Special Planning and Zoning Board Meeting
Agenda
May 16, 2023

Chair Sandy Burgess
Vice Chair Joe Hancock
Member Virginia Johns
Member William "Bill" Menadier
Member Dave Ferro
School Board Member Tina Certain

City Manager Mike DaRoza

Special Planning and Zoning Board Meeting
At 6:00 PM

Meeting Date: May 16, 2023

Meeting Location: James A. Lewis Commission Chambers

Notice given pursuant to Section 286.0105, Florida Statutes. In order to appeal any decision made at this meeting, you will need a verbatim record of the proceedings. It will be your responsibility to ensure such a record is made.

SPECIAL PLANNING AND ZONING BOARD MEETING AGENDA

CALL TO ORDER

I. NEW BUSINESS

A. Site Plan – Tower Hill Headquarters: A request by Walker Owen, P.E., of Causseaux, Hewett, & Walpole, Inc., applicant and agent for Sharleen O Cavaceppi Trustee, Sarcav, LLC, and Tomoka Hill Farms, Inc., property owners, for consideration of a Site Plan proposing the construction of a ±71,533 square foot office building and associated site improvements and an entrance road from US 441 to the building site; Tax Parcel Numbers 03053-000-000, 03054-001-000, 03054-001-002, and 03873-001-000 (Quasi-Judicial Hearing).

ADJOURN

City of Alachua
THE GOOD LIFE COMMUNITY

Board/Committee Agenda Item

MEETING DATE: 5/16/2023
SUBJECT: Site Plan – Tower Hill Headquarters: A request by Walker Owen, P.E., of Causseaux, Hewett, & Walpole, Inc., applicant and agent for Sharleen O Cavaceppi Trustee, Sarcav, LLC, and Tomoka Hill Farms, Inc., property owners, for consideration of a Site Plan proposing the construction of a ±71,533 square foot office building and associated site improvements and an entrance road from US 441 to the building site; Tax Parcel Numbers 03053-000-000, 03054-001-000, 03054-001-002, and 03873-001-000 (Quasi-Judicial Hearing).

PREPARED BY: Justin Tabor, AICP, Principal Planner

RECOMMENDED ACTION:

Staff recommends that the Planning & Zoning Board approve the Site Plan for the Tower Hill Headquarters subject to the five (5) conditions provided in Exhibit "A" and located on page 19 of the May 16, 2023 Staff Report to the Planning & Zoning Board upon making the following motion:

Based upon the competent substantial evidence presented at this hearing, the presentation before this Board, and Staff's recommendation, this Board finds the application to be consistent with the City of Alachua Comprehensive Plan and in compliance with the Land Development Regulations and approves the Site Plan for the Tower Hill Headquarters subject to the five (5) conditions provided in Exhibit "A" and located on page 19 of the May 16, 2023 Staff Report to the Planning & Zoning Board.

Summary

This application is a request by Walker Owen, P.E., of Causseaux, Hewett, & Walpole, Inc., applicant and agent for Sharleen O Cavaceppi Trustee, Sarcav, LLC, and Tomoka Hill Farms, Inc, property owners, for consideration of a Site Plan proposing the construction of a ±71,533 square foot office building and associated site improvements as well as the construction of an entrance road that is approximately 2,000 linear feet in length from US 441 to the building site on a ±37.07 acre portion of Tax Parcel Numbers 03053-000-000, 03054-001-000, 03054-001-002, and 03873-001-000.

The subject property is generally located south of US Highway 441 and NW 162nd Lane, east of CR 235-A and west of Interstate 75. The development will be provided access through the construction of the entrance road connecting to US 441 at the US 441/NW 167th Boulevard intersection. Stormwater will be conveyed to an on-site stormwater management facility located in the northeast portion of the site.

ATTACHMENTS:

Description

- Staff Report & Staff Supporting Materials
- Site Plan - Tower Hill Headquarters - Part 1 of 5
- Site Plan - Tower Hill Headquarters - Part 2 of 5
- Site Plan - Tower Hill Headquarters - Part 3 of 5

- Site Plan - Tower Hill Headquarters - Part 3 of 5
- Site Plan - Tower Hill Headquarters - Part 4 of 5
- Site Plan - Tower Hill Headquarters - Part 5 of 5
- Application & Supporting Materials
- Public Notice Materials for the 5/16/2023 PZB Hearing

City of Alachua

Planning & Community Development Department

Staff Report

Planning & Zoning Board Hearing Date: May 16, 2023
Quasi-Judicial Hearing

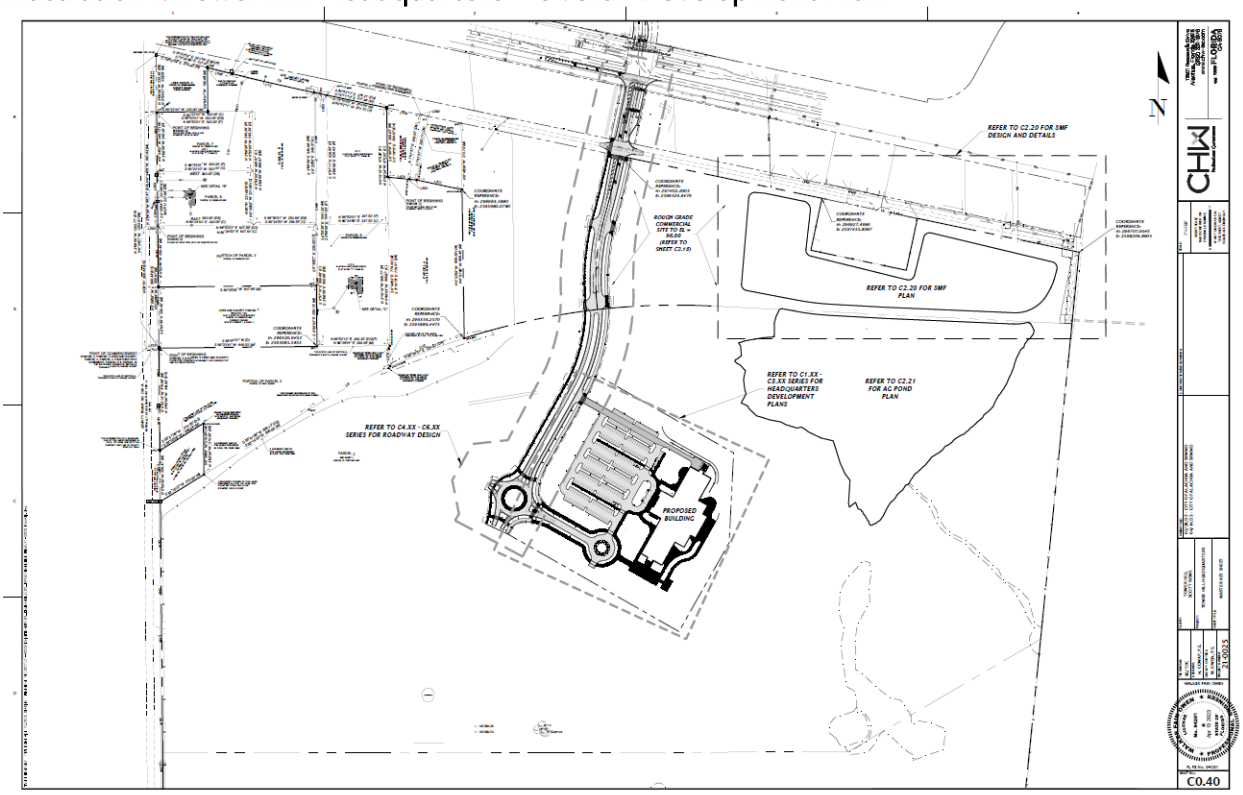
SUBJECT:	A request for a Site Plan proposing the construction of a ±71,533 square foot office building and associated site improvements as well as the construction of an entrance road that is approximately 2,000 linear feet in length from US 441 to the building site
APPLICANT/AGENT:	Walker Owen, P.E., Causseaux, Hewett, & Walpole, Inc.
PROPERTY OWNER:	Sharleen O Cavaceppi Trustee; Sarcav, LLC; Tomoka Hill Farms, Inc.
LOCATION:	Generally south of US Highway 441 and NW 162nd Lane, east of CR 235-A, and west of Interstate 75
PARCEL ID NUMBER:	03053-000-000; 03054-001-000; 03054-001-002; 03873-001-000
FLUM DESIGNATION:	Commercial & Community Commercial
ZONING:	Commercial Intensive (CI) & Community Commercial (CC)
OVERLAY:	N/A
ACREAGE:	±37.07 acres (project area)
PROJECT PLANNER:	Justin Tabor, AICP
RECOMMENDATION:	Staff recommends that the Planning & Zoning Board approve the Site Plan for the Tower Hill Headquarters subject to the five (5) conditions provided in Exhibit "A" and located on page 19 of the May 16, 2023 Staff Report to the Planning & Zoning Board.
RECOMMENDED MOTION:	*Based upon the competent substantial evidence presented at this hearing, the presentation before this Board, and Staff's recommendation, this Board finds the application to be consistent with the City of Alachua Comprehensive Plan and in compliance with the Land Development Regulations and approves the Site Plan for the Tower Hill Headquarters subject to the five (5) conditions provided in Exhibit "A" and located on page 19 of the May 16, 2023 Staff Report to the Planning & Zoning Board.*

SUMMARY

This application is a request by Walker Owen, P.E., of Causseaux, Hewett, & Walpole, Inc., applicant and agent for Sharleen O Cavaceppi Trustee, Sarcav, LLC, and Tomoka Hill Farms, Inc, property owners, for consideration of a Site Plan proposing the construction of a ±71,533 square foot office building and associated site improvements as well as the construction of an entrance road that is approximately 2,000 linear feet in length from US 441 to the building site on a ±37.07 acre portion of Tax Parcel Numbers 03053-000-000, 03054-001-000, 03054-001-002, and 03873-001-000.

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Illustration 1. Tower Hill Headquarters – Overall Development Plan



SURROUNDING USES

The existing uses, Future Land Use Map (FLUM) Designations, and zoning districts of the surrounding area are identified in Table 1. Map 1 provides an overview of the vicinity of the subject property. (NOTE: The information below is intended to provide a general overview of the area surrounding the subject property and to generally orient the reader. It is not intended to be all-inclusive, and may not identify all existing uses, FLUM Designations, and/or zoning districts surrounding the subject property.)

Map 1. Vicinity Map

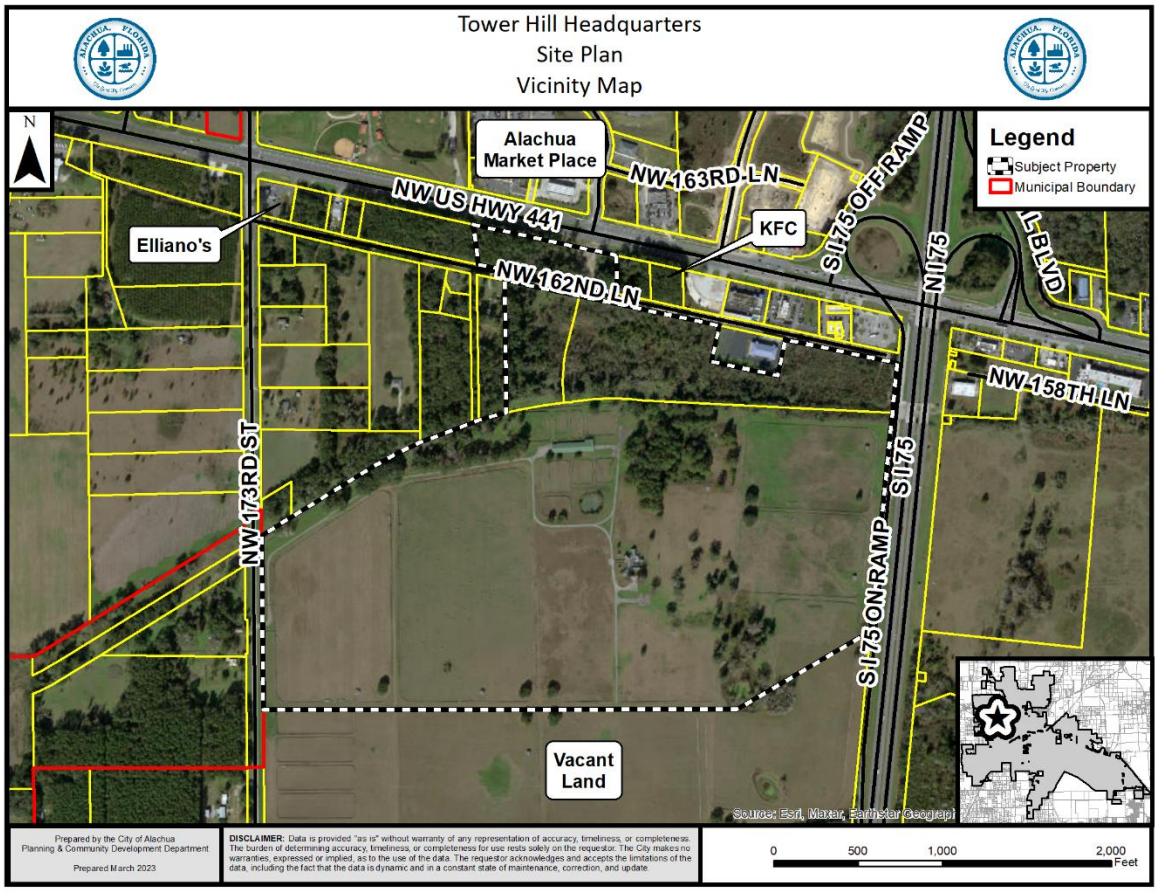


Table 1. Surrounding Land Uses

Direction	Existing Use(s)	FLUM Designation(s)	Zoning District(s)
North	Commercial Development (KFC, Burger King, Zaxby's, etc.)	Commercial	Commercial Intensive (CI)
South	Vacant Lands	Agriculture	Agricultural (A)
East	Interstate 75	N/A	N/A
West	Single Family Residential; Vacant Residential Lands	Moderate Density Residential; Medium Density Residential	Residential Single Family – 1 (RSF-1); Residential Single Family – 4 (RSF-4); Residential Multiple Family - 8 (RMF-8)

NEIGHBORHOOD MEETING

The purpose of a Neighborhood Meeting is to educate the owners of nearby land and any other interested members of the public about the project and to receive comments regarding the project. As required by Section 2.2.4 of the LDRs, all property owners within 400 feet of the subject property were notified of the meeting and notice of the meeting was published in a newspaper of general circulation.

A Neighborhood Meeting was held on January 11, 2023 at offices of CHW, located at 11801 Research Drive. The applicant was available to answer questions. Materials submitted by the applicant indicate that the meeting was attended by one (1) member of the public. A summary of the discussion which occurred at the Neighborhood Meeting has been provided by the applicant and is included with the application materials.

CONSISTENCY WITH THE COMPREHENSIVE PLAN

The Goals, Objectives, and Policies (GOPs) identified below are provided to establish a basis of the application's consistency with the Comprehensive Plan. There may be additional GOPs which the application is consistent with that are not identified within this report. An evaluation and findings of consistency with the identified GOPs is also provided below.

Future Land Use Element

Goal 1: *Future Land Use Map 2035*
The City shall maintain a Future Land Use Map in order to effectively guide development in a sustainable manner and to ensure economic prosperity and stability while maintaining a high quality of life for all of its present and future citizens, businesses, and visitors.

Objective 1.3: *Commercial*
The City shall establish three commercial land use categories: Community Commercial, Commercial, and Central Business District. These land use categories shall provide a broad range of commercial uses, including retail sales and services, personal services, offices, and tourist-oriented uses, in order to provide for the availability of goods and services, both to the citizens and visitors of Alachua and to the citizens of the North Central Florida region.

Policy 1.3.a: *Community Commercial*: The Community Commercial land use category is established to provide neighborhood and community scale goods and services to adjacent neighborhood and residential areas. The following uses are allowed within the Community Commercial land use category:

1. Neighborhood commercial establishments;
2. Residential/offices and live-work units;
3. Business and professional offices;
4. Personal services;
5. Financial institutions;
6. Retail sales and services that serve the community;
7. Eating establishments;
8. Indoor recreation/entertainment;
9. Single-family and multi-family residential above first floor commercial uses;
10. Bed and breakfasts;

11. Supporting community services such as schools, houses of worship, parks, and community centers; and,
12. Traditional Neighborhood Planned Developments.

Evaluation and Findings: The proposed office building is located on a portion of the property with a Community Commercial land use designation. This use is consistent with the uses permitted in the Community Commercial land use category.

Objective 2.4: Landscaping and Tree Protection Standards: The City shall adopt landscaping and tree protection standards in order to achieve the aesthetic design values of the community and preserve tree canopies, as well as to protect exceptional specimens and champion trees.

Policy 2.4.a: Landscaping: General – The City shall require landscaping plans to be submitted with each nonresidential and multiple family residential site plan. The minimum landscaped area shall be 10% of the development site, not inclusive of any designated open space areas. Landscaping designs shall incorporate principles of xeriscaping, where feasible. The City shall develop a list of preferred planting materials to assist in the landscape design. Landscape plans shall include perimeter and internal site landscaping.

Policy 2.4.b: Landscaping: Buffering – A buffer consists of horizontal space (land) and vertical elements (plants, berms, fences, walls) that physically separate and visually screen adjacent land uses. The City shall establish buffer yard requirements that are based on the compatibility of the adjacent uses and the desired result of the buffer.

Evaluation and Findings: The site plan includes a landscaping plan which demonstrates that the proposed development will comply with all applicable landscaping and buffering standards required by the City's Comprehensive Plan and Land Development Regulations. Upon completion of the development, the landscaped areas will exceed the minimum 10% area required by Policy 2.4.a.

Objective 2.5: Open Space Standards: The City shall utilize open space requirements to preserve the rural character of Alachua, protect natural resources, and provide spaces for people to recreate and gather.

Policy 2.5.a: There shall be a minimum of 10% percent open space required. The City shall establish incentives for the provision of open space beyond minimum requirements.

Evaluation and Findings: The site plan indicates that following completion of the development, the subject property exceeds the minimum 10% open space requirement.

Objective 5.1: Natural Features: The City shall coordinate land use categories with appropriate topography, soils, areas of seasonal flooding, wetlands and habitat during review of proposed amendments to the Future Land Use

Map and the development review process. Natural features may be included as amenities within a development project.

Evaluation and Findings: The applicant has submitted a Natural Resource Inventory/Environmental Resource Assessment (the "Inventory and Assessment") prepared by Environmental Resource Solutions ("ERS") and dated February 2023. The City engaged WSP to perform a review of the Inventory and Assessment. The review concludes that WSP generally agrees with the findings of the Inventory and Assessment prepared by ERS. Based upon the findings of the Inventory and Assessment prepared by ERS no adverse environmental impacts are expected.

Objective 5.2: Availability of facilities and services: The City shall utilize a concurrency management system to ensure that the adopted level of service standards are maintained.

Policy 5.2.a: All new development shall meet level of service requirements for roadways, potable water, sanitary sewer, stormwater, solid waste, and public schools in accordance with LOS standards adopted in the elements addressing these facilities.

Evaluation and Findings: An analysis of the development's impact to public facilities has been provided within this report. This analysis demonstrates that the development will not adversely affect the level of service (LOS) standard of any monitored public facilities.

Policy 9.1: Any new development or redevelopment within a Commercial or Industrial land use category within the corporate limits, where potable water and wastewater service are available, as defined in Policy 1.2.a and Policy 4.2.b of the Community Facilities Element of the City's Comprehensive Plan, shall connect to the City's potable water and wastewater system.

Evaluation and Findings: The development is located within the City's utility service area and will connect to potable water and wastewater facilities.

Transportation Element

Objective 1.1: Level of Service
The City shall establish a safe, convenient and efficient level of service standard for all motorized and non-motorized transportation systems.

Evaluation and Findings: An analysis of the development's impacts to transportation facilities is provided within this report. The development will not adversely affect the level of service for transportation facilities.

Policy 1.3.a: The City shall establish minimum and maximum parking standards in order to avoid excessive amounts of underutilized parking areas.

Policy 1.3.d: The City shall require landscaping within parking areas, with an emphasis on canopy trees. The City shall consider establishing incentives for landscaping in excess of minimum standards.

Policy 1.3.g: The City shall require spaces to accommodate persons with physical disabilities as required by the Americans with Disabilities Act.

Evaluation and Findings: The site plan demonstrates that the development will comply with Objective 1.1 and Policies 1.3.a, 1.3.d, and 1.3.g, which are implemented by the standards found within Section 6.1 of the City's Land Development Regulations. Required landscaping materials will be provided within parking areas. The site plan also provides the minimum number of required accessible parking spaces.

Community Facilities Element

Policy 1.2.a: The City shall establish a Community Wastewater Service Area, which shall include all areas where wastewater service is available. Wastewater service shall be deemed available if:

3. A gravity wastewater main, wastewater pumping station, or force main exists within 2,640 feet of the property line of any proposed residential subdivision comprised of more than 5 units, or any multi-family residential development, or any commercial development, or any industrial development and the gravity wastewater system, wastewater pumping station, or force main is accessible through public utility easements or right of ways. The distance shall be measured as required for construction of the infrastructure along public utility easements and right of ways.

Evaluation and Findings: The development is located within the City's utility service area and will connect to the City's wastewater system.

Policy 2.1.a: The City hereby establishes the following level of service standards for solid waste disposal facilities for residential uses:

FACILITY TYPE	LEVEL OF SERVICE STANDARD
Solid Waste Landfill	.73 tons per capita per year

Evaluation and Findings: An analysis of the development's impacts to solid waste facilities is provided within this report. The development will not adversely affect the level of service for solid waste facilities.

Policy 4.1.b: The City shall establish a Community Potable Water Service Area, which includes all areas where potable water service is available. Water service shall be deemed available if:

3. A water main exists within 2,640 feet of any proposed residential subdivision with more than 5 units, or any multi-family residential

development, or any commercial development, or any industrial development and water service is accessible through public utility easements or right of ways. The distance shall be measured as required for construction of the infrastructure along public utility easements and right of ways.

Evaluation and Findings: The development is located within the City's utility service area and will connect to the City's potable water system.

ENVIRONMENTAL CONDITIONS ANALYSIS

Wetlands

The applicant has submitted a Natural Resource Inventory/Environmental Resource Assessment (the "Inventory and Assessment") prepared by Environmental Resource Solutions ("ERS") and dated February 2023. The Inventory and Assessment notes that there are several man-made borrow areas and ponds throughout the project area and that these features have vegetated over time and are considered wetlands or other surface waters pursuant to Chapter 62-340, Florida Administrative Code.

Evaluation: The City engaged WSP to perform a review of the Inventory and Assessment. WSP identified wetlands consistent with ERS's findings and agreed with the conclusions made by ERS. Based upon the findings of the Inventory and Assessment prepared by ERS, the proposed development will not result in any impacts to naturally occurring wetland areas.

Strategic Ecosystems

Strategic Ecosystems were identified by an ecological inventory project in a report prepared for Alachua County Department of Growth Management in 1987 and updated in 1996. The purpose of the inventory was to identify, inventory, map, describe, and evaluate the most significant natural biological communities in private ownership in Alachua County.

Evaluation: The subject property is not located within or adjacent to a Strategic Ecosystem, therefore, the development will have no impact upon any Strategic Ecosystem(s) identified within the ecological inventory report.

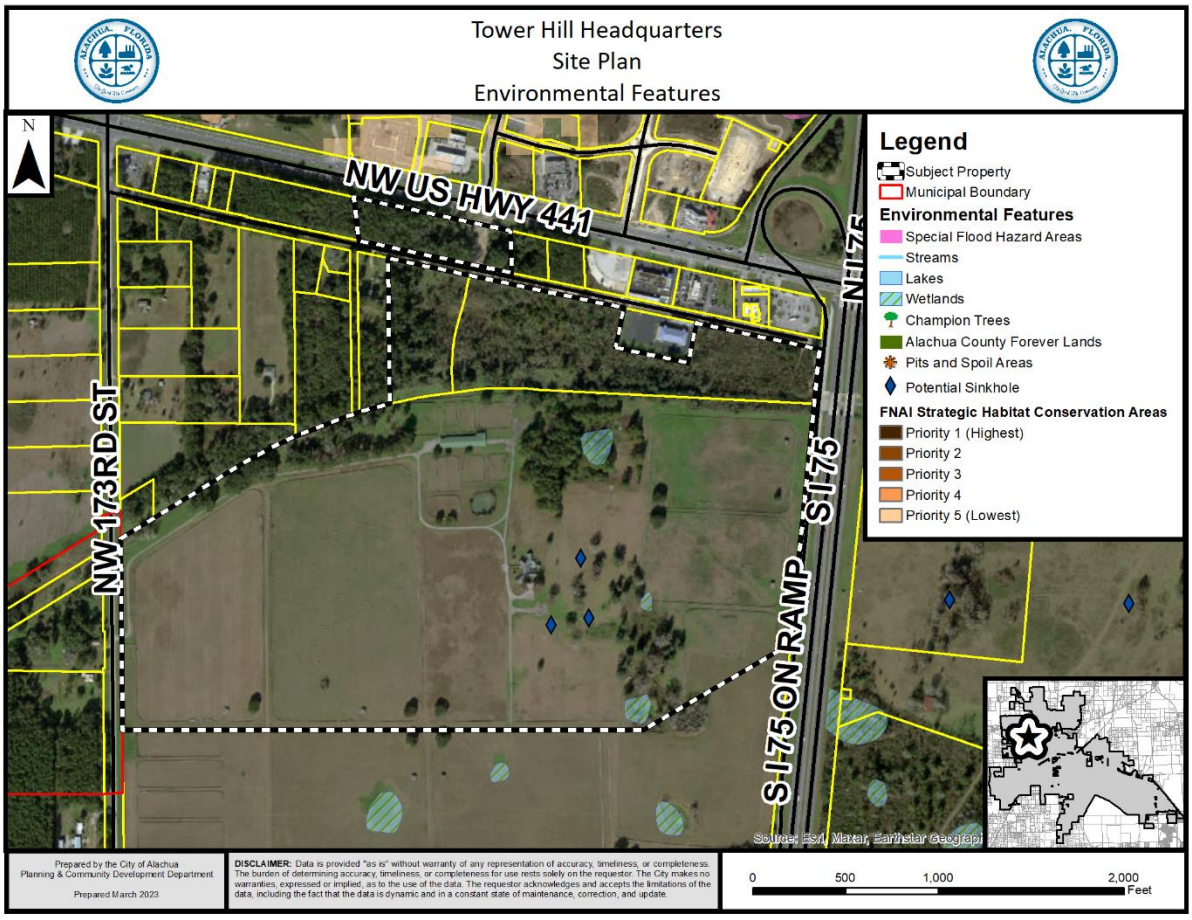
Regulated Plant & Animal Species

The applicant has submitted a Natural Resource Inventory/Environmental Resource Assessment (the "Inventory and Assessment") prepared by Environmental Resource Solutions and dated February 2023. The Inventory and Assessment notes that there are no state or federally protected wildlife species or associated critical habitats within the project area.

Evaluation: there are no state or federally protected wildlife species or associated critical habitats within the project area therefore no adverse impacts are anticipated. If a regulated plant or animal species is identified during development, the applicant must adhere to the

applicable standards in the City of Alachua Comprehensive Plan and the Land Development Regulations.

Map 2. Environmental Features



Soil Survey

The hydrologic soil group is an indicator of potential soil limitations. The hydrologic soil group, as defined for each specific soil, refers to a group of soils which have been categorized according to their runoff-producing characteristics. These hydrologic groups are defined by the Soil Survey of Alachua County, Florida, dated August 1985. The chief consideration with respect to runoff potential is the capacity of each soil to permit infiltration (the slope and kind of plant cover are not considered, but are separate factors in predicting runoff.) There are four hydrologic groups: A, B, C, and D. "Group A" soils have a higher infiltration rate when thoroughly wet and therefore have a lower runoff potential. "Group D" soils have very lower infiltration rates and therefore a higher runoff potential.

There are six (6) soil types found within the project area:

Arredondo Fine Sand (0% - 5% slopes)
Hydrologic Soil Group: A
This soil type is well drained and permeability is rapid at the surface. This soil type poses only slight limitations as sites for homes and small commercial buildings.

Arredondo-Urban Land Complex (0% – 5% slopes)
Hydrologic Soil Group: A

This soil type is well drained and permeability is rapid at the surface. This soil type does not pose any significant limitations for development.

Gainesville Sand (0%- 5% slopes)
Hydrologic Soil Group: A

This soil type is well drained with slow surface runoff and rapid permeability. This soil poses only slight limitations for dwellings and local roads.

Kendrick Sand (2-5% slopes)
Hydrologic Soil Group: B

This soil type is well drained with moderately slow surface runoff and rapid permeability. This soil poses only slight limitations for dwellings and local roads.

Kendrick Sand (5% – 8% slopes)
Hydrologic Soil Group: A

This soil type is well drained and permeability is rapid at the surface. This soil type poses only moderate limitations as sites for homes and small commercial buildings because of the slope.

Pits and Dumps
Hydrologic Soil Group: N/A

These areas consists of pits from which limestone has been or is being removed during surface mining operations and dumps where excavated overburden material has been piled adjacent to the pits. Included within this unit are some pits in which the soil has been excavated for use in road construction and for fill material on sites for buildings.

Evaluation: This soil type is located in the northwestern portion of the project area and will remain undeveloped. The pits and dumps classification appears to be a borrow pit used for roadway construction. The soil types present on the site do not pose any significant limitations for small commercial buildings. Therefore, there are no issues related to soil suitability.

Flood Potential

Panel 0140D of the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Series, dated June 16, 2006 indicates that the subject property is in Flood Zone X (areas determined to be outside of the 500-year floodplain).

Evaluation: The subject property is located in Flood Zone "X" (areas determined to be outside of the 500-year floodplain. Therefore, there are no issues related to flood potential.

Karst-Sensitive Features

Karst sensitive areas include geologic features, such as fissures, sinkholes, underground streams, and caverns, and are generally the result of irregular limestone formations.

The applicant has submitted a Natural Resource Inventory/Environmental Resource Assessment (the "Inventory and Assessment") prepared by Environmental Resource Solutions ("ERS") and dated February 2023. The Inventory and Assessment notes that there are no sinkholes, springs, caves, stream bluffs, escarpments, outcroppings, or other karst features identified on the subject property.

Evaluation: The City engaged WSP to perform a review of the Inventory and Assessment. WSP did not identify any significant karst features during the desktop data or site review and agree with the conclusions found within the Inventory and Assessment prepared by ERS.

Wellfield Protection Zones

Policy 7.2.1 of the Future Land Use Element of the City's Comprehensive Plan establishes a 500 foot radius area around each city-owned potable water well.

Evaluation: The subject property is not located within a City of Alachua wellhead protection zone as identified on the City of Alachua Wellfield Primary Protection Zones Map of the City's Comprehensive Plan, therefore, there are no issues related to wellfield protection.

Historic Structures/Markers and Historic Features

The subject property does not contain any historic structures as determined by the State of Florida and the Alachua County Historic Resources Inventory. Additionally, the subject property is not located within the City's Historic Overlay District, as established by Section 3.7 of the City's Land Development Regulations.

Evaluation: There are no issues related to historic structures or markers.

FINDINGS OF FACT: COMPLIANCE WITH LAND DEVELOPMENT REGULATIONS

SITE PLAN STANDARDS

Section 2.4.9(E) of the City's Land Development Regulations (LDRs) establishes the standards with which all site plans must be found to be compliant. The application has been reviewed for compliance with the standards of Section 2.4.9(E.) An evaluation and findings of the application's compliance with the standards of Section 2.4.9(E) is provided below.

(E) Site Plan Standards

A Site Plan shall be approved only upon a finding the applicant demonstrates all of the following standards are met:

(1) ***Consistency with Comprehensive Plan***
The development and uses in the Site Plan comply with the Goals, Objectives and Policies of the Comprehensive Plan.

Evaluation & Findings: An analysis of the application's consistency with the Comprehensive Plan has been provided in this report.

(2) *Use Allowed in Zone District*

The use is allowed in the zone district in accordance with Article 4: *Use Regulations*.

Evaluation & Findings: The area of the proposed office building is zoned Community Commercial (CC). "Business Services Office" is defined as follows in Article 10of the LDRs: "*a room or group of rooms used for conducting the affairs of a general business establishment, other than financial services and professional services. Examples of business services office uses include offices for retail and wholesale establishments*" Table 4.1-1 of the LDRs sets forth the uses allowed within each zoning district. This use is permitted in the CC zoning district.

(3) *Zone District Use-Specific Standards*

The development and uses in the Site Plan comply with Section 4.3, *Use-Specific Standards*.

Evaluation & Findings: There are no use specific standards for the Business Services Office use type.

(4) *Development and Design Standards*

The development proposed in the Site Plan and its general layout and design comply with all appropriate standards in Article 6: *Development Standards*.

Evaluation & Findings: The application has been reviewed for and is found to be in compliance with all applicable and relevant provisions of Article 6, *Development Standards*, including but not limited to *Section 6.1*, Off Street Parking & Loading Standards; *Section 6.2*, Tree Protection/Landscape/Xeriscape Standards; *Section 6.3*, Fencing Standards; *Section 6.4*, Exterior Lighting Standards; *Section 6.7*, Open Space Standards; *Section 6.8*, Design Standards for Business Uses; and *Section 6.9*, Environmental Protection Standards.

(5) *Subdivision Standards*

In cases where a subdivision has been approved or is pending, the development proposed in the Site Plan and its general layout and design comply with all appropriate standards in Article 7: *Subdivision Standards*.

Evaluation & Findings: No subdivision of land is proposed, therefore, compliance with this standard is not applicable.

(6) *Complies with All Other Relevant Laws and Ordinances*

The proposed site plan development and use complies with all other relevant City laws and ordinances, state and federal laws, and regulations.

Evaluation & Findings: The application is consistent with all other relevant City ordinances and regulations.

SECTION 6.8, DESIGN STANDARDS FOR BUSINESS USES

Section 6.8 of the City's Land Development Regulations (LDRs) establishes design standards for business uses. The standards established within Section 6.8.2 apply to business use types (unless otherwise exempt), except for single tenant retail sales and services uses greater than or equal to 20,000 square feet or unless otherwise exempted within Subsection 6.8.1(B.). The standards established within Section 6.8.3 apply to single tenant retail sales and services uses greater than 20,000 square feet.

The proposed development is subject to compliance with the requirements of Section 6.8.2. The standards of Section 6.8.2 establish requirements for front façades; façades facing streets or lands zoned for or used for residential uses; screening of mechanical equipment; and connections to existing sidewalk systems. Façade requirements primarily relate to glazing (e.g., windows/glass); façade massing; materials used for side and rear façades; and a prohibition on the use of certain building materials. The development has been reviewed for and is found to be in compliance with the standards of Section 6.8.2.

PUBLIC FACILITIES IMPACT

Traffic Impact

Table 2. Affected Comprehensive Plan Roadway Segments[1]

Segment Number[2,3]	Segment Description	Lanes	Functional Classification	Area Type	LOS
3 (4127)	US 441 (From MPO Boundary to CR 25A East Intersection)	4/D	Principle Arterial	Urban Trans	D
4 (106)	US 441 (From CR 25A East Intersection to SR 235)	4/D	Principle Arterial	Urban Trans	D
5 (107)	US 441 (from SR 235 to I-75)	4/D	Principle Arterial	Urban Trans	D
6 (106)	US 441 (from I-75 to CR 235A)	4/D	Principle Arterial	Urban Trans	D
8 (108)	SR 235 (from NW 143rd Place to US 441)	2/U	Major Collector	Comm	D
9 (109)	SR 235 (from US 441 to NW 140th Street)	2/U	Major Collector	Comm	D
11	CR 235 (from NW 143rd Place to South City Limit)	2/U	Major Collector	Comm	D
13	CR 241 (from CR 235 to South City Limit)	2/U	Major Collector	Comm	D
14	CR 2054 (from SR 235 to West City Limit)	2/U	Major Collector	Comm	D
15	CR 2054 (from SR 235 to US 441)	2/U	Major Collector	Comm	D

1 Source: City of Alachua Comprehensive Plan, Transportation Element.
2 For developments generating less than 1,000 trips or greater, affected roadway segments are identified as all those wholly or partially located within · mile of the development's ingress/egress, or to the nearest intersecting major street, whichever is greater [Section 2.4.14(H)(2)(b) of the LDRs].
3 FDOT roadway segment number shown in parenthesis. For the purposes of concurrency management, COA Comprehensive Plan segments that make up a portion of a larger FDOT roadway segment will be evaluated together when determining post development roadway capacity.

Table 3. Potential Trip Generation[1]

Land Use	AADT (Enter/Exit)	AM Peak Hour (Enter/Exit)	PM Peak Hour (Enter/Exit)
General Office Building[2] (ITE Code 710)	872 (436/436)	126 (111/15)	126 (21/105)

1 Source: ITE Trip Generation, 11th Edition.
2 Formulas: ITE Code 710: AADT -9.74 trips per 1,000 square feet x 71,533 square feet (50% entering/50% exiting); AM Peak Hour -1.16 trips per 1,000 square feet x 71,533 square feet (88% entering/12% exiting); PM Peak Hour - 1.15 trips per 1,000 square feet x 71,533 square feet (13% entering/87% exiting).ITE Code 760: AADT - 11.26 trips per 1,000 square feet x 71,533 square feet (50% entering/50% exiting); AM Peak Hour - 0.42 trips per 1,000 square feet x 71,533 square feet (62% entering/38% exiting); PM Peak Hour - 0.49 trips per 1,000 square feet x 71,533 square feet (48% entering/52% exiting).

Table 4a. Projected Impact on Affected Comprehensive Plan Roadway Segments (AADT)

Traffic System Category	Segment 1 I-75 (from North City Limit to US 441[1]	Segment 2 I-75 (from US 441 to South City Limit)[1]	Segment 5 US 441 (from SR 235 to I-75)[1]	Segment 6 US 441 (from I-75 to CR 235A)[1]	Segment 7 US 441 (from CR 235A to NW 188th St)[1]	Segment 16 CR 235-A (from US 441 to North City Limit)[1]	Segment 17 CR 235-A (from US 441 to CR 235)[1]
Maximum Service Volume[2]	91,600	91,600	39,000	39,000	43,000	15,120	15,120
Existing Traffic[3]	42,500	67,958	22,581	27,914	21,000	1,402	5,302
Reserved Trips[4]	254	254	2,831	2,578	204	1,392	112
Available Capacity[4]	48,846	23,388	13,588	8,508	21,796	12,326	9,706
Maximum AADT Generated by Development[5]	87	131	244	419	262	26	35
Residual Capacity After Development's Impacts[6]	**48,759**	**23,257**	**13,344**	**8,089**	**21,534**	**12,300**	**9,671**

1 FDOT roadway segment number shown in parenthesis (when applicable.) For the purposes of concurrency management, COA Comprehensive Plan segments that make up a portion of a larger FDOT roadway segment will be evaluated together when determining post development roadway capacity.
2 AADT & Peak Hour MSVs calculated using LOSPLAN 2012. County Facility AADT counts provided by Alachua County Public Works, April 2021.
3 Florida State Highway System Level of Service Report, Florida Department of Transportation, District Two.
4 Source: City of Alachua May 2023 Development Monitoring Report.
5 Trip Distribution: Segment 1 – 10%; Segment 2 – 15%; Segment 5 – 15%; Segment 6 – 48%; Segment 7 – 30%; Segment 16 – 3%; Segment 17 – 2%.
6 The application is for a Final Development Order. Facility capacity and concurrency will be reserved.

Table 4b. Projected Impact on Affected Comprehensive Plan Roadway Segments (Peak Hour)

Traffic System Category	Segment 1 I-75 (from North City Limit to US 441[1]	Segment 2 I-75 (from US 441 to South City Limit)[1]	Segment 5 US 441 (from SR 235 to I-75)[1]	Segment 6 US 441 (from I-75 to CR 235A)[1]	Segment 7 US 441 (from CR 235A to NW 188th St)[1]	Segment 16 CR 235-A (from US 441 to North City Limit)[1]	Segment 17 CR 235-A (from US 441 to CR 235)[1]
Maximum Service Volume[2]	8,250	8,250	3,510	3,510	3,870	1,359	1,359
Existing Traffic[3]	4,430	7,136	2,145	2,652	1,995	133	504
Reserved Trips[4]	19	19	225	191	28	146	12
Available Capacity[4]	3,768	1,095	1,140	667	1,847	1,080	843
Maximum PM Peak Hour Trips Generated by Development[5]	13	19	35	61	38	4	5
Residual Capacity After Development's Impacts[6]	**3,755**	**1,076**	**1,105**	**606**	**1,809**	**1,075**	**838**

1 *FDOT roadway segment number shown in parenthesis (when applicable.) For the purposes of concurrency management, COA Comprehensive Plan segments that make up a portion of a larger FDOT roadway segment will be evaluated together when determining post development roadway capacity.*
2 *AADT & Peak Hour MSVs calculated using LOSPLAN 2012. County Facility AADT counts provided by Alachua County Public Works, April 2021.*
3 *Florida State Highway System Level of Service Report, Florida Department of Transportation, District Two.*
4 *Source: City of Alachua May 2023 Development Monitoring Report.*
5 *Trip Distribution: Segment 1 – 10%; Segment 2 – 15%; Segment 5 – 15%; Segment 6 – 48%; Segment 7 – 30%; Segment 16 – 3%; Segment 17 – 2%.*
6 *The application is for a Final Development Order. Facility capacity and concurrency will be reserved.*

Evaluation: The impacts generated by the development will not adversely affect the Level of Service (LOS) of the roadway segments identified above. The impacts that will be generated by the development are acceptable.

Potable Water Impacts

Table 5. Potable Water Impacts

System Category	Gallons Per Day
Current Permitted Capacity[1]	2,300,000
Less Actual Potable Water Flows[1]	1,390,833
Reserved Capacity[2]	247,587
Available Capacity	661,580
Increase in Potable Water Demand from Application[3]	10,800
Residual Capacity	**650,780**
Percentage of Permitted Design Capacity Utilized	**71.71%**

Sources:
1 City of Alachua Public Services Department, April 2023
2 City of Alachua May 2023 Development Monitoring Report
3 Source: Chapter 64E-6, Florida Administrative Code.

Evaluation: The impacts to the potable water system that will be generated by the development will not adversely affect the Level of Service (LOS) for potable water facilities; therefore, the impacts that will be generated by the development are acceptable.

Sanitary Sewer Impacts

Table 6. Sanitary Sewer Impacts

System Category	Gallons Per Day
Treatment Plant Current Permitted Capacity	1,500,000
Less Actual Treatment Plant Flows[1]	719,250
Reserved Capacity[2]	233,461
Available Capacity	547,289
Increase/Decrease in Sanitary Sewer Demand from Application[3]	10,800
Residual Capacity	**536,489**
Percentage of Permitted Design Capacity Utilized	**63.51%**

Sources:
1 City of Alachua Public Services Department, April 2023
2 City of Alachua May 2023 Development Monitoring Report
3 Source: Chapter 64E-6, Florida Administrative Cod.

Evaluation: The impacts to the potable water system that will be generated by the development will not adversely affect the Level of Service (LOS) for sanitary sewer facilities; therefore, the impacts that will be generated by the development are acceptable.

Solid Waste Impacts

Table 7. Solid Waste Impacts

System Category	Pounds Per Day	Tons Per Year
Demand from Existing Development[1]	43,376	7,916.12
Reserved Capacity[2]	37,042.05	6,760.17
Increase in Demand Generated by Application[3]	157.68	28.78
New River Solid Waste Facility Capacity[4]	**50 years**	

Sources:

1 *University of Florida, Bureau of Economic & Business Research, Estimates of Population by County and City in Florida, 2021; Policy 2.1.a, CFNGAR Element (Formula: 10,844 persons x 0.73 tons per person per year).*

2 *City of Alachua May 2023 Development Monitoring Report.*

3 *Sincero and Sincero; Environmental Engineering: A Design Approach. Prentice Hall, New Jersey, 1996; City of Alachua Comprehensive Plan*

4 *New River Solid Waste Facility, April 2023.*

Evaluation: The impacts to the solid waste system that will be generated by the development will not adversely affect the Level of Service (LOS) for solid waste facilities. The impacts that will be generated by the development are therefore acceptable.

Recreation Facilities

The development is a nonresidential development. Therefore, there are no impacts to recreation facilities. The development will have no impact to the Level of Service (LOS) of recreation facilities.

Public School Facilities

The development is a nonresidential development. Therefore, there are no impacts to public school facilities. The development will have no impact to the Level of Service (LOS) of public school facilities.

EXHIBIT "A"
TO
TOWER HILL HEADQUARTERS
STAFF REPORT

CONDITIONS:

1. The Applicant agrees it shall provide Public Utilities Easements for all City-maintained public utilities. The Public Utilities Easements shall be prepared in coordination with the City's Compliance & Risk Management Department and shall receive approval of the City's Compliance & Risk Management Director prior to being recorded in the Public Records of Alachua County and prior to the issuance of a building permit for any building activity associated with this Development Order. The Applicant shall incur all costs associated with preparing and recording the Public Utilities Easements.
2. The Applicant agrees that it shall address all comments of the Public Services Department as provided in a memorandum from Rodolfo Valladares, P.E., Public Services Director, and Thomas Ridgik, P.E., Engineering Supervisor, and dated April 17, 2023. The Applicant further agrees that a verification that all comments have been sufficiently addressed shall be required prior to the issuance of a building permit for any building activity associated with this Development Order.
3. The applicant agrees it shall comply with all recommendations for Phase 1 of the project as provided by Brian Kanely, P.E., of Volkert, Inc., in a letter dated May 5, 2023.
4. The Applicant agrees it shall obtain all other applicable local, state, and federal permits before the commencement of site plan work.
5. The Applicant agrees that Conditions 1 – 4 as stated above do not inordinately burden the land and shall be binding upon the property owner, including any subsequent property owners, successors, or assigns, and that the site plan shall comply with Conditions 1 – 5 as stated herein.

EXHIBIT "B"

TO

TOWER HILL HEADQUARTERS
SITE PLAN
STAFF REPORT

SUPPORTING APPLICATION MATERIALS SUBMITTED BY CITY STAFF TO THE PLANNING AND ZONING BOARD

May 8, 2023

Justin Tabor, AICP
City of Alachua Planning & Community Development
15100 NW 142nd Terrace
Alachua, FL 32616

RE: Tower Hill New HQ

Dear Justin:

Please find attached the following items to address your comments from May 2, 2023:

- Revised plans

PAT Comments

1. Article 6, Development Standards
   a. Section 6.1, Parking and Off-Street Loading Standards
      i. Per Section 6.1.10(A)(1), pedestrian crosswalks at least ten feet in width must be provided in parking lots with 100 or more spaces. Crosswalks must either be raised above the adjacent pavement, striped, or otherwise designated through the use of alternative materials and must be located between all primary building entrances and the parking areas serving those entrances. Revise accordingly.

   Remaining Issue: The crosswalk with was revised however the proposed delineation of the crosswalk area utilizes a standard 12" stripe. Per Section 6.1.10(A)(1) crosswalks must either be raised above the adjacent pavement, striped (e.g., using a method such as special emphasis striping per FDOT Index No. 17346), or otherwise designated through the use of alternative materials. Revise accordingly.

   - **Crosswalk has been revised to be compliant with City of Alachua detail 405A.**

   b. Section 6.2, Landscape Standards
      i. Tree credits are being utilized for tree mitigation. Per Section 6.2.2(D)(4), tree credits may be used to fulfill the landscape requirements of Sections 6.2.2(D)(1) – (3) (site landscaping, parking lot landscaping, or perimeter buffers) but may not be utilized for tree mitigation (Section 6.2.1(D)(4)). Tree mitigation calculations utilize 479 tree credits to fulfill mitigation. Revise accordingly. Note – A full review of compliance with Sections 6.2.2(D)(1) – (3) has not been performed due to the significant revisions which may occur to address this comment.

   Remaining Issues: The applicant has included a letter dated April 14, 2023 from John-Michael Simpson, PLA, of CHW, addressing tree mitigation. This letter states that 539 tree credits will be applied to the site and buffer landscape requirements. Additionally, Sheet LS-! Notes in the Tree Mitigation Calculations table that 75% of the required site, parking and buffer landscape is provided through 539 tree preservation credits. However, the Perimeter Buffer Landscape Requirements table, Parking Area Landscape Requirements table, and Site Landscape Calculations table on Sheet LS-1 do not assign any credits to fulfill these requirements under the "Landscape/Trees Provided" columns. When tree credits are utilized, they must be identified within these tables. See example below. Note – A full review of compliance with Sections 6.2.2(D)(1) – (3) has not been performed as counts may change following revisions. to address this comment.

   - **We have updated the way the landscape calculations and tree credits are shown on LS-1 for clarification as requested.**

2. Article 6, Development Standards

a. Section 6.2, Landscape Standards
   i. Request for off-site tree mitigation must be approved by the City Commission prior to consideration of the Site Plan by the Planning & Zoning Board. The tentative City Commission meeting date will be May 22, 2023.

- **We have decided to not utilize off-site tree mitigation and will instead show all mitigation trees on site.**

   ii. Per the data provided in the Tree Mitigation Calculations table on Sheet LS-1 a total of 614 trees are required to fulfill the tree mitigation requirements. It appears off-site mitigation is required for 75 trees (614 required less 539 on-site mitigation equals a deficit of 75 trees).

- **We have increased the number of mitigation trees on-site to eliminate the deficit.**

   iii. The following footnote on the Tree Mitigation Calculations Table is not applicable to tree mitigation: "Note: 75% of the required site, parking, and buffer landscape is being provided for by 539 tree preservation credits."

- **We have removed this footnote.**

Public Services Comments

5. Sheet C0.11
   Site Information
   Is the Right of Way legend line missing a dot? Compare against C4.00.
   Please evaluate.
   Conditional Approval
   Please address the above comments. Rather than submitting a complete hard copy set, the design engineer has the option to instead forward to Public Services either by email the revised pdf of this sheet or a link of the pdf construction set. (Public Services contact is Tom Ridgik, th_ridgik@cityofalachua.org). Public Services would then review this sheet, presumably approve it and so notify the Planning Department.)
   - **Please note that no ROWs are proposed but instead the proposed roadway will be in an access easement. The lines in the typical sections have been updated to reflect that there is no ROW.**

10. Comment on April 17, 2023 Submittal
    Engineer's response concerning the location of the fire water and potable water assemblies is duly noted. Nevertheless, locate these assemblies near the road within the PUE. This will eliminate COAs maintenance and repair costs to the pipe and pavement repair in the event of a line leak. Additionally, this addresses potential long-lead times of procuring DI pipe. It is standard practice for COA to locate the fire water & potable water assemblies just as the water piping crosses the property line.
    Conditional Approval
    Please address the above comments. Rather than submitting a complete hard copy set, the design engineer has the option to instead forward to Public Services either by email the revised pdf of this sheet or a link of the pdf construction set. (Public Services contact is Tom Ridgik, th_ridgik@cityofalachua.org). Public Services would then review this sheet, presumably approve it and so notify the Planning Department.)
    - **The meter packages have been moved to be adjacent to the roadway.**

14. Comment on Apr 17, 2023 Submittal
    Sheet C4.11
    For WW manholes, please add the designator so that IDs are:
    M-206, M-207, M-208, M-209, M-211, M-212, etc.
    Change ADA compliant detail # from "405A" to "403".
    Conditional Approval

Please address the above comments. Rather than submitting a complete hard copy set, the design engineer has the option to instead forward to Public Services either by email the revised pdf of this sheet or a link of the pdf construction set. (Public Services contact is Tom Ridgik, th_ridgik@cityofalachua.org). Public Services would then review this sheet, presumably approve it and so notify the Planning Department.)

- **The manhole labels have been updated as requested.**
- **Please note that the ADA detail callout refers to the crosswalk construction and not to the curb ramps.**

15. Comment on Apr 17, 2023 Submittal
    Sheet C4.12
    For WW manholes, please add the designator so that IDs are:
    M-213, M214, M215, etc.
    Change ADA compliant detail # from “405A” to “403”.
    Conditional Approval
    Please address the above comments. Rather than submitting a complete hard copy set, the design engineer has the option to instead forward to Public Services either by email the revised pdf of this sheet or a link of the pdf construction set. (Public Services contact is Tom Ridgik, th_ridgik@cityofalachua.org). Public Services would then review this sheet, presumably approve it and so notify the Planning Department.)
    - **The manhole labels have been updated as requested.**
    - **Please note that the ADA detail callout refers to the crosswalk construction and not to the curb ramps.**

16. Comment on April 17, 2023 Submittal
    Change ADA compliant detail # from “405A” to “403”.
    Conditional Approval
    Please address the above comments. Rather than submitting a complete hard copy set, the design engineer has the option to instead forward to Public Services either by email the revised pdf of this sheet or a link of the pdf construction set. (Public Services contact is Tom Ridgik, th_ridgik@cityofalachua.org). Public Services would then review this sheet, presumably approve it and so notify the Planning Department.)
    - **Please note that the ADA detail callout refers to the crosswalk construction and not to the curb ramps.**

26. Comment on Apr 17, 2023
    Please relocate Keyed Note 4 as per attached markup.
    Conditional Approval
    Please address the above comments. Rather than submitting a complete hard copy set, the design engineer has the option to instead forward to Public Services either by email the revised pdf of this sheet or a link of the pdf construction set. (Public Services contact is Tom Ridgik, th_ridgik@cityofalachua.org). Public Services would then review this sheet, presumably approve it and so notify the Planning Department.)
    - **Keyed Note 4 has been moved as requested.**

We trust you will find this submittal to be complete for review and approval. If you have any questions, or need additional information, please contact me at (352) 331-1976 or via email at walkero@chw-inc.com

Sincerely,
CHW



Walker Owen, P.E.
Project Manager

TOWER HILL ENVIRONMENTAL RESOURCE ASSESSMENT

ENVIRONMENTAL RESOURCE ASSESSMENT THIRD PARTY REVIEW

CITY OF ALACHUA

PROJECT NO.:2402230074
DATE: MAY 08, 2023

WSP USA ENVIRONMENT & INFRASTRUCTURE INC.
3701 NW 98TH STREET
GAINESVILLE, FL 32606

WSP.COM

SIGNATURES

PREPARED BY



Shannon McMorrow, PWS
Assistant Vice President

APPROVED[1] BY *(must be reviewed for technical accuracy prior to approval)*



Charlene Stroehlen, PE
Vice President

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APPENDICES

APPENDIX A - SITE PHOTOGRAPHS
APPENDIX B – IPAC TRUST RESOURCES LIST

1 INTRODUCTION

1.1 PURPOSE

WSP USA was authorized by the City of Alachua (the City) to perform a technical review of the Environmental Resource Assessment Report prepared by Environmental Resource Solutions, Inc (February 2023) for the Tomoka Hills Farms site on Tower Hill property.

1.2 BACKGROUND

Environmental Resource Solutions prepared an Environmental Resource Assessment Report for the Tower Hill property (dated February 2023). The City has requested WSP review the report to confirm report findings and verify that professional standards have been used to reach the findings.

The property is 52.96 +/- acres located in Alachua County south of Highway 441 and west of Interstate 75 (**Figure 1**).

WSP scientists have reviewed the Environmental Resource Assessment Report to verify if the report findings are professionally acceptable. The findings of the review of the Environmental Resource Assessment are presented in Sections 2, 3, and 4.

2 ENVIRONMENTAL ASSESSMENT AND LISTED SPECIES SURVEY REVIEW

WSP environmental scientists conducted a desktop review and site assessment to confirm or deny the findings of the Environmental Resource Assessment report. The site assessment included review of wetland delineation lines for consistency with 1987 United States Army Corps of Engineers (USACE) "Corps of Engineers Wetland Delineation Manual" and the Florida wetland delineation method, "Delineation of the Landward Extent of Wetlands and Surface Waters" (Chapter 62-340). In addition, the site was reviewed for potential presence of protected species or their habitat.

2.1 WETLAND DELINEATION REVIEW

Environmental Resource Solutions biologists conducted a field assessment of the project site on April 6, 2022, to delineate wetlands as well as document general site conditions, vegetative communities, and wildlife utilization. Environmental Resource Solutions determined that the only wetland features on site were man-made. Exhibit 2 in their reports illustrates the delineated wetlands and surface waters.

WSP scientists reviewed the FLUCFCS and NRCS soils maps (provided in the Environmental Resource Assessment report) to aid in identification of wetlands. In addition, WSP reviewed the Florida Natural Area Inventory (FNAI) Ecological Communities (**Figure 2**) and United States Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) (**Figure 3**) maps to aid in identification of wetlands and habitats.

The FNAI map did not identify any wetland habitats within the Tower Hill Project Site. The USFWS NWI map identified a freshwater pond in the center of the project site. Based on NRCS Soils map (**Figure 4**), none of the soils within the project site are classified as hydric soils, and several areas within the project site are identified as Pits and Dumps.

On May 5, 2023, WSP scientists conducted a field review of the project site for wetland habitats. WSP scientists identified a wetland feature in the general vicinity of the USFWS NWI mapped freshwater pond (Location 1 on Site Observation Map **Figure 5**). Carolina willow (*Salix caroliniana)* an obligate wetland species was the dominant canopy species observed. Muck soil was also observed, but there was no standing water or hydrologic indicators. See photographs in **Appendix A**.

WSP scientists also observed herbaceous wetland vegetation at Location 2 (**Figure 5**). Herbaceous wetland vegetation included swamp smartweed (*Persicaria hydropiperoides),* rattlebox (*Sesbania punicea),* and bedstraw *(Galium spp.).* Although

Observation Location 2 exhibits herbaceous wetland vegetation, it is lacking hydric soil indicators, and/or hydrologic indicators. See photographs in **Appendix A**.

WSP scientists also observed wetland vegetation at Location 3 (**Figure 5**). Dominant canopy vegetation included red maples (*Acer rubrum),* sweet gum (*Liquidambar styraciflua),* and sugarberry (*Celtis laevigata*), and netted chain fern (*Woodwardia areolate)* was common ground cover. See photographs in **Appendix A**.

Our observations were consistent with the delineations completed by Environmental Resource Solutions.

Reviewing the 1962 United State Geologic Survey (USGS) (**Figure 6)** and the more recent 1996 USGS map (**Figure 7**) it appears the wetland at Location 1 is a man-made borrow pit feature. Further review of historic aerial photograph maps (**Figures 8-10**) revealed that the site is highly altered from its historical condition and was cleared, with several borrow pits constructed between 1951 and 1964.

WSP scientists were unable to access the southwestern portion of the property, but based on the desktop review, also agree that the wetland/surface water features within this portion of the property are also man-made.

Based on this desktop review and site observations, WSP scientists agree that the observed onsite features that display wetland characteristics are man-made features.

2.2 THREATENED & ENDANGERED SPECIES REVIEW

Environmental Resource Solutions scientists performed a preliminary survey for the potential presence of faunal species listed as endangered, threatened, or of special concern by the U.S. Fish and Wildlife Service (FWS) and/or the Florida Fish and Wildlife Conservation Commission (FWC). This included performing a Geographic Information System (GIS) database search for the occurrence of protected species or their habitat in the project site and surrounding areas, as well as for the potential presence of threatened and endangered species using data compiled by Florida Natural Areas Inventory (FNAI). Finally, Environmental Resource Solutions scientists performed a site investigation for evidence of listed species and their habitat.

WSP scientists reviewed the Environmental Resource Solutions assessment. The methods used by Environmental Resource Solutions are consistent with methods that WSP scientists follow for listed species evaluations. However, we also use the USFWS Information for Planning and Consultation (IPaC) Resource List Report (USFWS, 2023). The IPaC resources list report includes an informal list of endangered species, critical habitat, migratory birds, wildlife refuges, and wetlands (collectively referred to as trust resources) under the USFWS jurisdiction that are known or expected to be on or near the project area (**Appendix B**).

The IPaC resources list included two species not included in the FNAI species list for the project site. These included the Whooping Crane (*Grus americana*), and Monarch Butterfly (*Danaus plexippus*). Table 1 outlines the species listed in the IPaC resource lists, their preferred habitat, and if that preferred habitat is found on the subject property. The whooping crane is listed as Experimental Population, Non-Essential in the southeast region including Florida. The monarch butterfly was recently announced as a candidate species by USFWS. Currently these species are not yet listed or proposed for listing in Florida, and there are no Section 7 of the Endangered Species Act requirements at this time (USFWS, 2023). This species was not included in the Environmental Resource Solutions report and has been included in **Table 1**. **Table 1** outlines the species listed by the IPaC resource lists that were not included in the Environmental Resource Solutions report, their preferred habitat, if that preferred habitat is found on the subject property.

The IPaC resources list also included ten migratory bird species not included in the FNAI species list which may be present within or surrounding the project area: Black Skimmer (*Rynchops niger)*, Chimney Swift (*Chaetura pelagica*), Great Blue Heron (*Ardea herodias occidentalis*), Henslow's Sparrow (*Ammodramus henslowii*), Lesser Yellowlegs (*Tringa flavipes*), Magnificent Frigatebird (*Fregata magnificens*), Painted Bunting (*Passerina ciris*), Prairie Warbler (*Dendroica discolor*), Red-headed Woodpecker (*Melanerpes erythrocephalus*), and Swallow-tailed Kite (*Elanoides forficatus*).

On May 5, 2023, WSP scientists conducted an onsite habitat evaluation compared with preferred habitats for listed species identified by FNAI and IPaC. WSP scientists generally agreed with the habitat assessments by Environmental Resources Solutions scientists.

No threatened or endangered wildlife or plant species were observed during WSP's site assessment.

Table 1: Threatened and Endangered Species with Potential for Occurrence in the Project Area

SCIENTIFIC NAME[A]	COMMON NAME[A]	FEDERAL LISTING STATUS[A]	PREFERRED HABITAT	HABITAT PRESENT ON SUBJECT PROPERTY[D]
Birds				
Grus americana	Whooping Crane	E (Experimental Population, Non-essential)	Variety of wetlands and other habitats, including coastal and inland marshes, lakes, ponds, and agricultural fields (b)	No
Insects				
Danaus plexippus	Monarch Butterfly	C	Roosting: habitats with deciduous and evergreen trees with nectar sources nearby. Breeding: multiple habitats where milkweed and flowering plants are found including roadsides, urban areas, open grasslands etc. (c)	No

Created by: LG Checked by: SEM
Sources:
a) IPaC Resource Report generated 5/4/2023 (USFWS, 2023)
b)Preferred habitat determined using USFWS species profiles (USFWS, 2023)
c) Preferred habitat based on USFWS pollinator profile (USFWS, 2023)
d) WSP, 2023. Site Visit May 2023.
Abbreviation(s)
T = Federally Designated Threatened C = Federal Candidate for Listing E = Federally Designated Endangered

3 Geological Assessment

Environmental Resource Solutions' report indicated that although the majority of the site is mapped as Sensitive Karst Area, "No sinkholes, caves, springs, caves. Stream bluffs, escarpments, outcroppings, or other karst features were identified on-site."

According to Karst Environmental Solutions, Inc., Mill Creek & Lee Sink Dye Trace Study Report (2006), the Mill Creek Sink Cave and sink are located across I-75 from the Tower Hill project site (Figure 11). Mill Creek Sink is a direct connection to the Floridan Aquifer. The Karst Environmental Solutions, Inc. trace dye study showed a direct hydrologic connection between Mill Creek Sink with Hornsby Spring. The Tower Hill project site is within the Cross-County Fracture Zone and within the flow pathway from Mill Creek Sink to Hornsby Spring.

WSP scientists did not identify any significant karst features during the desktop or site review, and agree with Environmental Resource Solutions conclusions.

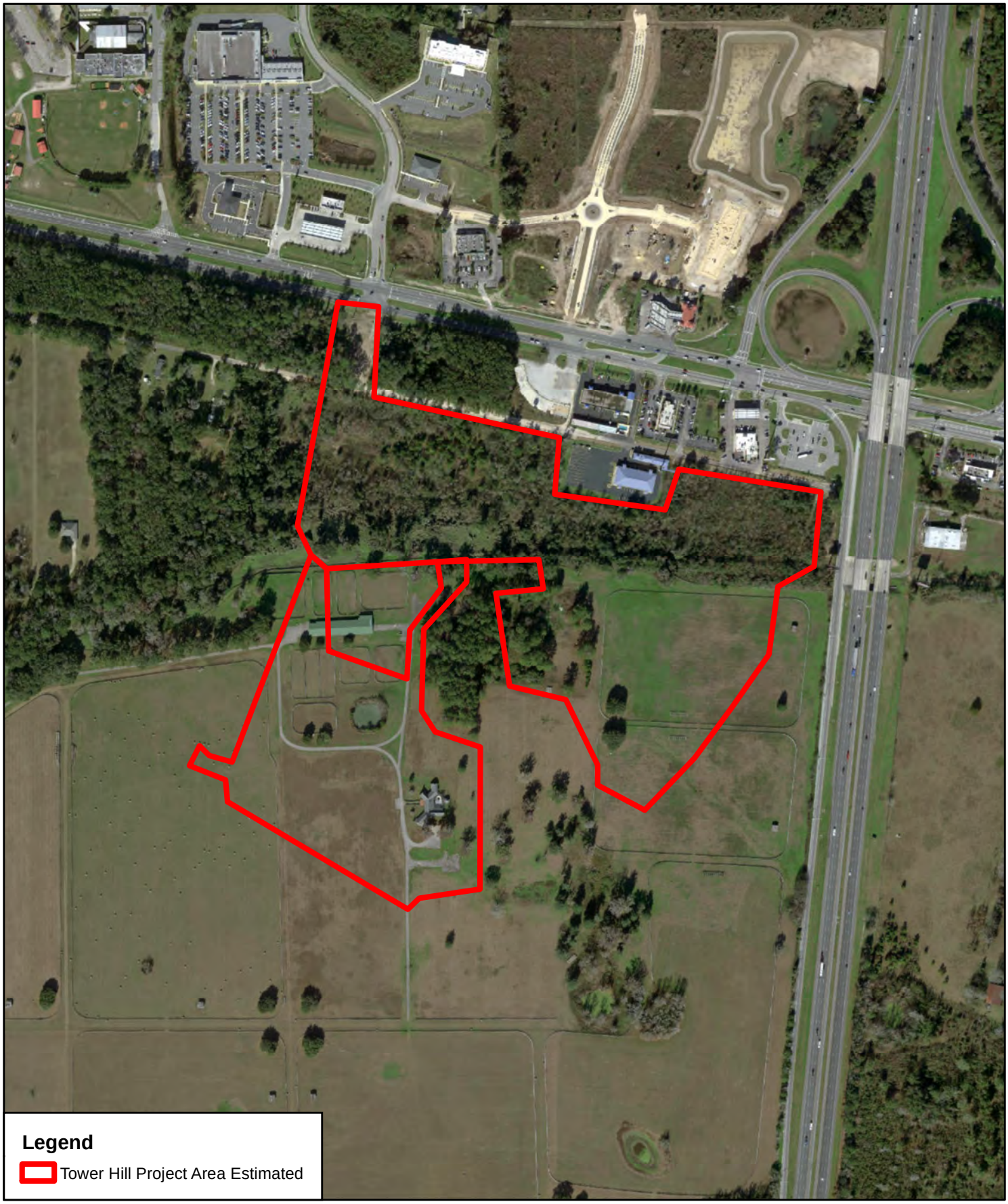
4 SUMMARY AND CONCLUSIONS

WSP scientists generally agree with the Environmental Resource Assessment Report for the Tower Hill property. WSP environmental scientists conducted a desktop review and site assessment to confirm or deny the findings of the Environmental Resource Assessment Report. The site assessment included review of wetland delineations and reviewed the property for potential presence of protected species or their habitat.

In general, WSP agreed with the findings and conclusions made by Environmental Resource Solutions. WSP identified wetlands consistent with Environmental Resource Solutions findings. Even though the report did not address some of the listed species with the potential to occur on the site, impacts to the additional listed species are not anticipated.

Wetlands are protected under Rule 62-330.020 Environmental Resource Permitting of the Florida Administrative Code (F.A.C.), Section 404 of the Clean Water Act [United States Environmental Protection Agency (USEPA)], and Alachua County Code of Ordinances (Part II, Title 7, Chapter 77). Environmental Resource Permit (ERP) and Alachua County development permits will be required prior to development.

FIGURES



Source:ESRI Imagery, 2022: WSP, 2023

N

0 250 500 1,000 Feet

City of Alachua Tower Hill Environmental Resource Assessment Review

Project Area Map

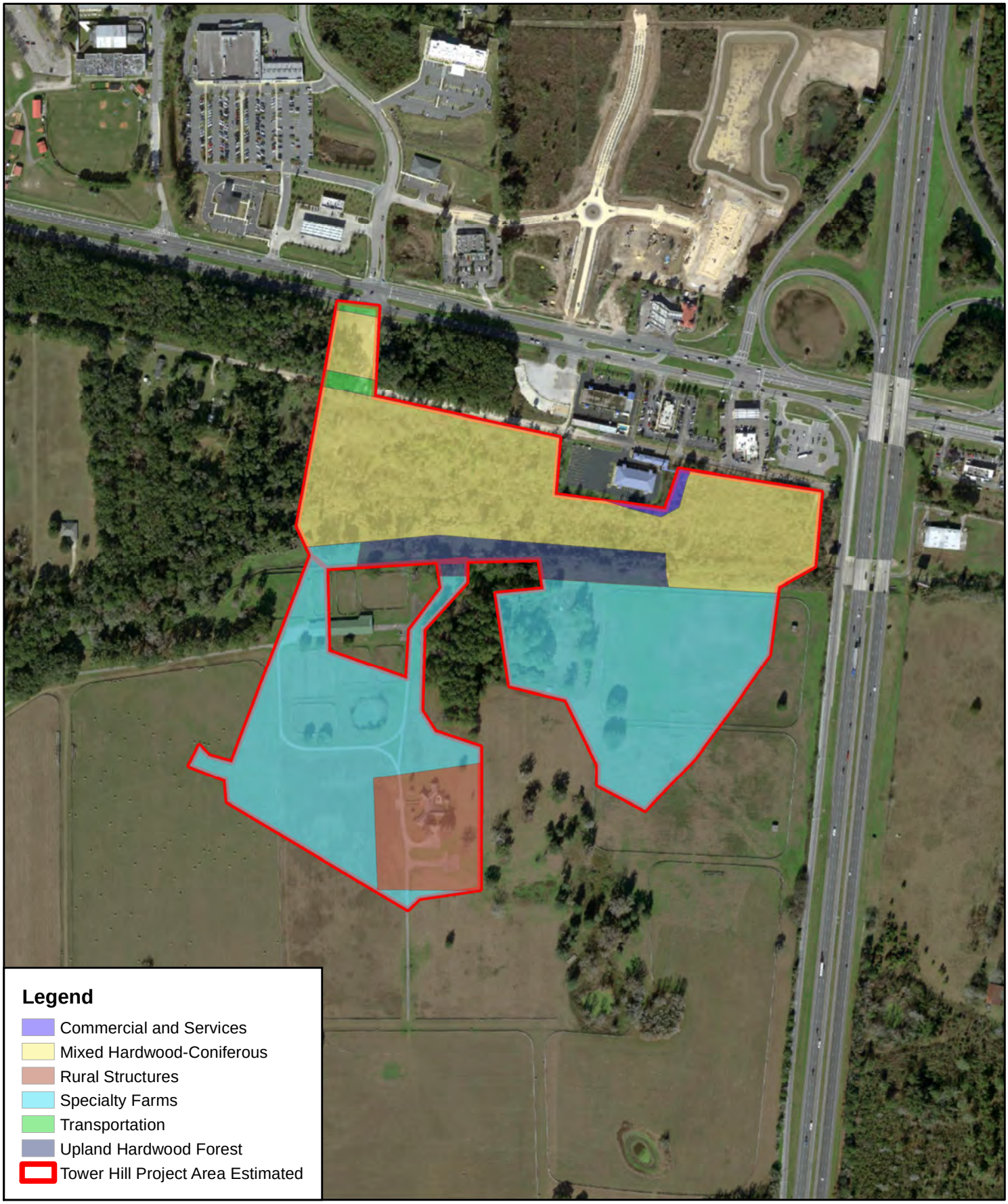
Drawn	Date
NFP	5/9/2023
Checked	Date
SEM	5/9/2023

Gainesville Florida
Project No. 2402230073

WSP

Figure 1

Path: \\GNV-FS1\projects\EAT\0_Projects\City_of_Alachua\Tower Hill Enviromental Review_2402230074\13 GIS\13.2_MXD\Figure 1-Project Area.mxd nichole.panico Date Saved: 5/9/2023 8:53:39 AM



Source: ESRI Imagery, 2022; Florida Natural Area Inventory, 2016; WSP, 2023

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City of Alachua Tower Hill Environmental Resource Assessment Review

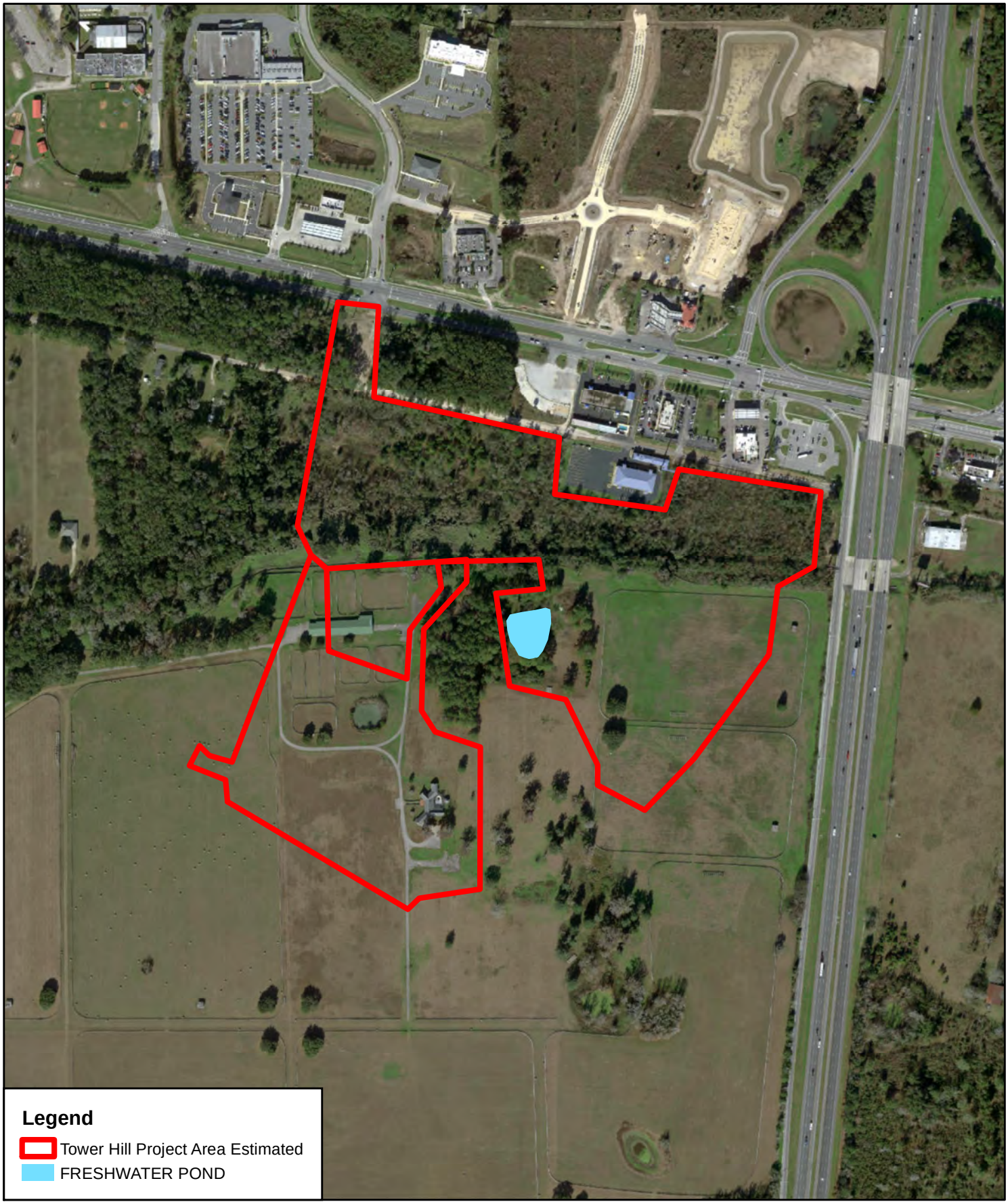
FNAI Ecological Communities Map

Drawn	Date
NFP	5/9/2023
Checked	Date
SEM	5/9/2023

Gainesville Florida Project No. 2402230073

Figure 2

Path: \\GNV-FS1\projects\EAT\0_Projects\City_of_Alachua\Tower Hill Enviromental Review_2402230074\13 GIS\13.2_MXD\Figure 2- FNAI Map.mxd nichole.panico Date Saved: 5/8/2023 10:50:02 AM



Source: ESRI Imagery, 2022; WSP, 2023; USFWS, 2016

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City of Alachua Tower Hill Environmental Resource Assessment Review

USFWS National Wetland Inventory Map

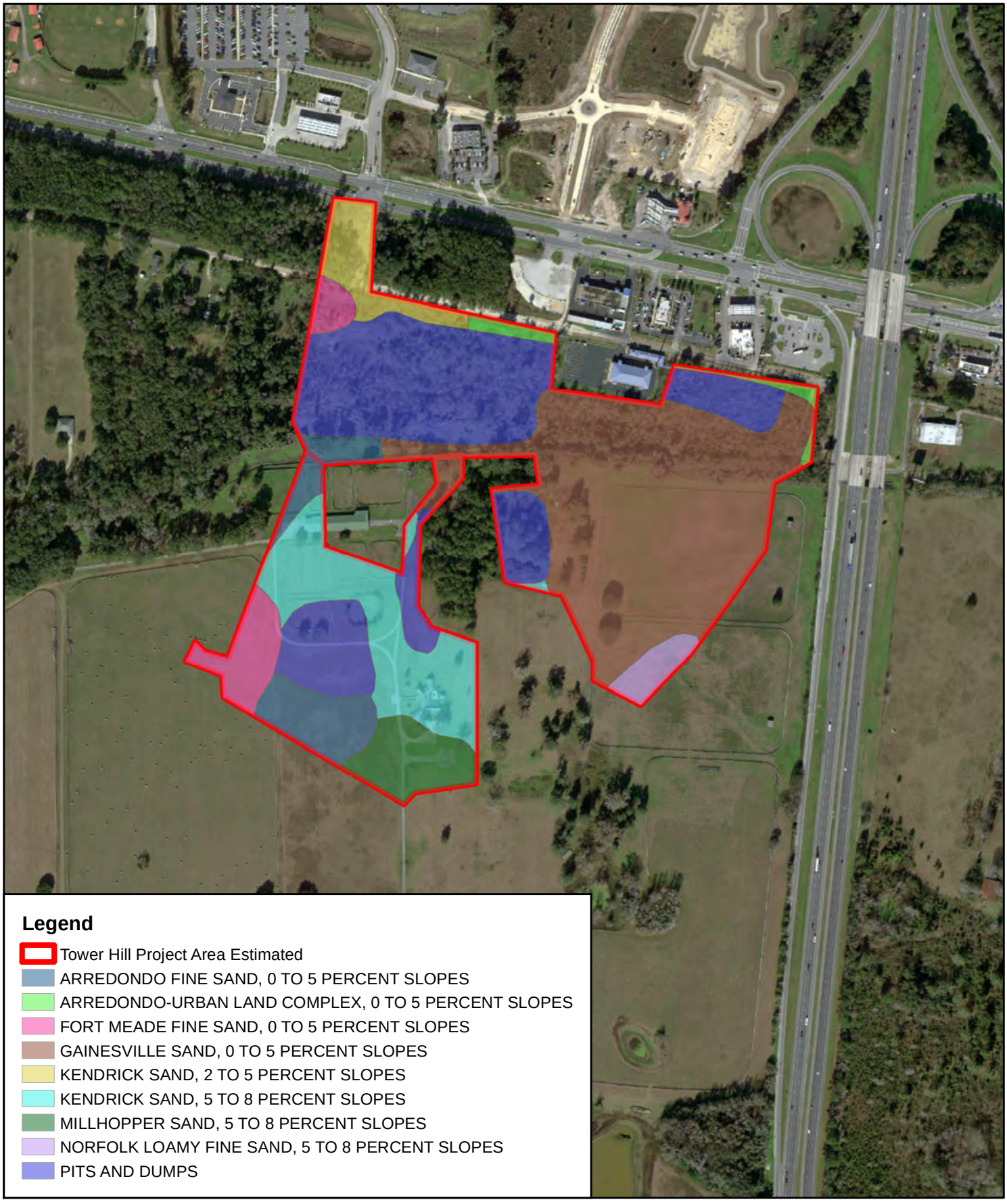
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Checked	Date
SEM	5/9/2023

Gainesville Florida Project No. 2402230073

WSP

Figure 3

Path: \\GNV-FS1\projects\EAT\0_Projects\City_of_Alachua\Tower Hill Enviromental Review_2402230074\13 GIS\13.2_MXD\Figure 3- NWI Map.mxd nichole.panico Date Saved: 5/9/2023 10:24:52 AM



Source: ESRI Imagery, 2022; NRCS, 2016; WSP, 2023

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City of Alachua Tower Hill Environmental Resource Assessment Review

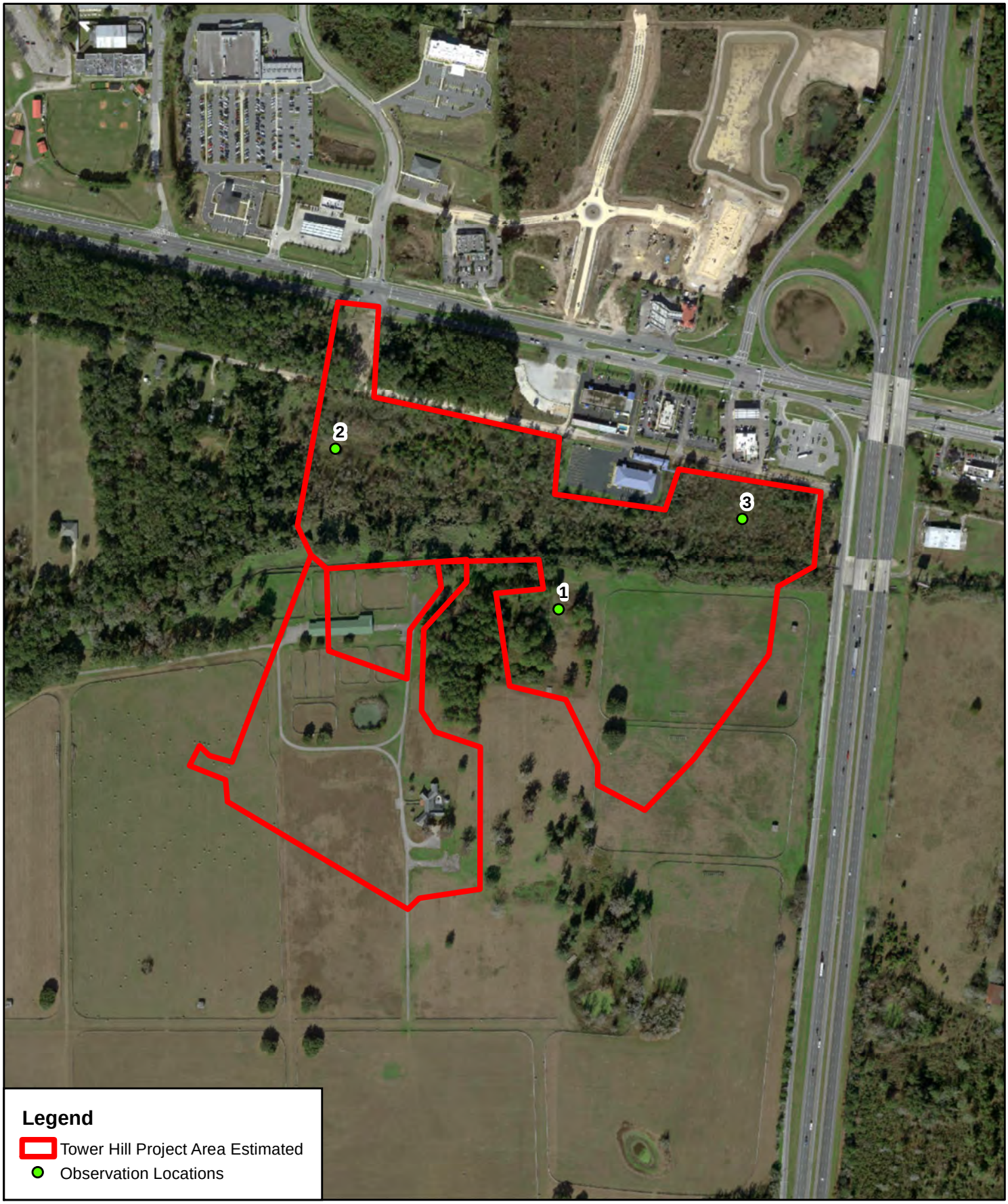
NRCS Soils Map

Drawn	Date
NFP	5/9/2023
Checked	Date
SEM	5/9/2023

Gainesville Florida Project No. 2402230073

Figure 4

Path: \\GNV-FS1\projects\EAT\0_Projects\City_of_Alachua\Tower Hill Enviromental Review_2402230074\13 GIS\13.2_MXD\Figure 4- Soils Map.mxd nichole.panico Date Saved: 5/9/2023 10:29:15 AM



Source: ESRI Imagery, 2022; WSP, 2023

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City of Alachua Tower Hill Environmental Resource Assessment Review

Site Observation Map

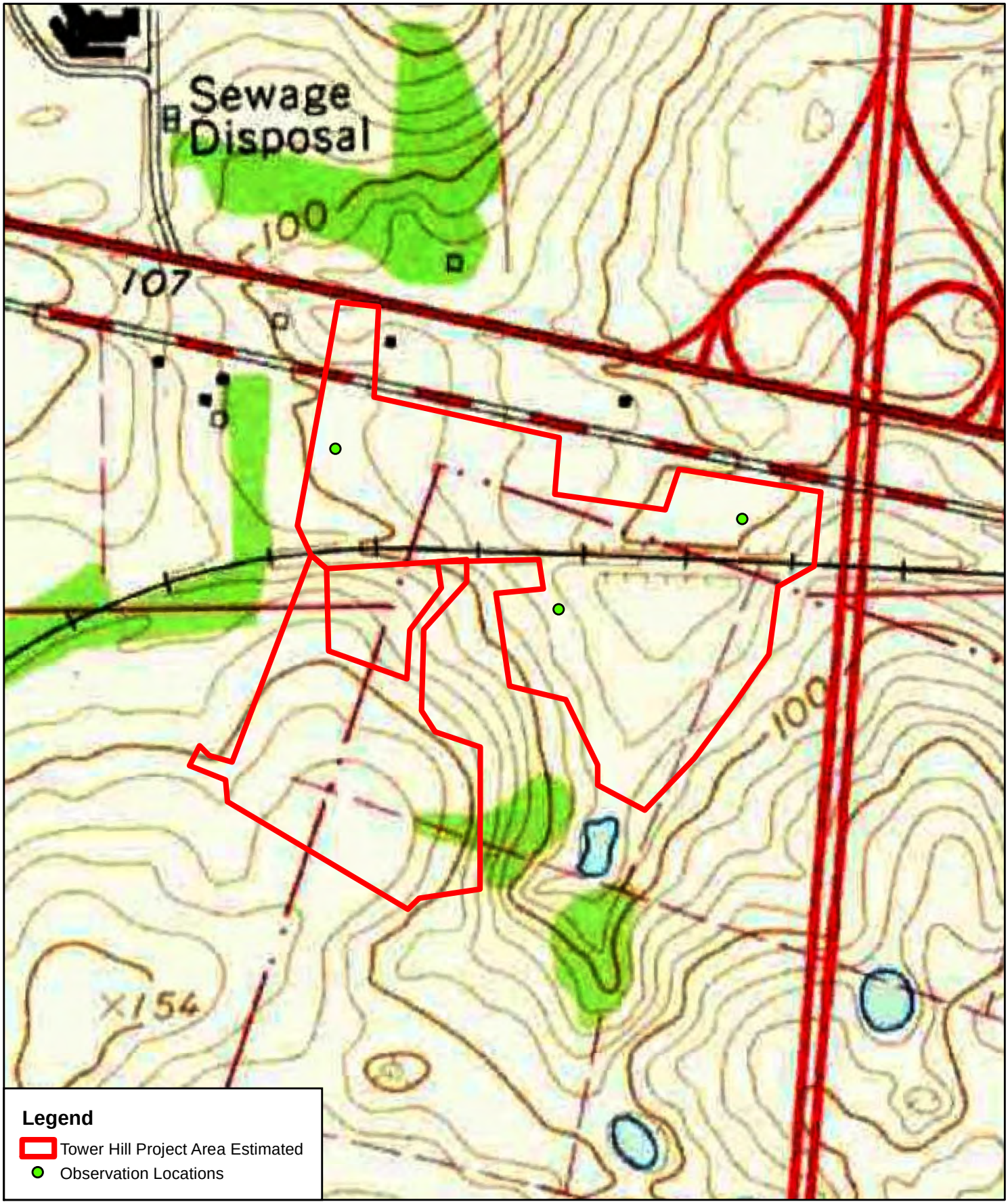
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NFP	5/9/2023
Checked	Date
SEM	5/9/2023

Gainesville Florida Project No. 2402230073

WSP

Figure 5

Path: \\GNV-FS1\projects\EAT\0_Projects\City_of_Alachua\Tower Hill Enviromental Review_2402230074\13 GIS\13.2_MXD\Figure 5- Site Observations Map.mxd nichole.panico Date Saved: 5/8/2023 10:59:55 AM



Source: Alachua, FL, 1:24,000 quad, 1996, USGS; High Springs, FL, 1:24,000 quad, 1962, USGS; WSP, 2023

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City of Alachua Tower Hill Environmental Resource Assessment Review

1962 USGS Map

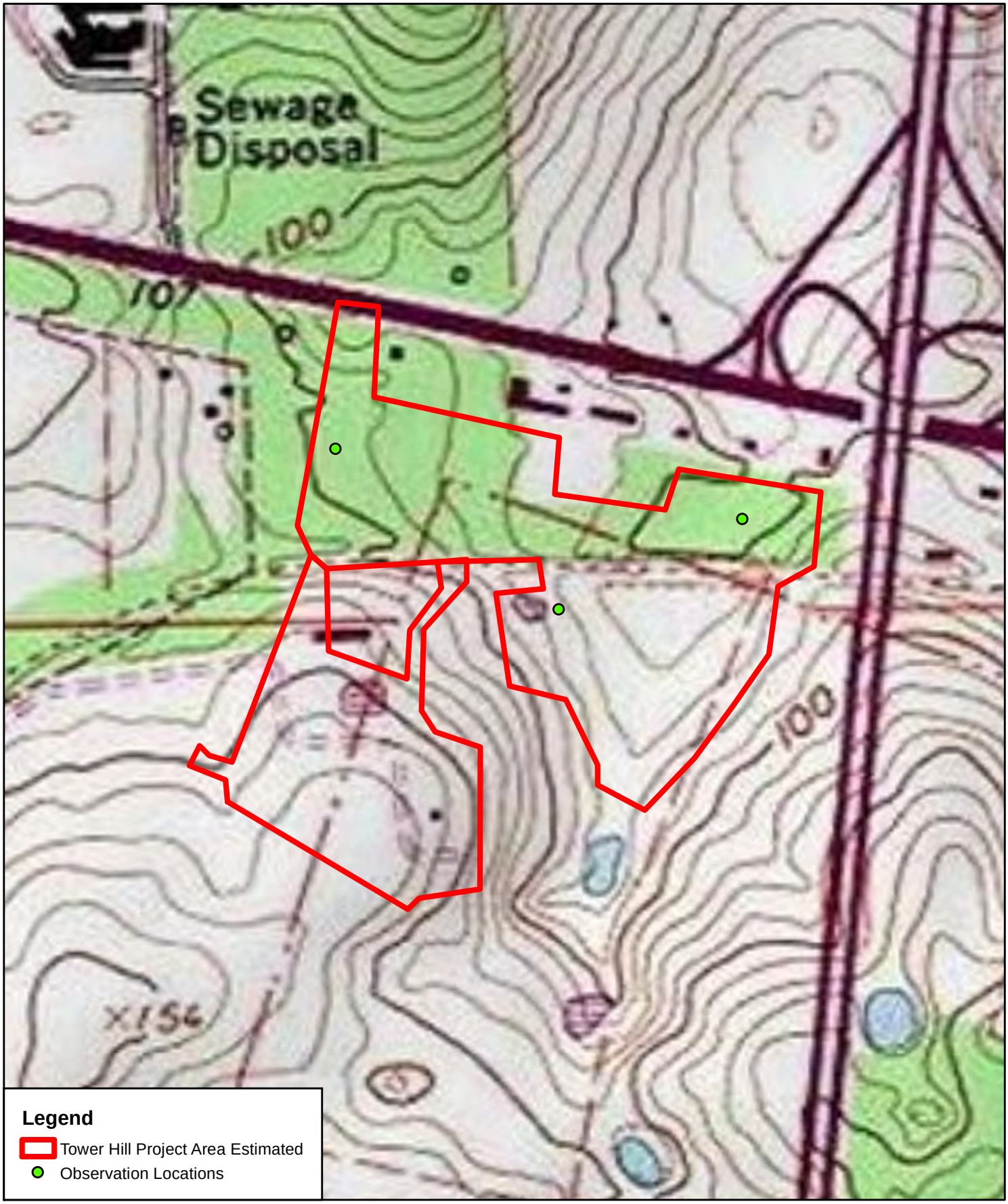
Drawn	Date
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Checked	Date
SEM	5/9/2023

Gainesville Florida Project No. 2402210028

WSP

Figure 6

Path: \\GNV-FS1\projects\EAT\0_Projects\City_of_Alachua\Tower Hill Enviromental Review_2402230074\13 GIS\13.2_MXD\Figure 6 Geological Review Map.mxd nichole.panico Date Saved: 5/9/2023 10:53:41 AM



Source: Alachua, FL, 1:24,000 quad, 1996, USGS; High Springs, FL, 1:24,000 quad, 1962, USGS; WSP, 2023

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City of Alachua Tower Hill Environmental Resource Assessment Review

1996 USGS Map

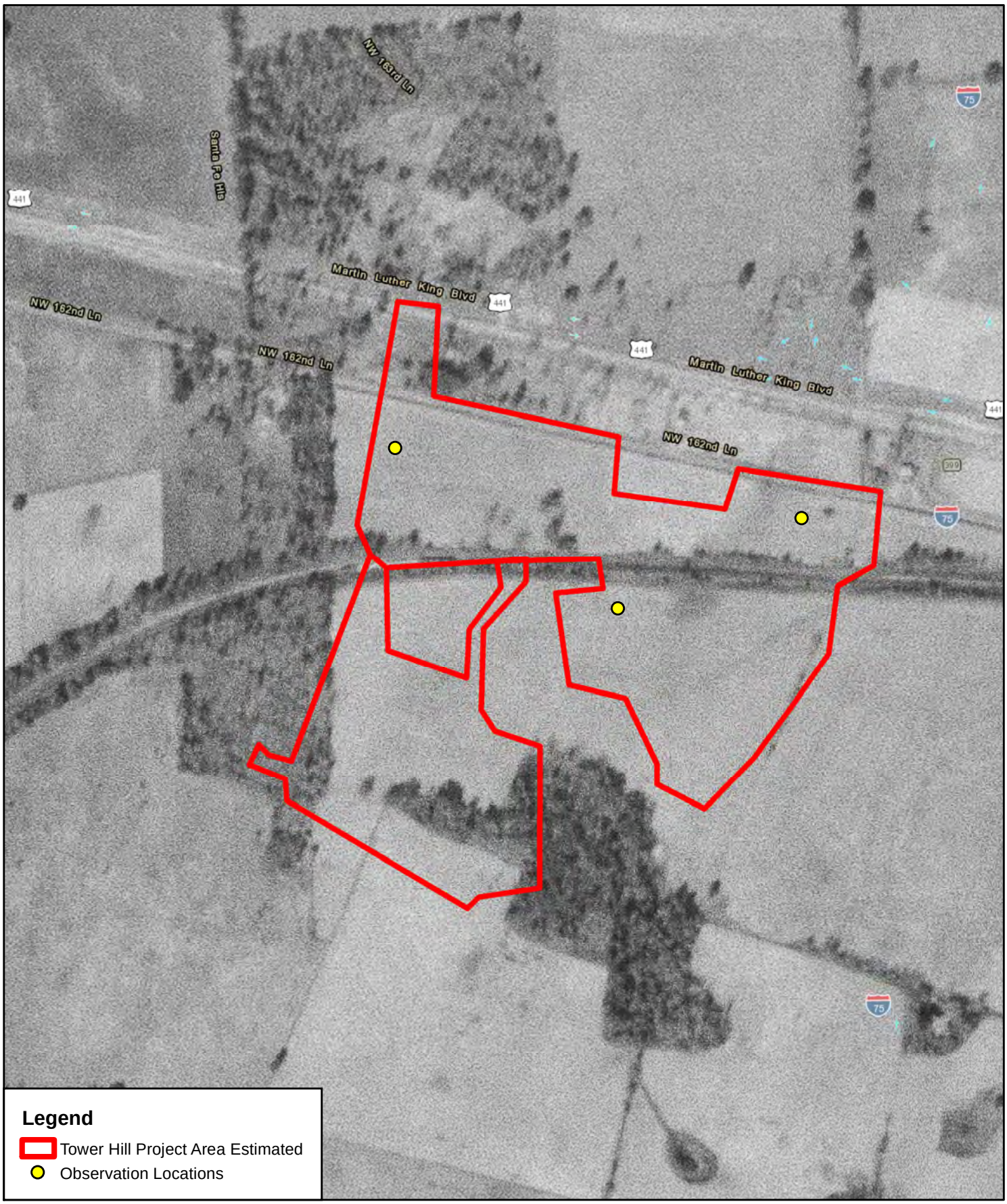
Drawn	Date
NFP	5/9/2023
Checked	Date
SEM	5/9/2023

Gainesville Florida Project No. 2402210028

WSP

Figure 7

Path: \\GNV-FS1\projects\EAT\0_Projects\City_of_Alachua\Tower Hill Enviromental Review_2402230074\13 GIS\13.2_MXD\Figure 7 Geological Review Map.mxd nichole.panico Date Saved: 5/8/2023 3:45:55 PM



Source:USGS Aerial 1951; WSP, 2023

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City of Alachua Tower Hill Environmental Resource Assessment Review

Historic Aerial Map 1951

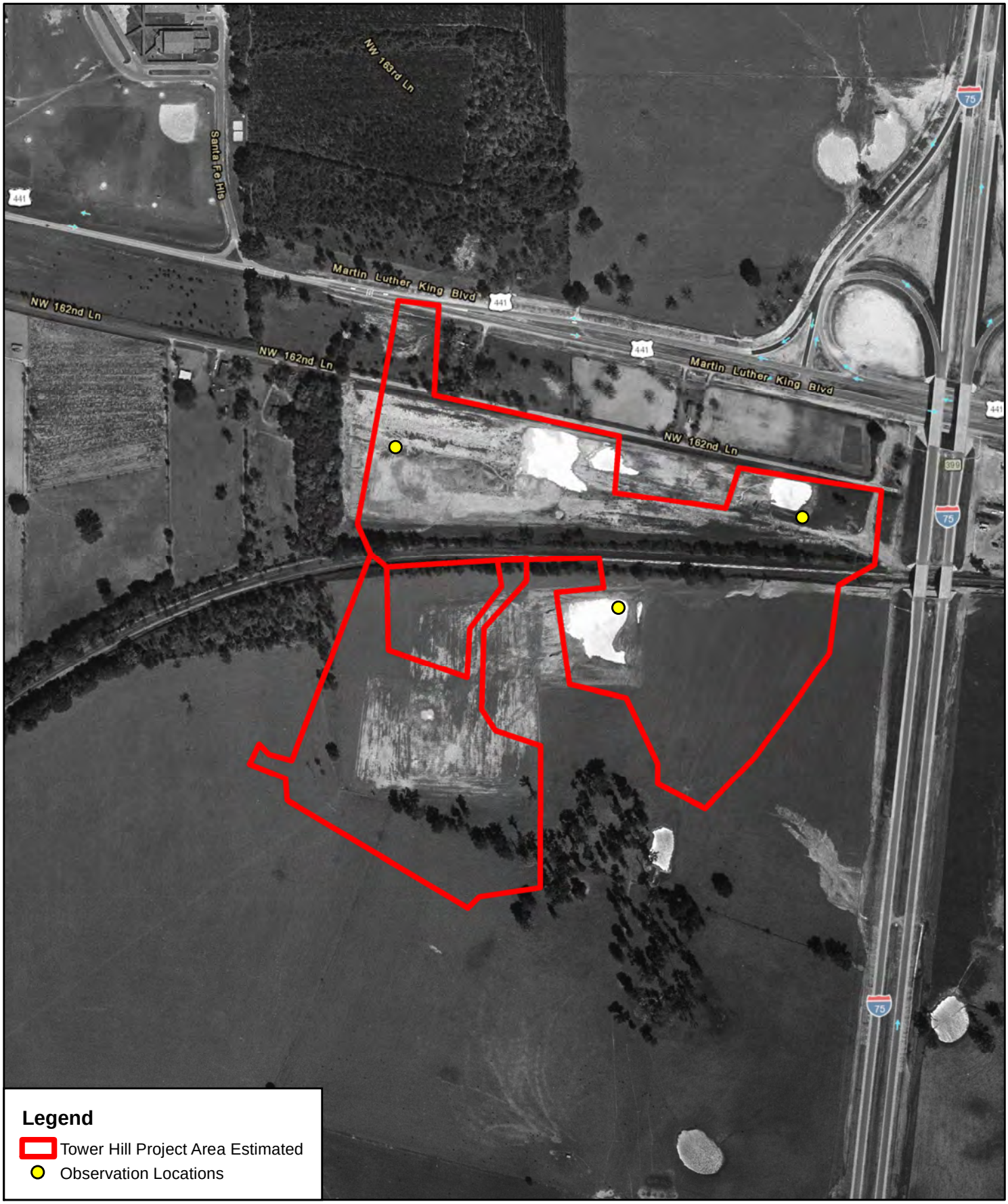
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Checked	Date
SEM	5/9/2023

Gainesville Florida Project No. 2402230073

WSP

Figure 8

Path: \\GNV-FS1\projects\EAT\0_Projects\City_of_Alachua\Tower Hill Enviromental Review_2402230074\13 GIS\13.2_MXD\Figure 8 Historic Aerials 1951.mxd nichole.panico Date Saved: 5/9/2023 11:02:40 AM



Source:FDOT Aerial 1964;WSP, 2023

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City of Alachua Tower Hill Environmental Resource Assessment Review

Historic Aerial Map 1964

Drawn	Date
DLA	5/9/2023
Checked	Date
SEM	5/9/2023

Gainesville Florida Project No. 2402230073

WSP

Figure 9

Path: \\GNV-FS1\projects\EAT\0_Projects\City_of_Alachua\Tower Hill Enviromental Review_2402230074\13 GIS\13.2_MXD\Figure 9 Historic Aerials 1964.mxd nichole.panico Date Saved: 5/8/2023 1:52:37 PM



Source:FDOT Aerial 1982;WSP, 2023

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0 250 500 1,000 Feet

City of Alachua Tower Hill Environmental Resource Assessment Review

Historic Aerial Map 1982

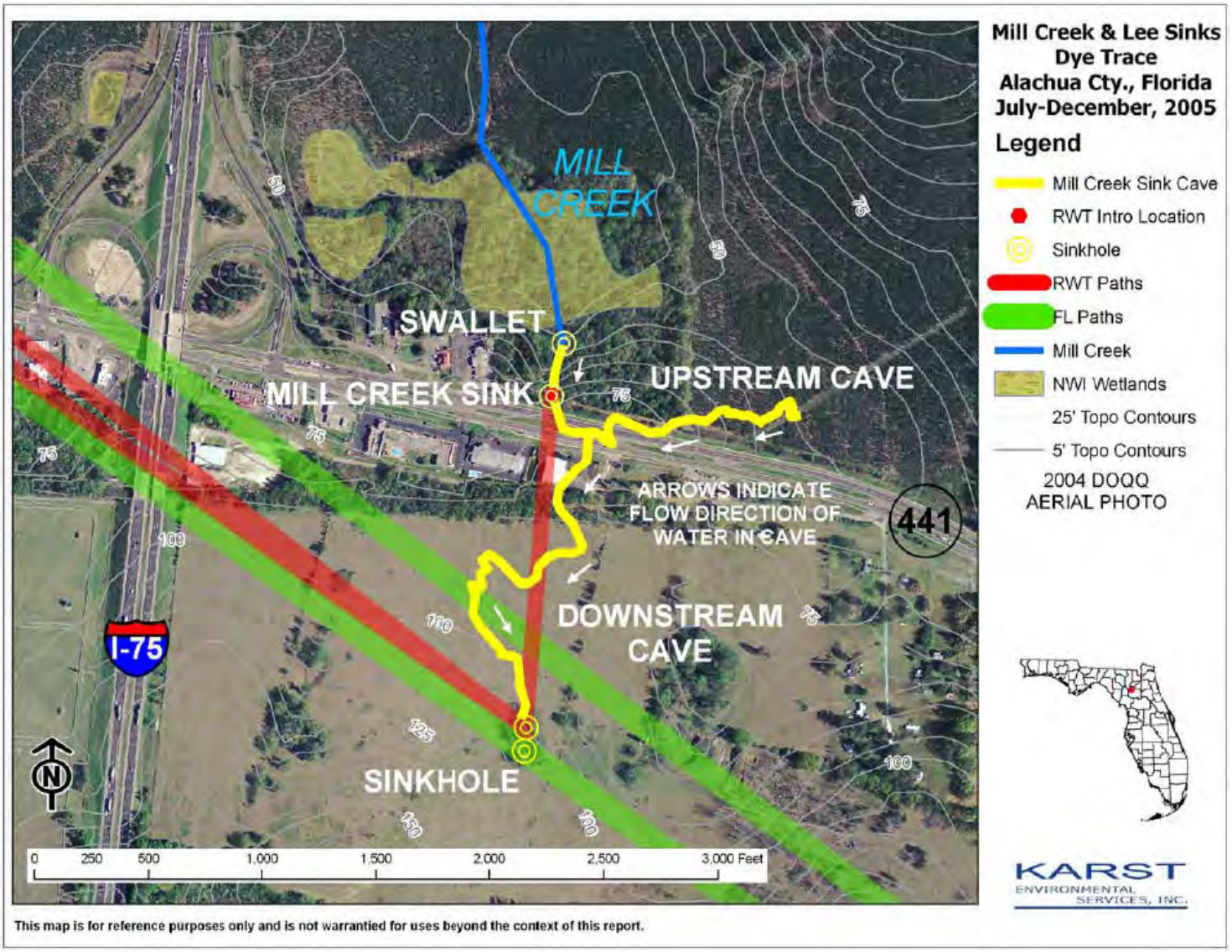
Drawn	Date
DLA	5/9/2023
Checked	Date
SEM	5/9/2023

Gainesville Florida Project No. 2402230073

WSP

Figure 10

Path: \\GNV-FS1\projects\EAT\0_Projects\City_of_Alachua\Tower Hill Enviromental Review_2402230074\13 GIS\13.2_MXD\Figure 10 Historic Aerials 1982.mxd nichole.panico Date Saved: 5/9/2023 11:20:17 AM



Source: Karst Environmental Solutions, Inc. 2006

City of Alachua Tower Hill Environmental Resource Assessment Review

Mill Creek & Lee Sinks Dye Trace Study Map

Gainesville
Florida
Project No.
2402230074

Figure 11

Path: \\GNV-FS1\projects\EAT\0_Projects\City_of_Alachua\TaraForest_Environmental Review_2402210028\13 GIS\13.2_MXD\Report\Figure 5 Mill Creek & Lee Sinks Dye Trace Study Map.mxd nichole.panico Date Saved: 12/15/2021 10:16:44 AM

APPENDIX

A SITE PHOTOGRAPHS



PHOTOGRAPH 1
Observation Location 1- Carolina willow



PHOTOGRAPH 2
Observation Location 1- Carolina willow



PHOTOGRAPH 3
Observation Location 2- Smartweed



PHOTOGRAPH 4
Observation Location 2- Rattlebox



PHOTOGRAPH 5
Observation Location 3- Netted Chain Fern



PHOTOGRAPH 6
Observation Location 3- Northern edge of property

APPENDIX

B IPAC TRUST RESOURCES LIST

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

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Location

Alachua County, Florida



Local office

Florida Ecological Services Field Office

(772) 562-3909
(772) 562-4288
fw4flesregs@fws.gov

1339 20th Street
Vero Beach, FL 32960-3559

https://www.fws.gov/office/florida-ecological-services

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Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

---

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

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2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Birds

NAME	STATUS
Eastern Black Rail Laterallus jamaicensis ssp. jamaicensis Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/10477	Threatened
Whooping Crane Grus americana No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/758	EXPN

Reptiles

NAME	STATUS
Eastern Indigo Snake Drymarchon couperi Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/646	Threatened

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

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You are still required to determine if your project(s) may have effects on all above listed species.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern https://www.fws.gov/program/migratory-birds/species
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

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NAME	BREEDING SEASON
American Kestrel *Falco sparverius paulus* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9587	Breeds Apr 1 to Aug 31
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Sep 1 to Jul 31
Black Skimmer *Rynchops niger* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/5234	Breeds May 20 to Sep 15
Chimney Swift *Chaetura pelagica* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 25
Great Blue Heron *Ardea herodias occidentalis* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Jan 1 to Dec 31
Henslow's Sparrow *Ammodramus henslowii* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3941	Breeds elsewhere
Lesser Yellowlegs *Tringa flavipes* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Magnificent Frigatebird *Fregata magnificens* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Oct 1 to Apr 30
Painted Bunting *Passerina ciris* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Apr 25 to Aug 15

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Prairie Warbler Dendroica discolor This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Jul 31
Red-headed Woodpecker Melanerpes erythrocephalus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Sep 10
Swallow-tailed Kite Elanoides forficatus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8938	Breeds Mar 10 to Jun 30

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the

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probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

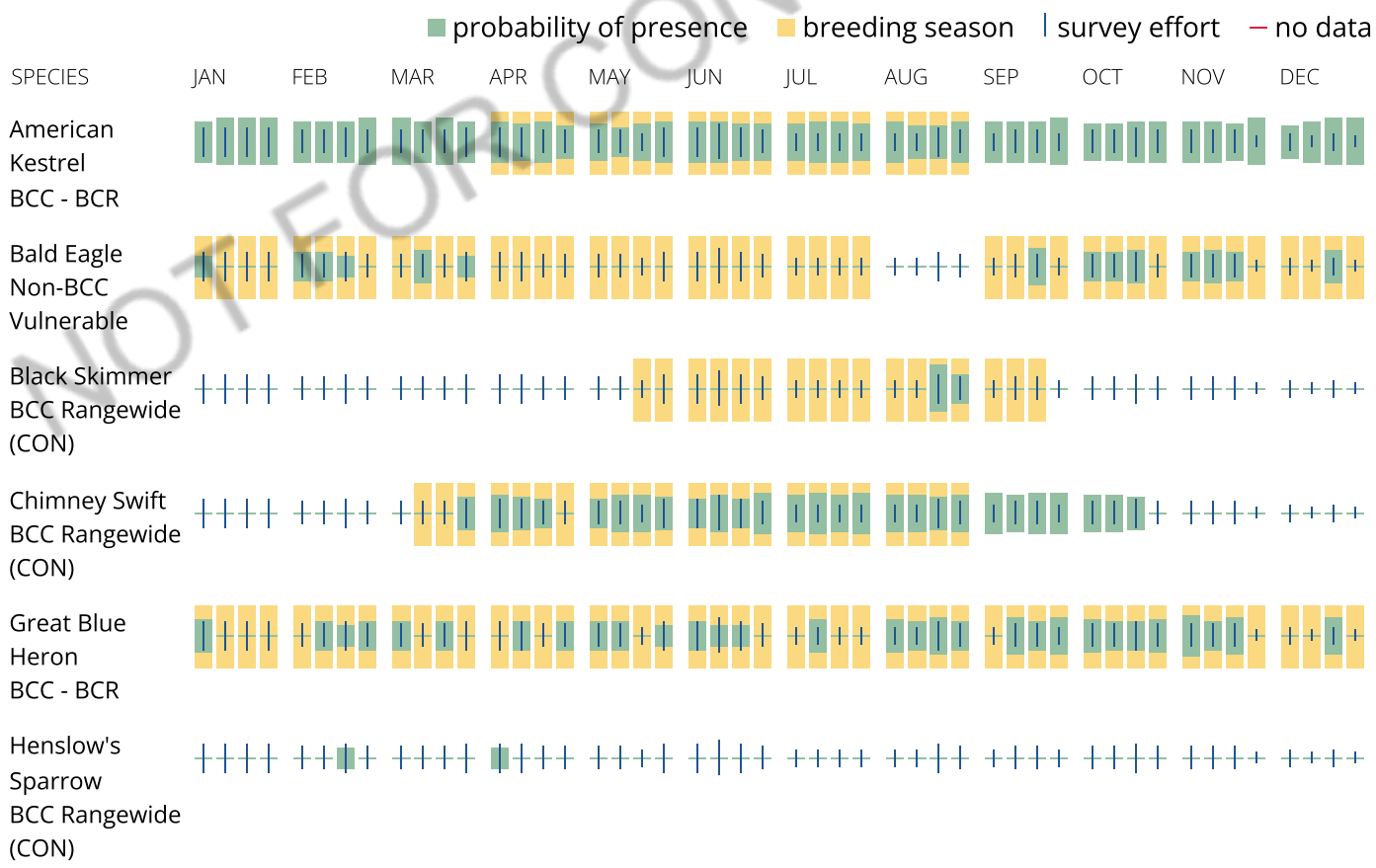
Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

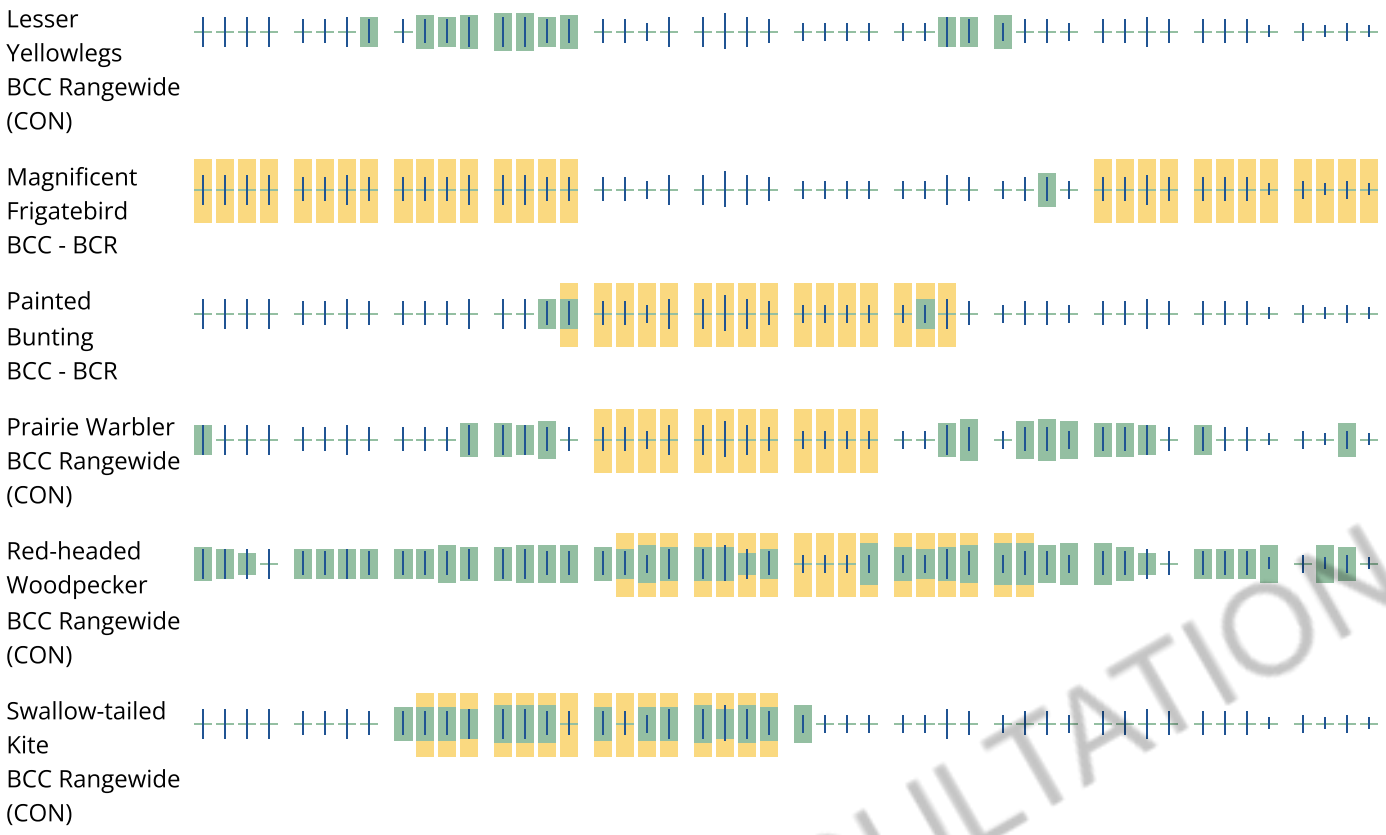
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



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Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact

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Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

NOT FOR CONSULTATION

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER POND

PUBHx

A full description for each wetland code can be found at the National Wetlands Inventory website

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

NOT FOR CONSULTATION

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and

nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION

Independent Review of the Traffic Impact Analysis for the Tower Hill Project for the City of Alachua, Florida; Prepared by Volkert, Inc. May 2023

At the request of the City of Alachua, FL, Planning and Community Development Department, Volkert, Inc., conducted an independent review of the Traffic Impact Analysis (TIA) for the Tower Hill Project. This project is located on the south side of US 441 between NW 173rd Street (CR 235A) and Interstate 75. The TIA was prepared by CHW in May 2023.

Tower Hill (Project) is located on the south side of US 441 (FDOT State Highway) between NW 173rd Street (Alachua County roadway) and Interstate 75 (I-75). From the KFC restaurant that fronts US 441 east to the I-75 southbound on-ramp the project is located immediately south of the commercial strip development. The project will generate 17,285 gross new trips with 725 gross new AM peak hour trips and 1,555 gross new PM peak hour trips. The project consists of two phases.

Phase 1 consists of the following with a buildout year of 2024.

- 71,000 square foot general office building (referred to in the TIA as Tower Hill Headquarters).
- Extension of NW 167th Blvd south from the existing traffic signal at US 441/NW 167th Blvd to the Tower Hill Headquarters office building.
- Construction of a new intersection at NW 167th Blvd/NW 162nd Lane. Traffic from Phase 1 will be able to access NW 173rd Street via NW 162nd Lane.

Phase 2 consists of the following with a buildout year of 2044.

- 72 single family detached homes.
- 300 multi-family low-rise dwelling units.
- Hotel (130 rooms).
- 140,000 square feet general office building.
- 235,000 square feet shopping center.
- Construction of an internal street system with access to US 441 via NW 167th Blvd and access to NW 173rd Street.

It is noted in the TIA that the Phase 2 buildout does not have any immediate plans for development and many of the land uses and their square footage may change as the development proceeds in the future. The land uses for the full buildout year 2044 were listed in the TIA to analyze the 2044 impacts on the intersection of US 441/NW 167th Blvd and what modifications at the intersection may be needed for this intersection to continue to operate at an acceptable level of service. The TIA states that future TIA's/traffic analysis will be needed as development proceeds to its 2044 buildout year.

The independent review of the TIA will include the following:

- Review of the Executive Summary.
- Review of the study intersections.
- Review of trip generation of site traffic.
- Review of data collection.
- Review of trip distribution.

- Review of the Analysis Section.
    - Access Management Evaluation.
    - Right-Turn Lane Warrant Analysis.
    - Intersection Analysis.
- Review of the TIA's Conclusions and Recommendations.
- Additional Volkert comments/recommendations.

Review of the Traffic Impact Analysis

Executive Summary

The Executive Summary is a concise summary of the TIA. It is important to note that the Executive Summary points out that Phase 2 land uses will most likely be modified as the project proceeds to the 2044 buildout year. Additional TIA's/traffic analysis will be needed as Phase 2 development is finalized in the planning process. Volkert has no comments or suggestions on this section.

Study Intersections

This section of the TIA lists the study intersections in Phase 1 and Phase 2 that were agreed upon in the Methodology Letter. Volkert has no comments or suggestions on this section.

Trip Generation of Site Traffic

This section of the TIA describes and documents the trip generation for the Project. The total daily trips, AM peak hour trips and PM peak hour trips are correctly calculated per the ITE *Trip Generation Manual, 11th Edition.* It is important to note that the project is a mixed-use development and there will be some internal trips between the various land uses (trips that do not use the adjacent public roadways; US 441, NW 173rd Street, etc.). This type of trip is called an internal capture trip. Also, a mixed-use development will attract existing trips on the roadway. A good example is a stop for gas or for a meal as someone is driving by the project. This type of trip is called a pass-by trip (the project captures a trip off the adjacent public roadway). The appropriate ITE Methodology was used to calculate the number of internal and pass-by trips. The total number of Project trips generated was then reduced to account for the internal and pass-by trips. This reduced trip number (referred to as new trips) is then used for the assignment of Project traffic onto the adjacent roadways. During the average weekday, the Project is expected to generate 12,355 new trips. During the AM peak hour, the project will generate 595 new trips (365 entering and 230 exiting). During the PM peak hour, the project will generate 1,081 new trips (477 entering and 604 exiting). The trip generation information is correct Volkert has no comments or suggestions on this section.

Data Collection

This section of the TIA documents how the existing traffic volumes on the adjacent intersections/roadways were obtained, how the existing traffic volumes were projected to the 2044 build-out year and how the ultimate 2044 build-out year traffic volumes were calculated. The traffic data calculations are correct. When calculating future traffic volumes, reserved trips are typically included. A reserved trip is a trip from a City of Alachua approved development where the development has not yet been constructed but the traffic from the development will

be on the roadway at the anticipated buildout year for the project in the TIA. The City of Alachua maintains a list of reserved trips and the list is periodically updated/revised as new development projects are approved.

The TIA for Tower Hill did not include reserved trips. The impact of this on Phases 1 and 2 is as follows.

- Phase 1 – Phase 1 has a buildout year of 2024 (next year). The number of reserved trips that may be on the roadways in 2024 adjacent to the Project would be small. Phase 1 consists of just one office building with a small number of new trips. Given that Phase 1 has a buildout year of 2024, Volkert does not have a problem with omitting reserved trips for Phase 1.
- Phase 2 – Phase 2 has a buildout year of 2044 with a total of over 12,000 new trips. As discussed in the TIA, additional TIA's/traffic analysis will be needed as Phase 2 is submitted for approval. Reserved trips should be included in any future TIA's since it would be expected that many existing reserved trips will be on the roadway network by 2044.

Volkert Comments/Suggestions:

1. Volkert concurs with omitting reserved trips for Phase 1.
2. When a future TIA is prepared for all or part of Phase 2, reserved trips should be included in the calculations for traffic at the buildout year.

Trip Distribution

This section of the TIA documents the trip distribution for the Project. The land uses for Tower Hill and the existing adjacent land uses are similar. CHW obtained traffic distribution from the existing Publix Shopping Center located on the north side of US 441 to determine the trip distributions for Tower Hill. Using similar existing adjacent land uses to document trip distributions is an accepted engineering practice. The trip distributions obtained are reasonable and consistent with other traffic studies submitted to the city.

Volkert Comments/Suggestions:

1. Phase 1 – Using adjacent existing land uses to determine trip distribution is acceptable.
2. Phase 2 – Phase 2 has a buildout year of 2044. This is an unusually long buildout year. Most buildout years for similar projects are five to ten years. As TIA's are submitted for Phase 2, the TIA Methodology Letter needs to discuss how trip distributions will be determined.

Analysis – Access Management

This section of the TIA documents the type of roadway connection (right-in/right-out only driveway, restricted/directional median opening, full median opening, etc.) the Project will have onto US 441 and NW 173rd Street. Since US 441 is a state highway, the FDOT has the permitting authority to determine the type and location of access onto its highways. This process is referred to by FDOT as access management. Alachua County has the permitting authority for access onto

NW 173rd Street. The TIA recommended access management along US 441 for Phases 1 and 2 is as follows.

- Phase 1: The following would be constructed in conjunction with Phase 1.
  - Construct the extension of NW 167th Blvd south from US 441 to the new office building (Tower Hill Headquarters). This includes the signalization of the northbound approach at the US 441/NW 167th Blvd intersection. The lane configuration for the new northbound approach is recommended as follows:
    - 1 southbound through lane.
    - 1 northbound left turn lane.
    - 1 northbound through lane.
    - 2 (dual) northbound right turn lanes.
  - Modify the existing southbound approach (from Publix) to the following:
    - 1 southbound through/right lane.
    - 2 (dual) southbound left turn lanes.
  - The dual northbound right turn lanes on the northbound approach should overlap with the US 441 westbound left turn lane traffic signal phase.
  - Prohibit westbound U-turns on US 441 at NW 167th Blvd with an overhead sign (standard practice with overlapping dual right turns).
  - Add an eastbound right turn lane on US 441 at NW 167th Blvd.
- Phase 2: The following access modifications are recommended for consideration along US 441.
  - Consider converting the existing full median opening on US 441 at the Santa Fe High School bus access to a westbound directional median opening (prohibits left turns out from the Santa Fe High School bus access). The westbound directional median opening would provide future access into the Project. An issue with this proposal is it would force exiting school buses that are headed east on US 441 to turn right and make a U-turn at the traffic signal at US 441/NW 173rd Street. This proposal would have to be coordinated with the Alachua County Public Schools Facilities Management Division and the Santa Fe High School principal.
  - On the south side of US 441, across from the Santa Fe High School bus ingress/egress, construct a right out only driveway from the Project to US 441.
  - At the existing right turn in/right turn out driveway on US 441 that provides access to the Publix Shopping Center and the Raceway Gas Station, convert the access to an eastbound left turn directional median opening (prohibits left turns out).
  - On US 441 halfway between NW 161st Terrace and NW 167th Blvd construct a westbound left turn directional median opening that would access a new right turn in/right turn out driveway connection to the Project.

Volkert Comments/Suggestions:

1. Phase 1:
   - Volkert concurs with the extension of NW 167th Blvd to the south and the recommended modifications to the existing traffic signal.
   - When NW 167th Blvd is extended to the south, the traffic signal poles on the southeast and southwest corners may be in or too close to the new roadway and

would need to be removed and new poles installed. If Phase 1 is to be completed by sometime in 2024, CHW should proceed at once with the traffic signal design plans to ensure the traffic signal modifications can be completed on time.

- If the traffic signal poles on the southeast and southwest corners must be removed, replacing all the signal poles with metal mast arm poles should be considered. The time frame to design/order/delivered new traffic signal mast arm poles can take up to one year, which is another reason to start the traffic signal design work as soon as possible.
- All the traffic signals in Alachua County are maintained and operated by the City of Gainesville Public Works Department – Traffic Management Center (TMC). All design plans for the traffic signal at US 441/NW 167th Blvd need to be coordinated with the TMC and FDOT – Traffic Operations.

2. Phase 2:
    - The Phase 2 access management recommendations are designed to maximize traffic efficiency and safety along the section of US 441 impacted by the Project.
    - Except for modifying the Santa Fe High School bus driveway, Volkert concurs with the concept of these modifications and recommends they be pursued and coordinated with FDOT as the project proceeds into Phase 2. Modifications to the school bus driveway raise several issues that would need careful consideration by all affected parties with respect to safe school bus operation and traffic safety along this section of US 441.

Analysis – Right Turn Lane Warrant Analysis

This section of the TIA documents the analysis that was performed to determine if an eastbound right turn lane on US 441 at NW 167th Blvd is warranted. Per the TIA, the right turn lane was not warranted. However, to maximize traffic operations and safety along this section of US 441, the TIA recommends the right turn lane be installed. Since this section of US 441 is congested, Volkert concurs with the TIA recommendation to install an eastbound right turn lane at this location.

Analysis – Intersection Analysis

This section of the TIA documents the intersection level of service/operational deficiencies at the study intersections for the Phase 1 buildout year (2024) and the Phase 2 buildout year (2044). Tables 5 and 6 summarize the results of this analysis. The appropriate highway capacity methodology was utilized, and the data results are correct based on the data included in the analysis. The intersection analysis documents that at Phase 1 and Phase 2 buildout, the intersections will operate at an acceptable level of service (LOS).

Volkert Comments/Suggestions:

The intersection analysis did not include reserved trips. The impact of this omission on the intersection analysis is as follows.

- Phase 1 – As discussed in the Data Collection section, omitting reserved trips for the 2024 buildout year in not considered a significant issue because it would be anticipated that few reserved trips would show up on the adjacent roads in just one year (2024).

- Phase 2 – The omission of reserved trips for the Phase 2 buildout year, 2044, and the twenty-year buildout horizon itself raises significant issues as follows.
    - The number of existing reserved trips has the potential to affect the LOS parameters for the study intersections in the 2044 buildout year.
    - Between now and 2044 it is unknown how many additional projects with reserved trips may get be approved the City of Alachua. These unknown number of trips also have the potential to affect the LOS parameters for the study intersections in the 2044 buildout year.
    - The rate of increase for background (existing) traffic is problematic for a twenty-year buildout horizon. Historical FDOT traffic data can provide insight into short term traffic data trends, but using historical traffic data for a twenty-year projection may produce results that are not accurate.
    - It is unknown how future City of Alachua Road projects, planned but not yet funded/constructed, could affect the segment of US 441 impacted by the Project. These road projects could increase or decrease the rate of future traffic projections on US 441. The proposed Peggy Road connector is a good example.
    - For these reasons, Volkert would consider the LOS traffic data for the Phase 2 buildout year to be speculative. As the Project proceeds, it will be necessary to perform other TIA's with updated traffic data and projections.

Conclusions and Recommendations

This section of the TIA lists the recommended traffic and highway improvements that need to be scheduled to support the development of the Project. It is important the city and FDOT monitor the progress of the project and schedule the necessary follow-up TIA's/traffic studies to determine when the traffic and highway improvements need to be constructed. As was previously discussed, the recommended roadway/access modifications for Phase 2 are proposed but will need to be studied/reviewed as the Project proceeds.

For Phase 1, the roadway and intersection modifications at the US 441/NW167th Blvd intersection that are recommended for immediate construction are listed as follows. These modifications will need to be coordinated and permitted through FDOT:

- Construct the extension of NW 167th Blvd south from US 441 to the new office building (Tower Hill Headquarters). This includes the signalization of the northbound approach at the US 441/NW 167th Blvd intersection. The lane configuration for the new northbound approach is recommended as follows:
    - 1 southbound through lane.
    - 1 northbound left turn lane.
    - 1 northbound through lane.
    - 2 (dual) northbound right turn lanes.
- Modify the existing southbound approach (from Publix) to the following:
    - 1 southbound through/right lane.
    - 2 (dual) southbound left turn lanes.

- The dual northbound right turn lanes on the northbound approach should overlap with the US 441 westbound left turn lane traffic signal phase.
- Prohibit westbound U-turns on US 441 at NW 167th Blvd with an overhead sign (standard practice with overlapping dual right turns).
- Add an eastbound right turn lane on US 441 at NW 167th Blvd.
- Coordinate all traffic signal design and operation activities with the City of Gainesville – Public Works Department Traffic Management Center.

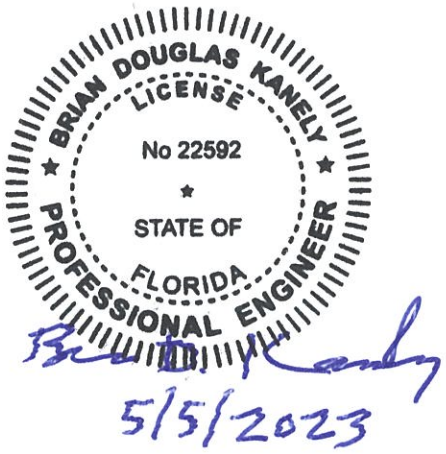
Additional Volkert Comments/Recommendations for the Tower Hill TIA

1. The TIA describes the phasing for the Project and the various traffic and highway improvements needed. It will be essential that the City of Alachua and FDOT establish and monitor the thresholds for the needed improvements. Additional TIA's will be required as the Project progresses to ensure that US 441 can continue to operate in a safe and efficient manner.
2. Volkert wants to re-emphasize that reserved trips should be included in all future TIA's for this project.
3. Volkert wants to re-emphasize that traffic projections for the Phase 2 buildout year may not be accurate and future TIA's will need to carefully address this issue.

Volkert, Inc. appreciates the opportunity to assist the City of Alachua with this independent review of the Tower Hill TIA. Please contact me if you have any questions or need additional information.

Prepared by:

Brian D. Kanely, P.E.
Senior Traffic Engineer
Volkert, Inc.
May 5, 2023
Cell: 352-262-3580
Email: briank5030@outlook.com



May 2, 2023

Justin Tabor, AICP
City of Alachua
15100 NW 142nd Terrace | PO Box 9
Alachua, Florida 32616

Ref: Tower Hill Headquarters Site Plan – Construction Plans Comments

Dear Mr. Tabor:

All of our comments for Tower Hill Headquarters Site plan have been resolved.

Please do not hesitate to contact me if you have any questions/comments.

Sincerely,

Claudia S. Vega, P.E.

Director of Engineering

cvega@edafl.com

edafl.com

City of Alachua

MIKE DAROZA
CITY MANAGER

PLANNING & COMMUNITY DEVELOPMENT
DIRECTOR KATHY WINBURN

May 1, 2023

Sent by electronic mail to walkero@chw-inc.com

Walker Owen, P.E.
Causseaux, Hewett, & Walpole, Inc.
11801 Research Drive
Alachua, FL 32615

RE: Second Project Assistance Team (PAT) Summary: Tower Hill Headquarters Site Plan Application

Dear Mr. Owen:

On April 17, 2023, the City of Alachua received your revised application for a Site Plan submitted on behalf of Tomoka Hill Farms, Inc. for the Tower Hill Headquarters project. The application proposes the construction of a ±71,533 square foot office building and associated site improvements as well as the construction of an entrance road that is approximately 2,000 linear feet in length from US 441 to the building site on a ±37.07 acre portion of Tax Parcel Numbers 03053-000-000, 03054-001-000, 03054-001-002, and 03873-001-000. The revised application received on April 17, 2023 was submitted in response to the Project Assistance Team (PAT) review comments issued to you in a letter dated March 23, 2023.

Upon review of the application and materials, the following insufficiencies must be addressed. A meeting to review these comments may be scheduled upon request.

Please address all insufficiencies in writing and provide an indication as to how they have been addressed by **5:00 PM** on **Thursday, May 4, 2023**. Materials may be submitted electronically to the project planner.

Please address the following:

3/23/23 PAT Review Comments

1. *Miscellaneous*
   a. Environmental Assessment must address the provisions of Objective 1.10 of the Comprehensive Plan Conservation & Open Space Element and Section 6.9.5 of the LDRs. Environmental Assessment will be sent to outside consultant for review once this comment is addressed.
   b. Traffic Impact Analysis will be sent to outside consultant for review. Traffic Impact Analysis will be sent once the configuration of the US 441/NW 167th Boulevard has been

agreed upon with FDOT and final design has been considered by the revised Traffic Impact Analysis.

Remaining Issues: Reviews by outside consultants are ongoing. Comments will be provided once available.

2. *Article 6, Development Standards*
   a. Section 6.1, Parking and Off-Street Loading Standards
      i. Per Section 6.1.10(A)(1), pedestrian crosswalks at least ten feet in width must be provided in parking lots with 100 or more spaces. Crosswalks must either be raised above the adjacent pavement, striped, or otherwise designated through the use of alternative materials and must be located between all primary building entrances and the parking areas serving those entrances. Revise accordingly.

      Remaining Issue: The crosswalk with was revised however the proposed delineation of the crosswalk area utilizes a standard 12" stripe. Per Section 6.1.10(A)(1) crosswalks must either be raised above the adjacent pavement, striped (e.g., using a method such as special emphasis striping per FDOT Index No. 17346), or otherwise designated through the use of alternative materials. Revise accordingly.

   b. Section 6.2, Landscape Standards
      i. Tree credits are being utilized for tree mitigation. Per Section 6.2.2(D)(4), tree credits may be used to fulfill the landscape requirements of Sections 6.2.2(D)(1) – (3) (site landscaping, parking lot landscaping, or perimeter buffers) but may not be utilized for tree mitigation (Section 6.2.1(D)(4)). Tree mitigation calculations utilize 479 tree credits to fulfill mitigation. Revise accordingly. Note – A full review of compliance with Sections 6.2.2(D)(1) – (3) has not been performed due to the significant revisions which may occur to address this comment.

      Remaining Issues: The applicant has included a letter dated April 14, 2023 from John-Michael Simpson, PLA, of CHW, addressing tree mitigation. This letter states that 539 tree credits will be applied to the site and buffer landscape requirements. Additionally, Sheet LS-! Notes in the Tree Mitigation Calculations table that 75% of the required site, parking and buffer landscape is provided through 539 tree preservation credits. However, the Perimeter Buffer Landscape Requirements table, Parking Area Landscape Requirements table, and Site Landscape Calculations table on Sheet LS-1 do not assign any credits to fulfill these requirements under the "Landscape/Trees Provided" columns. When tree credits are utilized, they must be identified within these tables. See example below. Note – A full review of compliance with Sections 6.2.2(D)(1) – (3) has not been performed as counts may change following revisions. to address this comment.

LOCATION AND BUFFER TYPE	REQUIREMENT	PROVIDED
NORTH UTILITY 10' BUFFER, TYPE C OPTION 2	One canopy tree every 30 linear ft, plus one shrub per 8 linear ft; *1329.7415 lf /30 =* ***45 canopy trees required*** *1329.7415 lf / 8 =* ***166 shrubs required***	12 trees; 2 mitigation trees; 31 credits; 166 shrubs

New Comments – April 17, 2023 Resubmittal

3. *Article 6, Development Standards*
   a. Section 6.2, Landscape Standards
      i. Request for off-site tree mitigation must be approved by the City Commission prior to consideration of the Site Plan by the Planning & Zoning Board. The tentative City Commission meeting date will be May 22, 2023.
      ii. Per the data provided in the Tree Mitigation Calculations table on Sheet LS-1 a total of 614 trees are required to fulfill the tree mitigation requirements. It appears off-site mitigation is required for 75 trees (614 required less 539 on-site mitigation equals a deficit of 75 trees).
      iii. The following footnote on the Tree Mitigation Calculations Table is not applicable to tree mitigation: "Note: 75% of the required site, parking, and buffer landscape is being provided for by 539 tree preservation credits."

4. *Public Services / Fire Rescue / Engineering Review Comments*
   a. The applicant must address all comments provided by the Public Services Department in a memorandum dated May 1, 2023.
   b. The applicant must address the comments provided by Claudia Vega, P.E., of EDA Consultants, Inc. (forthcoming – to be provided under separate cover).

If you have any questions regarding the information above, please contact me at 386-418-6100 x 1602 or via e-mail at jtabor@cityofalachua.com. We look forward to receiving your revised application.

Sincerely,

Justin Tabor, AICP
Principal Planner

Attachments

c: Mike DaRoza, City Manager *(by electronic mail)*
Kathy Winburn, Planning & Community Development Director *(by electronic mail)*
Adam Hall, AICP, Principal Planner *(by electronic mail)*
Project File

City of Alachua

MIKE DAROZA
CITY MANAGER

PLANNING & COMMUNITY DEVELOPMENT
DIRECTOR KATHY WINBURN, AICP

April 27, 2023

Sent by electronic mail to adam@abbfortis.com

Adam Boukari
Abbfortis Strategies, LLC
PO Box 567
Alachua, FL 32616

RE: LDR Administrator Interpretation: Land Development Regulations Text
- Application of Section 6.8 of the LDRs for Single Tenant Uses Greater Than or Equal to 20,000 Square Feet
- Application of Façade Massing Requirements for Front Facades with More than One (1) Exterior Wall

Dear Mr. Boukari:

On April 13, 2023 the City of Alachua Planning & Community Development Department received your application for an Interpretation of the Land Development Regulation (LDR) Administrator pursuant to Section 2.4.19 of the City's LDRs. This application requests an interpretation of the text of the LDRs by the LDR Administrator. Specifically, it requests an interpretation of the following:

- The applicability of Section 6.8.3 for single tenant uses other than single tenant retail sales and service uses which are greater than or equal to 20,000 square feet; and,
- The applicability of the façade massing requirements for front facades with more than one (1) exterior wall.

Section 6.8 of the LDRs establishes design standards for business uses. These standards are subdivided into two primary categories: design standards for all business use types (except for single tenant retail sales and service uses greater than or equal to 20,000 square feet and those uses identified in Section 6.8.1(B) as exempt) – as set forth in Section 6.8.2 of the LDRs; and design standards for single tenant retail sales and service uses greater than or equal to 20,000 square feet – as set forth in Section 6.8.3 of the LDRs

The City's current LDRs were adopted in February 2006. At that time, design standards for single tenant retail sales and service uses greater than or equal to 20,000 square feet were adopted with the current LDRs. In 2014 a City-initiated text amendment expanded the applicability of Section 6.8 to include all business use types except for those identified in Section 6.8.1(B). Exempt uses primarily include industrial related uses. The variations between Sections 6.8.2 and 6.8.3 generally address the scale of a larger single tenant use. For example, façade massing requirements increase from a wall offset every 30 feet for development subject to Section 6.8.2 to every 40 feet for development subject to Section 6.8.3. Similarly, less glazing is required for development subject to Section 6.8.2 than is required for development subject to Section 6.8.3.

The Planning Department is currently reviewing a Site Plan for the Tower Hill Headquarters project. This project proposes the construction of a ±72,400 square foot two-story office building and associated site improvements as well as the construction of an entrance road that is approximately 2,000 linear feet in length from US 441 to the building site.

During the review of this project it was noted by City Staff and the applicant that the intent to apply business design standards based upon the scale of a building does not provide consideration to uses other than retail sales and services uses. The intent of the 2014 LDR text amendments were to establish design standards that consider the scale of the building rather than the specific use. Therefore, the question presented in your LDR Administrator Interpretation request seeks to apply the standards of Section 6.8.3 to any single tenant use subject to Section 6.8 which is greater than or equal to 20,000 square feet rather than applying the standards of Section 6.8.3 exclusively to a single tenant retail sales and service use. Upon review of this request and the relevant information as described above, the LDR Administrator hereby affirms the provisions of Section 6.8.3 shall apply to any single tenant use which is greater than or equal to 20,000 square feet.

The second interpretation request pertains to the applicability of the façade massing requirements for front facades with more than one (1) exterior wall. Section 6.8.3(A)(2)(b)(i) states, "[f]ront facades 60 feet wide or wider shall incorporate wall offsets of at least two feet in depth (projections or recesses) a minimum of every 40 feet. Each required offset shall have a minimum width of 20 feet." Section 6.8.3(A)(2)(b)(ii) provides alternatives that can be used in lieu of the front façade offsets required by Section 6.8.3(A)(2)(b)(i).

The intent of Section 6.8.3(A)(2)(b) is to address large spans of exterior walls and avoid unbroken planes along the façade. In the central portion of the proposed Tower Hill building there is a continuous offset which occurs through a horizontal articulation. The lobby and porte cochere extend outward from the building while the office area is recessed from the lobby area. These projections and recesses work collectively to break the three-dimensional horizontal plane across the span of the building and thus achieve the intent of Section 6.8.3(A)(2)(b). Based upon this finding, the LDR Administrator hereby affirms that the architectural elevations prepared by Paul Stresing Associates, Inc., and dated March 15, 2023 (attached) fulfill the façade massing requirements of Section 6.8.3(A)(2)(b).

If you have any questions related to this interpretation, please contact the Planning & Community Development Department at 386-418-6121.

Sincerely,

Mike DaRoza
City Manager / LDR Administrator

Attachment

c: Kathy Winburn, Planning & Community Development Director *(by electronic mail)*
Justin Tabor, AICP, Principal Planner *(by electronic mail)*
Adam Hall, AICP, Principal Planner *(by electronic mail)*
File

City of ALACHUA

THE GOOD LIFE COMMUNITY

FOR PLANNING USE ONLY
Case #: _____
Application Fee: $_____
Filing Date: _____
Acceptance Date: _____
Review Type: Admin

Application for Interpretation by Land Development Regulations (LDR) Administrator

Reference City of Alachua Land Development Regulations 2.4.19

A. APPLICANT

1. Applicant's Status (check one):

   ☐ Owner (title holder) ☒ Agent

2. Name of Applicant(s) or Contact Person(s): Adam Boukari Title: Authorized Agent

   Company (if applicable): Abbfortis Strategies, LLC

   Mailing address: PO Box 567

   City: Alachua State: FL ZIP: 32616

   Telephone: (386) 682-5553 FAX: ( ) e-mail: adam@abbfortis.com

3. If the applicant is agent for the property owner*:

   Name of Owner (title holder): Tomoka Hills Farms, Inc.

   Mailing Address: PO Box 147018

   City: Gainesville State: FL ZIP: 32614

   * Must provide executed Property Owner Affidavit authorizing the agent to act on behalf of the property owner.

B. PROPERTY AFFECTED

1. Address of Subject Property: 15403 NW 173rd Street, Alachua, FL 32615
2. Parcel ID Number(s): 03873-001-000
3. Existing Use of Property: Vacant
4. Future Land Use Map Designation: Community Commercial
5. Zoning Designation: Community Commercial
6. Acreage: +/-134.88
7. Number of Existing Structures on the Property: 1

C. INTERPRETATION REQUESTED

☒ Land Development Regulations Text

☐ Zone District Boundaries

☐ Whether an unspecified use falls within a use classification, use category or use type allowed in a zone district *(If requesting the approval of an unlisted use pursuant to Section 4.2.1(D), provide documentation to support the standards provided within Section 4.2.1(D)(2).)*

Describe, in detail, the request being made (you may attach a separate document if additional room is needed):
LDRs Sec. 6.8 Design standards for business uses. See attached.

D. **ATTACHMENTS** (Provide ALL that are applicable)

1. A current aerial map or plat of the property (may be obtained from the Alachua County Property Appraiser.)
2. Legal description with tax parcel number.
3. Proof of ownership.
4. Proof of payment of taxes.
5. **Fee.** Please see fee schedule for fee determination. No application shall be accepted for processing until the required application fee is paid in full by the applicant. Any necessary technical review will be billed to the applicant at the rate of the reviewing entity. The invoice shall be paid in full prior to any legislative and/or quasi-judicial action of any kind on the petition, appeal, or development application.

All attachments that are applicable to your application are required for the application to be considered complete. **A completeness review of the application will be conducted within five (5) business days of receipt. If the application is determined to be incomplete, the application will be returned to the applicant.**

I/We certify and acknowledge that the information contained herein is true and correct to the best of my/our knowledge.

Signature of Applicant

Signature of Co-applicant

Adam Bakari, Authorized Agent

Typed or printed name and title of applicant

Typed or printed name of co-applicant

State of Florida County of Alachua

The foregoing application is acknowledged before me this 12 day of April, 2023 by Adam Bakari

_____, who is/are personally known to me, or who has/have produced _____

as identification.

LORETTA LYNN HOPE
MY COMMISSION # GG 979978
EXPIRES: May 19, 2024
Bonded Thru Notary Public Underwriters

Signature of Notary Public, State of Florida

City of ALACHUA

THE GOOD LIFE COMMUNITY

Authorized Agent Affidavit

A. PROPERTY INFORMATION

Address of Subject Property: 15403 NW 173rd Street

Parcel ID Number(s): 03873-001-000

Acreage: +/-134.88 acres

B. PERSON PROVIDING AGENT AUTHORIZATION

Name: Chris Allen Title: Authorized Representative

Company (if applicable): Tomoka Hills Farms, Inc. and Tower Hill Insurance Group

Mailing Address: PO Box 147018

City: Gainesville State: FL ZIP: 32614

Telephone: 352-332-8800 FAX: e-mail: chris@thig.com

C. AUTHORIZED AGENT

Name: Adam Boukari Title: Owner

Company (if applicable): Abbfortis Strategies

Mailing address: PO Box 567

City: Alachua State: FL ZIP: 32616

Telephone: 386-682-5553 FAX: e-mail: adam@abbfortis.com

D. REQUESTED ACTION:

Application for Interpretation by Land Development Regulations Administrator

I hereby certify that I am the property owner of record, or I have received authorization from the property owner of record to file an application for a development permit related to the property identified above. I authorize the agent listed above to act on my behalf for purposes of this application.

Signature of Applicant

Signature of Co-applicant

Chris Allen

Typed or printed name and title of applicant

Typed or printed name of co-applicant

State of Kentucky County of Fayette

The foregoing application is acknowledged before me this 12 day of April, 2023 by Chris Allen, who is/are personally known to me, or who has/have produced _____ as identification.

NOTARY SEAL

Signature of Notary Public, State of KY

abbfortis strategies

www.abbfortis.com
P.O. Box 567
Alachua, FL 32616
386.682.5553

April 12, 2023

VIA Hand Delivery

Justin Tabor, Principal Planner
City of Alachua – Planning & Community Development
15100 NW 142nd Ter.
Alachua, FL 32615

RE: Application for Interpretation by LDR Administrator – Tower Hill Insurance Group

Dear Justin:

Abbfortis Strategies, as authorized agent of Tomoka Hills Farms and Tower Hill Insurance Group, provides the following request for interpretation.

Tower Hill Insurance Group has submitted a Site Plan to the City of Alachua for a corporate headquarters to be constructed on Parcel # 03873-001-000. The Site Plan is under review by the City. As part of the review, the application is being evaluated for compliance with the City LDRs Sec. 6.8 – Design standards for business uses. Sec. 6.8.1(A) states:

> Unless exempted pursuant to Subsection 6.8.1(B), the standards in Subsection 6.8.2 shall apply to all business use types, except for single tenant retail sales and services uses greater than or equal to 20,000 square feet, which shall be subject to the standards of Subsection 6.8.3.

The City adopted revisions to Sec. 6.8 on Sept. 8, 2014 to provide for design standards for all business uses. Prior to the adoption of the revised language, the City LDRs only addressed design standards for single tenant uses greater than 20,000 square feet in size. The City's intent was to provide for design standards for all business uses (with exemptions) regardless of structure size. The current LDRs memorialize the Sept.8, 2014 adoption and provide design standards for all business uses via Sec. 6.8.2, unless a single tenant use is greater than or equal to 20,000 square feet, in which case Sec. 6.8.3 applies.

The intent of Sec. 6.8.1(A) is to recognize that large buildings (greater than or equal to 20,000 square feet) designed for single tenant users should have different standards than buildings that are of the same size and scale and designed for multitenant space. The use type of retail sales or service is not intended to preclude other business uses (except those exempted via 6.8.1(B)) from the applicability of this section, but rather the single tenancy is the differentiating intent. In that the Tower Hill Insurance Group building is a business use, greater than 20,000 square feet and a single tenant, it is requested that the LDR Administrator interpret that the design standards of Sec. 6.8.3 apply.

This request for interpretation also relates to façade massing offsets within the Sec. 6.8 design standards. Sec. 6.8.3(A)(2)(b)(i) states:

> Front facades 60 feet wide or wider shall incorporate wall offsets of at least two feet in depth (projections or recesses) a minimum of every 40 feet. Each required offset shall have a minimum width of 20 feet.

Sec. 10.2 defines "front façade" as, "the exterior walls of a structure which are immediately adjacent to the street which the structure fronts."

