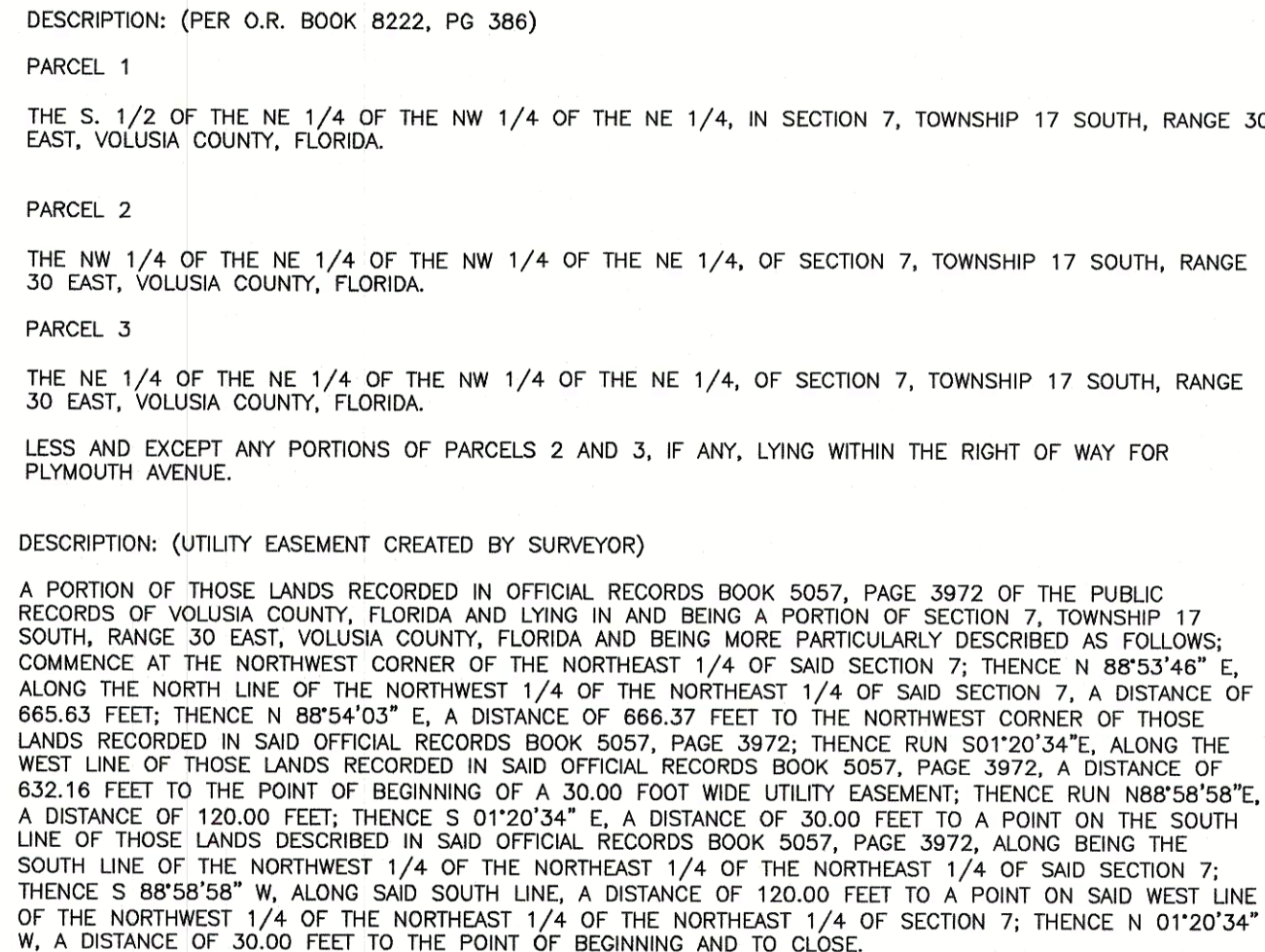
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

PROJECT No: 2024-54
DATE: JUNE 2024
DESIGN BY: CAB
DRAWN BY: CAB
CHECKED BY: HHN
SCALE: 1"=40'

DRAWING NUMBER

EX-A

DeLAND
VOLUSIA COUNTY, FLORIDA



	REVISED 9/8/2023 TO SHOW UPDATED SURVEY AND CREATE UTILITY EASEMENT	REVISED 3/20/2024 TO SHOW UPDATED SURVEY TREES AND TOPO
--	---	---

ABBREVIATIONS:							
A/C	= AIR CONDITIONER	ELEV	= ELEVATION	N/W	= NAIL AND WASHER	S	= SOUTH
CALCULATED	=	F.F.	= FINISHED FLOOR	O/R	= OFFICIAL RECORDS	S/T	= SEPTIC TANK
CL	= CENTERLINE	FD.	= FOUND	O/H	= OVERHANG	S.F.	= SQUARE FEET
CLF	= CHAIN LINK FENCE	F.M.E.	= FEET MEASURED	P/E	= PERMANENT ELEVATION	S/W	= SOUTHWEST
CONC.	= CONCRETE	IND.	= IDENTIFICATION	P.	= PAGE	W	= WEST
CONC. SLAB	= CONCRETE SLAB	IR	= IRON PIPE	P.F.	= PLANT (MAP) DIMENSION		
CR	= CURB	IR R	= IRON ROD	P.F.	= POWER CULVERT	W	= WATER METER
CR	= CONCRETE BLOCK	IR&C	= IRON ROD AND CUP	P.C.	= POINT OF CURVATURE	W.A.	= WATER MAIN
(D)	= DEED OR DESCRIPTION	L	= LICENSED SURVEYOR	P.F.	= FINISHED FLOOR	L	= LENGTH OF CURVE
(D)	= DRAINAGE UTILITY CASEMENT	L	= LICENSED SURVEYOR	P.O.B.	= POINT OF BEGINNING	N	= NORTH LINE
E	= EAST	N	= NORTH LINE	R/W	= RIGHT-OF-WAY	T	= TANGENT DISTANCE
E	= EASEMENT	N/D	= NAIL AND DISK	C.B.	= CHORD BEARING		
ESMT.	= EASEMENT						

Boundary, Topographic & Tree Survey			CORRECT, TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND COMPLYING WITH THE STATE STANDARDS OF PRACTICE AS SET FORTH BY THE BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 35.17, F.A.C. PURSUANT TO STATUTE #2008-10, I HEREBY CERTIFY THAT		
Survey Date 1/14/2022	Drawing Number 22-0009-B	Scale 1"=60'	DATE 1/14/22		
for BOB KELLOGG & BECKY KELLOGG TRINITY UNITED METHODIST CHURCH, DELAND, FLORIDA, INC. o/k/a TRINITY UNITED METHODIST CHURCH OF DELAND, INC. LANDS GRANTING NATIONAL TITLE INSURANCE COMPANY LANDS GRANTING CINCINNATI, P.A. ATTORNEYS' TITLE FUND SERVICES, LLC		DRAWN BY JM/BE/JM			
PROJECT 1500 S. GARDEN AVENUE, DELAND			LARRY R. EPIFANIO Professional Surveyor & Mapper, No. 581		



NEWKIRK ENGINEERING, INC.

CIVIL ENGINEERING - TRANSPORTATION - CEI - LANDSCAPE ARCHITECTURE

1230 N US HWY 1, SUITE 3, ORMOND BEACH, FLORIDA 32174 386-872-7794

June 17, 2024

Ms. Deborah Glick

Planning and Zoning

120 S. Florida Ave

Deland, FL 32720

RE: Trinity UMC – Trip Generation Memo

1338 W Plymouth Ave, Deland, FL

Parcel IDs: 70-07-00-00-0050, 70-07-00-00-0051, 70-07-00-00-0052

Dear Ms. Glick,

Submitted is a traffic trip generation calculation for the above referenced project:

The trip generation calculations for the proposed church development were performed with the 11th Edition of the ITE trip generation calculator. Attached is the ITE trip generation report and input data for church use. The ITE Code used in the chart, **(560) Church**, was used for existing, proposed, and current land use to provide results that consider the highest levels of possible traffic. A maximum 35% building area was used for calculating the maximum trip demand from peak use.

ZONING		Description / ITE Code		ITE Vehicle Trip Generation Rates										
	Land Use		UNIT	DAILY	AM	AM In	AM Out	PM	PM In	PM Out	SAT	SAT PEAK	SUN	SUN PEAK
DEL - R-1A	LDR	Low Density Residential (CHURCH 560)	KSF	7.6	0.32	62%	38%	0.49	44%	56%	4.9	2.7	31.46	10.36
VC - A-3	ULI	Urban Low Intensity (CHURCH 560)	KSF	7.6	0.32	62%	38%	0.49	44%	56%	4.9	2.7	31.46	10.36
ACTUAL USE	LDR	Urban Low Intensity (CHURCH 560)	KSF	7.6	0.32	62%	38%	0.49	44%	56%	4.9	2.7	31.46	10.36

		Maximum Proposed Zoning	Unit	Total Distribution of Generated Trips										
		(35% MAX building area)												
		Description (ITE Code)		Daily	AM Hour	AM In	AM Out	PM Hour	PM In	PM Out	SAT	SAT PEAK	SUN	SUN PEAK
DEL - R-1A	LDR	Low Density Residential (CHURCH 560)	144.97	1102	46	29	18	71	31	40	710	391	4561	1502
		Total Proposed	144.97	1102	46	29	18	71	31	40	710	391	4561	1502

		Maximum Existing Use (35% MAX building area)	Unit	Total Distribution of Generated Trips											
		Description (ITE Code)		Daily	AM Hour	AM In	AM Out	PM Hour	PM In	PM Out	SAT	SAT PEAK	SUN	SUN PEAK	
		VC - A-3	ULI	Urban Low Intensity (CHURCH 560)	144.97	1102	46	29	18	71	31	40	710	391	4561
		Total Existing	144.97	1102	46	29	18	71	31	40	710	391	4561	1502	

		Proposed Actual Conditions	Unit	Total Distribution of Generated Trips											
		(17.2% building area)													
		Description (ITE Code)		Daily	AM Hour	AM In	AM Out	PM Hour	PM In	PM Out	SAT	SAT PEAK	SUN	SUN PEAK	
VC - A-3	LDR	Urban Low Intensity (CHURCH 560)	7.16	54	2	1	1	4	2	2	35	19	225	74	
		Total Actual	7.16	54	2	1	1	4	2	2	35	19	225	74	

Proposed Max Use (LDR, Church): 1102 daily trips, 46 peak AM, 71 peak PM (weekend provided in table)

Existing Max Use (ULI, Church): 1102 daily trips, 46 peak AM, 71 peak PM (weekend provided in table)

Proposed Actual Use (LDR, Church): 54 daily trips, 2 peak AM, 4 peak PM (weekend provided in table)

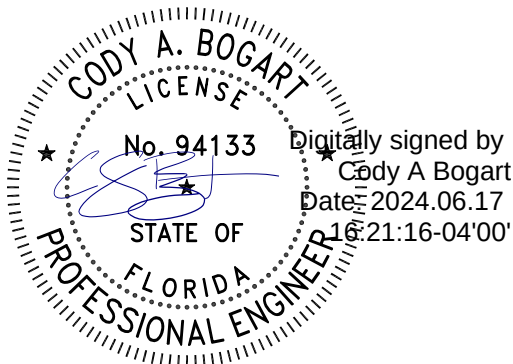
If proposed expansion of building area or change in use amounts to 1,000 daily trips or more, a TIA will be required to be done and submitted to the County.

Based on the 11th generation Trip Generation the current number of daily trips does not exceed the County's or City's threshold requirement of 1000 daily trips and therefore this application does not constitute a full TIA study to be conducted, at this time.

If you have any questions or need additional information, please feel free to call or email me at cody@Newkirk-Engineering.com.

Sincerely,
Cody A. Bogart, PE

NEWKIRK ENGINEERING, INC.



This report has been digitally signed and sealed by Cody A. Bogart, PE #94133 on

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Name:	Cody Bogart,
PE License No:	94133
Address:	1230 North US Highway 1 Suite 3 Ormond Beach, FL 32174

AM PEAK HOUR GENERATION

DATA STATISTICS

Land Use:

Church (560) [Click for Description and Data Plots](#)

Independent Variable:

1000 Sq. Ft. GFA

Time Period:

Weekday

Peak Hour of Adjacent Street Traffic

One Hour Between 7 and 9 a.m.

Setting/Location:

General Urban/Suburban

Trip Type:

Vehicle

Number of Studies:

6

Avg. 1000 Sq. Ft. GFA:

40

Average Rate:

0.32

Range of Rates:

0.08 - 0.94

Standard Deviation:

0.24

Fitted Curve Equation:

$T = 0.37(X) - 1.84$

R²:

0.81

Directional Distribution:

62% entering, 38% exiting

Calculated Trip Ends:

Average Rate: 5 (Total), 3 (Entry), 2 (Exit)

Fitted Curve: 4 (Total), 2 (Entry), 2 (Exit)

DATA SOURCE:

Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE:

560



LAND USE GROUP:

(500-599) Institutional

LAND USE :

560 - Church

LAND USE SUBCATEGORY:

All Sites

SETTING/LOCATION:

General Urban/Suburban

INDEPENDENT VARIABLE (IV):

1000 Sq. Ft. GFA

TIME PERIOD:

Weekday, Peak Hour of Adjacent Street Traffic

TRIP TYPE:

Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:

15.37

Calculate

PM PEAK HOUR GENERATION

DATA STATISTICS

Land Use:

Church (560) [Click for Description and Data Plots](#)

Independent Variable:

1000 Sq. Ft. GFA

Time Period:

Weekday

Peak Hour of Adjacent Street Traffic

One Hour Between 4 and 6 p.m.

Setting/Location:

General Urban/Suburban

Trip Type:

Vehicle

Number of Studies:

11

Avg. 1000 Sq. Ft. GFA:

35

Average Rate:

0.49

Range of Rates:

0.21 - 2.10

Standard Deviation:

0.41

Fitted Curve Equation:

$T = 0.36(X) + 4.70$

R²:

0.64

Directional Distribution:

44% entering, 56% exiting

Calculated Trip Ends:

Average Rate: 8 (Total), 3 (Entry), 5 (Exit)

Fitted Curve: 10 (Total), 5 (Entry), 5 (Exit)

DATA SOURCE:

Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE:

560

**LAND USE GROUP:**

(500-599) Institutional

LAND USE :

560 - Church

LAND USE SUBCATEGORY:

All Sites

SETTING/LOCATION:

General Urban/Suburban

INDEPENDENT VARIABLE (IV):

1000 Sq. Ft. GFA

TIME PERIOD:

Weekday, Peak Hour of Adjacent Street Traffic

TRIP TYPE:

Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:

15.37

Calculate

SUNDAY PEAK HOUR GENERATION

DATA STATISTICS

Land Use:

Church (560) [Click for Description and Data Plots](#)

Independent Variable:

1000 Sq. Ft. GFA

Time Period:

Sunday

Peak Hour of Generator

Setting/Location:

General Urban/Suburban

Trip Type:

Vehicle

Number of Studies:

16

Avg. 1000 Sq. Ft. GFA:

38

Average Rate:

10.36

Range of Rates:

3.36 - 51.31

Standard Deviation:

7.83

Fitted Curve Equation:

$T = 7.87(X) + 93.13$

R²:

0.56

Directional Distribution:

48% entering, 52% exiting

Calculated Trip Ends:

Average Rate: 159 (Total), 76 (Entry), 83 (Exit)

Fitted Curve: 214 (Total), 103 (Entry), 111 (Exit)

DATA SOURCE:

Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE:

560

**LAND USE GROUP:**

(500-599) Institutional

LAND USE :

560 - Church

LAND USE SUBCATEGORY:

All Sites

SETTING/LOCATION:

General Urban/Suburban

INDEPENDENT VARIABLE (IV):

1000 Sq. Ft. GFA

TIME PERIOD:

Sunday, Peak Hour of Generator

TRIP TYPE:

Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:

15.37

Calculate

DAILY TOTAL TRIP GENERATION

DATA STATISTICS

Land Use:

Church (560) [Click for Description and Data Plots](#)

Independent Variable:

1000 Sq. Ft. GFA

Time Period:

Weekday

Setting/Location:

General Urban/Suburban

Trip Type:

Vehicle

Number of Studies:

5

Avg. 1000 Sq. Ft. GFA:

23

Average Rate:

7.60

Range of Rates:

4.35 - 13.14

Standard Deviation:

3.01

Fitted Curve Equation:

$T = 5.40(X) + 50.83$

R²:

0.69

Directional Distribution:

50% entering, 50% exiting

Calculated Trip Ends:

Average Rate: 117 (Total), 58 (Entry), 59 (Exit)

Fitted Curve: 134 (Total), 67 (Entry), 67 (Exit)

DATA SOURCE:

Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE:

560

**LAND USE GROUP:**

(500-599) Institutional

LAND USE :

560 - Church

LAND USE SUBCATEGORY:

All Sites

SETTING/LOCATION:

General Urban/Suburban

INDEPENDENT VARIABLE (IV):

1000 Sq. Ft. GFA

TIME PERIOD:

Weekday

TRIP TYPE:

Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:

15.37

Calculate

**PLANNING STAFF REPORT
To
PLANNING BOARD**

August 14, 2024

APPLICATION: PSB24-090

SUBJECT: Preliminary Plat for Taylor Ridge Planned Development

- 1. Location:** Northwest corner of S. Blue Lake Ave. & E. Taylor Rd.
- 2. Applicant:** Sean Fortier, KCG Engineering
- 3. Size:** ± 26.01 acres, Parcel ID 702200000191 & 702200000090
- 4. Existing Zoning & Land Use:**
Land Use: Transitional Residential Development (TRD)
Zoning: Taylor Ridge PD
- 5. Surrounding Conditions:**

	SURROUNDING USE:	SURROUNDING ZONING:
North:	VC: Rural; LDR	VC: A-2; Saddlebrook PD
South:	VC: Rural; New Community Development	Bridle Oaks PD; Victoria Park PD
East:	VC: Rural	VC: A-3
West:	VC: Urban Low Intensity	VC: RA; VC: A-4

- 6. Applicable Regulations:**
Sec. 33-146.05. *Subdivision of Land.*
Taylor Ridge Planned Development Agreement

- 7. Physical Characteristics:**

The subject property is located On the northwest corner of S. Blue Lake Ave. and E. Taylor Rd. The property is entirely wooded, lying outside of the 100-year floodplain, and no wetlands are indicated.

There is a 100' wide power line easement that runs north to south at the center of the property which will remain clear. There is also an access easement for the abutting property to the west which provides the property owner of 1275 E. Taylor Rd. to reach the right-of-way. The applicant will continue to provide access for the abutting property via a 25' wide easement running to the west of the powerline easement. Access to Taylor Ridge will be from S. Blue Lake Ave. and E. Taylor Rd.

8. Public Utilities and Service:

Water: The proposed development will be served by City potable water facilities.

Sewer: The proposed development will be served by City sanitary sewer facilities.

9. Type of Development:

The applicant seeks to develop the subject property into a 65-lot single-family residential subdivision. The adopted PD agreement allows for single-family homes, and the development standards comply with the standards outlined in the PD. Taylor Ridge is the first development that was approved under the Transitional Residential Development land use designation.

The TRD land use designation is intended for areas with lower density development to provide a transition between existing low density residential and agricultural uses within unincorporated Volusia County and low density suburban residential uses within the city. In some circumstances, a density bonus may be granted that increases the maximum of 2.0 dwelling units per acre, to as much as 3.25 dwelling units per acre, if specific criteria outlined in the TRD are met. These criteria include enhanced amenities and open space. Specifically, the TRD designation stipulates all the following must be provided for a development to be eligible for the density bonus and the applicant is meeting said standards.



- A. Internal trail and bike lanes with connection to adjacent trails and natural areas are constructed throughout the development area.
- B. Sidewalks and bike lanes are provided throughout the development area.
- C. The project must be located within a mile of an arterial, interstate or the SunRail stations.
- D. A least three enhanced on-site amenities such as a recreation center, pool, clubhouse, fitness center, dog park, etc. are constructed to serve the residents. Community enhancements are being provided in the Taylor Ridge PD. These enhancements include:
 - Mulched pathways running from a centralized amenity parcel to Taylor Rd.
 - An 8' wide multi-use sidewalk that connects natural areas throughout the development
 - And 3 enhanced on-site amenities which will include:
 1. A fenced-in dog park
 2. A playground for children in the neighborhood.

3. A community gathering area with a large pavilion that offers picnic tables, grills for the residents to use and outdoor games such as “horseshoes”.

The development is consistent with the Comprehensive Plan, in that the underlying land use of Transitional Residential Development designation allows a density bonus up to 2.5 dwelling units per acre provided specific performance standards have been met. This project proposes a density of 2.5 dwelling units per acre and provided the enhanced amenities internal sidewalks and bike lanes and is within a mile of an arterial roadway.

10. Analysis:

The proposed subdivision is located at the northwest corner of S. Blue Lake Ave. & E. Taylor Rd. Access will be provided on both Blue Lake Ave. and E. Taylor Rd. The applicant will need to apply for a Use Permit from Volusia County.

An environmental report dated August 27, 2021 was submitted as part of the application. Per the report, no wetlands were found on the property. A permit through FWC will be required for relocation of gopher tortoises.

City Commission approved the request for rezoning of the subject property to Taylor Ridge Planned Development on February 5, 2024.

A School Concurrency Determination Letter dated May 29, 2024, reserving “stations” (student space) for the 65-lot residential subdivision.

The proposed preliminary plat includes the approved civil construction plans and is consistent with the adopted PD agreement, concept plan, and applicable land development regulations. Prior to construction, a separate site plan must be submitted for any model homes or temporary offices being permitted.

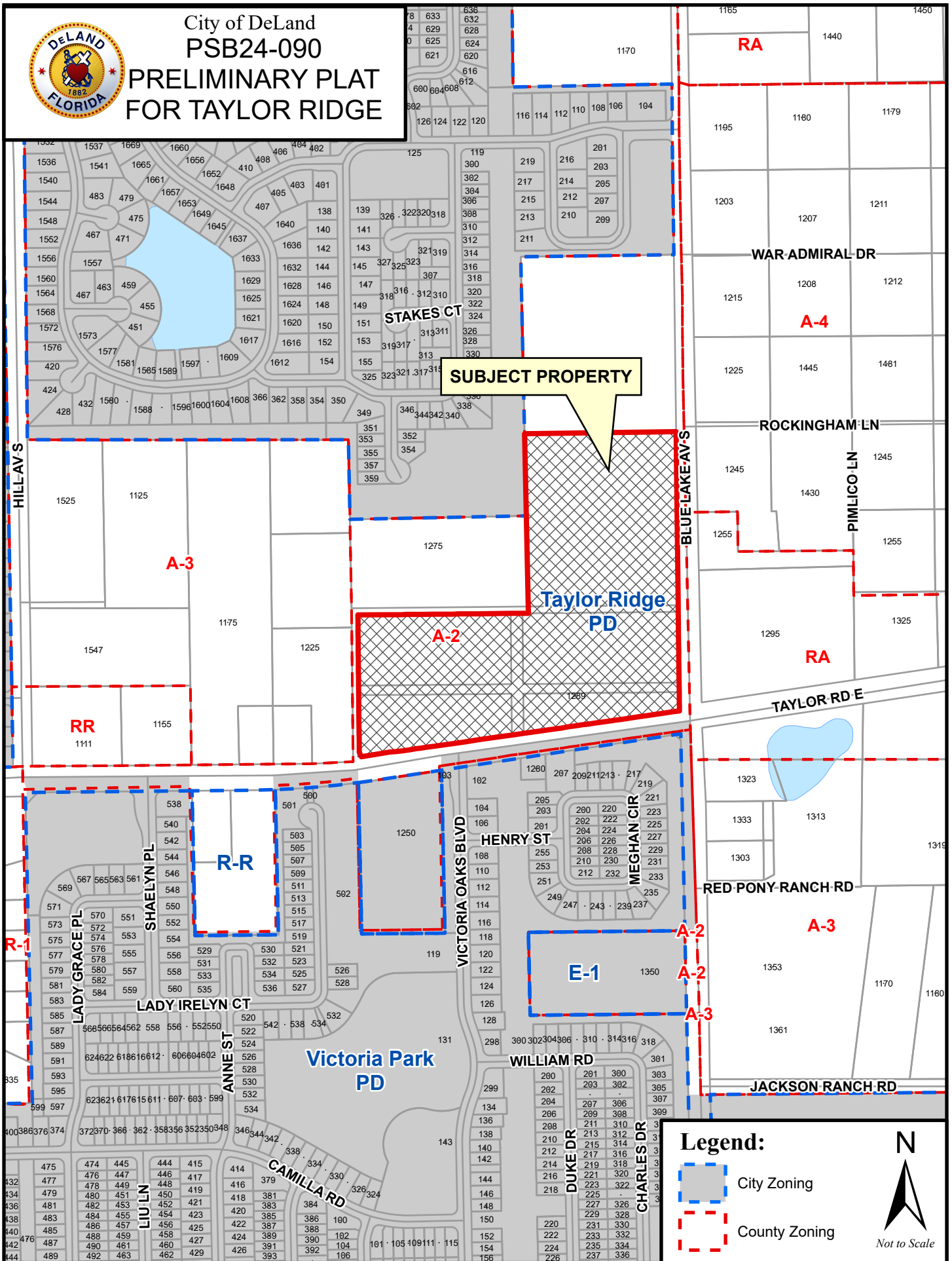
At the May 16, 2024, the Technical Review Committee members recommended the Preliminary Plat be forwarded on to the Planning Board.

11. Recommendation:

Staff recommends that the Planning Board forward the preliminary plat to the City Commission recommending approval of the development.



City of DeLand
PSB24-090
PRELIMINARY PLAT
FOR TAYLOR RIDGE





City of DeLand
PSB24-090
PRELIMINARY PLAT
FOR TAYLOR RIDGE



Legend:

- City Zoning
- County Zoning



PARCEL DESCRIPTION

PARCEL 1:
THE SOUTH 1/2 OF THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4, LYING NORTH OF TAYLOR ROAD, SECTION 22, TOWNSHIP 17 SOUTH, RANGE 30 EAST, VOLUSIA COUNTY, FLORIDA, LESS AND EXCEPT ROAD RIGHT OF WAYS.

ALSO DESCRIBED AS:

ALL OF BLOCKS 1 AND 2, AND THAT PORTION OF BLOCKS 3 AND 4, LYING NORTH OF TAYLOR ROAD, CARROLL AND MARSHALL, ADDITION TO DELAND, ACCORDING TO THE MAP THEREOF AS RECORDED IN MAP BOOK 9, PAGE 22, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, LESS AND EXCEPT ROAD RIGHT OF WAYS.

PARCEL 2:
THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4, SECTION 22, TOWNSHIP 17 SOUTH, RANGE 30 EAST, VOLUSIA COUNTY, FLORIDA, LESS ROAD RIGHT OF WAY.

CONTAINING: 26.013 ACRES, MORE OR LESS.

NOTE:

PARCEL DESCRIPTION PROVIDED BY JONES, WOOD AND GENTRY, INC., DATED 10/04/2021

SITE CONSTRUCTION PLANS

FOR:

TAYLOR RIDGE

RESIDENTIAL PLANNED DEVELOPMENT, TAYLOR RIDGE PD

NW OF BLUE LAKE & TAYLOR ROAD
CITY OF DELAND VOLUSIA COUNTY, FL.

PARCEL ID #:

70-22-00-00-0090, 70-22-00-00-0191

PREPARED FOR:

TLC
BLUE LAKE, LLC
605 COMMONWEALTH AVENUE
ORLANDO, FLORIDA 32803
PHONE: (407) 625 4747

PREPARED
BY:

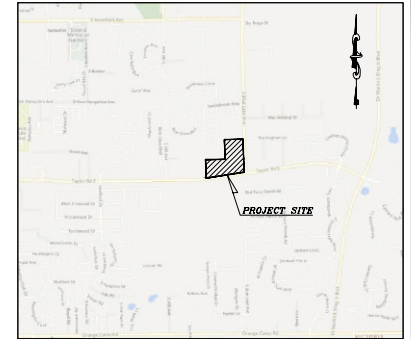


KELLY,
COLLINS &
GENTRY, INC.
ENGINEERING • PLANNING

1700 NORTH ORANGE AVENUE
SUITE 400
ORLANDO, FLORIDA 32804
PHONE (407) 898-7858
FAX (407) 898-1488

SECTION 14, TOWNSHIP 17 SOUTH, RANGE 30 EAST, VOLUSIA COUNTY, FLORIDA

VICINITY MAP



SCALE: 1"=2000'

TAYLOR RIDGE
CITY OF DELAND, FL

SHEET INDEX

SHEET TITLE	SHEET NO.
COVER SHEET	C-1.0
GENERAL NOTES	GN-1.0 TO GN-1.1
BOUNDARY & TOPOGRAPHIC SURVEY	1 OF 1
TREE REMOVAL & PROTECTION PLAN	TR-1.0
DEMOLITION & EROSION CONTROL PLAN	EC-1.0
OVERALL PLAN	C-2.0
DIMENSION PLAN	C-3.0 TO C-3.1
PAVING, GRADING, & DRAINAGE PLAN	C-4.0 TO C-4.1
UTILITY PLAN	C-5.0
PLAN AND PROFILE	C-6.0 TO C-6.3
ROADWAY IMPROVEMENTS PLAN	C-7.0 TO C-7.1
SITE DETAILS	C-8.0 TO C-8.2
UTILITY DETAILS	C-9.0 TO C-9.6

VERTICAL DATUM:

VERTICAL INFORMATION SHOWN ON THIS PLAN
REFERENCES THE VOLUSIA COUNTY NAVD 83 DATUM,
PER THE BOUNDARY AND TOPOGRAPHIC SURVEY
PROVIDED BY JONES, WOOD & GENTRY, INC. DATED
REVISED 10/04/21.

REVISION NOTE:

REVISION CLOUDS PROVIDED TO ASSIST THE CONTRACTOR
ONLY THE LATEST REVISION IS SHOWN. OTHER PLAN CHANGES
MAY BE NECESSARY AS A RESULT OF THIS REVISION WHICH MAY
NOT BE CLOUDS. IT IS THE RESPONSIBILITY OF THE
CONTRACTOR TO REVIEW THIS PLAN SET IN ITS ENTIRETY TO
ENSURE ALL PLAN CHANGES ARE ACCOUNTED FOR, INCLUDING
PREVIOUS REVISIONS, AND CHANGES TO OTHER PLAN SHEETS
AS A RESULT OF THE REVISIONS SHOWN.

DEVELOPMENT TEAM:

DEVELOPER

HANDOVER LAND COMPANY
605 COMMONWEALTH AVENUE
ORLANDO, FLORIDA 32803
ATTN: ANDRES ARVELO PE
PHONE: (407) 625 4747

SURVEYOR

DAN POINT SURVEYING, INC.
P.O. BOX 770931
WINTER GARDEN, FL 34777
ATTN: DAN GENTRY
PHONE: (321) 239-4868

UTILITIES:

WATER / SEWER / REUSE

CITY OF DELAND
1101 SOUTH AMELIA AVENUE,
DELAND, FLORIDA 32724
ATTN: JIM AILES
PHONE: (386) 626-7250

ENGINEER

KELLY, COLLINS & GENTRY, INC.
1700 NORTH ORANGE AVENUE,
SUITE 400
ORLANDO, FLORIDA 32804
ATTN: SEAN FORTIER PE
PHONE: (407) 898-7858
FAX: (407) 898-1488

LANDSCAPE ARCHITECT

BONNET DESIGN GROUP, LLC
400 SOUTH ORANGE AVE.,
SUITE 201
MAITLAND, FL 32751
ATTN: BRETT LARUE
PHONE: (407) 622-1588 (EXT. 7)

GEOTECHNICAL ENGINEER

GEOTECHNICAL & ENVIRONMENTAL CONSULTANTS, INC.
919 LAKE BALDWIN LANE,
ORLANDO, FL 32814
ATTN: CRAIG BALLOCK PE
PHONE: (407) 898-1818

ELECTRIC TRANSMISSION

DUKE ENERGY
4306 E. CR 62, BLDG F
WILLOWOOD, FL 34785
ATTN: CHRIS PADILLA
PHONE: (352) 661-4532

ELECTRIC DISTRIBUTION

DUKE ENERGY
4306 E. CR 62, BLDG F
WILLOWOOD, FL 34785
ATTN: CHRIS PADILLA
PHONE: (352) 661-4532

Sean Fortier
2024.08.06
15:18:27-04'00'

THIS PLAN HAS BEEN DIGITALLY SIGNED AND
SUBSCRIBED BY SEAN C. FORTIER, P.E. ON THE
DATE AND TIME SHOWN BY THE DIGITAL SIGNATURE
BLOCK.

PRINTED COPIES OF THIS DOCUMENT ARE
NOT CONSIDERED VALID UNLESS SIGNED AND
THE SIGNATURE HAS NOT BEEN COPIED
ON ANY ELECTRONIC COPIES.