The front façade of the Tower Hill Insurance Group building has a variety of horizontal articulations that occur, meaning the size and scale of the building is modulated by stepping portions of the front façade forward or backward from the predominant façade plane of the building. The definition of "front façade" by the LDRs applies to "exterior walls," which further supports the intention that a front façade can have multiple walls that are horizontally articulated.

The intent of Sec. 6.8.3(A)(2)(b)(i) is to provide offsets to break up large continuous spans of façade. Across the center portion of the building, there is a continuous offset that occurs via horizontal articulation as the lobby area (which spans 47'7") is projected forward, while the primary office area (which spans 100'9"), is recessed. Since the primary office area spans the entire length of the lobby area, a continuous offset of 47'7" occurs.

Additionally, it is worthwhile to note, the relevant façade massing section of the LDRs does not contemplate a predominantly glass façade, which the Tower Hill Insurance Group building provides. The intent of the façade massing section is to break up large continuous spans of stucco, concrete and similar façades to not have the appearance of large expanses of walls without architectural design elements. The intent was not to preclude large expanses of glass walls, as glazing by its nature breaks up large spans because it creates both reflection outward and visibility into a building.

In that the Tower Hill Insurance Group front façade incorporates horizontal articulation and the predominant material of glass is used as the façade, it is requested that the LDR Administrator interpret

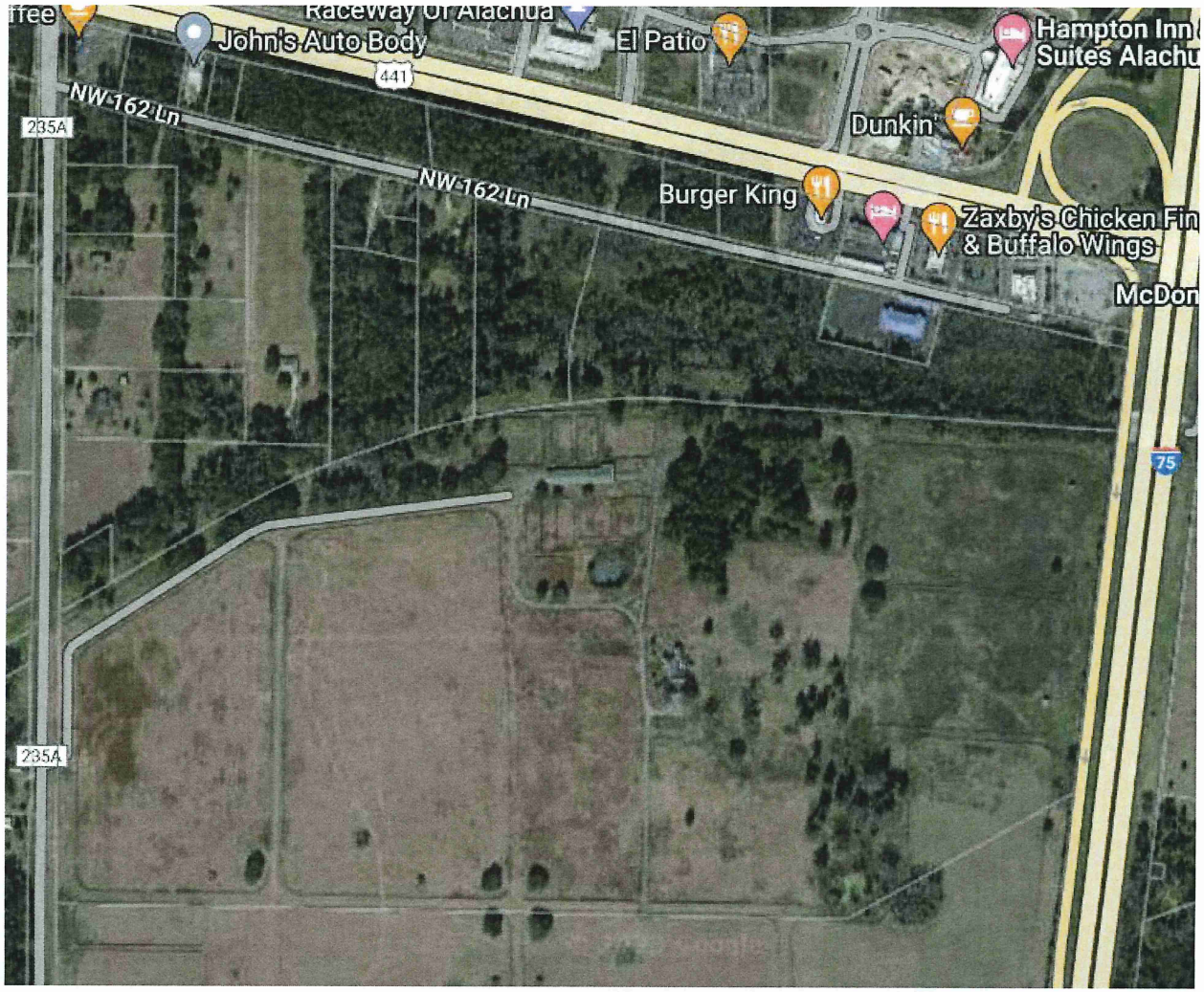
that the center portion of the building where the lobby projects forward from the primary office area provides for a continuous offset that meets the design standards of Sec. 6.8.3(A)(2)(b)(i).

Thank you for consideration of this request. Please reach out to me with any questions.

Respectfully,



Adam Boukari
Founder & CEO


John's Auto Body
El Patio
Hampton Inn
Suites Alachu
441
NW 162 Ln
235A
Dunkin'
Burger King
Zaxby's Chicken Fin
& Buffalo Wings
McDon
75
235A

PARCEL # 03873-001-000

LEGAL DESCRIPTION

A tract of land situated in Fractional Sections 9 & 16 and Section 37 (William Garvin Grant), Township 8 South, Range 18 East, Alachua County, Florida, said tract of land being more particularly described as follows:

Commence at a concrete monument at the Southeast corner of the aforementioned Fractional Section 9, Township 8 South, Range 18 East for a point of reference and run S. 01° 54'57" W., a distance of 3.76 feet to a concrete monument on the Southerly right of way line of the abandoned Seaboard Coastline Railroad (200 foot right of way); thence run N. 87°08'33" W., along said Southerly right of way line, a distance of 1090.74 feet to a concrete monument on the Westerly right of way line of State Road No. 93, also known as Interstate Highway No. 75 (300 foot right of way); thence run N. 05°41'41" E., along said Westerly right of way line, a distance of 100.12 feet to an iron pipe on the centerline of said railroad right of way and the True Point of Beginning; thence run N. 87°08'33" W., along said centerline, a distance of 1480.63 feet to an iron pipe at the point of curvature of a curve concave Southerly, said curve having a radius of 2864.79 feet, a central angle of 34°35'30", and a chord bearing and distance of S. 75°33'42" W., 1703.44 feet respectively; thence run Southwesterly, with said curve and along said centerline, an arc distance of 1729.58 feet to an iron pipe at the point of tangency of said curve; thence run S. 58°15'57" W., along said centerline, a distance of 716.12 feet to a concrete monument on the Easterly right of way line of County Road No. 235A (100 foot right of way); thence run S. 00°30'42" E., along said right of way line, a distance of 1030.00 feet to a concrete monument; thence run N. 89°58'49" E., a distance of 2807.17 feet to a concrete monument; thence run N. 59°41'41" E., a distance of 917.50 feet to a concrete monument on said Westerly right of way line of State Road No. 93; thence run N. 05°41'41" E., along said right of way line, a distance of 1300.00 feet to the True Point of Beginning.

Record 15.00
Doc. Stamps 6,384.00
Int.Tax
Total 6,399.00

CIRCUIT COURT CLERK
J.K. "Buddy" Irby
ALACHUA COUNTY, FL
Date 01/25/1999 16:28
Document ID 1587372
Book/Page 2213/ 1501

DTAX 6,384.00

Prepared by and return to:
Philip A. DeLaney
Attorney at Law
Scruggs & Carmichael, P.A.
3426 N.W. 43rd Street, Suite B
Gainesville, Florida 32606
352-374-4120
File No.: **98-3148**

[Space Above This Line For Recording Data]

Warranty Deed

This Warranty Deed made this **22nd** day of **January**, **1999** between

New Life Corporation of America, a Tennessee corporation
whose Social Security/FEIN Number is: [redacted]
whose post office address is
123 Walnut Drive, Hendersonville, Tennessee 37075
grantor, and

Tomoka Hills Farms, Inc., a Florida corporation
whose Social Security/FEIN Number(s) are: [redacted]
whose post office address is
Post Office Box 141150, Gainesville, Florida 32614
grantee:

(Whenever used herein the terms "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives, and assigns of individuals, and the successors and assigns of corporations, trusts and trustees)

WITNESSETH, that said grantor, for and in consideration of the sum of TEN AND NO/100 DOLLARS ($10.00) and other good and valuable considerations to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, has granted, bargained, and sold to the said grantee, and grantee's heirs and assigns forever, the following described land, situate, lying and being in **Alachua County, Florida** to-wit:

Legal Description Labeled Exhibit "A" Attached Hereto and By Reference Incorporated Herein

Parcel Identification Number: 03873-001-000

Subject to taxes for 1999 and subsequent years; covenants, conditions, restrictions, easements, reservations and limitations of record, if any.

TOGETHER WITH: Double Wide Mobile Home MVID numbers GEO729214 and GEO729215, which is permanently affixed to, a part of, and being sold with the real property described above.

TOGETHER with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

TO HAVE AND TO HOLD, the same in fee simple forever.

AND the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land; that the grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever; and that said land is free of all encumbrances, except taxes accruing subsequent to December 31, 1998 .

IN WITNESS WHEREOF, grantor has hereunto set grantor's hand and seal the day and year first above written.

Signed, sealed and delivered in our presence:

New Life Corporation of America
a Tennessee corporation

By: _____
Norvell Olive
Executive Director

_____
Witness Name: _____

_____
Witness Name: _____

(Corporate Seal)

STATE OF Tennessee
COUNTY OF DAVIDSON

The foregoing instrument was acknowledged before me this 21st day of January, 1999 by Norvell Olive, Executive Director of New Life Corporation of America, a Tennessee corporation, on behalf of the corporation. He/she is personally known to me or has produced a Driver's License as identification.

[Notary Seal]

_____
Notary Public
Printed Name: Ronald L. Stone
My Commission Expires: 03-25-2003

Exhibit A

A tract of land situated in Fractional Sections 9 & 16 and Section 37 (William Garvin Grant), Township 8 South, Range 18 East, Alachua County, Florida, said tract of land being more particularly described as follows:

Commence at a concrete monument at the Southeast corner of the aforementioned Fractional Section 9, Township 8 South, Range 18 East for a point of reference and run S. 01°54'57" W., a distance of 3.76 feet to a concrete monument on the Southerly right of way line of the abandoned Seaboard Coastline Railroad (200 foot right of way); thence run N. 87°08'33" W., along said Southerly right of way line, a distance of 1090.74 feet to a concrete monument on the Westerly right of way line of State Road No. 93, also known as Interstate Highway No. 75 (300 foot right of way); thence run N. 05°41'41" E., along said Westerly right of way line, a distance of 100.12 feet to an iron pipe on the centerline of said railroad right of way and the True Point of Beginning; thence run N. 87°08'33" W., along said centerline, a distance of 1480.63 feet to an iron pipe at the point of curvature of a curve concave Southerly, said curve having a radius of 2864.79 feet, a central angle of 34°35'30", and a chord bearing and distance of S. 75°33'42" W., 1703.44 feet respectively; thence run Southwesterly, with said curve and along said centerline, an arc distance of 1729.58 feet to an iron pipe at the point of tangency of said curve; thence run S. 58°15'57" W., along said centerline, a distance of 716.12 feet to a concrete monument on the Easterly right of way line of County Road No. 235A (100 foot right of way); thence run S. 00°30'42" E., along said right of way line, a distance of 1030.00 feet to a concrete monument; thence run N. 89°58'49" E., a distance of 2807.17 feet to a concrete monument; thence run N. 59°41'41" E., a distance of 917.50 feet to a concrete monument on said Westerly right of way line of State Road No. 93; thence run N. 05°41'41" E., along said right of way line, a distance of 1300.00 feet to the True Point of Beginning.

TOGETHER WITH rights of the "parent tract" (dominant tenement) set forth in the easement recorded in O. R. Book 1195, at Page 68, of the Public Records of Alachua County, Florida.

ALATB15081F

John Power TAX COLLECTOR
Serving Alachua County

2022 PAID REAL ESTATE 15089
NOTICE OF AD VALOREM TAXES AND NON-AD VALOREM ASSESSMENTS

ACCOUNT NUMBER	PROPERTY ADDRESS	MILLAGE CODE
03873 001 000	15403 NW 173RD ST	1700

TOMOKA HILLS FARMS INC
1301 DIXIANA DOMINO RD
LEXINGTON, KY 40511

EXEMPTIONS:

SCAN TO PAY ONLINE

AD VALOREM TAXES

TAXING AUTHORITY	MILLAGE RATE	ASSESSED VALUE	EXEMPTION(S)	TAXABLE VALUE	TAXES LEVIED
COUNTY GENERAL	7.7662	450,850	0	450,850	3,501.39
LIBRARY GENERAL	1.0565	450,850	0	450,850	476.32
SCHOOL CAP PROJECT	1.5000	450,850	0	450,850	676.28
SCHOOL DISCRNRY & CN	0.7480	450,850	0	450,850	337.24
SCHOOL GENERAL	3.2500	450,850	0	450,850	1,465.26
SCHOOL VOTED	1.0000	450,850	0	450,850	450.85
CHILDREN'S TRUST	0.4612	450,850	0	450,850	207.93
SUWANNEE RIVER WATER MGT DIST	0.3368	450,850	0	450,850	151.85
CITY OF ALACHUA	5.3900	450,850	0	450,850	2,430.08
TOTAL MILLAGE	21.5087			AD VALOREM TAXES	$9,697.20

LEGAL DESCRIPTION

TRACT IN FRAC SECTIONS 9 16 TWP 8 RNG 18 AND GARVIN GRANT COM SE COR OF SEC 9-8-
See Additional Legal on Tax Roll

NON-AD VALOREM ASSESSMENTS

LEVYING AUTHORITY	UNIT	RATE	AMOUNT
710 BOCC SOLID WASTE MGMT	4.000	@ 20.7800	83.12
550 COUNTY FIRE SERVICES	1.000	Varies	747.18
NON-AD VALOREM ASSESSMENTS			$830.30

PAY ONLY ONE AMOUNT.

COMBINED TAXES AND ASSESSMENTS	$10,527.50

IF PAID BY	Nov 30, 2022				
PLEASE PAY	$0.00				

Please Retain this Portion for your Records. Receipt Available Online.

JOHN POWER, CFC
ALACHUA COUNTY TAX COLLECTOR

2022 PAID REAL ESTATE 15089
NOTICE OF AD VALOREM TAXES AND NON-AD VALOREM ASSESSMENTS

PLEASE PAY IN U.S. FUNDS TO JOHN POWER, TAX COLLECTOR • P.O. Box 44310 • Jacksonville, FL 32231-4310

ACCOUNT NUMBER	PROPERTY ADDRESS
03873 001 000	15403 NW 173RD ST

TOMOKA HILLS FARMS INC
1301 DIXIANA DOMINO RD
LEXINGTON, KY 40511

PAY ONLY ONE AMOUNT

IF PAID BY	PLEASE PAY
☐ Nov 30, 2022	$0.00
☐	
☐	
☐	
☐	

WANT TO RECEIVE YOUR BILL ELECTRONICALLY NEXT YEAR? VISIT www.AlachuaCollector.com AND SIGN UP FOR E-BILLS!

Receipt # 22-0021072 $10,106.40 Paid 11/16/2022

City of ALACHUA
the good life community

City of Alachua

MIKE DAROZA
CITY MANAGER

RODOLFO VALLADARES, P.E.
PUBLIC SERVICES DIRECTOR

INTER-OFFICE COMMUNICATION

DATE: **Apr 26, 2023**

TO: **Kathy Winburn, AICP**
Planning & Community Development Director

FROM: **Rodolfo Valladares, P.E.**
Public Services Director
Tom Ridgik, P.E.
Engineering Supervisor

TR 5/1/2023

RE: **Tower Hill Headquarters Site Plans**

Public Services has reviewed the subject project (Apr 14, 2023 Documents) and offer the following comments. Review was specific to the Public Services Utilities.

.

NO.	COMMENTS
1.	**Comment on Feb 28, 2023 Submittal** **Sheet C0.00** Please note that the site is in the City of Alachua electrical service area. Thus please change the third item of General Note 5 to: "ELECTRIC SERVICE WILL BE PROVIDED BY CITY OF ALACHUA" Please note that the stormwater system will be maintained by the property owner. Thus, please add the following to General Note 6, Drainage: THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR OPERATION AND MAINTENANCE OF ALL COMPONENTS OF THE STORMWATER SYSTEM NOT IN THE RIGHT-OF-WAY. THE CITY OF ALACHUA WILL BE RESPONSIBLE FOR OPERATION AND MAINTENANCE OF THE STORMWATER SYSTEM WITHIN THE RIGHT-OF-WAY. The above text assumes the roads are public. If roads are private, the above text will need to

NO.	COMMENTS
	be modified. Please **Revise and Resubmit** this sheet. **Comment on Apr 17, 2023 Submittal** **Approved**
2.	**Comment on Feb 28, 2023 Submittal** **Sheet C0.10, Paving Grading and Drainage General Notes** On a recent project, stormwater manhole bottoms were not grouted, even though FDOT Index 425-001 was called out. Thus, for emphasis, please add the following note: "GROUT BOTTOM OF ALL STORMWATER DRAINAGE STRUCTURE INVERTS AS PER FDOT INDEX 425-001." Please **Revise and Resubmit** this sheet. **Comment on Apr 17, 2023 Submittal** **Approved**
3	**Comment on Feb 28, 2023 Submittal** **Sheet C0.10, Water & Wastewater General Notes (WWWGN)** Please add the following to the end of WWW-GN 1: " WATER AND WASTEWATER SYSTEM SHALL BE CONSTRUCTED IN ACCORDANCE WITH "CITY OF ALACHUA, PUBLIC SERVICES, DESIGN AND CONSTRUCTION MANUAL, LATEST EDITION" ". Please add the following General Notes: "DURING CONSTRUCTION, FOR EACH WATER METER AND EACH CLEANOUT, PROVIDE A TEMPORARY BARRIER TO PROTECT AGAINST DAMAGE. BARRIER SHALL EITHER CONFORM TO COA DETAIL 324 OR COA APPROVED EQUAL." " USE RIEBER GASKETS TO CONNECT ALL GRAVITY WASTEWATER MAINS AND ALL LATERALS". " PROVIDE TRACER SYSTEM WIRE FOR WATER AND WASTEWATER PIPING AS SHOWN ON THE DETAILS AND AS PER THE COA DCM." " ALL WATER AND WASTEWATER DESIGN DETAILS ARE TYPICAL AND MUST BE USED EVEN IF THE DESIGN DETAIL IS NOT CALLED OUT ON A SPECIFIC SHEET. ALL ASSOCIATED WORK SHALL BE IN ACCORDANCE WITH THE DESIGN DETAILS WHETHER THE DETAILS ARE SPECIFICALLY REFERENCED OR NOT." "WATER METER APPURTENANCES SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. THE WATER METER ITSELF SHALL BE FURNISHED AND INSTALLED BY THE CITY."

NO.	COMMENTS
	"WET TAP(S) SHALL BE DONE BY A SUB-CONTRACTOR PRE-APPROVED BY THE CITY OF ALACHUA.". "ALL POTABLE WATER PIPING SHALL BE NSF-61 RATED". Note to Designer: GN14 specifies the WW laterals, but not the wastewater mains. Thus please add note similar to: "ALL GRAVITY WASTEWATER MAINS SHALL BE 8" PVC SDR 26." Please **Revise and Resubmit** this sheet. **Comment on Apr 17, 2023 Submittal** **Approved**
4	**Comment on Feb 28, 2023 Submittal** **Sheet C0.10, Water & Wastewater General Notes (WWWGN) (Continued) & Various Applicable Sheets** On the various utility sheets, the water main piping materials do not appear to be specified. What is the design intent? Is the design intent for all water mains to be CLDI? If so, please call this out. Is the design intent for water mains to a combination of CLDI & PVC? If so, add notes or call out similar to: "WATER MAIN PIPING UNDER ROADS AND PAVEMENT SHALL BE CLDI. WATER MAIN PIPING NOT UNDER ROADS AND PAVEMENTS SHALL BE AWWA C900 DR-18 PVC." Note to Designer: If water main piping is a combination of DI & PVC, please call out and show the PVC-DI transitions on each applicable sheet. Please **Revise and Resubmit** this sheet. **Comment on Apr 17, 2023 Submittal** **Approved**
5.	**Comment on Feb 28, 2023 Submittal** **Sheet C0.11** **Abbreviations:** Please add "COA City of Alachua" Please review line legends; specifically, Right-of-Way, which is shown as dash-blank-dash-dot-dash. Should it be just dash-dot-dash-dot-dash? This appears to be how the ROW legend is shown on the sheets. (But this may in conflict with the line legend for wetlands setback. Also, the easement legend is shown as dash-bland-dash. Yet on a least some of the sheets, the easement (PUE) line is shown the same as the ROW

NO.	COMMENTS
	line; namely, dash-dot-dash-dot. Please clarify and make consistent the line legends shown on this sheet with the rest of the job. Please **Revise and Resubmit** this sheet. **Comment on Apr 17, 2023 Submittal** **Sheet C0.11** **Site Information** Is the Right of Way legend line missing a dot? Compare against C4.00. Please evaluate. **Conditional Approval** Please address the above comments. Rather than submitting a complete hard copy set, the design engineer has the option to instead forward to Public Services either by email the revised pdf of this sheet or a link of the pdf construction set. (Public Services contact is Tom Ridgik, th_ridgik@cityofalachua. org). Public Services would then review this sheet, presumably approve it and so notify the Planning Department.)
6.	**Comment on Feb 28, 2023 Submittal** **Sheet C0.40** What is the purpose of the Ag Pond? Please confirm the Ag Pond overflows to the SMF Pond. Please **submit** response. **Comment on Apr 17, 2023 Submittal** **Approved**
7.	**Comment on Feb 28, 2023 Submittal** **Sheet C2.01** **Roadway Sanitary Structure Table** Please change structure type from "FDOT Index, etc. to " "SANITARY SEWER MANHOLE PER CITY OF ALACHUA STANDARD DETAILS 212 & 215". Please **Revise and Resubmit** this sheet. **Comment on Apr 17, 2023 Submittal** **Approved**
8.	**Comment on Feb 28, 2023 Submittal** **Sheet C2.22** The Stormwater Management Facility (SMF) 1 shows 3 feet of undercut, but SMF 2 does

NO.	COMMENTS
	not show this undercut. Please explain why. Please **submit** response. **Comment on Apr 17, 2023 Submittal** **Approved**
9	**Comment on Feb 28, 2023 Submittal** **Sheets C2.31, C2.32, C2.33** Please add the following details. See Bryan G. 216 - Gravity Pipe thru Standard Manhole 324 – Temporary Protective Fence 148 - Potable Water 4-inch & Larger Water Meter & BFP 139 – Fire Line 4-inch and larger double check valve, etc. 318 – Access Point for Transmission Main 266 – Relocating Water Pipe to Below Existing Gravity Pipe 264- Clean-Out cover for paved Please **Revise and Resubmit** these sheets. **Comment on Apr 17, 2023 Submittal** **Approved**
10	**Comment on Feb 28, 2023 Submittal** **Sheet C3.10** Please move the fire line DDC backflow preventer and the 4-inch water meter/RPZ backflow preventer to as close to the road as possible. This will reduce the maintenance responsibility of COA. Please call out all required PUEs. Call-out materials of the water mains. Assuming the DDC backflow preventer and water meter are moved, COA takes no exception the water main piping under the paved parking lot as being PVC. Call out COA End of Maintenance for the fire and water main lines. Please show match lines at lease on the left and top of page. Please correct the water main abbreviation typo ("PPWW"). Call out size and materials of water main. If design intent is for bulk of water main to be PVC, show that the water mains under the roads are CLDI. Show and call-out the PVC/DI transitions. Please review that all water fittings are called out.

NO.	COMMENTS
	Add a 4th isolation valve at the water main cross, lower left. Please call out the horizontal min width between the gas line and water main. Cross-section suggest that this min width is 6 feet. Please review that PUEs have been shown for all COA-provided water, wastewater and electrical utilities. If possible, provide a 20-foot wide PUE for gravity WW lines not in the road easement. Or is the intent that wastewater is to be private, and thus no PUEs are needed? Assuming WW service will be provided by COA, please call out the COA End of Maintenance at the cleanout. Sheet IR-12 shows the irrigation meter and BFP. Please show these devices on sheet C3.10. Show the connection to the water main, the 2-inch gate valve , the applicable detail, COA end of maintenance, etc. If potable and irrigation water meters will be connected to a pressurized water main, call out text similar to "WET TAP SHALL BE DONE BY A CONTRACTOR PRE-APPROVED BY COA". Please **Revise and Resubmit** this sheet. **Comment on Apr 17, 2023 Submittal** Engineer's response concerning the location of the fire water and potable water assemblies is duly noted. Nevertheless, locate these assemblies near the road within the PUE. This will eliminate COAs maintenance and repair costs to the pipe and pavement repair in the event of a line leak. Additionally, this addresses potential long-lead times of procuring DI pipe. It is standard practice for COA to locate the fire water & potable water assemblies just as the water piping crosses the property line. **Conditional Approval** Please address the above comments. Rather than submitting a complete hard copy set, the design engineer has the option to instead forward to Public Services either by email the revised pdf of this sheet or a link of the pdf construction set. (Public Services contact is Tom Ridgik, th_ridgik@cityofalachua. org). Public Services would then review this sheet, presumably approve it and so notify the Planning Department.)

NO.	COMMENTS
11	**Comment on Feb 28, 2023 Submittal** **Sheet C3.20** Alternatively, the designer can show the PUEs on this sheet. Please **Revise and Resubmit** this sheet. **Comment on Apr 17, 2023 Submittal** **Approved**
12	**Comment on Feb 28, 2023 Submittal** **Sheet C3.21** Alternatively, the designer can show the PUEs & COA End of Maintenance on this sheet. Riser on right part of profile: The shows the plumbing connection to be in the vertical riser. Please show the connection at the riser bottom as per COA Standards. Please **Revise and Resubmit** this sheet. **Comment on Apr 17, 2023 Submittal** **Approved**
13	**Comment on Feb 28, 2023 Submittal** **Sheet C4.00** Please add "MUP" to Legends. Please **Revise and Resubmit** this sheet. **Comment on Apr 17, 2023 Submittal** **Approved**
14	**Comment on Feb 28, 2023 Submittal** **Sheets C4.11 & C4.14** Some comments apply to either C4.11 or C4.14, some apply to both. Please call out the min distance between the water mains and gas lines. Cross-section sheets suggest that this min distance is 6 feet. See previous comments re: water main materials. Please call out all water main fittings, including the material (CLDI). Please be consistent in identifiers for sanitary sewer manholes. For example, change from "211" to "M-211", typical. Assuming that the crosswalks must be ADA compliant, please call this out & cross reference COA detail 403, which requires pavers. Review that all blow-offs are called out as well as their size.

NO.	COMMENTS
	In the roundabout, please add a fourth isolation valve in the water main cross. Please **Revise and Resubmit** these sheets. **Comment on Apr 17, 2023 Submittal** **Sheet C4.11** For WW manholes, please add the designator so that IDs are: M-206, M-207, M-208, M-209, M-210, M-211, M-212, etc. Change ADA compliant detail # from "405A" to "403". **Conditional Approval** Please address the above comments. Rather than submitting a complete hard copy set, the design engineer has the option to instead forward to Public Services either by email the revised pdf of this sheet or a link of the pdf construction set. (Public Services contact is Tom Ridgik, th_ridgik@cityofalachua. org). Public Services would then review this sheet, presumably approve it and so notify the Planning Department.)
15.	**Comment on Feb 28, 2023 Submittal** **Sheets C4.12 & C4.14 (actually C4.15)** Please address comments similar to those for sheets C4.11 & C4.14. The most downstream MH in the middle of the sheet does not appear to connect to anything. Please clarify & complete the design. At the point of connection to the existing water main, please show & callout a new isolation valve. Call out text similar to "HOT-TAP SHALL BE DONE BY A CONTRACTOR PRE-APPROVED BY COA". Please **Revise and Resubmit** these sheets. **Comment on Apr 17, 2023 Submittal** **Sheet C4.12** For WW manholes, please add the designator so that IDs are: M-213, M-214, M-215, etc. Change ADA compliant detail # from "405A" to "403". **Conditional Approval** Please address the above comments. Rather than submitting a complete hard copy set, the design engineer has the option to instead forward to Public Services either by email the revised pdf of this sheet or a link of the pdf construction set. (Public Services contact is Tom Ridgik, th_ridgik@cityofalachua. org). Public Services would then review this sheet, presumably approve it and so notify the Planning Department.)
16	**Comment on Feb 28, 2023 Submittal**

NO.	COMMENTS
	Sheet C4.13 Assuming that the crosswalks must be ADA compliant, please call this out & cross reference COA detail 403, which requires pavers. Note that the "Proposed 100-foot ROW " text points to a line, which is defined as a property line on C0.11. Please coordinate. Should this be either a ROW or Easement line? Please **Revise and Resubmit** this sheet. **Comment on Apr 17, 2023 Submittal** Change ADA compliant detail # from "405A" to "403". **Conditional Approval** Please address the above comments. Rather than submitting a complete hard copy set, the design engineer has the option to instead forward to Public Services either by email the revised pdf of this sheet or a link of the pdf construction set. (Public Services contact is Tom Ridgik, th_ridgik@cityofalachua. org). Public Services would then review this sheet, presumably approve it and so notify the Planning Department.)
17	**Comment on Feb 28, 2023 Submittal** **Sheet LS-4 & various applicable sheets** Please add a general note with text similar to: "PLANT TREES SO THEIR TRUNKS ARE A MINIMUM OF 10 FEET FROM ALL WATER AND WASTEWATER LINES" This is a typical comment for applicable sheets. Please **Revise and Resubmit** this & other applicable sheets. **Comment on Apr 17, 2023 Submittal** **Approved**
18	**Comment on Feb 28, 2023 Submittal** **Sheet LS-6** One or possibly two LIM trees (middle of sheet) are within 10 feet of a WW main. Please either remove or relocate. Please **Revise and Resubmit** this & other applicable sheets. **Comment on Apr 17, 2023 Submittal** **Approved**
19	**Comment on Feb 28, 2023 Submittal** **Sheet LS-13** At least one QVC tree (upper right) is within 10 feet of PP-WW (actually P-W) line. Please either remove or relocate.

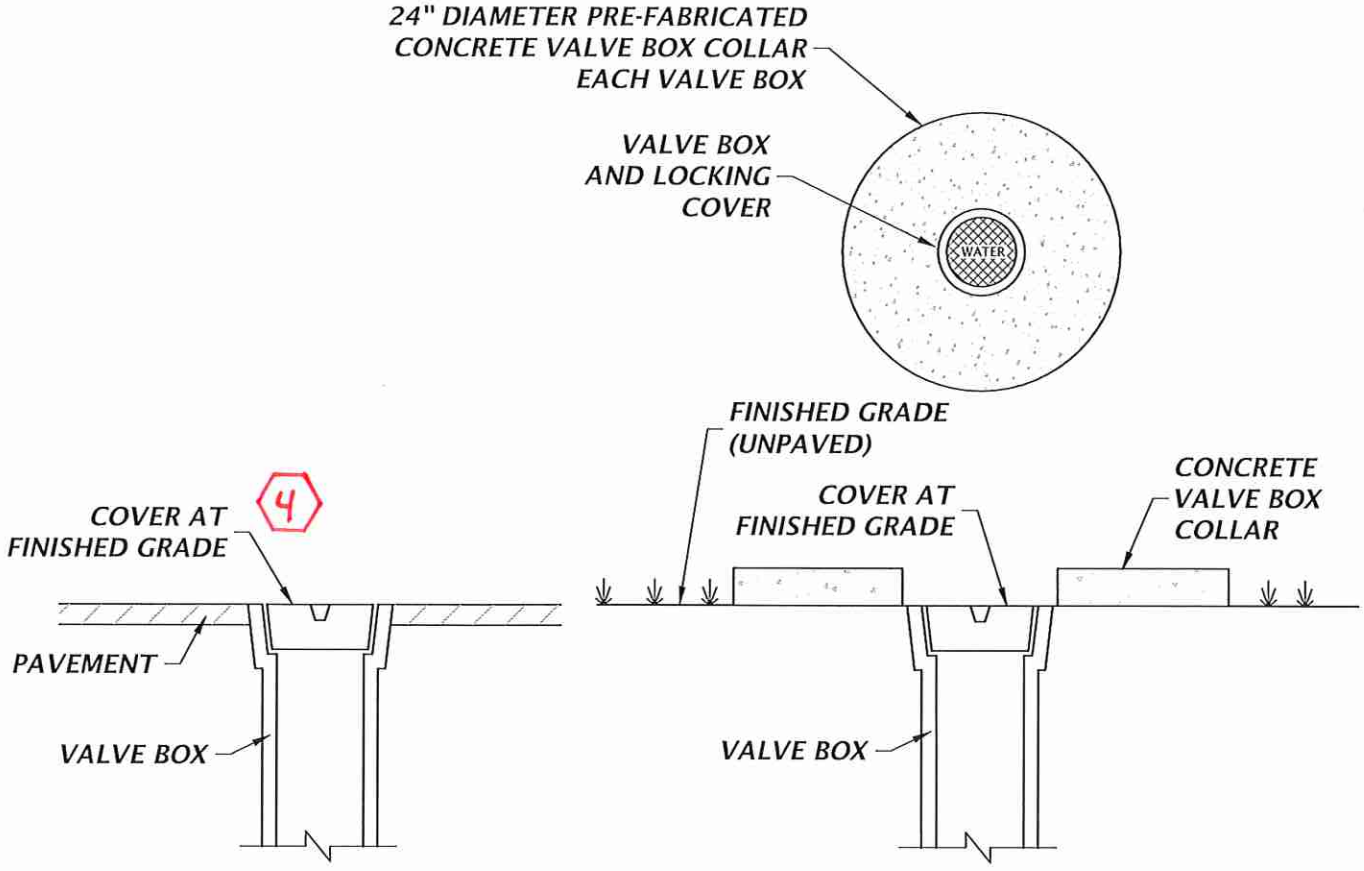
NO.	COMMENTS
	Please **Revise and Resubmit** this & other applicable sheets. **Comment on Apr 17, 2023 Submittal** **Approved**
20	**Comment on Feb 28, 2023 Submittal** **Sheet IR-12** This sheet shows the irrigation water meter and its BFP. Coordinate so that these are shown on the applicable utility sheet. Please **submit** response. **Comment on Apr 17, 2023 Submittal** **Approved**
21	**Comment on Feb 28, 2023 Submittal** **Sheet E1** Please increase font size. Show the electrical design from the road to the bldg, but see next comment. Remove "DUKE SERVICE TERRITORY" text near road. This is in the COA service area. Please **Revise and Resubmit** this sheet. **Comment on Apr 17, 2023 Submittal** **Approved**
22	**Comment on Feb 28, 2023 Submittal** **Sheet E2** Show the electrical design from the road to the bldg. Show the transformer, which on C3.10 is shown near the bldg. Is the design intent for the transformer to be located near the road? If so, only limited electrical design from the road to the bldg may be required. But please note that sheet C3.10 shows the transformer next to the bldg. Please coordinate. In the roundabout, a conduit crosses a P-W line. Please evaluate to ensure there is no obstruction. Detail 587 may address this. Remove text "DUKE SERVICE TERRITORY". Please **submit** response & **Revise and Resubmit** this sheet. **Comment on Apr 17, 2023 Submittal** **Approved**
23	**Comment on Feb 28, 2023 Submittal** **Sheet E3** Remove text "DUKE SERVICE TERRITORY", left side of sheet.

NO.	COMMENTS
	Please **Revise and Resubmit** this sheet. **Comment on Apr 17, 2023 Submittal** **Approved**
24	**Comment on Feb 28, 2023 Submittal** **Sheet E4** Under Paragraph 1 of Specifications, please add: " THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ELECTRICAL AS-BUILT INFORMATION , WHICH SHALL BE RECORDED AS CONSTRUCTION PROGRESSES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ELECTRICAL AS-BUILT DRAWINGS TO THE OWNER AND ENGINEER OF RECORD. BOTH PAPER AND AUTOCAD DRAWINGS SHALL BE PROVIDED." Please **Revise and Resubmit** this sheet. **Comment on Apr 17, 2023 Submittal** **Approved**
25	**Comment on Feb 28, 2023 Submittal** **Sheets E1-E3** Please show all required PUEs for the electrical components. Please **Revise and Resubmit** these sheets. **Comment on Apr 17, 2023 Submittal** **Approved**
26	**Comment on Feb 28, 2023 Submittal** **Sheet C2.31** Please modify Detail 127 as follows: • Call-out Keyed Note 4 that points to a COVER AT (PAVED) FINISHED GRADE • Add Keyed Note 4 as follows: "COVER SHALL BE TRAFFIC- RATED AS PER DETAIL 264". **Comment on Apr 17, 2023 Submittal** Please relocate Keyed Note 4 as per attached markup. **Conditional Approval** Please address the above comments. Rather than submitting a complete hard copy set, the design engineer has the option to instead forward to Public Services either by email the revised pdf of this sheet or a link of the pdf construction set. (Public Services contact is Tom Ridgik, th_ridgik@cityofalachua. org). Public Services would then review this sheet, presumably approve it and so notify the Planning Department.)

NO.	COMMENTS
END OF COMMENTS	

Please advise if you have any questions or require additional information.
cc: Justin Tabor – AICP Principal Planner
Adam Hall – AICP Principal Planner

① ② ③



PAVED AREA

UNPAVED AREA

KEYED NOTE(S):

④ COVER SHALL BE TRAFFIC-RATED AS PER DETAIL 264

① VALVE BOX COLLAR FEATURES:
- 24" DIAMETER, 11" INNER OPENING
- 4" THICK
- TWO RINGS OF #3 REBAR
- 4000 PSI TEST CONCRETE

② SUPPLIER AND PRODUCT:
- MASONRY SUPPLY, INC., SELMA, NC OR EQUAL
- ITEM: 24" CONCRETE VALVE BOX COLLAR OR EQUAL
- PART: MSVB-24 OR EQUAL

③ PAINT VALVE BOX COVER AND COLLAR AS PER 307

VALVE BOX COVER

NTS

City of ALACHUA public services

April 14, 2023

Justin Tabor, AICP
City of Alachua Planning & Community Development
15100 NW 142 Terrace
Alachua, FL 32615

RE: Tower Hill New HQ

Dear Justin:

Please find attached the following items to address your comments from March 23, 2023:

- Revised plans
- Traffic Impact Analysis
- Letter from Environmental Resource Solutions
- Drainage Exhibit

PAT Comments

Miscellaneous

a. Environmental Assessment must address the provisions of Objective 1.10 of the Comprehensive Plan Conservation & Open Space Element and Section 6.9.5 of the LDRs. Environmental Assessment will be sent to outside consultant for review once this comment is addressed.
   - **Please refer to the letter from Environmental Resource Solutions, included with this submittal.**

b. Traffic Impact Analysis will be sent to outside consultant for review. Traffic Impact Analysis will be sent once the configuration of the US 441/NW 167th Boulevard has been agreed upon with FDOT and final design has been considered by the revised Traffic Impact Analysis.
   - **See attached Traffic Impact Analysis which is in coordination with FDOT.**

c. Confirm if streets and right-of-ways are proposed to be public or private. If the streets shall be private, easements shall be required for public access and for public utilities.
   - **The proposed roadways will be private and covered by a public access easement and a public utilities easement will cover the public access easement and extend beyond the public access easement.**

Article 3, Zone Districts

a. Per Section 3.7.2(C)(5)(c)(ii), areas for outdoor storage, trash collection, and loading shall be incorporated into the primary building design (e.g., integrally connected to the primary building). Construction materials for such areas shall be of comparable quality and appearance as the primary building.
   - **See revised trash enclosure on C1.00, C1.11, & Sketch 1(attached).**

Article 4, Use Regulations

a. A stormwater management facility is proposed in a portion of the property zoned Agricultural (A). Per Section 4.3.2(I)(4), a Special Exception Permit must be granted to permit stormwater facilities on properties with a less intense zoning district, subject to requirements as specified therein.
   - **The proposed SMF-2 will not serve the proposed development, SMF-1 will serve the proposed building and right-of-ways. See attached exhibit of SMF-2/Ag Pond watershed.**

Article 6, Development Standards

a. Section 6.1, Parking and Off-Street Loading Standards
   i. Per Section 6.1.5(C)(3),two (2) off-street loading spaces are required. Identify the location of off-street loading space on the plans and confirm the off-street loading spaces conform to the requirements of Section 6.1.7(B).
   - **Two off-street loading spaces have been provided, see Sheet C1.00.**

   ii. Per Section 6.1.0(A)(1), pedestrian crosswalks at least ten feet in width must be provided in parking lots with 100 or more spaces. Crosswalks must either be raised above the adjacent pavement, striped, or otherwise designated through the use of alternative materials and must be located between all primary building entrances and the parking areas serving those entrances. Revise accordingly.
   - **Pedestrian crosswalks have been widened to ten feet. See Sheet C1.00.**

b. Section 6.2, Landscape Standards
   i. Sheet C0.35: Per Section 6.2.2(C)(1) identify the common name of each existing regulated tree proposed for removal. This may be accomplished by providing a legend.
   - **Legend added to Sheet C0.35.**

   ii. The locations of each perimeter buffer are unclear. Further define the location (north/south/east/west) for clarification of buffer locations.
   - **A cardinal direction description will be added to each buffer area to clarify their location.**

   iii. Tree credits are being utilized for tree mitigation. Per Section 6.2.2(D)(4), tree credits may be used to fulfill the landscape requirements of Sections 6.2.2(D)(1) – (3) (site landscaping, parking lot landscaping, or perimeter buffers) but may not be utilized for tree mitigation (Section 6.2.1(D)(4)). Tree mitigation calculations utilize 479 tree credits to fulfill mitigation. Revise accordingly. Note – A full review of compliance with Sections 6.2.2(D)(1) – (3) has not been performed due to the significant revisions which may occur to address this comment.
   - **The tree mitigation calculations will be updated to show that the preservation credits are being applied to the site, parking, and buffer landscape requirements. The 75% reduction in those requirements will then be shown as mitigation trees as designated with an "M" label.**

   iv. Mitigation trees must be demarcated on the landscape plans. This is typically accomplished by marking each mitigation tree symbol with an "M" next to the mitigation trees.
   - **We will add a mitigation designation for all the trees being utilized for mitigation purposes.**

   v. The total replacement trees to be provided appears to be less than will be required, even when crediting 25% of the required landscaping to be counted toward required tree mitigation. Provide a

more detailed summary that includes the following information: total number of trees required to meet landscape requirements.

- **A table will be added to show the total landscape requirements in a summarized fashion.**

c. Section 6.3, Fencing Standards

i. Confirm if any fencing is proposed at the tops of retaining walls and if so the type of material to be used.

- **Fencing will be used on the nearest retaining wall north of the proposed building. See Sheet C1.00 and Sheet C1.11 for location. The material will be prefinished specular aluminum, see attached materials.**

d. Section 6.4, Exterior Lighting Standards

i. Provide the mounting height of all proposed pole mounted light fixtures. Verify mounting heights conform to Section 6.4.5.

- **Mounting height noted at 20'-0" above grade, complies with 45ft MH per > 250 parking spaces in accordance with Section 6.4.5.**

ii. Provide verification that all floodlights will conform to Section 6.4.7 which requires:

1. Floodlights or spotlights to be selected, located, aimed, and shielded so that direct illumination is focused exclusively on a portion of the building facade or other intended site feature and away from adjoining land or the right-of-way
    - **Acknowledged requirement to be the design intent and to be observed.**
2. On-site lighting may be used to accent architectural elements but shall not be used to illuminate entire portions of buildings.
    - **Acknowledged requirement to be the design intent and to be observed.**
3. Such lighting shall be installed in a fixture that is shielded so that no portion of the light bulb extends below the bottom edge of the shield, and the main beam from the light source is not visible from adjacent lands of the adjacent right-of-way.
    - **Acknowledged requirement to be the design intent and to be observed. Refer to lighting cut-sheets for additional information.**
4. Floodlights or other type of lighting attached to light poles that illuminate the site and/or buildings are prohibited.
    - **Acknowledged requirement to be the design intent and to be observed. Refer to lighting cut-sheets for additional information.**

iii. Provide cut sheets for all proposed lighting fixtures.

- **Refer to lighting cut-sheets for additional information.**

e. Section 6.8, Design Standards for Business Uses

i. Per Section 6.8.2(A)(2))(a)(i)(b), a minimum 15% glazing is required for the east elevation. Provide glazing calculations for this elevation.

- **84% glazing is provided on the east elevation. See Façade Massing Layout, A.6.2.**

ii. Provide further clarification of how the façade massing requirements provided in Section 6.8.2.(A)(2)(b) are met.

- **See Façade Massing Layout, A.6.2.**

Public Services / Fire Rescue / Engineering Review Comments

a. The applicant must address all comments provided by the Public Services Department in a memorandum dated March 23, 2023.
- **See Responses to Comments provided by Public Services.**

b. The applicant must address the comments provided by Chip Ware of Alachua County Fire Rescue in an email dated March 21, 2023.
- **See Responses to comments provided by Chip Ware of Alachua County Fire Resuce.**

c. The applicant must address the comments provided by Claudia Vega, P.E., of EDA Consultants, Inc. in a letter dated March 23, 2023.
- **See responses to Comments provided by Claudia Vega of EDA Consultants.**

Concurrency Impact Analysis

a. Table 1: Pass-by rates do not appear to be applicable to land use code 710.
- **The pass-by rates have been removed from the updated report.**

b. Figure 1: Verify the percentage of trip distribution to Segment 7.
- **Percentages of trip distribution were updated in concurrency report.**

Minor Comments

a. General Comment: Verify correct project acreage and building square footage are stated throughout all plan sheets.
- **Building square footage and project acreage have been updated.**

b. Sheet C0.00, General Note #1: Typographical error in the spelling of the word “building” in the description of project.
- **Typo updated, see Sheet C0.00.**

c. Sheet C0.00, General Note #3: One (1) bicycle parking space is required for every ten parking spaces. Revise bicycle parking calculations.
- **Bicycle parking calcs updated, see Sheet C0.00.**

<u>Public Services</u>

1. Sheet C0.00
   Please note that the site is in the City of Alachua electrical service area. Thus please change the third item of General Note 5 to:
   “ELECTRIC SERVICE WILL BE PROVIDED BY CITY OF ALACHUA.”
   - **Utility note updated, see Sheet C0.00, Note #5.**

   Please note that the stormwater system will be maintained by the property owner. Thus, please add the following to General Note 6, Drainage:
   THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR OPERATION AND MAINTENANCE OF ALL COMPONENTS OF THE STORMWATER SYSTEM NOT IN THE RIGHT-OF-WAY. THE CITY OF

ALACHUA WILL BE RESPONSIBLE FOR OPERATION AND MAINTENANCE OF THE STORMWATER SYSTEM WITHIN THE RIGHT-OF-WAY.
The above text assumes the roads are public. If roads are private, the above text will need to be modified.

- **Roads will be privately owned, note updated accordingly, see C0.00 Note #6.**

2. Sheet C0.10, Paving and Grading and Drainage General Notes
On a recent project, stormwater manhole bottoms were not grouted, even though FDOT Index 425-001 was called out. Thus, for emphasis, please add the following note:
"GROUT BOTTOMS OF ALL STORMWATER DRAINAGE STRUCTURE INVERTS AS PER FDOT INDEX 425-001."
Please Revise and Resubmit this sheet.
   - **Note added, see Sheet C0.10, 'Paving, Grading, and Drainage General Notes', note #22.**

3. Sheet C0.10, Water & Wastewater General Notes (WWWGN)
Please add the following to the end of WWW-GN 1:
"WATER AND WASTEWATER SYSTEM SHALL BE CONSTRUCTED IN ACCORDANCE WITH "CITY OF ALACHUA, PUBLIC SERVICES, DESIGN AND CONSTRUCTION MANUAL, LATEST EDITION."
   - **Water and Wastewater General Note #1 updated as requested, See Sheet C0.10.**

   Please add the following General Notes:
"DURING CONSTRUCTION, FOR EACH WATER METER AND EACH CLEANOUT, PROVIDE A TEMPORARY BARRIER TO PROTECT AGAINST DAMAGE. BARRIER SHALL EITHER CONFORM TO COA DETAIL 324 OR COA APPROVED EQUAL."
"USE RIEBER GASKETS TO CONNECT ALL GRAVITY WASTEWATER MAINS AND ALL LATERALS."
"PROVIDE TRACER SYSTEM WIRE FOR WATER AND WASTEWATER PIPING AS SHOWN ON THE DETAILS AND AS PER THE COA DCM."
"ALL WATER AND WASTEWATER DESIGN DETAILS ARE TYPICAL AND MUST BE USED EVEN IF THE DESIGN DETAIL IS NOT CALLED OUT ON A SPECIFIC SHEET. ALL ASSOCIATED WORK SHALL BE IN ACCORDANCE WITH THE DESIGN DETAILS WHETHER THE DETAILS ARE SPECIFICALLY REFERENCED OR NOT."
"WATER METER APPURTENANCES SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. THE WATER METER ITSELF SHALL BE FURNISHED AND INSTALLED BY THE CITY."
"WET TAPS SHALL BE DONE BY A SUB-CONTRACTOR PRE-APPROVED BY THE CITY OF ALACHUA."
"ALL POTABLE WATER PIPING SHALL BE NSF-61 RATED."
   - **Notes added to 'Water and Wastewater General Notes', see C0.10, Notes #16-22.**

   Note to Designer: GN14 specifies the WW laterals, but not the wastewater mains. Thus please add note similar to:
"ALL GRAVITY WASTEWATER MAINS SHALL BE 8" PVC SDR 26."
   - **Note added to 'Water and Wastewater General Notes', see C0.10, Notes #23.**

4. Sheet C0.10, Water & Wastewater General Notes (WWWGN) (Continued) & Various Applicable Sheets
On the various utility sheets, the water main piping materials do not appear to be specified.
What is the design intent?
Is the design intent for all water mains to be CLDI? If so, please call this out.
Is the design intent for water mains to a combination of CLDI & PVC? If so, add notes or call out similar to:
"WATER MAIN PIPING UNDER ROADS AND PAVEMENT SHALL BE CLDI. WATER MAIN PIPING NOT UNDER ROADS AND PAVEMENTS SHALL BE AWWA C900 DR-18 PVC."
Note to Designer: If water main piping is a combination of DI & PVC, please call out and show the PVC-DI transitions on each applicable sheet.
Please Revise and Resubmit this sheet.

- **Note added to 'Water and Wastewater General Notes', see C0.10, Notes #24.**

5. Sheet C0.11
   Abbreviations: Please add "COA City of Alachua"
   - **Abbreviation added, see Sheet C0.11.**

   Please review line legends; specifically, Right-of-Way, which is shown as dash-blank-dash-dot-dash.
   Should it just be dash-dot-dash-dot-dash? This appears to be how the ROW legend is shown on the sheets.
   (But this may in conflict with the line legend for wetlands setback.
   Also, the easement legend is shown as dash-bland-dash.
   Yet, on at least some of the sheets, the easement (PUE) line is shown the same as the ROW line; namely, dash-dot-dash-dot.
   Please clarify and make consistent the line legends shown on this sheet with the rest of the job.
   Please Revise and Resubmit this sheet.
   - **Road way will be private and covered by a public access and public utility easements. Easement linework updated to be consistent with legend. See Sheets C0.11 and all plan view sheets.**

6. Sheet C0.40
   What is the purpose of the Ag Pond? Please confirm the Ag Pond overflows to the SMF Pond.
   Please submit response.
   - **The Ag Pond/Pond#2 includes an emergency overflow to Pond #1, however the emergency overflow will only be used in storms exceeding the back-to-back 100-year 10-day storm events.**

7. Sheet C2.01
   Roadway Sanitary Structure Table
   Please change structure type from "FDOT Index, etc." to "SANITARY SEWER MANHOLE PER CITY OF ALACHUA STANDARD DETAILS 212 & 215."
   Please Revise and Resubmit this sheet.
   - **Structure types updated, see Sheet C2.01.**

8. Sheet C2.22
   The Stormwater Management Facility (SMF) 1 shows 3 feet of undercut, but SMF 2 does not show this undercut.
   Please explain why.
   Please submit response.
   - **SMF 2 has been designed to contain back-to-back 100-year 10-day storms, therefore it does not an undercut to recover.**

9. Sheets C2.31, C2.32, C2.33
   Please add the following details. See Bryan G.
   216 – Gravity Pipe thru Standard Manhole
   324 – Temporary Protective Fence
   148 – Potable Water 4-inch & Larger Water Meter & BFP
   139 – Fire Line 4-inch and larger double check valve, etc.
   318 – Access Point for Transmission Main
   266 – Relocating Water Pipe to Below Existing Gravity Pipe
   264 – Clean-Out cover for paved
   Please Revise and Resubmit these sheets.
   - **Details added, see Sheets C2.31-C2.34.**

10. Sheet C3.10

Please move the fire line DDC backflow preventer and the 4-inch water meter/RPZ backflow preventer to as close to the road as possible. This will reduce the maintenance responsibility of COA.

- **The backflow and meter package has been placed near the building at the back-of-house because moving them to the roadway will require the installation of separate domestic and fire lines across the site. Additionally, the backflow preventers will be out of sight at the back-of-house area as opposed to the more public facing roadside.**

Please call out all required PUEs.

- **PUEs called out and dimensioned, see Sheet C3.10 for site PUEs and C4.00, 4.11 & 4.12 for roadway PUEs.**

Call-out materials of the water mains. Assuming the DDC backflow preventer and water meter are moved, COA takes no exception the water main piping under the paved parking lot as being PVC.

- **Watermain under parking lot updated to be CLDIP due to meters & end of City of Alachua maintenance remaining by building.**

Call out COA End of Maintenance for the fire and water main lines.

- **COA End of Maintenance called out at meters and point of service valve for fire line. See Inset A-A on Sheet C3.10.**

Please show match lines at lease on the left and top of page.

- **Match line added, see Sheet C3.10.**

Please correct the water main abbreviation typo (“PPWW”).

- **Watermain updated to remove overlapping lines creating “PPWW”. See Sheet C3.10.**

Call out size and materials of water main.

- **Water main materials and sizes called out, see Sheet C3.10**

If design intent is for bulk of water main to be PVC, show that the water mains under the roads are CLDI. Show and call-out the PVC/DI transitions.

- **Water main is intended to be PVC with CLDIP segments under roads and driveways. Callouts have been added noting water main material and transition location at 5 ft from roads and driveways. See Sheet C3.10, C4.14 and C4.15.**

Please review that all water fittings are called out.

- **All fittings have been called out, see Sheet C3.10, C4.14 and C4.15.**

Add a 4th isolation valve at the water main cross, lower left.

- **Isolation valve added at cross, see Sheet C3.10.**

Please call out the horizontal min width between the gas line and water main. Cross-section suggest that this min width is 6 feet.

- **Minimum separation is 3 feet, see Sheet C3.10 and C4.00.**

Please review that PUEs have been shown for all COA-provided water, wastewater and electrical utilities. If possible, provide a 20-foot wide PUE for gravity WW lines not in the road easement.
Or is the intent that wastewater is to be private, and thus no PUEs are needed?

- **Wastewater will be public to the south round-about. End of City of Alachua maintenance noted at MH-#49, see Sheet C3.10. PUE added to MH#49.**

Assuming WW service will be provided by COA, please call out the COA End of Maintenance at the cleanout.

- **Wastewater will be public to the south round-about. End of City of Alachua maintenance noted at MH-#49, see Sheet C3.10.**

Sheet IR-12 shows the irrigation meter and BFP. Please show these devices on sheet C3.10.

- **Irrigation Meter added at the meter assembly, see Sheet C3.10. Irrigation meter location updated accordingly on irrigation sheets.**

Show the connection to the water main, the 2-inch gate valve, the applicable detail, COA end of maintenance, etc.

- **See C3.10 for irrigation meter, valves & layout.**

If potable and irrigation water meters will be connected to a pressurized water main, call out text similar to "WET TAP SHALL BE DONE BY A CONTRACTOR PRE-APPROVED BY COA."

- **Note added to C0.10, Water and Wastewater General Notes, Note # 21.**

11. Sheet C3.20
    Alternatively, the designer can show the PUEs on this sheet.
    Please Revise and Resubmit this sheet.
    - **Sewer PUE shown on Sheet C3.10 & C3.20.**

12. Sheet C3.21
    Alternatively, the designer can show the PUEs & COA End of Maintenance on this sheet.
    - **Sewer PUE shown on Sheet C3.10 & C3.20.**

13. Sheet C4.00
    Please add "MUP" to Legends.
    Please Revise and Resubmit this sheet.
    - **"MUP" is an abbreviation for "Multi-Use Path", abbreviation added to Sheet C0.11.**

14. Sheets C4.11 & C4.14
    Some comments apply to either C4.11 or C4.14, some apply to both.
    Please call out the min distance between the water mains and gas lines. Cross-section sheets suggest that this min distance is 6 feet.
    - **Minimum distance between gas and water main is 3 feet, See Sheet C4.00.**

    See previous comments re: water main materials.
    - **Water main material called out as PVC under MUP, CLDI under roadways and driveways. See Sheet C4.14 & C4.15.**

    Please call out all water main fittings, including the material (CLDI).
    - **Fittings called out, see Sheet C4.14 & C4.15.**

    Please be consistent in identifiers for sanitary sewer manholes. For example, change from "200" to "M-211," typical.
    - **Sanitary Sewer Manhole identifiers updated on C3.10 to be consistent with C4.14 & C4.15.**

Assuming that the crosswalks must be ADA compliant, please call this out & cross reference COA detail 403, which requires pavers.

- **Note added to Sheets C4.11, C4.12 & C4.13 specifying crosswalks to be ADA compliant and per COA Detail 405A.**

Review that all blow-offs are called out as well as their size.

- **Blow off assembly and size are called out on Sheets C4.14 and C4.15.**

In the roundabout, please add a fourth isolation valve in the water main cross.

- **4th Isolation valve added, see Sheet C3.10 & C4.14.**

15. Sheets C4.12 & C4.14 (actually C4.15)
    Please address comments similar to those for sheets C4.11 & C4.14.
    - **Comments addressed, see Sheets C4.12 & C4.15. Please note, utilities are called out on Sheets C4.14 & C4.15, not on C4.11, C4.12 or C4.13.**

    The most downstream MH in the middle of the sheet does not appear to connect to anything. Please clarify & complete the design.
    - **Existing Main shown, see sheet C4.15.**

    At the point of connection to the existing water main, please show & callout a new isolation valve.
    - **Valve added, see Sheet C4.15.**

    Call out text similar to “HOT-TAP SHALL BE DONE BY A CONTRACTOR PRE-APPROVED BY COA.”
    - **Note added, see Sheet C4.15.**

16. Sheet C4.13
    Assuming that the crosswalks must be ADA compliant, please call this out & cross reference COA detail 403, which requires pavers.
    - **Note added to Sheets C4.11, C4.12 & C4.13 specifying crosswalks to be ADA compliant and per COA Detail 405A.**

    Note that the “Proposed 100-foot ROW” text points to a line, which is defined as a property line on C0.11. Please coordinate. Should this either be a ROW or Easement line?
    - **Callout updated to be ‘Proposed ingress/egress easement’, line types updated accordingly. See Sheet C4.13.**

17. Sheet LS-4 & various applicable sheets
    Please add a general note with text similar to:
    “PLANT TREES SO THEIR TRUNKS ARE A MINIMUM OF 10 FEET FROM ALL WATER AND WASTEWATER LINES”
    This is a typical comment for applicable sheets.
    - **A general note will be added to state that all trees are to be placed a minimum of 10’ from any water or wastewater line.**

18. Sheet LS-6
    One or possibly two LIM trees (middle of sheet) are within 10 feet of a WW main.
    Please either remove or relocate.
    Please Revise & Resubmit this & other applicable sheets.
    - **The LIM will be adjusted to maintain a minimum 10’ offset from the WW line.**

19. Sheet LS-13
    At least one QVC tree (upper right) is within 10 feet of PP-WW (actually P-W) line.
    Please either remove or relocate.
    Please Revise & Resubmit this & other applicable sheets.
    - **The QVC in this area will be removed.**

20. Sheet IR-12
    This sheet shows the irrigation water meter and its BFP. Coordinate so that these are shown on the applicable utility sheet.
    Please submit response.
    - **The irrigation point of connection and backflow preventer locations will be coordinated with the utility plans to be shown on both.**

21. Sheet E1
    Please increase font size.
    - **The font size will be increased.**

    Show the electrical design from the road to the bldg., but see next comment.
    - **Electrical design will be shown from the road to the building.**

    Remove “DUKE SERVICE TERRITORY” text near road. This is in the COA service area.
    - **Electrical plans will be updated as requested.**

22. Sheet E2
    Show the electrical design from the road to the bldg. Show the transformer, which on C3.10 is shown near the bldg.
    - **Electrical design will show the area between the road and building, and show the transformer location adjacent to the building.**

    Is the design intent for the transformer to be located near the road? If so, only limited electrical design from the road to the bldg may be required. But please note that sheet C3.10 shows the transformer next to the bldg. Please coordinate.
    - **The design intent is for the transformer to be located adjacent to the building. The electrical design has been coordinated and the electrical design to the building will be shown.**

    In the roundabout, a conduit crosses a P-W line. Please evaluate to ensure there is no obstruction. Detail 587 may address this.
    - **Detail 587 will be added to address this.**

    Remove text “DUKE SERVICE TERRITORY.”
    - **Electrical plans will be updated as requested.**

23. Sheet E3
    Remove text: “DUKE SERVICE TERRITORY”, left side of sheet.
    Please Revise and Resubmit this sheet.
    - **Electrical plans will be updated as requested.**

24. Sheet E4
    Under Paragraph 1 of Specifications, please add:

"THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ELECTRICAL AS-BUILT INFORMATION, WHICH SHALL BE RECORDED AS CONSTRUCTION PROGRESSES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ELECTRICAL AS-BUILT DRAWINGS TO THE OWNER AND ENGINEER OF RECORD. BOTH PAPER AND AUTOCAD DRAWINGS SHALL BE PROVIDED.
Please Revise and Resubmit this sheet.

- **The note will be added as requested.**

25. Sheets E1-E3
    Please show all required PUEs for the electrical components.
    Please Revise and Resubmit these sheets.
    - **All PUEs are shown on Sheet C3.10. PUEs will be updated on Sheets E-1-E-3.**

26. Sheet C2.31
    Please modify detail 127 as follows:
    Call-out Keyed Note 4 that points to a COVER AT (PAVED) FINISHED GRADE
    Add Keyed Note 4 as follows: "COVER SHALL BE TRAFFIC-RATED AS PER DETAIL 264".
    Please Revise and Resubmit this sheet.
    - **The detail has been updated as requested. See Sheet C2.31.**

<u>Fire Rescue</u>

1. Provide an Auto Turn exhibit that depicts ACFR travel though out the development utilizing the turning radii information above pertaining to the new ACFR apparatus. ACFR has chosen the third option under Crimp Angle "IFS; up to and including 385/65 R22.5 Tire
    - **An auto-turn exhibit is included with this submittal. Please refer to the attached.**

2. Provide a separate sheet depicting location of Fire Hydrant assemblies that comply with the NFPA 1 18.5.3 and 18.5.4 and location of free standing Fire Sprinkler Fire Department Connects (FDC) within 35 feet of an Fire Hydrant Assembly that complies the FBC 912.2
    - **The proposed fire hydrants and FDC are shown in exhibit AT-1, included with this submittal. Please refer to the attached.**

<u>EDA Comments</u>

Sheet C1.20
1. Please review the spot elevations at the crosswalk – the elevations are steeper than 12:1.
    - **All curb ramps less steep than 12:1. See Sheet C1.20.**

2. Review elevation 128.95 at the edge of the sidewalk in front of the handicap space (more appropriate 128.85).
    - **Spot elevation updated, please see Sheet C1.20.**

Sheet C1.21
1. Review the grades on both side of main entrance. It seems that ramps are proposed on sidewalk, but pavement elevations are not clear. Is slope steeper than 12:1?
    - **The proposed slopes are less than 12:1.**

Sheet C2.10:
1. Clarify grades in main entrance. Not clear the limits of flush sidewalk vs raised sidewalk. It seems some places the cross slope of the road exceeds 5%. Please confirm.

- **Cross slopes do not exceed 5%, see Sheets C2.10 & C2.12.**

Sheet C2.12

1. Suggest connecting storm cleanout directly to storm inlet S108 to prevent adverse flow.
   - **The storm cleanout has been redirected.**

2. Should the pipe between S114 to S109 be HDPE similar to the pipes used on the rest of the parking area?
   - **The pipes under the grass sections are to be RCP.**

3. Stormpipe between S110 to S106 is very deep (greater than 10 ft). Suggest connecting S-112to S120. This will allow to raise stormpipe running in front of the building.
   - **S-112 has been rerouted as suggested.**

Sheet C2.13

1. Inlet S114 should be deeper. Not enough cover over pipe. Pipe can be lower and reduce the slope.
   - **Top of S114 raised to 128.75.**

Sheet C4.11:

1. Signature from PE is missing from plans. Only seal is shown.
   - **Plans have been signed and sealed.**

2. Storm pipes should be shown in the plan and profiles.
   - **Please note that the storm pipes are shown in the utility plan and profiles (C4.14-C4.15).**

Sheet C4.14

1. There are two sheets with the same number C4.14.
   - **Plans have been revised so there is only one C4.14.**

2. Add spot elevations to the intersections.
   - **Spot elevations will be added to the intersections.**

We trust you will find this submittal to be complete for review and approval. If you have any questions, or need additional information, please contact me at (352) 331-1976 or via email at walkero@chw-inc.com

Sincerely,
CHW



Walker Owen, P.E.
Project Manager

City of Alachua

MIKE DAROZA
CITY MANAGER

PLANNING & COMMUNITY DEVELOPMENT
DIRECTOR KATHY WINBURN

March 23, 2023

Sent by electronic mail to walkero@chw-inc.com

Walker Owen, P.E.
Causseaux, Hewett, & Walpole, Inc.
11801 Research Drive
Alachua, FL 32615

RE: Planning Assistance Team (PAT) Summary: Tower Hill Headquarters Site Plan Application

Dear Mr. Owen:

On March 13, 2023, the City of Alachua received your revised application for a Site Plan submitted on behalf of Tomoka Hill Farms, Inc. for the Tower Hill Headquarters project. The application proposes the construction of a ±72,000 square foot office building and associated site improvements as well as the construction of an entrance road that is approximately 2,000 linear feet in length from US 441 to the building site on a ±37.07 acre portion of Tax Parcel Numbers 03053-000-000, 03054-001-000, 03054-001-002, and 03873-001-000.

The application has been reviewed by the City's Planning Assistance Team (PAT). Upon review of the application and materials, the following insufficiencies must be addressed. A meeting to review these comments is scheduled for Monday, March 27, 2023 at 1:30 PM.

Please address all insufficiencies in writing and provide an indication as to how they have been addressed by **5:00 PM** on **Thursday, March 30, 2023**. A total of four (4) copies of the application package and a digital copy of all materials in PDF format on a CD or sent by emailing a Cloud / FTP link must be provided by this date.

Please address the following:

1. *Miscellaneous*
   a. Environmental Assessment must address the provisions of Objective 1.10 of the Comprehensive Plan Conservation & Open Space Element and Section 6.9.5 of the LDRs. Environmental Assessment will be sent to outside consultant for review once this comment is addressed.
   b. Traffic Impact Analysis will be sent to outside consultant for review. Traffic Impact Analysis will be sent once the configuration of the US 441/NW 167th Boulevard has been agreed upon with FDOT and final design has been considered by the revised Traffic Impact Analysis.

c. Confirm if streets and right-of-ways are proposed to be public or private. If the streets shall be private, easements shall be required for public access and for public utilities.

2. *Article 3, Zone Districts*
   a. Per Section 3.7.2(C)(5)(c)(ii), areas for outdoor storage, trash collection, and loading shall be incorporated into the primary building design (e.g., integrally connected to the primary building). Construction materials for such areas shall be of comparable quality and appearance as the primary building.

3. *Article 4, Use Regulations*
   a. A stormwater management facility is proposed in a portion of the property zoned Agricultural (A). Per Section 4.3.2(I)(4), a Special Exception Permit must be granted to permit stormwater facilities on properties with a less intense zoning district, subject to requirements as specified therein.

4. *Article 6, Development Standards*
   a. Section 6.1, Parking and Off-Street Loading Standards
      i. Per Section 6.1.5(C)(3),two (2) off-street loading spaces are required. Identify the location of off-street loading space on the plans and confirm the off-street loading spaces conform to the requirements of Section 6.1.7(B).
      ii. Per Section 6.1.0(A)(1), pedestrian crosswalks at least ten feet in width must be provided in parking lots with 100 or more spaces. Crosswalks must either be raised above the adjacent pavement, striped, or otherwise designated through the use of alternative materials and must be located between all primary building entrances and the parking areas serving those entrances. Revise accordingly.
   b. Section 6.2, Landscape Standards
      i. Sheet C0.35: Per Section 6.2.2(C)(1) identify the common name of each existing regulated tree proposed for removal. This may be accomplished by providing a legend.
      ii. The locations of each perimeter buffer are unclear. Further define the location (north/south/east/west) for clarification of buffer locations.
      iii. Tree credits are being utilized for tree mitigation. Per Section 6.2.2(D)(4), tree credits may be used to fulfill the landscape requirements of Sections 6.2.2(D)(1) – (3) (site landscaping, parking lot landscaping, or perimeter buffers) but may not be utilized for tree mitigation (Section 6.2.1(D)(4)). Tree mitigation calculations utilize 479 tree credits to fulfill mitigation. Revise accordingly. Note – A full review of compliance with Sections 6.2.2(D)(1) – (3) has not been performed due to the significant revisions which may occur to address this comment.
      iv. Mitigation trees must be demarcated on the landscape plans. This is typically accomplished by marking each mitigation tree symbol with an "M" next to the mitigation trees.
      v. The total replacement trees to be provided appears to be less than will be required, even when crediting 25% of the required landscaping to be counted toward required tree mitigation. Provide a more detailed summary that includes the following information: total number of trees required to meet landscape requirements.

c. Section 6.3, Fencing Standards
   i. Confirm if any fencing is proposed at the tops of retaining walls and if so the type of material to be used.
d. Section 6.4, Exterior Lighting Standards
   i. Provide the mounting height of all proposed pole mounted light fixtures. Verify mounting heights conform to Section 6.4.5.
   ii. Provide verification that all floodlights will conform to Section 6.4.7 which requires:
      1. Floodlights or spotlights to be selected, located, aimed, and shielded so that direct illumination is focused exclusively on a portion of the building facade or other intended site feature and away from adjoining land or the right-of-way
      2. On-site lighting may be used to accent architectural elements but shall not be used to illuminate entire portions of buildings.
      3. Such lighting shall be installed in a fixture that is shielded so that no portion of the light bulb extends below the bottom edge of the shield, and the main beam from the light source is not visible from adjacent lands of the adjacent right-of-way.
      4. Floodlights or other type of lighting attached to light poles that illuminate the site and/or buildings are prohibited.
   iii. Provide cut sheets for all proposed lighting fixtures.
e. Section 6.8, Design Standards for Business Uses
   i. Per Section 6.8.2(A)(2))(a)(i)(b), a minimum 15% glazing is required for the east elevation. Provide glazing calculations for this elevation.
   ii. Provide further clarification of how the façade massing requirements provided in Section 6.8.2.(A)(2)(b) are met.

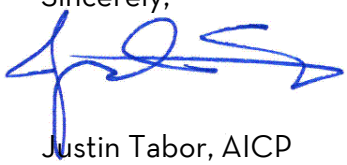
5. *Public Services / Fire Rescue / Engineering Review Comments*
   a. The applicant must address all comments provided by the Public Services Department in a memorandum dated March 23, 2023.
   b. The applicant must address the comments provided by Chip Ware of Alachua County Fire Rescue in an email dated March 21, 2023.
   c. The applicant must address the comments provided by Claudia Vega, P.E., of EDA Consultants, Inc. in a letter dated March 23, 2023.

6. *Concurrency Impact Analysis*
   a. Table 1: Pass-by rates do not appear to be applicable to land use code 710.
   b. Figure 1: Verify the percentage of trip distribution to Segment 7.

7. *Minor Comments*
   a. General Comment: Verify correct project acreage and building square footage are stated throughout all plan sheets.
   b. Sheet C0.00, General Note #1: Typographical error in the spelling of the word "building" in the description of project.
   c. Sheet C0.00, General Note #3: One (1) bicycle parking space is required for every ten parking spaces. Revise bicycle parking calculations.

If you have any questions regarding the information above, please contact me at 386-418-6100 x 1602 or via e-mail at jtabor@cityofalachua.com. We look forward to receiving your revised application.

Sincerely,



Justin Tabor, AICP
Principal Planner

Attachments

c: Mike DaRoza, City Manager *(by electronic mail)*
Kathy Winburn, Planning & Community Development Director *(by electronic mail)*
Adam Hall, AICP, Principal Planner *(by electronic mail)*
Project File

City of ALACHUA
the good life community

City of Alachua

MIKE DAROZA
CITY MANAGER

RODOLFO VALLADARES, P.E.
PUBLIC SERVICES DIRECTOR

INTER-OFFICE COMMUNICATION

DATE: **March 23, 2023**

TO: **Kathy Winburn, AICP**
Planning & Community Development Director

FROM: **Rodolfo Valladares, P.E.**
Public Services Director
Tom Ridgik, P.E.
Engineering Supervisor

TR 3/23/2023

RE: **Tower Hill Headquarters Site Plans**

Public Services has reviewed the subject project (Feb 28, 2023 Documents) and offer the following comments. Review was specific to the Public Services Utilities.

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NO.	COMMENTS
1.	**Comment on Feb 28, 2023 Submittal** **Sheet C0.00** Please note that the site is in the City of Alachua electrical service area. Thus please change the third item of General Note 5 to: "ELECTRIC SERVICE WILL BE PROVIDED BY CITY OF ALACHUA" Please note that the stormwater system will be maintained by the property owner. Thus, please add the following to General Note 6, Drainage: THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR OPERATION AND MAINTENANCE OF ALL COMPONENTS OF THE STORMWATER SYSTEM NOT IN THE RIGHT-OF-WAY. THE CITY OF ALACHUA WILL BE RESPONSIBLE FOR OPERATION AND MAINTENANCE OF THE STORMWATER SYSTEM WITHIN THE RIGHT-OF-WAY. The above text assumes the roads are public. If roads are private, the above text will need to

NO.	COMMENTS
	be modified. Please **Revise and Resubmit** this sheet.
2.	**Comment on Feb 28, 2023 Submittal** **Sheet C0.10, Paving Grading and Drainage General Notes** On a recent project, stormwater manhole bottoms were not grouted, even though FDOT Index 425-001 was called out. Thus, for emphasis, please add the following note: "GROUT BOTTOM OF ALL STORMWATER DRAINAGE STRUCTURE INVERTS AS PER FDOT INDEX 425-001." Please **Revise and Resubmit** this sheet.
3	**Comment on Feb 28, 2023 Submittal** **Sheet C0.10, Water & Wastewater General Notes (WWWGN)** Please add the following to the end of WWW-GN 1: " WATER AND WASTEWATER SYSTEM SHALL BE CONSTRUCTED IN ACCORDANCE WITH "CITY OF ALACHUA, PUBLIC SERVICES, DESIGN AND CONSTRUCTION MANUAL, LATEST EDITION" ". Please add the following General Notes: "DURING CONSTRUCTION, FOR EACH WATER METER AND EACH CLEANOUT, PROVIDE A TEMPORARY BARRIER TO PROTECT AGAINST DAMAGE. BARRIER SHALL EITHER CONFORM TO COA DETAIL 324 OR COA APPROVED EQUAL." " USE RIEBER GASKETS TO CONNECT ALL GRAVITY WASTEWATER MAINS AND ALL LATERALS". " PROVIDE TRACER SYSTEM WIRE FOR WATER AND WASTEWATER PIPING AS SHOWN ON THE DETAILS AND AS PER THE COA DCM." " ALL WATER AND WASTEWATER DESIGN DETAILS ARE TYPICAL AND MUST BE USED EVEN IF THE DESIGN DETAIL IS NOT CALLED OUT ON A SPECIFIC SHEET. ALL ASSOCIATED WORK SHALL BE IN ACCORDANCE WITH THE DESIGN DETAILS WHETHER THE DETAILS ARE SPECIFICALLY REFERENCED OR NOT." "WATER METER APPURTENANCES SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. THE WATER METER ITSELF SHALL BE FURNISHED AND INSTALLED BY THE CITY." "WET TAP(S) SHALL BE DONE BY A SUB-CONTRACTOR PRE-APPROVED BY THE CITY OF ALACHUA.".

NO.	COMMENTS
	"ALL POTABLE WATER PIPING SHALL BE NSF-61 RATED". Note to Designer: GN14 specifies the WW laterals, but not the wastewater mains. Thus please add note similar to: "ALL GRAVITY WASTEWATER MAINS SHALL BE 8" PVC SDR 26." Please **Revise and Resubmit** this sheet.
4	**Comment on Feb 28, 2023 Submittal** **Sheet C0.10, Water & Wastewater General Notes (WWWGN) (Continued) & Various Applicable Sheets** On the various utility sheets, the water main piping materials do not appear to be specified. What is the design intent? Is the design intent for all water mains to be CLDI? If so, please call this out. Is the design intent for water mains to a combination of CLDI & PVC? If so, add notes or call out similar to: "WATER MAIN PIPING UNDER ROADS AND PAVEMENT SHALL BE CLDI. WATER MAIN PIPING NOT UNDER ROADS AND PAVEMENTS SHALL BE AWWA C900 DR-18 PVC." Note to Designer: If water main piping is a combination of DI & PVC, please call out and show the PVC-DI transitions on each applicable sheet. Please **Revise and Resubmit** this sheet.
5.	**Comment on Feb 28, 2023 Submittal** **Sheet C0.11** **Abbreviations:** Please add "COA City of Alachua" Please review line legends; specifically, Right-of-Way, which is shown as dash-blank-dash-dot-dash. Should it be just dash-dot-dash-dot-dash? This appears to be how the ROW legend is shown on the sheets. (But this may in conflict with the line legend for wetlands setback. Also, the easement legend is shown as dash-bland-dash. Yet on a least some of the sheets, the easement (PUE) line is shown the same as the ROW line; namely, dash-dot-dash-dot. Please clarify and make consistent the line legends shown on this sheet with the rest of the job.

NO.	COMMENTS
	Please **Revise and Resubmit** this sheet.
6.	**Comment on Feb 28, 2023 Submittal** **Sheet C0.40** What is the purpose of the Ag Pond? Please confirm the Ag Pond overflows to the SMF Pond. Please **submit** response.
7.	**Comment on Feb 28, 2023 Submittal** **Sheet C2.01** **Roadway Sanitary Structure Table** Please change structure type from "FDOT Index, etc. to " "SANITARY SEWER MANHOLE PER CITY OF ALACHUA STANDARD DETAILS 212 & 215". Please **Revise and Resubmit** this sheet.
8.	**Comment on Feb 28, 2023 Submittal** **Sheet C2.22** The Stormwater Management Facility (SMF) 1 shows 3 feet of undercut, but SMF 2 does not show this undercut. Please explain why. Please **submit** response.
9	**Comment on Feb 28, 2023 Submittal** **Sheets C2.31, C2.32, C2.33** Please add the following details. See Bryan G. 216 - Gravity Pipe thru Standard Manhole 324 – Temporary Protective Fence 148 - Potable Water 4-inch & Larger Water Meter & BFP 139 – Fire Line 4-inch and larger double check valve, etc. 318 – Access Point for Transmission Main 266 – Relocating Water Pipe to Below Existing Gravity Pipe 264- Clean-Out cover for paved Please **Revise and Resubmit** these sheets.

NO.	COMMENTS
10	**Comment on Feb 28, 2023 Submittal** **Sheet C3.10** Please move the fire line DDC backflow preventer and the 4-inch water meter/RPZ backflow preventer to as close to the road as possible. This will reduce the maintenance responsibility of COA. Please call out all required PUEs. Call-out materials of the water mains. Assuming the DDC backflow preventer and water meter are moved, COA takes no exception the water main piping under the paved parking lot as being PVC. Call out COA End of Maintenance for the fire and water main lines. Please show match lines at lease on the left and top of page. Please correct the water main abbreviation typo ("PPWW"). Call out size and materials of water main. If design intent is for bulk of water main to be PVC, show that the water mains under the roads are CLDI. Show and call-out the PVC/DI transitions. Please review that all water fittings are called out. Add a 4th isolation valve at the water main cross, lower left. Please call out the horizontal min width between the gas line and water main. Cross-section suggest that this min width is 6 feet. Please review that PUEs have been shown for all COA-provided water, wastewater and electrical utilities. If possible, provide a 20-foot wide PUE for gravity WW lines not in the road easement. Or is the intent that wastewater is to be private, and thus no PUEs are needed? Assuming WW service will be provided by COA, please call out the COA End of Maintenance at the cleanout. Sheet IR-12 shows the irrigation meter and BFP. Please show these devices on sheet C3.10. Show the connection to the water main, the 2-inch gate valve , the applicable detail, COA end of maintenance, etc. If potable and irrigation water meters will be connected to a pressurized water main, call out text similar to "WET TAP SHALL BE DONE BY A CONTRACTOR PRE-APPROVED BY COA".

NO.	COMMENTS
	Please **Revise and Resubmit** this sheet.
11	**Comment on Feb 28, 2023 Submittal** **Sheet C3.20** Alternatively, the designer can show the PUEs on this sheet. Please **Revise and Resubmit** this sheet.
12	**Comment on Feb 28, 2023 Submittal** **Sheet C3.21** Alternatively, the designer can show the PUEs & COA End of Maintenance on this sheet. Riser on right part of profile: The shows the plumbing connection to be in the vertical riser. Please show the connection at the riser bottom as per COA Standards. Please **Revise and Resubmit** this sheet.
13	**Comment on Feb 28, 2023 Submittal** **Sheet C4.00** Please add "MUP" to Legends. Please **Revise and Resubmit** this sheet.
14	**Comment on Feb 28, 2023 Submittal** **Sheets C4.11 & C4.14** Some comments apply to either C4.11 or C4.14, some apply to both. Please call out the min distance between the water mains and gas lines. Cross-section sheets suggest that this min distance is 6 feet. See previous comments re: water main materials. Please call out all water main fittings, including the material (CLDI). Please be consistent in identifiers for sanitary sewer manholes. For example, change from "211" to "M-211", typical. Assuming that the crosswalks must be ADA compliant, please call this out & cross reference COA detail 403, which requires pavers. Review that all blow-offs are called out as well as their size. In the roundabout, please add a fourth isolation valve in the water main cross.

NO.	COMMENTS
	Please **Revise and Resubmit** these sheets.
15.	**Comment on Feb 28, 2023 Submittal** **Sheets C4.12 & C4.14 (actually C4.15)** Please address comments similar to those for sheets C4.11 & C4.14. The most downstream MH in the middle of the sheet does not appear to connect to anything. Please clarify & complete the design. At the point of connection to the existing water main, please show & callout a new isolation valve. Call out text similar to "HOT-TAP SHALL BE DONE BY A CONTRACTOR PRE-APPROVED BY COA". Please **Revise and Resubmit** these sheets.
16	**Comment on Feb 28, 2023 Submittal** **Sheet C4.13** Assuming that the crosswalks must be ADA compliant, please call this out & cross reference COA detail 403, which requires pavers. Note that the "Proposed 100-foot ROW " text points to a line, which is defined as a property line on C0.11. Please coordinate. Should this be either a ROW or Easement line? Please **Revise and Resubmit** this sheet.
17	**Comment on Feb 28, 2023 Submittal** **Sheet LS-4 & various applicable sheets** Please add a general note with text similar to: "PLANT TREES SO THEIR TRUNKS ARE A MINIMUM OF 10 FEET FROM ALL WATER AND WASTEWATER LINES" This is a typical comment for applicable sheets. Please **Revise and Resubmit** this & other applicable sheets.
18	**Comment on Feb 28, 2023 Submittal** **Sheet LS-6** One or possibly two LIM trees (middle of sheet) are within 10 feet of a WW main. Please either remove or relocate.

NO.	COMMENTS
	Please **Revise and Resubmit** this & other applicable sheets.
19	**Comment on Feb 28, 2023 Submittal** **Sheet LS-13** At least one QVC tree (upper right) is within 10 feet of PP-WW (actually P-W) line. Please either remove or relocate. Please **Revise and Resubmit** this & other applicable sheets.
20	**Comment on Feb 28, 2023 Submittal** **Sheet IR-12** This sheet shows the irrigation water meter and its BFP. Coordinate so that these are shown on the applicable utility sheet. Please **submit** response.
21	**Comment on Feb 28, 2023 Submittal** **Sheet E1** Please increase font size. Show the electrical design from the road to the bldg, but see next comment. Remove "DUKE SERVICE TERRITORY" text near road. This is in the COA service area. Please **Revise and Resubmit** this sheet.
22	**Comment on Feb 28, 2023 Submittal** **Sheet E2** Show the electrical design from the road to the bldg. Show the transformer, which on C3.10 is shown near the bldg. Is the design intent for the transformer to be located near the road? If so, only limited electrical design from the road to the bldg may be required. But please note that sheet C3.10 shows the transformer next to the bldg. Please coordinate. In the roundabout, a conduit crosses a P-W line. Please evaluate to ensure there is no obstruction. Detail 587 may address this. Remove text "DUKE SERVICE TERRITORY". Please **submit** response & **Revise and Resubmit** this sheet.

NO.	COMMENTS
23	**Comment on Feb 28, 2023 Submittal** **Sheet E3** Remove text "DUKE SERVICE TERRITORY", left side of sheet. Please **Revise and Resubmit** this sheet.
24	**Comment on Feb 28, 2023 Submittal** **Sheet E4** Under Paragraph 1 of Specifications, please add: " THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ELECTRICAL AS-BUILT INFORMATION , WHICH SHALL BE RECORDED AS CONSTRUCTION PROGRESSES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ELECTRICAL AS-BUILT DRAWINGS TO THE OWNER AND ENGINEER OF RECORD. BOTH PAPER AND AUTOCAD DRAWINGS SHALL BE PROVIDED." Please **Revise and Resubmit** this sheet.
25	**Comment on Feb 28, 2023 Submittal** **Sheets E1-E3** Please show all required PUEs for the electrical components. Please **Revise and Resubmit** these sheets.
26	**Comment on Feb 28, 2023 Submittal** **Sheet C2.31** Please modify Detail 127 as follows: • Call-out Keyed Note 4 that points to a COVER AT (PAVED) FINISHED GRADE • Add Keyed Note 4 as follows: "COVER SHALL BE TRAFFIC- RATED AS PER DETAIL 264". Please **Revise and Resubmit** this sheet.
30	

NO.	COMMENTS
	END OF COMMENTS

Please advise if you have any questions or require additional information.
cc: Justin Tabor – AICP Principal Planner
Adam Hall – AICP Principal Planner

RE: Request for Review - Tower Hill Headquarters Site Plan

Silver Ware <sware@alachuacounty.us>

Tue 3/21/2023 4:57 PM

To:Justin Tabor <ju_tabor@cityofalachua.org>;

1 attachments (84 KB)

Apperatus Crimp Angle.pdf;

Good afternoon

Plan Review notes

1 Provide an Auto Turn exhibit that depicts ACFR travel though out the development utilizing the turning radii information above pertaining to the new ACFR apparatus. ACFR has chosen the third option under Crimp Angle “IFS; up to and including 385/65 R22.5 Tire

2 Provide a separate sheet depicting location of Fire Hydrant assemblies that comply with the NFPA 1 18.5.3 and 18.5.4 and location of free standing Fire Sprinkler Fire Department Connects (FDC) within 35 feet of an Fire Hydrant Assembly that complies the FBC 912.2

Thank you

Chip

Silver Ware
Fire Prevention Officer Level 1
Fire Rescue
911 SE 5th ST • Gainesville • FL • 32601
352-384-3101 (office)

PLEASE NOTE: Florida has a very broad public records law (F.S.119).
All e-mails to and from County Officials and County Staff are kept as public records. Your e-mail communications, including your e-mail address, may be disclosed to the public and media at any time.

SAE Turning Radius Calculations for Quote No. 111179				
Wheelbase:		194"	Front Bumper Size:	12"
Body Width:		100"	Front Bumper Extension:	28"
Front Axle Kingpin Center:		68.5"	Front Wheel Type:	STEEL
Front Axle Track:		78.99"	Rear Wheel Type:	STEEL
Front Axle Tire Width:		12.5"	Tire Brand:	MICHELIN
Dimension Over Rear Tires:		96.374"		
Body Front Overhang:		100"		
Inside Cramp Angle	**S. A. E. Turning Radius**	**Tire Curb Clearance**	**Bumper Swing Clearance**	**Minimum Inside Radius**
35	33.5'	34'	38.8'	21.9'
36	32.7'	33.3'	38.2'	21.1'
37	32'	32.6'	37.6'	20.3'
38	31.4'	31.9'	37'	19.5'
39	30.8'	31.3'	36.4'	18.8'
40	30.2'	30.7'	35.9'	18.1'
41	29.6'	30.2'	35.4'	17.4'
42	29.1'	29.6'	35'	16.8'
43	28.6'	29.1'	34.5'	16.2'
44	28.1'	28.6'	34.1'	15.6'
45	27.6'	28.2'	33.7'	15'
46	27.2'	27.7'	33.4'	14.5'
47	26.8'	27.3'	33'	13.9'
48	26.4'	26.9'	32.6'	13.4'
49	26'	26.5'	32.3'	12.9'
50	25.6'	26.1'	32'	12.4'

Nominal Cramp Angles:	
Meritor FL941 & FL943 axles: up to and including 425/65R22.5 tires	45 degrees
Meritor FL941 & FL943 axles: 445/65R22.5 tires	38 degrees
Dana I220W axle: up to and including 445/65R22.5 tires	42 degrees
Reyco IFS: up to and including 385/65R22.5 tires	48 degrees
Reyco IFS: 425/65R22.5 tires	45 degrees
Reyco IFS: 445/65R22.5 tires without front intake	42 degrees
Meritor Front Drive Axle: up to and including 425/65R22.5 tires	37 degrees
Marmon Herrington Front Drive Axle: up to and including 425/65R22.5 tires	42 degrees

This Turning Radius report reflects how the quote was configured. Any succeeding changes may slightly alter the turning radius of the vehicle and the data in this report.

March 22, 2023

Justin Tabor, AICP
City of Alachua
15100 NW 142nd Terrace | PO Box 9
Alachua, Florida 32616

Ref: Tower Hill Headquarters Site Plan – Construction Plans Comments

Dear Mr. Tabor:

Our comments on the Construction Plans for Tower Hill Headquarters Site plan are summarized below.

Plans

Sheet C1.20

1. Please review the spot elevations at the crosswalk – the elevations are steeper than 12:1.
2. Review elevation 128.95 at the edge of the sidewalk in front of the handicap space (more appropriate 128.85).

Sheet C1.21

1. Review the grades on both side of main entrance. It seems that ramps are proposed on sidewalk, but pavement elevations are not clear. Is slope steeper than 12:1?

Sheet C2.10:

1. Clarify grades in main entrance. Not clear the limits of flush sidewalk vs raised sidewalk. It seems some places the cross slope of the road exceeds 5%. Please confirm.

Sheet C2.12

1. Suggest connecting storm cleanout directly to storm inlet S108 to prevent adverse flow.
2. Should the pipe between S114 to S109 be HDPE similar to the pipes used on the rest of the parking area?
3. Stormpipe between S110 to S106 is very deep (greater than 10 ft). Suggest connecting S-112 to S120. This will allow to raise stormpipe running in front of the building.

Sheet C2.13

1. Inlet S114 should be deeper. Not enough cover over pipe. Pipe can be lower and reduce the slope.

Sheet C4.11:

1. Signature from PE is missing from plans. Only seal is shown.
2. Storm pipes should be shown in the plan and profiles.

Sheet C4.14

1. There are two sheets with the same number C4.14.
2. Add spot elevations to the intersections.

Please do not hesitate to contact me if you have any questions/comments.

Sincerely,

Claudia S. Vega, P.E.
Director of Engineering
cvega@edafl.com
edafl.com

PROJECT ASSISTANCE TEAM SUMMARY

PROJECT NAME: Tower Hill Headquarters

APPLICATION TYPE: Site Plan

APPLICANT/AGENT: Walker Owen, P.E., Causseaux, Hewett, & Walpole, Inc.

PROPERTY OWNER: Tower Hill Farms, Inc.; Sarcav, Inc.; Charlene O Cavaceppi Trustee

PAT MEETING DATE: March 23, 2023

FLUM DESIGNATION: Agriculture; Commercial; Community Commercial

ZONING: Agricultural (A); Commercial Intensive (CI); Community Commercial (CC)

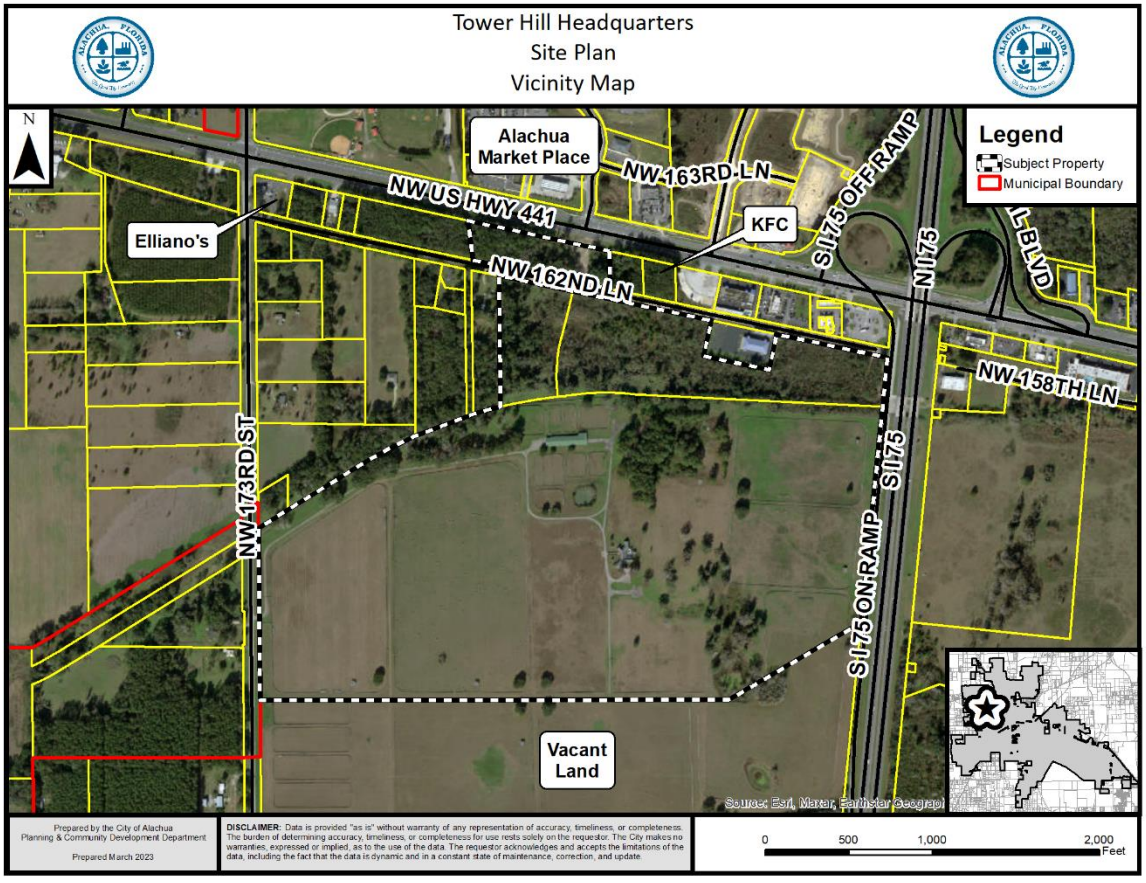
OVERLAY: Gateway Overlay District

ACREAGE: ±37.07 acres

PARCEL(S): 03053-000-000, 03054-001-000, 03054-001-002, and 03873-001-000

PROJECT SUMMARY: A Site Plan proposing the construction of a ±72,000 square foot office building and associated site improvements as well as the construction of an entrance road that is approximately 2,000 linear feet in length from US 441 to the building site

RESUBMISSION DUE DATE: All data, plans, and documentation addressing the insufficiencies identified below must be received by the Planning Department on or before **5:00 PM** on **Thursday, March 30, 2023**



Deficiencies to be Addressed

** Unless otherwise noted, references to code sections are to the City of Alachua Land Development Regulations. **

1. *Miscellaneous*
   a. Environmental Assessment must address the provisions of Objective 1.10 of the Comprehensive Plan Conservation & Open Space Element and Section 6.9.5 of the LDRs.
   b. Environmental Assessment will be sent to outside consultant for review.
   c. Traffic Impact Analysis will be sent to outside consultant for review. Traffic Impact Analysis will be sent once the configuration of the US 441/NW 167th Boulevard has been agreed upon with FDOT and final design has been considered by the revised Traffic Impact Analysis.
   d. Confirm if streets and right-of-ways are proposed to be public or private. If the streets shall be private, easements shall be required for public access and for public utilities.

2. *Article 3, Zone Districts*
   a. Per Section 3.7.2(C)(5)(c)(ii), areas for outdoor storage, trash collection, and loading shall be incorporated into the primary building design (e.g., integrally connected to the primary building). Construction materials for such areas shall be of comparable quality and appearance as the primary building.

3. *Article 4, Use Regulations*
   a. A stormwater management facility is proposed in a portion of the property zoned Agricultural (A). Per Section 4.3.2(I)(4), a Special Exception Permit must be granted to permit stormwater facilities on properties with a less intense zoning district, subject to requirements as specified therein.

4. *Article 6, Development Standards*
   a. Section 6.1, Parking and Off-Street Loading Standards
      i. Per Section 6.1.5(C)(3),two (2) off-street loading spaces are required. Identify the location of off-street loading space on the plans and confirm the off-street loading spaces conform to the requirements of Section 6.1.7(B).
      ii. Per Section 6.1.0(A)(1), pedestrian crosswalks at least ten feet in width must be provided in parking lots with 100 or more spaces. Crosswalks must either be raised above the adjacent pavement, striped, or otherwise designated through the use of alternative materials and must be located between all primary building entrances and the parking areas serving those entrances. Revise accordingly.
   b. Section 6.2, Landscape Standards
      i. Sheet C0.35: Per Section 6.2.2(C)(1) identify the common name of each exiting regulated tree proposed for removal. This may be accomplished by providing a legend.
      ii. The locations of each perimeter buffer are unclear. Further define the location (north/south/east/west) for clarification of buffer locations.
      iii. Tree credits are being utilized for tree mitigation. Per Section 6.2.2(D)(4), tree credits may be used to fulfill the landscape requirements of Sections 6.2.2(D)(1) – (3) (site landscaping, parking lot landscaping, or perimeter buffers) but may not be utilized for tree mitigation (Section 6.2.1(D)(4)). Tree mitigation calculations utilize 479 tree

credits to fulfill mitigation. Revise accordingly. Note – A full review of compliance with Sections 6.2.2(D)(1) – (3) has not been performed due to the significant revisions which may occur to address this comment.

iv. Mitigation trees must be demarcated on the landscape plans. This is typically accomplished by marking each mitigation tree symbol with an "M" next to the mitigation trees.

v. The total replacement trees to be provided appears to be less than will be required, even when crediting 25% of the required landscaping to be counted toward required tree mitigation. Provide a more detailed summary that includes the following information: total number of trees required to meet landscape requirements.

c. Section 6.3, Fencing Standards

i. Confirm if any fencing is proposed at the tops of retaining walls and if so the type of material to be used.

d. Section 6.4, Exterior Lighting Standards

i. Provide the mounting height of all proposed pole mounted light fixtures. Verify mounting heights conform to Section 6.4.5.

ii. Provide verification that all floodlights will conform to Section 6.4.7 which requires:

1. Floodlights or spotlights to be selected, located, aimed, and shielded so that direct illumination is focused exclusively on a portion of the building facade or other intended site feature and away from adjoining land or the right-of-way

2. On-site lighting may be used to accent architectural elements but shall not be used to illuminate entire portions of buildings.

3. Such lighting shall be installed in a fixture that is shielded so that no portion of the light bulb extends below the bottom edge of the shield, and the main beam from the light source is not visible from adjacent lands of the adjacent right-of-way.

4. Floodlights or other type of lighting attached to light poles that illuminate the site and/or buildings are prohibited.

iii. Provide cut sheets for all proposed lighting fixtures.

e. Section 6.8, Design Standards for Business Uses

i. Per Section 6.8.2(A)(2))(a)(i)(b), a minimum 15% glazing is required for the east elevation. Provide glazing calculations for this elevation.

ii. Provide further clarification of how the façade massing requirements provided in Section 6.8.2.(A)(2)(b) are met.

5. *Public Services / Fire Rescue / Engineering Review Comments*

a. The applicant must address all comments provided by the Public Services Department in a memorandum dated March 23, 2023.

b. The applicant must address the comments provided by Chip Ware of Alachua County Fire Rescue in an email dated March 21, 2023.

c. The applicant must address the comments provided by Claudia Vega, P.E., of EDA Consultants, Inc. in a letter dated March 23, 2023.

6. *Concurrency Impact Analysis*

a. Table 1: Pass-by rates do not appear to be applicable to land use code 710.

b. Figure 1: Verify the percentage of trip distribution to Segment 7.

7. *Minor Comments*
    a. General Comment: Verify correct project acreage and building square footage are stated throughout all plan sheets.
    b. Sheet C0.00, General Note #1: Typographical error in the spelling of the word "building" in the description of project.
    c. Sheet C0.00, General Note #3: One (1) bicycle parking space is required for every ten parking spaces. Revise bicycle parking calculations.

City of ALACHUA
the good life community

City of Alachua

MIKE DAROZA
CITY MANAGER

RODOLFO VALLADARES, P.E.
PUBLIC SERVICES DIRECTOR

INTER-OFFICE COMMUNICATION

DATE: **March 23, 2023**

TO: **Kathy Winburn, AICP**
Planning & Community Development Director

FROM: **Rodolfo Valladares, P.E.**
Public Services Director
Tom Ridgik, P.E.
Engineering Supervisor

TR 3/23/2023

RE: **Tower Hill Headquarters Site Plans**

Public Services has reviewed the subject project (Feb 28, 2023 Documents) and offer the following comments. Review was specific to the Public Services Utilities.

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NO.	COMMENTS
1.	**Comment on Feb 28, 2023 Submittal** **Sheet C0.00** Please note that the site is in the City of Alachua electrical service area. Thus please change the third item of General Note 5 to: "ELECTRIC SERVICE WILL BE PROVIDED BY CITY OF ALACHUA" Please note that the stormwater system will be maintained by the property owner. Thus, please add the following to General Note 6, Drainage: THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR OPERATION AND MAINTENANCE OF ALL COMPONENTS OF THE STORMWATER SYSTEM NOT IN THE RIGHT-OF-WAY. THE CITY OF ALACHUA WILL BE RESPONSIBLE FOR OPERATION AND MAINTENANCE OF THE STORMWATER SYSTEM WITHIN THE RIGHT-OF-WAY. The above text assumes the roads are public. If roads are private, the above text will need to

NO.	COMMENTS
	be modified. Please **Revise and Resubmit** this sheet.
2.	**Comment on Feb 28, 2023 Submittal** **Sheet C0.10, Paving Grading and Drainage General Notes** On a recent project, stormwater manhole bottoms were not grouted, even though FDOT Index 425-001 was called out. Thus, for emphasis, please add the following note: "GROUT BOTTOM OF ALL STORMWATER DRAINAGE STRUCTURE INVERTS AS PER FDOT INDEX 425-001." Please **Revise and Resubmit** this sheet.
3	**Comment on Feb 28, 2023 Submittal** **Sheet C0.10, Water & Wastewater General Notes (WWWGN)** Please add the following to the end of WWW-GN 1: " WATER AND WASTEWATER SYSTEM SHALL BE CONSTRUCTED IN ACCORDANCE WITH "CITY OF ALACHUA, PUBLIC SERVICES, DESIGN AND CONSTRUCTION MANUAL, LATEST EDITION" ". Please add the following General Notes: "DURING CONSTRUCTION, FOR EACH WATER METER AND EACH CLEANOUT, PROVIDE A TEMPORARY BARRIER TO PROTECT AGAINST DAMAGE. BARRIER SHALL EITHER CONFORM TO COA DETAIL 324 OR COA APPROVED EQUAL." " USE RIEBER GASKETS TO CONNECT ALL GRAVITY WASTEWATER MAINS AND ALL LATERALS". " PROVIDE TRACER SYSTEM WIRE FOR WATER AND WASTEWATER PIPING AS SHOWN ON THE DETAILS AND AS PER THE COA DCM." " ALL WATER AND WASTEWATER DESIGN DETAILS ARE TYPICAL AND MUST BE USED EVEN IF THE DESIGN DETAIL IS NOT CALLED OUT ON A SPECIFIC SHEET. ALL ASSOCIATED WORK SHALL BE IN ACCORDANCE WITH THE DESIGN DETAILS WHETHER THE DETAILS ARE SPECIFICALLY REFERENCED OR NOT." "WATER METER APPURTENANCES SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. THE WATER METER ITSELF SHALL BE FURNISHED AND INSTALLED BY THE CITY." "WET TAP(S) SHALL BE DONE BY A SUB-CONTRACTOR PRE-APPROVED BY THE CITY OF ALACHUA.".

NO.	COMMENTS
	"ALL POTABLE WATER PIPING SHALL BE NSF-61 RATED". Note to Designer: GN14 specifies the WW laterals, but not the wastewater mains. Thus please add note similar to: "ALL GRAVITY WASTEWATER MAINS SHALL BE 8" PVC SDR 26." Please **Revise and Resubmit** this sheet.
4	**Comment on Feb 28, 2023 Submittal** **Sheet C0.10, Water & Wastewater General Notes (WWWGN) (Continued) & Various Applicable Sheets** On the various utility sheets, the water main piping materials do not appear to be specified. What is the design intent? Is the design intent for all water mains to be CLDI? If so, please call this out. Is the design intent for water mains to a combination of CLDI & PVC? If so, add notes or call out similar to: "WATER MAIN PIPING UNDER ROADS AND PAVEMENT SHALL BE CLDI. WATER MAIN PIPING NOT UNDER ROADS AND PAVEMENTS SHALL BE AWWA C900 DR-18 PVC." Note to Designer: If water main piping is a combination of DI & PVC, please call out and show the PVC-DI transitions on each applicable sheet. Please **Revise and Resubmit** this sheet.
5.	**Comment on Feb 28, 2023 Submittal** **Sheet C0.11** **Abbreviations:** Please add "COA City of Alachua" Please review line legends; specifically, Right-of-Way, which is shown as dash-blank-dash-dot-dash. Should it be just dash-dot-dash-dot-dash? This appears to be how the ROW legend is shown on the sheets. (But this may in conflict with the line legend for wetlands setback. Also, the easement legend is shown as dash-bland-dash. Yet on a least some of the sheets, the easement (PUE) line is shown the same as the ROW line; namely, dash-dot-dash-dot. Please clarify and make consistent the line legends shown on this sheet with the rest of the job.

NO.	COMMENTS
	Please **Revise and Resubmit** this sheet.
6.	**Comment on Feb 28, 2023 Submittal** **Sheet C0.40** What is the purpose of the Ag Pond? Please confirm the Ag Pond overflows to the SMF Pond. Please **submit** response.
7.	**Comment on Feb 28, 2023 Submittal** **Sheet C2.01** **Roadway Sanitary Structure Table** Please change structure type from "FDOT Index, etc. to " "SANITARY SEWER MANHOLE PER CITY OF ALACHUA STANDARD DETAILS 212 & 215". Please **Revise and Resubmit** this sheet.
8.	**Comment on Feb 28, 2023 Submittal** **Sheet C2.22** The Stormwater Management Facility (SMF) 1 shows 3 feet of undercut, but SMF 2 does not show this undercut. Please explain why. Please **submit** response.
9	**Comment on Feb 28, 2023 Submittal** **Sheets C2.31, C2.32, C2.33** Please add the following details. See Bryan G. 216 - Gravity Pipe thru Standard Manhole 324 – Temporary Protective Fence 148 - Potable Water 4-inch & Larger Water Meter & BFP 139 – Fire Line 4-inch and larger double check valve, etc. 318 – Access Point for Transmission Main 266 – Relocating Water Pipe to Below Existing Gravity Pipe 264- Clean-Out cover for paved Please **Revise and Resubmit** these sheets.

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11	**Comment on Feb 28, 2023 Submittal** **Sheet C3.20** Alternatively, the designer can show the PUEs on this sheet. Please **Revise and Resubmit** this sheet.
12	**Comment on Feb 28, 2023 Submittal** **Sheet C3.21** Alternatively, the designer can show the PUEs & COA End of Maintenance on this sheet. Riser on right part of profile: The shows the plumbing connection to be in the vertical riser. Please show the connection at the riser bottom as per COA Standards. Please **Revise and Resubmit** this sheet.
13	**Comment on Feb 28, 2023 Submittal** **Sheet C4.00** Please add "MUP" to Legends. Please **Revise and Resubmit** this sheet.
14	**Comment on Feb 28, 2023 Submittal** **Sheets C4.11 & C4.14** Some comments apply to either C4.11 or C4.14, some apply to both. Please call out the min distance between the water mains and gas lines. Cross-section sheets suggest that this min distance is 6 feet. See previous comments re: water main materials. Please call out all water main fittings, including the material (CLDI). Please be consistent in identifiers for sanitary sewer manholes. For example, change from "211" to "M-211", typical. Assuming that the crosswalks must be ADA compliant, please call this out & cross reference COA detail 403, which requires pavers. Review that all blow-offs are called out as well as their size. In the roundabout, please add a fourth isolation valve in the water main cross.

NO.	COMMENTS
	Please **Revise and Resubmit** these sheets.
15.	**Comment on Feb 28, 2023 Submittal** **Sheets C4.12 & C4.14 (actually C4.15)** Please address comments similar to those for sheets C4.11 & C4.14. The most downstream MH in the middle of the sheet does not appear to connect to anything. Please clarify & complete the design. At the point of connection to the existing water main, please show & callout a new isolation valve. Call out text similar to "HOT-TAP SHALL BE DONE BY A CONTRACTOR PRE-APPROVED BY COA". Please **Revise and Resubmit** these sheets.
16	**Comment on Feb 28, 2023 Submittal** **Sheet C4.13** Assuming that the crosswalks must be ADA compliant, please call this out & cross reference COA detail 403, which requires pavers. Note that the "Proposed 100-foot ROW " text points to a line, which is defined as a property line on C0.11. Please coordinate. Should this be either a ROW or Easement line? Please **Revise and Resubmit** this sheet.
17	**Comment on Feb 28, 2023 Submittal** **Sheet LS-4 & various applicable sheets** Please add a general note with text similar to: "PLANT TREES SO THEIR TRUNKS ARE A MINIMUM OF 10 FEET FROM ALL WATER AND WASTEWATER LINES" This is a typical comment for applicable sheets. Please **Revise and Resubmit** this & other applicable sheets.
18	**Comment on Feb 28, 2023 Submittal** **Sheet LS-6** One or possibly two LIM trees (middle of sheet) are within 10 feet of a WW main. Please either remove or relocate.

NO.	COMMENTS
	Please **Revise and Resubmit** this & other applicable sheets.
19	**Comment on Feb 28, 2023 Submittal** **Sheet LS-13** At least one QVC tree (upper right) is within 10 feet of PP-WW (actually P-W) line. Please either remove or relocate. Please **Revise and Resubmit** this & other applicable sheets.
20	**Comment on Feb 28, 2023 Submittal** **Sheet IR-12** This sheet shows the irrigation water meter and its BFP. Coordinate so that these are shown on the applicable utility sheet. Please **submit** response.
21	**Comment on Feb 28, 2023 Submittal** **Sheet E1** Please increase font size. Show the electrical design from the road to the bldg, but see next comment. Remove "DUKE SERVICE TERRITORY" text near road. This is in the COA service area. Please **Revise and Resubmit** this sheet.
22	**Comment on Feb 28, 2023 Submittal** **Sheet E2** Show the electrical design from the road to the bldg. Show the transformer, which on C3.10 is shown near the bldg. Is the design intent for the transformer to be located near the road? If so, only limited electrical design from the road to the bldg may be required. But please note that sheet C3.10 shows the transformer next to the bldg. Please coordinate. In the roundabout, a conduit crosses a P-W line. Please evaluate to ensure there is no obstruction. Detail 587 may address this. Remove text "DUKE SERVICE TERRITORY". Please **submit** response & **Revise and Resubmit** this sheet.

NO.	COMMENTS
23	**Comment on Feb 28, 2023 Submittal** **Sheet E3** Remove text "DUKE SERVICE TERRITORY", left side of sheet. Please **Revise and Resubmit** this sheet.
24	**Comment on Feb 28, 2023 Submittal** **Sheet E4** Under Paragraph 1 of Specifications, please add: " THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ELECTRICAL AS-BUILT INFORMATION , WHICH SHALL BE RECORDED AS CONSTRUCTION PROGRESSES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ELECTRICAL AS-BUILT DRAWINGS TO THE OWNER AND ENGINEER OF RECORD. BOTH PAPER AND AUTOCAD DRAWINGS SHALL BE PROVIDED." Please **Revise and Resubmit** this sheet.
25	**Comment on Feb 28, 2023 Submittal** **Sheets E1-E3** Please show all required PUEs for the electrical components. Please **Revise and Resubmit** these sheets.
26	**Comment on Feb 28, 2023 Submittal** **Sheet C2.31** Please modify Detail 127 as follows: • Call-out Keyed Note 4 that points to a COVER AT (PAVED) FINISHED GRADE • Add Keyed Note 4 as follows: "COVER SHALL BE TRAFFIC- RATED AS PER DETAIL 264". Please **Revise and Resubmit** this sheet.
30	

NO.	COMMENTS
	END OF COMMENTS

Please advise if you have any questions or require additional information.
cc: Justin Tabor – AICP Principal Planner
Adam Hall – AICP Principal Planner

RE: Request for Review - Tower Hill Headquarters Site Plan

Silver Ware <sware@alachuacounty.us>

Tue 3/21/2023 4:57 PM

To:Justin Tabor <ju_tabor@cityofalachua.org>;

1 attachments (84 KB)

Apperatus Crimp Angle.pdf;

Good afternoon

Plan Review notes

1 Provide an Auto Turn exhibit that depicts ACFR travel though out the development utilizing the turning radii information above pertaining to the new ACFR apparatus. ACFR has chosen the third option under Crimp Angle “IFS; up to and including 385/65 R22.5 Tire

2 Provide a separate sheet depicting location of Fire Hydrant assemblies that comply with the NFPA 1 18.5.3 and 18.5.4 and location of free standing Fire Sprinkler Fire Department Connects (FDC) within 35 feet of an Fire Hydrant Assembly that complies the FBC 912.2

Thank you

Chip

Silver Ware
Fire Prevention Officer Level 1
Fire Rescue
911 SE 5th ST • Gainesville • FL • 32601
352-384-3101 (office)

PLEASE NOTE: Florida has a very broad public records law (F.S.119).
All e-mails to and from County Officials and County Staff are kept as public records. Your e-mail communications, including your e-mail address, may be disclosed to the public and media at any time.

SAE Turning Radius Calculations for Quote No. 111179				
Wheelbase:		194"	Front Bumper Size:	12"
Body Width:		100"	Front Bumper Extension:	28"
Front Axle Kingpin Center:		68.5"	Front Wheel Type:	STEEL
Front Axle Track:		78.99"	Rear Wheel Type:	STEEL
Front Axle Tire Width:		12.5"	Tire Brand:	MICHELIN
Dimension Over Rear Tires:		96.374"		
Body Front Overhang:		100"		
Inside Cramp Angle	**S. A. E. Turning Radius**	**Tire Curb Clearance**	**Bumper Swing Clearance**	**Minimum Inside Radius**
35	33.5'	34'	38.8'	21.9'
36	32.7'	33.3'	38.2'	21.1'
37	32'	32.6'	37.6'	20.3'
38	31.4'	31.9'	37'	19.5'
39	30.8'	31.3'	36.4'	18.8'
40	30.2'	30.7'	35.9'	18.1'
41	29.6'	30.2'	35.4'	17.4'
42	29.1'	29.6'	35'	16.8'
43	28.6'	29.1'	34.5'	16.2'
44	28.1'	28.6'	34.1'	15.6'
45	27.6'	28.2'	33.7'	15'
46	27.2'	27.7'	33.4'	14.5'
47	26.8'	27.3'	33'	13.9'
48	26.4'	26.9'	32.6'	13.4'
49	26'	26.5'	32.3'	12.9'
50	25.6'	26.1'	32'	12.4'

Nominal Cramp Angles:	
Meritor FL941 & FL943 axles: up to and including 425/65R22.5 tires	45 degrees
Meritor FL941 & FL943 axles: 445/65R22.5 tires	38 degrees
Dana I220W axle: up to and including 445/65R22.5 tires	42 degrees
Reyco IFS: up to and including 385/65R22.5 tires	48 degrees
Reyco IFS: 425/65R22.5 tires	45 degrees
Reyco IFS: 445/65R22.5 tires without front intake	42 degrees
Meritor Front Drive Axle: up to and including 425/65R22.5 tires	37 degrees
Marmon Herrington Front Drive Axle: up to and including 425/65R22.5 tires	42 degrees

This Turning Radius report reflects how the quote was configured. Any succeeding changes may slightly alter the turning radius of the vehicle and the data in this report.

March 22, 2023

Justin Tabor, AICP
City of Alachua
15100 NW 142nd Terrace | PO Box 9
Alachua, Florida 32616

Ref: Tower Hill Headquarters Site Plan – Construction Plans Comments

Dear Mr. Tabor:

Our comments on the Construction Plans for Tower Hill Headquarters Site plan are summarized below.

Plans

Sheet C1.20

1. Please review the spot elevations at the crosswalk – the elevations are steeper than 12:1.
2. Review elevation 128.95 at the edge of the sidewalk in front of the handicap space (more appropriate 128.85).

Sheet C1.21

1. Review the grades on both side of main entrance. It seems that ramps are proposed on sidewalk, but pavement elevations are not clear. Is slope steeper than 12:1?

Sheet C2.10:

1. Clarify grades in main entrance. Not clear the limits of flush sidewalk vs raised sidewalk. It seems some places the cross slope of the road exceeds 5%. Please confirm.

Sheet C2.12

1. Suggest connecting storm cleanout directly to storm inlet S108 to prevent adverse flow.
2. Should the pipe between S114 to S109 be HDPE similar to the pipes used on the rest of the parking area?
3. Stormpipe between S110 to S106 is very deep (greater than 10 ft). Suggest connecting S-112 to S120. This will allow to raise stormpipe running in front of the building.

Sheet C2.13

1. Inlet S114 should be deeper. Not enough cover over pipe. Pipe can be lower and reduce the slope.

Sheet C4.11:

1. Signature from PE is missing from plans. Only seal is shown.
2. Storm pipes should be shown in the plan and profiles.

Sheet C4.14

1. There are two sheets with the same number C4.14.
2. Add spot elevations to the intersections.

Please do not hesitate to contact me if you have any questions/comments.

Sincerely,

Claudia S. Vega, P.E.
Director of Engineering
cvega@edafl.com
edafl.com

Re: Request for Review - Tower Hill Headquarters Site Plan

Grafton Wilson

Tue 3/21/2023 3:40 PM

To:Justin Tabor <ju_tabor@cityofalachua.org>;

Cc:Thomas Ridgik <th_ridgik@cityofalachua.org>;

Justin,

C&RM needs to know if streets (ROWs) are private or public but, in either case, the standard language requiring developer to provide all required easements applies. Answers should be available by Staff PAT meeting.
I will check with Tom or ask that he contact me if he receives info first..cap

---

From: Justin Tabor <jtabor@cityofalachua.org> on behalf of Justin Tabor <jtabor@cityofalachua.org> <jtabor@cityofalachua.org>
Sent: Tuesday, March 14, 2023 1:01:19 PM
To: Adler, John; DiRocco, Anne-Marie; Rush, Marian; Wilson, Grafton; Adam Hall; Eiman Abbas; Kathy Winburn; Kenyata Curtis; Mark Avery; Mike DaRoza; Rodolfo Valladares; sware@alachuacounty.us; Thomas Ridgik; Timothy Hunt
Subject: Request for Review - Tower Hill Headquarters Site Plan

PAT Members,

The Planning Department has received a new Site Plan application from CHW submitted on behalf of Tomoka Hills Farms, Inc., Sarcav, Inc., and Sharlene O Cavaceppi Trustee. The application proposes the construction of a ±72,000 square foot office building and associated site improvements as well as the construction of an entrance road that is approximately 2,000 linear feet in length from US 441 to the building site on a ±37.07 acre portion of Tax Parcel Numbers 03053-000-000, 03054-001-000, 03054-001-002, 03873-000-000, and 03873-001-000.

Project Review Schedule
Initial Application Submittal: February 28, 2023
Completeness Review Letter Issued: March 8, 2023
Application Resubmitted for Completeness Review: March 13, 2023
Application Deemed Complete: March 14, 2023
PAT Comments Deadline: Wednesday, March 22, 2023 at 5 PM
Staff PAT Meeting: TBD
Applicant PAT Meeting: TBD

Please review the application and provide any comments in writing no later than **5 PM on Wednesday, March 22, 2023.**

If a response is not received by this date, it is presumed that the reviewer has no comments and deems the application approvable.

Application materials can be accessed at the links below:
Plans
All Application Materials

If you have any questions about this application, please let me know.

Sincerely,

Justin Tabor, AICP
Principal Planner
City of Alachua
15100 NW 142nd Terrace | PO Box 9
Alachua, Florida 32616
386.418.6100 x 1602 | fax: 386.418.6130
jtabor@cityofalachua.com

City Hall Hours of Operation
Monday - Thursday, 7:30 AM - 6:00 PM

Under Florida law, e-mail addresses are public records. If you do not want your e-mail address released in response to a public records request, do not send electronic mail to this entity. Instead, contact this office by phone or in writing.

City of Alachua

MIKE DAROZA
CITY MANAGER

PLANNING & COMMUNITY DEVELOPMENT
DIRECTOR KATHY WINBURN, AICP

March 15, 2023

Sent by electronic mail to walkero@chw-inc.com

Walker Owen, P.E.
Causseaux, Hewett, & Walpole, Inc.
11801 Research Drive
Alachua, FL 32615

RE: Second Completeness Review: Tower Hill Headquarters Site Plan Application

Dear Mr. Owen:

On March 13, 2023, the City of Alachua received your revised application for a Site Plan submitted on behalf of Tomoka Hill Farms, Inc. for the Tower Hill Headquarters project. The application proposes the construction of a ±72,000 square foot office building and associated site improvements as well as the construction of an entrance road that is approximately 2,000 linear feet in length from US 441 to the building site on a ±37.07 acre portion of Tax Parcel Numbers 03053-000-000, 03054-001-000, 03054-001-002, 03873-000-000, and 03873-001-000. The revised application received on March 13, 2023 was submitted in response to the completeness review comments issued to you in a letter dated March 8, 2023.

According to Section 2.2.6 of the Land Development Regulations (LDRs), upon receipt of an application, a completeness review shall be conducted to determine that the application contains all the necessary information and materials, is in proper form and of sufficient detail, and is accompanied by the appropriate fee. The Planning Department has reviewed the aforementioned application for completeness and finds that **the application is now complete**.

An in-depth review of the content of the application will be performed, and the findings of the in-depth review will be discussed at a Project Assistance Team (PAT) Meeting, which will be sent under separate cover.

If you have any questions regarding the information above, please contact me at 386-418-6100 x 1602 or via e-mail at jtabor@cityofalachua.com.

Sincerely,

Justin Tabor, AICP
Principal Planner

c: Mike DaRoza, City Manager *(by electronic mail)*
Kathy Winburn, Planning & Community Development Director *(by electronic mail)*
Adam Hall, AICP, Principal Planner *(by electronic mail)*
Project File

March 13, 2023

Justin Tabor, AICP
City of Alachua
15100 NW 142nd Terrace
Alachua, FL 32616

RE: Tower Hill New HQ

Dear Justin:

Please find attached the following items to address your comments from March 8, 2023:

- Agent Authorization for Parcel 03053-000-000
- Agent Authorization for Parcel 03054-001-000
- Revised plans
- Stormwater report
- Revised Concurrency Impact Analysis
- Mailing labels
- Traffic Impact Analysis
- Environmental Assessment
- Proof of SRWMD Submittal
- Glazing calculations
- Building Renderings (electronic only)
- Revised Fire Flow Memo
- Revised Meter Sizing Calculations
- Revised Site Plan Application
- Sketch and Legal Descriptions for Right-of-Way, PUE, and Access Agreements

1. Agent Authorization:
   a. Tax Parcel Number 03053-000-000 is owned by Sharleen O Cavaceppi Trustee. Agent authorization not provided by an authorized representative of the Trust.
   - **An agent authorization for this parcel is included with this submittal. Please refer to the attached.**

   b. Tax Parcel Number 03054-001-000 is owned by Sarcav, LLC. Agent Authorization not provided for by an authorized member of the LLC.
   - **An agent authorization for this parcel is included with this submittal. Please refer to the attached.**

2. Site Plan Application Attachment #1 – Site Plan:
   a. Attachment #1.e.: Boundary survey is not inclusive of all lands subject to the application.
   - **Sketch and legals for the right-of-way acquisition, PUEs, and access agreements are included with this submittal. Please refer to the attached.**

   b. Attachment #1.cc.: Architectural plans do not provide sufficient information to confirm the building complies with the requirements of Section 6.8.2, including but not limited to: required glazing; façade massing; and material design.
   - **The glazing calculations and two renderings of the building are included in this submittal. Please note that the renderings have been submitted electronically only.**

3. Site Plan Application Attachment #2: Stormwater Management Plan. Drainage calculations have not been submitted with the application.
   - **Two copies of the drainage report are included with this submittal. Please note that two copies of the drainage report were also included with the previous submittal. Please refer to the attached.**

4. Site Plan Application Attachment #4 – Concurrency Impact Analysis: Concurrency Impact Analysis utilizes a building square footage of ±70,833 square feet, however, elsewhere in application materials the square footage provided is inconsistent with this square footage. Revise the Concurrency Impact Analysis if this square footage is inaccurate.
   - **A revised Concurrency Impact Analysis is included with this submittal. Please note that the total building square footage over two stories is ±72,000 sf.**

5. Site Plan Application Attachment #6 – Mailing Labels: Address information for several parcels located within 400 feet of the subject property were printed on more than one mailing label. Submit one (1) set of mailing labels for all properties within 400 feet ensuring the address information for each parcel is printed on a single label.
   - **A revised set of mailing labels is included with this submittal. Please refer to the attached.**

6. Site Plan Application Attachment #10 – Proof of Payment of Taxes: Proof of payment of taxes for Tax Parcels 03053-000-000 and 03054-001-000 is for Tax Year 2021. Submit proof of payment for Tax Year 2022.
   - **The 2022 proof of payment of taxes is included with this submittal. Please refer to the attached.**

7. Site Plan Application Attachment #11 – Traffic Impact Analysis: Given the anticipated future use of the proposed roadway, a Traffic Impact Analysis which considers the proposed connection to US Highway 441 is warranted. Submit a Traffic Impact Analysis which (at a minimum) considers the operational impacts to US Highway 441 at the intersections/interchanges of: US Highway 441 and NW 167th Boulevard; US Highway 441 and CR235-A; US Highway 441 and I-75 on/off ramps.
   - **A Traffic Impact Analysis is included with this submittal. Please refer to the attached.**

8. Site Plan Application Attachment #12 – Environmental Assessment or Study: Sheet C0.00 notes “There are several on-site wetlands”. Further analysis of potential environmental impacts is warranted. Submit an Environmental Assessment for the property which considers potential impacts to environmental features, including but not limited to: wetlands; karst features; regulated plant and animal species; on-site soils; and flood potential.
   - **An Environmental Report is included with this submittal. Please refer to the attached.**

9. Site Plan Application Attachment #13 – Environmental Resource Permit (ERP): Submit documentation that confirms an application for an ERP has been submitted to Suwannee River Water Management Permit
   - **The requested documentation is included with this submittal. Please refer to the attached.**

10. Site Plan Application Attachment #15 – Access Management Permit: Submit documentation that confirms an application for an Access Management Permit has been submitted to the Florida Department of Transportation.
    - **At this time an Access Management Permit has not been submitted to the FDOT due to disagreements over the proposed intersection design between the engineering consultant, FDOT, and the City of Alachua. Once the disagreements have been resolved, the application will be submitted and the requested documentation will be supplied.**

11. General Comment: Subject property is within the Gateway Overlay District. Review Section 3.7.2(C) for additional information regarding the Gateway Overlay District.

- **The proposed site plan has been designed in accordance with the development standards outlined in LDR Sec. 3.7(C)(5). The proposed building does not front on a public right-of-way. The new proposed roadway extending south from U.S. 441 will be a private road. Since the building has visibility from I-75, the east side of the building facing I-75 is considered the front. Parking is located to the rear of the building.**

12. General Comment: The floor area of the building is unclear. The building square footage is inconsistent throughout the application materials (±50,000 square feet, ±56,590 square feet, ±70,833 square feet, etc.) Confirm the correct floor area is utilized within all application materials.
    - **Please note that this is a two-story building. The building footprint, listed on the cover sheet, is ±56,590 sf while the total building square footage, over two floors, is ±72,000 sf. All affected documents have been updated.**

13. General Comment: Project acreage is inconsistent throughout application materials (±43.42, ±65.44 acres, etc.) Confirm correct project acreage is utilized within all application materials.
    - **The disturbed area—which is being used as the overall project area--will be approximately ±37.07 acres. Submittal documents have been updated as necessary and are included with this submittal.**

14. General Comment: Not all plan sheets were signed and sealed. Ensure in future submittals all sheets are signed and sealed.
    - **Acknowledged.**

We trust you will find this submittal to be complete for review and approval. If you have any questions, or need additional information, please contact me at (352) 331-1976 or via email at walkero@chw-inc.com

Sincerely,
CHW



Walker Owen, P.E.
Project Manager

City of Alachua

MIKE DAROZA
CITY MANAGER

PLANNING & COMMUNITY DEVELOPMENT
DIRECTOR KATHY WINBURN, AICP

March 8, 2023

Sent by electronic mail to walkero@chw-inc.com

Walker Owen, P.E.
Causseaux, Hewett, & Walpole, Inc.
11801 Research Drive
Alachua, FL 32615

RE: Completeness Review: Tower Hill Headquarters Site Plan Application

Dear Mr. Owen:

On February 28, 2023, the City of Alachua received your application for a Site Plan submitted on behalf of Tomoka Hill Farms, Inc. for the Tower Hill Headquarters project. The application proposes the construction of a ±50,000 square foot office building and associated site improvements as well as the construction of an entrance road that is approximately 2,000 linear feet in length from US 441 to the building site on a ±43.42 acre portion of Tax Parcel Numbers 03053-000-000, 03054-001-000, 03054-001-002, 03873-000-000, and 03873-001-000.

According to Section 2.2.6 of the Land Development Regulations (LDRs), upon receipt of an application, a completeness review shall be conducted to determine that the application contains all the necessary information and materials, is in proper form and of sufficient detail, and is accompanied by the appropriate fee. The Planning Department has reviewed the aforementioned application for completeness and finds that the application is incomplete and the following information is needed to begin the review of the application. Please address the following deficiencies no later than **5:00 PM on Monday, March 13, 2023**.

In accordance with Section 2.2.6(B) of the LDRs, the applicant must correct the deficiencies and resubmit the application for completeness determination. *Plans and application materials may be made available for return in order to revise and resubmit as needed.*

The time frame and cycle for review shall be based upon the date the application is determined to be complete. If the applicant fails to respond to the identified deficiencies within forty-five (45) calendar days, the application shall be considered withdrawn.

Please note that if an additional completeness review is required, a resubmittal fee equal to 10% of the application fee will be assessed for each additional completeness review and must be paid prior to further review of the application.

The comments below are based solely on a preliminary review of your application for completeness. An in-depth review of the content of the application will be performed, and the findings of the in-depth review will be discussed at a Project Assistance Team (PAT) Meeting, which will be sent under separate cover and subsequent to a determination of completeness.

In order to provide a complete application, please address the following:

1. **Agent Authorization:**
   a. Tax Parcel Number 03053-000-000 is owned by Sharleen O Cavaceppi Trustee. Agent authorization not provided by an authorized representative of the Trust.
   b. Tax Parcel Number 03054-001-000 is owned by Sarcav, LLC. Agent Authorization not provided for by an authorized member of the LLC.

2. **Site Plan Application Attachment #1 – Site Plan:**
   a. *Attachment #1.e.:* Boundary survey is not inclusive of all lands subject to the application.
   b. *Attachment #1.*cc.: Architectural plans do not provide sufficient information to confirm the building complies with the requirements of Section 6.8.2, including but not limited to: required glazing; façade massing; and material design.

3. **Site Plan Application Attachment #2: Stormwater Management Plan.** Drainage calculations have not been submitted with the application.

4. **Site Plan Application Attachment #4 – Concurrency Impact Analysis:** Concurrency Impact Analysis utilizes a building square footage of ±70,833 square feet, however, elsewhere in application materials the square footage provided is inconsistent with this square footage. Revise the Concurrency Impact Analysis if this square footage is inaccurate.

5. **Site Plan Application Attachment #6 – Mailing Labels:** Address information for several parcels located within 400 feet of the subject property were printed on more than one mailing label. Submit one (1) set of mailing labels for all properties within 400 feet ensuring the address information for each parcel is printed on a single label.

6. **Site Plan Application Attachment #10 – Proof of Payment of Taxes:** Proof of payment of taxes for Tax Parcels 03053-000-000 and 03054-001-000 is for Tax Year 2021. Submit proof of payment for Tax Year 2022.

7. **Site Plan Application Attachment #11 – Traffic Impact Analysis:** Given the anticipated future use of the proposed roadway, a Traffic Impact Analysis which considers the proposed connection to US Highway 441 is warranted. Submit a Traffic Impact Analysis which (at a minimum) considers the operational impacts to US Highway 441 at the intersections/interchanges of: US Highway 441 and NW 167th Boulevard; US Highway 441 and CR235-A; US Highway 441 and I-75 on/off ramps.

8. **Site Plan Application Attachment #12 – Environmental Assessment or Study:** Sheet C0.00 notes "There are several on-site wetlands". Further analysis of potential environmental impacts is warranted. Submit an Environmental Assessment for the property which considers potential impacts to environmental features, including but not limited to: wetlands; karst features; regulated plant and animal species; on-site soils; and flood potential.

9. **Site Plan Application Attachment #13 – Environmental Resource Permit (ERP):** Submit documentation that confirms an application for an ERP has been submitted to Suwannee River Water Management Permit

10. **Site Plan Application Attachment #15 – Access Management Permit:** Submit documentation that confirms an application for an Access Management Permit has been submitted to the Florida Department of Transportation.

11. **General Comment:** Subject property is within the Gateway Overlay District. Review Section 3.7.2(C) for additional information regarding the Gateway Overlay District.

12. **General Comment:** The floor area of the building is unclear. The building square footage is inconsistent throughout the application materials (±50,000 square feet, ±56,590 square feet, ±70,833 square feet, etc.) Confirm the correct floor area is utilized within all application materials.

13. **General Comment:** Project acreage is inconsistent throughout application materials (±43.42, ±65.44 acres, etc.) Confirm correct project acreage is utilized within all application materials.

14. **General Comment:** Not all plan sheets were signed and sealed. Ensure in future submittals all sheets are signed and sealed.

If you have any questions regarding the information above, please contact me at 386-418-6100 x 1602 or via e-mail at jtabor@cityofalachua.com.

Sincerely,

Justin Tabor, AICP
Principal Planner

c: Mike DaRoza, City Manager *(by electronic mail)*
Kathy Winburn, Planning & Community Development Director *(by electronic mail)*
Adam Hall, AICP, Principal Planner *(by electronic mail)*
Project File

February 28, 2023

City of Alachua Planning and Community Development
15100 NW 142 Terrace
Alachua, FL 32615

RE: Tower Hill New HQ

Dear Staff:

Please find attached the following items for review and approval of the above referenced project:

- Check #111802 in the amount of $2,700.00
- Two (2) Sets of Mailing Labels for Property Owners within 400 feet
- Four (4) Copies of the Following:
  - Site Plan Review Application
  - Property Owner Affidavit
  - Alachua County Property Appraiser Information
  - Proof of Tax Payment
  - Legal Description
  - Warranty Deed
  - Division of Corporations Information
  - Neighborhood Workshop Materials
  - Concurrency Impact Analysis
  - Analysis of Consistency with the CoA Comprehensive Plan
  - Signed and Sealed Meter Sizing Calculations
  - Signed and Sealed Fire Flow Calculations
  - Signed and Sealed Development Plans
- Two (2) Copies of the Following:
  - Signed and Sealed Stormwater Management Report
  - Traffic Impact Analysis
- Hightail Link including all PDFs

The project is phase 1 of a multi-year planned development that will include single family, multi-family, retail, office, and recreation area. This submittal is for phase 1 only which will include a +/- 50,000 s.f. office building with associated utility infrastructure and parking (+/- 175 spaces) located within a defined area that is currently being master planned and rezoned to Commercial to allow the proposed office use. In addition to the building and parking, phase 1 will include an entrance road that is approximately 2,000 LF long from US 441 to the building site. This road will carry major water, sewer, and stormwater infrastructure to support the building project. The road from US 441 requires signal modifications which must be approved by FDOT. A lot split to create the parcel and ROW dedication will be required to be processed simultaneously with the site plan approval process. All utilities will connect to the existing utilities that are at 162nd and US 441. Water, wastewater, and storm lines will be extended along the road and parking areas to serve the project as well as the future phases of the development.

We trust you will find this submittal to be complete for review and approval. If you have any questions, or need additional information, please contact me at (352) 331-1976 or via email at walkero@chw-inc.com

Sincerely,
CHW



Walker Owen, P.E.
Project Manager

should separate the land and house from development for inclusion to and/or access from an adjacent property.

Also, prior to the issuance of the Certificate of Occupancy for the 151st home, the developer should have the infrastructure in place for the planned commercial properties.

Newberry is looking at its inventory of unpaved, rural roads. Recently, there has been an up-tick in conversation about paving a 2.6-mile segment of Southwest 30th Avenue between U.S. Highway 27/41 and Southwest 202nd Street, although paving this segment of Southwest 30th

work to survey the road and prepare deeds to convey the property from the adjacent landowners to the City. The work totals $125,600, or 2.8 percent of the estimated total construction cost of $5.3 million, which includes planning, survey, land acquisition, design, permitting, stormwater and


Music - Light Refreshments - Jewelry Sale
Rocks & Minerals - Gifts - Labyrinth
1-5 p.m., Saturday, May 13, 2023
High Springs Emporium
Rock Shop
19765 NW U.S. Highway 441
High Springs, Florida 32643

Alachua man killed in motorcycle crash

By C.M. WALKER
Today Reporter

ALACHUA – An 18-year-old Alachua man was killed on Sunday, April 23, in a collision between a motorcycle and a pickup truck crash. The 8:36 p.m. crash occurred at the intersection of West State Road 235 and County Road 237.

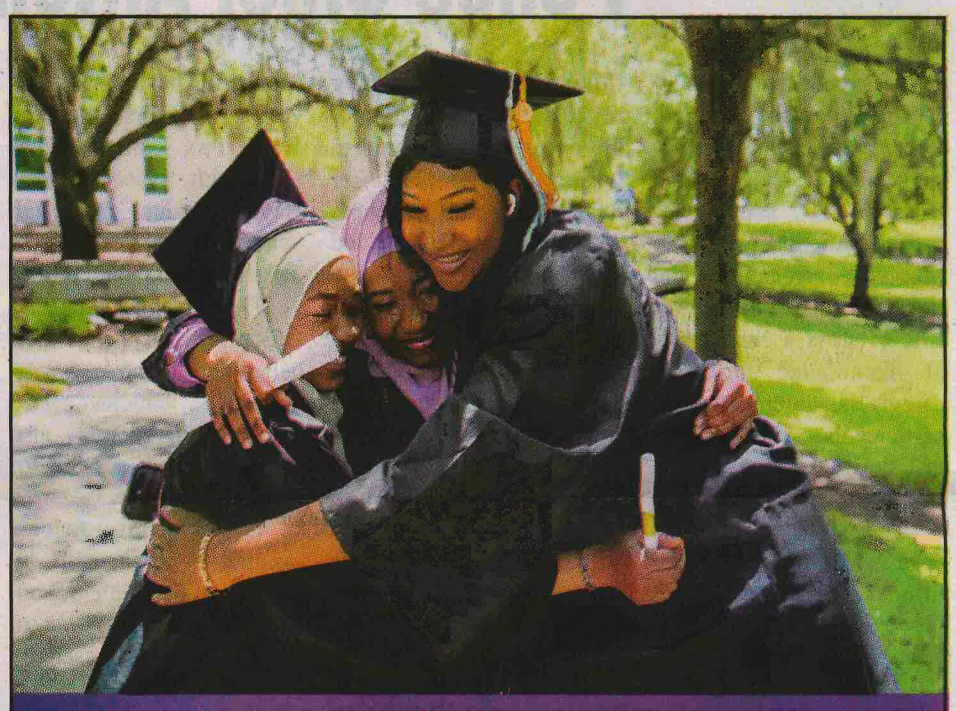
According to the Florida Highway Patrol (FHP), the pickup truck driven by a 45-year-old man from Lake Butler was pulling a trailer as he traveled north on CR 237. The truck collided with the motorcycle, which was traveling west on West SR 235.

The motorcycle rider, who was wearing a helmet at the time of the incident, sustained fatal injuries. According to FHP, the driver of the pickup truck was wearing a seatbelt at the time of the crash and sustained minor injuries.

The crash is currently under investigation by FHP.

# # #

Email cwalker@alachuatoday.com

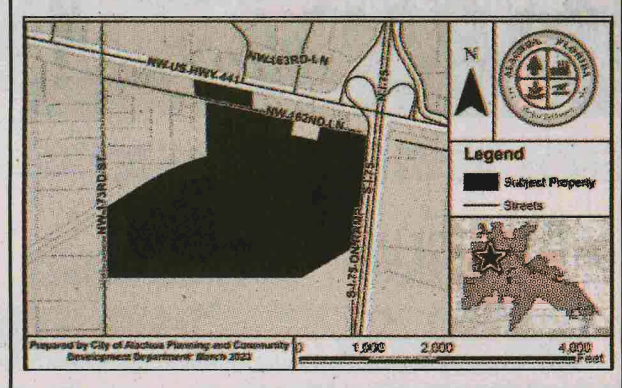

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City of ALACHUA

NOTICE OF PUBLIC HEARING BEFORE THE PLANNING AND ZONING BOARD OF THE CITY OF ALACHUA, FLORIDA

Notice is hereby given that the Planning and Zoning Board of the City of Alachua will hold a public hearing on May 16, 2023 at 6:00 p.m. The hearing will be held in the James A. Lewis Commission Chambers in City Hall, located at 15100 NW 142nd Terrace, Alachua, Florida, to consider the following: A request by Walker Owen, P.E., of Causseaux, Hewett, & Walpole, Inc., applicant and agent for Sharleen O Cavaceppi Trustee, Sarcav, LLC, and Tomoka Hill Farms, Inc., property owners, for consideration of a Site Plan proposing the construction of a ±71,533 square foot office building and associated site improvements as well as the construction of an entrance road that is approximately 2,000 linear feet in length from US 441 to the building site on a ±37.07 acre subject property; Tax Parcel Numbers 03053-000-000, 03054-001-000, 03054-001-002, and 03873-001-000; FLUM: Commercial and Community Commercial ; Zoning: Commercial Intensive (CI) and Community Commercial (CC).



At the public hearing, all interested parties may appear and be heard with respect to the application. Copies of the application are available for public inspection at the Planning and Community Development Department, 15100 NW 142nd Terrace, Alachua, Florida, on any regular business day between the hours of 7:30 a.m. to 6:00 p.m. Written comments on the application may be sent to the following address: City of Alachua, Planning and Community Development, P.O. Box 9, Alachua, FL 32616. Notice is given pursuant to Section 286.0105, Florida Statutes, that, in order to appeal any decision made at the public hearing, you will need a record of the proceedings, and that, for such purpose, you may need to ensure that a verbatim record of the proceedings is made, which includes the testimony and evidence upon which the appeal is to be based. In accordance with the Americans with Disabilities Act, any persons with a disability requiring reasonable accommodation in order to participate in this meeting should call the City Clerk at (386) 418-6100 x 1501 at least 48 hours prior to the public hearing.

(Published: Alachua County Today - May 4, 2023)

HORIZON REALTY of ALACHUA, INC.
info@HorizonRealtyFL.com
SERVING THE COMMUNITY SINCE 1979


SPANISH GATES! Sellers are willing to negotiate a credit to buy down the interest rate for the buyer. Prepare to be impressed by this custom-built home in High Springs! With 4 bedrooms plus a comfortable home office and the backyard totally fenced there is plenty of room to stretch out and take care of the garden that the sellers have started for you. You will appreciate the well-appointed kitchen with a spacious pantry overlooking the open concept dining area and living room. The kitchen features solid wood cabinets, Granite countertops, and Stainless-Steel Appliances! The spacious utility room even has a wash sink! The private owner's suite features an attached bath and split walk-in closet to fulfill any and all of your organizational needs. Luxury vinyl plank flooring and ceramic tile throughout the home makes cleaning less of a hassle. Walk through an entry foyer with built-in seating and coat racks that leads to the beautiful Great room. High ceilings throughout, custom light fixtures and fans PLUS a covered back porch, large privacy fenced backyard that even has room for a garden! What more could you ask for? Location, that's what! Located just minutes from everyday shopping, local dining, and four of north central Florida's most beloved natural springs! Schedule a showing before its too late to make this your next dream home! Sellers also have a survey and termite contract!
MLS GC509375

YOUR HOME TOWN REALTOR WITH GLOBAL CONNECTIONS

RESIDENTIAL

MUST SEE this absolutely gorgeous property to appreciate the almost 11 beautiful acres in historic High Springs. If you're looking for privacy and seclusion, this is the perfect location. Private driveway off county-maintained road that opens up to property. Two mobile homes on the property. First (1975) is used as living quarters with front and back decks to enjoy your morning coffee or an evening libation while watching the deer and turkey wander about. The second (1993) is used for storage. Well and two septic tanks. Multitude of trees and wildlife throughout the entire property. This home works for hunting lodge, building your dream home, or barn-dominium as it has plenty of cleared open area to build with woods around the property. It's worth the short drive to check out the scenery! MLS GC500812

You have found your new home in High Springs! This house is tucked into a neighborhood on a corner lot only minutes from Downtown High Springs and 10 minutes to Ginnie Springs! Corner lot home with driveways on the front and side of the home for plenty of parking. Enjoy some coffee on the front porch with the beautiful views of the tree farm across the street. This 3/2 home has plenty of space! In addition to the living room and cozy sitting area by the fireplace, the home includes a large closed in porch AND attached workshop room. With these cold days already here, the fireplace will keep the whole house warm without having to turn on the heater! The closed in porch would be great for entertaining with large windows overlooking the garden in the backyard. Step outside to the already established, thriving garden with irrigation system and a pergola. Garden has fruits, vegetables, and flowers from figs, olives, mulberry, lemon, pears, peaches, blueberries, blackberries, turmeric, ginger, moringa, sweet potatoes, kumquats, jasmine, and mint! Wow, talk about living off the land! Homesteaders dream with a chicken coop included! Home features a metal roof and solid wood cabinets! Appliances include a second fridge in workshop and a gas stove with an extra-large, FULL tank. Updates include flooring, new drain field, gutters, and electric. Owner has been making those small repairs including a new front door to truly make this home move-in ready! Come see it today! MLS GC509088

VACANT LAND

A convenient drive down Hwy 24 will lead you to the well-maintained private roads only minutes to the many springs and rivers in this area. A few minutes' drive will take you to your very own private 4.79 acre hideaway! Drive through your gated entrance on the lovely rock road. Be sure to stop and envision your new home on the other side of the circle driveway! Low Levy County taxes makes the steady breeze blowing through the towering pines sound even sweeter! Plus there are no rear neighbors to block the view of the gorgeous sunsets over the gently rolling hills in the backyard. A well is already in place and power is only a pole or two away plus there is a RV septic in place! A privacy fence stall around the well offers a place to shower under the stars on a hot summer night. This is a great property to build your next home, camp out, enjoy nature and build memories while building your dream home! The south and west property lines are fenced and the north and east property lines are cleared of all trees and stumps - ready to be fenced to fully enclose the lot if you want to! All this located on a dead-end road which brings low traffic - plus an easy drive to UF, Gainesville, shopping or wherever you want to go! the seller got this property ready for his plans, but situations changed so now it's your chance to enjoy all the extras! MLS #: GC504548

Two acres in the countryside of Williston! About 10 minutes from Goathe State Forest and less than 10 minutes to town! Great midpoint between Ocala and Gainesville. Property is less than 500 feet from paved road NE 20th Street. Highest elevation of property is located right in the center allowing for prime location to build your home! No HOA or deed restrictions! Located in Levy County allowing you to save on taxes! MLS GC507978

THINKING ABOUT A CAREER IN REAL ESTATE? CALL US TODAY!
386-462-4020 OR 1-866-455-2092

AFFIDAVIT FOR POSTED LAND USE SIGN

I April Dotson, POSTED THE LAND USE
(name)
SIGN ON 5/2/2023 FOR THE Tower Hill Headquarters Site Plan
(date) (state type of action and project name)
LAND USE ACTION.

AS PER ARTICLE 2.2.9 D OF THE LAND DEVELOPMENT REGULATIONS.

THIS WILL BE INCLUDED IN THE STAFF REPORT.

(signature)

8 (eight)
(number of signs)

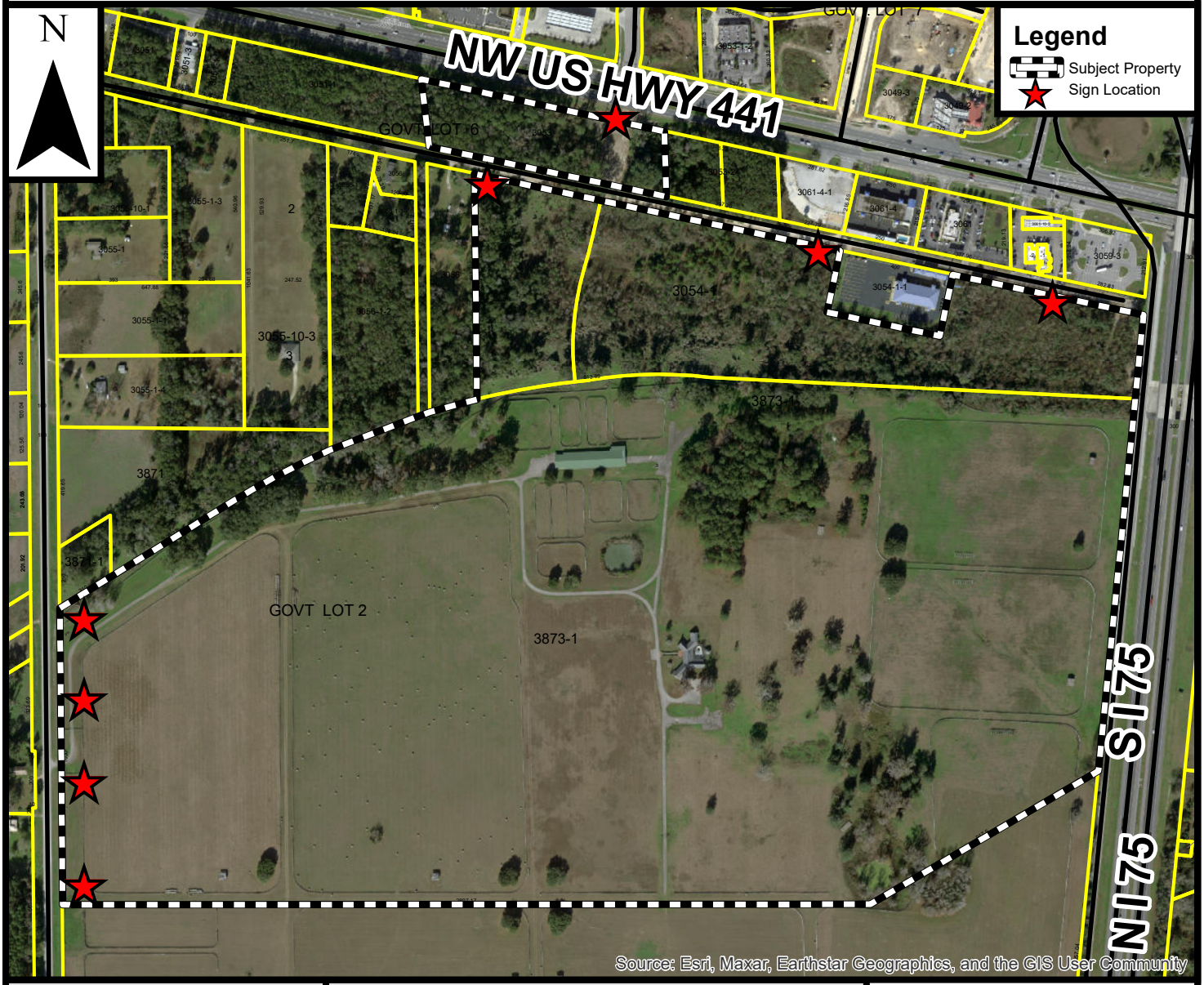
IMPORTANT INFORMATION REGARDING POSTED NOTICE SIGNS

Pursuant to Section 2.2.9(D) of the City's Land Development Regulations, posted notice signs must be placed on the land that is the subject of the application, along each street which is adjacent to or runs through the land in a manner that makes them clearly visible. Signs shall be posted at intervals of not more than 400 feet when the land subject to the application has less than 1,500 feet of road frontage. When the land subject to the application has 1,500 feet or more of road frontage, signs shall be posted at intervals of not more than 1,320 feet.

Signs shall be inspected by the City subsequent to their posting. The applicant shall be responsible for ensuring that the posted notice is maintained on the land subject to the application until the completion of the final public hearing on the application.

Signs must be removed by the applicant and returned to the City within ten days after the final decision on the application.

Tower Hill Headquarters
Site Plan



Prepared by the City of Alachua
Planning & Community Development Department

Prepared March 2023

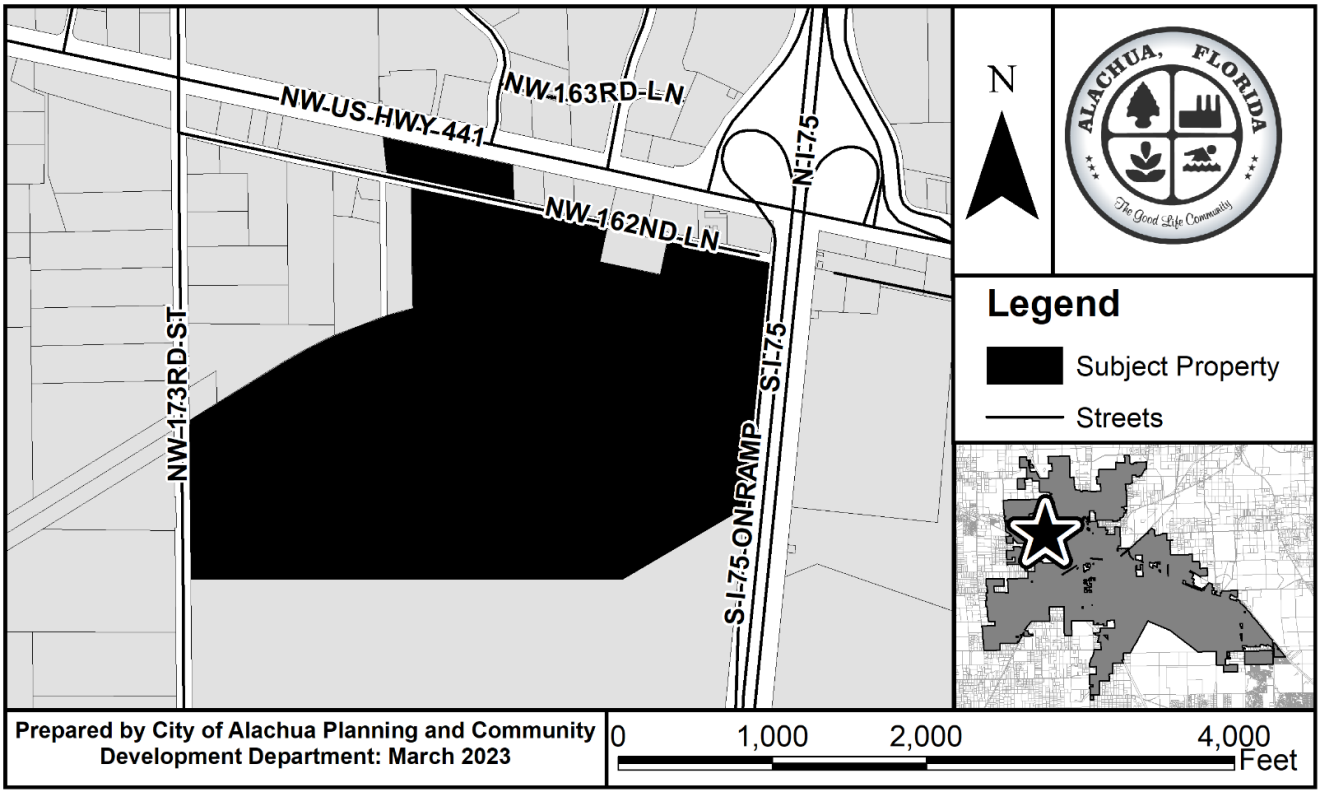
DISCLAIMER: Data is provided "as is" without warranty of any representation of accuracy, timeliness, or completeness. The burden of determining accuracy, timeliness, or completeness for use rests solely on the requestor. The City makes no warranties, expressed or implied, as to the use of the data. The requestor acknowledges and accepts the limitations of the data, including the fact that the data is dynamic and in a constant state of maintenance, correction, and update.

0 200 400 800 Feet

Mailed 5/2/2023

NOTICE OF PUBLIC HEARING BEFORE THE PLANNING AND ZONING BOARD OF THE CITY OF ALACHUA, FLORIDA

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P.O. Box 9 ♦ Alachua, Florida 32616-0009
Phone: (386) 418-6121 ♦ planning@cityofalachua.com

03042-052-005
M3 ALACHUA LLC
1276 MINNESOTA AVE
WINTER PARK, FL 32789

03042-052-006
M3 ALACHUA LLC
1276 MINNESOTA AVE
WINTER PARK, FL 32789

03051-001-000
SARCAV LLC
8303 AUTUMNWIND DR
JACKSONVILLE, FL 32218

03052-000-000
SCHOOL BOARD OF ALACHUA COUNTY
620 E UNIV AVE SANTA FE HIGH SCHOOL
GAINESVILLE, FL 32601

03053-000-000
CAVACEPPI SHARLEEN O TRUSTEE
PO BOX1325
ALACHUA, FL 32616

03053-001-001
ALACHUA GATEWAY CENTER SURFACEW
PO BOX969
ALACHUA, FL 32616

03053-001-002
TALAL PROPERTIES LTD & TAREK PROPERTIES LTD
1326 E LUMSDEN RD
BRANDON, FL 33511

03053-001-003
RACETRAC PETROLEUM INC
PO BOX2437
SMYRNA, GA 30081

03053-001-004
PUBLIX SUPER MARKETS INC
PO BOX32018
LAKELAND, FL 33802

03053-001-006
VYSTAR CREDIT UNION
PO BOX45085
JACKSONVILLE, FL 32232

03053-002-000
SARCAV LLC
C/O SILVIO CAVACEPPI
8303 AUTUMNWIND DR
JACKSONVILLE, FL 32218

03053-002-001
CATA LIGHTS CORP
630 VASSAR ST #2506
ORLANDO, FL 32804

03054-000-000
JP & KP LLC
11149 CONISTON WAY
WINDERMERE, FL 34786

03054-001-000
SARCAV LLC
C/O SILVIO CAVACEPPI
8303 AUTUMNWIND DR
JACKSONVILLE, FL 32218

03054-001-001
DWARKADHISH INVESTMENTS INC
1800 S ATLANTIC AVE
DAYTONA BEACH, FL 32118

03054-001-002
TOMOKA HILLS FARMS INC
1301 DIXIANA DOMINO RD
LEXINGTON, KY 40511

03055-001-004
ACKLEY ROBERT L & MARY J
15817 NW 173RD ST
ALACHUA, FL 32615

03055-010-003
TOMOKA HILLS FARMS INC
1301 DIXIANA DOMINO RD
LEXINGTON, KY 40511

03056-000-000
CAMPBELL MENZIE G
16903 NW 162ND LN
ALACHUA, FL 32615

03056-001-000
BRADLEY & WILLIAMS
16919 NW 162ND LN
ALACHUA, FL 32615

03056-001-001
CAMPBELL MENZIE G
16903 NW 162ND LN
ALACHUA, FL 32615

03056-001-002
LAMNECK EUGENE S JR & PEGGY E
2813 PLEASANT VALLEY RD
ROME, GA 30161

03058-000-000
GOOLSBY JEROME S & LYDIA
16807 NW 162ND LN
ALACHUA, FL 32615

03059-001-000
MCDONALD'S CORP (009/0551)
C/O JUAN PRADO
6625 VAN DYKE RD
LUTZ, FL 33558

03059-003-000
FDOT
% RIGHT OF WAY DEPT
MAIL STATION 2020 1109 S MARION AVE
LAKE CITY, FL 32025

03061-000-000
CHASING CHICKEN 2 INC
501 E TENNESSEE ST A
TALLAHASSEE, FL 32308

03061-004-000
DWARKADHISH INVESTMENTS INC
1800 S ATLANTIC AVE
DAYTONA BEACH, FL 32118

03061-004-001
IMPERIAL AIRPORT
489 CROCKER SPERRY DR
MONTECITO, CA 93108

03061-010-001
HOOVER RESTAURANTS LLC
4030 JOHNS CREEK PARKWAY
SUWANEE, GA 30024

03061-010-002
LE STORE LLC
22211 W NEWBERRY RD
NEWBERRY, FL 32669

03066-006-000
MOHAN-LERRA FAMILY PARTNERSHIP
16715 NW 129TH TER
ALACHUA, FL 32615

03066-007-000
ALL AMERICAN OIL LLC
380 COMMERCE PARKWAY
ROCKLEDGE, FL 32955

03066-008-002
JP & KP LLC
11149 CONISTON WAY
WINDERMERE, FL 34786

03863-000-000
ALACHUA HOLDINGS LTD
PO BOX 1990
ALACHUA, FL 32616

03863-100-000
MALBEC II LLC
100 S BISCAYNE BLVD SUITE 900
MIAMI, FL 33131

03869-000-000
FIRST STREET GROUP L C
PO BOX 1990
ALACHUA, FL 32616

03869-001-000
TLC PROPERTIES INC
2065 NW 57TH ST
OCALA, FL 34475

03869-002-000
HARKINS JAMES E JR & RENEE
PO BOX 6307
MARIANNA, FL 32447

03869-013-000
FIRST STREET GROUP LC
PO BOX 1990
ALACHUA, FL 32616

03870-000-000
CITY OF ALACHUA
PO BOX 9
ALACHUA, FL 32616

03871-000-000
TOMOKA HILLS FARMS INC
1301 DIXIANA DOMINO RD
LEXINGTON, KY 40511

03871-001-000
THOMAS & THOMAS & THOMAS HEIRS
312 MCBRIEN RD APT 423
CHATTANOOGA, TN 37411

03872-000-000
SHIRES CYNTHIA H
PO BOX 1259
ALACHUA, FL 32616

03873-000-000
TOMOKA HILLS FARMS INC
1301 DIXIANA DOMINO RD
LEXINGTON, KY 40511

03873-001-000
TOMOKA HILLS FARMS INC
1301 DIXIANA DOMINO RD
LEXINGTON, KY 40511

03874-000-000
VICKORY WILLIAM A & SUSAN S
15404 NW 173RD ST
ALACHUA, FL 32615

03874-001-000
VICKORY WILLIAM HENRY LIFE ESTATE
15310 NW 173RD ST
ALACHUA, FL 32615

03874-002-000
BURGESS & BURGESS
15008 NW 173RD ST
ALACHUA, FL 32615

03874-002-002
BURGESS & BURGESS
15008 NW 173RD ST
ALACHUA, FL 32615

03875-050-001
ALACHUA COUNTY
12 SE 1ST ST
GAINESVILLE, FL 32601

03876-000-000
DELOACH VIRGIL C & HOLLY H
PO BOX 532
FT WHITE, FL 32038

03876-001-000
MALLARD MITCHELL E & ESTHER R
14614 NW 173RD ST
ALACHUA, FL 32615

03876-002-000
MAKENNA PARKER HOMES LLC
2714 SW 130TH TER
ARCHER, FL 32618

03876-005-000
ALSPAUGH & BROWN TRUSTEE & DIXON &
% HIMMERLRICH AND COMPANY
898 SW 21ST ST
BOCA RATON, FL 33486

03876-100-000
ALACHUA COUNTY
12 SE 1ST ST
GAINESVILLE, FL 32601

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Antoinette Endelicato
5562 NW 93rd Avenue
Gainesville FL 32653

Dan Rhine
288 Turkey Creek
Alachua FL 32615

Tom Gorman
9210 NW 59th Street
Alachua FL 32653

Richard Gorman
5716 NW 93rd Avenue
Alachua FL 32653

Peggy Arnold
410 Turkey Creek
Alachua FL 32615

David Forest
23 Turkey Creek
Alachua FL 32615

President
TCMOA
1000 Turkey Creek
Alachua FL 32615

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Assistant Director Planning
PO Box 115050
Gainesville FL 32611

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4801 Camp Ranch Road
Gainesville FL 32641

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Alachua FL 32616

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Alachua FL 32615

Lynda Coon
7216 NW 126 Avenue
Alachua FL 32615

Tamara Robbins
PO Box 2317
Alachua FL 32616

Michele L. Lieberman
County Manager
12 SE 1st Street
Gainesville FL 32601

Bonnie Flynn
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Alachua FL 32615

Hugh & Jean Calderwood
14095 NW 174th Ave
Alachua FL 32615

Lisia Jenkins
P.O. Box 1071
Alachua FL 32616

Shasta Schoellhorn
15907 NW 188th St.
Alachua FL 32615

Carrie Luke
16611 NW 138th Ave.
Alachua FL 32615

Dena Courtney
P.O. Box 1215
High Springs FL 32655

George & Joan Walker
12910 NW 151 Rd
Alachua FL 32615

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SITE PLANS
FOR:

TOWER HILL HEADQUARTERS

ALACHUA COUNTY, FLORIDA

SECTION 9/16/37, TOWNSHIP 8 SOUTH, RANGE 18 EAST

SUBMITTED TO:

SUWANNEE RIVER WATER MANAGEMENT DISTRICT
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FLORIDA DEPARTMENT OF TRANSPORTATION
CITY OF ALACHUA

GENERAL NOTES

1. *DEVELOPMENT DATA:*

	PROPOSED DEVELOPMENT		
OVERALL SITE AREA=	1,614,769 S.F.	100.0%	37.07 ACRES
BUILDING FOOTPRINT AREA (1ST FLOOR)=	56,590 S.F.	3.5%	
BUILDING FOOTPRINT AREA (2ND FLOOR)=	14,943 S.F.	3.5%	
CONC./PAVE AREA=	14,243 S.F.	0.9%	
TOTAL IMPERVIOUS AREA=	648,978 S.F.	40.5%	
OPEN AREA=	965,791 S.F.	60%	

DESCRIPTION: THIS PROJECT CONSISTS OF THE CONSTRUCTION OF A ±70,833 SF (2 FLOORS) BUILDING, WITH AN EXTENSIVE PARKING AREA, ROADWAY INFRASTRUCTURE, STORMWATER MANAGEMENT FACILITY, AND ASSOCIATED UTILITY INFRASTRUCTURE.

2. *MINIMUM BUILDING / YARD SETBACKS PER COMMERCIAL INTENSIVE ZONING ARE AS FOLLOWS:*
   PRIMARY BUILDING (CI)
   FRONT: 20'
   SIDE: NONE
   REAR: 15'

MINIMUM LOT AREA	NONE
MINIMUM LOT WIDTH	NONE
MAX BUILDING HEIGHT	65'
MAX LOT COVERAGE	NONE
PROPOSED FAR	0.04

3. *PARKING CALCULATIONS:*
   CAR: 1 SPACE PER 330 SQ. FT. FLOOR AREA
   70,833 SQ. FT. / 330 SQ. FT. = MINIMUM 215 SPACES
   215 SPACES X 125% = MAXIMUM 268 SPACES
   PROVIDED: 257 SPACES TOTAL
   ACCESSIBLE SPACES:
   REQUIRED = 7
   PROVIDED = 8

   BICYCLE: 1 SPACE/10 CAR SPACES = 257 / 10 = 25.7 SPACES REQUIRED; 26 SPACES PROVIDED

4. *DATE OF BOUNDARY SURVEY:*
   A BOUNDARY SURVEY WAS COMPLETED BY CHW AND DATED MAY 10, 2022.

5. *UTILITIES:*
   -POTABLE WATER AND FIRE SERVICE WILL BE PROVIDED BY CITY OF ALACHUA.
   -SANITARY SEWER SERVICE WILL BE PROVIDED BY CITY OF ALACHUA.
   -ELECTRIC SERVICE WILL BE PROVIDED BY CITY OF ALACHUA.
   -GAS SERVICE WILL BE PROVIDED BY GRU.

6. *DRAINAGE:*
   AN ON-SITE STORMWATER COLLECTION SYSTEM WILL BE CONSTRUCTED AND CONNECT TO A PROPOSED STORMWATER MANAGEMENT FACILITY. THE FACILITY MEETS CITY OF ALACHUA AND SRWMD DESIGN CRITERIA. THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR OPERATION AND MAINTENANCE OF ALL COMPONENTS OF THE STORMWATER SYSTEM.

7. *NATURAL FEATURES:*
   TOPOGRAPHY SLOPES FROM SOUTH TO NORTH WITH MODERATE SLOPES. THERE ARE SEVERAL ON-SITE WETLANDS.

8. *ZONING/LAND USE INFORMATION AND COMPLIANCE:*
   ZONING DISTRICT = COMMERCIAL, INTENSIVE COMMERCIAL (CI), AND COMMUNITY COMMERCIAL (CC)

   PER ARTICLE 6 OF THE LDRS, THE PROPOSED SITE IS CONSIST WITH ALL APPLICABLE DEVELOPMENT STANDARDS. COMPLIANCE WITH THE REQUIRED PARKING CAN BE FOUND IN NOTE 3 ON THIS SHEET. THE SITE IS CURRENTLY CLEARED AND GRASSED FOR AGRICULTURAL PURPOSES AND THE PROPOSED LANDSCAPING FULFILLS GENERAL, MITIGATION, AND BUFFER REQUIREMENTS. A STORMWATER MANAGEMENT SYSTEM WILL BE BUILT WITH THE PROPOSED PROJECT.

9. *CONCURRENCY IMPACT ANALYSIS:*
   SUBMITTED UNDER SEPARATE COVER

10. *LEGAL DESCRIPTION:*

    REFER TO SURVEY

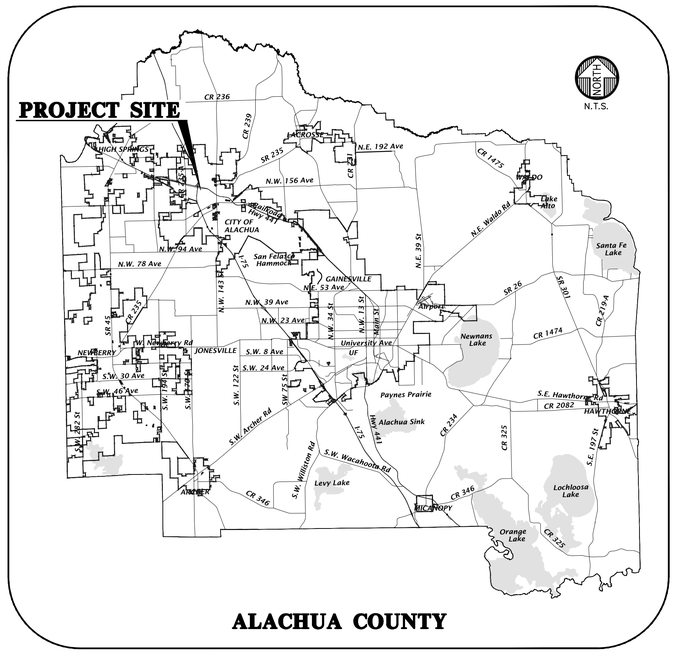
BEFORE YOU DIG !
CALL SUNSHINE STATE ONE CALL OF FLORIDA
AT LEAST TWO FULL BUSINESS DAYS BEFORE DIGGING OR DISTURBING EARTH

1-800-432-4770

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

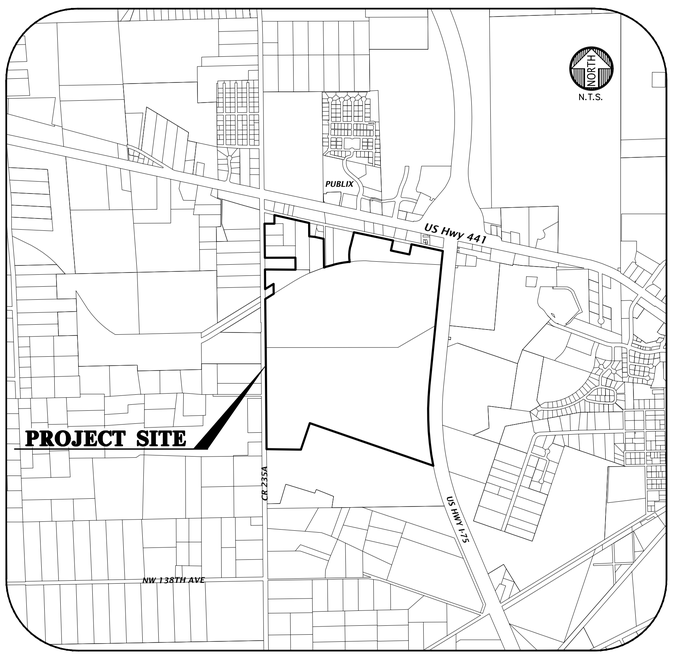
SHEET INDEX

SHEET NUMBER	DESCRIPTION
C0.00	COVER SHEET AND INDEX
1 OF 1	BOUNDARY SKETCH
1-26 OF 26	BOUNDARY AND TOPOGRAPHIC SURVEY
C0.10	GENERAL NOTES
C0.11	LEGEND
C0.20	STORMWATER POLLUTION PREVENTION NOTES
C0.21 - C0.25	STORMWATER POLLUTION PREVENTION PLAN AND DETAILS
C0.30 - C0.35	DEMOLITION AND TREE PROTECTION PLAN
C0.40	MASTER KEY SHEET
C0.41	PROPOSED DRAINAGE EASEMENT PLAN
C1.00	MASTER HEADQUARTERS SITE PLAN
C1.10 - C1.13	DETAILED HORIZONTAL CONTROL AND SITE PLAN
C1.20 - C1.22	ON-SITE ACCESSIBILITY SITE PLAN
C1.23	ON-SITE ACCESSIBILITY DETAILS
C2.00	MASTER HEADQUARTERS GRADING PLAN
C2.01	OVERALL STRUCTURE TABLES
C2.10 - C2.15	DETAILED GRADING AND DRAINAGE PLAN
C2.20 - C2.22	STORMWATER MANAGEMENT FACILITY PLAN AND DETAILS
C2.30 - C2.34	CONSTRUCTION DETAILS
C3.10	DETAILED UTILITY SITE PLAN
C3.20 - C3.21	HEADQUARTERS SANITARY SEWER PLAN AND PROFILE
C4.00	TYPICAL ROADWAY SECTIONS
C4.11 - C4.12	ROADWAY PLAN AND PROFILE SHEETS
C4.13	ROADWAY ROUNDABOUT PLAN SHEET
C4.14 - C4.15	ROADWAY UTILITY PLAN AND PROFILE SHEETS
C4.16 - C4.17	SIGNING AND PAVEMENT MARKING PLAN SHEETS
C6.05 - C6.20	ROADWAY CROSS SECTIONS SHEETS
LS-1	LANDSCAPE NOTES AND DETAILS
LS-2	OVERALL LANDSCAPE PLAN AND PLANT SCHEDULE
LS-3 - LS-18	LANDSCAPE PLAN
IR-1	OVERALL IRRIGATION PLAN AND DETAILS
IR-2 - IR-17	IRRIGATION PLAN
1-2 OF 2	ROADWAY PHOTOMETRIC PLAN
E1 - E3	ELECTRICAL AND LIGHTING PLAN
E4	SPECS AND LEGEND
E5 - E6	ELECTRICAL DETAILS
E7	LIGHTING SCHEDULE
E8	LIGHTING DETAILS AND STATS
E-0.1	CORPORATE OFFICE PHOTOMETRIC PLAN
A.3.0 - A.3.1	ARCHITECTURAL FLOOR PLAN
A.6.0 - A.6.1	ARCHITECTURAL EXTERIOR ELEVATIONS



ALACHUA COUNTY

VICINITY MAP



LOCATION MAP

SURVEYOR OF RECORD

CHAD A. COLSON, P.L.S.
CHW
11801 RESEARCH DRIVE
ALACHUA, FL 32615
(352) 331-1976

LANDSCAPE ARCHITECT

CAELI M. TOLAR, L.A.
CHW
11801 RESEARCH DRIVE
ALACHUA, FL 32615
(352) 331-1976

OWNER/DEVELOPER

TOMOKA HILLS FARMS, INC.
7201 NW 11TH PLACE
GAINESVILLE, FL 32605

ROAD PHOTOMETRIC

BILL STORMANT, PE
5304 NW 173 ST.
ALACHUA, FL. 32615
stormantwt@cox.net

SITE PHOTOMETRIC

KPI ENGINEERING, INC.
3203 QUEEN PALM DRIVE
TAMPA, FLORIDA 33619
(813) 241-6488

ENGINEER OF RECORD

WALKER OWEN, P.E.
CHW
11801 RESEARCH DRIVE
ALACHUA, FL 32615
(352) 331-1976

11801 Research Drive
Alachua, FL 32615
(352) 331-1976
www.chw-inc.com
est. 1988 FLORIDA CA-5075
CHW Professional Consultants

SCALE: N/A
VERIFY SCALE BAR IS CORRECT FOR DRAWING SIZE
0 1" IF NOT ONE INCH ON THIS SHEET ADJUST SCALES ACCORDINGLY

CONSTRUCTION/BID REVISIONS:

SUBMITTALS:
02/28/23 - CITY OF ALACHUA AND SRWMD
04/14/23 - CITY OF ALACHUA AND SRWMD
05/08/23 - CITY OF ALACHUA AND SRWMD

CLIENT: TOWER HILL SCOTT ROWE
PROJECT: TOWER HILL HEADQUARTERS
SHEET TITLE: COVER SHEET AND INDEX

TECHNICIAN: BG/TFC
DESIGNER: J. CHRISTOPHER
QUALITY CONTROL: W. OWEN, P.E.
PROJECT MANAGER: WALKER FAIN OWEN
PROJECT NUMBER: 21-0025

FL PE No. 94201

SHEET NO.: C0.00

Tech: ThomasE Plot Date: May 05,2023 8:54am Filename: H:\2021\21-0025\Departments\04_Engineering\03_DWGs\Production Files\21-0025 C0.dwg

BOUNDARY & TOPOGRAPHIC SURVEY

LOCATED IN SECTIONS 9 & 16, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA

LEGEND:

= BENCHMARK
= SET NAIL AND DISK STAMPED "TRAVERSE LB 5075"
= FOUND 4"X4" CONCRETE MONUMENT (MARKED AS NOTED)
= FOUND IRON PIPE (SIZE AS NOTED)
= FOUND 5/8" IRON ROD (NO ID.)
= FOUND NAIL AND DISK (MARKED AS NOTED)
= FOUND STEEL REBAR & CAP (MARKED AS NOTED)(SIZE AS NOTED)
= SET 1/2" STEEL REBAR AND CAP MARKED "TRAVERSE LB 5075"
= CLEANOUT
= CONCRETE POWER POLE
= GAS VALVE
= GUY ANCHOR
= METAL LIGHT POLE
= TELEPHONE PEDESTAL
= TRAFFIC SIGNAL BOX
= GUY POLE
= WOODEN POWER POLE
= ELECTRIC METER
= FIRE HYDRANT
= FIBER OPTIC BOX
= FIBER OPTIC LINE MARKER
= MAILBOX
= SIGN
= TREE (SIZE AND TYPE AS NOTED)
= SPIGOT
= SANITARY SEWER MANHOLE
= STORM SEWER MANHOLE
= UTILITY POLE
= WOODEN POWER POLE
= WATER VALVE
= STORM INLET
= SIGN WITH TWO POLES
= BOLLARD
= MONITORING WELL
= CROSSWALK INDICATOR
= HORSE WATERER
= WATER TANK
= ELECTRIC BOX
= AIR CONDITIONER
= TELEPHONE MANHOLE
= CABLE TELEVISION BOX
= ASPHALT SURFACE
= CONCRETE SURFACE
= DIRT SURFACE

TYP = TYPICAL
ELEV = ELEVATION
ID = IDENTIFICATION
NRE = NORTH RIM ELEVATION
FEMA = FEDERAL EMERGENCY MANAGEMENT AGENCY
NAVD = NORTH AMERICAN VERTICAL DATUM
X 95.5 = SPOT ELEVATION (PERVIOUS SURFACE)
X 95.75 = SPOT ELEVATION (IMPERVIOUS SURFACE)
SCO = SWAMP CHESTNUT OAK
LO = LIVE OAK
LAO = LAUREL OAK
HB = HACKBERRY
MAG = MAGNOLIA
CAM = CAMPHOR
SG = SWEETGUM
CB = CHINA BERRY
CL = CHERRY LAUREL
HIC = HICKORY
CED = CEDAR
MIM = MIMOSA
BE = BOX ELDER
PCN = PECAN
RO = RED OAK
WO = WATER OAK
CT = CHINESE TALLOW
INV = INVERT
RCP = REINFORCED CONCRETE PIPE
PVC = POLYVINYL CHLORIDE
CMP = CORRUGATED METAL PIPE
(M) = DATA BASED ON FIELD MEASUREMENTS
(C) = CALCULATED DATA
P.U.E. = PUBLIC UTILITIES EASEMENT
P.O.B. = POINT OF BEGINNING
P.O.C. = POINT OF COMMENCEMENT
O.R.B. = OFFICIAL RECORDS BOOK
R/W = RIGHT OF WAY
CONC. = CONCRETE
TP = TAX PARCEL
N = NORTH
E = EAST
S = SOUTH
W = WEST
NE = NORTHEAST
SE = SOUTHEAST
SW = SOUTH WEST
NW = NORTHWEST
NO. = NUMBER
(M) = DATA BASED ON FIELD MEASUREMENTS
(C) = DATA BASED ON CALCULATIONS
(P) = DATA BASED ON PLAT BOOK "I", PAGE 53
(D1) = DATA BASED ON PARCEL 1 DESCRIPTION (O.R.B. 3299, PAGE 210)
(D2) = DATA BASED ON PARCEL 2 DESCRIPTION (O.R.B. 2213, PAGE 1501)
(D3) = DATA BASED ON PARCEL 3 DESCRIPTION (O.R.B. 2219, PAGE 1139)
(D4) = DATA BASED ON PARCEL 4 DESCRIPTION (O.R.B. 4921, PAGE 21)
(D6) = DATA BASED ON PARCEL 6 DESCRIPTION (O.R.B. 2645, PAGE 97)
(D8) = DATA BASED ON PARCEL 8 DESCRIPTION (O.R.B. 2971, PAGE 987)
(D9) = DATA BASED ON PARCEL 9 DESCRIPTION (O.R.B. 4540, PAGE 598)

= OVERALL BOUNDARY LINE
= INTERNAL BOUNDARY AND ADJOINER BOUNDARY LINES
= MATCHLINE
= EASEMENT LINE
= R/W LINE
= WETLAND DELINEATION LINE TO BOUNDARY TIE LINE
= WETLAND DELINEATION LINE
OHW = OVERHEAD WIRE
X = FENCE (SIZE AND TYPE AS NOTED)
SS = SANITARY SEWER LINE
W = UNDERGROUND WATER LINE
ST = STORM SEWER LINE
(W) = WATER LINE (PER MAPS)
(G) = GAS LINE (PER MAPS)
(FM) = SANITARY SEWER FORCE MAIN LINE (PER MAPS)
95 = CONTOUR LINE

= ROADWAY PAVEMENT MARKINGS

DESCRIPTIONS:

PARCEL 1 (PER O.R.B. 3299, PAGE 210)

A TRACT OF LAND SITUATED IN FRACTIONAL SECTION 16 AND THE WILLIAM GARVIN GRANT, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA, SAID TRACT OF LANE BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT A CONCRETE MONUMENT AT THE NORTHEAST CORNER OF THE AFOREMENTIONED FRACTIONAL SECTION 16, TOWNSHIP 8 SOUTH, RANGE 18 EAST FOR A POINT OF REFERENCE AND RUN SOUTH 00 DEGS., 27 MINS., 55 SECS. WEST, A DISTANCE OF 3.76 FEET TO THE SOUTH RIGHT OF WAY LINE OF THE SEABOARD COASTLINE RAILROAD (200 FOOT RIGHT OF WAY ABANDONED); THENCE RUN NORTH 88 DEGS., 37 MINS., 15 SECS. WEST, ALONG SAID RIGHT OF WAY LINE , A DISTANCE OF 1090.69 FEET TO THE WEST RIGHT OF WAY LINE OF INTERSTATE NO. 75 (300 FOOT RIGHT OF WAY); THENCE RUN SOUTH 04 DEGS., 11 MINS., 43 SECS. WEST, ALONG SAID RIGHT OF WAY LINE OF INTERSTATE HIGHWAY NO. 75, A DISTANCE OF 1290.36 FEET TO A CONCRETE MONUMENT AT THE INTERSECTION OF THE SOUTH LINE OF THAT CERTAIN PARCEL OF LAND DESCRIBED IN OFFICIAL RECORDS BOOK 1195, AT PAGE 66 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA WITH SAID WEST RIGHT OF WAY LINE, OF INTERSTATE HIGHWAY NO.75 AND THE TRUE POINT OF BEGINNING; THENCE CONTINUE SOUTH 04 DEGS., 11 MINS., 43 SECS. WEST, ALONG SAID RIGHT OF WAY LINE, A DISTANCE OF 1257.04 FEET TO A CONCRETE MONUMENT AT THE POINT OF CURVATURE OF A 00 DEGS., 58 MINS., 28 SEC. CURVE, HAVING A RADIUS OF 5879.58 FEET, A TOTAL INTERNAL ANGLE OF 28 DEGS., 38 MINS., 28 SECS. AND BEING CONCAVE TO AN EASTERLY DIRECTION; THENCE RUN SOUTHEASTERLY, ALONG THE ARC OF THE SAID RIGHT OF WAY CURVE, AN ARC DISTANCE OF 1734.82 FEET TO A CONCRETE MONUMENT, SAID CONCRETE MONUMENT BEING THE SOUTHEAST CORNER OF THE CERTAIN PARCEL OF LAND DESCRIBED IN OFFICIAL RECORDS BOOK 742, AT PAGE 153 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA; THENCE RUN NORTH 72 DEGS., 29 MINS., 54 SECS. WEST, ALONG THE SOUTH LINE OF SAID PARCEL OF LAND RECORDED IN OFFICIAL RECORDS BOOK 742, AT PAGE 153, A DISTANCE OF 2775.69 FEET TO A CONCRETE MONUMENT; THENCE RUN SOUTH 17 DEGS., 05 MINS., 50 SECS. WEST, ALONG SAID SOUTH LINE, A DISTANCE OF 592.04 FEET TO A CONCRETE MONUMENT; THENCE RUN SOUTH 89 DEGS., 04 MINS., 44 SECS. WEST, ALONG SAID SOUTH LINE, A DISTANCE OF 725.63 FEET TO THE EAST RIGHT OF WAY LINE OF STATE ROAD NO. S-235-A (100 FOOT RIGHT OF WAY); THENCE RUN NORTH 01 DEGS., 59 MINS., 55 SECS. WEST, ALONG SAID RIGHT OF WAY LINE, A DISTANCE OF 2164.71 FEET TO A CONCRETE MONUMENT AT THE SOUTHWEST CORNER OF SAID PARCEL OF LAND DESCRIBED IN OFFICIAL RECORDS BOOK 1195, AT PAGE 66; THENCE RUN NORTH 88 DEGS., 29 MINS., 13 SECS. EAST, ALONG THE SOUTH LINE OF SAID PARCEL OF LAND, A DISTANCE OF 2807.17 FEET TO A CONCRETE MONUMENT; THENCE RUN NORTH 58 DEGS., 14 MINS., 10 SECS. EAST, ALONG SAID SOUTH LINE, A DISTANCE OF 917.09 FEET TO THE TRUE POINT OF BEGINNING.

PARCEL 2 (PER O.R.B. 2213, PAGE 1501)

A TRACT OF LAND SITUATED IN FRACTIONAL SECTIONS 9 & 16 AND SECTION 37 (WILLIAM GARVIN GRANT), TOWNSHIP 8 SOUTH , RANGE 18 EAST, ALACHUA COUNTY, FLORIDA, SAID TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT A CONCRETE MONUMENT AT THE SOUTHEAST CORNER OF THE AFOREMENTIONED FRACTIONAL SECTION 9, TOWNSHIP 8 SOUTH, RANGE 18 EAST FOR A POINT OF REFERENCE AND RUN S. 01°54'57" W., A DISTANCE OF 3.76 FEET TO A CONCRETE MONUMENT ON THE SOUTHERLY RIGHT OF WAY LINE OF THE ABANDONED SEABOARD COASTLINE RAILROAD (200 FOOT RIGHT OF WAY); THENCE RUN N. 87°08'33" W., ALONG SAID SOUTHERLY RIGHT OF WAY LINE, A DISTANCE OF 1090.74 FEET TO A CONCRETE MONUMENT ON THE WESTERLY RIGHT OF WAY LINE OF STATE ROAD NO. 93, ALSO KNOWN AS INTERSTATE HIGHWAY NO. 75 (300 FOOT RIGHT OF WAY); THENCE RUN N. 05°41'41" E., ALONG SAID WESTERLY RIGHT OF WAY LINE; A DISTANCE OF 100.12 FEET TO AN IRON PIPE ON THE CENTERLINE OF SAID RAILROAD RIGHT OF WAY AND THE TRUE POINT OF BEGINNING; THENCE RUN N. 87°08'33"W., ALONG SAID CENTERLINE, A DISTANCE OF 1480.63 FEET TO AN IRON PIPE AT THE POINT OF CURVATURE OF A CURVE CONCAVE SOUTHERLY, SAID CURVE HAVING A RADIUS OF 2864.79 FEET, A CENTRAL ANGLE OF 34°35'30", AND A CHORD BEARING AND DISTANCE OF S. 75°33'47" W., 1703.44 FEET RESPECTIVELY; THENCE RUN SOUTHWESTERLY, WITH SAID CURVE AND ALONG SAID CENTERLINE, AN ARC DISTANCE OF 1729.58 FEET TO AN IRON PIPE AT THE POINT OF TANGENCY OF SAID CURVE; THENCE RUN S. 58°15'57" W., ALONG SAID CENTERLINE, A DISTANCE OF 716.12 FEET TO A CONCRETE MONUMENT ON THE EASTERLY RIGHT OF WAY LINE OF COUNTY ROAD NO. 235A (100 FOOT RIGHT OF WAY); THENCE RUN S. 00°30'42" E., ALONG SAID RIGHT OF WAY LINE, A DISTANCE OF 1030.00 FEET TO A CONCRETE MONUMENT; THENCE RUN N. 89°58'49" E, A DISTANCE OF 280.17 FEET TO A CONCRETE MONUMENT; THENCE RUN N. 59°41'41" E., A DISTANCE OF 917.50 FEET TO A CONCRETE MONUMENT ON SAID WESTERLY RIGHT OF WAY LINE OF STATE ROAD NO. 93; THENCE RUN N. 05°41'41" E., ALONG SAID RIGHT OF WAY LINE, A DISTANCE OF 1300.00 FEET TO THE TRUE POINT OF BEGINNING.

PARCEL 3 (PER O.R.B. 2219, PAGE 1139)

A TRACT OF LAND SITUATED IN SECTION 9, TOWNSHIP 8 SOUTH, RANGE 18 EAST AND FRACTIONAL SECTION 16, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA, SAID TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHWEST CORNER OF THE AFOREMENTIONED SECTION 9, TOWNSHIP 8 SOUTH, RANGE 18 EAST FOR THE POINT OF REFERENCE AND RUN N.86°54'12"E., ALONG THE SOUTH LINE OF SAID SECTION 9, A DISTANCE OF 50.00 FEET TO THE EAST RIGHT OF WAY LINE OF COUNTY ROAD NO. 235-A (100 FOOT RIGHT OF WAY) AND THE TRUE POINT OF BEGINNING; THENCE RUN N.03°06'59"W., ALONG SAID EAST RIGHT OF WAY LINE, A DISTANCE OF 500.44 FEET; THENCE RUN N.86°53'01"E., A DISTANCE OF 647.68 FEET; THENCE RUN S.03°06'59"E., A DISTANCE OF 500.66 FEET TO THE AFOREMENTIONED SOUTH LINE OF SECTION 9; THENCE RUN N.86°54'12"E., ALONG SAID SOUTH LINE, A DISTANCE OF 299.30 FEET TO THE EAST LINE OF THAT CERTAIN PARCEL OF LAND AS DESCRIBED IN OFFICIAL RECORD BOOK 175, PAGE 1000 OF THE PUBLIC RECORDS ALACHUA COUNTY, FLORIDA, SAID PARCEL OF LAND BEING HEREINAFTER REFERRED TO AS THE "ORIGINAL PARCEL"; THENCE RUN S.03°19'15"E., ALONG THE EAST LINE OF SAID "ORIGINAL PARCEL", A DISTANCE OF 84.71 FEET TO THE CENTERLINE OF THE ABANDONED SEABOARD COASTLINE RAILROAD (100 FOOT RIGHT OF WAY); THENCE RUN SOUTHWESTERLY, ALONG SAID CENTERLINE AND WITH A CURVE CONCAVE SOUTHERLY, SAID CURVE HAVING A RADIUS OF 2864.79 FEET, THROUGH AN ARC ANGLE OF 07°33'14", AN ARC DISTANCE OF 377.68 FEET (CHORD BEARING AND DISTANCE OF S.59°28'16"W., 377.42 FEET RESPECTIVELY) TO THE END OF SAID CURVE; THENCE RUN S.55°41'39"W., ALONG SAID CENTERLINE, A DISTANCE OF 506.12 FEET TO A BOUNDARY CORNER OF SAID "ORIGINAL PARCEL"; THENCE RUN N.03°05'00"W., ALONG A BOUNDARY LINE OF SAID "ORIGINAL PARCEL", A DISTANCE OF 210.00 FEET; THENCE RUN S.55°41'39"W., ALONG A BOUNDARY LINE OF SAID "ORIGINAL PARCEL", A DISTANCE OF 210.00 FEET TO THE INTERSECTION OF SAID BOUNDARY LINE WITH THE AFOREMENTIONED EAST RIGHT OF WAY LINE OF COUNTY ROAD NO. 235-A; THENCE RUN N.03°05'00"W., ALONG SAID EAST RIGHT OF WAY LINE, A DISTANCE OF 419.65 FEET TO THE TRUE POINT OF BEGINNING, CONTAINING 14.105 ACRES MORE OR LESS.

LESS AND EXCEPT; A TRACT OF LAND SITUATED IN SECTION 9, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA, SAID TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE SOUTH 1/2 OF THE FOLLOWING DESCRIBED PROPERTY:

COMMENCE AT THE SW CORNER OF THE AFOREMENTIONED SECTION 9, TOWNSHIP 8 SOUTH, RANGE 18 EAST FOR THE POINT OF REFERENCE AND RUN N.86°54'12"E., ALONG THE SOUTH LINE OF SAID SECTION 9, A DISTANCE OF 50.00 FEET TO THE EAST RIGHT OF WAY LINE OF COUNTY ROAD NO. 235-A (100 FOOT RIGHT OF WAY) AND THE TRUE POINT OF BEGINNING; THENCE RUN N.03°06'59"W., ALONG SAID EAST RIGHT OF WAY LINE A DISTANCE OF 500.44 FEET; THENCE RUN N.86°53'01"E. A DISTANCE OF 647.68 FEET; THENCE RUN S.03°06'59"E. A DISTANCE OF 500.66 FEET TO THE AFOREMENTIONED SOUTH LINE OF SECTION 9; THENCE RUN S.86°54'12"W. ALONG THE SOUTH LINE OF SAID SECTION 9 TO THE POINT OF BEGINNING.

PARCEL 4 (PER O.R.B. 4921, PAGE 21)

COMMENCE AT THE SOUTHWEST CORNER OF SECTION 9, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA AND RUN NORTH 86°54'12" EAST, 50.00 FEET; THENCE NORTH 03°06'59" WEST, 1202.77 FEET; THENCE SOUTH 78°37'24" EAST, 321.65 FEET TO A POINT OF CURVE OF A CURVE CONCAVE TO THE NORTH, HAVING A RADIUS OF 10209.13 FEET AND AN INCLUDED ANGLE OF 02°04'47"; THENCE RUN ALONG THE ARC OF SAID CURVE AN ARC DISTANCE OF 370.57 FEET TO THE END OF SAID CURVE; THENCE SOUTH 80°42'11" EAST, 278.21FEET; THENCE SOUTH 03°15' EAST, 284.97 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE SOUTH 03°19'15" EAST,776.51 FEET; THENCE NORTH 66°30'51" EAST, 324.93 FEET; THENCE NORTH 03°22'35" WEST, 609.28 FEET; THENCE NORTH 80°30'38" WEST, 190.44 FEET; THENCE NORTH 87°04'27" WEST, 119.43 FEET TO THE POINT OF BEGINNING. CONTAINING 4.88 ACRES, MORE OR LESS.

TOGETHER WITH AN EASEMENT FOR INGRESS AND EGRESS OVER AND ACROSS THE FOLLOWING:

COMMENCE AT THE SOUTHWEST CORNER OF SECTION 9,TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA AND RUN NORTH 86°54'12" EAST 50.00 FEET; THENCE NORTH 03°06'59" WEST, 1202.77 FEET; THENCE SOUTH 78°37'24" EAST, 321.65 FEET TO A POINT OF CURVE OF A CURVE CONCAVE TO THE NORTH, HAVING A RADIUS OF 10209.13 FEET AND AN INCLUDED ANGLE OF 02°04'47"; THENCE RUN ALONG THE ARC OF SAID CURVE AN ARC DISTANCE OF 370.57 FEET TO THE END OF SAID CURVE, THENCE SOUTH 80°42'11" EAST, 278.21FEET; THENCE SOUTH 80°57'41" EAST, 143.99 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE SOUTH 80°57'41" EAST 30.01 FEET; THENCE SOUTH 07°47'57" WEST, 265.71 FEET; THENCE NORTH 87°04'27" WEST, 30.11 FEET; THENCE NORTH 07°47'57" EAST, 268.92 FEET TO THE POINT OF BEGINNING.

PARCEL 5 (PER O.R.B. 2229, PAGE 1239)

LOTS TWO (2) AND THREE (3), ALACHUA OAKS SUBDIVISION, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK "I", PAGE 53, OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA.

PARCEL 6 (PER O.R.B. 2645, PAGE 97)

A TRACT OF LAND SITUATED IN SECTION 9, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHWEST CORNER OF THE AFOREMENTIONED SECTION 9, TOWNSHIP 8 SOUTH, RANGE 18 EAST, FOR THE POINT OF REFERENCE AND RUN NORTH 86°54'12" EAST, ALONG THE SOUTH LINE OF SAID SECTION 9, A DISTANCE OF 50.00 FEET TO THE EAST RIGHT OF WAY LINE OF COUNTY ROAD NO. 235-A (100 FOOT RIGHT OF WAY); THENCE RUN NORTH 03°06'59" WEST, ALONG SAID EAST RIGHT OF WAY LINE, A DISTANCE OF 967.41 FEET TO THE TRUE POINT OF BEGINNING; THENCE CONTINUE NORTH 03°06'59" WEST, ALONG SAID RIGHT OF WAY LINE, A DISTANCE OF 235.36 FEET TO THE INTERSECTION OF SAID EAST RIGHT OF WAY LINE WITH THE SOUTH RIGHT OF WAY LINE OF OLD STATE HIGHWAY NO. 2 (66 FOOT RIGHT OF WAY); THENCE RUN SOUTH 78°37'24" EAST, ALONG SAID SOUTH RIGHT OF WAY LINE, A DISTANCE OF 321.65 FEET TO THE BEGINNING OF A CURVE CONCAVE NORTHERLY, SAID CURVE HAVING A RADIUS OF 10209.13 FEET; THENCE RUN SOUTHEASTERLY, ALONG SAID SOUTH RIGHT OF WAY LINE AND WITH SAID CURVE, THROUGH AN ARC ANGLE OF 01°56'28", AN ARC DISTANCE OF 345.87 FEET (CHORD BEARING AND DISTANCE OF SOUTH 79°35'38" EAST, 345.86 FEET RESPECTIVELY); THENCE RUN SOUTH 03°06'59" EAST, A DISTANCE OF 540.96 FEET; THENCE RUN SOUTH 86°53'01" WEST, A DISTANCE OF 254.68 FEET; THENCE RUN NORTH 03°06'59" WEST, A DISTANCE OF 466.97 FEET; THENCE RUN SOUTH 86°53'01" WEST, A DISTANCE OF 393.00 FEET TO THE TRUE POINT OF BEGINNING.

LESS THE WESTERLY 210 FEET THEREOF.

PARCEL 7 (PER O.R.B. 3090, PAGE 1391)

LOT 1, ALACHUA OAKS SUBDIVISION, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK "I", PAGE 53, OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA.

PARCEL 8 (PER O.R.B. 2971, PAGE 987)

A TRACT OF LAND SITUATED IN SECTION 9, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCE AT THE SOUTHWEST CORNER OF THE AFOREMENTIONED SECTION 9 FOR A POINT OF REFERENCE AND RUN NORTH ALONG THE WEST LINE OF SAID SECTION 9, A DISTANCE OF 500.44 FEET; THENCE RUN EAST PERPENDICULAR TO THE SAID WEST LINE OF SECTION 9, A DISTANCE OF 50.00 FEET TO THE EASTERLY RIGHT OF WAY LINE OF STATE ROAD NO. 235-A (100' R/W) AND THE POINT OF BEGINNING; THENCE CONTINUE EAST PERPENDICULAR TO THE SAID WEST LINE OF SECTION 9 A DISTANCE OF 393.00 FEET; THENCE RUN NORTH PARALLEL TO THE SAID WEST LINE OF SECTION 9, A DISTANCE OF 221.68 FEET; THENCE RUN WEST, PERPENDICULAR TO THE SAID WEST LINE OF SECTION 9 A DISTANCE OF 393.00 FEET TO THE SAID EASTERLY RIGHT OF WAY OF STATE ROAD NO. 235-A; THENCE SOUTH PARALLEL TO THE SAID WEST LINE OF SECTION 9, AND ALONG THE SAID EASTERLY RIGHT OF WAY LINE OF STATE ROAD NO. 235-A, A DISTANCE OF 221.68 FEET TO THE POINT OF BEGINNING.

PARCEL 9 (PER O.R.B. 4540, PAGE 598)

EAST PARCEL: A PARCEL OF LAND SITUATED IN FRACTIONAL SECTION 9 AND THE WILLIAM GARVIN GRANT, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCE AT A CONCRETE MONUMENT AT THE SOUTHEAST CORNER OF SAID FRACTIONAL SECTION 9, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCE AT A CONCRETE MONUMENT AT THE SOUTHEAST CORNER OF SAID FRACTIONAL SECTION 9 FOR A POINT OF REFERENCE AND RUN SOUTH 01 DEG. 54'57" WEST, A DISTANCE OF 3.76 FEET TO A CONCRETE MONUMENT ON THE SOUTHERLY RIGHT OF WAY LINE OF THE ABANDONED SEABOARD COASTLINE RAILROAD (200 FOOT RIGHT OF WAY); THENCE RUN NORTH 87 DEG. 08'33" WEST, ALONG SAID SOUTHERLY RIGHT OF WAY LINE A DISTANCE OF 1090.74 FEET TO A CONCRETE MONUMENT AT THE INTERSECTION OF SAID SOUTHERLY RIGHT OF WAY LINE WITH THE WESTERLY RIGHT OF WAY LINE OF STATE ROAD NO. 93, ALSO KNOWN AS INTERSTATE HIGHWAY NO. 75 (300 FOOT RIGHT OF WAY); THENCE RUN NORTH 05 DEG. 41'41" EAST ALONG SAID WESTERLY RIGHT OF WAY LINE, A DISTANCE OF 100.12 FEET TO A 5/8" STEEL, ROD AND CAP STAMPED CHW INC. (LB 5075) AT THE CENTERLINE OF AFOREMENTIONED ABANDONED SEABOARD COASTLINE RAILROAD AND THE POINT OF BEGINNING; THENCE RUN NORTH 87 DEG. 10'32" WEST, ALONG SAID CENTERLINE OF ABANDONED RAILROAD, A DISTANCE OF 1480.76 FEET TO A 1/2" STEEL ROD AND CAP STAMPED ACLS (LB2903) AT THE POINT OF CURVATURE OF A CURVE CONCAVE SOUTHERLY AND HAVING A RADIUS OF 2864.79 FEET; THENCE RUN 416.82 FEET ALONG THE ARC OF SAID CURVE TO THE LEFT, THROUGH A CENTRAL ANGLE OF 8 DEG. 20'11" AND SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 88 DEG. 41'02" WEST, 416.45 FEET TO IT'S INTERSECTION WITH THE EAST LINE OF A PROPOSED 100 FOOT WIDE ROADWAY SAID INTERSECTION BEING ON THE ARC OF A CURVE CONCAVE EASTERLY AND HAVING A RADIUS OF 900.00 FEET; THENCE RUN ALONG SAID EAST LINE, 364.58 FEET ALONG THE ARC OF SAID NON-TANGENT CURVE TO THE RIGHT, THROUGH A CENTRAL ANGLE 23 DEG. 12'35" AND SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 04 DEG. 14'21" EAST, 362.09 FEET TO A NON-TANGENT POINT OF REVERSE CURVATURE ON THE ARC OF A CURVE CONCAVE WESTERLY AND HAVING A RADIUS OF 3309.14 FEET; THENCE CONTINUE ALONG SAID EAST LINE, 211.79 FEET ALONG THE ARC OF SAID CURVE TO THE LEFT, THROUGH A CENTRAL ANGLE OF 03 DEG. 40'01" AND SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 13 DEG. 59'35" EAST, 211.76 FEET TO A POINT OF TANGENCY; THENCE CONTINUE ALONG SAID EAST LINE, NORTH 12 DEG. 09'34" EAST, A DISTANCE OF 49.63 FEET TO IT'S INTERSECTION WITH THE SOUTH RIGHT OF WAY LINE OF NW 162ND LANE, (A 60 FOOT WIDE RIGHT OF WAY); THENCE RUN SOUTH 78 DEG. 09'10" EAST, ALONG SAID SOUTH RIGHT OF WAY LINE, A DISTANCE OF 798.74 FEET TO A 4" SQUARE CONCRETE MONUMENT (NO IDENTIFICATION), MARKING THE NORTHWEST CORNER OF LANDS AS DESCRIBED AND RECORDED IN OFFICIAL RECORDS BOOK 4281 AT PAGE 128 OF THE PUBLIC RECORDS OF ALACHUA COUNTY FLORIDA; THENCE RUN ALONG THE BOUNDS OF SAID LANDS THE FOLLOWING THREE (3) COURSES; 1) SOUTH 12 DEG. 02'06" WEST, A DISTANCE OF 217.73 FEET TO A 4" SQUARE CONCRETE MONUMENT AND DISK STAMPED (PLS 2228); 2) SOUTH 78 DEG. 08'35" EAST, A DISTANCE OF 399.95 FEET TO A 4" SQUARE CONCRETE MONUMENT AND DISK STAMPED (PLS2228); 3) NORTH 12 DEG. 02'06" EAST, A DISTANCE OF 217.80 TO A 5/8" STEEL ROD AND CAP STAMPED CHW INC (LB 5075) SAID POINT BEING THE NORTHEAST CORNER OF SAID LANDS AND A POINT ON THE AFOREMENTIONED SOUTH RIGHT OF WAY LINE OF NW 162ND LANE; THENCE RUN SOUTH 78 DEG. 09'10" EAST, ALONG SAID SOUTH RIGHT OF WAY LINE, A DISTANCE OF 677.36 FEET TO IT'S INTERSECTION WITH THE AFOREMENTIONED WESTERLY RIGHT OF WAY LINE OF STATE ROAD NO. 93; THENCE RUN SOUTH 05 DEG. 41'04" WEST, ALONG SAID WESTERLY RIGHT OF WAY LINE, A DISTANCE OF 294.78 FEET TO THE POINT OF BEGINNING.

TOGETHER WITH EAST ROADWAY PARCEL:.

A PARCEL OF LAND SITUATED IN FRACTIONAL SECTION 9, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT A CONCRETE MONUMENT AT THE SOUTHEAST CORNER OF SAID FRACTIONAL SECTION 9, TOWNSHIP 8 SOUTH, RANGE 18 EAST, FOR A POINT OF REFERENCE AND RUN SOUTH 01 DEG. 54'57" WEST, A DISTANCE OF 3.76 FEET TO A CONCRETE MONUMENT ON THE SOUTHERLY RIGHT OF WAY LINE OF THE ABANDONED SEABOARD COASTLINE RAILROAD (200 FOOT RIGHT OF WAY); THENCE RUN NORTH 87 DEG. 08'33" WEST, ALONG SAID SOUTHERLY RIGHT OF WAY LINE A DISTANCE OF 1090.74 FEET TO A CONCRETE MONUMENT AT THE INTERSECTION OF SAID SOUTHERLY RIGHT OF WAY LINE WITH THE WESTERLY RIGHT OF WAY LINE OF STATE ROAD NO. 93, ALSO KNOWN AS INTERSTATE HIGHWAY NO. 75 (300 FOOT RIGHT OF WAY); THENCE RUN NORTH 05 DEG. 41'41" EAST ALONG SAID WESTERLY RIGHT OF WAY LINE, A DISTANCE OF 100.12 FEET TO A 5/8" STEEL ROD AND CAP STAMPED CHW INC (LB5075) AT THE CENTERLINE OF AFOREMENTIONED ABANDONED SEABOARD COASTLINE RAILROAD; THENCE RUN NORTH 87 DEG. 10'32" WEST, ALONG SAID CENTERLINE OF ABANDONED RAILROAD, A DISTANCE OF 1480.76 FEET TO A 1/2" STEEL ROD AND CAP STAMPED ACLS(LB2903) AT THE POINT OF CURVATURE OF A CURVE CONCAVE SOUTHERLY AND HAVING A RADIUS OF 2864.79 FEET; THENCE RUN 416.82 FEET ALONG THE ARC OF SAID CURVE TO THE LEFT, THROUGH A CENTRAL ANGLE OF 8 DEG. 20'11" AND SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 88 DEG. 41'02" WEST, 416.45 FEET TO IT'S INTERSECTION WITH THE EAST LINE OF A PROPOSED 100 FOOT WIDE ROADWAY AND THE POINT OF BEGINNING, SAID INTERSECTION BEING ON THE ARC OF A CURVE CONCAVE EASTERLY AND HAVING A RADIUS OF 900.00 FEET; THENCE RUN ALONG SAID EAST LINE, 364.58 FEET ALONG THE ARC OF SAID NON-TANGENT CURVE TO THE RIGHT, THROUGH A CENTRAL ANGLE 23 DEG. 12'35" AND SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 04 DEG. 14'21" EAST, 362.09 FEET TO A NON-TANGENT POINT OF REVERSE CURVATURE ON THE ARC OF A CURVE CONCAVE WESTERLY AND HAVING A RADIUS OF 3309.14 FEET; THENCE CONTINUE ALONG SAID EAST LINE, 211.79 FEET ALONG THE ARC OF SAID CURVE TO THE LEFT, THROUGH A CENTRAL ANGLE OF 03 DEG. 40'01" AND SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 13 DEG. 59'35" EAST, 211.76 FEET TO A POINT OF TANGENCY; THENCE CONTINUE ALONG SAID EAST LINE, NORTH 12 DEG. 09'34" EAST, A DISTANCE OF 49.63 FEET TO IT'S INTERSECTION WITH THE SOUTH RIGHT OF WAY LINE OF NW 162ND LANE, (A 60 FOOT WIDE RIGHT OF WAY); THENCE RUN NORTH 78 DEG. 09'10" WEST, ALONG SAID SOUTH RIGHT OF WAY, A DISTANCE OF 50.00 FEET TO IT'S INTERSECTION WITH THE CENTERLINE OF SAID PROPOSED 100 FOOT WIDE ROADWAY; THENCE RUN SOUTH 12 DEG. 09'34" WEST, ALONG SAID CENTERLINE, A DISTANCE OF 49.36 FEET TO A POINT OF CURVATURE OF A CURVE CONCAVE TO WESTERLY, HAVING A RADIUS OF 3259.14 FEET; THENCE RUN ALONG SAID CENTERLINE, 209.02 FEET ALONG THE ARC OF SAID CURVE TO THE RIGHT, THROUGH A CENTRAL ANGLE OF 03 DEG. 40'29" AND SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 13 DEG. 59'49" WEST, 208.99 FEET TO A NON-TANGENT POINT OF REVERSE CURVATURE ON THE ARC OF A CURVE CONCAVE EASTERLY, HAVING A RADIUS OF 950.00 FEET; THENCE CONTINUE ALONG SAID CENTERLINE, 383.18 FEET ALONG THE ARC OF SAID CURVE TO THE LEFT, THROUGH A CENTRAL ANGLE OF 23 DEG. 06'36" AND SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 04 DEG. 15'43" WEST, 380.59 FEET TO IT'S POINT OF INTERSECTION WITH THE AFOREMENTIONED CENTERLINE OF THE ABANDONED SEABOARD COASTLINE RAILROAD, SAID INTERSECTION BEING ON THE ARC OF A CURVE CONCAVE SOUTHERLY AND HAVING A RADIUS OF 2864.79 FEET; THENCE RUN ALONG SAID CENTERLINE OF ABANDONED RAILROAD,

BOUNDARY & TOPOGRAPHIC SURVEY

LOCATED IN SECTIONS 9 & 16, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA

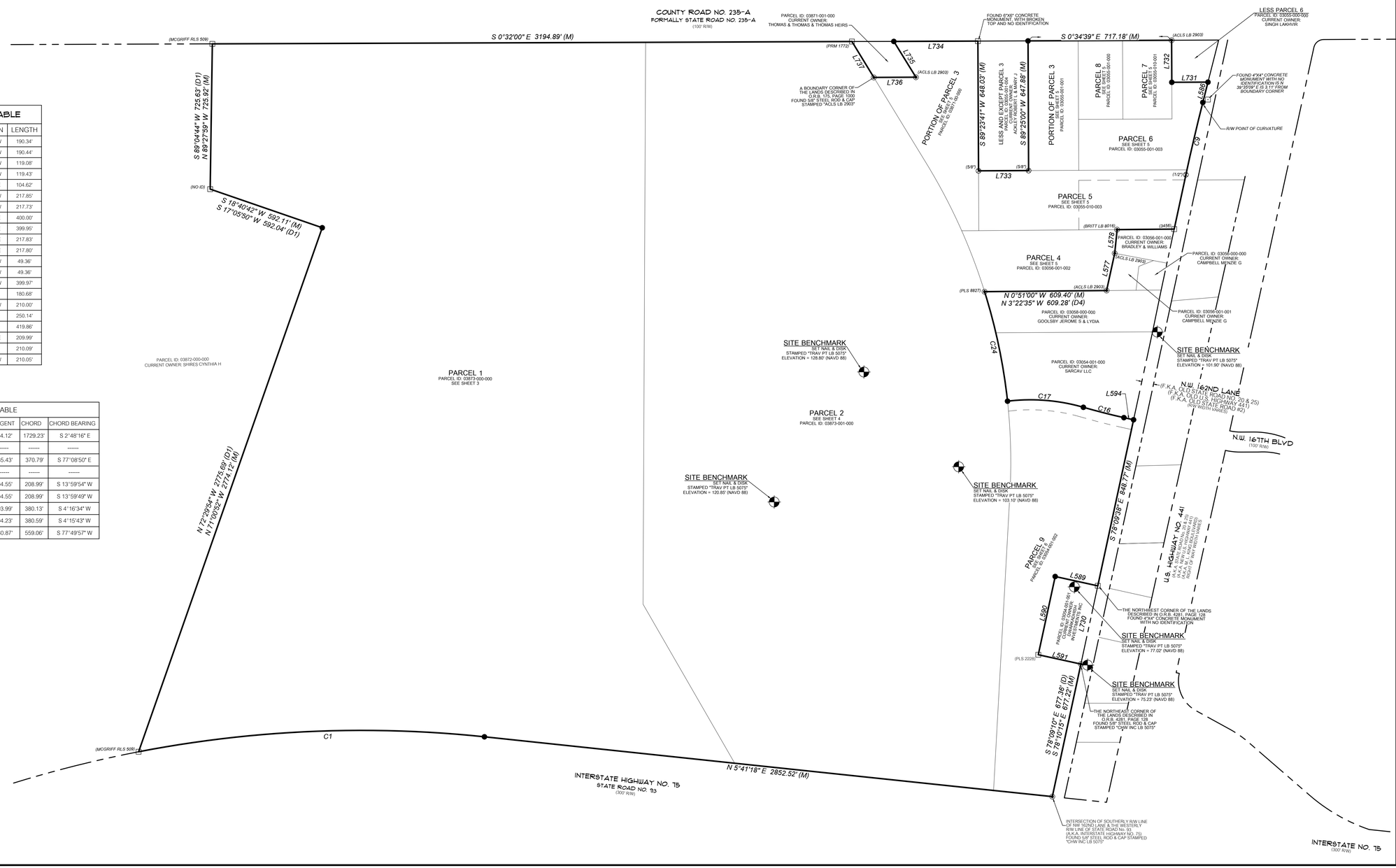
SURVEYOR'S NOTES:

1. THIS SURVEY CONSISTS OF TWENTY-SIX SHEETS AND IS NOT COMPLETE WITHOUT ALL SHEETS. SEE SHEET ONE FOR COMPLETE SURVEYOR'S NOTES.

GRAPHIC SCALE
0 125 250 500

LINE DATA TABLE		
LINE	DIRECTION	LENGTH
L577(M)	N 77°57'58" W	190.34'
L577(D4)	N 80°30'38" W	190.44'
L578(M)	N 84°30'07" W	119.08'
L578(D4)	N 87°04'27" W	119.43'
L586(M)	S 76°02'39" E	104.62'
L589(M)	S 12°02'31" W	217.85'
L589(D9)	S 12°02'06" W	217.73'
L590(M)	S 78°08'19" E	400.00'
L590(D9)	S 78°08'35" E	399.95'
L591(M)	N 12°02'06" E	217.83'
L591(D9)	N 12°02'06" E	217.80'
L594(M)	S 12°09'36" W	49.36'
L594(D9)	S 12°09'34" W	49.36'
L730(M)	N 78°08'10" W	399.97'
L731(M)	S 0°34'01" E	180.68'
L732(M)	S 89°22'44" W	210.00'
L733(M)	S 0°35'52" E	250.14'
L734(M)	S 0°32'14" E	419.86'
L735(M)	N 58°03'05" E	209.99'
L736(M)	S 0°36'09" E	210.09'
L737(M)	S 58°15'37" W	210.05'

CURVE DATA TABLE						
CURVE	LENGTH	RADIUS	DELTA	TANGENT	CHORD	CHORD BEARING
C1(M)	1735.53'	5879.58'	16°54'45"	874.12'	1729.23'	S 2°48'16" E
C1(D1)	1734.82'	5879.58'	28°28'28"	-------	-------	-------
C9(M)	370.81'	10209.13'	2°04'52"	185.43'	370.79'	S 77°08'50" E
C9(D4)	370.57'	10209.13'	2°04'47"	------	------	------
C16(M)	209.03'	3259.14'	3°40'29"	104.55'	208.99'	S 13°59'54" W
C16(D9)	209.03'	3259.14'	3°40'29"	104.55'	208.99'	S 13°59'49" W
C17(M)	382.71'	950.00'	23°04'54"	193.99'	380.13'	S 4°16'34" W
C17(D9)	383.18'	950.00'	23°06'37"	194.23'	380.59'	S 4°15'43" W
C24(M)	559.96'	2864.79'	11°11'57"	280.87'	559.06'	S 77°49'57" W



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SCALE: 1" = 250'

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SURVEY DATE: 05/10/2022
REVISION DATE: N/A
PROJECT NUMBER: 21-0025.07

TECHNICIAN: KWM
CREW CHIEF: WM
CHECKED BY: CAC
FIELD BOOK & PAGE: 635 / 69 & 650 / 4

TOMOKA HILLS FARMS, INC.

CHAD A. COLSON

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2 OF 26

Tech: chdw Plot Date: Jun 07,2023 10:12pm Filename: C:\AcadResources\Temp\AcPublish_10396\21-0025 BOUNDARY & TOPO.dwg

BOUNDARY & TOPOGRAPHIC SURVEY

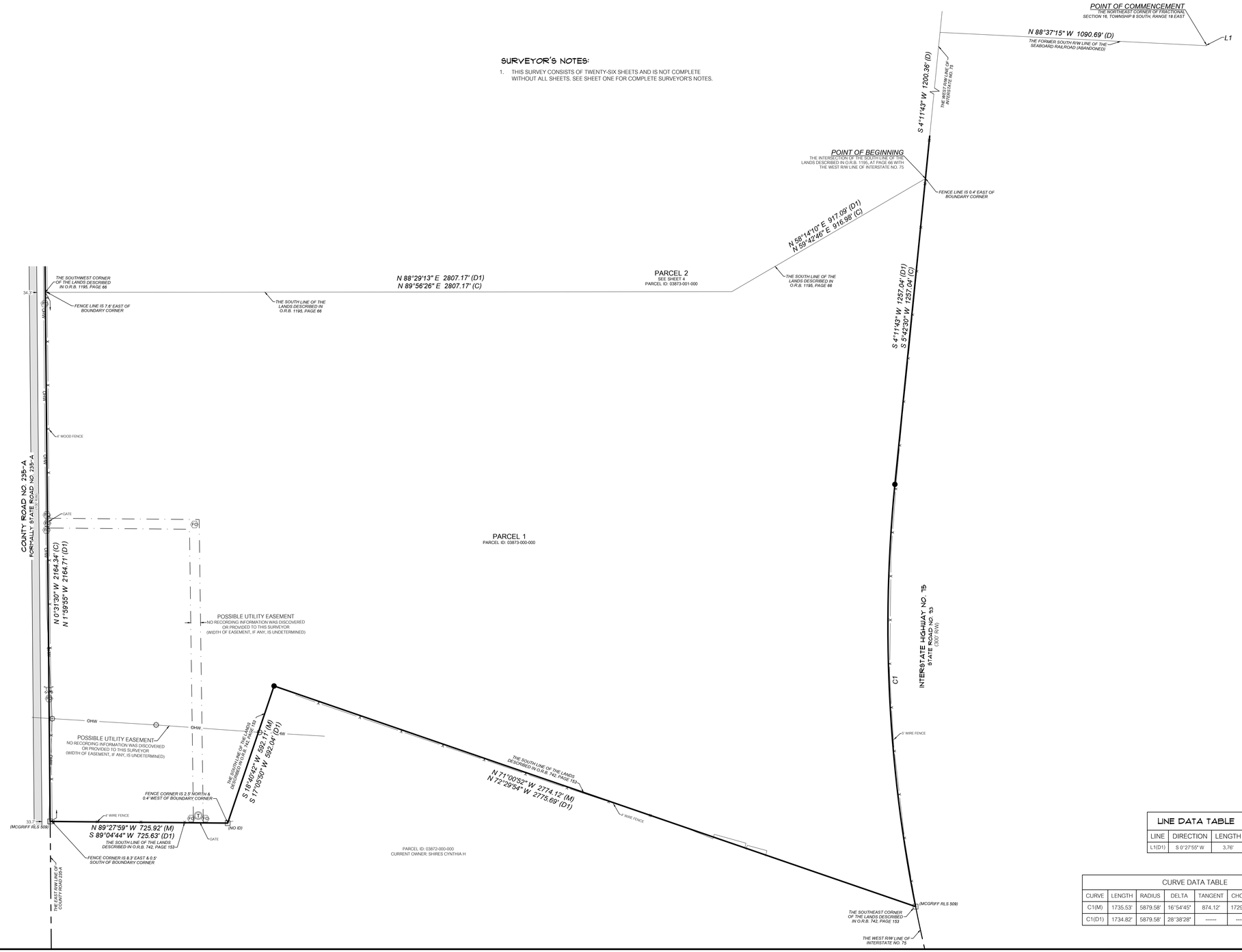
LOCATED IN SECTIONS 9 & 16, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA

GRAPHIC SCALE
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N

SURVEYOR'S NOTES:

1. THIS SURVEY CONSISTS OF TWENTY-SIX SHEETS AND IS NOT COMPLETE WITHOUT ALL SHEETS. SEE SHEET ONE FOR COMPLETE SURVEYOR'S NOTES.



LINE DATA TABLE		
LINE	DIRECTION	LENGTH
L1(D1)	S 0°27'55" W	3.76'

CURVE DATA TABLE						
CURVE	LENGTH	RADIUS	DELTA	TANGENT	CHORD	CHORD BEARING
C1(M)	1735.53'	5879.58'	16°54'45"	874.12'	1729.23'	S 2°48'16" E
C1(D1)	1734.82'	5879.58'	28°38'28"	-------	-------	-------

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CREW CHIEF: WM
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3 OF 26

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BOUNDARY & TOPOGRAPHIC SURVEY

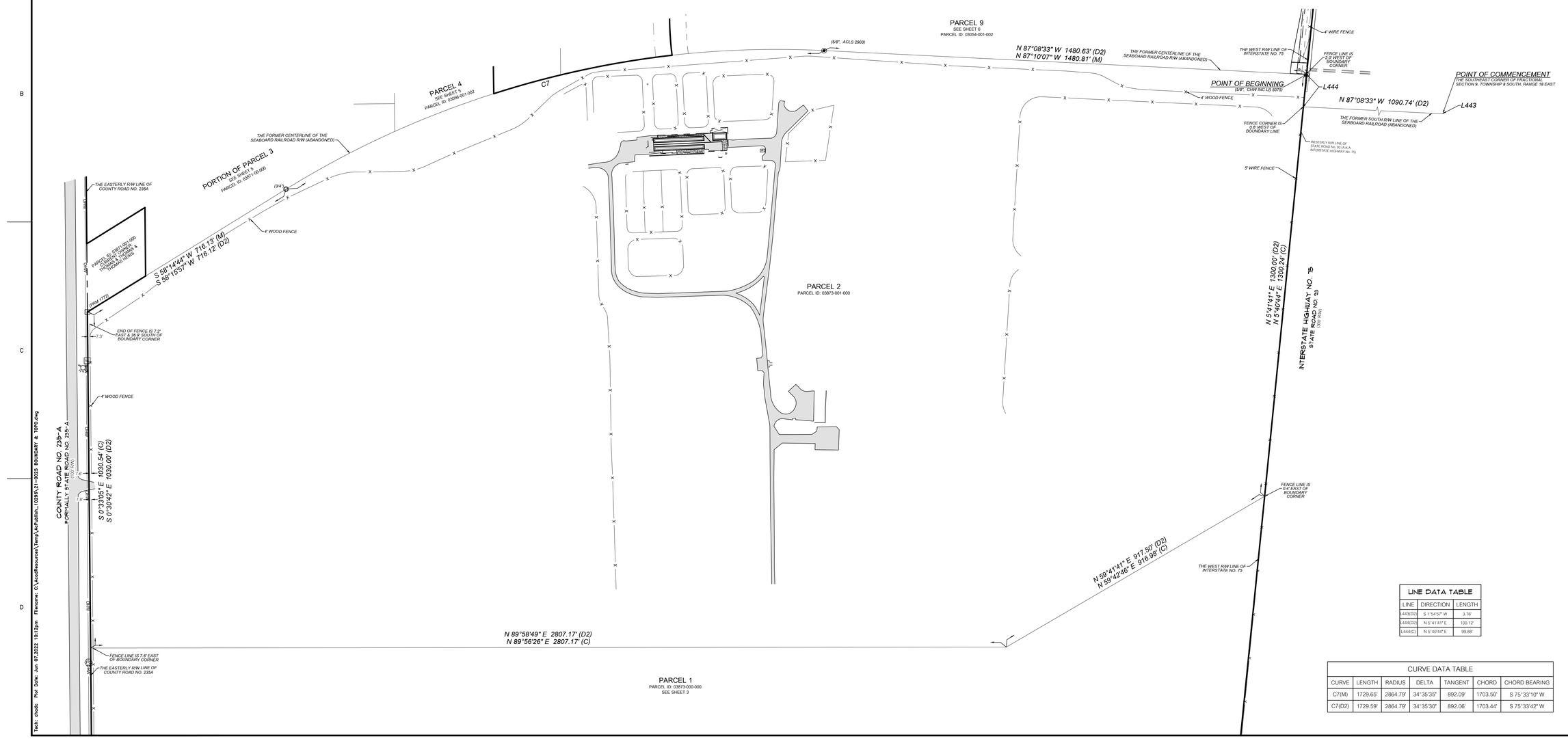
LOCATED IN SECTIONS 9 & 16, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA

GRAPHIC SCALE
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N

SURVEYOR'S NOTES:

1. THIS SURVEY CONSISTS OF TWENTY-SIX SHEETS AND IS NOT COMPLETE WITHOUT ALL SHEETS. SEE SHEET ONE FOR COMPLETE SURVEYOR'S NOTES.



LINE DATA TABLE		
LINE	DIRECTION	LENGTH
L443(D2)	S 1°54'5" W	3.76'
L444(D2)	N 5°41'41" E	100.12'
L444(C)	N 5°40'44" E	99.88'

CURVE DATA TABLE						
CURVE	LENGTH	RADIUS	DELTA	TANGENT	CHORD	CHORD BEARING
C7(M)	1729.65'	2864.79'	34°35'35"	892.09'	1703.50'	S 75°33'10" W
C7(D2)	1729.59'	2864.79'	34°35'30"	892.06'	1703.44'	S 75°33'42" W

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SCALE: 1" = 150'

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TOMOKA HILLS FARMS, INC.

SURVEY DATE:	05/10/2022
REVISION DATE:	N/A
PROJECT NUMBER:	21-0025.07
TECHNICIAN:	KWM
CREW CHIEF:	N/A
DRAWN BY:	CMC
CHECKED BY:	CAC
FIELD BOOK & PAGE:	635 / 69 & 650 / 4

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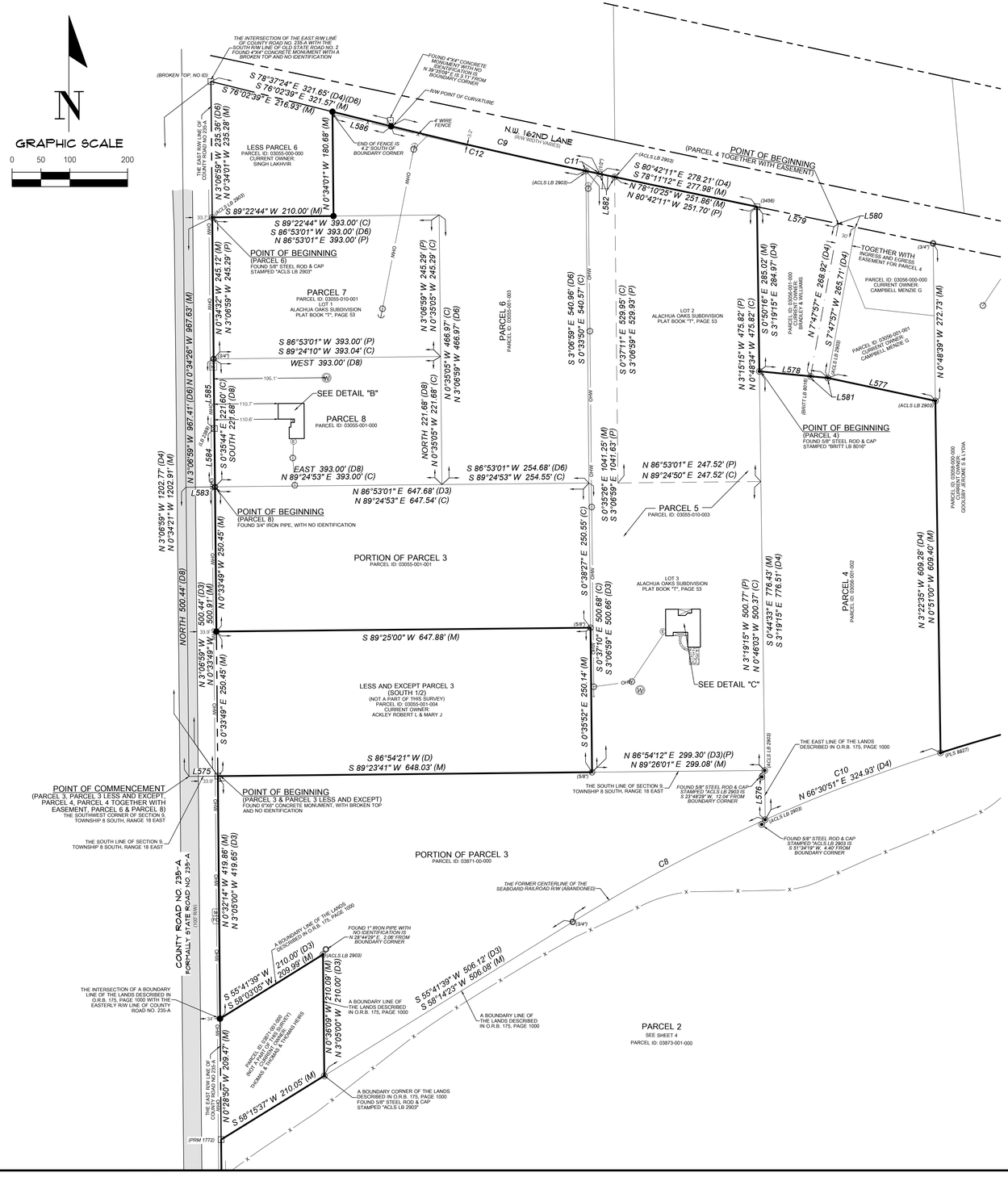
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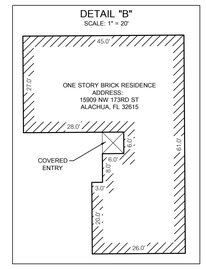
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4 OF 26

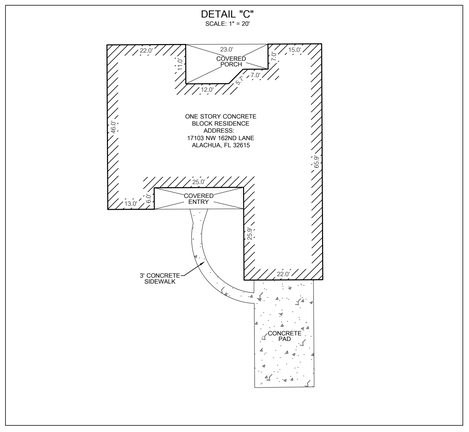
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BOUNDARY & TOPOGRAPHIC SURVEY

LOCATED IN SECTIONS 9 & 16, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA







SURVEYOR'S NOTES:

1. THIS SURVEY CONSISTS OF TWENTY-SIX SHEETS AND IS NOT COMPLETE WITHOUT ALL SHEETS. SEE SHEET ONE FOR COMPLETE SURVEYOR'S NOTES.

LINE DATA TABLE

LINE	DIRECTION	LENGTH
L575(D3)(D4)(D6)	N 86°54'12" E	50.00'
L576(M)	S 3°19'15" E	84.71'
L576(D3)	S 0°32'24" E	85.25'
L577(M)	N 77°57'58" W	190.34'
L577(D4)	N 80°30'38" W	190.44'
L578(M)	N 84°30'07" W	119.08'
L578(D4)	N 87°04'27" W	119.43'
L579(D4)	S 80°57'41" E	143.99'
L580(D4)	S 80°57'41" E	30.01'
L581(D4)	N 87°04'27" W	30.11'
L581(M)	N 84°22'200" W	29.96'
L582(M)	N 78°18'40" W	26.12'
L582(P)	N 80°42'11" W	26.51'
L583(D8)	S 89°24'53" W	50.00'
L584(M)	N 0°33'30" W	100.95'
L585(M)	N 0°37'36" W	120.65'
L586(M)	S 76°02'39" E	104.77'

CURVE DATA TABLE

CURVE	LENGTH	RADIUS	DELTA	TANGENT	CHORD	CHORD BEARING
C8(M)	377.58'	2864.79'	7°33'06"	189.07'	377.31'	S 62°01'39" W
C8(D3)	377.68'	2864.79'	7°33'14"	189.12'	377.42'	S 59°28'16" W
C9(M)	370.81'	10209.13'	2°04'52"	185.43'	370.79'	S 77°08'50" E
C9(D4)	370.57'	10209.13'	2°04'47"	------	------	------
C10(M)	325.22'	2864.79'	6°30'16"	162.78'	325.04'	S 69°06'13" W
C11(M)	24.84'	10209.13'	0°08'22"	12.42'	24.84'	S 77°50'27" E
C11(P)	24.70'	10209.13'	0°08'19"	12.35'	24.70'	S 80°38'01" E
C12(M)	345.97'	10209.13'	1°56'30"	173.00'	345.95'	S 76°05'51" E
C12(D6)	345.88'	10209.13'	1°56'28"	172.95'	345.86'	S 79°35'38" E

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CERTIFIED TO:

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REVISION DATE: N/A

PROJECT NUMBER: 21-0025.07

TECHNICIAN: KWM

CREW CHIEF: MW

CHECKED BY: CAC

FIELD BOOK & PAGE: 635 / 69 & 650 / 4

TOMOKA HILLS FARMS, INC.

CHAD A. COLSON

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Professional Surveyor & Mapper Fla. License No. 7142

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5 OF 26

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BOUNDARY & TOPOGRAPHIC SURVEY

LOCATED IN SECTIONS 9 & 16, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA

SURVEYOR'S NOTES:

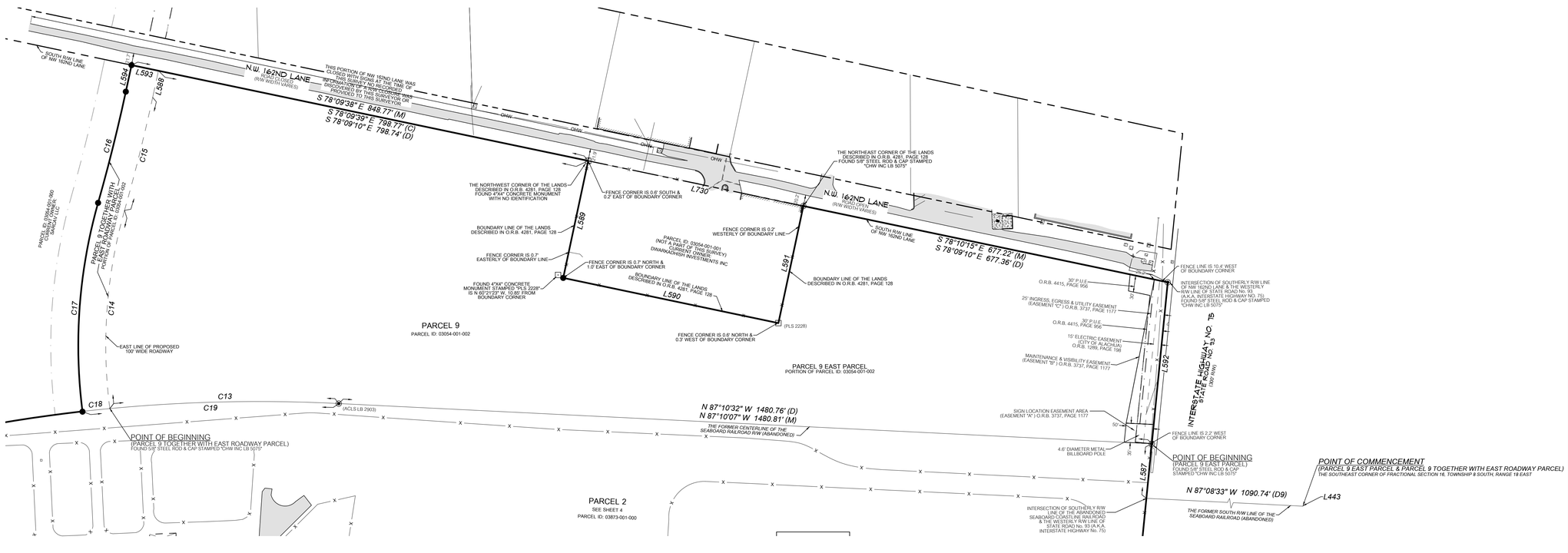
1. THIS SURVEY CONSISTS OF TWENTY-SIX SHEETS AND IS NOT COMPLETE WITHOUT ALL SHEETS. SEE SHEET ONE FOR COMPLETE SURVEYOR'S NOTES.

GRAPHIC SCALE

0 50 100 200

LINE DATA TABLE		
LINE	DIRECTION	LENGTH
L443(D9)	S 1°54'57" W	3.76'
L587(C)	N 5°40'44" E	99.88'
L587(D9)	N 5°41'41" E	100.12'
L588(C)	N 12°09'34" E	49.63'
L588(D9)	N 12°09'34" E	49.63'
L589(M)	S 12°02'31" W	217.85'
L589(D9)	S 12°02'06" W	217.73'
L590(M)	S 78°08'19" E	400.00'
L590(D9)	S 78°08'35" E	399.95'
L591(M)	N 12°02'06" E	217.83'
L591(D9)	N 12°02'06" E	217.80'
L592(M)	S 5°38'39" W	295.24'
L592(D9)	S 5°41'04" W	294.78'
L593(M)	N 78°09'08" W	50.00'
L593(D9)	N 78°09'10" W	50.00'
L594(M)	S 12°09'36" W	49.36'
L594(D9)	S 12°09'34" W	49.36'
L730(M)	N 78°08'10" W	399.97'

CURVE DATA TABLE						
CURVE	LENGTH	RADIUS	DELTA	TANGENT	CHORD	CHORD BEARING
C13(C)	416.95'	2864.79'	8°20'20"	208.84'	416.58'	S 88°44'58" W
C13(D9)	416.82'	2864.79'	8°20'11"	208.78'	416.45'	S 88°41'02" W
C14(C)	364.16'	900.00'	23°11'00"	184.61'	361.68'	N 4°15'08" E
C14(D9)	364.58'	900.00'	23°12'35"	184.82'	362.09'	N 4°14'21" E
C15(C)	211.80'	3309.14'	3°40'01"	105.93'	211.58'	N 13°59'35" E
C15(D9)	211.79'	3309.14'	3°40'01"	105.93'	211.76'	N 13°59'35" E
C16(M)	209.03'	3259.14'	3°40'29"	104.55'	208.99'	S 13°59'54" W
C16(D9)	209.03'	3259.14'	3°40'29"	104.55'	208.99'	S 13°59'49" W
C17(M)	382.71'	950.00'	23°04'54"	193.99'	380.13'	S 4°16'34" W
C17(D9)	383.18'	950.00'	23°06'37"	194.23'	380.59'	S 4°15'43" W
C18(M)	50.02'	2864.79'	1°00'01"	25.01'	50.01'	N 84°04'47" E
C18(D9)	50.01'	2864.79'	1°00'01"	25.01'	50.01'	N 84°00'56" E
C19(M)	466.96'	2864.79'	9°20'21"	234.00'	466.45'	S 88°14'57" W



11801 Research Drive
Alachua, (352) 331-1976
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CHW Professional Consultants

SCALE: 1" = 100'

VERIFY SCALE BAR IS CORRECT ON PLOTTED DRAWING
0 100 200
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

TOMOKA HILLS FARMS, INC.

CERTIFIED TO:

SURVEY DATE: 05/10/2022
REVISION DATE: N/A
PROJECT NUMBER: 21-0025.07

TECHNICIAN: KWM
CREW CHIEF: WB
CHECKED BY: CAC
FIELD BOOK & PAGE: 635 / 69 & 650 / 4

CHAD A. COLSON
Professional Surveyor & Mapper Fla. License No. 7142

SEE SHEET ONE OF TWENTY-SIX

This map prepared by:

Certificate of Authorization No. LB 5075
NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND RAISED EMBOSSED DIGITAL SIGNATURE OF A FLORIDA LICENSED SURVEYOR AND MAPPER

SHEET NO.:
6 OF 26

Path: chde Plot Date: Jan 07,2022 | 10:13pm Filename: C:\Acad\Resources\Temp\AcPublish_10396\21-0025 BOUNDARY & TOPO.dwg

BOUNDARY & TOPOGRAPHIC SURVEY

LOCATED IN SECTIONS 9 & 16, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA

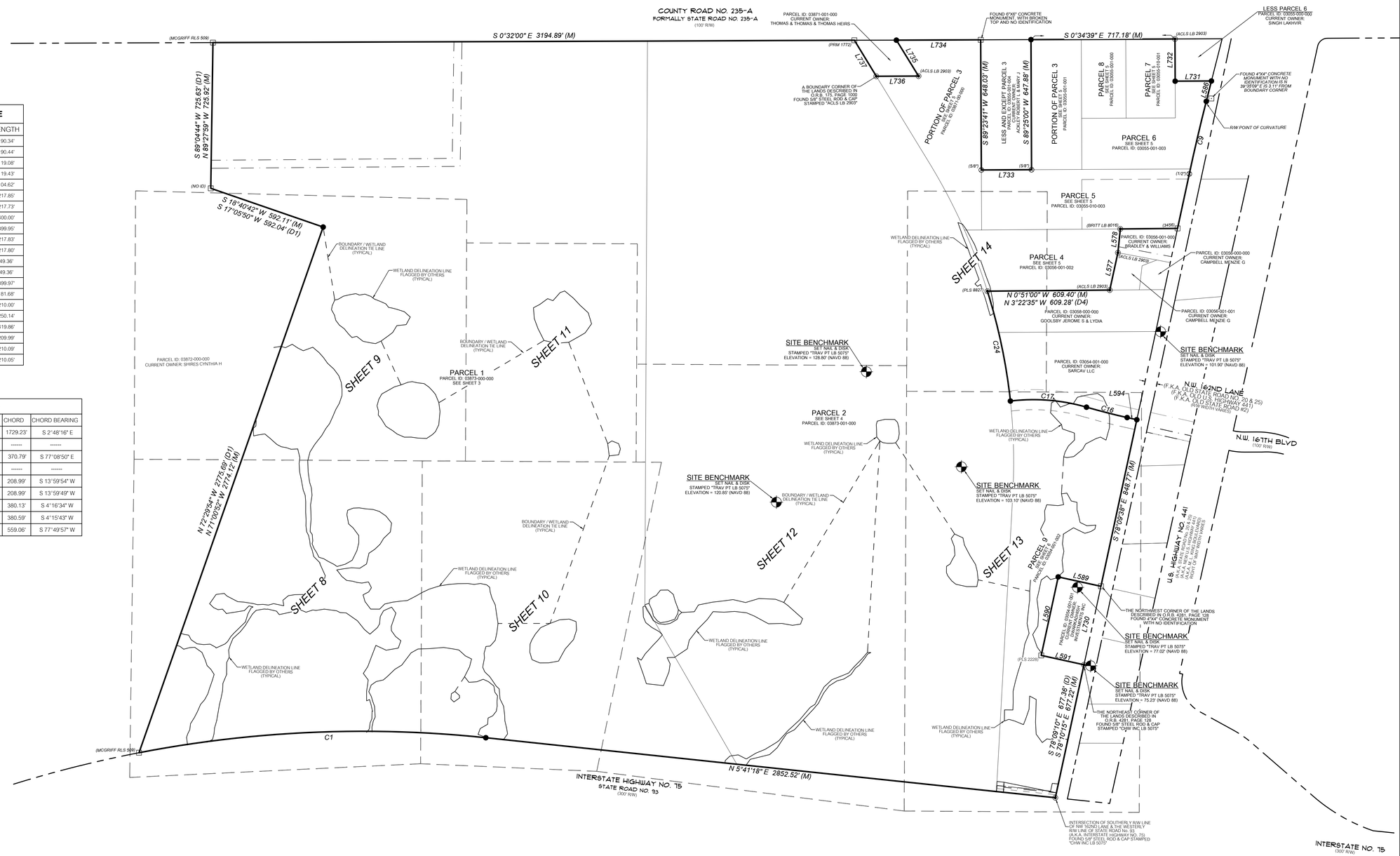
SURVEYOR'S NOTES:

1. THIS SURVEY CONSISTS OF TWENTY-SIX SHEETS AND IS NOT COMPLETE WITHOUT ALL SHEETS. SEE SHEET ONE FOR COMPLETE SURVEYOR'S NOTES.

GRAPHIC SCALE
0 125 250 500

LINE DATA TABLE		
LINE	DIRECTION	LENGTH
L577(M)	N 77°57'58" W	190.34'
L577(D4)	N 80°30'38" W	190.44'
L578(M)	N 84°30'07" W	119.08'
L578(D4)	N 87°04'27" W	119.43'
L586(M)	S 76°02'39" E	104.62'
L589(M)	S 12°02'31" W	217.85'
L589(D9)	S 12°02'06" W	217.73'
L590(M)	S 78°08'19" E	400.00'
L590(D9)	S 78°08'35" E	399.95'
L591(M)	N 12°02'06" E	217.83'
L591(D9)	N 12°02'06" E	217.80'
L594(M)	S 12°09'36" W	49.36'
L594(D9)	S 12°09'34" W	49.36'
L730(M)	N 78°08'10" W	399.97'
L731(M)	S 0°34'44" E	181.68'
L732(M)	S 89°22'44" W	210.00'
L733(M)	S 0°35'52" E	250.14'
L734(M)	S 0°32'14" E	419.86'
L735(M)	N 58°03'05" E	209.99'
L736(M)	S 0°36'09" E	210.09'
L737(M)	S 58°15'37" W	210.05'

CURVE DATA TABLE						
CURVE	LENGTH	RADIUS	DELTA	TANGENT	CHORD	CHORD BEARING
C1(M)	1735.53'	5879.58'	16°54'45"	874.12'	1729.23'	S 2°48'16" E
C1(D1)	1734.82'	5879.58'	16°54'21"	-------	-------	-------
C9(M)	370.81'	10209.13'	2°04'52"	185.43'	370.79'	S 77°08'50" E
C9(D4)	370.57'	10209.13'	2°04'47"	-------	-------	-------
C16(M)	209.03'	3259.14'	3°40'29"	104.55'	208.99'	S 13°59'54" W
C16(D9)	209.03'	3259.14'	3°40'29"	104.55'	208.99'	S 13°59'49" W
C17(M)	382.71'	950.00'	23°04'54"	193.99'	380.13'	S 4°16'34" W
C17(D9)	383.18'	950.00'	23°06'37"	194.23'	380.59'	S 4°15'43" W
C24(M)	559.96'	2864.79'	11°11'57"	280.87'	559.06'	S 77°49'57" W



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SCALE: 1" = 250'

VERIFY SCALE BAR IS CORRECT FOR PLOTTED SIZE
0 0.5" 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

CERTIFIED TO:

TOMOKA HILLS FARMS, INC.

SURVEY DATE:	05/10/2022
REVISION DATE:	N/A
PROJECT NUMBER:	21-0025.07
TECHNICIAN:	KWM
ORDER CHIEF:	LW
DRAWN BY:	CAC
FIELD BOOK & PAGE:	633 / 69 & 650 / 4

CHAD A. COLSON
Professional Surveyor & Mapper Fla. License No. 7142

SEE SHEET ONE OF TWENTY-SIX

This map prepared by:
Certificate of Authorization No. L.B. 5075
NOT VALID WITHOUT THE ELECTRONIC SIGNATURE AND SEAL OF A FLORIDA DIGITAL SIGNATURE OF A FLORIDA LICENSED SURVEYOR AND MAPPER

SHEET NO.:
7 OF 26

Tech: cbode Plot Date: Jun 07,2022 10:15pm Filename: C:\Users\kwm\Desktop\Temp\Jeff Addish_102950\21-0025 BOUNDARY & TOPO.dwg

BOUNDARY & TOPOGRAPHIC SURVEY

LOCATED IN SECTIONS 9 & 16, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA

LINE DATA TABLE		
LINE	DIRECTION	LENGTH
L2(M)	N 18°59'08" E	18.07'
L3(M)	N 37°45'19" E	22.35'
L4(M)	N 14°55'48" W	31.01'
L5(M)	N 4°11'40" W	25.07'
L6(M)	N 34°38'07" E	44.37'
L7(M)	N 66°33'22" E	41.64'
L8(M)	N 71°02'59" E	28.98'
L9(M)	N 43°42'17" E	25.62'
L10(M)	N 13°06'09" E	30.86'
L11(M)	S 73°52'06" E	29.30'
L12(M)	S 70°56'06" E	46.19'
L13(M)	S 73°27'49" E	25.09'
L14(M)	S 61°59'52" E	33.85'
L15(M)	S 49°52'15" E	31.57'
L16(M)	S 66°39'44" E	40.47'
L17(M)	S 62°49'55" E	32.64'
L18(M)	S 58°12'03" E	35.35'
L19(M)	S 83°04'44" E	30.18'
L20(M)	S 64°25'34" E	23.66'
L21(M)	S 72°03'54" E	17.79'
L22(M)	N 82°26'17" E	38.56'
L23(M)	N 27°22'51" W	31.72'
L24(M)	N 75°24'09" W	28.18'
L25(M)	N 84°42'04" W	30.66'
L26(M)	N 73°50'14" W	39.16'
L27(M)	S 2°34'03" E	0.45'
L28(M)	N 80°28'59" W	79.88'
L29(M)	N 76°19'30" W	32.73'
L30(M)	N 78°50'59" W	38.26'
L31(M)	N 87°36'55" W	36.05'
L32(M)	N 67°35'12" W	50.66'
L33(M)	S 43°27'43" W	1.71'
L34(M)	N 89°50'09" W	56.21'
L35(M)	N 64°22'43" W	28.87'
L36(M)	S 84°48'41" W	35.75'
L37(M)	N 72°29'30" W	27.14'
L38(M)	N 67°43'49" W	34.61'
L39(M)	N 42°43'49" W	49.05'
L40(M)	N 51°26'00" W	40.15'
L41(M)	N 59°05'25" W	31.64'
L42(M)	N 57°51'02" W	36.58'
L43(M)	N 45°13'32" W	25.34'
L44(M)	N 9°52'08" W	40.33'
L45(M)	N 4°52'15" E	14.12'
L46(M)	N 23°47'05" W	2.91'
L47(M)	N 12°41'12" E	46.23'
L48(M)	N 52°40'28" E	21.75'
L49(M)	N 12°17'32" W	39.83'
L50(M)	N 13°16'54" W	41.06'
L51(M)	N 28°22'13" W	21.02'
L52(M)	N 22°41'35" E	39.40'
L53(M)	N 18°39'49" W	35.90'
L54(M)	N 8°01'08" E	15.74'
L55(M)	N 9°06'38" W	40.31'
L56(M)	N 85°26'21" W	0.35'
L57(M)	N 7°13'34" E	63.33'
L58(M)	N 26°37'03" E	20.04'
L59(M)	N 2°42'52" E	30.13'
L60(M)	N 34°40'13" E	68.73'
L61(M)	N 51°11'30" E	54.51'
L62(M)	N 40°14'03" E	36.64'
L63(M)	N 41°45'20" W	50.45'
L64(M)	N 60°30'02" W	20.32'
L65(M)	N 84°49'02" W	36.53'
L66(M)	N 61°01'20" W	33.79'
L67(M)	N 24°05'14" W	43.88'
L68(M)	N 53°51'55" E	36.32'
L69(M)	S 71°06'59" E	70.25'
L70(M)	N 87°59'26" E	21.05'
L71(M)	N 54°10'41" E	35.90'
L72(M)	N 38°07'18" E	33.77'
L73(M)	S 71°00'48" E	39.05'
L74(M)	S 10°12'49" E	61.33'
L75(M)	S 24°52'02" W	56.62'
L76(M)	S 65°16'00" E	62.45'
L77(M)	S 69°49'32" E	50.59'
L78(M)	S 57°02'12" E	40.64'
L79(M)	N 52°48'41" E	40.56'
L80(M)	S 83°08'03" E	20.32'
L81(M)	S 81°38'37" E	36.97'
L82(M)	N 89°33'55" E	47.32'
L83(M)	N 23°31'37" W	15.83'
L84(M)	N 72°36'32" E	27.77'
L85(M)	N 77°44'13" E	33.13'
L86(M)	S 31°57'34" W	2.64'
L87(M)	S 88°40'04" E	38.67'
L88(M)	S 66°54'18" E	22.20'
L89(M)	S 83°10'12" E	28.93'
L90(M)	S 53°58'14" E	22.99'
L91(M)	N 75°51'47" E	45.03'
L92(M)	S 82°46'11" E	29.34'
L93(M)	N 85°42'01" E	43.15'
L94(M)	N 77°38'00" E	42.72'
L95(M)	N 79°31'23" E	47.29'
L96(M)	N 69°04'03" E	28.69'
L97(M)	N 84°53'14" E	32.36'
L98(M)	N 89°53'56" E	51.00'
L99(M)	N 86°48'17" E	41.05'
L100(M)	S 88°34'46" E	27.51'
L101(M)	N 82°13'37" E	30.46'
L102(M)	N 62°25'17" E	20.58'
L103(M)	N 77°49'46" E	27.24'
L104(M)	N 83°14'20" E	22.42'
L105(M)	N 68°05'45" E	25.66'
L106(M)	N 75°27'39" E	32.83'
L107(M)	N 44°52'10" E	44.98'
L108(M)	S 43°30'10" E	2.79'
L109(M)	N 65°31'03" E	67.37'
L110(M)	S 77°00'29" E	23.18'
L111(M)	S 75°20'26" E	21.52'
L112(M)	S 23°41'24" E	36.96'
L113(M)	S 26°36'04" E	28.35'

LINE DATA TABLE		
LINE	DIRECTION	LENGTH
L114(M)	S 34°00'33" E	41.68'
L115(M)	S 1°24'52" E	46.22'
L116(M)	S 9°18'07" E	32.76'
L117(M)	S 40°18'45" E	35.56'
L118(M)	N 80°23'12" E	26.40'
L119(M)	S 64°51'05" E	1.34'
L120(M)	S 11°29'00" W	51.29'
L121(M)	S 15°43'12" E	27.00'
L122(M)	S 4°16'39" W	27.47'
L123(M)	S 3°59'51" E	26.75'
L124(M)	S 15°08'34" W	20.94'
L125(M)	S 8°33'28" W	48.63'
L126(M)	S 3°39'32" W	30.73'
L127(M)	S 27°20'48" W	60.88'
L128(M)	S 44°00'34" W	18.16'
L129(M)	S 7°28'59" E	40.94'
L130(M)	S 55°23'17" E	34.11'
L131(M)	S 55°07'33" E	22.23'
L132(M)	N 43°55'56" E	28.12'
L133(M)	N 24°40'46" E	23.93'
L134(M)	N 7°11'11" W	22.62'
L135(M)	N 47°05'21" E	27.25'
L136(M)	S 74°25'53" E	2.00'
L137(M)	N 9°37'37" W	37.92'
L138(M)	N 9°29'08" W	54.39'
L139(M)	N 45°56'48" W	32.82'
L140(M)	N 14°07'24" E	20.89'
L141(M)	S 29°02'44" E	11.54'
L142(M)	S 62°12'07" E	33.46'
L143(M)	S 72°53'31" E	43.46'
L144(M)	S 42°17'22" W	0.73'
L145(M)	S 44°40'50" E	77.48'
L146(M)	S 47°27'31" E	22.88'
L147(M)	S 57°33'23" E	30.81'
L148(M)	S 42°56'45" E	16.27'
L149(M)	S 24°44'49" E	49.59'
L150(M)	S 61°11'40" W	3.91'
L151(M)	S 29°07'29" W	31.84'
L152(M)	S 4°24'30" E	32.72'
L153(M)	S 6°31'50" W	32.35'
L154(M)	S 33°29'12" W	35.63'
L155(M)	S 61°43'49" W	26.56'
L156(M)	S 9°20'12" W	25.05'
L157(M)	S 18°59'08" W	15.34'
L158(M)	S 25°21'59" E	37.32'
L159(M)	S 29°53'37" E	42.87'
L160(M)	S 27°36'00" E	44.32'
L161(M)	S 5°31'01" E	32.89'
L162(M)	S 7°18'10" E	40.04'
L163(M)	S 13°35'12" E	41.41'
L164(M)	S 45°48'20" E	35.55'
L165(M)	S 0°06'06" E	44.51'
L166(M)	S 52°28'08" W	46.98'
L167(M)	S 73°46'24" W	34.88'
L168(M)	N 27°38'39" W	31.79'
L169(M)	N 57°49'22" W	24.77'
L170(M)	S 62°46'18" W	32.49'
L171(M)	S 10°28'00" E	33.56'
L172(M)	S 7°07'09" W	24.00'
L173(M)	S 15°10'36" W	23.51'
L174(M)	S 7°21'14" W	29.27'
L175(M)	S 39°09'52" W	31.09'
L176(M)	S 52°28'51" W	26.09'
L177(M)	S 49°33'54" W	15.28'
L178(M)	N 9°34'37" W	40.64'
L179(M)	N 7°37'56" W	34.14'
L180(M)	N 3°18'57" E	41.13'
L181(M)	N 32°58'58" W	39.79'
L182(M)	N 77°41'07" W	54.84'
L183(M)	N 34°21'01" W	34.42'
L184(M)	N 43°29'33" W	36.53'
L185(M)	N 58°47'40" W	36.10'
L186(M)	N 43°36'16" W	44.83'
L187(M)	N 82°46'01" W	44.91'
L188(M)	S 51°20'05" W	44.70'
L189(M)	S 34°08'50" W	40.38'
L190(M)	S 16°48'59" W	32.16'
L191(M)	S 4°37'20" W	38.83'
L192(M)	S 8°39'34" W	30.78'
L193(M)	S 2°45'26" E	29.66'
L194(M)	S 21°13'19" E	29.94'
L195(M)	S 79°54'34" E	22.67'
L196(M)	N 78°35'52" E	47.06'
L197(M)	N 40°19'48" E	28.91'
L198(M)	N 53°28'42" E	47.74'
L199(M)	N 89°11'09" E	36.45'
L200(M)	S 76°47'35" E	39.20'
L201(M)	S 64°21'04" E	54.15'
L202(M)	S 29°46'24" E	39.31'
L203(M)	S 16°08'54" E	42.81'
L204(M)	S 34°29'36" W	19.07'
L205(M)	S 26°47'00" W	32.42'
L206(M)	S 30°27'31" W	25.59'
L207(M)	S 16°33'27" W	25.11'
L208(M)	S 63°58'03" W	25.75'
L209(M)	S 57°37'01" W	24.02'
L210(M)	S 66°51'11" W	25.20'
L211(M)	N 77°50'18" W	15.20'
L212(M)	S 84°27'41" W	32.12'
L213(M)	S 54°12'22" W	17.44'
L214(M)	N 87°31'14" W	22.44'
L215(M)	N 85°17'35" W	38.41'
L216(M)	S 88°35'48" W	39.37'
L217(M)	S 86°40'03" W	32.67'
L218(M)	N 81°39'02" W	48.96'
L219(M)	S 84°28'58" W	37.68'
L220(M)	S 72°01'34" W	28.57'
L221(M)	S 81°47'49" W	50.93'
L222(M)	S 87°11'50" W	56.43'
L223(M)	N 75°40'22" W	45.60'
L225(M)	S 89°02'30" W	25.23'
L226(M)	N 77°58'00" W	29.94'
L227(M)	N 65°12'43" W	22.44'

LINE DATA TABLE		
LINE	DIRECTION	LENGTH
L228(M)	S 86°29'04" W	34.92'
L229(M)	S 86°25'26" W	18.52'
L230(M)	S 69°35'06" W	29.73'
L231(M)	S 73°57'32" W	21.04'
L232(M)	S 62°14'21" W	27.82'
L233(M)	N 70°33'04" W	35.12'
L234(M)	N 35°18'41" W	30.64'
L235(M)	N 12°43'46" W	36.42'
L236(M)	N 41°46'06" W	35.74'
L237(M)	N 44°17'54" W	42.56'
L238(M)	N 31°30'23" W	40.08'
L239(M)	N 53°17'06" W	36.78'
L240(M)	N 53°07'59" W	40.11'
L241(M)	N 29°09'22" W	39.40'
L242(M)	N 2°12'15" W	57.02'

CURVE DATA TABLE						
CURVE	LENGTH	RADIUS	DELTA	TANGENT	CHORD	CHORD BEARING
C2(M)	244.97'	5879.58'	2°23'14"	122.50'	244.95'	S 10°04'01" E
C3(M)	106.65'	5879.58'	1°02'22"	53.33'	106.65'	N 8°21'13" W
C4(M)	793.36'	5879.58'	7°43'52"	397.28'	792.75'	S 3°58'06" E
C5(M)	22.57'	5879.58'	0°13'12"	11.28'	22.57'	S 0°00'26" W

SURVEYOR'S NOTES:

1. THIS SURVEY CONSISTS OF TWENTY-SIX SHEETS AND IS NOT COMPLETE WITHOUT ALL SHEETS. SEE SHEET ONE FOR COMPLETE SURVEYOR'S NOTES.

GRAPHIC SCALE

0 40 80 160

SEE SHEET 10
MATCH LINE
SEE SHEET 8

SEE SHEET 9
MATCH LINE
SEE SHEET 8

WETLAND DELINEATION FLAG AND DESIGNATION NUMBER (FLAGGED BY OTHERS)

WETLAND DELINEATION LINE (FLAGGED BY OTHERS)

PARCEL 1
PARCEL ID: 03873-000-000
SEE SHEET 3

PARCEL ID: 03872-000-000
CURRENT OWNER: SHIRES CYNTHIA H

WETLAND DELINEATION LINE TO BOUNDARY TIE LINE

WETLAND DELINEATION LINE TO BOUNDARY TIE LINE

INTERSTATE HIGHWAY NO. 75
STATE ROAD NO. 93
(300' R/W)

N 71°00'52" W 2774.12' (C)

63.14'(C)

35.33'

3.24'

10.11'

21.60'

7.27'

15.72'

21.56'

3.67'

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SCALES ACCORDINGLY.

0 1"

CERTIFIED TO:

SURVEY DATE: 05/10/2022
REVISION DATE: N/A
PROJECT NUMBER: 21-0025.07

TECHNICIAN: KWM
CREW CHIEF: KWM
CHECKED BY: CAC
FIELD BOOK & PAGE: 635 / 69 & 650 / 4

CHAD A. COLSON

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Professional Surveyor & Mapper Fla. License No. 7142

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Certificate of Authorization No. L.B. 5075
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SHEET NO.:
8 OF 26

TOMOKA HILLS FARMS, INC.

Tech: chads Plot Date: Jun. 07,2022 10:14pm Filename: C:\Acad\Resources\Text_Lsp\Alachua_102\8131-0025 BOUNDARY & TOPO.dwg

BOUNDARY & TOPOGRAPHIC SURVEY

LOCATED IN SECTIONS 9 & 16, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA

SURVEYOR'S NOTES:

1. THIS SURVEY CONSISTS OF TWENTY-SIX SHEETS AND IS NOT COMPLETE WITHOUT ALL SHEETS. SEE SHEET ONE FOR COMPLETE SURVEYOR'S NOTES.

N

GRAPHIC SCALE
0 40 80 160

LINE DATA TABLE		
LINE	DIRECTION	LENGTH
L91(M)	N 75°51'47" E	45.03'
L92(M)	S 82°46'11" E	29.34'
L93(M)	N 85°42'01" E	43.15'
L94(M)	N 77°38'00" E	42.72'
L95(M)	N 79°31'23" E	47.29'
L96(M)	N 69°04'03" E	28.69'
L219(M)	S 84°28'58" W	37.68'
L220(M)	S 72°01'34" W	28.57'
L221(M)	S 81°47'49" W	50.93'
L222(M)	S 87°11'50" W	56.43'
L223(M)	N 75°40'22" W	45.60'
L243(M)	N 58°11'16" W	42.31'
L244(M)	N 52°54'58" W	28.01'
L245(M)	N 51°21'55" W	29.99'
L246(M)	N 60°29'30" W	39.98'
L247(M)	N 52°45'01" W	30.77'
L248(M)	N 65°41'10" W	38.18'
L249(M)	N 67°26'48" W	38.80'
L250(M)	N 60°25'28" W	35.21'
L251(M)	N 71°25'41" W	41.75'
L252(M)	N 89°59'27" W	31.06'
L253(M)	S 83°31'36" W	33.96'
L254(M)	S 69°36'03" W	36.01'
L255(M)	S 52°56'03" W	41.69'
L256(M)	S 42°04'14" W	41.59'
L257(M)	S 53°48'12" W	38.09'
L258(M)	S 47°57'04" W	30.77'
L259(M)	S 40°07'42" W	40.76'
L260(M)	S 20°20'47" E	50.67'
L261(M)	S 26°00'41" W	28.76'
L262(M)	S 33°11'59" W	34.06'
L263(M)	N 73°43'48" E	12.34'
L264(M)	S 86°50'28" E	26.19'
L265(M)	S 40°58'52" E	15.05'
L266(M)	S 83°22'38" E	12.10'
L267(M)	N 86°01'40" E	27.38'
L268(M)	N 12°10'03" W	23.62'
L269(M)	N 8°47'08" W	33.03'
L270(M)	N 39°37'46" E	35.55'
L271(M)	N 41°38'32" E	44.77'
L272(M)	N 26°38'04" E	24.04'
L273(M)	N 10°16'57" E	26.21'
L274(M)	N 18°03'19" E	24.97'
L275(M)	N 3°36'15" W	32.42'
L276(M)	N 12°40'53" W	16.67'
L277(M)	N 30°22'14" W	31.49'
L278(M)	N 13°16'50" W	29.41'
L279(M)	N 10°35'42" W	33.36'
L280(M)	N 20°50'31" E	19.47'
L281(M)	N 9°38'31" W	27.67'
L282(M)	N 20°20'10" E	31.74'
L283(M)	N 37°30'20" E	21.37'
L284(M)	N 21°05'49" E	33.21'
L285(M)	N 23°37'58" E	29.24'

LINE DATA TABLE		
LINE	DIRECTION	LENGTH
L286(M)	N 52°31'01" E	22.29'
L287(M)	N 9°19'38" E	15.69'
L288(M)	N 13°48'30" E	22.87'
L289(M)	N 17°20'07" E	42.58'
L290(M)	N 41°16'25" E	40.08'
L291(M)	S 61°51'44" E	43.29'
L292(M)	S 6°26'49" E	46.70'
L293(M)	S 59°15'32" E	39.30'
L294(M)	S 38°06'18" E	25.30'
L295(M)	S 36°11'36" E	46.84'
L296(M)	S 24°52'03" E	30.68'
L297(M)	S 8°21'46" W	21.53'
L298(M)	S 10°50'22" W	41.32'
L299(M)	S 37°24'23" W	40.44'
L300(M)	S 14°06'34" E	24.07'
L301(M)	S 45°19'40" W	25.10'
L302(M)	S 50°18'33" W	33.54'
L303(M)	S 36°13'50" W	29.75'
L304(M)	S 52°42'21" W	30.74'
L305(M)	S 76°42'41" W	25.60'
L306(M)	S 60°35'26" W	31.38'
L307(M)	N 80°00'39" W	19.77'
L308(M)	N 66°28'25" W	31.35'
L309(M)	N 21°24'07" W	37.20'
L310(M)	N 8°41'48" W	21.25'
L311(M)	N 12°38'56" E	26.27'
L312(M)	N 6°15'04" E	33.62'
L313(M)	N 35°05'30" E	30.52'
L314(M)	N 46°21'25" E	23.98'
L315(M)	N 49°59'30" E	24.23'
L316(M)	N 67°29'35" E	44.80'
L317(M)	N 81°55'24" E	44.31'
L318(M)	S 84°45'09" E	66.31'
L319(M)	S 64°53'52" E	37.89'
L320(M)	S 44°25'56" E	20.71'
L321(M)	S 34°01'38" E	35.41'
L322(M)	S 2°23'27" W	44.35'
L323(M)	S 7°57'53" W	32.68'
L324(M)	S 0°39'03" E	34.16'
L325(M)	S 22°56'35" W	39.73'
L326(M)	S 37°32'45" W	26.25'
L327(M)	S 32°11'23" W	40.45'
L328(M)	S 5°34'27" W	43.32'
L329(M)	S 52°11'21" W	25.39'
L330(M)	N 86°38'41" W	18.74'
L331(M)	S 74°01'44" W	27.85'
L332(M)	N 74°40'03" W	34.41'
L333(M)	N 61°08'10" W	29.95'
L334(M)	N 29°18'20" W	39.85'
L335(M)	N 29°56'56" W	32.03'
L336(M)	N 16°50'54" W	34.37'
L738(M)	S 27°00'44" E	37.76'
L739(M)	S 16°08'45" W	23.01'
L740(M)	S 8°51'51" E	36.39'



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TECHNICIAN: KWM
CREW CHIEF: N/A
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SURVEY DATE: 05/10/2022
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SHEET NO.: 9 OF 26

Tech: bbade Plot Date: Jan 07,2022 10:14pm Filename: C:\Acadresources\Temp\AcPublish_10208\21-0025 BOUNDARY & TOPO.dwg

BOUNDARY & TOPOGRAPHIC SURVEY

LOCATED IN SECTIONS 9 & 16, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA

SURVEYOR'S NOTES:

1. THIS SURVEY CONSISTS OF TWENTY-SIX SHEETS AND IS NOT COMPLETE WITHOUT ALL SHEETS. SEE SHEET ONE FOR COMPLETE SURVEYOR'S NOTES.

N

GRAPHIC SCALE
0 40 80 160

LINE DATA TABLE		
LINE	DIRECTION	LENGTH
L158(M)	S 25°21'39" E	37.32'
L159(M)	S 29°53'37" E	42.87'
L242(M)	N 2°12'15" W	57.02'
L337(M)	N 4°48'49" W	70.82'
L338(M)	N 8°20'21" E	43.25'
L339(M)	N 9°33'34" E	33.50'
L340(M)	N 42°02'12" E	44.28'
L341(M)	N 25°53'40" E	33.97'
L342(M)	S 76°03'36" E	40.45'
L343(M)	S 63°23'17" E	32.70'
L344(M)	S 63°41'57" E	22.20'
L345(M)	N 51°48'17" E	35.62'
L346(M)	N 4°28'49" W	39.52'
L347(M)	N 21°34'52" W	33.75'
L348(M)	N 23°42'35" E	28.08'
L349(M)	N 38°00'06" E	35.10'
L350(M)	N 80°27'02" E	31.81'
L351(M)	N 53°26'00" E	22.07'
L352(M)	S 85°31'32" E	28.85'
L353(M)	N 87°45'03" E	22.37'
L354(M)	S 80°50'56" E	25.87'
L355(M)	S 52°06'12" E	29.41'
L356(M)	S 25°17'56" E	25.24'
L357(M)	S 86°16'35" E	31.40'
L358(M)	S 30°08'02" E	42.66'
L359(M)	S 70°29'44" E	31.03'
L360(M)	N 21°03'45" E	32.97'
L361(M)	N 29°03'23" E	19.32'
L362(M)	S 57°14'31" E	87.98'
L363(M)	S 32°20'05" E	20.54'
L364(M)	S 84°30'47" E	26.58'
L365(M)	N 44°18'56" E	21.01'
L366(M)	N 35°26'49" W	34.11'
L367(M)	S 87°50'29" W	12.80'
L368(M)	S 41°04'34" W	29.77'
L369(M)	N 54°34'03" W	38.09'
L370(M)	S 79°32'15" W	31.22'
L371(M)	S 76°30'14" W	35.82'
L372(M)	S 87°53'48" W	27.03'
L373(M)	S 82°46'43" W	45.65'
L374(M)	S 63°14'47" W	40.08'
L375(M)	S 84°58'39" W	50.33'
L376(M)	S 43°29'27" W	20.32'
L377(M)	S 23°01'32" W	0.22'
L378(M)	S 55°08'29" W	58.20'

LINE DATA TABLE		
LINE	DIRECTION	LENGTH
L379(M)	S 42°10'09" W	23.25'
L380(M)	S 47°35'12" W	10.69'
L381(M)	S 65°43'50" W	23.73'
L382(M)	N 82°18'32" W	15.92'
L383(M)	N 78°38'53" W	31.21'
L384(M)	S 85°01'13" W	24.12'
L385(M)	N 75°07'04" W	35.00'
L386(M)	N 4°30'42" W	20.85'
L387(M)	N 48°50'29" W	38.34'
L388(M)	N 78°08'17" W	38.77'
L389(M)	N 83°02'00" W	46.53'
L390(M)	S 80°46'09" W	57.31'
L391(M)	S 81°32'36" W	36.64'
L392(M)	S 64°00'12" W	37.20'
L393(M)	S 73°17'13" W	30.42'
L394(M)	S 82°37'16" W	24.91'
L395(M)	S 39°26'56" W	18.68'
L396(M)	S 11°52'13" W	32.25'
L397(M)	S 8°35'17" E	31.54'
L398(M)	S 8°01'58" W	30.97'
L399(M)	S 1°13'55" E	10.70'
L400(M)	S 5°03'20" E	43.17'
L401(M)	S 9°36'06" E	49.04'
L402(M)	S 17°24'36" E	52.26'
L403(M)	S 24°32'01" E	51.22'
L404(M)	S 51°00'31" E	43.17'
L405(M)	S 59°16'27" E	31.79'
L406(M)	S 67°23'30" E	22.79'
L407(M)	S 88°14'42" E	40.45'
L408(M)	N 73°14'51" E	39.21'
L409(M)	N 21°55'48" E	42.07'
L410(M)	N 0°45'19" W	43.93'
L411(M)	N 10°16'28" W	49.86'
L412(M)	N 61°51'44" W	43.10'
L413(M)	N 60°52'36" W	26.51'
L414(M)	N 48°42'23" W	61.92'
L415(M)	N 72°46'15" W	49.50'
L416(M)	S 86°36'14" W	42.20'
L417(M)	S 19°49'49" W	36.88'
L418(M)	S 4°37'53" E	47.41'
L419(M)	S 21°06'05" E	51.04'
L437(M)	N 6°52'38" W	47.19'
L438(M)	N 73°50'57" W	30.73'
L442(M)	N 82°21'47" E	61.39'

CURVE DATA TABLE						
CURVE	LENGTH	RADIUS	DELTA	TANGENT	CHORD	CHORD BEARING
C6(M)	0.11'	5879.58'	0°00'04"	0.05'	0.11'	S 5°39'05" W

SEE SHEET 12
MATCH LINE
SEE SHEET 10

PARCEL 2
SEE SHEET 4
PARCEL ID: 03873-001-000

SEE SHEET 12
MATCH LINE
SEE SHEET 10

SEE SHEET 11
MATCH LINE
SEE SHEET 10

N 70°51'49" W 885.08' (M)
WETLAND DELINEATION LINE TO BOUNDARY TIE LINE

N 0°22'39" W 259.07' (M)
WETLAND DELINEATION LINE TO BOUNDARY TIE LINE

WETLAND DELINEATION FLAG AND DESIGNATION NUMBER (FLAGGED BY OTHERS)

WETLAND DELINEATION LINE (FLAGGED BY OTHERS)

PARCEL 1
PARCEL ID: 03873-000-000
SEE SHEET 3

WETLAND DELINEATION LINE TO BOUNDARY TIE LINE

WETLAND DELINEATION FLAG AND DESIGNATION NUMBER (FLAGGED BY OTHERS)

WETLAND DELINEATION LINE (FLAGGED BY OTHERS)

SEE DETAIL "A"

INTERSTATE HIGHWAY NO. 75
STATE ROAD NO. 93
(300' R/W)

SEE SHEET 9
MATCH LINE
SEE SHEET 10

SEE SHEET 10
MATCH LINE
SEE SHEET 8

DETAIL "A"
SCALE: 1" = 20'

S 5°42'30" W 68.57'

L369
34.69'

3.20'

10.39'

8.94'

C6
R/W POINT OF CURVATURE TO WETLAND DELINEATION LINE

L361

L360

INTERSTATE HIGHWAY NO. 75
STATE ROAD NO. 93
(300' R/W)

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SURVEY DATE:	05/10/2022
REVISION DATE:	N/A
PROJECT NUMBER:	21-0025.07
TECHNICIAN:	KWM
CREW CHIEF:	N/A
DRAWED BY:	CAC
FIELD BOOK & PAGE:	635 / 69 & 650 / 4

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SHEET NO.:
10 OF 26

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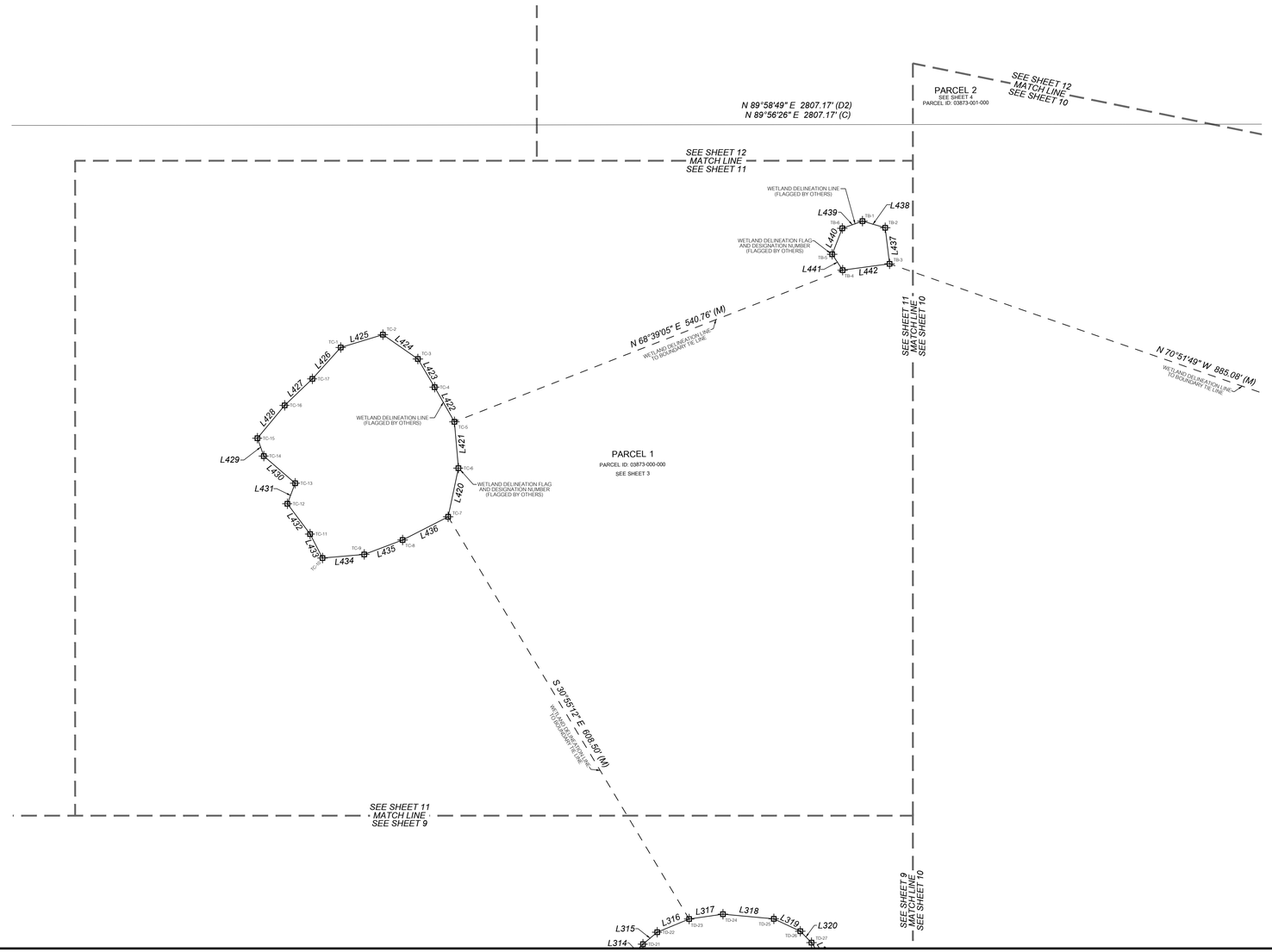
BOUNDARY & TOPOGRAPHIC SURVEY

LOCATED IN SECTIONS 9 & 16, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA

SURVEYOR'S NOTES:

1. THIS SURVEY CONSISTS OF TWENTY-SIX SHEETS AND IS NOT COMPLETE WITHOUT ALL SHEETS. SEE SHEET ONE FOR COMPLETE SURVEYOR'S NOTES.

GRAPHIC SCALE
0 40 80 160



LINE DATA TABLE

LINE	DIRECTION	LENGTH
L314(M)	N 46°21'25" E	23.98'
L315(M)	N 49°59'30" E	24.23'
L316(M)	N 67° 29'36" E	44.80'
L317(M)	N 81°55'24" E	44.31'
L318(M)	S 84°45'09" E	66.31'
L319(M)	S 64°53'52" E	37.89'
L320(M)	S 44°25'58" E	20.71'
L420(M)	N 11°56'29" E	64.54'
L421(M)	N 4°54'36" W	60.36'
L422(M)	N 29°43'32" W	51.83'
L423(M)	N 30°46'33" W	42.49'
L424(M)	N 55°08'28" W	55.31'
L425(M)	S 73°03'02" W	57.15'
L426(M)	S 42°36'16" W	54.94'
L427(M)	S 46°14'14" W	49.75'
L428(M)	S 39°39'27" W	55.33'
L429(M)	S 19°35'31" E	24.60'
L430(M)	S 49°04'10" E	53.84'
L431(M)	S 20°43'46" W	28.48'
L432(M)	S 36°50'27" E	49.16'
L433(M)	S 27°25'30" E	34.98'
L434(M)	N 85°04'30" E	54.34'
L435(M)	N 69°26'11" E	53.16'
L436(M)	N 62°56'19" E	66.29'
L437(M)	N 6°52'39" W	47.19'
L438(M)	N 73°50'57" W	30.73'
L439(M)	S 70°23'11" W	27.75'
L440(M)	S 21°22'51" W	36.13'
L441(M)	S 33°29'33" E	24.70'
L442(M)	N 82°21'47" E	61.39'

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CERTIFIED TO:

TOMOKA HILLS FARMS, INC.

SURVEY DATE: 05/10/2022
REVISION DATE: N/A
PROJECT NUMBER: 21-0025.07

TECHNICIAN: KWM
CREW CHIEF: N/A
CHECKED BY: CAC
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CHAD A. COLSON

SEE SHEET ONE OF TWENTY-SIX

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SHEET NO.:
11 OF 26

Tech: chads Plot Date: Jun 07,2022 10:14pm Filename: C:\Acad\Resources\Temp\Act-Publish_10196\21-0025 BOUNDARY & TOPO.dwg

BOUNDARY & TOPOGRAPHIC SURVEY

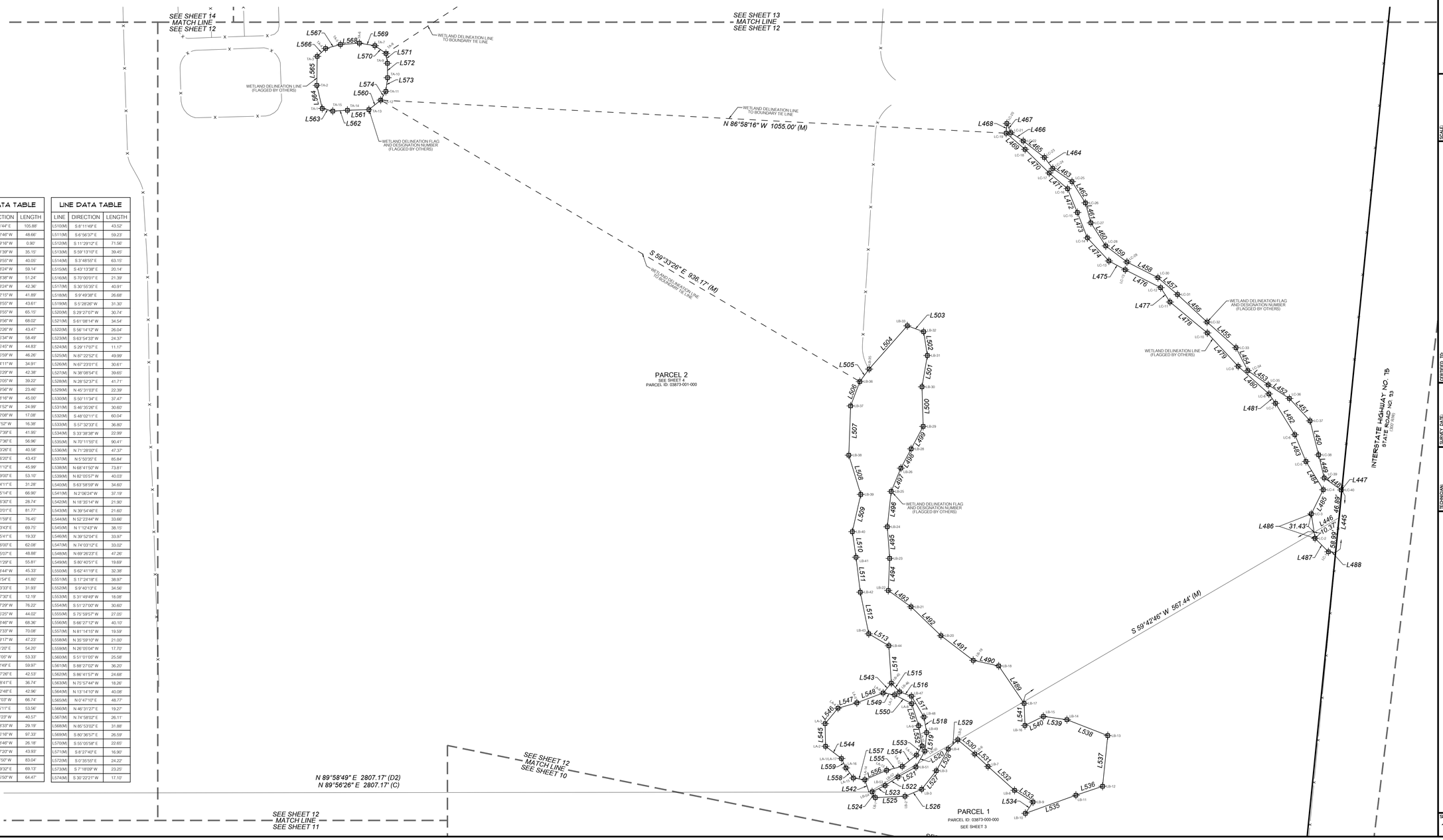
LOCATED IN SECTIONS 9 & 16, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA

GRAPHIC SCALE
0 40 80 160

N

SURVEYOR'S NOTES:

1. THIS SURVEY CONSISTS OF TWENTY-SIX SHEETS AND IS NOT COMPLETE WITHOUT ALL SHEETS. SEE SHEET ONE FOR COMPLETE SURVEYOR'S NOTES.



LINE DATA TABLE		
LINE	DIRECTION	LENGTH
L445(M)	N 5°41'44" E	105.88'
L446(M)	S 59°42'46" W	48.66'
L447(M)	N 84°19'16" W	0.90'
L448(M)	N 54°5'139" W	35.15'
L449(M)	N 13°39'55" W	40.05'
L450(M)	N 14°08'24" W	59.14'
L451(M)	N 42°38'38" W	51.24'
L452(M)	N 57°13'24" W	42.36'
L453(M)	N 55°12'15" W	41.89'
L454(M)	N 27°18'50" W	43.61'
L455(M)	N 48°23'50" W	65.15'
L456(M)	N 46°59'56" W	68.02'
L457(M)	N 49°20'26" W	43.47'
L458(M)	N 63°05'34" W	58.49'
L459(M)	N 52°55'45" W	44.83'
L460(M)	N 32°40'59" W	46.26'
L461(M)	N 15°14'11" W	34.91'
L462(M)	N 32°16'29" W	42.38'
L463(M)	N 55°40'05" W	39.22'
L464(M)	N 37°09'56" W	23.46'
L465(M)	N 51°58'16" W	45.00'
L466(M)	N 56°31'52" W	24.99'
L467(M)	N 23°52'09" W	17.06'
L468(M)	S 3°54'52" W	16.38'
L469(M)	S 49°27'39" E	41.95'
L470(M)	S 45°37'36" E	56.96'
L471(M)	S 49°23'26" E	40.58'
L472(M)	S 22°26'20" E	43.43'
L473(M)	S 21°31'12" E	45.99'
L474(M)	S 42°59'00" E	53.10'
L475(M)	S 61°24'11" E	31.28'
L476(M)	S 63°15'14" E	66.90'
L477(M)	S 33°06'30" E	28.74'
L478(M)	S 50°20'01" E	81.77'
L479(M)	S 42°41'59" E	76.45'
L480(M)	S 48°03'43" E	69.75'
L481(M)	S 34°55'41" E	19.33'
L482(M)	S 31°36'00" E	62.08'
L483(M)	S 22°30'07" E	48.88'
L484(M)	S 31°31'29" E	55.81'
L485(M)	S 26°23'44" W	45.33'
L486(M)	S 8°34'54" E	41.80'
L487(M)	S 44°43'33" E	31.93'
L488(M)	S 84°17'30" E	12.19'
L489(M)	N 34°07'29" W	76.22'
L490(M)	N 77°35'25" W	44.02'
L491(M)	N 52°33'46" W	68.36'
L492(M)	N 46°02'33" W	70.08'
L493(M)	N 54°19'17" W	47.23'
L494(M)	N 2°31'20" E	54.20'
L495(M)	N 4°16'05" W	53.33'
L496(M)	N 6°12'49" E	59.97'
L497(M)	N 22°37'26" E	42.53'
L498(M)	N 28°08'41" E	36.74'
L499(M)	N 28°02'48" E	42.96'
L500(M)	N 1°42'03" W	66.74'
L501(M)	N 9°45'11" E	53.56'
L502(M)	N 8°58'23" W	40.57'
L503(M)	N 69°58'33" W	29.19'
L504(M)	S 41°26'16" W	97.33'
L505(M)	S 36°28'46" W	26.18'
L506(M)	S 20°47'20" W	43.93'
L507(M)	S 2°05'50" W	83.04'
L508(M)	S 16°59'32" E	89.13'
L509(M)	S 12°45'07" W	64.47'

LINE DATA TABLE		
LINE	DIRECTION	LENGTH
L510(M)	S 8°11'49" E	43.52'
L511(M)	S 6°56'37" E	59.23'
L512(M)	S 11°29'12" E	71.56'
L513(M)	S 59°13'10" E	39.45'
L514(M)	S 3°48'55" E	63.15'
L515(M)	S 43°13'58" E	20.14'
L516(M)	S 70°00'01" E	21.39'
L517(M)	S 30°55'35" E	40.91'
L518(M)	S 9°49'38" E	26.68'
L519(M)	S 5°28'26" W	31.30'
L520(M)	S 29°27'01" W	30.74'
L521(M)	S 61°08'14" W	34.54'
L522(M)	S 56°14'12" W	26.04'
L523(M)	S 63°54'33" W	24.37'
L524(M)	S 29°17'01" E	11.17'
L525(M)	N 87°22'52" E	49.99'
L526(M)	N 67°23'01" E	30.61'
L527(M)	N 38°08'54" E	39.65'
L528(M)	N 28°52'37" E	41.71'
L529(M)	N 45°31'03" E	22.39'
L530(M)	S 50°11'34" E	37.47'
L531(M)	S 46°35'26" E	30.60'
L532(M)	S 48°02'11" E	60.04'
L533(M)	S 57°32'23" E	36.80'
L534(M)	S 33°38'36" W	22.99'
L535(M)	N 70°11'50" E	90.41'
L536(M)	N 71°28'00" E	47.37'
L537(M)	N 5°50'35" E	85.84'
L538(M)	N 68°41'50" W	73.81'
L539(M)	N 82°05'57" W	40.03'
L540(M)	S 63°58'59" W	34.60'
L541(M)	N 2°06'24" W	37.19'
L542(M)	N 18°35'14" W	21.90'
L543(M)	N 39°54'46" E	21.60'
L544(M)	N 52°23'44" W	33.66'
L545(M)	N 1°12'43" W	38.15'
L546(M)	N 39°52'04" E	33.97'
L547(M)	N 74°03'12" E	33.02'
L548(M)	N 69°26'23" E	47.26'
L549(M)	S 80°40'51" E	19.69'
L550(M)	S 62°41'19" E	32.38'
L551(M)	S 17°24'18" E	38.97'
L552(M)	S 9°46'13" E	34.56'
L553(M)	S 31°49'49" W	18.08'
L554(M)	S 51°27'00" W	30.60'
L555(M)	S 75°59'57" W	27.05'
L556(M)	S 66°27'12" W	40.10'
L557(M)	N 81°14'15" W	19.59'
L558(M)	N 35°59'10" W	21.00'
L559(M)	N 26°05'04" W	17.70'
L560(M)	S 51°01'05" W	25.58'
L561(M)	S 88°27'02" W	36.20'
L562(M)	S 86°41'57" W	24.68'
L563(M)	N 75°57'44" W	18.26'
L564(M)	N 13°14'10" W	40.08'
L565(M)	N 0°47'10" E	48.77'
L566(M)	N 46°31'27" E	19.27'
L567(M)	N 74°58'02" E	26.11'
L568(M)	N 85°53'02" E	31.88'
L569(M)	S 80°36'57" E	26.59'
L570(M)	S 55°05'58" E	22.65'
L571(M)	S 8°27'40" E	16.90'
L572(M)	S 0°35'55" E	24.22'
L573(M)	S 7°18'09" W	23.25'
L574(M)	S 30°22'21" W	17.10'

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Alachua, FL 32615
(352) 331-1976
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est. 1988 FLORIDA CA-5075

CHW
Professional Consultants

SCALE: 1" = 80'

VERIFY SCALE
BAR ON ANY SHEET IS ONE INCH LONG
IF NOT ONE INCH ON THIS SHEET ADJUST SCALES ACCORDINGLY.
0 1"

CERTIFIED TO:

TOMOKA HILLS FARMS, INC.

SURVEY DATE:	05/10/2022
REVISION DATE:	N/A
PROJECT NUMBER:	21-0025.07
TECHNICIAN:	KWM
CREW CHIEF:	N/A
DRAWN BY:	CAC
FIELD BOOK & PAGE:	635 / 69 & 650 / 4

CHAD A. COLSON

SEE SHEET ONE OF TWENTY-SIX

Professional Surveyor & Mapper Fla. License No. 7142

This map prepared by:

Certificate of Authorization No. LB. 5075
NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND RAISED EMBOSSED DIGITAL SIGNATURE OF A FLORIDA LICENSED SURVEYOR AND MAPPER

SHEET NO.:
12 OF 26

Tech: chode Plot Date: Jun 07 2022 10:14pm Filename: C:\LocalResources\Temp\AcPublish_10356\21-0025 BOUNDARY & TOPO.dwg

BOUNDARY & TOPOGRAPHIC SURVEY

LOCATED IN SECTIONS 9 & 16, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA

CURVE DATA TABLE						
CURVE	LENGTH	RADIUS	DELTA	TANGENT	CHORD	CHORD BEARING
C16(M)	209.03'	3259.14'	3°40'29"	104.55'	208.99'	S 13°59'54" W
C16(D9)	209.03'	3259.14'	3°40'29"	104.55'	208.99'	S 13°59'49" W
C17(M)	382.71'	950.00'	23°04'54"	193.99'	380.13'	S 4°16'34" W
C17(D9)	383.18'	950.00'	23°06'37"	194.23'	380.59'	S 4°15'43" W
C19(M)	466.96'	2864.79'	9°20'21"	234.00'	466.45'	S 88°14'57" W
C20(M)	94.35'	3259.14'	1°39'31"	47.18'	94.35'	N 12°59'25" E
C21(M)	114.68'	3259.14'	2°00'58"	57.34'	114.67'	N 14°49'40" E
C22(M)	72.31'	950.00'	4°21'39"	36.17'	72.29'	S 13°38'12" W
C23(M)	213.06'	950.00'	12°50'59"	106.98'	212.61'	S 0°50'23" E

SURVEYOR'S NOTES:

1. THIS SURVEY CONSISTS OF TWENTY-SIX SHEETS AND IS NOT COMPLETE WITHOUT ALL SHEETS. SEE SHEET ONE FOR COMPLETE SURVEYOR'S NOTES.