REVISIONS:		
DATE	DESCRIPTION	DRAWN BY
		DESIGN: CGR
		CHECKED: JKT
		JOB NO.: 118119
		DATE: 08/06/2024
		SHEET C-1.0



EROSION CONTROL:

1. **PERMITTING:** CONTRACTOR SHALL INSTALL ANY ADDITIONAL EROSION CONTROL WHEN NECESSARY IN ORDER TO MEET STATE AND LOCAL STANDARDS.
2. **DESIGN/SETTINGS:** CONTRACTOR SHALL PROTECT ALL EXISTING STORMWATER COLLECTION SYSTEMS FROM DAMAGE BY SEDIMENT OR OTHER CONSTRUCTION RELATED CAUSES.
3. **COORDINATION:** CONTRACTOR SHALL COORDINATE ALL UTILITY CROSSINGS AND ADDRESS CONFLICTS PRIOR TO BEGINNING WORK IN A GIVEN AREA.
4. **EROSION CONTROL:**
 - A. EROSION CONTROL SHALL BE MAINTAINED WITHIN CONSTRUCTION AREAS BY QUICKLY ESTABLISHING DISTURBED AREAS TO PREVENT THE RELEASE OF SEDIMENT. THIS SHALL BE ACCOMPLISHED USING SILT, TURBIDITY FENCES, AND OTHER MEANS ACCEPTABLE TO OWNER, INSURER, AND REGULATORY AGENCIES.
 - B. AREAS SO DISTURBED THAT THEY WILL NOT BE RECOVERED FOR A PERIOD OF 30 DAYS OR MORE SHALL RECEIVE TEMPORARY STABILIZATION AND BE MAINTAINED BY THE MAINTENANCE INSPECTOR.
 - C. TEMPORARILY EXPOSED UNPROTECTED CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENTATION SHALL BE IMMEDIATELY STABILIZED. CONTRACTOR SHALL MAINTAIN APPROPRIATE SITE MANAGEMENT PRACTICES TO ELIMINATE THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENTATION.
 - D. WHEN UTILIZING CONSTRUCTION PHASES, CONTRACTOR SHALL BE RESPONSIBLE FOR ADDITIONAL ON SITE BMPs AS DEEMED NECESSARY AND SHALL BE APPROVED BY A JUDICIAL AUTHORITY.
 - E. ALL BMPs SHALL BE CLEANED OF SEDIMENT WHEN 50% OR LESS OF BMP IS REACHED.
 - F. ALL BMPs SHALL REMAIN IN PLACE UNTIL SUCH TIME THAT THE MUNICIPAL INSPECTOR ALLOWS REMOVAL.
 - G. APPROPRIATE BMPs MUST BE IMPLEMENTED TO INSURE THAT DISCHARGES DO NOT EXCEED SWAMP WATER QUALITY STANDARDS PER THE DEEP CONSTRUCTION GEN. PERMIT (CGP). IF IDENTIFYING OF SITE OR INTO A COUNTRY WEA, FURTHER MUST BE MONITORED TO INSURE THAT DISCHARGES DO NOT EXCEED 2.0 TPD OR EXCEEDING 100 GPD OR 100 GPD. REFER TO THE CONSTRUCTION REQUIREMENTS IN EACH SUBSEQUENT CONSTRUCTION PHASE. PERMIT OF A COUNTRY WEA OR EXCEEDING 100 GPD OR 100 GPD.
 - H. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPs SHALL BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE: INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROL BMPs AFTER EACH RAIN EVENT OF 1/2" AND ON A WEEKLY BASIS, ALL PRESENTATION AND REPAIRS, MAINTENANCE, TYPING, INCLUDING CLEANING, REPAIRS, AND REPAIRS MUST BE PERFORMED IMMEDIATELY. EROSION AND SEDIMENT CONTROL BMPs FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPs, OR MODIFICATIONS OF THOSE INSTALLED SHALL BE REQUIRED.
 - I. CONTRACTOR SHALL INSPECT BMPs AT 1/2" OF EACH RAINING DAY.
 - J. SEDIMENT REMOVED FROM BMPs SHALL BE DEPOSITED IN UNDESIGNATED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAIN, OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED OR PLACED IN TYPICAL STOCKPILES.
5. **MAINTENANCE:**
 - A. BARRIERS WITH MAJOR CONTROL BARRIERS OR EROSION CONTROL BARRIERS SHALL BE INSTALLED ON ALL SLOPES 3:1 AND STEEPER.
 - B. STRAW MULCH SHALL BE APPLIED IN LONG STRIPS, NOT CHIPPED OR FINELY BROADCAST.
6. **CONSTRUCTION ENTRANCE:**
 - A. CONSTRUCTION ENTRANCE SHALL BE GRADED SO THAT NO SEDIMENT LEAVE THE SITE.
 - B. ALL EMPLOYEES, SUBCONTRACTORS, AND SUPPLIES SHALL UTILIZE CONSTRUCTION ACCESS.
 - C. CONSTRUCTION VEHICLES SHALL ENTER AND EXIT THE SITE AT ONE LOCATION.
 - D. ALL EXISTING LOCATIONS INTENDED SHALL BE USED CONTINUOUSLY ON SITE FOR A PERIOD OF TIME SHALL HAVE STABILIZED CONSTRUCTION ENTRANCE BMPs (E.G. STABILIZED CONSTRUCTION ENTRANCE BMP OR "S" TO STABILIZED ENTRANCE BMP).
 - E. INSPECT ROUTINELY FOR DAMAGE AND ADDRESS STREET/VEHICLES OF THE BMP. REMOVE AGGREGATE, SEPARATE AND DISPOSE OF SEDIMENT IF CONSTRUCTION ENTRANCE/EXIT IS CLOGGED NO MORE THAN 50% WITH SEDIMENT.
 - F. IF APPLICABLE, ROUTE TRAFFIC FROM STABILIZED ENTRANCES THROUGH A SEDIMENT TRAPPING DEVICE BEFORE DISCHARGE.
7. **STREET:**
 - A. EXISTING AND PROPOSED STORM DRAINAGE INLETS AND PREPARED SHALL BE PROTECTED FROM ALL SAND, SODS, AND DEBRIS DURING CONSTRUCTION. ANY ACCUMULATION OF DEBRIS WITHIN THE STORM DRAINAGE PREPARED SHALL BE REMOVED BY CONTRACTOR.
 - B. PROVIDE GEOTEXTILE BARRIERS IN FRONT OF ALL DRAINAGE CURB INLETS AND PROVIDE 1" FABRIC UNDER THE GRADE OF ALL DITCH BOTTOM INLETS AFTER INITIAL COMPLETION OF THE DRAINAGE STRUCTURES. MAINTAIN THESE BARRIERS DAILY.
8. **STREET:**
 - A. CONSTRUCTION SITE SHALL BE PROTECTED FOR EROSION PROBLEMS DURING AND AFTER EACH RAINFALL GREATER THAN 0.1". A MAIN GAGE SHALL BE ON SITE TO MONITOR THE FALL RAINFALL.
 - B. THE ADJACENT STREET SHALL BE SWEEP AT THE END OF EACH DAY OF DIRT FROM THE CONSTRUCTION SITE. CONTRACTOR SHALL IMPLEMENT STREET SWEEPING AND VACUUMING AS BEING CLEAN DIRT FROM THE ADJACENT STREET.
 - C. CONSTRUCTION SITE SHALL BE CLEANED OF LITTER AND TRASH EACH DAY AND DEPOSITED OFF SITE.
 - D. INSPECT ALL SEDIMENT CONTROL DEVICES FOR DAMAGE DAILY AND REPAIRS AS NEEDED.
 - E. CONTRACTOR SHALL EMPLOY SAFETY AND ROADWAY ENTRY AND EXIT PLANS ON A DAILY WEEKLY BASIS.
 - F. PLUMBER WASTEWATER SHALL BE COLLECTED ON SITE BY THE USE OF TEMPORARY SANITARY SERVICE.
9. **STREET:**
 - A. SILT FENCE SHALL BE IN PLACE AS SHOWN PRIOR TO CONSTRUCTION.
 - B. PRIOR TO CONSTRUCTION, SILT FENCE SHALL BE INSTALLED AT THE LIMITS OF CONSTRUCTION AS DEFINED THROUGHOUT THIS PLAN SET. SEE DETAIL SHEETS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION ON EROSION CONTROL.
 - C. SILT FENCE SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.
 - D. SOIL ALL DISTURBED AREAS SHALL BE SOILED TO EXPOSE AS SHOWN ON PLAN. ALL SOILS OF ANY WAY SHALL BE ARGENTINE BROWN. ALL SLOPES 4:1 OR GREATER SHALL BE SOILED.
 - E. TURBIDITY SHALL BE MONITORED WITH SILT FENCE. SHALL NOT EXCEED 50% IN HEIGHT, AND SHALL NOT BE LOCATED NEAR SITE PERIMETER. LOCATION AND HEIGHT SHALL BE APPROVED BY MUNICIPAL INSPECTOR OR OTHER JURISDICTIONAL AUTHORITY AS REQUIRED.
 - F. SOIL DISTURBED, ALL TUCKS, SLOPES, AND ANY BUILT UP ON SITE SHALL BE HANDLED AND STORED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND STANDARDS. ALL SUBSTRATES THAT MAY BE CONSIDERED TO BE HANDLED AND STORED ACCORDING TO FEDERAL, STATE, AND LOCAL LAWS AND STANDARDS.
 - G. SEDIMENT TRAPPING DEVICES SHALL BE MAINTAINED PROPERLY. PROVIDE ALL NECESSARY SUPPLIES TO PROVIDE FOR THE DRAINAGE AND PREVENT FLOWING OF WATER. DISTURBED AREAS SHALL BE SOILED TO EXPOSE AS SHOWN ON PLAN. ALL SOILS OF ANY WAY SHALL BE ARGENTINE BROWN. ALL SLOPES 4:1 OR GREATER SHALL BE SOILED.
 - H. SEDIMENT TRAPPING DEVICES SHALL BE MAINTAINED PROPERLY. PROVIDE ALL NECESSARY SUPPLIES TO PROVIDE FOR THE DRAINAGE AND PREVENT FLOWING OF WATER. DISTURBED AREAS SHALL BE SOILED TO EXPOSE AS SHOWN ON PLAN. ALL SOILS OF ANY WAY SHALL BE ARGENTINE BROWN. ALL SLOPES 4:1 OR GREATER SHALL BE SOILED.
 - I. SEDIMENT TRAPPING DEVICES SHALL BE MAINTAINED PROPERLY. PROVIDE ALL NECESSARY SUPPLIES TO PROVIDE FOR THE DRAINAGE AND PREVENT FLOWING OF WATER. DISTURBED AREAS SHALL BE SOILED TO EXPOSE AS SHOWN ON PLAN. ALL SOILS OF ANY WAY SHALL BE ARGENTINE BROWN. ALL SLOPES 4:1 OR GREATER SHALL BE SOILED.
 - J. SEDIMENT TRAPPING DEVICES SHALL BE MAINTAINED PROPERLY. PROVIDE ALL NECESSARY SUPPLIES TO PROVIDE FOR THE DRAINAGE AND PREVENT FLOWING OF WATER. DISTURBED AREAS SHALL BE SOILED TO EXPOSE AS SHOWN ON PLAN. ALL SOILS OF ANY WAY SHALL BE ARGENTINE BROWN. ALL SLOPES 4:1 OR GREATER SHALL BE SOILED.
10. **STREET:**
 - A. SEDIMENT TRAPPING DEVICES SHALL BE MAINTAINED PROPERLY. PROVIDE ALL NECESSARY SUPPLIES TO PROVIDE FOR THE DRAINAGE AND PREVENT FLOWING OF WATER. DISTURBED AREAS SHALL BE SOILED TO EXPOSE AS SHOWN ON PLAN. ALL SOILS OF ANY WAY SHALL BE ARGENTINE BROWN. ALL SLOPES 4:1 OR GREATER SHALL BE SOILED.
 - B. SEDIMENT TRAPPING DEVICES SHALL BE MAINTAINED PROPERLY. PROVIDE ALL NECESSARY SUPPLIES TO PROVIDE FOR THE DRAINAGE AND PREVENT FLOWING OF WATER. DISTURBED AREAS SHALL BE SOILED TO EXPOSE AS SHOWN ON PLAN. ALL SOILS OF ANY WAY SHALL BE ARGENTINE BROWN. ALL SLOPES 4:1 OR GREATER SHALL BE SOILED.
 - C. SEDIMENT TRAPPING DEVICES SHALL BE MAINTAINED PROPERLY. PROVIDE ALL NECESSARY SUPPLIES TO PROVIDE FOR THE DRAINAGE AND PREVENT FLOWING OF WATER. DISTURBED AREAS SHALL BE SOILED TO EXPOSE AS SHOWN ON PLAN. ALL SOILS OF ANY WAY SHALL BE ARGENTINE BROWN. ALL SLOPES 4:1 OR GREATER SHALL BE SOILED.
 - D. SEDIMENT TRAPPING DEVICES SHALL BE MAINTAINED PROPERLY. PROVIDE ALL NECESSARY SUPPLIES TO PROVIDE FOR THE DRAINAGE AND PREVENT FLOWING OF WATER. DISTURBED AREAS SHALL BE SOILED TO EXPOSE AS SHOWN ON PLAN. ALL SOILS OF ANY WAY SHALL BE ARGENTINE BROWN. ALL SLOPES 4:1 OR GREATER SHALL BE SOILED.
 - E. SEDIMENT TRAPPING DEVICES SHALL BE MAINTAINED PROPERLY. PROVIDE ALL NECESSARY SUPPLIES TO PROVIDE FOR THE DRAINAGE AND PREVENT FLOWING OF WATER. DISTURBED AREAS SHALL BE SOILED TO EXPOSE AS SHOWN ON PLAN. ALL SOILS OF ANY WAY SHALL BE ARGENTINE BROWN. ALL SLOPES 4:1 OR GREATER SHALL BE SOILED.
 - F. SEDIMENT TRAPPING DEVICES SHALL BE MAINTAINED PROPERLY. PROVIDE ALL NECESSARY SUPPLIES TO PROVIDE FOR THE DRAINAGE AND PREVENT FLOWING OF WATER. DISTURBED AREAS SHALL BE SOILED TO EXPOSE AS SHOWN ON PLAN. ALL SOILS OF ANY WAY SHALL BE ARGENTINE BROWN. ALL SLOPES 4:1 OR GREATER SHALL BE SOILED.
 - G. SEDIMENT TRAPPING DEVICES SHALL BE MAINTAINED PROPERLY. PROVIDE ALL NECESSARY SUPPLIES TO PROVIDE FOR THE DRAINAGE AND PREVENT FLOWING OF WATER. DISTURBED AREAS SHALL BE SOILED TO EXPOSE AS SHOWN ON PLAN. ALL SOILS OF ANY WAY SHALL BE ARGENTINE BROWN. ALL SLOPES 4:1 OR GREATER SHALL BE SOILED.
 - H. SEDIMENT TRAPPING DEVICES SHALL BE MAINTAINED PROPERLY. PROVIDE ALL NECESSARY SUPPLIES TO PROVIDE FOR THE DRAINAGE AND PREVENT FLOWING OF WATER. DISTURBED AREAS SHALL BE SOILED TO EXPOSE AS SHOWN ON PLAN. ALL SOILS OF ANY WAY SHALL BE ARGENTINE BROWN. ALL SLOPES 4:1 OR GREATER SHALL BE SOILED.
 - I. SEDIMENT TRAPPING DEVICES SHALL BE MAINTAINED PROPERLY. PROVIDE ALL NECESSARY SUPPLIES TO PROVIDE FOR THE DRAINAGE AND PREVENT FLOWING OF WATER. DISTURBED AREAS SHALL BE SOILED TO EXPOSE AS SHOWN ON PLAN. ALL SOILS OF ANY WAY SHALL BE ARGENTINE BROWN. ALL SLOPES 4:1 OR GREATER SHALL BE SOILED.
 - J. SEDIMENT TRAPPING DEVICES SHALL BE MAINTAINED PROPERLY. PROVIDE ALL NECESSARY SUPPLIES TO PROVIDE FOR THE DRAINAGE AND PREVENT FLOWING OF WATER. DISTURBED AREAS SHALL BE SOILED TO EXPOSE AS SHOWN ON PLAN. ALL SOILS OF ANY WAY SHALL BE ARGENTINE BROWN. ALL SLOPES 4:1 OR GREATER SHALL BE SOILED.
11. **STREET:**
 - A. SEDIMENT TRAPPING DEVICES SHALL BE MAINTAINED PROPERLY. PROVIDE ALL NECESSARY SUPPLIES TO PROVIDE FOR THE DRAINAGE AND PREVENT FLOWING OF WATER. DISTURBED AREAS SHALL BE SOILED TO EXPOSE AS SHOWN ON PLAN. ALL SOILS OF ANY WAY SHALL BE ARGENTINE BROWN. ALL SLOPES 4:1 OR GREATER SHALL BE SOILED.
 - B. SEDIMENT TRAPPING DEVICES SHALL BE MAINTAINED PROPERLY. PROVIDE ALL NECESSARY SUPPLIES TO PROVIDE FOR THE DRAINAGE AND PREVENT FLOWING OF WATER. DISTURBED AREAS SHALL BE SOILED TO EXPOSE AS SHOWN ON PLAN. ALL SOILS OF ANY WAY SHALL BE ARGENTINE BROWN. ALL SLOPES 4:1 OR GREATER SHALL BE SOILED.
 - C. SEDIMENT TRAPPING DEVICES SHALL BE MAINTAINED PROPERLY. PROVIDE ALL NECESSARY SUPPLIES TO PROVIDE FOR THE DRAINAGE AND PREVENT FLOWING OF WATER. DISTURBED AREAS SHALL BE SOILED TO EXPOSE AS SHOWN ON PLAN. ALL SOILS OF ANY WAY SHALL BE ARGENTINE BROWN. ALL SLOPES 4:1 OR GREATER SHALL BE SOILED.
 - D. SEDIMENT TRAPPING DEVICES SHALL BE MAINTAINED PROPERLY. PROVIDE ALL NECESSARY SUPPLIES TO PROVIDE FOR THE DRAINAGE AND PREVENT FLOWING OF WATER. DISTURBED AREAS SHALL BE SOILED TO EXPOSE AS SHOWN ON PLAN. ALL SOILS OF ANY WAY SHALL BE ARGENTINE BROWN. ALL SLOPES 4:1 OR GREATER SHALL BE SOILED.
 - E. SEDIMENT TRAPPING DEVICES SHALL BE MAINTAINED PROPERLY. PROVIDE ALL NECESSARY SUPPLIES TO PROVIDE FOR THE DRAINAGE AND PREVENT FLOWING OF WATER. DISTURBED AREAS SHALL BE SOILED TO EXPOSE AS SHOWN ON PLAN. ALL SOILS OF ANY WAY SHALL BE ARGENTINE BROWN. ALL SLOPES 4:1 OR GREATER SHALL BE SOILED.
 - F. SEDIMENT TRAPPING DEVICES SHALL BE MAINTAINED PROPERLY. PROVIDE ALL NECESSARY SUPPLIES TO PROVIDE FOR THE DRAINAGE AND PREVENT FLOWING OF WATER. DISTURBED AREAS SHALL BE SOILED TO EXPOSE AS SHOWN ON PLAN. ALL SOILS OF ANY WAY SHALL BE ARGENTINE BROWN. ALL SLOPES 4:1 OR GREATER SHALL BE SOILED.
 - G. SEDIMENT TRAPPING DEVICES SHALL BE MAINTAINED PROPERLY. PROVIDE ALL NECESSARY SUPPLIES TO PROVIDE FOR THE DRAINAGE AND PREVENT FLOWING OF WATER. DISTURBED AREAS SHALL BE SOILED TO EXPOSE AS SHOWN ON PLAN. ALL SOILS OF ANY WAY SHALL BE ARGENTINE BROWN. ALL SLOPES 4:1 OR GREATER SHALL BE SOILED.
 - H. SEDIMENT TRAPPING DEVICES SHALL BE MAINTAINED PROPERLY. PROVIDE ALL NECESSARY SUPPLIES TO PROVIDE FOR THE DRAINAGE AND PREVENT FLOWING OF WATER. DISTURBED AREAS SHALL BE SOILED TO EXPOSE AS SHOWN ON PLAN. ALL SOILS OF ANY WAY SHALL BE ARGENTINE BROWN. ALL SLOPES 4:1 OR GREATER SHALL BE SOILED.
 - I. SEDIMENT TRAPPING DEVICES SHALL BE MAINTAINED PROPERLY. PROVIDE ALL NECESSARY SUPPLIES TO PROVIDE FOR THE DRAINAGE AND PREVENT FLOWING OF WATER. DISTURBED AREAS SHALL BE SOILED TO EXPOSE AS SHOWN ON PLAN. ALL SOILS OF ANY WAY SHALL BE ARGENTINE BROWN. ALL SLOPES 4:1 OR GREATER SHALL BE SOILED.
 - J. SEDIMENT TRAPPING DEVICES SHALL BE MAINTAINED PROPERLY. PROVIDE ALL NECESSARY SUPPLIES TO PROVIDE FOR THE DRAINAGE AND PREVENT FLOWING OF WATER. DISTURBED AREAS SHALL BE SOILED TO EXPOSE AS SHOWN ON PLAN. ALL SOILS OF ANY WAY SHALL BE ARGENTINE BROWN. ALL SLOPES 4:1 OR GREATER SHALL BE SOILED.
12. **STREET:**
 - A. SEDIMENT TRAPPING DEVICES SHALL BE MAINTAINED PROPERLY. PROVIDE ALL NECESSARY SUPPLIES TO PROVIDE FOR THE DRAINAGE AND PREVENT FLOWING OF WATER. DISTURBED AREAS SHALL BE SOILED TO EXPOSE AS SHOWN ON PLAN. ALL SOILS OF ANY WAY SHALL BE ARGENTINE BROWN. ALL SLOPES 4:1 OR GREATER SHALL BE SOILED.
 - B. SEDIMENT TRAPPING DEVICES SHALL BE MAINTAINED PROPERLY. PROVIDE ALL NECESSARY SUPPLIES TO PROVIDE FOR THE DRAINAGE AND PREVENT FLOWING OF WATER. DISTURBED AREAS SHALL BE SOILED TO EXPOSE AS SHOWN ON PLAN. ALL SOILS OF ANY WAY SHALL BE ARGENTINE BROWN. ALL SLOPES 4:1 OR GREATER SHALL BE SOILED.
 - C. SEDIMENT TRAPPING DEVICES SHALL BE MAINTAINED PROPERLY. PROVIDE ALL NECESSARY SUPPLIES TO PROVIDE FOR THE DRAINAGE AND PREVENT FLOWING OF WATER. DISTURBED AREAS SHALL BE SOILED TO EXPOSE AS SHOWN ON PLAN. ALL SOILS OF ANY WAY SHALL BE ARGENTINE BROWN. ALL SLOPES 4:1 OR GREATER SHALL BE SOILED.
 - D. SEDIMENT TRAPPING DEVICES SHALL BE MAINTAINED PROPERLY. PROVIDE ALL NECESSARY SUPPLIES TO PROVIDE FOR THE DRAINAGE AND PREVENT FLOWING OF WATER. DISTURBED AREAS SHALL BE SOILED TO EXPOSE AS SHOWN ON PLAN. ALL SOILS OF ANY WAY SHALL BE ARGENTINE BROWN. ALL SLOPES 4:1 OR GREATER SHALL BE SOILED.
 - E. SEDIMENT TRAPPING DEVICES SHALL BE MAINTAINED PROPERLY. PROVIDE ALL NECESSARY SUPPLIES TO PROVIDE FOR THE DRAINAGE AND PREVENT FLOWING OF WATER. DISTURBED AREAS SHALL BE SOILED TO EXPOSE AS SHOWN ON PLAN. ALL SOILS OF ANY WAY SHALL BE ARGENTINE BROWN. ALL SLOPES 4:1 OR GREATER SHALL BE SOILED.
 - F. SEDIMENT TRAPPING DEVICES SHALL BE MAINTAINED PROPERLY. PROVIDE ALL NECESSARY SUPPLIES TO PROVIDE FOR THE DRAINAGE AND PREVENT FLOWING OF WATER. DISTURBED AREAS SHALL BE SOILED TO EXPOSE AS SHOWN ON PLAN. ALL SOILS OF ANY WAY SHALL BE ARGENTINE BROWN. ALL SLOPES 4:1 OR GREATER SHALL BE SOILED.
 - G. SEDIMENT TRAPPING DEVICES SHALL BE MAINTAINED PROPERLY. PROVIDE ALL NECESSARY SUPPLIES TO PROVIDE FOR THE DRAINAGE AND PREVENT FLOWING OF WATER. DISTURBED AREAS SHALL BE SOILED TO EXPOSE AS SHOWN ON PLAN. ALL SOILS OF ANY WAY SHALL BE ARGENTINE BROWN. ALL SLOPES 4:1 OR GREATER SHALL BE SOILED.
 - H. SEDIMENT TRAPPING DEVICES SHALL BE MAINTAINED PROPERLY. PROVIDE ALL NECESSARY SUPPLIES TO PROVIDE FOR THE DRAINAGE AND PREVENT FLOWING OF WATER. DISTURBED AREAS SHALL BE SOILED TO EXPOSE AS SHOWN ON PLAN. ALL SOILS OF ANY WAY SHALL BE ARGENTINE BROWN. ALL SLOPES 4:1 OR GREATER SHALL BE SOILED.
 - I. SEDIMENT TRAPPING DEVICES SHALL BE MAINTAINED PROPERLY. PROVIDE ALL NECESSARY SUPPLIES TO PROVIDE FOR THE DRAINAGE AND PREVENT FLOWING OF WATER. DISTURBED AREAS SHALL BE SOILED TO EXPOSE AS SHOWN ON PLAN. ALL SOILS OF ANY WAY SHALL BE ARGENTINE BROWN. ALL SLOPES 4:1 OR GREATER SHALL BE SOILED.
 - J. SEDIMENT TRAPPING DEVICES SHALL BE MAINTAINED PROPERLY. PROVIDE ALL NECESSARY SUPPLIES TO PROVIDE FOR THE DRAINAGE AND PREVENT FLOWING OF WATER. DISTURBED AREAS SHALL BE SOILED TO EXPOSE AS SHOWN ON PLAN. ALL SOILS OF ANY WAY SHALL BE ARGENTINE BROWN. ALL SLOPES 4:1 OR GREATER SHALL BE SOILED.

DEMOLITION NOTES:

1. DEMOLITION AS REQUIRED TO ACCOMPLISH WORK SHOWN IN THESE DOCUMENTS. ALL REQUIRED DEMOLITION WORK SHALL BE INCLUDED IN THE BASE BID PRICES SUBMITTED BY THE CONTRACTOR.
2. DO NOT ALLOW MATERIALS AND WASTE GENERATED BY DEMOLITION ACTIVITIES TO ACCUMULATE ON THE JOB SITE. REMOVE DAILY AND DISPOSE OF IN A LEGAL MANNER. NO ON SITE SALE OR BURNING OF REMOVED ITEMS IS PERMITTED.
3. THIS PLAN IS TO BE USED IN CONJUNCTION WITH THE INTERIOR SET OF CONSTRUCTION DRAWINGS. DO NOT REMOVE ANYTHING WITHOUT THE PERMITTING AGENCIES.
4. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO ENSURE THE SAFETY OF THE PUBLIC AND/OR WORKMEN ON THE SITE TO PREVENT ACCIDENTS OR INJURY TO THE PERSONS OR PROPERTY. THE CONTRACTOR SHALL COMPLY WITH ALL LAWS, ORDINANCES, CODES AND REGULATIONS PERTAINING TO SAFETY AND THE PREVENTION OF ACCIDENTS.
5. THE CONTRACTOR SHALL MAINTAIN ADEQUATE SUPPLIES, ILLUMINATIONS, WATERPROOFING, EMERGENCY LIGHTING, SECURITY, ALARMS, ETC. FOR ALL ON PART OF THE WORK AREA AND TO REMAIN.
6. THE CONTRACTOR SHALL PROVIDE A DUST ABATEMENT PLAN INCLUDING A DUST HOOD SCREEN FENCE ALONG ALL PROPERTY LINES.

CONTRACTOR CERTIFICATION:

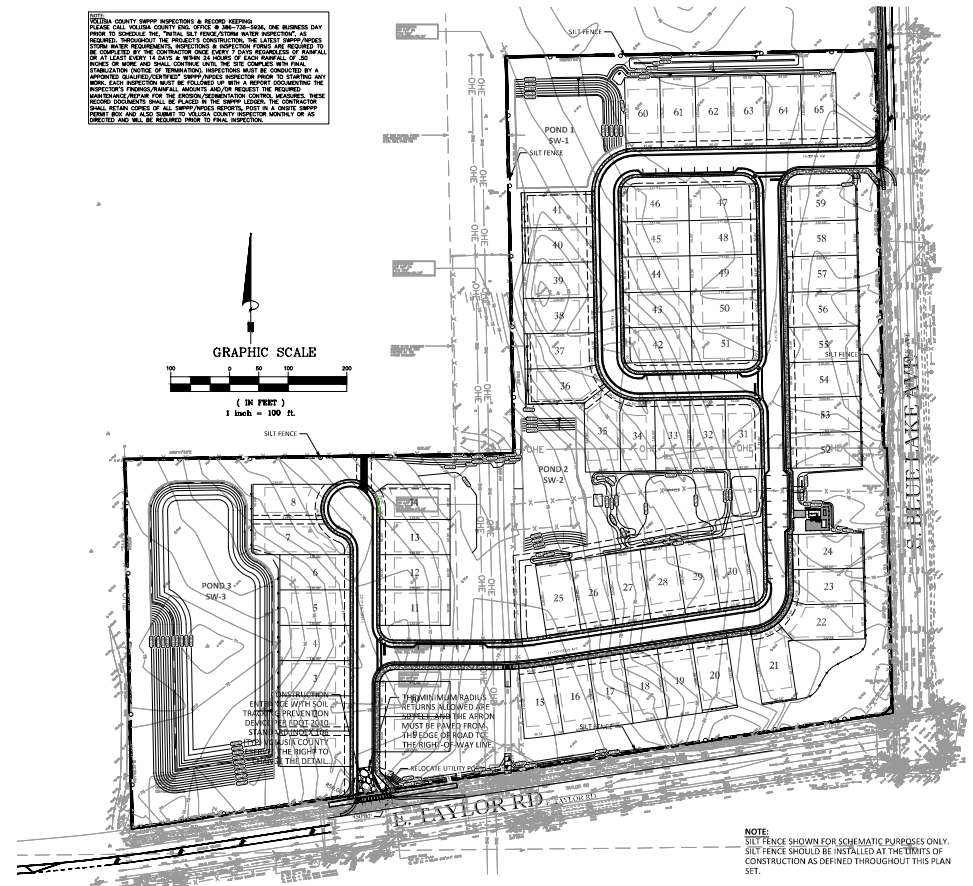
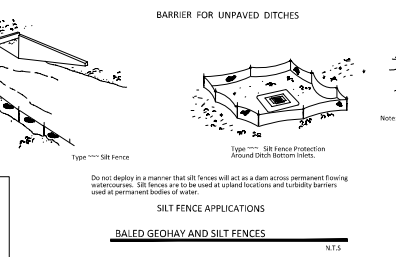
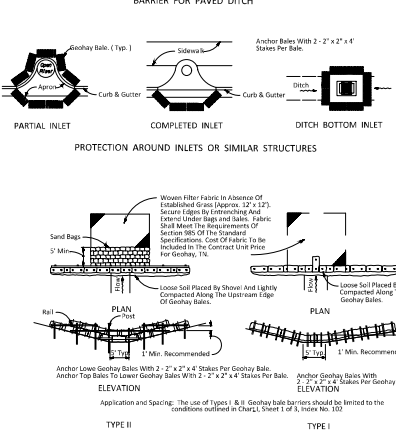
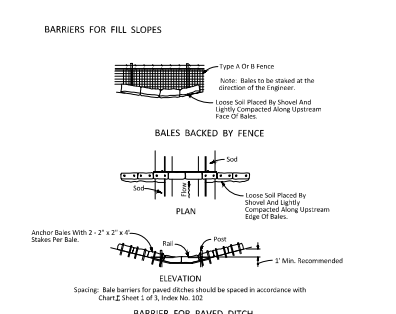
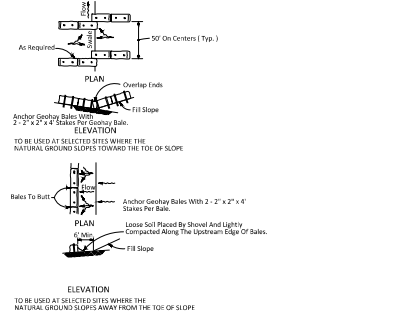
"I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND, AND SHALL COMPLY WITH THE TERMS AND CONDITIONS OF THE STATE OF FLORIDA GENERAL PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES AND THIS STORMWATER POLLUTION PLAN THEREUNDER."

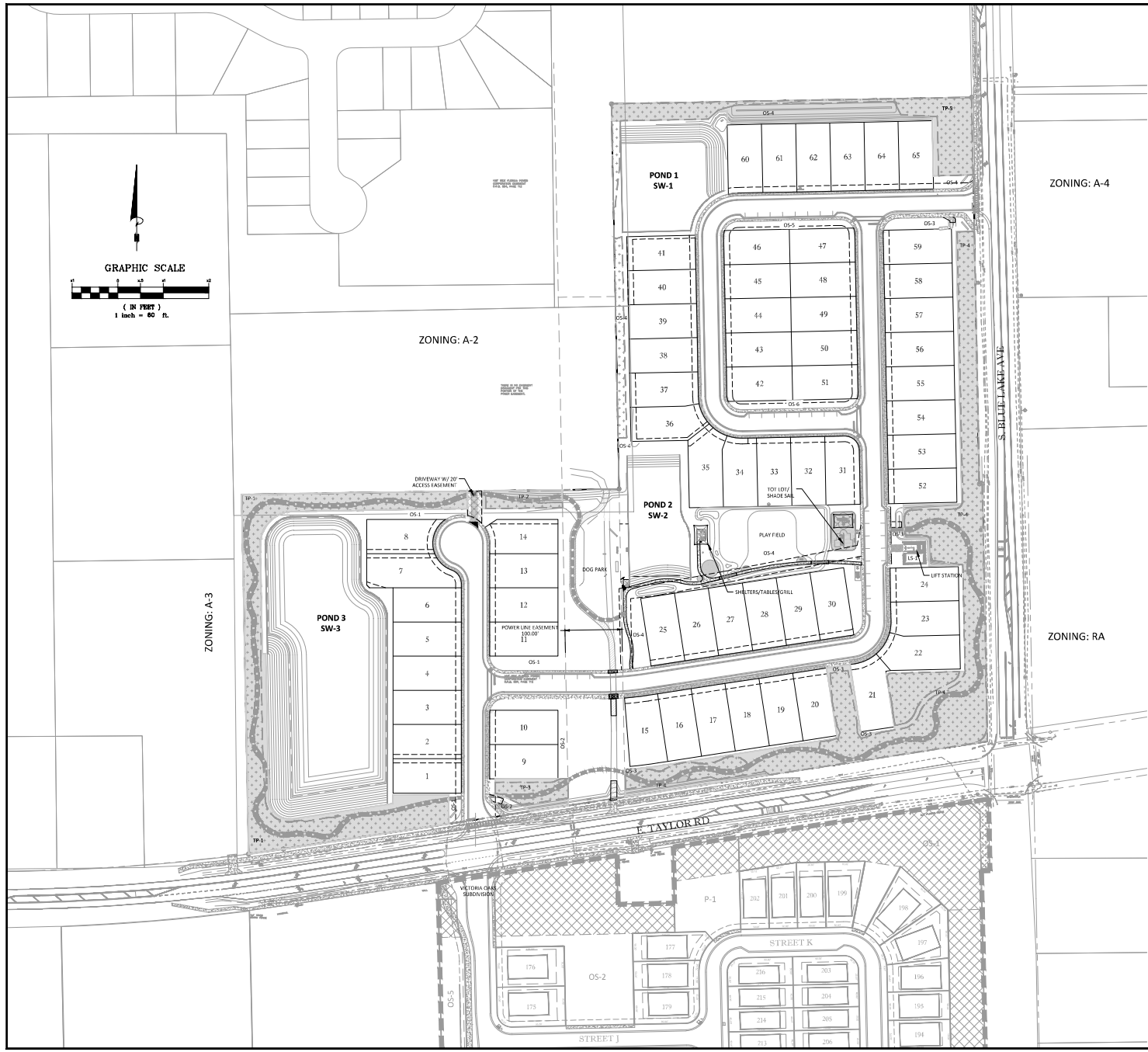
NAME: TITLE:

CONTRACTING FIRM: ADDRESS:

TELEPHONE #: DATE:

THIS SOIL EROSION/SEDIMENT CONTROL & DUST ABATEMENT PLAN IS FOR THE PURPOSE OF SHOWING INTENTION OF METHOD TO CONTROL STORM WATER RUNOFF & DUST DISTURBANCE CAUSED BY CONSTRUCTION ACTIVITY. CONTRACTOR SHALL ADJUST AND/OR ADD BMPs BASED ON SPECIFIC SITE CONDITIONS & CONSTRUCTION ACTIVITY SATISFYING NPDES REQUIREMENTS. CONTRACTOR TO OBTAIN GENERAL PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES (RULE 62-621.300(4), F.A.C.)