GRAPHIC SCALE
0 40 80 160

N

LINE DATA TABLE		
LINE	DIRECTION	LENGTH
L565(M)	N 0°47'10" E	48.77'
L566(M)	N 46°31'27" E	19.27'
L567(M)	N 74°58'02" E	26.11'
L568(M)	N 85°53'00" E	31.88'
L569(M)	S 80°36'57" E	26.59'
L570(M)	S 55°05'58" E	22.65'
L571(M)	S 8°27'40" E	16.90'
L572(M)	S 0°35'55" E	24.22'
L589(M)	S 12°02'31" W	217.85'
L589(D9)	S 12°02'06" W	217.73'
L590(M)	S 78°08'19" E	400.00'
L590(D9)	S 78°08'35" E	399.95'
L591(M)	N 12°02'06" E	217.83'
L591(D9)	N 12°02'06" E	217.80'
L592(M)	S 5°38'39" W	295.24'
L592(D9)	S 5°41'04" W	294.78'
L594(M)	S 12°09'36" W	49.36'
L594(D9)	S 12°09'34" W	49.36'
L598(M)	S 11°49'45" W	22.37'
L599(M)	S 10°54'15" E	41.53'
L600(M)	S 9°05'51" W	41.84'
L601(M)	S 38°43'39" E	29.83'
L602(M)	S 53°35'20" W	51.61'
L603(M)	S 86°35'03" W	59.56'
L604(M)	N 88°36'14" W	113.24'
L605(M)	S 27°33'34" W	36.98'
L606(M)	S 87°46'07" E	65.47'
L607(M)	S 71°18'50" E	48.42'
L608(M)	S 69°04'03" E	33.34'
L609(M)	S 21°52'47" W	47.80'
L610(M)	S 15°48'35" W	29.61'
L611(M)	S 21°12'13" E	23.99'
L612(M)	N 89°38'33" W	55.92'
L613(M)	N 0°21'01" E	41.70'
L614(M)	N 88°01'31" W	39.21'
L615(M)	S 89°14'25" W	53.77'
L616(M)	N 77°18'57" W	47.89'
L617(M)	N 75°01'58" W	50.35'
L618(M)	N 72°30'52" W	75.53'
L619(M)	N 81°09'24" W	69.48'
L620(M)	N 68°17'31" W	56.82'
L621(M)	S 78°06'13" W	50.47'
L622(M)	N 84°15'50" W	94.73'
L623(M)	N 81°59'48" W	22.16'
L624(M)	S 89°30'02" W	44.86'
L625(M)	N 85°55'04" W	54.15'
L626(M)	N 74°06'58" W	45.75'
L627(M)	N 79°03'08" W	55.21'
L628(M)	N 7°17'50" W	57.89'
L629(M)	S 79°47'52" W	43.84'
L630(M)	N 67°04'14" W	45.33'
L631(M)	S 52°20'06" W	44.33'
L632(M)	S 62°06'32" W	31.62'
L633(M)	N 64°26'58" W	50.89'
L634(M)	S 87°26'15" W	46.77'
L635(M)	N 70°54'54" W	32.30'
L636(M)	N 4°13'59" E	55.87'
L637(M)	N 9°53'51" W	28.69'
L638(M)	S 78°07'38" W	54.96'
L639(M)	N 8°03'21" W	27.55'
L640(M)	N 60°58'32" E	44.80'
L641(M)	N 12°44'10" E	29.44'
L642(M)	N 89°40'10" E	37.77'
L643(M)	N 73°33'12" E	26.88'
L644(M)	N 77°08'35" E	37.45'

LINE DATA TABLE		
LINE	DIRECTION	LENGTH
L645(M)	N 25°36'14" E	37.64'
L646(M)	N 4°59'07" W	44.31'
L647(M)	S 78°18'34" E	20.60'
L648(M)	S 31°28'51" E	23.12'
L649(M)	S 17°32'29" E	31.45'
L650(M)	S 25°31'59" W	35.98'
L651(M)	S 25°54'36" W	27.43'
L652(M)	S 32°29'07" E	60.41'
L653(M)	N 36°36'44" E	1.51'
L654(M)	S 84°15'57" E	47.58'
L655(M)	N 78°52'56" E	37.56'
L656(M)	S 79°17'43" E	45.34'
L657(M)	N 83°40'18" E	57.66'
L658(M)	S 43°43'21" E	25.44'
L659(M)	S 54°11'33" E	14.79'
L660(M)	S 14°41'57" E	38.04'
L661(M)	S 46°22'07" W	25.64'
L662(M)	S 36°17'23" E	35.14'
L663(M)	S 78°27'39" E	61.11'
L664(M)	S 76°52'47" E	37.10'
L665(M)	N 82°38'18" E	70.43'
L666(M)	S 86°31'27" E	64.03'
L667(M)	S 59°06'28" E	49.40'
L668(M)	N 70°10'05" E	66.98'
L669(M)	N 53°15'25" E	36.69'
L670(M)	S 81°31'40" E	11.33'
L671(M)	S 84°11'11" W	42.14'
L672(M)	S 75°34'44" W	35.97'
L673(M)	S 57°28'48" W	50.72'
L674(M)	S 62°00'06" W	60.35'
L675(M)	S 77°46'31" W	36.65'
L676(M)	S 24°27'30" W	45.90'
L677(M)	S 53°58'01" E	28.40'
L678(M)	N 68°21'07" E	41.23'
L679(M)	N 84°47'44" E	43.90'
L680(M)	S 60°00'34" E	24.54'
L681(M)	S 63°04'20" E	26.28'
L682(M)	S 33°27'16" E	21.05'
L683(M)	S 89°22'51" E	31.18'
L684(M)	N 66°01'21" E	18.37'
L685(M)	N 51°49'22" E	31.28'
L686(M)	N 38°37'49" E	26.68'
L687(M)	N 11°50'31" E	55.52'
L688(M)	N 0°38'54" W	50.19'
L689(M)	N 80°15'14" W	34.19'
L690(M)	S 84°33'31" E	7.15'
L691(M)	S 85°12'49" E	51.23'
L692(M)	N 46°28'03" E	78.56'
L693(M)	N 39°04'26" E	0.97'
L694(M)	N 78°16'15" E	22.30'
L695(M)	N 18°47'39" E	63.16'
L696(M)	N 88°32'20" E	34.59'
L697(M)	S 44°47'19" E	42.56'
L698(M)	S 61°18'41" E	34.09'
L699(M)	S 74°15'55" E	25.32'
L700(M)	N 12°12'26" E	15.90'
L701(M)	N 8°22'28" W	34.95'
L702(M)	N 39°26'26" W	57.03'
L703(M)	N 61°02'34" W	30.89'
L704(M)	N 27°47'15" W	58.18'
L705(M)	N 18°35'29" W	23.40'
L706(M)	N 28°30'18" E	31.18'
L707(M)	N 74°48'16" W	65.20'
L708(M)	N 89°50'37" W	50.23'
L709(M)	S 78°05'35" W	53.94'
L710(M)	S 67°55'58" W	7.61'

LINE DATA TABLE		
LINE	DIRECTION	LENGTH
L741	S 65°02'28" W	45.47'
L742	S 33°01'48" W	33.10'
L743	S 9°15'01" E	54.53'
L744	S 13°06'54" E	47.10'
L745	S 57°18'26" E	37.88'
L746	S 4°11'54" E	25.98'
L747	N 85°33'11" E	1.46'
L748	S 20°37'30" E	40.98'
L749	S 52°57'50" W	58.21'
L750	S 84°14'44" E	23.69'

S 78°09'38" E 848.77' (M)
N.W. 162ND LANE (F.K.A. OLD STATE ROAD NO. 20 & 25) (F.K.A. OLD U.S. HIGHWAY 441) (F.K.A. OLD STATE ROAD 25) (ROW WIDTH VARIES)
S 78°09'10" E 677.36' (D)
S 78°10'15" E 677.22' (M)
295.75' (M)
S 86°47'14" E 184.60' (M)
N 12°00'46" E 263.08' (M)
N 87°10'32" W 1480.76' (D)
N 87°10'07" W 1480.81' (M)
N 56°49'59" E 540.66' (M)
C19
C23
L590
L591
L592
L594
L598
L599
L670
PARCEL ID: 03054-001-001 OWNER: CURRENT OWNER DWARKADHISH INVESTMENTS INC
PARCEL ID: 03054-001-000 OWNER: SAMJAK LLC
PARCEL 2 SEE SHEET 4 PARCEL ID: 03873-001-000
WETLAND DELINEATION FLAG AND DESIGNATION NUMBER (FLAGGED BY OTHERS)
WETLAND DELINEATION LINE TO BOUNDARY TIE LINE
WETLAND DELINEATION LINE (FLAGGED BY OTHERS)
LH-1 START CTR
LG-50 END CTR
SEE SHEET 14 MATCH LINE SEE SHEET 13
SEE SHEET 13 MATCH LINE SEE SHEET 12
INTERSTATE HIGHWAY NO. 75 STATE ROAD NO. 93 (ROW VAR)
TOMOKA HILLS FARMS, INC.

11801 Research Drive
Alachua, FL 32615
(352) 331-1976
www.chw-inc.com
est. 1988 FLORIDA CA-5075

CHW Professional Consultants

SCALE: 1" = 80'
VERIFY SCALE BAR IS CORRECT FOR PLOTTED SIZE
0 80 160 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

CERTIFIED TO:

SURVEY DATE: 05/10/2022
REVISION DATE: N/A
PROJECT NUMBER: 21-0025.07

TECHNICIAN: KWM
CREW CHIEF: WS
DESIGNED BY: CAC
FIELD BOOK & PAGE: 635 / 69 & 650 / 4

CHAD A. COLSON

SEE SHEET ONE OF TWENTY-SIX

Professional Surveyor & Mapper Fla. License No. 7142

This map prepared by:

Certificate of Authorization No. LB. 5075
NOT VALID WITHOUT THE ORIGINAL SIGNATURE & SEAL OF FLORIDA DIGITAL SIGNATURE OF A FLORIDA LICENSED SURVEYOR AND MAPPER

SHEET NO.:
13 OF 26

Tech: chde Plot Date: Jun 07,2023 10:14pm Filename: C:\Acad\Resurvey\Twng\Ad\Sdds_10395\21-0025 BOUNDARY & TOPO.dwg

BOUNDARY & TOPOGRAPHIC SURVEY

LOCATED IN SECTIONS 9 & 16, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA

GRAPHIC SCALE
0 40 80 160

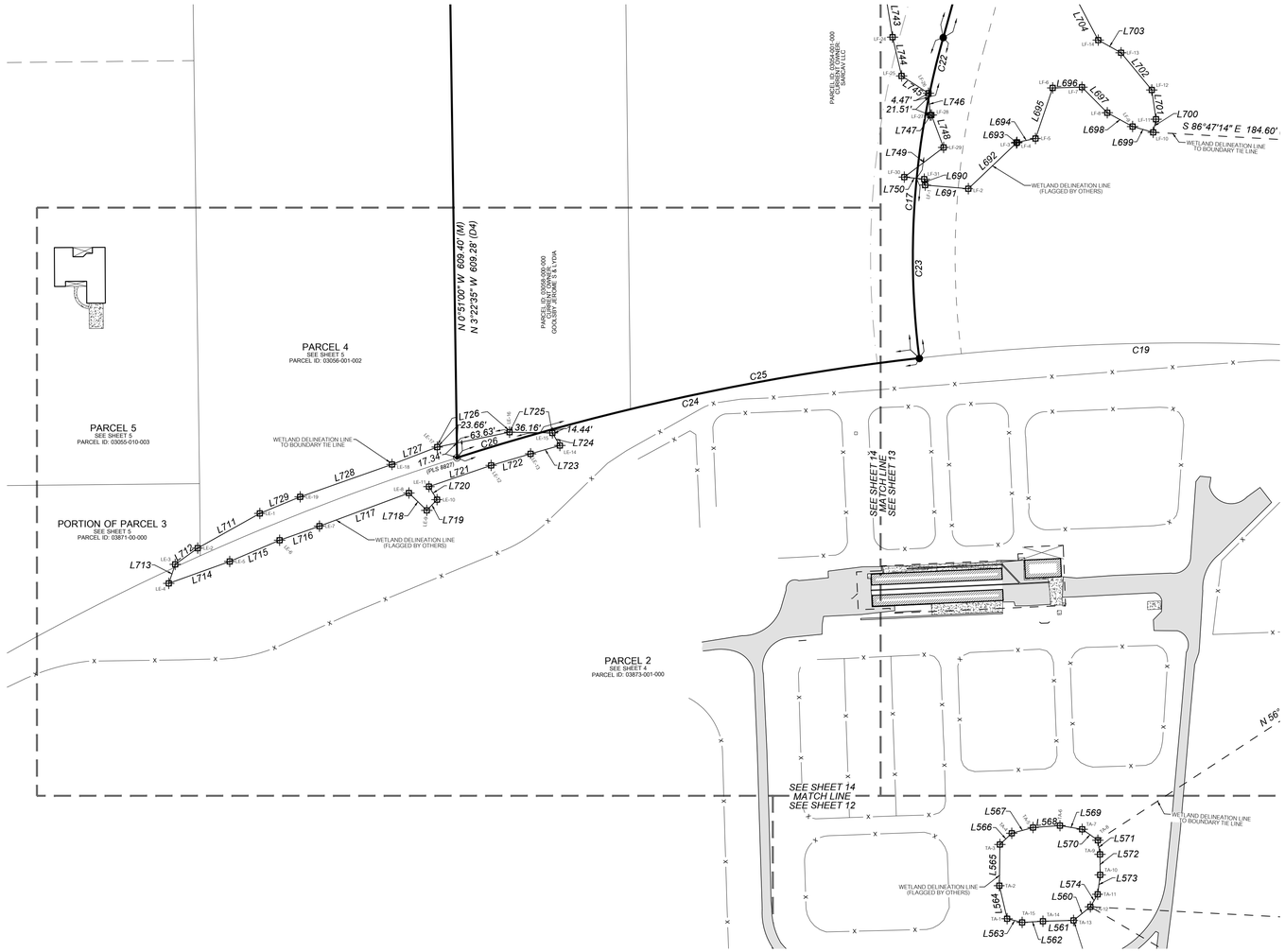
N

SURVEYOR'S NOTES:

1. THIS SURVEY CONSISTS OF TWENTY-SIX SHEETS AND IS NOT COMPLETE WITHOUT ALL SHEETS. SEE SHEET ONE FOR COMPLETE SURVEYOR'S NOTES.

CURVE DATA TABLE						
CURVE	LENGTH	RADIUS	DELTA	TANGENT	CHORD	CHORD BEARING
C17(M)	382.71'	950.00'	23°04'54"	193.99'	380.13'	S 4°16'34" W
C17(D9)	383.18'	950.00'	23°06'37"	194.23'	380.59'	S 4°15'43" W
C19(M)	466.96'	2864.79'	9°20'21"	234.00'	466.45'	S 88°14'57" W
C22(M)	176.69'	950.00'	10°39'23"	88.60'	176.44'	S 10°29'20" W
C23(M)	206.02'	950.00'	12°25'31"	103.42'	205.62'	S 1°03'07" E
C24(M)	559.96'	2864.79'	11°11'57"	280.87'	559.06'	S 77°49'57" W
C25(M)	457.37'	2864.79'	9°08'51"	229.17'	456.89'	S 78°51'29" W
C26(M)	102.58'	2864.79'	2°03'06"	51.30'	102.58'	S 73°15'31" W

LINE DATA TABLE		
LINE	DIRECTION	LENGTH
L560(M)	S 51°01'05" W	25.58'
L561(M)	S 88°27'02" W	36.20'
L562(M)	S 86°41'57" W	24.68'
L563(M)	N 75°57'44" W	18.26'
L564(M)	N 13°14'10" W	40.08'
L565(M)	N 0°47'10" E	48.77'
L566(M)	N 46°31'27" E	19.27'
L567(M)	N 74°58'02" E	26.11'
L568(M)	N 85°53'02" E	31.88'
L569(M)	S 80°36'57" E	26.59'
L570(M)	S 55°05'58" E	22.65'
L571(M)	S 8°27'40" E	16.90'
L572(M)	S 0°35'55" E	24.22'
L573(M)	S 7°18'09" W	23.25'
L574(M)	S 30°22'21" W	17.10'
L690(M)	S 84°16'22" E	10.75'
L691(M)	S 85°12'49" E	51.23'
L692(M)	N 46°28'03" E	78.56'
L693(M)	N 39°04'26" E	0.97'
L694(M)	N 78°16'15" E	22.30'
L695(M)	N 18°47'39" E	63.16'
L696(M)	N 68°32'20" E	34.59'
L697(M)	S 44°47'19" E	42.56'
L698(M)	S 61°18'41" E	34.09'
L699(M)	S 74°15'55" E	25.32'
L700(M)	N 12°12'26" E	15.90'
L701(M)	N 8°22'28" W	34.95'
L702(M)	N 39°26'26" W	57.03'
L703(M)	N 61°02'34" W	30.89'
L704(M)	N 27°47'15" W	58.18'
L711(M)	S 60°47'22" W	84.15'
L712(M)	S 54°10'04" W	32.86'
L713(M)	S 18°41'00" W	23.72'
L714(M)	N 70°14'39" E	76.57'
L715(M)	N 66°56'36" E	64.16'
L716(M)	N 70°29'28" E	50.01'
L717(M)	N 69°40'21" E	112.70'
L718(M)	S 45°56'55" E	29.47'
L719(M)	N 43°43'16" E	17.55'
L720(M)	N 31°57'36" W	18.08'
L721(M)	N 71°05'40" E	77.70'
L722(M)	N 73°41'16" E	48.61'
L723(M)	N 74°02'52" E	35.95'
L724(M)	N 30°48'43" W	17.29'
L725(M)	N 89°02'51" W	50.59'
L726(M)	S 78°23'12" W	87.29'
L727(M)	S 69°00'28" W	57.27'
L728(M)	S 70°32'36" W	115.20'
L729(M)	S 67°41'22" W	51.50'



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CERTIFIED TO:

SURVEY DATE: 05/10/2022
REVISION DATE: N/A
PROJECT NUMBER: 21-0025.07

TECHNICIAN: KWM
CREW CHIEF: WM
CHECKED BY: CAC
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CHAD A. COLSON

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SHEET NO.:
14 OF 26

Tech: chde Plot Date: Jan 07,2023 10:15pm Filename: C:\AcadResource\Temp\AcPublish_10396\21-0025 BOUNDARY & TOPO.dwg

BOUNDARY & TOPOGRAPHIC SURVEY

LOCATED IN SECTIONS 9 & 16, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA

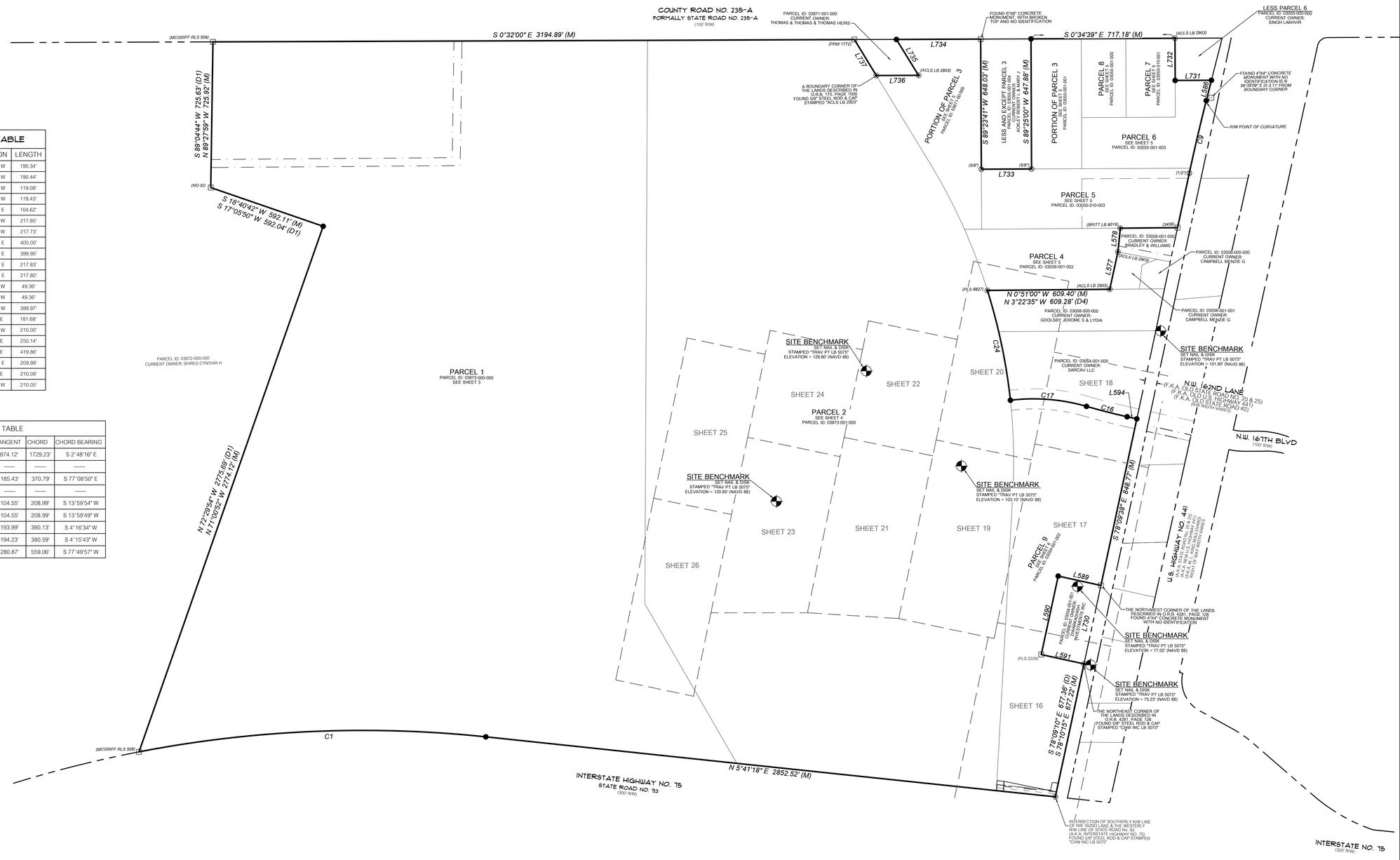
GRAPHIC SCALE
0 125 250 500

SURVEYOR'S NOTES:

1. THIS SURVEY CONSISTS OF TWENTY-SIX SHEETS AND IS NOT COMPLETE WITHOUT ALL SHEETS. SEE SHEET ONE FOR COMPLETE SURVEYOR'S NOTES.

LINE DATA TABLE		
LINE	DIRECTION	LENGTH
L577(M)	N 77°57'58" W	190.34'
L577(D4)	N 80°30'38" W	190.44'
L578(M)	N 84°30'07" W	119.08'
L578(D4)	N 87°04'27" W	119.43'
L586(M)	S 76°02'39" E	104.62'
L589(M)	S 12°02'31" W	217.85'
L589(D9)	S 12°02'06" W	217.73'
L590(M)	S 78°08'19" E	400.00'
L590(D9)	S 78°08'35" E	399.95'
L591(M)	N 12°02'06" E	217.83'
L591(D9)	N 12°02'06" E	217.80'
L594(M)	S 12°09'36" W	49.36'
L594(D9)	S 12°09'34" W	49.36'
L730(M)	N 78°08'10" W	399.97'
L731(M)	S 0°34'01" E	181.68'
L732(M)	S 89°22'44" W	210.00'
L733(M)	S 0°35'52" E	250.14'
L734(M)	S 0°32'14" E	419.86'
L735(M)	N 58°03'05" E	209.99'
L736(M)	S 0°36'09" E	210.09'
L737(M)	S 58°15'37" W	210.05'

CURVE DATA TABLE						
CURVE	LENGTH	RADIUS	DELTA	TANGENT	CHORD	CHORD BEARING
C1(M)	1735.53'	5879.58'	16°54'45"	874.12'	1729.23'	S 2°48'16" E
C1(D1)	1734.82'	5879.58'	16°54'21"	------	------	------
C9(M)	370.81'	10209.13'	2°04'52"	185.43'	370.79'	S 77°08'50" E
C9(D4)	370.57'	10209.13'	2°04'47"	------	------	------
C16(M)	209.03'	3259.14'	3°40'29"	104.55'	208.99'	S 13°59'54" W
C16(D9)	209.03'	3259.14'	3°40'29"	104.55'	208.99'	S 13°59'49" W
C17(M)	382.71'	950.00'	23°04'54"	193.99'	380.13'	S 4°16'34" W
C17(D9)	383.18'	950.00'	23°06'37"	194.23'	380.59'	S 4°15'43" W
C24(M)	559.96'	2864.79'	11°11'57"	280.87'	559.06'	S 77°49'57" W



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TECHNICIAN: KWM
CREW CHIEF: MM
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CHAD A. COLSON
Professional Surveyor & Mapper Fla. License No. 7142

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SHEET NO.:
15 OF 26

Tech: chde Plot Date: Jan 07,2022 10:15pm Filename: C:\Acad\Resources\Temp\AcPublish_10395\21-0025 BOUNDARY & TOPO.dwg

BOUNDARY & TOPOGRAPHIC SURVEY

LOCATED IN SECTIONS 9 & 16, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA

GRAPHIC SCALE
0 15 30 60

SURVEYOR'S NOTES:

1. THIS SURVEY CONSISTS OF TWENTY-SIX SHEETS AND IS NOT COMPLETE WITHOUT ALL SHEETS. SEE SHEET ONE FOR COMPLETE SURVEYOR'S NOTES.

SITE BENCHMARK
SET NAIL & DISK
STAMPED "TRAV PT LB 5075"
ELEVATION = 75.23' (NAVD 88)

N.W. 162ND LANE
(ROAD OPEN)
(R/W WIDTH VARIES)

INTERSTATE HIGHWAY NO. 75
STATE ROAD NO. 93
(300' R/W)

SHEET 17
MATCH LINE
SHEET 16

SHEET 16
MATCH LINE
SHEET 19

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0 1" 2"

CERTIFIED TO:

TOMOKA HILLS FARMS, INC.

SURVEY DATE:	05/10/2022
REVISION DATE:	N/A
PROJECT NUMBER:	21-0025.07
TECHNICIAN:	KWM
ORDER CHIEF:	
DRAWN BY:	CAC
FIELD BOOK & PAGE:	633 / 69 & 650 / 4

CHAD A. COLSON
SEE SHEET ONE OF TWENTY-SIX
Professional Surveyor & Mapper Fla. License No. 7142

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SHEET NO.:
16 OF 26

Tech: cbode Plot Date: Jan 07,2022 10:15pm Filename: C:\Jacobsecure\Temp\AcPublish_10292\21-0025 BOUNDARY & TOPO.dwg

BOUNDARY & TOPOGRAPHIC SURVEY

LOCATED IN SECTIONS 9 & 16, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA

GRAPHIC SCALE
0 15 30 60

N

SURVEYOR'S NOTES:

1. THIS SURVEY CONSISTS OF TWENTY-SIX SHEETS AND IS NOT COMPLETE WITHOUT ALL SHEETS. SEE SHEET ONE FOR COMPLETE SURVEYOR'S NOTES.

N.W. 162ND LANE
ROAD CLOSED
(R/W WIDTH VARIES)

N.W. 162ND LANE
ROAD OPEN
(R/W WIDTH VARIES)

LIME ROCK SURFACE

GAS LINE RISER

THIS PORTION OF NW 162ND LANE WAS CLOSED WITH SIGNS AT THE TIME OF THIS SURVEY. NO RECORDED INFORMATION OF A R/W CLOSURE WAS DISCOVERED BY THIS SURVEYOR OR PROVIDED TO THIS SURVEYOR

BENCHMARK
SET 60D NAIL & DISK
MARKED "TRAV LB 5075"
ELEV = 82.94'

TP: 03054-001-000
KENNETH J & REBECCA H FICKETT

SITE BENCHMARK
SET NAIL & DISK
STAMPED "TRAV PT LB 5075"
ELEVATION = 77.02' (NAVD 88)

1-STORY
BLOCK BUILDING

3" PVC ELECTRIC RISER
ON BUILDING

POOL AREA

8' WIDE
CONCRETE
BLOCK WALL

(VACANT)

GRAVEL
DRIVE

DUMPSTER PAD
6'HT FENCE
WITH 6' CLF

ASPHALT
PATCH

1.5' CURB & GUTTER

ELECTRICAL
OUTLET

SOUTH R/W LINE

NORTH R/W LINE

8' CHAIN LINK FENCE

TOP = 76.01' (8" PVC)

TOP = 76.08' (8" PVC)

INV. = 75.38' (8" PVC)

PORTIONS OF THE SITE AS SHOWN HEREON HAS BEEN DISTURBED BY EARTH MOVING AND CLEARING. THERE ARE AREAS OF DEBRIS EXPOSED AND POSSIBLY COVERED WITH DIRT.

WETLAND DELINEATION LINE
SEE SHEETS 7 - 14 FOR
DETAILED INFORMATION

FENCE CORNER
0.5' O.N. & 1.0' E. OF
PROPERTY CORNER

SHEET 18
MATCH LINE
SHEET 17

SHEET 17
MATCH LINE
SHEET 16

SHEET 17
MATCH LINE
SHEET 20

SHEET 17
MATCH LINE
SHEET 19

Tech: chcde Plot Date: Jun 07,2022 10:15pm Filename: C:\Acad\Resources\Temp\AcPublish_10\595\21-0025 BOUNDARY & TOPO.dwg

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TOMOKA HILLS FARMS, INC.

SURVEY DATE: 05/10/2022
REVISION DATE: N/A
PROJECT NUMBER: 21-0025.07

TECHNICIAN: KWM
CREW CHIEF: N/A
CHECKED BY: CAC
FIELD BOOK & PAGE: 635 / 69 & 650 / 4

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Professional Surveyor & Mapper Fla. License No. 7142

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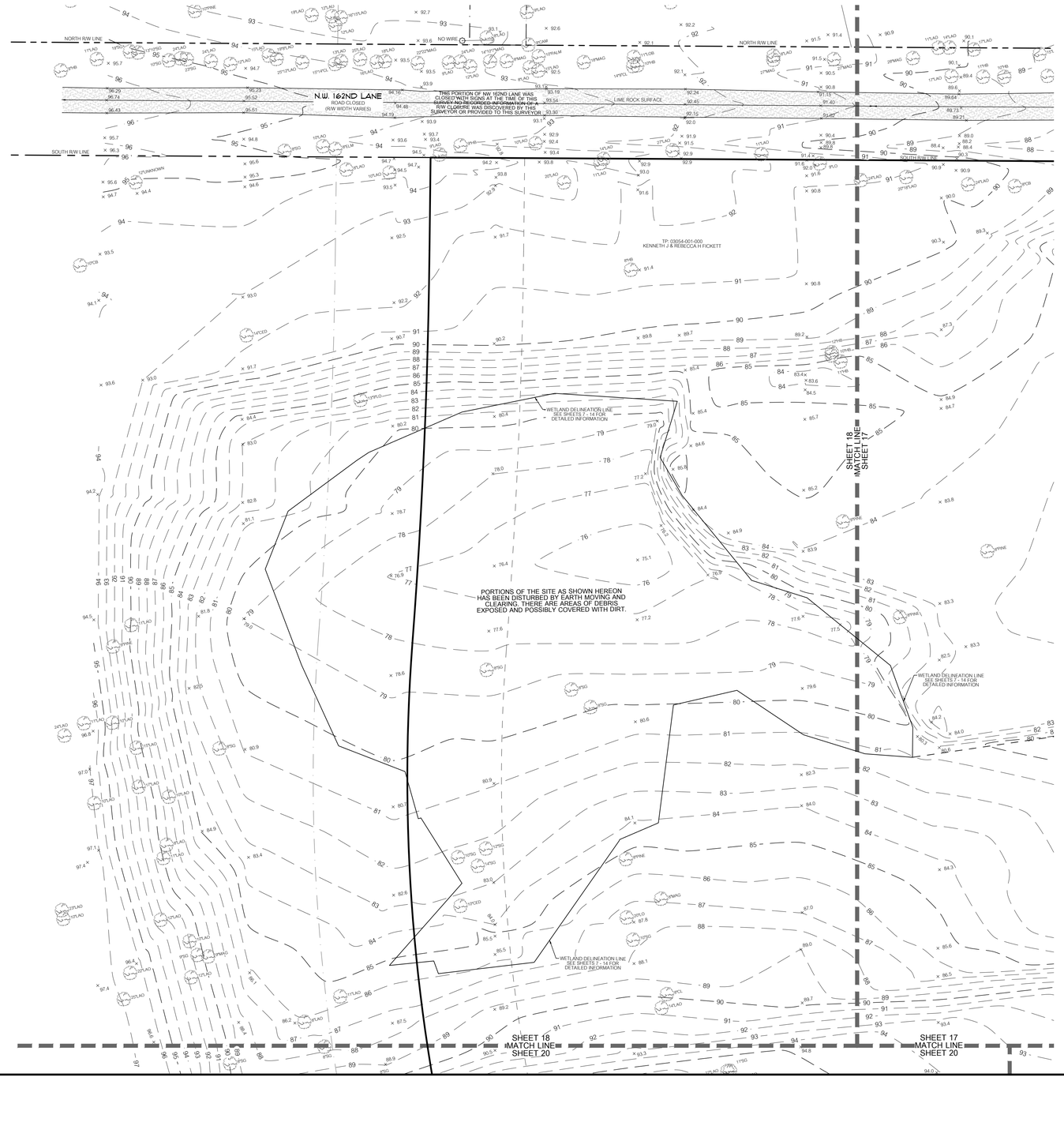
SHEET NO.:
17 OF 26

BOUNDARY & TOPOGRAPHIC SURVEY

LOCATED IN SECTIONS 9 & 16, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA

SURVEYOR'S NOTES:

1. THIS SURVEY CONSISTS OF TWENTY-SIX SHEETS AND IS NOT COMPLETE WITHOUT ALL SHEETS. SEE SHEET ONE FOR COMPLETE SURVEYOR'S NOTES.



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0 15 30 60

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SURVEY DATE: 05/10/2022
REVISION DATE: N/A
PROJECT NUMBER: 21-0025.07

TECHNICIAN: KWM
CREW CHIEF: MB
CHECKED BY: CAC
FIELD BOOK & PAGE: 635 / 69 & 650 / 4

TOMOKA HILLS FARMS, INC.

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SHEET NO.:
18 OF 26

Tech: chde Plot Date: Jan 07,2022 10:15pm Filename: C:\Acad\Resurvey\Temp\AcPublish_10396\21-0025 BOUNDARY & TOPO.dwg

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BOUNDARY & TOPOGRAPHIC SURVEY

LOCATED IN SECTIONS 9 & 16, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA

GRAPHIC SCALE
0 15 30 60

SHEET 17 MATCH LINE SHEET 19

SHEET 16 MATCH LINE SHEET 19

SHEET 20 MATCH LINE SHEET 19

SHEET 19 MATCH LINE SHEET 22

SHEET 19 MATCH LINE SHEET 21

6' WOOD FENCE

WETLAND DELINEATION LINE SEE SHEETS 7 - 14 FOR DETAILED INFORMATION

SITE BENCHMARK
SET NAIL & DISK
STAMPED "TRAV PT LB 5075"
ELEVATION = 103.10' (NAVD 88)

TCP = 104.10' (18" CMP)

INV. = 104.84' (18" CMP)

ATE = 112.82'

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0 1"

TECHNICIAN: KWM
CREW CHIEF: KWM
DESIGNED BY: CAC
FIELD BOOK & PAGE: 635 / 69 & 650 / 4

SURVEY DATE: 05/10/2022
REVISION DATE: N/A
PROJECT NUMBER: 21-0025.07

CERTIFIED TO:

TOMOKA HILLS FARMS, INC.

CHAD A. COLSON

SEE SHEET ONE OF TWENTY-SIX

Professional Surveyor & Mapper Fla. License No. 7142

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SHEET NO.:
19 OF 26

Tech: bhale Plot Date: Jun. 07,2022 10:15pm Filename: C:\Acad\Resources\Temp\Act-Publish_102\SR 21--0025 BOUNDARY & TOPO.dwg

BOUNDARY & TOPOGRAPHIC SURVEY

LOCATED IN SECTIONS 9 & 16, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA

SURVEYOR'S NOTES:

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GRAPHIC SCALE
0 15 30 60

N

SHEET 18 MATCH LINE SHEET 20

SHEET 17 MATCH LINE SHEET 20

SHEET 20 MATCH LINE SHEET 18

SHEET 20 MATCH LINE SHEET 22

BENCHMARK
SET 600 NAIL & CAP MARKED "TRAV LB 5075" ELEV = 103.60'

END OF FENCE: 15.5' EAST OF PROPERTY LINE

WETLAND DELINEATION LINE SEE SHEETS 7 - 14 FOR DETAILED INFORMATION

WETLAND DELINEATION LINE SEE SHEETS 7 - 14 FOR DETAILED INFORMATION

6' CHAIN LINK FENCE

4' WOOD FENCE

GATE

ROOF LINE

ROOF OVERHANG

ONE STORY BLOCK BUILDING

TRENCH DRAIN

COVERED WALKWAY

13.0' x 164.5' CONCRETE BLOCK WORKS STORAGE

TOP OF GRATE = 112.82'

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CERTIFIED TO:

TOMOKA HILLS FARMS, INC.

SURVEY DATE:	05/10/2022
REVISION DATE:	N/A
PROJECT NUMBER:	21-0025.07
TECHNICIAN:	KWM
CREW CHIEF:	KWM
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SHEET NO.:
20 OF 26

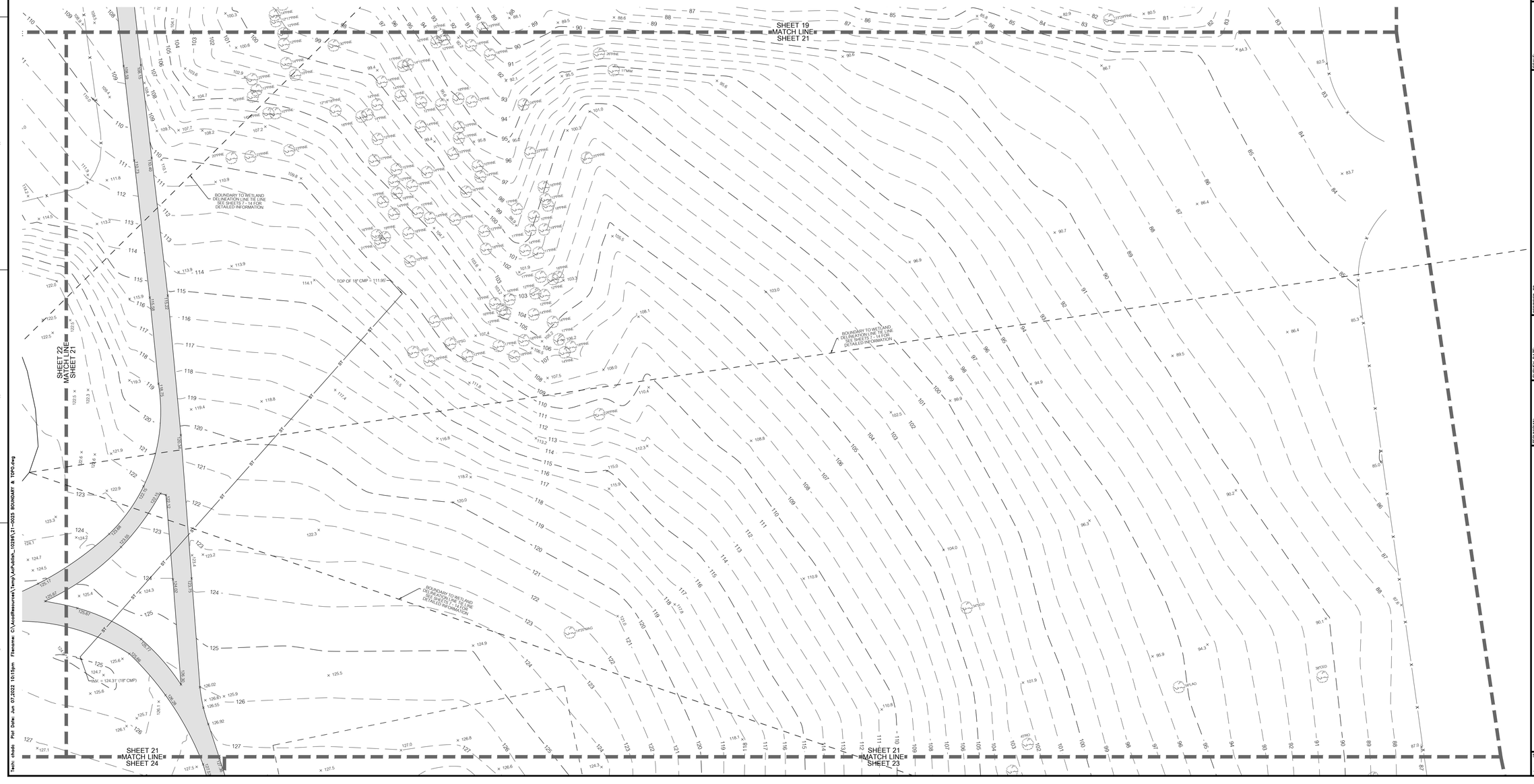
BOUNDARY & TOPOGRAPHIC SURVEY

LOCATED IN SECTIONS 9 & 16, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA

GRAPHIC SCALE
0 15 30 60

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CERTIFIED TO:

SURVEY DATE: 05/10/2022
REVISION DATE: N/A
PROJECT NUMBER: 21-0025.07

TECHNICIAN: KWM
CREW CHIEF: MM
CHECKED BY: CAC
FIELD BOOK & PAGE: 633 / 69 & 650 / 4

CHAD A. COLSON

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SHEET NO.:
21 OF 26

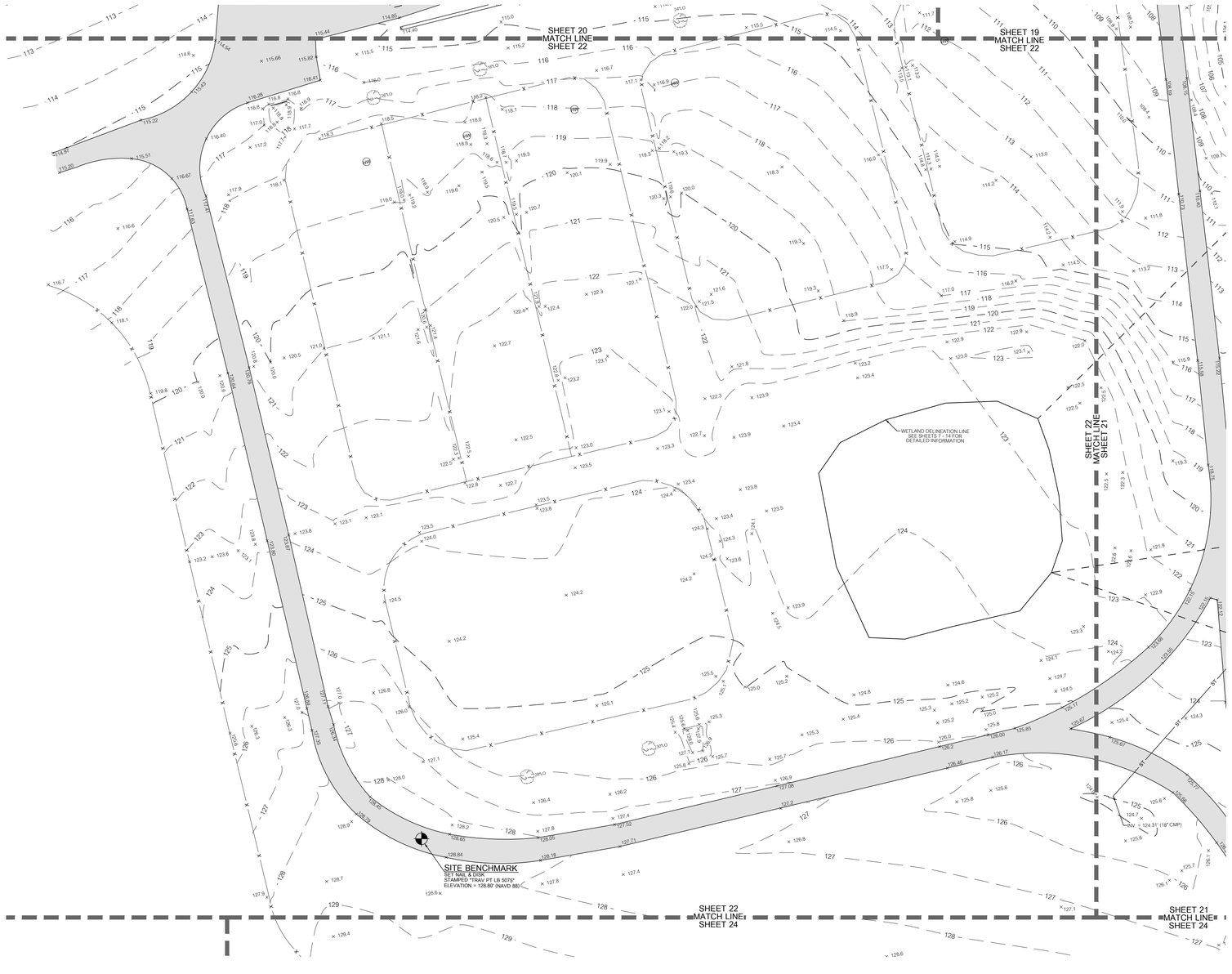
Tech: kbode Plot Date: Jun 07,2022 10:15pm Filename: C:\Acad\Resources\Temp\Acf-Publish_102\Dwg\21-0025 BOUNDARY & TOPO.dwg

BOUNDARY & TOPOGRAPHIC SURVEY

LOCATED IN SECTIONS 9 & 16, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA

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0 1"

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FIELD BOOK & PAGE: 635 / 69 & 650 / 4

TOMOKA HILLS FARMS, INC.

CHAD A. COLSON

SEE SHEET ONE OF TWENTY-SIX

Professional Surveyor & Mapper Fla. License No. 7142

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SHEET NO.:
22 OF 26

Text: chde Plot Date: Jun 07,2022 10:15pm Filename: C:\Jobs\Resurvey\Temp\ACPublish_10295\21-0025 BOUNDARY & TOPO.dwg

SURVEYOR'S NOTES:

1. THIS SURVEY CONSISTS OF TWENTY-SIX SHEETS AND IS NOT COMPLETE WITHOUT ALL SHEETS. SEE SHEET ONE FOR COMPLETE SURVEYOR'S NOTES.

BOUNDARY & TOPOGRAPHIC SURVEY

LOCATED IN SECTIONS 9 & 16, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA

GRAPHIC SCALE
0 15 30 60



11801 Research Drive
Alachua, FL 32615
(352) 331-1976
www.chw-inc.com
est. 1988 FLORIDA CA-5075

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SURVEY DATE: 05/10/2022
REVISION DATE: N/A
PROJECT NUMBER: 21-0025.07

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CREW CHIEF: KWM
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SURVEYOR'S NOTES:

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BOUNDARY & TOPOGRAPHIC SURVEY

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PROJECT NUMBER: 21-0025.07

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AARON H. HICKMAN

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25 OF 26

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BOUNDARY & TOPOGRAPHIC SURVEY

LOCATED IN SECTIONS 9 & 16, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA

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SURVEY DATE: 05/10/2022
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26 OF 26

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GENERAL NOTES

1. THE TOPOGRAPHIC AND EXISTING INFORMATION SHOWN HEREON WERE TAKEN FROM A BOUNDARY AND TOPOGRAPHIC SURVEY PREPARED BY CHW, AND DATED MAY 10, 2022.
2. THE LOCATION OF ALL EXISTING UTILITIES SHOWN ON THE PLANS HAS BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR ACCURACY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE VARIOUS UTILITIES AND TO MAKE NECESSARY ARRANGEMENTS FOR ANY RELOCATION OF THESE UTILITIES WITH THE OWNER OF THE UTILITY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN CROSSING ANY UNDERGROUND UTILITY, WHETHER SHOWN ON THE PLANS OR LOCATED BY THE UTILITY COMPANY. THE RESPECTIVE UTILITY COMPANIES SHALL RELOCATE ALL UTILITIES THAT INTERFERE WITH THE PROPOSED CONSTRUCTION. THE CONTRACTOR SHALL COOPERATE WITH THE UTILITY COMPANIES DURING THE RELOCATION OPERATIONS. ANY DELAY OR INCONVENIENCE CAUSED TO THE CONTRACTOR BY THE VARIOUS UTILITIES SHALL BE INCIDENTAL TO THE CONTRACT AND NO EXTRA COMPENSATION WILL BE ALLOWED.
3. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN AREAS OF BURIED UTILITIES AND SHALL PROVIDE AT LEAST 48 HOURS NOTICE TO THE APPROPRIATE UTILITY COMPANIES IN ORDER TO ALLOW MARKING OF THE LOCATIONS OF EXISTING UNDERGROUND FACILITIES IN ADVANCE OF CONSTRUCTION BY CALLING THE FLORIDA SUNSHINE STATE ONE-CALL CENTER, INC. AT 1-800-432-4770 OR 811. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY "SUNSHINE" 48 HOURS PRIOR TO ANY CLEARING OF CONSTRUCTION TO IDENTIFY ALL UTILITY LOCATIONS. NO CONSTRUCTION ACTIVITY MAY OCCUR UNTIL THE UTILITIES HAVE BEEN PROPERLY MARKED.
4. THE CONTRACTOR SHALL FIELD VERIFY THE HORIZONTAL LOCATION AND VERTICAL LOCATION OF ALL EXISTING UTILITIES WITHIN THE LIMITS OF THE PROJECT ENVELOPE SHOWN PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL CALL ALL UTILITY COMPANIES TO HAVE THE LOCATIONS OF ALL UTILITIES FIELD MARKED PRIOR TO COMMENCEMENT OF CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO CONTINUING CONSTRUCTION.
5. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING FACILITIES, ABOVE OR BELOW GROUND THAT MAY OCCUR AS A RESULT OF THE WORK PERFORMED BY THE CONTRACTOR.
6. ALL PRIVATE AND PUBLIC PROPERTY AFFECTED BY THIS WORK SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN EXISTING CONDITIONS BEFORE COMMENCING CONSTRUCTION WORK, UNLESS SPECIFICALLY EXEMPTED BY THE PLANS. ADDITIONAL COSTS ARE INCIDENTAL TO OTHER CONSTRUCTION AND NO EXTRA COMPENSATION WILL BE ALLOWED.
7. ALL WORK PERFORMED SHALL COMPLY WITH THE REGULATIONS AND ORDINANCES OF THE VARIOUS GOVERNMENTAL AGENCIES HAVING JURISDICTION OVER THE WORK INCLUDING LANDSCAPING.
8. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BECOME FAMILIAR WITH THE PERMIT AND INSPECTION REQUIREMENTS OF THE VARIOUS GOVERNMENTAL AGENCIES. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION AND SCHEDULE INSPECTIONS ACCORDING TO AGENCY AND/OR MUNICIPALITY INSTRUCTIONS.
9. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY WITH AND ENFORCE ALL APPLICABLE SAFETY REGULATIONS.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXCAVATIONS AGAINST COLLAPSE AND SHALL PROVIDE BRACING, SHEETING OR SHORING AS NECESSARY. TRENCHES SHALL BE KEPT DRY WHILE PIPES ARE BEING PLACED. DEWATERING SHALL BE USED AS REQUIRED, AND PERMITTED THROUGH LOCAL GOVERNMENTAL AGENCIES AND WATER MANAGEMENT DISTRICT PER CURRENT REGULATIONS AT THE SOLE COST OF THE CONTRACTOR.
11. CONTRACTOR TO REVIEW GEOTECHNICAL REPORT AND BORINGS PRIOR TO BIDDING THE PROJECT AND FOLLOW OUTLINED CONSTRUCTION TECHNIQUES.
12. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING APPLICABLE TESTING WITH THE SERVICES OF AN APPROVED TESTING LABORATORY AND/OR SOILS ENGINEER, APPLICABLE REGULATORY AGENCIES, AND AS MAY BE FOUND IN THE ENGINEERING CONSTRUCTION DRAWINGS OR SPECIFICATIONS. CONTRACTOR TO VERIFY ALL TESTING WITH THE OWNER PRIOR TO COMMENCING CONSTRUCTION. UPON COMPLETION OF THE WORK, THE TESTING LABORATORY AND/OR SOILS ENGINEER MUST SUBMIT TO THE OWNER'S ENGINEER CERTIFICATIONS STATING THAT ALL REQUIREMENTS HAVE BEEN MET.
13. INSTALL SILT FENCE PRIOR TO SITE DEMOLITION OR NEW SITE CONSTRUCTION. INSTALL SILT FENCE PER FLORIDA STORMWATER EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL AND PROVIDE TOE-IN. THE CONTRACTOR SHALL MAINTAIN THE SILT FENCE IN WORKING ORDER THROUGHOUT THE CONSTRUCTION PHASE. THE PROJECT SILT FENCE SHALL BE INSPECTED DAILY AND ANY CORRECTIVE MEASURES SHALL BE COMPLETED WITHIN 24 HOURS.
14. ALL TREE BARRICADES AND SILT FENCING SHALL BE INSTALLED AND INSPECTED BY ALACHUA COUNTY ENVIRONMENTAL PROTECTION DEPARTMENT PRIOR TO COMMENCEMENT OF ANY DEMOLITION OR CONSTRUCTION ACTIVITIES.
15. THE CONTRACTOR IS TO PREPARE THE SITE PRIOR TO BEGINNING ACTUAL CONSTRUCTION IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.
16. ALL DELETERIOUS MATERIAL (I.E. MUCK, PEAT, BURIED DEBRIS) IS TO BE EXCAVATED IN ACCORDANCE WITH THESE PLANS OR AS DIRECTED BY THE OWNER'S ENGINEER OR OWNER'S SOIL TESTING COMPANY. DELETERIOUS MATERIAL IS TO BE STOCKPILED AND REMOVED FROM THE SITE. EXCAVATED AREAS ARE TO BE BACKFILLED WITH APPROVED MATERIALS AND COMPACTED AS SHOWN ON THESE AREAS.
17. CONTRACTOR SHALL CLEAR AND GRUB ONLY THOSE PORTIONS OF THE SITE NECESSARY FOR CONSTRUCTION. DISTURBED AREAS SHALL BE SODDED, SEEDED, MULCHED, OR PLANTED WITH OTHER APPROVED LANDSCAPE MATERIAL, AS DIRECTED BY THESE PLANS, IMMEDIATELY FOLLOWING CONSTRUCTION PER LOCAL INSPECTOR.
18. WORK BEING PERFORMED UNDER THIS CONTRACT SHALL INTERFACE SMOOTHLY WITH OTHER WORK BEING PERFORMED ON THE SITE BY OTHER CONTRACTORS AND/OR UTILITY COMPANIES. IT WILL BE NECESSARY FOR THE CONTRACTOR TO COORDINATE AND SCHEDULE HIS ACTIVITIES, WHERE NECESSARY, WITH OTHER CONTRACTORS AND UTILITY COMPANIES.
19. ALL PAVEMENT DIMENSIONS SHOWN ARE TO EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
20. THE GOVERNING STANDARDS AND SPECIFICATIONS, UNLESS STATED OTHERWISE SHALL BE PER FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD PLANS (FY 2022-23 ROAD CONSTRUCTION), AND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION DATED JUYY 2022, AS AMENDED BY CONTRACT DOCUMENTS. ALL MATERIALS AND METHODS SHALL MEET FDOT SPECIFICATIONS AND SHALL BE PRODUCED OR OBTAINED FROM AN FDOT APPROVED SOURCE.
21. ALL NEW TRAFFIC CONTROL DEVICES (SIGNS AND PAVEMENT MARKINGS) SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND FDOT STANDARDS.
22. ALL STRIPING WITHIN THE FDOT RIGHT OF WAY SHALL BE PLACED FIRST AS TEMPORARY STRIPING FOLLOWED BY APPLICATION OF THERMOPLASTIC STRIPING 30 DAYS LATER.
23. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING PROPER BENCHMARKS ON-SITE. EXISTING BENCH MARKS SCHEDULED FOR REMOVAL SHALL BE RELOCATED AT CONTRACTORS EXPENSE AND RE-ESTABLISHED BY A LICENSED SURVEYOR.
24. ALL HANDICAP RAMPS SHALL COMPLY WITH THE FLORIDA ACCESSIBILITY CODE AND AMERICANS WITH DISABILITIES ACT.
25. A PRE-CONSTRUCTION CONFERENCE SHALL BE REQUIRED. THE CONTRACTOR, ENGINEER OF RECORD, AND THE OWNER SHALL MEET WITH THE ALACHUA COUNTY PUBLIC WORKS DEPARTMENT PRIOR TO INITIATION OF SITE CONSTRUCTION.
26. ANY CHANGE ORDER REQUESTS, SITE REVISIONS, AND PAY REQUESTS MUST BE SUBMITTED TO AND APPROVED BY THE ENGINEER OF RECORD.
27. CONTRACTOR IS RESPONSIBLE FOR ALL DEWATERING AS NEEDED THROUGHOUT ALL CONSTRUCTION ACTIVITIES COVERED BY THESE PLANS. DEWATERING SHALL BE DONE IN ACCORDANCE WITH FDOT STANDARD SPECIFICATIONS, 2018 EDITION, SECTION 120.
28. THE CONTRACTOR IS RESPONSIBLE FOR THE PERFORMANCE AND COST OF ALL CLEARING AND GRUBBING AND ALL WORK OF REMOVAL, DISPOSAL, AND REPAIR OR REPLACEMENT OF EXISTING IMPROVEMENTS WHERE SHOWN IN THE PLANS, OR ORDERED BY THE ENGINEER TO BE REMOVED, OR WHERE REQUIRED BECAUSE OF THE CONSTRUCTION OPERATIONS, IN ORDER TO CONSTRUCT THE PROPOSED IMPROVEMENTS (THIS INCLUDES BUT IS NOT LIMITED TO PROPOSED PIPING, STRUCTURES, UTILITIES, PAVING, CURBING, ETC.).
29. AN AS-BUILT SURVEY MAY BE REQUIRED BY REGULATORY AGENCIES. CONTRACTOR TO COORDINATE WITH PROJECT OWNER FOR COMPLETION OF AS-BUILT SURVEYS PRIOR TO PROJECT / PERMIT CLOSE-OUT.

MAINTENANCE OF TRAFFIC (MOT) NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR CREATING A MAINTENANCE OF TRAFFIC (MOT) PLAN FOR CONSTRUCTION ACTIVITY THAT OCCURS WITHIN THE PUBLIC RIGHT-OF-WAY, INCLUDING BUT NOT LIMITED TO SIDEWALK WORK AND ACTIVITIES THAT REQUIRE A LANE (OR ROAD) CLOSURE, SUCH AS CONNECTION TO SEWER MANHOLES AND WATER MAINS. THE MOT PLAN MUST BE CREATED BY A REGISTERED PROFESSIONAL ENGINEER WHO IS CERTIFIED TO DO SO BY THE FDOT MOT CERTIFICATION TRAINING. THE MOT PLAN MUST ALSO BE IN ACCORDANCE WITH FDOT STANDARDS PLANS AND FDOT STANDARD SPECIFICATIONS REQUIREMENTS AND MUST BE REVIEWED AND APPROVED BY THE FDOT AND CITY OF ALACHUA.
2. THE CONTRACTOR SHALL SUBMIT THE MOT TO THE APPROPRIATE REGULATORY AUTHORITY PRIOR TO WORK REQUIRING THE MOT FOR APPROVAL. NO WORK IN THE ROW SHALL OCCUR UNTIL THE MOT IS APPROVED.

DEMOLITION GENERAL NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE TO DISPOSE OF ALL DEMOLITION MATERIALS IN A SAFE AND LAWFUL MANNER. THE CONTRACTOR SHALL SALVAGE TO THE OWNER ANY ITEM AS DETERMINED BY THE OWNER. ONCE DEMOLISHED, MATERIAL SHALL BE DISPOSED OF PROPERLY AND IMMEDIATELY.
2. REMOVE ALL IMPROVEMENTS DEFINED ON THE DEMOLITION PLAN. SALVAGE ITEMS TO OWNER AS DEFINED BY THE OWNER'S REPRESENTATIVE AND CONSTRUCTION DOCUMENT SPECIFICATIONS.
3. EXISTING PAVEMENT AND SIDEWALK EDGES THAT BORDER NEW CONSTRUCTION OR DEMOLITION ARE TO BE SAW-CUT TO PROVIDE A SMOOTH TRANSITION.
4. ALL EXISTING TREES ARE TO REMAIN UNLESS OTHERWISE NOTED.
5. ROOTS LARGER THAN 1 INCH IN DIAMETER ON TREES TO BE PRESERVED THAT ARE ENCOUNTERED DURING CONSTRUCTION MUST BE CUT CLEANLY AND COVERED OVER WITH SOIL BY THE END OF THE WORKING DAY.
6. ALL ASPHALT AND LIMEROCK WILL BE COMPLETELY REMOVED FROM AREAS THAT WILL BE LANDSCAPED. IN PARTICULAR, AREAS WHERE ASPHALT WILL BE REMOVED MUST HAVE THE TOP HARD SURFACE, LIMEROCK, AND COMPACTED SOIL REMOVED. REPLACEMENT SOIL SHALL BE CLEAN DEEP FILL OF PH 5.5 - 6.5. THE DEPTH OF UNCOMPACTED SOIL PRIOR TO PLANTING MUST BE AT LEAST 3 FEET TO ACCOMMODATE FUTURE TREE ROOT GROWTH. NO LIMEROCK, LARGE STONES, OR OTHER CONSTRUCTION DEBRIS CAN REMAIN IN AREAS TO BE LANDSCAPED.

PAVING, GRADING, AND DRAINAGE GENERAL NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR EROSION/SEDIMENTATION CONTROL PRACTICES DURING CONSTRUCTION TO MINIMIZE ON-SITE EROSION/SEDIMENTATION AND TO PROTECT AGAINST DAMAGE TO OFF SITE PROPERTY. THE FOLLOWING PRACTICES SHALL BE EMPLOYED:
   A. A. EROSION AND SEDIMENTATION CONTROL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. AREAS OF OFF-SITE DISCHARGE DURING CONSTRUCTION SHALL BE PROTECTED WITH A SEDIMENT BARRIER PER FLORIDA STORMWATER EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL TO PREVENT OFF-SITE DISCHARGE OF SEDIMENTS. A SILT BARRIER SHALL SPECIFICALLY BE REQUIRED, CONSTRUCTED, AND MAINTAINED AS INDICATED ON THIS SHEET. TEMPORARY SEED AND MULCH SHOULD BE USED TO CONTROL ON-SITE EROSION WHEN IT IS NOT PRACTICAL TO ESTABLISH PERMANENT VEGETATION. SOD SHALL BE PLACED AS EARLY AS POSSIBLE ON ALL SLOPES STEEPER THAN 5 (FT) HORIZONTAL TO 1 (FT) VERTICAL. SOD SHALL BE PINNED AS REQUIRED. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE MAINTAINED IN WORKING ORDER THROUGHOUT THE CONSTRUCTION PHASE. THE CONTRACTOR SHALL INSPECT AND REPAIR AS NECESSARY THE EROSION/SEDIMENTATION PROTECTION AT THE END OF EACH WORKING DAY.
   B. NOTE: EROSION/SEDIMENTATION CONTROL SHALL BE PLACED PRIOR TO SITE EXCAVATION AND SHALL REMAIN IN PLACE UNTIL SITE VEGETATION AND LANDSCAPING IS COMPLETE.
   C. B. ALL INLET STRUCTURES AND PIPE SHALL BE PROTECTED FROM SILTATION BY CONSTRUCTING INLET PROTECTION AS DEFINED BY THESE PLANS OR IN THE FDOT STANDARDS. IF SILTATION OCCURS, THE CONTRACTOR IS RESPONSIBLE TO REMOVE SILTATION AS PART OF THE BASE CONTRACT AT NO ADDITIONAL COST TO THE OWNER.
   D. C. EXCAVATED STORMWATER FACILITIES SHALL BE CONSTRUCTED AS PART OF THE INITIAL CONSTRUCTION. THE FACILITIES SHALL BE ROUGH GRADED TO THE DESIGN ELEVATIONS. AFTER THE CONTRIBUTING DRAINAGE AREA IS STABILIZED. THE FACILITIES BOTTOM SHALL BE OVER-EXCAVATED BY SIX INCHES, SCARIFIED, BACKFILLED WITH ARCHER FILL (HAVING NO MORE THAN 5% PASSING NO. 200 SIEVE), AND GRADED TO FINAL DESIGN GRADES. EXCESS AND UNSUITABLE SOILS SHALL BE REMOVED FROM THE BASIN (REMOVE ALL ACCUMULATED SILTS, CLAYS, ORGANIC, AND DEBRIS). FINALLY, SCARIFY AND RAKE BOTTOM AND VEGETATE.
   E. D. PERMANENT VEGETATIVE STABILIZATION SHALL BE APPLIED ON FINE GRADED SITES AS SOON AS PRACTICAL. TEMPORARY SEEDING SHOULD BE EMPLOYED TO PREVENT EXPOSURE OF BARREN SOILS UNTIL PERMANENT VEGETATION CAN BE APPLIED.
   F. E. ALL SLOPES 1:3 OR STEEPER REQUIRE LAPPED OR PEGGED SOD.
   G. F. EROSION, SEDIMENT AND TURBIDITY CONTROL ARE THE RESPONSIBILITY OF THE CONTRACTOR. THESE DELINEATED MEASURES ARE THE MINIMUM REQUIRED, WITH ADDITIONAL CONTROLS TO BE UTILIZED AS NEEDED, DEPENDENT UPON ACTUAL SITE CONDITIONS AND CONSTRUCTION OPERATION.
   H. G. ALL SYNTHETIC BALES, SILT FENCE, AND OTHER EROSION CONTROL MEASURES SHALL BE REMOVED AT THE COMPLETION OF THE PROJECT.
2. THE CONTRACTOR SHALL MAINTAIN IN HIS POSSESSION A COPY OF THE WATER MANAGEMENT DISTRICT CONSTRUCTION PERMIT. HE SHALL BE RESPONSIBLE FOR ADHERENCE TO ALL CONDITIONS CONTAINED IN THE PERMIT.
3. PROPOSED SPOT ELEVATIONS REPRESENT FINISHED PAVEMENT OR GROUND SURFACE GRADE UNLESS OTHERWISE NOTED ON DRAWINGS.
4. CONTRACTOR SHALL SUBMIT FOR REVIEW TO THE OWNER AND OWNER'S ENGINEER SHOP DRAWINGS ON ALL PRECAST AND MANUFACTURED ITEMS TO BE USED ON THIS SITE. FAILURE TO OBTAIN APPROVAL BEFORE INSTALLATION MAY RESULT IN REMOVAL AND REPLACEMENT AT CONTRACTOR'S EXPENSE. ENGINEER'S APPROVAL OF A SHOP DRAWING DOES NOT RELIEVE THE CONTRACTOR'S RESPONSIBILITY FOR THE PERFORMANCE OF THE ITEM.
5. THE COST OF ALL TESTING OF COMPACTION AND OTHER REQUIRED TESTS SHALL BE PAID BY THE CONTRACTOR AND MADE AVAILABLE TO THE ENGINEER OF RECORD DURING SITE INSPECTIONS.
6. GENERAL CONTRACTOR TO CONTACT ENGINEER OF RECORD AND THE OWNER REPRESENTATIVE 48 HOURS IN ADVANCE PRIOR TO BACKFILLING TRENCHES FOR FIELD INSPECTION AND PRIOR TO LAYING ASPHALT FOR FIELD INSPECTION.
7. CONTRACTOR IS TO SUBMIT FDOT APPROVED ASPHALT DESIGN MIXES TO THE OWNER'S REPRESENTATIVE AND ENGINEER OF RECORD BEFORE ANY WORK IS TO COMMENCE ON PROJECT. THE MIXTURE AT THE PLANT OR ON THE ROAD SHALL NOT EXCEED 335 DEGREES. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE AND PROVIDE TEMPERATURE READINGS PRIOR TO LAYING ASPHALT.
8. AS DETERMINED NECESSARY AND DIRECTED BY ALACHUA COUNTY PUBLIC WORKS DEPARTMENT OR ENGINEER OF RECORD, THE CONTRACTOR SHALL UNDERCUT ALL UNSUITABLE MATERIAL 24 INCHES BELOW THE BOTTOM OF ANY PROPOSED LIMEROCK BASE, AND SHALL BACKFILL WITH FILL MATERIAL MEETING FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. SEE FDOT INDEX 120-001 AND 120-002.
9. PROVIDE LEVEL PLATFORM IN FRONT OF ALL EGRESS DOORS. THE FLOOR SURFACE ON BOTH SIDES OF A DOOR SHALL BE AT THE SAME ELEVATION. THE FLOOR SURFACE OR LANDING ON EACH SIDE OF THE DOOR SHALL EXTEND FROM THE DOOR IN THE CLOSED POSITION A DISTANCE EQUAL TO THE DOOR WIDTH AND SHALL COMPLY WITH SECTION 4.13.6 MANEUVERING CLEARANCES AT DOORS OF THE FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION.
10. RAMPS SHALL HAVE LEVEL LANDINGS AT THE BOTTOM AND TOP OF EACH RAMP RUN. CURB RAMPS ARE NOT REQUIRED TO HAVE LANDINGS. LANDINGS SHALL HAVE THE FOLLOWING FEATURES:
    A. THE LANDING SHALL BE AT LEAST AS WIDE AS THE RAMP RUN LEADING TO IT.
    B. ALL LANDINGS ON RAMPS SHALL BE NOT LESS THAN 60" CLEAR, AND THE BOTTOM OF EACH RAMP SHALL HAVE NOT LESS THAN 72" OF STRAIGHT AND LEVEL CLEARANCE.
    C. IF RAMPS CHANGE DIRECTION AT LANDINGS, THE MINIMUM LANDING SIZE SHALL BE 60"X60". IF A RAMP RUN HAS A RISE GREATER THAN 6" OR A HORIZONTAL PROJECTION GREATER THAN 72" THEN IT SHALL HAVE HANDRAILS ON BOTH SIDES. HANDRAILS ARE NOT REQUIRED ON CURB RAMPS. HANDRAILS SHALL BE SHOWN ON THE SITE PLAN.
11. THE CONTRACTOR SHALL STOCKPILE TOPSOIL AND CONSTRUCTION MATERIALS IN AREAS DESIGNATED BY THE OWNER.
12. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING RECORD DRAWINGS AS NOTED IN NOTE #29 UNDER SITE GENERAL NOTES.
13. ALL CONCRETE USED SHALL BE 2,500 PSI MINIMUM.
14. ALL WELLS, CLEANOUTS, MANHOLE TOPS, PULL BOX COVERS AND OTHER UTILITY APPURTENANCES IN THE AREA OF REDEVELOPMENT SHALL BE PROTECTED AND TOPS ADJUSTED TO MATCH PROPOSED GRADES.
15. CONTRACTOR SHALL SAW CUT, TACK, AND MATCH EXISTING PAVEMENT AT LOCATIONS WHERE NEW PAVEMENT MEETS ANY EXISTING PAVEMENT.
16. SOD SHALL BE PLACED AROUND ALL STRUCTURES AS DIRECTED BY THE FDOT INDEX 524-001 AND FDOT INDEX 425- AND 430- SERIES AS APPROPRIATE. ALL OTHER DISTURBED AREAS SHALL BE SEEDED AND MULCHED.
17. ALL STORM SEWER CURB AND DITCH BOTTOM INLETS SHALL CONFORM TO THE APPLICABLE FDOT INDEX. ALL DRAINAGE STRUCTURES WITH GRATES THAT ARE LOCATED IN GRASSED AREAS SHALL HAVE THE GRATE CHAINED TO THE STRUCTURE USING AN EYE BOLT AND CHAIN.
18. ALL CONCRETE STRUCTURES SHALL HAVE ALL EXPOSED EDGES CHAMFERED 3/4" AND CLASS I SURFACE FINISH.
19. ALL HDPE FITTINGS AND CONNECTORS SHALL BE WATER TIGHT. SEE SPECIFICATIONS FOR MORE INFORMATION.
20. COMPACTION OF ALL MATERIALS SHALL BE LIMITED TO STATIC MODE ONLY, UNLESS DIRECTED OTHERWISE BY THE ENGINEER OF RECORD.
21. ALL RCP PIPE JOINTS SHALL BE WRAPPED WITH FILTER FABRIC IN ACCORDANCE WITH FDOT STANDARD SPECIFICATION SECTION 430.
22. GROUT BOTTOM OF ALL STORMWATER DRAINAGE STRUCTURE INVERTS PER FDOT INDEX 425-001.

WATER AND WASTEWATER GENERAL NOTES

1. MATERIALS AND CONSTRUCTION METHODS FOR WATER AND WASTEWATER SYSTEMS SHALL BE IN ACCORDANCE WITH THE LOCAL REGULATORY AGENCY CODES, PLANS, AND SPECIFICATIONS FOR CONSTRUCTION, LATEST REVISION THEREOF AND SUPPLEMENTAL SPECIFICATIONS THERETO. APPROVAL AND CONSTRUCTION OF ALL UTILITY EXTENSIONS AND CONNECTIONS MUST BE COORDINATED THROUGH THE REGULATORY AGENCY DEPARTMENT FOR PUBLIC UTILITIES. WATER AND WASTEWATER SYSTEM SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALACHUA, PUBLIC SERVICES, DESIGN AND CONSTRUCTION MANUAL, LATEST ADDITION.
2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY ALL UTILITY COMPANIES TO DISCONNECT OR REMOVE THEIR FACILITIES PRIOR TO REMOVING OR DEMOLISHING ANY EXISTING STRUCTURES FROM THE SITE.
3. THE CONTRACTOR IS RESPONSIBLE FOR ANY NECESSARY UTILITY FIELD LOCATION AND RELOCATION AS REQUIRED.
4. THE COST OF ALL TESTING OF COMPACTION AND OTHER REQUIRED TESTS SHALL BE PAID BY THE CONTRACTOR AND MADE AVAILABLE TO THE ENGINEER OF RECORD DURING SITE INSPECTIONS.
5. THE CONTRACTOR SHALL PERFORM AN INFILTRATION/EXFILTRATION TEST ON GRAVITY SEWERS IN ACCORDANCE WITH THE REGULATORY JURISDICTION. SAID TESTS ARE TO BE CERTIFIED BY THE ENGINEER AND SUBMITTED TO THE REGULATORY AGENCY FOR APPROVAL. COORDINATION AND NOTIFICATION OF PARTIES US THE CONTRACTOR'S RESPONSIBILITY.
6. ALL FORCE MAINS SHALL BE SUBJECT TO A HYDROSTATIC PRESSURE TEST IN ACCORDANCE WITH THE REGULATORY AGENCY HAVING JURISDICTION. SAID TESTS ARE TO BE CERTIFIED BY THE ENGINEER AND SUBMITTED TO THE REGULATORY AGENCY FOR APPROVAL. COORDINATION AND NOTIFICATION OF PARTIES IS THE CONTRACTOR'S RESPONSIBILITY.
7. CONTRACTOR SHALL SUBMIT FOR REVIEW TO THE OWNER AND OWNER'S ENGINEER SHOP DRAWINGS ON ALL PRECAST AND MANUFACTURED ITEMS TO BE USED ON THIS SITE. FAILURE TO OBTAIN APPROVAL BEFORE INSTALLATION MAY RESULT IN REMOVAL AND REPLACEMENT AT CONTRACTOR'S EXPENSE. ENGINEER'S APPROVAL OF A SHOP DRAWING DOES NOT RELIEVE THE CONTRACTOR'S RESPONSIBILITY FOR THE PERFORMANCE OF THE ITEM.
8. A HORIZONTAL SEPARATION OF TEN FEET PREFERRED, BUT NO LESS THAN SIX FEET, SHALL BE MAINTAINED BETWEEN POTABLE WATER MAINS AND GRAVITY OR PRESSURE WASTEWATER MAINS, WASTEWATER FORCE MAINS, AND RECLAIMED WATER MAINS NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. A HORIZONTAL SEPARATION OF TEN FEET PREFERRED, BUT NO LESS THAN THREE FEET, SHALL BE MAINTAINED BETWEEN POTABLE WATER MAINS AND VACUUM WASTEWATER MAINS. A HORIZONTAL SEPARATION OF THREE FEET SHALL BE MAINTAINED BETWEEN POTABLE WATER MAINS AND STORM SEWERS, STORMWATER FORCE MAINS, AND RECLAIMED WATER MAINS REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
9. WHEN POTABLE WATER MAINS CROSS OTHER PIPES, THE TWO PIPES SHALL HAVE JOINTS A MINIMUM OF SIX FEET FROM THE CROSSING. WHEN POTABLE WATER MAINS CROSS UNDERNEATH OTHER PIPES, THE MINIMUM VERTICAL SEPARATION IS TWELVE INCHES. WHEN POTABLE WATER MAINS CROSS ABOVE PRESSURE WASTEWATER MAINS, WASTEWATER FORCE MAINS, AND RECLAIMED WATER MAINS, THE MINIMUM VERTICAL SEPARATION IS TWELVE INCHES. WHEN POTABLE WATER MAINS CROSS ABOVE GRAVITY AND VACUUM WASTEWATER MAINS, STORM SEWERS, AND STORMWATER FORCE MAINS, THE PREFERRED VERTICAL SEPARATION IS TWELVE INCHES AND THE THE MINIMUM VERTICAL SEPARATION IS SIX INCHES.
10. ALL WATER MAINS SHALL HAVE A MINIMUM OF 36 INCHES OF COVER.
11. RESTRAINED JOINTS SHALL BE PROVIDED AT ALL FITTINGS AND HYDRANTS IN ACCORDANCE WITH AWWA STANDARDS.
12. ALL PVC WATER SERVICE LINES SHALL BE SCH 40 PVC.
13. THE SITE WORK CONTRACTOR SHALL ENGAGE THE SERVICES OF A LICENSED UNDERGROUND UTILITY AND EXCAVATION CONSTRACTOR TO INSTALL THE NEW WATER SERVICE LINE.
14. ALL SANITARY SEWER SERVICE LATERALS SHALL BE 4" PVC SDR 35 OR 6" PVC SDR 35 WITH A CLEAN-OUT LOCATED PER THE PLANS. MINIMUM SLOPE FOR 4" LATERALS SHALL BE 1.0% AND A MINIMUM CLEANOUT SPACING OF 75 FEET ON-CENTER AND MINIMUM SLOPE FOR 6" LATERALS SHALL BE 0.6% AND A MINIMUM CLEANOUT SPACING OF 100 FEET ON-CENTER.
15. PUBLIC UTILITY EASEMENTS WILL BE PROVIDED AS REQUIRED FOR ALL UTILITIES SHOWN HEREON BY METES AND BOUND DESCRIPTION AND IN ACCORDANCE WITH THE REGULATORY AGENCY DEPARTMENT FOR PUBLIC UTILITIES.
16. DURING CONSTRUCTION, FOR EACH WATER METER AND EACH CLEANOUT, PROVIDE A TEMPORARY BARRIER TO PROTECT AGAINST DAMAGE. BARRIER SHALL EITHER CONFORM TO COA DETAIL 324 OR COA APPROVED EQUAL.
17. USE RIEBER GASKETS TO CONNECT ALL GRAVITY WASTEWATER MAINS AND ALL LATERALS.
18. PROVIDE TRACER SYSTEM WIRE FOR WATER AND WASTEWATER PIPING AS SHOWN ON THE DETAILS AND AS PER THE COA DCM.
19. ALL WATER AND WASTEWATER DESIGN DETAILS ARE TYPICAL AND MUST BE USED EVEN IF THE DESIGN DETAIL IS NOT CALLED OUT ON A SPECIFIC SHEET. ALL ASSOCIATED WORK SHALL BE IN ACCORDANCE WITH THE DESIGN DETAILS WHETHER THE DETAILS ARE SPECIFICALLY REFERENCED OR NOT.
20. WATER METER APPURTENANCES SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. THE WATER METER ITSELF SHALL BE FURNISHED AND INSTALLED BY THE CITY.
21. WET TAP(S) SHALL BE DONE BY A SUB-CONTRACTOR PRE-APPROVED BY THE CITY OF ALACHUA.
22. ALL POTABLE WATER PIPING SHALL BE NSF-61 RATED.
23. ALL GRAVITY WASTEWATER MAINS SHALL BE 8" PVC SDR 26.
24. WATER MAIN PIPING UNDER ROADS AND PAVEMENT SHALL BE CLDI. WATER MAIN PIPING NOT UNDER ROADS AND PAVEMENT SHALL BE AWWA C900 DR-18 PVC.

ELECTRIC SERVICE GENERAL NOTES

1. ALL ELECTRICAL UTILITIES AND INFORMATION SHOWN ON THE CIVIL PLANS ARE FOR LOCATION AND COORDINATION PURPOSES ONLY. REFER TO ELECTRICAL PLANS BY OTHERS FOR THE ELECTRICAL DESIGN AND DETAILS.

FDOT GENERAL NOTES

1. ALL WORK PERFORMED WITHIN THE FLORIDA DEPARTMENT OF TRANSPORTATION RIGHT-OF-WAY SHALL CONFORM TO THE FOLLOWING:
   A. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (JULY 2018).
   B. FDOT STANDARD PLANS (FY 2018-19 ROAD CONSTRUCTION)
   C. FDOT DESIGN MANUAL (2018)
   D. FDOT FLEXIBLE PAVEMENT DESIGN MANUAL FOR NEW CONSTRUCTION AND PAVEMENT REHABILITATION

   SHOULD A CONFLICT ARISE BETWEEN THE DETAILS SHOWN IN THE PLANS AND THE DEPARTMENT OF TRANSPORTATION STANDARDS THE ENGINEER/ PERMITTEE SHALL IMMEDIATELY CONFER WITH THE DEPARTMENT'S ENGINEER IN ORDER TO RESOLVE THE DISCREPANCY. IN NO CASE WILL ANYTHING LESS THAT THE DEPARTMENT'S MINIMUM STANDARD BE ALLOWED.
2. ALL TRAFFIC STRIPING AND MARKINGS ARE TO BE LEAD-FREE, NON-SOLVENT BASED THERMOPLASTIC.
3. REMOVAL OF EXISTING STRIPING SHALL BE ACCOMPLISHED USING THE "HYDRO-BLAST" METHOD.
4. ALL CURB AND GUTTER AND SIDEWALK WILL BE REMOVED AND REPLACED JOINT TO JOINT.
5. ALL DISTURBED AREA WITH THE DEPARTMENT OF TRANSPORTATION RIGHT OF WAY WILL RESTORED TO ORIGINAL OR BETTER CONDITION BY GRADING AND SODDING THE AREA DISTURBED (B

ABBREVIATIONS

	SYMBOLS
'	FEET (WHEN USED WITH LENGTHS)
°	DEGREES
'	MINUTES (WHEN USED WITH ANGLES)
"	SECONDS
%	PERCENT
@	AT
	A
AASHTO	ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
AC	ACRES
ADA	AMERICAN WITH DISABILITIES ACT
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
ARCH	ARCHITECT
ARV	AIR RELEASE VALVE
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AWWA	AMERICAN WATER WORKS ASSOCIATION
	B
BC	BACK OF CURB
BFP	BACKFLOW PREVENTER
BLDG	BUILDING
BM	BENCHMARK
BMP	BEST MANAGEMENT PRACTICE
BOC	BACK OF CURB
BVCS	BEGIN VERTICAL CURVE STATION
BVCE	BEGIN VERTICAL CURVE ELEVATION
BW	BOTTOM OF WALL
BSL	BUILDING SETBACK LINE
	C
CATV	CABLE TELEVISION
CI	CURB INLET
CIP	CAST IRON PIPE
CLDIP	CEMENT LINE DUCTILE IRON PIPE
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
COA	CITY OF ALACHUA
CONC	CONCRETE
COORD	COORDINATE
CR	COUNTY ROAD
C/O	CLEANOUT
	D
DBH	DIAMETER AT BREAST HEIGHT
DE	DRAINAGE EASEMENT
DEG	DEGREE
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DWG	DRAWING
	E
e	RATE OF ELEVATION
E	EAST
EA	EACH
EL	ELEVATION
ELEV	ELEVATION
EOP	EDGE OF PAVEMENT
EOR	ENGINEER OF RECORD
ERCP	ELLIPTICAL REINFORCED CONCRETE PIPE
ESMT	EASEMENT
EVCS	END VERTICAL CURVE STATION
EVCE	END VERTICAL CURVE ELEVATION
EX	EXISTING
	F
FAC	FLORIDA ADMINISTRATIVE CODE
FBR	FLORIDA BEARING RATIO
FC	FRICTION COURSE
FDEP	FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION
FFE	FINISHED FLOOR ELEVATION
FH	FIRE HYDRANT
FHWA	FLORIDA HIGHWAY ADMINISTRATION
FIG	FIGURE
FM	FORCE MAIN
FOC	FACE OF CURB
FS	FLORIDA STATUTES
FT	FEET
	G
GALV	GALVANIZED
GM	GAS MAIN
GV	GATE VALVE
	H
HDPE	HIGH DENSITY POLYETHYLENE
HP	HIGH POINT
	I
ID	IDENTIFICATION
INV	INVERT
INV EL	INVERT ELEVATION
IP	IRON PIPE
	K
K	VERTICAL CURVE RATE OF CHANGE
	L
L	LENGTH
LA	LANDSCAPE ARCHITECT
LBR	LIMEROCK BEARING RATIO
LDR	LAND DEVELOPMENT REGULATION
LF	LINEAR FEET
LP	LOW POINT
LT	LEFT
	M
MAX	MAXIMUM
ME	MATCH EXISTING
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MJ	MECHANICAL JOINT
MUP	MULTI-USE PATH
MUTCD	MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
	N
N	NORTH
N-E	NORTHING - EASTING
N/A	NOT APPLICABLE
NAVD	NORTH AMERICAN VERTICAL DATUM OF 1988
NGVD	NATIONAL GEODETIC VERTICAL DATUM OF 1929
NO	NUMBER
NPDES	NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
NTS	NOT TO SCALE
	O
OC	ON CENTER
OHW	OVERHEAD WIRE
ORB	OFFICIAL RECORDS BOOK
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
	P
PAVT	PAVEMENT
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVE
PE	POLYETHYLENE
PERF	PERFORATED
PROP	PROPOSED
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE
PUE	PUBLIC UTILITY EASEMENT
PVI	POINT OF VERTICAL INTERSECTION
	R
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RPM	RAISED REFLECTIVE PAVEMENT MARKER
RPZ	REDUCED PRESSURE ZONE
RT	RIGHT
RWM	RECLAIMED WATER MAIN
R/W	RIGHT-OF-WAY
	S
S	SOUTH
SAN	SANITARY
SHWE	SEASONAL HIGH WATER ELEVATION
SF	SILT FENCE
SL	SLOPE
SP	SUPERPAVE
SR	STATE ROAD
SS	SANITARY SEWER
ST	STORM
STA	STATION
STD	STANDARD
	T
TB	TREE BARRICADE
TCE	TEMPORARY CONSTRUCTION EASEMENT
TEMP	TEMPORARY
TOB	TOP OF BANK
TV	TELEVISION
TW	TOP OF WALL
TYP	TYPICAL
	U
USF	UNITED STATES FOUNDRY
USGS	UNITED STATES GEOLOGICAL SURVEY
UTIL	UTILITY
	V
V	VERTICAL
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
	W
W	WEST
W	WATER
W/	WITH
WM	WATER MAIN
WW	WASTEWATER
WWF	WELDED WIRE FABRIC

SIGNAGE

SIGNS ARE PER FDOT SPECIFICATIONS OR PER MUTCD. SIGN POSTS AND INSTALLATION SHALL BE PER FDOT INDEX NO. 700-010. SIGN PLACEMENT SHALL BE PER FDOT INDEX NO. 700-101.



FTP-20-06 (12" X 18") PER FDOT INDEX NO. 700-102



R1-1 "STOP" - SEE PLANS FOR SIZE

SITE INFORMATION

EX. PROPERTY LINE

LANDSCAPE BUFFER LINE

BUILDING SETBACK LINE

WETLAND LIMITS LINE

WETLAND SETBACK LINE

CENTER LINE

EASEMENT LINE

RIGHT-OF-WAY LINE

SF — SF *SILT FENCE LINE*

TB — TB *TREE BARRICADE LINE*

EX. STRUCTURE OR BUILDING

PROPOSED BUILDING

PROPOSED ASPHALTIC PAVEMENT

PROPOSED CONCRETE PAVEMENT

PROPOSED DETECTABLE WARNING SURFACE

DIRECTIONAL TRAFFIC ARROW PER FDOT INDEX NO. 17346

WATERSHED DIVIDE

99 *EX. ELEVATION CONTOUR*

99 *PROPOSED CONTOUR*

93.23 *EX. SPOT ELEVATION*

93.23 *PROPOSED SPOT ELEVATION*

DIRECTION OF SURFACE DRAINAGE FLOW

PROPOSED SWALE LINE

x — x *EX. FENCE*

PROPOSED FENCE

12" PINE *EX. TREE (SIZE & TYPE)*

1234 *EX. TREE (TREE ID)*

12" PINE *EX. TREE TO BE REMOVED (SIZE & TYPE)*

1234 *EX. TREE TO BE REMOVED (TREE ID)*

PROJECT BENCHMARK

STORMWATER

THE PROPOSED STORMWATER STRUCTURES DEPICTED BELOW ARE DRAWN PER FDOT SPECIFICATIONS AND TO SCALE WHEN SHOWN ON THE PLAN SHEETS.

ST — ST *EX. GRAVITY STORMWATER MAIN*

P–ST *PROPOSED GRAVITY STORMWATER MAIN (PIPE LENGTHS ARE FROM N-E LOCATION OF A STRUCTURE TO N-E LOCATION OF A STRUCTURE)*

N-E LOCATION TOP/RIM ELEV. LOCATION — ST *EX. STORMWATER MANHOLE*

N-E LOCATION TOP/RIM ELEV. LOCATION *PROPOSED 48" DIA. STORMWATER MANHOLE PER FDOT INDEX. NO. 425-001 AND 425-010*

N-E LOCATION TOP/GRATE ELEV. LOCATION *PROPOSED CIRCULAR AREA DRAIN*

N-E LOCATION TOP/GRATE ELEV. LOCATION *PROPOSED SQUARE AREA DRAIN*

N-E LOCATION TOP ELEV. LOCATION *PROPOSED TYPE 1 CURB INLET TOP PER FDOT INDEX NO. 425-020 (SEE PLANS FOR BOTTOM SPECIFICATION)*

N-E LOCATION TOP ELEV. LOCATION *PROPOSED TYPE 2 CURB INLET TOP PER FDOT INDEX NO. 425-020 (SEE PLANS FOR BOTTOM SPECIFICATION)*

N-E LOCATION TOP ELEV. LOCATION *PROPOSED TYPE 3 CURB INLET TOP PER FDOT INDEX NO. 425-020 (SEE PLANS FOR BOTTOM SPECIFICATION)*

N-E LOCATION TOP ELEV. LOCATION *PROPOSED TYPE 4 CURB INLET TOP PER FDOT INDEX NO. 425-020 (SEE PLANS FOR BOTTOM SPECIFICATION)*

N-E LOCATION TOP ELEV. LOCATION *PROPOSED TYPE 5 CURB INLET TOP PER FDOT INDEX NO. 425-021 (SEE PLANS FOR BOTTOM SPECIFICATION)*

N-E LOCATION TOP ELEV. LOCATION *PROPOSED TYPE 6 CURB INLET TOP PER FDOT INDEX NO. 425-021 (SEE PLANS FOR BOTTOM SPECIFICATION)*

N-E LOCATION TOP/GRATE ELEV. LOCATION *PROPOSED TYPE 9 CURB INLET TOP PER FDOT INDEX NO. 425-024 (SEE PLANS FOR BOTTOM SPECIFICATION)*

N-E LOCATION TOP/GRATE ELEV. LOCATION *PROPOSED TYPE 'C' DITCH BOTTOM INLET TOP PER FDOT INDEX NO. 425-052 (SEE PLANS FOR GRATE MATERIAL AND BOTTOM SPECIFICATION)*

N-E LOCATION TOP/GRATE ELEV. LOCATION *PROPOSED TYPE 'D' DITCH BOTTOM INLET TOP PER FDOT INDEX NO. 425-052 (SEE PLANS FOR GRATE MATERIAL AND BOTTOM SPECIFICATION)*

N-E LOCATION TOP/GRATE ELEV. LOCATION *PROPOSED TYPE 'E' DITCH BOTTOM INLET TOP PER FDOT INDEX NO. 425-052 (SEE PLANS FOR GRATE MATERIAL AND BOTTOM SPECIFICATION)*

N-E LOCATION TOP/GRATE ELEV. LOCATION *PROPOSED TYPE 'F' DITCH BOTTOM INLET TOP WITH STEEL GRATE PER FDOT INDEX NO. 425-053 (SEE PLANS FOR BOTTOM SPECIFICATION)*

N-E LOCATION TOP/GRATE ELEV. LOCATION *PROPOSED TYPE 'G' DITCH BOTTOM INLET TOP WITH STEEL GRATE PER FDOT INDEX NO. 425-053 (SEE PLANS FOR BOTTOM SPECIFICATION)*

N-E LOCATION TOP/GRATE ELEV. LOCATION *PROPOSED TYPE 'H' DITCH BOTTOM INLET TOP PER FDOT INDEX NO. 425-052 (SEE PLANS FOR GRATE MATERIAL AND BOTTOM SPECIFICATION)*

N-E LOCATION TOP/GRATE ELEV. LOCATION *PROPOSED TYPE 'J' DITCH BOTTOM INLET TOP WITH STEEL GRATE PER FDOT INDEX NO. 425-054 (SEE PLANS FOR BOTTOM SPECIFICATION)*

PIPE INV. LOCATION N-E LOCATION *PROPOSED U-TYPE CONCRETE ENDWALLS WITH GRATES PER FDOT INDEX NO. 430-010 (SEE PLANS FOR SIZE)*

N-E LOCATION INV. ELEV. LOCATION *PROPOSED FLARED END SECTION PER FDOT INDEX NO. 430-020 (SEE PLANS FOR SIZE)*

N-E LOCATION PIPE INV. ELEV. LOCATION *PROPOSED CROSS DRAIN MITERED END SECTION PER FDOT INDEX NO. 430-021 (SEE PLANS FOR SIZE)*

N-E LOCATION PIPE INV. ELEV. LOCATION *PROPOSED SIDE DRAIN MITERED END SECTION PER FDOT INDEX NO. 430-022 (SEE PLANS FOR SIZE)*

S-10 *PROPOSED STORMWATER STRUCTURE ID TAG*

POTABLE AND RECLAIMED WATER

W — W *EX. POTABLE WATER MAIN*

P–W *PROPOSED POTABLE WATER MAIN*

RCW — RCW *EX. RECLAIMED WATER MAIN*

P–RCW *PROPOSED RECLAIMED WATER MAIN*

11.25° BEND W/ MECHANICALLY RESTRAINED JOINTS (POTABLE AND RCW)

22.5° BEND W/ MECHANICALLY RESTRAINED JOINTS (POTABLE AND RCW)

45° BEND W/ MECHANICALLY RESTRAINED JOINTS (POTABLE AND RCW)

90° BEND W/ MECHANICALLY RESTRAINED JOINTS (POTABLE AND RCW)

TEE (POTABLE AND RCW)

CROSS (POTABLE AND RCW)

BLOWOFF ASSEMBLY (POTABLE AND RCW)

REDUCER (POTABLE AND RCW)

EX. GATE VALVE AND BOX (POTABLE AND RCW)

PROPOSED GATE VALVE AND BOX (POTABLE AND RCW)

EX. AIR RELEASE VALVE (POTABLE AND RCW)

PROPOSED AIR RELEASE VALVE (POTABLE AND RCW)

EX. FIRE HYDRANT ASSEMBLY

PROPOSED FIRE HYDRANT ASSEMBLY

PROPOSED SAMPLE POINT

EX. WATER METER (POTABLE AND RCW)

PROPOSED POTABLE WATER METER

PROPOSED POTABLE WATER BACK FLOW PREVENTER

PROPOSED RECLAIMED WATER METER

W *EX. WATER WELL*

EX, HOSE BIB (POTABLE AND RECLAIMED)

PROPOSED HOSE BIB (POTABLE AND RECLAIMED)

11 *PROPOSED FITTING ID TAG (POTABLE AND RECLAIMED)*

WASTEWATER

WW — WW *EX. GRAVITY WASTEWATER MAIN*

P–WW *PROPOSED GRAVITY WASTEWATER MAIN (PIPE LENGTHS ARE FROM N-E LOCATION OF A STRUCTURE TO N-E LOCATION OF A STRUCTURE)*

FM — FM *EX. WASTEWATER FORCE MAIN*

P–FM *PROPOSED WASTEWATER FORCE MAIN*

N-E LOCATION RIM ELEV. LOCATION *EX. WASTEWATER MANHOLE*

N-E LOCATION RIM ELEV. LOCATION *PROPOSED WASTEWATER MANHOLE*

EX. WASTEWATER CLEANOUT

PROPOSED WASTEWATER CLEANOUT

PROPOSED WASTEWATER GREASE TRAP

MH# *PROPOSED WASTEWATER MANHOLE ID*

11.25° BEND W/ MECHANICALLY RESTRAINED JOINTS (WW FORCE MAIN)

22.5° BEND W/ MECHANICALLY RESTRAINED JOINTS (WW FORCE MAIN)

45° BEND W/ MECHANICALLY RESTRAINED JOINTS (WW FORCE MAIN)

90° BEND W/ MECHANICALLY RESTRAINED JOINTS (WW FORCE MAIN)

WYE W/ MECHANICALLY RESTRAINED JOINTS (WW FORCE MAIN)

EX. PLUG VALVE AND BOX (WW FORCE MAIN)

PROPOSED PLUG VALVE AND BOX (WW FORCE MAIN)

EX. AIR RELEASE VALVE (WW FORCE MAIN)

PROPOSED AIR RELEASE VALVE (WW FORCE MAIN)

MISCELLANEOUS UTILITIES

THE PROPOSED UTILITIES BELOW ARE DESIGN BY OTHERS AND ARE DEPICTED FOR COORDINATION PURPOSES ONLY. REFER TO PLANS BY OTHERS FOR EXACT LOCATIONS, DIMENSION, AND DETAILS.

P–ATT *PROPOSED AT&T LINE*

BC — BC *EX. BURIED CABLE LINE*

P–BC *PROPOSED BURIED CABLE LINE*

BTEL *EX. BURIED TELEPHONE LINE*

P–TEL *PROPOSED TELEPHONE LINE*

CATV *EX. CABLE TELEVISION LINE*

P–TV *PROPOSED CABLE/TELEVISION LINE*

FO — FO *EX. FIBER OPTIC LINE*

UGTEL *EX. UNDERGROUND TELEPHONE LINE*

T *EX. TELEPHONE PEDESTAL*

TV *EX. TELEVISION/CABLE PEDESTAL*

CHW — CHW *EX. CHILLED WATER MAIN*

P–CHW *PROPOSED CHILLED WATER MAIN*

FIRE *EX. FIRE MAIN*

P–FIRE *PROPOSED FIRE MAIN*

IRR — IRR *EX. IRRIGATION LINE*

P–IRR *PROPOSED IRRIGATION LINE*

STEAM *EX. STEAM LINE*

P–STEAM *PROPOSED STEAM LINE*

P–CLAY *PROPOSED CLAY ELECTRIC LINE*

E — E *EX. ELECTRIC LINE*

P–E *PROPOSED ELECTRIC LINE*

EN — EN *EX. ENERGY LINE*

P–LIGHT *PROPOSED PRIVATE LIGHTING LINE*

OHW — OHW *EX. OVERHEAD WIRE LINE*

UGE — UGE *EX. UNDERGROUND ELECTRIC LINE*

EX. LIGHT

EX. UTILITY POLE

EX. UTILITY POLE

EX. WOOD POWER POLE

EX. GUY ANCHOR

T *PROPOSED TRANSFORMER*

GAS — GAS *EX. GAS LINE*

P–GAS *PROPOSED GAS LINE*

EX. GAS MARKER

G *EX. GAS MARKER*

NOTES:
1. THIS LEGEND IS ALL INCLUSIVE AND MAY INCLUDE ITEMS NOT A PART OF THIS PLAN SET.

2. SYMBOLS SHOWN ON THIS SHEET ARE FOR ILLUSTRATIVE PURPOSES ONLY. UNLESS NOTED OTHERWISE, SYMBOLS IN THESE PLANS MAY NOT BE REPRESENTATIVE OF SIZE.

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Alachua, FL 32615
(352) 331-1976
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est. 1988 FLORIDA CA-9075
CHW Professional Consultants

SCALE: N/A

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET ADJUST SCALES ACCORDINGLY.
0 1"

CONSTRUCTION/BID REVISIONS

SUBMITTALS:
02/28/23 - CITY OF ALACHUA AND SRWMD
04/14/23 - CITY OF ALACHUA AND SRWMD
05/08/23 - CITY OF ALACHUA AND SRWMD

CLIENT: TOWER HILL SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: LEGEND

TECHNICIAN: BG/TFC

DESIGNED: M. CROWHAP, P.E.

DRAWN BY: CHECKED BY: W. OWEN, P.E.

PROJECT NUMBER: 21-0025

WALKER FAIN OWEN

FL PE No. 94201

SHEET NO.: C0.11

Tech: ThomasE Plot Date: May 05,2023 8:55am Filename: N:\2021\21-0025\Department\04_Engineering\03_DWGs\Production Files\21-0025 C1.dwg

I. INTRODUCTION

THIS DOCUMENT WAS PREPARED IN ORDER TO ILLUSTRATE COMPLIANCE WITH CHAPTER 62-621.300 (4) OF THE FLORIDA ADMINISTRATIVE CODE, WHICH PERTAINS TO THE GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES. THE ADMINISTRATIVE CODE GRANTS THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) THE AUTHORITY TO REGULATE POINT SOURCE DISCHARGE OF STORMWATER FROM CONSTRUCTION SITES. THIS DOCUMENT ESTABLISHES A STORMWATER POLLUTION PREVENTION PLAN FOR THE SITE USING STANDARD PRACTICE AND BEST MANAGEMENT PRACTICES (BMPs) AND IS ORGANIZED TO CORRESPOND TO 62-621.300(4)(a) GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES FDEP FORM 62-621.300(4)(b) IS TO BE SUBMITTED IN CONJUNCTION WITH THIS DOCUMENT. CONTRACTOR(S) MUST FILL IN THE ACTIVITIES SEQUENCE (SECTION II. B. BELOW) AND SIGN THIS SHEET (REFER TO SIGNATURE TABLE THIS SHEET) AND RETAIN THIS SHEET AND ALL FOLLOWING SWPPP SHEETS ON SITE. ALTERNATIVELY, CONTRACTOR(S) MAY PREPARE AND SIGN THEIR OWN SWPP PLAN MEETING THE REQUIREMENTS. IF THE SITE OR CONTRACTOR ACTIVITIES REQUIRE ANY BMPs THAT ARE NOT DESCRIBED ON THIS SHEET, THE CONTRACTOR MUST PREPARE AN ALTERNATIVE OR ADDITIONAL SWPPP DOCUMENT CONTAINING THE NECESSARY BMPs.

II. SITE DESCRIPTION

COUNTY:	*ALACHUA COUNTY, FLORIDA*
SECTION, TOWNSHIP, RANGE:	*SECTION 16, TOWNSHIP 8 SOUTH, RANGE 18 EAST*
COUNTY PARCEL NO.:	*03054-001-002, 03873-001-000, & 03873-000-000*
STREET ADDRESS:	*TBD; ADJACENT TO 16305 NW 162ND LN, ALACHUA, FL 32615*
PROJECT AREA:	*37.07 ACRES*
SITE LOCATION MAP:	*SEE COVER SHEET OF CONSTRUCTION DRAWINGS*

A. NATURE OF CONSTRUCTION ACTIVITY

THE PROPOSED DEVELOPMENT IS THE CONSTRUCTION OF ±72,000 S.F. OF OFFICE BUILDING AND ASSOCIATED PAVEMENT FOR DRIVEWAYS AND PARKING, SIDEWALKS, UTILITIES, AND STORMWATER MANAGEMENT FACILITY(S) PLUS ±2,000 LF OF ROADWAY. THE PROJECT SITE IS LOCATED NEAR 16305 NW 162ND LN, ALACHUA FLORIDA. THE PROJECT SITE TOTAL AREA IS APPROXIMATELY 37.07 ACRES.

B. SEQUENCE OF MAJOR SOIL DISTURBING ACTIVITIES - CONTRACTOR MUST FILL IN DAYS

DAYS	
FROM_____TO_____	*PRIOR TO CONSTRUCTION, SILT FENCING AND TREE PROTECTION FENCING SHALL BE INSTALLED AND ALL EXISTING STORM DRAINAGE SWALE AND INLETS SHALL BE PROTECTED IN ACCORDANCE WITH THE STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL, DATED JULY 2013, AND THESE PLANS.*
FROM_____TO_____	*THE CONSTRUCTION SERVICE ENTRANCE SHALL BE STABILIZED TO MINIMIZE THE CREATION OF DUST AND OFF-SITE TRACKING OF SEDIMENTS.*
FROM_____TO_____	*ONLY THE AREA COMPRISING THE PROPOSED STORMWATER MANAGEMENT FACILITY(S) SHALL BE CLEARED AND GRUBBED OF UNWANTED VEGETATION.*
FROM_____TO_____	*THE PROPOSED STORMWATER MANAGEMENT FACILITY(S) SHALL BE CONSTRUCTED.*
FROM_____TO_____	*IF SUITABLE, THE EXCAVATED SOIL FROM THE FACILITY(S) MAY BE USED AS FILL FOR ON-SITE GRADING THAT IS DEPICTED IN THESE CONSTRUCTION PLANS. THE CONTRACTOR SHALL DISPOSE OF ALL UNSUITABLE MATERIAL ON-SITE OR OFF-SITE TO A PERMITTED LOCATION.*
FROM_____TO_____	*THE REMAINING PORTION OF THE SITE THAT IS TREATED BY THE CONSTRUCTED STORMWATER MANAGEMENT FACILITY(S) SHALL BE CLEARED AND GRUBBED.*
FROM_____TO_____	*THE PERMANENT ROADWAYS/DRIVEWAYS SHALL BE ROUGHLY GRADED.*
FROM_____TO_____	*THE UNDERGROUND UTILITIES INFRASTRUCTURE AND STORMWATER PIPING SYSTEM SHALL BE INSTALLED. ANY DE-WATERING (PUMPED) SHALL BE DIVERTED TO THE ASSOCIATED STORMWATER MANAGEMENT FACILITY(S).*
FROM_____TO_____	*THE PERMANENT ROADWAY/DRIVEWAY SUBGRADE SHALL BE COMPACTED, A LIMEROCK BASE SHALL BE ESTABLISHED, AND THEN FOLLOWED BY AN OVERLAY OF ASPHALT.*
FROM_____TO_____	*UPON SIGNIFICANT COMPLETION OF CONSTRUCTION, THE STORMWATER PIPING SYSTEM SHALL BE FLUSHED OUT TO REMOVE ACCUMULATED DEBRIS AND SEDIMENT.*
FROM_____TO_____	*UPON COMPLETION OF THE DEBRIS AND SEDIMENT REMOVAL FROM THE STORMWATER PIPING SYSTEM, THE PROPOSED STORMWATER MANAGEMENT FACILITY(S) SHALL BE FINE GRADED AND SHALL BE EXCAVATED A MINIMUM OF SIX INCHES BELOW THE DESIGN BOTTOM ELEVATION AND REPLACED WITH FILL HAVING A MINIMUM PERMEABILITY RATE OF 20 FEET/DAY WITH A MAXIMUM OF 5% SOIL FINES PASSING THE NO. 200 SIEVE. THE BOTTOM SHALL BE SCARIFIED AND STABILIZED ACCORDING TO THESE PLANS. ONCE COMPLETED, NO HEAVY MACHINERY SHALL BE ALLOWED WITHIN THE STORMWATER MANAGEMENT FACILITY(S).*
FROM_____TO_____	*ALL REMAINING DISTURBED AREAS WITHIN THE CONSTRUCTION AREA SHALL BE COMPLETELY GRASSED AND/OR LANDSCAPED ACCORDING TO THESE PLANS. TURF ESTABLISHMENT SHALL BE PER FDOT STANDARD SPECIFICATIONS SECTION 570. EVIDENCE OF GROWTH MUST BE PRESENT PRIOR TO REMOVAL OF SILT FENCING AND OTHER EROSION CONTROL APPLICATIONS.*

C. SITE DEVELOPMENT DATA:

TOTAL PROJECT SITE AREA:	*37.07 ACRES*
TOTAL SITE AREA TO BE DISTURBED:	*44.73 ACRES*
TOTAL IMPERVIOUS AREA (AS SHOWN IN CONSTRUCTION DRAWINGS):	*14.90 ACRES*
TOTAL DETENTION VOLUME:	*89.97 ACRE-FEET*
TOTAL OPEN AREA:	*123.24 ACRES*

D. SOIL CONDITIONS AND STORMWATER QUALITY

THE NRCS DATA FOR THE SITE REVEALS THAT THE SITE SOILS ARE COMPRISED OF ARREDONDO FINE SAND, FORT MEADE FINE SAND, MILLHOPPER SAND, TAVARES SAND, LOCHLOOSA FINE SAND, KENDRICK SAND, BLICHTON SAND, GAINESVILLE SAND, BIVANS SAND AND NORFOLK LOAMY SAND. CSE ENGINEERING & CONSULTING, INC. CONDUCTED A GEOTECHNICAL EXPLORATION OF THE PROPOSED STORMWATER MANAGEMENT FACILITY(S) LOCATION IN AUGUST OF 2022. THE INVESTIGATION REVEALED THAT THE PROJECT SITE'S SURFACE SOILS HAVE THE FOLLOWING CHARACTERISTICS:

DEPTH TO EFFECTIVE OR MOBILIZED AQUIFER:	*13 FEET*
DEPTH OF SEASONAL HIGH WATER TABLE:	*12.5 FEET*
HORIZONTAL HYDRAULIC CONDUCTIVITY:	*4.0 FEET/DAY*
UNSATURATED VERTICAL INFILTRATION:	*2.5 FEET/DAY*

DESIGN PERCOLATION RATES FOR THE STORMWATER MANAGEMENT FACILITY(S) WERE DETERMINED BASED ON LABORATORY PERMEABILITY TEST RESULTS FROM BORING SAMPLES TAKEN WITHIN THE LIMITS OF THE STORMWATER MANAGEMENT FACILITY(S).

THE STORMWATER MANAGEMENT FACILITY(S) WAS DESIGNED TO PROVIDE FULL RETENTION AND WATER QUALITY TREATMENT OF THE STORMWATER RUNOFF RESULTING FROM THE POST-DEVELOPMENT SITE UNDER 100-YEAR CRITICAL STORM EVENT RAINFALL CONDITIONS. THE STORMWATER POLLUTION PREVENTION PLANS (C0.21-C0.25) DEPICTS THE POST-DEVELOPMENT WATERSHED(S) LIMITS AND THE TABLE BELOW SUMMARIZES EACH WATERSHED.

WATERSHED ID	*POST DEVELOPMENT AREA (ACRES)*	*POST DEVELOPMENT IMPERVIOUS AREA (ACRES)*	*STORMWATER MANAGEMENT FACILITY TYPE*	*FACILITY DETENTION CAPACITY (ACRE-FEET)*	*100-YEAR FLOOD ELEVATION (FT)*
1	*78.45*	*15.45*	*RETENTION*	*20.43*	*74.67*
2	*98.56*	*0*	*RETENTION*	*69.53*	*82.19*

E. SITE MAP

PLEASE SEE THE STORMWATER POLLUTION PREVENTION PLANS (C0.21-C0.25) FOR DETAILS.

F. STORMWATER OUTFALL LOCATION AND RECEIVING WATER BODY

THE STORMWATER MANAGEMENT FACILITIES ARE DESIGNED FOR FULL RETENTION. THE ASSOCIATED WATER BODY IS MILL CREEK.

III. CONTROLS TO REDUCE POLLUTION

AS OUTLINED IN THE SUWANNEE RIVER WATER MANAGEMENT DISTRICT (SRWMD) PERMIT, ALL CONSTRUCTION ACTIVITIES SHALL BE CONDUCTED IN A MANNER AS TO NOT VIOLATE STATE WATER QUALITY STANDARDS. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL IMPLEMENT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES REQUIRED TO RETAIN SEDIMENT ON-SITE. IF SITE CONDITIONS ARE SUCH THAT ADDITIONAL CONTROL MEASURES ARE REQUIRED OTHER THAN WHAT IS SPECIFIED IN THE EROSION AND SEDIMENTATION CONTROL PLAN, THEN THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL BEST MANAGEMENT PRACTICES. THESE MEASURES MUST BE INSPECTED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PHASE AND UNTIL AS DIRECTED BY THESE PLANS. THE STORMWATER POLLUTION PREVENTION PLAN (C0.21) AND SECTION IV BELOW PROVIDE DETAILS ON THE SPECIFIC CONTROL MEASURES TO REDUCE STORMWATER POLLUTION.

IV. EROSION AND SEDIMENT CONTROLS

A. STABILIZATION PRACTICES

EXISTING TREES AND NATURAL VEGETATION TO REMAIN ON-SITE SHALL BE PROTECTED BY TREE BARRICADE FENCING AS DEPICTED ON THE STORMWATER POLLUTION PREVENTION PLAN (C0.21). TYPE III SILT FENCING SHALL PROTECT ALL DRAINAGE STRUCTURES AND SHALL BUFFER AREAS WITH POTENTIAL TO CONTRIBUTE OFF-SITE RUNOFF AND AS SPECIFICALLY DEPICTED ON THE STORMWATER POLLUTION PREVENTION PLAN (C0.21). STABILIZATION MEASURES SHALL BE INITIATED FOR EROSION AND SEDIMENT CONTROL ON DISTURBED AREAS AS SOON AS PRACTICAL, BUT IN NO CASE MORE THAN 7 DAYS, IN PORTIONS OF THE SITE WHERE CONSTRUCTION HAS TEMPORARILY OR PERMANENTLY CEASED. AS SPECIFIED IN SECTION II.B. ABOVE, UPON COMPLETION OF CONSTRUCTION, ALL STORMWATER MANAGEMENT FACILITIES SHALL BE SCRAPED CLEAN OF ACCUMULATED SEDIMENT AFTER THE COMPLETION OF CONSTRUCTION. ALL TURF ESTABLISHMENT SHALL BE PERFORMED MEETING THE REQUIREMENTS OF SECTION 570 OF THE STANDARD SPECIFICATIONS. EVIDENCE OF GROWTH MUST BE PRESENT PRIOR TO FINAL RELEASE.

B. STRUCTURE PRACTICES

AS DEPICTED IN THE STORMWATER POLLUTION PREVENTION PLAN (C0.21), A STORMWATER MANAGEMENT SYSTEM WILL BE CONSTRUCTED AND WILL BE COMPRISED OF A DRY RETENTION FACILITY AND A STORM PIPE CONVEYANCE SYSTEM. TO PREVENT EROSION DURING CONSTRUCTION, TYPE III SILT FENCING WILL BE INSTALLED IN THE LOCATIONS SHOWN ON THE PLANS. ALL EXISTING AND PROPOSED STORM DRAINS AND DRAINAGE SWALES SHALL BE PROTECTED ACCORDING TO THE STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL, DATED JULY 2013 OR PER DETAILS PROVIDED ON SHEET C0.21 UNTIL CONSTRUCTION IS COMPLETE. THE STORM PIPE CONVEYANCE SYSTEM SHALL BE FLUSHED OUT TO REMOVE ALL ACCUMULATED DEBRIS AND SEDIMENT UPON COMPLETION OF CONSTRUCTION.

C. DRAINAGE LOCATIONS THAT SERVE AREAS WITH LESS THAN 10 DISTURBED ACRES

NOT APPLICABLE, SEE SECTION D, BELOW

D. DRAINAGE LOCATIONS THAT SERVE AREAS WITH MORE THAN 10 DISTURBED ACRES

AS SPECIFIED IN THE "SEQUENCE OF MAJOR SOIL DISTURBING ACTIVITIES," THE SMF(S) WILL BE CONSTRUCTED PRIOR TO CLEARING AND GRUBBING OUTSIDE OF THE SMF(S) AREAS AND CONSTRUCTION OF THE PERMANENT PAVED AREAS. THE TOTAL CONTRIBUTING DRAINAGE AREA TO THE STORMWATER MANAGEMENT SYSTEM IS APPROXIMATELY 138.26 ACRES AND WILL CONSIST OF APPROXIMATELY 44.73 ACRES OF DISTURBED CONSTRUCTION AREA. THEREFORE, NO ADDITIONAL SEDIMENT TRAP BASINS ARE NECESSARY TO PROVIDE SEDIMENT STORAGE ON-SITE DURING CONSTRUCTION. AS SHOWN ON THE STORMWATER POLLUTION PREVENTION PLAN (C0.21), THE PROPOSED STORMWATER MANAGEMENT SYSTEM WILL PREVENT OFF-SITE EROSION DURING CONSTRUCTION. SILT FENCES OR EQUIVALENT SEDIMENT CONTROLS SHALL BE INSTALLED AT SIDE SLOPE AND DOWN SLOPE BOUNDARIES, INLET LOCATION, OUTLET LOCATIONS, AND OTHER LOCATIONS AS SHOWN ON THE STORMWATER POLLUTION PREVENTION PLAN, AS REQUIRED. BY COMPLETION OF CONSTRUCTION, THE SIDE SLOPES, SWALES, AND ALL DISTURBED AREAS SHALL BE STABILIZED WITH GRASS AND LANDSCAPING AS SPECIFIED ON THE CONSTRUCTION DRAWINGS.

V. STORMWATER MANAGEMENT

A. BEST MANAGEMENT PRACTICES

AFTER CONSTRUCTION, THE STORMWATER MANAGEMENT SYSTEM SHALL BE MAINTAINED IN ACCORDANCE WITH THE SPECIFIED STORMWATER MAINTENANCE NOTES IN THE INCLUDED CONSTRUCTION DRAWINGS AND/OR RESPECTIVE MAINTENANCE REPORTS. SPECIFICALLY, THE PROPOSED SMF(S) SHALL BE MOWED REGULARLY IN THE SPECIFIED AREAS, STORM PIPES AND STRUCTURES WILL BE INSPECTED SEMI-ANNUALLY AND CLEANED ANNUALLY, SMF(S) SIDE SLOPES SHALL BE MAINTAINED TO PREVENT EROSION, AND LANDSCAPING AND GRASS THAT PREVENTS EROSION SHALL BE MAINTAINED. ADDITIONALLY, REMEDIAL ACTIONS SHALL BE TAKEN SHOULD THE SMF(S) NOT PERFORM AS DESIGNED.

B. VEGETATED SWALES

WHEN VEGETATED SWALES ARE UTILIZED, SILT FENCING OR EQUIVALENT SEDIMENT CONTROLS SHALL BE INSTALLED AT ADEQUATE INTERVALS TO COLLECT SEDIMENT ALONG THE SWALE. THE SEDIMENT SHALL BE REMOVED WHEN SEDIMENT REACHES ONE-THIRD OF THE HEIGHT OF THE SILT FENCING. SEE THE STORMWATER POLLUTION PREVENTION PLAN (C0.21) FOR DETAILS AND LOCATIONS, AS REQUIRED.

C. VELOCITY DISSIPATION DEVICES AT DISCHARGE POINTS

WHEN DISCHARGE POINTS ARE NOT LOCATED UNDER WATER, RIP RAP PADS HAVE BEEN PROVIDED AT LOCATIONS WHERE NECESSARY DUE TO ANTICIPATED DISCHARGE VELOCITIES. PLEASE SEE THE CONSTRUCTION PLANS FOR DETAILS AND LOCATIONS, AS NEEDED.

VI. CONTROLS FOR OTHER POTENTIAL POLLUTANTS

A. WASTE DISPOSAL

THE CONTRACTOR SHALL PROVIDE LITTER COLLECTION CONTAINERS WITHIN THE PROJECT BOUNDARIES DURING CONSTRUCTION. CONTRACTOR SHALL DISPOSE OF ALL UNSUITABLE MATERIALS AND CONSTRUCTION DEBRIS IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REQUIREMENTS.

B. DUST CONTROL

TO PREVENT OFF-SITE VEHICULAR TRACKING OF SEDIMENTS AND DUST GENERATION, A STABILIZED CONSTRUCTION ENTRANCE SHALL BE ESTABLISHED BY THE SITE CONTRACTOR. PLEASE SEE THE STORMWATER POLLUTION PREVENTION PLAN (C0.21) FOR DETAILS AND LOCATION(S).

C. EXISTING VERSUS PROPOSED POTABLE AND SANITARY SEWER SYSTEMS

THERE ARE EXISTING SANITARY SEWER AND POTABLE WATER SYSTEMS LOCATED NEAR THE PROJECT SITE. EXTENSION AND UPGRADES ARE PROPOSED. IF TEMPORARY SANITARY SYSTEMS ARE UTILIZED DURING CONSTRUCTION, THE CONTRACTOR SHALL PROPERLY CONTROL AND DISCHARGE ANY SANITARY WASTE IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.

D. FERTILIZER & PESTICIDES

THE USE OF FERTILIZERS, HERBICIDES, AND PESTICIDES ON THE PROJECT SITE, WILL BE DIRECTED BY THE LANDSCAPE PLAN AND THE FDOT STANDARD SPECIFICATIONS SECTION 570, TO SUPPORT THE GROWTH OF THE PROPOSED VEGETATION. ESTABLISHING THIS VEGETATION WILL AID IN THE STABILIZATION OF THE PROJECT SITE AND REDUCE EROSION. APPLICATION RATES FOR THE FERTILIZERS, HERBICIDES, AND PESTICIDES SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS TO GUARD AGAINST OVER-USE, WHICH CAN LEAD TO VIOLATIONS OF STATE WATER QUALITY STANDARDS.

E. TOXIC MATERIAL

THE CONSTRUCTION SITE WILL BE IN FULL COMPLIANCE WITH STATE AND FEDERAL REQUIREMENTS. A PLASTIC MAT, TAR PAPER, OR OTHER IMPERVIOUS MATERIAL SHALL BE PLACED UNDER AREAS WHERE TOXIC LIQUIDS ARE TO BE OPENED AND STORED.

F. HAZARDOUS MATERIALS

ALL HAZARDOUS MATERIALS SHALL BE STORED IN A SECURE LOCATION, UNDER COVER, AND IN APPROPRIATE TIGHTLY, SEALED CONTAINERS WHEN NOT IN USE. ALL PRODUCTS SHALL BE STORED IN AND USED FROM THE ORIGINAL CONTAINER WITH THE ORIGINAL PRODUCT LABEL. CONTAINERS MUST BE STORED IN A MANNER TO PROTECT THEM FROM THE ELEMENTS AND INCIDENTAL DAMAGE. THE MINIMUM PRACTICAL QUANTITY OF ALL SUCH MATERIALS SHALL BE KEPT ON THE JOB SITE AND SCHEDULED FOR DELIVERY AS CLOSE TO TIME OF USE AS PRACTICAL.

ALL PRODUCTS SHALL BE USED IN STRICT COMPLIANCE WITH THE INSTRUCTIONS ON THE PRODUCT LABEL.

SUFFICIENT EQUIPMENT AND/OR MATERIALS SHALL BE KEPT ONSITE TO CONTAIN AND CLEAN UP SPILLS OF HAZARDOUS MATERIALS IN THE AREAS WHERE THESE MATERIALS ARE STORED OR USED. SPILL CONTROL AND CONTAINMENT KIT SUPPLIES SHALL BE OF SUFFICIENT QUANTITIES AND APPROPRIATE CONTENT TO CONTAIN A SPILL FROM THE LARGEST ANTICIPATED PIECE OF EQUIPMENT AND FROM THE LARGEST ANTICIPATED QUANTITIES OF PRODUCTS STORED ON THE SITE AT ANY GIVEN TIME.

CONTRACTOR TO CONTAIN AND CLEAN UP ANY SPILLS IMMEDIATELY AFTER THEY OCCUR. ANY SPILLS OF PETROLEUM PRODUCTS OR HAZARDOUS MATERIALS IN EXCESS OF REPORTABLE QUANTITIES AS DEFINED BY EPA, STATE, OR LOCAL AGENCY REGULATIONS SHALL BE REPORTED TO THE APPROPRIATE AGENCIES IN THE REQUIRED TIME FRAMES. THE CONTRACTOR SHALL PROVIDE A WRITTEN NOTICE TO THE OWNER IMMEDIATELY UPON IDENTIFICATION OF ANY SPILL.

ALL EXCESS, USED, OR SPILLED PRODUCTS, INCLUDING CONTAMINATED SOIL, SHALL BE DISPOSED OF BY THE CONTRACTOR IN STRICT COMPLIANCE WITH INSTRUCTIONS ON THE PRODUCT LABEL AND ALL APPLICABLE REGULATIONS.

VII. APPROVED STATE AND LOCAL PLANS

THE CONSTRUCTION DRAWINGS FOR THE PROJECT WERE APPROVED AND PERMITTED BY THE FOLLOWING AGENCIES:

- *CITY OF ALACHUA*
- *FLORIDA DEPARTMENT OF TRANSPORTATION*
- *SUWANNEE RIVER WATER MANAGEMENT DISTRICT*
- *FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION*

VIII. CONSTRUCTION ACTIVITY DISCHARGES

IN ACCORDANCE WITH THIS PLAN, THERE ARE NO ANTICIPATED DISCHARGES OF STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES.

IX. CHANGES TO THE POLLUTION PREVENTION PLAN

THIS STORMWATER POLLUTION PREVENTION PLAN SHALL BE AMENDED TO REFLECT ANY APPLICABLE CHANGE IN A STATE, REGIONAL, OR LOCAL PERMIT FOR WHICH THE PERMITTEE RECEIVES WRITTEN NOTICE. WHEN WRITTEN NOTICE IS RECEIVED, THE PERMITTEE SHALL PROVIDE A RE-CERTIFICATION OF THIS POLLUTION PREVENTION PLAN, WHICH HAS BEEN REVISED TO ADDRESS SUCH CHANGES. AMENDMENTS TO THE PLAN SHALL BE PREPARED, SIGNED, DATE, AND KEPT AS ATTACHMENTS TO THE ORIGINAL PLAN.

X. ALTERNATIVE PERMIT REQUIREMENTS

NO ALTERNATIVE PERMIT REQUIREMENTS ARE REQUESTED.

XI. MAINTENANCE

THE CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE, INSPECTION SCHEDULE, AND REPAIRS OUTLINED IN THIS PLAN. MAINTENANCE SHALL CONTINUE THROUGHOUT THE PROJECT UNTIL WORK IS COMPLETE. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER CONSTRUCTION IS COMPLETE. IN ADDITION TO THE TIMES MENTIONED IN THE PREVIOUS SECTIONS, THE CONTRACTOR SHALL INITIATE ANY REPAIRS WITHIN 24 HOURS OF BEING REPORTED. IN THE EVENT THAT THE SMF(S) DO NOT PERFORM PROPERLY OR IF A SINKHOLE DEVELOPS, THE PROJECT ENGINEER SHALL BE NOTIFIED TO ASSIST IN COORDINATING REMEDIAL ACTION. ACCUMULATED SEDIMENT SHALL BE REMOVED FROM SILT FENCING WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE SILT FENCE. UPON FINAL COMPLETION OF CONSTRUCTION AND ACCEPTANCE BY BOTH THE CITY AND OWNER, THE OPERATION AND MAINTENANCE ENTITY WILL BE "TOMOKA HILLS FARMS INC".

XII. INSPECTIONS

THE CONTRACTOR SHALL INSPECT ALL POINTS OF POTENTIAL DISCHARGE FROM THE PROJECT SITE FOR ALL DISTURBED AREAS ON THE CONSTRUCTION SITE AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.50 INCHES OR GREATER. FOR POINTS OF DISCHARGE INTO SURFACE WATERS OF THE STATE OR AN MS4, A QUALIFIED INSPECTOR (PROVIDED BY THE OPERATOR) SHALL PERFORM THE REQUIRED INSPECTIONS. THE CONTRACTOR SHALL INSTALL A RAIN GAUGE AT THE SITE TO MONITOR AND DOCUMENT RAINFALL EVENTS 0.50 INCHES OR GREATER. LOCATIONS WHERE THE SITE IS COMPLETELY CONSTRUCTED AND STABILIZED, SUCH INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE A MONTH. ALL INSPECTIONS SHALL BE RECORDED ON THE CONSTRUCTION INSPECTION FORM. THE CONTRACTOR MAY USE THEIR OWN FORM (MEETING FDEP SWPPP REQUIREMENTS) OR A SAMPLE FORM FROM FDEP. A SAMPLE CONSTRUCTION FORM IS AVAILABLE AT: "HTTPS://FLORIDADEP.GOV/WATER/STORMWATER/DOCUMENTS/CONSTRUCTION-SWPPP". MORE SPECIFICALLY, THE INSPECTION SHALL ENSURE THE FOLLOWING CATEGORIES.

A. DISTURBED AREAS

ALL DISTURBED AREAS AND AREAS USED FOR MATERIAL STORAGE SHALL BE INSPECTED FOR POLLUTANTS ENTERING THE STORMWATER SYSTEM. THE STORMWATER MANAGEMENT SYSTEM AND EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN SHALL BE INSPECTED TO ENSURE THEY ARE OPERATING CORRECTLY. LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING.

B. MAINTENANCE PERFORMANCE

BASED ON THE RESULTS OF THE INSPECTION, ALL MAINTENANCE OPERATIONS NEEDED TO ASSURE PROPER COMPLIANCE WITH THIS PLAN SHALL BE DONE IN A TIMELY MANNER, BUT IN NO CASE LATER THAN 7 DAYS FOLLOWING THE INSPECTION.

C. REPORTING REQUIREMENTS

ALL INSPECTIONS SHALL BE RECORDED ON THE CONSTRUCTION INSPECTION FORM. THIS FORM IS CREATED TO SUMMARIZE THE SCOPE OF THE INSPECTION, THE NAME(S) AND QUALIFICATION OF THE INSPECTOR(S), THE DATE OF INSPECTION, RAINFALL DATA, OBSERVATIONS, THE ACTIONS TAKEN TO CORRECT INCIDENTS OF NON-COMPLIANCE WITH THE PROVISIONS OF THIS PLAN. IF NO INCIDENTS OF NON-COMPLIANTS ARE OBSERVED, THE REPORT SHALL CONTAIN A CERTIFICATION THAT THE FACILITY IS IN COMPLIANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN AND THE ASSOCIATED PERMIT.

XIII. NON-STORMWATER DISCHARGES

IN ADDITION TO STORMWATER RUNOFF, THIS PLAN APPLIES TO RUNOFF FROM IRRIGATION OPERATIONS AND CONSTRUCTION PRACTICES. THIS PLAN DOES NOT PERTAIN TO DISCHARGES FROM FIRE FIGHTING ACTIVITIES.

XIV. CONTRACTORS CERTIFICATION

THE CONTRACTORS OR SUB-CONTRACTORS SHALL PHOTOCOPY AND COMPLETE THE FORM ON THIS PAGE. IT SHALL BE PROVIDED TO THE OWNER AND KEPT ON FILE PURSUANT TO SECTION XV REGARDING PROJECT RECORDS.

XV. RETENTION OF RECORDS

THE PERMITTEE SHALL RETAIN COPIES OF STORMWATER POLLUTION PREVENTION PLANS AND ALL REPORTS REQUIRED BY THIS PERMIT, AND RECORDS OF ALL DATA USED TO COMPLETE THE NOTICE OF INTENT TO BE COVERED BY THIS PERMIT, FOR A PERIOD OF AT LEAST THREE YEARS FROM THE DATE THAT THE SITE IS FINALLY STABILIZED.

THE PERMITTEE SHALL RETAIN A COPY OF THE STORMWATER POLLUTION PREVENTION PLAN AND ALL REPORTS, RECORDS, AND DOCUMENTATION REQUIRED BY THIS PERMIT AT THE CONSTRUCTION SITE, OR AN APPROPRIATE ALTERNATIVE LOCATION AS SPECIFIED IN THE NOTICE OF INTENT, FROM THE DATE OF PROJECT INITIATION TO THE DATE OF FINAL STABILIZATION.

XVI. NOTICE OF TERMINATION

NOTICE OF TERMINATION:

1. *WHERE A SITE HAS BEEN FINALLY STABILIZED AND ALL STORMWATER DISCHARGES AUTHORIZED BY THIS PERMIT ARE ELIMINATED, THE PERMITTEE SHALL SUBMIT A NOTICE OF TERMINATION (DEP FORM 62-621.300(6)), SIGNED IN ACCORDANCE WITH PART VII.C OF DEP DOCUMENT NO. 62-621.300(4)(a), WITHIN 14 DAYS OF FINAL STABILIZATION OF THE SITE TO TERMINATE COVERAGE UNDER THIS PERMIT.*
2. *ELIMINATION OF STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY MEANS THAT ALL DISTURBED SOILS AT THE SITE HAVE BEEN FINALLY STABILIZED AND TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES HAVE BEEN REMOVED OR WILL BE REMOVED AT AN APPROPRIATE TIME, OR THAT ALL STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY FROM THE SITE THAT ARE AUTHORIZED BY THIS GENERIC PERMIT HAVE OTHERWISE BEEN ELIMINATED.*
3. *FOR CONSTRUCTION ACTIVITIES WHERE THE OPERATOR CHANGES, THE EXISTING OPERATOR SHALL FILE AN N.O.T. IN ACCORDANCE WITH THIS PART WITHIN 14 DAYS OF RELINQUISHING CONTROL OF THE PROJECT TO A NEW OPERATOR.*

THE PERMITTEE SHALL SUBMIT A NOTICE OF TERMINATION TO THE FOLLOWING ADDRESS:

NPDES STORMWATER NOTICES CENTER, MS# 2510
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400

PROJECTS THAT DISCHARGED STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY TO A MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) SHALL SUBMIT A COPY OF THE N.O.T. TO THE OPERATOR OF THE MS4.

Contractor/Subcontractor Certification Statement
Stormwater Pollution Prevention Plan

Site Name: Tower Hill Headquarters
Site Location: TBD; adjacent to 16305 NW 162nd Ln
Alachua County, Florida

THE CONTRACTOR(S) OR SUB-CONTRACTOR(S) RESPONSIBLE FOR COMPLYING WITH THIS STORMWATER POLLUTION PREVENTION PLAN SHALL SIGN THE CERTIFICATION STATEMENT BELOW. MULTIPLE COPIES OF THIS CERTIFICATION STATEMENT MAY BE NECESSARY DEPENDING ON THE NUMBER OF SUB-CONTRACTORS ASSOCIATED WITH THE PROJECT

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

DATE	RESPONSIBLE INDIVIDUAL'S NAME	RESPONSIBLE INDIVIDUAL'S SIGNATURE	TITLE	COMPANY NAME, ADDRESS, AND PHONE NUMBER

11801 Research Drive
Alachua, FL 32615
(352) 331-1976
www.chw-inc.com
CHW
Professional Consultants
est. 1988 FLORIDA CA-9075

SCALE: N/A

VERIFY SCALE
BAR IS ONE INCH ON
ORIGINAL DRAWING

0 1" 2"

IF NOT ONE INCH ON
THIS SHEET ADJUST
SCALES ACCORDINGLY

CONSTRUCTION/BID REVISIONS:

SUBMITTALS:
02/28/23 - CITY OF ALACHUA AND SRWMD
04/14/23 - CITY OF ALACHUA AND SRWMD
05/08/23 - CITY OF ALACHUA AND SRWMD

CLIENT: TOWER HILL
SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: STORMWATER POLLUTION PREVENTION NOTES

TECHNICIAN: BC/TFC
DESIGNER: M. CHAPM

STORMWATER POLLUTION PREVENTION LEGEND

TS	*= TEMPORARY SEEDING*
PS	*= PERMANENT SEEDING*
ML	*= MULCHING*
SD	*= SOD STABILIZATION*
SF	*= SILT BARRIER*
TB	*= TREE BARRIER*
IP	*= INLET PROTECTION*
OP	*= OUTLET PROTECTION*
CO	*= CONSTRUCTION ENTRANCE/EXIT*

30' WIDE BLUE BERRY'S MAPP PLACE 2002

MATCHLINE

MATCHLINE

C0.21
C0.22

C0.21
C0.23

11801 Research Drive
Alachua, FL 32615
(352) 331-1976
www.chw-inc.com
est. 1988 FLORIDA CA-9075

CHW
Professional Consultants

SCALE: 1"=40'

VERIFY SCALE
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

0 1" 2"

CONSTRUCTION/BID REVISIONS:

SUBMITTALS:
02/28/23 - CITY OF ALACHUA AND SRWMD
04/14/23 - CITY OF ALACHUA AND SRWMD
05/08/23 - CITY OF ALACHUA AND SRWMD

CLIENT: TOWER HILL
SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: STORMWATER POLLUTION PREVENTION PLAN

TECHNICIAN: BG/TFC
DESIGNER: M. CRAWFORD, P.E.
QUALITY CONTROL: W. OWEN, P.E.
PROJECT NUMBER: 21-0025

WALKER FAIN OWEN

FL PE No. 94201

SHEET NO: C0.21

Tech: ThomasG Plot Date: May 05,2023 8:48am Filename: H:\2021\21-0025\Department\04_Engineering\03_Design\Production Files\21-0025 SWPP.dwg

C0.21
C0.22

MATCHLINE

C0.22
C0.23

C0.22
C0.24

MATCHLINE

STORMWATER POLLUTION PREVENTION LEGEND

TS	*= TEMPORARY SEEDING*
PS	*= PERMANENT SEEDING*
ML	*= MULCHING*
SD	*= SOD STABILIZATION*
SF	*= SILT BARRIER*
TB	*= TREE BARRIER*
IP	*= INLET PROTECTION*
OP	*= OUTLET PROTECTION*
CO	*= CONSTRUCTION ENTRANCE/EXIT*

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Professional Consultants

SCALE: 1"=40'

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET ADJUST SCALES ACCORDINGLY.

CONSTRUCTION/BID REVISIONS:

SUBMITTALS:
02/28/23 - CITY OF ALACHUA AND SRWMD
04/14/23 - CITY OF ALACHUA AND SRWMD
05/08/23 - CITY OF ALACHUA AND SRWMD

CLIENT: TOWER HILL
SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: STORMWATER POLLUTION PREVENTION PLAN

TECHNICIAN: BG/TFC
DESIGNER: JOSEPH WAP, P.E.
QUALITY CONTROL: W. OWEN, P.E.
PROJECT NUMBER: 21-0025

WALKER FAIN OWEN

FL PE No. 94201

SHEET NO.: C0.22

Tools: ThreadS Plot Date: May 05,2023 8:50am FileName: M:\2021\21-0025\Department\04_Engineering\03_Design_Production Files\21-0025 SWPP.dwg

STORMWATER POLLUTION PREVENTION LEGEND

TS	= TEMPORARY SEEDING
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05/08/23 CITY OF ALACHUA AND SRWMD

CLIENT: TOWER HILL
SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: STORMWATER POLLUTION PREVENTION PLAN

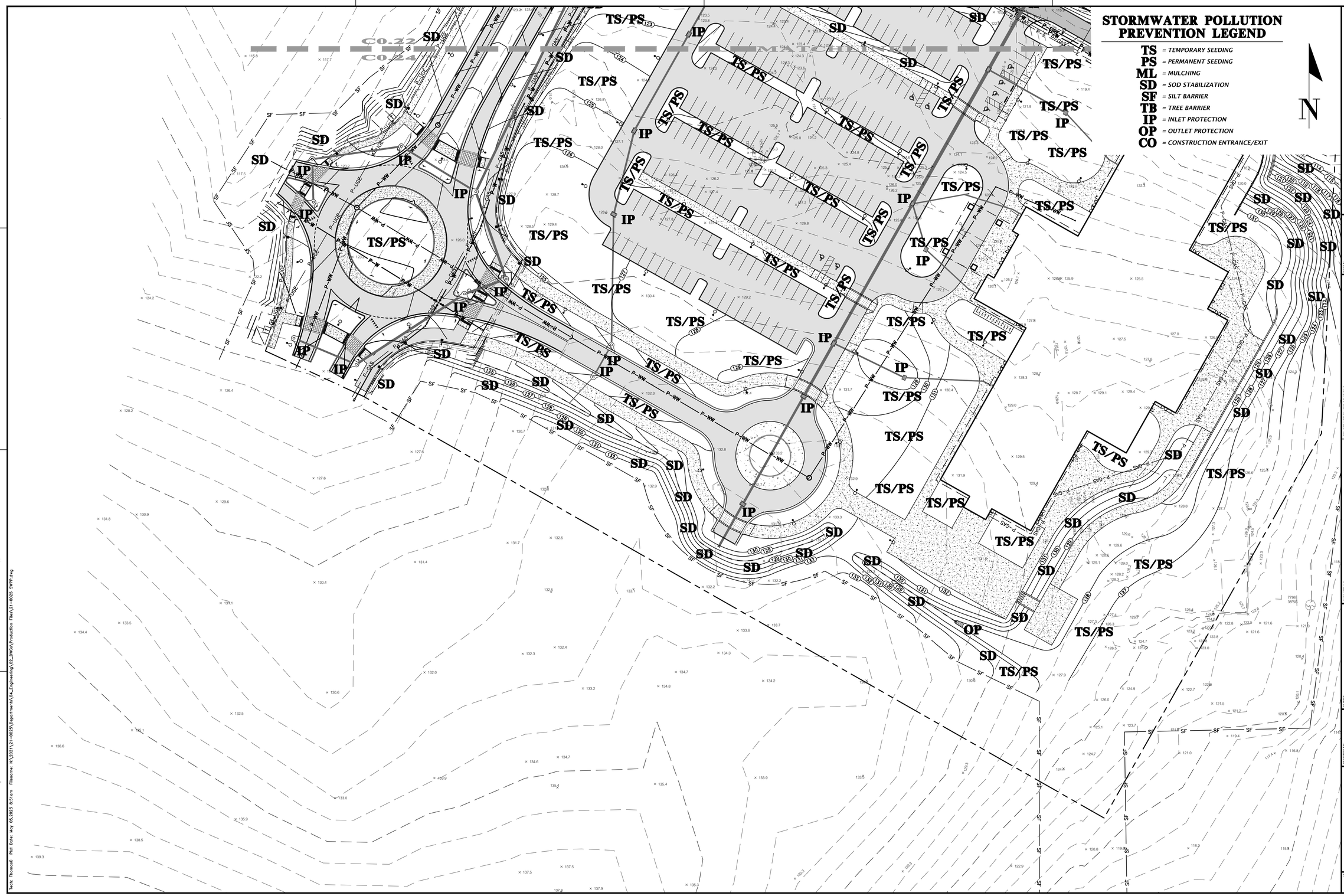
TECHNICIAN: BG/TFC
DESIGNER: M. CROWAP, P.E.
QUALITY CONTROL: W. OWEN, P.E.
PROJECT NUMBER: 21-0025

WALKER FAIN OWEN

FL PE No. 94201

SHEET NO.:
C0.23

Tech: ThomasC Plot Date: May 02,2023 8:50:08 File Name: I:\2021\21-0025\Stormwater\04-Engineering\02-Plans\21-0025 SWPPP.dwg



STORMWATER POLLUTION PREVENTION LEGEND

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ORIGINAL DRAWING.
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SCALES ACCORDINGLY.

0 1"

CONSTRUCTION/BID REVISIONS:

SUBMITTALS:
02/28/23 - CITY OF ALACHUA AND SWMD
04/04/23 - CITY OF ALACHUA AND SWMD
05/08/23 - CITY OF ALACHUA AND SWMD

CLIENT: TOWER HILL
SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: STORMWATER POLLUTION PREVENTION PLAN

TECHNICIAN: BG/TFC
DESIGNER:
QA/QC EXPERT: K. LOVAP, P.E.
QUALITY CONTROL: W. OWEN, P.E.
PROJECT NUMBER: 21-0025

WALKER FAIN OWEN

FL PE No. 94201

SHEET NO: C0.24

Tech: ThomasC Plot Date: May 05,2023 8:51am Filename: N:\2021\21-0025\Departments\04_Engineering\03_Civil\Production Files\21-0025 SWPP.dwg

TYPICAL INSTALLATION SEQUENCE FOR SILT-SAVER FRAME AND FILTER

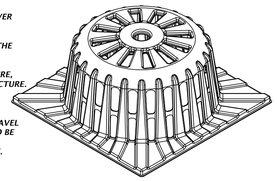
1. EXCAVATE APPROXIMATELY 4" TO 6" BELOW THE TOP OF THE INLET STRUCTURE.

2. PLACE THE FRAME ONTO THE INLET STRUCTURE, ENSURING PROPER SEATING OF FRAME TO STRUCTURE.

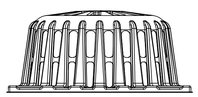
3. SLIDE THE FILTER OVER THE FRAME.

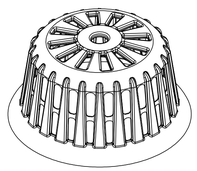
4. FILL THE FILTER POCKETS WITH SOIL, #57 GRAVEL OR EQUIVALENT. THE FILTER POCKETS SHOULD BE COMPLETELY FILLED TO ENSURE A GOOD SEAL BETWEEN THE GROUND AND INLET STRUCTURE.

5. BACK FILL AROUND THE FRAME AND FILTER ASSEMBLY IS NOT REQUIRED TO COMPLETE INSTALLATION; HOWEVER, BACK FILLING MAY BE NECESSARY TO COMPLETE EXCAVATION REQUIREMENTS FOR THE SITE.



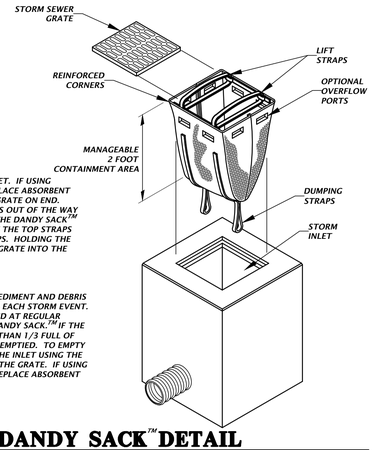
BASE OF FRAME SHAPED & SIZED TO FIT INLET TOP





SILT-SAVER® DETAIL

NTS



INSTALLATION:

REMOVE THE GRATE FROM INLET. IF USING OPTIONAL OIL ABSORBENTS; PLACE ABSORBENT PILLOW IN UNIT. STAND THE GRATE ON END. MOVE THE TOP LIFTING STRAPS OUT OF THE WAY AND PLACE THE GRATE INTO THE DANDY SACK™ SO THAT THE GRATE IS BELOW THE TOP STRAPS AND ABOVE THE LOWER STRAPS. HOLDING THE LIFTING DEVICES, INSERT THE GRATE INTO THE INLET.

MAINTENANCE:

REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS FROM VICINITY OF UNIT AFTER EACH STORM EVENT. AFTER EACH STORM EVENT AND AT REGULAR INTERVALS, LOOK INTO THE DANDY SACK™ IF THE CONTAINMENT AREA IS MORE THAN 1/3 FULL OF SEDIMENT, THE UNIT MUST BE EMPTIED. TO EMPTY UNIT, LIFT THE UNIT OUT OF THE INLET USING THE LIFTING STRAPS AND REMOVE THE GRATE. IF USING OPTIONAL OIL ABSORBENTS; REPLACE ABSORBENT WHEN NEAR SATURATION.

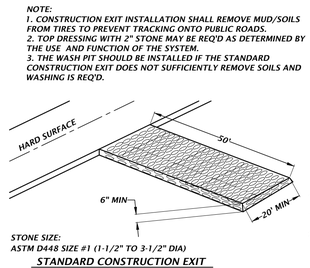
DANDY SACK™ DETAIL

NTS

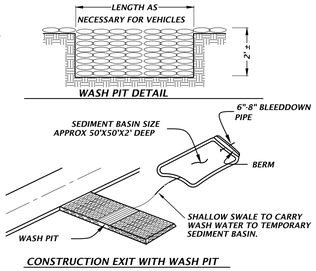
INLET PROTECTION OPTIONS DETAIL

NTS

NOTE:
1. CONSTRUCTION EXIT INSTALLATION SHALL REMOVE MUD/SOILS FROM TIRES TO PREVENT TRACKING ONTO PUBLIC ROADS.
2. TOP DRESSING WITH 2" STONE MAY BE REQ'D AS DETERMINED BY THE USE AND FUNCTION OF THE SYSTEM.
3. THE WASH PIT SHOULD BE INSTALLED IF THE STANDARD CONSTRUCTION EXIT DOES NOT SUFFICIENTLY REMOVE SOILS AND WASHING IS REQ'D.



STANDARD CONSTRUCTION EXIT



CONSTRUCTION EXIT WITH WASH PIT

TEMPORARY CONSTRUCTION EXIT DETAIL

NTS

STORMWATER POLLUTION PREVENTION LEGEND

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BASIN EROSION & SEDIMENTATION CONTROL

1. SILT FENCING AND/OR STAKED HAYBALES SHALL BE CONSTRUCTED WHERE SHOWN ON THE DRAWINGS PRIOR TO STARTING CONSTRUCTION.

2 ALL STORMDRAIN INLETS SHALL BE PROTECTED DURING CONSTRUCTION IN ACCORDANCE WITH FDOT STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL.

3. THE DRAINAGE BASINS SHALL BE ROUGH GRADED PRIOR TO CONSTRUCTING THE LIMEROCK BASE. THE RETENTION BASINS SHALL BE FINE GRADED AND GRASSED PRIOR TO PAVING AND SITE CLEANUP.

4. THE STORMDRAIN SYSTEM SHALL BE FLUSHED OUT TO REMOVE ALL ACCUMULATED DEBRIS AND SEDIMENT UPON COMPLETION OF CONSTRUCTION.

5. THE DRAINAGE BASIN BOTTOM SHALL BE SCRAPED CLEAN OF ALL ACCUMMULATED SEDIMENT UPON COMPLETION OF CONSTRUCTION AFTER THE STORMDRAIN SYSTEM IS COMPLETELY FLUSHED OUT. THIS ACTIVITY SHALL ONLY OCURR IN A DRY STATE.

6. ALL DISTURBED AREAS IN THE CONSTRUCTION AREA SHALL BE COMPLETELY STABILIZED BY COMPLETION OF CONSTRUCTION. GRASS SEEDING RATES AND MIXTURES SHALL BE PER SECTION 570 OF THE STANDARD SPECIFICATIONS. EVIDENCE OF GROWTH MUST BE PRESENT PRIOR TO FINAL RELEASE.

7. REFER TO THE SWPPP PLAN FOR COMPLETE EROSION CONTROL MEASURES.

8. WHERE POND TOP OF BANK IS IN CUT TO EXISTING GRADE, CONTRACTOR SHALL SOD 5-FT BEYOND TOP OF BANK FOR EROSION PROTECTION.

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SCALE: N/A

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING
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0 1"

CONSTRUCTION/BID REVISIONS:

SUBMITTALS:
02/28/23 - CITY OF ALACHUA AND SRWMD
04/14/23 - CITY OF ALACHUA AND SRWMD
05/08/23 - CITY OF ALACHUA AND SRWMD

CLIENT: TOWER HILL
SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: STORMWATER POLLUTION PREVENTION DETAILS

TECHNICIAN: BG/TFC
DESIGNER
N. CONWAY, P.E.
QUALITY CONTROL
W. OWEN, P.E.
PROJECT NUMBER: 21-0025

WALKER FAIN OWEN

FL PE No. 94201

SHEET NO.: C0.25

Tech: ThomasC Plot Date: May 05,2023 8:51am Filename: H:\2021\21-0025\Department\04_Engineering\02_SWPPP\Production Files\21-0025 SWPP.dwg

NOTE:

- CONTRACTOR SHALL HAVE ALL SILT FENCE & TREE BARRICADES INSTALLED PRIOR TO ANY SITE WORK.

- CONTRACTOR SHALL REPAIR/RESTORE ANY DISTURBED AREAS TO EXISTING OR BETTER CONDITION.

= EX. IMPROVEMENTS TO BE REMOVED

= WETLAND IMPACT

= MANMADE SURFACE WATER TO REMOVE

= EX. TREE TO BE REMOVED

TB = TREE BARRICADE

SF = SILT FENCE

30' WIDE PUE PER O.R.B. 4429, PAGE 2085

SITE BENCHMARK
SET NAIL & DISK STAMPED "TBM" EL. 107'
EL. = REFER TO SURVEY

NW 162ND LANE

POSITIONS OF THE SITE AS SHOWN HEREON HAS BEEN DETERMINED BY EARTH MOVING AND CLEARING. THERE ARE AREAS OF FILLING AND DISPOSED AND POSSIBLE COVERED WITH DIRT.