SITE DATA	
SUBDIVISION PROJECT AREA:	26.01 AC
TOTAL:	26.01 AC
LOTS / UNITS:	65 LOTS
DENSITY:	2.50 UNITS / AC
TOTAL LENGTH OF STREETS	3043 LF
LAND USE:	VACANT
FUTURE LAND USE:	TRANSITIONAL RESIDENTIAL DEV.
ZONING:	PD
LOT / UNIT SUMMARY:	
60 LOTS:	65
TOTAL:	65 LOTS
TOTAL PROJECT AREA:	
RESIDENTIAL LOT AREA	26.01 AC
INTERNAL RIGHT OF WAY	10.77 AC
LIFT STATION	3.63 AC
OPEN SPACE (INCLUDES TREE PROTECTION AREA & AMENITY TRACT)	0.68 AC
STORMWATER TRACTS	11.59 AC
TREE PROTECTION (15% MIN)*	3.73 AC
POWERLINE EASEMENT	4.02 AC*
OPEN SPACE	1.14 AC
TOTAL AREA	2.70 AC
	100%

DETACHED DEVELOPMENT STANDARDS (PROVIDED)	
MIN. LOT WIDTH:	60 FT
MIN. LOT DEPTH:	115 FT
MAX. IMPERVIOUS AREA LOT COVERAGE:	65 %
MAX. BUILDING HEIGHT:	35 FT
SETBACKS:	
FRONT (TO THE STRUCTURE):	15 FT
REAR:	20 FT
SIDE:	5 FT
STREET SIDE (CORNER):	10 FT
GARAGE (TO GARAGE FACE/DOOR):	25 FT

TRACT TABLE			
TRACT	AREA	DESCRIPTION	OWNERSHIP
US-3	0.04 AC	LIFT STATION TRACT	CITY OF DELAND
SW-1	0.78 AC	STORMWATER MANAGEMENT	HOMEOWNER'S ASSOCIATION
SW-2	0.51 AC	STORMWATER MANAGEMENT	HOMEOWNER'S ASSOCIATION
SW-3	2.46 AC	STORMWATER MANAGEMENT	HOMEOWNER'S ASSOCIATION
OS-1	0.42 AC	OPEN SPACE / WALL EASEMENT / ACCESS EASEMENT	HOMEOWNER'S ASSOCIATION
OS-2	0.34 AC	OPEN SPACE / LANDSCAPE BUFFER	HOMEOWNER'S ASSOCIATION
OS-3	0.33 AC	OPEN SPACE / LANDSCAPE BUFFER	HOMEOWNER'S ASSOCIATION
OS-4	1.67 AC	LANDSCAPE BUFFER	HOMEOWNER'S ASSOCIATION
OS-5	0.07 AC	LANDSCAPE BUFFER	HOMEOWNER'S ASSOCIATION
OS-6	0.07 AC	LANDSCAPE BUFFER	HOMEOWNER'S ASSOCIATION
TP-1	1.16 AC	TREE PROTECTION AREA / NATURAL VEGETATION RETENTION AREA	HOMEOWNER'S ASSOCIATION
TP-2	0.34 AC	TREE PROTECTION AREA / NATURAL VEGETATION RETENTION AREA	HOMEOWNER'S ASSOCIATION
TP-3	0.33 AC	TREE PROTECTION AREA / NATURAL VEGETATION RETENTION AREA	HOMEOWNER'S ASSOCIATION
TP-4	1.94 AC	TREE PROTECTION AREA / NATURAL VEGETATION RETENTION AREA	HOMEOWNER'S ASSOCIATION
TP-5	0.65 AC	TREE PROTECTION AREA / NATURAL VEGETATION RETENTION AREA	HOMEOWNER'S ASSOCIATION
TOTAL			
1.14 AC POWERLINE EASEMENT			
10.49 AC TRACT AREA			
10.77 AC LOT AREA			
3.63 AC SUBDIVISION RIGHT OF WAY			
TOTAL 26.01 AC			

VARIES 40' TO 60'

TYPICAL LOT LAYOUT

SCALE: 1" = 30'

LEGEND

- PROJECT BOUNDARY
- TRACT BOUNDARY
- TREE PRESERVATION AREA
- NATURAL VEGETATION RETENTION AREA

FOR REVIEW ONLY

SEAN C. FORSTER, P.E.

REGISTERED PROFESSIONAL ENGINEER

STATE OF FLORIDA

EXPIRATION DATE: 12/31/2024

NOT VALID FOR CONSTRUCTION

ISSUED UNDER THE SEAL

KELLY, COLLINS & GENTRY, INC.

1700 NORTH WINDY HILLS DRIVE, SUITE 400
ORLANDO, FLORIDA 32809
(407) 850-7000 FAX (407) 850-1400

PREPARED FOR:

TLC

BLUE LAKE, LLC

TAYLOR RIDGE

SUBDIVISION

OVERALL PLAN

DRAWN: TMT

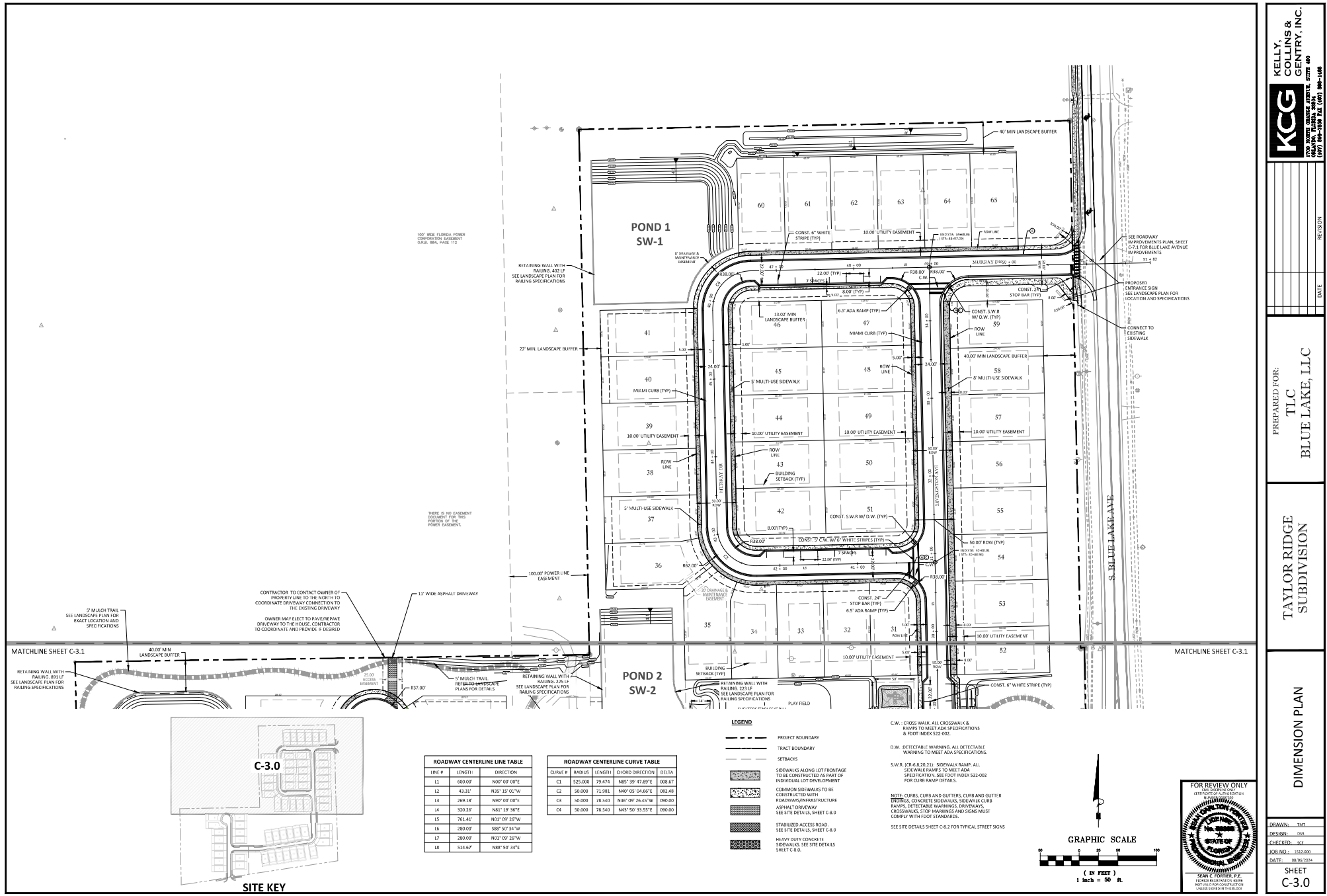
DESIGN: JCR

CHECKED: JCR

DATE: 10/20/2024

SHEET

C-2.0



ROADWAY CENTERLINE TABLE		
LINE #	LENGTH	DIRECTION
L1	600.00'	N00° 00' 00"E
L2	43.31'	N33° 33' 02"W
L3	269.18'	N00° 00' 00"E
L4	320.20'	N81° 19' 38"E
L5	763.42'	N01° 00' 26"W
L6	280.00'	S00° 00' 34"W
L7	280.00'	N02° 00' 26"W
L8	514.67'	N88° 50' 34"E

ROADWAY CENTERLINE CURVE TABLE				
CURVE #	RADIUS	LENGTH	CHORD DIRECTION	DTLTA
C1	525.000'	79.474'	N85° 39' 47.89"E	036.67°
C2	50.000'	71.983'	N40° 00' 04.66"E	082.48°
C3	50.000'	78.540'	N48° 09' 25.45"W	090.00°
C4	50.000'	78.540'	N45° 50' 33.55"E	090.00°

LEGEND

- PROJECT BOUNDARY
- TRACT BOUNDARY
- SETBACKS
- SEWERALONG LOT FRONTAGE TO BE CONSTRUCTED AS PART OF INDIVIDUAL LOT DEVELOPMENT
- COMMON SIDEWALKS TO BE CONSTRUCTED WITH ROADWAYS/INFRASTRUCTURE
- ASPHALT DRIVEWAY SEE SITE DETAILS, SHEET C-8.0
- STABILIZED ACCESS ROAD SEE SITE DETAILS, SHEET C-8.0
- HEAVY DUTY CONCRETE SIDEWALKS SEE SITE DETAILS SHEET C-8.0

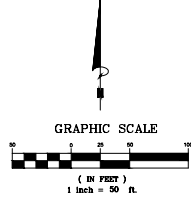
C.W. - CROSS WALK, ALL CROSSWALKS & RAMPS TO MEET ADA SPECIFICATIONS & FOOT INDEX 522.002

D.W. - DETECTABLE WARNING, ALL DETECTABLE WARNING TO MEET ADA SPECIFICATIONS.

S.W.R. (C.R. & 20.21) - SIDEWALK RAMP, ALL SIDEWALK RAMP TO MEET ADA SPECIFICATIONS, SEE FOOT INDEX 522.002 FOR CURB RAMP DETAILS.

NOTE: CURBS, CURB AND GUTTERS, CURB AND GUTTER TYPING, CONCRETE SIDEWALKS, SIDEWALK CURB RAMPS, DETECTABLE WARNING, DRIVEWAYS, CROSSWALKS, STOP MARKINGS AND SIGNS MUST COMPLY WITH FOOT STANDARDS.

SEE SITE DETAILS SHEET C-8.2 FOR TYPICAL STREET SIGNS



KELLY, COLLINS & GENTRY, INC.
1700 NORTH DIXIE AVENUE, SUITE 200
OAKLAND, FLORIDA 32067
(904) 330-3333 FAX (904) 330-1400

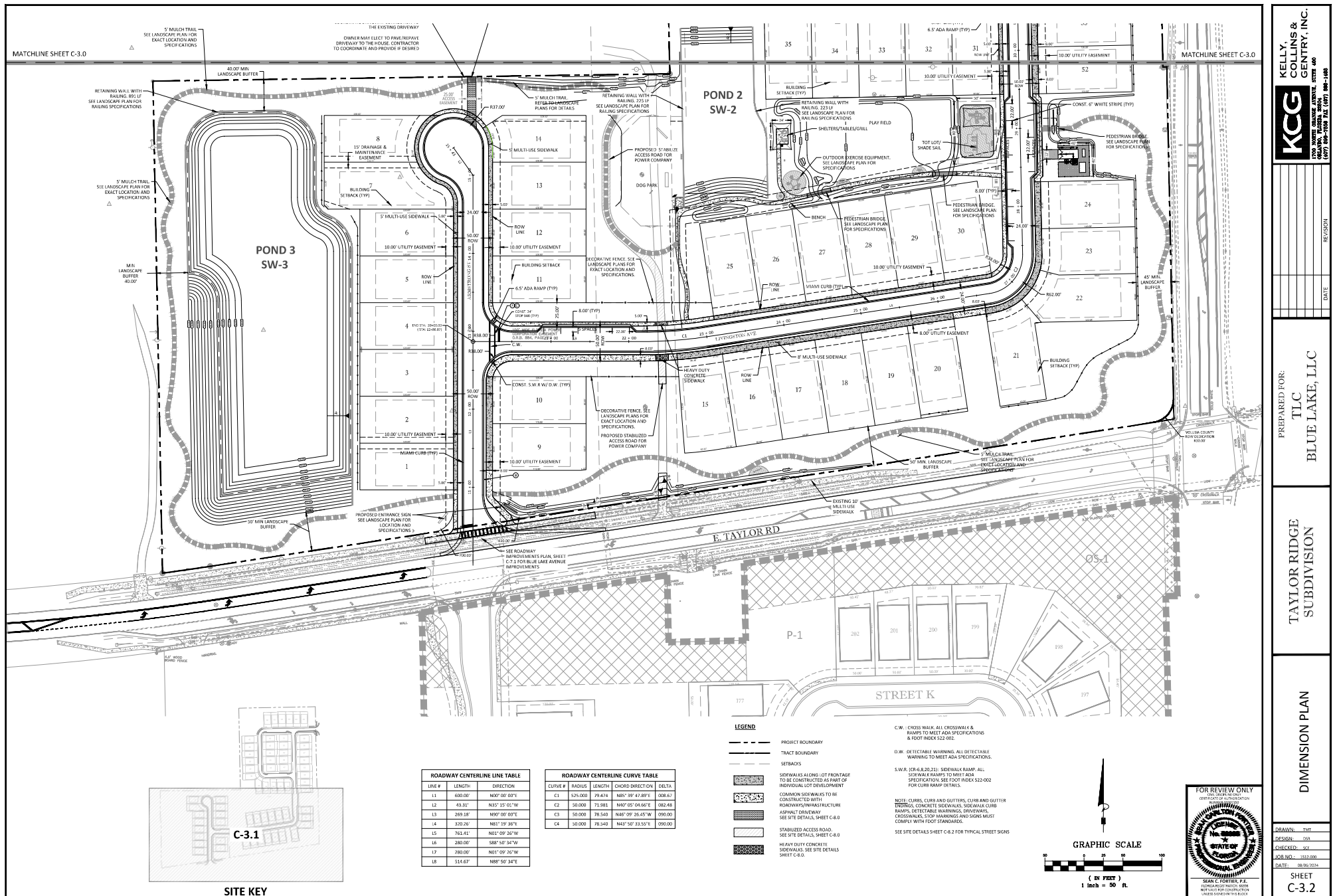
PREPARED FOR:
TLC
BLUE LAKE, LLC

TAYLOR RIDGE
SUBDIVISION

DIMENSION PLAN

SHEET
C-3.0

DRAWN: TWT
DESIGN: JCR
CHECKED: JCY
DATE: 08/20/2024



KCG
 KELLY, COLLINS & GENTRY, INC.
 1700 NORTH DALLAS AVENUE, SUITE 400
 DALLAS, TEXAS 75201
 (972) 880-7000 FAX (972) 880-1400

PREPARED FOR:

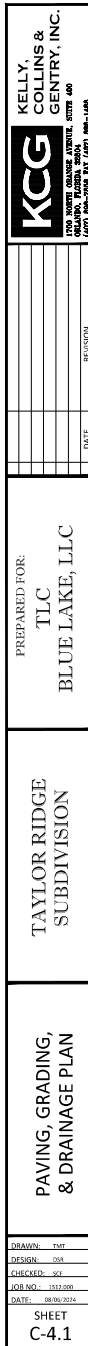
TLC
BLUE LAKE, LLC

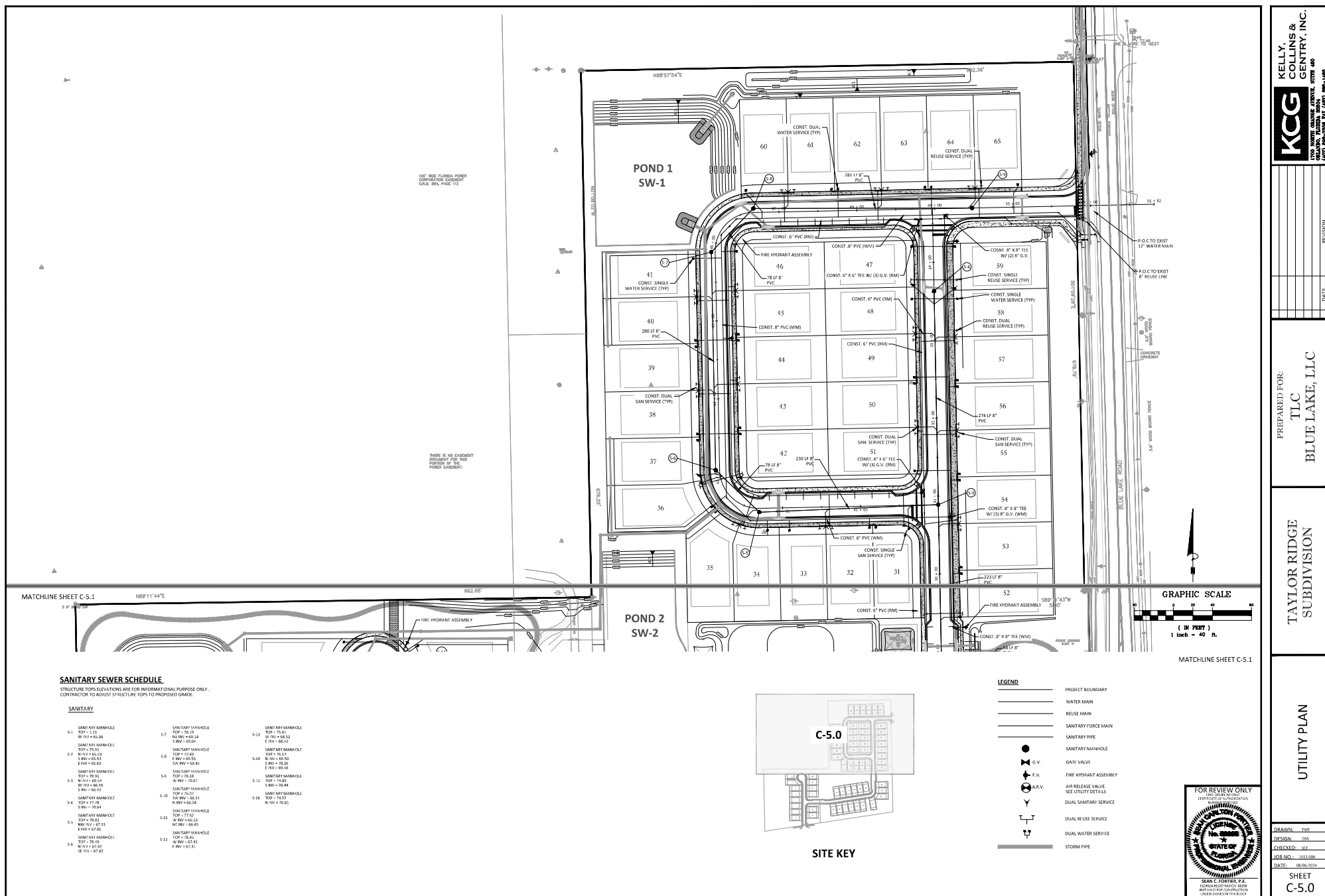
TAYLOR RIDGE
 SUBDIVISION

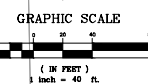
DIMENSION PLAN

SHEET
C-3.2

DRAWN	TRT
DESIGN	ORA
CHECKED	JOE
DATE	10/20/2024







STRUCTURE TOPS ELEVATIONS ARE FOR INFORMATIONAL PURPOSE ONLY.
CONTRACTOR TO ADJUST STRUCTURE TOPS TO PROPOSED GRADE.

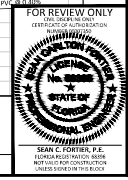
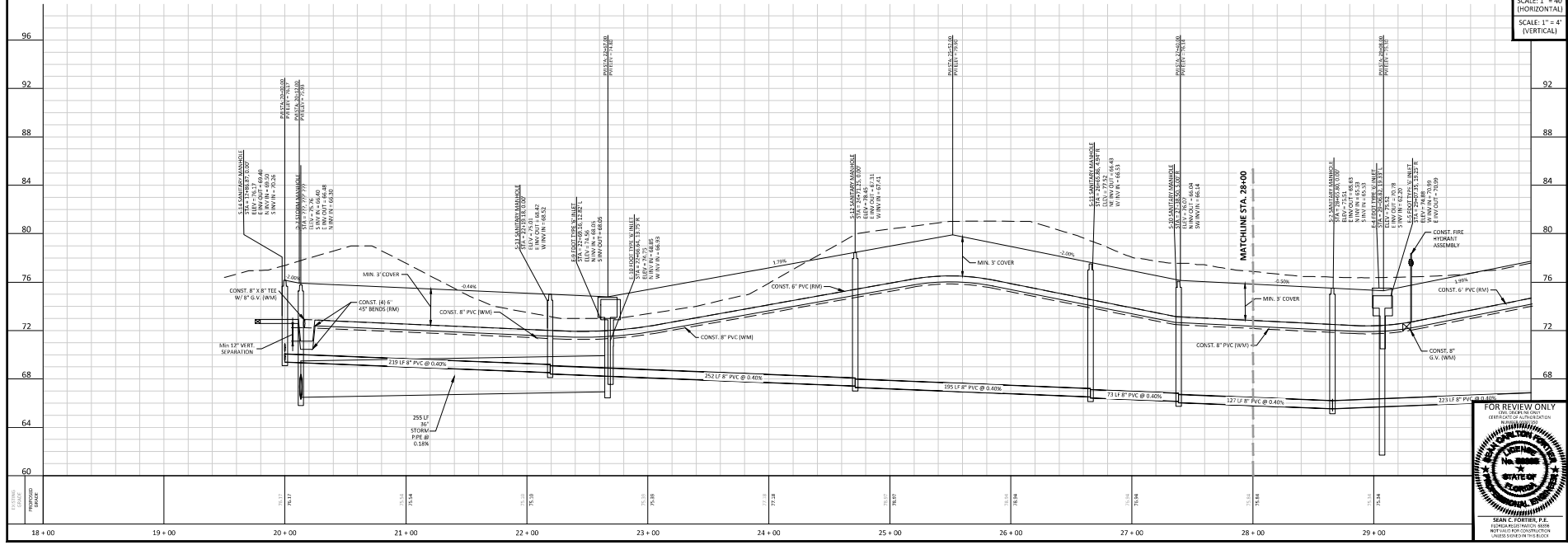
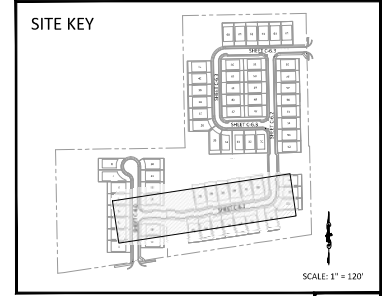
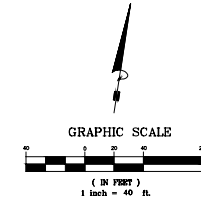
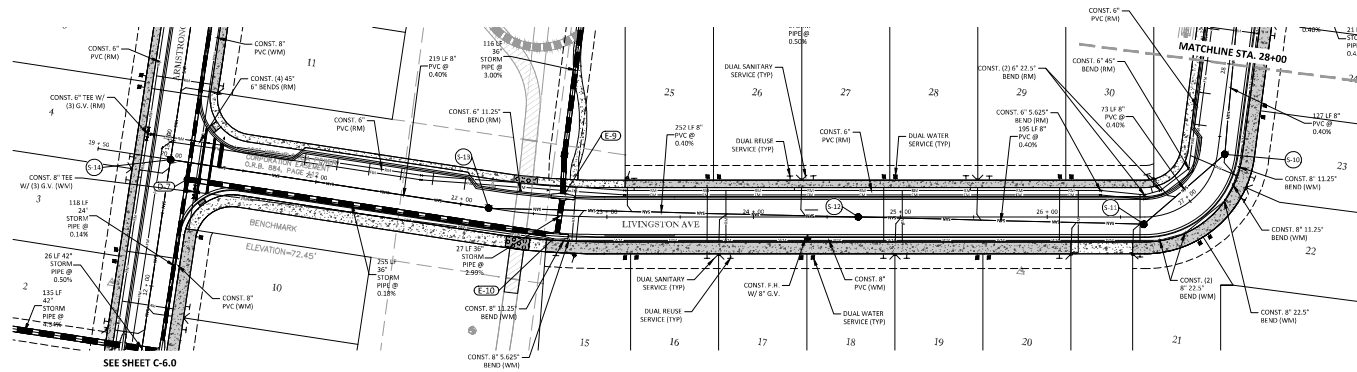
S-1	SANITARY MANHOLE TOP = 1.13 NW INW = 65.36 SE INW = 65.36	S-7	SANITARY MANHOLE TOP = 79.19 NE INW = 69.14 SW INW = 69.04
S-2	SANITARY MANHOLE TOP = 75.31 N INW = 65.51 W INW = 65.51 E INW = 65.51	S-8	SANITARY MANHOLE TOP = 77.43 E INW = 69.55 SW INW = 69.45
S-3	SANITARY MANHOLE TOP = 78.31 N INW = 69.51 W INW = 69.49 S INW = 66.42	S-9	SANITARY MANHOLE TOP = 78.34 W INW = 70.67
S-4	SANITARY MANHOLE TOP = 77.18 N INW = 70.64	S-10	SANITARY MANHOLE TOP = 80.0 SW INW = 69.14 N INW = 65.04
S-5	SANITARY MANHOLE TOP = 67.52 NW INW = 67.51 EW INW = 67.51	S-11	SANITARY MANHOLE TOP = 77.52 W INW = 68.53 NE INW = 65.43
S-6	SANITARY MANHOLE TOP = 76.80 N INW = 67.51 SE INW = 67.62	S-12	SANITARY MANHOLE TOP = 78.45 N INW = 67.41 E INW = 67.51



	PROJECT BOUNDARY		SANITARY MANHOLE
			DUAL SANITARY SERVICE
	TRACT BOUNDARY		DUAL REUSE SERVICE
	WATER MAIN		DUAL WATER SERVICE
	REUSE MAIN		GATE VALVE
	SANITARY FORCE MAIN		FIRE HYDRANT ASSEMBLY
	SANITARY GRAVITY MAIN		



DRAWN:	TMT
DESIGN:	DSR
CHECKED:	S/S
JOB NO.:	1532-000
DATE:	08/06/2014
SHEET C-5.1	



KELLY, COLLINS & GENTRY, INC.
1700 NORTH MAIN STREET, SUITE 400
COLLETON, ALABAMA 36626
(205) 336-7000 FAX (205) 336-1400

PREPARED FOR:

TLC

BLUE LAKE, LLC

TAYLOR RIDGE

SUBDIVISION

PLAN AND PROFILE -

LIVINGSTON ST

DRAWN: TMT

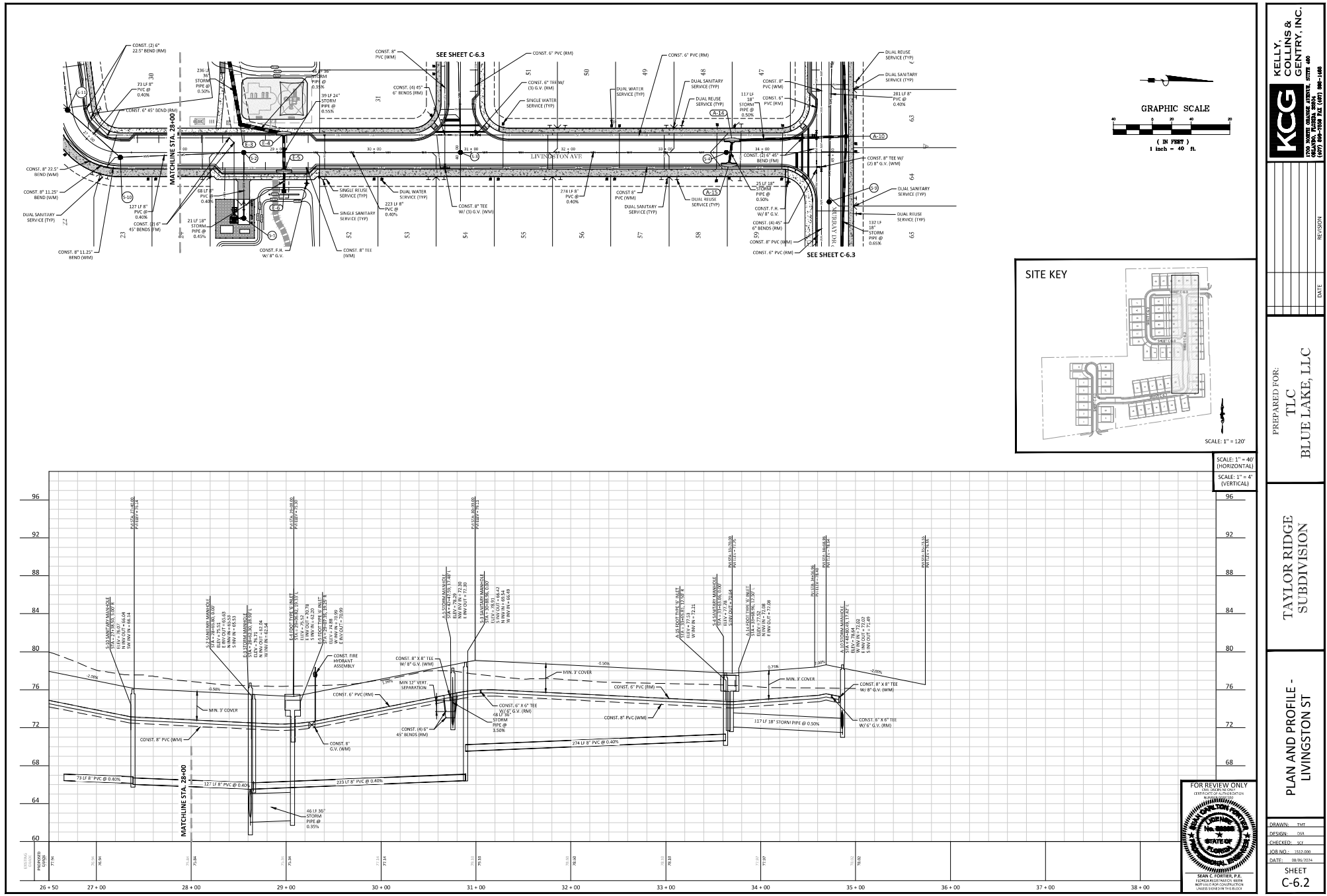
DESIGN: JCR

CHECKED: JCF

DATE: 08/20/2014

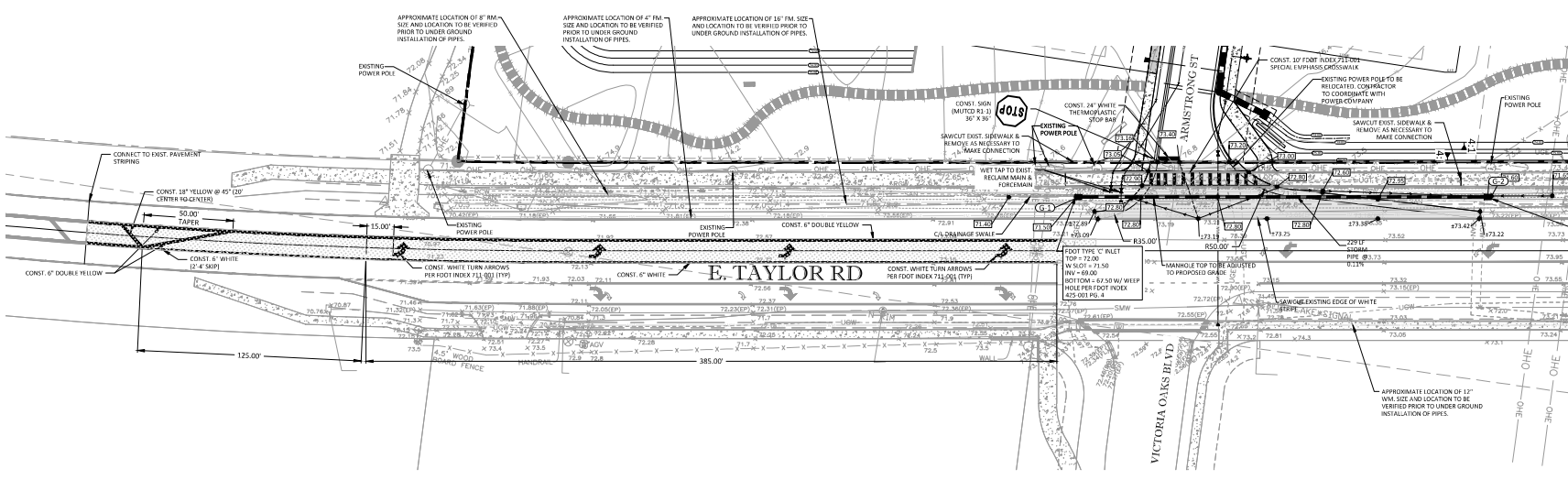
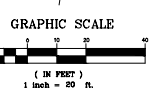
SHEET

C-6.1

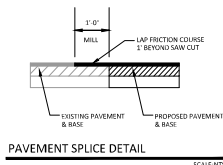
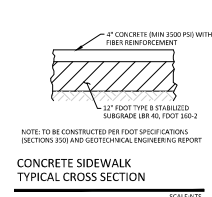
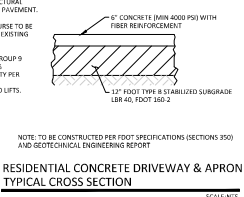
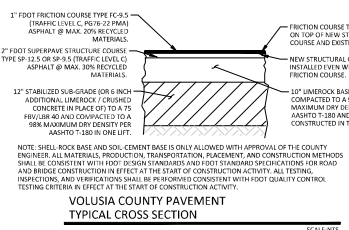


KCG
KELLY, COLLINS & GENTRY, INC.
1700 NORTH GRAND AVENUE, SUITE 400
OAKLAND, ALABAMA 36601
(205) 938-7000 FAX: (205) 938-1400

DATE: _____
REVISION: _____



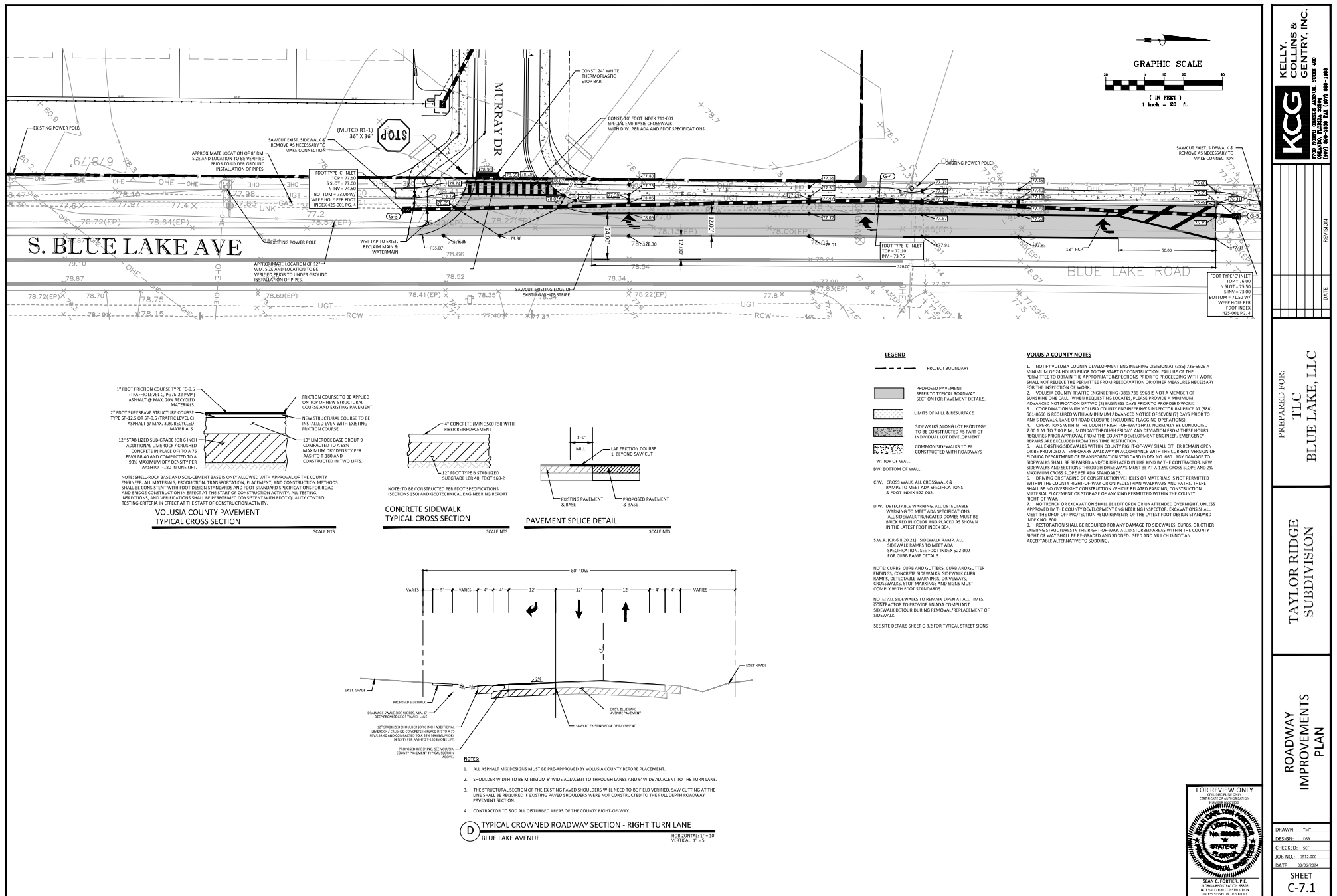
FOOT TYPE 'C' INLET
TOP 72.00
IN SLOPE 72.50
IN V 68.35
BOTTOM 60.00 IN V/VEEP
HOLE PER FOOT INDEX
425.001 PG. 4



- LEGEND**
- PROJECT BOUNDARY
 - PROPOSED PAVEMENT
 - LIMITS OF MILL & RESURFACE
 - SIDEWALKS ALONG LOT FRONTAGE
 - COMMON SIDEWALKS TO BE CONSTRUCTED WITH ROADWAYS
 - TW: TOP OF WALL
 - BW: BOTTOM OF WALL
 - C.W.: CROSS WALK, ALL CROSSWALK & RAMP TO MEET ADA SPECIFICATIONS & FOOT INDEX 522-002
 - D.W.: DETECTABLE WARNING, ALL DETECTABLE WARNING TO MEET ADA SPECIFICATIONS
 - S.W.R.: (FOR 4.8.20.21): SIDEWALK RAMP, ALL SIDEWALK RAMP TO MEET ADA SPECIFICATION, SEE FOOT INDEX 522-002 FOR CURB RAMP DETAILS

- VOLUSIA COUNTY NOTES**
1. NOTIFY VOLUSIA COUNTY DEVELOPMENT ENGINEERING DIVISION AT (888) 716-5950 A MINIMUM OF 24 HOURS PRIOR TO THE START OF CONSTRUCTION. FAILURE OF THE PERMITTEE TO OBTAIN THE APPROPRIATE INSPECTIONS PRIOR TO PROCEEDING WITH WORK SHALL NOT RELIEVE THE PERMITTEE FROM RESPONSIBILITY OR OTHER MEASURES NECESSARY FOR THE PROTECTION OF WORK.
 2. VOLUSIA COUNTY TRAFFIC ENGINEERING (888) 716-5950 IS NOT A MEMBER OF SURVEYING ONE CALL. WHEN ACQUIRING LOCATES, PLEASE PROVIDE A MINIMUM ADVANCED NOTIFICATION OF TWO (2) BUSINESS DAYS PRIOR TO PROPOSED WORK.
 3. COORDINATION WITH VOLUSIA COUNTY ENGINEERING'S INSPECTOR (JIM PRICE AT (888) 582-8888) IS REQUIRED WITH A MINIMUM ADVANCED NOTICE OF SEVEN (7) DAYS PRIOR TO ANY SIDEWALK, LAKE OR ROAD CLOSURE (INCLUDING FLAGGING OPERATIONS).
 4. OPERATIONS WITHIN THE COUNTY RIGHT-OF-WAY SHALL NORMALLY BE CONDUCTED 7:00 A.M. TO 7:00 P.M., MONDAY THROUGH FRIDAY, ANY DEVIATION FROM THESE HOURS REQUIRES PRIOR APPROVAL FROM THE COUNTY DEVELOPMENT ENGINEER. EMERGENCY REPAIRS ARE EXCLUDED FROM THIS TIME RESTRICTION.
 5. ALL EXISTING SIDEWALKS WITHIN THE COUNTY RIGHT-OF-WAY SHALL EITHER REMAIN OPEN OR BE PROVIDED A TEMPORARY SIDEWALK IN ACCORDANCE WITH THE CURRENT VERSION OF FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD ROAD NO. 605, ANY DAMAGE TO SIDEWALKS SHALL BE REPAIRED AND/OR REPLACED IN LIKE KIND BY THE CONTRACTOR, NEW SIDEWALKS AND SECTIONS THROUGH DRIVEWAYS MUST BE AT A 1.5% CROSS SLOPE AND 2% MAXIMUM CROSS SLOPE PER ADA STANDARDS.
 6. DRIVING OR STAGING OF CONSTRUCTION VEHICLES OR MATERIALS IS NOT PERMITTED WITHIN THE COUNTY RIGHT-OF-WAY OR ON PROPOSED SIDEWALKS AND PATHS, THERE SHALL BE NO OBSTRUCTION OF CONSTRUCTION VEHICLE RELATED PARKING, CONSTRUCTION MATERIAL, PLACEMENT OR STORAGE OF ANY KIND PERMITTED WITHIN THE COUNTY RIGHT-OF-WAY.
 7. NO TRENCH OR EXCAVATION SHALL BE LEFT OPEN OR UNATTENDED OVERNIGHT, UNLESS APPROVED BY THE COUNTY DEVELOPMENT ENGINEERING INSPECTOR. EXCAVATIONS SHALL MEET THE DROP OFF PROTECTION REQUIREMENTS OF THE LATEST FOOT DESIGN STANDARD INDEX 601-001.
 8. RESTORATION SHALL BE REQUIRED FOR ANY DAMAGE TO SIDEWALKS, CURBS, OR OTHER EXISTING STRUCTURES IN THE RIGHT-OF-WAY. ALL DISTURBED AREA WITHIN THE COUNTY RIGHT-OF-WAY SHALL BE RE-GRADED AND SOODED. SEED AND MULCH IS NOT AN ACCEPTABLE ALTERNATIVE TO SOODING.





KELLY, COLLINS & GENTRY, INC.
1700 NORTH SHARON AVENUE, SUITE 100
ORLANDO, FLORIDA 32809
(407) 880-7000 FAX (407) 880-1400

PREPARED FOR:
TLC
BLUE LAKE, LLC

TAYLOR RIDGE SUBDIVISION

ROADWAY IMPROVEMENTS PLAN

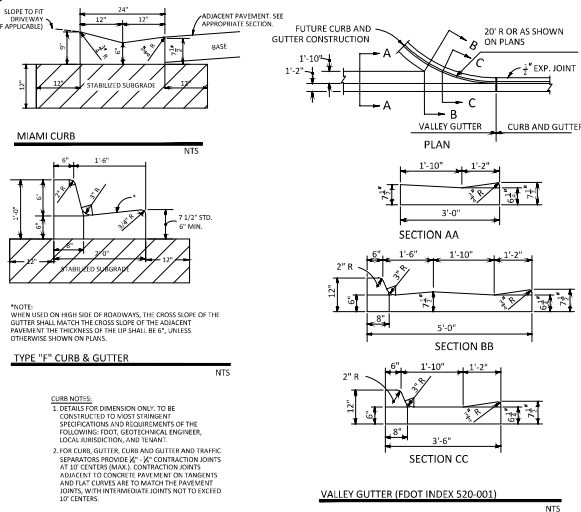
SHEET C-7.1

FOR REVIEW ONLY
THIS SEAL IS TO BE USED ONLY FOR REVIEW PURPOSES
NOT VALID FOR CONSTRUCTION
UNLESS SIGNED BY THE BOARD

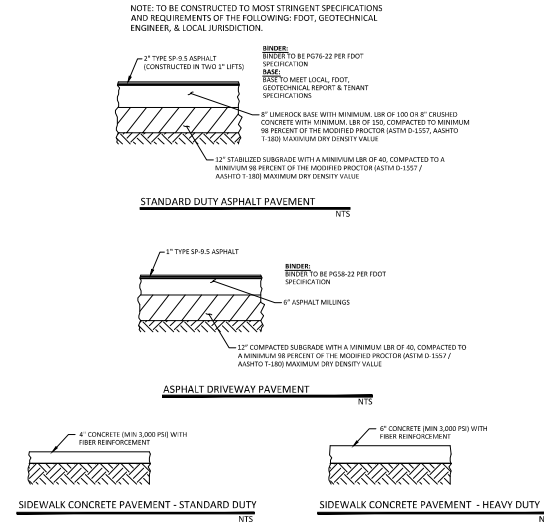
SEAN C. FORTNER, P.E.
FLORIDA PROFESSIONAL ENGINEER
NO. 12454
EXPIRATION DATE 12/31/2024

DRAWN: TMT
DESIGN: JCR
CHECKED: JCF
DATE: 10/20/2024

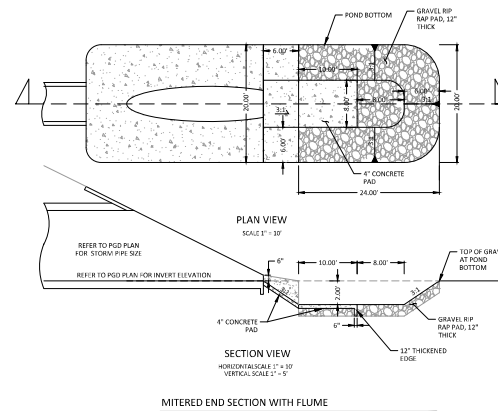
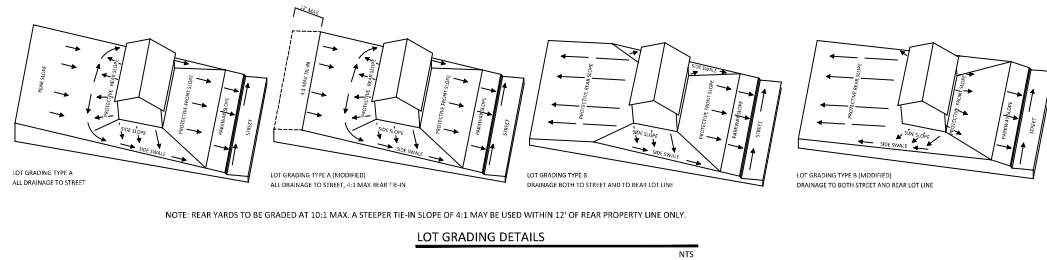
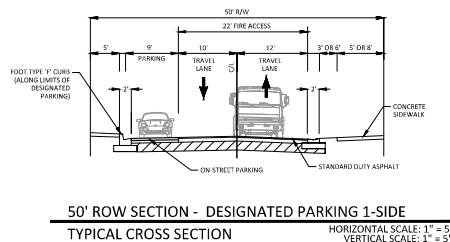
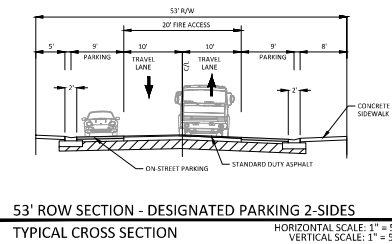
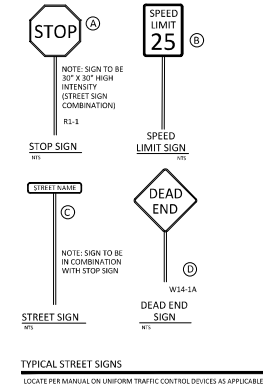
CURB DETAILS



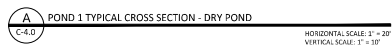
PAVEMENT DETAILS



SIGNAGE & STRIPING DETAILS



KELLY, COLLINS & GENTRY, INC. 1700 NORTH GARDEN AVENUE, SUITE 400 OMAHA, NEBRASKA 68102 (402) 552-7000 FAX: (402) 552-1400	PREPARED FOR: TLC BLUE LAKE, LLC	TAYLOR RIDGE SUBDIVISION	SITE DETAILS	DRAWN: TMT DESIGNED: JGA CHECKED: JGA DATE: 08/20/2024
				SHEET C-8.0
				DATE:
				DATE:



KCG
KELLY, COLLINS & GENTRY, INC.
700 NORTH ORANGE AVENUE, SUITE 400
MELBOURNE, FLORIDA 32904

SITE DETAILS

GENERAL NOTES:

1. This Note contains information specific to the Federal and State guidelines and standards for the preparation of traffic control plans and for the execution of traffic control in work zones. For construction and maintenance operations and safety work on highways, roads and streets in the State of Maryland, these guidelines and requirements in this Notice are based on the following:
 - a. Federal Highway Administration (FHWA) Manual of Uniform Traffic Control Devices (MUTCD) for highways, roads and streets of the State Highway System, the local agency (city/county) having jurisdiction may adopt requirements based on the minimum requirements, provided they meet the FHWA.
2. *Other Notes* in accordance with the Plans and between 102-401 and 102-404. Includes: 102-401 through 102-404 are considered specific to local applications of commonly understood standards. *Advised* (place location in Number) (refer to) as recommended by the Maryland Traffic Supervisor and approved by the Engineer. *Section* (include) but are not limited to, flaggers, portable message signs, and other equipment and personnel. *Section* (include) but are not limited to, Section 102-401 through 102-404 are considered specific to local applications and elements the Engineer for the change.
3. *Except for emergencies, any road closure in the Western System must comply with Section 102-401 through 102-404.*

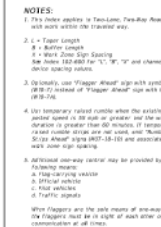
Work Zone Speed (mph)	W/L Length (feet)
≤ 40	$L = \frac{WS^2}{60}$
≥ 45	$L = 85$

Work Zone Speed (mph)	Min. Length (Feet)
25	133
30	200
35	253
40	306
45	360

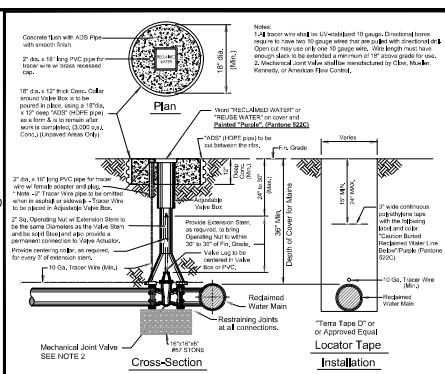
[illegible]

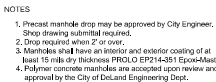
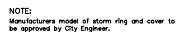
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----

1. This index applies to Two-Lane, Two-Way and Multi-Lane Roadways, including Medians of divided roadways, with work as the situation.
2. L = Travel Length
 W = Work Zone Sign Spacing
 S = Sight Distance Length
Use Index 300-600 for "T", "C", "S", and channelizing device spacing rules.
3. For incidental work (e.g., mowing or litter removal), only the Road Block Ahead sign is required.
4. When five or more work vehicles enter the through traffic lanes in a one hour period (excluding detouring and terminating the work area), use a Flagger or lane closure to accommodate more realistic traffic impacts.

[illegible][illegible]

DRAWN:	TMT
DESIGN:	OSR
CHECKED:	SCF
JOB NO.:	1517-000
DATE:	08/05/2024
SHEET	
C-8.2	

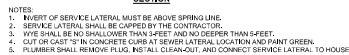
[illegible]



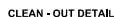
SEE S303 FOR PLAN VIEW



SEE S302 FOR SECTION

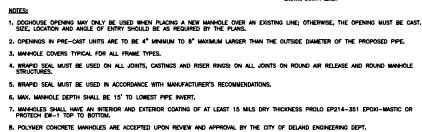


SANITARY SERVICE MATERIALS	\$301
----------------------------	-------



HAND HOLE COVER

NOTE: HAND HOLE COVER TO BE U.S. FOUNDRY
7621 OR EQUAL

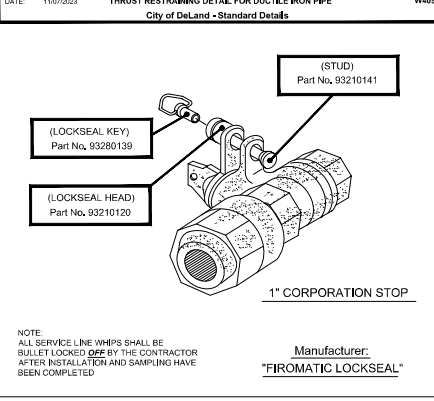
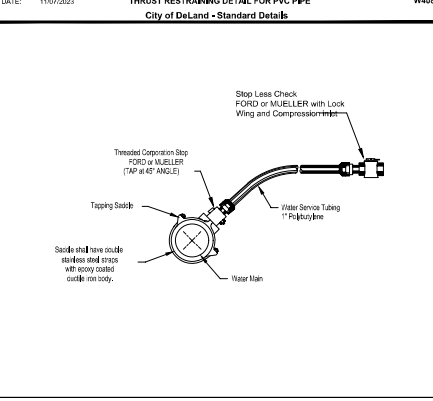
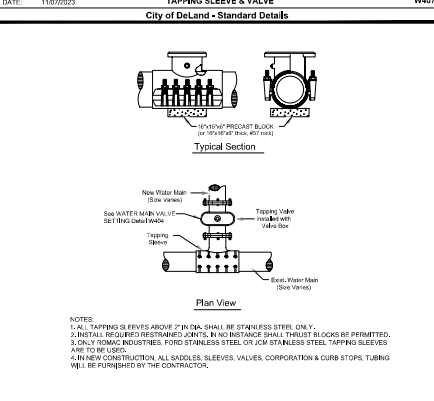
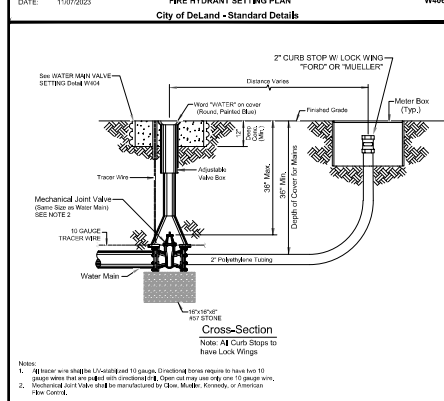
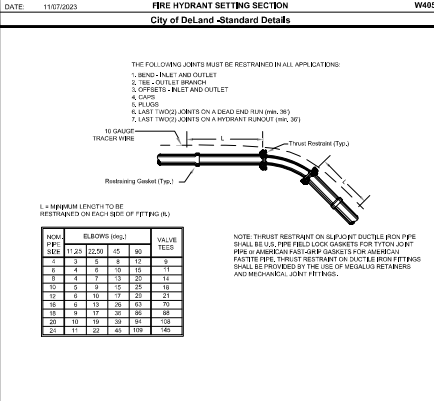
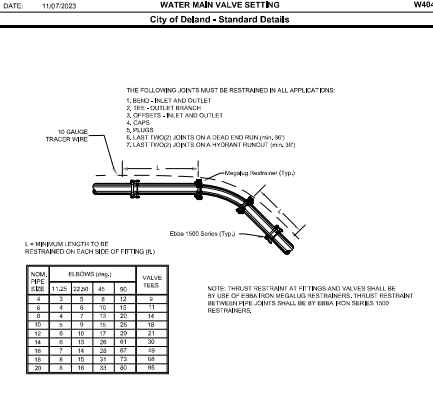
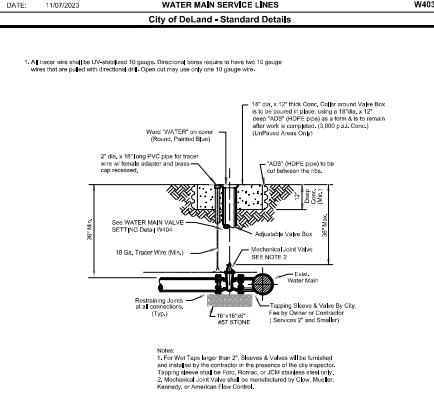
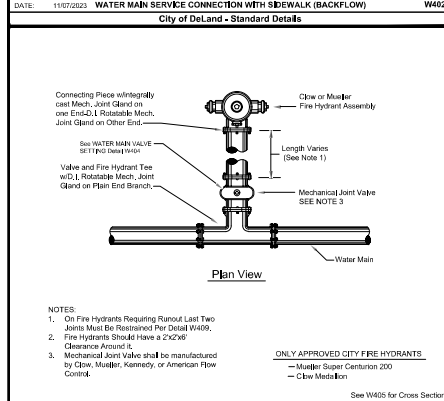
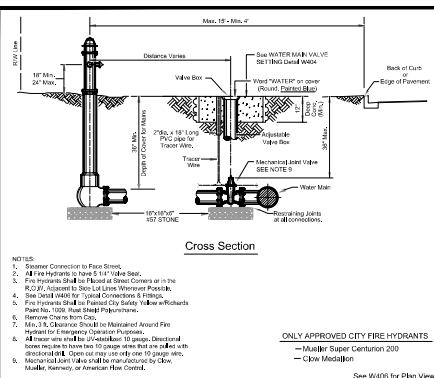
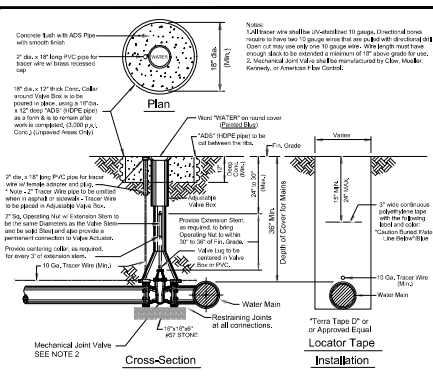
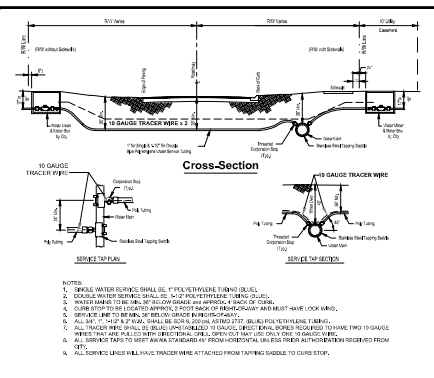
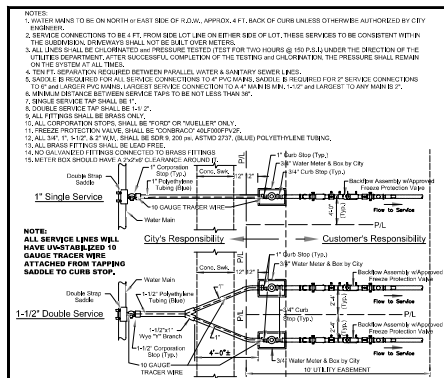


DATE: 11/07/2023 DOGHOUSE MANHOLE 53

City of DeLand - Standard Details

UTILITY DETAILS		TAYLOR RIDGE SUBDIVISION		PREPARED FOR: TLC BLUE LAKE, LLC		 KCG KELLY, COLLINS & GENTRY, INC. 1700 NORTH ORANGE AVENUE, SUITE 400 ORLANDO, FLORIDA 32809 (407) 226-1400 FAX (407) 226-1408	
DRAWN:	TST						
DESIGN:	CSA						
CHECKED:	SCA						
JOB NO.:	1512-006						
DATE:	08/06/2014						

THIS IS NOT INCLUDED WITH THE CIVIL PLANS AND IS FOR INFORMATIONAL PURPOSES ONLY.



THIS IS NOT INCLUDED WITH THE CIVIL PLANS AND IS FOR INFORMATIONAL PURPOSES ONLY.

KELLY, COLLINS & GENTRY, INC.
100 SOUTH MAIN STREET, SUITE 400
ORLANDO, FLORIDA 32801
(407) 255-7000 FAX (407) 255-1400

KCG

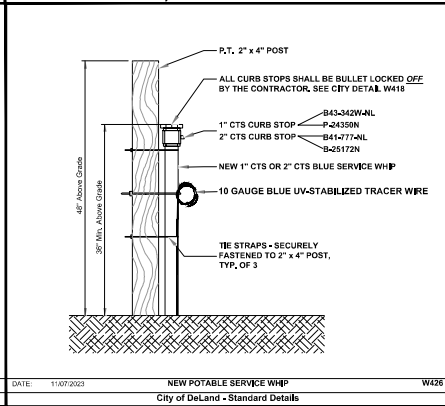
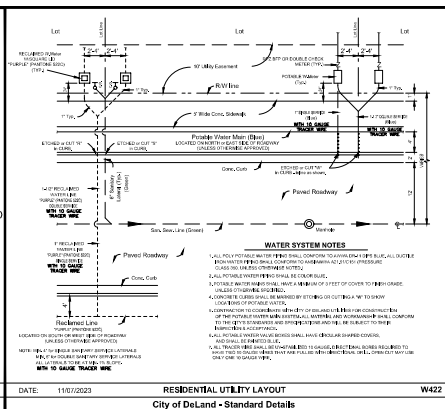
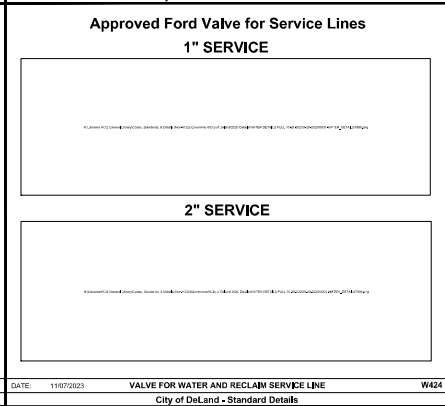
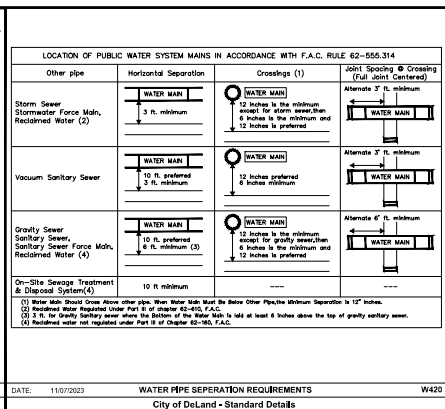
TAYLOR RIDGE SUBDIVISION

UTILITY DETAILS

PREPARED FOR:
TLC
BLUE LAKE, LLC

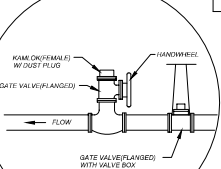
DRAWN: TMT
DESIGN: JGA
CHECKED: JMT
DATE: 10/20/2024

SHEET C-9.2

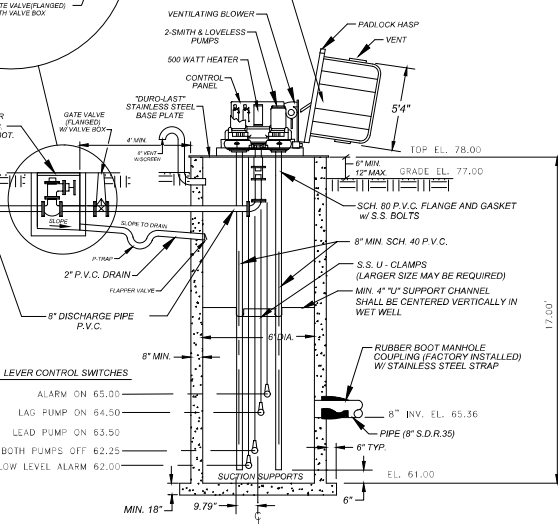


SPARE PARTS

- VACUUM PUMP AND FLOAT CHECK VALVE
- CHECK VALVE
- CW OR CCW IMPELLER
- PARKER SOLENOID VALVE (25 PSI)
- MECHANICAL SEAL
- SONIC START VACUUM DOME HOUSING
- SONIC START REPLACEMENT PRIME SENSOR



SEE PAGE 2 & 3 FOR CONTROL PANEL RACK AND SET-UP



SECTIONAL ELEVATION

N.T.S.

GENERAL SITE PLAN NOTES:

- BACKFLOW PREVENTER SHALL BE WILKINS 34" 975-XL RP w/ WATTS 34" 919-QT RP. W/ "CONBRACO" FREEZE PROTECTION VALVE MODEL NO. 4000-PPV2 TO BE MOUNTED AT TEST COCK #4.
- ALL 34" HOSE BIBBS SHALL ALSO HAVE A VACUUM BREAKER.
- LIFT STATION SITE SHALL BE SODDED.
- PRIOR TO ACCEPTANCE OF THIS LIFT STATION, CITY STAFF WILL OBSERVE THAT THIS STATION WILL PUMP DOWN TO THE CITY'S SPECIFIED CUT-OFF LEVEL UNDER THE CONDITIONS OF A FULL DISCHARGE PRESSURE SEWER, BEING PRESSURIZED BY ALL OTHER PUMP STATIONS OPERATING. IF THERE EXISTS A MANHOLE UNDER THE DEVELOPER WILL SUPPLY LABOR AND MATERIALS FOR THIS DEMONSTRATION.
- DO NOT PLACE TRANSFORMERS OR OTHER APPLIANCES WITHIN THE DESIGNATED EASEMENT THAT WILL IMPAIR MAINTENANCE ACTIVITIES OF THIS STATION.
- ORIENTATE THE MANWAY TOWARD THE STREET SIDE FOR EASY ACCESS BY OPERATING & MAINTENANCE PERSONNEL.
- PROVIDE ADEQUATE PAVING (CONC. OR ASPHALT) 12" WIDE DRIVE FROM STREET TO PUMP STATION FOR SAFE ACCESS OF EMERGENCY GENERATOR, SEWER CLEANER, AND OTHER MAINTENANCE VEHICLES.
- FENCE WITH 6' HIGH COMMERCIAL GRADE CYCLOPE FENCE, USING TWO 8' FOOT GATES. FENCE SHOULD BE LOCATED IN SUCH A WAY AS NOT TO INTERFERE WITH ANY PANEL, DOORS OR HATCH OPENINGS, AND GATE POSITIONS TO ALLOW EASY ACCESS TO WET WELL. BLACK OR GREEN VINYL COATING (REFER TO SITE PLAN).
- A 4" x 4" TRACT SHALL BE DEDICATED TO THE CITY OF DELAND FOR THE LIFT STATION SITE.
- PROVIDE "DURO-LAST" STAINLESS STEEL BASE PLATE ON LIFT STATION.
- BRASS OR COPPER PIPE & FITTINGS, ONLY, SHALL BE USED FOR BPP & HOSE BIBBS AND LINES ABOVE GROUND.
- ALL SEWER AIR RELEASE VALVES SHALL BE 2" A.R.I. MODEL D-023T02.
- MIN. 2" x 2" AND 1" CLEARANCE ABOVE METER

CONTROLS:

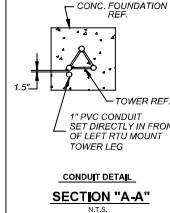
THE CONTROL EQUIPMENT SHALL BE MOUNTED IN A NEMA TYPE 1 STEEL ENCLOSURE WITH A REMOVABLE ACCESS COVER. THE CIRCUIT BREAKERS, STARTER RESET BUTTONS, AND CIRCUIT SWITCHES SHALL BE OPERABLE WITHOUT REMOVING THE ACCESS COVER, FOR BACKUP/ON OPERATION.

A GATE VALVE CONVENIENCE OUTLET SHALL BE PROVIDED ON THE SIDE OF THE CABINET FOR OPERATION OF 120 VOLT AC SERVICES. THERMAL MAGNETS ARE CIRCUIT BREAKERS SHALL BE PROVIDED FOR BRANCH DISCONNECT SERVICE AND SHORT CIRCUIT PROTECTION OF ALL MOTOR CONTROL AND AUXILIARY CIRCUITS.

MAGNETIC ACROSS-THE-LINE STARTERS WITH UNDER-VOLTAGE RELEASE AND OVERLOAD COILS FOR EACH PHASE SHALL BE PROVIDED FOR EACH PUMP MOTOR TO GIVE POSITIVE PROTECTION. EACH SINGLE-PHASE AUXILIARY MOTOR SHALL BE EQUIPPED WITH AN OVER-CURRENT PROTECTION DEVICE IN ADDITION TO THE BRANCH CIRCUIT BREAKER, OR SHALL BE IMPEDANCE PROTECTED. ALL SWITCHES SHALL BE LABELED AND A CODED WIRING DIAGRAM SHALL BE PROVIDED.

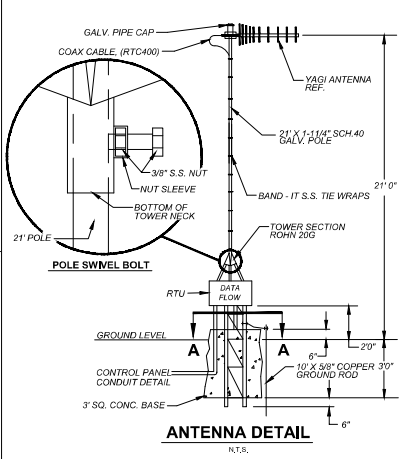
TO CONTROL THE OPERATION OF THE PUMPS WITH VARIATIONS OF LIQUID LEVEL IN THE WET WELL, A MINIMUM OF FOUR REPLACEMENT SWITCHES SHALL BE PROVIDED, A 30-CORD SHALL BE PROVIDED WITH EACH SWITCH. THE CORD SHALL HAVE A CORROSION-RESISTANT VINYL JACKET AND BE EASY TO UNWIND IN ORDER TO PREVENT TANGLES.

AN AUTOMATIC ALTERNATOR WITH MANUAL SWITCH SHALL BE PROVIDED TO CHANGE THE FREQUENCY OF OPERATION OF THE PUMPS EVERY 60 HOURS. ALTERNATING PUMPS AT LESS THAN 60 HOURS INTERVALS WILL NOT BE ACCEPTABLE. PROVISIONS SHALL ALSO BE MADE FOR THE PUMPS TO OPERATE IN PARALLEL SHOULD THE LEVEL IN THE WET WELL CONTINUE TO RISE ABOVE THE STARTING LEVEL FOR THE LAG PUMP.



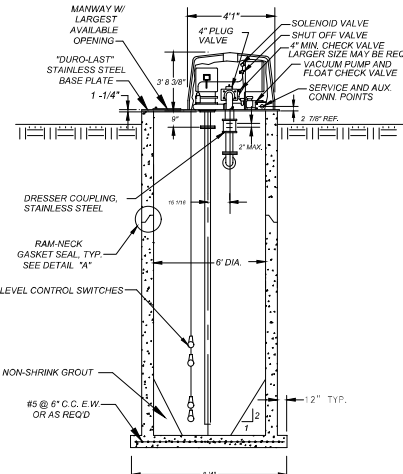
SECTION "A-A"

N.T.S.



ANTENNA DETAIL

N.T.S.



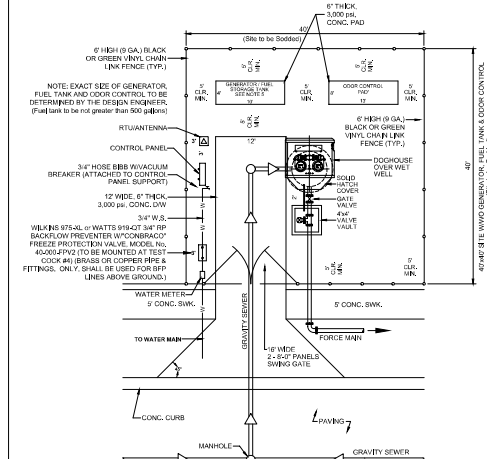
CROSS SECTION

N.T.S.