C0.30
C0.31

MATCHLINE

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Professional Consultants

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CONSTRUCTION BID REVISIONS:

SUBMITTALS:
02/28/23 - CITY OF ALACHUA AND SRWMD
04/14/23 - CITY OF ALACHUA AND SRWMD
05/08/23 - CITY OF ALACHUA AND SRWMD

CLIENT: TOWER HILL SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: DEMOLITION AND TREE PROTECTION PLAN

TECHNICIAN: BC/TFC
DESIGNER: M. BRADSHAW, P.E.
QUALITY CONTROL: W. OWEN, P.E.
PROJECT NUMBER: 21-0025

WALKER FAIN OWEN

FL PE No. 94201

SHEET NO.: C0.30

Tech: ThomasC Plot Date: May 05,2023 8:54am Filename: N:\2021\21-0025\Departments\04_Engineering\02_Design\Presentation Files\21-0025_Dem.dwg

C0.30

C0.31

MATCHLINE

MATCHLINE

REMOVE FENCE

REMOVE AIR CONDITIONING UNIT

REMOVE LIGHT POLE

REMOVE TELEPHONE PEDESTAL

REMOVE INLET

SITE BENCHMARK

NOTE:

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= EX. TREE TO BE REMOVED

TB = TREE BARRICADE

SF = SILT FENCE

= EX. IMPROVEMENTS TO BE REMOVED

= WETLAND IMPACT

= MANMADE SURFACE WATER TO REMOVE

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SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: DEMOLITION AND TREE PROTECTION PLAN

TECHNICIAN: BG/TFC

DESIGNER: N. COWAP, P.E.

QUALITY CONTROL: W. OWEN, P.E.

PROJECT NUMBER: 21-0025

WALKER FAIN OWEN

FL PE No. 94201

SHEET NO.: C0.31

Tech: Thornton Plot Date: Jan. 02, 2024 - 8:56am Filename: W:\2021\21-0025\Department\04_Engineering\00_design\Productivity_Flash\21-0025 SM.dwg

NOTE:

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N

= EX. TREE TO BE REMOVED

TB = TREE BARRICADE

SF = SILT FENCE

= EX. IMPROVEMENTS TO BE REMOVED

= WETLAND IMPACT

= MANMADE SURFACE WATER TO REMOVE

PROTECT EX. STORM PIPE

PROTECT EX. FENCE

REMOVE EX. FENCE

PROTECT EX. SANITARY SEWER

PROTECT EX. BILLBOARD ACCESS

PROTECT EX. BILLBOARD IN PLACE

4' WIRE FENCE

SITE BENCHMARK

N.W. 162ND LANE

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SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: DEMOLITION AND TREE PROTECTION PLAN

TECHNICAL: BG/TFC
DESIGN:
DRAWN: M. CROMAR, P.E.
CHECKED:
QUALITY CONTROL: W. OWEN, P.E.
PROJECT NUMBER: 21-0025

WALKER FAIN OWEN

FL PE No. 94201

SHEET NO.: C0.32

C0.31
C0.33
MATCHLINE

REMOVE FENCE

T BOARD FENCE

SITE BENCHMARK
SET MAG NAIL
ELEVATION = 127.80ft
(U.S. SURVEY FEET DATUM NAVD 88)
ELEVATIONS TO SCALE 300%

REMOVE FENCE

REMOVE FENCE

REMOVE FENCE

T BOARD FENCE

REMOVE STORM PIPE

REMOVE EX. WELL (CONTRACTOR TO COORDINATE REMOVAL WITH ALL APPLICABLE AGENCIES)

REMOVE RETAINING WALL

REMOVE STORM INLET AND ASSOCIATED PIPES

SITE BENCHMARK
SET MAG NAIL
ELEVATION = 121.80ft
(U.S. SURVEY FEET DATUM NAVD 88)
ELEVATIONS TO SCALE 300%

C0.33
C0.34
MATCHLINE

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SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: DEMOLITION AND TREE PROTECTION PLAN

TECHNICIAN: BG/TFC
DESIGNER: M. COWAP, P.E.
QA/QC CONTROL: W. OWEN, P.E.
PROJECT NUMBER: 21-0025

WALKER FAIN OWEN

FL PE No. 94201

SHEET NO.: C0.33

Xref: Thumbs.dat Plot Date: May 05,2023 8:56am Filename: K:\2021\21-0025\Department\04_Engineering\02_Civil\Production Files\21-0025 DM.dwg

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SF = SILT FENCE

C0.33

C0.34

MATCHLINE

REMOVE FENCE

REMOVE FENCE

REMOVE BARN

REMOVE FENCE

REMOVE PIPE (REGRADE AREA TO DRAIN TO LOW AREA)

ROAD FENCE

SMALL VEGETATION AREA

OPEN BARN

25' LO

POND 2 ANCHOR

TB

SF

N

Tb-1

Tb-2

Tb-3

Tb-4

Tb-5

Tb-6

Tb-7

Tb-8

Tb-9

Tb-10

Tb-11

Tb-12

Tb-13

Tb-14

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Tb-32

Tb-33

Tb-34

Tb-35

Tb-36

Tb-37

Tb-38

Tb-39

Tb-40

DEMO TREE TABLE		DEMO TREE TABLE		DEMO TREE TABLE		DEMO TREE TABLE		DEMO TREE TABLE		DEMO TREE TABLE		DEMO TREE TABLE		DEMO TREE TABLE	
POINT	DESCRIPTION	POINT	DESCRIPTION	POINT	DESCRIPTION	POINT	DESCRIPTION	POINT	DESCRIPTION	POINT	DESCRIPTION	POINT	DESCRIPTION	POINT	DESCRIPTION
35	24"LAO	1900	10"SG	2143	18"LAO	2332	12"12"10"CB	4773	9"CAM	7996	12"ELM	8259	13"LAO	8439	10"SG
66	36"LO	1901	8"CL	2144	23"LAO	2335	9"MIM	4774	8"LAO	7997	10"LAO	8260	14"LAO	8449	17"PALM
67	9"LO	1902	14"LAO	2145	13"LAO	2336	10"CB	4775	8"MAG	7998	14"LAO	8261	11"CB	8453	38"LAO
68	42"LAO	1907	9"PINE	2154	27"LAO	2344	12"MIM	4776	14"10"7"MAG	7999	11"LAO	8264	10"CB	8459	10"CB
69	9"LAO	1908	11"HB	2155	27"LAO	2347	11"BE	6069	26"LO	8000	14"ELM	8269	12"CB	8461	10"MIM
112	8"HB	1909	10"HB	2156	9"CB	2348	9"CED	6070	16"LO	8001	12"LAO	8270	20"LAO	8511	10"SG
844	12"LAO	1910	12"HB	2157	18"LO	2353	11"MIM	7482	45"LAO	8005	18"LAO	8272	12"CB	8512	14"ASH
864	24"LAO	1916	20"18"LAO	2158	16"CB	2357	9"ELM	7772	17"36"SG	8006	14"LAO	8274	10"CB	8513	10"ASH
865	9"LAO	1917	24"LAO	2176	8"SG	2358	12"8"MIM	7773	38"SG	8020	11"HIC	8304	5"10"CB	8514	13"HB
866	22"22"MAG	1918	8"CB	2177	10"SG	2373	13"LAO	7908	40"LAO	8021	10"SG	8305	10"MIM	8515	17"LAO
867	18"LAO	1927	8"PINE	2178	12"SG	2374	10"LAO	7915	34"LAO	8022	12"HIC	8306	10"CB	8516	8"14"SG
868	16"LAO	1929	8"PINE	2179	8"SG	2375	14"LAO	7918	18"LAO	8023	10"CB	8307	10"CB	8517	12"MIM
869	25"LAO	1951	38"LAO	2180	9"CED	2376	11"LAO	7919	16"LAO	8024	9"13"SG	8308	14"SG	8518	12"SG
870	12"LAO	1967	8"PINE	2181	8"8"CL	2379	13"MAG	7920	22"LAO	8032	14"CB	8312	10"CB	8521	16"PALM
871	12"LAO	1990	29"LAO	2182	38"PINE	2387	10"LAO	7921	12"LAO	8033	17"CB	8313	11"SG	8522	10"12"LAO
872	16"15"LAO	1991	16"LO	2183	12"MIM	2388	8"LAO	7922	13"LAO	8038	10"CB	8314	12"CB	8523	12"SG
878	19"LAO	1992	23"LAO	2184	28"LO	2389	8"CAM	7923	13"LAO	8039	11"CL	8315	10"10"CB	8524	16"SG
881	25"12"LAO	1993	26"LAO	2185	10"8"LAO	2390	10"LAO	7924	10"12"LAO	8050	16"CB	8316	10"LAO	8525	12"LAO
882	15"14"CL	1994	11"CED	2186	10"CL	2392	11"SG	7931	16"LAO	8053	12"CB	8340	10"MIM	8544	10"CT
883	13"LAO	1995	9"LAO	2187	14"LAO	2423	10"HB	7932	19"LO	8067	10"CB	8341	7"11"CB	8545	7"8"11"CB
884	9"HB	2012	8"CED	2188	11"SG	2424	15"CB	7933	11"HB	8068	32"LO	8349	12"CB	8546	10"LO
885	20"LAO	2013	8"SG	2198	10"SG	2425	8"CB	7935	12"LO	8097	10"MIM	8350	9"10"CB	8550	11"CB
886	9"LAO	2014	8"CED	2199	16"CB	2426	8"CB	7936	11"PINE	8100	8"10"CB	8371	10"HB	8551	11"SG
887	10"LAO	2015	10"PINE	2200	8"LAO	2427	11"MIM	7941	13"CB	8101	10"CB	8378	10"CAM	8552	10"CB
888	8"LAO	2016	8"PINE	2201	10"LO9"CL	2428	8"CB	7942	10"LAO	8102	10"CB	8379	5"9"10"CB	8557	12"PALM
889	8"ELM	2017	9"PINE	2202	12"CB	2429	10"MIM	7943	10"LAO	8104	13"MIM	8381	13"CB	8561	12"14"LAO
890	10"LAO	2018	9"PINE	2203	16"13"LO	2430	10"SG	7944	13"SG	8106	14"MIM	8388	10"CB	8568	10"MIM
891	8"SG	2019	8"PINE	2204	36"LAO	2461	8"CB	7945	14"LAO	8111	13"CB	8389	9"12"CL	8575	24"LAO
1714	54"LO	2027	27"LAO	2205	36"LAO	2462	10"10"CB	7946	16"LAO	8112	10"12"CB	8390	13"HB	8580	36"LAO
1718	36"CL	2028	9"9"CB	2206	10"CB	2463	10"8"LAO	7952	19"22"SG	8131	14"MIM	8391	12"SG	8582	12"SG
1719	36"LAO	2042	9"MAG	2207	20"LO	2464	8"CB	7953	27"SG	8133	13"10"LAO	8392	11"CB	8583	24"PINE
1720	10"MAG	2043	8"PINE	2208	11"ELM	2465	8"MIM	7958	14"LAO	8134	5"10"HB	8393	10"CB	8585	12"SG
1737	28"LO	2045	8"LAO	2209	8"SG	2466	10"SG	7959	12"CB	8135	10"CB	8399	5"11"CB	8586	18"PINE
1821	8"LAO	2046	8"HB	2210	8"SG	2467	11"SG	7960	12"LAO	8171	10"CB	8400	10"CB	8590	10"SG
1822	11"LAO	2074	8"CED	2229	14"SG	2483	8"CB	7961	11"LAO	8172	10"CB	8403	10"HB	8593	50"LO
1823	8"SG	2076	11"LO	2230	10"SG	2484	15"LAO	7962	11"ELM	8173	11"CB	8404	12"CB	8602	10"CB
1829	13"9"LO	2093	9"HB	2231	8"MIM	2485	8"8"CB	7963	16"CB	8175	10"CB	8424	14"HB	8604	10"CB
1839	10"SG	2095	9"ELM	2232	8"SG	2486	8"LAO	7964	12"LAO	8177	12"CB	8425	10"MIM14"HB	8610	14"SG
1840	12"SG	2107	9"MIM	2233	9"LAO	4534	32"LO	7965	13"SG	8194	12"CB	8426	12"CB	8611	10"CB
1841	14"SG	2132	8"SG	2234	12"MIM	4628	9"LO	7970	10"LAO	8195	10"SG	8427	11"ELM	20302	25" LO
1842	10"CED	2133	11"CL	2235	12"LAO	4642	8"LAO	7971	11"12"CB	8207	8"12"CB	8428	12"ELM	20303	25" LO
1845	8"SG	2134	11"ELM	2236	12"CL	4648	9"LAO	7972	13"CB	8208	26"LO	8429	10"CB	20304	17" WO
1846	9"SG	2135	9"SG	2237	11"CL	4750	11"LAO	7973	12"CB	8209	13"LAO	8430	13"PALM	20305	8" CAMPHOR
1847	10"LO	2136	11"CB	2238	12"LAO	4751	27"LAO	7974	12"LAO	8252	10"CB	8431	10"CB		
1861	8"SG	2137	10"8"MIM	2251	10"CB	4767	11"LAO	7988	12"CB	8253	11"CB	8432	12"CB		
1895	8"SG	2138	13"CB	2252	11"CB	4768	14"LAO	7989	11"LAO	8254	12"CB	8434	6"14"MIM		
1896	8"SG	2139	8"CL	2253	30"10"LAO	4769	10"LAO	7991	12"CB	8255	11"CB	8435	10"CB		
1897	8"PINE	2140	10"CL	2288	10"HB	4770	18"MAG	7993	11"LAO	8256	12"LAO	8436	10"CB		
1898	8"MAG	2141	23"LAO	2289	9"9"HB	4771	15"LAO	7994	11"ELM	8257	10"CB	8437	15"PALM		
1899	20"LO	2142	10"MIM	2290	13"PALM	4772	10"PALM	7995	12"CB	8258	11"LAO	8438	14"HB		

SCO = SWAMP CHESTNUT OAK
LO = LIVE OAK
LAO = LAUREL OAK
HB = HACKBERRY
MAG = MAGNOLIA
CAM = CAMPHOR
SG = SWEETGUM
CB = CHINA BERRY
CL = CHERRY LAUREL
HIC = HICKORY
CED = CEDAR
MIM = MIMOSA
BE = BOX ELDER
PCN = PECAN
RO = RED OAK
WO = WATER OAK
CT = CHINESE TALLOW

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0 1"

CONSTRUCTION/BID REVISIONS:

SUBMITTALS:
02/28/23 - CITY OF ALACHUA AND SRWMD
04/14/23 - CITY OF ALACHUA AND SRWMD
05/08/23 - CITY OF ALACHUA AND SRWMD

CLIENT: TOWER HILL
SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: DEMOLITION AND TREE PROTECTION PLAN

TECHNICIAN: BG/TFC
DESIGNER: N.C. CHAP, P.E.
PROJECT CONTROL: W. OWEN, P.E.
PROJECT NUMBER: 21-0025

WALKER FAIN OWEN

FL PE No. 94201

SHEET NO.: C0.35

Tech: ThomasC Plot Date: May 05,2023 8:57am Filename: H:\2021\21-0025\Department\04_Engineering\02_Civil\Production Files\21-0025 D&E.dwg

REFER TO C2.20 FOR SMF DESIGN AND DETAILS

COORDINATE REFERENCE: N: 297102.2003 E: 2596324.9176

ROUGH GRADE COMMERCIAL SITE TO EL = 96.00 (REFER TO SHEET C2.15)

COORDINATE REFERENCE: N: 296927.4690 E: 2597155.8067

COORDINATE REFERENCE: N: 296707.0015 E: 2598209.8905

REFER TO C2.20 FOR SMF PLAN

REFER TO C1.XX - C3.XX SERIES FOR HEADQUARTERS DEVELOPMENT PLANS

REFER TO C2.21 FOR AG POND PLAN

REFER TO C4.XX - C6.XX SERIES FOR ROADWAY DESIGN

PROPOSED BUILDING

COORDINATE REFERENCE: N: 296963.5880 E: 2595680.0780

COORDINATE REFERENCE: N: 296354.2570 E: 2595689.1175

COORDINATE REFERENCE: N: 296320.6132 E: 2595085.5855

POINT OF COMMENCEMENT (PARCEL 1, PARCEL 3 LESS AND EXCEPT PARCEL 4, PARCEL 4 TOGETHER WITH EASEMENT, PARCEL 6 & PARCEL 8) THE SOUTHWEST CORNER OF SECTION 5 TOWNSHIP 8 SOUTH, RANGE 18 EAST

POINT OF BEGINNING (PARCEL 3 & PARCEL 3 LESS AND EXCEPT) FOUND 5/8" IRON PIPE, WITH NO IDENTIFICATION

POINT OF BEGINNING (PARCEL 4 TOGETHER WITH EASEMENT)

POINT OF BEGINNING (PARCEL 6) FOUND 5/8" IRON PIPE, WITH NO IDENTIFICATION

POINT OF BEGINNING (PARCEL 8) FOUND 5/8" IRON PIPE, WITH NO IDENTIFICATION

POINT OF BEGINNING (PARCEL 7) FOUND 5/8" STEEL ROD & CAP STAMPED "KOLLS LB 2903"

POINT OF BEGINNING (PARCEL 11) FOUND 5/8" STEEL ROD & CAP STAMPED "BARTT LB 8078"

PARCEL 1 SEE SHEET 4 PARCEL ID: 03903-000-000

PARCEL 2 SEE SHEET 4 PARCEL ID: 03903-001-000

PARCEL 3 PARCEL ID: 03901-000-000

PARCEL 4 PARCEL ID: 03904-001-000

PARCEL 5 PARCEL ID: 03930-010-003

PARCEL 6 PARCEL ID: 03930-001-000

PARCEL 7 PARCEL ID: 03930-010-001 ALACHUA OAKS SUBDIVISION PLAT BOOK "I", PAGE 53

PARCEL 8 PARCEL ID: 03930-001-000

PARCEL 11 PARCEL ID: 07268-000-001 CAMPBELL MENZE, G CAMPBELL MENZE, T

PARCEL ID: 03906-000-000 CURRENT OWNER: CAMPBELL MENZE, G CAMPBELL MENZE, T

LESS PARCEL 6 PARCEL ID: 03930-000-000 CURRENT OWNER: SINGH, LAKHVIR

LESS AND EXCEPT PARCEL 3 (SOUTH 1/2) (NOT A PART OF THIS SURVEY) PARCEL ID: 03901-000-004 CURRENT OWNER: ACKLEY ROBERT L & MARY J

LOT 2 ALACHUA OAKS SUBDIVISION PLAT BOOK "I", PAGE 53

LOT 3 ALACHUA OAKS SUBDIVISION PLAT BOOK "I", PAGE 53

LOT 4 ALACHUA OAKS SUBDIVISION PLAT BOOK "I", PAGE 53

LOT 5 ALACHUA OAKS SUBDIVISION PLAT BOOK "I", PAGE 53

PARCEL 9 SUBDIVISION GOLDEN GLADES, LLC

N.W. 182ND LANE

COUNTY ROAD NO. 235-A ALACHUA - NEWBERRY

SEE DETAIL "B"

SEE DETAIL "C"

THE INTERSECTION OF THE EAST R/W LINE OF COUNTY ROAD NO. 235-A AND THE SOUTH R/W LINE OF U.S.2 STATE ROAD NO. 2 (FOUND 4X4" CONCRETE MONUMENT WITH A DISK, NO IDENTIFICATION)

(BROKEN TOP, NO ID)

FOUND 4X4" CONCRETE MONUMENT WITH DISK STAMPED "LB 2903" IN INTERSECTION OF CONCRETE SIDEWALK

POINT OF TANGENCY

POINT OF CURVATURE

NON-POINT OF CURVATURE

FENCE

FENCE

FENC

= PROPOSED DRAINAGE EASEMENT

N 3°19'15" W 475.82' (P)
N 0°48'34" W 475.82' (C)
S 0°50'16" E 285.02'
S 3°19'15" E 284.97'
N 7°47'57" E 268.92'
S 7°47'57" W 265.71' (D)
N 0°48'39" W 272.73' (M)
L578
L577
L581
(ACLS LB 2903)
(BRITT LB 8016)
POINT OF BEGINNING
(PARCEL 4)
FOUND 5/8" STEEL ROD & CAP
STAMPED "BRITT LB 8016"
EASEMENT FOR ACCESS FOR PARCEL 4
PARCEL ID: 03056-000-000
CURRENT OWNER:
CAMPBELL MENZIE G
PARCEL ID: 03056-001-001
CURRENT OWNER:
BRADLEY & WILLIAMS
PARCEL ID: 03056-001-000
CURRENT OWNER:
CAMPBELL MENZIE G
PARCEL ID: 03056-000-000
CURRENT OWNER:
GOULDS JEWELRY & VISA
N 3°19'15" W 500.77' (P)
N 0°46'03" W 500.37' (C)
S 0°44'33" E 776.43' (M)
S 3°19'15" E 776.51' (D4)
PARCEL 4
PARCEL ID: 03056-001-002
N 3°22'35" W 609.28' (D4)
N 0°51'00" W 609.40' (M)
(PLS 6827)
THE EAST LINE OF THE LANDS
DESCRIBED IN O.R.B. 175, PAGE 1000
L576
C10
N 66°30'51" E 324.93' (D4)
FOUND 5/8" STEEL ROD & CAP
STAMPED "ACLS LB 2903 IS
S 51°34'19" W, 4.40' FROM
BOUNDARY CORNER
15' TYP.
30' TYP.
REFER TO C2.20 FOR SMF PLAN
REFER TO C2.21 FOR AG POND PLAN
PROPOSED BUILDING
P-WW
N

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SCALE: 1" = 100'

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0 1"

CONSTRUCTION/BID REVISIONS:

SUBMITTALS:
02/28/23 - CITY OF ALACHUA AND SRWMD
04/14/23 - CITY OF ALACHUA AND SRWMD
05/08/23 - CITY OF ALACHUA AND SRWMD

CLIENT: TOWER HILL
SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: PROPOSED DRAINAGE EASEMENT PLAN

TECHNICIAN: BG/TFC
DESIGNER: M. COWAP, P.E.
QUALITY CONTROL: W. OWEN, P.E.
PROJECT NUMBER: 21-0025

WALKER FAIN OWEN

FL PE No. 94201

SHEET NO.
C0.41

Tech: ThomasC Plot Date: May 05,2023 9:05am Filename: N:\2021\21-0025\Department\04_Engineering\03_DWGs\Production Files\21-0025 DrainageEasementMap.dwg

C1.10

C1.11

C1.12

C1.13

PROPOSED ROADWAY

REFER TO C4.XX SERIES FOR ROADWAY PLANS AND DETAILS

R=155.00'
L=140.44'
Δ=51°9'19"

S 60°19'57" E 648.48'

HAND RAIL (REFER TO ARCH. PLANS FOR DETAILS)

RETAINING WALL

12'X30' LOADING SPACE

S 42°53'8" W 104.82'

PROPERTY LINE; TYP.

UTILITY EASEMENT LINE; TYP.

N 29°28'37" E 319.45'

PROPOSED PARKING
257 TOTAL SPACES
(8 ACCESSIBLE)

10'

12'X30' LOADING SPACE

DROP OFF CANOPY

PROPOSED HEADQUARTERS
FFE=132.00
(56,590 SF 1ST FLOOR)
(14,243 2ND FLOOR)

SEAT WALL

PARCEL LINE

R=273.00'
L=101.68'
Δ=21°20'24"

UTILITY EASEMENT LINE; TYP.

R=63.00'
L=65.75'
Δ=59°48'02"

N 29°28'37" E 92.93'

R=273.00'
L=30.00'
Δ=6°17'46"

R=63.00'
L=74.62'
Δ=67°52'04"

N 29°28'37" E 23.01'

N 60°20'15" W 806.50'

S 29°39'37" W 418.44'

N

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CONSTRUCTION/BID REVISIONS:

SUBMITTALS:
02/28/23 - CITY OF ALACHUA AND SRWMD
04/14/23 - CITY OF ALACHUA AND SRWMD
05/08/23 - CITY OF ALACHUA AND SRWMD

CLIENT: TOWER HILL
SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: MASTER HEADQUARTERS SITE PLAN

TECHNICIAN: BG/TTC
DESIGNER:
PLAN CONTROL:
PROJECT MANAGER: W. OWEN, P.E.
PROJECT NUMBER: 21-0025

WALKER FAIN OWEN

FL PE No. 94201

SHEET NO.:
C1.00

Mech. ThomasC Plot Date: May 05,2023 8:08am Filename: M:\2021\21-0025\Department\04_Engineering\03_Civil\A Production Files\21-0025 MSP.dwg

= CONCRETE (FOR SIDEWALK)(REFER TO C2.30 FOR DETAIL)

= CROSSWALK PAVERS (REFER TO C2.34 FOR COA DETAIL 405A)

= ASPHALT PAVEMENT (REFER TO C2.30 FOR DETAIL)

= HEAVY DUTY ASPHALT PAVEMENT (REFER TO C2.30 FOR DETAIL)

NOTES:
1) SEE SURVEY FOR BENCHMARK ELEVATIONS, LOCATIONS, AND DESCRIPTIONS.

2) CONTRACTOR SHALL REPAIR/RESTORE ANY DISTURBED AREAS TO EXISTING CONDITIONS OR BETTER.

N

C1.10
C1.11

N: 295990.8921
E: 2596499.8436

R79.53'

HANDRAIL (REFER TO ARCH. PLANS FOR DETAILS)

N: 295927.5270
E: 2596533.6630

N: 295923.6291
E: 2596495.8503

S 60°31'23" E 96.20'

N 60°31'23" W 193.80'

N: 296053.2904
E: 2596266.4593

S 60°31'23" E 263.50'

TYPE 'F' CURB AND GUTTER; TYP. (REFER TO C2.30 FOR DETAIL)

10 SPACES @ 9.5'=95'

11 SPACES @ 9.5'=104.5'

4" WHITE; TYP.

6" CURB; TYP. (REFER TO C2.30 FOR DETAIL)

S 29°28'37" W 70.00'

N: 295992.3516
E: 2596232.0142

N: 295862.6903
E: 2596461.4051

S 29°28'37" W 78.50'

8 SPACES @ 9.5'=76'

N: 295924.0131
E: 2596193.3865

2 ACCESSIBLE SPACES; REFER TO C1.22 SERIES FOR ACCESSIBLE SPACE/RAMP DETAILS

12" CONC. BAND

3 SPACE @ 9'=27'

4 ACCESSIBLE SPACES: REFER TO C1.22 FOR ACCESSIBLE RAMP/SPACE DETAILS

N: 295794.3518
E: 2596422.7774

S 60°31'23" E 32.00'

1:12 MAX

R44'

P=32.00'
A=90°00'00"
R=20.00'

N: 295730.1938
E: 2596495.6386

N: 295707.2049
E: 2596482.7106

N: 295733.4131
E: 2596388.3323

6" CURB; TYP. (REFER TO C2.30 FOR DETAIL)

S 29°28'37" W 70.00'

N: 295666.0991
E: 2596459.4096

N: 295643.1384
E: 2596446.4312

N: 295643.2
E: 2596459.

13 U-SHAPED BIKE RACKS (REFER TO C2.30 FOR DETAIL)

N: 295672.4743
E: 2596353.8872

N 60°31'23" W 32.00'

N: 295863.0743
E: 2596158.9413

N: 295802.1356
E: 2596124.4962

N 60°31'23" W 263.50'

C1.10
C1.12

MATCHLINE

REFER TO C4.XX SERIES FOR ROADWAY PLANS AND DETAILS

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SUBMITTALS:
02/24/23 - CITY OF ALACHUA AND SRWMD
04/14/23 - CITY OF ALACHUA AND SRWMD
05/08/23 - CITY OF ALACHUA AND SRWMD

CLIENT: TOWER HILL
SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: DETAILED HORIZONTAL CONTROL AND SITE PLAN

TECHNICIAN: BG/TFC
DESIGNER: J. SCHWAP, P.E.
QUALITY CONTROL: W. OWEN, P.E.
PROJECT NUMBER: 21-0025

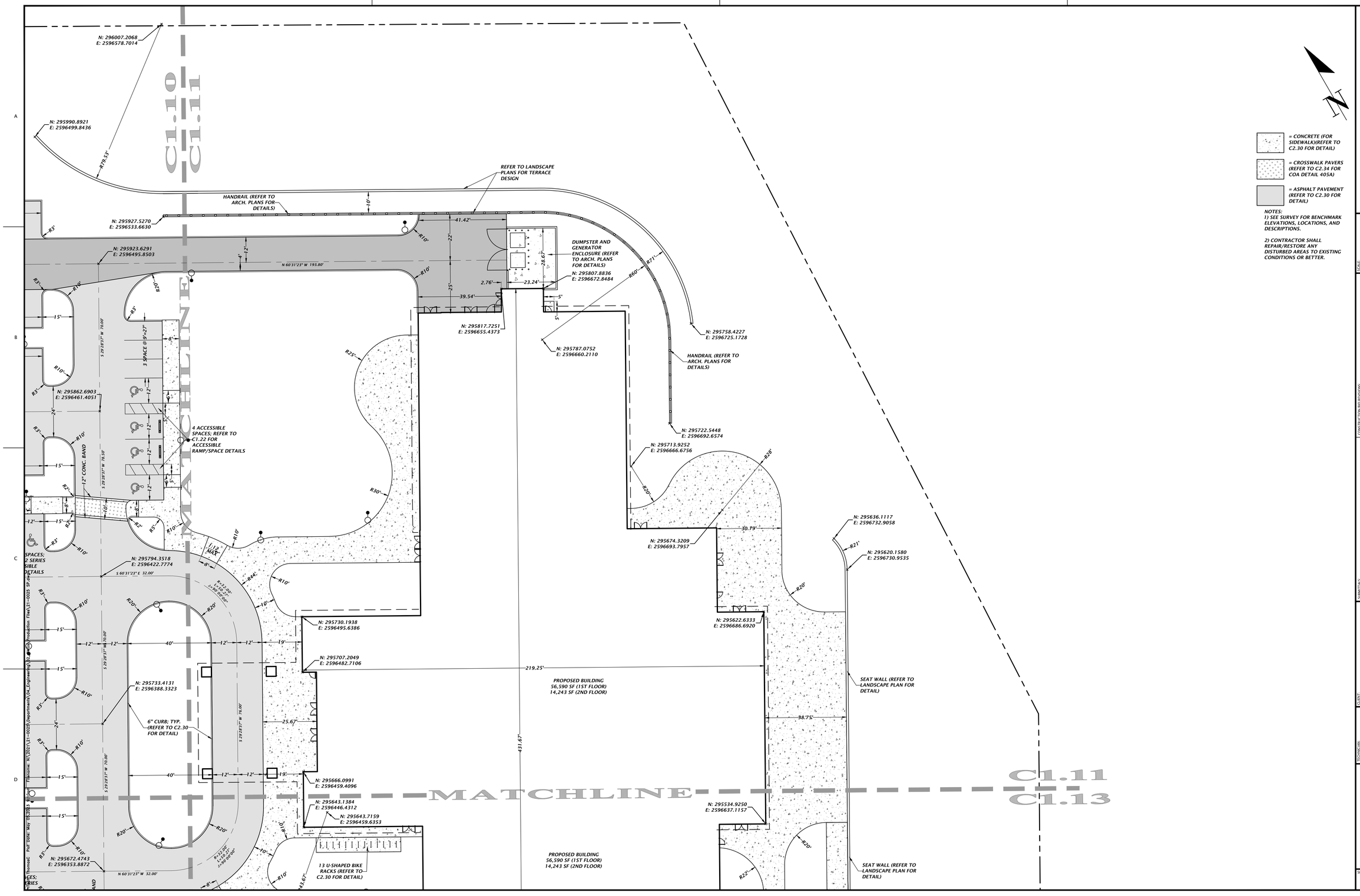
WALKER FAIN OWEN

FL PE No. 94201

SHEET NO.: C1.10

CONSTRUCTION/BID REVISIONS:

Tech: ThomasD Plot Date: May 05,2023 9:10am Filename: N:\2021\21-0025\Department\04_Engineering\04_DWGs\Production Files\21-0025 SP.dwg



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CLIENT: TOWER HILL
SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: DETAILED HORIZONTAL CONTROL AND SITE PLAN

TECHNICIAN: BG/TTC

DESIGNER: M. COWAP, P.E.

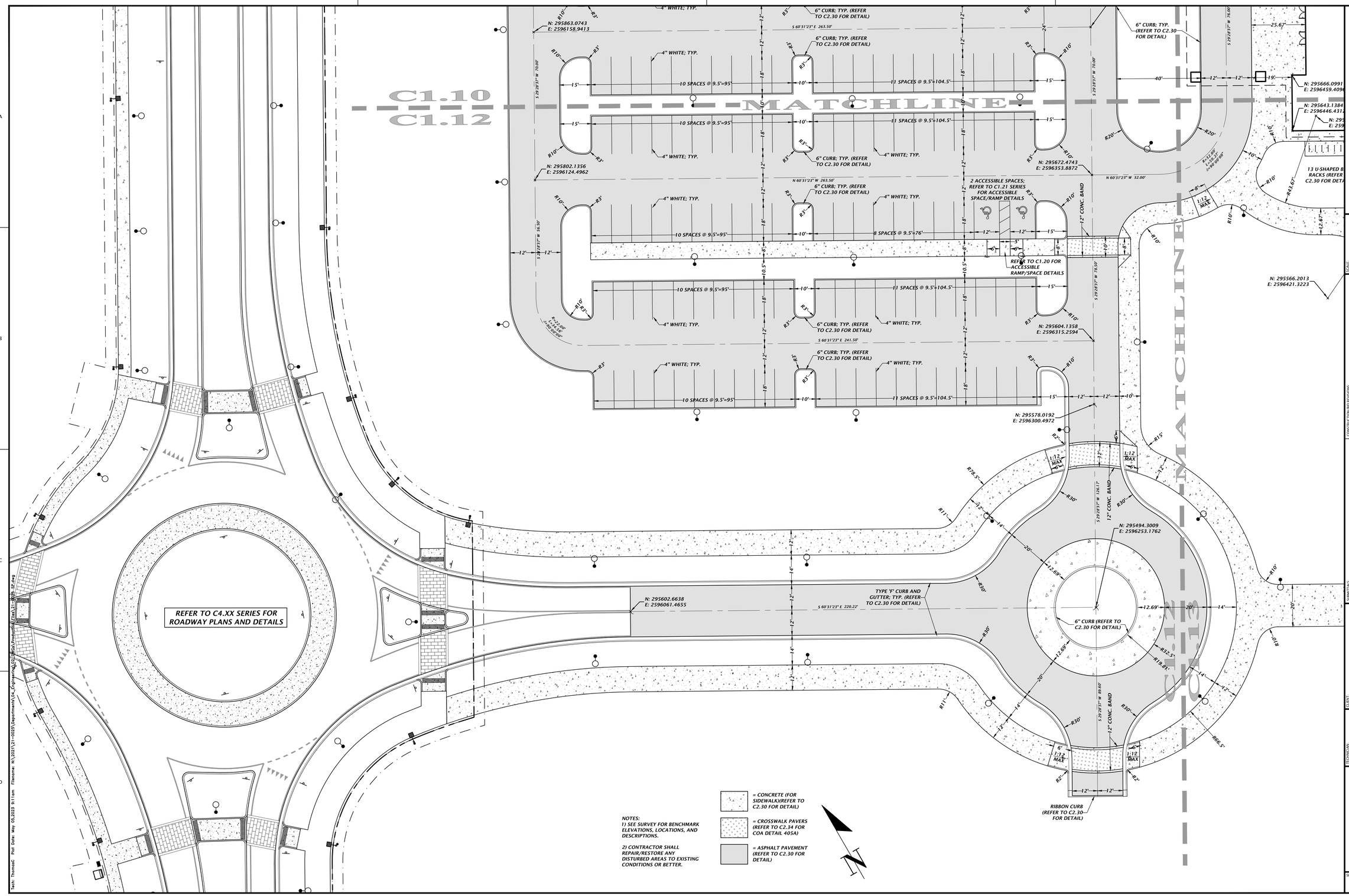
QUALITY CONTROL: W. OWEN, P.E.

PROJECT NUMBER: 21-0025

WALKER FAIN OWEN

FL PE No. 94201

SHEET NO.: C1.11



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02/28/23 - CITY OF ALACHUA AND SRWMD
04/14/23 - CITY OF ALACHUA AND SRWMD
05/08/23 - CITY OF ALACHUA AND SRWMD

CLIENT: TOWER HILL SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: DETAILED HORIZONTAL CONTROL AND SITE PLAN

TECHNICAL: BG/TFC
DESIGN: K. HOWAR, P.E.
QUALITY CONTROL: W. OWEN, P.E.
PROJECT NUMBER: 21-0025

WALKER FAIN OWEN

FL PE No. 94201

SHEET NO.
C1.12

Tech: Thomas2 Plot Date: May 05,2023 9:11am Filename: W:\2021\21-0025\Department\Civil_Engineering\02-Design\Sheets\Site\21-0025_SP.dwg

MATCHLINE

MATCHLINE

C1.11
C1.13

N: 295672.4743
E: 2596353.8872

N: 295666.0991
E: 2596459.4096

N: 295643.1384
E: 2596446.4312

N: 295643.7159
E: 2596459.6353

13 U-SHAPED BIKE RACKS (REFER TO C2.30 FOR DETAIL)

PROPOSED BUILDING
56,590 SF (1ST FLOOR)
14,243 SF (2ND FLOOR)

N: 295534.9250
E: 2596637.1157

SEAT WALL (REFER TO LANDSCAPE PLAN FOR DETAIL)

N: 295508.8421
E: 2596586.4759

N: 295473.9049
E: 2596648.2852

N: 295566.2013
E: 2596421.3223

N: 295604.1358
E: 2596315.2594

REFER TO C1.20 FOR ACCESSIBLE RAMP/SPACE DETAILS

N: 295578.0192
E: 2596300.4972

N: 295445.6677
E: 2596436.4238

N: 295433.8579
E: 2596457.3171

N: 295494.3009
E: 2596253.1762

6" CURB (REFER TO C2.30 FOR DETAIL)

STAIRS (REFER TO LANDSCAPE PLAN FOR DETAILS)

N: 295358.3554
E: 2596544.4906

N: 295314.8277
E: 2596519.8869

= CONCRETE (FOR SIDEWALK)(REFER TO C2.30 FOR DETAIL)

= CROSSWALK PAVERS (REFER TO C2.34 FOR COA DETAIL 405A)

= ASPHALT PAVEMENT (REFER TO C2.30 FOR DETAIL)

NOTES:
1) SEE SURVEY FOR BENCHMARK ELEVATIONS, LOCATIONS, AND DESCRIPTIONS.

2) CONTRACTOR SHALL REPAIR/RESTORE ANY DISTURBED AREAS TO EXISTING CONDITIONS OR BETTER.

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SCALE: 1"=20'

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING
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0 1"

CONSTRUCTION/BID REVISIONS:

SUBMITTALS:
02/28/23 - CITY OF ALACHUA AND SRWMD
04/14/23 - CITY OF ALACHUA AND SRWMD
05/08/23 - CITY OF ALACHUA AND SRWMD

CLIENT: TOWER HILL
SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: DETAILED HORIZONTAL CONTROL AND SITE PLAN

TECHNICIAN: BG/TFC
DESIGNER: M. CHWAP, P.E.
QUALITY CONTROL: W. OWEN, P.E.
PROJECT NUMBER: 21-0025

WALKER FAIN OWEN

FL PE No. 94201

SHEET NO.: C1.13

Tech: ThompsC Plot Date: May 05,2023 9:12am Filename: H:\2021\21-0025\Department\Civil\Engineering\02_DWGs\Production Files\21-0025 SP.dwg

MATCHLINE A-A

MATCHLINE A-A

MATCHLINE B-B

PAVERS COA DETAIL 405A
(REFER TO C2.34 FOR DETAIL)

12" CONC. BAND

PAVERS COA DETAIL 405A
(REFER TO C2.34 FOR DETAIL)

12" CONC. BAND

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1"

0

CONSTRUCTION/BID REVISIONS:

SUBMITTALS:
02/28/23 - CITY OF ALACHUA AND SRWMD
04/14/23 - CITY OF ALACHUA AND SRWMD
05/08/23 - CITY OF ALACHUA AND SRWMD

CLIENT: TOWER HILL
SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: ON SITE ACCESSIBILITY SITE PLAN

TECHNICIAN: BG/TFC
DESIGNER: C. COWAP, P.E.
QUALITY CONTROL: W. OWEN, P.E.
PROJECT NUMBER: 21-0025

WALKER FAIN OWEN

FL PE No. 94201

SHEET NO.:
C1.20

Tech: Thomas C Plot Date: May 05,2023 8:16am Filename: W:\2021\21-0025\Departments\04_Engineering\03_DWGS\Production Files\21-0025 AC.dwg

UNIVERSAL MARKER FOR ACCESSIBILITY

ACCESSIBLE SPACES TO BE STRIPED IN ACCORDANCE TO MEET FDOT DESIGN INDEX 711-001 (REFER TO C1.22 FOR DETAIL)

PAVERS COA DETAIL 405A (REFER TO C2.34 FOR DETAIL)

12" CONC. BAND

MATCHLINE B-B

RAISED SIDEWALK

FLUSH WITH ASPHALT

ACCESSIBLE ROUTE

PROPOSED BUILDING FFE=132.00

MATCHLINE C-C

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CONSTRUCTION/BID REVISIONS:

SUBMITTALS:
02/28/23 - CITY OF ALACHUA AND SRWMD
04/14/23 - CITY OF ALACHUA AND SRWMD
05/08/23 - CITY OF ALACHUA AND SRWMD

CLIENT: TOWER HILL
SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: ON-SITE ACCESSIBILITY SITE PLAN

TECHNICIAN: BG/TTC

DESIGNER: W. OWEN, P.E.

QUALITY CONTROL: W. OWEN, P.E.

PROJECT NUMBER: 21-0025

WALKER FAIN OWEN

FL PE No. 94201

SHEET NO.: C1.21

Mech. ThomasF Plot Date: May 05,2023 8:15am Filename: M:\2021\21-0025\Departments\04_Engineering\02_Civil\Production Files\21-0025 AC.dwg

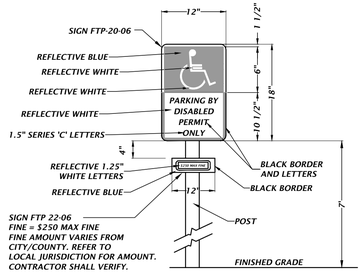
UNIVERSAL MARKER FOR ACCESSIBILITY

ACCESSIBLE SPACES TO BE STRIPED IN ACCORDANCE TO MEET FDOT DESIGN INDEX 711-001 (REFER TO C1.22 FOR DETAIL)

129.75 129.93 130.43 130.51 130.59
130.01 130.08 130.16
129.90 129.97 130.15 130.23
130.22 130.30 130.63 130.71
130.11 130.23 130.81 130.95
130.89

1:12 MAX

18' 12' 5' 6' 5' 6' 5' 6

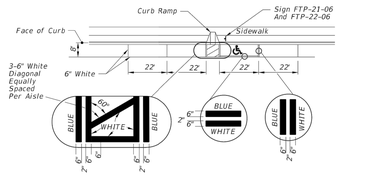


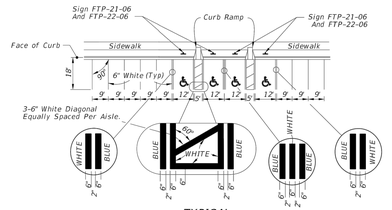
SIGN NOTES:

1. *SIGN CONSTRUCTION, DESIGN AND PLACEMENT SHALL COMPLY WITH STATE AND LOCAL STATUTES.*

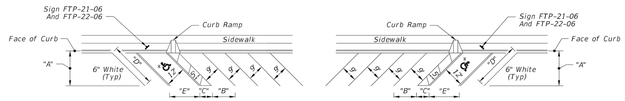
ACCESSIBLE PARKING SIGN DETAIL

NTS





TYPICAL



FORWARD-IN PARKING *REVERSE-IN PARKING*

**FOR ACCESSIBLE MARKINGS - SEE ABOVE*

DIMENSIONS					
∠ θ	"A"	"B"	"C"	"D"	"E"
45°	17'-0"	12'-9"	7'-0"	24'-0"	17'-0"

PAVEMENT MARKING FOR PARKING





(See Note 5)

UNIVERSAL SYMBOL OF ACCESSIBILITY

NOTES:

1. *Dimensions are to the centerline of markings.*
2. *An Access Aisle is required for each accessible space when angle parking is used.*
3. *Criteria for pavement markings only, not public sidewalk curb ramp locations. For ramp locations refer to plans.*
4. *Mount FTP-22-06 sign below the FTP-21-06 sign.*
5. *Use of the pavement symbol in accessible parking spaces is optional. When pavement symbol is used, the symbol is either 3'-0" or 5'-0" high and white in color.*

LAST REVISION	DESCRIPTION:	FDOT FY 2022-23 STANDARD PLANS	PAVEMENT MARKINGS	INDEX	SHEET
11/01/21				711-001	11 of 13

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CONSTRUCTION/BID REVISIONS:

SUBMITTALS:
02/28/23 - CITY OF ALACHUA AND SRWMD
04/14/23 - CITY OF ALACHUA AND SRWMD
05/08/23 - CITY OF ALACHUA AND SRWMD

CLIENT: TOWER HILL SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: ON-SITE ACCESSIBILITY DETAILS

TECHNICIAN: BG/TFC

DESIGNER: M. COWAP, P.E.

QUALITY CONTROL: W. OWEN, P.E.

PROJECT NUMBER: 21-0025

WALKER FAIN OWEN

FL PE No. 94201

SHEET NO.: C1.23

Tools: Thomas6 Plot Date: May 05,2023 9:17am Filename: H:\2021\21-0025\Department\04_Engineering\03_Design\Production Files\21-0025 AC.dwg

9/22/2021 3:13:05 PM



STORMWATER STRUCTURE TABLE

STRUCTURE:	STRUCTURE TYPE	TOP	INVERT ELEV	NORTHING & EASTING
S-100	42" MITERED END SECTION PER FDOT INDEX 430-021	N/A	70.50' SW	N: 296572.92 E: 2596850.44
S-101	6'Ø STORM MANHOLE PER FDOT INDEX 425-001 & 425-010	90.00'	76.08' S 76.08' NE 76.08' W	N: 296475.66 E: 2596793.66
S-102	6'Ø STORM MANHOLE PER FDOT INDEX 425-001 & 425-010	89.00'	81.75' S 81.75' N	N: 296100.58 E: 2596774.86
S-103	6'Ø STORM MANHOLE PER FDOT INDEX 425-001 & 425-010	97.50'	84.86' N 84.86' W	N: 295934.55 E: 2596766.65
S-104	6'Ø STORM MANHOLE PER FDOT INDEX 425-001 & 425-010	113.50'	106.00' SW 106.00' E	N: 295978.94 E: 2596521.84
S-105	TYPE 'F' INLET TOP W/ 6'Ø TYPE 'J' BOTTOM PER FDOT INDEX 425-053 & 425-010	128.05'	121.90' SW 116.70' NE 116.70' NW	N: 295923.63 E: 2596495.85
S-106	TYPE 'F' INLET TOP W/ 5'Ø TYPE 'J' BOTTOM PER FDOT INDEX 425-053 & 425-010	130.26'	122.26' SW 122.26' NE 122.26' SE	N: 295860.17 E: 2596459.98
S-107	TYPE 'C' INLET FDOT INDEX 425-052	130.00'	125.36' NW 127.00' SE	N: 295819.15 E: 2596533.21
S-108	TYPE 'F' INLET TOP W/ 5'Ø TYPE 'J' BOTTOM PER FDOT INDEX 425-053 & 425-010	129.71'	122.99' SW 122.99' NE 126.00' S 127.07' E	N: 295732.97 E: 2596388.08
S-109	TYPE 'F' INLET TOP W/ 5'Ø TYPE 'J' BOTTOM PER FDOT INDEX 425-053 & 425-010	128.41'	123.75' NE 123.75' SW 123.75' SE	N: 295600.89 E: 2596313.42
S-110	TYPE 'F' INLET TOP W/ 5'Ø TYPE 'J' BOTTOM PER FDOT INDEX 425-053 & 425-010	129.20'	123.95' SW 123.95' NE	N: 295550.52 E: 2596284.95
S-111	TYPE 'F' INLET PER FDOT INDEX 425-053	129.29'	124.36' SW 124.36' NE	N: 295448.60 E: 2596227.34
S-112	CURB INLET TYPE 3 (RIGHT) P BOTTOM ROUND	128.00'	120.50' SW 120.50' N	N: 295599.34 E: 2596102.91
S-113	CURB INLET TYPE 3 (LEFT) P BOTTOM ROUND	128.11'	120.61' NE 120.63' SW	N: 295568.89 E: 2596085.71
S-114	TYPE C INLET, FDOT INDEX 425-052	128.75'	125.50' NW 125.50' E	N: 295568.28 E: 2596380.31
S-115	TYPE C INLET, FDOT INDEX 425-052	130.95'	126.94' N 126.94' SE	N: 295689.69 E: 2596400.76
S-116	TYPE 'F' INLET PER FDOT INDEX 425-053	118.80'	113.50' SW 113.50' SE	N: 296053.29 E: 2596266.46
S-117	TYPE 'F' INLET PER FDOT INDEX 425-053	120.08'	115.00' SW 115.00' NE	N: 295992.35 E: 2596232.01
S-118	TYPE 'F' INLET PER FDOT INDEX 425-053	122.33'	117.25' SW 117.25' NE	N: 295893.54 E: 2596176.16
S-119	TYPE 'F' INLET PER FDOT INDEX 425-053	124.42'	119.42' S 119.42' NE	N: 295802.14 E: 2596124.50
S-120	TYPE 'F' INLET PER FDOT INDEX 425-053	125.87'	120.07' N 120.07' S	N: 295722.97 E: 2596105.02
S-121	TYPE 'C' INLET PER FDOT INDEX 425-052	75.50'	69.21' N	N: 296713.02 E: 2597875.32
S-122	15" MITERED END SECTION PER FDOT INDEX 430-021	N/A	69.00' S	N: 296752.94 E: 2597885.51
S-123	TYPE 'C' INLET PER FDOT INDEX 425-052	83.50'	73.35' N	N: 296412.66 E: 2597656.66
S-124	15" MITERED END SECTION PER FDOT INDEX 430-021	N/A	73.00' S	N: 296482.81 E: 2597659.79

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SCALE: 1"=50'

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SUBMITTALS:
02/24/23 - CITY OF ALACHUA AND SRWMD
04/14/23 - CITY OF ALACHUA AND SRWMD
05/08/23 - CITY OF ALACHUA AND SRWMD

CLIENT: TOWER HILL SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: MASTER HEADQUARTERS GRADING PLAN

TECHNICAL: BG/TTC
DESIGNED: M. COMPAR, P.E.
DRAWN: GM/TTC/BG/TTC
CHECKED: W. OWEN, P.E.
PROJECT NUMBER: 21-0025

WALKER FAIN OWEN

FL PE No. 94201

SHEET NO.: C2.00

Nath Thomas - Plot Date: May 05,2023 9:20am Filename: N:\2021\21-0025\Departments\04_Civil\Engineering\02_Design Production Final 81%\

STORM

ROADWAY
STORM SEWER

STORMWATER STRUCTURE TABLE

STRUCTURE:	STRUCTURE TYPE	TOP	INVERT ELEV	NORTHING & EASTING
S-11	TYPE 3 CURB INLET (LEFT) WITH P BOTTOM PER FDOT INDEX 425-020 AND 425-010	125.24'	120.22' SE	N: 295605.64 E: 2595802.25
S-12	TYPE 3 CURB INLET (RIGHT) WITH P BOTTOM PER FDOT INDEX 425-020 AND 425-010	125.30'	120.00' NE 120.00' NW	N: 295580.91 E: 2595861.22
S-13	TYPE 4 CURB INLET WITH P BOTTOM PER FDOT INDEX 425-020 AND 425-010	123.55'	118.78' SW 118.78' E	N: 295647.57 E: 2595963.59
S-14	TYPE 4 CURB INLET WITH P BOTTOM PER FDOT INDEX 425-020 AND 425-010	123.56'	118.36' W 117.86' N	N: 295661.73 E: 2596003.11
S-15	TYPE 3 CURB INLET (RIGHT) WITH P BOTTOM PER FDOT INDEX 425-020 AND 425-010	123.88'	117.20' S 117.70' NW 117.20' NE	N: 295744.43 E: 2595974.45
S-16	TYPE 4 CURB INLET WITH P BOTTOM PER FDOT INDEX 425-020 AND 425-010	123.63'	118.43' N	N: 295734.53 E: 2595820.62
S-17	TYPE 4 CURB INLET WITH P BOTTOM PER FDOT INDEX 425-020 AND 425-010	122.98'	118.29' S 118.29' E	N: 295775.23 E: 2595819.53
S-18	TYPE 3 CURB INLET (LEFT) WITH P BOTTOM PER FDOT INDEX 425-020 AND 425-010	124.07'	117.99' W 117.99' SE	N: 295787.34 E: 2595903.98
S-19	TYPE 3 CURB INLET (LEFT) WITH P BOTTOM PER FDOT INDEX 425-020 AND 425-010	118.73'	114.80' SE	N: 296020.34 E: 2596044.14
S-20	TYPE 3 CURB INLET (RIGHT) WITH P BOTTOM PER FDOT INDEX 425-020 AND 425-010	118.73'	114.10' SW 114.60' NW 114.10' NE	N: 295992.30 E: 2596093.76
S-21	TYPE 3 CURB INLET (LEFT) WITH P BOTTOM PER FDOT INDEX 425-020 AND 425-010	111.82'	107.25' E	N: 296255.75 E: 2596165.29
S-22	TYPE 3 CURB INLET (RIGHT) WITH P BOTTOM PER FDOT INDEX 425-020 AND 425-010	111.82'	106.55' SW 107.05' W 106.55' N	N: 296236.82 E: 2596219.05
S-23	TYPE 3 CURB INLET (RIGHT) WITH P BOTTOM PER FDOT INDEX 425-020 AND 425-010	103.75'	98.12' E	N: 296443.57 E: 2596202.48
S-24	TYPE 3 CURB INLET (RIGHT) WITH P BOTTOM PER FDOT INDEX 425-020 AND 425-010	103.03'	97.41' S 96.91' E 97.92' W	N: 296459.39 E: 2596260.14
S-25	MANHOLE PER FDOT INDEX 425-001 AND 425-010	95.73'	88.91' W 88.91' E	N: 296479.90 E: 2596506.83
S-26	TYPE 4 CURB INLET WITH P BOTTOM PER FDOT INDEX 425-020 AND 425-010	93.51'	88.13' E 88.13' W	N: 296776.55 E: 2596217.01
S-27	TYPE 4 CURB INLET WITH P BOTTOM PER FDOT INDEX 425-020 AND 425-010	93.50'	87.93' W 87.93' N	N: 296762.88 E: 2596272.44
S-28	TYPE 3 CURB INLET (RIGHT) WITH P BOTTOM PER FDOT INDEX 425-020 AND 425-010	94.63'	87.65' E 87.65' W	N: 296909.63 E: 2596250.48
S-29	TYPE 3 CURB INLET (LEFT) WITH P BOTTOM PER FDOT INDEX 425-020 AND 425-010	94.64'	87.45' S 87.45' W 87.45' N	N: 296894.97 E: 2596305.57
S-30	TYPE 3 CURB INLET (RIGHT) WITH P BOTTOM PER FDOT INDEX 425-020 AND 425-010	95.63'	86.80' S 86.80' E	N: 297076.95 E: 2596348.62
S-31	MANHOLE PER FDOT INDEX 425-001 AND 425-010	95.31'	86.67' W 81.96' E 81.97' N	N: 297080.06 E: 2596385.50
S-32	TYPE 4 CURB INLET WITH P BOTTOM PER FDOT INDEX 425-020 AND 425-010	87.17'	83.00' E	N: 297367.24 E: 2596345.19
S-33	TYPE 4 CURB INLET WITH P BOTTOM PER FDOT INDEX 425-020 AND 425-010	86.90'	82.82' W 82.82' S	N: 297349.23 E: 2596428.77
S-34	TYPE 3 CURB INLET (LEFT) WITH P BOTTOM PER FDOT INDEX 425-020 AND 425-010	92.57'	86.51' E	N: 297190.60 E: 2596307.13
S-35	TYPE 3 CURB INLET (RIGHT) WITH P BOTTOM PER FDOT INDEX 425-020 AND 425-010	92.30'	82.29' N 86.29' W 82.29' SE	N: 297182.48 E: 2596371.85

STORMWATER STRUCTURE TABLE

STRUCTURE:	STRUCTURE TYPE	TOP	INVERT ELEV	NORTHING & EASTING
S-36	TYPE 3 CURB INLET (LEFT) WITH P BOTTOM PER FDOT INDEX 425-020 AND 425-010	92.33'	82.14' NW 82.14' S	N: 297135.47 E: 2596399.21
S-37	TYPE 3 CURB INLET (RIGHT) WITH P BOTTOM PER FDOT INDEX 425-020 AND 425-010	92.70'	82.03' N 82.03' S	N: 297101.29 E: 2596390.12
S-39	MANHOLE PER FDOT INDEX 425-001 AND 425-010	90.22'	80.81' W 80.81' E	N: 297029.91 E: 2596610.62
S-40	MANHOLE PER FDOT INDEX 425-001 AND 425-010	80.19'	74.38' W 74.38' SE	N: 296975.85 E: 2596854.49
S-41	CROSS DRAIN MES PER FDOT INDEX 430-021	N/A	73.01' NW	N: 296938.97 E: 2596874.98
S-42	CROSS DRAIN MES PER FDOT INDEX 430-021	N/A	87.83' E	N: 296920.25 E: 2596210.64
S-43	CROSS DRAIN MES PER FDOT INDEX 430-021	N/A	88.29' E	N: 296783.39 E: 2596182.90
S-44	MANHOLE PER FDOT INDEX 425-001 AND 425-010	80.29'	76.08' W	N: 296475.66 E: 2596793.66
S-45	SIDE DRAIN MES PER FDOT INDEX 430-022	N/A	83.75' E	N: 297421.45 E: 2596291.09
S-46	SIDE DRAIN MES PER FDOT INDEX 430-022	N/A	82.50' W	N: 297385.82 E: 2596479.88
S-234	SIDE DRAIN MES PER FDOT INDEX 430-022	N/A	82.50' W	N: 297380.42 E: 2596478.83
S-235	SIDE DRAIN MES PER FDOT INDEX 430-022	N/A	83.75' E	N: 297416.05 E: 2596290.04

HEADQUARTERS
STORM SEWER

STORMWATER STRUCTURE TABLE

STRUCTURE:	STRUCTURE TYPE	TOP	INVERT ELEV	NORTHING & EASTING
S-100	42" MITERED END SECTION PER FDOT INDEX 430-021	N/A	70.50' SW	N: 296572.92 E: 2596850.44
S-101	6'Ø STORM MANHOLE PER FDOT INDEX 425-001 & 425-010	90.00'	76.08' S 76.08' NE 76.08' W	N: 296475.66 E: 2596793.66
S-102	6'Ø STORM MANHOLE PER FDOT INDEX 425-001 & 425-010	89.00'	81.75' S 81.75' N	N: 296100.58 E: 2596774.86
S-103	6'Ø STORM MANHOLE PER FDOT INDEX 425-001 & 425-010	97.50'	84.86' N 84.86' W	N: 295934.55 E: 2596766.65
S-104	6'Ø STORM MANHOLE PER FDOT INDEX 425-001 & 425-010	113.50'	106.00' SW 106.00' E	N: 295978.94 E: 2596521.84
S-105	TYPE 'F' INLET TOP W/ 6'Ø TYPE 'J' BOTTOM PER FDOT INDEX 425-053 & 425-010	128.05'	121.90' SW 116.70' NE 116.70' NW	N: 295923.63 E: 2596495.85
S-106	TYPE 'F' INLET TOP W/ 5'Ø TYPE 'J' BOTTOM PER FDOT INDEX 425-053 & 425-010	130.26'	122.26' SW 122.26' NE 122.26' SE	N: 295860.17 E: 2596459.98
S-107	TYPE 'C' INLET FDOT INDEX 425-052	130.00'	125.36' NW 127.00' SE	N: 295819.15 E: 2596533.21
S-108	TYPE 'F' INLET TOP W/ 5'Ø TYPE 'J' BOTTOM PER FDOT INDEX 425-053 & 425-010	129.71'	122.99' SW 122.99' NE 126.00' S 127.07' E	N: 295732.97 E: 2596388.08
S-109	TYPE 'F' INLET TOP W/ 5'Ø TYPE 'J' BOTTOM PER FDOT INDEX 425-053 & 425-010	128.41'	123.75' NE 123.75' SW 123.75' SE	N: 295600.89 E: 2596313.42
S-110	TYPE 'F' INLET TOP W/ 5'Ø TYPE 'J' BOTTOM PER FDOT INDEX 425-053 & 425-010	129.20'	123.95' SW 123.95' NE	N: 295550.52 E: 2596284.95
S-111	TYPE 'F' INLET PER FDOT INDEX 425-053	129.29'	124.36' SW 124.36' NE	N: 295448.60 E: 2596227.34
S-112	CURB INLET TYPE 3 (RIGHT) P BOTTOM ROUND	128.00'	120.50' SW 120.50' N	N: 295599.34 E: 2596102.91
S-113	CURB INLET TYPE 3 (LEFT) P BOTTOM ROUND	128.11'	120.61' NE 120.63' SW	N: 295568.89 E: 2596085.71
S-114	TYPE C INLET, FDOT INDEX 425-052	128.75'	125.50' NW 125.50' E	N: 295568.28 E: 2596380.31
S-115	TYPE C INLET, FDOT INDEX 425-052	130.95'	126.94' N 126.94' SE	N: 295689.69 E: 2596400.76
S-116	TYPE 'F' INLET PER FDOT INDEX 425-053	118.80'	113.50' SW 113.50' SE	N: 296053.29 E: 2596266.46
S-117	TYPE 'F' INLET PER FDOT INDEX 425-053	120.08'	115.00' SW 115.00' NE	N: 295992.35 E: 2596232.01
S-118	TYPE 'F' INLET PER FDOT INDEX 425-053	122.33'	117.25' SW 117.25' NE	N: 295893.54 E: 2596176.16
S-119	TYPE 'F' INLET PER FDOT INDEX 425-053	124.42'	119.42' S 119.42' NE	N: 295802.14 E: 2596124.50
S-120	TYPE 'F' INLET PER FDOT INDEX 425-053	125.87'	120.07' N 120.07' S	N: 295722.97 E: 2596105.02
S-121	TYPE 'C' INLET PER FDOT INDEX 425-052	75.50'	69.21' N	N: 296713.02 E: 2597875.32
S-122	15" MITERED END SECTION PER FDOT INDEX 430-021	N/A	69.00' S	N: 296752.94 E: 2597885.51
S-123	TYPE 'C' INLET PER FDOT INDEX 425-052	83.50'	73.35' N	N: 296412.66 E: 2597656.66
S-124	15" MITERED END SECTION PER FDOT INDEX 430-021	N/A	73.00' S	N: 296482.81 E: 2597659.79

SANITARY

ROADWAY
SANITARY SEWER

SANITARY SEWER STRUCTURE TABLE

MH-206	MANHOLE PER FDOT INDEX 425-001 AND 425-010	125.14'	118.52' SW 118.42' N	N: 295588.93 E: 2595809.48
MH-207	MANHOLE PER FDOT INDEX 425-001 AND 425-010	124.15'	115.42' S 115.32' NE 115.52' SE 115.52' NW	N: 295729.38 E: 2595861.81
MH-208	MANHOLE PER FDOT INDEX 425-001 AND 425-010	123.25'	114.22' SW 114.12' NE	N: 295807.61 E: 2595938.56
MH-209	MANHOLE PER FDOT INDEX 425-001 AND 425-010	119.45'	112.26' SW 109.45' NE	N: 295970.13 E: 2596029.47
MH-210	MANHOLE PER FDOT INDEX 425-001 AND 425-010	115.63'	109.55' SW 109.45' NE	N: 296132.66 E: 2596120.39
MH-211	MANHOLE PER FDOT INDEX 425-001 AND 425-010	111.26'	104.24' SW 104.14' N	N: 296270.48 E: 2596196.04
MH-212	MANHOLE PER FDOT INDEX 425-001 AND 425-010	101.26'	93.87' S 93.77' N 93.87' W 93.87' E	N: 296496.87 E: 2596217.56
MH-213	MANHOLE PER FDOT INDEX 425-001 AND 425-010	95.14'	87.65' S 87.55' N	N: 296652.22 E: 2596213.20
MH-214	MANHOLE PER FDOT INDEX 425-001 AND 425-010	93.40'	85.79' S 85.69' N 85.89' W 85.89' E	N: 296820.83 E: 2596235.97
MH-215	MANHOLE PER FDOT INDEX 425-001 AND 425-010	94.61'	82.51' S	N: 297128.29 E: 2596316.95

HEADQUARTERS
SANITARY SEWER

SANITARY SEWER STRUCTURE TABLE

STRUCTURE NAME:	STRUCTURE TYPE	TOP	INVERT ELEV	NORTHING & EASTING
MH-49	SANITARY SEWER MANHOLE PER CITY OF ALACHUA STANDARD DETAILS 212 & 215	124.76'	117.98' SE 117.88' NW	N: 295607.16 E: 2596063.78
MH-50	SANITARY SEWER MANHOLE PER CITY OF ALACHUA STANDARD DETAILS 212 & 215	129.82'	119.03' NW 119.33' NE	N: 295473.39 E: 2596290.17

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SCALE: 1"=50'
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SUBMITTALS:
02/28/23 - CITY OF ALACHUA AND SRWMD
04/14/23 - CITY OF ALACHUA AND SRWMD
05/08/23 - CITY OF ALACHUA AND SRWMD

CONSTRUCTION/BID REVISIONS:

CLIENT: TOWER HILL SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: OVERALL STRUCTURE TABLES

TECHNICIAN: BG/TFC

DESIGNED: N. COWAP, P.E.

DRAWN/CHECKED: W. OWEN, P.E.

PROJECT NUMBER: 21-0025

WALKER FAIN OWEN

FL PE No. 94201

SHEET NO.: C2.01

Tech: ThomasE Plot Date: May 05,2023 9:22am Filename: N:\2021\21-0025\Departments\04_Engineering\03_DWGs\Production Files\21-0025 sht05.dwg

C2.14 MATCHLINE

C2.10 MATCHLINE

C2.10 C2.12 MATCHLINE

REFER TO C4.XX SERIES FOR ROADWAY PLANS AND DETAILS

STORMWATER STRUCTURE TABLE

STRUCTURE:	STRUCTURE TYPE	TOP	INVERT ELEV	NORTHING & EASTING
S-105	TYPE 'F' INLET TOP W/ 6'Ø TYPE 'J' BOTTOM PER FDOT INDEX 425-053 & 425-010	128.05'	121.90' SW 116.70' NE 116.70' NW	N: 295923.63 E: 2596495.85
S-106	TYPE 'F' INLET TOP W/ 5'Ø TYPE 'J' BOTTOM PER FDOT INDEX 425-053 & 425-010	130.26'	122.26' SW 122.26' NE 122.26' SE	N: 295860.17 E: 2596459.98
S-107	TYPE 'C' INLET FDOT INDEX 425-052	130.00'	125.36' NW 127.00' SE	N: 295819.15 E: 2596533.21
S-108	TYPE 'F' INLET TOP W/ 5'Ø TYPE 'J' BOTTOM PER FDOT INDEX 425-053 & 425-010	129.71'	122.99' SW 122.99' NE 126.00' S 127.07' E	N: 295732.97 E: 2596388.08
S-115	TYPE C INLET, FDOT INDEX 425-052	130.95'	126.94' N 126.94' SE	N: 295689.69 E: 2596400.76
S-116	TYPE 'F' INLET PER FDOT INDEX 425-053	118.80'	113.50' SW 113.50' SE	N: 296053.29 E: 2596266.46
S-117	TYPE 'F' INLET PER FDOT INDEX 425-053	120.08'	115.00' SW 115.00' NE	N: 295992.35 E: 2596232.01
S-118	TYPE 'F' INLET PER FDOT INDEX 425-053	122.33'	117.25' SW 117.25' NE	N: 295893.54 E: 2596176.16

TW/BW=117.00
TW=122.00 BW=117.00
TW=123.00 BW=117.00
TW/BW=126.00
TW=129.0 BW=126.0
61"-42" RCP @ 17.51%
263'-24" HDPE @ 1.21%
70'-18" HDPE @ 2.14%
117'-18" HDPE @ 1.98%
105'-18" HDPE @ 2.07%
73'-36" RCP @ 0.50%
84'-15" HDPE @ 3.69%
146'-36" RCP @ 0.50%
54'-12" PVC @ 1.00%
STORM C/O TOP=131.50 INV=127.60
FLUSH WITH ASPHALT

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CONSTRUCTION/BID REVISIONS:

SUBMITTALS:
02/28/23 - CITY OF ALACHUA AND SWWMD
04/14/23 - CITY OF ALACHUA AND SWWMD
05/08/23 - CITY OF ALACHUA AND SWWMD

CLIENT: TOWER HILL
SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: DETAILED GRADING AND DRAINAGE PLAN

TECHNICIAN: BG/TFC
DESIGNER: M. CHAP, P.E.
QUALITY CONTROL: W. OWEN, P.E.
PROJECT NUMBER: 21-0025

WALKER FAIN OWEN

FL PE No. 94201

SHEET NO: C2.10

Tech: ThomasG Plot Date: May 05,2023 9:24am Filename: M:\2021\21-0025\Department\04_Engineering\04_Civil\Production\[21-0025 P1C.dwg

STORMWATER STRUCTURE TABLE

STRUCTURE:	STRUCTURE TYPE	TOP	INVERT ELEV	NORTHING & EASTING
S-105	TYPE 'F' INLET TOP W/ 6'Ø TYPE 'J' BOTTOM PER FDOT INDEX 425-053 & 425-010	128.05'	121.90' SW 116.70' NE 116.70' NW	N: 295923.63 E: 2596495.85
S-106	TYPE 'F' INLET TOP W/ 5'Ø TYPE 'J' BOTTOM PER FDOT INDEX 425-053 & 425-010	130.26'	122.26' SW 122.26' NE 122.26' SE	N: 295860.17 E: 2596459.98
S-107	TYPE 'C' INLET FDOT INDEX 425-052	130.00'	125.36' NW 127.00' SE	N: 295819.15 E: 2596533.21
S-108	TYPE 'F' INLET TOP W/ 5'Ø TYPE 'J' BOTTOM PER FDOT INDEX 425-053 & 425-010	129.71'	122.99' SW 122.99' NE 126.00' S 127.07' E	N: 295732.97 E: 2596388.08
S-115	TYPE C INLET, FDOT INDEX 425-052	130.95'	126.94' N 126.94' SE	N: 295689.69 E: 2596400.76

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CONSTRUCTION BID REVISIONS

SUBMITTALS:
02/28/23 - CITY OF ALACHUA AND SRWMD
04/14/23 - CITY OF ALACHUA AND SRWMD
05/08/23 - CITY OF ALACHUA AND SRWMD

CLIENT: TOWER HILL
SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: DETAILED GRADING AND DRAINAGE PLAN

TECHNICIAN: BC/TFC
DESIGNED: J. CHAPMAN, P.E.
PROJECT CONTROL: W. OWEN, P.E.
PROJECT NUMBER: 21-0025

WALKER FAIN OWEN

FL PE No. 94201

SHEET NO.: C2.11

Tech: ThomasC Plot Date: May 05, 2023 7:06am Filename: M:\2021\21-0025\Department\C3D\Civil\Plan Files\21-0025 PG.dwg

REFER TO C4.XX SERIES FOR ROADWAY PLANS AND DETAILS

C2.10

C2.12

MATCHLINE

C2.12

C2.13

MATCHLINE

STORMWATER STRUCTURE TABLE

STRUCTURE:	STRUCTURE TYPE	TOP	INVERT ELEV	NORTHING & EASTING
S-108	TYPE 'F' INLET TOP W/ S'Ø TYPE 'J' BOTTOM PER FDOT INDEX 425-053 & 425-010	129.71'	122.99' SW 122.99' NE 126.00' S 127.07' E	N: 295732.97 E: 2596388.08
S-109	TYPE 'F' INLET TOP W/ S'Ø TYPE 'J' BOTTOM PER FDOT INDEX 425-053 & 425-010	128.41'	123.75' NE 123.75' SW 123.75' SE	N: 295600.89 E: 2596313.42
S-110	TYPE 'F' INLET TOP W/ S'Ø TYPE 'J' BOTTOM PER FDOT INDEX 425-053 & 425-010	129.20'	123.95' SW 123.95' NE	N: 295550.52 E: 2596284.95
S-111	TYPE 'F' INLET PER FDOT INDEX 425-053	129.29'	124.36' SW 124.36' NE	N: 295448.60 E: 2596227.34
S-112	CURB INLET TYPE 3 (RIGHT) P BOTTOM ROUND	128.00'	120.50' SW 120.50' N	N: 295599.34 E: 2596102.91
S-113	CURB INLET TYPE 3 (LEFT) P BOTTOM ROUND	128.11'	120.61' NE 120.63' SW	N: 295568.89 E: 2596085.71
S-115	TYPE C INLET, FDOT INDEX 425-052	130.95'	126.94' N 126.94' SE	N: 295689.69 E: 2596400.76
S-118	TYPE 'F' INLET PER FDOT INDEX 425-053	122.33'	117.25' SW 117.25' NE	N: 295893.54 E: 2596176.16
S-119	TYPE 'F' INLET PER FDOT INDEX 425-053	124.42'	119.42' S 119.42' NE	N: 295802.14 E: 2596124.50
S-120	TYPE 'F' INLET PER FDOT INDEX 425-053	125.87'	120.07' N 120.07' S	N: 295722.97 E: 2596105.02

STORM C/O TOP=131.50 INV=127.60

54"-12" PVC @ 1.00%

45"-15" RCP @ 2.00%

54"-12" PVC @ 1.00%

105"-18" HDPE @ 2.00%

152"-30" HDPE @ 0.50%

122"-18" HDPE @ 0.80%

74"-15" RCP @ 2.35%

58"-30" RCP @ 0.35%

24"-15" HDPE @ 0.35%

32"-15" HDPE @ 0.35%

117"-24" HDPE @ 0.35%

47"-24" HDPE @ 0.35%

STORM C/O TOP=124.90 INV=121.44

100' - 6" COREX PERFORATED DRAIN PIPE WITH SOCK

STORM C/O TOP=123.50 INV=120.94

100' - 6" COREX PERFORATED DRAIN PIPE WITH SOCK

STORM C/O TOP=128.10 INV=121.44

85' - 6" COREX PERFORATED DRAIN PIPE WITH SOCK

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CONSTRUCTION BID REVISIONS

SUBMITTALS:
02/28/23 - CITY OF ALACHUA AND SRWMD
04/14/23 - CITY OF ALACHUA AND SRWMD
05/08/23 - CITY OF ALACHUA AND SRWMD

CLIENT: TOWER HILL
SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: DETAILED GRADING AND DRAINAGE PLAN

TECHNICIAN: BG/TFC

DESIGNER: C. COWAP, P.E.

QUALITY CONTROL: W. OWEN, P.E.

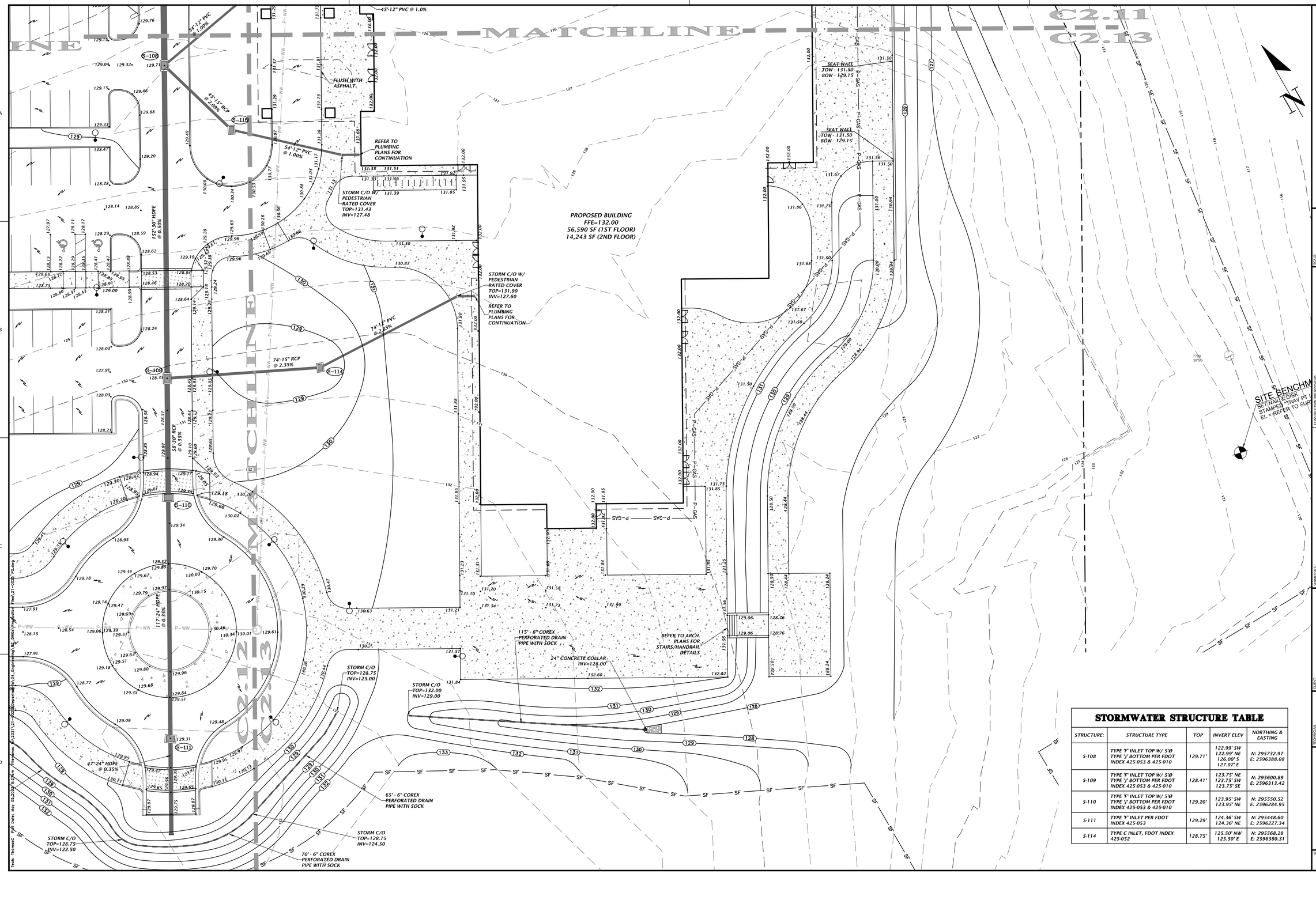
PROJECT NUMBER: 21-0025

WALKER FAIN OWEN

FL PE No. 94201

SHEET NO.: C2.12

Tech: ThomasC Plot Date: May 05,2023 9:26am Filename: H:\2021\21-0025\Department\04_Engineering\02_DWGs\Production Files\21-0025 Pc.dwg



STORMWATER STRUCTURE TABLE

STRUCTURE:	STRUCTURE TYPE	TOP	INVERT ELEV	NORTHING & EASTING
S-108	TYPE 'F' INLET TOP W/ S'Ø TYPE 'J' BOTTOM PER FDOT INDEX 425-053 & 425-010	129.71'	122.99' SW 122.99' NE 126.00' S 127.07' E	N: 295732.97 E: 2596388.08
S-109	TYPE 'F' INLET TOP W/ S'Ø TYPE 'J' BOTTOM PER FDOT INDEX 425-053 & 425-010	128.41'	123.75' NE 123.75' SW 123.75' SE	N: 295600.89 E: 2596313.42
S-110	TYPE 'F' INLET TOP W/ S'Ø TYPE 'J' BOTTOM PER FDOT INDEX 425-053 & 425-010	129.20'	123.95' SW 123.95' NE	N: 295550.52 E: 2596284.95
S-111	TYPE 'F' INLET PER FDOT INDEX 425-053	129.29'	124.36' SW 124.36' NE	N: 295448.60 E: 2596227.34
S-114	TYPE C INLET, FDOT INDEX 425-052	128.75'	125.50' NW 125.50' E	N: 295568.28 E: 2596380.31

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SCALE: 1"=20'

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CONSTRUCTION BID REVISIONS

SUBMITTALS:
02/28/23 - CITY OF ALACHUA AND SRWMD
04/14/23 - CITY OF ALACHUA AND SRWMD
05/08/23 - CITY OF ALACHUA AND SRWMD

CLIENT: TOWER HILL SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: DETAILED GRADING AND DRAINAGE PLAN

TECHNICIAN: BG/TFC
DESIGNER: M. COMPAP, P.E.
QUALITY CONTROL: W. OWEN, P.E.
PROJECT NUMBER: 21-0025

WALKER FAIN OWEN

FL PE No. 94201

SHEET NO.: C2.13

Tech: ThomasB Plot Date: May 05,2023 7:47am Plotted by: Owen, Preston K:\2021\21-0025 Towerhill, Inc\04_Engineering\04_Civil\Sheets\21-0025 Plan Set.dwg

STORMWATER STRUCTURE TABLE

STRUCTURE:	STRUCTURE TYPE	TOP	INVERT ELEV	NORTHING & EASTING
S-100	42" MITERED END SECTION PER FDOT INDEX 430-021	N/A	70.50' SW	N: 296572.92 E: 2596850.44
S-101	6'Ø STORM MANHOLE PER FDOT INDEX 425-001 & 425-010	90.00'	76.08' S 76.08' NE 76.08' W	N: 296475.66 E: 2596793.66
S-102	6'Ø STORM MANHOLE PER FDOT INDEX 425-001 & 425-010	89.00'	81.75' S 81.75' N	N: 296100.58 E: 2596774.86
S-104	6'Ø STORM MANHOLE PER FDOT INDEX 425-001 & 425-010	113.50'	106.00' SW 106.00' E	N: 295978.94 E: 2596521.84

SITE BENCHMARK
SET NAIL & DISK
STAMPED "TRAV PT LS 6075"
EL REFER TO SURVEY

S-101

S-102

376' 42" RCP @ 1.51%

166' 42" RCP @ 2.72%

C2.10
C2.11
C2.14

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0 1"

CONSTRUCTION/BID REVISIONS:

SUBMITTALS:
02/28/23 - CITY OF ALACHUA AND SRWMD
04/14/23 - CITY OF ALACHUA AND SRWMD
05/08/23 - CITY OF ALACHUA AND SRWMD

CLIENT: TOWER HILL SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: DETAILED GRADING AND DRAINGE PLAN

TECHNICIAN: BG/TTC

DESIGNER: A. COWAP, P.E.

QUALITY CONTROL: W. OWEN, P.E.

PROJECT NUMBER: 21-0025

WALKER FAIN OWEN

FL PE No. 94201

SHEET NO.: C2.14

Tech: ThomasF Plot Date: Wed 05.10.23 10:40am Filename: M:\2021\21-0025\Design\Civil\C2.5-Overall Grading\Design\Precision Flash 21-0025 PS.dwg



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SCALE: 1"=30'

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CONSTRUCTION/BID REVISIONS:

SUBMITTALS:
02/28/23 - CITY OF ALACHUA AND SRWMD
04/14/23 - CITY OF ALACHUA AND SRWMD
05/08/23 - CITY OF ALACHUA AND SRWMD

CLIENT: TOWER HILL SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: DETAILED GRADING AND DRAINAGE PLAN

TECHNICIAN: BG/TFC

DESIGNER: J. COWAP, P.E.

QUALITY CONTROL: W. OWEN, P.E.

PROJECT NUMBER: 21-0025

WALKER FAIN OWEN

FL PE No. 94201

SHEET NO.: C2.15

Path: Thomas© Plot Date: May 05,2023 9:50am Filename: H:\2021\21-0025\Department\04_Engineering\02_dwg\Production Files\21-0025 PG.dwg

STORMWATER STRUCTURE TABLE

STRUCTURE:	STRUCTURE TYPE	TOP	INVERT ELEV	NORTHING & EASTING
S-100	42" MITERED END SECTION PER FDOT INDEX 430-021	N/A	70.50' SW	N: 296572.92 E: 2596850.44
S-101	6'Ø STORM MANHOLE PER FDOT INDEX 425-001 & 425-010	90.00'	76.08' S 76.08' NE 76.08' W	N: 296475.66 E: 2596793.66
S-102	6'Ø STORM MANHOLE PER FDOT INDEX 425-001 & 425-010	89.00'	81.75' S 81.75' N	N: 296100.58 E: 2596774.86
S-104	6'Ø STORM MANHOLE PER FDOT INDEX 425-001 & 425-010	113.50'	106.00' SW 106.00' E	N: 295978.94 E: 2596521.84

PROPOSED STORMWATER MANAGEMENT FACILITY #1
DHW=74.67
(100HR-240YR)
(REFER TO C2.21 FOR SMF #1 SECTION)

PROPOSED STORMWATER MANAGEMENT FACILITY #2
DHW=82.19
(100HR-240YR)
(REFER TO C2.21 FOR SMF #2 SECTION)

41"-15" RCP @ 0.50%

70"-15" RCP @ 0.50%

176"-42" RCP @ 3.12%

S-100 S-101 S-102 S-103 S-104 S-105 S-106 S-107 S-108 S-109 S-110 S-111 S-112 S-113 S-114 S-115 S-116 S-117 S-118 S-119 S-120 S-121 S-122 S-123 S-124

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CONSTRUCTION BID REVISIONS

SUBMITTALS:
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04/28/23 - CITY OF ALACHUA AND SRWMD
05/08/23 - CITY OF ALACHUA AND SRWMD

CLIENT: TOWER HILL SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: STORMWATER MANAGEMENT FACILITY PLAN #1

TECHNICIAN: BG/TFC

DESIGNER: K. COWAP, P.E.

QUALITY CONTROL: W. OWEN, P.E.

PROJECT NUMBER: 21-0025

WALKER FAIN OWEN

FL PE No. 94201

SHEET NO.: C2.20

Path: Thomas Plot Date: Mar 05,2023 9:30am Revised: N:\2021\21-0025\Department\04_Engineering\03_Civil\Production Files\21-0025 SMF.dwg

PROPOSED STORMWATER MANAGEMENT FACILITY #1
DHW=74.67
(100HR-240YR)
(REFER TO C2.21 FOR SMF #1 SECTION)

70"-15" RCP @ 0.50%

PROPOSED STORMWATER MANAGEMENT FACILITY #2
DHW=82.19
(100HR-240YR)
(REFER TO C2.21 FOR SMF #2 SECTION)

EX. ELEVATION = 85.00 CONTOUR

EX. WETLAND IMPACT

166"-42" RCP @ 1.75%

N

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CONSTRUCTION/BID REVISIONS

SUBMITTALS:
02/28/23 - CITY OF ALACHUA AND SRWMD
04/14/23 - CITY OF ALACHUA AND SRWMD
05/08/23 - CITY OF ALACHUA AND SRWMD

CLIENT: TOWER HILL
SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

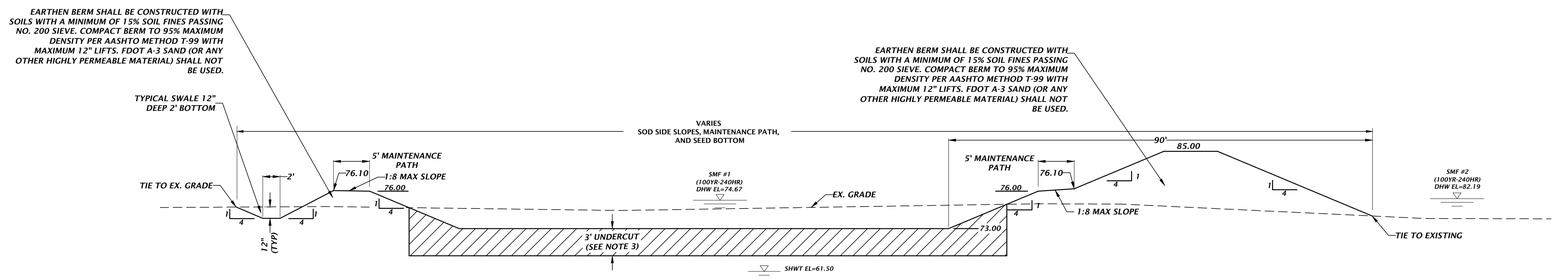
SHEET TITLE: STORMWATER MANAGEMENT FACILITY PLAN #2

TECHNICIAN: BG/TFC
DESIGNER: M. COWAP, P.E.
QUALITY CONTROL: W. OWEN, P.E.
PROJECT NUMBER: 21-0025

WALKER FAIN OWEN

FL PE No. 94201

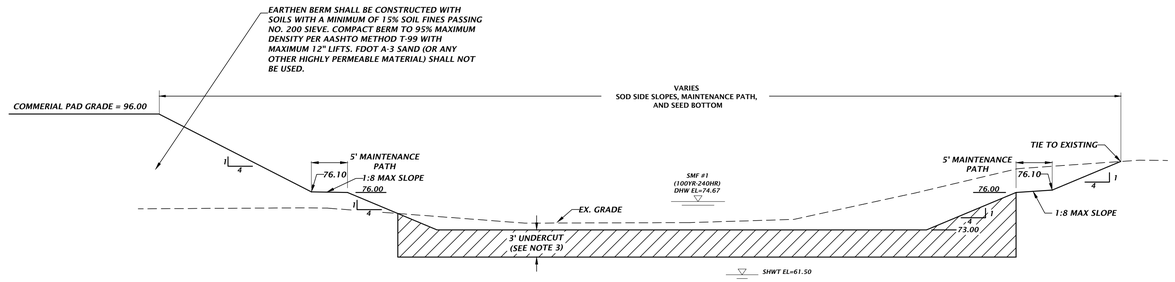
SHEET NO.: C2.21



1. *IF A CONTINUOUS LIMEROCK FORMATION IS ENCOUNTERED IN THE BASIN AREA CONTACT THE ENGINEER OF RECORD. THE LIMEROCK SHALL BE EXCAVATED TO A MINIMUM DEPTH OF 3 FEET BEYOND THE BASIN UNDERCUT LIMITS.*
2. *IF A SOLUTION PIPE SINKHOLE DOES FORM IN THE STORMWATER BASIN, THEN THE SINKHOLE SHALL BE REPAIRED BY BACKFILLING WITH MATERIAL OF LOWER-PERMEABILITY MATERIAL, SUCH AS CLAYEY SAND OR CLAY. THE MATERIAL SHALL BE COMPACTED AND THE SINKHOLE REPAIR SHOULD BRING THE SURFACE BACK TO AN ELEVATION WHICH IS SLIGHTLY ABOVE THE ORIGINAL BOTTOM, CREATING A SMALL MOUND.*
3. *UNDERCUT 3' AND BACKFILL WITH ON-SITE OR IMPORTED SANDS WITH SILT (SP, SP-SM) HAVING A MAXIMUM OF 10 PERCENT SOIL FINES PASSING THE NO. 200 SIEVE.*

STORMWATER MANAGEMENT FACILITY 1
CROSS SECTION XX-XX

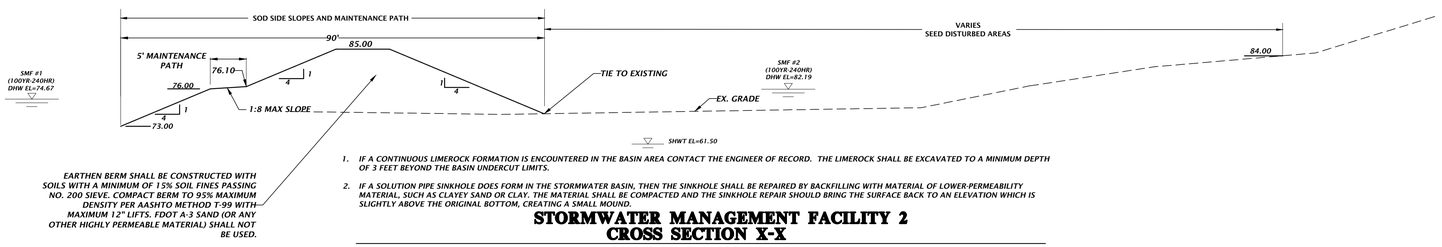
NTS



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STORMWATER MANAGEMENT FACILITY 1
CROSS SECTION XX-XX

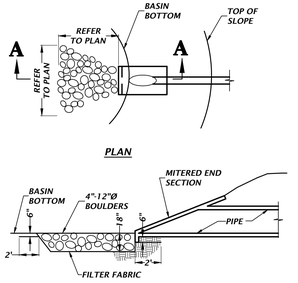
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STORMWATER MANAGEMENT FACILITY 2
CROSS SECTION X-X

NTS



NOTES:

1. *ANCHOR FILTER FABRIC BY EXTENDING BEYOND RIPRAP AND BACKFILLING AS SHOWN ON DETAIL.*
2. *RIPRAP SHALL NOT EXTEND ONTO SIDE SLOPES.*
3. *ADJUST SHAPE OF APRON WHERE REQUIRED TO MATCH TOE OF SLOPE.*
4. *BROKEN SLOPE IS NOT ACCEPTABLE.*

RIP-RAP EROSION PROTECTION

NTS

11801 Research Drive
Alachua, FL 32615
(352) 331-1976
www.chw-inc.com
est. 1988 FLORIDA CA-5075
CHW Professional Consultants

SCALE: N/A
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET ADJUST SCALES ACCORDINGLY
0 1"

CONSTRUCTION/BID REVISIONS:

SUBMITTALS:
02/28/23 - CITY OF ALACHUA AND SRWMD
04/14/23 - CITY OF ALACHUA AND SRWMD
05/08/23 - CITY OF ALACHUA AND SRWMD

CLIENT: TOWER HILL
SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: STORMWATER MANAGEMENT FACILITY DETAILS

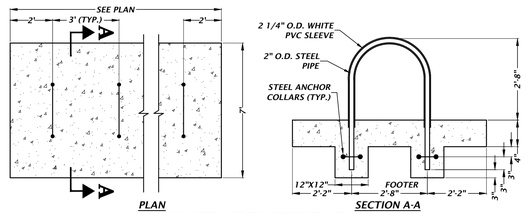
TECHNICIAN: BG/TEC
DESIGNER: M. CONWAY, P.E.
QUALITY CONTROL: W. OWEN, P.E.
PROJECT NUMBER: 21-0025

WALKER FAIN OWEN

FL PE No. 94201

SHEET NO.: C2.22

Mech. ThomasC Plot Date: May 05,2023 8:31am Filename: N:\2021\21-0025\Department\04_Engineering\02_DWGs\Production Files\21-0025 P6.dwg



U-SHAPE BIKE RACK

NTS



NOTE: CONCRETE PAVEMENT & JOINTS SHALL BE CONSTRUCTED TO FC & PA STANDARDS.

STANDARD DUTY CONCRETE DETAIL

NTS



NOTE: CONCRETE PAVEMENT & JOINTS SHALL BE CONSTRUCTED TO FC & PA STANDARDS.

HEAVY DUTY CONCRETE DETAIL

NTS

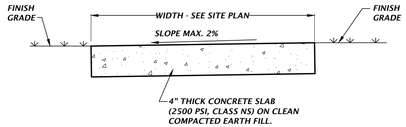
NOTE:
JOINT PATTERN AND TYPE PER FLORIDA CONCRETE & PRODUCTS ASSOCIATION SPECIFICATIONS

STANDARD DUTY ASPHALT DETAIL

HEAVY DUTY ASPHALT DETAIL

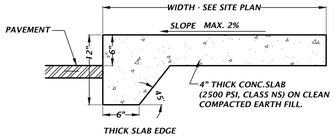
ASPHALT PAVEMENT DETAILS

NTS



NOT ADJACENT TO PAVEMENT

NTS



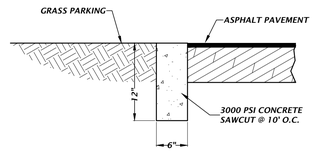
ADJACENT TO PAVEMENT

NTS

NOTES:

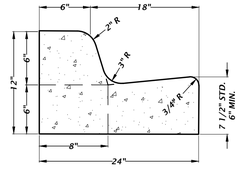
1. SAWCUT CONTROL JOINTS SHALL BE CONSTRUCTED 5 FEET ON CENTER
2. EXPANSION JOINTS WITH PREFORMED JOINT FILLER SHALL BE CONSTRUCTED BETWEEN ALL FIXED OBJECTS AND WALK AND AT CONSTRUCTION JOINTS.

CONCRETE SIDEWALK DETAILS



FLUSH CURB DETAIL

NTS

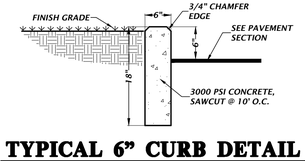


NOTE:

WHEN USED ON THE HIGH SIDE OF ROADWAY, THE CROSS-SLOPE OF THE GUTTER SHALL MATCH THE CROSS-SLOPE OF THE ADJACENT PAVEMENT AND THE THICKNESS OF THE LIP SHALL BE 6".

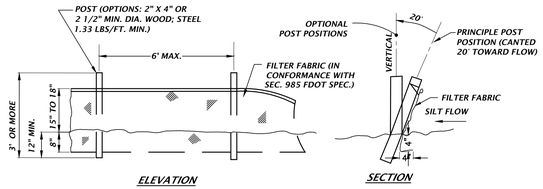
TYPE 'F' CONCRETE CURB AND GUTTER DETAIL

NTS



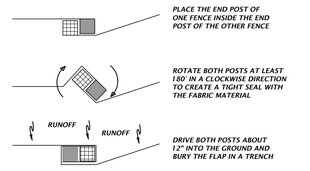
TYPICAL 6" CURB DETAIL

NTS



TYPE III SILT FENCE DETAIL

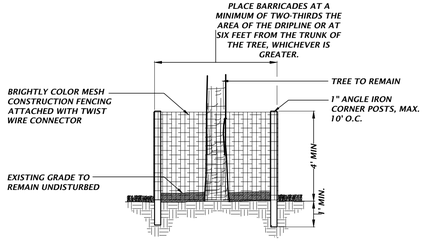
NTS



FOR ATTACHING TWO SILT FENCES WHEN TRENCHING IS USED

TYPE III SILT FENCE WRAPPING DETAIL

NTS



TREE PROTECTION DETAIL

NTS

TREE PROTECTION NOTES

1) PROTECTIVE BARRIERS SHALL BE CONSTRUCTED, AS NECESSARY, TO PREVENT THE DESTRUCTION OR DAMAGING OF REGULATED TREES THAT ARE LOCATED WITHIN 50 FEET OF ANY CONSTRUCTION ACTIVITY OR STORAGE OF EQUIPMENT AND MATERIALS.

2) PROTECTIVE BARRIERS SHALL BE PLAINLY VISIBLE AND SHALL CREATE A CONTINUOUS BOUNDARY AROUND TREES OR VEGETATION CLUSTERS IN ORDER TO PREVENT ENCROACHMENT BY MACHINERY, VEHICLES OR STORED MATERIALS.

3) NO TRENCHING ALLOWED WITHIN THE PROTECTIVE BARRIER ZONE. HAND DIG TO INSTALL UTILITY IF APPROVED BY CITY MANAGER OR DESIGNEE. WHERE ROOTS GREATER THAN ONE INCH IN DIAMETER ARE DAMAGED OR EXPOSED, THEY SHALL BE CUT CLEANLY AND RE-COVERED WITH SOIL WITHIN ONE HOUR OF DAMAGE OR EXPOSURE.

4) PROTECTIVE BARRIERS SHALL REMAIN IN PLACE AND INTACT UNTIL SUCH TIME AS LANDSCAPE OPERATIONS BEGIN.

5) LANDSCAPE PREPARATION IN THE PROTECTED AREA SHALL BE LIMITED TO SHALLOW DISCING OF THE AREA. DISCING SHALL BE LIMITED TO A DEPTH OF 4 INCHES.

6) NO BUILDING MATERIALS, MACHINERY OR HARMFUL CHEMICALS SHALL BE PLACED WITHIN PROTECTIVE BARRIERS.

7) THE AMERICAN NATIONAL STANDARDS INSTITUTE A-300 PART V: MANAGEMENT OF TREES AND SHRUBS DURING SITE PLANNING, SITE DEVELOPMENT, AND SITE CONSTRUCTION OR OTHER NATIONALLY RECOGNIZED ARBORICULTURAL STANDARDS SHALL BE USED AS GUIDELINES FOR TREE PROTECTION, PLANTING, PRUNING AND CARE DURING DEVELOPMENT AND CONSTRUCTION.

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Alachua, FL 32615
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www.chw-inc.com
est. 1988 FLORIDA CA-5075
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SCALE: N/A

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET ADJUST SCALES ACCORDINGLY
0 1"

SUBMITTALS:
02/28/23 - CITY OF ALACHUA AND SRWMD
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CONSTRUCTION/BID

CLIENT: TOWER HILL
SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: CONSTRUCTION DETAILS

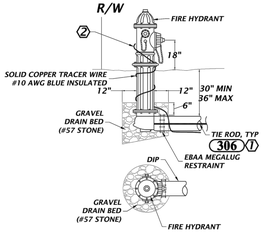
TECHNICIAN: BG/TFC
DESIGNER: N. CHRISTOPHAP, P.E.
PROJECT CONTROL: W. OWEN, P.E.
PROJECT NUMBER: 21-0025

WALKER FAIN OWEN

FL PE No. 94201

SHEET NO.: C2.30

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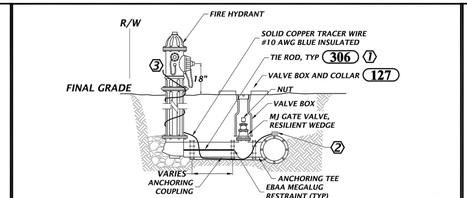
GENERAL NOTE(S):

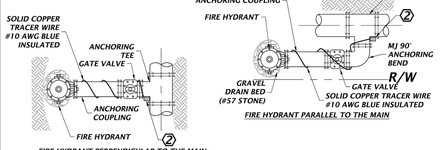
1. RESTRAIN MINIMUM OF 58' OF PIPE.

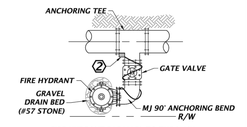
KEYED NOTE(S):

1. *PROVIDE TIE RODS FOR DUAL RESTRAINT AND AS PER 306.*
2. *EXTEND TRACER WIRE AT LEAST 8-INCHES ABOVE GRADE.*

100 **FIRE HYDRANT (DEAD END)**
NTS



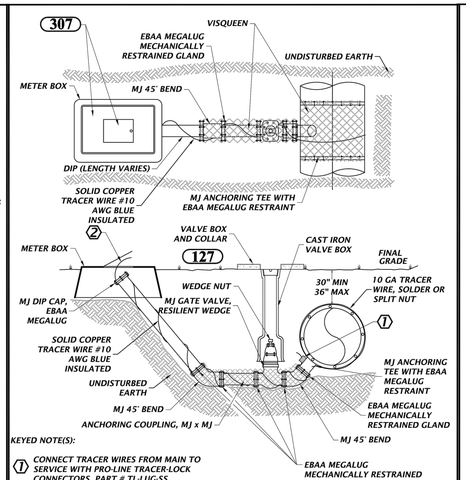




KEYED NOTE(S):

1. *PROVIDE TIE RODS FOR DUAL RESTRAINT AND AS PER 306 .*
2. *CONNECT TRACER WIRES FROM MAIN TO SERVICE WITH PRO-LINE TRACER-LOCK CONNECTORS. PART # TL-LUG-SS.*
3. *EXTEND TRACER WIRE AT LEAST 8-INCHES ABOVE GRADE.*

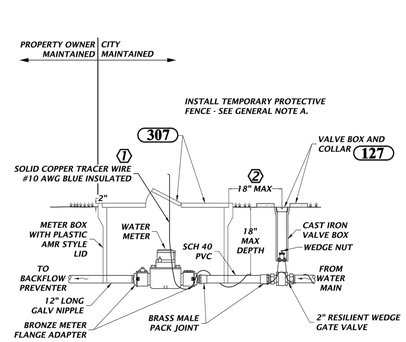
103 **FIRE HYDRANT (PERPENDICULAR/ PARALLEL TO MAIN)**
NTS



KEYED NOTE(S):

1. *CONNECT TRACER WIRES FROM MAIN TO SERVICE WITH PRO-LINE TRACER-LOCK CONNECTORS. PART # TL-LUG-SS.*
2. *PROVIDE ENOUGH TRACER WIRE SO IT CAN EXTEND AT LEAST 8-INCHES ABOVE METER BOX.*

106 **2" AND 3" BLOW OFF ASSEMBLY**
NTS



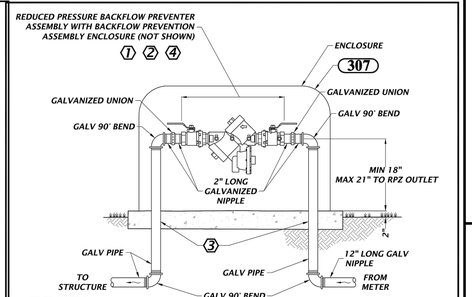
GENERAL NOTE:

A. DURING CONSTRUCTION, PROVIDE TEMPORARY PROTECTIVE FENCE AROUND METER AS PER 324.

KEYED NOTE(S):

1. *PROVIDE ENOUGH TRACER WIRE SO IT CAN EXTEND AT LEAST 8-INCHES ABOVE METER BOX.*
2. *PROVIDE ENOUGH SPACE FOR INSTALLING VALVE BOX COLLAR*

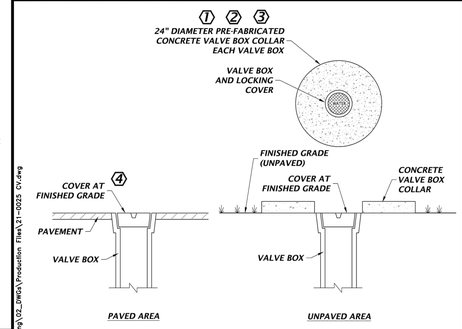
112 **1 1/2" AND 2" METER ASSEMBLY**
NTS



KEYED NOTE(S):

1. *PROVIDE BACKFLOW PREVENTION ASSEMBLY ENCLOSURE. COORDINATE WITH VENDOR TO SELECT ENCLOSURE SIZE SUITABLE FOR INSTALLED BACKFLOW PREVENTER ASSEMBLY.*
2. *ENCLOSURE VENDOR AND FEATURES:*
   - *MARINE GRADE ALUMINUM*
   - *1.5 INCH INSULATION, 9.0 R VALUE*
   - *MEANS TO ACCESS ASSEMBLY*
   - *LOCKABLE*
   - *MOUNTING HARDWARE*
   - *COLOR: TAN, UNLESS OTHERWISE NOTED.*
   - *VENDORS: SAFE T COVER, NASHVILLE, TN; OR EQUAL*
3. *POUR CONCRETE PAD WITH DIMENSIONS AS PER VENDOR'S RECOMMENDATIONS. MINIMUM THICKNESS OF 4 INCHES.*
   - *PROVIDE SLEEVES AROUND PIPING*
4. *BACKFLOW PREVENTER FURNISHED, INSTALLED AND MAINTAINED BY PROPERTY OWNER, NOT COA.*

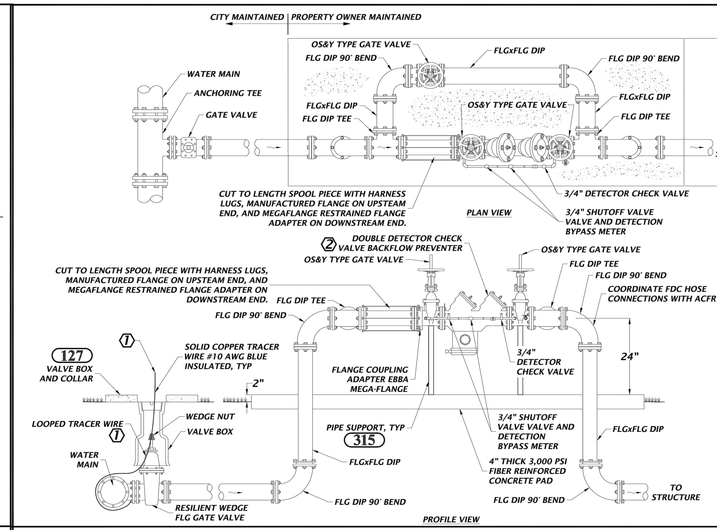
121 **3/4" TO 2" BACKFLOW PREVENTER AND ENCLOSURE**
NTS



KEYED NOTE(S):

1. *VALVE BOX COLLAR FEATURES:*
   - *24" DIAMETER, 11" INNER OPENING*
   - *4" THICK*
   - *TWO RINGS OF #3 REBAR*
   - *4000 PSI TEST CONCRETE*
2. *SUPPLIER AND PRODUCT:*
   - *MASONRY SUPPLY, INC., SELMA, NC OR EQUAL*
   - *ITEM: 24" CONCRETE VALVE BOX COLLAR OR EQUAL*
   - *PART: MSVB-24 OR EQUAL*
3. *PAINT VALVE BOX COVER AND COLLAR AS PER 307*
4. *COVER SHALL BE TRAFFIC RATED AS PER DETAIL 264*

127 **VALVE BOX COVER**
NTS



GENERAL NOTE(S):

1. *PROVIDE FREEZE PROTECTION BOX AS FOLLOWS:*
   - *CORRUGATED ALUMINUM EXTERIOR WITH INTERIOR INSULATION*
   - *EASY INTERNAL ACCESS FOR TESTING AND MAINTENANCE. PROVIDE CLASPS OR EQUIVALENT.*
   - *BOX SHALL COVER BOTH WATER METER AND BYPASS LINE SEGMENTS.*
2. *BOX SHALL COVER BOTH WATER METER AND BYPASS LINE SEGMENTS.*

KEYED NOTE:

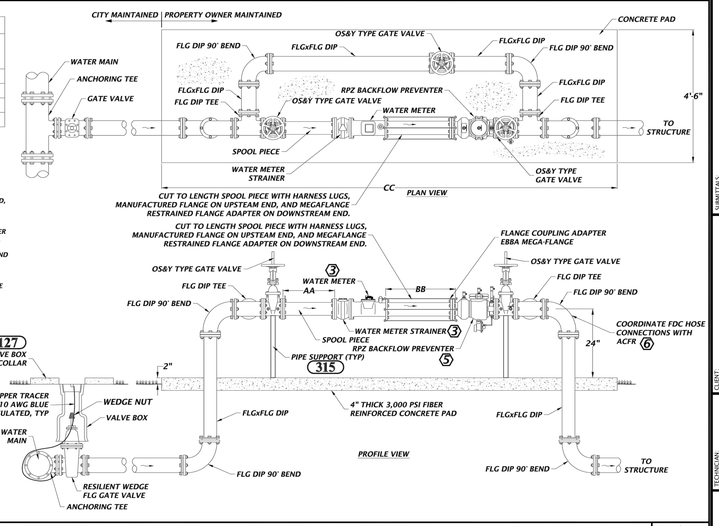
1. *VALVE BOX SERVES AS ACCESS POINT FOR TRACER WIRES. PROVIDE ENOUGH LOOPED TRACER WIRE SO IT CAN EXTEND 8-INCHES ABOVE VALVE BOX.*
2. *BACKFLOW PREVENTER FURNISHED, INSTALLED AND MAINTAINED BY PROPERTY OWNER, NOT COA.*
3. *IF REQUIRED BY ALACHUA COUNTY FIRE RESCUE (ACFR), REPLACE ELBOW WITH TEE AND FDC HOSE CONNECTIONS.*

139 **FIRE LINE 4" AND LARGER DOUBLE DETECTOR CHECK VALVE BACKFLOW PREVENTER (NO DOWNSTREAM DIESEL FIRE PUMP)**
NTS

DIMENSION			
METER SIZE	1 AA	2 BB	CC
4"	24"	12"	14'
6"	36"	18"	18'
8"	48"	24"	22'
10"	60"	30"	27'

KEYED NOTE(S):

1. *DIMENSION AA MUST BE MINIMUM 5 TIMES PIPE DIAMETER (UPSTREAM OF METER).*
2. *DIMENSION BB MUST BE MINIMUM 3 TIME PIPE DIAMETER (DOWNSTREAM OF METER).*
3. *WATER METER AND STRAINER FURNISHED, OWNED, AND MAINTAINED BY COA.*
4. *VALVE BOX MAY SERVE AS ACCESS POINT FOR TRACER WIRES. PROVIDE ENOUGH LOOPED TRACER WIRE SO IT CAN EXTEND 8-INCHES ABOVE GRADE.*
5. *BACKFLOW PREVENTER FURNISHED,INSTALLED AND MAINTAINED BY PROPERTY OWNER, NOT COA.*
6. *IF REQUIRED BY ALACHUA COUNTY FIRE RESCUE (ACFR), REPLACE ELBOW WITH TEE AND FDC HOSE CONNECTIONS.*



GENERAL NOTE(S):

1. *PROVIDE FREEZE PROTECTION BOX AS FOLLOWS:*
   - *CORRUGATED ALUMINUM EXTERIOR WITH INTERIOR INSULATION*
   - *EASY INTERNAL ACCESS FOR TESTING AND MAINTENANCE. PROVIDE CLASPS OR EQUIVALENT.*
   - *BOX SHALL COVER BOTH WATER METER AND BYPASS LINE SEGMENTS.*

148 **POTABLE WATER 4" AND LARGER WATER METER AND BACKFLOW PREVENTER ASSEMBLY**
NTS

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Alachua, FL 32615
(352) 331-1976
www.chw-inc.com
est. 1988 FLORIDA CA-5075
CHW Professional Consultants

SCALE: N/A
VERIFY SCALE BAR IS CORRECT FOR PLOTTED SIZE. IF NOT ONE INCH ON THIS SHEET ADJUST SCALES ACCORDINGLY.

CONSTRUCTION/BID REVISIONS

SUBMITTALS:
02/28/23 - CITY OF ALACHUA AND SRWMD
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CLIENT: TOWER HILL SCOTT ROWE
PROJECT: TOWER HILL HEADQUARTERS
SHEET TITLE: CONSTRUCTION DETAILS

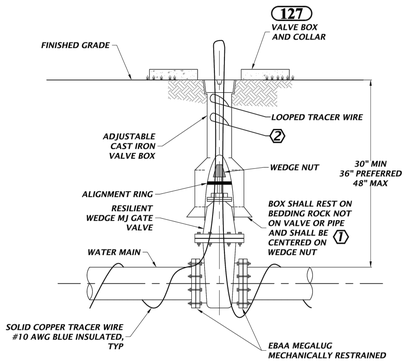
TECHNICIAN: BG/TFC
DESIGNER: A. C. KNAPP, P.E.
QUALITY CONTROL: W. OWEN, P.E.
PROJECT NUMBER: 21-0025

WALKER FAIN OWEN

FL PE No. 94201

SHEET NO.: C2.31

Tech: ThomasG Plot Date: May 08, 2023 8:58am Filename: H:\2021\21-0025\Departments\04_Engineering\03_Civil\Production Files\21-0025 C11.dwg



GENERAL NOTE(S):

1. *PVC EXTENSIONS SHALL NOT BE USED ON VALVE BOX INSTALLATION.*
2. *VALVE BOX LID TO BE LETTERED WITH THE WORD "WATER" OR "RECLAIMED".*

KEYED NOTE(S):

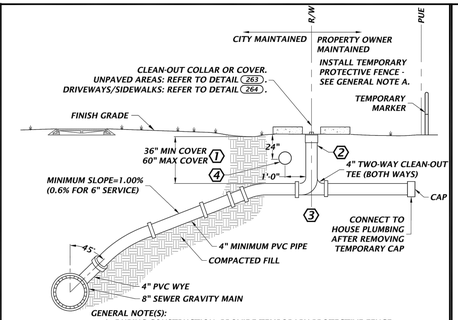
1. *WHEN VALVE BOX IS TO BE INSTALLED IN ROADWAY OR OTHER TRAFFIC AREAS SET VALVE BOX ON FIVE (5) SOLID COMMON BRICKS.*
2. *VALVE BOX MAY SERVE AS ACCESS POINT FOR TRACER WIRES. PROVIDE ENOUGH LOOPED TRACER WIRE SO IT CAN EXTEND 8-INCHES ABOVE GRADE.*

145 GATE VALVE FOR WATER AND RECLAIMED WATER MAINS 4" OR LARGER
NTS

ABBREVIATIONS

APP	APPROXIMATE
ARV	AIR RELEASE VALVE
AWG	AMERICAN WIRE GAUGE
DI	DUCTILE IRON
DIP	DUCTILE IRON PIPE
E	ELECTRIC CONDUCTOR
FLG	FLANGED
FT	FOOT
FM	FORCE MAIN
GA	GAUGE
GALV	GALVANIZED
GRN	GREEN
GSP	GALVANIZED STEEL PIPE
GV	GATE VALVE
ID	INSIDE DIAMETER
LF	LINEAR FEET
MAX	MAXIMUM
MIN	MINIMUM
MJ	MECHANICAL JOINT
NTS	NOT TO SCALE
OD	OUTSIDE DIAMETER
OS&Y	OUTSIDE SCREW AND YOKE
PUE	PUBLIC UTILITY EASEMENT
PVC	POLYVINYL CHLORIDE
R/W	RIGHT OF WAY
RPZ	REDUCED PRESSURE ZONE
SCH	SCHEDULE
SF	SQUARE FEET
SIM	SIMILAR
SS	STAINLESS STEEL
TYP	TYPICAL
URD	UNDERGROUND RESIDENTIAL DISTRIBUTION
YEL	YELLOW
WM	WATER MAIN
WW	WASTEWATER

151 DETAIL ABBREVIATIONS
NTS



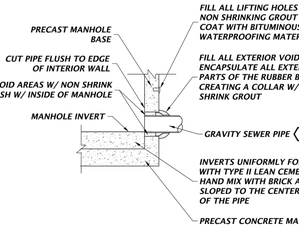
GENERAL NOTE(S):

A. *DURING CONSTRUCTION, PROVIDE TEMPORARY PROTECTIVE FENCE AROUND CLEANOUT PER 324.*
B. *SOLVENT WELD ALL PVC FITTINGS.*
C. *DURING DESIGN AND CONSTRUCTION, REVIEW LATERAL LOCATION RELATIVE TO PROPOSED DRIVEWAY. STRONG CITY OF ALACHUA PREFERENCE IS FOR CLEAN-OUT NOT TO BE INSTALLED IN DRIVEWAY. SEE CITY OF ALACHUA DESIGN AND CONSTRUCTION MANUAL.*

KEYED NOTE(S):

1. *CONTRACTOR SHALL VERIFY SUFFICIENT VERTICAL DIMENSION TO INSTALL UTILITIES ABOVE LATERAL.*
2. *DO NOT CONNECT HOUSE PLUMBING TO STUB RISER.*
3. *DETAIL SHOWS CLEAN-OUT (CO) AT R/W. INSTALLING CITY MAINTAINED CO BETWEEN R/W AND MIDDLE OF PUE IS PERMITTED. CITY OF ALACHUA MUST APPROVE LOCATION IF CO IS INSTALLED BETWEEN MIDDLE OF PUE AND PUE TERMINUS.*
4. *TEMPO OMNI MARKER II: ELECTRONIC MARKER, SANITARY GREEN, MODEL OM-6, PART 52085009.*

200 WASTEWATER SERVICE LATERAL
NTS



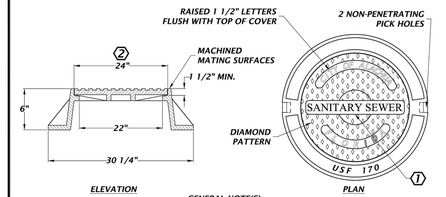
GENERAL NOTE:

RUBBER BOOT, DOUBLE BANDED, 316 S/S CLAMPS, MEETING THE ASTM C923 STANDARD. Kor-N-Seal® I EX SERIES CONNECTOR WITH DOUBLE STAINLESS STEEL BANDS OR EQUAL

KEYED NOTE(S):

1. *ESPECIALLY FOR RETRO FIT WORK, INSTALLING A GRAVITY SEWER PIPE UP TO 2 FEET ABOVE INVERT IS PERMISSIBLE.*

209 MANHOLE PIPE CONNECTION
NTS



ELEVATION *PLAN*

GENERAL NOTE(S):

1. *USF 170 RING AND CE COVER*
2. *LOAD CLASSIFICATION: HEAVY DUTY*
3. *MATERIAL: GRAY CAST IRON, ASTM A48 CLASS 35B*
4. *PAINT TOP AS PER 307*

KEYED NOTE(S):

1. *INSCRIBING "SANITARY SEWER" ON TWO LINES IS ACCEPTABLE.*
2. *FOR A 72-INCH DIAMETER MANHOLE IN A TYPE 1 APPLICATION, PROVIDE A 30-INCH MANHOLE COVER.*

212 CAST IRON SANITARY SEWER MANHOLE FRAME AND COVER
NTS

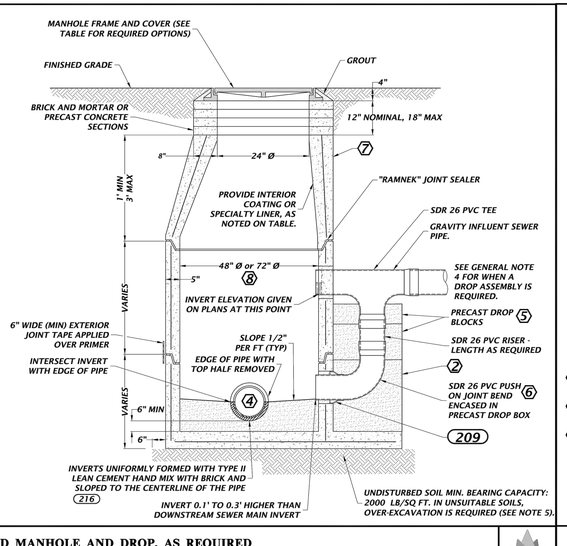
TABLE - MANHOLE LININGS AND COVERS			
APPLICATION TYPE 3	HYDROGEN SULFIDE GAS CONCENTRATION	MANHOLE LINING REQUIRED	MANHOLE COVER AND FLUME
TYPE 1: WASTEWATER DISCHARGE FROM RESIDENTIAL HOMES, EITHER DIRECTLY OR INDIRECTLY	LOW	YES 3	CAST IRON 212
TYPE 2: OFF-ROAD OR CITY ROAD, RECEIVES FORCE MAIN DISCHARGE, EITHER DIRECTLY OR INDIRECTLY	HIGH	YES 1	COMPOSITE 213
TYPE 3: COUNTY OR STATE ROAD, RECEIVES FORCE MAIN DISCHARGE, EITHER DIRECTLY OR INDIRECTLY	HIGH	YES 1	CAST IRON WITH COATING 214

GENERAL NOTE(S):

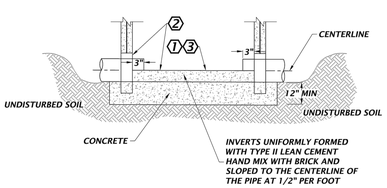
1. *MODIFY DETAIL AS NECESSARY IF DROP NOT REQUIRED.*
2. *PRECAST MANHOLE SECTIONS TO BE MANUFACTURED IN ACCORDANCE WITH THE LATEST EDITIONS OF A.S.T.M. C-478-73 WITH 4000 LB. CONC., TYPE II CEMENT. ALL LIFTING HOLES AND OUTSIDE INSERTS SHALL BE FILLED WITH NON-SHRINK GROUT AND SEALED WITH "RAMNEK" SEALER.*
3. *THE INTERIOR AND EXTERIOR OF MANHOLE AND THE INTERIOR OF THE ADJUSTMENT RINGS SHALL BE JOINED AND SEALED WITH "RAMNEK" SEALER.*
4. *MANHOLE AND DROP ASSEMBLY SHALL BE REQUIRED FOR 4" OR LARGER INFLUENT PIPES WITH 2 FOOT OR GREATER INFLUENT DROP.*
5. *ALL M/H JOINTS BELOW THE TOP CONE SECTION SHALL INCLUDE A 6" WIDE (MIN) EXTERIOR JOINT TAPE (W/PRIMER). TAPE ON THE CONE SECTION IS OPTIONAL.*
6. *PRECAST BASE SECTIONS WITH A BOTTOM SHALL BE INSTALLED ON UNDISTURBED EARTH. BEDDING IS REQUIRED WHEN THE SOIL CONDITIONS ARE WET OR WHEN THE SOIL IS UNSUITABLE. UTILITIES SHALL DETERMINE IN THE FIELD REQUIRED REMOVAL OF UNSUITABLE MATERIAL TO REACH SUITABLE FOUNDATION. IF UNDERCUTTING OCCURS, THE BOTTOM OF THE TRENCH SHALL BE BROUGHT UP TO THE ORIGINAL GRADE WITH APPROVED MATERIAL AND THOROUGHLY COMPACTED TO A MINIMUM OF 95% MODIFIED PROCTOR.*

KEYED NOTE(S):

1. *UNLESS OTHERWISE NOTED OR SHOWN, FOR NEW MANHOLES, PROVIDE AGRU SURE-GRIP YELLOW 3.0 MM THICK LINER. FOR EACH EXISTING MANHOLE THAT CONNECTS TO NEW PIPING, PROVIDE RAVEN 405 EPOXY COATING. FURNISH AND INSTALL THESE PRODUCTS AS PER LATEST VERSION OF CITY OF ALACHUA, PUBLIC SERVICES, REQUIREMENTS FOR DESIGN AND CONSTRUCTION.*
2. *THIS CONCRETE BOX INCLUDES PIPING INTEGRALLY CAST AT THE FACTORY.*
3. *INTERIOR: TWO COATS WATER BASED EPOXY COATING. RED INITIAL COAT FOLLOWED BY GRAY FINAL COAT.*
4. *GRAVITY PIPE WITH TOP HALF REMOVED PASSES THROUGH MANHOLE AS PER 216*
5. *FROM MANHOLE VENDOR. TYPICAL SIZES ARE 2'x2'x2' AND 2'x2'x1'.*
6. *FOR EXISTING MANHOLE, PROVIDE FLOWABLE FILL AROUND JOINT BEND INSTEAD OF PRECAST DROP BOX*
7. *FOR ALL MANHOLES, PROVIDE EXTERIOR COAT AS FOLLOWS: TWO COATS WATER BASED EPOXY COATING. RED INITIAL COAT FOLLOWED BY GRAY FINAL COAT.*
8. *MANHOLE (MH) HEIGHT = RIM ELEVATION MINUS FLOOR ELEVATION. WHEN MANHOLE HEIGHT LESS THAN 20 FEET, PROVIDE 48" DIAMETER. WHEN MANHOLE HEIGHT 20 FEET OR MORE, PROVIDE 72" DIAMETER WITH COVER SIZE AS PER DETAILS 212 213 214*



215 STANDARD MANHOLE AND DROP, AS REQUIRED
NTS



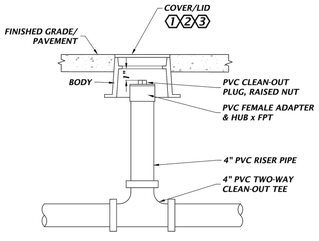
GENERAL NOTE(S):

1. *GRAVITY PIPE PASSES THROUGH MANHOLE. REMOVE ITS TOP HALF.*

KEYED NOTE(S):

1. *BEFORE CUTTING PIPE, INSTALL BRICK/MORTAR MIXTURE FROM MANHOLE BOTTOM TO PIPE CENTERLINE. SLOPE TO PIPE CENTERLINE.*
2. *TYPES 2 OR 3 APPLICATION ONLY: BEFORE CUTTING PIPE, COAT BRICK/MORTAR MIXTURE WITH RAVEN 405 EPOXY COATING. ALSO COAT MANHOLE BOTTOM AND PIPE PENETRATIONS.*
3. *CUT AND REMOVE TOP HALF (CENTERLINE) OF (PVC) PIPE. START CUT 3-INCHES FROM MANHOLE WALL.*

216 GRAVITY PIPE THROUGH STANDARD MANHOLE, LONGITUDINAL VIEW
NTS



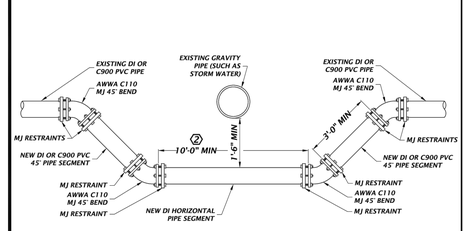
KEYED NOTES:

1. *HEAVY DUTY LOAD RATING MODEL: SIGMA CORPORATION CO-2610S*
2. *COVER/LID CAN ALSO ACCOMMODATE 6" CLEAN-OUT*
3. *PAINT COVER/LID AS PER 307*

GENERAL NOTES:

A. *REFER TO 200*

264 CLEAN-OUT COVER FOR DRIVEWAYS/SIDEWALKS
NTS



GENERAL NOTE(S)

A. *USE THIS DETAIL TO RESOLVE CONFLICT BETWEEN PRESSURIZED PIPE AND GRAVITY PIPE.*
B. *REFER TO 266D.*
C. *MAINTAIN TRACER WIRE CONTINUITY,REFER TO 266H*

KEYED NOTE(S)

1. *FOR ALTERNATE TIE ROD RESTRAINT, REFER TO 266F. MAXIMUM ALLOWABLE TIE ROD LENGTH = 5'-0"*
2. *CENTER HORIZONTAL PIPE SEGMENT ON CENTER OF EXISTING GRAVITY PIPE*

266D RELOCATING WATER/WASTEWATER PIPE TO BELOW EXISTING GRAVITY PIPE
NTS

11801 Research Drive
Alachua, FL 32615
(352) 331-1976
www.chw-inc.com
est. 1988 FLORIDA CA-5075
CHW Professional Consultants

SCALE: N/A
VERIFY SCALE BAR IS CORRECT FOR PLOTTED SIZE OF DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.
0 1"

SUBMITTALS:
02/28/23 CITY OF ALACHUA AND SRWMD
04/18/23 CITY OF ALACHUA AND SRWMD
05/08/23 CITY OF ALACHUA AND SRWMD

CLIENT: TOWER HILL SCOTT ROWE
PROJECT: TOWER HILL HEADQUARTERS
SHEET TITLE: CONSTRUCTION DETAILS

TECHNICIAN: BG/TTC
DESIGNER: M. COWAP, P.E.
QUALITY CONTROL: W. OWEN, P.E.
PROJECT NUMBER: 21-0025

WALKER FAIN OWEN

FL PE No. 94201

SHEET NO.: C2.32

CONSTRUCTION/BID REVISIONS:

Tech: ThomasC Plot Date: May 08, 2023 - 8:37am Filename: J:\2021\21-0025 Development\04_Engineering\02_Plans\Production Files\21-0025 Standard Details.dwg

A

B

C

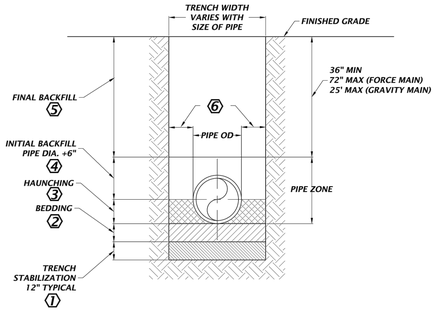
D

GENERAL NOTE(S):

1. *WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.*
2. *ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.*
3. *DEPTH FOR REMOVAL OF UNSUITABLE MATERIAL SHALL GOVERN DEPTH OF BEDDING ROCK BELOW THE PIPE. UTILITIES SHALL DETERMINE IN THE FIELD REQUIRED REMOVAL OF UNSUITABLE MATERIAL TO REACH SUITABLE FOUNDATION. THE BOTTOM OF THE TRENCH SHALL NOT BE EXCAVATED BELOW THE SPECIFIED GRADE. IF UNDERCUTTING OCCURS, THE BOTTOM OF THE TRENCH SHALL BE BROUGHT UP TO THE ORIGINAL GRADE WITH APPROVED MATERIAL AND THOROUGHLY COMPACTED TO A MINIMUM OF 95% MODIFIED PROCTOR.*
4. *FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES.*

KEYED NOTE(S):

1. *TRENCH STABILIZATION SHALL BE PROVIDED TO A DEPTH OF 12-INCHES. THE MATERIAL SHALL BE NO. 57 STONE.*
2. *BEDDING SHALL BE A MINIMUM OF 6-INCHES AND COMPOSED OF IMPORTED GRANULAR FILL. COMPACT TO 95% STANDARD PROCTOR, AASHTO T-99.*
3. *HAUNCHING PORTION OF THE PIPE ZONE SHALL BE PLACED TO THE SPRINGLINE OF THE PIPE AND COMPOSED OF IMPORTED GRANULAR FILL. COMPACT TO 95% STANDARD PROCTOR ASSHTO T-99.*
4. *INITIAL BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180. FROM THE SPRINGLINE OF THE PIPE TO TWO (2) FEET ABOVE THE PIPE THE SOIL SHALL BE CAREFULLY BACKFILLED IN 6-INCH LIFTS AND THE SOIL CONSOLIDATED WITH THE HAND OPERATED TAMPING MACHINE (OR AS REQUIRED BY CITY, COUNTY, OR STATE INSPECTORS).*
5. *FINAL BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180. AFTER PLACEMENT AND COMPACTION OF THE INITIAL BACKFILL, THE BALANCE OF THE BACKFILL MATERIAL MAY BE MACHINE PLACED OR AS REQUIRED BY THE INSPECTOR AND SHALL NOT CONTAIN ANY ROCKS OR DEBRIS.*
6. *12" MINIMUM*



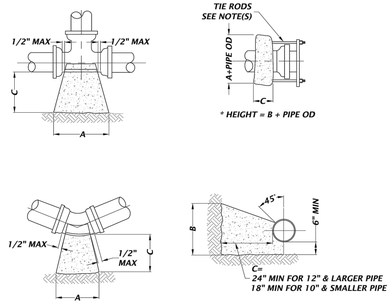
303 **BEDDING AND TRENCHING DETAIL**
NTS

GENERAL NOTE(S):

1. *ALL BEARING SURFACES TO BE CARRIED TO UNDISTURBED SOIL.*
2. *THESE TABLES SHOW MINIMUM SIZES FOR THRUST BLOCKS IN GOOD SOIL (A-1 THRU A-3, CLEAN SANDS AND GRAVELS) WITH MINIMUM BEARING CAPACITY OF 2000 psi.*
3. *POOR SOILS A-4 THRU A-8, SILTY SOILS, CLAYS, MUCK AND PEAT WILL REQUIRE LARGER THRUST BLOCKING.*
4. *BOTH CONCRETE THRUST BLOCKS AND TIE RODS MUST BE USED WHEN, IN THE JUDGEMENT OF THE ENGINEER, THE NATURE AND CRITICALITY OF AN INSTALLATION IS SUCH AS TO REQUIRE POSITIVE ASSURANCE OF STABILITY.*
5. *THE USE OF THRUST BLOCKS SHALL BE LIMITED TO SITUATIONS SUCH AS POINT REPAIR WHERE EXPOSING SEVERAL JOINTS OF PIPE IS NOT FEASIBLE DUE TO EXISTING GROUND CONDITIONS.*
6. *CONCRETE COLLARS WITH TIE RODS MAY BE USED ON DEAD END LINES AT THE CONTRACTOR'S DISCRETION. NUMBER OF TIE RODS REQUIRED IS AS FOLLOWS:*

3" - 8"	*DIAMETER MAIN - 2 TIE RODS REQUIRED PER JOINT (5/8" ROD)*
10" - 12"	*DIAMETER MAIN - 4 TIE RODS REQUIRED PER JOINT (5/8" ROD)*
14" - 16"	*DIAMETER MAIN - 6 TIE RODS REQUIRED PER JOINT (5/8" ROD)*

7. *TIE RODS AND NUTS SHALL CONFORM TO AWWA/ANSI CIII/A21.11*
8. *TIE RODS AND NUTS SHALL PROVIDE MIN YIELD AND TENSILE STRENGTH OF 45,000 PSI AND 60,000 PSI, RESPECTIVELY.*
9. *MAXIMUM TEST PRESSURE TO BE 150 PSI.*
10. *SAFETY FACTOR = 1.5*



THRUST BLOCK FOR BENDS

	90° BEND			SF BEARING	45° BEND			SF BEARING	22-1/2° BEND			SF BEARING	11-1/4° BEND			SF BEARING
SIZE	*A*	*B*	*C*	*SURFACE*	*A*	*B*	*C*	*SURFACE*	*A*	*B*	*C*	*SURFACE*	*A*	*B*	*C*	*SURFACE*
4"	*16"*	*16"*	*18"*	*1.78*	*14"*	*16"*	*18"*	*1.56*	*14"*	*16"*	*18"*	*1.56*	*14"*	*16"*	*18"*	*1.56*
6"	*22"*	*32"*	*18"*	*4.89*	*16"*	*18"*	*18"*	*2.00*	*14"*	*16"*	*18"*	*1.56*	*14"*	*16"*	*18"*	*1.56*
8"	*32"*	*36"*	*18"*	*8.00*	*24"*	*28"*	*18"*	*4.67*	*16"*	*18"*	*18"*	*2.00*	*14"*	*16"*	*18"*	*1.56*
10"	*36"*	*46"*	*18"*	*11.50*	*26"*	*36"*	*18"*	*6.50*	*20"*	*24"*	*18"*	*3.33*	*14"*	*18"*	*18"*	*1.75*
12"	*44"*	*56"*	*24"*	*17.11*	*32"*	*40"*	*24"*	*8.89*	*24"*	*30"*	*24"*	*5.00*	*16"*	*20"*	*24"*	*2.22*
14"	*52"*	*62"*	*24"*	*22.39*	*36"*	*48"*	*24"*	*12.00*	*26"*	*36"*	*24"*	*6.50*	*20"*	*24"*	*24"*	*3.33*
16"	*58"*	*72"*	*24"*	*29.00*	*40"*	*54"*	*24"*	*15.00*	*32"*	*38"*	*24"*	*8.44*	*22"*	*26"*	*24"*	*3.97*

THRUST BLOCK FOR TEES AND PLUGS

	90° BEND			SF BEARING
SIZE	*A*	*B*	*C*	*SURFACE*
4"	*16"*	*16"*	*18"*	*1.78*
6"	*20"*	*24"*	*18"*	*3.33*
8"	*26"*	*32"*	*18"*	*5.78*
10"	*32"*	*40"*	*18"*	*8.89*
12"	*36"*	*48"*	*24"*	*12.00*
14"	*40"*	*56"*	*24"*	*15.56*
16"	*48"*	*60"*	*24"*	*20.00*

306 **THRUST BLOCK AND TIE ROD DETAILS**
NTS

PAINT SYSTEM NO. 5
SURFACE PREPARATION -PRESSSURE WASH SURFACE TO BE PAINTED
OPTIMAL APPLICATION CONDITIONS
AMBIENT TEMPERATURE BETWEEN 55 AND 75 DEGREES F.
HUMIDITY BELOW 60 PERCENT
IF OUTSIDE THESE LIMITS, REQUEST PERMISSION TO APPLY PAINT FROM COA INSPECTOR OR SERVICES DURING CONSTRUCTION ENGINEER
APPLY (SPRAY) FIRST COAT
APPLY (SPRAY) SECOND COAT EITHER WITHIN TWO HOURS OR MORE THAN 48 HOURS AFTER APPLYING FIRST COAT.
PRODUCT
KRYLON SPAY PAINT
FUSION ALL-IN-ONE
PAINT PLUS PRIMER
COLORS
POTABLE WATER - GLOSS PATRIOTIC BLUE
WASTEWATER - GLOSSY SPRING GRASS
RECLAIMED - GLOSSY ICY GRAPE

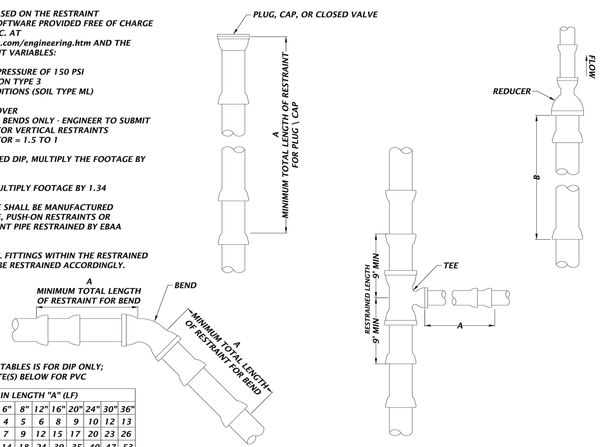
307 **PAINT SYSTEM NO. 5**
NTS

GENERAL NOTE(S):

1. *THIS TABLE IS BASED ON THE RESTRAINT CALCULATION SOFTWARE PROVIDED FREE OF CHARGE BY EBAA IRON INC. AT http://www.ebaa.com/engineering.htm AND THE FOLLOWING INPUT VARIABLES:*

A. MAXIMUM TEST PRESSURE OF 150 PSI
B. LAYING CONDITION TYPE 3
C. POOR SOIL CONDITIONS (SOIL TYPE ML)
D. USING DIP
E. 2 FEET OF COVER
F. HORIZONTAL BENDS ONLY - ENGINEER TO SUBMIT CALCULATIONS FOR VERTICAL RESTRAINTS
G. SAFETY FACTOR = 1.5 TO 1

2. *FOR POLYWRAPPED DIP, MULTIPLY THE FOOTAGE BY 1.50*
3. *FOR PVC PIPE, MULTIPLY FOOTAGE BY 1.34*
4. *RESTRAINED PIPE SHALL BE MANUFACTURED RESTRAINED PIPE, PUSH-ON RESTRAINTS OR MECHANICAL JOINT PIPE RESTRAINED BY EBAA MEGALUG.*
5. *ANY ADDITIONAL FITTINGS WITHIN THE RESTRAINED SECTION SHALL BE RESTRAINED ACCORDINGLY.*



NOTE: THIS TABLES IS FOR DIP ONLY; SEE NOTE(S) BELOW FOR PVC

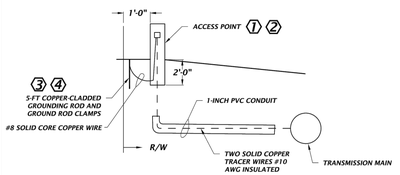
RESTRAIN LENGTH "A" (LF)								
FITTING	*4"*	*6"*	*8"*	*12"*	*16"*	*20"*	*24"*	*30"*	*36"*
11¼° BEND	*3*	*4*	*5*	*6*	*8*	*9*	*10*	*12*	*13*
22½° BEND	*5*	*7*	*9*	*12*	*15*	*17*	*20*	*23*	*26*
45°/OFFSET	*10*	*14*	*18*	*24*	*30*	*35*	*40*	*47*	*53*
90° BEND	*24*	*33*	*42*	*58*	*72*	*85*	*97*	*112*	*126*
DEAD END	*42*	*58*	*75*	*104*	*131*	*157*	*181*	*213*	*243*

A=MINIMUM FOOTAGE OF PIPE TO BE RESTRAINED.

	RESTRAIN (LF)	
FITTING SIZE	*TEE "A"*	*REDUCER "B"*
4x4	*21*	*"*
6x4	*10*	*30*
6x6	*37*	*"*
8x4	*A.T.*	*54*
8x6	*28*	*32*
8x8	*54*	*"*
12x4	*A.T.*	*90*
12x6	*11*	*76*
12x8	*37*	*55*
12x12	*82*	*"*
16x6	*A.T.*	*111*
16x8	*21*	*96*
16x12	*66*	*56*
16x16	*109*	*"*
20x6	*A.T.*	*141*
20x8	*8*	*130*
20x12	*51*	*99*
20x16	*93*	*55*
20x20	*134*	*"*
24x6	*A.T.*	*168*
24x8	*A.T.*	*159*
24x12	*37*	*134*
24x16	*77*	*99*
24x20	*117*	*54*
24x24	*157*	*"*
30x6	*A.T.*	*203*
30x8	*A.T.*	*196*
30x12	*20*	*177*
30x16	*57*	*150*
30x20	*94*	*116*
30x24	*132*	*75*
30x30	*189*	*"*
36x6	*A.T.*	*235*
36x8	*A.T.*	*229*
36x12	*7*	*214*
36x16	*40*	*193*
36x20	*74*	*166*
36x24	*109*	*133*
36x30	*162*	*74*
36x36	*218*	*"*

A.T.=RESTRAINT REQUIRED AT TEE ONLY.
"-NOT APPLICABLE

309 **JOINT RESTRAINT**
NTS

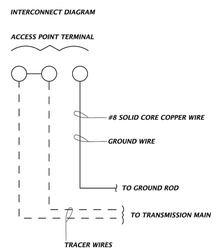


GENERAL NOTE(S):

1. *THIS DETAIL APPLIES TO WATER, WASTEWATER, OR RECLAIMED WATER TRANSMISSION MAINS.*

KEYED NOTE(S):

1. *PRODUCT: PROMARK CATHODIC PROTECTION TEST-STATION, 3-INCH TEST STATION WITH STANDARD 5 STAINLESS STEEL TERMINALS, PART # PM-TS3.*
2. *COLORS: BLUE FOR POTABLE WATER, GREEN FOR WASTEWATER, PURPLE FOR RECLAIMED WATER.*
3. *INSTALL ROD SO TOP IS ABOUT 3-INCHES BELOW GRADE.*
4. *DO NOT LOCATE GROUNDING ROD IN PATH OF TRACER WIRE.*



318 **ACCESS POINT FOR TRANSMISSION MAIN**
NTS

FLOW STREAMS
POTABLE WATER
WASTEWATER FORCE MAIN
WASTEWATER GRAVITY

LINE LEGENDS
TRACER WIRE
SUBDIVISION BOUNDARY OR PROPERTY LOT BOUNDARY
TRACER WIRE CONNECTOR
GROUND WIRE

SYMBOLS
ACCESS POINT WITH PROVISIONS TO GROUND TRANSMITTER
MANHOLE
GENERAL VALVE WITH VALVE BOX USED AS ACCESS POINT. (NON-GROUNDED)
LIFT STATION
METER BOX
FIRE HYDRANT

GENERAL NOTE(S):

1. *RIGHT-OF-WAY AND PUBLIC UTILITY EASEMENTS NOT SHOWN.*
2. *THESE CONFIGURATION DETAILS DO NOT STAND ALONE. SEE RELATED TRACER WIRE DETAILS.*
3. *TRACER WIRE CONNECTORS SHALL BE PRO-LINE TRACER-LOCK CONNECTORS, PART #TL-LUG-SS.*
4. *TRACER WIRE REQUIRED FOR BOTH DUCTILE IRON AND PVC PIPE.*

321A **TRACER WIRE CONFIGURATION: LEGENDS AND ABBREVIATIONS**
NTS

11801 Research Drive
Alachua, FL 32615
(352) 331-1976
www.chw-inc.com
est. 1988 FLORIDA CA-5075
CHW Professional Consultants

SCALE: N/A
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET ADJUST SCALES ACCORDINGLY
0 1"

CONSTRUCTION/BID REVISIONS

SUBMITTALS:
02/28/23 - CITY OF ALACHUA AND SRWMD
04/14/23 - CITY OF ALACHUA AND SRWMD
05/08/23 - CITY OF ALACHUA AND SRWMD

CLIENT: TOWER HILL
SCOTT ROWE
PROJECT: TOWER HILL HEADQUARTERS
SHEET TITLE: CONSTRUCTION DETAILS

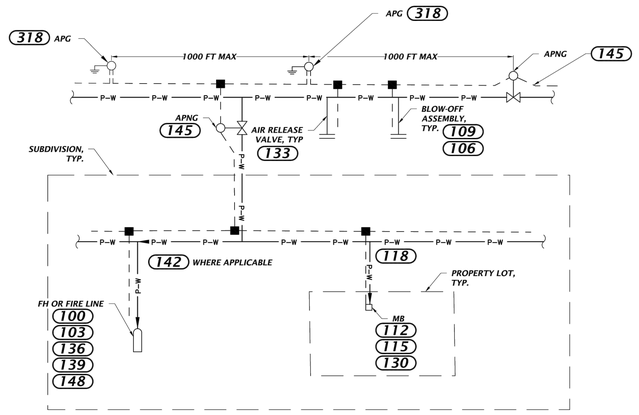
TECHNICIAN: BG/TFC
DESIGNER: N. CONWAY, P.E.
QA/QC CONTROL: W. OWEN, P.E.
PROJECT NUMBER: 21-0025

WALKER FAIN OWEN

FL PE No. 94201

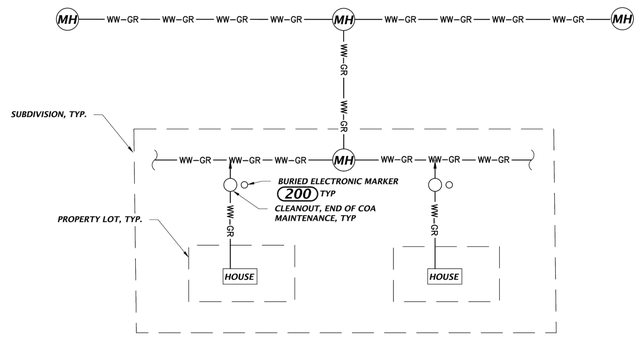
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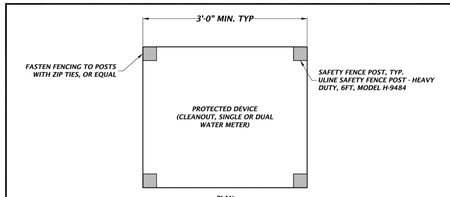
GENERAL NOTES: SEE 321A

321B POTABLE (OR RECLAIMED) TRACER WIRE CONFIGURATION
NTS



GENERAL NOTES: SEE 321A

321D WASTEWATER GRAVITY SYSTEM TRACER WIRE CONFIGURATION
NTS

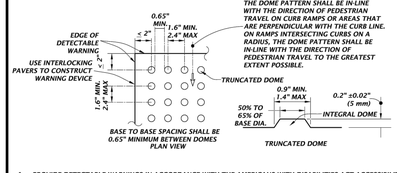


GENERAL NOTE(S):

A. PROVIDE TEMPORARY PROTECTIVE FENCE AS SOON AS DEVICE (CLEANOUT, WATER METER BOX AND/OR YOKE BAR) IS INSTALLED.

B. REMOVE FENCE ONCE BLDG HAS RECEIVED CERTIFICATE OF OCCUPANCY (CO).

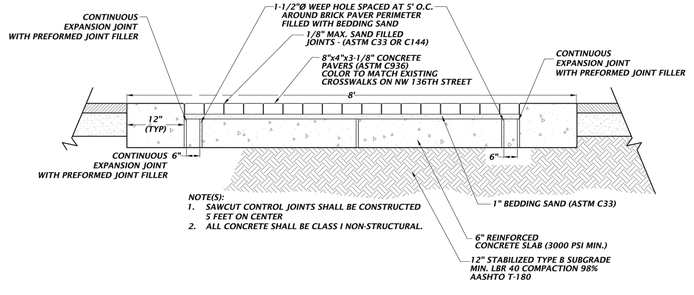
324 TEMPORARY PROTECTIVE FENCE
NTS



THE DOME PATTERN SHALL BE IN-LINE WITH THE DIRECTION OF PEDESTRIAN TRAVEL ON CURB RAMPS OR AREAS THAT ARE PERPENDICULAR WITH THE CURB LINE. ON RAMPS INTERSECTING CURBS ON A RADIUS, THE DOME PATTERN SHALL BE IN-LINE WITH THE DIRECTION OF PEDESTRIAN TRAVEL TO THE GREATEST EXTENT POSSIBLE.

1. PROVIDE DETECTABLE WARNINGS IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG) SECTION 705-DETECTABLE WARNINGS ON WALKING SURFACES AND THE 2020 FLORIDA BUILDING CODE, ACCESSIBILITY, CHAPTER 7, SECTION 705.
2. RAISED TRUNCATED DOMES SHALL HAVE A BASE DIAMETER FROM 0.9" MIN TO 1.4" MAX, A TOP DIAMETER FROM 50% TO 65% OF BASE DIAMETER, A HEIGHT OF 0.2 INCH (5 mm) NOMINAL, CENTER-TO-CENTER SPACING FROM 1.6" MIN TO 2.4" MAX, AND BASE-TO-BASE SPACING OF 0.65% MINIMUM, MEASURED BETWEEN THE MOST ADJACENT DOMES ON A SQUARE GRID.
3. SURFACES SHALL CONTRAST VISUALLY WITH ADJACENT WALKING SURFACES EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT.
4. ALL SIDEWALK CURB RAMPS SHALL HAVE DETECTABLE WARNING SURFACES THAT EXTEND THE FULL WIDTH OF THE RAMP AND IN THE DIRECTION OF TRAVEL 24 INCHES.
5. MATS ARE NOT ACCEPTABLE.
6. PROVIDE INTERLOCKING PAVERS AS FOLLOWS:
   A - DETECTABLE WARNING SURFACE FOR THE RAMPS SHALL CONSIST OF INTERLOCKING 4" X 8" ADA DETECTABLE WARNING SURFACE PAVERS HAVING A MINIMUM DEPTH OF 2". CONCRETE PAVERS ARE TO MEET ASTM C902 CLASS SX TYPE 1; AND BRICK PAVERS ARE TO MEET ASTM C55, GRADE N, SOLID BRICK COLOR TO MEET ADA CONTRAST REQUIREMENTS.
   B - ALL UNITS SHALL BE SOUND AND FREE OF DEFECTS THAT WOULD INTERFERE WITH THE APPEARANCE OF PROPER PLACEMENT OF THE UNIT OR IMPAIR THE STRENGTH OR LONGEVITY OF THE FINAL STRUCTURE. ANY UNITS THAT ARE STRUCTURALLY DAMAGED DURING THE WORK SHALL BE IMMEDIATELY REMOVED AND REPLACED. THE PAVERS ARE TO BE LAID IN A TWO BY TWO BASKETWEAVE PATTERN, FLUSH WITH THE FINISH GRADE OF THE RAMP SURFACE, AND HAVE GAPS BETWEEN 1/16 AND 1/8 INCH. CUT PAVERS (MASONRY SAW ONLY) SHALL BE NO SMALLER THAN ONE-THIRD OF A WHOLE PAVER.
   C - MODIFY FORMWORK OR PROVIDE FORMED GROUT INFILL BEHIND CURVED DROP CURB SECTIONS TO ENSURE STRAIGHT EDGE RESTRAINT FOR PAVERS.
   D - CONCRETE EDGE RESTRAINT FOR WARNING AREA. MAXIMUM GAP OF 1/8" BETWEEN PAVERS AND EDGE. USE½" RADIUS ALONG CONCRETE EDGES.
   E - WHEN PAVERS ABUT EITHER EARTH/DIRT OR PAVEMENT, A SIX INCH CONCRETE BAND SHALL BE INSTALLED. BAND SHALL BE WITHIN LIMITS OF THE WIDTH OF PROPOSED CONCRETE AND NOT EXTENDED AN ADDITIONAL SIX INCHES..
7. ALL MATERIALS/METHODS TO BE UTILIZED SHALL BE SUBMITTED FOR APPROVAL TO THE ENGINEER AND CITY OF ALACHUA PRIOR TO ORDERING THE MATERIALS/METHODS. FAILURE TO OBTAIN APPROVAL BEFORE ORDERING OR INSTALLATION MAY RESULT IN REMOVAL AND REPLACEMENT AT CONTRACTOR'S EXPENSE. ENGINEER'S APPROVAL DOES NOT RELIEVE THE CONTRACTOR'S RESPONSIBILITY FOR THE PERFORMANCE OF THE ITEM.

403 ADA DETECTABLE WARNING
NTS



NOTE(S):
1. SAWCUT CONTROL JOINTS SHALL BE CONSTRUCTED 5 FEET ON CENTER
2. ALL CONCRETE SHALL BE CLASS I NON-STRUCTURAL.

405A CROSS-WALK BRICK PAVER PAVEMENT DETAIL
NTS

11801 Research Drive
Alachua, FL 32615
(352) 331-1976
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SCALE: N/A
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET ADJUST SCALES ACCORDINGLY.
0 1"

CONSTRUCTION/BID REVISIONS:

SUBMITTALS:
02/28/23 - CITY OF ALACHUA AND SRWMD
04/17/23 - CITY OF ALACHUA AND SRWMD
05/08/23 - CITY OF ALACHUA AND SRWMD

CLIENT: TOWER HILL SCOTT ROWE
PROJECT: TOWER HILL HEADQUARTERS
SHEET TITLE: CONSTRUCTION DETAILS

TECHNICIAN: BG/TFC
DESIGNER: N. COWAP, P.E.
QUALITY CONTROL: W. OWEN, P.E.
PROJECT NUMBER: 21-0025

WALKER FAIN OWEN

FL PE No. 94201

SHEET NO.: C2.34

Tech: ThomasC Plot Date: May 05,2023 8:58am Filename: H:\2021\21-0025\Department\04_Engineering\02_DWGs\Production Files\21-0025 CV.dwg

REFER TO C4.XX SERIES FOR ROADWAY PLANS AND DETAILS

REFER TO ROADWAY PLANS FOR CONTINUATION OF UTILITY DESIGN

8" 45° CLDI BEND

4" CLDI WATER MAIN (36" COVER MIN.)

8" FIRE LINE (DESIGNED BY OTHERS)

PROPOSED P.U.E.

PVC CLDI

4" 45° CLDI BEND

REFER TO INSET A-A

GAS SERVICE (DESIGNED BY OTHERS)

FDC (DESIGNED AND PERMITTED BY OTHERS)

CLDI PVC

6" FIRE LINE (FDC) (DESIGNED AND PERMITTED BY OTHERS)

GAS METER LOCATION REFER TO MEP PLANS FOR CONTINUATION

4" CLDI 22.5° BEND

FIRE LINE (DESIGNED BY OTHERS)

REFER TO INSET B-B

8" GATE VALVE AND BOX (POINT OF SERVICE) END COA MAINT.)

4" GATE VALVE AND BOX

4" WATER METER (END COA MAINT.)

8" CLDI TEE

8" PVC WATER MAIN (MIN. 36" DEPTH)

8" GATE VALVE AND BOX

8"X4" SERVICE SADDLE

8"X2" TAPPED CAP

2" 90° BRASS BEND

2" PE

8" DDC BACKFLOW PREVENTER (DESIGNED AND PERMITTED BY OTHERS)

8" FIRE (DESIGNED & PERMITTED BY OTHERS)

4" PVC WATER SERVICE (MIN. 36" COVER)

4" RPZ BACKFLOW PREVENTER

REFER TO IRRIGATION PLANS FOR CONTINUATION

2" BACKFLOW (REFER TO IRRIGATION PLANS FOR DETAILS)

2" METER (END COA MAINT.)

2" GATE VALVE AND BOX

INSET A-A
SCALE: 1"=10'

8"X6" PVC REDUCER

6" GATE VALVE AND BOX

FIRE HYDRANT ASSEMBLY PER COA DETAIL 103

8"X8"X6" CLDI TEE

6" PVC

6" CLDI 90° BEND

PROPOSED P.U.E.

PROPOSED TRANSFORMER

INSET B-B
SCALE: 1"=10'

SS C/O W/ (H-20) TRAFFIC RATED COVER TOP=131.31 INV=126.25

79'-6" PVC @ 2.00%

SS C/O TOP=131.75 W-INV=127.83 E. INV=127.83

SS C/O W/ (H-20) TRAFFIC RATED COVER TOP=131.61 INV=125.04

57'-5"6" PVC @ 2.11%

PROPOSED BUILDING FFE=132.00 56,590 SF (1ST FLOOR) 14,243 SF (2ND FLOOR)

PROPOSED GAS (DESIGNED BY OTHERS, SHOWN FOR COORD. PURPOSES ONLY)

SS C/O W/ (H-20) TRAFFIC RATED COVER TOP=130.70 INV=123.83

100'-6" PVC @ 2.11%

SS C/O W/ (H-20) TRAFFIC RATED COVER TOP=128.90 INV=121.72

72'-6" PVC @ 2.11%

SS C/O W/ (H-20) TRAFFIC RATED COVER TOP=130.00 INV=120.21

42'-6" PVC @ 2.11%

END CITY OF ALACHUA MAINTENANCE

263'-8" PVC @ 0.40%

PROPOSED P.U.E.

MH-49

MH-50

REFER TO ROADWAY PLANS FOR CONTINUATION OF UTILITY DESIGN

SANITARY SEWER STRUCTURE TABLE

STRUCTURE NAME:	STRUCTURE TYPE	TOP	INVERT ELEV	NORTHING & EASTING
MH-49	SANITARY SEWER MANHOLE PER CITY OF ALACHUA STANDARD DETAILS 212 & 215	124.76'	117.98' SE 117.88' NW	N: 295607.16 E: 2596063.78
MH-50	SANITARY SEWER MANHOLE PER CITY OF ALACHUA STANDARD DETAILS 212 & 215	129.82'	119.03' NW 119.33' NE	N: 295473.39 E: 2596290.17

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Alachua, FL 32615
(352) 331-1976
www.chw-inc.com
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CHW Professional Consultants

SCALE: 1"=30'

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET ADJUST SCALES ACCORDINGLY

CONSTRUCTION BID REVISIONS

SUBMITTALS:
02/28/23 - CITY OF ALACHUA AND SRWMD
04/14/23 - CITY OF ALACHUA AND SRWMD
05/08/23 - CITY OF ALACHUA AND SRWMD

CLIENT: TOWER HILL SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: DETAILED UTILITY SITE PLAN

TECHNICIAN: BG/TFC
DESIGNER: M. COWAP, P.E.
QUALITY CONTROL: W. OWEN, P.E.
PROJECT NUMBER: 21-0025

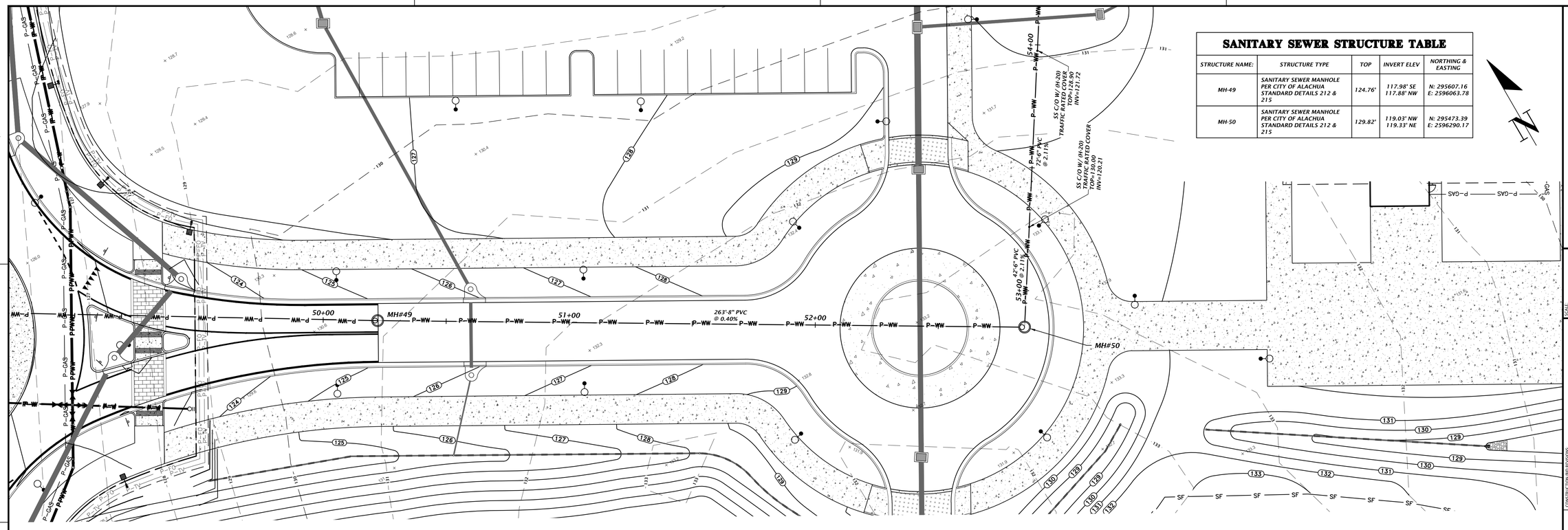
WALKER FAIN OWEN

FL PE No. 94201

SHEET NO.: C3.10

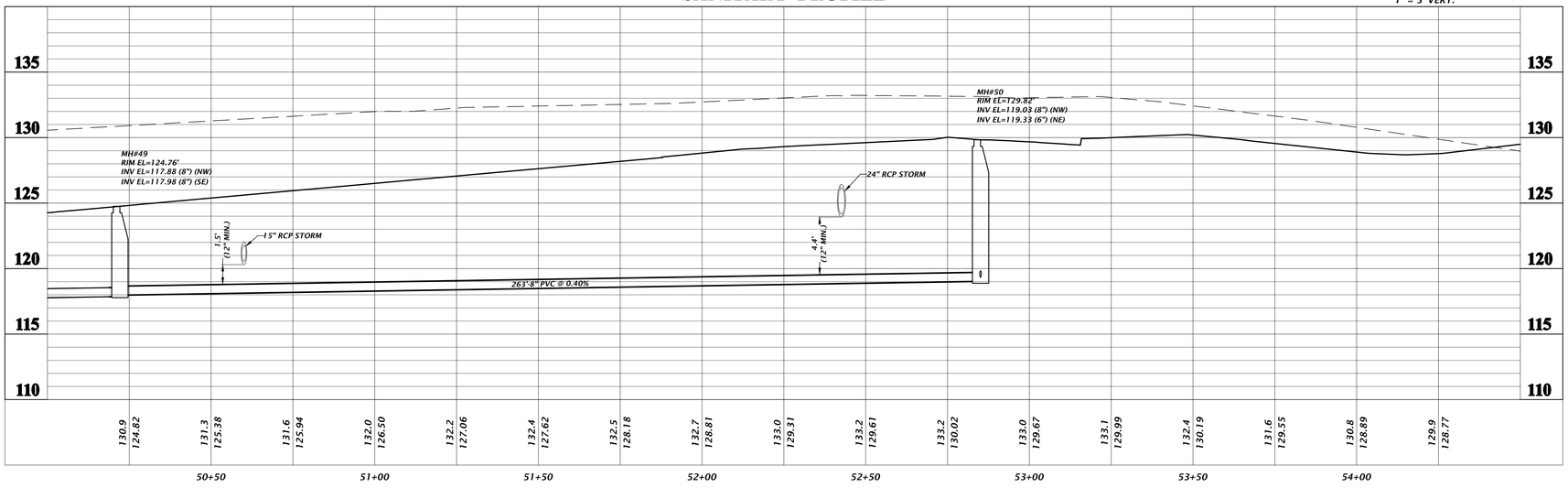
SANITARY SEWER STRUCTURE TABLE

STRUCTURE NAME:	STRUCTURE TYPE	TOP	INVERT ELEV	NORTHING & EASTING
MH-49	SANITARY SEWER MANHOLE PER CITY OF ALACHUA STANDARD DETAILS 212 & 215	124.76'	117.98' SE 117.88' NW	N: 295607.16 E: 2596063.78
MH-50	SANITARY SEWER MANHOLE PER CITY OF ALACHUA STANDARD DETAILS 212 & 215	129.82'	119.03' NW 119.33' NE	N: 295473.39 E: 2596290.17



SANITARY PROFILE

SCALE: 1" = 20' HORIZ.
1" = 5' VERT.



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0 1"

SUBMITTALS:
02/28/23 - CITY OF ALACHUA AND SRWMD
04/14/23 - CITY OF ALACHUA AND SRWMD
05/08/23 - CITY OF ALACHUA AND SRWMD

CLIENT: TOWER HILL
SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: HEADQUARTERS SANITARY PLAN AND PROFILE

TECHNICIAN: BG/TFC
DESIGNER: N. CHWAP, P.E.
QUALITY CONTROL: W. OWEN, P.E.
PROJECT NUMBER: 21-0025

WALKER FAIN OWEN

FL PE No. 94201

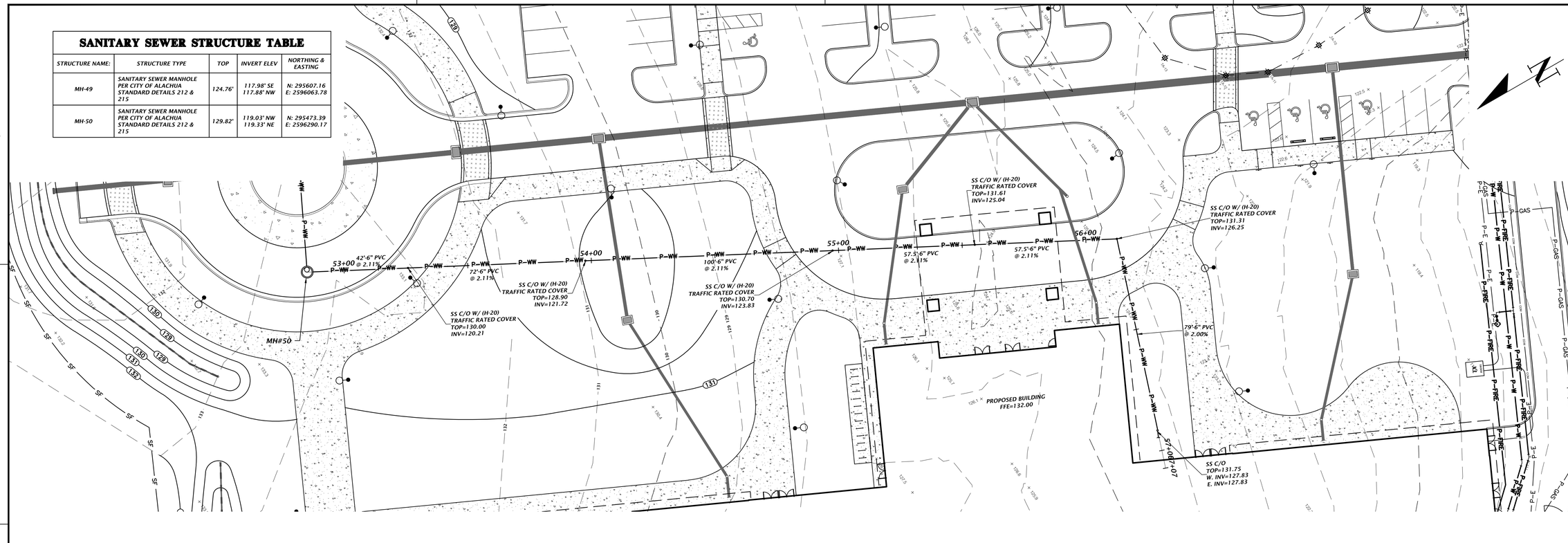
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C3.20

CONSTRUCTION/BID REVISIONS:

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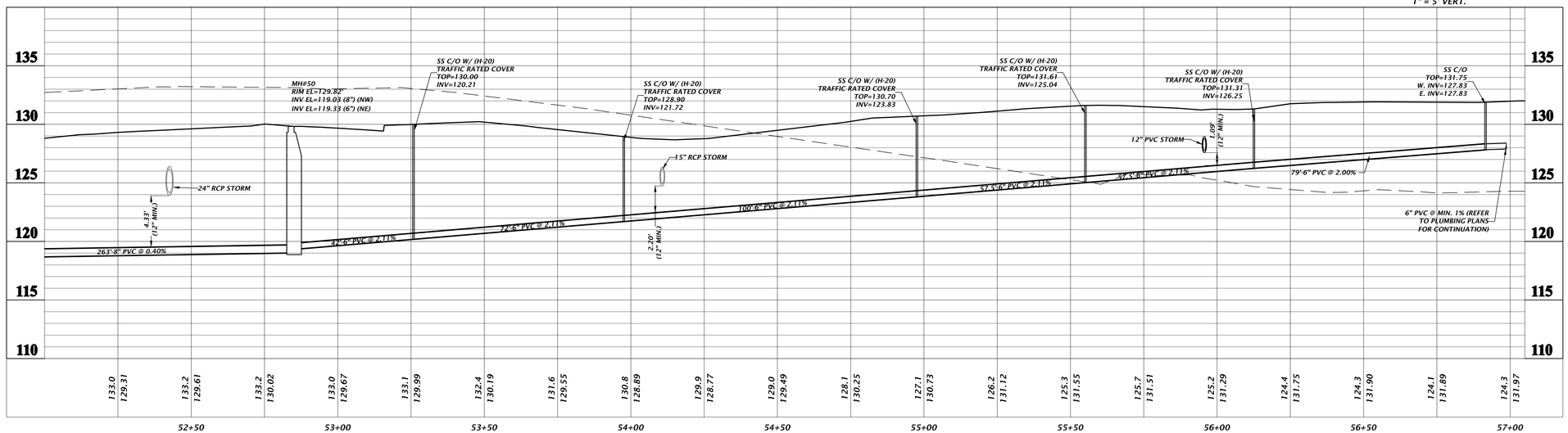
SANITARY SEWER STRUCTURE TABLE

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MH-49	SANITARY SEWER MANHOLE PER CITY OF ALACHUA STANDARD DETAILS 212 & 215	124.76'	117.98' SE 117.88' NW	N: 295607.16 E: 2596063.78
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SANITARY PROFILE

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CONSTRUCTION/BID REVISIONS

SUBMITTALS:
02/28/23 - CITY OF ALACHUA AND SRWMD
04/25/23 - CITY OF ALACHUA AND SRWMD
05/08/23 - CITY OF ALACHUA AND SRWMD

CLIENT: TOWER HILL SCOTT ROWE
PROJECT: TOWER HILL HEADQUARTERS
SHEET TITLE: HEADQUARTERS SANITARY PLAN AND PROFILE

TECHNICIAN: BG/TTC
DESIGNER: I. CONRAD, P.E.
QUALITY CONTROL: W. OWEN, P.E.
PROJECT NUMBER: 21-0025

WALKER FAIN OWEN

FL PE No. 94201

SHEET NO.
C3.21

Tech: ThomasD Plot Date: May 05,2023 9:42am Filename: H:\2021\21-0025\Department\04_Engineering\04_Civil\Production Files\21-0025 SSPP.dwg

LEGEND

E	=	ELECTRIC
FO	=	FIBER OPTIC
G	=	GAS
SS	=	SANITARY SEWER
ST	=	STORM
TV	=	CABLE TELEVISION
W	=	WATER
MUP	=	MULTI-USE PATH

NW 167TH BLVD SOUTH
NW 162ND LANE TO ROUNDABOUT
100' RIGHT-OF-WAY
STA TBD
DESIGN SPEED = 35 MPH
POSTED SPEED = 25 MPH

NW 167TH BLVD NORTH
US 441 TO NW 162ND LANE
100' RIGHT-OF-WAY
STA 16+50 - 19+50
DESIGN SPEED = 35 MPH
POSTED SPEED = 25 MPH

TRAFFIC DATA

COUNT YEAR	= 2022 AADT = 0
ESTIMATED OPENING YEAR	= 2024 AADT = 660
ESTIMATED DESIGN YEAR	= 2044 AADT = 4200
K =9.5 D = 56.0%	T = 3
DESIGN SPEED	= 35 MPH
POSTED SPEED	= 25 MPH
ROUNDABOUT DESIGN SPEED	= 20 MPH
ROUNDABOUT POSTED SPEED	= 15 MPH
CLEAR ZONE	= 14 FEET

NEW CONSTRUCTION
TYPE B STABILITATION (LBR 40)(12")
OPTIONAL BASE GROUP 6 (8")
TYPE SP-12.5 STRUCTURAL COURSE (TRAFFIC B)(2")

NOTE: ELECTRIC AND FIBER OPTIC SHALL BE JOINT TRENCHED WHERE APPLICABLE

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SCALE: N/A
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IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

CONSTRUCTION/BID REVISIONS:

SUBMITTALS:
02/28/23 - CITY OF ALACHUA AND SRWMD
04/14/23 - CITY OF ALACHUA AND SRWMD

CLIENT: TOWER HILL FARMS
PROJECT: TOWER HILLS NEW HQ
SHEET TITLE: TYPICAL ROADWAY SECTIONS

TECHNICIAN: R.L./B.G.
DESIGNER: M. CAMPBELL, E.I.
QUALITY CONTROL: R. WALPOLE, P.E.
PROJECT NUMBER: 21-0025

CODY CASH, P.E.
FL PE No. 92346

SHEET NO.: C4.00

Tools: bryony Plot Date: May 05,2023 7:24am Filename: W:\2021\21-0025\Department\04_Engineering\02_RWAs_ROAD\Production Files\C4.00 Typical Roadway Sections.dwg

LEGEND:

- = 6" THICK CONCRETE (SEE 2.30 FOR DETAIL)
- = 4" THICK CONCRETE (SEE 2.30 FOR DETAIL)
- = PAVEMENT ASPHALT (SEE 2.30 FOR DETAIL)
- (B) = TYPE 'B' CURB AND GUTTER PER FDOT INDEX 520-001
- (E) = TYPE 'E' CURB AND GUTTER PER FDOT INDEX 520-001
- (F) = TYPE 'F' CURB AND GUTTER PER FDOT INDEX 520-001
- (CR-F) = CURB RAMP TYPE 'CR-F' PER FDOT INDEX 522-002
- (CR-E) = CURB RAMP TYPE 'CR-E' PER FDOT INDEX 522-002

GRAPHIC SCALE
0 20 40 80

SEE SHEET C4.14 FOR ROUNDABOUT DESIGN DETAILS

ADA COMPLIANT CROSSWALK TO BE CONSTRUCTED WITH BRICK PAVERS AS PER COA DETAIL 405A. (TYP)

PROPOSED 100' INGRESS/EGRESS EASEMENT

STA: 11+35.48
N: 295697.20
E: 2595894.22

REFER TO SITE PLANS FOR CONTINUATION

CENTER OF RADIUS
STA: 15+86.65
N: 296063.88
E: 2596162.36

CENTER OF RADIUS
STA: 16+68.33
N: 296137.37
E: 2596203.07

CENTER OF RADIUS
STA: 19+67.22
N: 296450.58
E: 2596178.29

CENTER OF RADIUS
STA: 20+57.13
N: 296535.10
E: 2596176.62

CENTER OF RADIUS
STA: 19+82.97
N: 296462.90
E: 2596284.73

CENTER OF RADIUS
STA: 20+63.39
N: 296547.03
E: 2596282.13

MATCHLINE - STA: 21+00.00

L=408.303
=33.4200
R=700.000

SCALE: 1" = 40' HORIZ.
1" = 10' VERT.

100' VC
PVI STA = 10+05.26
PVI ELEV = 125.19
A.D. = 2.22%
K = 45.04
BVCS: 9+55.26
BVCE: 126.41
EVCS: 10+55.26
EVCE: 125.08

PVI STA: 12+17.93
PVI ELEV: 124.28

PVI STA: 10+62.48
PVI ELEV: 125.06

EXISTING GRADE LINE

PROPOSED GRADE LINE

-0.50%
-0.22%
-2.03%
-4.03%

150' VC
PVI STA = 16+90.14
PVI ELEV = 114.68
A.D. = -2.00%
K = 75.14
BVCS: 16+15.14
BVCE: 116.21
EVCS: 17+65.14
EVCE: 111.66

10+00	10+50	11+00	11+50	12+00	12+50	13+00	13+50	14+00	14+50	15+00	15+50	16+00	16+50	17+00	17+50	18+00	18+50	19+00	19+50	20+00	20+50
125.4	125.97	124.6	125.54	124.4	125.25	124.3	125.09	124.2	125.00	124.1	124.87	124.1	124.75	123.9	124.62	123.8	124.50	123.6	124.37	123.5	124.14
123.6	123.63	123.7	123.12	123.8	122.62	123.8	122.11	123.8	121.60	123.7	121.09	123.0	120.58	122.5	120.07	122.0	119.57	121.1	119.06	120.4	118.55
120.0	118.04	119.5	117.53	118.8	117.03	118.5	116.52	117.7	116.00	115.7	115.42	115.0	114.75	114.9	114.00	114.9	113.17	114.0	112.26	112.2	111.26
110.6	110.26	109.6	109.25	108.4	108.24	107.8	107.24	107.2	106.23	106.2	105.22	104.6	104.21	101.7	103.21	101.6	102.20	100.6	101.19	100.0	100.18	98.9	99.18

150	145	140	135	130	125	120	115	110	105	100	95	90	85

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CONSTRUCTION/BID REVISIONS:

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06/16/23 - CITY OF ALACHUA AND SRWMD

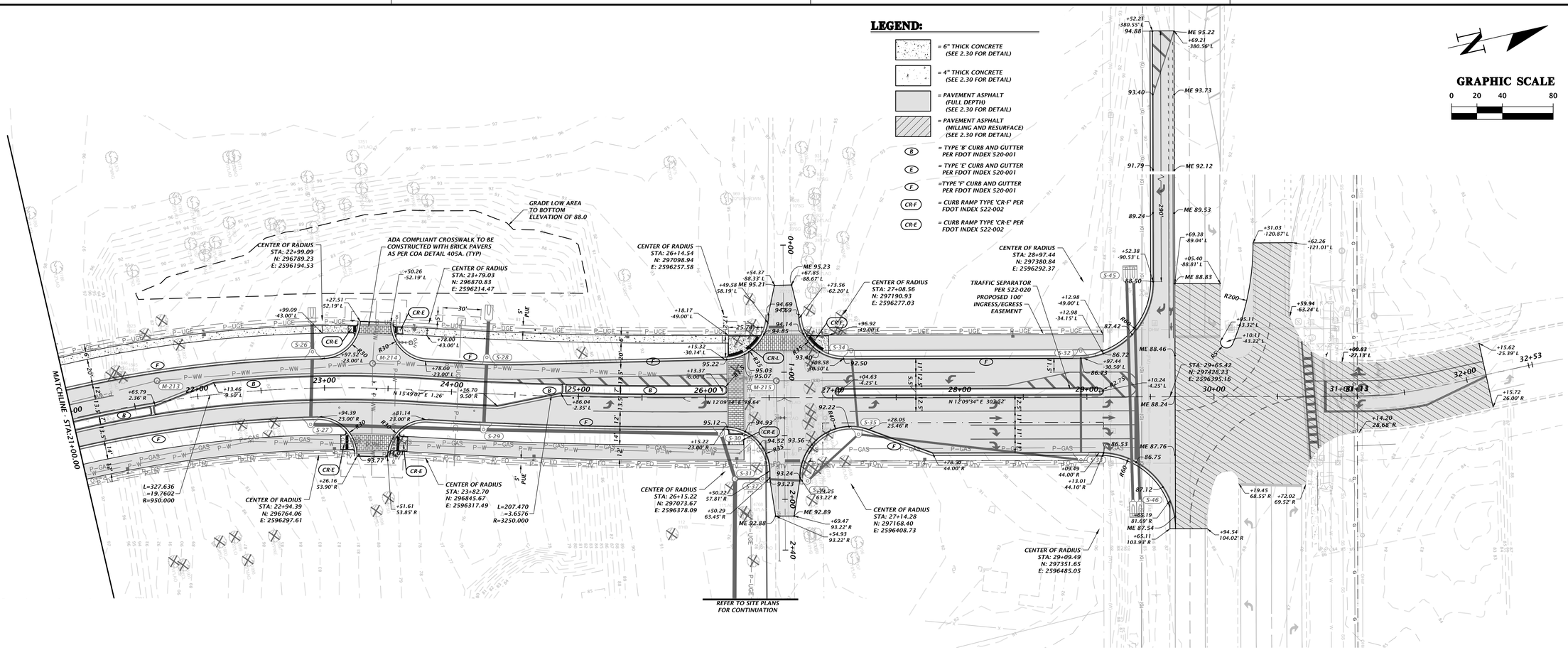
CLIENT: TOWER HILL FARMS
PROJECT: TOWER HILLS NEW HQ
SHEET TITLE: ROADWAY PLAN AND PROFILE

TECHNICIAN: R.L./B.G.
DESIGNER: M. CAMPBELL, E.I.
QUALITY CONTROL: R. WALPOLE, P.E.
PROJECT NUMBER: 21-0025

CODY CASH, P.E.
FL PE No. 92346

SHEET NO: C4.11

Tools: tanyag Plot Date: May 05,2023 7:26am Filename: W:\2021\21-0025\Departments\04_Engineering\02_Civil_ROAD\Production Files\C4-10 Roadway Plan and Profile.dwg



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CONSTRUCTION/BID REVISIONS:

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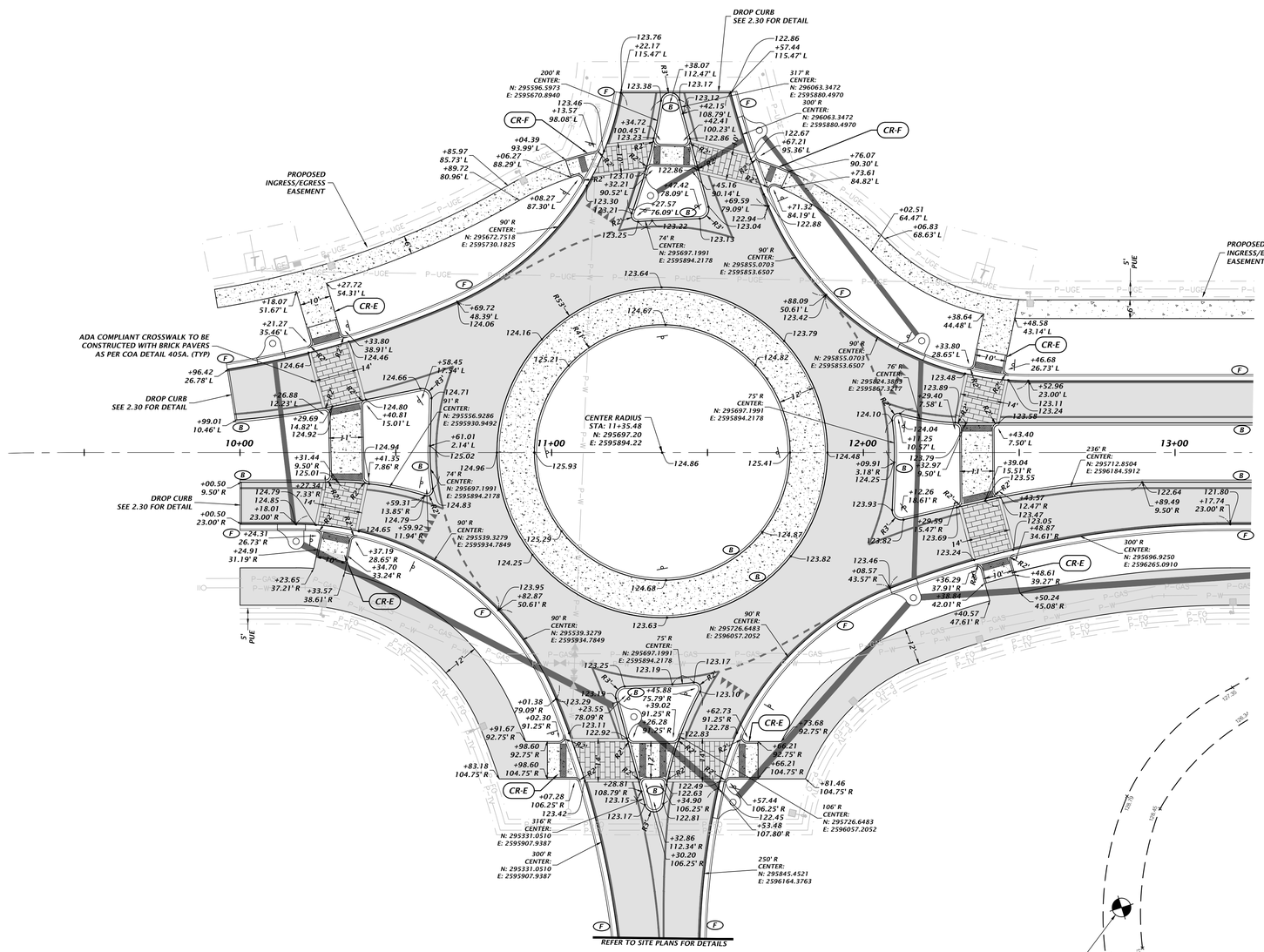
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PROJECT: TOWER HILLS NEW HQ
SHEET TITLE: ROADWAY PLAN AND PROFILE

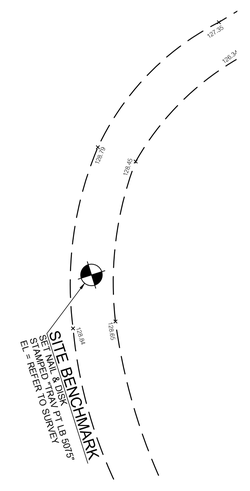
TECHNICIAN: R.L./B.G.
DESIGNER: M. A. CANTRELL, E.I.
QUALITY CONTROL: R. WALPOLE, P.E.
PROJECT NUMBER: 21-0025

CODY CASH, P.E.
FL PE No. 92346

SHEET NO.: C4.12

Path: bryang Plot Date: May 05,2023 7:26am Filename: N:\2021\21-0025\Department\04_Engineering\03_PWDs_ROAD\Production Files\C4.10 Roadway Plan and Profile.dwg





GRAPHIC SCALE

0 10 20 40

LEGEND:

- = 6" THICK CONCRETE (SEE 2.30 FOR DETAIL)
- = 4" THICK CONCRETE (SEE 2.30 FOR DETAIL)
- = PAVEMENT ASPHALT (SEE 2.30 FOR DETAIL)
- (B) = TYPE 'B' CURB AND GUTTER PER FDOT INDEX 520-001
- (E) = TYPE 'E' CURB AND GUTTER PER FDOT INDEX 520-001
- (F) = TYPE 'F' CURB AND GUTTER PER FDOT INDEX 520-001
- (CR-F) = CURB RAMP TYPE 'CR-F' PER FDOT INDEX 522-002
- (CR-E) = CURB RAMP TYPE 'CR-E' PER FDOT INDEX 522-002

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SCALE: 1"=20'

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CONSTRUCTION/BID REVISIONS:

SUBMITTALS:
02/28/23 - CITY OF ALACHUA AND SRWMD
06/14/23 - CITY OF ALACHUA AND SRWMD

CLIENT: TOWER HILL FARMS

PROJECT: TOWER HILLS NEW HQ

SHEET TITLE: ROADWAY ROUNDABOUT PLAN

TECHNICIAN: R.L./B.G.

DESIGNER: M. CARRELL, E.I.

QUALITY CONTROL: R. WALPOLE, P.E.

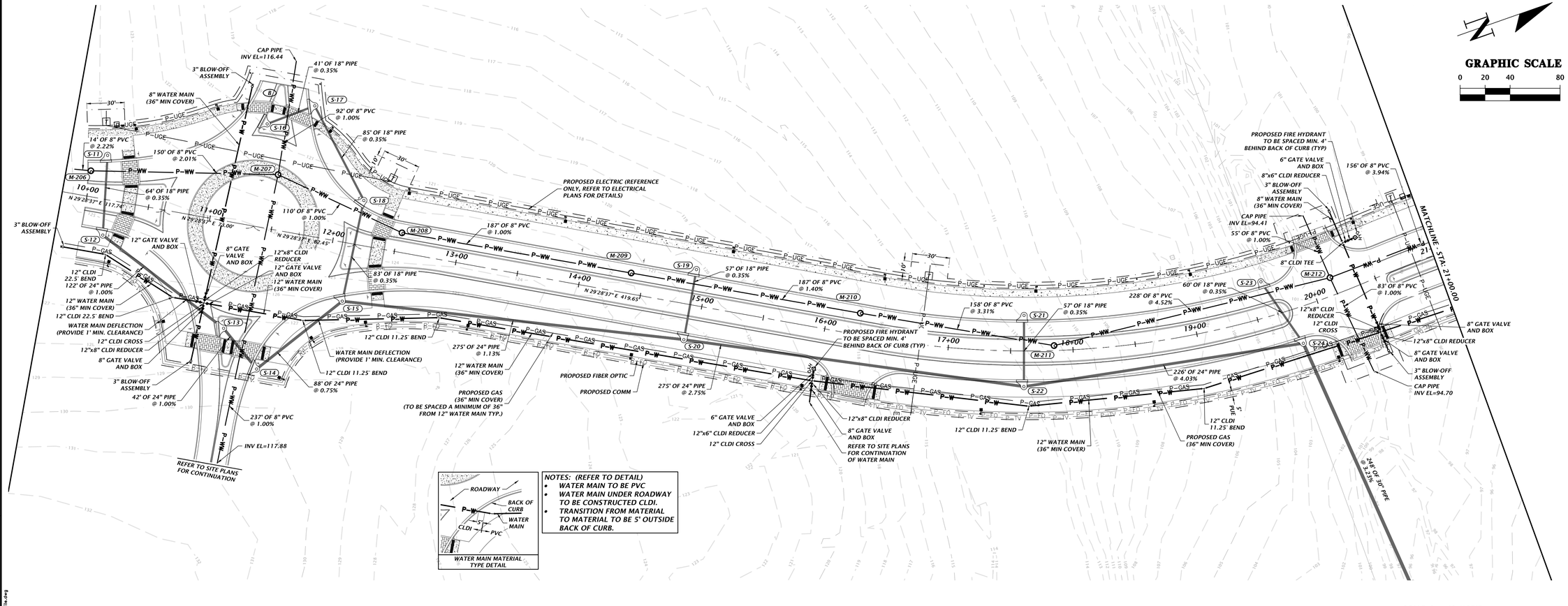
PROJECT NUMBER: 21-0025

CODY CASH, P.E.

FL PE No. 92346

SHEET NO: C4.13

Tech: bryang Plot Date: May 08,2023 7:06am Filename: M:\2021\21-0025\Department\04_Engineering\02_DWGs_ROAD\Production Files\C4.13 Roadway Roundabout Plan.dwg



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06/14/23 - CITY OF ALACHUA AND SJRWMD

CLIENT: TOWER HILL FARMS

PROJECT: TOWER HILLS NEW HQ

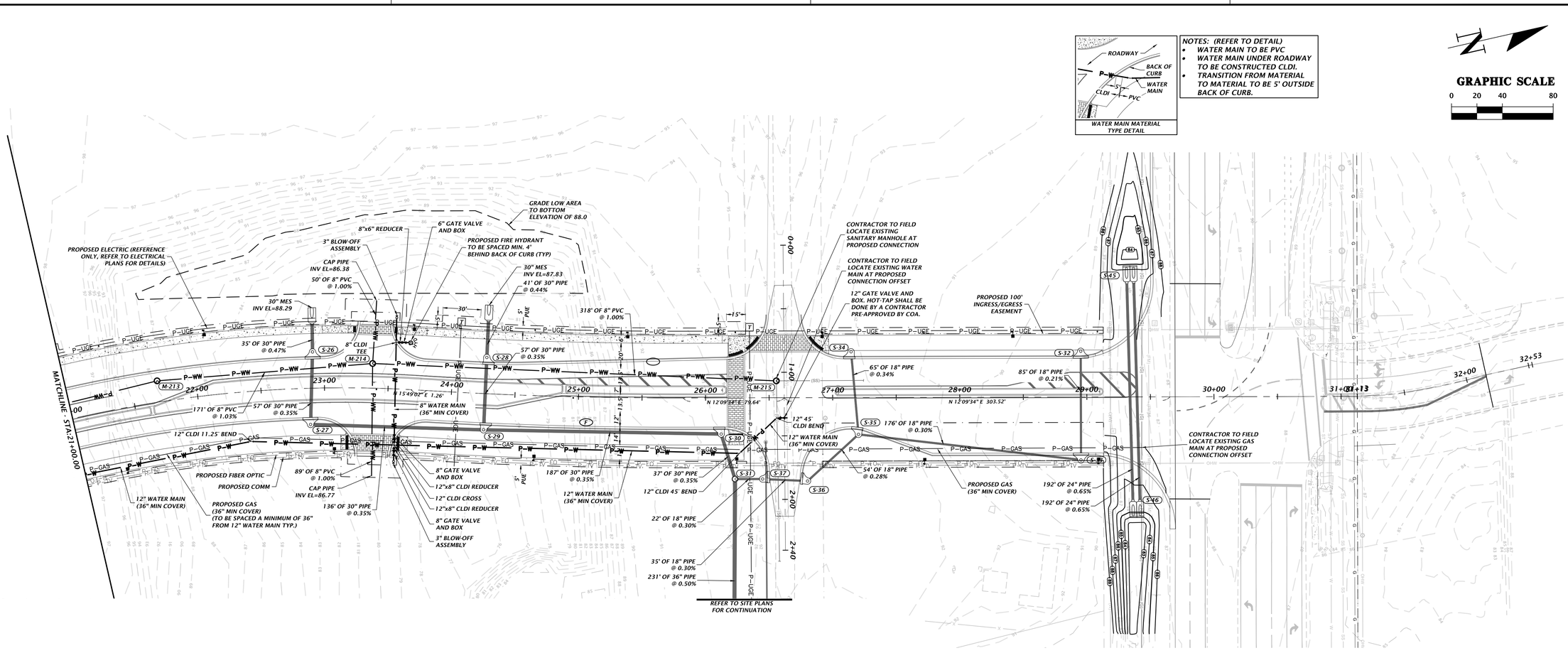
SHEET TITLE: ROADWAY UTILITY PLAN AND PROFILE

TECHNICIAN: R.L./B.G.
DESIGNER: M. CAMPBELL, E.I.
QUALITY CONTROL: R. WALPOLE, P.E.
PROJECT NUMBER: 21-0025

CODY CASH, P.E.
FL PE No. 92346

SHEET NO.: C4.14

Tech: bryang Plot Date: May 05,2023 7:27pm Filename: N:\2021\21-0025\Department\04_Engineering\03_DWGs_RAWS\Production Files\C4.14 Roadway Utility Plan and Profile.dwg

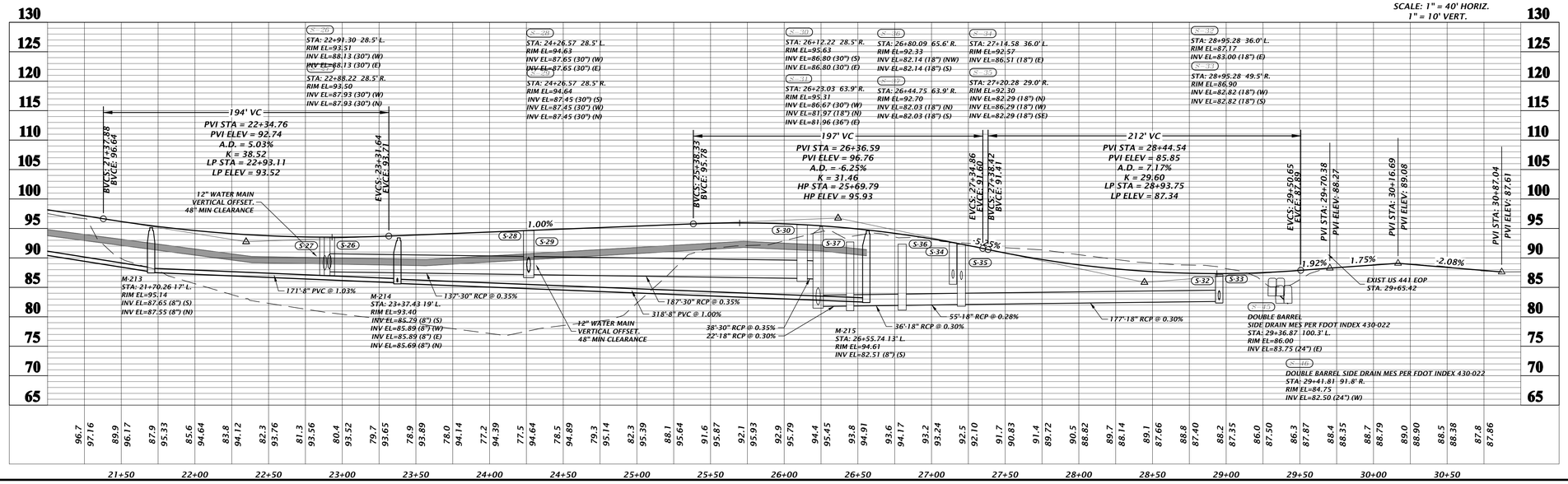


NOTES: (REFER TO DETAIL)
- WATER MAIN TO BE PVC
- WATER MAIN UNDER ROADWAY TO BE CONSTRUCTED CLDI.
- TRANSITION FROM MATERIAL TO MATERIAL TO BE 5' OUTSIDE BACK OF CURB.

WATER MAIN MATERIAL TYPE DETAIL

GRAPHIC SCALE
0 20 40 80

SCALE: 1" = 40' HORIZ.
1" = 10' VERT.



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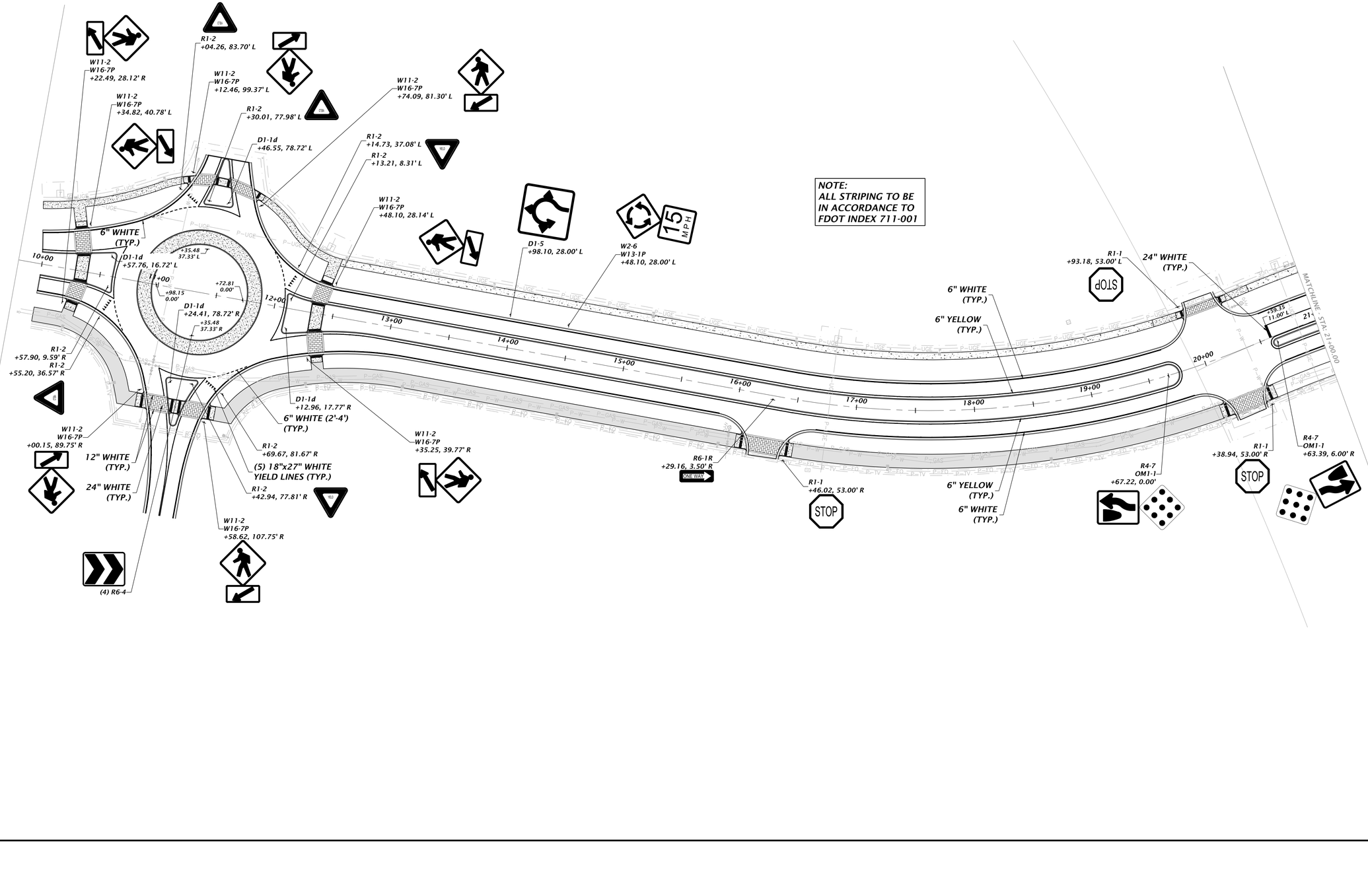
CLIENT: TOWER HILL FARMS
PROJECT: TOWER HILLS NEW HQ
SHEET TITLE: ROADWAY UTILITY PLAN AND PROFILE

TECHNICIAN: R.L./B.G.
DESIGNER: M. LOVERELL, E.I.
QUALITY CONTROL: R. WALPOLE, P.E.
PROJECT NUMBER: 21-0025

CODY CASH, P.E.
FL PE No. 92346

SHEET NO: C4.15

Tech: kyung Plot Date: May 05,2023 7:08am Filename: M:\2021\21-0025\Department\04_Engineering\02_Plans_ROAD\Production Files\C4.14 Roadway Utility Plan and Profile.dwg



GRAPHIC SCALE

0 20 40 80

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SCALE:
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CONSTRUCTION/BID REVISIONS:

SUBMITTALS:
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04/14/23 - CITY OF ALACHUA AND SRWMD

CLIENT: TOWER HILL FARMS

PROJECT: TOWER HILLS NEW HQ

SHEET TITLE: SIGNING AND PAVEMENT MARKING PLAN

TECHNICIAN: R.L./B.G.

DESIGNER: M. CAVERELL, E.I.

QUALITY CONTROL: R. WALPOLE, P.E.

PROJECT NUMBER: 21-0025

CODY CASH, P.E.

FL PE No. 92346

SHEET NO:
C4.16

Tech: kyung Plot Date: May 05,2023 7:28am Filename: W:\2021\21-0025\Departments\04_Engineering\02_DWGs_ROAD\Production Files\Signing and Pavement Marking Plan.dwg

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GRAPHIC SCALE
0 20 40 80

NOTE:
ALL STRIPING TO BE IN ACCORDANCE TO FDOT INDEX 711-001

6" WHITE (2-4 SKIP)
BICYCLE MARKINGS PER FDOT INDEX 711-002
6" YELLOW (2-4 SKIP)
18" YELLOW (TYP)
LEFT TURN ARROW (TYP)
6" WHITE (TYP.)
6" YELLOW (TYP.)
24" WHITE STOP BAR
RIGHT TURN ARROWS
18"x27" WHITE YIELD LINES
R1-2 +88.86, 32.75' L
RIGHT TURN ARROW
LEFT TURN ARROWS
6" DOUBLE YELLOW
12" WHITE (TYP.)
18" WHITE (TYP)
R6-1R +21.82, 53.00' L
R1-1 +38.88, 4.87' L
R4-7 OM1-1 +13.37, 6.00' L
R1-1 +44.48, 55.50' L
R6-1R +38.88, 4.82' R
R1-1 +57.96, 53.00' R
R1-1 +82.36, 50.24' R
R4-7 OM1-1 +04.63, 4.25' L
STOP
ONE WAY
MATCHLINE - STA 21+00.00

SCALE:
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CONSTRUCTION/BID REVISIONS:

SUBMITTALS:
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CLIENT: TOWER HILL FARMS
PROJECT: TOWER HILLS NEW HQ
SHEET TITLE: SIGNING AND PAVEMENT MARKING PLAN

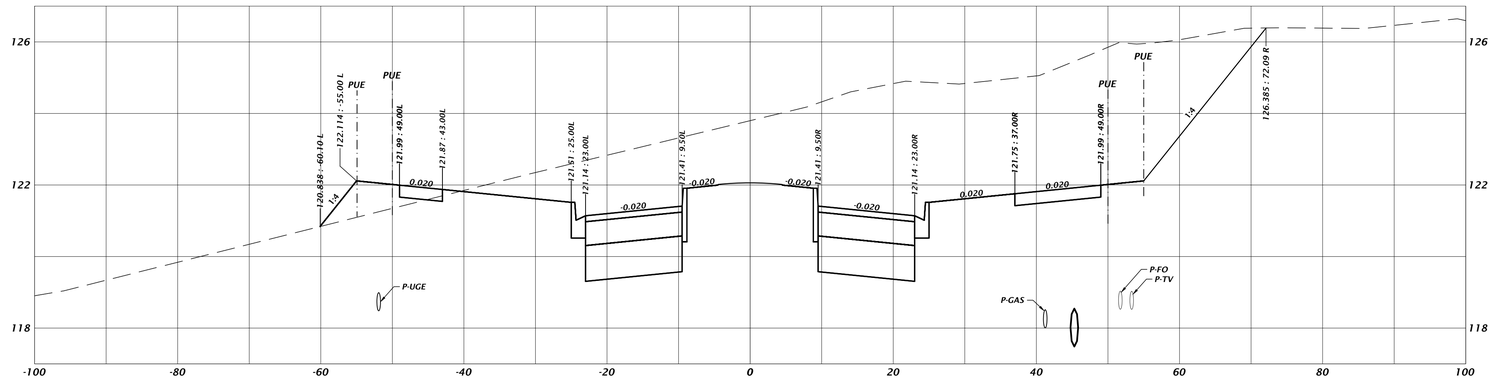
TECHNICIAN: R.L./B.G.
DESIGNER: M. CANTRELL, E.I.
QUALITY CONTROL: R. WALPOLE, P.E.
PROJECT NUMBER: 21-0025

CODY CASH, P.E.
FL PE No. 92346

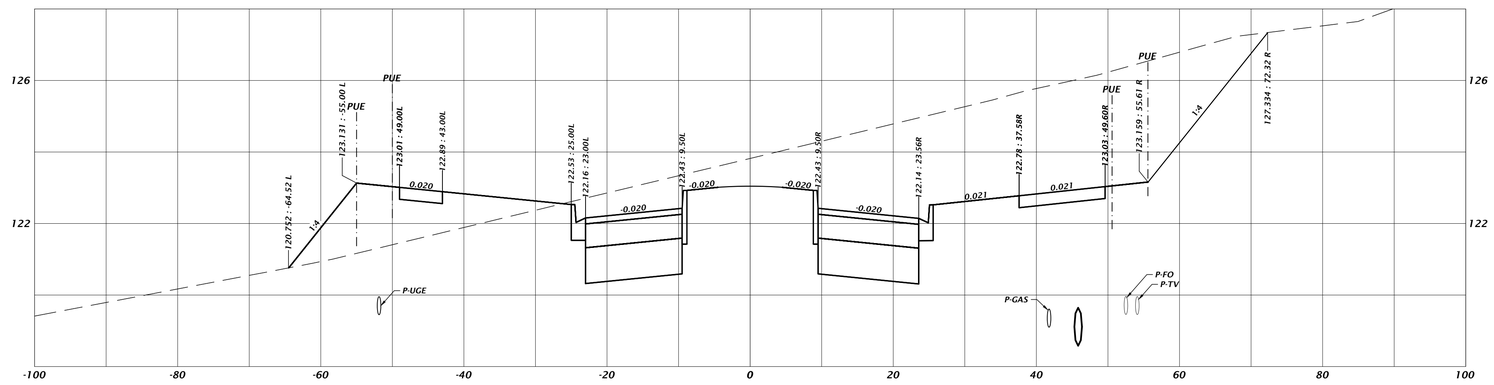
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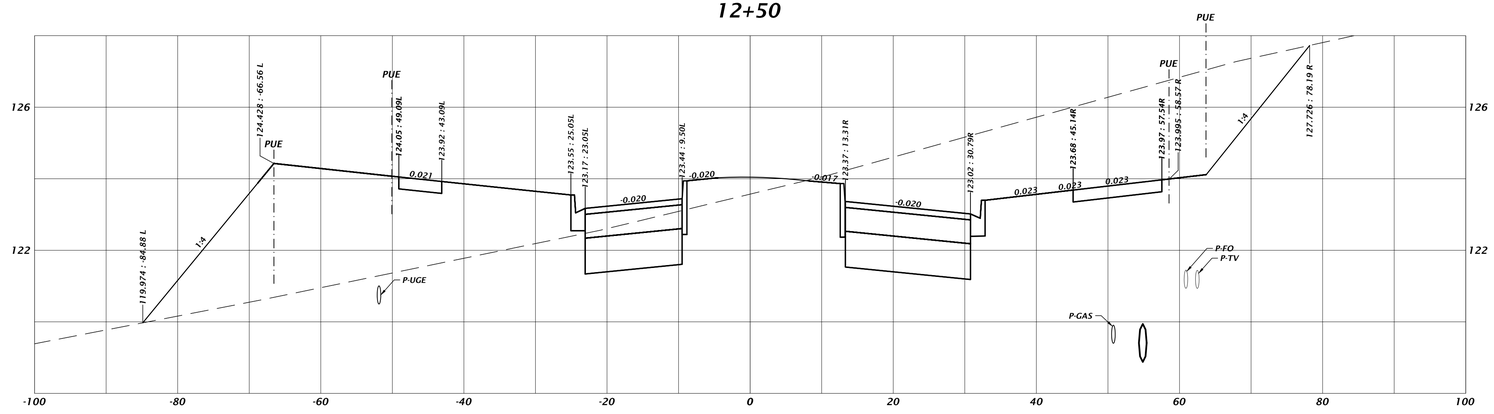
13+50



13+00



12+50



1" = 10' HORIZONTAL
1" = 5' VERTICAL

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CONSTRUCTION/BID REVISIONS:

SUBMITTALS:

CLIENT: TOWER HILL FARMS

PROJECT: TOWER HILLS NEW HQ

SHEET TITLE: CROSS SECTIONS

TECHNICIAN: R.L./B.G.

DESIGNER: M. CAVERRELL, E.I.

QUALITY CONTROL: R. WALPOLE, P.E.

PROJECT NUMBER: 21-0025

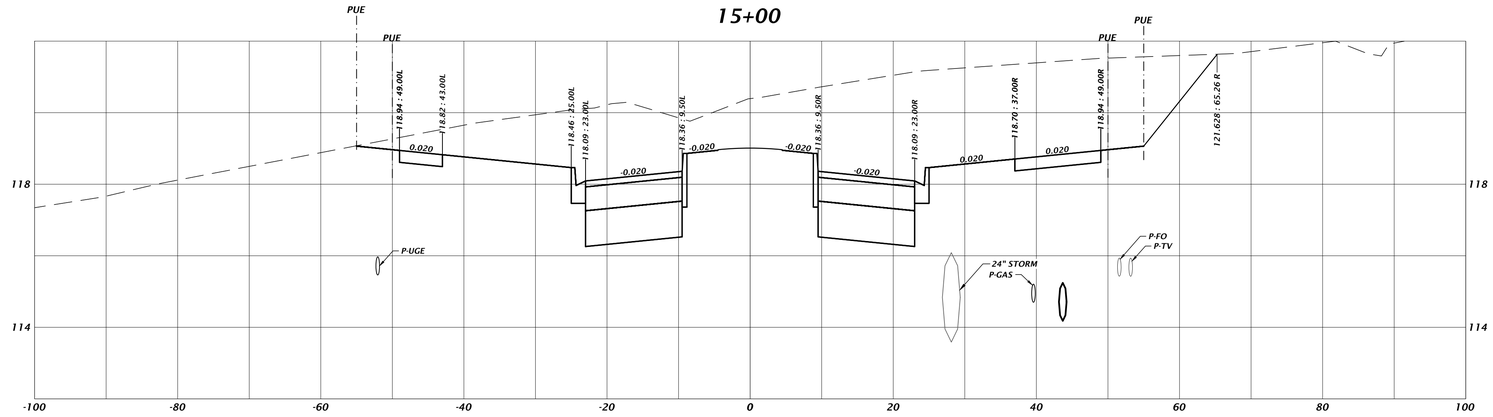
CODY CASH, P.E.

FL PE No. 92346

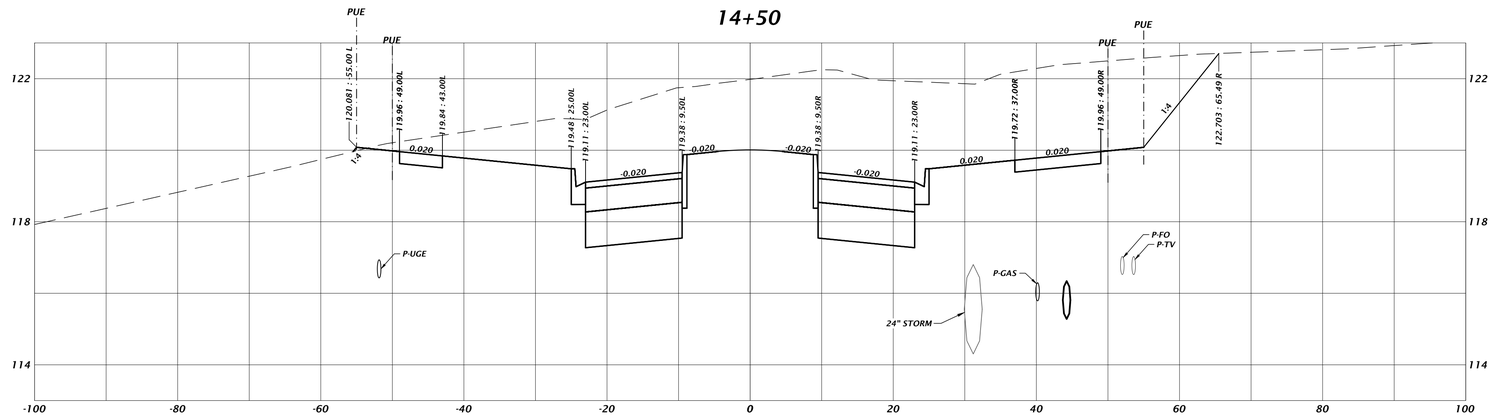
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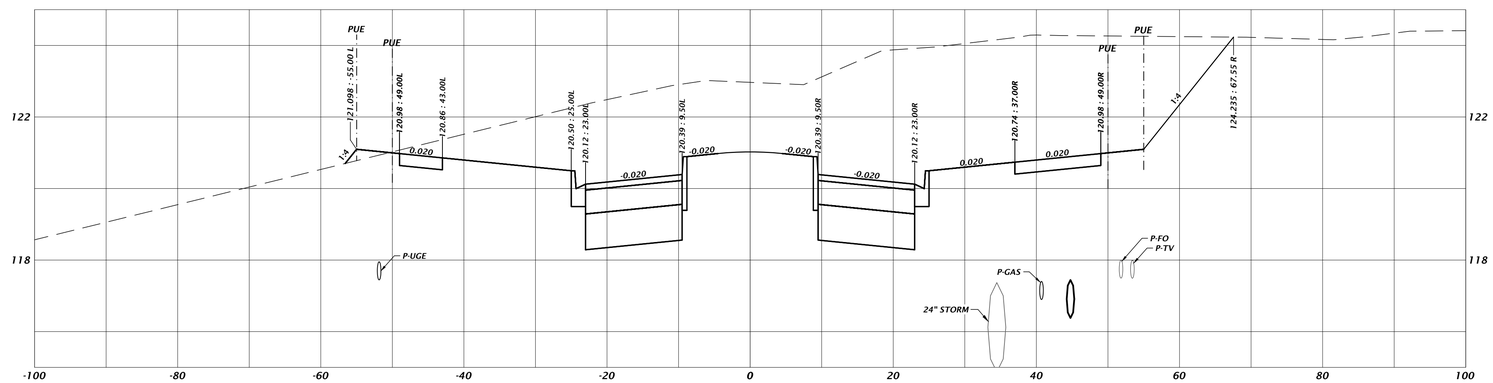
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14+50



14+00



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SUBMITTALS:

CLIENT: TOWER HILL FARMS

PROJECT: TOWER HILLS NEW HQ

SHEET TITLE: CROSS SECTIONS

TECHNICIAN: R.L./B.G.

DESIGNER: M.C. CAVERELL, E.I.

QUALITY CONTROL: R. WALPOLE, P.E.

PROJECT NUMBER: 21-0025

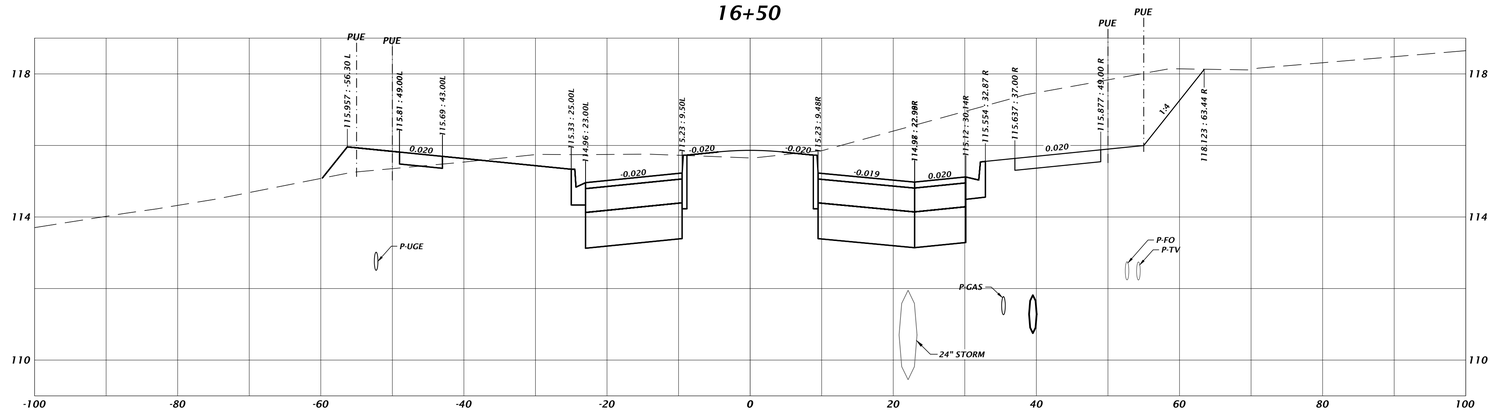
CODY CASH, P.E.

FL PE No. 92346

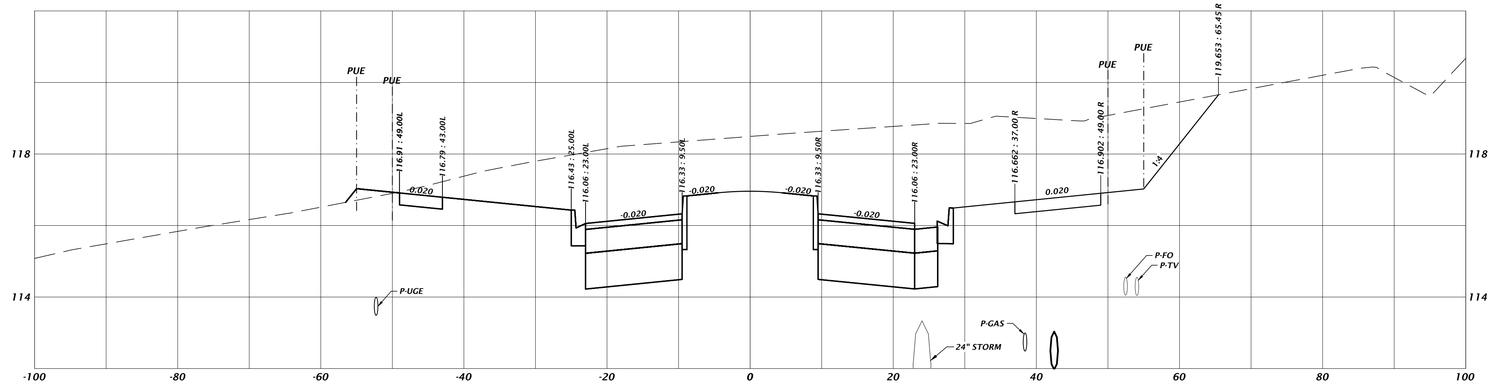
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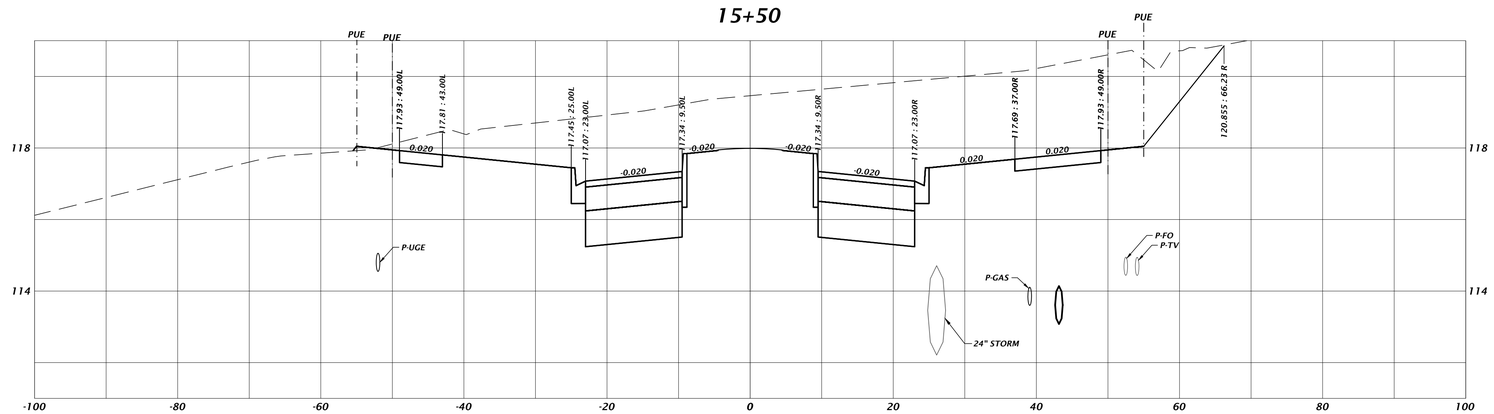
16+50



16+00



15+50



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1" = 5' VERTICAL

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CONSTRUCTION/BID REVISIONS:

SUBMITTALS:

CLIENT: TOWER HILL FARMS
PROJECT: TOWER HILLS NEW HQ
SHEET TITLE: CROSS SECTIONS

TECHNICIAN: R.L./B.G.
DESIGNER: M.C.
QUALITY CONTROL: R. WALPOLE, P.E.
PROJECT NUMBER: 21-0025

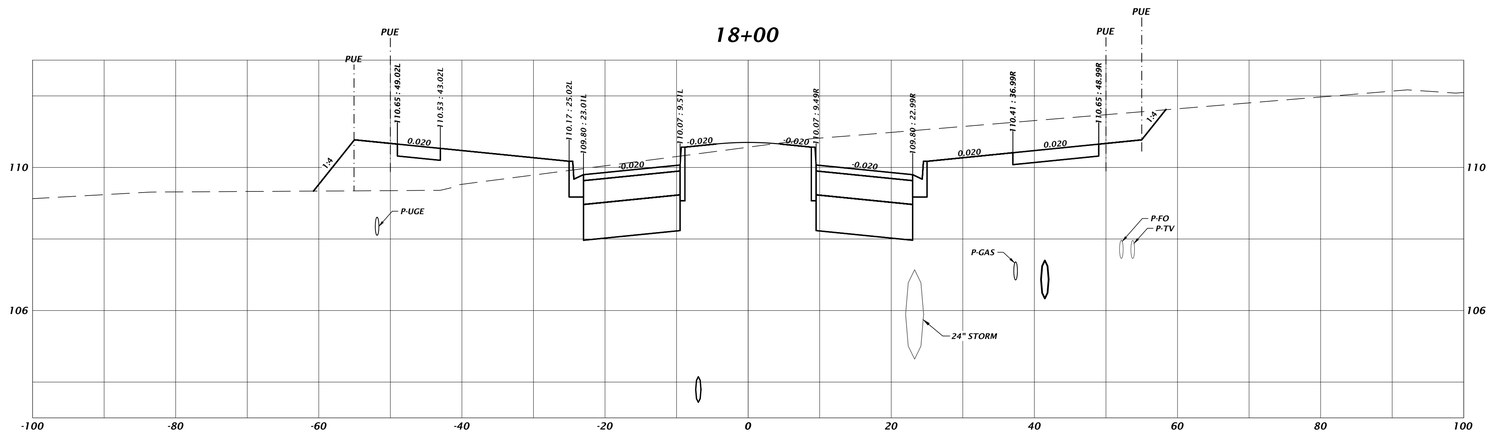
CODY CASH, P.E.

FL PE No. 92346

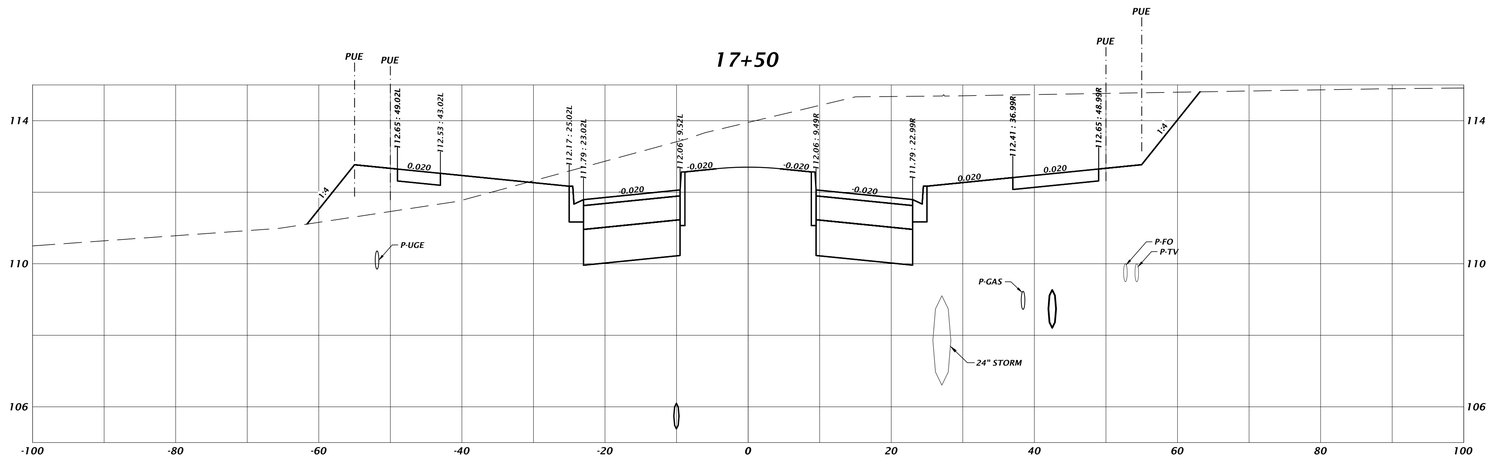
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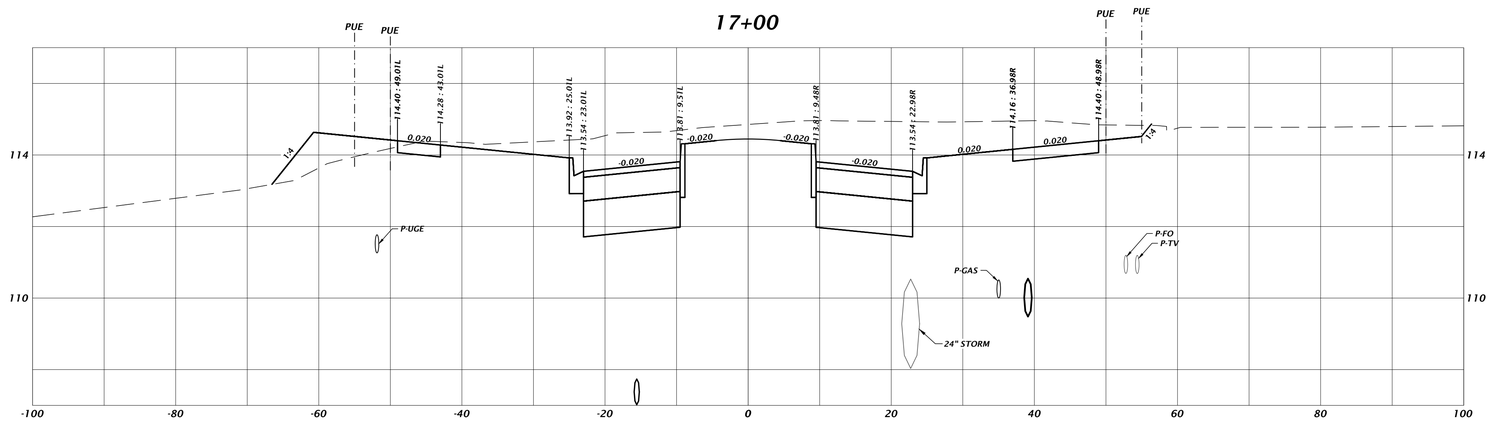
18+00



17+50



17+00



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1" = 5' VERTICAL

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CONSTRUCTION/BID REVISIONS:

SUBMITTALS:

CLIENT: TOWER HILL FARMS
PROJECT: TOWER HILLS NEW HQ
SHEET TITLE: CROSS SECTIONS

TECHNICIAN: R.L./B.G.
DESIGNER: M.C. MATRELL, E.I.
QUALITY CONTROL: R. WALPOLE, P.E.
PROJECT NUMBER: 21-0025

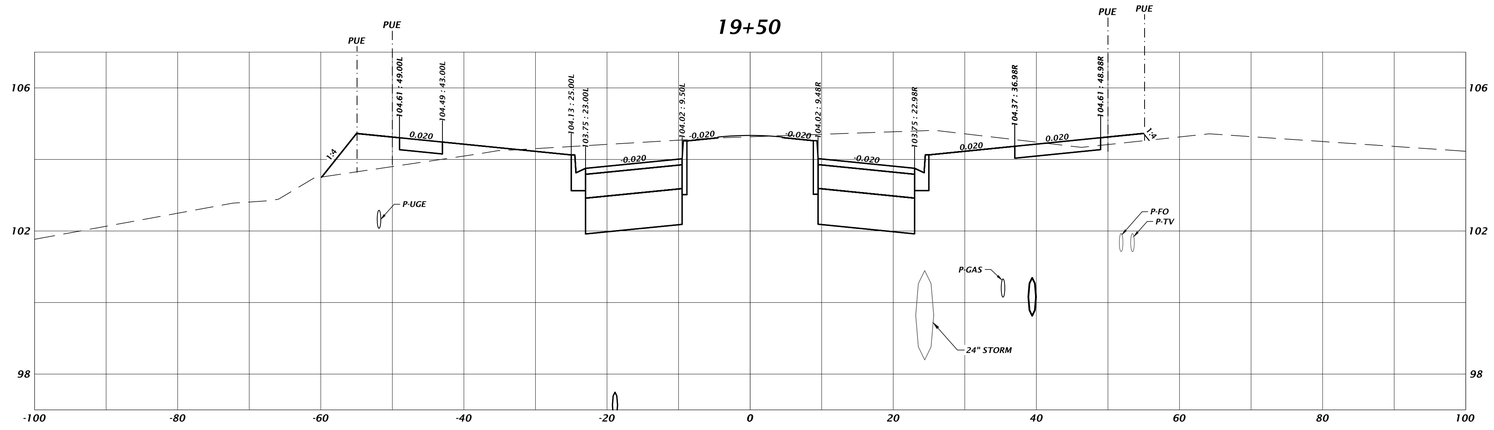
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FL PE No. 92346

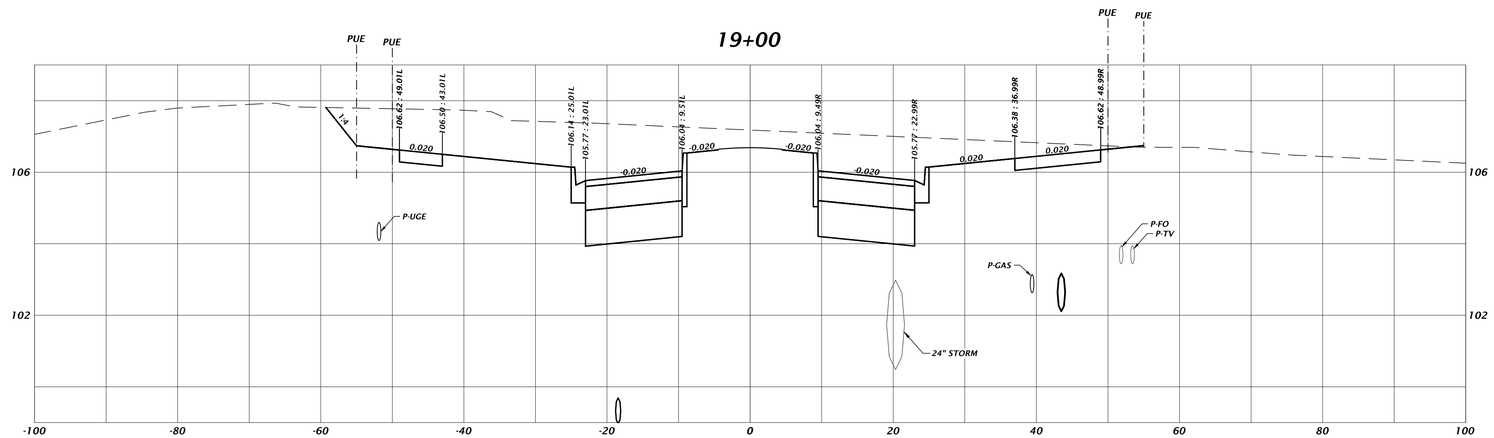
SHEET NO.: C6.08

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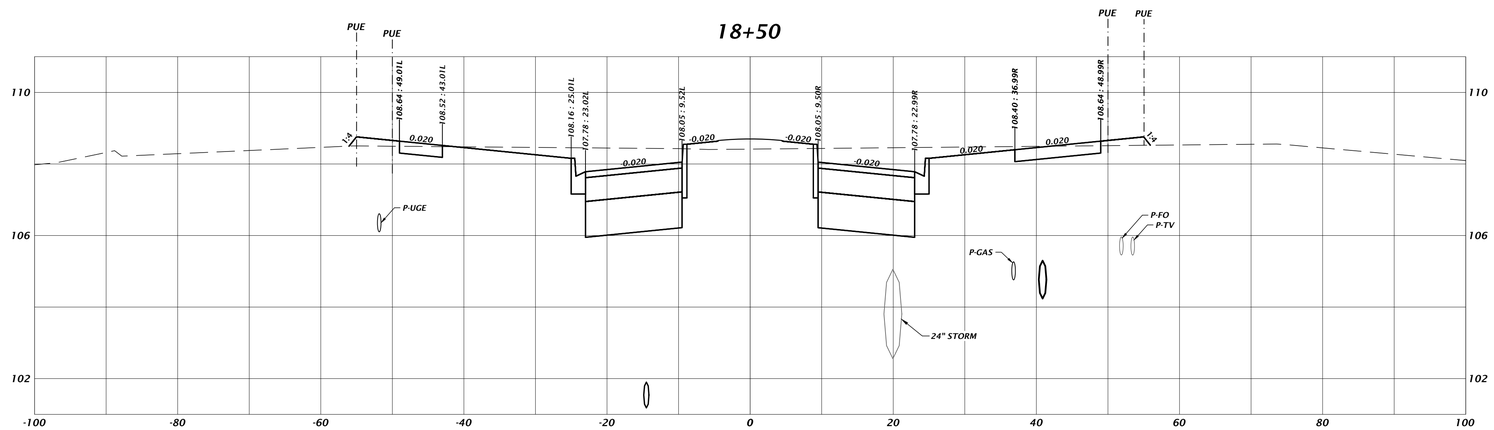
19+50



19+00



18+50



1" = 10' HORIZONTAL
1" = 5' VERTICAL

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SCALES ACCORDINGLY.

CONSTRUCTION/BID REVISIONS:

SUBMITTALS:

CLIENT: TOWER HILL FARMS

PROJECT: TOWER HILLS NEW HQ

SHEET TITLE: CROSS SECTIONS

TECHNICIAN: R.L./B.G.

DESIGNER: M. CAVERELL, E.I.

PROJECT CONTROL: R. WALPOLE, P.E.

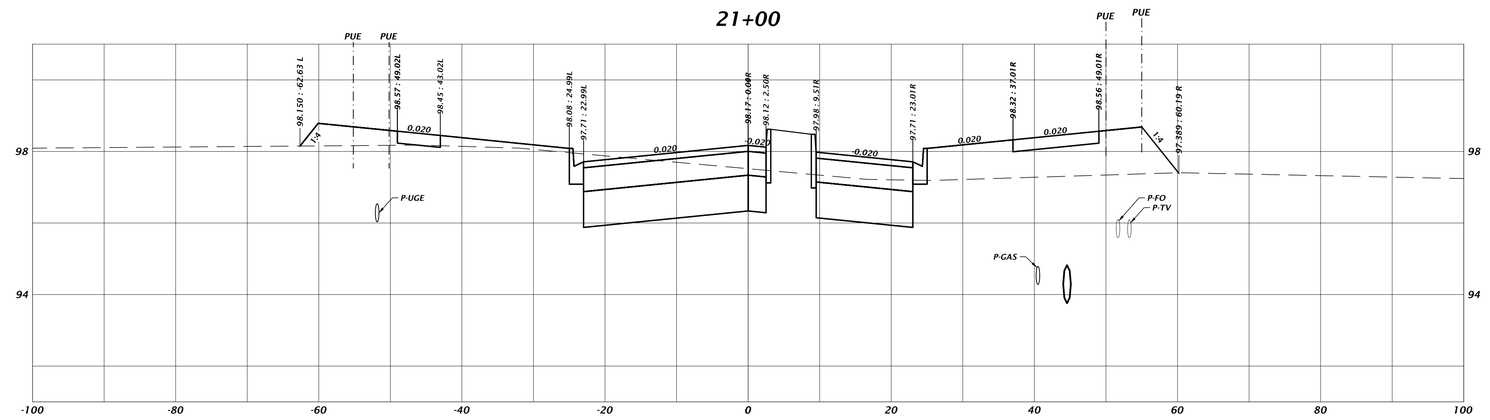
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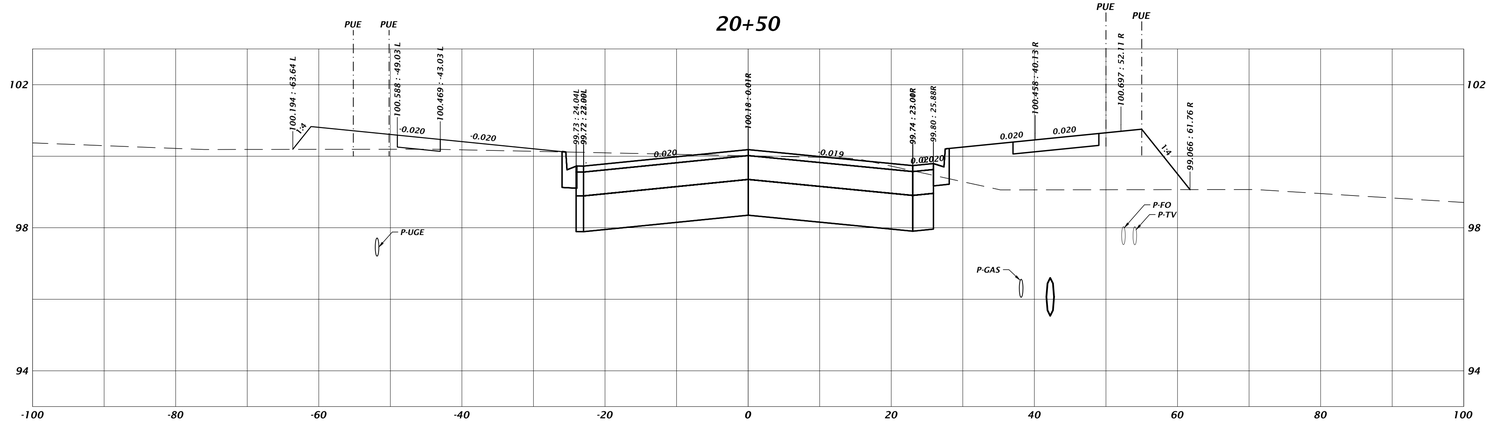
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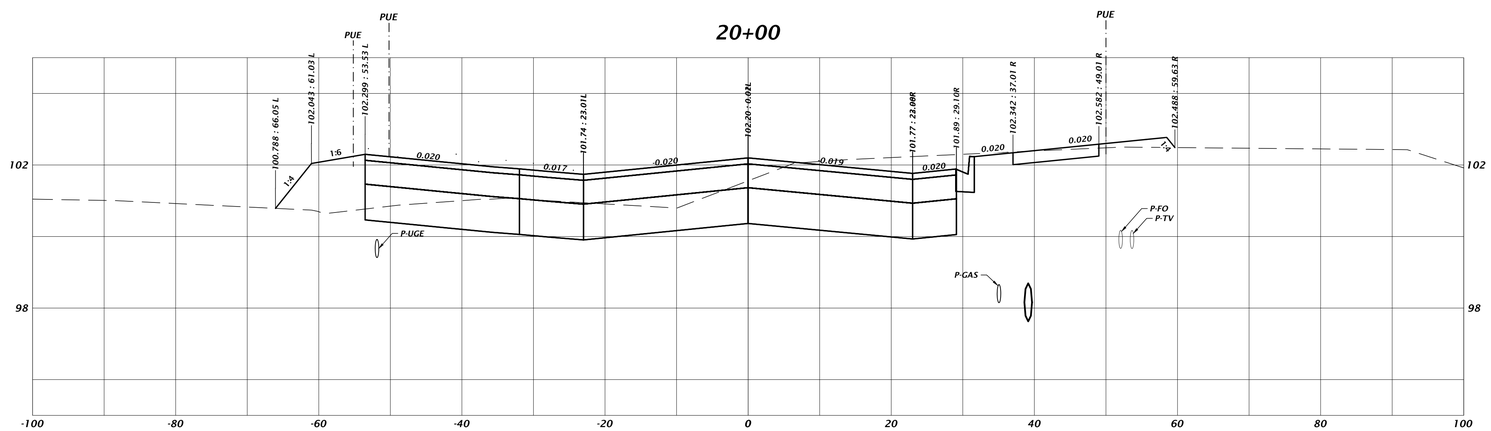
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SHEET NO: C6.09

Tech: kyung Plot Date: May 05,2023 7:29am Filename: M:\2021\21-0025\Department\04_Engineering\02_DWGs_ROAD\Production Files\cSections.dwg







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CONSTRUCTION/BID REVISIONS:

SUBMITTALS:

CLIENT: TOWER HILL FARMS

PROJECT: TOWER HILLS NEW HQ

SHEET TITLE: CROSS SECTIONS

TECHNICIAN: R.L./B.G.

DESIGNER: M.C. MONTRELL, E.I.

QUALITY CONTROL: R. WALPOLE, P.E.

PROJECT NUMBER: 21-0025

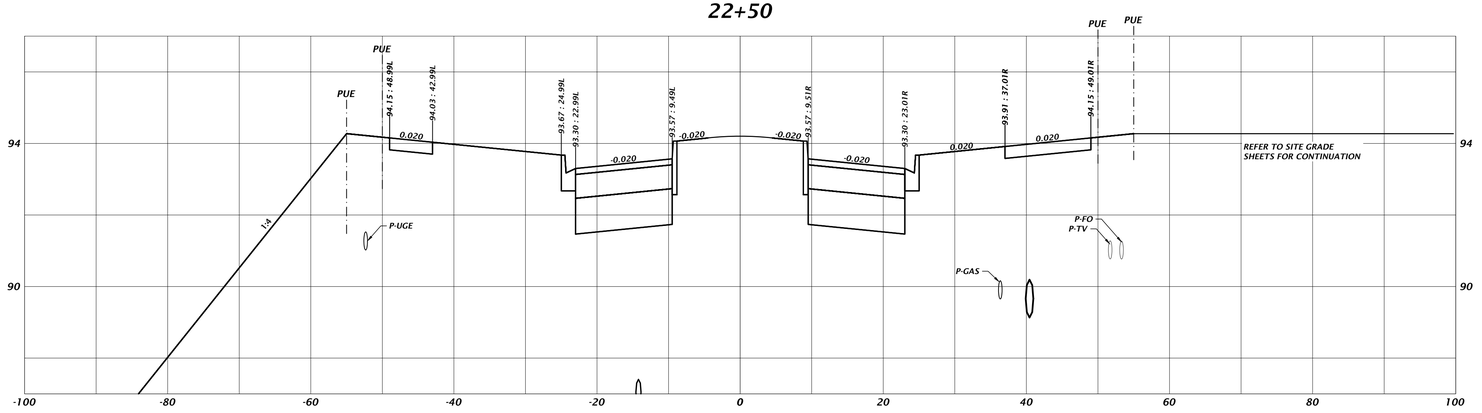
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FL PE No. 92346

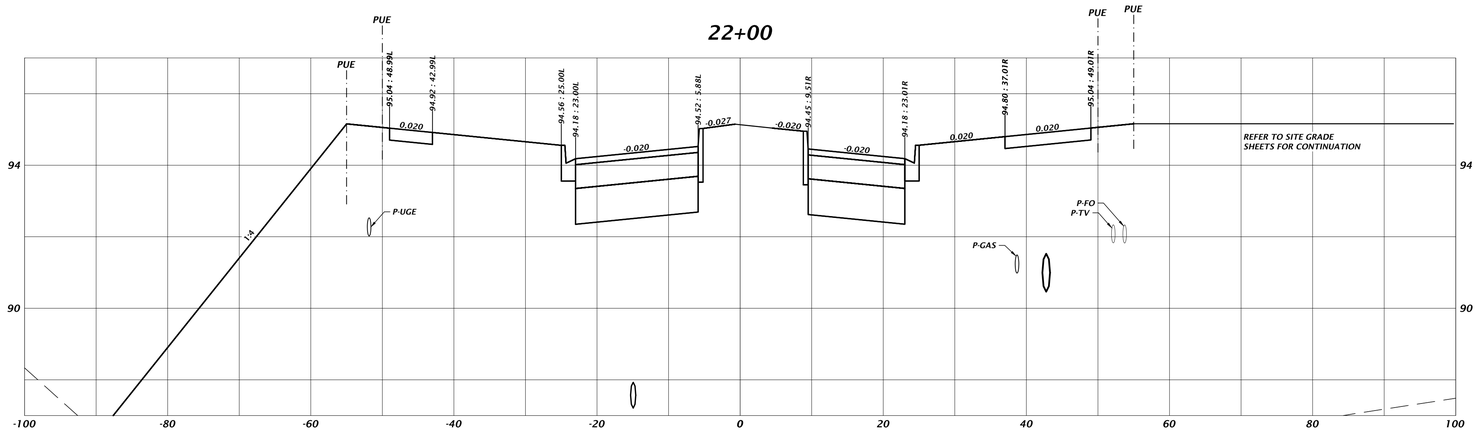
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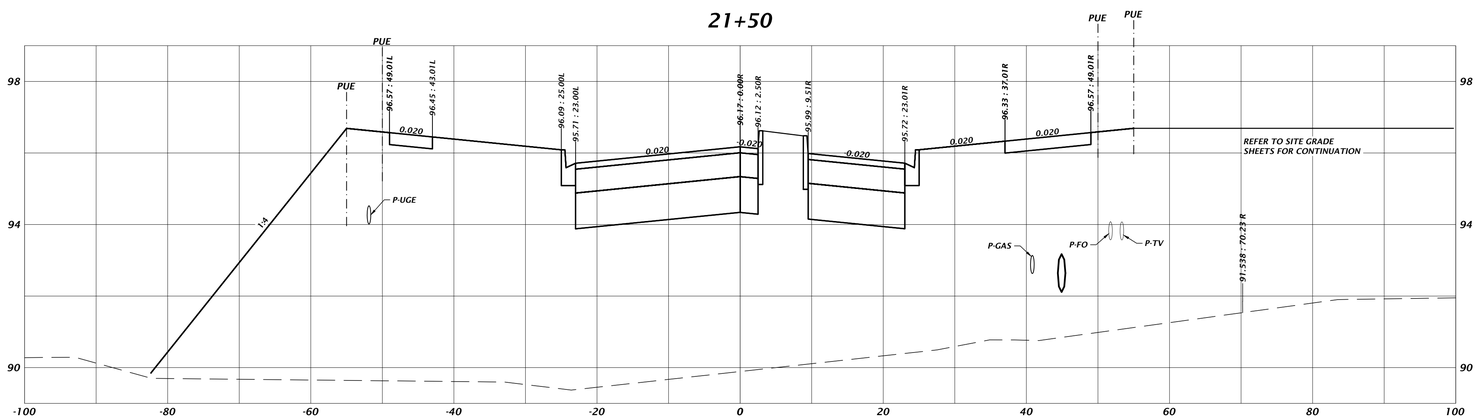
22+50



22+00



21+50



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CONSTRUCTION/BID REVISIONS:

SUBMITTALS:

CLIENT: TOWER HILL FARMS
PROJECT: TOWER HILLS NEW HQ
SHEET TITLE: CROSS SECTIONS

TECHNICIAN: R.L./B.G.
DESIGNER: M.C.
CHECKED: L.S. MITCHELL, E.I.
QUALITY CONTROL: R. WALPOLE, P.E.
PROJECT NUMBER: 21-0025

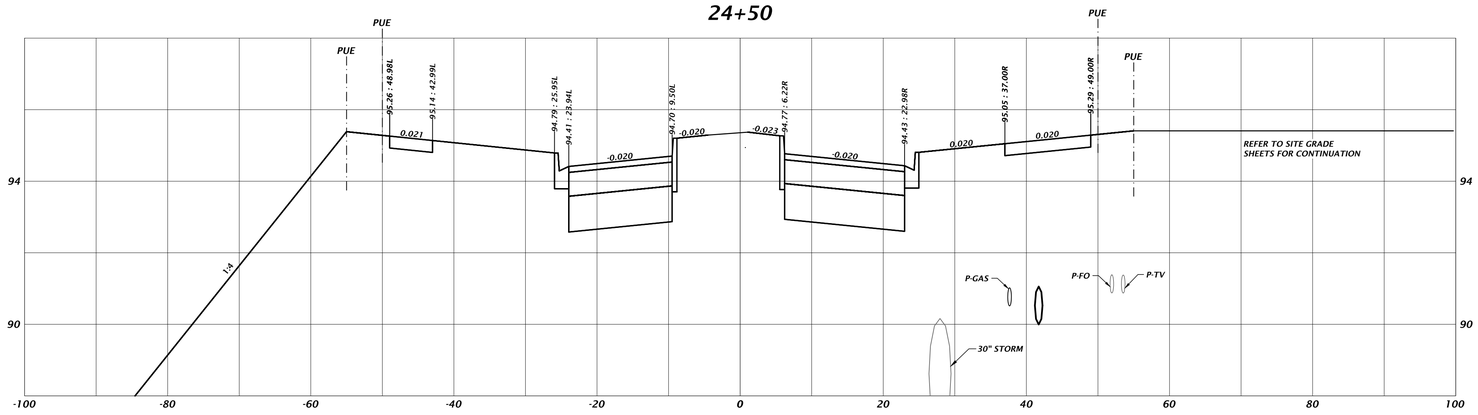
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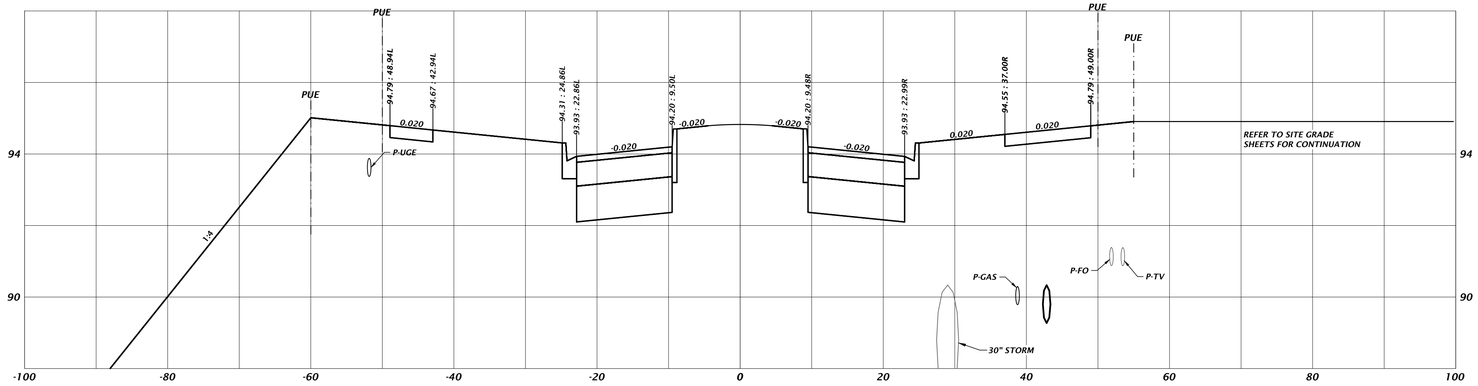
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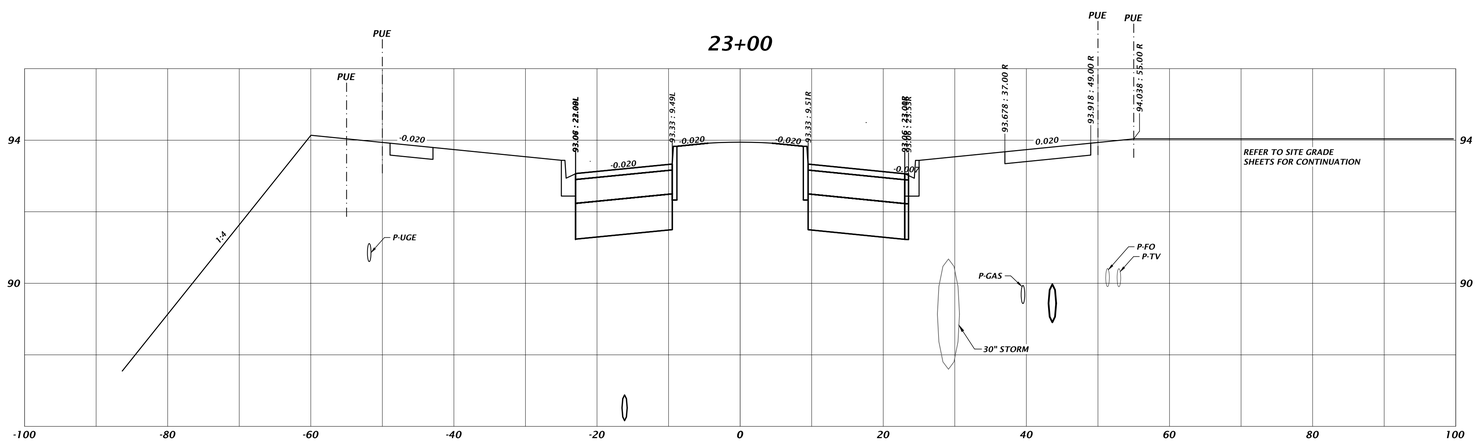
24+50



24+00



23+00



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CONSTRUCTION/BID REVISIONS:

SUBMITTALS:

CLIENT: TOWER HILL FARMS

PROJECT: TOWER HILLS NEW HQ

SHEET TITLE: CROSS SECTIONS

TECHNICIAN: R.L./B.G.

DESIGNER: M. CAVERELL, E.I.

QUALITY CONTROL: R. WALPOLE, P.E.

PROJECT NUMBER: 21-0025

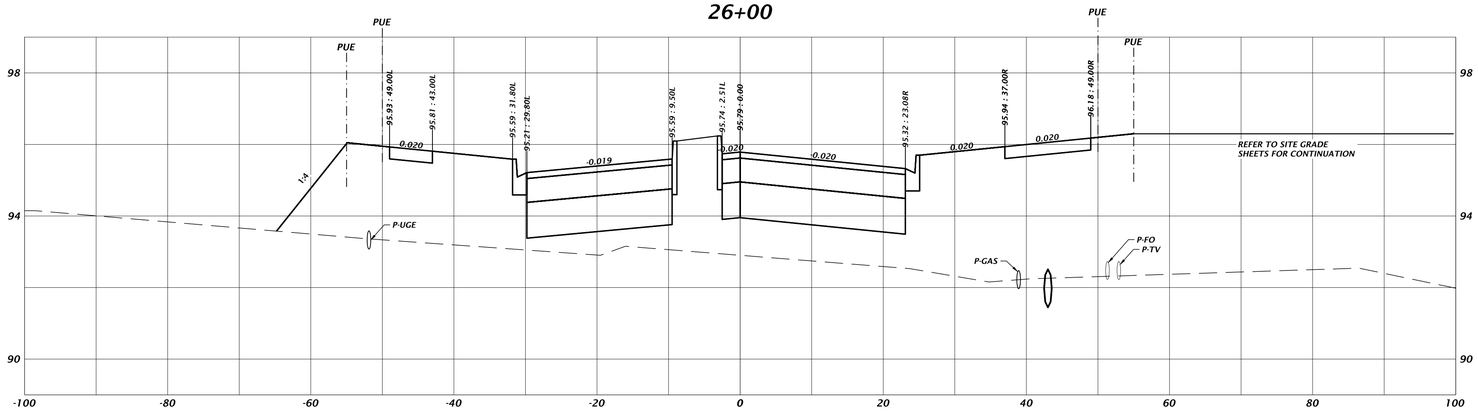
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FL PE No. 92346

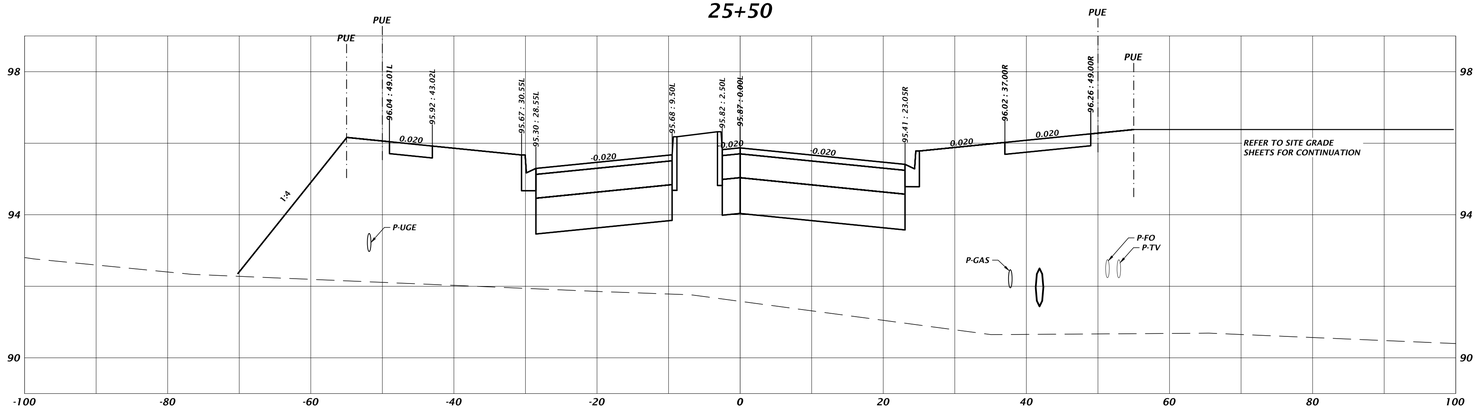
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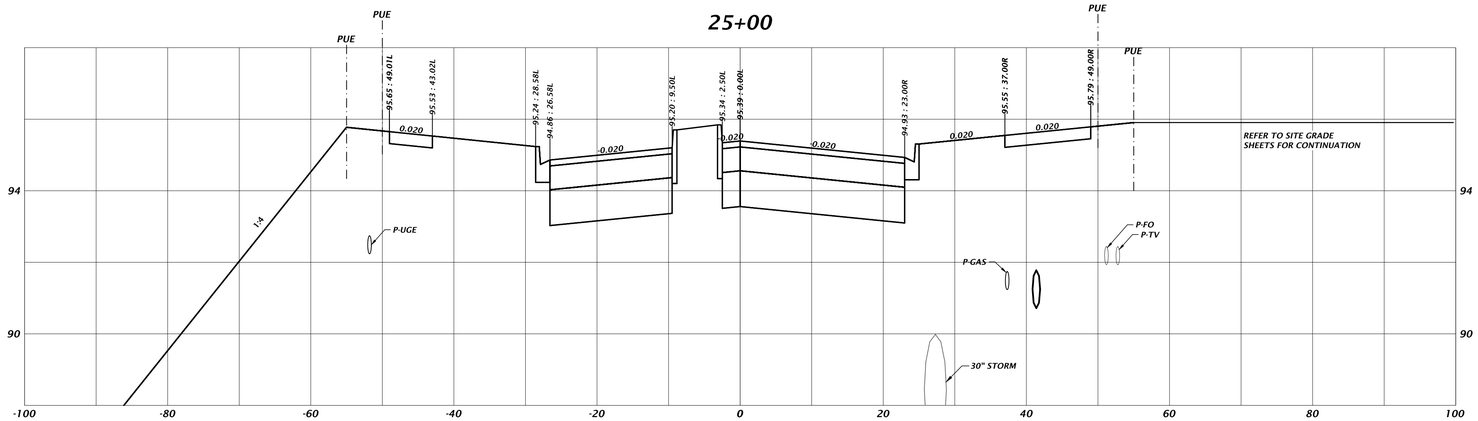
26+00



25+50



25+00



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CONSTRUCTION/BID REVISIONS:

SUBMITTALS:

CLIENT: TOWER HILL FARMS

PROJECT: TOWER HILLS NEW HQ

SHEET TITLE: CROSS SECTIONS

TECHNICIAN: R.L./B.G.

DESIGNER: M. CAVERELL, E.I.

QUALITY CONTROL: R. WALPOLE, P.E.

PROJECT NUMBER: 21-0025

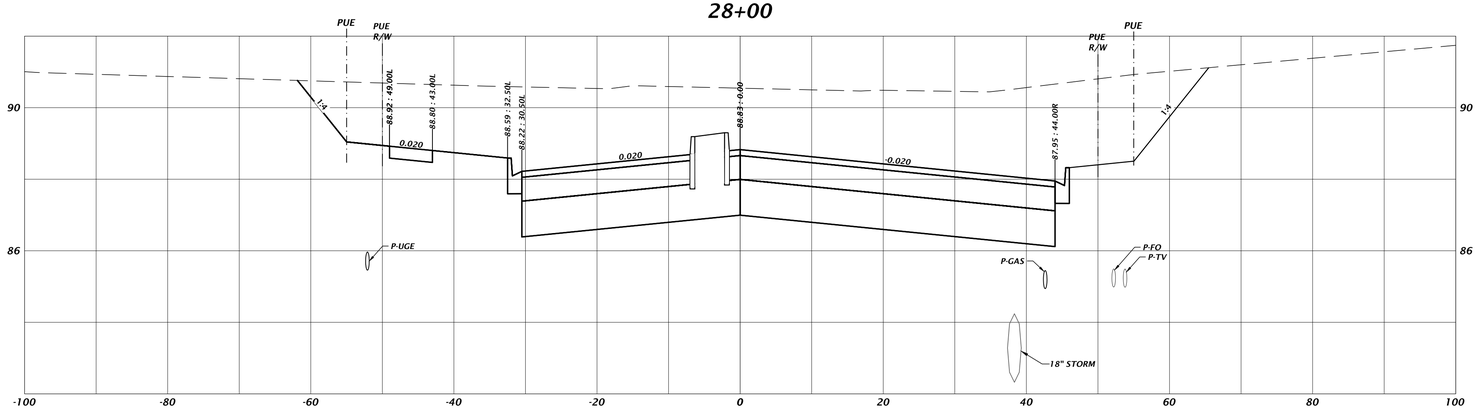
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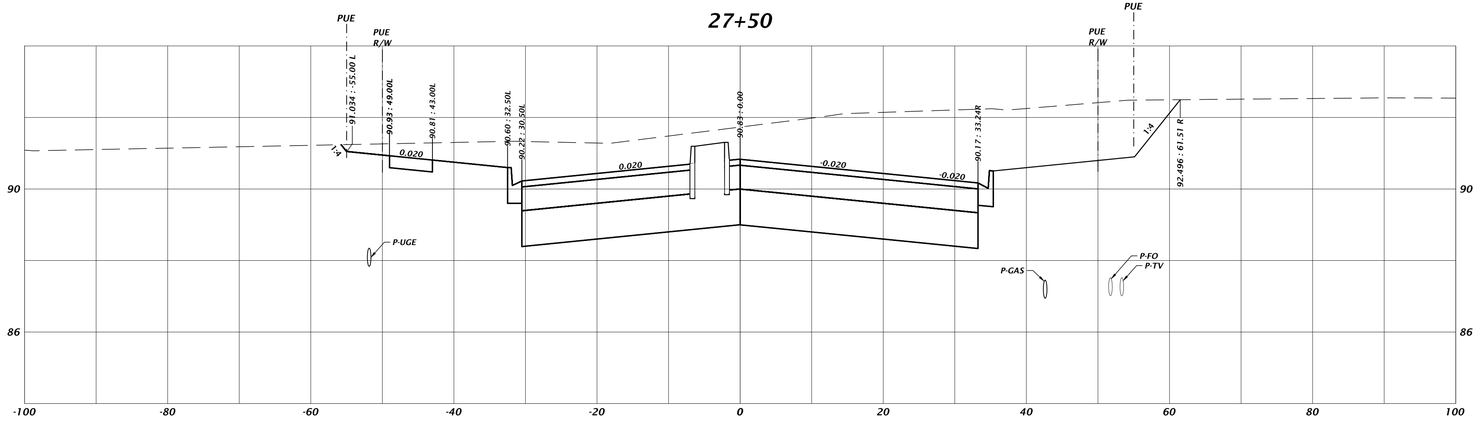
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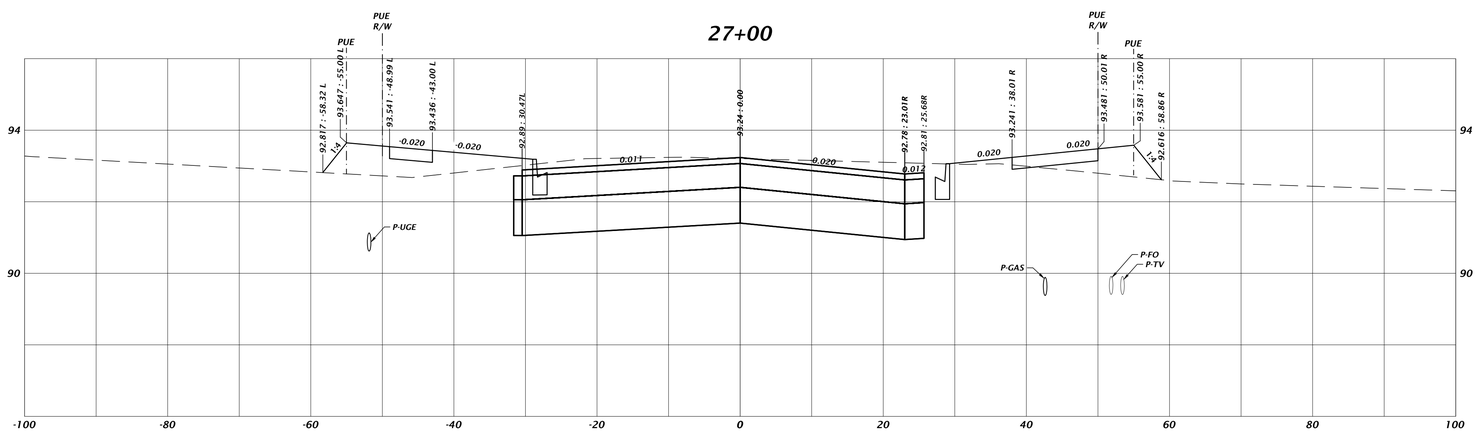
28+00



27+50



27+00



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1" = 5' VERTICAL

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CONSTRUCTION/BID REVISIONS:

SUBMITTALS:

CLIENT: TOWER HILL FARMS

PROJECT: TOWER HILLS NEW HQ

SHEET TITLE: CROSS SECTIONS

TECHNICIAN: RL/B.G.

DESIGNER: M.A. CASTRELL, E.I.

QUALITY CONTROL: R. WALPOLE, P.E.

PROJECT NUMBER: 21-0025

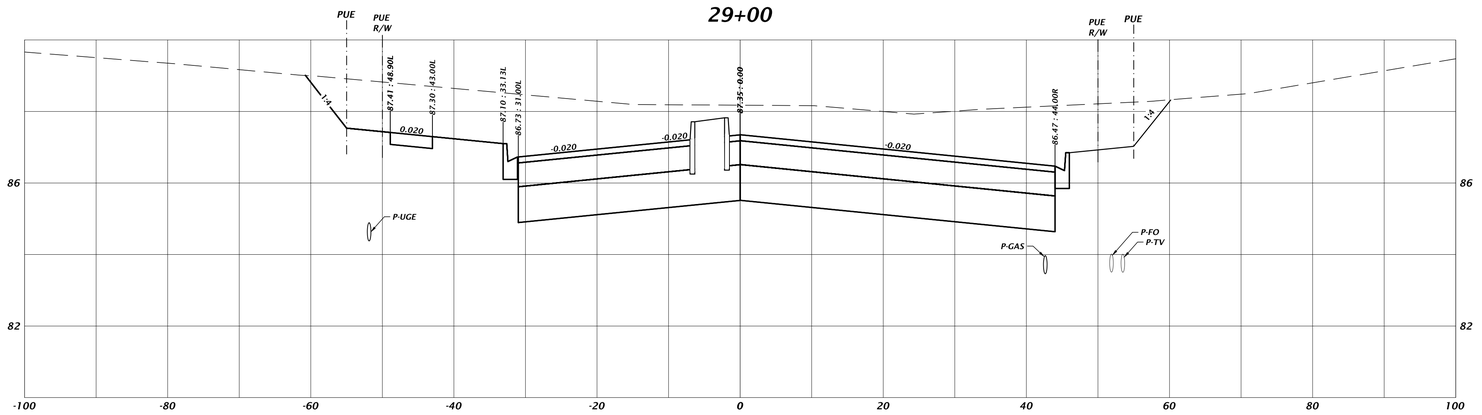
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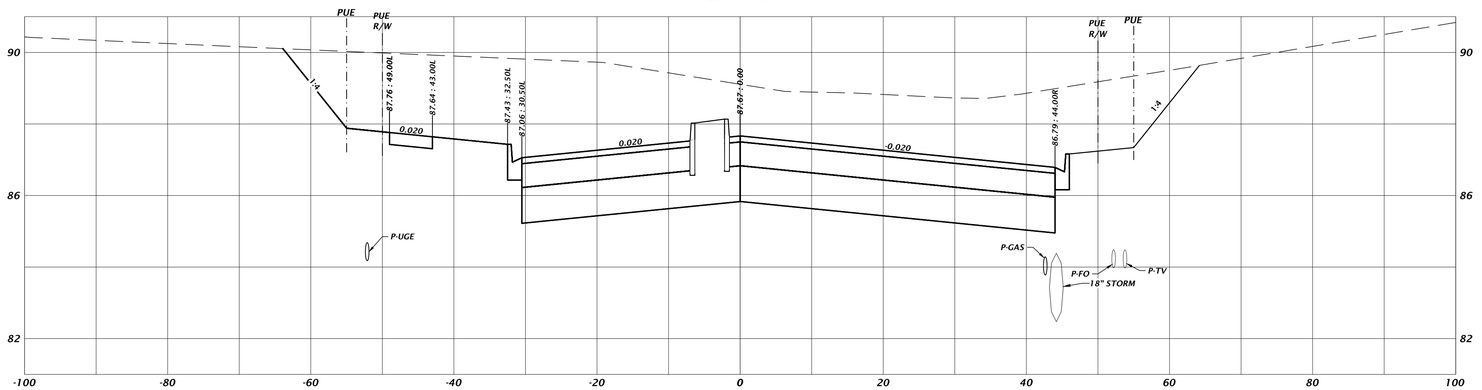
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29+00



28+50



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CONSTRUCTION/BID REVISIONS:

SUBMITTALS:

CLIENT: TOWER HILL FARMS
PROJECT: TOWER HILLS NEW HQ
SHEET TITLE: CROSS SECTIONS

TECHNICIAN: R.L./B.G.
DESIGNER: M.C. CAMPBELL, E.I.
QUALITY CONTROL: R. WALPOLE, P.E.
PROJECT NUMBER: 21-0025

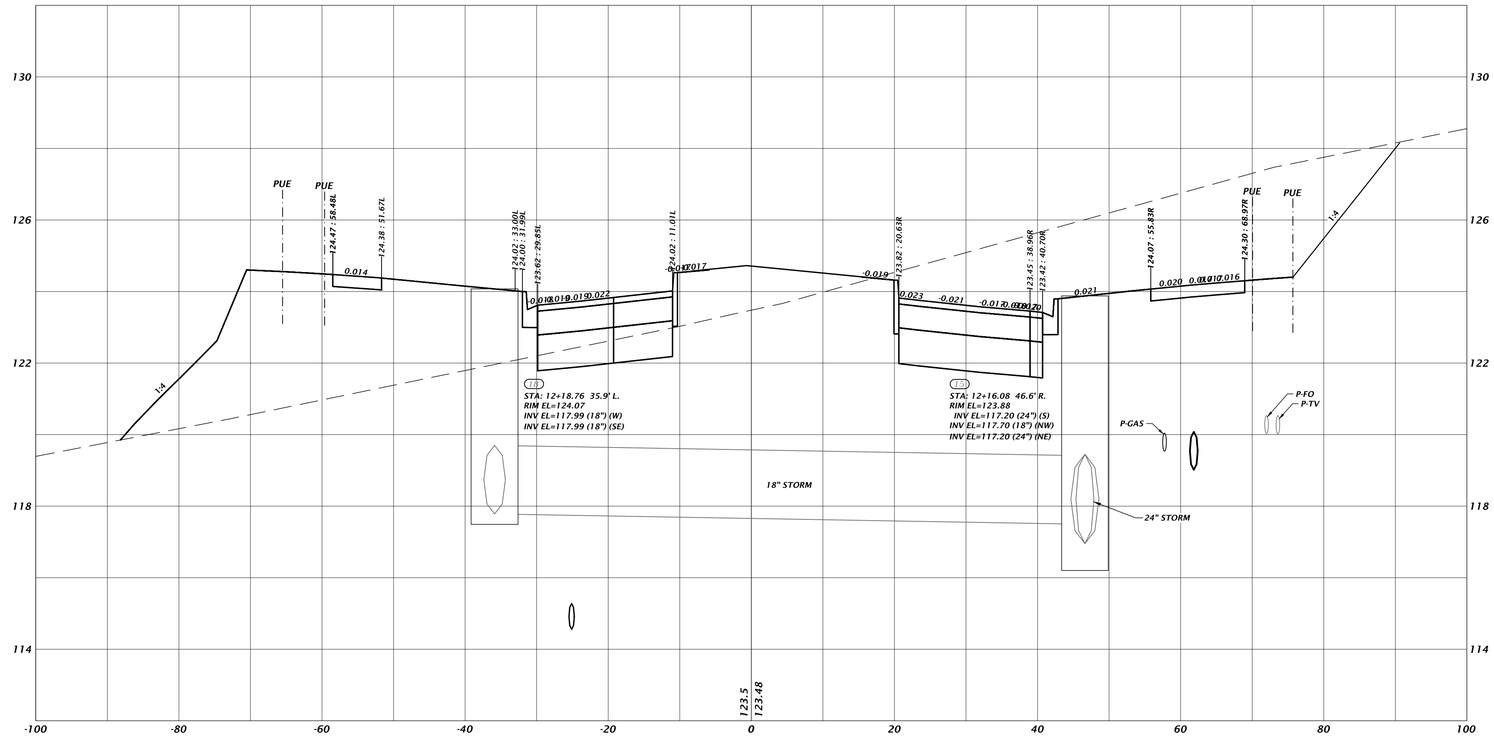
CODY CASH, P.E.

FL PE No. 92346

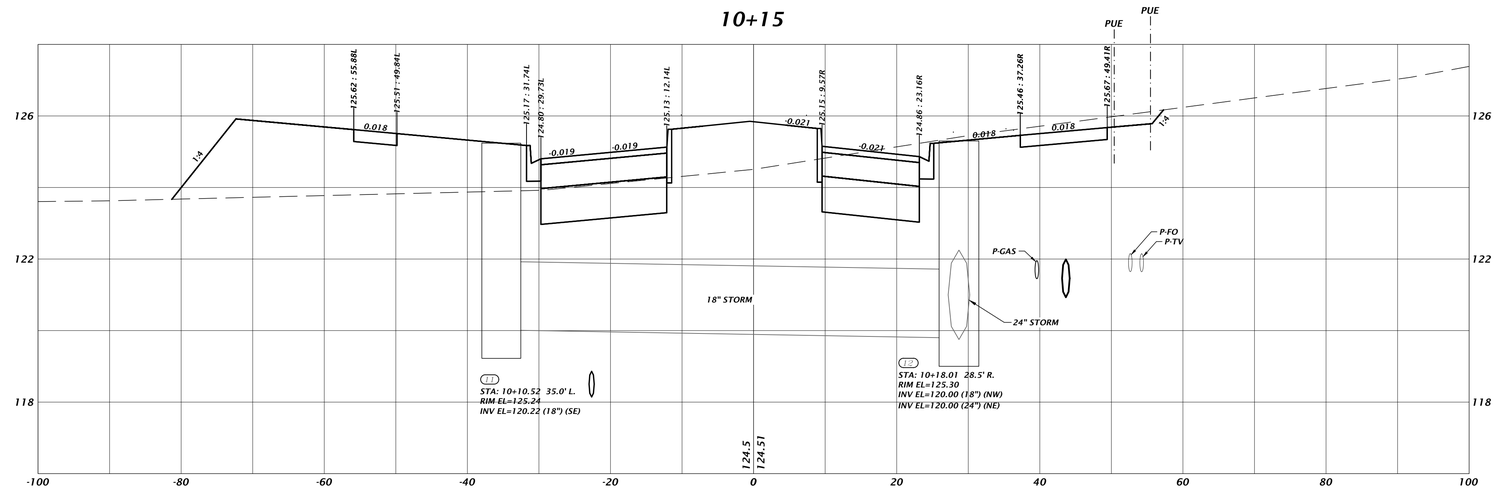
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12+18



10+15



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1" = 5' VERTICAL

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CONSTRUCTION/BID REVISIONS:

SUBMITTALS:

CLIENT: TOWER HILL FARMS

PROJECT: TOWER HILLS NEW HQ

SHEET TITLE: DRAINAGE CROSS SECTIONS

TECHNICIAN: R.L./B.G.

DESIGNER: M. CAVERRELL, E.I.

QUALITY CONTROL: R. WALPOLE, P.E.

PROJECT NUMBER: 21-0025

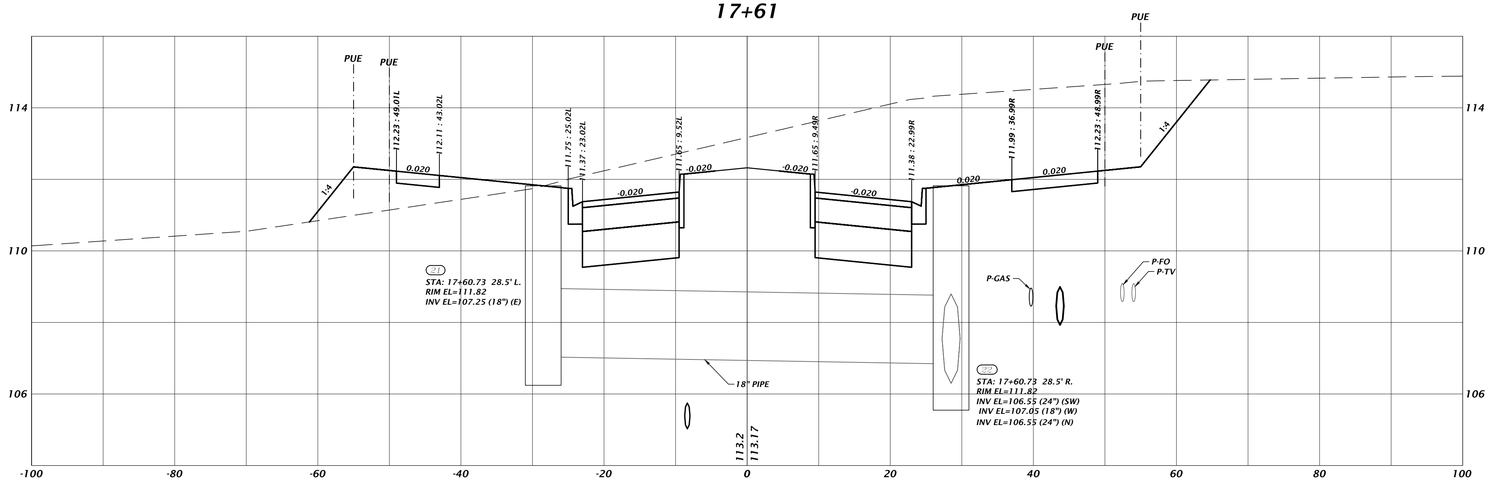
CODY CASH, P.E.

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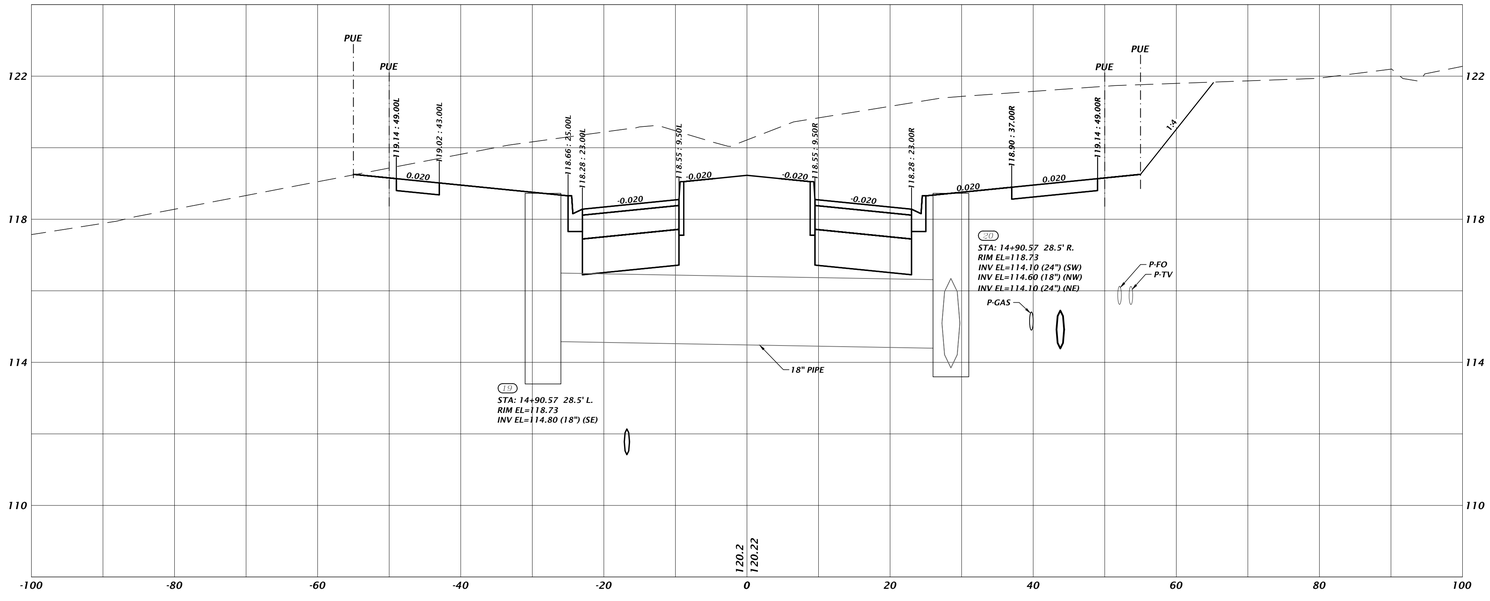
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Tech: kyung Plot Date: May 05,2023 7:28am Filename: M:\2021\21-0025\Department\04_Engineering\02_DWGs_ROAD\Production Files\xSections.dwg

17+61



14+91



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CONSTRUCTION/BID REVISIONS:

SUBMITTALS:

CLIENT: TOWER HILL FARMS

PROJECT: TOWER HILLS NEW HQ

SHEET TITLE: DRAINAGE CROSS SECTIONS

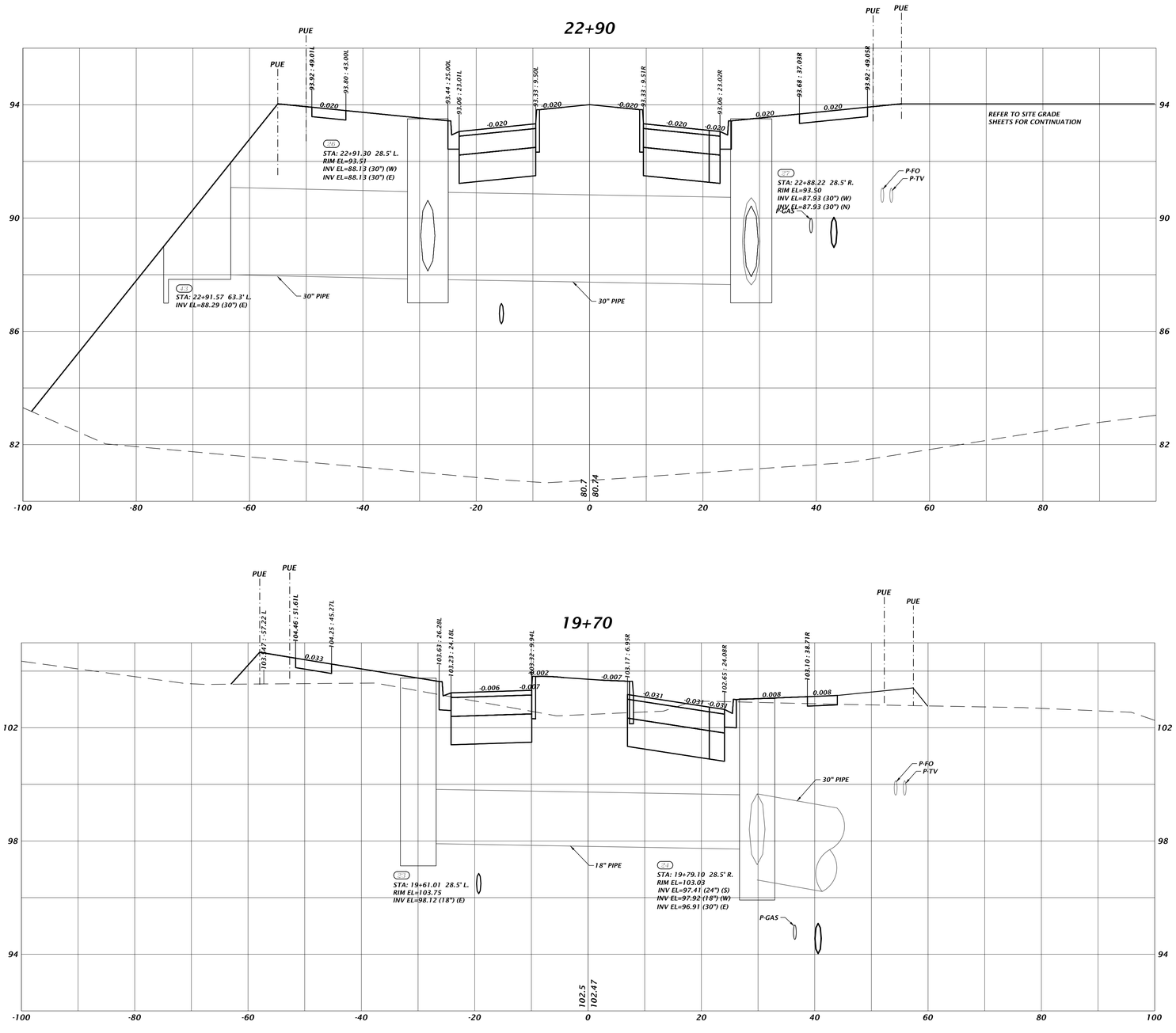
TECHNICIAN: R.L./B.G.
DESIGNER: M. CAVERELL, E.I.
QUALITY CONTROL: R. WALPOLE, P.E.
PROJECT NUMBER: 21-0025

CODY CASH, P.E.

FL PE No. 92346

SHEET NO.: C6.17

Tools: bryony Plot Date: May 05,2023 7:29pm Filename: N:\2021\21-0025\Department\04_Engineering\02_DWGs_RDAD\Production Files\xSections.dwg



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SUBMITTALS:

CONSTRUCTION/BID REVISIONS:

CLIENT: TOWER HILL FARMS

PROJECT: TOWER HILLS NEW HQ

SHEET TITLE: DRAINAGE CROSS SECTIONS

TECHNICIAN: R.L./B.G.

DESIGNER: M. CAVERNELL, E.I.

QUALITY CONTROL: R. WALPOLE, P.E.

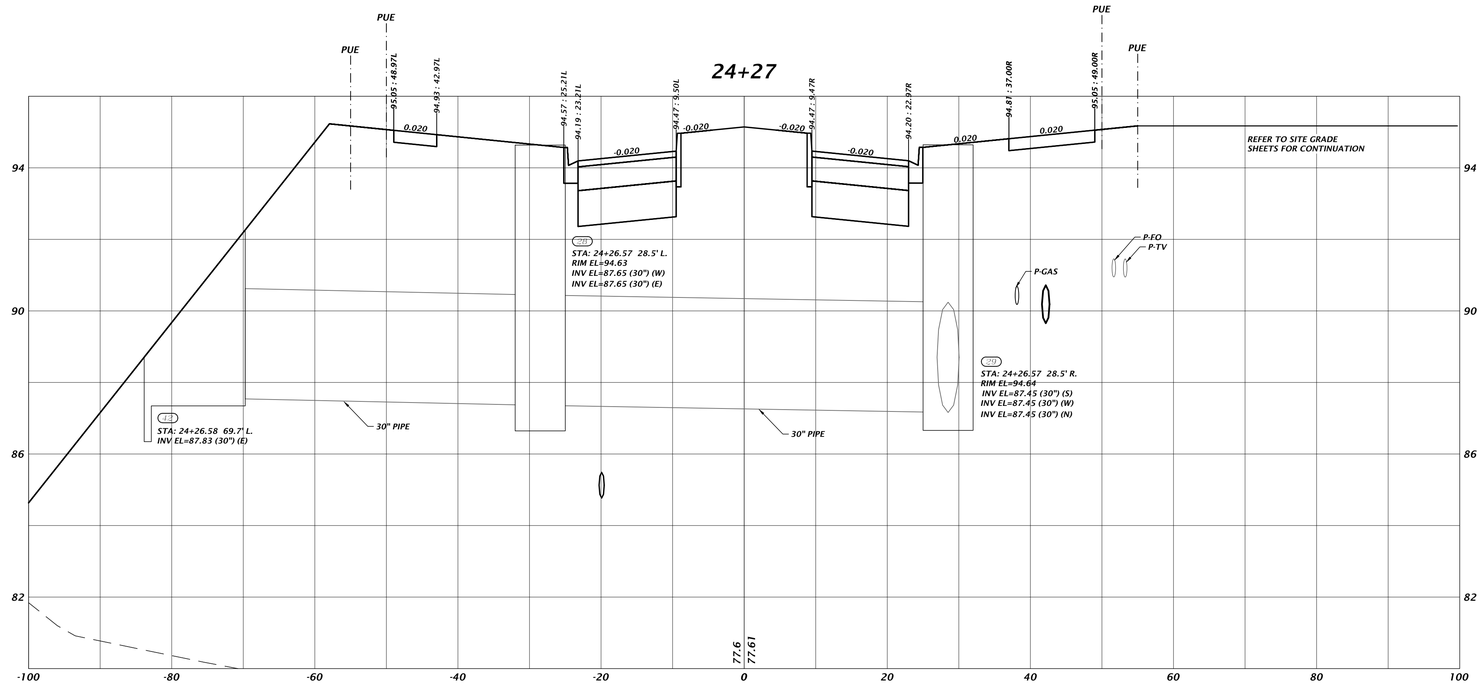
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CODY CASH, P.E.

FL PE No. 92346

SHEET NO.: C6.18

Tools: byrung Plot Date: May 05,2023 7:29am Filename: M:\2021\21-0025\Department\04_Engineering\03_DWGs_ROAD\Production Files_Sections.dwg



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CONSTRUCTION/BID REVISIONS:

SUBMITTALS:

CLIENT: TOWER HILL FARMS
PROJECT: TOWER HILLS NEW HQ
SHEET TITLE: DRAINAGE CROSS SECTIONS

TECHNICIAN: R.L./B.G.
DESIGNER: M. CAVERELL, E.I.
QUALITY CONTROL: R. WALPOLE, P.E.
PROJECT NUMBER: 21-0025

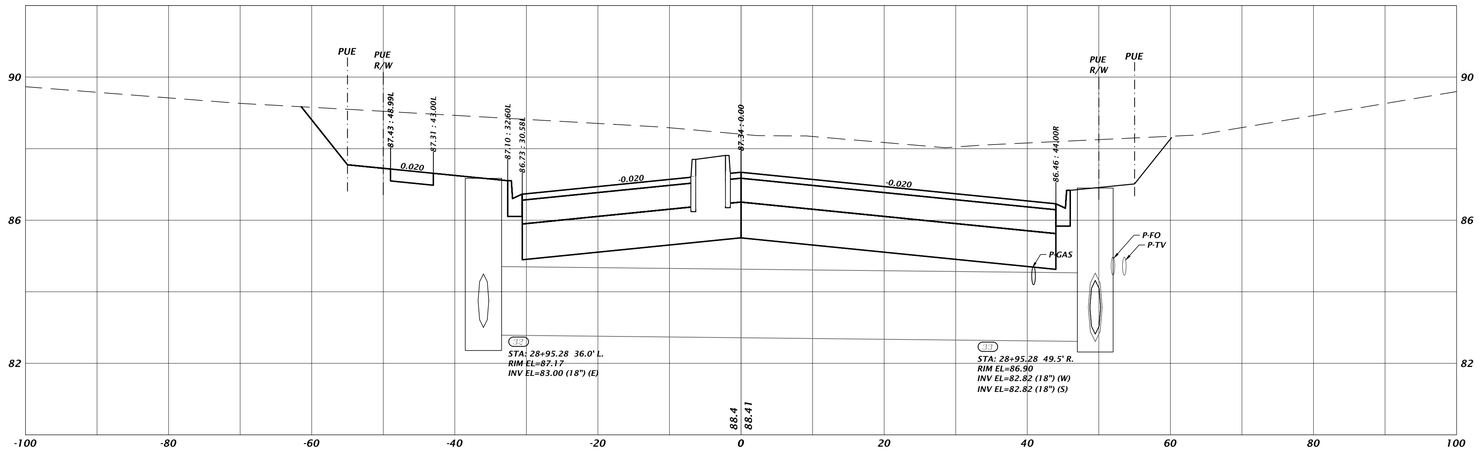
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FL PE No. 92346

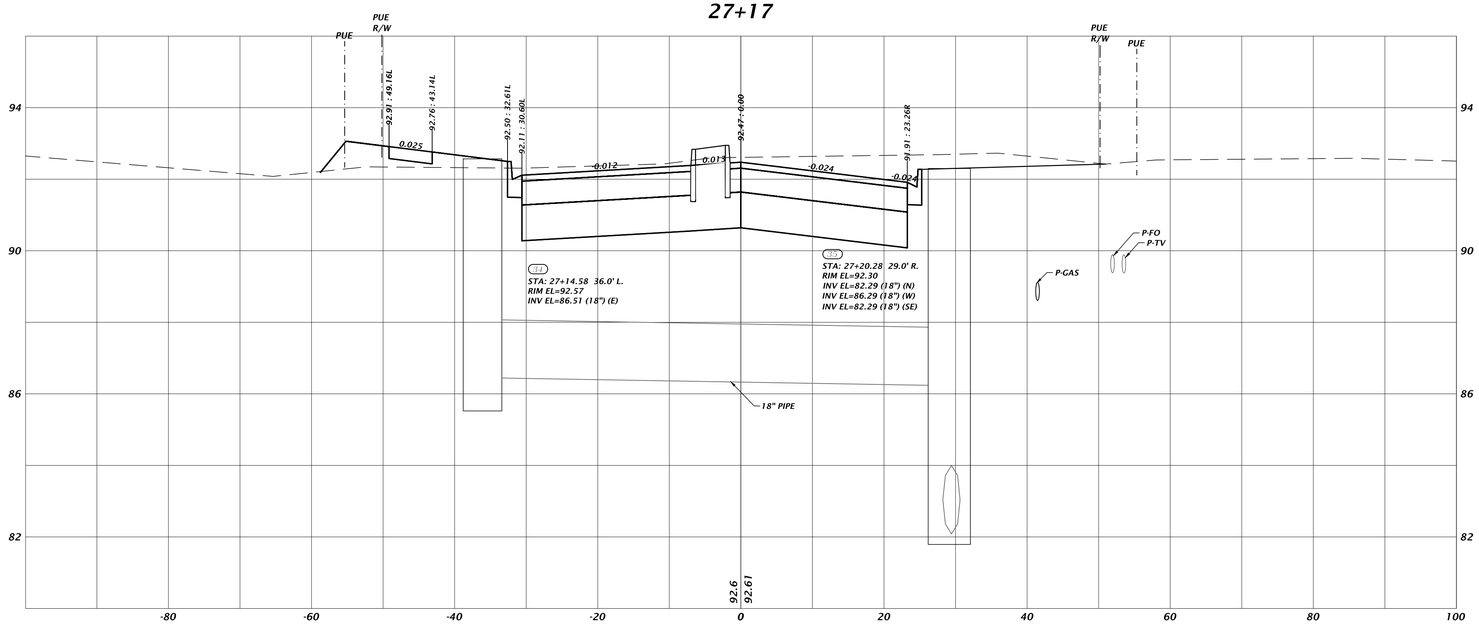
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Tools: bryony Plot Date: May 05,2023 7:30am Filename: N:\2021\21-0025\Department\04_Engineering\02_DWGs_ROAD\Production Files\xSections.dwg

28+95



27+17



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CONSTRUCTION/BID REVISIONS:

SUBMITTALS:

CLIENT: TOWER HILL FARMS

PROJECT: TOWER HILLS NEW HQ

SHEET TITLE: DRAINAGE CROSS SECTIONS

TECHNICIAN: RL/B.G.

DESIGNER: M. CASTRELL, E.I.

QUALITY CONTROL: R. WALPOLE, P.E.

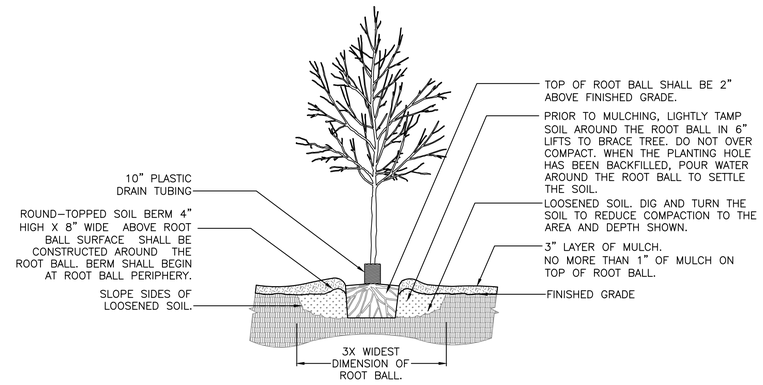
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CODY CASH, P.E.