WET WELL DIA.	DIM "A"	DIM "B"	DIM "C"	DIM "D"	DIM "E"	DIM "F"	DIM "G"	DIM "H"	DIM "I"	DIM "J"	DIM "K"	DIM "L"
6'-0"	2'-11 1/16"	3'-4 1/8"	3'-4 1/8"	2'-1 3/8"	2'-5 7/8"	1'-4"	3'-10"	3'-5 1/2"	10'	1'-8 7/8"		

DETAIL "A-A"

N.T.S.

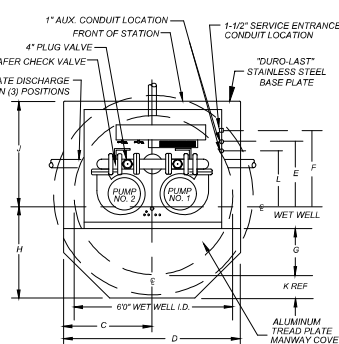


LIFT STATION SITE PLAN

N.T.S.

- NOTES:
- MINIMUM 20' ACCESS DRIVEWAY FROM EDGE OF PAVEMENT TO THE GATE SHALL BE PROVIDED ON NON-RESIDENTIAL ROADS.
 - MINIMUM SPACING BETWEEN FENCE AND ALL INSTALLED EQUIPMENT SHALL BE 5 FEET UNLESS OTHERWISE NOTED.
 - ALL WORK SHALL BE PER CITY OF DELAND'S SPECIFICATIONS.
 - BRASS OR COPPER PIPE & FITTINGS, ONLY, SHALL BE USED FOR HOSE BIBBS AND ALL WATER LINES ABOVE GROUND.
 - CITY ONLY ACCEPTS BLUE STAR, FLORIDA DETROIT DIESEL, OR CAT/IN AN GENERATOR.
 - POLYMER CONCRETE WET WELLS ARE ACCEPTED UPON REVIEW AND APPROVAL BY THE CITY OF DELAND ENGINEERING DEPT.

NOTE: 40' WET WELLS ARE DEDICATED TO CITY OF DELAND (into a progress-entirety agreement shall be provided to Site if required)



PLAN VIEW

N.T.S.

MACH. CHAMBER (SHOW LESS HOOD)

PUMP SELECTION:

Wet Well (Anti-Floation)
Displacement = XXXXX lbs. Up
Structure = XXXXX lbs. Down
Vapour Vault (Anti-Floation)
Displacement = XXXXX lbs. Up
Structure = XXXXX lbs. Down

POWER: 15 HP & 22.6%
IMPELLER DIA: 9"
OPERATING POINT: 80 GPM @ 104 FT

THIS IS NOT INCLUDED WITH THE CIVIL PLANS AND IS FOR INFORMATIONAL PURPOSES ONLY.

Index No.
30800
REVISED 5/31/07
REVISED 8/6/08
REVISED 10/2/09
REVISED 4/8/10
REVISED 8/1/13
REVISED 9/2/14
REVISED 5/15/17
REVISED 7/24/18
REVISED 11/05/21
SHEET 1 OF 3

DRAWN	DATE
DESIGN	00A
CHECKED	00A
DATE	10/20/2024

SHEET
C-9.4

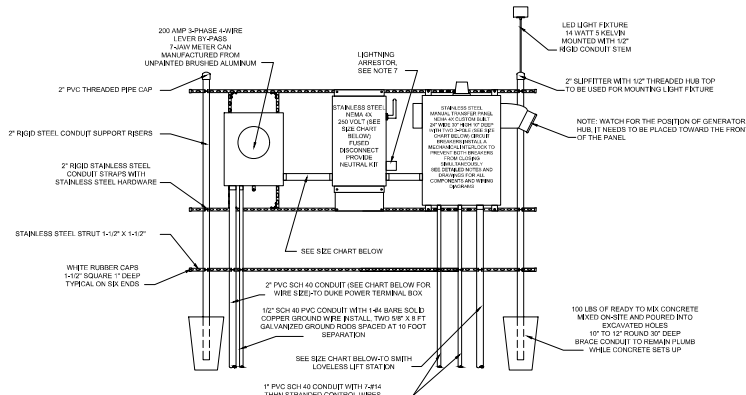
KELLY, COLLINS & GENTLY, INC.
1700 STATE AVENUE, SUITE 400
DELAND, FLORIDA 32725-4000
(904) 255-7000 FAX (904) 255-1400

PREPARED FOR:
TLC
BLUE LAKE, LLC

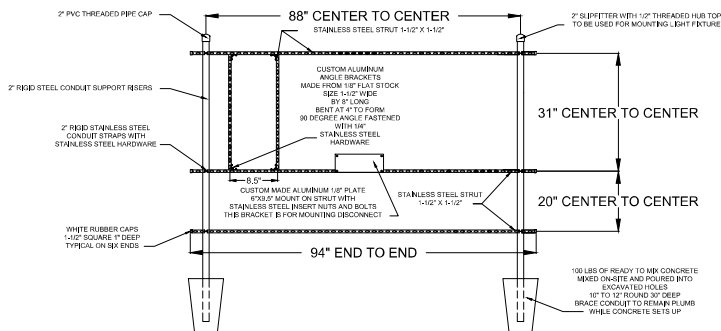
TAYLOR RIDGE
SUBDIVISION

UTILITY DETAILS

DETAIL "A"



240 VOLT POWER RACK WITHOUT GENERATOR

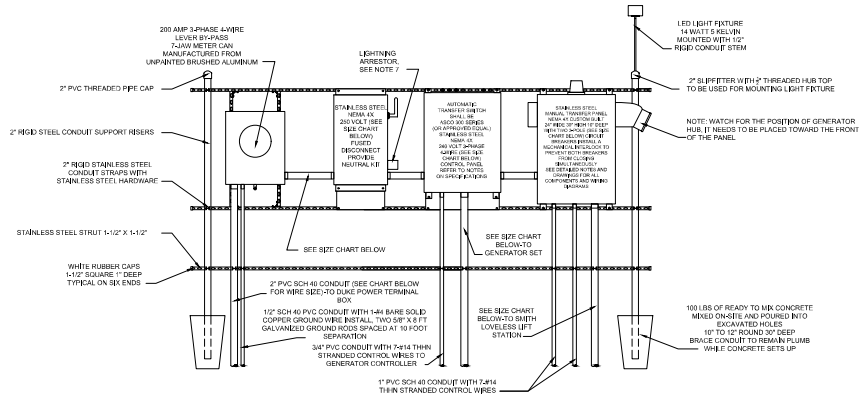


RACK FRAMING DETAILS
240 VOLT WITHOUT AUTOMATIC TRANSFER SWITCH

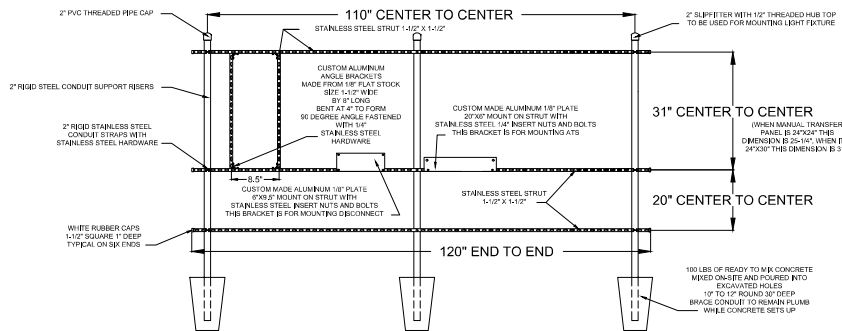
CONTROL GENERATOR RECEPTACLE PANEL

1. ENCLOSURE - NEMO 4X STAINLESS, 30 GAUGE, 14 GAUGE, GASKETED, 34 BRUSHED FINISH, U.S. AND CSA APPROVED, HMP* AND STAPLE FOR PADLOCKING, INSIDE PRINT POCKET, STAINLESS STEEL HINGE, MIN. SIZE 24" x 24" IF ORDER TO 15" x 14".
2. MAIN BREAKERS - SQUARE HEAVY DUTY COUSID PROPERLY FOR FULL LOAD OF STATION PLUS 25%.
3. EMERGENCY BKR. - SQUARE HEAVY DUTY COUSID PROPERLY FOR FULL LOAD OF STATION PLUS 25%.
4. MEDIA TERMINAL: ALL ALUMINUM AND STAINLESS STEEL, WIPROTECT MEANS OF LOCKING OFF BREAKER NOT IN USE. THE BREAKERS WILL PROTRUDE THROUGH INNER DOOR.
5. RECEPTACLES: STALL RECEPTACLES (250 VOLT ONLY), 1.4KE TRIP PART #37-8007 HED VOLT ONLY.
6. ANGLE ADAPTER - RUSSELL STOLL, MAB-10, 20 DEG. ADAPTER.
7. LIGHT ADAPTER: HEAVY DUTY COUSID PROPERLY FOR FULL LOAD OF STATION PLUS 25%.
8. PHASE MONITOR: DIVERSIFIED P/N 26-4-335-45A, 5 PIN WITH N.O. AND N.C. CONTACTS WIRE TO TERMINAL FOR RTU EQUIPMENT.
9. ALARM HORN: HED, LEXALUM WITH EXTERNAL SPEAKERS.
10. HORN RELAY: SQUARE D OR CARRON, 1 PIN DOUBLE POLE, DOUBLE THROW WIRED TO RTU TERMINAL.
11. ALARM HORN: HED, WIRELESS P/N 317-115 MOUNTED TO ADD A HORN PROTECT CAST BOX ON EXTENSION OF ENCLOSURE.
12. ALARM RELAY: SQUARE D OR CARRON, 1 PIN DOUBLE POLE, DOUBLE THROW WIRED TO RTU TERMINAL.
13. ALARM RESEAL: SQUARE D, WEATHER PROOF MOUNTED ON EXTERIOR OF ENCLOSURE.
14. BNC: BNC-DATE ALUMINUM, 12 GAUGE.
15. TERMINAL STRIP: BUCHANAN P/N 6025.
16. GROUND LUG: BUCHANAN P/N 624.
17. NEUTRAL LUG: BUCHANAN P/N 624.
18. MAIN LOAD LUG: SQUARE D P/N 610.
19. LABELS: ALL BREAKERS AND SWITCHES TO BE IDENTIFIED BY PERMANENTLY ATTACHED LABEL TO PANEL, DOOR, INTERIOR.
20. MOUNTING SCREWS: STAINLESS STEEL, 3/4".
21. SCHEMATIC: ONLY - PROTECTED BY PLASTIC COATING AND ATTACHED TO PANEL, DOOR, INTERIOR.
22. MANUFACTURER, STAGAN, ELEC OR CITY OF DELAND APPROVAL.
23. RTU LOG: DATA LOG, INSIDE/OUTSIDE (16" x 18" x 20" OR EQUIV) TO BE INSTALLED BY CITY-DEVELOPER TO BEAR ALL COSTS.
24. PROVIDE SPARE PARTS - SEE SPARE PARTS LIST.
25. WE TELL TO BE COATED INSIDE AND OUT WITH MIN. 2 MILS OF COAL TAREE.
26. EQUIPMENT PROTECTS CAN ONLY BE IMPROVED UPON RECEIPT OF WRITTEN AUTHORIZATION FROM THE CITY OF DELAND.

DETAIL "B"



240 VOLT POWER RACK WITH GENERATOR AUTOMATIC TRANSFER SWITCH



RACK FRAMING DETAILS

240 VOLT WITH AUTOMATIC TRANSFER SWITCH

SIZE CHART

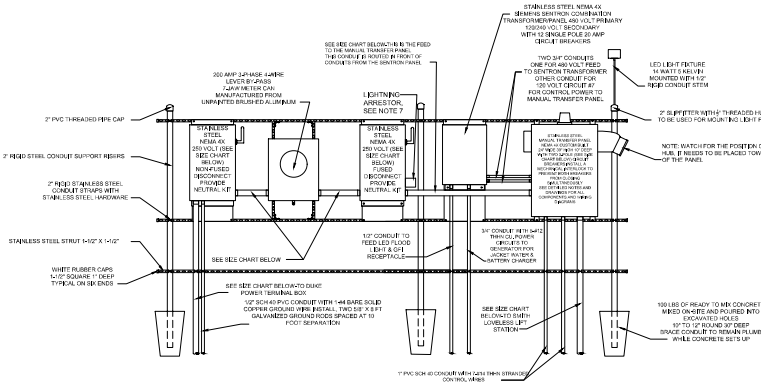
- STEP #1: DETERMINE LIFT STATION SIZE & SPECIFICATIONS FROM THE UTILITY CONTRACTOR OR CITY OF DELAND ENGINEERING DEPT.
- STEP #2: MAKE NOTE OF THE FOLLOWING: THE VOLTAGE FOR THE STATION, THE NUMBER OF PUMPS (2 OR 3) & THE HORSEPOWER OF PUMPS,
- STEP #3: REFER TO THE ELECTRICAL SERVICE DATA CHARTS FOR THE STANDARD 2 PUMP OR 3 PUMP STATION (FOUND ON SHEET 3 OF 3),
- STEP #4: USE THE VOLTAGE COLUMN AND THE HORSEPOWER ROW TO FIND THE TOTAL STATION FULL LOAD AMPS.
- STEP #5: UPON DETERMINING THE FULL LOAD AMPS OF THE STATION, THE SERVICE ENTRANCE SIZE SHALL NOT BE SMALLER THAN 100 AMPS, STATIONS THAT REQUIRE A SERVICE SIZE LARGER THAN 100 AMPS SHALL BE SIZED CLOSEST TO THE STANDARD SIZES LISTED BELOW.

SERVICE SIZE	CONDUIT SIZE	WIRE SIZE	BREAKER OR FUSE RATING
100 AMP	1-1/2"	#3 THHN CU	100 AMP
125 AMP	1-1/2"	#2 THHN CU	125 AMP
150 AMP	2"	#1 THHN CU	150 AMP
200 AMP	2"	3/0 THHN CU	200 AMP
225 AMP	2-1/2"	4/0 THHN CU	225 AMP

Index No.
30800
REVISED 11/05/21
SHEET 2 OF 3

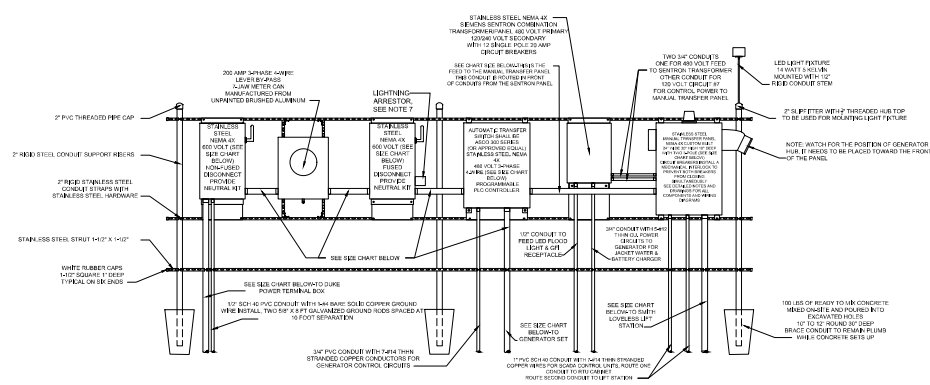
THIS IS NOT INCLUDED WITH THE
CIVIL PLANS AND IS FOR
INFORMATIONAL PURPOSES ONLY.

DETAIL "C"

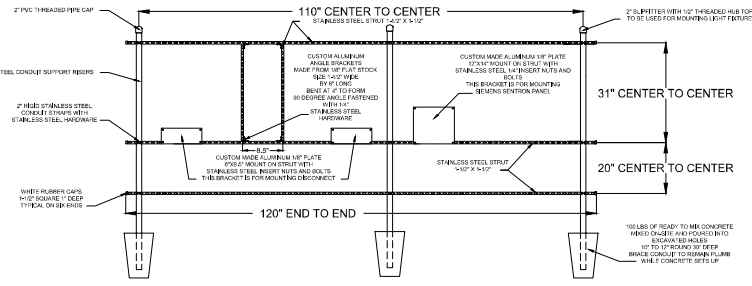


480 VOLT POWER RACK WITHOUT GENERATOR
AUTOMATIC TRANSFER SWITCH

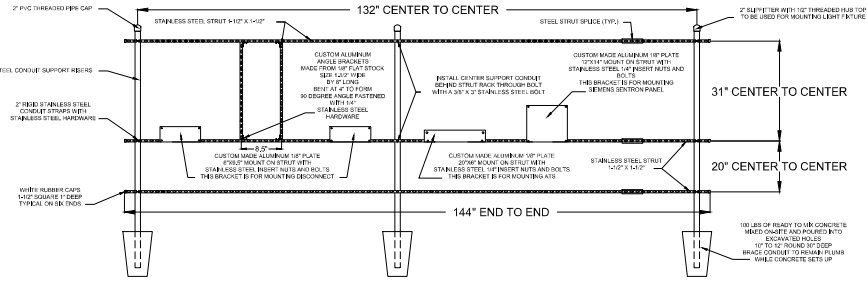
DETAIL "D"



480 VOLT POWER RACK WITH GENERATOR
WITH AUTOMATIC TRANSFER SWITCH



RACK FRAMING DETAILS
480 VOLT WITHOUT AUTOMATIC TRANSFER SWITCH



RACK FRAMING DETAILS
480 VOLT WITH AUTOMATIC TRANSFER SWITCH

CONTROL GENERATOR RECEPTACLE PANEL

1. ENCLOSURE, NEMA 4X STAINLESS, 304 GRADE, 14 GAUGE, GASKETED, 14 BRUSHED FINISH, U.L. AND CSA APPROVED, HASP AND STAPLE FOR PADLOCKING, INSIDE PRINT POCKET, STAINLESS STEEL HINGE, MIN. SIZE 24\"/>

ELECTRICAL SERVICE DATA
STANDARD 2-PUMP WET WELL MOUNTED PUMP STATION

MAIN PUMP MOTOR SIZE	TOTAL STATION FULL LOAD AMPS		
	208 VOLT	230 VOLT	460 VOLT
RATED HP EACH			
1	17.6	15.3	7.6
1-1/2	21.8	18.9	9.5
2	25.9	22.5	11.3
3	33.1	28.8	14.5
5	47.7	41.4	20.7
7-1/2	65.3	56.7	28.4
10	80.8	70.2	35.1
15	117.0	101.7	50.9
20	148.1	128.7	64.4
25	190.44	160.2	80.1
30	215.3	187.2	93.6
40	--	--	120.6
50	--	--	150.0

ELECTRICAL SERVICE DATA
STANDARD 3-PUMP WET WELL MOUNTED PUMP STATION

MAIN PUMP MOTOR SIZE	TOTAL STATION FULL LOAD AMPS		
	208 VOLT	230 VOLT	460 VOLT
RATED HP EACH			
1	27.3	23.7	11.9
1-1/2	33.3	28.9	14.5
2	39.3	34.1	17.1
3	49.6	43.2	21.6
5	70.6	61.4	30.7
7-1/2	96.1	83.5	41.8
10	118.5	103.0	51.5
15	170.9	148.5	74.3
20	215.7	187.5	93.8
25	--	--	116.5
30	--	--	136.0
40	--	--	175.0
50	--	--	217.3

Index No.
30800
REVISED 11/05/21
SHEET 3 OF 3

THIS IS NOT INCLUDED WITH THE
CIVIL PLANS AND IS FOR
INFORMATIONAL PURPOSES ONLY.

KELLY, COLLINS & GENTLY, INC.

1700 SOUTH GARDEN AVENUE, SUITE 400
TAYLOR RIDGE, ALABAMA 36089-4400
(205) 886-5000 FAX: (205) 886-1408

KCG

1700 SOUTH GARDEN AVENUE, SUITE 400
TAYLOR RIDGE, ALABAMA 36089-4400
(205) 886-5000 FAX: (205) 886-1408

PREPARED FOR:

TLC
BLUE LAKE, LLC

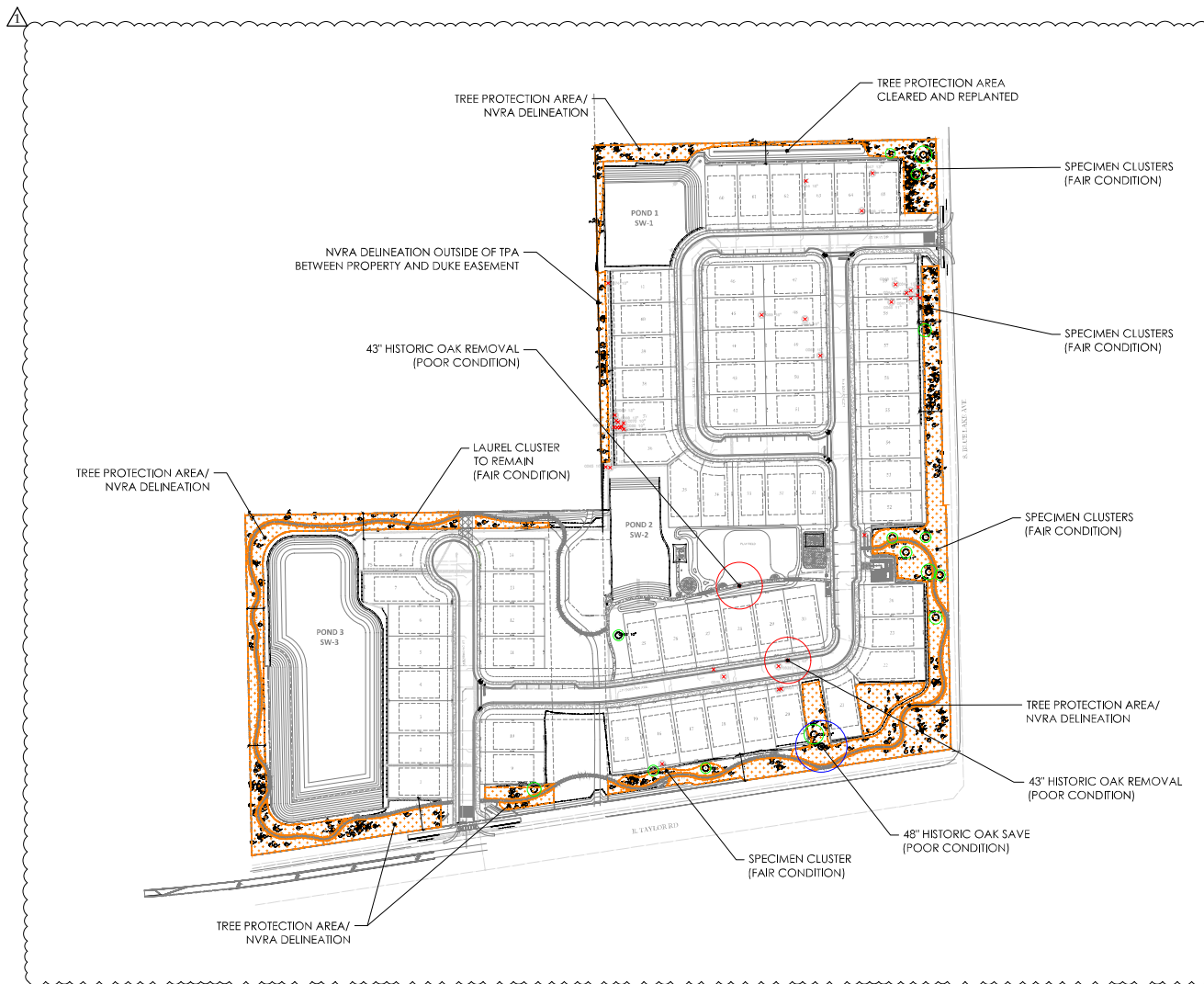
TAYLOR RIDGE
SUBDIVISION

UTILITY DETAILS

DRAWN: TMT
DESIGN: JDA
CHECKED: JMT
DATE: 10/20/2021

SHEET
C-9.6

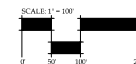
DRAWING PLOTTED: 7/24/2024 10:00 AM
Z:\PROJECTS\2024\2024-04-12\TAYLOR RIDGE\TAYLOR RIDGE L100.DWG



*SEE TREE MITIGATION CALCULATIONS AND TREE PROTECTION FENCE DETAIL ON SHEET L110

TREE INVENTORY LEGEND:

- | | | | | |
|--|---|--|--|--|
| ✗ SPECIMEN TREE TO BE REMOVED | ○ SPECIMEN TREE TO BE RETAINED | ✗ HISTORIC TREE TO BE REMOVED | ○ HISTORIC TREE TO BE RETAINED | NATURAL VEGETATION RETENTION AREA 2'-5' TREES TO BE RETAINED |
|--|---|--|--|--|



DESIGNED BY: Todd W. Bonnett
 DRAWN BY: Todd W. Bonnett
 CHECKED BY: Todd W. Bonnett
 JOB NUMBER: 2024-04-12
 FILE NAME: TAYLOR RIDGE L100.DWG
 REVISIONS: City Comments 07-26-2024

L100

CITY SUBMITTAL - 2024-04-12



BONNETT design group, llc
 landscape architecture
 community planning
 FL LIC 26000341

400 South Orlando Ave. Suite 201
 Maitland, FL 32751
 407-622-1588 ext. 201

Taylor Ridge
Landscape Architecture
Hanover Land Company, LLC
 Deland, Florida
TREE MITIGATION PLAN

DATE: April 12, 2024

DRAWN BY: BRL

CHECKED BY: TWS

JOB NUMBER: 2024-04-12

FILE NAME: TAYLOR RIDGE L100.DWG

REVISIONS: City Comments 07-26-2024

REVISIONS: City Comments 07-26-2024

REVISIONS: City Comments 07-26-2024

REVISIONS: City Comments 07-26-2024

REVISIONS: City Comments 07-26-2024

REVISIONS: City Comments 07-26-2024

REVISIONS: City Comments 07-26-2024

REVISIONS: City Comments 07-26-2024

REVISIONS: City Comments 07-26-2024

REVISIONS: City Comments 07-26-2024

REVISIONS: City Comments 07-26-2024

REVISIONS: City Comments 07-26-2024

REVISIONS: City Comments 07-26-2024

REVISIONS: City Comments 07-26-2024

REVISIONS: City Comments 07-26-2024

REVISIONS: City Comments 07-26-2024

REVISIONS: City Comments 07-26-2024

REVISIONS: City Comments 07-26-2024

REVISIONS: City Comments 07-26-2024

REVISIONS: City Comments 07-26-2024

REVISIONS: City Comments 07-26-2024

REVISIONS: City Comments 07-26-2024

REVISIONS: City Comments 07-26-2024

OVERALL TREE CALCULATIONS:

Tree Protection Table (Per Civil Plans)		
Total Project Area	26.01	AC
Residential Lot Area	10.77	AC
Internal Right of Way	3.63	AC
Lift Station	0.04	AC
Open Space	11.59	AC
Amenity/ Park Tract	0.87	AC
Stormwater Tract	3.73	AC
Powerline Easement	1.14	AC
Other Open Space	2.70	AC
Tree Protection Required	3.90	AC
Tree Protection Area Provided	4.02	AC

Tree Coverage Table		
Net Developable Area	24.87	AC
Minimum Coverage Trees (1,132,996 / 2,500)	453	Trees
Minimum DBH Coverage (453x 6")	2,719	DBH
Specimen/Historic Inches Retained	232	Inches
NVRA Inches Retained	1,436	Inches
Total Proposed Inches	2,116	Inches
Overage Inches	1,065	Inches

Specimen Tree Summary		
Total Specimen Trees on Site	48	Trees
Specimen Trees per Acre (Total Trees / 26)	2	Trees
Per Code Specimen Trees to be retained per Acre	-	Trees
(Minimum Number of Specimen Trees to be Retained (100%))	48	Trees
Total Specimen Trees to be Protected / Retained	25	Trees

Common Area Tree Replacement Table			
Total Trees in Common Areas	372	Trees	744
Total Palms in Common Areas	94	12" dbh Trees	376
Total Common Area Street Trees	18	Trees	36
Total Trees to Replace Historic Removals	13	Trees	91
Total Common Area Plantings	497	Trees	1,247

Lot Tree Replacement Table			
Total 60' x 115' (10" DBH / Lot)	57	Lots	741
Total 60' x 115' (16" DBH / Lot)	8	Lots	128
Total Lot Tree Replacement	65	Lots	869

Palm Tree Summary	
Palm Tree credits for Common Areas	376
Palm Tree credits for Lots	164
Total Credits for Palm Trees (11.6%)	540
Maximum Palm Credits per Code (25% x 6,653)	1,663

SPECIMEN REMOVALS	INCHES	HISTORIC REMOVALS	INCHES
C021	11	C006	48
C030	11		
C031	12		
C032	10		
C034	16		
C035	17		
C041	13		
C042	12		
C043	12		
C044	14		
C045	13		
C046	10		
C047	13		
C048	10		
C049	11		
C050	10		
C052	10		
C053	10		
C054	10		
C058	10		
C059	15		
C063	10		
C064	10		
C065	12		
C066	10		
C067	13		
C068	13		
C069	12		
C070	10		
C071	11		
C072	10		
C073	10		
C074	10		
TOTAL	390		

Tree Replacement Table		
Historic Trees to be Removed	86	Inches
Specimen Trees to be Removed	390	Inches
Required Mitigation for Specimen Removal	195	Inches
All Other Protected Tree Removal (Statistical)	10,116	Inches
Required Protected Tree Replacement Mitigation	6,372	Inches
Total Number of Tree Replacement Required	6,653	Inches
Total Trees to be Planted on Lots, Streets, & Common	2,116	Inches
Total Credit for 2" DBH to 5" DBH Live Oaks Preserved	1,436	Inches
Net Mitigation Required	3,101	Inches

Replacement Summary		
Total Common Area Plantings	1,247	Inches
Total Lot Trees Planting	869	Inches
Grand Total	2,116	Inches

Inches deficit	3,101
total contribution is DBH deficit multiplied by 75 (1" = 375)	\$232,574.43

TREE	QTY	Inches
AR	35	30
CC	4	8
JV	40	80
LS	13	26
PTA	108	216
QV	10	38
QV-H	13	93
TD	26	52
PDM	4	16
SP	50	360
UAS	18	36
LIN	24	48
PAN	59	118
MGB	26	52
QVB	38	76
	497	1247

STATISTICAL TREE CALCULATIONS:

Site Data	TOTAL
CLEARING	20.95
ASSESSMENT	1.25
CLEARING	19.7

Statistical Summary			
TOTAL	AVERAGE PER ACRE	TOTAL ESTIMATE	
7763	970	19116	

ACREAGE	0.25 SECTION 1	TREE	SIZE
A062	LAUREL	16	
A063	LAUREL	7	
A064	LAUREL	14	
A065	LAUREL	6	
A066	LAUREL	10	
A067	SLASH	14	
A068	SLASH	6	
A069	LAUREL	18	
A070	LAUREL	6	
A071	LAUREL	10	
A072	LAUREL	8	
A073	SLASH	9	
A074	LAUREL	13	
A075	LAUREL	10	
A084	LAUREL	7	
A085	LAUREL	9	
A086	SLASH	11	
A087	LAUREL	6	
TOTAL	176		
per acre	704		

ACREAGE	0.25 SECTION 5	TREE	SIZE
T066	LAUREL	11	
T067	LAUREL	9	
T068	LAUREL	7	
T069	LAUREL	9	
T070	LAUREL	13	
T071	LAUREL	13	
T072	LAUREL	13	
T073	LAUREL	13	
T074	LAUREL	13	
T075	LAUREL	13	
T076	LAUREL	13	
T077	LAUREL	13	
TOTAL	346		
per acre	1384		

ACREAGE	0.3 SECTION 2	TREE	SIZE
A116	SLASH	20	
A117	SLASH	14	
A118	LAUREL	9	
A119	LAUREL	8	
A120	LAUREL	14	
A121	LAUREL	20	
A122	SLASH	14	
A123	LAUREL	14	
A124	SLASH	18	
A125	LAUREL	9	
A126	LAUREL	11	
A127	LAUREL	15	
A128	LAUREL	7	
A129	LAUREL	4	
A130	LAUREL	8	
A131	SLASH	15	
A132	LAUREL	17	
A133	LAUREL	18	
A134	SLASH	22	
A135	LAUREL	11	
A136	SLASH	35	
A137	LAUREL	7	
A138	LAUREL	30	
A139	LAUREL	7	
A140	SLASH	17	
TOTAL	319		
per acre	3063		

ACREAGE	0.3 SECTION 6	TREE	SIZE
T184	SLASH	15	
T185	SLASH	14	
T186	LAUREL	12	
T187	LAUREL	13	
T188	LAUREL	22	
T189	LAUREL	32	
T190	LAUREL	19	
T191	LAUREL	6	
T192	LAUREL	8	
T193	LAUREL	41	
T194	LAUREL	39	
T195	LAUREL	18	
T196	SLASH	15	
T197	LAUREL	41	
T198	LAUREL	13	
T199	LAUREL	34	
T201	LAUREL	20	
T205	LAUREL	6	
T206	LAUREL	15	
T207	LAUREL	13	
T208	LAUREL	21	
T209	LAUREL	17	
T210	LAUREL	7	
T211	SLASH	8	
T212	SLASH	16	
T213	LAUREL	8	
T214	SLASH	17	
T215	LAUREL	9	
T216	SLASH	17	
T217	LAUREL	8	
T219	SLASH	15	
T220	LAUREL	9	
T221	LAUREL	18	
T222	LAUREL	20	
T223	SLASH	14	
T224	LAUREL	15	
T225	LAUREL	20	
T226	LAUREL	24	
TOTAL	646		
per acre	2153		

ACREAGE	0.25 SECTION 3	TREE	SIZE
T131	LAUREL	16	
T132	LAUREL	9	
T133	LAUREL	11	
T134	SAND	25	
T136	LAUREL	9	
T137	LAUREL	12	
T138	BLACK CHERRY	9	
T140	LAUREL	12	
T141	LAUREL	10	
T142	LAUREL	6	
T147	LAUREL	12	
T148	LAUREL	10	
T149	LAUREL	10	
T150	LAUREL	8	
T151	LAUREL	15	
T152	SLASH	13	
T153	LAUREL	11	
T154	SLASH	18	
T155	LAUREL	17	
T156	LAUREL	6	
T157	LAUREL	8	
T158	LAUREL	7	
T164	LAUREL	50	
T165	LAUREL	16	
T166	LAUREL	18	
T167	LAUREL	43	
TOTAL	379		
per acre	1516		

ACREAGE	0.3 SECTION 7	TREE	SIZE
A002	LAUREL	12	
A003	LAUREL	12	
A004	SLASH	16	
T321	SLASH	30	
T322	LAUREL	12	
T323	LAUREL	11	
T327	LAUREL	8	
T328	LAUREL	17	
T330	LAUREL	6	
T331	LAUREL	20	
T332	LAUREL	9	
T333	LAUREL	13	
T334	LAUREL	12	
T335	LAUREL	12	
T336	LAUREL	9	
T337	SLASH	13	
T338	LAUREL	9	
T339	SLASH	15	
T340	LAUREL	10	
T341	SLASH	13	
TOTAL	259		
per acre	863		

ACREAGE	0.25 SECTION 4	TREE	SIZE
T015	LAUREL	12	
T016	SLASH	13	
T017	LAUREL	9	
T018	LAUREL	9	
T019	LAUREL	10	
T020	SLASH	14	
T021	LAUREL	14	
T022	LAUREL	14	
T023	LAUREL	14	
T024	LAUREL	10	
T025	LAUREL	10	
T026	PALM	25	
T027	LAUREL	10	
T028	LAUREL	10	
T029	LAUREL	10	
T030	LAUREL	6	
T031	SLASH	9	
T032	LAUREL	13	
T033	LAUREL	17	
T040	LAUREL	14	
TOTAL	267		
per acre	1068		