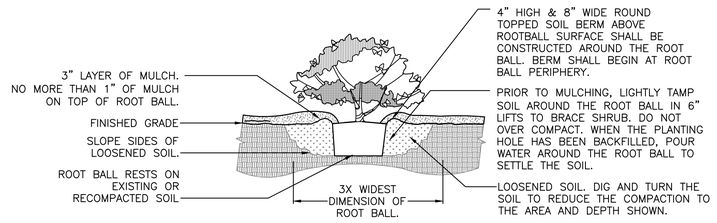
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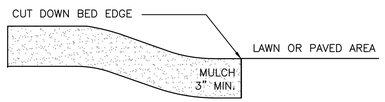
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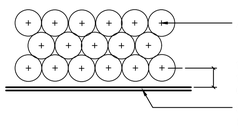
1 TREE PLANTING DETAIL
SCALE: N.T.S.



2 SHRUB PLANTING DETAIL
SCALE: N.T.S.



3 MULCH DETAIL
SCALE: N.T.S.



NOTE: THE PERIMETER OF ALL CURVED PLANTING BEDS SHALL BE PLANTED WITH A ROW OF SHRUBS AS SHOWN IN THE PLANS AND AT THE SPACING SHOWN IN THE PLANT LIST. INTERIOR PORTIONS OF EACH BED SHALL BE PLANTED AT APPROPRIATE SPACING ACCORDING TO THIS PLANT SPACING DETAIL.

4 SHRUB PLANTING DETAIL
SCALE: N.T.S.

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CANOPY AND UNDERTORY TREE REQUIREMENT SUMMARY

LANDSCAPE REQUIREMENTS	TREE TYPE BREAKDOWN	LANDSCAPE REQUIREMENTS MEET VIA MITIGATION CREDITS	LANDSCAPE PROVIDED
TOTAL REQUIREMENTS*	582 CANOPY TREES 61 CANOPY/UNDERSTORY TREES 302 UNDERSTORY TREES	438 CANOPY TREES 101 UNDERSTORY TREES	582 CANOPY TREES 61 CANOPY/UNDERSTORY TREES 302 UNDERSTORY TREES 945 TOTAL TREES

*NOTE: A MAXIMUM OF 75% OF THE REQUIRED SITE, PARKING, AND BUFFER LANDSCAPE IS BEING PROVIDED FOR BY 539 TREE PRESERVATION CREDITS

PERIMETER BUFFER LANDSCAPE REQUIREMENTS [Section 6.2.2(D)(3)]

LOCATION	BUFFER LENGTH & TYPE	LANDSCAPE REQUIRED	LANDSCAPE PROVIDED
OFFICE PERIMETER (EAST)	613 L.F. BUFFER TYPE 'D' (25' WIDE)	OPTION 1 1 CANOPY TREE PER 25 LF 1 UNDERSTORY TREE PER 40 LF CONTINUOUS HEDGE	OPTION 1 5 CANOPY TREES AND 20 CREDITS PROVIDED 16 UNDERSTORY TREES CONTINUOUS HEDGE
OFFICE PERIMETER (SOUTH)	820 L.F. BUFFER TYPE 'A' (5' WIDE)	OPTION 2 1 CANOPY TREE PER 60 LF CONTINUOUS HEDGE	OPTION 2 6 CANOPY TREES AND 8 CREDITS PROVIDED CONTINUOUS HEDGE
OFFICE PERIMETER (NORTH)	680 L.F. BUFFER TYPE 'A' (5' WIDE)	OPTION 2 1 CANOPY TREE PER 60 LF CONTINUOUS HEDGE	OPTION 2 6 CANOPY TREES AND 8 CREDITS PROVIDED CONTINUOUS HEDGE
STORMWATER PERIMETER (SOUTH)	1,436 L.F. BUFFER TYPE 'D' (25' WIDE)	OPTION 1 1 CANOPY TREE PER 25 LF 1 UNDERSTORY TREE PER 40 LF CONTINUOUS HEDGE	OPTION 1 16 CANOPY TREES AND 44 CREDITS PROVIDED 36 UNDERSTORY TREES CONTINUOUS HEDGE
STORMWATER PERIMETER (NORTH)	2,312 L.F. BUFFER TYPE 'A' (5' WIDE)	OPTION 2 1 CANOPY TREE PER 60 LF CONTINUOUS HEDGE	OPTION 2 10 CANOPY TREES AND 29 CREDITS PROVIDED CONTINUOUS HEDGE
STORMWATER PERIMETER (EAST)	293 L.F. ARTERIAL BUFFER (15' WIDE)	4 CANOPY TREES PER 100 LF 3 UNDERSTORY TREES PER 100 LF CONTINUOUS HEDGE	3 CANOPY TREES AND 9 CREDITS PROVIDED 9 UNDERSTORY TREES CONTINUOUS HEDGE

LANDSCAPED AREA REQUIREMENT
PER CITY OF ALACHUA COMPREHENSIVE PLAN FUTURE LAND USE ELEMENT, POLICY 2.4.A

TOTAL SITE AREA	37.07 ACRES
TOTAL PROJECT AREA	37.07 ACRES
TOTAL PROPOSED OPEN AREA	4.20 ACRES
OPEN AREA % OF TOTAL SITE AREA (MIN. 10%)	11.33%
TOTAL PROPOSED LANDSCAPE AREA (EXCLUSIVE OF OPEN AREA)	3.80 ACRES
LANDSCAPED AREA % OF TOTAL SITE AREA (MIN. 10%)	10.25%

PARKING AREA LANDSCAPE REQUIREMENTS [Sec. 6.2.2(D)(2)(a) & (b)]

DESCRIPTION	LANDSCAPE REQUIRED	LANDSCAPE PROVIDED
PARKING AREA PERIMETER LANDSCAPE	PARKING PERIMETER = 935 L.F. 4 CANOPY TREES PER 100 L.F. 2 UNDERSTORY/ORNAMENTAL PER 100 L.F. CONTINUOUS ROW OF SHRUBS 37 CANOPY TREES REQUIRED 19 UNDERSTORY TREES REQUIRED CONTINUOUS ROW OF SHRUBS	10 CANOPY TREES AND 27 CREDITS PROVIDED 19 UNDERSTORY TREES PROVIDED CONTINUOUS ROW OF SHRUBS PROVIDED
INTERIOR PARKING AREA LANDSCAPE	PARKING AREA = 110,500 S.F. 1 CANOPY/UNDERSTORY TREE REQUIRED PER 1,800 S.F. 10 SHRUBS REQUIRED PER LANDSCAPE ISLAND 61 CANOPYUNDERSTORY TREES REQUIRED 400 SHRUBS REQUIRED	16 TREES AND 45 CREDITS PROVIDED 400 SHRUBS PROVIDED

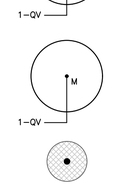
SITE LANDSCAPE CALCULATIONS [Sec. 6.2.2(D)(1)(c)]

DESCRIPTION	TREE REQUIREMENTS	TREES PROVIDED
PRIMARY SIDE CANOPY TREES (WEST SIDE)	3 TREES PER ACRE X 37.07 ACRES = 111 CANOPY TREES REQUIRED	28 CANOPY TREES AND 83 CREDITS
REAR SIDE CANOPY TREES (EAST SIDE)	2 TREES PER ACRE X 37.07 ACRES = 74 TREES REQUIRED	19 CANOPY TREES AND 55 CREDITS
NORTH SIDE CANOPY TREES	2 TREES PER ACRE X 37.07 ACRES = 74 TREES REQUIRED	19 CANOPY TREES AND 55 CREDITS
SOUTH SIDE CANOPY TREES	2 TREES PER ACRE X 37.07 ACRES = 74 TREES REQUIRED	19 CANOPY TREES AND 55 CREDITS
SITE UNDERSTORY TREES	6 UNDERSTORY TREES PER ACRE X 37.07 ACRES = 222 TREES REQUIRED 50% IN FRONT = 111 TREES REQUIRED 25% ON EAST SIDE = 56 TREES REQUIRED 25% ON WEST SIDE = 55 TREES REQUIRED 222 UNDERSTORY TREES REQUIRED	FRONT SIDE 61 UNDERSTORY TREES AND 50 CREDITS EAST SIDE 30 UNDERSTORY TREES AND 26 CREDITS WEST SIDE 30 UNDERSTORY TREES AND 25 CREDITS 121 UNDERSTORY TREES AND 101 CREDITS
BUILDING FACADE	4 CANOPY TREES PER 100 LIN. FT. AND ROW OF SHRUBS REQUIRED ON EACH SIDE 218 LF NORTH FACADE = 9 TREES REQUIRED 218 LF SOUTH FACADE = 9 TREES REQUIRED 430 LF WEST FACADE = 17 TREES REQUIRED 430 LF EAST FACADE = 17 TREES REQUIRED	NORTH FACADE 9 CANOPY TREES PROVIDED SOUTH FACADE 9 CANOPY TREES PROVIDED WEST FACADE 17 CANOPY TREES PROVIDED EAST FACADE 17 CANOPY TREES PROVIDED ROW OF SHRUBS PROVIDED ON ALL SIDES

TREE MITIGATION CALCULATIONS

CATEGORY	MITIGATION CALCULATIONS
INCH-FOR-INCH REPLACEMENT	HERITAGE TREES 54" LIVE OAK....54" 50" LIVE OAK....50" 45" LAUREL OAK....45" 42" LAUREL OAK....42" 40" LAUREL OAK....40" 38" SWEET GUM....38" 38" LAUREL OAK....38" 38" LAUREL OAK....38" 36" LIVE OAK....36" 36" SWEET GUM....36" 36" CHERRY LAUREL....36" 36" LAUREL OAK....36" 36" LAUREL OAK....36" 36" LAUREL OAK....36" 36" LAUREL OAK....36" 34" LAUREL OAK....34" 32" LIVE OAK....32" 32" LIVE OAK....32" 30" LIVE OAK....30" 30" LAUREL OAK....30" TOTAL INCHES REQUIRED....755" TOTAL TREE REQUIRED (2" PER TREE)....378 TREES
1:1 REPLACEMENT	TOTAL TREES TO BE MITIGATED AT 1:1 REPLACEMENT....236 TREES TOTAL TREES REQUIRED FOR MITIGATION @ 1:1 REPLACEMENT....236 TREES
SUMMARY	TOTAL TREES TO BE MITIGATED AT INCH-FOR-INCH REPLACEMENT....378 TREES TOTAL TREES REQUIRED FOR MITIGATION @ 1:1 REPLACEMENT....236 TREES TOTAL REPLACEMENT TREES PROVIDED....614 TREES TOTAL MITIGATION DEFICIT....0 TREES

LEGEND



NEW TREES TO BE ADDED
MITIGATION TREES
EXISTING TREES TO REMAIN

GENERAL NOTES
ALL ASPHALT, LIMEROCK, AND CONSTRUCTION DEBRIS SHALL BE REMOVED FROM PLANTING BEDS AND SOD AREAS PRIOR TO LANDSCAPE INSTALLATION. IF ENCOUNTERED DURING CONSTRUCTION OR INSTALLATION, THESE SHALL BE EXCAVATED AND REMOVED FROM THE SITE. PLANTING DEPTH OF SOIL IN SUCH AREAS SHOULD BE AT LEAST 3'. IF FILL MUST BE ADDED, IT MUST BE FLORIDA CLEAN DEEP FILL (FREE OF WEED SEEDS) WITH pH 6.0 – 7.5.

ALL LANDSCAPED AREAS SHALL BE MULCHED WITH 3" THICKNESS OF MULCH. PINE BARK MULCH SHALL BE USED IN ALL AREAS, EXCEPT RETENTION AREAS. PINE STRAW MULCH SHALL BE USED IN RETENTION AREAS.

NEW TREES OUTSIDE OF MULCHED LANDSCAPED BEDS WILL BE PROTECTED FROM MOWER AND STRING TRIMMER DAMAGE WITH 10" OF PLASTIC DRAIN TUBING.

LEADER SHOOTS AND MAIN STRUCTURAL LIMBS OF TREES SHALL NOT BE TOPPED OR PRUNED. TREES WILL BE STAKED AS NEEDED. GUYLINES WILL BE OF NON-SYNTHETIC BIODEGRADABLE MATERIAL.

REFER TO CIVIL PLANS FOR TREE BARRICADE DETAILS AND INFORMATION.

GRASSING
ALL DISTURBED AND UNPAVED AREAS TO BE GRASSED WITH SOD THAT IS FREE OF NOXIOUS WEEDS INCLUDING TROPICAL SODA APPLE OR SHALL BE SEEDED AND MULCHED. SEE CIVIL SITE PLANS FOR ADDITIONAL RELATED INFORMATION.

PLANT MATERIAL
ALL PLANT MATERIAL TO BE FLORIDA NO.1 OR BETTER, GRADED IN ACCORDANCE WITH THE STATE OF FLORIDA DEPARTMENT OF AGRICULTURE, DIVISION OF PLANT INDUSTRY'S 'GRADES AND STANDARDS FOR NURSERY PLANTS', CURRENT EDITION AT THE TIME PLANS ARE ISSUED. CALL THE LANDSCAPE ARCHITECT PRIOR TO PURCHASING ANY PLANT MATERIAL FOR AN ON SITE INSPECTION AND REVIEW OF LANDSCAPE PLAN.

PLANT QUANTITIES SHOWN ARE FOR PERMITTING PURPOSES ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONFIRM ALL QUANTITIES SHOWN ON THE PLAN.

10% OPEN SPACE REQUIREMENT
AS PER CITY OF ALACHUA LDR SECTION 6.7.3 (A), THE MINIMUM OPEN SPACE SET ASIDE SHALL BE 10% OF THE DEVELOPMENT SITE. REFER TO CIVIL PLANS FOR OPEN SPACE CALCULATIONS.

IRRIGATION
LANDSCAPE IRRIGATION TO BE PROVIDED BY AUTOMATIC IRRIGATION SYSTEM IN ACCORDANCE WITH CITY OF ALACHUA LDR SECTION 6.2.2(D)(6)(B)(VI).

ALL NEWLY PLANTED TREES SHALL HAVE INDIVIDUAL LOW FLOW OR MICRO-IRRIGATION SUPPLIES [407.46(A).3]. ALL IRRIGATION SYSTEMS ARE REQUIRED TO HAVE A MOISTURE SENSOR/AUTOMATIC RAINFALL SHUTOFF DEVICE [407.46(A)4].

UTILITIES
TREES SHALL BE PLANTED SO THEIR TRUNKS ARE A MINIMUM OF 10' FROM ALL WATER AND WASTEWATER LINES.

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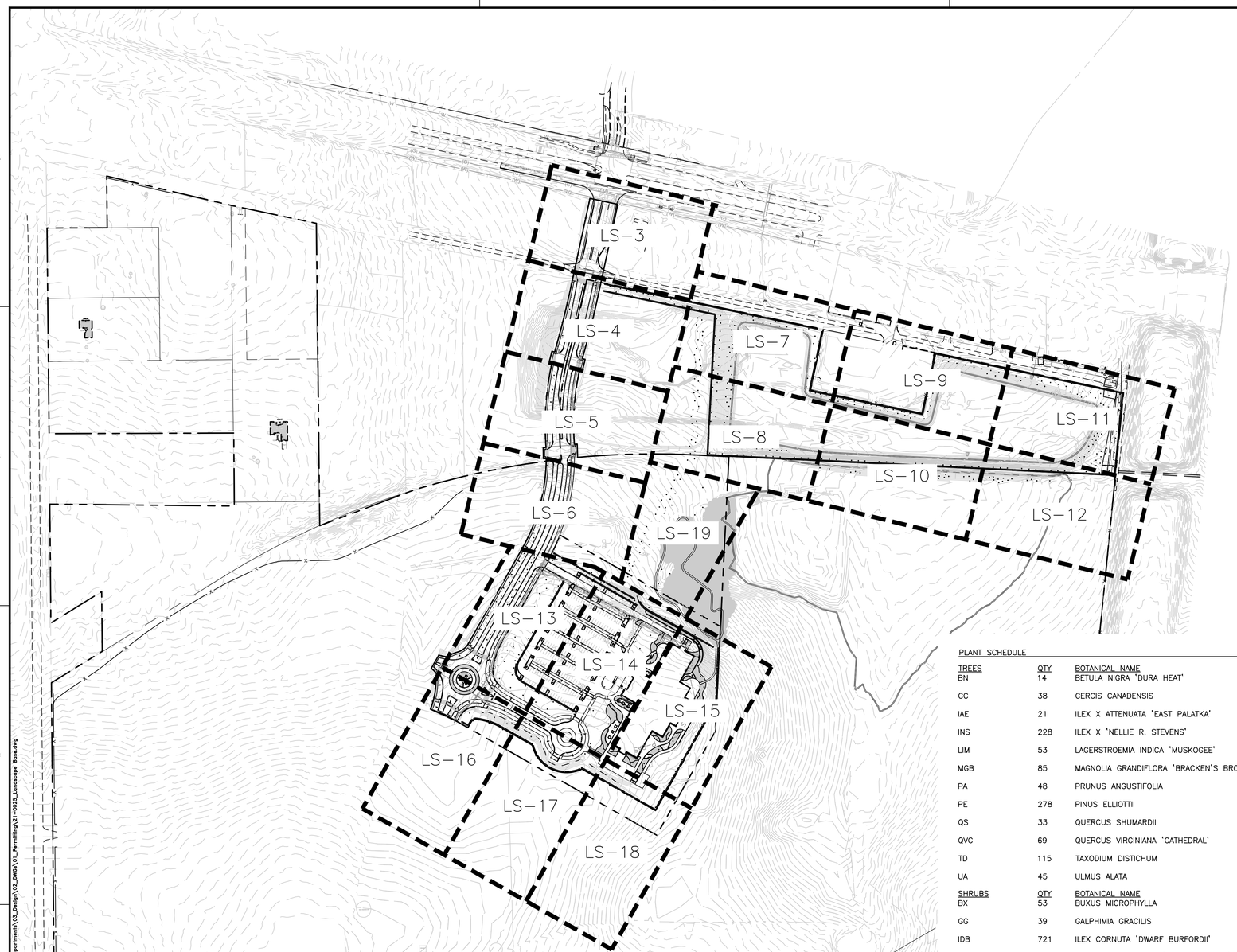
CLIENT: TOWER HILL SCOTT ROWE
PROJECT: TOWER HILL HEADQUARTERS
SHEET TITLE: LANDSCAPE NOTES, AND DETAILS

TECHNICIAN: LR
DESIGNER: MS
QUALITY CONTROL: CT
PROJECT NUMBER: 21-0025

REGISTERED LANDSCAPE ARCHITECT
JOHN MICHAEL SIMPSON
LA6667436
STATE OF FLORIDA

SHEET NO.: LS-1

Tech: john-mitchell Plot Date: May 05,2023 10:26am Filename: M:\2021\21-0025\Department\03_Design\03_DWGs\01_Permitting\21-0025_Landscape Base.dwg



PLANT SCHEDULE

TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE
BN	14	BETULA NIGRA 'DURA HEAT'	DURA HEAT RIVER BIRCH	30 GAL, 12' HT, 42" SPR, 2" CAL
CC	38	CERCIS CANADENSIS	EASTERN REDBUD	30 GAL, 10' HT, 4' SPR, 2" CAL
IAE	21	ILEX X ATTENUATA 'EAST PALATKA'	EAST PALATKA HOLLY	30 GAL, 8' HT, 42" SPR, 2" CAL
INS	228	ILEX X 'NELLIE R. STEVENS'	NELLIE R. STEVENS HOLLY	15 GAL, 8' HT, 30" SPR, 1.5" CAL
LIM	53	LAGERSTROEMIA INDICA 'MUSKOGEE'	MUSKOGEE CRAPE MYRTLE	15 GAL, 8' HT, 30" SPR, 1.5" CAL, STANDARD
MGB	85	MAGNOLIA GRANDIFLORA 'BRACKEN'S BROWN BEAUTY'	BRACKEN'S BROWN BEAUTY MAGNOLIA	30 GAL, 12' HT, 42" SPR, 2" CAL
PA	48	PRUNUS ANGUSTIFOLIA	CHICKASAW PLUM	15 GAL, 8' HT, 30" SPR, 1.5" CAL
PE	278	PINUS ELLIOTTII	SLASH PINE	30 GAL, 12' HT, 42" SPR, 2" CAL
QS	33	QUERCUS SHUMARDII	SHUMARD RED OAK	30 GAL, 12' HT, 42" SPR, 2" CAL
QVC	69	QUERCUS VIRGINIANA 'CATHEDRAL'	CATHEDRAL LIVE OAK	30 GAL, 12' HT, 54" SPR, 2" CAL
TD	115	TAXODIUM DISTICHUM	BALD CYPRESS	30 GAL, 12' HT, 42" SPR, 2" CAL
UA	45	ULMUS ALATA	WINGED ELM	30 GAL, 10' HT, 4' SPR, 2" CAL

SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	SIZE
BX	53	BUXUS MICROPHYLLA	BOXWOOD	3 GAL, 18" HT, 9" SPR
GG	39	GALPHIMIA GRACILIS	RAIN OF GOLD	3 GAL, 18" HT, 12" SPR
IDB	721	ILEX CORNUTA 'DWARF BURFORDII'	DWARF BURFORD HOLLY	3 GAL, 24" HT, 16" SPR
RI	978	RHAPHIOLEPIS INDICA 'ELEANOR TABER'	ELEANOR TABER INDIAN HAWTHORN	3 GAL., 24" HT. X 12" SPR.
RSF	505	RHODODENDRON SIMSII 'FORMOSA'	FORMOSA AZALEA	3 GAL., 18" HT., 18"SPR.
VOS	1,265	VIBURNUM OBOVATUM 'MRS. SCHILLER'S DELIGHT'	MRS. SCHILLER'S DELIGHT VIBURNUM	3 GAL., 18" HT., 18"SPR.
ZF	238	ZAMIA FLORIDANA	COONTIE	3 GAL., 15" HT X 15" HT.

GROUND COVERS	QTY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING
DV	402	DIETES VEGETA	AFRICAN IRIS	1 GAL, FULL	24" o.c.
JBP	152	JUNIPERUS CHINENSIS 'BLUE PACIFIC'	BLUE PACIFIC JUNIPER	1 GAL., FULL	24" o.c.
LEM	2,967	LIRIOPE MUSCARI 'EMERALD GODDESS'	EMERALD GODDESS LIRIOPE	1 GAL., FULL	18" o.c.
MU	1,039	MUHLENBERGIA CAPILLARIS	PINK MUHLY	1 GAL., FULL	24" o.c.
SB	754	SPARTINA BAKERI	SAND CORD GRASS	1 GAL., FULL	42" o.c.
TG	273	TRIPSACUM DACTYLOIDES	FAKAHATCHEE GRASS	1 GAL., FULL	48" o.c.

SOD/SEED		BOTANICAL NAME	COMMON NAME	SIZE
SOD		PASPALUM NOTATUM 'ARGENTINE'	BAHIA GRASS	WEED FREE AND SAND GROWN SOD

N

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CLIENT: TOWER HILL SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

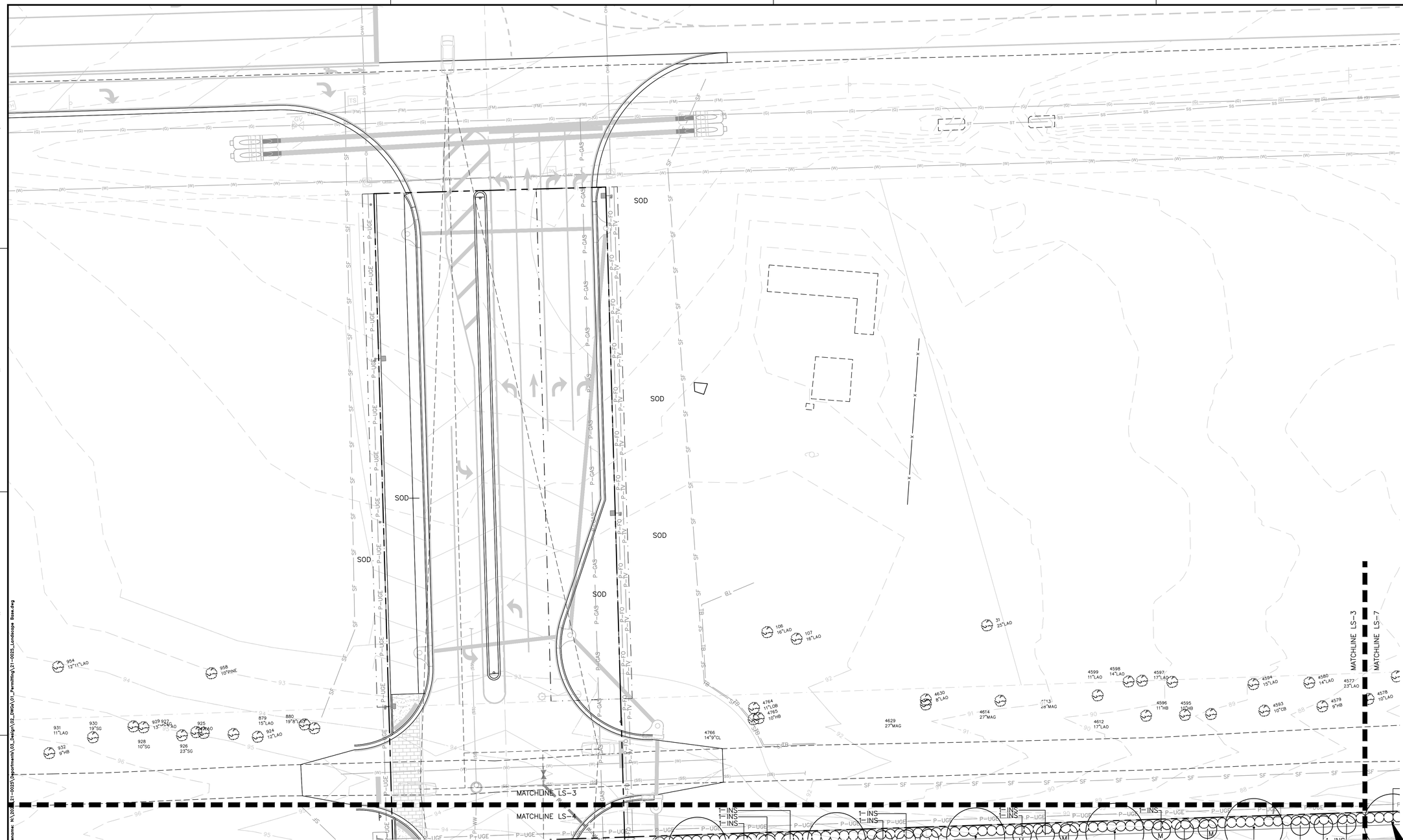
SHEET TITLE: OVERALL LANDSCAPE PLAN AND PLANT SCHEDULE

TECHNICIAN: LR
DESIGNER: MS
QUALITY CONTROL: CT
PROJECT NUMBER: 21-0025

REGISTERED LANDSCAPE ARCHITECT
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STATE OF FLORIDA

SHEET NO.: LS-2

Tech: john-michaels Plot Date: May 05,2023 10:25am File:I:\Work in N\2021\21-0025\Department\05_Design\02_DWGs\05_Permitting\21-0025_Landscape Base.dwg



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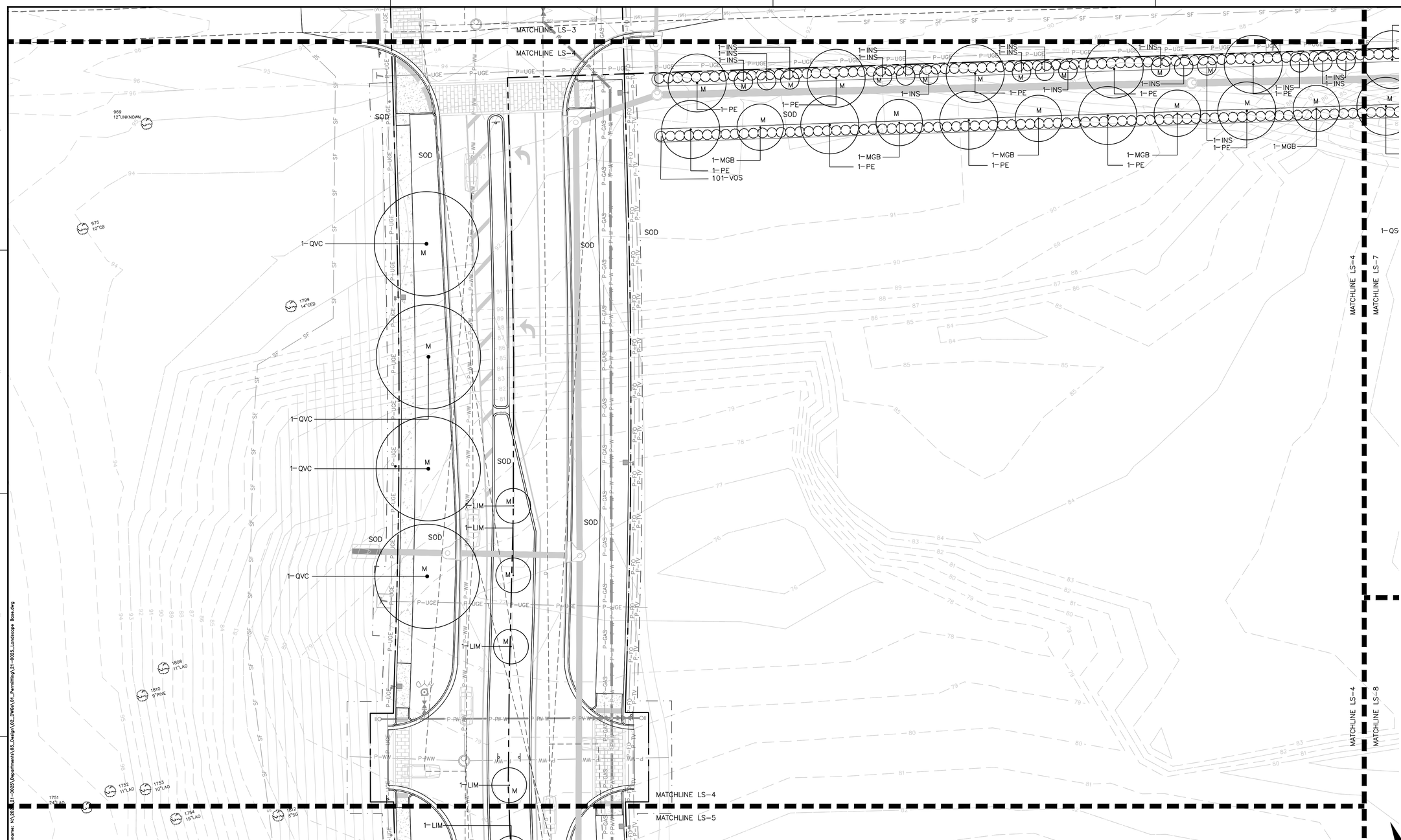
CLIENT: TOWER HILL SCOTT ROWE
PROJECT: TOWER HILL HEADQUARTERS
SHEET TITLE: LANDSCAPE PLAN

TECHNICIAN: LR
DESIGNER: MS
QUALITY CONTROL: CT
PROJECT NUMBER: 21-0025

DESIGNED LANDSCAPE ARCHITECT
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SHEET NO.: LS-3

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CLIENT: TOWER HILL SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

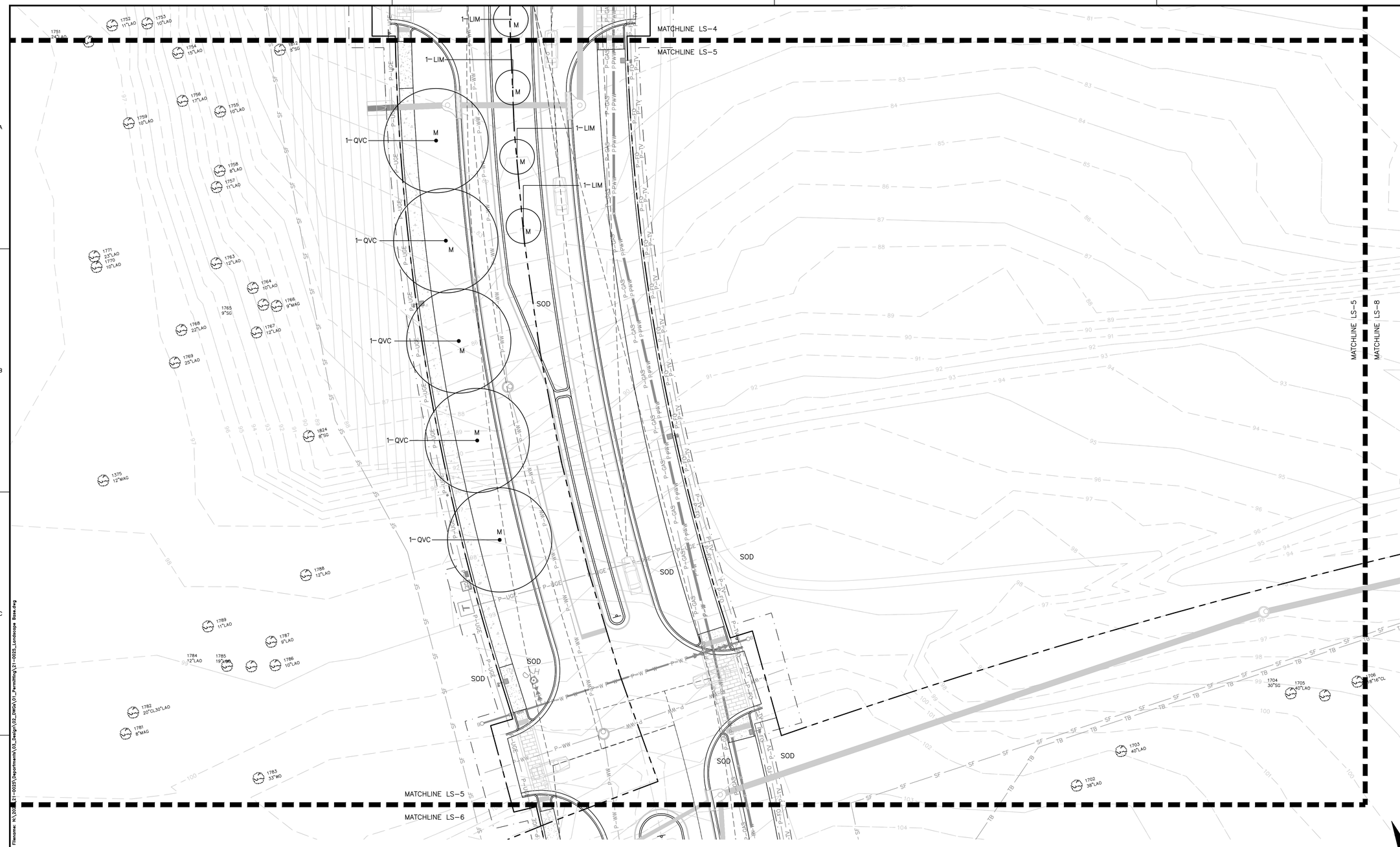
SHEET TITLE: LANDSCAPE PLAN

TECHNICIAN: LR
DESIGNER: MS
QUALITY CONTROL: CT
PROJECT NUMBER: 21-0025

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SHEET NO.: LS-4

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PROJECT: TOWER HILL HEADQUARTERS
SHEET TITLE: LANDSCAPE PLAN

TECHNICIAN: LR
DESIGNER: MAS
QUALITY CONTROL: CT
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SHEET NO.: LS-5

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MATCHLINE LS-5

MATCHLINE LS-6

SOD

1-LIM

1-QVC

1-LIM
1-LIM

7-IDB
1-PE

1-PA
1-UA

1-QS
1-PA
1-IAE

1-PA
1-IAE

1-INS

MATCHLINE LS-6

MATCHLINE LS-13

GRAPHIC SCALE
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CLIENT: TOWER HILL SCOTT ROWE
PROJECT: TOWER HILL HEADQUARTERS
SHEET TITLE: LANDSCAPE PLAN

TECHNICIAN: LR
DESIGNER: MS
QUALITY CONTROL: CT
PROJECT NUMBER: 21-0025

SHEET NO.: LS-6

Tech: john--michaels Plot Date: May 05,2023 10:26am File name: N:\2021-0025\Department\A (G)_Design (D)_Drwgs (S)_Permitting\21-0025_Landscape Base.dwg

MATCHLINE LS-3
MATCHLINE LS-7
MATCHLINE LS-4
MATCHLINE LS-7
MATCHLINE LS-7
MATCHLINE LS-9
MATCHLINE LS-7
MATCHLINE LS-8

101-VOS
1-PE
1-INS
50-IDB
1-INS
123-IDB
1-MGB
1-PE
1-MGB
1-PE
SOD
1-TD
1-CC
1-MGB
17-VOS
24-VOS
25-VOS
103-IDB

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SUBMITTALS:
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04/14/23 CITY OF ALACHUA, FDOT & SRWMD
05/05/23 CITY OF ALACHUA, FDOT & SRWMD

CLIENT: TOWER HILL SCOTT ROWE
PROJECT: TOWER HILL HEADQUARTERS
SHEET TITLE: LANDSCAPE PLAN

TECHNICIAN: LR
DESIGNER: MS
QUALITY CONTROL: CT
PROJECT NUMBER: 21-0025

REGISTERED LANDSCAPE ARCHITECT
JOHN MICHAEL SIMPSON
LA6667436
STATE OF FLORIDA

SHEET NO.: LS-7

Tech: john-nicholas Plot Date: May 05,2023 10:26am Filename: N:\2021\21-0025\Departments\05_Design\05_Civil\01_Permitting\21-0025_Landscape Base.dwg

MATCHLINE LS-7
MATCHLINE LS-8
MATCHLINE LS-4
MATCHLINE LS-8
MATCHLINE LS-5
MATCHLINE LS-8
MATCHLINE LS-8
MATCHLINE LS-10
MATCHLINE LS-8
MATCHLINE LS-19

SOD

63-IDB

7346 25"LAO
7347 54"LAO
7348 46"LO
7484 41"LAO
7485 55"LAO
7488 30"HB
7492 38"LAO
7494 40"LAO
7495 50"LAO

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05/05/23 CITY OF ALACHUA, FDOT & SRWMD

CLIENT: TOWER HILL SCOTT ROWE
PROJECT: TOWER HILL HEADQUARTERS
SHEET TITLE: LANDSCAPE PLAN

TECHNICIAN: LR
DESIGNER: MAS
QUALITY CONTROL: CT
PROJECT NUMBER: 21-0025

REGISTERED LANDSCAPE ARCHITECT
JOHN MICHAEL SIMPSON
LA6667436
STATE OF FLORIDA

SHEET NO.: LS-8

Tech: John--mitchell Plot Date: May 05,2023 10:28am Filename: M:\2021\21-0025\Department\03_Design\02_Design\01_Permitting\21-0025_Landscape Base.dwg

MATCHLINE LS-7

MATCHLINE LS-9

MATCHLINE LS-9

MATCHLINE LS-11

MATCHLINE LS-9

MATCHLINE LS-10

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0 1"

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04/13/23 CITY OF ALACHUA, FDOT & SRWMD
05/05/23 CITY OF ALACHUA, FDOT & SRWMD

CLIENT: TOWER HILL SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: LANDSCAPE PLAN

TECHNICIAN: LR
DESIGNER: MS
QUALITY CONTROL: CT
PROJECT NUMBER: 21-0025

REGISTERED LANDSCAPE ARCHITECT
JOHN MICHAEL SIMPSON
LA6667436
STATE OF FLORIDA

SHEET NO.: LS-9

Tech: John-mitchell Plot Date: May 05,2023 10:26am Filename: N:\2021\21-0025\Drawings\03_Tower Hill\21-0025_Permitting\21-0025_Landscape Base.dwg

MATCHLINE LS-9

MATCHLINE LS-10

MATCHLINE LS-8

MATCHLINE LS-10

MATCHLINE LS-10

MATCHLINE LS-12

1-PE 1-INS 1-TD M SF 83-VOS 63-IDB

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CLIENT: TOWER HILL SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: LANDSCAPE PLAN

TECHNICIAN: LR
DESIGNER: MLS
QUALITY CONTROL: CT
PROJECT NUMBER: 21-0025

REGISTERED LANDSCAPE ARCHITECT
JOHN MICHAEL SIMPSON
LA6667436
STATE OF FLORIDA

SHEET NO.: LS-10

Tools: John-mitchell Plot Date: May 05,2023 10:26am Filename: M:\2021\21-0025\Department\03_Design\03_DWGs\01_Permitting\21-0025_Landscape Plan.dwg

MATCHLINE LS-9

MATCHLINE LS-11

MATCHLINE LS-11

MATCHLINE LS-12

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05/05/23 CITY OF ALACHUA, FDOT & SWWMD

CLIENT: TOWER HILL SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

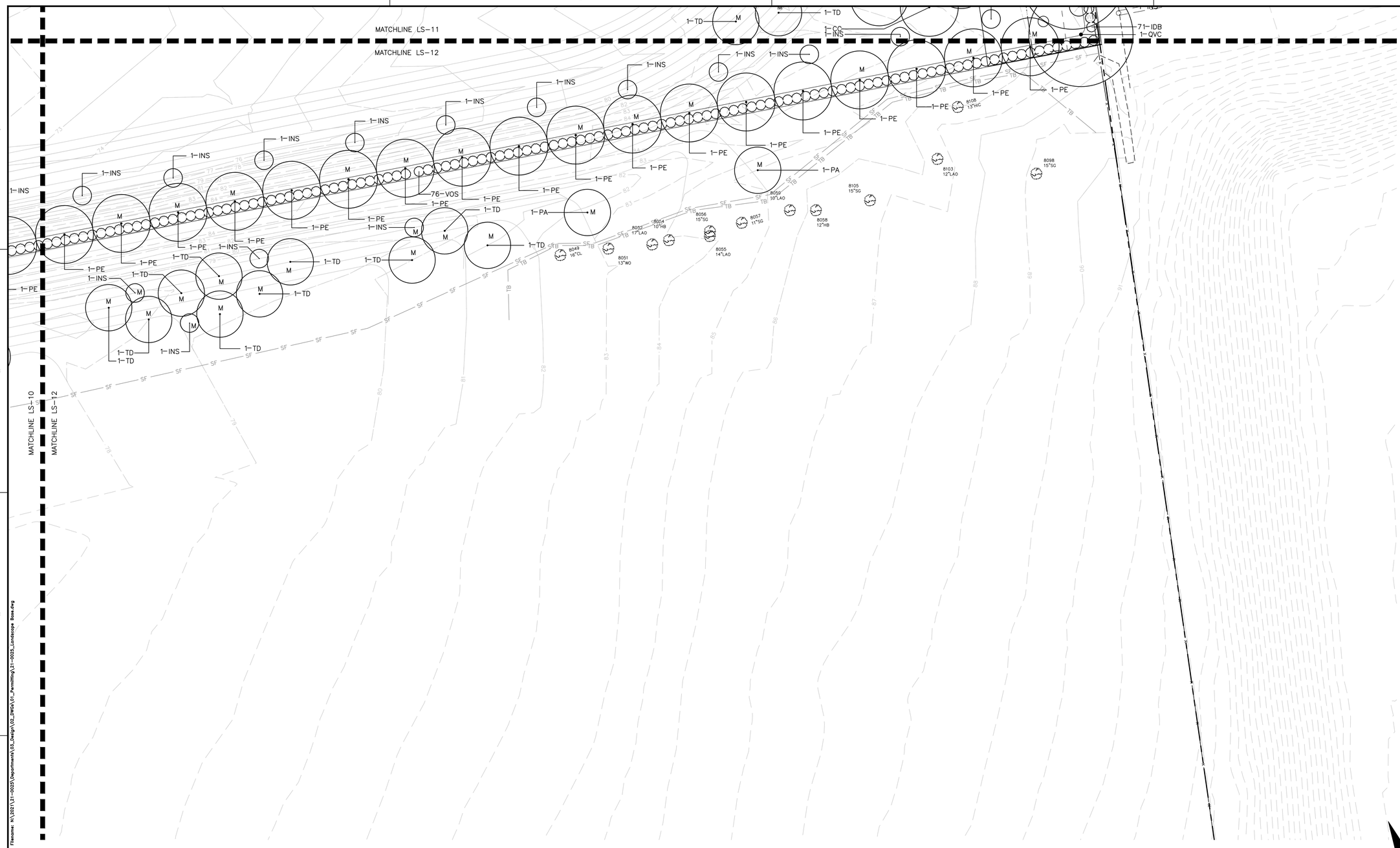
SHEET TITLE: LANDSCAPE PLAN

TECHNICIAN: LR
DESIGNER: MS
DATE:
QUALITY CONTROL: CT
PROJECT NUMBER: 21-0025

REGISTERED LANDSCAPE ARCHITECT
JOHN MICHAEL SIMPSON
LA6667436
STATE OF FLORIDA

SHEET NO.:
LS-11

Tech: john-michaels Plot Date: May 05,2023 10:26am File name: N:\2021\21-0025\Departments\03_Design\02_Design\01_Permitting\21-0025_Landscape Base.dwg



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0 1"

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05/05/23 CITY OF ALACHUA, FDOT & SRWMD

CLIENT: TOWER HILL SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: LANDSCAPE PLAN

TECHNICIAN: LR
DESIGNER: MS
QA/QTY CONTROL: CT
PROJECT NUMBER: 21-0025

REGISTERED LANDSCAPE ARCHITECT
JOHN MICHAEL SIMPSON
LA6667436
STATE OF FLORIDA

SHEET NO.: LS-12

Tech: john-michaels Plot Date: May 05,2023 10:27am Filename: M:\2021\21-0025\Departments\03_Design\02_DWGs\01_Permitting\21-0025_Landscape Base.dwg

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05/05/23 CITY OF ALACHUA, FDOT & SRWMD

CLIENT: TOWER HILL SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: LANDSCAPE PLAN

TECHNICIAN: LR
DESIGNER: MS
QUALITY CONTROL: CT

PROJECT NUMBER: 21-0025

REGISTERED LANDSCAPE ARCHITECT
JOHN MICHAEL SIMPSON
LA6667436
STATE OF FLORIDA

SHEET NO.: LS-13

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MATCHLINE LS-16
MATCHLINE LS-13
MATCHLINE LS-14
MATCHLINE LS-6
MATCHLINE LS-13

Tech: john-michaels Plot Date: May 05,2023 10:21am Filename: W:\2021\21-0025 Tallahassee\03 Design\01 Drawings\21-0025 Tallahassee Base.dwg

MATCHLINE LS-13
MATCHLINE LS-14
MATCHLINE LS-17
MATCHLINE LS-19
MATCHLINE LS-15

1-MGB 1-INS 1-QVC 1-IAE 1-LIM 1-UA 67-LEM 25-RI 66-RI 72-RI 48-RI 29-RI 19-RI 47-RI 14-VOS 1-PE 1-PA 1-CC 1-IAE 119-SB 514-LEM 78-JBP 74-JBP 1-BN 271-LEM 188-LEM 60-RSF 26-IDB 74-RSF 11-IDB 42-TG 101-MU 273-MU 219-RSF 45-SB 99-RI 40-TG 150-DV 314-LEM 38-ZF 4-IDB 138-LEM 80-LEM 1-QVC 514-LEM

SOD

P-WW P-GAS P-FIRE P-E P-W

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0 1" 2"

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05/05/23 CITY OF ALACHUA, FDOT & SRWMD

CLIENT: TOWER HILL SCOTT ROWE
PROJECT: TOWER HILL HEADQUARTERS
SHEET TITLE: LANDSCAPE PLAN

TECHNICIAN: LR
DESIGNER: JMS
QUALITY CONTROL: CT
PROJECT NUMBER: 21-0025

REGISTERED LANDSCAPE ARCHITECT
JOHN MICHAEL SIMPSON
LA6667436
STATE OF FLORIDA

SHEET NO.: LS-14

Tech: john-michaela Plot Date: May 05,2023 10:27am FileName: N:\2021\21-0025\Design\02_Schematic Design\21-0025_Landscape Plan.dwg

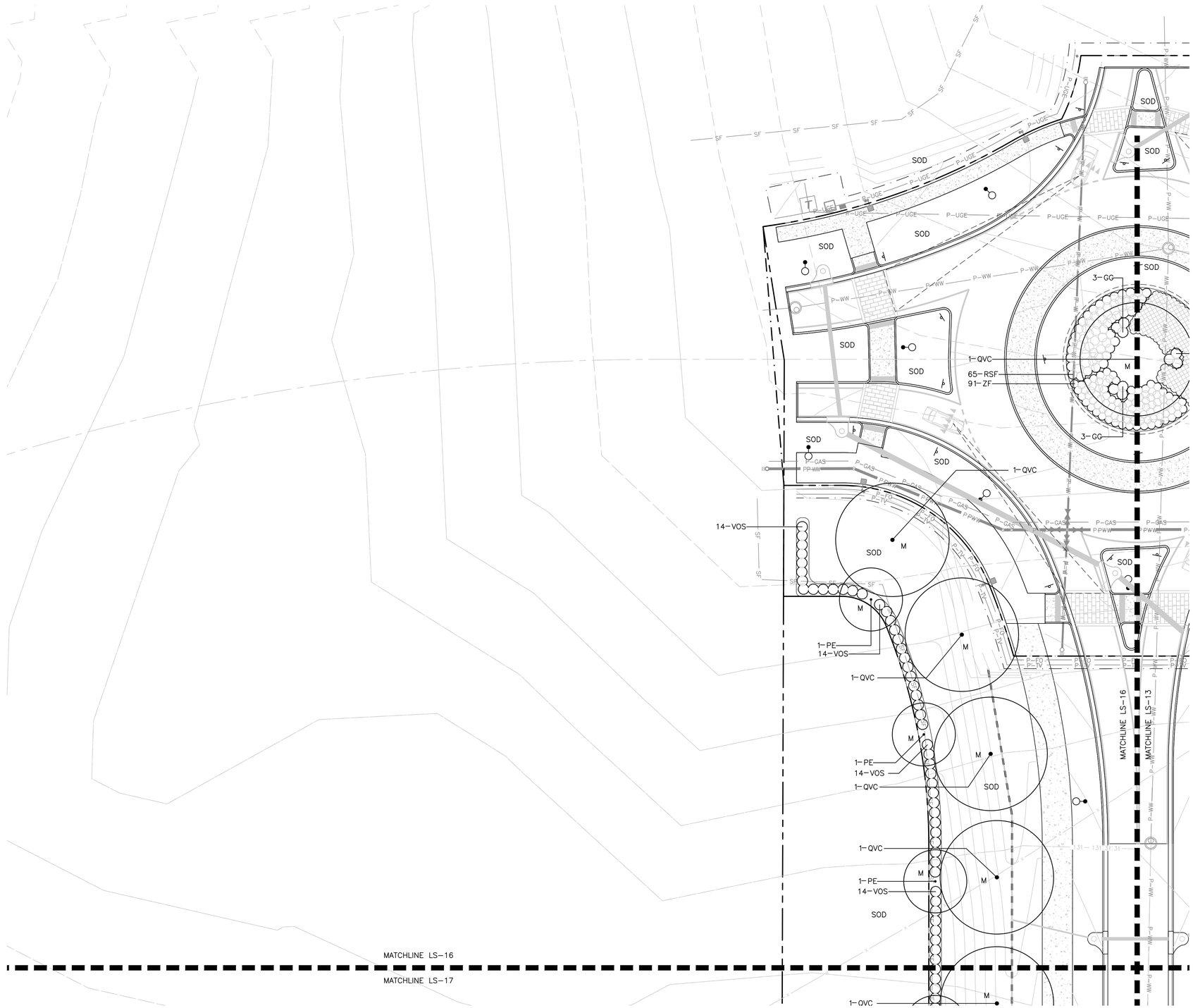
MATCHLINE LS-14

MATCHLINE LS-15

MATCHLINE LS-18

MATCHLINE LS-15

42 TG
101-MU
1-IAE
1-IAE
219-RSF
74-RSF
11-IDB
26-IDB
38-ZF
4-IDB
1-BN
1-PE
1-BN
45-SB
13-IDB
1-BN
1-BN
1-BN
17-IDB
126-MU
56-SB
1-BN
28-TG
53-BX
1-MGB
91-SB
114-LEM
1-MGB
1-MGB
63-DV
33-TG
30-RSF
1-PA
408-LEM
49-SB
1-PA
15-GG
8-TG
15-GG
QVC
MGB
MGB
1-MGB
1-MGB
SOD
57-RSF
67-DV
1-PA
88-SB
1-QVC
1-QVC
1-MGB
SOD
1-IAE
1-QVC
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5-VOS



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0 1"

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CONSTRUCTION/BID REVISIONS:

CLIENT: TOWER HILL SCOTT ROWE
PROJECT: TOWER HILL HEADQUARTERS
SHEET TITLE: LANDSCAPE PLAN

TECHNICIAN: LR
DESIGNER: MS
QUALITY CONTROL: CT
PROJECT NUMBER: 21-0025

SHEET NO.: LS-16

Tech: John-michaels Plot Date: May 05,2023 10:27am Filename: N:\2021\21-0025\Department\03_Design\02_DWGs\01_Permitting\21-0025_Landscape Base.dwg

MATCHLINE LS-16

MATCHLINE LS-17

1-QVC
M
1-PE
14-VOS
SOD
SOD
1-QVC
M
M
1-PE
9-VOS
SOD
M
1-PE
14-VOS
1-IAE
1-IAE
1-IAE
SOD
1-PE
14-VOS
MATCHLINE LS-17
MATCHLINE LS-14
SOD
SOD
1-QVC
SOD
SOD
1-PE
14-VOS
1-PA
M
M
1-PE
14-VOS
1-QVC
42-TG-
101-M
M
1-PE
14-IDB

4' BOARD FENCE

MATCHLINE LS-17

MATCHLINE LS-18

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05/05/23 CITY OF ALACHUA, FDOT & SRWMD

CLIENT: TOWER HILL SCOTT ROWE
PROJECT: TOWER HILL HEADQUARTERS
SHEET TITLE: LANDSCAPE PLAN

TECHNICIAN: LR
DESIGNER: MAS
QUALITY CONTROL: CT
PROJECT NUMBER: 21-0025

REGISTERED LANDSCAPE ARCHITECT
JOHN MICHAEL SIMPSON
LA6667436
STATE OF FLORIDA

SHEET NO.:
LS-17

Tech: john-michaela Plot Date: May 05,2023 10:27am FileName: N:\2021\21-0025\Department\03_Design\02_DWGs\01_Permitting\21-0025_Landscape Base.dwg

MATCHLINE LS-17

MATCHLINE LS-18

MATCHLINE LS-18

MATCHLINE LS-15

1-PE
14-IDB

1-BN

1-BN

1-BN

SOD

1-PE
14-IDB

SOD

1-PE
14-IDB

SOD

15-GG
8-TG

1-QVC

1-MGB

1-MGB

1-PE
15-IDB

1-MGB

1-INS

1-PE
5-VOS

1-PE
5-VOS

1-PE

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SUBMITTALS:
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04/14/23 CITY OF ALACHUA, FDOT & SRWMD
05/05/23 CITY OF ALACHUA, FDOT & SRWMD

CLIENT: TOWER HILL SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

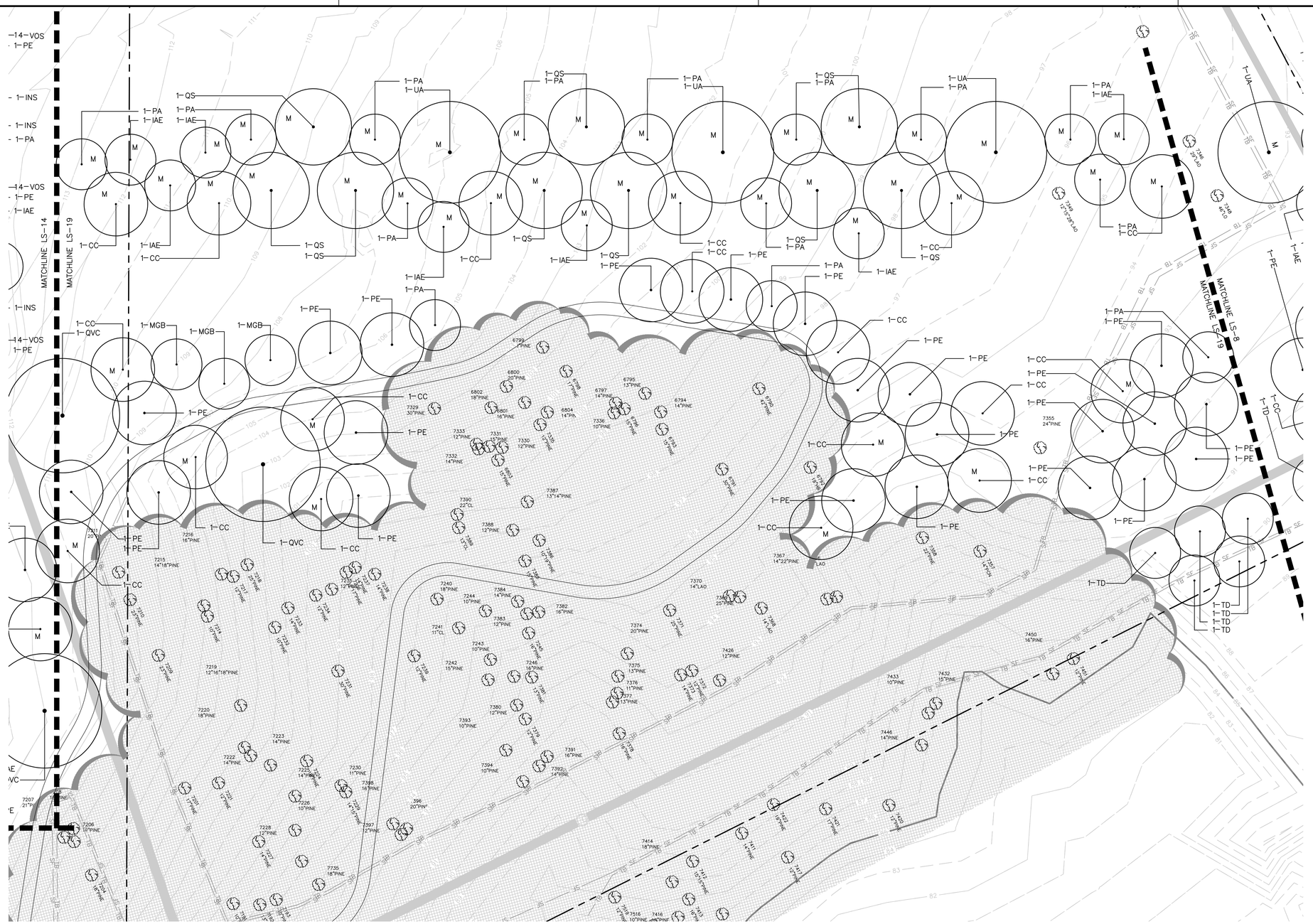
SHEET TITLE: LANDSCAPE PLAN

TECHNICIAN: LR
DESIGNER: MS
QUALITY CONTROL: CT
PROJECT NUMBER: 21-0025

REGISTERED LANDSCAPE ARCHITECT
JOHN MICHAEL SIMPSON
LA6667436
STATE OF FLORIDA

SHEET NO.: LS-18

Tech: john-michaels Plot Date: May 05,2023 10:27am FileName: N:\2021\21-0025\Department\03_Design\02_DWGs\01_Permitting\21-0025_Landscape Base.dwg



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05/05/23 CITY OF ALACHUA, FDOT & SRWMD

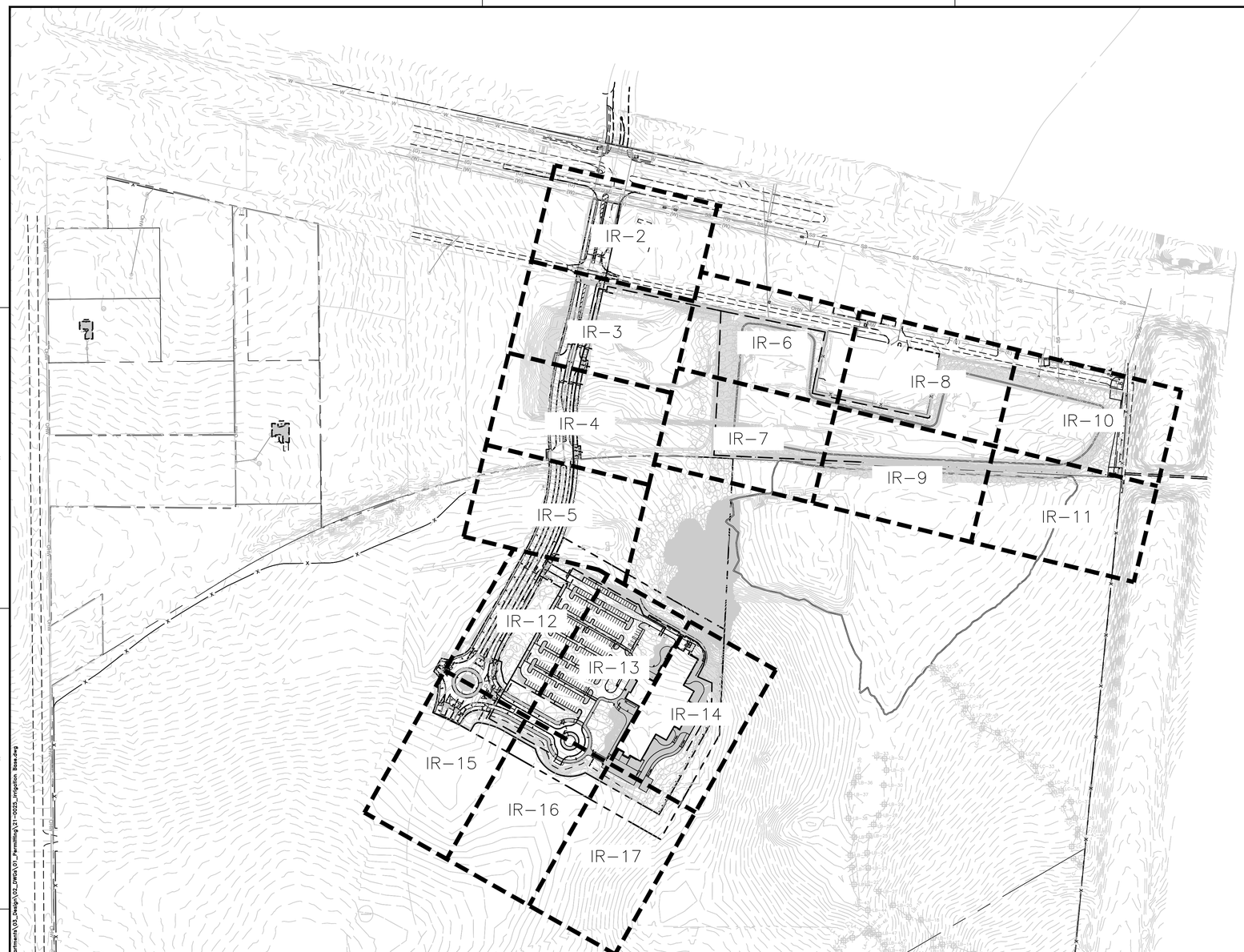
CLIENT: TOWER HILL SCOTT ROWE
PROJECT: TOWER HILL HEADQUARTERS
SHEET TITLE: LANDSCAPE PLAN

TECHNICIAN: LR
DESIGNER: MAS
QUALITY CONTROL: CT
PROJECT NUMBER: 21-0025

REGISTERED LANDSCAPE ARCHITECT
JOHN MICHAEL SIMPSON
LA6667436
STATE OF FLORIDA

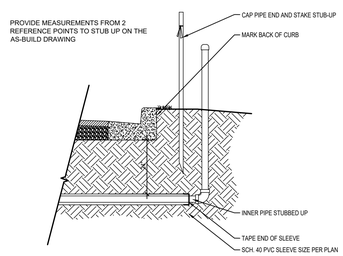
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LS-19

Xref: John-michaels Plot Date: May 05,2023 10:28am Filename: W:\2021\21-0025\Departments\03_Design\02_Design\01_Permitting\21-0025_Landscape Base.dwg



IRRIGATION_SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
M	Water Meter 2"
BF	Zurn 975XL 2" Reduced Pressure Backflow device
C	Hunter A2C–75D–PP Two Wire Controller
S	Hunter Solar Sync Weather Sensor
========	Pipe Sleeve: PVC Schedule 40



1 SLEEVING ROUGH-IN DETAIL
SCALE: N.T.S.

GRAPHIC SCALE
0 100 200 400

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CONSTRUCTION/BID REVISIONS:

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04/14/23 CITY OF ALACHUA, FDOT & SWWMD
05/05/23 CITY OF ALACHUA, FDOT & SWWMD

CLIENT: TOWER HILL SCOTT ROWE
PROJECT: TOWER HILL HEADQUARTERS
SHEET TITLE: OVERALL IRIGATION PLAN AND DETAILS

TECHNICIAN: LR
DESIGNER: MS
QUALITY CONTROL: CT
PROJECT NUMBER: 21-0025

REGISTERED LANDSCAPE ARCHITECT
JOHN MICHAEL SIMPSON
LA6667436
STATE OF FLORIDA

SHEET NO.: IR-1

Tech: john-michaels Plot Date: May 05,2023 10:28am Filename: N:\2021\21-0025\Department\05_Design\02_Design\01_Permitting\21-0025_Irrigation Base.dwg

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04/17/23 CITY OF ALACHUA, FDOT & SRWMD
05/05/23 CITY OF ALACHUA, FDOT & SRWMD

CLIENT: TOWER HILL SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: IRRIGATION PLAN

TECHNICIAN: LR
DESIGNER: LR
QUALITY CONTROL: CT
PROJECT NUMBER: 21-0025

REGISTERED LANDSCAPE ARCHITECT
JOHN MICHAEL SIMSON
LA6667436
STATE OF FLORIDA

SHEET NO.: IR-2

Tech: john-mitchell Plot Date: May 05,2023 10:28am Filename: N:\21-0025\Departments\03_Design\02_DWGs\01_Permitting\21-0025_Irrigation Base.dwg

MATCHLINE IR-2

MATCHLINE IR-3

6"&2" SLEEVES

2" SLEEVE

2" SLEEVE

2" SLEEVE

6"&2" SLEEVES

MATCHLINE IR-3

MATCHLINE IR-6

MATCHLINE IR-3

MATCHLINE IR-7

MATCHLINE IR-3

MATCHLINE IR-4

969 12"UNKNOWN

975 10"CB

1799 14"CED

1808 11"LAO

1810 9"PINE

1751 24"LAO

1752 11"LAO

1753 10"LAO

1754 15"LAO

1817 9"SG

GRAPHIC SCALE

0 10 20 40

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0 1"

CONSTRUCTION/BID REVISIONS:

SUBMITTALS:
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04/14/23 CITY OF ALACHUA, FDOT & SRWMD
05/05/23 CITY OF ALACHUA, FDOT & SRWMD

CLIENT: TOWER HILL SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: IRRIGATION PLAN

TECHNICIAN: LR
DESIGNER: MS
QUALITY CONTROL: CT
PROJECT NUMBER: 21-0025

REGISTERED LANDSCAPE ARCHITECT
JOHN MICHAEL SIMPSON
LA6667436
STATE OF FLORIDA

SHEET NO.: IR-3

Tech: John-michaels Plot Date: May 05,2023 10:28am Filename: N:\2021\21-0025\Department\03_Design\02_DWGs\01_Permitting\21-0025_Irrigation Base.dwg

MATCHLINE IR-3

MATCHLINE IR-4

2" SLEEVE

2" SLEEVE

2" SLEEVE

6"&2" SLEEVES

MATCHLINE IR-4

MATCHLINE IR-7

MATCHLINE IR-4

MATCHLINE IR-5

1751 24"LAO
1752 11"LAO
1753 10"LAO
1754 15"LAO
1755 10"LAO
1756 17"LAO
1757 11"LAO
1758 8"LAO
1759 10"LAO
1761 8"MAG
1763 12"LAO
1764 10"LAO
1765 9"SG
1766 9"MAG
1767 12"LAO
1768 22"LAO
1769 25"LAO
1771 23"LAO
1770 10"LAO
1775 12"MAG
1783 33"WO
1784 12"LAO
1785 19"WO
1786 10"LAO
1787 9"LAO
1788 12"LAO
1789 11"LAO
1782 20"CL30"LAO
1824 8"SG
1702 38"LAO
1703 40"LAO
1704 30"SG
1705 40"LAO
1706 18"16"CL

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CLIENT: TOWER HILL SCOTT ROWE
PROJECT: TOWER HILL HEADQUARTERS
SHEET TITLE: IRRIGATION PLAN

TECHNICIAN: LR
DESIGNER: MAS
QUALITY CONTROL: CT
PROJECT NUMBER: 21-0025

REGISTERED LANDSCAPE ARCHITECT
JOHN MICHAEL SIMPSON
LA6667436
STATE OF FLORIDA

SHEET NO.: IR-4

Tech: john-michaels Plot Date: May 05,2023 10:28am File:www-W:\2021\21-0025\Department\03_Design\02_DWGs\01_Permitting\21-0025_Irrigation Base.dwg

MATCHLINE IR-4

MATCHLINE IR-5

1760
33"WO

1702
38"LAO

1537
26"SG

6071
24"LO

2" SLEEVE

MATCHLINE IR-5

MATCHLINE IR-12

GRAPHIC SCALE
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05/05/23 CITY OF ALACHUA, FDOT & SRWMD

CLIENT: TOWER HILL SCOTT ROWE

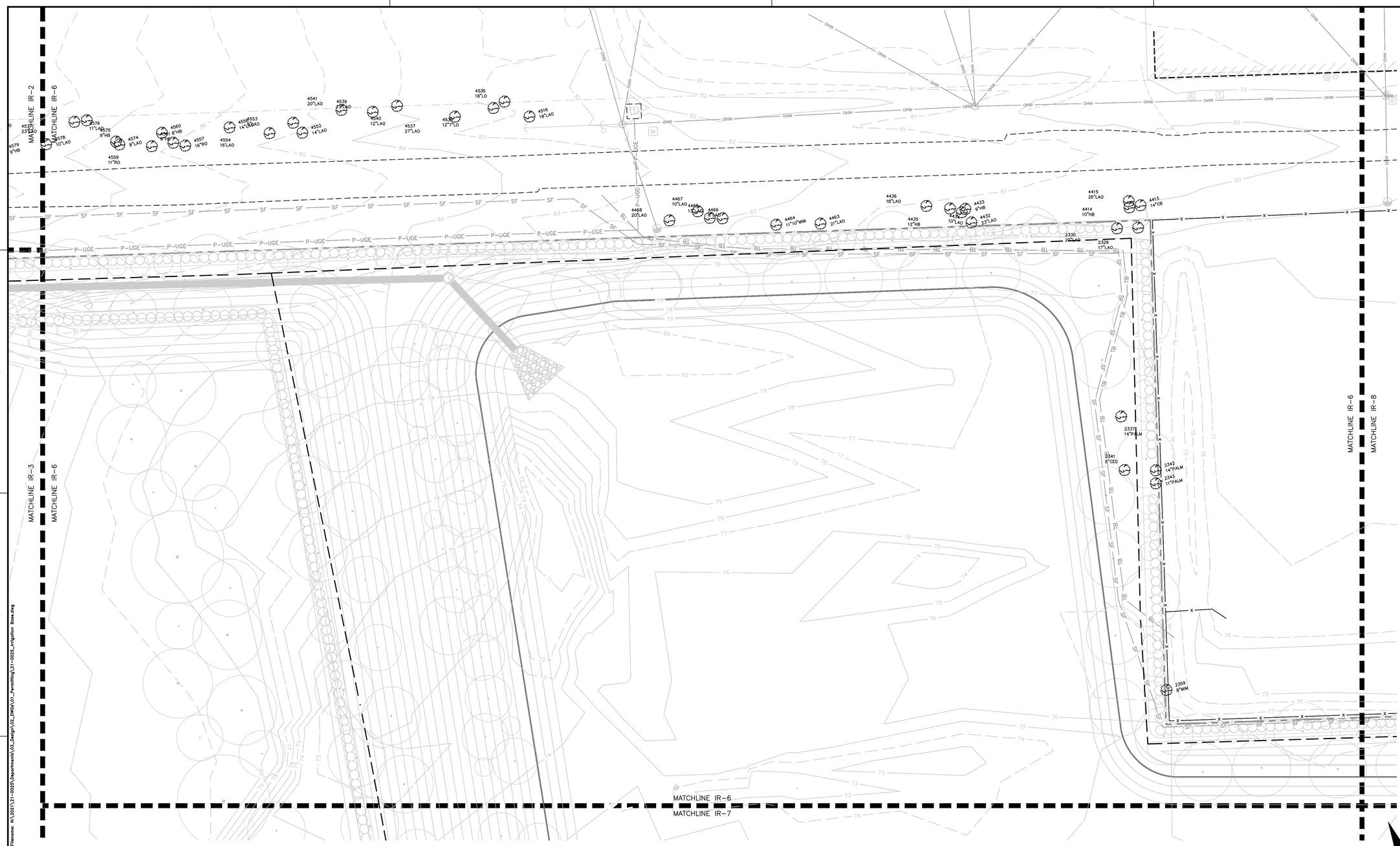
PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: IRRIGATION PLAN

TECHNICIAN: LR
DESIGNER: MS
QUALITY CONTROL: CT
PROJECT NUMBER: 21-0025

REGISTERED LANDSCAPE ARCHITECT
JOHN MICHAEL SIMPSON
LA6667436
STATE OF FLORIDA

SHEET NO.:
IR-5



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CLIENT: TOWER HILL SCOTT ROWE
PROJECT: TOWER HILL HEADQUARTERS
SHEET TITLE: IRRIGATION PLAN

TECHNICIAN: LR
DESIGNER: MS
QUALITY CONTROL: CT
PROJECT NUMBER: 21-0025

REGISTERED LANDSCAPE ARCHITECT
JOHN MICHAEL SIMPSON
LA6667436
STATE OF FLORIDA

SHEET NO.: IR-6

Tech: John-michaels Plot Date: May 05,2023 10:50am Filename: N:\2021\21-0025\Department\03_Design\02_CHW\01_Permitting\21-0025_Irrigation Base.dwg

MATCHLINE IR–6
MATCHLINE IR–7

MATCHLINE IR–3
MATCHLINE IR–7

MATCHLINE IR–4
MATCHLINE IR–7

MATCHLINE IR–7
MATCHLINE IR–9

7346
25"LAO

7347
54"LAO

7348
46"LO

7484
41"LAO

7485
55"LAO

7488
30"HB

7492
38"LAO

7494
40"LAO

7495
50"LAO

811

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SCALE: 1"=20'

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05/05/23 CITY OF ALACHUA, FDOT & SRWMD

CLIENT: TOWER HILL SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

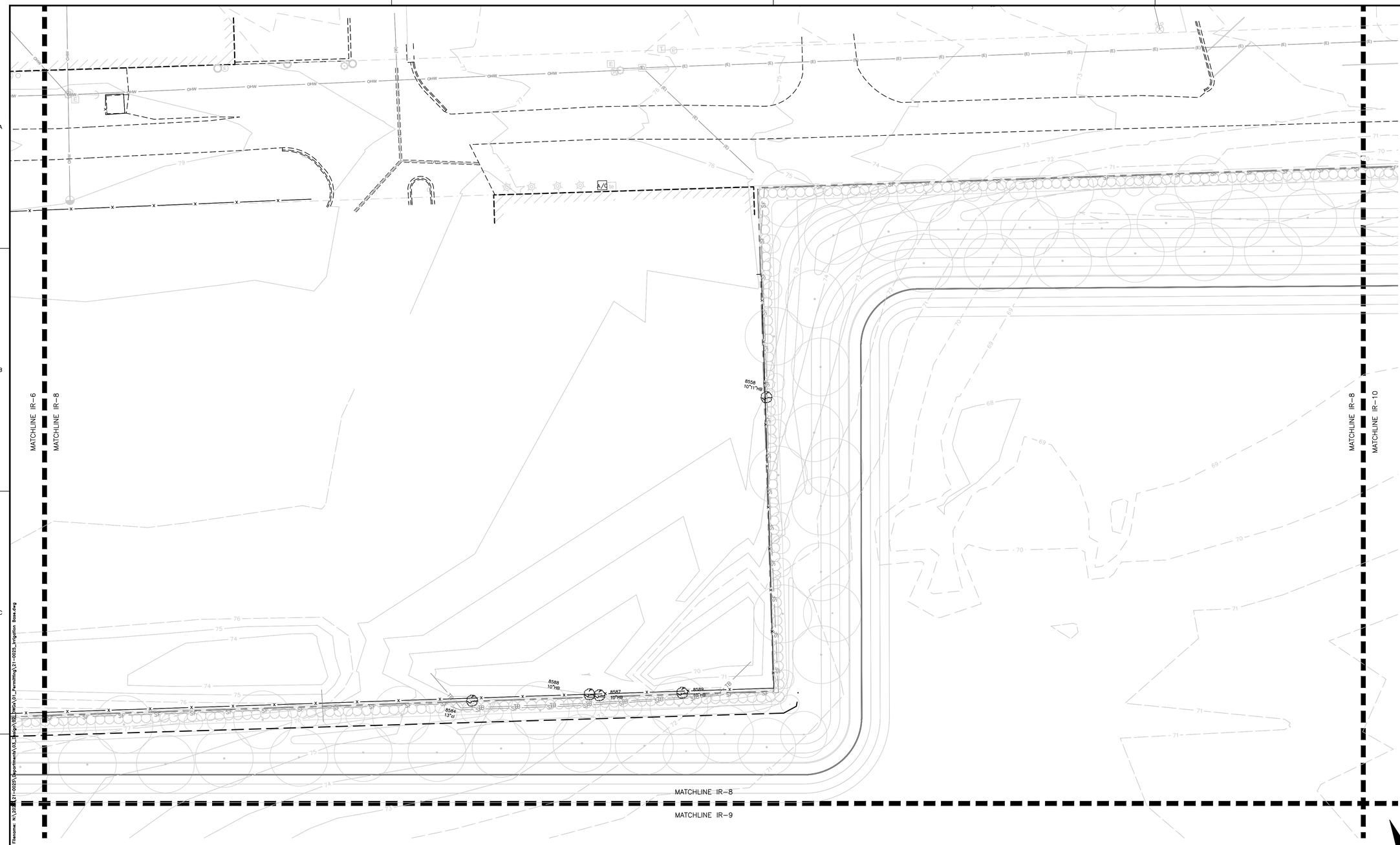
SHEET TITLE: IRRIGATION PLAN

TECHNICIAN: LR
DESIGNER: MS
DATE:
QUALITY CONTROL: CT
PROJECT NUMBER: 21-0025

REGISTERED LANDSCAPE ARCHITECT
JOHN MICHAEL SIMPSON
LA6667436
STATE OF FLORIDA

SHEET NO.:
IR-7

Tech: john—mitchele Plot Date: May 05,2023 10:30am Filename: M:\2021\21–0025\Department\03_Design\02_Design\01_Permitting\21–0025_Irrigation Base.dwg



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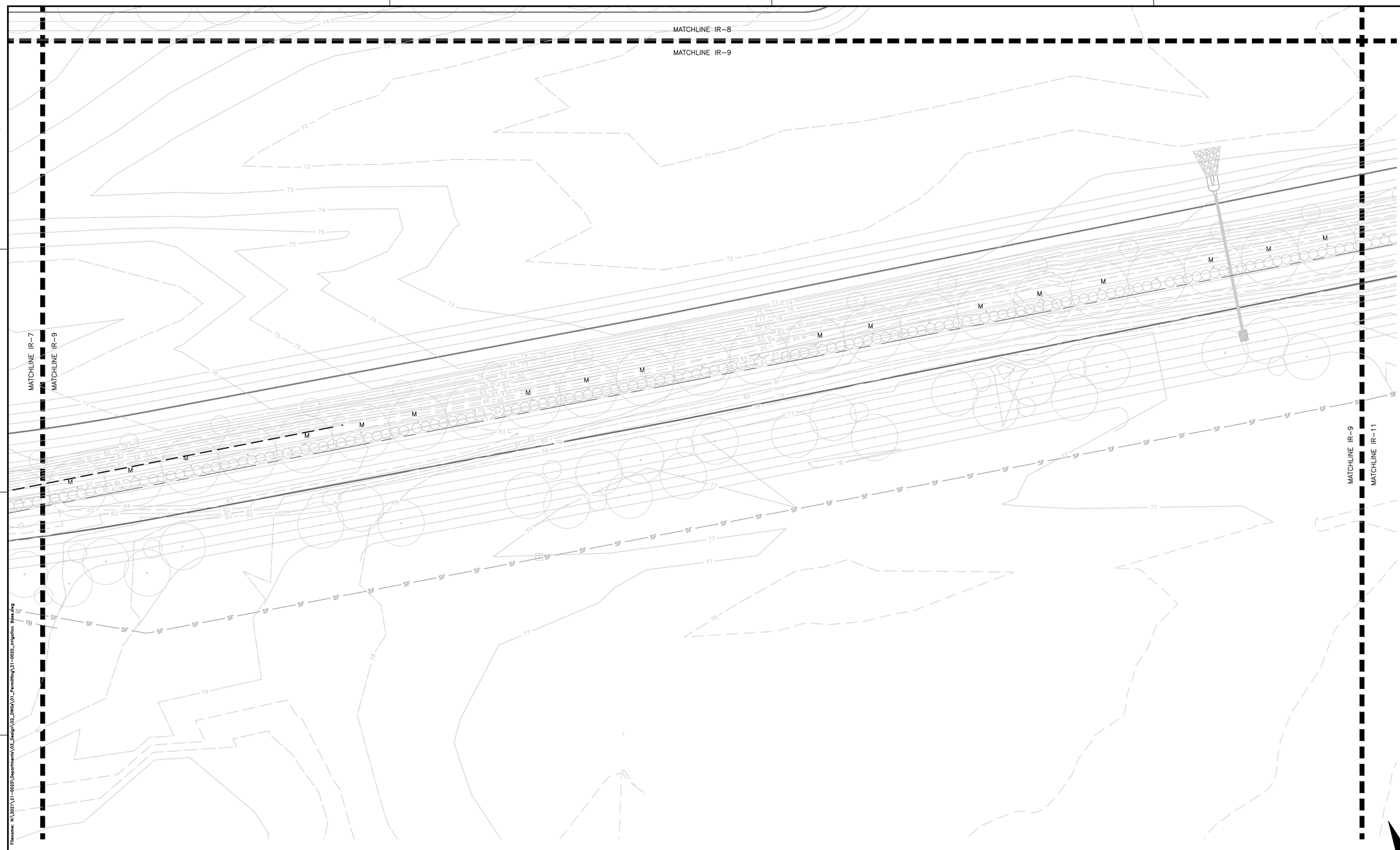
CLIENT: TOWER HILL SCOTT ROWE
PROJECT: TOWER HILL HEADQUARTERS
SHEET TITLE: IRRIGATION PLAN

TECHNICIAN: LR
DESIGNER: JMS
QUALITY CONTROL: CT
PROJECT NUMBER: 21-0025

REGISTERED LANDSCAPE ARCHITECT
JOHN MICHAEL SIMPSON
LA6667436
STATE OF FLORIDA

SHEET NO.: IR-8

Tech: john-michaels Plot Date: May 05,2023 10:51am FileName: N:\2021\21-0025\Departments\03_Landscape\02_Design\01_Permitting\21-0025_Irrigation Base.dwg



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CLIENT: TOWER HILL SCOTT ROWE
PROJECT: TOWER HILL HEADQUARTERS
SHEET TITLE: IRRIGATION PLAN

TECHNICIAN: LR
DESIGNER: MJS
QUALITY CONTROL: CT
PROJECT NUMBER: 21-0025

REGISTERED LANDSCAPE ARCHITECT
JOHN MICHAEL SIMPSON
LA6667436
STATE OF FLORIDA

SHEET NO.: IR-9

Tools: john-mitchell Plot Date: May 05,2023 10:31am Filename: M:\2021\21-0025\Department\03_Design\02_DWGs\01_Permitting\21-0025_Irrigation Base.dwg

MATCHLINE IR-8

MATCHLINE IR-10

MATCHLINE IR-10

MATCHLINE IR-11

8203
35"LA0

8190
10"SC

8192
13"

8191
10"10"15"SC

GRAPHIC SCALE
0 10 20 40

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CLIENT: TOWER HILL SCOTT ROWE

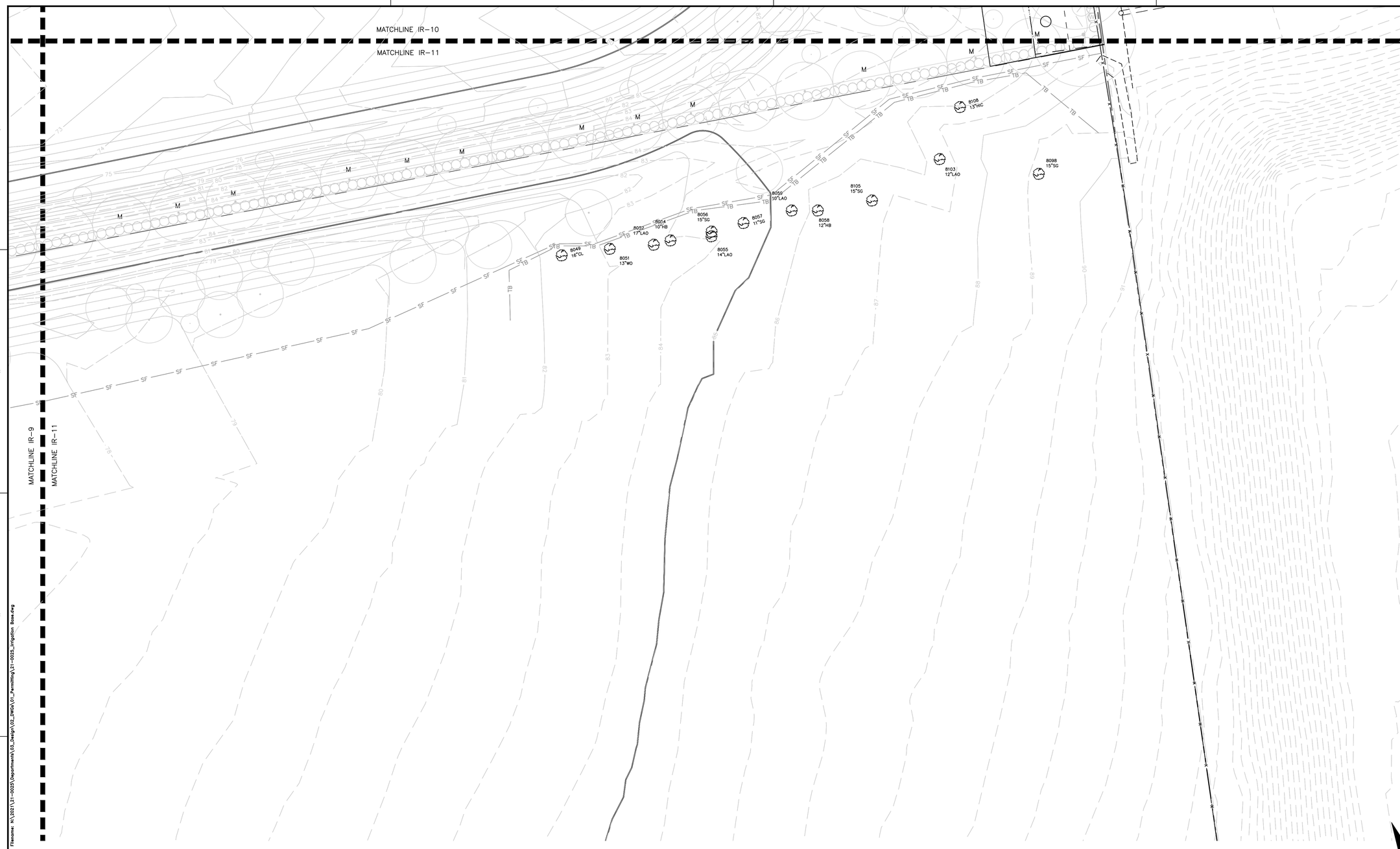
PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: IRRIGATION PLAN

TECHNICIAN: LR
DESIGNER: MS
QUALITY CONTROL: CT
PROJECT NUMBER: 21-0025

REGISTERED LANDSCAPE ARCHITECT
JOHN MICHAEL SIMPSON
LA6667436
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SHEET NO.:
IR-10



GRAPHIC SCALE
0 10 20 40

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05/05/23 CITY OF ALACHUA, FDOT & SRWMD

CLIENT: TOWER HILL SCOTT ROWE
PROJECT: TOWER HILL HEADQUARTERS
SHEET TITLE: IRRIGATION PLAN

TECHNICIAN: LR
DESIGNER: MS
QA/QC CONTROL: CT
PROJECT NUMBER: 21-0025

REGISTERED LANDSCAPE ARCHITECT
JOHN MICHAEL SIMPSON
LA6667436
STATE OF FLORIDA

SHEET NO.: IR-11

Tech: john-michaels Plot Date: May 05,2023 10:32am Filename: M:\2021\21-0025\Departments\03_Design\02_DWGs\01_Permitting\21-0025_Irrigation Base.dwg

4" SLEEVE
4" SLEEVE
4"&2" SLEEVES
4"&2" SLEEVES
4"&2" SLEEVES
4" SLEEVE
4" SLEEVE
4"&2" SLEEVES
4" SLEEVE
6"&2" SLEEVES
2" SLEEVE
BF
M
6"&2" SLEEVES
6"&2" SLEEVES
4"&2" SLEEVES
4"&2" SLEEVES
4"&2" SLEEVES
4"&2" SLEEVES
MATCHLINE IR-5
MATCHLINE IR-12
MATCHLINE IR-12
MATCHLINE IR-13
MATCHLINE IR-15
MATCHLINE IR-12

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05/05/23 CITY OF ALACHUA, FDOT & SRWMD

CLIENT: TOWER HILL SCOTT ROWE
PROJECT: TOWER HILL HEADQUARTERS
SHEET TITLE: IRRIGATION PLAN

TECHNICIAN: LR
DESIGNER: MAS
QUALITY CONTROL: CT
PROJECT NUMBER: 21-0025

REGISTERED LANDSCAPE ARCHITECT
JOHN MICHAEL SIMPSON
LA6667436
STATE OF FLORIDA

SHEET NO.: IR-12

Tech: john-michaels Plot Date: May 05,2023 10:32am Filename: W:\2021\21-0025 Tower Hill Headquarters\05 Design\02 Drawings\Civil\21-0025 Irrigation Sheet.dwg

MATCHLINE IR-12

MATCHLINE IR-13

2" SLEEVE

2" SLEEVE

4" SLEEVE

4" SLEEVE

2" SLEEVE

2" SLEEVE

2" SLEEVE

2" SLEEVE

4" SLEEVE

4" SLEEVE

6"&2" SLEEVES

4" SLEEVE

MATCHLINE IR-13

MATCHLINE IR-14

MATCHLINE IR-15

MATCHLINE IR-12

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CONSTRUCTION/BID REVISIONS:

CLIENT: TOWER HILL SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: IRRIGATION PLAN

TECHNICIAN: LR
DESIGNER: MS
QUALITY CONTROL: CT
PROJECT NUMBER: 21-0025

REGISTERED LANDSCAPE ARCHITECT
JOHN MICHAEL SIMPSON
LA6667436
STATE OF FLORIDA

SHEET NO.: IR-13

Tech: johnmichaels Plot Date: May 05,2023 10:53am Filename: N:\2021\21-0025\Design\02_DRAW\01_Permit\21-0025_Irrigation Sheet.dwg

MATCHLINE IR-13

MATCHLINE IR-14

MATCHLINE IR-17

MATCHLINE IR-14

4" SLEEVE

4" SLEEVE

4" SLEEVE

4" SLEEVE

4" SLEEVE

P-GAS

M

SF

EMERGENCY GENERATOR

7207 21"PINE

7208 16"PINE

7183 7160 11"PINE 12"PINE

7182 12"PINE

7798

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CLIENT: TOWER HILL SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: IRRIGATION PLAN

TECHNICIAN: LR
DESIGNER: MS
QUALITY CONTROL: CT
PROJECT NUMBER: 21-0025

REGISTERED LANDSCAPE ARCHITECT
JOHN MICHAEL SIMPSON
LA6667436
STATE OF FLORIDA

SHEET NO.:
IR-14

Tech: john-michaela Plot Date: May 05,2023 10:53am FileName: N:\2021\21-0025\Departments\03_Design\02_Drawings_Permitting\21-0025_Irrigation Base.dwg



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SCALE: 1"=20'

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05/05/23 CITY OF ALACHUA, FDOT & SRWMD

CLIENT: TOWER HILL SCOTT ROWE

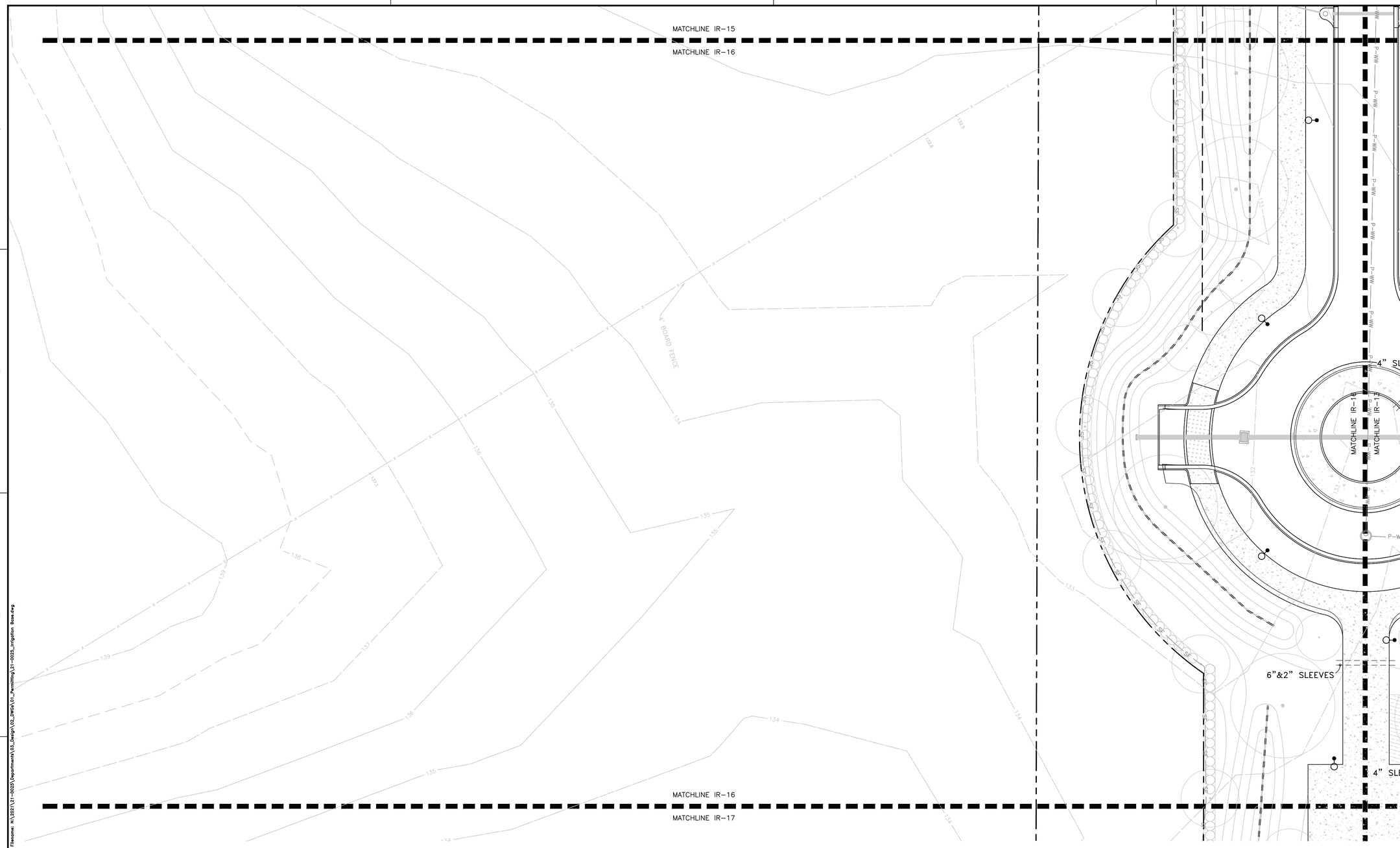
PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: IRRIGATION PLAN

TECHNICIAN: LR
DESIGNER: MS
QUALITY CONTROL: CT
PROJECT NUMBER: 21-0025

SHEET NO.: IR-15

Xrefs: john-michaels Plot Date: May 05,2023 10:33am Filename: M:\2021\21-0025\Departments\03_Design\02_DWGs\01_Permitting\21-0025_Irrigation Base.dwg



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SCALE: 1"=20'
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0 1"
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SCALES ACCORDINGLY.

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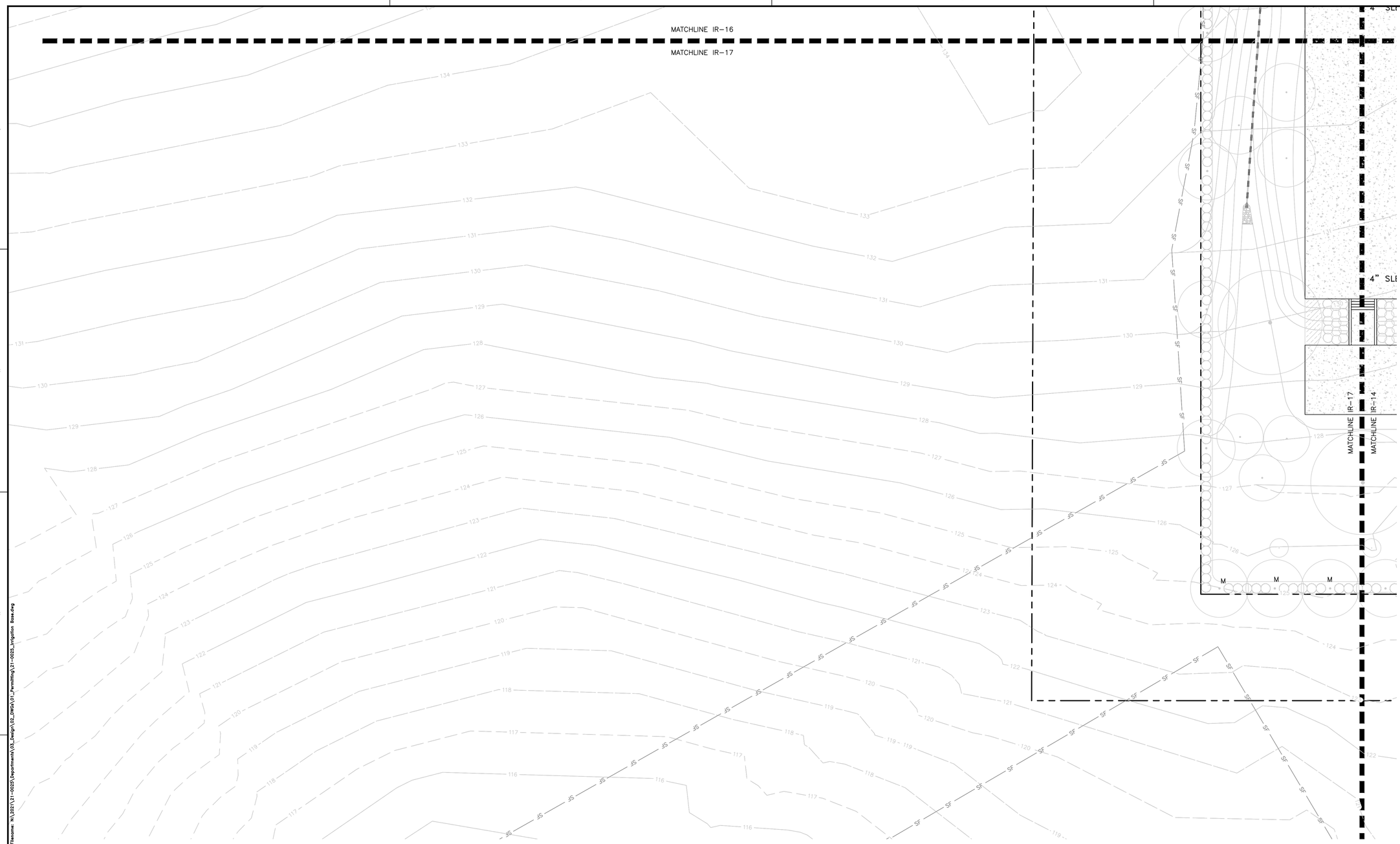
CLIENT: TOWER HILL SCOTT ROWE
PROJECT: TOWER HILL HEADQUARTERS
SHEET TITLE: IRRIGATION PLAN

TECHNICIAN: LR
DESIGNER: MAS
QUALITY CONTROL: CT
PROJECT NUMBER: 21-0025

REGISTERED LANDSCAPE ARCHITECT
JOHN MICHAEL SIMPSON
LA6667436
STATE OF FLORIDA

SHEET NO.:
IR-16

Tech: john-michaels Plot Date: May 05,2023 10:54am Filename: N:\2021\21-0025\Department\03_Design\02_DWGs\01_Permitting\21-0025_Irrigation Base.dwg



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0 1"

CONSTRUCTION/BID REVISIONS:

SUBMITTALS:
02/28/23 CITY OF ALACHUA, FDOT & SRWMD
04/14/23 CITY OF ALACHUA, FDOT & SRWMD
05/05/23 CITY OF ALACHUA, FDOT & SRWMD

CLIENT: TOWER HILL SCOTT ROWE
PROJECT: TOWER HILL HEADQUARTERS
SHEET TITLE: IRRIGATION PLAN

TECHNICIAN: LR
DESIGNER: MS
QUALITY CONTROL: CT
PROJECT NUMBER: 21-0025

REGISTERED LANDSCAPE ARCHITECT
JOHN MICHAEL SIMPSON
LA6667436
STATE OF FLORIDA

SHEET NO.: IR-17

Tech: john-michaels Plot Date: May 05,2023 10:54am File:I:\new - W\2021\21-0025\Department\03_Design\02_DWGs\01_Permitting\21-0025_Irrigation Base.dwg

GRAPHIC SCALE
0 40 80 160

SHEET E2

INSET ON E2

SHEET E3

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SUBMITTALS:
07/28/23 SUBMITTAL
04/19/23 SUBMITTAL
05/08/23 SUBMITTAL

CLIENT:

PROJECT: TOWER HILL

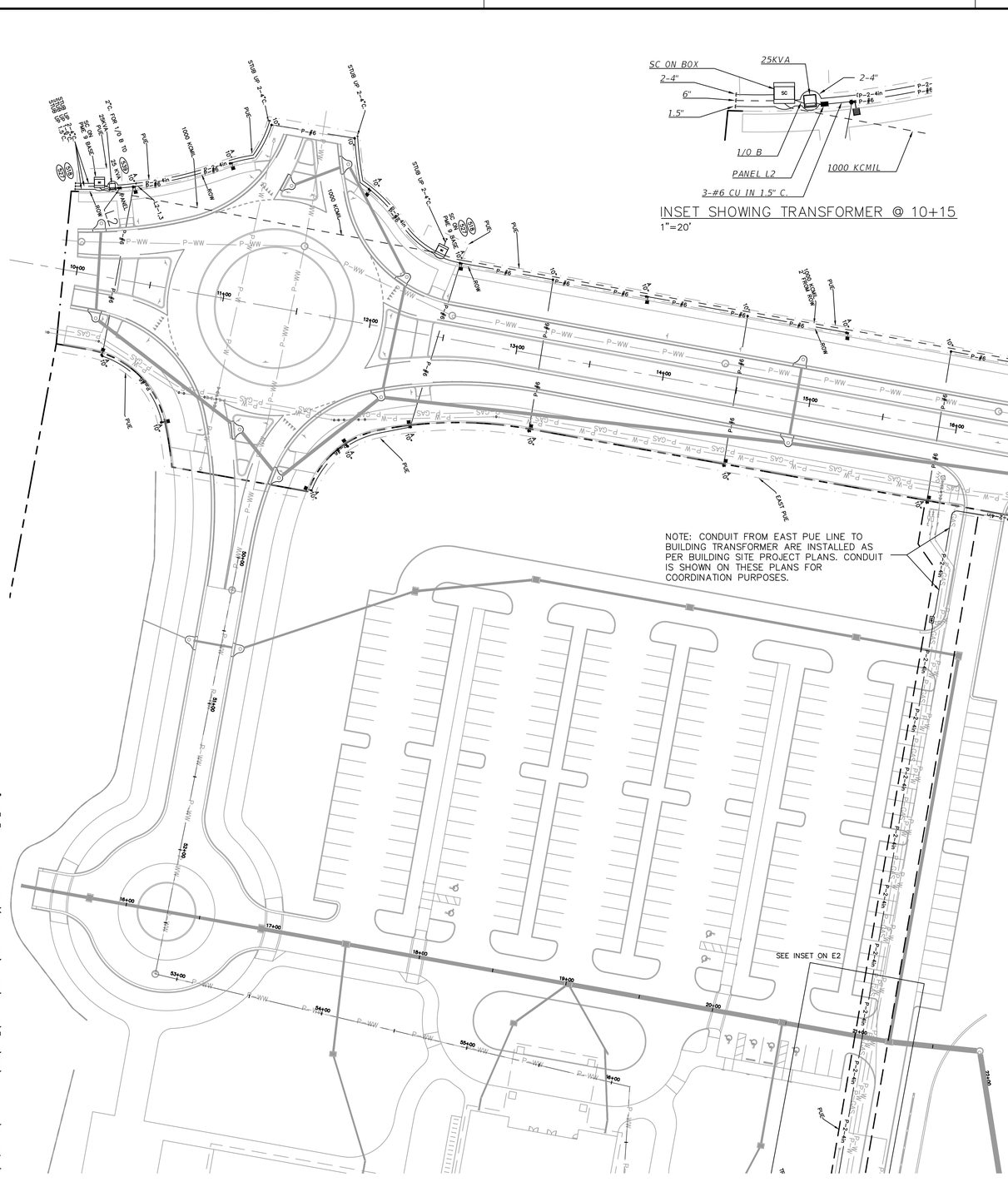
SHEET TITLE: ELECTRICAL KEY PLAN

TECHNICIAN:
DESIGNER:
QUALITY CONTROL:
PROJECT NUMBER:

WILLIAM T. STORMANT
LICENSE
No. 44156
STATE OF FLORIDA
PROFESSIONAL ENGINEER
05/08/23
FL PE No. 44156

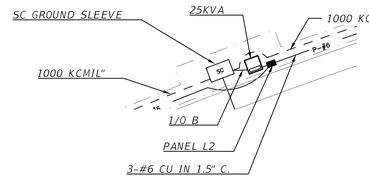
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E1

Tech: storm_t Plot Date: May 08,2023 2:59pm Filename: C:\Users\storm_t\Documents\Tower Hill Electric Plans 05_08_23.dwg



INSET SHOWING TRANSFORMER @ 10+15
1"=20'

GRAPHIC SCALE
0 20 40 80



INSET SHOWING TRANSFORMER @ 21+90
1"=20'

NOTE: CONDUIT FROM EAST PUE LINE TO BUILDING TRANSFORMER ARE INSTALLED AS PER BUILDING SITE PROJECT PLANS. CONDUIT IS SHOWN ON THESE PLANS FOR COORDINATION PURPOSES.



INSET SHOWING TRANSFORMER LOCATION 1"=40'

SEE INSET ON E2

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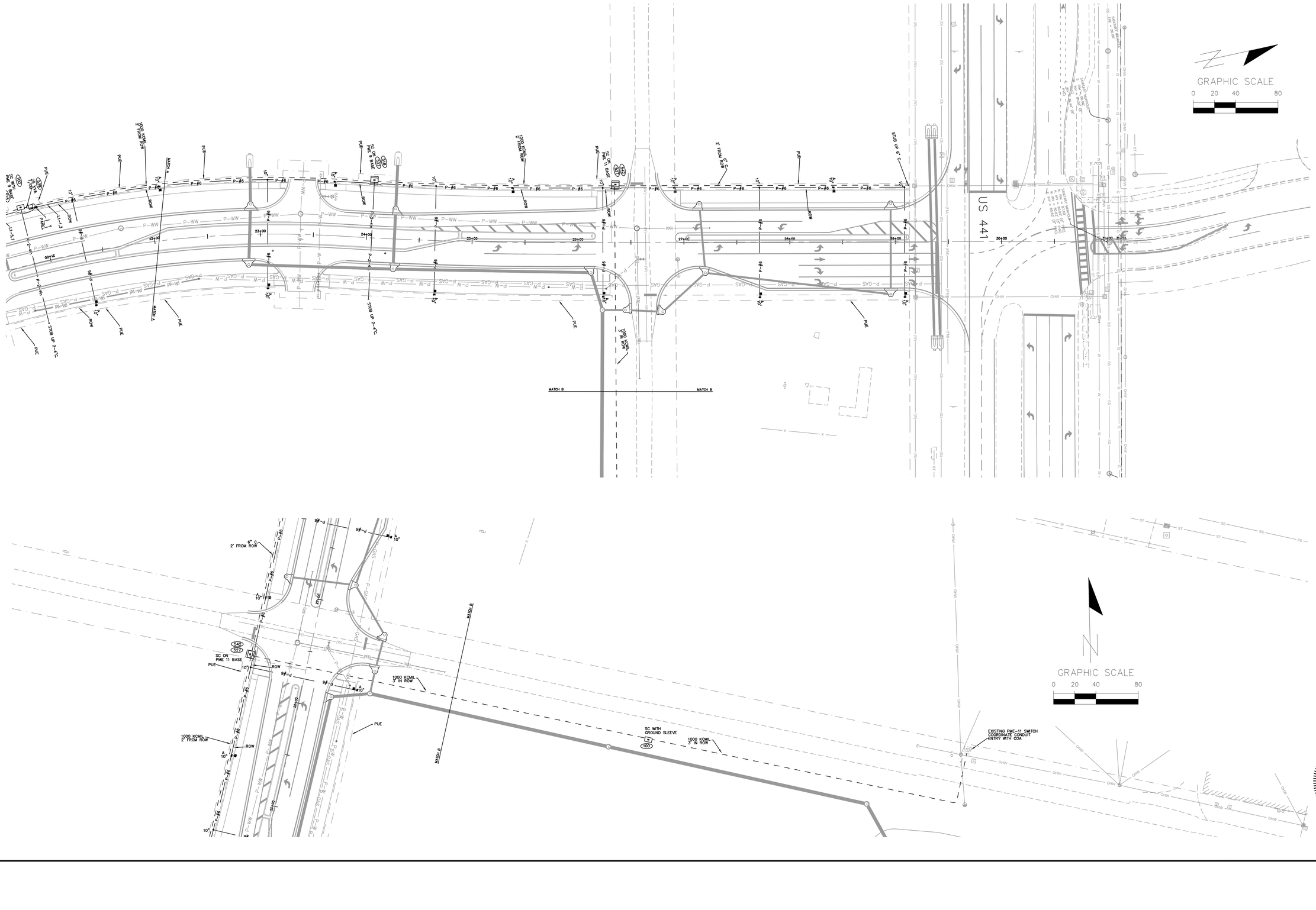
CLIENT:
PROJECT: TOWER HILL
SHEET TITLE: ELECTRICAL AND LIGHTING PLAN

TECHNICIAN:
DESIGNER:
QUALITY CONTROL:
PROJECT NUMBER:

WILLIAM T. STORMANT
WILLIAM T. STORMANT LICENSE
No. 44156
STATE OF FLORIDA
PROFESSIONAL ENGINEER
05/08/23
FL PE No. 44156

SHEET NO.:
E2

Tools: storm_| Plot Date: May 05,2023 3:59pm Filename: C:\Users\vstorm_A\Documents\Tower Hill Electric Plans 05_08_23.dwg



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CONSTRUCTION/BID REVISIONS:

SUBMITTALS:
07/07/23 SUBMITTAL
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05/08/23 SUBMITTAL

CLIENT:

PROJECT: TOWER HILL

SHEET TITLE: ELECTRICAL AND LIGHTING PLAN

TECHNICIAN:

DESIGNER:

QUALITY CONTROL:

PROJECT NUMBER:

WILLIAM T. STORMANT

WILLIAM T. STORMANT LICENSE No. 44156 STATE OF FLORIDA PROFESSIONAL ENGINEER

05/08/23

FL PE No. 44156

SHEET NO.:

E3

Tech: storm_t Plot Date: May 05,2023 2:37pm FileName: C:\Users\storm_t\Documents\Tower Hill (Second Iteration)\Tower Hill Electric Plans 05_08_23.dwg

SPECIFICATIONS:

1. SCOPE OF PROJECT - THE WORK SHALL INCLUDE (BUT NOT BE LIMITED TO) THE FOLLOWING COMPLETE (AND OPERATING) SYSTEMS AND AS SHOWN ON THE DRAWINGS AND SPECIFIED HEREIN FOR A ON-SITE COA ELECTRICAL PRIMARY VOLTAGE DISTRIBUTION SYSTEM INCLUDING A 3 PHASE -1000KCMIL FEEDER, SWTCHGEAR, THREE PHASE 4/0 URD CABLE, SINGLE PHASE 1/0 URD CABLE, CONDUIT STUB OUTS FOR FUTURE SERVICES AND PRIVATE LIGHTING SYSTEMS FOR THE BOULEVARD. THE BREAK OUT IS DETAILED BELOW.

1.1 SCOPE OF COA ELECTRICAL WORK: AT NO COST TO THE CITY, THE COA WILL PERFORM CERTAIN WORK ELEMENTS TO ASSIST THE CONTRACTOR IN PROVIDING COMPLETE AND OPERATING ELECTRICAL SYSTEMS AS SHOWN ON THE DRAWINGS AND SPEIFIED HEREIN.

1.2 THE WORK TO EXTEND THE ELECTRICAL SERVICE AND TO PROVIDE THE TRANSFORMERS SHALL BE A JOINT EFFORT BETWEEN THE CONTRACTOR AND COA.

1.3 THE CONTRACTOR SHALL FURNISH AND INSTALL THE UTILITY UNDERGROUND SECONDARY CABLE, CONDUIT AND RELATED INFRASTRUCTURE. THE CABLE SHALL BE OF SUFFICIENT LENGTH ALLOW A MINIMUM OF A FIVE-FOOT TAIL FOR MAKE UP PURPOSES.

1.4 THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ALL ELECTRICAL WORK REQUIRED TO PROVIDE SECONDARY LOAD-SIDE SERVICE FROM THE TRANSFORMER TO THE PRIVATE LIGHTING SYSTEM LOCATED ALONG THE ROADWAY.

1.5 COA WILL ORDER THE FOLLOWING PRODUCTS, WHICH WILL BE PAID FOR BY THE CONTRACTOR: ALL PRIMARY CABLES, ALL TRANSFORMERS, AND ALL MAKEUP MATERIALS. ONCE ON SITE, THESE PRODUCTS WILL BE INSTALLED BY COA. ALL PRIMARY MAKE UP, CONNECTIONS AND TESTING WILL BE COMPLETED BY COA. ALL WORK PERFORMED BY COA WILL BE BACK CHARGED TO THE CONTRACTOR.

1.6 THE CONTRACTOR SHALL FURNISH AND INSTALL ALL OTHER MATERIALS, INCLUDING BUT NOT LIMITED TO ALL CONDUIT, ENCLOSURES, POLES, LUMINAIRES, TRANSFORMER PADS AND EQUIPMENT BASES AS NEEDED FOR THE UTILITY SYSTEM.

1.7 THE CONTRACTOR SHALL SCHEDULE AN ELECTRICAL COORDINATION MEETING AT START OF PROJECT. REQUIRED ATTENDEES INCLUDE THE CONTRACTOR, THE ELECTRICAL SUB-CONTRACTOR, THE ENGINEER OF RECORD, THE COA PROJECT MANAGER AND COA ELECTRICAL STAFF.

1.8 PROVIDE ALL WIRING, PANELS, CONDUIT, POLES, LUMINAIRES, BASES AND EQUIPMENT TO INSTALL A COMPLETE AND OPERATING PRIVATE STREET LIGHTING SYSTEM. LIGHT POLES ARE CONTROLLED BY INDIVIDUAL PHOTOCELLS AT EACH LUMINAIRE.

1.9 THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ELECTRICAL AS-BUILT INFORMATION, WHICH SHALL BE RECORDED AS CONSTRUCTION PROGRESSES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ELECTRICAL AS-BUILT DRAWINGS TO THE OWNER AND ENGINEER OF RECORD. BOTH PAPER AND AUTOCAD DRAWINGS SHALL BE PROVIDED.

1.10 ALL UTILITY SYSTEM CONSTRUCTION SHALL BE IN COMPLIANCE WITH THE REQUIREMENTS FOR THIS TYPE FACILITY AND MEET CITY OF ALACHUA UTILITIES POLICIES AND PRACTICES.

1.11 "PROVIDE" SHALL MEAN FURNISH, INSTALL, CONNECT, ADJUST, AND TEST EXCEPT WHERE NOTED.

1.12 "PROCURE" SHALL MEAN COA PROCURED AND INSTALLED AT CONTRACTOR EXPENSE.

2. MATERIALS AND EQUIPMENT SHALL BE NEW AND SUITABLE FOR THE PURPOSE INTENDED. CUT SHEETS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD AND THE ELECTRIC DEPARTMENT PRIOR TO ORDERING FOR APPROVAL.CONTRACTOR IS RESPONSIBLE FOR PROCURING AND INSTALLING: CONDUITS, POLES, LUMINARIES. ALL SECONDARY VOLTAGE CABLES AND CONNECTORS, SECTIONALIZING CABNETS, SWITCHGEAR BASES AND COVERS, UNDERGROUND JUNCTION BOXES AND BURIED WIRE ENCLOSURES AND ALL OTHER ITEMS REQUIRED FOR COMPLETE OPERATING SYSTEMS.

2.1A. UNDERGROUND 15 KV 1/0 AWG AL, 19 STRAND, JACKETED PRIMARY CABLE SHALL HAVE STRAND FILLED CENTRAL CONDUCTOR, SEMI-CONDUCTING CONDUCTOR SHIELD, 175 MIL VIRGIN TREE RETARDANT CROSS-LINKED POLYETHYLENE INSULATION, BLACK CROSS-LINKED POLYETHYLENE SHIELD, FULL CONCENTRIC CU NEUTRAL, WITH INSULATING, BLACK LINEAR LOW DENSITY POLYETHYLENE JACKET EXTRUDED OVER THE NEUTRAL. APPROVED MANUFACTURERS ARE HENDRIX, PIRELLI, PRYSMIAN AND SOUTHWIRE. COA PROCURED.

2.1B. UNDERGROUND 15 KV 4/0 AWG AL, 19 STRAND, (3/4 HARD) JACKETED PRIMARY CABLE SHALL HAVE STRAND FILLED CENTRAL CONDUCTOR, SEMI-CONDUCTING CONDUCTOR SHIELD, 175 MIL VIRGIN TREE RETARDANT CROSS-LINKED POLYETHYLENE INSULATION, BLACK CROSS-LINKED POLYETHYLENE SHIELD, 1/3 CONCENTRIC CU NEUTRAL, WITH INSULATING, BLACK LINEAR LOW DENSITY POLYETHYLENE JACKET EXTRUDED OVER THE NEUTRAL. APPROVED MANUFACTURERS ARE HENDRIX, PIRELLI, PRYSMIAN AND SOUTHWIRE. COA PROCURED.

2.1C. UNDERGROUND 15 KV 1000 KCMIL AL, 61 STRAND, JACKETED PRIMARY CABLE SHALL HAVE STRAND FILLED CENTRAL CONDUCTOR, SEMI-CONDUCTING CONDUCTOR SHIELD, 175 MIL VIRGIN TREE RETARDANT CROSS-LINKED POLYETHYLENE INSULATION, BLACK CROSS-LINKED POLYETHYLENE SHIELD, REDUCED CONCENTRIC CU NEUTRAL (19 #14 STRANDS), WITH INSULATING, BLACK LINEAR LOW DENSITY POLYETHYLENE JACKET EXTRUDED OVER THE NEUTRAL. APPROVED MANUFACTURERS ARE HENDRIX, PIRELLI, AND SOUTHWIRE.

2.2. UTILITY UNDERGROUND SECONDARY CABLES SHALL HAVE THERNOSETTING XLP INSULATION WITH YELLOW STRIPE TO IDENTIFY NEUTRAL.: 350 KCMIL TRIPLEX (350-350-4/0 WESLEYAN) IN 3" CONDUIT, 4/0 TRIPLEX (4/0-4/0-2/0 SWEETBRIAR) IN 2.5" CONDUIT, 6 TRIPLEX IN 1.5" CONDUIT. APPROVED MANUFACTURERS ARE HENDRIX, PIRELLI AND SOUTHWIRE, CONTRACTOR FURNISHED AND INSTALLED.

2.3. UNDERGROUND PRIVATE LIGHTING SECONDARY CABLES SHALL BE COPPER WITH THHN OR THWN-2 INSULATION WITH COLORATION TO MEET THE NATIONAL ELECTRICAL CODE REQUIREMENTS.

2.4. THE LOAD BREAK ELBOWS AND T HOUSINGS SHALL HAVE EPDM RUBBER INSULATION. VERIFY CABLE DIMENSIONS FOR APPLICABILITY. APPROVED MANUFACTURERS ARE ELASTIMOLD, COOPER POWER SYSTEMS, AND RTE. COA PROCURED.

2.5A. SINGLE PHASE PAD MOUNTED TRANSFORMERS SHALL BE DEAD FRONT, LOOP FEED CAPABILITY, HIGH VOLTAGE 12470 GRD Y 7200 VOLTS, LOW VOLTAGE 240/120 VOLT, 95 KV BIL, COMPARTMENTAL TYPE, RATINGS BASED ON 65 DEGREE C WINDING RISE, HIGH GRADE, COLD REDUCED, GRAIN ORIENTED SILICON STEEL CORE, 8.3/14.4 KV CLASS BUSHING WELLS AND LOAD BREAK INSERTS, LOW VOLTAGE TANK SHALL BE SEALED AND FURNISHED COMPLETE WITH PCB FREE DIELECTRIC OIL, AND COVER SHALL BE PAD LOCKABLE. TRANSFORMERS SHALL BE PROTECTED WITH A BAYONET FUSE. TRANSFORMERS WILL BE MOUNTED ON A WINDOWED , PREFABRICATED CONCRETE PAD SUITABLE FOR THE THE TRANSFORMER. APPROVED BASE MANFACTURER IS SOUTHERN PRE-CAST DRAWING #0006795 OR APPROVED EQUAL. PAD PROVIDED BY CONTRACTOR, TRANSFORMER PROCURED AND INSTALLED BY COA.

2.5.B THREE PHASE PAD MOUNTED TRANSFORMER SHALL BE DEAD FRONT, LOOP FEED CAPABILITY, HIGH VOLTAGE 12470 GRD Y 7200 VOLTS, LOW VOLTAGE 208 GRD Y/120 VOLT, 95 KV BIL, COMPARTMENTAL TYPE, RATINGS BASED ON 65 DEGREE C WINDING RISE, HIGH GRADE, COLD REDUCED, GRAIN ORIENTED SILICON STEEL CORE, 8.3/14.4 KV CLASS BUSHING WELLS AND LOAD BREAK INSERTS, LOW VOLTAGE TERMINALS SHALL BE STUD TYPE, TANK SHALL BE SEALED AND FURNISHED COMPLETE WITH PCB FREE DIELECTRIC OIL, AND DOORS SHALL BE PAD LOCKABLE. TRANSFORMERS SHALL BE PROTECTED WITH A BAYONET FUSE. SHALL BE EQUIPPED WITH A PRESSURE RELIEF DEVICE. TRANSFORMER. SHALL MEET OR EXCEED THE JANUARY 1, 2010 D.O.E. EFFICIENCY LEVELS FOR LIQUID FILLED TRANSFORMERS. TRANSFORMERS WILL BE MOUNTED ON A WINDOWED, CONTRACTOR PROVIDED, POURED IN PLACE TRANSFORMER PAD AS SHOWN IN THE DETAILS. TRANSFORMER IS SIZED AS SHOWN AND IS COA PROCURED. COORDINATE WITH COA FOR A DETAILED TRANSFORMER SPECIFICATION.

2.6. SECONDARY CABLES SHALL BE TERMINATED BY COA WITHIN THE TRANSFORMERS ON TRANSFORMER TERMINALS.

2.7. PVC CONDUIT SHALL BE SCHEDULE 40, HEAVY WALL, RATED FOR 90C. CABLE, UL LISTED IN 10 OR 20 FOOT LENGTHS WITH INTEGRAL BELLS. ALL 6" ELBOWS SHALL BE FIBERGLASS WITH 48" RADIUS WITH APPROPRIATE TRANSITION FITTINGS. ALL OTHER ELBOWS SHALL BE PVC SCHEDULE 40 WITH LONG RADIUS SWEEPS. CONTRACTOR PROVIDED.

2.8. PROVIDE PARKING STAND ARRESTORS TO BE INSTALLED AT EACH OPEN POINT AND ELBOW ARRESTORS AT END POINT. APPROVED MANUFACTURER IS ELASTIMOLD. COA PROCURED.

2.9. ALL TRANSFORMERS SHALL HAVE SCHWEITZER ENGINEERING LABORATORIES (SEL) 3 PHASE FAULT INDICATORS INSTALLED ON B SIDE OF TRANSFORMER. - COA PROCURED.

2.10. CONTRACTOR TO PROVIDE PRIVATE LIGHTING SYSTEMS. SEE LIGHTING SCHEDULE FOR STREET LIGHT FIXTURE AND POLE SPECIFICATIONS.

GENERAL NOTES:

THE DRAWINGS ARE IN PART DIAGRAMMATIC AND ARE INTENDED TO CONVEY THE SCOPE OF THE WORK, INDICATE THE GENERAL LOCATION AND ARRANGEMENT OF CONDUIT AND PADS OR BASES, AND THE LIKE. IT IS NOT INTENDED TO SHOW IN MINUTE DETAIL EVERY AND ALL ACCESSORIES REQUIRED AT EACH LOCATION FOR THE EXECUTION OF THE WORK, BUT IT IS INTENDED THAT ALL ACCESSORIES REQUIRED FOR A COMPLETE SYSTEM BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

EXAMINE ALL DRAWINGS FOR COORDINATION AND ALLOCATION OF SPACE AND AVOID INTERFERENCE WITH SURROUNDS. THE DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS PRACTICAL IN PERFORMING THE WORK. DISCREPANCIES BETWEEN THE ELECTRICAL CONDUIT SYSTEM AND WORK OF OTHER TRADES SHALL BE COORDINATED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER AND AS REQUIRED BY FIELD CONDITIONS.

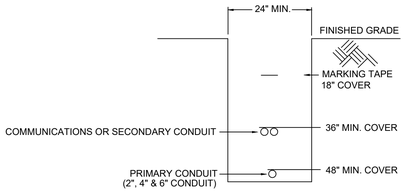
DISCREPANCIES DISCOVERED DURING THE BID PROCESS SHALL BE REFERRED TO THE ENGINEER PRIOR TO SUBMITTING A BID. THE ENGINEER WILL ISSUE INSTRUCTIONS BY ADDENDUM WHEN NECESSARY. INTERPRETATION OF THE DRAWINGS WILL BE BY THE ENGINEER.

CHANGES FROM THE DRAWINGS THAT ARE NECESSARY TO MAKE WORK CONFORM TO FIELD CONDITIONS, TO FIT WORK OF OTHER TRADES, OR TO RULES OF BODIES HAVING JURISDICTION, WILL BE MADE BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CONTRACT. IN CASE OF DISPUTE, THE ENGINEER WILL RENDER A DECISION ON HOW TO PRECEED.

THE WORK SHALL COMPLY WITH ALL LEGALLY REQUIRED CODES AND STANDARDS, INCLUDING:

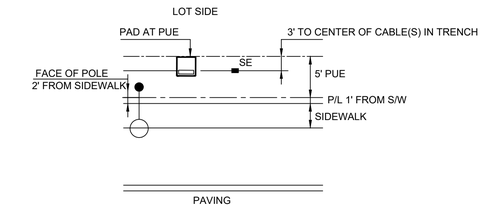
NFPA 70, NATIONAL ELECTRICAL CODE LATEST ADOPTED EDITION
NATIONAL ELECTRICAL SAGETY CODE LATEST ADOPTED EDITION
NECA STANDARD OF INSTALLATION
NFPA 72 LATEST ADOPTED REVISION
FLORIDA BUILDING CODE LATEST REVISIONS
NFPA 101 LATEST ADOPTED REVISION
ADA LATEST ADOPTED REVISION
CITY OF ALACHUA UTILITY STANDARDS AND POLICIES
CITY OF ALACHUA ELECTRIC SERVICE POLICY MANUAL 2020
CITY OF ALACHUA CODE OF ORDINANCES
UNDERWRITER'S LABORATORY STANDARDS (UL)
ILLUMINATION ENGINEERING SOCIENTY HANDBOOK 10TH EDITION
OTHER APPLICABLE CODES AND STANDARDS THAT APPLY TO THIS TYPE OF CONSTRUCTION

WARNING TAPE SHALL BE RED WITH CONTINUOUS BLACK MARKINGS "CAUTION CAUTION - CITY OF ALACHUA - ELECTRIC LINE BURIED BELOW SHALL BE ALLENSYSTEM "MARKLINE" OR EQUAL REEFINDUSTRIES OR THORENTERPRISES.



TYPICAL CONDUIT TRENCH DETAIL

NOT TO SCALE



TYPICAL ELECTRIC UTILITY ALLOCATION

SCALE: NTS

ELECTRICAL UTILITIES LEGEND

SC	PRIMARY SECTIONALIZING CABINET DIRECT BURIED INTEGRAL BASE- FOR 1000 KCMI PRIMARY VOLTAGE FEEDER
SC	SECTIONALIZING CABINET ON CONCRETE BASE WITH TOP
TX	TRANSFORMER ON CONCRETE PAD, PROVIDE PADS
PME9 SG	600 AMP PAD MOUNTED SWITCHGEAR, "PME 9" INDICATES TYPE OF SWITCH. INCLUDE BOX AND TOP AS SHOWN IN DETAIL.
1000	3-1000 KCMIL AL UTILITY PRIMARY CABLE IN 6" PVC AT 48" MIN. COVER
P--4/0P 4/0 P P--4/0P	3-4/0 AL UTILITY PRIMARY CABLE IN 4" PVC AT 48" MIN. COVER
1/0 A	1/0 AL UTILITY PRIMARY CABLE IN 4" PVC AT 2" MIN. COVER. "A" INDICATES PHASE.
P--#6 #6 P--#6	2-#6 AND #6 CU EGC AT 24" MIN. CONDUIT FOR #6 IS 1 1/2"FOR PRIVATE STREETLIGHT SYSTEM.
P--2--4in P--2--4in	2-4" PVC CONDUITS AT 48" MIN. COVER FOR FUTURE1/0 OR 4/0 PRIMARY.
P--2--4in P--2--4in	MARK CONDUIT STUBS WITH 4' STICK OF CONDUIT
10"	SMALL BURIED WIRE ENCLOSURE, APPROXIMATELY10" DIA. X 19" DEEP. (TYPICALLY FOR STREETLIGHTING FEEDS - INCLUDED BUT NOT SHOWN ON ALL LIGHTS)
BWE	LARGE BURIED WIRE ENCLOSURE, APPROXIMATELY 30" X 17"X16" DEEP.
UJB	UD JUNCTION BOX 30" X 48" X 30" DEEP - FOR 1/0 PRIMARY CONNECTIONS.

SEE LIGHTING DETAIL SHEET FOR LIGHTING LEGEND FOR LUMINAIRE DESCRIPTION AND SPECS.

ABBREVIATIONS

ABBREVIATION	DESCRIPTION
AL	ALUMINUM
AWG	AMERICAN WIRE GAUGE
AFF	ABOVE FINISH FLOOR
AFG	ABOVE FINISH GRADE
BIL	BASIC INSULATION LEVEL
BUG	BACK, UP AND GLARE RATING
BWE	BURIED WIRE ENCLOSURE
C	CONDUIT
COA	CITY OF ALACHUA
CU	COPPER
EGC	EQUIPMENT GROUNDING CONDUCTOR
FC	FOOTCANDLE
GRD	GROUND
IES	ILLUMINATING ENGINEERING SOCIETY
KCMIL	THOUSANDS OF CIRCULAR MILS
KV	KILOVOLT
LED	LIGHT EMITTING DIODE
SE	LARGE BURIED WIRE ENCLOSURE
LDR	LAND DEVELOPMENT REGULATIONS
MAX	MAXIMUM
MEP	MECHANICAL, ELECTRICAL, AND PLUMBING
M,H,	MOUNTING HEIGHT AFG OR AFF
MIN	MINIMUM
NEC	NATIONAL ELECTRIC CODE
P	PROPOSED
P--E	PROPOSED ELECTRIC
PSI	POUNDS PER SQUARE INCH
PUE	PUBLIC UTILITY EASEMENT
ROW	RIGHT OF WAY
RP	RECOMMENDED PRACTICE
S/L	STREET LIGHT
10"	SMALL BURIED WIRE ENCLOSURE
SC	SECTIONALIZING CABINET
TPX	TRIPLEX
TX	TRANSFORMER
TYP	TYPICAL
UD	UNDERGROUND
UGE	UNDERGROUND ELECTRIC
UJB	UNDERGROUND JUNCTION BOX
UON	UNLESS OTHERWISE NOTED
URD	UNDERGROUND DISTRIBUTION

2.11A SECTIONALIZING CABINET (SC) SHALL BE FIBERGLASS WITH STAINLESS STEEL HARDWARE AND PENTA HEAD LOCKING SYSTEM. PROVIDE WITH (3)4-WAY 15 KV MULTITAP FEED THROUGH JUNCTION BARS INSTALLED AT FACTORY. SHALL HAVE GROUND SLEEVE. APPROVED MANUFACTURER IS NORDIC FIBERGLASS , INC. STOCK # OF CABINET IS ND552454-MG-101-X-X AND JUNCTION BAR IS 215J4U.

2.11B SECTIONALIZING CABINET INSTALLED ON TOP OF THE PRECAST CONCRETE SWITCHGEAR BASE. SHALL HAVE PRECAST BOX AND TOP AND SHALL BE 5000 PSI CONCRETE MADE BY SOUTHERN PRECAST INC. CATALOG NUMBER FOR BOX IS SPSWB0016X6 AND SECTIONALIZING CABINET BOX TOP IS SPSWTOO36X6. PROVIDE SECTIONALIZING CABINET, BOX AND TOP.

2.12. PME 9 PAD-MOUNTED SWITCHGEAR SHALL BE ELBOW CONNECTED (DEADFRONT) AND SHALL HAVE TWO THREE-PHASE 600 AMP EXTERNALLY OPERATED THREE POLE SWITCHES AND TWO THREE-PHASE 200 AMP HOOKSTICK OPERATED FUSED TAPS. PROVIDE SMU-20 FUSE HOLDERS. THE CABINET SHALL BE ALL WELDED STAINLESS STEEL WITH STAINLESS STEEL HARDWARE AND SHALL HAVE ANTI-CONDENSATION ROOF UNDERCOATING. FINISH COLOR SHALL BE PAD-MOUNT GREEN ANSI-32 (MUNSELL NOTATION 7GY3.29/1.5). PROVIDE SEL 3BCRB0600IR FAULT INDICATORS ON 600 AMP CONDUCTORS. ALL BUSHING MUST BE PROVIDED. APPROVED MANUFACTURERS: S&C ELECTRIC CO. 65152R1-A14-F14 WITH 90362. PROVIDE 100E FUSES FOR 200 AMP POSITIONS. INSTALLED AND PROCUED BY COA.

2.13 UNDERGROUND JUNCTION BOX "UJB" SHALL BE MADE OF CORRUGATED POLYESTER WALLS AND POLYMER CONCRETE COLLAR AND TOP. BASIS OF DESIGN CDR SYSTEM CORP. PA10-3038-30.

2.14 UNDERGROUND BURIED WIRE "BWE" ENCLOSURE SHALL BE MADE OF HIGH DENSITY POLYETHYLENE. COVER IDENTIFIED AS "ELECTRIC. BASIS OF DESIGN IS PEN-CELL TYPE PE-20HDX. CONTRACTOR PROVIDED.

2.15 UNDERGROUND ROUND STREET WIRE ENCLOSURE "10"" SHALL BE MADE OF HIGH DENSITY POLYETHYLENE. COVER IDENTIFIED AS "ELECTRIC. BASIS OF DESIGN IS PEN-CELL TYPE PE-10X. CONTRACTOR PROVIDED.

2.16 CONTRACTOR SHALL PROVIDE CONCRETE BASES SIZED TO MEET FLORIDA BUILDING CODE WIND LOADING REQUIREMENTS FOR THE PRIVATE LIGHTING SYSTEM.

2.17 SEE LIGHTING DETAIL SHEET FOR SPECIFICATIONS FOR LUMINAIRE, ARM AND POLES.

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CONSTRUCTION/AS BUILT REVISIONS:

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CLIENT:
PROJECT: TOWER HILL
SHEET TITLE: SPECS AND LEGEND

TECHNICIAN:
DESIGNER:
QUALITY CONTROL:
PROJECT NUMBER:

WILLIAM T. STORMANT
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PROFESSIONAL ENGINEER
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SHEET NO.:
E4

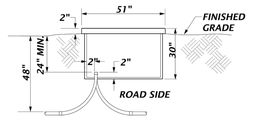
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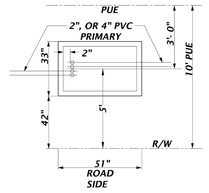
ELECTRICAL UTILITIES LEGEND AND ABBREVIATIONS

50a	TRANSFORMER ON CONCRETE PAD, 50 KVA PHASE b, 120/240 VOLT SINGLE PHASE SECONDARY.
P-2b — P-2b	1/0 AL PRIMARY CABLE, IN 2" PVC AT 48" MIN. COVER.
P-4/0 — P-4/0	4/0 AL TPX SECONDARY CABLE, IN 2.5" PVC AT 36" MIN. COVER.
6/3 P-SL — P-SL — P-SL	6/3 AL TPX SECONDARY STREETLIGHT CABLE, IN 1.5" PVC AT 36" MIN. COVER.
12/2 P-SL — P-SL — P-SL	12/2 WITH GROUND, IN 1.5" PVC AT 36" MIN. COVER.
	JUNCTION BOX
SE	SERVICE ENCLOSURE, BURIED, APPROXIMATELY 33" X 20" X 15" DEEP.
80W 30'	80 WATT LED CUTOFF LUMINAIRE ON 30' FIBERGLASS POLE (25' MOUNTING HT) WITH 4' ARM.
10"	ROUND BURIED STREETLIGHT WIRING ENCLOSURE APPROXIMATELY 10" DIAMETER X 12" DEEP HIGH DENSITY POLYETHYLENE.
SW	600 AMP PAD MOUNTED SWITCHGEAR. DOORS INDICATE SOURCE AND LOAD SIDES.

PME	PAD MOUNTED EQUIPMENT
PUE	PUBLIC UTILITY EASEMENT
PVC	POLYVINYL CHLORIDE
CT	CURRENT TRANSFORMER
R/W	RIGHT OF WAY

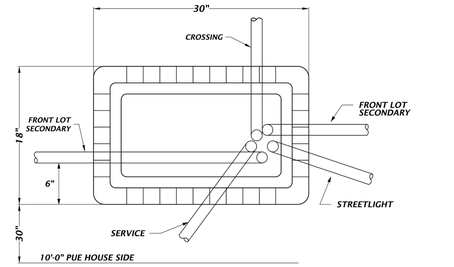
500 ELECTRICAL UTILITIES LEGEND AND ABBREVIATIONS
NTS

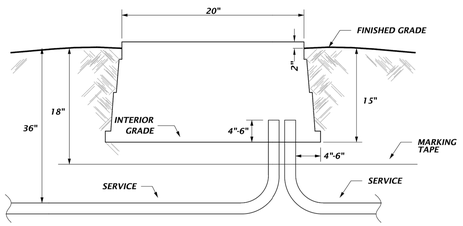




TRANSFORMER PADS SHALL BE PLACED ON COMPACTED EARTH.

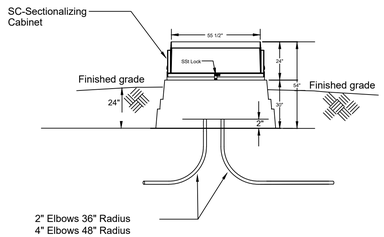
530 UNDERGROUND JUNCTION BOX
NTS

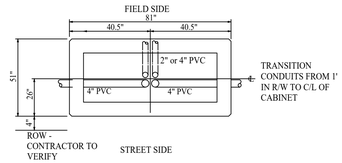




503 SERVICE ENCLOSURE
NTS

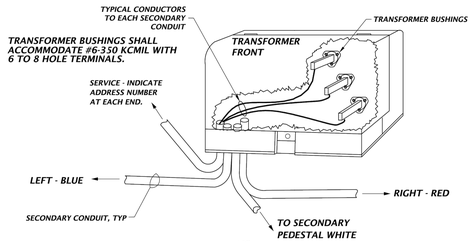
NOTES:
1) Do not cut off elbows. Elbows at equipment locations and the conduit system transition to this equipment will be installed deeper than the nominal installation depth to meet turn-up requirements. Elbows shall be turned up in center portion of base.
2) 2" or 4" conduit shall be used as shown on the site plan.
3) Provide three 4-way junction bars at all locations. Ground per National Electrical Safety Code.
4) For 4" conduit, 48" radius elbows are required; for less than 4" conduit 36" radius elbows are required
5) Fiberglass enclosure made by Nordic Fiberglass Catalog # ND552454-MG-101-X-X-215J4U. or approved equal. (TOP 23"Dx55"Wx24"H) (BASE 51"Dx81"Wx30"H)
6) The centerline of the base shall be located 2' 6" from right of way line.
7) The base flares out to 81" at bottom.

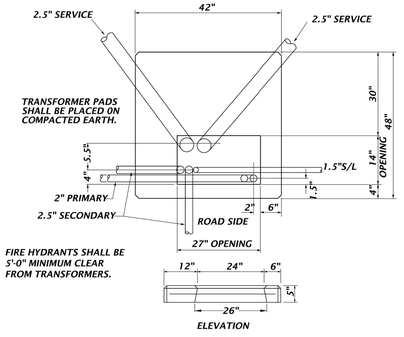




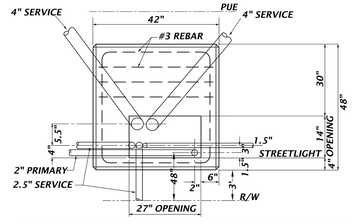
SECTIONALIZING CABINET (SC) WITH GROUND SLEEVE (TYP.)

DETAIL 100: NOT TO SCALE



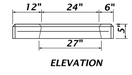


501 SINGLE-PHASE TRANSFORMER AND PAD
NTS



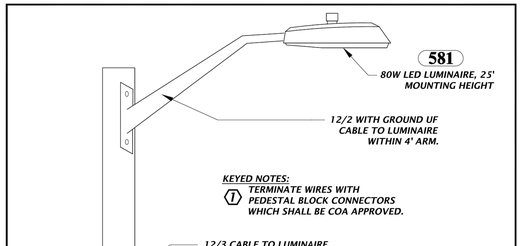
FIRE HYDRANTS SHALL BE 5'-0" MINIMUM CLEAR FROM TRANSFORMERS.

WARNING: CONTRACTOR SHALL NOT OPEN TRANSFORMER, PUSH CONDUIT UNDER TRANSFORMER, OR INSTALL CONDUCTORS WHEN TRANSFORMER IS ENERGIZED. LIFE THREATENING ELECTRICAL SHOCK MAY OCCUR.



TRANSFORMER BUSHINGS WILL ACCOMMODATE UP TO 8 SETS OF 500 KCMIL CONDUCTORS.

539 TYPICAL SINGLE-PHASE TRANSFORMER PAD
NTS

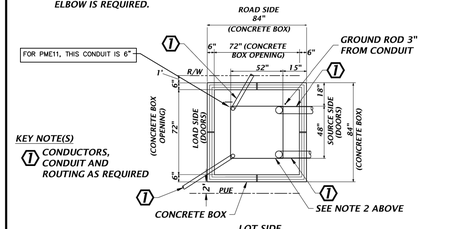


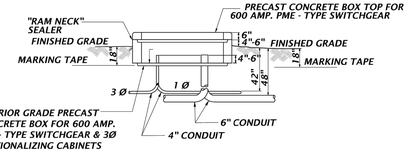
CONTRACTOR SHALL FURNISH AND INSTALL ALL POLE MOUNTED LIGHT FIXTURES, POLES, AND 10" DIAM. SECONDARY ENCLOSURES AS SHOWN ON THE DRAWINGS.

515 STREETLIGHT
NTS

GENERAL NOTE(S) :

1) ALL CONDUIT FURNISHED AND INSTALLED BY OWNER. CONDUIT SHALL BE INSTALLED WITH ONE PIECE OF CONTINUOUS PRE-LUBRICATED WOVEN POLYESTER PULL TAPE WITH PRINTED SEQUENTIAL FOOTAGE MARKINGS.
2) THIS 48" X 52" (NOTE LOCATION OF FUSE AND SWITCH SIDES OF SWITCHGEAR) AREA WILL BE LOCATED IN THE FIELD AND USED TO INSTALL CONDUIT BEFORE THE CONCRETE BOX IS INSTALLED.
3) DO NOT CUT OFF ELBOWS.
4) FOR 4" CONDUIT A 48" RADIUS ELBOW IS REQUIRED, FOR LESS THAN 4" CONDUIT 36" RADIUS ELBOW IS REQUIRED.





518 TYPICAL 600 AMP. PME 9 & SOURCE TRANSFER PME 9, SWITCHGEAR AND SECTIONALIZING CABINET (SC) & 3Ø CONDUIT LAYOUT
NTS

11801 Research Drive
Alachua, Florida 32615
(352) 331-1976
www.chw-inc.com
est. 1988 FLORIDA CA-5075
CHW Professional Consultants

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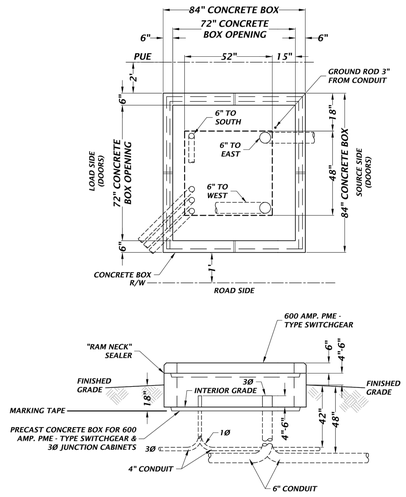
CLIENT:
PROJECT: TOWER HILL
SHEET TITLE: ELECTRICAL DETAILS

TECHNICIAN:
DESIGNER:
QUALITY CONTROL:
PROJECT NUMBER:

WILLIAM T. STORMANT
WILLIAM T. STORMANT LICENSE No. 44156 STATE OF FLORIDA PROFESSIONAL ENGINEER
05/08/23
FL PE No. 44156

SHEET NO.: E5

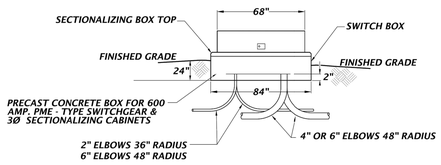
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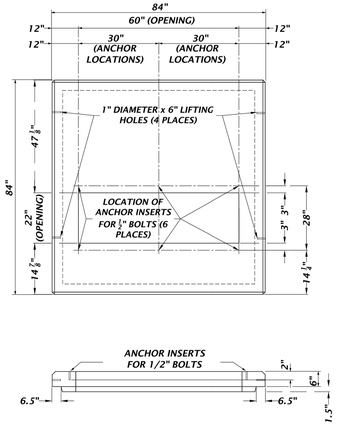
542 **TYPICAL 600 AMP. PME 11 SWITCHGEAR CONDUIT LAYOUT**
NTS

GENERAL NOTE(S):

1) *DO NOT CUT OFF ELBOWS. ELBOWS AT EQUIPMENT LOCATIONS AND THE CONDUIT SYSTEM TRANSITION TO THIS EQUIPMENT WILL BE INSTALLED DEEPER THAN THE NOMINAL INSTALLATION DEPTH TO MEET TURN-UP REQUIREMENTS. ELBOWS SHALL BE TURNED UP IN CENTER PORTION OF BASE.*
2) *2" OR 4" CONDUIT SHALL BE USED AS SHOWN ON THE SITE PLAN.*
3) *PROVIDE THREE 4-WAY JUNCTION BARS AT ALL LOCATIONS. GROUND PER NATIONAL ELECTRICAL SAFETY CODE.*
4) *FOR 4" AND 6" CONDUIT, 48" RADIUS ELBOWS ARE REQUIRED; FOR LESS THAN 4" CONDUIT 36" RADIUS ELBOWS ARE REQUIRED*
5) *CABINET MADE BY SHALLBETTER, INC. CATALOG # SSED-306830-NJM-AL-GRU.*



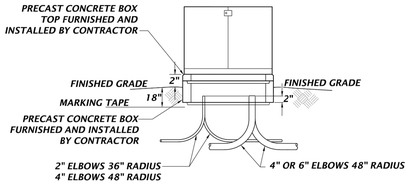
527 **TYPICAL SECTIONALIZING CABINET (SC) WITH SECTIONALIZING BOX TOP AND SWITCH BOX**
NTS



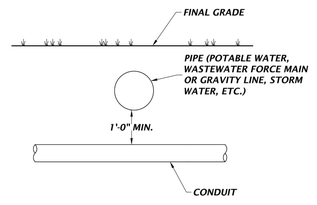
536 **PRECAST CONCRETE BOX TOP FOR SECTIONALIZING CABINET**
NTS

NOTE(S) :

1) *DO NOT CUT OFF ELBOWS. ELBOWS AT EQUIPMENT LOCATIONS AND THE CONDUIT SYSTEM TRANSITION TO THIS EQUIPMENT WILL BE INSTALLED DEEPER THAN THE NOMINAL INSTALLATION DEPTH TO MEET TURN-UP REQUIREMENTS.*
2) *2", 4", OR 6" CONDUIT SHALL BE USED AS SHOWN ON THE SITE PLAN.*
3) *COMPLETE CONDUIT SYSTEM AND CONCRETE PRODUCTS FURNISHED AND INSTALLED BY CONTRACTOR.*
4) *FOR 6" AND 4" CONDUIT, 48" RADIUS ELBOWS ARE REQUIRED; FOR LESS THAN 4" CONDUIT 36" RADIUS ELBOWS ARE REQUIRED.*
5) *PRECAST BOX SHALL BE 5000 PSI CONCRETE MADE BY SOUTHERN PRE-CAST INC. CATALOG # SPSWB0016X6 WITH SPGRUPME911 TOP OR APPROVED EQUAL.*
6) *PAD MOUNTED 600 AMP SWITCHGEAR WITH SMU-20 FUSE HOLDERS MADE BY S&C ELECTRIC CO. PROVIDE FUSES AS REQUIRED BY THE UTILITY.*



533 **TYPICAL 600 AMP. PME TYPE SWITCHGEAR INSTALLATION**
NTS



GENERAL NOTE(S):

A. WHERE DISTANCES BETWEEN EXISTING CONDUIT AND NEW PIPE ARE LESS THAN MINIMUM, CONTRACTOR SHALL PERFORM WORK TO ACHIEVE THE MINIMUM VERTICAL SEPARATION DISTANCE. CONTRACTOR SHALL COORDINATE REQUIRED WORK WITH CITY.

B. CONTRACTOR SHALL EITHER:
- *REPLACE EXISTING CONDUIT AND CONDUCTORS WITH RE-ROUTED NEW CONDUIT AND CONDUCTORS.*

--OR--
- *KEEP EXISTING CONDUIT AS IS. INSTEAD INSTALL NEW PIPE BELOW EXISTING CONDUIT.*

587 **VERTICAL DISTANCE REQUIREMENT BETWEEN CONDUIT AND PIPE**
NTS

11801 Research Drive
Alachua, Florida 32615
(352) 331-1976
www.chw-inc.com
est. 1988 FLORIDA CA-5075
CHW Professional Consultants

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FL PE No. 44156

SHEET NO.:
E6

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Control Number: AREA-VSX-II-AR-08_19_2022

VSX-II Array LED Specifications



*Universal Arm Mount (UAM) Version Shown.