ACREAGE	0.3 SECTION 8	TREE	SIZE
T269	SLASH	14	
T270	LAUREL	12	
T271	SLASH	12	
T272	LAUREL	12	
T273	SLASH	12	
T274	LAUREL	12	
T275	LAUREL	12	
T276	LAUREL	12	
T278	LAUREL	12	
T279	LAUREL	12	
T280	LAUREL	12	
T281	LAUREL	8	
T282	LAUREL	17	
T283	SLASH	12	
T286	LAUREL	20	
T287	SLASH	12	
T296	LAUREL	13	
T297	SLASH	12	
T298	LAUREL	12	
T300	SLASH	12	
T301	SLASH	13	
T302	SLASH	13	
T303	LAUREL	10	
T304	LAUREL	10	
T305	SLASH	13	
T306	SLASH	13	
T307	LAUREL	10	
T308	LAUREL	10	
T309	LAUREL	10	
T310	LAUREL	10	
T311	LAUREL	10	
T312	LAUREL	10	
T313	LAUREL	10	
T315	SLASH	10	
T316	LAUREL	10	
T317	LAUREL	10	
T318	LAUREL	10	
T319	SLASH	10	
TOTAL	449		
per acre	1123		



RONNETT design group, llc
landscape architecture
community planning
FL LIC 26000341

400 South Orlando Ave. Suite 201
Maitland, FL 32751
407-622-1588 voice

Taylor Ridge
Landscape Architecture
Hanover Land Company, LLC
Deland, Florida
TREE MITIGATION CALCULATIONS

DATE: April 12, 2024

DRAWN BY: BRL

CHECKED BY: TWS

JOB NUMBER: 2023.188

FILE NAME: B:\2023\TAYLOR RIDGE\JOB

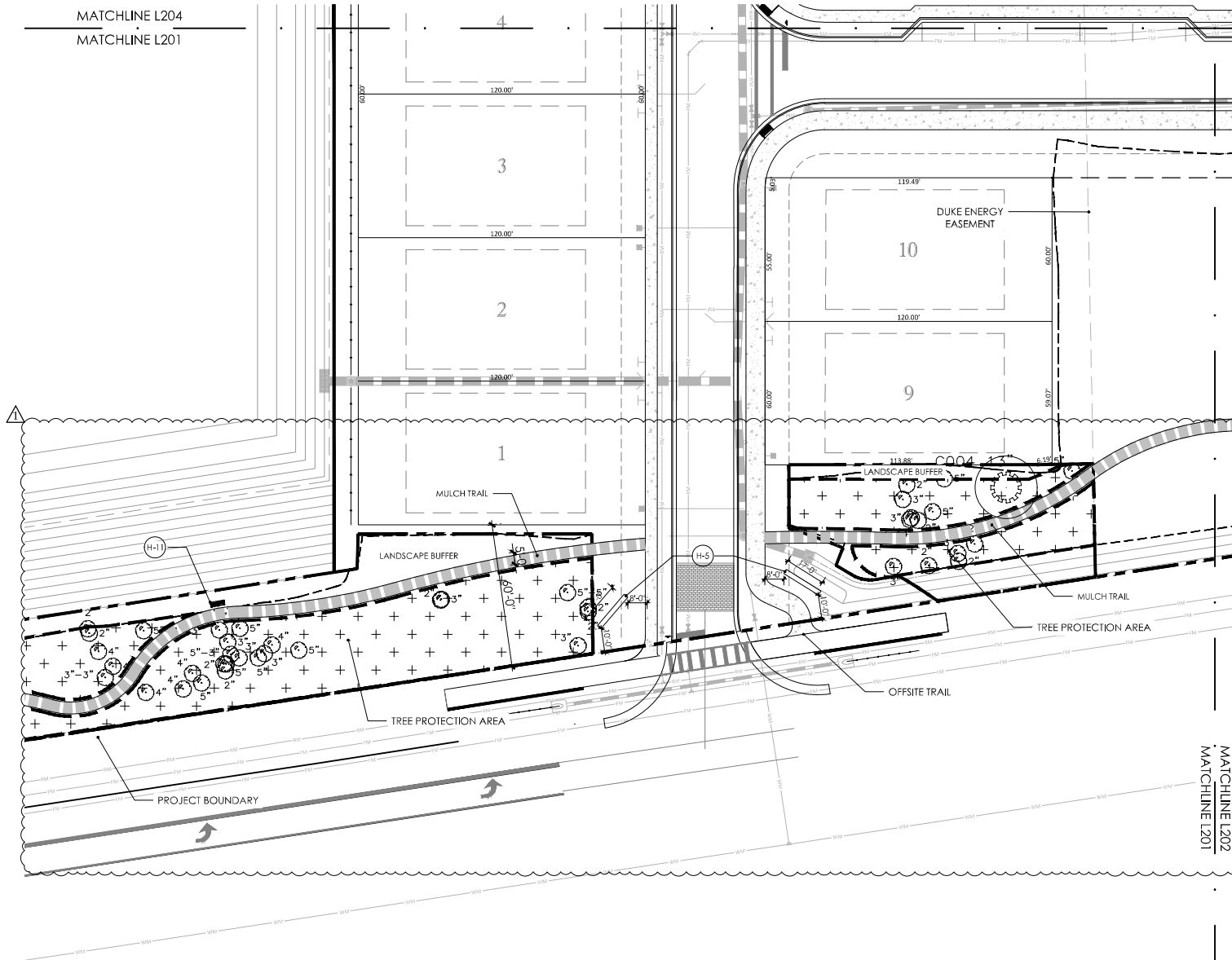
REVISIONS:

City Comments 07/26/2024



Noted by: Taylor Ridge
07

BRUNNEN T-1000 7/20/2014 10:00 AM
2/1/2014 BONNETT DESIGN GROUP, INC. FOR TAYLOR RIDGE LANDSCAPE ARCHITECTURE, LLC



- HARDWARE SCHEDULE
- ① SHADE STRUCTURE
 - ② BOARDWALK
 - ③ CONCRETE WALK, RAMP TO C&M PLANS
 - ④ HAIL BUSH
 - ⑤ COMMUNITY DECK
 - ⑥ PLAY FENCE
 - ⑦ DECORATIVE FENCE
 - ⑧ DOG FENCE
 - ⑨ DOG PARK SIGN, BAGS & TRASH CAN
 - ⑩ CHARCOAL GRILLS
 - ⑪ BENCH
 - ⑫ BICYCLE RACK
 - ⑬ TRASH RECEPTACLE
 - ⑭ PLAY EQUIP
 - ⑮ PLAY SURFACE

THIS PLAN IS THE PROPERTY OF BONNETT DESIGN GROUP, INC. AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF BONNETT DESIGN GROUP, INC.



© 2014 Bonnett Design Group, Inc. All rights reserved.
This plan was prepared by Taylor Ridge Landscape Architecture, LLC, a professional landscape architecture firm, under the supervision of Todd W. Bonnett, a Licensed Professional Landscape Architect, No. 13275, State of Florida.

Printed by: Todd W. Bonnett
Date: 07/26/2013 10:28:04 AM

Scale: 1" = 20'

North Arrow

City Comments: 07/26/2014

Revisions:

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

Checked By: TWB

Drawn By: BRL

Date: April 12, 2014

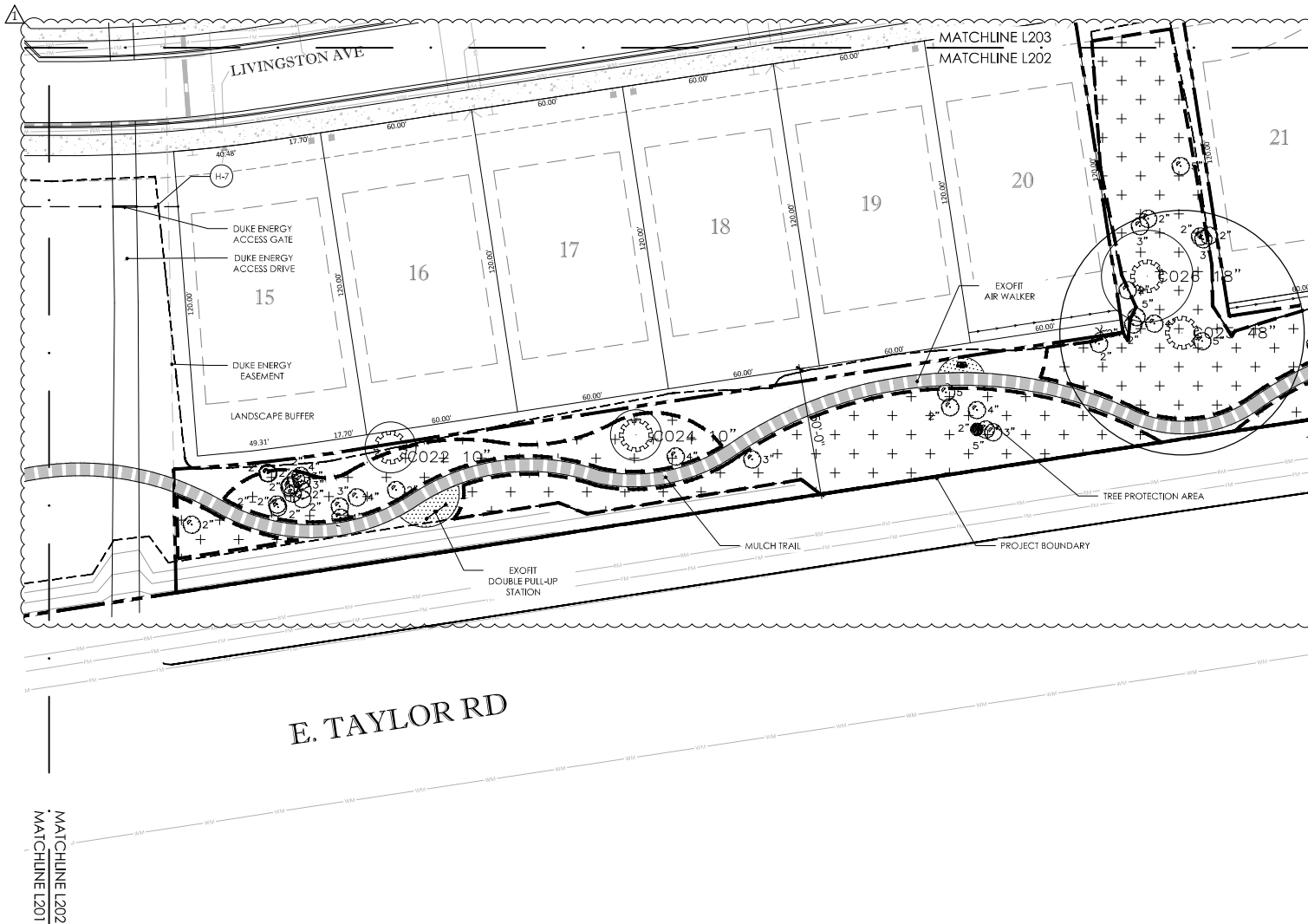
File Name: T118 TAYLOR RIDGE L201

Job Number: 2013.188

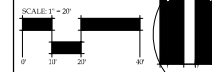
Checked By: TWB

Drawn By: BRL

Date: April



- HARDSCAPE SCHEDULE**
- (H-1) SHADE STRUCTURE
 - (H-2) BOARDWALK
 - (H-3) CONCRETE WALK, REFER TO CIVIL PLANS
 - (H-4) HAIL HOSE
 - (H-5) COMMUNITY BEN
 - (H-6) PLAY FENCE
 - (H-7) DECORATIVE FENCE
 - (H-8) DOG FENCE
 - (H-9) DOG PARK SIGN, BAGS & TRASH CAN
 - (H-10) CHARCOAL GRILLS
 - (H-11) BENCH
 - (H-12) BICYCLE RACK
 - (H-13) TRASH RECEPTACLE
 - (H-14) PLAY EQUIP
 - (H-15) PLAY SURFACE



THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF TAYLOR RIDGE LANDSCAPE ARCHITECTURE, LLC. NO PART OF THESE PLANS OR SPECIFICATIONS MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION IN WRITING FROM TAYLOR RIDGE LANDSCAPE ARCHITECTURE, LLC.



BONNETT design group, llc
 landscape architecture
 community planning
 FL LIC 26000341
 400 South Orlando Ave. Suite 201
 Maitland, FL 32751
 407.622.1588 ext. 2

Taylor Ridge
Landscape Architecture
Hanover Land Company, LLC
 Deland, Florida
LAYOUT PLAN

DATE: April 12, 2024
 DRAWN BY: BRJ
 CHECKED BY: TWS
 JOB NUMBER: 2021.188
 FILE NAME: 21-18-21-HANOVER-TAYLOR RD L202
 REVISIONS:
 Δ City Comments 07-26-2024



Designed by Todd W. Bonnett
 07/26/2013 08:28:04/07
 Todd W. Bonnett, L.A. #12547

L202

CITY SUBMITTAL - 2024-04-12



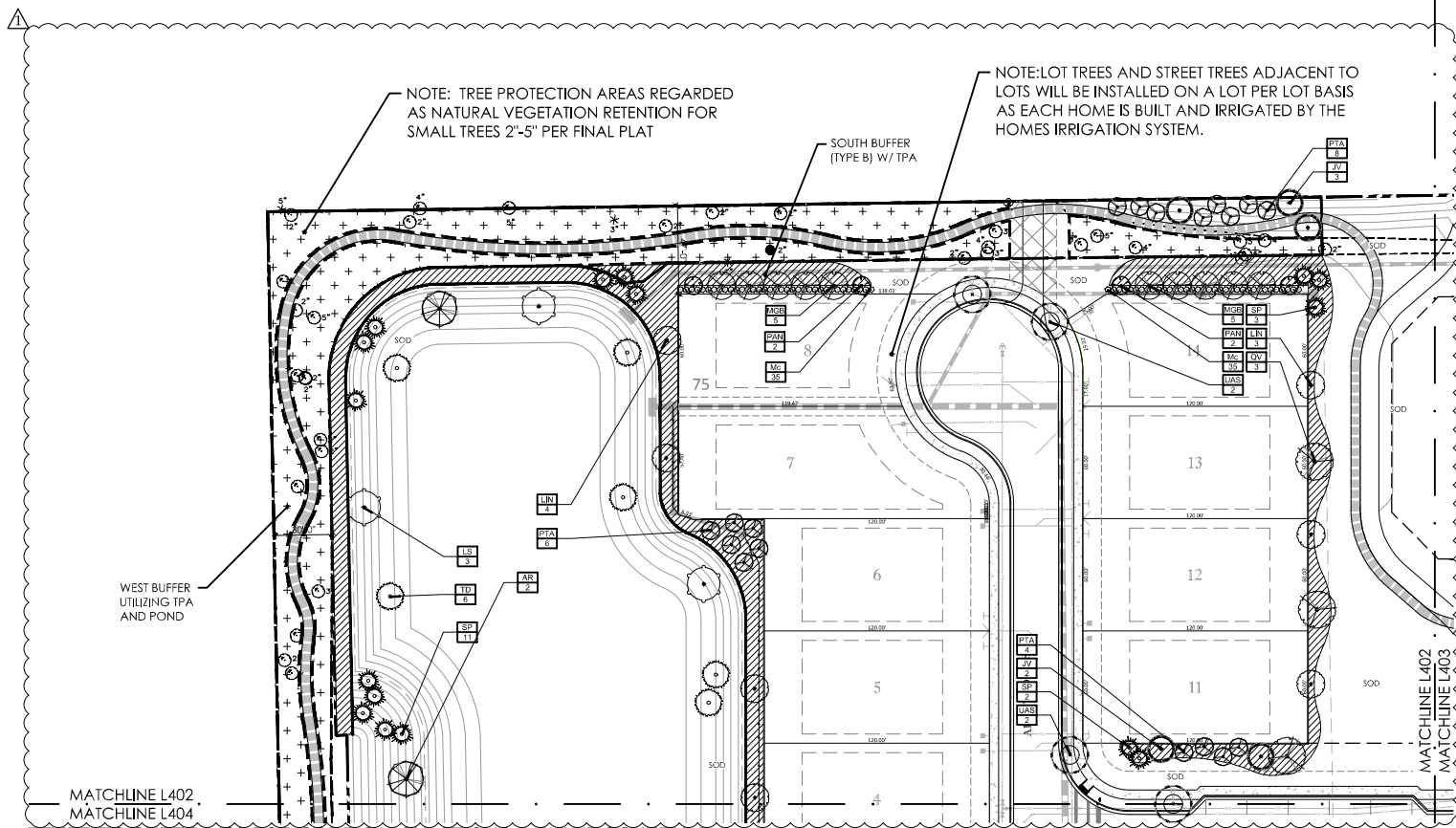
BLUHLAKE AVE



2024.07.26 13:28:42-0400

City Comments 07-26-20

407.622.1588 twice



NOTE:
 ALL CANOPY TREES SHALL BE PLANTED A
 MINIMUM 5' FROM ANY UNDERGROUND
 UTILITY OR A ROOT BARRIER SHALL BE
 INSTALLED. (SEE DETAIL ON SHEET L431)

REFER TO SHEET L430 FOR CODE CALCULATIONS & PLANT SCHEDULE

Sheet Legend

- Project Boundary
- Fence/Gate

PLANT SCHEDULE CODE

SYMBOL	CODE	QTY
TREES		
	AR	15
	CC	4
	JV	40
	LS	13
	PTA	108
	QV	19
	QV-H	13
	TD	26
BUFFER TREES		
	MGB	26
	QVB	38
PALM TREES		
	PDM	4
	SP	90
STREET TREES		
	UAS	18
UNDERSTORY		
	LIN	24
	PAN	59
SHRUBS		
	Bmg	53
	Mc	190
	Vow	451
	LANDSCAPE AREA	

SCALE: 1" = 30'





BONNETT design group, llc
 landscape architecture
 community planning
 FL LIC 26000341

400 South Orlando Ave. Suite 201
 Maitland, FL 32751
 407-622-1588 ext. 201

Taylor Ridge
 Landscape Architecture
 Hanover Land Company, LLC
 Deland, Florida
 LANDSCAPE PLAN

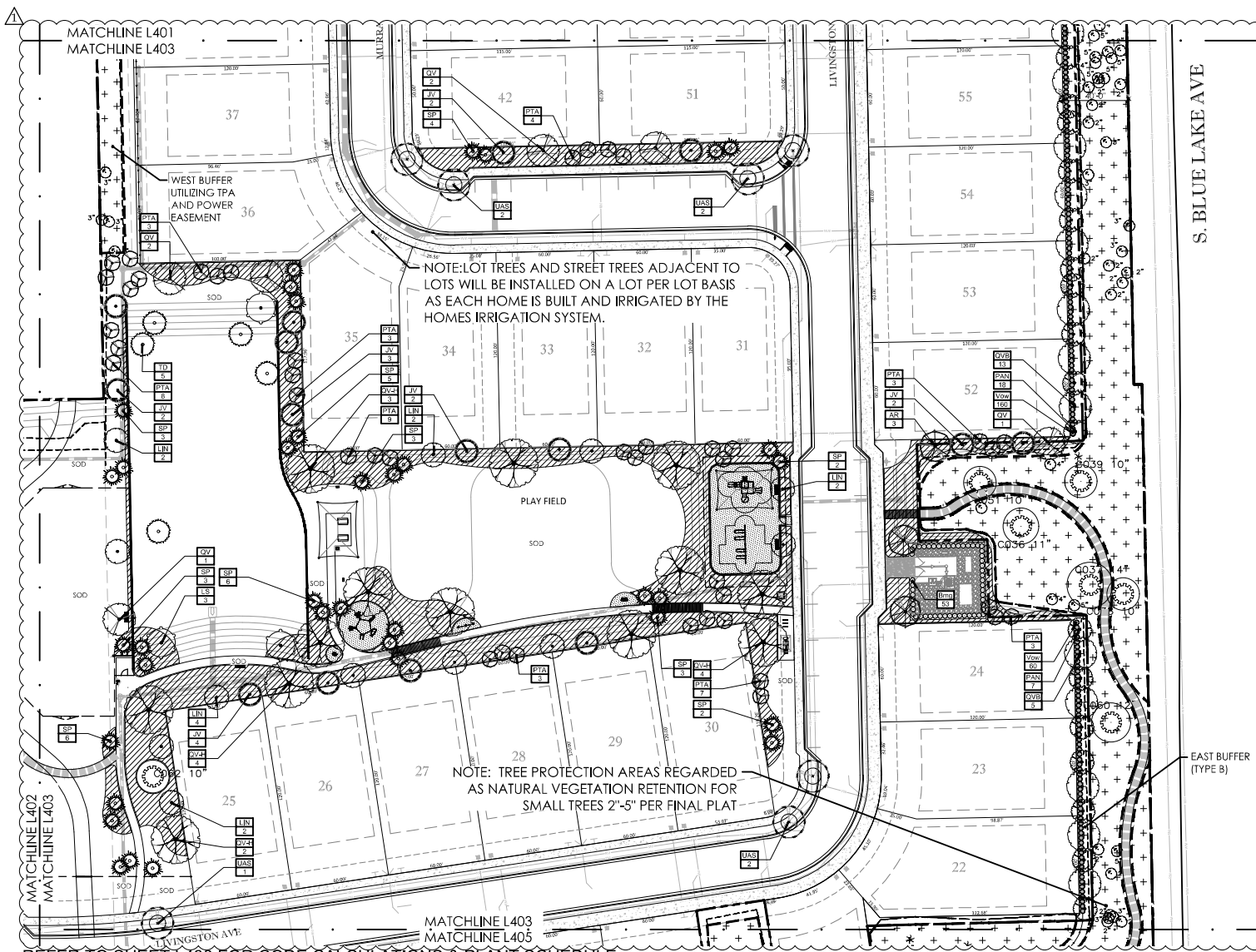
DATE: April 12, 2024
 DRAWN BY: BRL
 CHECKED BY: TWB
 JOB NUMBER: 2021.188
 FILE NAME: D:\188 TAYLOR RIDGE LANDSCAPE PLAN

REVISIONS:
 1 City Comments 07-26-2024



Seal of the State of Florida
 Professional Engineer
 License No. 12844
 Exp. Date 12/31/2024
 Todd W. Bonnett, P.E.
 400 South Orlando Ave., Suite 201
 Maitland, FL 32751
 407-622-1588 ext. 201

L402



Sheet Legend
 — Project Boundary
 — Fence/Gate

PLANT SCHEDULE CODE

SYMBOL	CODE	QTY
TREES		
	AR	15
	CC	4
	JV	40
	LS	13
	PTA	108
	QV	19
	QV-H	13
	TD	26
BUFFER TREES		
	MGB	26
	QVB	38
PALM TREES		
	PDM	4
	SP	90
STREET TREES		
	UAS	18
UNDERSTORY		
	LIN	24
	PAN	59
SHRUBS		
	Bmg	53
	Mc	190
	Vow	451
	LANDSCAPE AREA	



RONNETT design group, llc
 landscape architecture
 community planning
 FL LIC 26000341

400 South Orlando Ave., Suite 201
 Maitland, FL 32751
 407.622.1588 voice

Taylor Ridge
 Landscape Architecture
 Hanover Land Company, LLC
 Deland, Florida
 LANDSCAPE PLAN

DATE: April 12, 2024

DRAWN BY: BRL

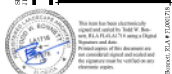
CHECKED BY: TYW

JOB NUMBER: 2023.188

FILE NAME: D:\188\TAYLOR-RIDGE\LANDSCAPE

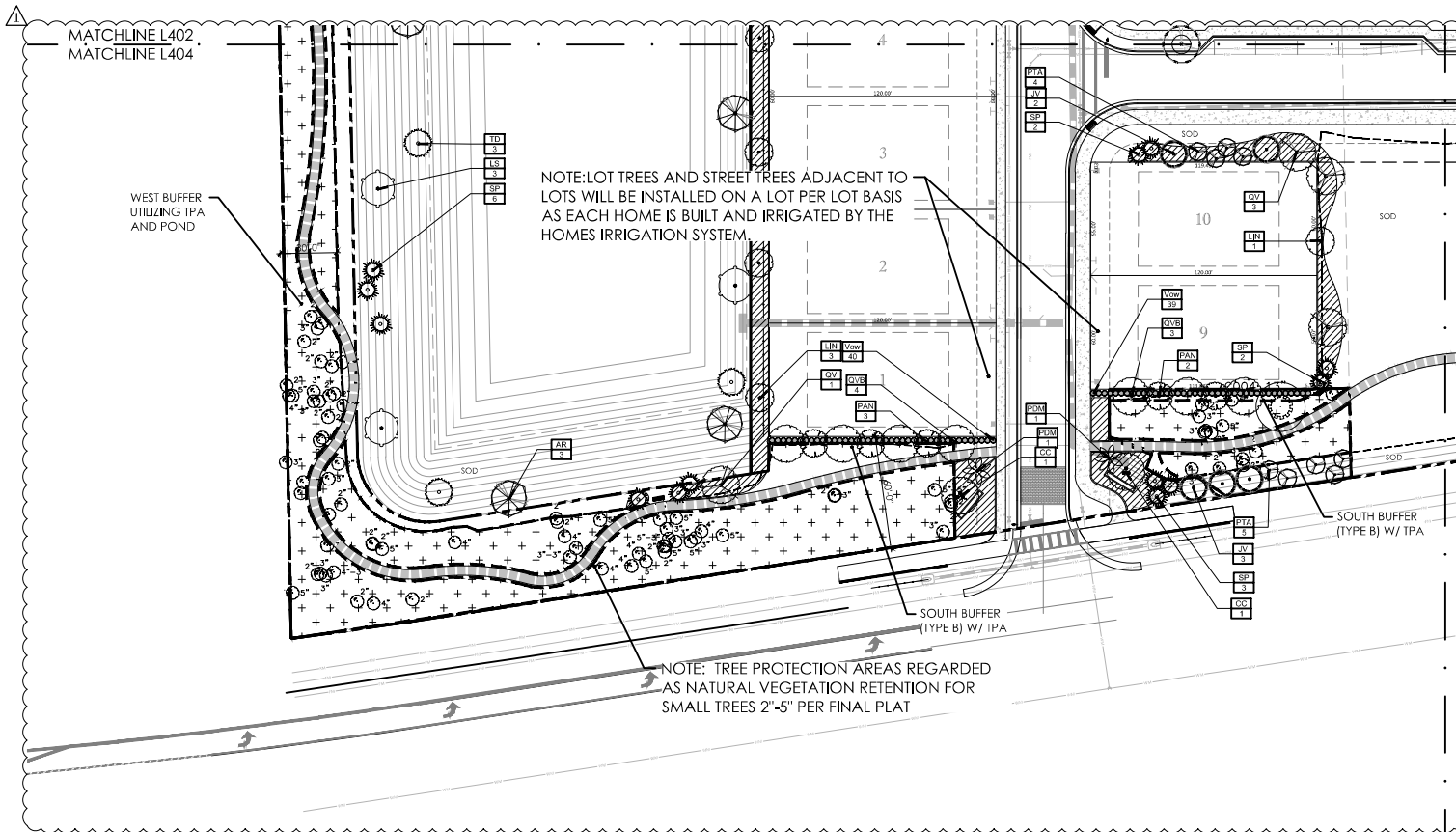
REVISIONS:

City Comments: 07/26/2024



© 2024 Taylor Ridge Landscape Architecture, LLC
 All rights reserved. No part of this document may be reproduced without written permission from Taylor Ridge Landscape Architecture, LLC.
 04/12/2024 13:28:45-04/12/2024

L403



Sheet Legend

- Project Boundary
- Fence/Gate

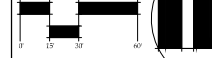
PLANT SCHEDULE CODE

SYMBOL	CODE	QTY
TREES		
	AR	15
	CC	4
	JV	40
	LS	13
	PTA	108
	QV	19
	QV-H	13
	TD	26
BUFFER TREES		
	MGB	26
	QVB	38
PALM TREES		
	PDM	4
	SP	90
STREET TREES		
	UAS	18
UNDERSTORY		
	LIN	24
	PAN	59
SHRUBS		
	Bmg	53
	Mc	190
	Vow	451
	LANDSCAPE AREA	

REFER TO SHEET L430 FOR CODE CALCULATIONS & PLANT SCHEDULE

NOTE:
ALL CANOPY TREES SHALL BE PLANTED A MINIMUM 5' FROM ANY UNDERGROUND UTILITY OR A ROOT BARRIER SHALL BE INSTALLED. (SEE DETAIL ON SHEET L431)

SCALE: 1" = 30'



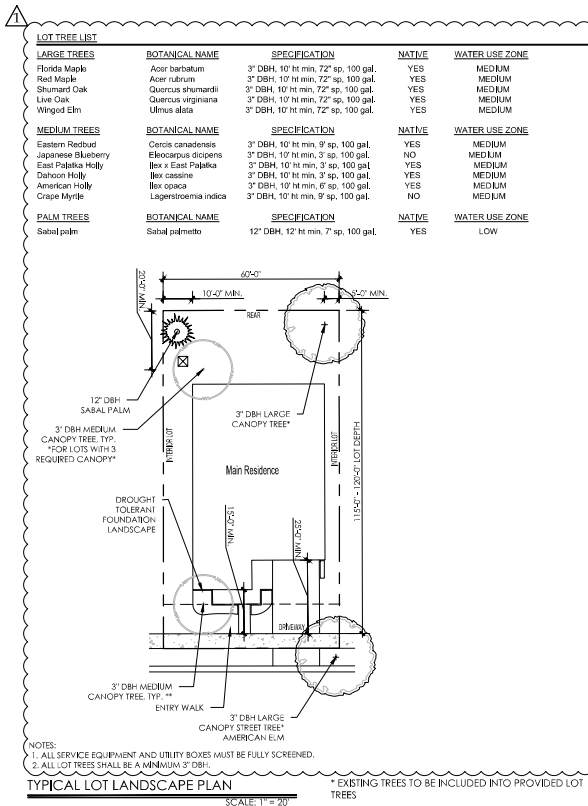
DESIGNED BY: Todd W. Bonnett
DATE: 07/26/13 28:48:00

L404

CITY SUBMITTAL - 2024-04-12

PROPOSED LOT TREES:

Lot #	Area (sf)	# of Trees
1	7200	2
2	7200	2
3	7200	2
4	7200	2
5	7200	2
6	7200	2
7	8808	3
8	7248	2
9	7197	2
10	7199	2
11	7200	2
12	7200	2
13	7200	2
14	7246	2
15	7511	3
16	7200	2
17	7200	2
18	7200	2
19	7200	2
20	7200	2
21	7369	2
22	8167	3
23	7157	2
24	7200	2
25	7200	2
26	7200	2
27	7200	2
28	7200	2
29	7200	2
30	7199	2
31	7066	2
32	7200	2
33	7200	2
34	7172	2
35	8145	3
36	7493	3
37	7157	2
38	7200	2
39	7200	2
40	7200	2
41	7200	2
42	6893	2
43	6900	2
44	6900	2
45	6900	2
46	6893	2
47	6893	2
48	6900	2
49	6900	2
50	6900	2
51	6893	2
52	7200	2
53	7200	2
54	7200	2
55	7200	2
56	7200	2
57	7200	2
58	7200	2
59	7199	2
60	7208	2
61	7200	2
62	7200	2
63	7200	2
64	7200	2
65	7200	2
		135



CITY OF DELAND LDC REFERENCES:

33-92.02. REQUIRED LANDSCAPING

(d) front yard trees.

1. For single-family uses, the developer shall plant, within each front yard setback area, no closer than five feet or further than 15 feet from the right-of-way, one shade tree for every 75 linear feet of right-of-way. Except where property on one side of the right-of-way is not owned by the developer, the trees shall be planted alternately on either side of the street. Existing trees and native tree species that need less water and maintenance are preferred.

2. Trees planted pursuant to this section shall be selected from the approved list of canopy trees contained in the document entitled "List of permitted shade and trees for landscaping and tree protection", and shall have a minimum overall height of eight feet or less at planting. The planning department shall be consulted in selecting appropriate tree species and planting procedures. Existing trees and native tree species that need less water and maintenance are preferred.

1. NEWLY INSTALLED SHADE TREES SHALL HAVE THEIR CALIPER MEASURED 4" ABOVE THE TOP OF THE ROOT BALL. ALL NEWLY INSTALLED UNDERSTORY TREES SHALL HAVE THEIR CALIPER MEASURED 8" ABOVE THE TOP OF THE ROOT BALL.

2. ALL PLANT MATERIAL SHALL MEET OR EXCEED THE MINIMUMS OF FLORIDA'S AS GIVEN "GRADES AND STANDARDS FOR NURSERY PLANTS 2022," STATE OF FLORIDA, DEPARTMENT OF AGRICULTURE, HAWAIIAN, AND ANNUAL PLANT TREES.

3. THE LANDSCAPE ARCHITECT MAY REJECT ANY PLANT MATERIAL BROUGHT TO THE SITE WHICH HE DEEMS TO BE OF INFERIOR QUALITY OR UNSUITABLE.

4. ALL PLANT BEDS SHALL BE TOP DRESSED WITH A MINIMUM OF 2" DEPTH FINE BARK MULCH WITHIN 4'-6" CLEAR SPACE BETWEEN MULCH AND THE PLANT STEM.

5. ALL TREES SHALL HAVE ALL SYNTHETIC BURLAP REMOVED FROM THE INNER ROOT BALL. JUTE BURLAP SHALL BE REMOVED FROM THE TOP CHAIRING OF THE ROOT BALL. THE TOP THREE ROWS OF SQUARES ON ALL CAGES AROUND THE ROOT BALLS SHALL BE CLIPPED OFF AND BRANDED.

6. THE CONTRACTOR SHALL READ AND ADHERE TO ALL WRITTEN SPECIFICATIONS.

7. THE CONTRACTOR SHALL VIGILANTLY INSPECT THE SOIL CONDITION OF THE SITE. HE SHALL DIG A MINIMUM OF 12 TEST HOLES. 3 FOOT DEEP HANDWAY AROUND THE TREE. HE SHALL PERFORM PERCOLATION TESTS IN THESE HOLES FOR A PERIOD OF ONE HOUR EACH. THE HOLES SHALL BE FILLED WITH WATER AND IF THE HOLES FILL MORE THAN 6" OF WATER AFTER ONE HOUR, THE LANDSCAPE ARCHITECT SHOULD BE NOTIFIED OF THE PROBLEM. THE CONTRACTOR SHALL RECOMMEND SUBSTITUTIONS OF PLANT MATERIAL AND PLANTING INSTALLATION TO ACCOMMODATE POOR DRAINAGE SITES. ANY SUBSTITUTIONS MUST BE SUBMITTED TO THE CITY ENGINEER IN WRITING FOR APPROVAL.

8. THE CONTRACTOR SHALL PROVIDE A SOIL TEST IN FOUR LOCATIONS AND PROVIDE RECOMMENDATIONS FOR AMENDMENTS BASED ON THE RESULTS. ANYPOOR SOIL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL RECTIFY ALL INCURRED DAMAGES AT NO ADDITIONAL COST TO THE OWNER.

9. THE CONTRACTOR SHALL REVIEW THE SOILS REPORT ON FILE WITH THE OWNER.

10. THE INSTALLATION OF PLANT MATERIAL SHALL BE VIEWED AS ACCEPTANCE BY THE CONTRACTOR OF EXISTING GRADES AS GIVEN TO HIM. THE CONTRACTOR SHALL PROVIDE TO THE LANDSCAPE ARCHITECT A WRITTEN LETTER OF ACCEPTABILITY OF GRADES. FAILURE TO DO SO WILL BE VIEWED AS AN ACCEPTANCE OF EXISTING GRADES BY THE CONTRACTOR.

11. THE CONTRACTOR SHALL BERA ALL PARKING LOT ELEVATIONS 17' ABOVE TOP OF CURB ELEVATION WITHOUT EXCEEDING A 4:1 SLOPE (TYPICAL).

12. WHERE LIGHT POLES AND TRUS BOTH OCCUR IN A PARKING LOT ELEVATION, THE TREE SHALL BE SPACED AN ADEQUATE DISTANCE FROM THE POLE.

13. THE CONTRACTOR WILL BE REQUIRED TO SAND AREAS OF SOIL THAT ARE NOT SMOOTHLY APPLIED TO MINIMIZE SMALL IRREGULARITIES IN GRADES. LARGE IRREGULARITIES IN GRADE WILL REQUIRE REGRADING & RESODDING.

14. THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF THE SITE INCLUDING ALL MOVING, EDDING, TREEMING, PRUNING & SPRAYING OF PESTICIDES & FUNGICIDES UNTIL THE DATE OF FINAL ACCEPTANCE BY THE OWNER.

15. ALL NEWLY PLANTED STREET TREES SHALL BE PLANTED ALONG AN ALTERNATE LINE, GENERALLY 3' TO 2.5' FROM THE BACK OF CURB.

16. AT PLANTING TREES SHALL BE AT GRADE OR 10" GRAVITY SHALL BE 10" INCHES IN HEIGHT ABOVE THE FINAL GRADE.

CONTRACTOR SHALL PROVIDE A SOIL TEST IN FOUR LOCATIONS AND PROVIDE RECOMMENDATIONS FOR AMENDMENTS BASED ON THE RESULTS. ANYPOOR SOIL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL RECTIFY ALL INCURRED DAMAGES AT NO ADDITIONAL COST TO THE OWNER.



BONNETT design group, llc
landscape architecture
community planning
FL LLC 26000341

400 South Orlando Ave. Suite 201
Maitland, FL 32751
407-622-1588 voice

Taylor Ridge
Landscape Architecture
Hanover Land Company, LLC
Deland, Florida
LOT TREE COUNTS

DATE: April 12, 2024

DRAWN BY: BRL

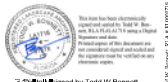
CHECKED BY: TWB

JOB NUMBER: 2024-188

FILE NAME: 01 IN JACOBY-TAYLOR RIDGE_L438

REVISIONS:

Δ City Comments 07-26-2024



Sealed by: Todd W. Bonnett
Date: 07-26-2024 13:28:48-04:00

L420

SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	SPECIFICATION	NATIVE	WATER USE ZONE	SPACING
TREES								
	AR	15	Acer rubrum	Red Maple	3" cal., 8' ht, 48" sp, 45 gal.	YES	HIGH	As Shown
	CC	4	Cercis canadensis	Eastern Redbud	3" cal., 8' ht. x 42" spd, 45 gal.	YES	LOW	As Shown
	JV	40	Juniperus virginiana 'Silicola'	Southern Red Cedar	3" cal., 8' ht, 24" sp, 45 gal.	YES	LOW	As Shown
	LS	13	Liquidambar styraciflua	American Sweet Gum	3" cal., 8' ht, 48" sp, 45 gal.	YES	LOW	As Shown
	PTA	108	Pinus palustris	Long-leaf Pine	3" cal., 8' ht, 24" sp, 45 gal.	YES	HIGH	As Shown
	OV	19	Quercus virginiana	Live Oak	3" cal., 8' ht, 48" sp, 45 gal.	YES	LOW	As Shown
	QV-H	13	Quercus virginiana	Live Oak	8" cal., 19' ht, 12" sp, 6' ct, 300 gal.	YES	LOW	As Shown
	TD	26	Taxodium distichum	Bald Cypress	3" cal., 8' ht, 24" sp, 45 gal.	YES	LOW	As Shown
BUFFER TREES								
	MGB	26	Magnolia grandiflora 'Brackens Brown Beauty'	Bracken's Southern Magnolia	3" cal., 8' ht, 24" sp, 45 gal.	YES	MEDIUM	As Shown
	QVB	38	Quercus virginiana	Live Oak	3" cal., 8' ht, 48" sp, 45 gal.	YES	LOW	As Shown
PALM TREES								
	PDM	4	Phoenix dactylifera 'Medpool'	Medpool Date Palm	12" c.l. Heavy, matched specimen	NO	LOW	As Shown
	SP	90	Sabal palmetto	Sabal Palm	12"-18" CT, mixed	YES	LOW	As Shown
STREET TREES								
	UAS	18	Ulmus alata	Winged Elm	3" cal., 8' ht, x 54" spd, 45 gal.	YES	LOW	As Shown
UNDERSTORY								
	LIN	24	Lagerstroemia x 'Natchez'	Natchez Crape Myrtle	3" cal., 8' ht, x 42" spd, 45 gal.	NO	HIGH	As Shown
	PAN	59	Prunus angustifolia	Chickasaw Plum	3" cal., 8' ht, x 42" spd, 45 gal.	YES	LOW	As Shown
SHRUBS								
	Bmg	53	Bambusa multiplex 'Golden Goddess'	Golden Goddess Bamboo	15 gal., 6"-7" o.a.	NO	MEDIUM	36" o.c.
	Mc	190	Myrica cerifera	Wax Myrtle	7 gal., 30"-36" ht., 24"-30" spd.	YES	MEDIUM	36" o.c.
	Vow	451	Viburnum ovatum	Walter's Viburnum	7 gal., 30"-36" ht., 24"-30" spd.	YES	LOW	36" o.c.
	LANDSCAPE AREA							

** UNDERSTORY AND SHRUB PLANTING TO BE SUPPLEMENTED AS NEEDED TO COMPLIMENT EXISTING PLANT MATERIAL

BUFFER REQUIREMENT								
*Existing Trees in IPA to be included into Provided Buffer Landscape								
BUFFER	WIDTH	LENGTH	CALC	CANOPY TREES	CALC	UNDERSTORY TREES	CALC	SHRUBS
NORTH	40'	1295'						
TYPE 'B'	REQUIRED	4.4X365/100=		57	1X360/100=	13	10X360/100=	136
	PROVIDED	RETAINED*		26	11	11	11	136
				IPA			IPA	IPA
SOUTH	50'	1312'						
TYPE 'B'	REQUIRED	4.4X367/100=		58	1X367/100=	13	10X367/100=	137
	PROVIDED	RETAINED*		16		19	19	20
				IPA			IPA	IPA
EAST	40'	1131'						
TYPE 'B'	REQUIRED	4.4X660/100=		50	1X660/100=	11	10X660/100=	117
	PROVIDED	RETAINED*		22	29			29
				IPA		IPA	IPA	IPA
WEST	40'	1307'						
TYPE 'B'	REQUIRED	4.4X660/100=		58	1X660/100=	13	10X660/100=	137
	PROVIDED	RETAINED*		0	0	0	0	0
				IPA		IPA	IPA	IPA

NOTE:
ALL CANOPY TREES SHALL BE PLANTED A
MINIMUM 5' FROM ANY CURB/UTILITY OR A
ROOT BARRIER SHALL BE INSTALLED.
(SEE DETAIL ON SHEET 1431)

2. Trees planted pursuant to this section shall be selected from the approved list of canopy trees contained in the document entitled "List of permitted shrubs and trees for landscaping and tree protection," and shall have a minimum overall height of eight feet at time of planting. The planning department shall be consulted in selecting appropriate tree species and planting procedures. Existing trees and native tree species that need less water and maintenance are preferred.

1. NEWLY INSTALLED "SHADE" TREES SHALL HAVE THEIR CALIPER MEASURED 6" ABOVE THE TOP OF THE ROOT BALL. ALL NEWLY INSTALLED "UNDERSTORY" TREES SHALL HAVE THEIR CALIPER MEASURED 6" ABOVE THE TOP OF THE ROOT BALL.
2. ALL PLANT MATERIAL SHALL MEET OR EXCEED THE STANDARDS OF FLORIDA NO. 1 AS GIVEN IN GRASSES AND STANDARDS FOR NURSERY PLANTS 2022, STATE OF FLORIDA, DEPARTMENT OF AGRICULTURE, TALLAHASSEE, AND ANY AMENDMENTS THERETO.
3. THE LANDSCAPE ARCHITECT MAY BRING ANY PLANT MATERIAL BROUGHT TO THE SITE WHICH HE DEEMS TO BE OF INFERIOR QUALITY OR APPEARANCE.
4. ALL PLANT BEDS SHALL BE TOP DRESSED WITH A MINIMUM OF 3" DEPTH FINE BARK MULCH. MAINTAIN A 4" CLEAR SPACE BETWEEN MULCH AND THE PLANT STEM.

**Taylor Ridge
Landscape Architecture
Hanover Land Company, LLC
Deland, Florida**

City Comments 07-25-21/24



7/26 13:28:49-0400

L430

SECTION 32.92.00 SODDING

PART 1- GENERAL

1.01 SCOPE OF WORK

A. This section shall govern the furnishing of all sod, labor, materials, equipment and services necessary for the complete installation of all sodding and other items necessary to complete the work as shown on the drawings and as specified herein.

1.02 GENERAL REQUIREMENTS

- A. See drawings for area to be sodded.
- B. Labor crews shall be directed by a landscape foreman experienced in plant materials, planting, reading blueprints, and coordination between job and nursery.
- C. Coordinate work with other related work in order to expedite installation of work.

1.03 APPLICABLE DOCUMENTS

- A. The following publications of the issues listed below form a part of this specification.
 - A.1. American Joint Committee on Horticultural Nomenclature (AJCH) Standard Plant Names, Second Edition (1942)
 - A.2. American National Standards Institute (ANSI)- 260.1-2004 Nursery Stock (sponsored by the American Association of Nurserymen, Inc.)
 - A.3. Grades and Standards for Nursery Plants, Part I and Part II, State Plant Board of Florida

PART 2- MATERIALS

2.01 TOPSOIL

A. If the quantity of existing stored or excavated topsoil is inadequate for sodding, sufficient additional topsoil shall be furnished. Topsoil furnished shall be a natural, fertile, friable soil, possessing characteristics of representative productive soils in the vicinity. It shall be obtained from naturally well-drained areas. Topsoil shall be without a mixture of subsoil and free from Johnson grass (*Sorghum holosericeum*), nutgrass (*Cyperus rotundus*) and objectionable weeds and toxic substances.

2.02 LIME

A. Shall be ground limestone (dolomite) containing not less than 85% of total carbonates, and shall be ground to such a fineness that 50% will pass a 100-mesh sieve and 90% will pass a 20-mesh sieve.

2.03 FERTILIZER

A. Commercial, fertilizer shall be 8-8-8 formulation, of which 60% of the nitrogen is in the urea-formalddehyde form and shall conform to the applicable State Fertilizer laws. It shall be granulated so that 80% is held on a 16-mesh screen, uniform in composition, dry and free-flowing.

2.04 SOD

A. Sod shall be St. Augustine Floratum or Bahia Argentina, as noted on the plans. Sod shall be fresh, healthy, living stems and attached roots. Sod shall be obtained from approved sources where the soil is heavy and thickly matted and free from ground pest and lady bug. The sod depth shall be uniform and 1"- 1-1/2" thick. Sod shall be free of nutgrass (*Cyperus rotundus*), Johnson grass (*Sorghum holosericeum*), and other objectionable weeds, and shall not contain material which might be detrimental to the development of the turf.

2.05 REQUIREMENTS

A. All areas within the limits of work indicated for sodding and all areas disturbed by the Contractor's operations, shall be grassed (sodded).

PART 3- EXECUTION

3.01 INSTALLATION

- A. Grading: Areas to be grassed shall be graded to remove depressions, undulations, and irregularities in the surface before sodding.
- B. Tilling: When it is determined by a Landscape Architect that the soil conditions warrant special attention, the area to be grassed shall be thoroughly tilled to a depth of 3" using a plow and disc harrow or rotary tilling machinery until a suitable seed bed has been prepared and no clods or clumps remain larger than 1"- 1-1/2" diameter.
- C. Applying Lime: The pH of the soil shall be determined. If the pH is below 6.0, sufficient lime shall be added to provide a pH between 5.5 and 6.5. The lime shall be thoroughly incorporated into the top three or four inches of the soil. Lime and fertilizer may be applied in one operation.
- D. Applying Fertilizer: Fertilizer should only be used if required by soil testing. Fertilizer shall be applied at the rate of 10 pounds per 1,000 sq. ft. and soil be broadcast over the surface after the sod has been placed.
- E. Sodding: Sod shall be placed within 48 hours of harvesting. In addition sod shall not be left stacked for longer than 24 hours.
- F. Placing Sod: The sod shall be soaked just prior to placing sod. Each block or strip of sod shall be butted firmly against the last. Gaps shall be filled with pieces of root and topsoil. The sod shall not be stretched while placing. Immediately after placing sod, roll to provide firm contact with soil.
- G. Watering: Sodding will not be authorized unless the planting soil has a moisture content level sufficient to prevent the immediate drying out of newly placed sod. Water shall be applied prior to sodding operations. At least one-half inch of water shall be applied uniformly to all areas to be sodded. In addition, watering will be required over all areas on which sodding has been completed. This application shall be made not later than 30 minutes after sodding has been completed and shall amount to at least one-half inch of water over the entire area sodded. Watering shall be done in a manner which will prevent erosion due to the application of excessive quantities in a concentrated area. Water source shall be provided by the Owner.
- H. Winter Cover: All areas to be grassed shall be protected against erosion at all times. For protection during winter months, Italian Broomgrass shall be planted at the rate of four pounds per 1,000 sq. ft. on all areas which are not protected by permanent grass.
- I. Cleanup: All excess grass, grass materials, stones, and other waste shall be removed from the site daily and not allowed to accumulate. All paved areas shall be kept clean at all times.
- J. Maintenance shall begin immediately following the last operation of sodding and continue until final acceptance. Maintenance shall include watering, mowing, replanting, and all other work necessary to produce a uniform stand of grass. Grassing will be considered for final acceptance when the permanent grass is healthy and growing on 100% of area to be sodded.

3.02 QUALITY CONTROL

A. Contractor quality control shall apply to all work in this Section in accordance with the provisions of Division I, General Requirements. Except where specified, the Contractor shall be responsible for the Contractor's quality control representative or a member of his staff. Where it is specified that a submission be made to others for approval, the CQC representative shall check the submission and satisfy himself that it complies with contract requirements prior to submission to others for approval.

3.03 CONTRACTOR'S RECORD OF CERTIFICATION

A. Contractor's records of certification will be required for the following, and three copies each of all documentation shall be furnished the Owner for record purposes:

- A.1. Certificates of Conformance will be required for the following
 - A.1.1. Sod
 - A.1.2. Fertilizer
 - A.1.3. Topsoil
 - A.1.4. Lime
- A.2. Test Reports: The results of laboratory tests performed on the topsoil material shall be submitted. The reports shall include the pH level, the amount of organic matter, and available phosphoric acid and potash of the soil intended for use in the work.

3.04 REQUEST FOR FINAL ACCEPTANCE

A. The Contractor shall submit to the Owner or his Representative two copies of a written request for final acceptance of the grassing work. The request shall be submitted at least ten days prior to anticipated date of acceptance. The

condition of the grass will be noted, and the Contractor will be notified if maintenance is to continue

3.05 GUARANTEE AND REPLACEMENT

- A. All sod shall be guaranteed for a period of thirty (30) days from the time of job acceptance.
- B. Replacement of sod necessary during the maintenance period shall be the responsibility of the Contractor, except for possible replacements of sod due to theft, vandalism, neglect by Owner or acts of negligence of the part of others.
- C. At the end of the warranty period, and at any time during the period, any sod that dies or is not in satisfactory condition, as determined by the Owner and the Landscape Architect, shall be removed and replaced with new, healthy material of the original. The new material shall be guaranteed as outlined above. The Landscape Contractor shall be responsible for the material and labor.
- D. The time limit may be extended by agreement by agreement for any material in questionable condition at the end of the warranty period.

END OF SECTION 32.92.00

SECTION 32.93.00

PART1- GENERAL WORK

1.01 SCOPE OF WORK

A. This section covers furnishing and installing all landscape plants and not-plant materials covered by the drawings and these specifications. The work shall include materials, labor, equipment and services as described herein and indicated on the drawings. Also, the work shall include the maintenance of all plants and planting areas until acceptance by the Owner, and the fulfillment of all guarantee provisions as herein specified.

1.02 PLANTING LAYOUT

- A. Before beginning work, the Contractor shall investigate and verify, in the field, the existence and location of all underground utilities and irrigation piping, and take precautions to prevent their disturbance. It shall be the responsibility of the Contractor to obtain all such information as it is made available. Plans and specifications of related work may be obtained from the Owner.
- B. The Contractor shall locate all general reference points, take precautions to prevent their disturbance; perform the layout work be responsible for all lines, elevations and measurements of work executed under the contract; exercise proper precaution to verify existing conditions before laying out work and be responsible for any error resulting from failure to exercise such precaution. The Contractor shall make field measurements for his own work and be responsible for its accuracy.
- C. Discrepancies between conditions existing on the site and conditions indicated on the drawings shall be called to the attention of the Owner before or at the time plant locations are staked out.
- D. In the event of a variation between the plant list and the actual number of plants shown on the plans, the plans shall control.

1.03 HORTICULTURAL STANDARDS

- A. Unless otherwise noted, plant materials, including collected materials, shall be grade FLORIDA NO. 1 or better as outlined under Grades and Standards for Nursery Plants, Part I and Part II, State Plant Board of Florida; and shall also conform to American Standard for Nursery Stock, ANSI (American National Standards Institute, Inc.) 260.1-2004 as approved by the American Association of Nurserymen.
- B. All plant names shall conform to the names given in Standardized Plant Names, 1942 Edition, prepared by the American Committee on Horticultural Nomenclature. Names of varieties not included therein shall conform generally with names accepted in the nursery trade. All plant materials shall be true to botanical, common and variety name.
- C. Botanical name shall have precedence over common name.
- D. The Landscape Architect shall have the right, at any stage of the operations, to reject any and all work and materials that, in their opinion, do not meet with the requirements of these Specifications. Such rejected material shall be removed from the site and acceptable material substituted in its place.

1.04 CERTIFICATES OF INSPECTION

A. All plant material shall be inspected by the Florida Department of Agriculture, as required by state law. Plants of a grade less than that specified in the article titled HORTICULTURAL STANDARDS will not be accepted.

PART 2- MATERIALS

2.01 SOIL BACKFILL

- A. Soil for backfilling planting areas and plant pits shall be the existing surface soil, free from subsoil, objectionable weeds, litter, rods, stiff clay, stones, stumps, roots, trash, toxic substances, mortar, cement, ironwork, asphalt, or any other material that may be harmful to plant growth or hinder planting operations. Poorly drained soils shall not be used.
- B. Soil amendments shall be added to the soil in the amount and manner prescribed by soil analysis to obtain a pH of 5.5 to 6.5. Results from soil analysis and a list of the prescribed amendments shall be presented to the Owner and verified by the Landscape Architect prior to being incorporated into the soil.
- C. If additional soil is required, it shall be furnished by the contractor and shall be a natural, friable soil representative of productive, well-drained soils in the vicinity. It shall be obtained from well drained areas which have never been stripped before, and shall be free of admixture of subsoil and foreign matter, stones, toxic substances, and any material or substance that may be harmful to plant growth.
- D. The Contractor shall provide the following information on imported topsoil:
 - D.1. Specific location from which topsoil will be (or was) stripped.
 - D.2. Present Owner of that property.
 - D.3. Approximate amount of topsoil available.
 - D.4. Test results showing topsoil composition and analysis.
- E. Soil test shall be performed by a qualified soils laboratory, in accordance with "Methods of Soil Analysis-Agronomy II" as published by the American Society of Agronomy, and shall be performed at the Contractor's expense.
- F. Planting soil backfill for raised architectural planters, if applicable, shall consist of 40% potting soil, 40% coarse washed builders sand and 20% horticultural perlite.
- G. Areas designated to be planted with flowering annuals, if applicable, shall be excavated to a depth of 8" and backfilled with a mixture consisting of 40% peat, 40% 0.01-1.0 (coarse) sand, 10% pine bark (decomposed) and 10% cypress chips.
- H. Planting soil backfill for tree wells, if applicable, shall be 3 approved topsoil and 1 coarse washed builder's sand

2.02 FERTILIZER

- A. Commercial fertilizer shall be Florikan18-6-8 Premium Ornamental formulation, 100 day site release, available from USA Corp., Sarasota, Florida USA, PH 941.377.8666, or approved equiv. Fertilizer shall be uniform in composition, dry and free flowing.
- B. Specimen plants- A transplant amendment shall be used which is formulated as a transplant preparation to inoculate landscape trees and/or shrubs with live beneficial mycorrhizal fungi when planting. It contains highly selected ends and ectomycorrhizal fungi that will quickly colonize the roots of new transplants to provide the best possible conditions for the roots to become as effective as possible during the establishment period and beyond. Both ends and ectomycorrhizal inoculants are combined with Trichoderma, humic acids, beneficial bacteria, soluble sea ells, yucca plant extracts, to promote rapid root development, to reduce transplant stress and to reduce transplant stress and to site release all soluble components of the formulation, water management gel is added to complete the package.
- C. Specimen Plant palms- shall be treated when planting with an inoculum of the beneficial mycorrhizal fungi to promote new feeder roots and mycorrhizal development on newly planted palms. The inoculum shall contain highly selected ectomycorrhizal fungi that will quickly colonize roots of palms to provide the best possible conditions for the roots to grow and extract from the soil and water. The mycorrhizal fungi shall be combined with humic acids, biofertilizers, beneficial bacteria, soluble sea ells, yucca plant extracts, fulvic acid, nitrogen, phosphorus, potassium, and chelated magnesium, manganese, iron and zinc, to promote rapid root development.

2.03 DOLOMITE LIMESTONE

A. Dolomitic limestone shall be a natural limestone, designated for agricultural use, shall contain not less than 85 percent of natural limestone, and shall be ground so that 50 percent will pass a 100 mesh sieve and 90 percent will pass a 20 mesh sieve.

2.04 PRE-EMERGENCE WEED CONTROL

A. Weed control shall be Bonstar 20 as manufactured by Bayer Environmental Science, Canada, PH 888.283.6847, www.bayerusa.com or Pendulum Aqua Cap as manufactured by BASF- The Chemical company, Florida USA. http://bethenn.basf.us/ or an approved equiv.

2.05 WATER

A. Water will be available for use on site during landscape installation at no cost to the Contractor. Care shall be exercised to assure that water is kept free of harmful chemicals, acids, alkalis, or any substance that might be harmful chemicals, acids, alkalis, or any substances that might be harmful to plant growth.

2.06 ANTI-DESICCANT

A. Anti-desiccant shall be an emulsion type, film-forming agent designed to permit transpiration, but retard excessive loss of moisture from plants, such as Daze by Dow Chemical Co., or Wilt-Pruf by Nursery Specialty Products, Inc., or an acceptable equiv. The anti-desiccant shall be delivered in the manufacturer's fully identified containers and shall be mixed in accordance with manufacturer's instructions.

2.07 BORICIDE

A. Boricide shall be Onyx manufactured by FMC, www.fmcprotections.com

2.08 MULCH

A. All mulch shall be pine bark mini nuggets, 100% organic, Grade "B", or better. Alternative mulch types, if so identified on the drawings shall be used.

2.09 GUYING AND STAKING MATERIAL

A. Stakes or supporting trees shall be ArborGaze or ArborGaze Tree Guying System as shown per details.

2.10 DRAINAGE GROVEL

A. Where indicated on the drawings, or where soil conditions deem it necessary, the Contractor shall install gravel subdrains beneath trees and/or planting areas to aid in soil drainage and percolation. The subdrain shall be constructed as detailed on the drawings, or as directed by the Landscape Architect. Drainage gravel shall consist of washed, clean gravel 3/4 inch to 2 inches in size.

2.11 SOIL SEPARATION MATS/FILTER FABRIC

A. Soil separation mats, if indicated on the drawings, shall be Minfil 140N as manufactured by TenCate, or approved equiv. Mats shall be installed as indicated on the drawings, and edges overlapped a minimum of 4 inches. Care shall be taken to prevent tearing or excessive crushing during the installation process.

2.12 QUALITY OF PLANT MATERIAL

- A. During inspection, as set forth hereinafter, all plant material will be judged, and rejections shall be based upon these requirements. All plant material shall comply with federal and state law requiring inspection for plant diseases and infestations. Inspection certificates required by law shall be made available to the Owner or Owner's representative at his/her request.
- C. In determining the quality of plant material, the following elements will be valued:
 - C.1. Root condition
 - C.2. Plant size (above ground)
 - C.3. Trunk and disease free condition
 - C.4. General appearance (Color, shape, pruning)- a deficiency in one or more of these areas will be sufficient reason to reject selectively or by lot.
- D. The Landscape Architect shall have the right, at any stage of the operations, to reject any and all work and materials which, in their opinion, do not meet with the requirements of these specifications. Such rejected material shall be removed from the site and acceptable material substituted in its place.

2.13 SIZE AND MEASUREMENTS

A. Plants shall be measured when branches are in their normal position. Heights and spread dimensions specified refer to the main body of the plant and not to extreme branch tip to tip. The measurements specified are the minimum size acceptable and where pruning is required, these proper proportion as outlined in Florida Department of Agriculture, Grades and Standards for Nursery Plants Part I and II. Plants that have been headed back to conform to the size specified will not be acceptable. Plants larger than specified may be used if approved the Owner; however, the use of such plants shall not increase the contract price.

2.14 LABEL

A. Plant materials shall have durable, legible labels stating, in weather resistant ink, the correct botanical and common name and size as indicated in the Plant List. Each plant, or sufficient representative sample of each delivery shipment, shall have labels securely attached in a fashion that will interfere with normal plant growth. Plant materials that have (or will have) a seasonal bloom shall be tagged with labels indicating the specific variety of that species' botanical and common name.

2.15 BALLED / BURLAPPED / WIRE BALLED / BURLAPPED PLANTS

- A. All ball sizes shall be of a diameter and depth to encompass the fibrous and feeding root system necessary for full recovery of the plant after planting. All balls shall be firm, shall not be broken or crushed, and shall be wrapped and securely tied with heavy twine or wire. All trees shall be root pruned a minimum of 6 weeks before delivery.
- B. Plants designated B&B or W&B in the Plant List shall be adequately balled with firm, natural bolls of soil in sizes at least equal to those set forth in ANSI 2601-2004. Bolls shall be firmly wrapped with jute burlap or equivalent cloth capable of rotting in the ground.
- B.1. No balled plant shall be planted if the ball is cracked, malfunctioned, or broken either before or during the process of planting. Trees grown in grow bags shall not be acceptable. Synthetic strings, straps, and burlap material shall be properly removed from the rootball. Synthetic burlap is to be totally removed from the rootball.
- B.2. New balled plants should be removed from the site if the rootball is damaged.

2.16 COLLECTED PLANTS

A. All plant material (except West Myrtles and Sabal Palms) shall be nursery grown. Collected plants shall have been grown under climatic conditions similar to those in the locality of the project. All collected plants shall meet the requirements as specified and shall meet all specified grades and standards, unless otherwise specified in the Plant List or these specifications. Rootballs shall be increased in size one third greater than nursery grown plants.

2.17 CONTAINERIZED PLANTS

A. All container grown plants shall be well rooted and established in the container in which they are delivered to the site. The plants shall have been in that container sufficiently long for the fibrous roots to hold the soil together when the plant is removed from the container. Container grown plants found to be root-bound during planting will not be acceptable. Containerized trees have a tendency to dry out quickly. The Contractor shall be responsible for hand watering the trees at time of delivery through the time of final acceptance at a rate consistent with the nursery watering schedule to assure that the trees do not go into shock.

2.18 SPECIMEN PLANTS

A. After receiving the Notice to Proceed, the Contractor shall locate all plants specified as specimen. The Contractor shall notify the Owner so they may agree on a time to mutually inspect the selected plants. The Owner will inspect and tag those plants that are acceptable and shall be responsible to the Owner for any subsequent inspection of specimen plants, at any time, in addition to the mutually agreed time, shall be responsibility of the Contractor.

2.19 PALMS (if required)

- A. Palms, except cabbage palms and unless otherwise indicated, shall be burlapped. Bolls of palms shall be tied and supported in an upright position in accordance with the guidelines of Florida Dept. of Agriculture, Grades and Standards for Nursery Plants, Part I, II, Palms and Trees.
- B. Special care shall be applied to the handling and planting of palms. Unless otherwise indicated, palms shall have heavy straight (unless curved is noted) trunks with full heads. Washingtonia palm rootballs shall be dug with a minimum of 5' diameter ball 3' deep. Where Sabal palms are specified with heads, the head shall be tied and supported during transport with a 2"x4" tied parallel to the trunk extending up to the foliage. Avoid excessive pressure on the pedicles when tying the head. Date Palm heads shall be tied using 4"x4" wood poles.

2.20 FLOWERING ANNUALS

A. Landscape Contractor to submit "Flowering Annuals" selections to Owner's Representative and/or Landscape Architect for approval prior to purchasing. Flowering annual selections to be based on availability, quality, and growing season. Locations and spacing as indicated on drawings.



RONNETT design group, llc
landscape architecture
commercial/residential
FL LIC 26000341

400 South Orlando Ave. Suite 201
Maitland, FL 32751
407-622-1588 voice

Taylor Ridge
Landscape Architecture
Hanover Land Company, LLC
Deland, Florida
PLANTING SPECIFICATIONS

DATE: April 12, 2024

DRAWN BY: BRL

CHECKED BY: TWR

JOB NUMBER: 2021-188

FILE NAME: 2021-188-TAYLOR RIDGE LANSAP

REVISIONS: 07-26-2024

City Comments



Designed by Todd W. Bonnett
07-26-2024 12:28:51-04:00

L432

2.21 SUBSTITUTIONS

- A. All substitutions must be submitted in writing to the City Forester for approval.
- B. The use of materials differing in kind, quality or size from those specified will be allowed only after the Owner is convinced that all means of obtaining the specified materials have been exhausted.
- C. Where it is indicated that the Contractor may furnish or use a substitute that is equal to the material or equipment specified and if the Contractor is to furnish or use a proposed substitute, they shall, after the owner of the contract, make written application to the Owner for acceptance of such a substitute. The substituted product or method shall be equal or superior in all respects to the specified product or method, shall perform at least as well as the material or method specified, and shall be compatible with all other elements of the job, and shall be sufficient to complete the job. The substitution shall not add cost to the contract. Should it be necessary to accept a substitute of a quality less than specified, the unit price shall be used to adjust the contract price downward accordingly. No substitution shall be ordered or installed without the written permission of the Owner.

PART 3 - EXECUTION

- D. The Contractor shall exercise care in handling, loading and unloading, storage and transporting all plant material and allied materials to prevent damage. The Contractor shall assume full responsibility for protection and safekeeping of products stored on the job.
- E. The Contractor shall dig and prepare B&B and W&B planting material for shipment in a manner that will not damage roots, branches, shape and future development after planting.
- F. Trees indicated on the plans as W&B and those where size, soil conditions and direction of transport to the site would warrant, shall be wireballed. Bottom wired baskets manufactured specifically for use in tree handling may be used.
- G. The Contractor shall handle all plants so that roots and branches are protected at all times from drying out, heating and from other injury. All plants shall be handled by the ball or container.
- H. Before moving plants from the nursery or storage area to the site, they shall be thoroughly sprayed with a solution of anti-desiccant. Anti-desiccant shall be applied to all collected pines, oaks and myrtles. Two weeks after planting or as specified by the product manufacturer, the material shall be sprayed again with the anti-desiccant. The anti-desiccant shall be applied using power spray to provide an adequate film over trunks, branches, stems, twigs and foliage.
- I. When transporting plants to and at the site, the Contractor shall make provisions to protect plants from wind damage by avoiding high-speed highways, transporting in enclosed or partially enclosed vehicles, or covering the plants with burlap or other suitable material. Plants severely damaged by wind will be rejected.
- J. Any plant with signs of insects, their eggs or larvae, or disease will be rejected and shall be removed from the project site.
- K. Only the nursery stock intended for planting on a particular day shall be delivered and stored on the site during the day unless otherwise acceptable to the Owner. All plants shall be stored in one location as designated by the Owner, protected from wind and kept moist. The roots of all plants that cannot be planted immediately in soil shall be covered with mulch and other suitable material. No plants shall be taken from the temporary storage area for planting on the project until after the tree pits or holes for the plants in the section to be planted have been properly excavated and prepared ready to receive the tree and shrubs.
- L. Trees moved by which or crane shall be thoroughly protected from chain marks, grilling, or other bark damage by means of burlap, wood battens and other acceptable method.

3.02 NON-PLANT MATERIALS

- M. Fertilizer shall be delivered to the site in original, unopened containers bearing manufacturer's guaranteed chemical analysis, name, trade name, trademark and conformance to state law. In lieu of containers and provided that it is to be applied at the time of delivery, fertilizer may be furnished in bulk, and a certificate indicating the above information shall accompany each delivery.
- N. Pesticide and herbicide materials shall be delivered to the site in the original, unopened containers. Containers that do not have a legible label that identifies the Environmental Protection Agency registration number and manufacturer's registered uses will be rejected.
- O. Storage of material shall be in the area designated for use by the Owner. All materials shall be kept in dry storage and away from contaminants.
- P. 3.03 PREPARATION BEFORE PLANTING
- Q. The Contractor shall verify that final grades have been established prior to beginning planting operations. All unsatisfactory grading shall be reported to the Owner, and the Contractor shall not proceed with the work until the unsatisfactory conditions have been corrected. When conditions detrimental to plant growth are encountered, such as rubble, fill or adverse drainage conditions, the Contractor shall notify the Owner for their directions.
- R. Should undesirable existing vegetation be present on the site at the time of installation, the Contractor shall prepare the site for planting by use of chemicals, when used as recommended by the manufacturer, and/or mechanical means acceptable to the Owner.
- R.A. Core shall be exercised to avoid any misuse of chemicals that would create detrimental residual conditions. Core must also be used not to alter final grades that have been established or cause damage to previously established turf areas.

3.04 SITE PREPARATION

- A. If so called for by the Owner, all plant locations and the areas of all planting beds shall be staked out on the ground, for acceptance by the Owner, before planting operations begin. The Contractor shall stake the location of the center of each tree and point the outline of each shrub and groundcover bed. The stakes shall be oriented in a vertical manner so that they can be viewed and read from one direction. The Contractor shall give the Owner notice 24 hours prior to the completion of staking described herein.
- B. The Contractor shall verify the location of underground utilities, and irrigation heads and valves, and provide markers or other suitable protection, where necessary, to prevent damage.

3.05 EXCAVATION OF PLANTING AREAS

- A. No tree or shrub pit shall be dug or prepared until their location is acceptable to the Owner. Reasonable care shall be exercised to have pits dug and soil prepared prior to moving plants to their respective locations for planting to ensure that they will not be unnecessarily exposed to drying elements or to physical damage.
- B. Circular pits with vertical side shall be excavated for all plants. The depth of all plant pits shall be enough to accommodate the ball or roots and the prepared soil in the bottom of the pit. Diameter of pits for trees shall be at least 1 foot greater than the diameter of the rootball.
- C. Plant beds and pits shall be tested for proper drainage by filling with water twice in succession. Conditions permitting the retention of more than 6 inches of water in 1 hour shall be brought to the attention of the Owner. A written proposal and cost estimate for correction of such conditions shall be submitted to the Owner for acceptance, before proceeding with the work.
- D. All tree pits in curved planting islands, tree wells, or in areas in which the soil has been compacted to an undesirable density, shall be excavated to a depth of at least two feet greater than the measure depth & diameter of the ball. The minimum depth & diameter of an excavation shall be four feet. Soil backfill in areas of densely compacted soil must meet specification 2.01.C.
- E. In shrub and groundcover beds where soils have been compacted to a density that is detrimental to plant growth, the Contractor shall loosen soils to a depth of 18" minimum to allow root penetration beyond the planting pit.
- F. If acceptable for use, existing topsoil in shrub and groundcover beds shall be treated with the specified soil amendments, at rates determined by soil tests. Amendments shall be incorporated into the soil to a depth of 12 inches. Where soil is not acceptable as determined by soil tests, the soil in the entire area shall be removed to a depth of 8 inches and replaced with the specified planting soil.

3.06 PLANTING

- A. All plants, except as otherwise specified, shall be centered in their pits, faced for best effect and set plumb for backfilling.
- B. Burlap on B&B and W&B&B plants shall be removed from top one third of the ball. Burlap shall not be removed from under balls. If the ball is cracked or broken before or during planting process, the plant shall not be planted and shall be removed from the site. All synthetic strings, straps, and wire cages shall be removed from the top third of the rootball. Synthetic burlap shall be removed completely.
- C. Plants shall be removed from cans by cutting two sides of a container with an acceptable can cutter. Sides shall not be cut with a spade. Sides of knockout cans shall not be cut. Plastic containers with slanted sides shall not require cutting. Plants shall be removed from the container carefully, without injury or damage to the plant and root system. Bottom of plant boxes shall be removed before planting. Sides of the box shall be removed, without damage to the rootball, after positioning the plant and partially backfilling around it. The Contractor shall hand water containerized trees from the time of delivery until the time of final acceptance of a nursery conditions from which the trees were obtained. Trees which go into shock due to insufficient water may be rejected.
- E. Plants shall be set in the center of pits and shall be plumb and straight and at such a level that after settlement the root crown will be level with the surrounding grade.
- F. Plant holes shall be backfilled with the specified planting mixture placed in layers around the roots or ball. Each layer shall be carefully tamped in place in a manner to avoid injury to the roots or ball or disturbing the position of the plant. When approximately two thirds of the plant holes has been backfilled, the holes shall be filled with water and the soil allowed to settle around the roots. Balled and burlapped plants shall have the burlap cut away or folded back from the top of the ball before applying the topsoil. After the water has been absorbed, the plant hole shall be filled and tamped lightly to grade. Any subsequent settlement shall be brought to grade.
- G. Immediately after each tree pit is backfilled, a shallow basin slightly larger than the pit shall be formed with a ridge of

- topsoil to facilitate watering. This soil saucer shall be formed in a circle and tamped around each tree so that the saucer will retain water. Where curbing occurs around plant pits, the saucer shall be omitted.
- H. The Contractor shall include adding a water retentive additive Terra-Sorb AG for all shrubs, groundcovers, annuals, and trees at the manufacturer's suggested rates.
- I. The Contractor shall include amendments to specimen trees and palms that meet specification 2.02.B and 2.02.C respectively at rates specified by the manufacturer.

3.07 FERTILIZING

- A. If required by soil testing, each tree and shrub shall be fertilized by placing the manufacturer's recommended amount around the base of the ball before backfilling.

3.08 STAKING, GUYING AND WRAPPING

- A. Staking or guying and wrapping of trees shall be done immediately after they are planted. Each plant shall stand plumb after staking or guying has been completed. It shall be the Contractor's responsibility to ensure that all trees are plumb and secure after planting. Staking of trees of a 10 foot height or less shall be at the discretion of the Owner. All other trees shall be staked.
- B. Immediately after planting, trees shall be staked and guyed for support with Arborbrace or ArborGuy Tree Guying System per manufacturer's instructions.
- B.A. ATG-R for up to 4" caliper trees: (3) Polypropylene guylines 1/4"x12"-800 lb test, olive drab, UV resistant; (3) nickel plated spring cam-lock tension clips; (3) arrowhead nylon anchors (4"x3-3/4").
- B.B. ATG-L for up to 4" caliper trees: (3) Polypropylene guylines 1/4"x12"-1000 lb test, olive drab, UV resistant; (3) 1-1/4" nickel plated, non-rusting, spring cam-lock tensioning clips (1500 lb break strength); (3) arrowhead nylon anchors (5-1/2"x4-1/2").
- B.C. Care shall be taken when driving anchors to avoid damaging the tree roots.
- C. If planted while void of foliage, the trunks of all deciduous trees shall be wrapped spirally from bottom to top, and shall be securely tied with cord at top and bottom and at 2 foot intervals along the trunk. The wrapping shall overlap and entirely cover the trunk from the ground to the height of the second branches and shall be neat and snug. Overlap of wrapping material shall be approximately 2 inches. Trees shall be inspected for injury to trunks, evidence of insect infestation and improper pruning before wrapping.

3.09 MULCHING

- A. Immediately after planting operations are completed, all tree and shrub saucers, and shrubs and groundcover beds shall be covered with a 3 inch layer of pine bark mulch nuggets. Limits of the mulch shall be as indicated on the drawings.

3.10 PRUNING

- A. Each tree and shrub shall be pruned in accordance with standard horticultural practices to preserve the natural character of the plant and in the manner fitting its use in the landscape design. Pruning shall be done with clean, sharp tools and as indicated on the drawings.
- B. No more than one third of the growth of large deciduous trees (those with 2 inch caliper or larger) shall be pruned by removal of superfluous branches. Main leaders of trees shall not be cut back. Remove any crossing or damaged branches. Long side branches may be shortened. Shrubbery with extremely heavy tops may have one fourth to one third of the weaker growth removed by thinning.

3.11 CLEAN-UP

- A. During the course of planting, excess and waste materials shall be continuously and promptly removed daily, towns kept clear, and all reusable materials taken to avoid damage to existing structures, plants and grass. After completion of the work, the entire site shall be cleared of excess soils, waste material, debris and all objects that may hinder maintenance and affect the visual appearance of the site.
- A.A. The Contractor shall clean all roads and walks of dirt and broom sweep all asphalt pavement prior to the final lift of asphalt to be laid.

3.12 DISTURBED AREAS

- A. All areas outside of the limit of work that are disturbed by the Contractor's construction activities shall be repaired and replanted to it original condition.

3.13 GUARANTEED PROVING PERIOD

- A. There shall be a guarantee period of 1 year for trees and specimen material and 3 months for shrubs. This guarantee period shall start at the final acceptance date. Contractor shall replace any and all plant material that die during this guarantee proving period. Replacement of plants necessary during the guarantee period shall be the responsibility of the Contractor, except for possible replacements of plants resulting from removal, vandalism, acts of neglect on the part of others, or acts of God. All replacement material shall have the same guarantee time (1 year from installation of replacement for trees and specimen material and 3 months of shrubs).
- B. Planting maintenance shall include all necessary watering, cultivation, weeding, pruning and spraying; wrapping and mulching; straightening of plants which lean or sag and which develop more than a normal amount of settlement; such adjustments to include excavating around and leveling or rolling the ball when so directed; and all other incidental work necessary for proper maintenance as directed by the Owner until substantial completion and written release.
- C. Transplanted material (if applicable) shall not be guaranteed, however, good horticultural practices should be used before, during and after the material is transplanted. Good horticultural practices should include but not be limited to, all necessary watering, pruning and spraying; wrapping and mulching; fertilizing; moving; maintaining the same orientation and grade level from the original location; and all other incidental work necessary for proper transplanting.

3.14 FINAL INSPECTION AND ACCEPTANCE

- A. The Contractor shall notify the Owner in writing when the work has been completed in accordance with this Contract and request an inspection. The Owner will make the inspection of the work and report findings as to acceptability and completeness. Any work remaining to be done shall be subject to re-inspection before final acceptance. The Contractor will be notified in writing by the Owner of the final acceptance of the work.

3.15 CONTRACTOR'S RESPONSIBILITY AFTER ACCEPTANCE

- A. The Owner may elect to assume maintenance of all work, at the time of acceptance, or may elect to contract for maintenance by others for a specified period. Should maintenance after final acceptance be the responsibility of those other than the Contractor, the Contractor shall monitor all work for which he is responsible by guarantee, to assure that maintenance being performed will not jeopardize the condition and quality of the work and materials guaranteed by the Contractor. Any inadequate or damaging maintenance practices shall be reported immediately in writing to the Owner so that appropriate measures may be taken to correct the condition. Failure to so notify the Owner will invalidate any later claim of negligence or malpractice in maintenance.

3.16 ACCEPTANCE AND REPLACEMENT OF PLANT MATERIAL

- A. At the expiration of the proving period, an inspection of the plantings will be made by the Owner. Only those plants that are alive and normally healthy will be accepted. Unacceptable material shall be removed and replaced by the Contractor at their own expense, during the next planting season. Material and method of replacement planting shall be the same as specified for the original planting unless otherwise directed. The Contractor shall continue to make replacements until a plant shows vigorous and healthy growth for a period of 1 year from the date of acceptance by the Owner. All such replacements at the end of the proving period by the Owner.

END OF SECTION 32.93.00

THIS DOCUMENT IS THE PROPERTY OF TAYLOR RIDGE LANDSCAPE ARCHITECTURE, LLC. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREIN. IT IS NOT TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF TAYLOR RIDGE LANDSCAPE ARCHITECTURE, LLC.



RONNETT design group, llc
landscape architecture
community planning
FL LLC 26000341

400 South Orlando Ave. Suite 201
Maitland, FL 32751
407-622-1588 voice

Taylor Ridge
Landscape Architecture
Hanover Land Company, LLC
Deland, Florida
PLANTING SPECIFICATIONS

DATE: April 12, 2024
DRAWN BY: SRL
CHECKED BY: TWR
JOB NUMBER: 2021-188

FILE NAME:
D:\2021\TAYLOR RIDGE\JOB

REVISIONS:
A City Comments 07-26-2024



Issued by Todd W. Bonnett
04/07/20 13:28:52-04:00
Seal No. 66066, E.C. # 160670

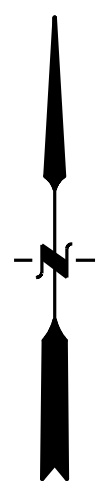
L433

BOUNDARY & TOPOGRAPHIC SURVEY

SEE SHEETS 2-X FOR TOPOGRAPHIC DETAIL SHEETS

SECTION 22, TOWNSHIP 17 SOUTH, RANGE 30 EAST

VOLUSIA COUNTY, FLORIDA



SCALE: 1"=100'

DESCRIPTION

Parcel 1:
The South 1/2 of the Southeast 1/4 of the Southeast 1/4, lying North of Taylor Road, Section 22, Township 17 South, Range 30 East, Volusia County, Florida, Less and Except Road Right of Ways.

also described as:

All of Blocks 1 and 2, and that portion of Blocks 3 and 4, lying North of Taylor Road, Carroll and Marshall Addition to Deland, according to the map thereof as recorded in Map Book 9, Page 22, Public Records of Volusia County, Florida, Less and Except Road Right of Ways.

Parcel 2:
The Northeast 1/4 of the Southeast 1/4 of the Southeast 1/4, Section 22, Township 17 South, Range 30 East, Volusia County, Florida, Less Road Right of Way.

CONTAINING: 26.011 acres, more or less.

LEGEND

R = RADIUS
Δ = DELTA
L = LENGTH
CH = CHORD LENGTH
CB = CHORD BEARING
ASPH = ASPHALT
BC = BACK OF CURB
BNDY = BOUNDARY
C&G = CURB & GUTTER
CM = CONCRETE MONUMENT
CONC. = CONCRETE
CSL = CONCRETE SLAB
D = DESCRIPTION
DOC. = DOCUMENT
EL = ELEVATION
EP = EDGE OF PAVEMENT
F = FIELD
FL = FLOWLINE OF CURB
IBC = IRON BAR & CAP
ID = IDENTIFICATION
INV = PIPE INVERT
MES = MITERED END SECTION
N&D = NAIL & DISK
OHE = OVERHEAD ELECTRIC WIRES
ORB = OFFICIAL RECORDS BOOK
P = PLAT
PB = PLAT BOOK
PG = PAGE
POB = POINT OF BEGINNING
POC = POINT OF COMMENCEMENT
RCP = REINFORCED CONCRETE PIPE
REC = RECOVERED
TB = TANGENT BEARING
W/ = WITH
□ = CABLE RISER
□ = ELECTRIC SERVICE BOX
→ = GUY ANCHOR
✉ = MAILBOX
⊙ = MANHOLE-SANITARY
-- = PEDESTRIAN CROSSING SIGN
◄ = POWER POLE-CONCRETE
✦ = POWER POLE-METAL
◄ = POWER POLE-WOOD
+ = SIGN
⊞ = TELEPHONE PEDESTAL
⊞ = WELL PUMP
■ = 4"x4" CONCRETE MONUMENT
● = 5/8" IRON BAR & CAP, UNLESS NOTED OTHERWISE

NOTES

1. This Plat represents a Boundary Survey of the Description provided by client to Jones, Wood & Gentry, Inc. and does not indicate ownership.

2. Bearings shown hereon are based on the East Boundary of the Southeast 1/4 of Section 22 as bearing S01°09'26"E, per Florida State Plane coordinates Zone East.

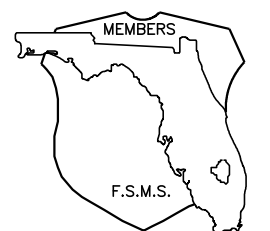
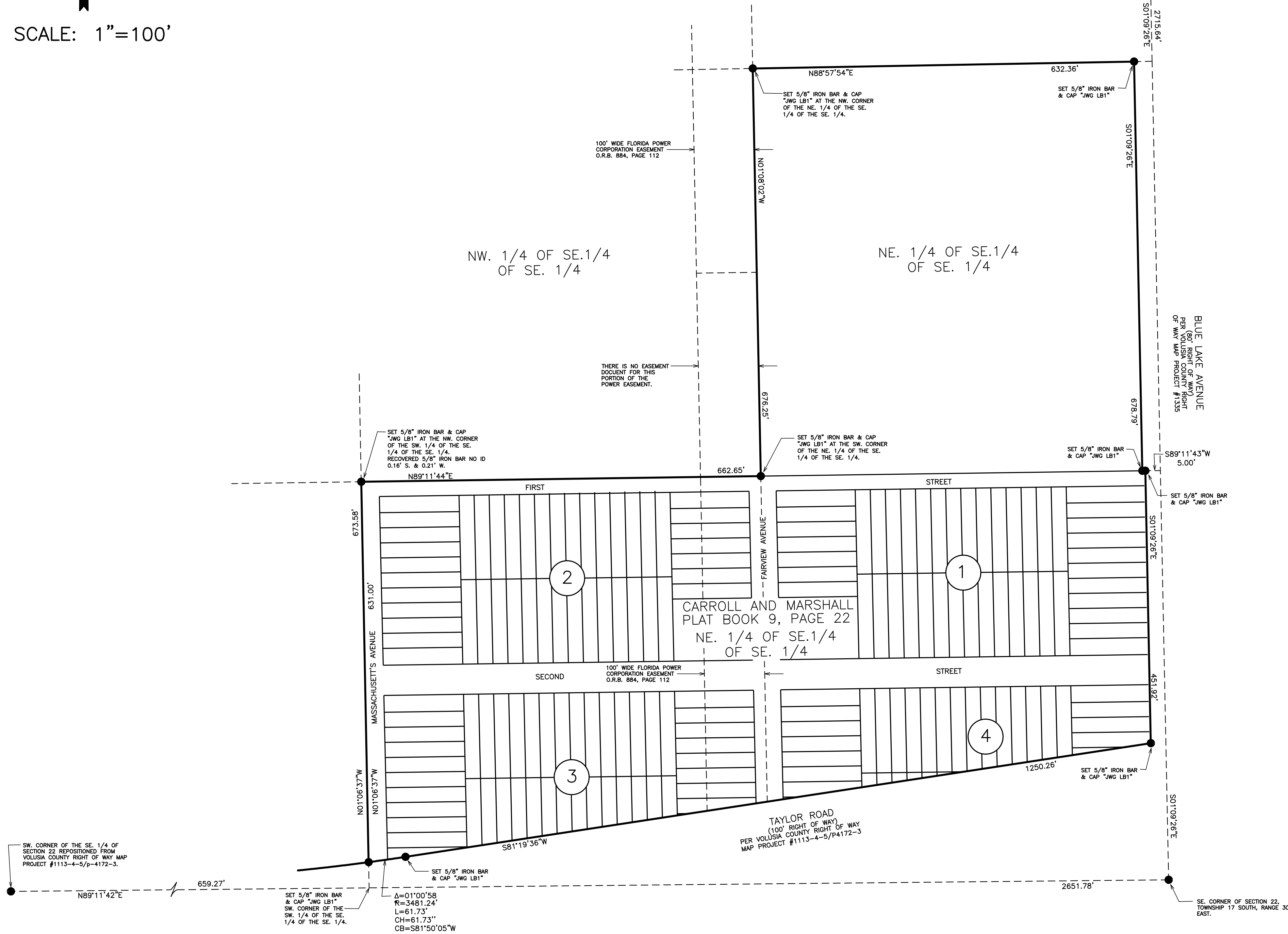
3. A Commitment for Title Insurance was prepared by Chicago Title Insurance Company, Commitment No. RTG2121201 with a commitment date of July 12, 2021 at 5:00 P.M. and was provided to Jones, Wood & Gentry, Inc. for use in preparing this survey. Research of the public records was not a part of the Scope of Surveying Services contract. Items listed in Schedule B Section II of the title commitment, to the extent they affect and can be shown graphically on the survey, relative to the subject property, are listed below:

ITEM 6. Restrictions, covenants, conditions, easements and other matters as contained on the Plat of CARROLL AND MARSHALL ADDITION TO DELAND, recorded in Map Book 9, Page 22, of the Public Records of Volusia County, Florida.

ITEM 7. Easement in favor of Florida Power Corporation recorded November 1, 1966 in Official Records Book 884, Page 112; Subordination of Utility Interests recorded March 19, 1991 in Official Records Book 3603, Page 829. O.R.B. 884, Page 112 describes a 100' wide Power easement. But does not describe that part of the property known as "The S. 1/2 of the NW. 1/4 of the SE. 1/4 of the SE. 1/4 of SECTION 22" as shown hereon. O.R.B. 3603, Page 829 does not affect the property. That description described the a portion of the powerline easement where the Taylor Road widening occurred and no longer affects the property.

4. Elevations shown hereon are based on Volusia County 1988 datum Vertical Control Points:

BLA#4 X-Cut in Concrete Published Elevation 84.343.



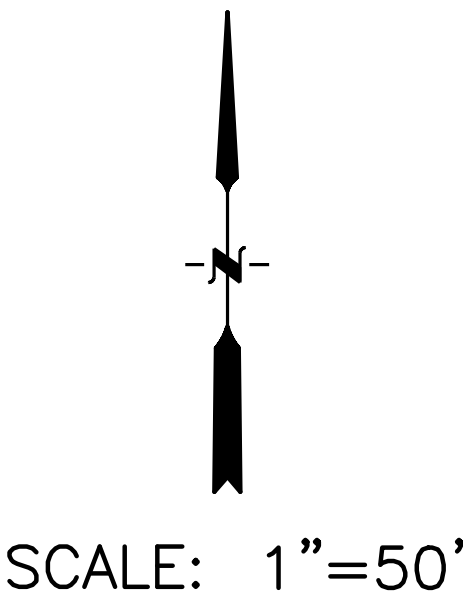
JONES, WOOD & GENTRY, INC.
PROFESSIONAL SURVEYORS AND MAPPERS - LB1
9645 EAST COLONIAL DRIVE
SUITE 114
ORLANDO, FLORIDA 32817
407-898-7780

FOR:
HANOVER LAND COMPANY, LLC

BY: DG3
DATE: 10-XX-2021
DRAWING: 29293-COV.DWG
JOB: 29293
SHEET: 1 OF XX SHEETS

BOUNDARY & TOPOGRAPHIC SURVEY

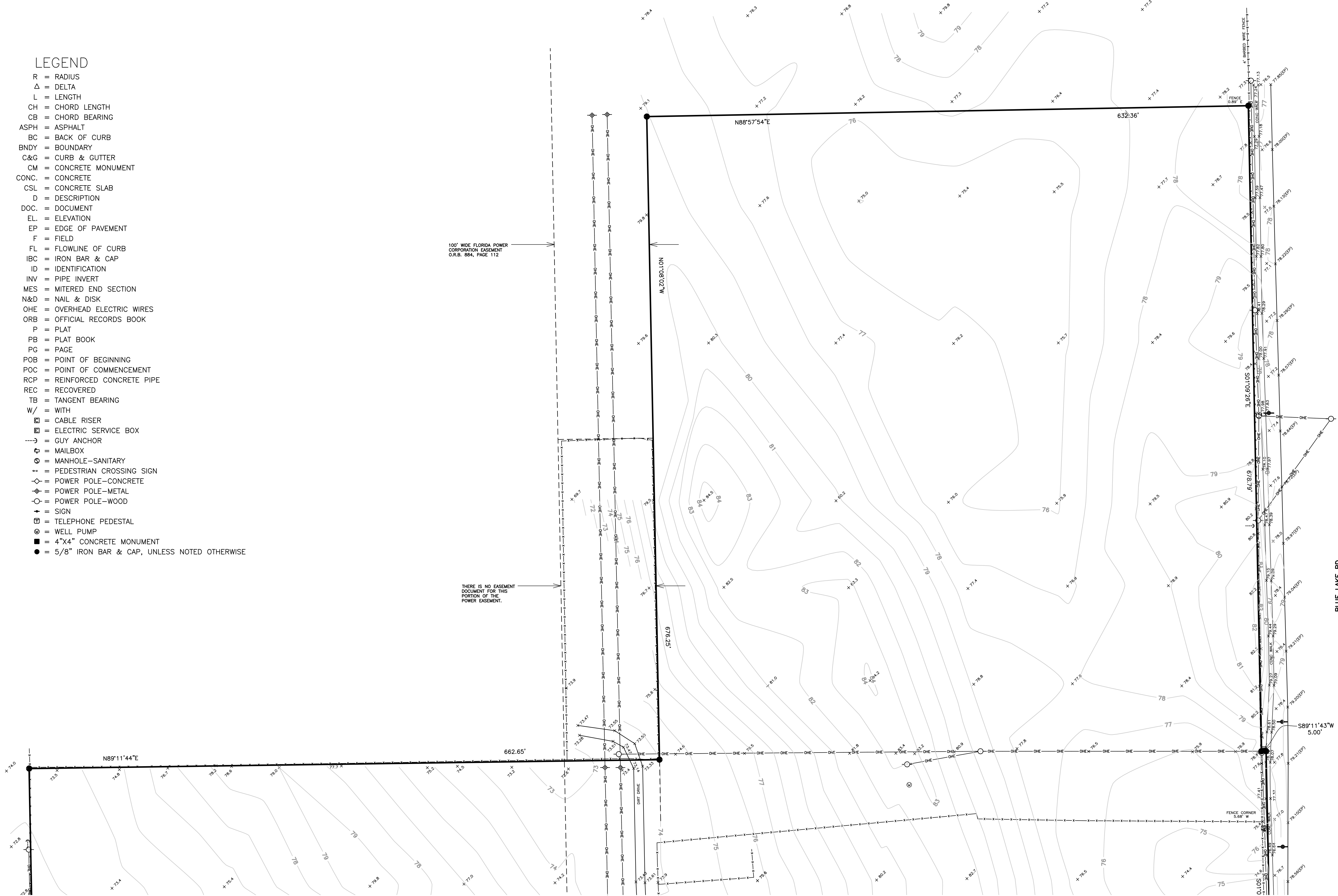
SEE SHEET 1 FOR DESCRIPTION
SECTION 22, TOWNSHIP 17 SOUTH. RANGE 30 EAST
VOLUSIA COUNTY, FLORIDA



SCALE: 1"=50'

LEGEND

- R = RADIUS
- Δ = DELTA
- L = LENGTH
- CH = CHORD LENGTH
- CB = CHORD BEARING
- ASPH = ASPHALT
- BC = BACK OF CURB
- BNDY = BOUNDARY
- C&G = CURB & GUTTER
- CM = CONCRETE MONUMENT
- CONC. = CONCRETE
- CSL = CONCRETE SLAB
- D = DESCRIPTION
- DOC. = DOCUMENT
- EL. = ELEVATION
- EP = EDGE OF PAVEMENT
- F = FIELD
- FL = FLOWLINE OF CURB
- IBC = IRON BAR & CAP
- ID = IDENTIFICATION
- INV = PIPE INVERT
- MES = MITERED END SECTION
- N&D = NAIL & DISK
- OHE = OVERHEAD ELECTRIC WIRES
- ORB = OFFICIAL RECORDS BOOK
- P = PLAT
- PB = PLAT BOOK
- PG = PAGE
- POB = POINT OF BEGINNING
- POC = POINT OF COMMENCEMENT
- RCP = REINFORCED CONCRETE PIPE
- REC = RECOVERED
- TB = TANGENT BEARING
- W/ = WITH
- ☐ = CABLE RISER
- ☐ = ELECTRIC SERVICE BOX
- > = GUY ANCHOR
- ☐ = MAILBOX
- ⊙ = MANHOLE-SANITARY
- = PEDESTRIAN CROSSING SIGN
- ◇ = POWER POLE-CONCRETE
- ⊕ = POWER POLE-METAL
- ⊖ = POWER POLE-WOOD
- + = SIGN
- ⊕ = TELEPHONE PEDESTAL
- ⊙ = WELL PUMP
- = 4"x4" CONCRETE MONUMENT
- = 5/8" IRON BAR & CAP, UNLESS NOTED OTHERWISE

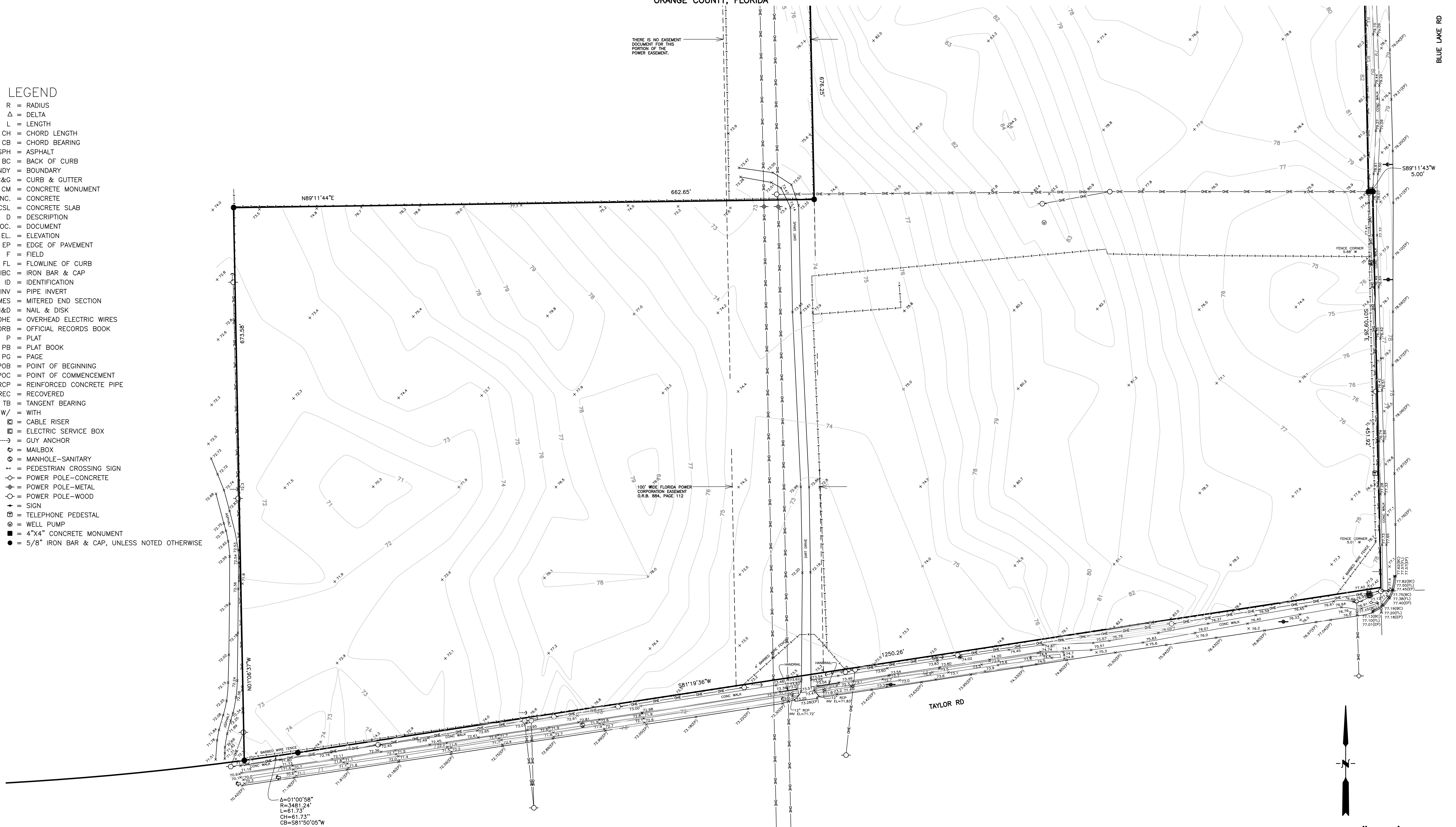


BOUNDARY & TOPOGRAPHIC SURVEY

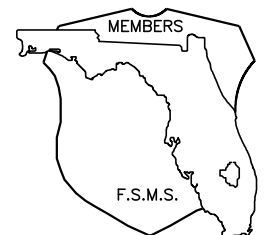
SEE SHEET 1 FOR DESCRIPTION
SECTION 22, TOWNSHIP 17 SOUTH. RANGE 30 EAST
ORANGE COUNTY, FLORIDA

LEGEND

- R = RADIUS
 Δ = DELTA
 L = LENGTH
 CH = CHORD LENGTH
 CB = CHORD BEARING
 ASPH = ASPHALT
 BC = BACK OF CURB
 BNDY = BOUNDARY
 C&G = CURB & GUTTER
 CM = CONCRETE MONUMENT
 CONC. = CONCRETE
 CSL = CONCRETE SLAB
 D = DESCRIPTION
 DOC. = DOCUMENT
 EL. = ELEVATION
 EP = EDGE OF PAVEMENT
 F = FIELD
 FL = FLOWLINE OF CURB
 IBC = IRON BAR & CAP
 ID = IDENTIFICATION
 INV = PIPE INVERT
 MES = MITERED END SECTION
 N&D = NAIL & DISK
 OHE = OVERHEAD ELECTRIC WIRES
 ORB = OFFICIAL RECORDS BOOK
 P = PLAT
 PB = PLAT BOOK
 PG = PAGE
 POB = POINT OF BEGINNING
 POC = POINT OF COMMENCEMENT
 RCP = REINFORCED CONCRETE PIPE
 REC = RECOVERED
 TB = TANGENT BEARING
 W/ = WITH
 ☒ = CABLE RISER
 ☒ = ELECTRIC SERVICE BOX
 ---> = GUY ANCHOR
 ⚡ = MAILBOX
 ⚡ = MANHOLE-SANITARY
 ⇄ = PEDESTRIAN CROSSING SIGN
 ⇄ = POWER POLE-CONCRETE
 ⚡ = POWER POLE-METAL
 ⇄ = POWER POLE-WOOD
 + = SIGN
 ☒ = TELEPHONE PEDESTAL
 ☒ = WELL PUMP
 ■ = 4"x4" CONCRETE MONUMENT
 ● = 5/8" IRON BAR & CAP, UNLESS NOTED OTHERWISE



SCALE: 1"=50'



JONES, WOOD & GENTRY, INC.
PROFESSIONAL SURVEYORS AND MAPPERS - LB1
9645 EAST COLONIAL DRIVE
SUITE 114
ORLANDO, FLORIDA 32817
407-898-7780

FOR:

BY: DG3
DATE:
DRAWING: 29293-BDY.dwg
JOB: 29293
SHEET: 3 OF 3



Carmen J. Balgobin, Ed.D
Superintendent of Schools

School Board of Volusia County

Ms. Jamie M. Haynes, Chairman
Mrs. Anita Burnette, Vice Chairman
Mr. Ruben Colón
Mr. Carl Persis
Mrs. Jessie Thompson

School Concurrency Determination Concurrency Letter

May 29, 2024

Mr. Michael J. Woods, Esq
Cobb Cole
231 N Woodland Blvd
DeLand, FL 32720

RE : Taylor Ridge PD – City of DeLand
School Concurrency Case # 24-04-26-001-R

Dear Mr. Woods:

District staff reviewed the information regarding the residential project known as Taylor Ridge PD associated with 26.01 +/- acres of property. The property is located at or near the intersection of E Taylor Rd and S Blue Lake Ave within DeLand city limits. Information provided in the school concurrency application indicates the development activity will consist of sixty-five (65) single family homes.

The district uses a county wide Student Generation Rate (SGR) of (0.258) per single family dwelling unit to calculate projected students. By applying the SGR to the use types in Table 1 below, the project could generate seventeen (17) full time students.

Table 1

UNIT TYPE	SGR	UNIT COUNT	STUDENTS GENERATED
Single Family Dwelling Unit	0.258	65	17
Multi Family Dwelling Unit	0.137	0	0
Mobile/ Manufactured Home Dwelling Unit	0.052	0	0
Total		65	17

The Concurrency Analysis (Table 2, next page) adjusts for impacts to the Concurrency Service Areas (CSAs) by accounting for current school year enrollments, existing reservations at the impacted schools, and the projected students generated by the applicant. These factors give an associated utilization or Level of Service (LOS) percentage for each CSA.

The schools impacted by this development are Freedom Elementary School, DeLand Middle School, and DeLand High School.

Concurrency Analysis

Table 2

Schools	Adopted LOS	SY 2023/24 Enrollment	Active Reservations	Existing LOS w/ Res	Students Generated by Request	Result LOS
Freedom Elementary	115%	752	14	107%	6	108%
DeLand Middle	115%	1,090	77	101%	3	102%
West CSA (DeLand High)	120%	2,874	238	113%	6	113%
Other					2	

The adopted LOS standard for elementary and middle school is (115%) of permanent student stations, and (120%) for high school CSAs. This projected increase in students **will not** exceed the adopted LOS at any school level; therefore, the school district does not have an objection to the proposed site plan. Minimum planning considerations should include pedestrian and vehicular access, safety, connectivity, and buffering.

Please note that the School Board has the right to adjust the attendance boundaries to balance the student enrollment populations at these area schools. Therefore, students generated from this project may not attend the current assigned schools.

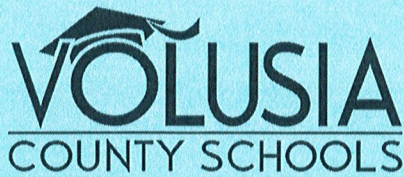
Should you need additional information, please contact me at (386) 947-8786, ext. 50806.

Sincerely,



Leineriza V. Divina
Coordinator, Planning

CC: Carmen J. Balgobin, Ed.D, Superintendent of Schools
Ron Young, Director of Planning & Construction
Kendal Story, Senior Planner, City of DeLand
James F. Roberts, VCSB Planning Services Project File



Certificate of School Concurrency

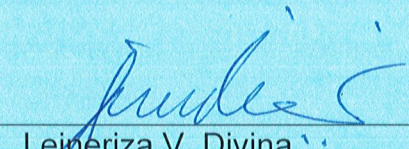
VOLUSIA COUNTY SCHOOL BOARD

Project Information	
Project Name	Taylor Ridge PD
VCSB Project #	24-04-26-001-R
Jurisdiction Project #	
Parcel ID Numbers	7022-00-00-0090; 7022-00-00-0191
Project Location	E Taylor Rd and S Blue Lake Ave
# of Residential Units	65
Residential Unit Type	Single Family Homes
Property Owners	TLC Blue Lake, LLC
Applicant/Agent Name	Michael J. Woods, Esq – Cobb Cole

This School Concurrency Certificate shall reserve student stations for the above referenced project and shall confirm that said project meets the School Concurrency requirements of the adopted Interlocal Agreement for Public School Facility Planning.

School Concurrency Analysis					
School Levels	Elementary	Middle	High	Other	Total Student Stations Reserved
Students Generated	6	3	6	2	17
<u>Comments:</u> This certificate is required to be included with the building permit submittal(s) as proof of school concurrency.					

This concurrency reservation shall expire two (2) years from the date of issuance of this certificate.



Leineriza V. Divina
Coordinator, Planning

May 29, 2024
Issue Date

VCSB Schools Impacted by Development

School Concurrency Review - Taylor Ridge PD