Project Name:

Catalog Number:

Type:

The new **VSX-II Array LED** Series offers clean, functional styling that is defined by its sleek low profile design and rugged construction. It combines the latest LED Array technology, advanced LED thermal management and provides outdoor lighting that is both energy efficient and aesthetically pleasing.

The LED's performance and the driver's life are maximized by enclosing them in two separate die cast aluminum housings.

The VSX-II Array LED fixture is offered with lumen packages ranging from 5,000 - 25,000. Ten optical distribution patterns are available. Choose between 3000, 4000 or 5000 Kelvin temperature of the LEDs.

A durable polyester powder coat finish is guaranteed for five years; and is available in standard or custom colors.

The **VSX-II Array LED** series is an exceptional choice for commercial parking lots, office complexes, architectural projects, and other general lighting projects.

Ordering Information

MODEL	OPTICS	LUMENS	KELVIN	VOLTAGE	MOUNTING	FINISH	OPTIONS	OPTIONS	OPTIONS
VSX-II	**T1** Type 1 **T2** Type 2 **T3** Type 3 **T3L** Type 3 Long **T4** Type 4 **T4L** Type 4 Long **T4A** Type 4 Automotive **T5SR** Type 5 Short Round **T5LR** Type 5 Long Round **T5LS** Type 5 Long Square	**5L** **10L** **15L** **20L** **25L**	**3K** 3000K **4K** 4000K **5K** 5000K	**UNV** 120-277V **8** 347V **5** 480V	**AM** Arm Mount **SAM** Straight Arm Mount W/ Terminal Block (New Construction) **UAM** Universal ArmW/ Terminal Block Mount (Retrofit) **MAF*** Mast Arm Fitter **KM** Knuckle Mount **WM** Wall Mount *Requires BAWP **AWM** Adjustable Wall Mount *Round Pole Plate Adapters (RPP) are to be ordered separately. *BAWP to be ordered separately	**BZ** Bronze **BK** Black **SBK** Smooth Black **WH** White **SWH** Smooth White **GP** Graphite **GY** Grey **SL** Silver Metallic **CC** Custom Color	**PCR-120** **PCR-208** **PCR-240** **PCR-277** **PCR-347** **PCR-480** Photocell & Receptacle **PER** NEMA 7 Pin Photo Receptacle w/Shorting cap Required for Dimming Driver **5PINPER** **7PINPER** 5 Pin or 7 Pin Photo Receptacle **DIM** 0-10V Dimming Driver **RPP-3*** Round Pole Plate Adaptor **RPP-4*** Round Pole Plate Adaptor **RPP-5*** Round Pole Plate Adaptor **VWC** Visionaire Wireless Controls *Consult Factory	**WSC-8** Motion Sensor 8' Mounting Height **WSC-20** Motion Sensor 9-20' Mounting Height **WSC-40** Motion Sensor 21-40' Mounting Height (WSC option will require (1) FSIR-100 remote for programming **UMAP** Universal Mast arm fitter **ECLS** Egg Crate Louver Shield **ADJLS** Adjustable Louver Light Shield **BD** Barn Door Shield	**UPMA-S** Universal Square Pole Mount Adaptor **UPMA-R** Universal Round Pole Mount Adaptor **BAWP** Cast Wall Plate **ROT-R** Rotated Optics Right Side **ROT-L** Rotated Optics Left Side **CLS** Backside cutoff shield *Not to be used with XM **RCLS** Rightside cutoff shield *Not to be used with XM **LCLS** Leftside cutoff shield *Not to be used with XM **HS** House shield

VISIONAIRE LIGHTING

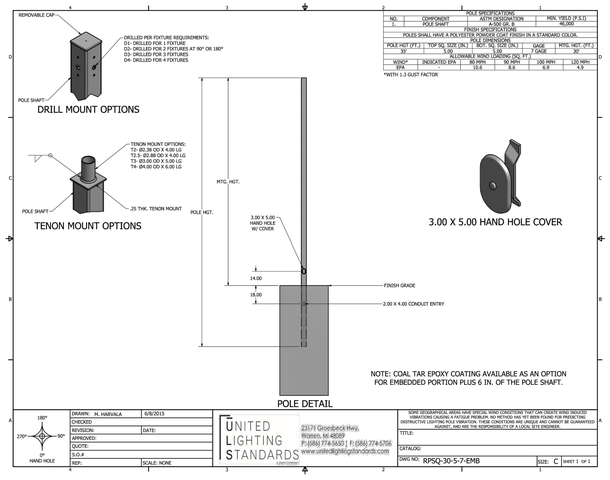
VL-PA-ING-001-F37 REV. 0 CRCABR22-03

Lighting Schedule - PROVIDE ALL FIXTURES

Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lumen Multiplier	Lamp Lumens	Wattage	Distribution	MOUNT HT/POLE LENGTH	Notes
	A	32	VISIONAIRE LIGHTING LLC	VSX-II_T4L_25L_4K_UNV_UAM_BK-PCR-240	100-277V 50/60HZ 4000K FULL CUTOFF FIXTURE, ARM MOUNT, BLACK FINISH, 240V PHOTOCELL	.9	22225	167	TYPE 4 LONG	30' M.H. 35' POLE	PRIVATE LIGHT AND POLE SEE 30' M.H. POLE SCHEDULE. CONNECT AT 240V

Pole Schedule - PROVIDE ALL POLES

Label	Quantity	Manufacturer	Catalog Number	Description	MOUNT HT/POLE LENGTH	Notes
30' M.H.	32	UNITED LIGHTING STANDARDS	RPSQ-30-5-7-EMB-D1-BK UL-VD ADD COAL TAR EPOXY COATING TO EMBEDDED PORTION + 6'	SQUARE STRAIGHT STEEL POLES, 5" SQUARE TO BE DIRECT BURIED BLACK FINISH	30' M.H. 35' LENGTH	BACKFILL PER MANUFACTURER DIRECTIONS LOCATE FACE OF POLE 2' FROM BACK OF ROW



POLE SPECIFICATIONS

NO.	COMPONENT	ASTM DESIGNATION	MIN. YIELD (P.S.I)
1	POLE SHAFT	A-595 GR. A	50,000

FINISH SPECIFICATIONS

POLES SHALL HAVE A POLYESTER POWDER COAT FINISH IN A STANDARD COLOR.

POLE HGT. (FT.)	TOP SQ. SIZE (IN.)	BOTT. SQ. SIZE (IN.)	GAGE	MTG. HGT. OFF 3
30'	5.00	7.00	7 GAGE	30'

ALLOWABLE WIND LOADING (SQ. FT.)

WIND*	INDICATED EPA	80 MPH	90 MPH	100 MPH	120 MPH
EPA		10.0	8.6	6.9	4.9

*WITH 1.3 GUST FACTOR

UNITED LIGHTING STANDARDS
A DAKA COMPANY

www.unitedlightingstandards.com

POLE ORDERING GUIDE

ORDER NUMBER TEMPLATE

Example Order Number

Fixture			Catalog Number				Mounting Type	Fixture Mounting Arrangement	Finish	Options			Accessories		
Brand	Product	Number	Design	Mounting Height	Shaft Size	Wall Thickness				Design	Orientation	Height From Base	Design	Orientation	Height From Base
			RPSQ	20	4	11	AB	T2	DB	WB-15	@90	10'	FH	@180	9'

Build Your Order Number

Fixture			Catalog Number				Mounting Type	Fixture Mounting Arrangement	Finish	Options			Accessories		
Brand	Product	Number	Design	Mounting Height	Shaft Size	Wall Thickness				Design	Orientation	Height From Base	Design	Orientation	Height From Base
			RPSQ	30'	5"	7 GAGE	EMB	D1	BK	UL					
										VD					

ADD: COAL TAR EPOXY COATING *Note: N/A = Not Applicable*

Mounting Type

AB = Anchor Base
EMB = Embedded (Direct Burial)

Fixture Mounting Arrangement

D1	D4
D2@90	T2
D2@180	T2.5
D3@90	T3
D3@120*	T4

*Round poles only

Refer to the Mounting Orientation Guide on the next page of this file.

Finish

WH = White
TWH = Textured White
DB = Dark Bronze
TMB = Textured Medium Bronze
HB = Harvest Bronze
NB = New Bronze
SL = Silver
MGY = Medium Gray
GR = Gray
TGR = Textured Gray
GM = Graphite Metallic
DP = Dark Platinum
MA = Matte Aluminum
PSP = Platinum Silver
BK = Black
TBK = Textured Black
MG = Moss Green

Contact us for custom colors.

Options

CMB = Camera Mounting Bracket
CMP = Camera Mounting Plate
WB-15 = Welded Bracket
WC = Welded Coupling (denote size)
WN = Welded Nipple (denote size)
Festoon = Festoon Provision
CSBC = Custom Steel Base Cover
VD = Vibration Dampener
GFCI/UC = Ground Fault Circuit Interrupter with In-Use Cover
UL = UL Listed**

**See our online product catalog for complete catalog numbers of these options and accessories.*

*** UL Listed labeling is available for catalog steel and aluminum poles—both Commercial & Industrial and Roadway. UL Listed labeling is not available for brackets. UL Listing must be specified at the time of order.*

Accessories

TB = Transformer Base*
ABS-BC = ABS Base Cover*
LW = Lowering Winch
LW-ELECTRIC = Electric Lowering
Winch BA = Banner Arm
FH = Flag Holder
PTTA = Pole Top Tenon Adapter*

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TECHNICIAN:
DESIGNER:
QUALITY CONTROL:
PROJECT NUMBER:

WILLIAM T. STORMANT
LICENSE
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BRANCH CIRCUIT PANELBOARD SCHEDULE — PANEL L1

FOR 240/120 VOLT, SINGLE PHASE, 3-WIRE FEEDER. PROVIDE ALL SPARE BREAKERS AND GROUND BAR.
100 AMP. MAIN BREAKER, 10,000 AIR SYMMETRICAL FULLY RATED ALL BREAKERS. 100% NEUTRAL. SERVICE ENTRANCE RATED. TYPE NEMA 3R

SERVING POLE ZONE	WIRE HOT	WIRE NEUT	WIRE GRD	BREAKER AMP	BREAKER POLES	CIR NO	CONNECTED LOAD VA		CIR NO	BREAKER POLES	BREAKER AMP	WIRE GRD	WIRE NEUT	WIRE HOT	SERVING POLE ZONE
STREET LIGHTS	6		6	30	2	1	1837		2	2	30				SPARE
	6					3			4						
STREET LIGHTS	6		6	30	2	5	1336		6						
	6					7			8						
						9			10						
						11			12						

LIGHTS X 1.25 = 3966 VA (3173 VA CONNECTED)

TOTAL = 3966 VA (17 AMP, PROVIDE 100 AMP PANEL, 3-#CU SERVICE)

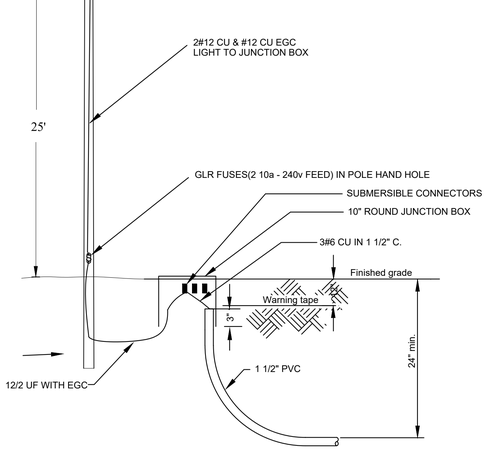
BRANCH CIRCUIT PANELBOARD SCHEDULE — PANEL L2

FOR 240/120 VOLT, SINGLE PHASE, 3-WIRE FEEDER. PROVIDE ALL SPARE BREAKERS AND GROUND BAR.
100 AMP. MAIN BREAKER, 10,000 AIR SYMMETRICAL FULLY RATED ALL BREAKERS. 100% NEUTRAL. SERVICE ENTRANCE RATED. TYPE NEMA 3R

SERVING POLE ZONE	WIRE HOT	WIRE NEUT	WIRE GRD	BREAKER AMP	BREAKER POLES	CIR NO	CONNECTED LOAD VA		CIR NO	BREAKER POLES	BREAKER AMP	WIRE GRD	WIRE NEUT	WIRE HOT	SERVING POLE ZONE
STREET LIGHTS	6		6	30	2	1	1670		2	2	30				SPARE
	6					3			4						
SPARE					2	5			6						
						7			8						
						9			10						
						11			12						

LIGHTS X 1.25 = 1336 VA (1670 VA CONNECTED)

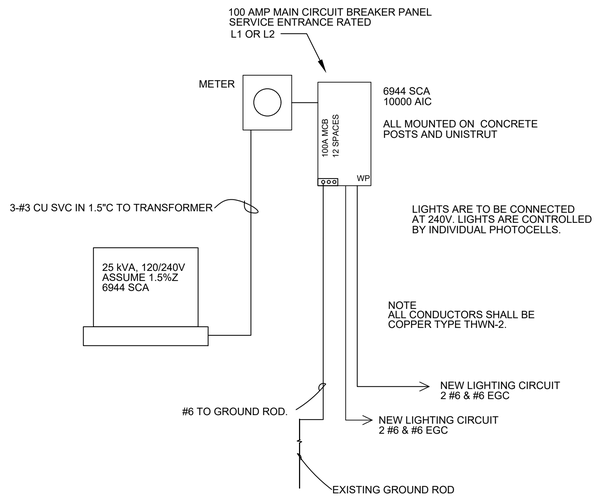
TOTAL = 1336 VA (6 AMP, PROVIDE 100 AMP PANEL, 3-#CU SERVICE)



NOTE:
CONTRACTOR SHALL FURNISH AND INSTALL ALL POLE MOUNTED LIGHT FIXTURES, POLES, AND JUNCTION BOXES AS SHOWN ON THE DRAWINGS.

STREET LIGHT POLE DETAIL

NOT TO SCALE



ELECTRICAL DISTRIBUTION RISER DIAGRAM

NOT TO SCALE

11801 Research Drive
Alachua, Florida 32615
(352) 331-1976
www.chw-inc.com
est. 1988 FLORIDA CA-3075

CHW Professional Consultants

SCALE:
VERIFY SCALE
BAR IS ONE INCH ON
ORIGINAL DRAWING
IF NOT ONE INCH ON
THIS SHEET ADJUST
SCALES ACCORDINGLY

CONSTRUCTION/BID REVISIONS:

SUBMITTALS:
02/28/23 SUBMITTAL
04/10/23 SUBMITTAL
05/08/23 SUBMITTAL

CLIENT:
PROJECT: TOWER HILL
SHEET TITLE: LIGHTING DETAILS AND STATS

TECHNICIAN:
DESIGNER:
QUALITY CONTROL:
PROJECT NUMBER:

WILLIAM T. STORMANT
LICENSE
No. 44156
STATE OF FLORIDA
PROFESSIONAL ENGINEER
05/08/23
FL PE No. 44156

SHEET NO.:
E8

Tech: tstorm_f Plot Date: May 05,2023 2:33pm Filename: C:\Users\tstorm_f\Documents\Tower Hill (Second Iteration)\Tower Hill Specifications, Legend and Details.dwg

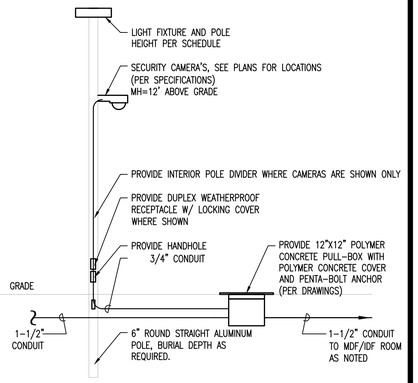
ANY MODIFICATIONS TO THESE PLANS OR RE-USE OF THESE PLANS MUST BE APPROVED BY AND SIGNED BY THE ARCHITECT.

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SITE POLE DETAIL

CONTRACTOR FURNISHED AND INSTALLED LOW-VOLTAGE SCOPE

1. PROVIDE HOMERUN TO DEMARCATION FRAMEWORK AS SHOWN. CONTRACTOR SHALL PROVIDE PULL-TAPE (MULE OR EQUAL).
2. PROVIDE PULL-BOXES FOR ALL LOW-VOLTAGE SYSTEMS.
3. PROVIDE LIGHTING POLES WITH DIVIDED INTERIOR CHANNEL FOR ALL SECURITY CAMERA LOCATIONS. ALTERNATE METHODS MAY BE CONSIDERED TO REDUCE LEAD-TIMES AND COST.
4. CAMERA EQUIPMENT, INCLUDING BUT NOT LIMITED TO THE FOLLOWING: NETWORK CAMERAS, MOUNTING EQUIPMENT, POLE MOUNTED EQUIPMENT, POE EXTENDERS, NETWORK CABLE CONNECTORS, SINGLE-MODE FIBER OPTIC CONNECTORS, NETWORK VIDEO RECORDERS, NETWORK SWITCH, DATA EQUIPMENT RACKS.
5. FEEDERS FOR POWER TO CAMERA SYSTEM SIGNAL EXPANDERS AND OTHER PERIPHERALS REQUIRING ELECTRIC.

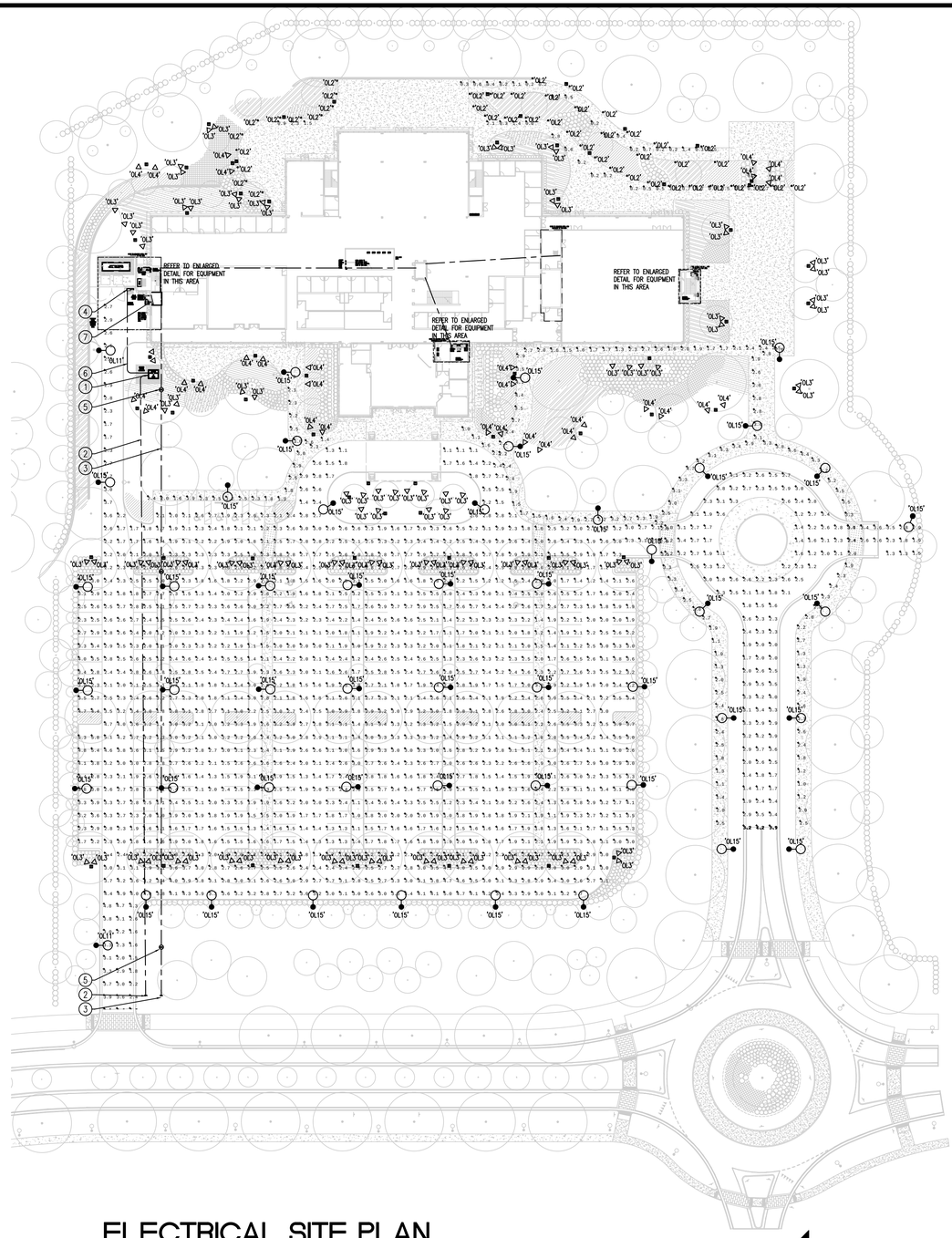


TWO-WAY RADIO ENHANCEMENT SYSTEM CONDUIT LEGEND

1-1/2" DEDICATED UNDERGROUND CONDUIT AS SHOWN

LIGHTNING PROTECTION

A LIGHTNING RISK ASSESSMENT PER NFPA 780 ANNEX 'L' AND SHALL BE PERFORMED TO EVALUATE THE REQUIREMENTS TO SAFEGUARD PEOPLE AND PROPERTY FROM FIRE RISK AND RELATED HAZARDS ASSOCIATED WITH LIGHTNING EXPOSURE. A COMPLETE REPORT SHALL BE PROVIDED TO THE ARCHITECT AND ENGINEER OF RECORD. A PERFORMANCE BASED CONTRACTED SYSTEM SHALL BE PROVIDED WHERE APPROVED BY THE CUSTOMER AND SUBMITTED FOR REVIEW AS COMPLETE SHOP DRAWINGS SIGNED AND SEALED BY LICENSED LIGHTNING SYSTEM DESIGN PROFESSIONAL.



ELECTRICAL SITE PLAN

SCALE: 1"=50'-0"

GENERAL NOTES:

1. UNDERGROUND PRIMARY AND SECONDARY CONDUIT SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. TWO PARALLEL RUNS WITH PULL STRINGS AND ELLS OF 36" RADIUS.
2. PRIMARY CONDUCTORS SHALL BE INSTALLED BY UTILITY.
3. METERING EQUIPMENT SHALL BE SELF-CONTAINED AND ALL EQUIPMENT AND CONDUCTORS INSTALLED BY UTILITY.
4. CONTRACTOR SHALL FURNISH CONDUIT SWEEPS AS NECESSARY FOR UTILITY INSTALLATION.
5. UTILITY SHALL PERFORM ALL TERMINATIONS AT UTILITY TRANSFORMER FOR CONTRACTOR FURNISHED AND INSTALLED FEEDERS.
6. CONTRACTOR SHALL FURNISH AND INSTALL TRANSFORMER PADS.
7. CONTRACTOR SHALL AT NO TIME PERFORM ANY WORK INSIDE UTILITY ENERGIZED EQUIPMENT. THIS INCLUDES METERING EQUIPMENT WHERE INSTRUMENT CURRENT TRANSFORMERS METERING IS PROVIDED AT THE TRANSFORMER.
8. UTILITY APPROVED METER ENCLOSURE SHALL BE PROVIDED BY CONTRACTOR AND INSTALLED ON TRANSFORMER ENCLOSURE.
9. ANY SPECIAL METER SOCKET WHICH IS NOT FURNISHED BY THE UTILITY SHALL REQUIRE PRIOR APPROVAL BY THE UTILITY.
10. CONTRACTOR SHALL VERIFY WITH UTILITY REQUIREMENTS FOR VOLTAGE DISTORTION CORRECTION WHEN SUCH DISTORTION DUE TO HARMONIC LOADS OF THE CUSTOMER EQUALS OR EXCEEDS 5% THD OF THE DELIVERY VOLTAGE.
11. UTILITY SHALL HAVE THE RIGHTS OF ENTRY TO THE CUSTOMER'S PREMISES AT REASONABLE HOURS TO INSTALL, READ, INSPECT, REPAIR OR REMOVE METERS OR OTHER SYSTEM-OWNED EQUIPMENT USED TO SUPPLY ELECTRICITY.
12. UTILITY EASEMENTS SHALL BE IDENTIFIED AND SECURED PRIOR TO ANY WORK. ALL REQUIREMENTS SHALL BE COORDINATED WITH CIVIL ENGINEERING DOCUMENTS. THE EASEMENT IS TO BE CLEAR OF ALL BUILDINGS,STRUCTURES OR OTHER OBSTRUCTIONS.
13. ALL PUBLIC ROADWAY INTERSECTION LIGHTING DESIGN AND INSTALLATION SHALL BE PROVIDED BY UTILITY. ALL REQUIREMENTS SHALL BE COORDINATED WITH CIVIL ENGINEERING DOCUMENTS.
14. CONTRACTOR SHALL COORDINATE WITH UTILITY ALL REQUIREMENTS FOR TEMPORARY SERVICES FOR CONSTRUCTION.

CODED NOTES:

1. UTILITY TRANSFORMERS. COORDINATE ALL REQUIREMENTS WITH UTILITY PRIOR TO ANY WORK. MAINTAIN VEHICLE ACCESS AS REQUIRED.
2. (2) 4" SCH 80 PVC CONDUITS FOR UNDERGROUND UTILITY PRIMARY SERVICE CONDUCTORS. COORDINATE ALL REQUIREMENTS WITH UTILITY PRIOR TO ANY WORK. PROVIDE DETECTABLE WARNING TAPE ABOVE ALL CONDUITS.
3. (2) 2" SCH 80 PVC CONDUITS FOR TELECOMMUNICATIONS SERVICE ENTRANCE. COORDINATE ALL REQUIREMENTS WITH SERVICE PROVIDER AND EXISTING FIELD CONDITIONS PRIOR TO ANY WORK. PROVIDE DETECTABLE WARNING TAPE ABOVE ALL CONDUITS.
4. BUILDING ELECTRICAL SERVICE ENTRANCE ROOM. COORDINATE ALL REQUIREMENTS WITH RISER DIAGRAM.
5. TELECOMMUNICATIONS PULL-BOX AND CONDUIT AS REQUIRED. COORDINATE ALL REQUIREMENTS WITH RISER DIAGRAM, DETAILS AND CIVIL SITE PLANS.
6. ELECTRICAL SERVICE PULL-BOX AND CONDUIT AS REQUIRED. COORDINATE ALL REQUIREMENTS WITH RISER DIAGRAM, DETAILS AND CIVIL SITE PLANS.
7. BUILDING COMMUNICATIONS ENTRANCE ROOM. COORDINATE ALL REQUIREMENTS WITH RISER DIAGRAM AND DETAILS.

SITE LIGHTING NOTES:

1. SITE LIGHTING POLES SHALL MEET FBC 1609 WIND SPEED REQUIREMENTS. CALCULATIONS SHALL INCLUDE COMPLETE ASSEMBLY EPA.
2. LIGHTING POLES MAY INCLUDE ADDITIONAL EQUIPMENT SUCH AS SECURITY CAMERAS AND COMMUNICATIONS DEVICES. PROVIDE DUAL CHAMBER OR DIVIDED POLES WHERE REQUIRED.
3. LIGHTING POLES SHALL BE DIRECT BURIAL TYPE.
4. LIGHT POLES SHALL BE PROVIDED A HAND-HOLE AT THE BASE.
5. ALL POLES SHALL BE GROUNDED AND ALL METALLIC PARTS BONDED TOGETHER USING #6 SOLID BARE GROUNDING CONDUCTOR. LIGHTING CIRCUIT EQUIPMENT GROUNDING CONDUCTOR SHALL BE BONDED TO POLE BASE GROUNDING STUD.
6. PROVIDE 5/8" X 15' GROUND ROD AT EACH POLE LOCATED IN HAND-HOLE.

LUMINAIRE SCHEDULE

TAG	DESCRIPTION	MANUFACTURER	CATALOG NUMBER	VOLTS	LAMP TYPE	FIXTURE VA	LUMENS	MOUNT	LOCATION	NOTES	TAG
			EXTERIOR LIGHTING								
OL1	EXTERIOR FLAG POLE	HYDREL	M9720C A LED P3 5K MVOLT NSP FLC 34B	MVOLT	LED	46	4600	GRADE/STAKE	FLAG POLE	-	OL1
OL2	EXTERIOR PATHWAY LIGHT	LINEA LIGHT-INTERLUX	BON-BODB-RE-20-11-CC-30-GE/SOLO100W-300/E14931	MVOLT	LED	11	591	GRADE/STAKE	WALKING PATH	-	OL2
OL3	EXTERIOR FLOOD STANDARD OUTPUT	LINEA LIGHT-INTERLUX	IR67-RGR-Z24-13CC-30K-ZE+E98112/SOLO50W-350	MVOLT	LED	13	594	GRADE/STAKE	AS SHOWN	-	OL3
OL4	EXTERIOR FLOOD HIGH OUTPUT	LINEA LIGHT-INTERLUX	IR67-RGR-Z32-20CC-30K-ZE+E98112/SOLO50W-350	MVOLT	LED	20	884	GRADE/STAKE	AS SHOWN	-	OL4
OL5	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	-	OL5
OL6	EXTERIOR ACCENT STANDARD OUTPUT	LINEA LIGHT-INTERLUX	IR67-RGR-Z24-13CC-30K-ZE+E98112/SOLO50W-350	MVOLT	LED	13	594	GRADE/STAKE	AS SHOWN	-	OL6
OL7	EXTERIOR ACCENT HIGH OUTPUT	LINEA LIGHT-INTERLUX	IR67-RGR-Z39-30CC-30K-ZE+E98112/SOLO50W-350	MVOLT	LED	30	1302	GRADE/STAKE	AS SHOWN	-	OL7
OL8	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	-	OL8
OL9	EXTERIOR BUILDING WALL LIGHT	ALVA	TESSIE-SLOTTED-90-XXX-3000	MVOLT	LED	60	2375	WALL	BUILDING ENTRANCES	-	OL9
OL10	EXTERIOR CANOPY DOWNLIGHT	LINEA LIGHT-INTERLUX	GUA-SFGR-F-91-34IND-30-FL+E99675/SOLO-100W-630	MVOLT	LED	34	3294	RECESSED	EXTERIOR CANOPY	-	OL10
OL11	20FT POLE W/ AREA LIGHT - TYPE II	US ARCH	VPR-EA-30-VLED-II-100LED-525mA-WW-480-PTB27-RAL-XXXX-T-OPTIONS-XXX	480	LED	160	12623	POST-TOP	SITE/ROADWAY	-	OL11
OL15	20FT POLE W/ AREA LIGHT - TYPE V WIDE	US ARCH	VPR-EA-30-VLED-VSQ-100LED-525mA-WW-480-PTB27-RAL-XXXX-T-OPTIONS-XXX	480	LED	160	12623	POST-TOP	SITE/ROADWAY	-	OL15

KPI ENGINEERING, INC.
PROFESSIONAL ENGINEERS
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FAX (813) 241-6489
Board of Professional Engineers – License # 27336

DRAWN BY: JFO
DATE: APRIL 22, 2023
PROJECT NO.: 22-607

PAUL STRESING ASSOCIATES, INC.

TOWER HILL INSURANCE GROUP
NEW CORPORATE OFFICES
CITY OF ALACHUA, FLORIDA

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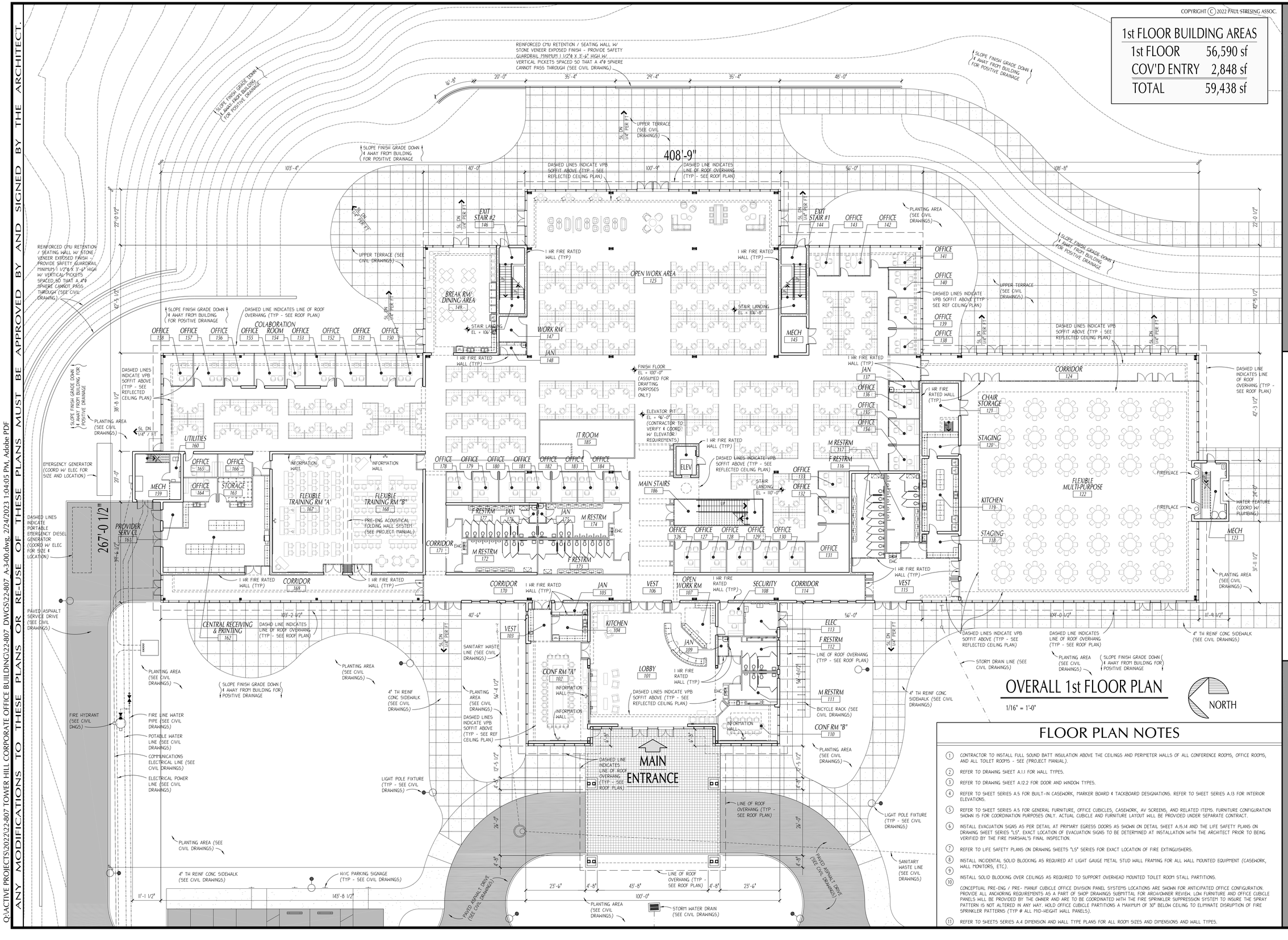
ARCHITECT'S SEAL

LUIS G. VARGAS JR. P.E.
FL. Lic. No. 52139
Exp 02-28-2025

SHEET NO.
E-0.1

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1st FLOOR BUILDING AREAS	
1st FLOOR	56,590 sf
COV'D ENTRY	2,848 sf
TOTAL	59,438 sf



OVERALL 1st FLOOR PLAN

1/16" = 1'-0"

NORTH

FLOOR PLAN NOTES

1. CONTRACTOR TO INSTALL FULL SOUND BATT INSULATION ABOVE THE CEILINGS AND PERIMETER WALLS OF ALL CONFERENCE ROOMS, OFFICE ROOMS, AND ALL TOILET ROOMS - SEE (PROJECT MANUAL).
2. REFER TO DRAWING SHEET A1.1 FOR WALL TYPES.
3. REFER TO DRAWING SHEET A.12.2 FOR DOOR AND WINDOW TYPES.
4. REFER TO SHEET SERIES A.5 FOR BUILT-IN CASEWORK, MARKER BOARD & TACKBOARD DESIGNATIONS. REFER TO SHEET SERIES A.13 FOR INTERIOR ELEVATIONS.
5. REFER TO SHEET SERIES A.5 FOR GENERAL FURNITURE, OFFICE CUBICLES, CASEWORK, AV SCREENS, AND RELATED ITEMS. FURNITURE CONFIGURATION SHOWN IS FOR COORDINATION PURPOSES ONLY. ACTUAL CUBICLE AND FURNITURE LAYOUT WILL BE PROVIDED UNDER SEPARATE CONTRACT.
6. INSTALL EVACUATION SIGNS AS PER DETAIL AT PRIMARY EGRESS DOORS AS SHOWN ON DETAIL SHEET A.15.14 AND THE LIFE SAFETY PLANS ON DRAWING SHEET SERIES "LS". EXACT LOCATION OF EVACUATION SIGNS TO BE DETERMINED AT INSTALLATION WITH THE ARCHITECT PRIOR TO BEING VERIFIED BY THE FIRE MARSHAL'S FINAL INSPECTION.
7. REFER TO LIFE SAFETY PLANS ON DRAWING SHEETS "LS" SERIES FOR EXACT LOCATION OF FIRE EXTINGUISHERS.
8. INSTALL INCIDENTAL SOLID BLOCKING AS REQUIRED AT LIGHT GAUGE METAL STUD WALL FRAMING FOR ALL WALL MOUNTED EQUIPMENT (CASEWORK, WALL MONITORS, ETC.).
9. INSTALL SOLID BLOCKING OVER CEILINGS AS REQUIRED TO SUPPORT OVERHEAD MOUNTED TOILET ROOM STALL PARTITIONS.
10. CONCEPTUAL PRE-ENG / PRE- MANUF CUBICLE OFFICE DIVISION PANEL SYSTEMS LOCATIONS ARE SHOWN FOR ANTICIPATED OFFICE CONFIGURATION. PROVIDE ALL ANCHORING REQUIREMENTS AS A PART OF SHOP DRAWINGS SUBMITTAL FOR ARCH/OWNER REVIEW. LOW FURNITURE AND OFFICE CUBICLE PANELS WILL BE PROVIDED BY THE OWNER AND ARE TO BE COORDINATED WITH THE FIRE SPRINKLER SUPPRESSION SYSTEM TO INSURE THE SPRAY PATTERN IS NOT ALTERED IN ANY WAY. HOLD OFFICE CUBICLE PARTITIONS A MAXIMUM OF 30" BELOW CEILING TO ELIMINATE DISRUPTION OF FIRE SPRINKLER PATTERNS (TYP @ ALL MID-HEIGHT WALL PANELS).
11. REFER TO SHEETS SERIES A.4 DIMENSION AND WALL TYPE PLANS FOR ALL ROOM SIZES AND DIMENSIONS AND WALL TYPES.

ANY MODIFICATIONS TO THESE PLANS OR RE-USE OF THESE PLANS MUST BE APPROVED BY AND SIGNED BY THE ARCHITECT.
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REGISTRATION NO. AR0013985 - CA NO. AA0003377

DRAWN BY: JMA / KC
DATE: MARCH 15, 2023
PROJECT NO: 22-807

TOWER HILL INSURANCE GROUP
NEW CORPORATE OFFICES
CITY OF ALACHUA, FLORIDA

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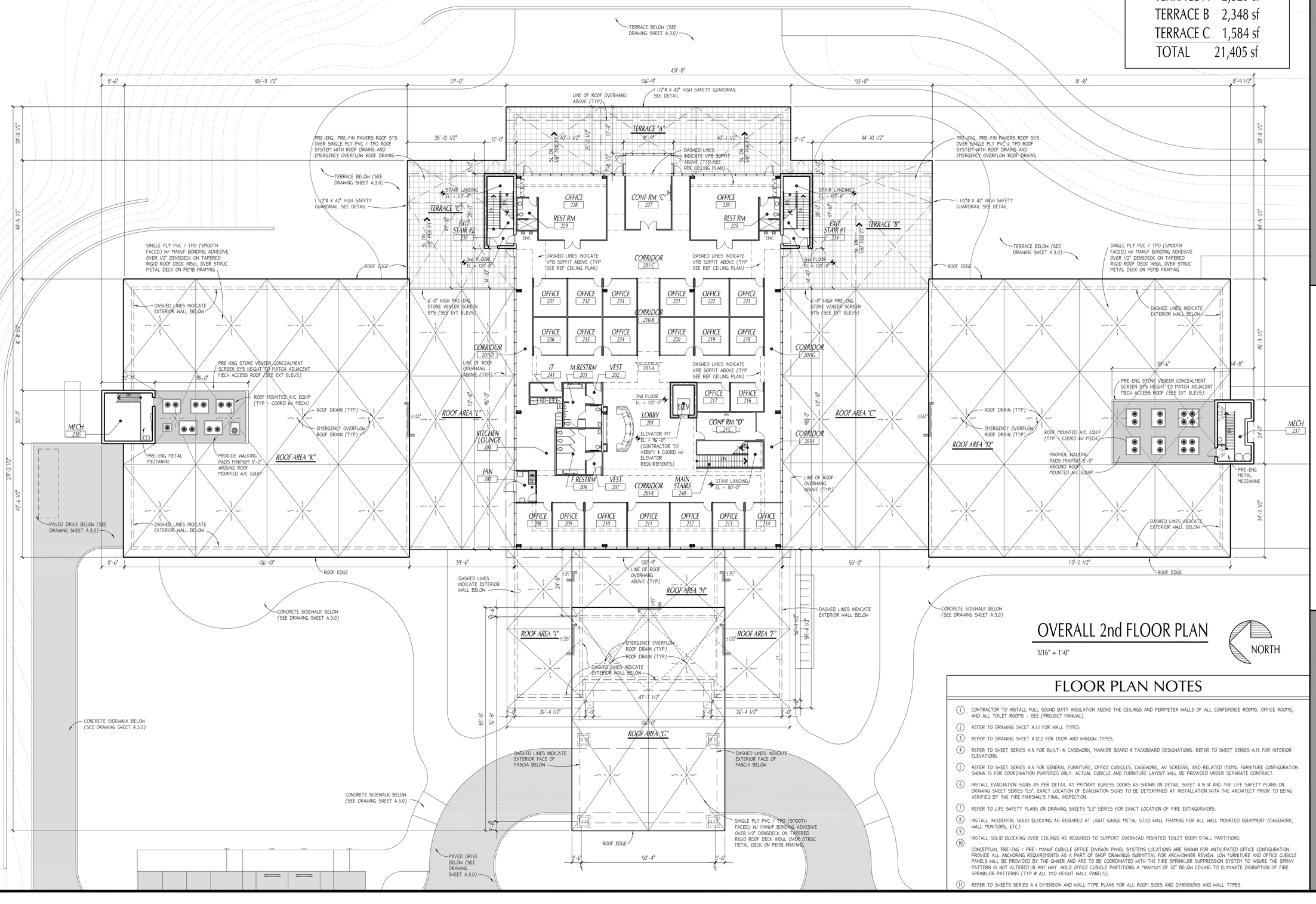
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LIC. NO: AR0013985

SHEET NO.
A.3.0

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2nd FLOOR BUILDING AREAS	
2nd FLOOR	14,944 sf
TERRACE A	2,529 sf
TERRACE B	2,348 sf
TERRACE C	1,584 sf
TOTAL	21,405 sf



OVERALL 2nd FLOOR PLAN

1/16" = 1'-0"

NORTH

FLOOR PLAN NOTES

1. CONTRACTOR TO INSTALL FULL SOUND BATT INSULATION ABOVE THE CEILINGS AND PERIMETER WALLS OF ALL CONFERENCE ROOMS, OFFICE ROOMS, AND ALL TOILET ROOMS - SEE (PROJECT MANUAL).
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DRAWN BY: JMA / KC
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PROJECT NO: 22-807

TOWER HILL INSURANCE GROUP
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CITY OF ALACHUA, FLORIDA

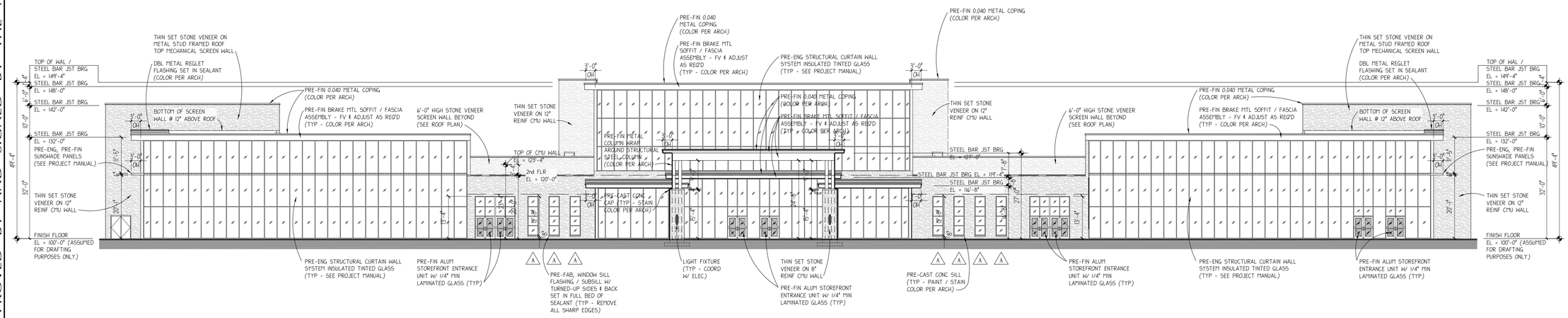
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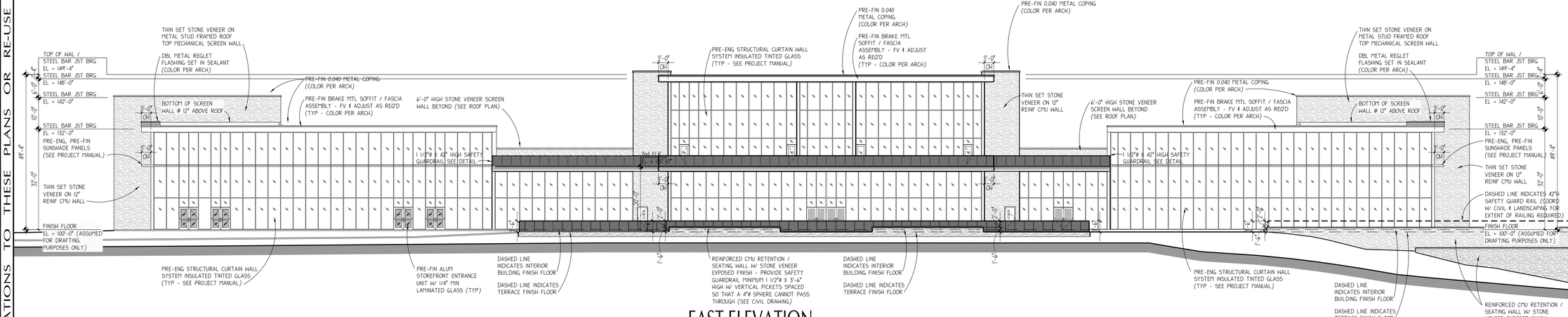
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WEST ELEVATION

1/16" = 1'-0"

*NOTE: THE ROOF SYSTEM ASSEMBLY IS TO BE TESTED AS A SYSTEM AND IS TO COMPLY W/ ALL TESTING REQUIREMENTS NOTED IN THE SPECIFICATIONS.



EAST ELEVATION

1/16" = 1'-0"

*NOTE: THE ROOF SYSTEM ASSEMBLY IS TO BE TESTED AS A SYSTEM AND IS TO COMPLY W/ ALL TESTING REQUIREMENTS NOTED IN THE SPECIFICATIONS.

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DRAWN BY: JMA / KC
DATE: MARCH 15, 2023
PROJECT NO: 22-807

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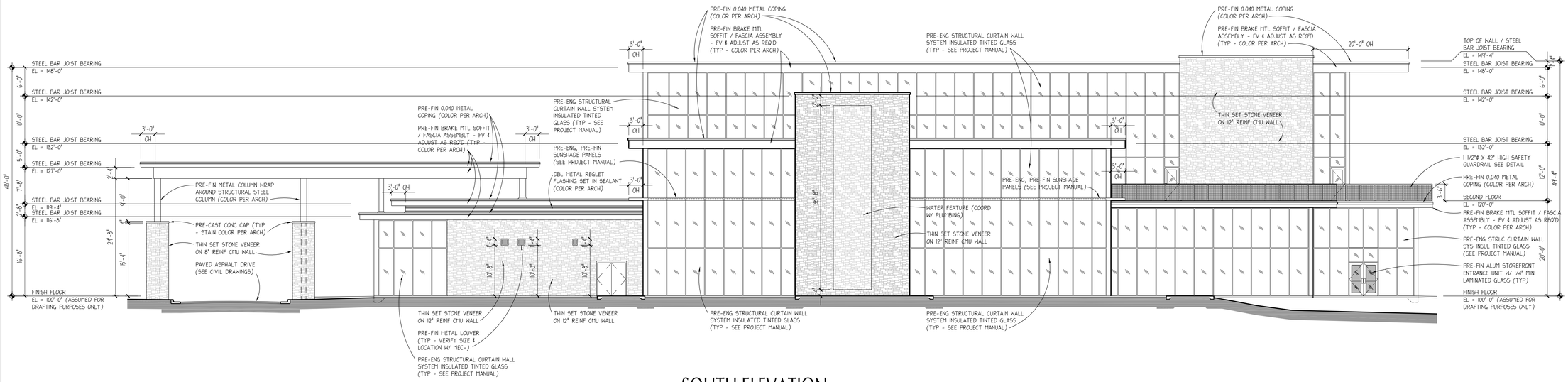
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SHEET NO.
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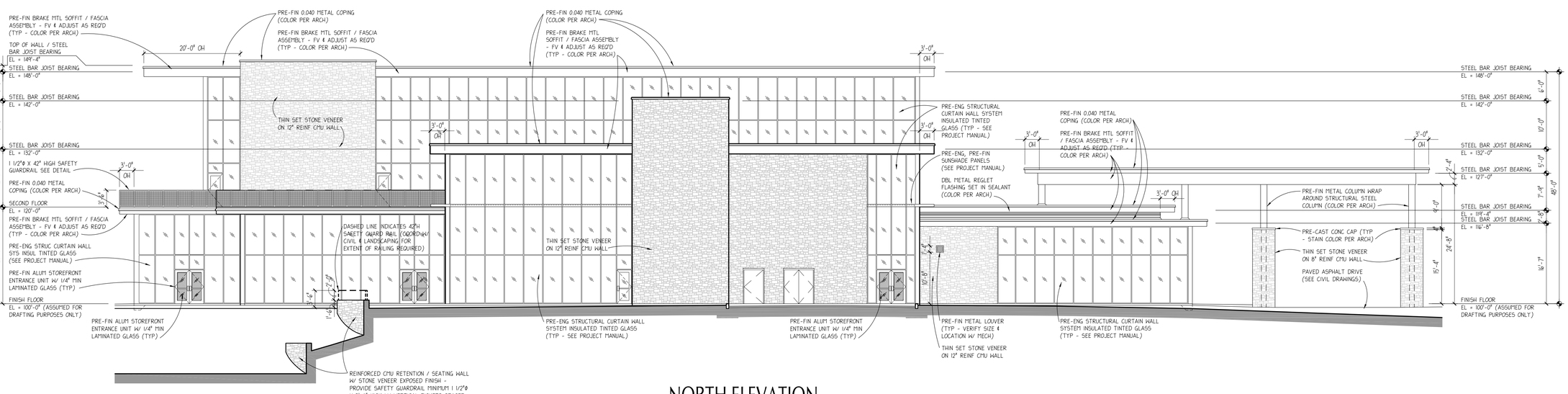
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SOUTH ELEVATION

3/32" = 1'-0"

NOTE: THE ROOF SYSTEM ASSEMBLY IS TO BE TESTED AS A SYSTEM AND IS TO COMPLY W/ ALL TESTING REQUIREMENTS NOTED IN THE SPECIFICATIONS.



NORTH ELEVATION

3/32" = 1'-0"

NOTE: THE ROOF SYSTEM ASSEMBLY IS TO BE TESTED AS A SYSTEM AND IS TO COMPLY W/ ALL TESTING REQUIREMENTS NOTED IN THE SPECIFICATIONS.

ANY MODIFICATIONS TO THESE PLANS OR RE-USE OF THESE PLANS MUST BE APPROVED BY AND SIGNED BY THE ARCHITECT.

Q:\ACTIVE PROJECTS\2022\22-807 TOWER HILL CORPORATE OFFICE BUILDING\22-807 DWGS\22-807 A-6-01.dwg, 2/24/2023 1:00:18 PM, Adobe PDF

PAUL STRESING ASSOCIATES, INC.
14617 MAIN STREET
ALACHUA, FLORIDA 32615
E-MAIL: info@paulstresing.com
TELEPHONE: (386) 462-6407
REGISTRATION NO. AR0013985 - CA NO. AA0003377

DRAWN BY: JMA / KC
DATE: MARCH 15, 2023
PROJECT NO: 22-807

TOWER HILL INSURANCE GROUP
NEW CORPORATE OFFICES
CITY OF ALACHUA, FLORIDA

REVISIONS
ITEM:
DATE:

ARCHITECT'S SEAL

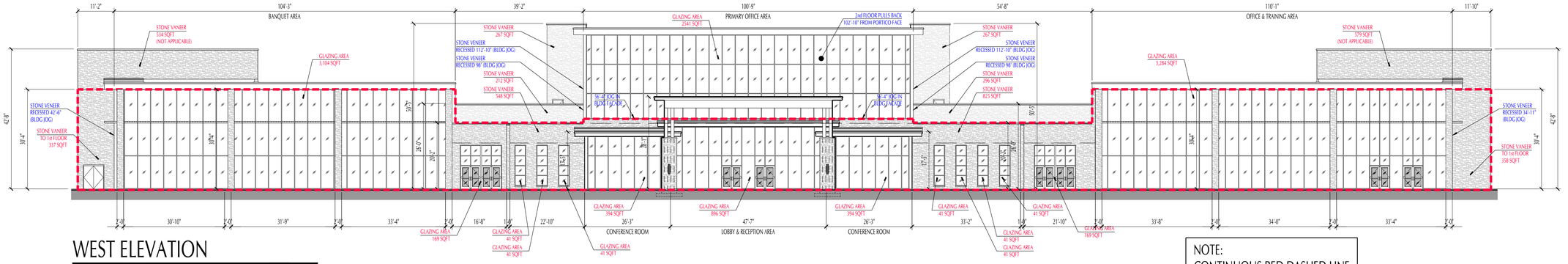
LIC. NO: AR0013985

SHEET NO.

A.6.1

COPYRIGHT © 2022 PAUL STRESING ASSOC.

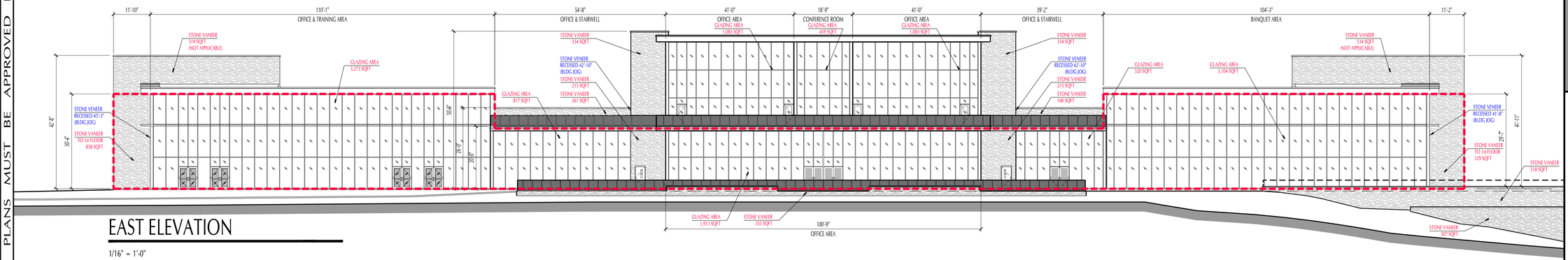
ANY MODIFICATIONS TO THESE PLANS OR RE-USE OF THESE PLANS MUST BE APPROVED BY AND SIGNED BY THE ARCHITECT.



WEST ELEVATION

1/16" = 1'-0"

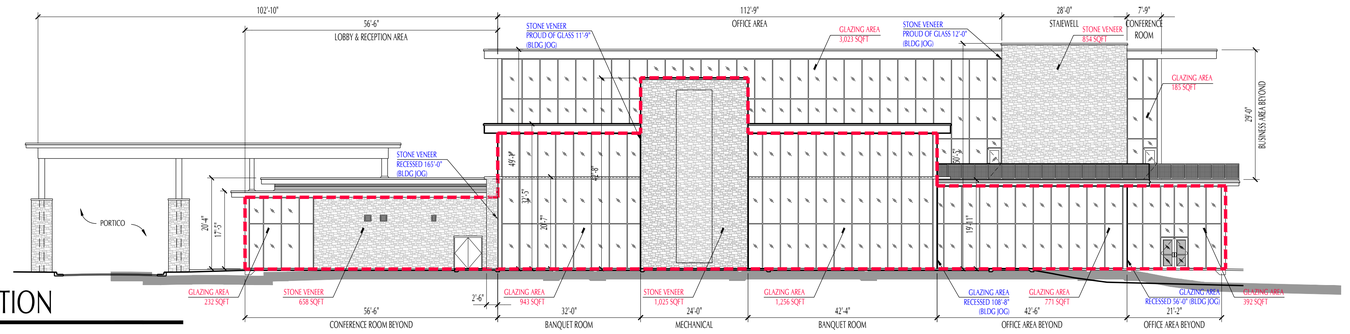
NOTE:
CONTINUOUS RED DASHED LINE
INDICATES LINE OF 1st FLOOR.



EAST ELEVATION

1/16" = 1'-0"

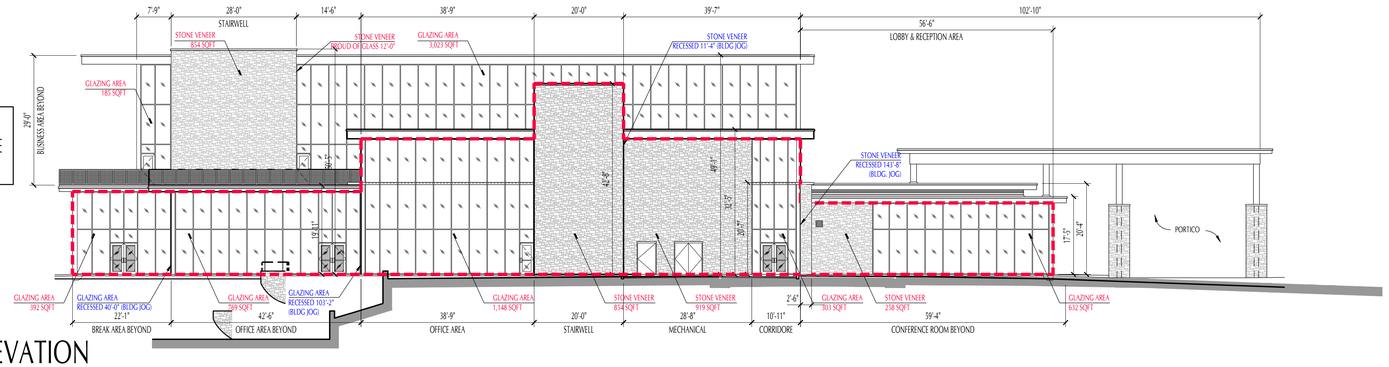
NOTE:
CONTINUOUS RED DASHED LINE
INDICATES LINE OF 1st FLOOR.



SOUTH ELEVATION

1/16" = 1'-0"

NOTE:
CONTINUOUS RED DASHED LINE
INDICATES LINE OF 1st FLOOR.



NORTH ELEVATION

1/16" = 1'-0"

DESIGN STANDARDS FOR BUSINESS USE

SUBSECTION 6.8.3(A)(2)(a) GLAZING — FRONT 30% GROUND FLOOR WHEN FACING STREET; SIDES 20% GROUND FLOOR WHEN FACING VACANT LAND

ACTUAL GLAZING AREA

- FRONT ELEVATION / WEST
  - GLASS & GLAZING - 11,238 SF / 78% OF ELEVATION
  - STONE VENEER - 3,110 SF / 22% OF ELEVATION
- BACK ELEVATION / EAST
  - GLASS & GLAZING - 12,252 SF / 84% OF ELEVATION
  - STONE VENEER - 2,252 SF / 16% OF ELEVATION
- LEFT ELEVATION / NORTH
  - GLASS & GLAZING - 6,052 SF / 78% OF ELEVATION
  - STONE VENEER - 1,683 SF / 22% OF ELEVATION
- RIGHT ELEVATION / SOUTH
  - GLASS & GLAZING - 6,802 SF / 77% OF ELEVATION
  - STONE VENEER - 2,031 SF / 23% OF ELEVATION

6.8.3 DESIGN STANDARDS SINGLE TENANT BUSINESS

6.8.3(b) FACADE MASSING

(i) OFFSET REQUIRED - FRONT FACADE 60'-0" WIDE OR WIDER SHALL INCORPORATE A OFFSET OF AT LEAST 2'-0" (PROJECTION OR RECESS) A MINIMUM EVERY 40'-0" AND HAVE A WIDTH OF MINIMUM 20'-0".

(ii) OFFSET ALTERNATE:
- (a) FACADE COLOR CHANGE
- (b) PILASTERS 1'-0"x1'-0" MINIMUM WITH MINIMUM 80% FACADE HEIGHT.
- (c) ROOF LINE CHANGES WHEN COUPLED WITH ALIGNED FACED MATERIAL CHANGES.

DRAWN BY: JMA / KC
DATE: MARCH 15, 2023
PROJECT NO: 22-807

PAUL STRESING ASSOCIATES, INC.
14617 MAIN STREET
ALACHUA, FLORIDA 32615
E-MAIL: psa@paulstresingassociates.com
TEL: 386-462-6617 FAX: 386-462-6617
REGISTRATION NO. AR0013985 - CA NO. AA00037377

TOWER HILL INSURANCE GROUP
NEW CORPORATE OFFICES
CITY OF ALACHUA, FLORIDA

REVISIONS
ITEM:
DATE:

ARCHITECT'S SEAL

LIC. NO: AR0013985

SHEET NO.
A.6.2

City of ALACHUA

THE GOOD LIFE COMMUNITY

FOR OFFICE USE ONLY
Case #: _____
Application Fee: $_____
Filing Date: _____
Completeness Date: _____
Review Type: P&Z or PZB & CCOM

Site Plan Application

Reference City of Alachua Land Development Regulations (LDRs), Section 2.4.9

A. PROJECT

1. Project Name: Tower Hill New HQ
2. Pre-Application Conference Date: August 23, 2022
3. Neighborhood Meeting Date: January 25, 2023
4. Address of Subject Property: 15403 NW 173RD ST ALACHUA, FL 32615
5. Parcel ID Number(s): 03873-001-000, 03873-000-000, 03054-001-002, 03054-001-000, 03053-000-000
6. Existing Use of Property: _____
7. Future Land Use Map Designation: Community Commercial, Commercial, Agriculture
8. Zoning Designation: Community Commercial, Community Intensive, Agriculture
9. Acreage: 37.07
10. Total Existing Building Square Footage, if applicable: 0
11. Total Existing Impervious Area (not including existing building area), if applicable: _____
12. Total Building Square Footage Proposed: ±72,000 sf (over two stories)
13. Total New Impervious Area Proposed (not including building area): 592,388 sf

B. APPLICANT

1. Applicant's Status ☐ Owner (title holder) ■ Agent
2. Name of Applicant(s) or Contact Person(s): Walker Owen Title: Project Manager
   Company (if applicable): CHW
   Mailing address: 11801 Research Dr
   City: Alachua State: Florida ZIP: 32615
   Telephone: (352) 331-1976 FAX: _____ e-mail: walkero@chw-inc.com
3. If the applicant is agent for the property owner*:
   Name of Owner (title holder): Tomoka Hill Farms Inc.
   Mailing Address: 1301 Dixiana Domino Rd
   City: Lexington State: Kentucky ZIP: 40511

** Must provide an executed Authorized Agent Affidavit or other acceptable documentation (as deemed acceptable by the City in its sole discretion) authorizing the agent to act on behalf of the property owner.*

C. ADDITIONAL INFORMATION

1. Is there any additional contact for sale of, or options to purchase, the subject property? ☐ Yes ■ No
   If yes, list names of all parties involved: _____
2. Has the applicant discussed possible utility/infrastructure fees with the Public Services Department?
   If no, contact the Public Services Department at 386-418-6140. ■ Yes ☐ No

D. ATTACHMENTS

1. Site Plan. Sheet size shall be 24" X 36" with a 3" left margin and ½" top, bottom, and right margin.

Site Plan shall include:

a. Name and location of project.
b. Name and contact information (address, telephone, and email address) of property owner, developer (if applicable), and all professional consultants (i.e., landscape architect, photometric, electrical engineer, architect, etc.) for the project.
c. Zoning of the subject property.
d. Vicinity map - indicating general location of the site and major adjacent streets and all adjacent properties.
e. Boundary and topographic survey. Survey shall be signed and sealed by the surveyor, and shall be no older than two (2) years.
f. Complete legal description of the subject property.
g. Statement of proposed uses.
h. Location of the subject property in relation to adjacent properties.
i. Date, north arrow, and graphic scale (not to exceed one (1) inch equal to 50 feet.)
j. Area and dimensions of the subject property.
k. Structures and major features – fully dimensioned – including setbacks from property lines and right-of-ways, distances between structures (if structures are within 25 feet of one another), floor area of each building, floor area ratio, and property lines.
l. Location of all property lines, existing and proposed adjacent right-of-ways, sidewalks, curbs, and gutters.
m. Distance between ingress and egress connections for the project and the ingress / egress connections for all contiguous properties and for properties on the opposite side of the road, measured from the interior radius of all ingress/egress connections.
n. Location of all existing and proposed utilities (electric, potable water, sanitary sewer, gas, etc.) on the subject property, and on adjacent properties if located within 50 feet of the subject property, and within adjacent rights-of-way.
o. Location of all existing and proposed fire hydrants.
p. Location of all existing easements on the property and on adjacent properties if located within 50 feet of the subject property, and recording information for such easements.
q. Location of all proposed easements (legal descriptions and sketches of all proposed easements shall be provided by the applicant following a review of proposed utility locations by Public Services).
r. Location and dimensions of all existing and proposed vehicular parking spaces, dimensions of all drive aisles, and the angle of parking spaces.
s. Location of all bicycle parking areas and specifications of bicycle racks.
t. Location, dimensions, and vertical clearance of all off-street loading spaces, if required by Section 6.1 of the LDRs.
u. Location and dimensions of all vehicle stacking spaces, if required by Section 6.1 of the LDRs.
v. Vehicular parking calculations, indicating the minimum and maximum number of required spaces and the number of parking spaces provided (regular and accessible spaces) in accordance with Section 6.1 of the LDRs.
w. Bicycle parking calculations, if required by Section 6.1 of the LDRs.
x. Striping and signage for all traffic control devices.
y. Landscape Plan, indicating the location, size, and design of required and proposed landscaped areas. Landscape Plans shall identify the following with sufficient detail and calculations to demonstrate compliance with Section 6.2.2 of the LDRs:
    i. Location, identification of the species, and size of all existing trees.
    ii. Required perimeter buffer areas.
    iii. Parking lot perimeter landscaping.
    iv. Parking lot interior landscaping.
    v. Building façade landscaping.
    vi. Calculation of landscaped areas (see Policy 2.4.a of the Comprehensive Plan Future Land Use Element).
    vii. Calculation of open space provided (see Section 6.7 of the LDRs).
    viii. Calculation of tree credits, if applicable. Calculations shall be as set forth in Sections 6.2.1(D)(4) and 6.2.2(D)(6) of the LDRs and shall be shown on the plan in tabular format (if tree credits are utilized, the Landscape Plan must identify in the landscape calculations where credit is applied).
    ix. Tree protection detail in accordance with Section 6.2.1(D)(2) of the LDRs.
    x. If tree removal is proposed, a tree survey, showing:
        (a) Each tree proposed for removal;
        (b) Each tree proposed for retention;
        (c) The size and species (both common and scientific names) of all trees proposed for removal/retention;
        (d) Location, size, and species of all new trees proposed to meet mitigation requirements. Mitigation trees must be shown on the plans and a list of all mitigation trees and calculation of required mitigation must be provided on the plan in tabular format.

z. Location of waste receptacles and detail of waste receptacle screening, demonstrating compliance with Section 6.2.3(B) and, if within the Gateway Overlay District, with Section 3.7.2(C)(5)(c)(ii).
aa. Photometric Plan, demonstrating compliance with the applicable provisions of Section 6.4 of the LDRs.
bb. Location and size of any lakes, ponds, canals, or other waters and waterways, and required setbacks dimensioned on the plans from such waterways.
cc. For development consisting of a nonresidential use, except for single tenant retail sales and services uses greater than or equal to 20,000 square feet in area and except for use types within the industrial services, manufacturing and production, warehouse freight and movement, waste-related services, and wholesale sales use categories ***not*** located within 500 feet of the right-of-way of US Highway 441: Architectural plans demonstrating compliance with the design standards for business uses as provided in Section 6.8.2 of the LDRs. Architectural plans shall include:
    i. Calculation of glazing of:
        (a) the front façade;
        (b) any facade facing a street;
        (c) any façade facing a publicly-accessible parking area which is a part of the development and consisting of 15 percent or more of the minimum off-street parking required by Section 6.1.4(B) of the LDRs; and,
        (d) any façade facing vacant land classified as CSV, A, RSF-1, RSF-3, RSF-4, RSF-6, RMH-5, RMH-P, RMF-8 or RMF-15, or lands containing existing residential uses.
    ii. Calculation of the area of all façades subject to glazing.
    iii. Detail on the architectural plans depicting façade massing or a massing alternative as defined in Section 6.8.2(A)(2)(b).
    iv. Identification of each material utilized in each façade and the percentage of the total area of the façade for each material used.
dd. For development consisting of a nonresidential use where a single retail services tenant is greater than or equal to 20,000 square feet in area: Architectural plans demonstrating compliance with the design standards for single tenant retail sales and service uses greater than or equal to 20,000 square feet in area as provided in Section 6.8.3 of the LDRs. Architectural plans shall include:
    i. Color plans depicting the color of all materials used in the façade.
    ii. Identification of each material utilized in each façade and the percentage of the total area of the façade for each material used.
    iii. Calculation of glazing of:
        (a) the front façade;
        (b) any facade facing a street;
        (c) any façade facing a publicly-accessible parking area which is a part of the development and consisting of 15 percent or more of the minimum off-street parking required by Section 6.1.4(B) of the LDRs; and,
        (d) any façade facing vacant land classified as CSV, A, RSF-1, RSF-3, RSF-4, RSF-6, RMH-5, RMH-P, RMF-8 or RMF-15, or lands containing existing residential uses.
    iv. Calculation of the area of all façades subject to glazing.
    v. If a glazing alternative as defined in Section 6.8.3(A)(2)(a)(iv) is used, calculation of area of alternative materials used or identification of other architectural features meeting the requirements of Section 6.8.3 of the LDRs.
    vi. Detail on the architectural plans depicting façade massing or a massing alternative as defined in Section 6.8.2(A)(2)(b) of the LDRs.
ee. For development consisting multi-family residential uses and/or a mobile home park:
    i. Gross acreage.
    ii. Number of dwelling units proposed.
    iii. Density.
    iv. Location and percentage of total open space and recreation areas.
    v. Floor area of each dwelling unit.
    vi. Number of proposed parking spaces.
    vii. Street layout, if applicable.
    viii. Layout of mobile home stands (for mobile home parks only).
    ix. City of Alachua Public School Student Generation Form.

2. Stormwater management plan - including the following:
    a. Plans showing existing contours at one (1) foot intervals based on U.S. Coastal and Geodetic Datum.
    b. Proposed finished floor elevation of all buildings.
    c. Existing and proposed stormwater management facilities with size and grades.
    d. Proposed orderly disposal of surface water runoff.
    e. Drainage calculations.

3. Fire Department Access and Water Supply Plan. All fire protection plans are subject to review and approval by the Alachua County Fire Marshal and City of Alachua Public Services Department. Fire Department Access and Water Supply Plan shall include:
    a. Plans prepared by a professional engineer licensed in the State of Florida.

b. Fire flow calculations for each newly constructed building. Calculations shall be performed in accordance with Chapter 18, Section 18.4 of the Florida Fire Prevention Code.
c. Documentation from the water purveyor stating the available flow to the subject property.

4. Concurrency Impact Analysis showing the impact on public facilities, including potable water, sanitary sewer, transportation, solid waste, recreation, stormwater, and public schools (if applicable) in accordance with Section 2.4.14 of the LDRs.

5. Analysis of Consistency with the City of Alachua Comprehensive Plan (analysis must identify specific Goals, Objectives, and Policies and describe in detail how the application complies with the noted Goal, Objective, or Policy).

   For commercial/corporate park/industrial projects: In addition to submitting specific written information regarding the development's compliance with the relevant Goals, Objectives, and Policies of the City of Alachua Comprehensive Plan, a response to the design and performance standards as provided in Policy 1.3.d (for commercial projects), Policy 1.4.f (for corporate park projects), or Policy 1.5.d (for industrial projects) of the Future Land Use Element:

   The following criteria shall apply when evaluating commercial/corporate park/industrial development proposals:

   1. Integration of vehicular and non-vehicular access into the site and access management features of site in terms of driveway cuts and cross access between adjacent sites, including use of frontage roads and/or shared access;
   2. Buffering from adjacent existing/potential uses;
   3. Open space provisions and balance of proportion between gross floor area and site size;
   4. Adequacy of pervious surface area in terms of drainage requirements;
   5. Placement of signage;
   6. Adequacy of site lighting and intrusiveness of lighting upon the surrounding area;
   7. Safety of on-site circulation patterns (patron, employee and delivery vehicles), including parking layout and drive aisles, and points of conflict;
   8. Landscaping, as it relates to the requirements of the Comprehensive Plan and Land Development Regulations;
   9. Unique features and resources which may constrain site development, such as soils, existing vegetation and historic significance; and
   10. Performance based zoning requirements, which may serve as a substitute for or accompany land development regulations in attaining acceptable site design.
   11. Commercial/Corporate Park/Industrial uses shall be limited to an intensity of less than or equal to 0.50 floor area ratio for parcels 10 acres or greater, 0.50 floor area ratio for parcels less than 10 acres but 5 acres or greater, a 0.75 floor area ratio for parcels less than 5 acres but greater than 1 acre, and 1.0 floor area ratio to parcels 1 acre or less.
   12. Complementary residential uses (corporate park only).

6. *For Site Plans for Buildings Less than 80,000 Square Feet in Area:* One (1) set of mailing labels for all property owners within 400 feet of the subject property boundaries – even if property within 400 feet falls outside of City limits (obtain from the Alachua County Property Appraiser's web site) – and all persons/organizations registered to receive notice of development applications (current list may be obtained from the Planning & Community Development Department).
   For Site Plans for Buildings Greater than or Equal to 80,000 Square Feet in Area: Two (2) sets of mailing labels for all property owners within 400 feet of the subject property boundaries – even if property within 400 feet falls outside of City limits (obtain from the Alachua County Property Appraiser's web site) – and all persons/organizations registered to receive notice of development applications (current list may be obtained from the Planning & Community Development Department).

7. Neighborhood Meeting Materials, including:
   i. Copy of the required published notice (advertisement) – must be published a newspaper of general circulation, as defined in Article 10 of the City's LDRs;
   ii. Copy of written notice (letter) sent to all property owners within 400 feet and to all persons/organizations registered with the City to receive notice, and a copy of the mailing labels or a list of those who received written notice; and,
   iii. Written summary of meeting – must include (1) those in attendance; (2) a summary of the issues related to the development proposal discussed; (3) comments by those in attendance about the development proposal; and, (4) any other information deemed appropriate.

8. Legal description: (1) on 8.5" x 11" paper; and (2) electronic file in Word format.

9. Proof of ownership (i.e., copy of deed.)

10. Proof of payment of taxes.

11. Traffic Impact Analysis or Statement, as deemed applicable to the project by the City of Alachua in its sole discretion.

12. Environmental Assessment or Study, as deemed applicable to the project by the City of Alachua in its sole discretion.

13. Environmental Resource Permit (or Letter of Exemption) from the Suwannee River Water Management District (SRWMD) or Self-Certification for a Stormwater Management System in Uplands Serving Less than 10 Acres of Total Project Area and Less than 2 Acres of Impervious Surfaces from the Florida Department of Environmental Protection (FDEP) pursuant to Section 403.814(12), Florida Statutes (or documentation which shows a permit application/exemption/self-certification has been submitted to SRWMD or FDEP).

14. If access is from a County Road, access management permit from Alachua County Public Works (or documentation which shows a permit application has been submitted).

15. If access is from a State Road, access management permit from Florida Department of Transportation (or documentation which shows a permit application has been submitted).

16. **Fee.** Please see fee schedule for fee determination. No application shall be accepted for processing until the required application fee is paid in full by the applicant. Any costs associated with outside professional consulting services deemed necessary by the City in its sole discretion will be billed to the applicant at the rate of the consultant. The invoice for such services shall be paid in full prior to any public hearing(s) on the application.

All applicable attachments are required for a complete application. A completeness review of the application will be conducted within five (5) business days of receipt. If the application is determined to be incomplete, the application will be returned to the applicant.

Under penalty of perjury, I/we certify and acknowledge that the information contained herein is true and correct to the best of my/our knowledge.

Signature of Applicant

Signature of Co-applicant

WALKER FAITH OKIEH, PE, PROJECT MANAGER

Typed or printed name *and title* of applicant

Typed or printed name *and title* of co-applicant

STATE OF FLORIDA

COUNTY OF ALACHUA

The foregoing instrument was acknowledged before me by means of ☐ physical presence or ☐ online notarization, this

day of _____, 20_____, by _____ who executed the same

and has _____ produced _____ as identification or ☐ is personally known to me.

_____

Signature of Notary

Print Name: _____

Notary Public, State of Florida

My Commission Expires: _____

City of ALACHUA

THE GOOD LIFE COMMUNITY

Authorized Agent Affidavit

A. PROPERTY INFORMATION

Address of Subject Property: TBD - Near intersection of NW 167th Blvd and US 441, south of US 441 and north of NW 162nd Ln

Parcel ID Number(s): 03053-000-000

Acreage: 4.35

B. PERSON PROVIDING AGENT AUTHORIZATION

Name: Sharleen Cavaceppi Title: Trustee

Company (if applicable):

Mailing Address: PO Box 1325

City: Alachua State: FL ZIP: 32616-1325

Telephone: contact agent FAX: e-mail: contact agent

C. AUTHORIZED AGENT

Name: Walker F Owen Title: Project Manager

Company (if applicable): CHW

Mailing address: 11801 Research Dr

City: Alachua State: FL ZIP: 32615

Telephone: 352-331-1976 FAX: e-mail: walkero@chw-inc.com

D. REQUESTED ACTION:

To obtain approval from the City of Alachua

I hereby certify that I am the property owner of record, or I have received authorization from the property owner of record to file an application for a development permit related to the property identified above. I authorize the agent listed above to act on my behalf for purposes of this application.

Sharleen O. Cavaceppi
Signature of Applicant

N/A
Signature of Co-applicant

Sharleen O. Cavaceppi
Typed or printed name and title of applicant

N/A
Typed or printed name of co-applicant

State of Florida County of Alachua

The foregoing application is acknowledged before me this 18 day of January, 2023 by Sharleen Cavaceppi, who is/are personally known to me, or who has/have produced FLDL C121794305180 as identification.

LACIANNA BIELLING
MY COMMISSION # HH 341196
EXPIRES: December 14, 2026

Lacianna Bielling
Signature of Notary Public, State of Florida

City of ALACHUA

THE GOOD LIFE COMMUNITY

Authorized Agent Affidavit

A. PROPERTY INFORMATION

Address of Subject Property: TBD - south of NW 162nd Lane

Parcel ID Number(s): 03054-001-000

Acreage: 6.06

B. PERSON PROVIDING AGENT AUTHORIZATION

Name: Silvio Cavaceppi Title: CEO

Company (if applicable): Sarcav LLC

Mailing Address: 8303 Autumnwind Dr

City: Jacksonville State: FL ZIP: 32218

Telephone: contact agent FAX: e-mail: contact agent

C. AUTHORIZED AGENT

Name: Walker F Owen Title: Project Manager

Company (if applicable): CHW

Mailing address: 11801 Research Dr

City: Alachua State: FL ZIP: 32615

Telephone: 352-331-1976 FAX: e-mail: walkero@chw-inc.com

D. REQUESTED ACTION:

To obtain approval from the City of Alachua

I hereby certify that I am the property owner of record, or I have received authorization from the property owner of record to file an application for a development permit related to the property identified above. I authorize the agent listed above to act on my behalf for purposes of this application.

Signature of Applicant

Signature of Co-applicant

Silvio Cavaceppi, CEO

Typed or printed name and title of applicant

Typed or printed name of co-applicant

State of FLORIDA County of DUVAL

The foregoing application is acknowledged before me this 13 day of MARCH, 2023, by SILVIO CAVACEPPI

_____, who is/are personally known to me, or who has/have produced FL DL as identification.

NOTARY SEAL

TAMARIN THOMAS
Commission # HH 363807
Expires February 16, 2027

Signature of Notary Public, State of FL

City of ALACHUA

THE GOOD LIFE COMMUNITY

Authorized Agent Affidavit

A. PROPERTY INFORMATION

Address of Subject Property: NW 173rd Street, Alachua, FL, 32615

Parcel ID Number(s): 03054-001-002; 03055-001-000; 03055-001-001; 03055-001-003; 03055-010-001; 03055-010-003; 03871-000-000; 03873-000-000; 03873-001-000

Acreage: ±347

B. PERSON PROVIDING AGENT AUTHORIZATION

Name: William J Shively Title: Title President, Secretary, Treasurer

Company (if applicable): Tomoka Hills Farms, Inc.

Mailing Address: PO Box 147018

City: Gainesville State: FL ZIP: 32614-7018

Telephone: Contact agent FAX: e-mail:

C. AUTHORIZED AGENT

Name: Craig Brashier Title: Director of Planning

Company (if applicable): CHW

Mailing address: 11801 Research Drive

City: Alachua State: Florida ZIP: 32615

Telephone: 352-331-1976 FAX: N/A e-mail: sethw@chw-inc.com

D. REQUESTED ACTION:

To obtain approvals from the City of Alachua, Suwannee River Water Management District, Alachua County, Florida Department of Environmental Protection, and all other pertinent government agencies.

I hereby certify that I am the property owner of record, or I have received authorization from the property owner of record to file an application for a development permit related to the property identified above. I authorize the agent listed above to act on my behalf for purposes of this application.

Signature of Applicant

William Shively

Typed or printed name and title of applicant

Signature of Co-applicant

Typed or printed name of co-applicant

State of Kentucky County of Fayette

The foregoing application is acknowledged before me this 23 day of March, 2022 by William Shively

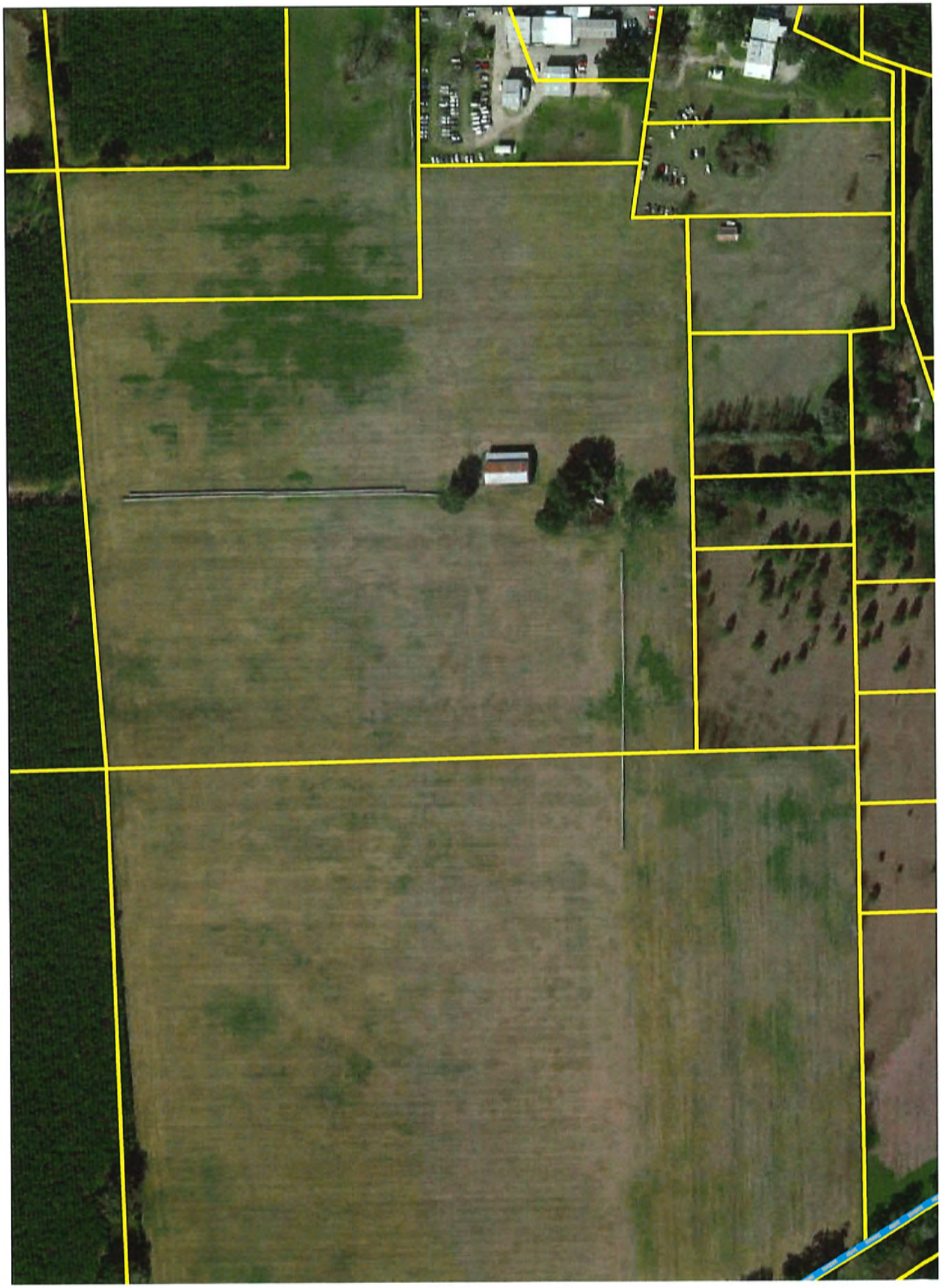
_____, who is/are personally known to me, or who has/have produced _____ as identification.

NOTARY SEAL

Sueticia Rodgers

Signature of Notary Public, State of KY

Sueticia Ann Rodgers
Notary Public, ID KYNP36730
State at Large, Kentucky
My Commission Expires on Sept. 22, 2025



PROJECT NAME:	Tower Hill Headquarters	
PROJECT No.:	21-0025	1:56 PM
FILE PATH:	N:\2021\21-0025\Departments\04_Engineering\01_Regulatory Permitting\Utilities\Meter Sizing\	

ADF and ADF METER SIZING CALCULATIONS

Proposed Average Daily Flow:

Office Building: 15 gpd per 100 square feet of floor space (per FAC 64e-6)

Proposed Average Water Demand	72,000	square feet	X	15 gpd per 100 sf	10,800	gpd
				Total	10,800	gpd
Proposed Average Water Demand ERC (Eqv. Residential Connection = 350 GPD)					30.9	ERC
Peak Water Demand ERC (PF = 4)					123.4	ERC
Peak Flow for Meter Sizing based on ADF (PF = 4, over 10 hour period)					72.0	gpm
Peak Flow per MEP					150	gpm
Min. meter size per AWWA Manual M22 2nd Edition Table 6-1					2	inches

Use 2" Meter with 4" RPZ BFP

Nicola Cowap, FL PE No. 91233

Date

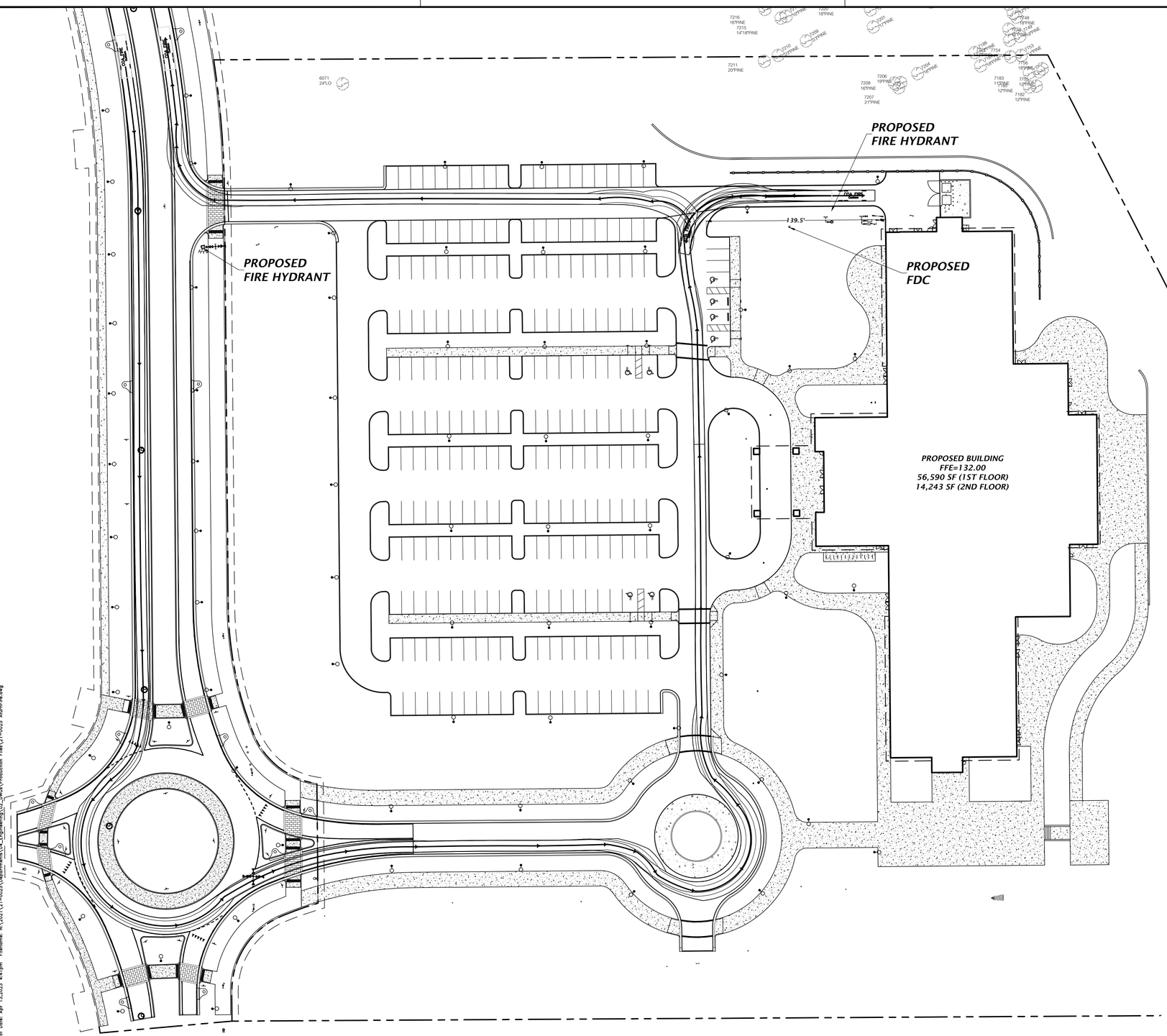
Table 6-1 AWWA meter standards

Meter	Minimum Flow Rate (*gpm*)	Low Normal Flow Rate (*gpm*)	Change-over Range (Compound Meters)	High Normal Flow Rate (*gpm*)	Maximum Flow Rate (*gpm*)	Head Loss at Maximum Flow (*psi*)
Positive Displacement						
1/2 in.	0.25	1	N/A	7.5	15	15
5/8 in.	0.25	1		10	20	15
3/4 in.	0.5	2		15	30	15
1 in.	0.75	3		25	50	15
1 1/2 in.	1.5	5	N/A	50	100	15
2 in.	2	8		80	160	15
Multijet						
5/8 in.	0.25	1	N/A	10	20	15
3/4 in.	0.5	2		15	30	15
1 in.	0.75	3		25	50	15
1 1/2 in.	1.5	5		50	100	15
2 in.	2.0	8		80	160	15
Turbine class 1						
3/4 in.	1.5	N/A	N/A	20	30	15
1 in.	2			35	50	15
1 1/2 in.	3			65	100	15
2 in.	4			100	160	15
3 in.	6			220	350	15
4 in.	8			420	630	15
6 in.	15			865	1,300	15
Turbine class 2						
1 1/2 in.	4	N/A	N/A	80	120	7
2 in.	4			100	160	7
3 in.	8			240	350	7
4 in.	15			420	630	7
6 in.	30			920	1,400	7
8 in.	50			1,600	2,400	7
10 in.	75			2,500	3,800	7
12 in.	120			3,300	5,000	7
14 in.	150			5,200	7,500	7
16 in.	200			6,500	10,000	7
18 in.	250			8,500	12,500	7
20 in.	300			10,000	15,000	7
Compound						
2 in.	0.25	2	20	80	160	20
3 in.	0.5	4	23	160	320	20
4 in.	0.75	6	28	250	500	20
6 in.	1.5	10	32	500	1,000	20
8 in.	2	16	50	800	1,600	20
Singlejet						
1 1/2 in.	0.5	1.5	N/A	50	100	15
2 in.	0.5	2.0		80	160	15
3 in.	0.5	2.5		160	320	15
4 in.	0.75	3.0		250	500	15
6 in.	1.5	4.0		500	1000	15

Source: Data are drawn from AWWA Standards C700, C701, C702, C708, C710, and C712, of latest revision as of December 2002.
N/A = not applicable

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PROPOSED
FIRE HYDRANT
PROPOSED
FIRE HYDRANT
PROPOSED
FDC
139.5'
PROPOSED BUILDING
FFE=132.00
56,590 SF (1ST FLOOR)
14,243 SF (2ND FLOOR)
7216
16"PINE
7215
14"18"PINE
7211
20"PINE
6071
24"LO
7208
16"PINE
7207
21"PINE
7206
19"PINE
7204
21"PINE
7183
11"PINE
12"PINE
7182
12"PINE
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To:	Kathy Winburn, AICP, City of Alachua Planning & Community Dev. Director
From:	Braxton Linton III, Project Planner
Date:	May 8th, 2023
RE:	Tower Hill Headquarters – Concurrency Impact Analysis

This Concurrency Analysis is submitted for Tower Hill Headquarters. The proposed use is a ±72,000-square-foot multistory office building, with associated utility infrastructure, stormwater facility, and parking spaces. This development will also include a ±2,000-linear-foot extension of NW 167th Boulevard from its existing terminus at US 441 south to the building site. This extension will include signal modifications at the NW 167th Boulevard/US 441 intersection. The project area includes Alachua County Tax Parcel 03873-001-000, 03054-001-002 and a portion of tax parcel 03879-000-000. The development area is located on US 441, and West of I-75. The site's Future Land Use (FLU) categories are Commercial and Community commercial. The Zoning District classifications are Commercial, Intensive (CI) and Community Commercial (CC).

The following analysis estimates potential impacts on City of Alachua public facilities that may result from the proposed development. Please note, building square footage, rather than building footprint area, is used for all calculations.

Roadways / Transportation

Table 1: Projected Trip Generation

Land Use	ITE Code	Variable Quantity	Variable Type	AM Peak			PM Peak			Daily
				Total	In	Out	Total	In	Out	
General Office Building	710	72.0	KSF	126	111	15	126	21	105	872

Source: ITE Trip Generation 11th Edition

Conclusion: Approval of this application may generate **872 daily vehicle trips**. The proposed development *will not* negatively impact the adopted LOS for adjacent and nearby roadways, as demonstrated in Tables 1-3 of this report.

Per City LDR §2.4.14(H)(2), affected roadways for developments generating *less* than 1,000 external average daily trips (ADT) are those within one-half mile of the development's ingress/egress, or to the nearest intersecting major street, whichever is greater. Table 2 calculates projected impacts on City of Alachua roadways.

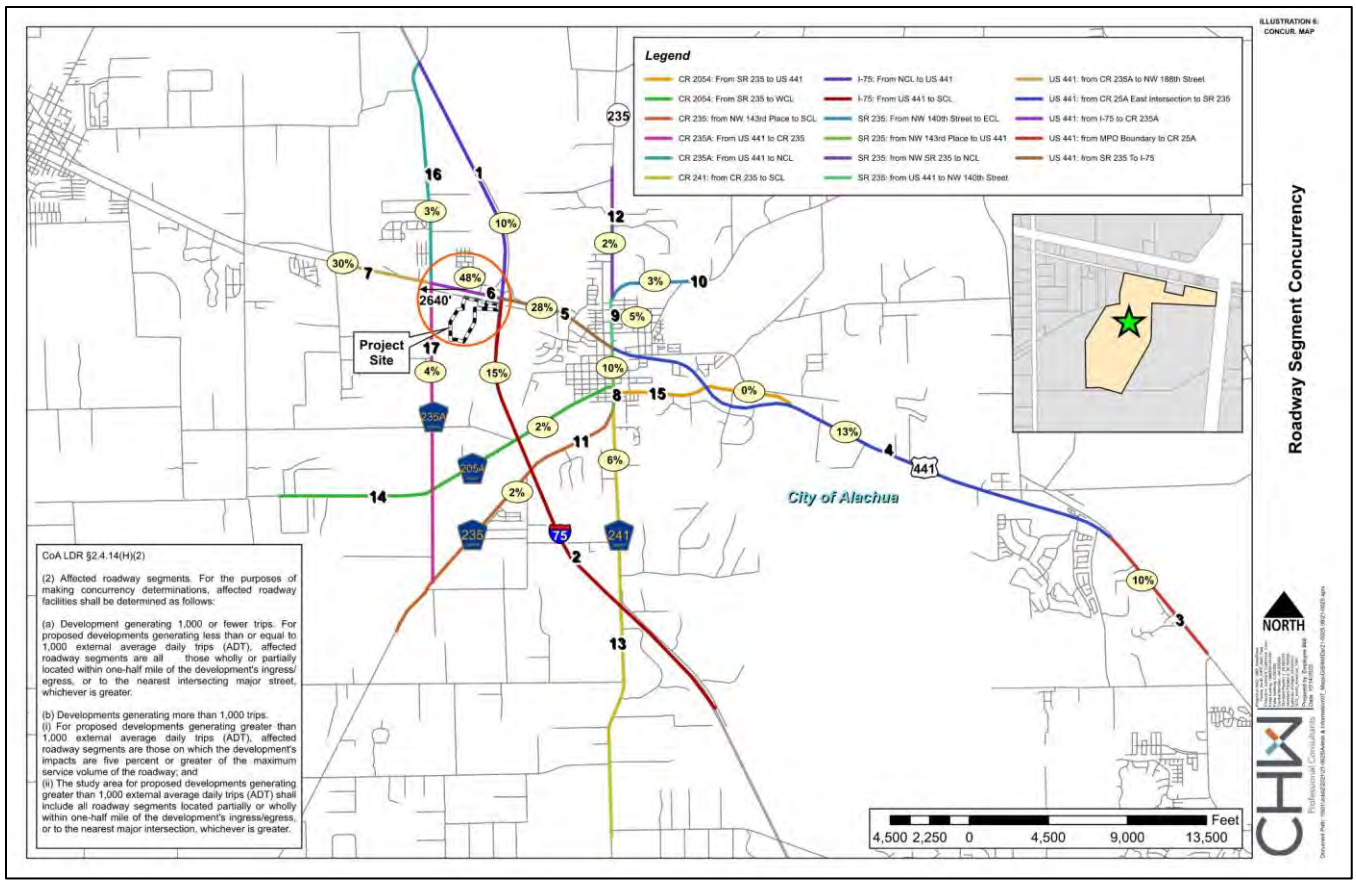


Figure 1: Traffic Segment Map

Table 2: Projected Impacts on Roadway Segments

	AADT	PM	AADT	PM	AADT	PM	AADT	PM	AADT	PM	AADT	PM	AADT	PM
Traffic System Category	**Segment 1**		**Segment 2**		**Segment 5**		**Segment 6**		**Segment 7**		**Segment 16**		**Segment 17**	
	I-75 From North city Limit to US 441		I-75 From US 441 to the South City Limit		US 441 From SR 235 to I-75		US 441 From I-75 to CR 235A		US 441 From CR 235A to NW 188th Street		CR 235A From US 441 to North City Limit		CR 235A From US 441 to CR 235	
Maximum Service Volume[1]	91,600	8,250	91,600	8,250	39,000	3,510	39,000	3,510	43,000	3,870	15,120	1,359	15,120	1,359
Existing Traffic[1]	29,500	3,098	55,956	5,875	22,581	2,145	27,914	2,652	22,250	2,114	1,402	133	5,302	504
Reserved Trips[1]	349	26	349	26	4,279	335	4,026	301	1,652	138	2,185	229	112	12
Available Capacity	61,751	5,126	35,295	2,349	12,140	1,030	7,060	557	19,098	1,618	11,533	997	9,706	843
Projected Trip Generation[2]	87	13	131	19	244	35	419	61	262	38	26	4	35	5
Available Capacity w/ Application approval	**61,664**	**5,113**	**35,164**	**2,330**	**11,922**	**995**	**6,641**	**496**	**18,836**	**1,580**	**11,507**	**993**	**9,671**	**838**

1. *Source: City of Alachua April 2023 Development Monitoring Report*
2. *NOTE: Projected trip distribution percentage is as follows:*
    a. *Segment 1: 10%*
    b. *Segment 2: 15%*
    c. *Segment 5: 28%*
    d. *Segment 6: 48%*
    e. *Segment 7: 30%*
    f. *Segment 16: 3%*
    g. *Segment 17: 4%*

Conclusion: Affected roadway segments includes I-75 (From North city Limit to US 441), I-75 (From US 441 to the South City Limit), US 441(from SR 235 to I-75), US 441 (From I-75 to CR 235A), US 441 (From CR 235A to NW 188th Street), CR 235A (From US 441 to North City Limit), & CR 235A(From US 441 to CR 235). There is available capacity with this application's approval. Therefore, this development *will not* cause the roadway segments to fall below the LOS standards.

Potable Water/Sanitary Sewer

Table 3: Projected Potable Water Impact

System Category	Gallons Per Day (GPD)
Current Permitted Capacity[1]	2,300,000
Less actual Potable Water Flows[1]	1,309,417
Reserved Capacity[1]	341,309
Residual Capacity[1]	649,274
Percentage of Permitted Design Capacity Utilized[1]	71.77%
Projected Potable Water Demand from Proposed Project[2]	10,800
Residual Capacity after Proposed Project	**638,474**

1. *Source: City of Alachua April 2023 Development Monitoring Report*
2. *Formulas used: (72,000 sq. ft. / 100)* 15 gpd*
    a. *Source: 62-6.008 Florida Administrative Code (FAC)*

Conclusion: There is residual capacity with this application's approval. Therefore, the proposed development *will not* cause the City's potable water facilities to fall below LOS standards.

Table 4: Projected Sanitary Sewer Impact

System Category	Gallons Per Day (GPD)
Treatment Plant Current Permitted Capacity[1]	1,500,000
Less actual Treatment Plant Flows[1]	758,000
Reserved Capacity[1]	311,219
Residual Capacity[1]	430,781
Percentage of Permitted Design Capacity Utilized[1]	71.28%
Projected Potable Water Demand from Proposed Project[2]	10,800
Residual Capacity after Proposed Project	**419,981**

1. *Source: City of Alachua April 2023 Development Monitoring Report*
2. *Formulas used: (72,000 sq. ft. / 100)* 15 gpd*
    a. *Source: 62-6.008 Florida Administrative Code (FAC)*

Conclusion: There is residual capacity with this application's approval. Therefore, the proposed development will not cause sanitary sewer facilities to fall below LOS standards.

Solid Waste

Table 5: Projected Solid Waste Impact

System Category	LBs Per Day	Tons Per Year
Existing Demand[1]	43,024.00	7,851.88
Reserved Capacity[1]	41,727.39	7,615.25
New River Solid Waste Facility Capacity[1]	50 years	
Solid Waste Generated by Proposed Project[2]	**157.68**	**28.78**

1. *Source: City of Alachua April 2023 Development Monitoring Report.*
2. *Source: Sincero and Sincero; Environmental Engineering: A Design Approach. Prentice Hall, New Jersey, 1996. Formula used: (((12 lbs. / 1,000 ft^2/day x 72,000 sq. ft.) x 365)/2,000)*
    a. *Lbs/Day to Tons/Year: (lbs/day * 0.1825)*

Conclusion: There is available capacity with this application's approval. Therefore, the proposed development *will not* cause the City's solid waste facilities to fall below LOS standards.

To:	Kathy Winburn, AICP, City of Alachua Planning & Community Dev. Director
From:	Braxton Linton III, Project Planner
Date:	May 8th, 2023
RE:	Tower Hill Headquarters – Comprehensive Plan Consistency Analysis

This Comprehensive Plan Consistency Analysis is submitted for Tower Hill Alachua. The proposed use is a multistory office building, with associated utility infrastructure, stormwater facility, and parking spaces. This development will also include the ±2,000-linear-foot extension of NW 167th Boulevard from its existing terminus at US 441 south to the building site. This extension will include signal modifications at the NW 167th Boulevard/US 441 intersection. The project site includes Alachua County Tax Parcel 03873-001-000, 03054-001-002 and a portion of tax parcel 03879-000-000. The development area is located on the south side of US 441 and is west of I-75. The site's Future Land Use (FLU) categories are Commercial and Community Commercial. The Zoning District classifications are Commercial, Intensive (CI) and Community Commercial (CC).

The following identifies specific City of Alachua Comprehensive Plan Goals, Objectives, and Policies and explains how this application is consistent with each. Comprehensive Plan text is provided in normal font, while consistency statements are provided in **bold**.

Future Land Use Element

Objective 1.3: Commercial

The City of Alachua shall establish three commercial districts: Community Commercial, Commercial, and Central Business District. These districts shall provide a broad range of retail sales and services, as well as office uses, to provide for the availability of goods and services, both to the citizens of Alachua and to the citizens of the North Central Florida region.

Policy 1.3.a: Community Commercial: The Community Commercial land use category is established to provide neighborhood and community scale goods and services to adjacent neighborhood and residential areas. The following uses are allowed within the Community Commercial land use category:

1. Neighborhood commercial establishments;
2. Residential/offices and live-work units;
3. Business and professional offices;
4. Personal services;
5. Financial institutions;
6. Retail sales and services that serve the community;
7. Eating establishments;
8. Indoor recreation/entertainment;
9. Single-family and multi-family residential above first floor commercial uses;
10. Bed and breakfasts;
11. Supporting community services such as schools, houses of worship, parks, and community centers; and,
12. Traditional Neighborhood Planned Developments.

Policy 1.3.b: Commercial: The Commercial land use category is established to provide for general commercial uses, as well as more intense commercial and highway commercial uses. This is the land use category in which large-scale, regional commercial uses may locate. The following uses are allowed within the Commercial land use category:

1. Retail sales and services;
2. Personal services;
3. Financial Institutions;
4. Outdoor recreation and entertainment;
5. Tourist-related uses;
6. Hotels, motels;
7. Commercial shopping centers;
8. Auto-oriented uses;
9. Traditional Mixed-use Neighborhood Planned Developments;
10. Employment Center Planned Developments;
11. Commercial recreation centers;
12. Office/business parks;
13. Limited industrial services;
14. Eating establishments

The proposed use, an office building, is consistent with the Community Commercial FLU category. This application is for the development of an office building with associated utility infrastructure, stormwater facility, and parking spaces. Development will be consistent with standards set forth by the Community Commercial FLU category and CC Zoning District.

Policy 1.3.d: Design and performance standards: The following criteria shall apply when evaluating commercial development proposals:

1. Integration of vehicular and non-vehicular access into the site and access management features of site in terms of driveway cuts and cross access between adjacent sites, including use of frontage roads and/or shared access;

For vehicular site access, the application proposes a full ingress/egress point on NW 162nd Lane on the site's northern boundary. This will also include a ±2,000 linear foot extension of NW 167th Boulevard from its existing terminus at US 441 south to the building site. This extension will include signal modifications at the NW 167th Boulevard / US 441 intersection. A roundabout will be included in the extension of NW 167th Boulevard that leads to the site.

2. Buffering from adjacent existing/potential uses;

- **Office Perimeter (rear): 25-foot-wide Type 'D' Buffer**
- **Office Perimeter (side): 5-foot-wide Type 'A' Buffer**
- **Stormwater Perimeter (rear): 25-foot-wide Type 'D' Buffer**
- **Stormwater Perimeter (side & front): 5-foot-wide Type 'A' Buffer**

Per City of Alachua LDR Sec. 6.2.2(D)(2)(b), parking areas must be buffered around their exterior at a minimum of 5 feet in width and an average of 7 feet in width.

As depicted in the application, the submitted site plan adheres to all required buffers.

3. Open space provisions and balance of proportion between gross floor area and site size;

City of Alachua LDR §6.7.3(A), Table 6.7-1. states that a minimum of 10% of the gross site area shall be designated as open space. The project proposes to designate more than 10% of the project site as open space, through the use of stormwater management facilities, thus exceeding the 10% minimum requirement.

4. Adequacy of pervious surface area in terms of drainage requirements.

The proposed development drains to a proposed master Stormwater Management Facility (SMF) northeast portion of the project site.

5. Placement of signage.

All proposed signage will adhere to the policies stated in Section 6.5 of Article 6 of the City of Alachua LDR.

6. Adequacy of site lighting and potential impacts of lighting upon the surrounding area. Lighting should be designed to minimize impacts and preserve the ambiance and quality of the nighttime sky by reducing light trespass and light pollution on adjacent properties by utilizing lighting at an appropriate intensity, direction and times to ensure light is not overused or impacting areas where it is not intended.

All proposed lighting will adhere to the policies stated in Section 6.4 of Article 6 of the City of Alachua LDR.

7. Safety of on-site circulation patterns (patron, employee, and delivery vehicles), including parking layout and drive aisles, and points of conflict.

The proposed on-site parking area is designed for safe onsite circulation with minimal vehicle and pedestrian conflicts. Two crosswalks connect the sidewalk to a walkway from the parking lot, providing a safe travel option for pedestrians. According to Section 6.1.5(C)(3) in the City of Alachua's LDR, there is a 2-space loading zone requirement due to the building's size. Loading zones are located at the west side of the building.

8. Landscaping, as it relates to the requirements of the Comprehensive Plan and Land Development Regulations.

Future Land Use Element (FLUE) Policy 2.4.a states that the minimum landscaped area shall be 10% of the development site, not inclusive of any designated open space areas. The submitted Landscape Plans demonstrate that more than 10% of the total site area will be landscaped.

9. Unique features and resources which may constrain site development, such as soils, existing vegetation, and historic significance; and

There are no environmental features or significant resources onsite that warrant protection.

10. Performance based zoning requirements, which may serve as a substitute for or accompany land development regulations in attaining acceptable site design.

There are no performance-based zoning requirements being proposed for this site.

11. Commercial uses shall be limited to an intensity of less than or equal to .50 floor area ratio for parcels 10 acres or greater, .50 floor area ratio for parcels less than 10 acres but 5 acres or greater, a .75 floor area ratio for parcels less than 5 acres but greater than 1 acre, and 1.0 floor area ratio to parcels 1 acre or less.

The project site is ±44.25 acres. The proposed building is a ±72,000 sq. ft. structure. This yields an approximate Floor Area Ratio (FAR) of 0.04. The proposed development onsite will not exceed the permitted 0.50 FAR.

Transportation Element

Objective 1.1: Level of Service

The City shall establish a safe, convenient, and efficient level of service standard for all motorized and non-motorized transportation systems.

The proposed office building (Institute of Transportation Engineers (ITE) Land Use Code 710) will not result in a degradation of transportation Level of Service (LOS) standards, as is demonstrated in the complementary Concurrency Impact Analysis memorandum submitted as part of this application.

Conservation and Open Space Element

Objective 1.5: Soils. The City shall protect soil resources through erosion and sedimentation control, by requiring proper design criteria on specific soils.

The site is composed of six different soil types.

1. **Arredondo Fine Sand, 0 to 5 percent slopes (hydro group: A)**
2. **Fort Meade Fine Sand, 0 to 5 percent slopes (hydro group: A)**
3. **Gainesville Sand, 0 to 5 percent slopes (hydro group: A)**
4. **Pits and Dumps**
5. **Millhopper Sand, 5 to 8 percent slopes (hydro group: A)**
6. **Kendrick Sand, 5 to 8 percent slopes (hydro group: B)**

According to the NRCS soil database, the soil types are conducive to the proposed development, which is also demonstrated on adjacent sites with similar uses and soil types.

Community Facilities Element

Policy 1.1.d: The City hereby establishes the following Level of Service standards for sanitary sewer facilities:

b. Quantity: System-wide wastewater collection and treatment will be sufficient to provide a minimum of 250 gallons per day per equivalent residential unit (ERU) on an average annual basis.

Per the current City of Alachua Development Monitoring Report, there is residual capacity for existing Sanitary Sewer facilities. As is demonstrated in the Concurrency Impact Analysis submitted as part of this application, facility demands by the proposed nonresidential use will not exceed this residual capacity.

Objective 2.1: Continue to ensure satisfactory and economical solid waste service for all City residents, with an emphasis on reuse and recycling.

Policy 2.1.a: The City hereby establishes the following level of service standards for solid waste disposal facilities:

FACILITY TYPE	LEVEL OF SERVICE STANDARD
Solid Waste Landfill	.73 tons per capita per year

Per the current City of Alachua Development Monitoring Report, there is a 50-year build-out capacity for the solid waste disposal facility. As is demonstrated in the Concurrency Impact Analysis submitted as part of this application, facility demands by the proposed nonresidential use will not exceed this build-out capacity.

Objective 4.1: Achieve and maintain acceptable levels of service for potable water quantity and quality.

Policy 4.1.c: The City establishes the following level of service standards for potable water:

2. Quantity: System-wide potable water distribution and treatment will be sufficient to provide a minimum of 275 gallons per day per equivalent residential unit (ERU) on an average annual basis.

Per the current City of Alachua Development Monitoring Report, there is residual capacity for existing Potable Water facilities. As is demonstrated in the Concurrency Impact Analysis submitted as part of this application, facility demands by the proposed nonresidential use will not exceed this residual capacity.

Detail by Entity Name

Florida Profit Corporation
TOMOKA HILLS FARMS, INC.

Filing Information

Document Number	P99000006829
FEI/EIN Number	59-3551165
Date Filed	01/19/1999
Effective Date	01/15/1999
State	FL
Status	ACTIVE

Principal Address

7201 NW 11TH PLACE
GAINESVILLE, FL 32605

Mailing Address

P.O. BOX 147018
ATTN: LEGAL COMPLIANCE
GAINESVILLE, FL 32614-7018

Changed: 02/14/2002

Registered Agent Name & Address

ROWE, SCOTT P
7201 NW 11TH PLACE
GAINESVILLE, FL 32605

Name Changed: 01/26/2006

Officer/Director Detail

Name & Address

Title President, Secretary, Treasurer

SHIVELY, WILLIAM J
P.O. Box 147018
GAINESVILLE, FL 32614-7018

Annual Reports

Report Year	Filed Date
2019	02/13/2019

2020	02/20/2020
2021	04/08/2021

Document Images

04/08/2021 -- ANNUAL REPORT	View image in PDF format
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02/21/2014 -- ANNUAL REPORT	View image in PDF format
02/04/2013 -- ANNUAL REPORT	View image in PDF format
02/20/2012 -- ANNUAL REPORT	View image in PDF format
03/02/2011 -- ANNUAL REPORT	View image in PDF format
02/22/2010 -- ANNUAL REPORT	View image in PDF format
03/18/2009 -- ANNUAL REPORT	View image in PDF format
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01/26/2006 -- ANNUAL REPORT	View image in PDF format
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04/21/2003 -- ANNUAL REPORT	View image in PDF format
02/14/2002 -- ANNUAL REPORT	View image in PDF format
02/06/2001 -- ANNUAL REPORT	View image in PDF format
05/02/2000 -- ANNUAL REPORT	View image in PDF format
01/19/1999 -- Domestic Profit	View image in PDF format

AYESHA SOLOMON
ALACHUA COUNTY
PROPERTY APPRAISER
KNOWLEDGEABLE - COMMUNITY FOCUSED - COMMITTED

Sign Up for Property Watch

Parcel Summary

Parcel ID	03053-000-000
Prop ID	12660
Location Address	
Neighborhood/Area	(233200.50)
Subdivision	
Brief Legal Description*	E 18 CHS OF W 37.70 CHS S OF US 441 & N OF OLD SR 20 OR 503/107 INCLUDES COM SE COR SEC N 3 DEG W 286.74 FT TO N R/W OLD SR 25 N 79 DEG W 2353.88 FT POB N 79 DEG W 74 FT N 223.54 FT TO S R/W US 441 S 79 DEG E ALG R/W 69 FT SELY TO POB OR 743/001 LESS COM (Note: *The Description above is not to be used on legal documents.)
Property Use Code	TMBR SI 80-89 (05500)
Sec/Twp/Rng	09-08-18
Tax District	ALACHUA (District 1700)
Millage Rate	22.0463
Acreage	3.640
Homestead	N

View Map

Owner Information

CAVACEPPI SHARLEEN O TRUSTEE
PO BOX 1325
ALACHUA, FL 32616-1325

Valuation

	2022 Proposed Values	2021 Certified Values	2020 Certified Values	2019 Certified Values	2018 Certified Values
Improvement Value	$0	$0	$0	$0	$0
Land Value	$0	$903,878	$903,878	$903,878	$903,900
Land Agricultural Value	$1,402	$0	$0	$0	$0
Agricultural (Market) Value	$903,878	$0	$0	$0	$0
Just (Market) Value	**$903,878**	**$903,878**	**$903,878**	**$903,878**	**$903,900**
Assessed Value	$1,402	$459,634	$417,849	$379,863	$345,330
Exempt Value	$0	$0	$0	$0	$0
Taxable Value	$1,402	$459,634	$417,849	$379,863	$345,330
Maximum Save Our Homes Portability	$0	$444,244	$486,029	$524,015	$558,570

"Just (Market) Value" description - This is the value established by the Property Appraiser for ad valorem purposes. This value does not represent anticipated selling price.

TRIM Notice

2022 TRIM Notice (PDF)

Land Information

Land Use	Land Use Desc	Acres	Square Feet	Eff. Frontage	Depth	Zoning
5501	TIMBER 2-N	3.64	158575	0	0	CI

Sales

Sale Date	Sale Price	Instrument	Book	Page	Qualified	Vacant/Improved	Grantor	Grantee	Link to Official Records
3/11/2004	$100	SD	2872	53	U - UNQUALIFIED	Vacant	* CAVACEPPI BILLIE S AKA SHARL	CAVACEPPI SHARLEEN O	Link (Clerk)

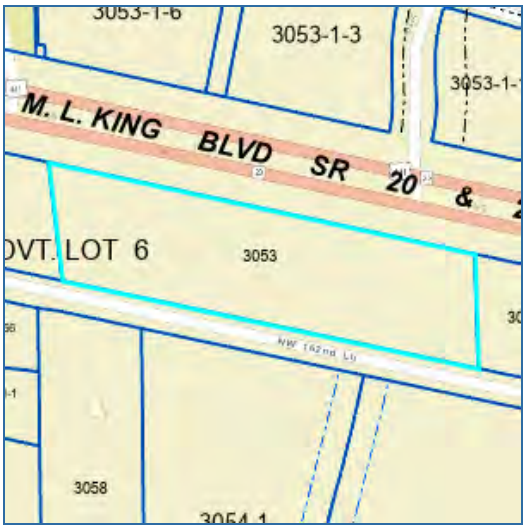
Official Public Records information is provided by the Alachua County Clerk's Office. Clicking on these links will direct you to their web site displaying the document details for this specific transaction.

Permits

Permit Number	Type	Primary	Active	Issue Date	Value
93-00000	OVER THE COUNTER INSPECT	Yes	No	9/21/1993	$0

Our permitting information is pulled from the Alachua County Permitting Offices. Permitting information shown here is all the Property Appraiser has on file for this property. Any detailed questions about permits should be directed to the Permitting Offices.

Map



No data available for the following modules: Building Information, Sub Area, Extra Features, Sketches, Photos.

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Version 2.3.219

AYESHA SOLOMON
ALACHUA COUNTY
PROPERTY APPRAISER
KNOWLEDGEABLE - COMMUNITY FOCUSED - COMMITTED

Sign Up for Property Watch

Parcel Summary

Parcel ID	03054-001-000
Prop ID	12722
Location Address	ALACHUA, FL 32615
Neighborhood/Area	(233200.50)
Subdivision	
Brief Legal Description*	COM SE COR SEC S 01 DEG 54 MIN 57 SEC W 3.76 FT N 87 DEG 08 MIN 33 SEC W 1090.74 FT N 05 DEG 41 MIN 41 SEC E 100.12 FT N 87 DEG 10 MIN 32 SEC W 1480.76 FT WLY ALG CURVE 516.14 FT POB NLY ALG CURVE 400.80 FT NLY ALG CURVE 205.34 FT N 12 DEG 09 MIN 34 SEC E (Note: *The Description above is not to be used on legal documents.)
Property Use Code	TMBR SI 80-89 (05500)
Sec/Twp/Rng	09-08-18
Tax District	ALACHUA (District 1700)
Millage Rate	22.0463
Acreage	6.080
Homestead	N



View Map

Owner Information

SARCAV LLC
C/O SILVIO CAVACEPPI
8303 AUTUMNWIND DR
JACKSONVILLE, FL 32218

Valuation

	2022 Proposed Values	2021 Certified Values	2020 Certified Values	2019 Certified Values	2018 Certified Values
Improvement Value	$0	$0	$0	$0	$0
Land Value	$0	$133,494	$133,494	$133,494	$133,500
Land Agricultural Value	$2,341	$0	$0	$0	$0
Agricultural (Market) Value	$198,634	$0	$0	$0	$0
Just (Market) Value	**$198,634**	**$133,494**	**$133,494**	**$133,494**	**$133,500**
Assessed Value	$2,341	$133,494	$133,494	$133,494	$133,500
Exempt Value	$0	$0	$0	$0	$0
Taxable Value	$2,341	$133,494	$133,494	$133,494	$133,500
Maximum Save Our Homes Portability	$0	$0	$0	$0	$0

"Just (Market) Value" description - This is the value established by the Property Appraiser for ad valorem purposes. This value does not represent anticipated selling price.

TRIM Notice

2022 TRIM Notice (PDF)

Land Information

Land Use	Land Use Desc	Acres	Square Feet	Eff. Frontage	Depth	Zoning
5501	TIMBER 2-N	6.08	264844.8	0	0	CI

Sales

Sale Date	Sale Price	Instrument	Book	Page	Qualified	Vacant/Improved	Grantor	Grantee	Link to Official Records
8/14/2017	$335,700	WD	4540	0604	37 - NOT EXPOSED TO OPEN MKT	Vacant		SARCAV LLC	Link (Clerk)
1/10/2008	$175,000	WD	3731	123	U - UNQUALIFIED	Vacant	* FICKETT & MCKINNEY /// HARRI	* FICKETT, KENNETH J & REBECCA	Link (Clerk)
6/1/2005	$100	WD	3140	975	U - UNQUALIFIED	Vacant	* KENNETH FICKETT & CARL SCHLI	* FICKETT & MCKINNEY	Link (Clerk)
5/28/2005	$100	WD	3514	670	U - UNQUALIFIED	Vacant	* FICKETT & FICKETT & MCKINNEY	* KENNETH FICKETT & CARL SCHLI	Link (Clerk)
5/28/2005	$485,800	WD	3140	978	Q - QUALIFIED	Improved	* HARRIET FICKETT	* FICKETT & FICKETT & MCKINNEY	Link (Clerk)

Sale Date	Sale Price	Instrument	Book	Page	Qualified	Vacant/Improved	Grantor	Grantee	Link to Official Records
4/1/1986	$50,000	WD	1621	442	U - UNQUALIFIED	Vacant	* KENNETH J FICKETT REBEBBA H	* HARRIET FICKETT & CARL SCHL	Link (Clerk)
3/1/1978	$75,000	WD	1127	459	U - UNQUALIFIED	Vacant		* KENNETH J FICKETT REBEBBA H	Link (Clerk)

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Map



Photos

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AYESHA SOLOMON
ALACHUA COUNTY
PROPERTY APPRAISER
KNOWLEDGEABLE - COMMUNITY FOCUSED - COMMITTED

Sign Up for Property Watch

Parcel Summary

Parcel ID	03054-001-002
Prop ID	107846
Location Address	
Neighborhood/Area	(233200.50)
Subdivision	
Brief Legal Description*	COM SE COR SEC S 01 DEG 54 MIN 57 SEC W 3.76 FT N 87 DEG 08 MIN 33 SEC W 1090.74 FT N 05 DEG 41 MIN 41 SEC E 100.12 FT POB N 87 DEG 10 MIN 32 SEC W 1480.76 FT WLY ALG CURVE 416.45 FT NLY ALG CURVE 362.09 FT NLY ALG CURVE 211.76 FT N 12 DEG 09 MIN 34 SEC E (Note: *The Description above is not to be used on legal documents.)
Property Use Code	VACANT COMM (01000)
Sec/Twp/Rng	09-08-18
Tax District	ALACHUA (District 1700)
Millage Rate	21.5087
Acreage	18.150
Homestead	N

View Map

Owner Information

TOMOKA HILLS FARMS INC
1301 DIXIANA DOMINO RD
LEXINGTON, KY 40511

Valuation

	2022 Proposed Values	2021 Certified Values	2020 Certified Values	2019 Certified Values	2018 Certified Values
Improvement Value	$0	$0	$0	$0	$0
Land Value	$592,961	$592,961	$592,961	$592,961	$593,000
Land Agricultural Value	$0	$0	$0	$0	$0
Agricultural (Market) Value	$0	$0	$0	$0	$0
Just (Market) Value	**$592,961**	**$592,961**	**$592,961**	**$592,961**	**$593,000**
Assessed Value	$592,961	$592,961	$592,961	$592,961	$593,000
Exempt Value	$0	$0	$0	$0	$0
Taxable Value	$592,961	$592,961	$592,961	$592,961	$593,000
Maximum Save Our Homes Portability	$0	$0	$0	$0	$0

"Just (Market) Value" description - This is the value established by the Property Appraiser for ad valorem purposes. This value does not represent anticipated selling price.

TRIM Notice

2022 TRIM Notice (PDF)

Land Information

Land Use	Land Use Desc	Acres	Square Feet	Eff. Frontage	Depth	Zoning
0000	VACANT RESIDENTIAL	18.15	790614	0	0	CI

Sales

Sale Date	Sale Price	Instrument	Book	Page	Qualified	Vacant/Improved	Grantor	Grantee	Link to Official Records
8/14/2017	$1,014,400	WD	4540	0598	37 - NOT EXPOSED TO OPEN MKT	Vacant	* KENNETH J & REBECCA H FICKET	TOMOKA HILLS FARMS INC	Link (Clerk)

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Map



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Version 2.3.250

AYESHA SOLOMON
ALACHUA COUNTY
PROPERTY APPRAISER
KNOWLEDGEABLE - COMMUNITY FOCUSED - COMMITTED

Sign Up for Property Watch

Parcel Summary

Parcel ID	03873-000-000
Prop ID	15088
Location Address	
Neighborhood/Area	(233200.00)
Subdivision	
Brief Legal Description*	FRAC SEC & GARVIN GRT COM NE COR SEC S 3.76 FT TO S R/W ACL RR (ABANDONED) W ALG R/W 1090.69 FT TO W R/W I-75 S ALG R/W 1200.36 FT POB S ALG R/W 1257.04 FT SELY ALG R/W 1734.82 FT N 72 DEG W 2775.69 FT S 17 DEG W 592.04 FT W 725.63 FT TO E R/W SR-235A N 2 (Note: *The Description above is not to be used on legal documents.)
Property Use Code	GRZGSOIL CLASS6 (06500)
Sec/Twp/Rng	16-08-18
Tax District	ALACHUA (District 1700)
Millage Rate	21.5087
Acreage	168.920
Homestead	N

View Map

Owner Information

TOMOKA HILLS FARMS INC
1301 DIXIANA DOMINO RD
LEXINGTON, KY 40511

Valuation

	2022 Proposed Values	2021 Certified Values	2020 Certified Values	2019 Certified Values	2018 Certified Values
Improvement Value	$1,080	$1,080	$1,080	$1,080	$1,100
Land Value	$0	$0	$0	$0	$0
Land Agricultural Value	$59,700	$59,700	$59,700	$59,700	$59,700
Agricultural (Market) Value	$298,176	$298,176	$298,176	$298,176	$298,200
Just (Market) Value	**$299,256**	**$299,256**	**$299,256**	**$299,256**	**$299,300**
Assessed Value	$60,780	$60,780	$60,780	$60,780	$60,800
Exempt Value	$0	$0	$0	$0	$0
Taxable Value	$60,780	$60,780	$60,780	$60,780	$60,800
Maximum Save Our Homes Portability	$0	$0	$0	$0	$0

"Just (Market) Value" description - This is the value established by the Property Appraiser for ad valorem purposes. This value does not represent anticipated selling price.

TRIM Notice

2022 TRIM Notice (PDF)

Land Information

Land Use	Land Use Desc	Acres	Square Feet	Eff. Frontage	Depth	Zoning
6550	HAY	155.00	6751800	0	0	A
5501	TIMBER 2-N	10.00	435600	0	0	A
5930	SWAMP/WATER	3.92	170755.2	0	0	A

Building Information

Type	SOH MISC	**Heat**	
Total Area	1	**HC&V**	
Heated Area		**HVAC**	
Exterior Walls		**Bathrooms**	
Interior Walls		**Bedrooms**	
Roofing		**Total Rooms**	
Roof Type		**Stories**	1.0
Frame		**Actual Year Built**	0
Floor Cover		**Effective Year Built**	1998

Sub Area

Type	Description	Sq. Footage	Quality	Imprv Use	Imprv Use Descr
2400	WELL	1		R5	RES

Sales

Sale Date	Sale Price	Instrument	Book	Page	Qualified	Vacant/Improved	Grantor	Grantee	Link to Official Records
1/18/2006	$100	WD	3299	210	U - UNQUALIFIED	Improved	* SHIVELY WILLIAM J	TOMOKA HILLS FARMS INC	Link (Clerk)
9/23/1998	$98,600	WD	2193	1160	U - UNQUALIFIED	Vacant	* KEFFER & MATTHEWS TRUSTEES M	* SHIVELY WILLIAM J	Link (Clerk)
9/23/1998	$493,000	WD	2193	1126	U - UNQUALIFIED	Vacant	* KEFFER & MATTHEWS TRUSTEES /	* KEFFER & MATTHEWS TRUSTEES M	Link (Clerk)
5/17/1995	$100	WD	2012	1545	U - UNQUALIFIED	Vacant	* MARY JOSEPHINE MATTHEWS	* KEFFER & MATTHEWS TRUSTEES	Link (Clerk)
4/11/1994	$63,500	WD	1959	2058	U - UNQUALIFIED	Vacant	* DONALD G AHEARN & MARILYNN R	* MARY JOSEPHINE MATTHEWS	Link (Clerk)

Sale Date	Sale Price	Instrument	Book	Page	Qualified	Vacant/Improved	Grantor	Grantee	Link to Official Records
1/30/1989	$17,000	WD	1725	342	U - UNQUALIFIED	Vacant		* DONALD G AHEARN & MARILYNN R	Link (Clerk)
12/31/1988	$55,000	WD	1723	2020	U - UNQUALIFIED	Vacant		* UNASSIGNED	Link (Clerk)
2/1/1980	$405,500	WD	1262	94	U - UNQUALIFIED	Vacant		* UNASSIGNED	Link (Clerk)

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Permits

Permit Number	Type	Primary	Active	Issue Date	Value
05-09826	ROOFING	Yes	No	3/28/2005	$26,820
6896	MECHANICAL	Yes	No	2/16/1999	$2,500

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Map



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Sign Up for Property Watch

Parcel Summary

Parcel ID	03873-001-000
Prop ID	15089
Location Address	15403 NW 173RD ST ALACHUA, FL 32615 ⊞ see more addresses...
Neighborhood/Area	(233200.00)
Subdivision	
Brief Legal Description*	TRACT IN FRAC SECTIONS 9 16 TWP 8 RNG 18 AND GARVIN GRANT COM SE COR OF SEC 9-8-18 RUN S 3.76 FT N 87 DEG W ALONG RR R/W 1090.74 FT TO W R/W I-75 N 5 DEG E 100.12 FT THE POB N 87 DEG W 1480.63 FT SYLY AN ARC DISTANCE OF 1729.58 FT S 58 DEG W 716.12 FT TO (Note: *The Description above is not to be used on legal documents.)
Property Use Code	GRZGSOIL CLASS6 (06500)
Sec/Twp/Rng	16-08-18
Tax District	ALACHUA (District 1700)
Millage Rate	21.5087
Acreage	135.000
Homestead	N

View Map

Owner Information

TOMOKA HILLS FARMS INC
1301 DIXIANA DOMINO RD
LEXINGTON, KY 40511

Valuation

	2022 Proposed Values	2021 Certified Values	2020 Certified Values	2019 Certified Values	2018 Certified Values
Improvement Value	$395,050	$368,962	$345,676	$353,867	$412,100
Land Value	$9,000	$9,000	$9,000	$9,000	$9,000
Land Agricultural Value	$46,800	$46,800	$46,800	$46,800	$46,800
Agricultural (Market) Value	$234,000	$234,000	$234,000	$234,000	$234,000
Just (Market) Value	**$638,050**	**$611,962**	**$588,676**	**$596,867**	**$655,100**
Assessed Value	$450,850	$424,762	$401,476	$409,667	$455,170
Exempt Value	$0	$0	$0	$0	$0
Taxable Value	$450,850	$424,762	$401,476	$409,667	$455,170
Maximum Save Our Homes Portability	$0	$0	$0	$0	$12,730

"Just (Market) Value" description - This is the value established by the Property Appraiser for ad valorem purposes. This value does not represent anticipated selling price.

TRIM Notice

2022 TRIM Notice (PDF)

Land Information

Land Use	Land Use Desc	Acres	Square Feet	Eff. Frontage	Depth	Zoning
6550	HAY	130.00	5662800	0	0	A
0115	SFR ACREAGE	5.00	217800	0	0	A

Building Information

Type	SINGLE FAMILY	**Heat**	ELECTRIC
Total Area	7,154	**HC&V**	FORCED AIR
Heated Area	5,130	**HVAC**	CENTRAL
Exterior Walls	FACE BRICK; TILE/WD STUCCO	**Bathrooms**	4.0-Baths
Interior Walls	PANEL; PLASTER	**Bedrooms**	3 BEDROOMS
Roofing	ASPHALT	**Total Rooms**	
Roof Type	GABLE/HIP	**Stories**	1.0
Frame		**Actual Year Built**	1981
Floor Cover	CARPET	**Effective Year Built**	1981

Type	SOH MISC	**Heat**	
Total Area	34,121	**HC&V**	
Heated Area		**HVAC**	
Exterior Walls		**Bathrooms**	
Interior Walls		**Bedrooms**	
Roofing		**Total Rooms**	
Roof Type		**Stories**	1.0
Frame		**Actual Year Built**	0
Floor Cover		**Effective Year Built**	1981

Sub Area

Type	Description	Sq. Footage	Quality	Imprv Use	Imprv Use Descr
BAS	BASE AREA	5,130	4	0100	SINGLE FAMILY
FDU	FINISHED DET UTILITY	140	4	0100	SINGLE FAMILY
FGR	FINISHED GARAGE	858	4	0100	SINGLE FAMILY
FOP	FINISHED OPEN PORCH	1,026	4	0100	SINGLE FAMILY

Type	Description	Sq. Footage	Quality	Imprv Use	Imprv Use Descr
0222	BARN 2	8,550		R2	RES

Type	Description	Sq. Footage	Quality	Imprv Use	Imprv Use Descr
0241	BARN POLE 1	375		R2	RES
0242	BARN POLE 2	3,307		R2	RES
0280	BATH HOUSE	256		R2	RES
0959	FP 2	1		R7	RES
1020	GATE EL OP	1		R7	RES
1641	PATIO 1	2,200		R1	RES
1680	PAVING 1	15,880		R1	RES
1762	POOL 2	576		R3	RES
1960	SCREEN ENC	2,975		R5	RES

Sales

Sale Date	Sale Price	Instrument	Book	Page	Qualified	Vacant/Improved	Grantor	Grantee	Link to Official Records
1/22/1999	$912,000	WD	2213	1501	Q - QUALIFIED	Improved	* NEW LIFE CORPORATION OF AMER	TOMOKA HILLS FARMS INC	Link (Clerk)
4/10/1998	$100	CT	2162	2267	U - UNQUALIFIED	Improved	* SOUTHERN CROSS OSTRICH FARM	* NEW LIFE CORPORATION OF AMER	Link (Clerk)
12/27/1994	$255,000	WD	2003	236	U - UNQUALIFIED	Improved	* OSTRICH AMERICA CORP	* SOUTHERN CROSS OSTRICH FARM	Link (Clerk)
12/27/1994	$255,000	WD	1994	1479	U - UNQUALIFIED	Improved	* OSTRICH AMERICA CORP	* OSTRICH AMERICA CORP	Link (Clerk)
4/9/1993	$385,000	WD	1902	834	U - UNQUALIFIED	Improved	* DICKINSON HUNT DIC	* OSTRICH AMERICA CORP	Link (Clerk)
3/1/1979	$243,000	WD	1195	66	U - UNQUALIFIED	Vacant		* DICKINSON HUNT DIC	Link (Clerk)

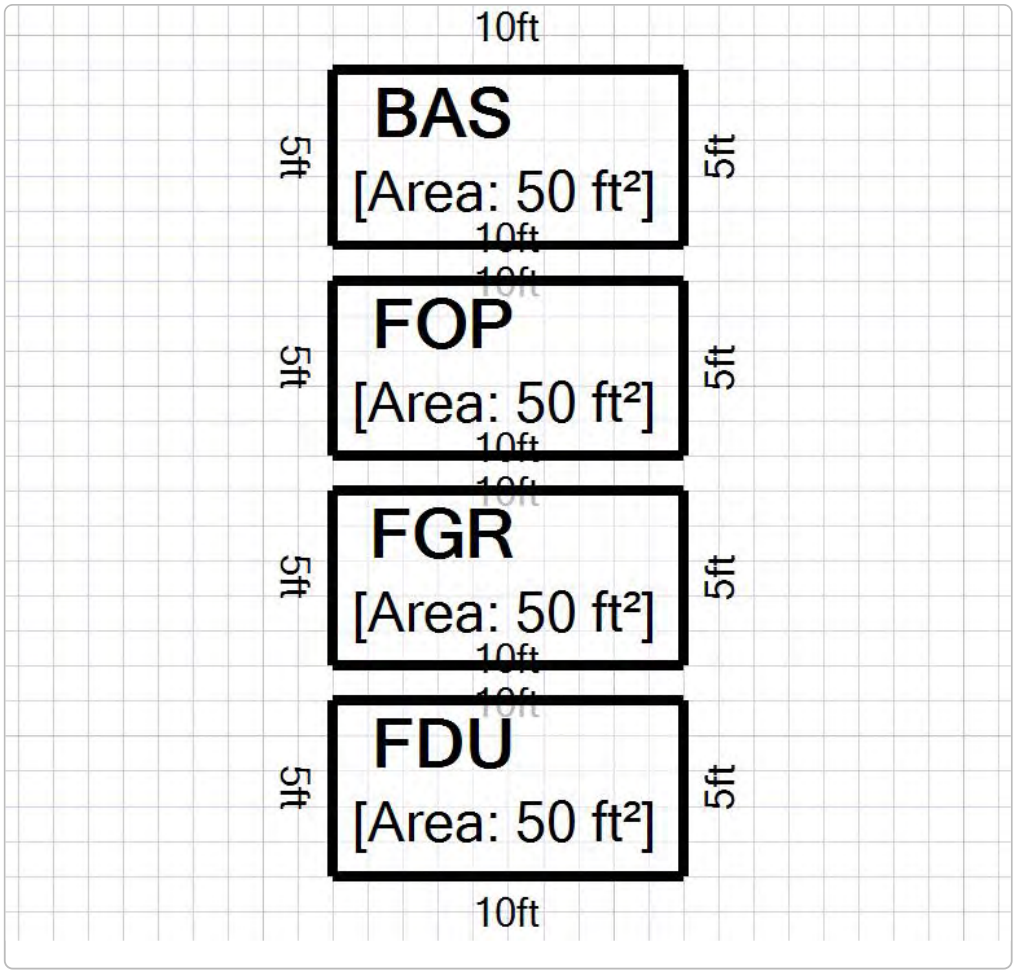
Official Public Records information is provided by the Alachua County Clerk's Office. Clicking on these links will direct you to their web site displaying the document details for this specific transaction.

Permits

Permit Number	Type	Primary	Active	Issue Date	Value
P04-22-9258	DEMOLITION PERMIT	Yes	Yes	4/14/2022	$25,000
11-00000	OVER THE COUNTER INSPECT	Yes	No	8/31/2011	$0
06-10835	ROOFING	Yes	No	12/20/2006	$45,240
06-10831	REMODEL SFD	Yes	No	12/18/2006	$20,000
7499	POOL ENCLOSURE	Yes	No	8/18/2000	$11,174
7295	REMODEL RESI.	Yes	No	2/28/2000	$6,000
6009	MECHANICAL	Yes	No	5/14/1996	$800
5333	OVER THE COUNTER INSPECT	Yes	No	9/9/1993	$500
5278	PARK MOBILE HOME	Yes	No	6/3/1993	$0
5279	PARK MOBILE HOME	Yes	No	6/3/1993	$0

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Sketches



Map



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Version 2.3.250

LEGAL DESCRIPTION

DATE: APRIL 27, 2022
CLIENT: TOMOKA FARMS
PROJECT NO: 21-0025.08
DESCRIPTION FOR: OUTPARCEL

A TRACT OF LAND SITUATED IN FRACTIONAL SECTIONS 9, 16 AND SECTION 37 (WILLIAM GARVIN GRANT), TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA, SAID TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF THE AFOREMENTIONED FRACTIONAL SECTION 9, TOWNSHIP 8 SOUTH, RANGE 18 EAST FOR A POINT OF REFERENCE AND RUN S 01°54'57" W, A DISTANCE OF 3.76 FEET TO THE SOUTHERLY RIGHT OF WAY LINE OF THE ABANDONED SEABOARD COASTLINE RAILROAD (200 FOOT RIGHT OF WAY); THENCE RUN N 87°08'33" W, ALONG SAID SOUTHERLY RIGHT OF WAY LINE, A DISTANCE OF 1090.74 FEET TO THE WESTERLY RIGHT OF WAY LINE OF STATE ROAD NO. 93, ALSO KNOWN AS INTERSTATE HIGHWAY NO. 75 (300 FOOT RIGHT OF WAY); THENCE RUN N 05°41'41" E, ALONG SAID WESTERLY RIGHT OF WAY LINE, A DISTANCE OF 100.12 FEET TO THE CENTERLINE OF SAID RAILROAD RIGHT OF WAY; THENCE RUN N 87°08'33" W, ALONG SAID RAILROAD CENTERLINE, A DISTANCE 1308.44 FEET TO THE POINT OF BEGINNING; THENCE FROM SAID **POINT OF BEGINNING**, RUN S 03°04'31" W, A DISTANCE OF 673.94 FEET TO A POINT OF CURVATURE OF A CURVE CONCAVE WESTERLY, SAID CURVE HAVING A RADIUS OF 500.00 FEET, A CENTRAL ANGLE OF 26°24'06", AND A CHORD BEARING AND DISTANCE OF S 16°16'34" W, 228.36 FEET; THENCE RUN SOUTHWESTERLY, WITH SAID CURVE, AN ARC DISTANCE OF 230.40 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE RUN S 29°28'37" W, A DISTANCE OF 1165.48 FEET; THENCE RUN N 45°31'23" W, A DISTANCE OF 127.63 FEET TO A POINT OF CURVATURE OF A CURVE CONCAVE SOUTHERLY, SAID CURVE HAVING A RADIUS OF 200.00 FEET, A CENTRAL ANGLE OF 45°00'00", AND A CHORD BEARING AND DISTANCE OF N 68°01'23" W, 153.07 FEET; THENCE RUN NORTHWESTERLY, WITH SAID CURVE, AN ARC DISTANCE OF 157.08 FEET TO A POINT OF TANGENCY OF SAID CURVE; THENCE RUN S 89°28'37" W, A DISTANCE OF 524.72 FEET; THENCE RUN N 15°31'23" W, A DISTANCE OF 55.93 FEET TO A POINT OF CURVATURE OF A CURVE CONCAVE EASTERLY, SAID CURVE HAVING A RADIUS OF 1200.00 FEET, A CENTRAL ANGLE OF 45°00'00", AND A CHORD BEARING AND DISTANCE OF N 06°58'37" E, 918.44 FEET; THENCE RUN NORTHEASTERLY, WITH SAID CURVE, AN ARC DISTANCE OF 942.48 FEET TO THE PINT OF TANGENCY OF SAID CURVE; THENCE RUN N 29°28'37" E, A DISTANCE OF 797.84 FEET TO A POINT OF CURVATURE OF A CURVE CONCAVE WESTERLY, SAID CURVE HAVING A RADIUS OF 100.00 FEET, A CENTRAL ANGLE OF 30°04'38", AND A CHORD BEARING AND DISTANCE OF N 14°26'18" E, 51.89 FEET; THENCE RUN NORTHEASTERLY, WITH SAID CURVE, AN ARC DISTANCE OF 52.49 TO THE END OF CURVE, ALSO BEING THE CENTERLINE OF THE ABANDONED SEABOARD COASTLINE RAILROAD, TO A POINT OF CURVATURE OF A CURVE CONCAVE SOUTHERLY, SAID CURVE HAVING A RADIUS OF 2864.79 FEET, A CENTRAL ANGLE OF 15°14'34", AND A CHORD BEARING AND DISTANCE N 85°14'10" E, 759.90 FEET; THENCE RUN EASTERLY, WITH SAID CURVE, AN ARC DISTANCE OF 762.14 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE RUN S 87°08'33" E, A DISTANCE OF 172.19 FEET TO THE **POINT OF BEGINNING**.

CONTAINING 45.30 ACRES, MORE OR LESS

ALL AS SHOWN ON THE MAP ATTACHED HEREWITH AND MADE A PART HEREOF

SPECIAL WARRANTY DEED

RECORDED IN OFFICIAL RECORDS
INSTRUMENT # 2021095 3 PGS
2004 MAR 12 02:00 PM BK 2872 PG 53
J. K. "BUDDY" IRBY
CLERK OF CIRCUIT COURT
ALACHUA COUNTY,FLORIDA
CLERK12 Receipt#181097

Doc Stamp-Deed: 0.70

This instrument prepared by: Charles I. Holden, Jr.
Holden, Rappenecker and Eubank, P.A.
2772 NW 43rd Street, Suite S
Gainesville, FL 32606

File Number: 5985.0004

Return to:
HOLDEN, RAPPENECKER, AND EUBANK, P.A.
2772-S N.W. 43rd Street
Gainesville, FL 32606-7433

THIS SPECIAL WARRANTY DEED, Made and entered into on this 11 day of March, 2004, by

SHARLEEN O. CAVACEPPI, a/k/a BILLIE SHARLEEN OWNBEY CAVACEPPI, an unmarried person,

whose address is: P. O. Box 1325, Alachua, FL 32616-1325

hereinafter called grantor*, to

SHARLEEN O. CAVACEPPI, Trustee under the Sharleen O. Cavaceppi Revocable Trust Agreement Dated January 27, 2003

whose address is: P. O. Box 1325, Alachua, FL 32616-1325

social security number is: _____

2021095

hereinafter called grantee*:

(Wherever used herein the terms "grantor" and grantee" include all the parties to this instrument and the heirs, legal representatives and assigns of individuals, and the successors and assigns of corporations)

WITNESSETH, That said grantor, for and in consideration of the sum of **Ten and No/100 ($10.00) Dollars** and other good and valuable consideration to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, has granted, bargained and sold to the said grantee, and grantee's heirs and assigns forever, the following described land situated, lying and being in **Alachua** County, Florida, to-wit:

That portion of the following described parcel of property lying South of US Highway 441 and North of Old State Road No. 20, to-wit:

Begin at the Northwest (NW) corner of Section Nine (9), Township Eight (8) South, Range Eighteen (18) East; thence run South along the West line of said Section 23.88 chains; thence East 19.70 chains to point of beginning; thence South 42.56 chains to North edge of State Highway #2; thence in a Southeasterly direction on North edge of right-of-way 18.88 chains; thence North 46.42 chains; thence West 18 chains to the point of beginning. Containing 80 acres, more or less. Said tract of land situate, lying and being in Alachua County, Florida.

LESS AND EXCEPT therefrom the following described real property:

A parcel of land situated in Section 9, Township 8 South, Range 18 East, Alachua County, Florida, being more particularly described as follows:

For a point of reference commence at the Southeast corner of said Section 9 and run North 03°37'28" West, a distance of 286.74 feet to the North Right-of-Way line of Old S.R. No. 25 (Old U.S. Highway 441); thence run North 79°23'05" West along said north Right-of-Way line, a distance of 2,353.88 feet to the Point of Beginning; thence continue North 79°23'05" West along said North Right-of-Way line, a distance of 397.76 feet; thence departing from said North Right-of-Way line run North 03°02'54" West, a distance of 226.49 feet to the South Right-of-Way line of New U.S. Highway No. 441; thence run South 79°05'00" East along said South Right-of-Way line, a distance of 398.27 feet; thence departing from said South Right-of-Way line run South 03°02'54" East, a distance of 224.33 feet to the Point of Beginning.

BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

INSTRUMENT # 2021095
3 PGS

A PARCEL OF LAND SITUATED IN SECTION 9, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

FOR A POINT OF REFERENCE COMMENCE AT THE SOUTHEAST CORNER OF SAID SECTION 9 AND RUN NORTH 03°37'28" WEST, A DISTANCE OF 286.74 FEET TO THE NORTH RIGHT-OF-WAY LINE OF OLD STATE ROAD NO. 20 (OLD U.S. HIGHWAY 441); THENCE RUN NORTH 79°23'05" WEST, ALONG SAID NORTH RIGHT-OF-WAY LINE, A DISTANCE OF 2751.64 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE NORTH 79°23'05" WEST, ALONG SAID NORTH RIGHT-OF-WAY LINE, A DISTANCE OF 843.74 FEET MORE OR LESS, TO THE EAST LINE OF THAT CERTAIN PARCEL RECORDED IN O.R. BOOK 1638, PAGE 2522 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA; THENCE DEPARTING SAID NORTH RIGHT-OF-WAY LINE, RUN NORTH 06°17'36" WEST, ALONG SAID EAST LINE, A DISTANCE OF 234.74 FEET TO THE SOUTH RIGHT-OF-WAY LINE OF NEW U.S. HIGHWAY 441; THENCE RUN SOUTH 79°05'00" EAST, ALONG SAID SOUTH RIGHT-OF-WAY LINE, A DISTANCE OF 858.52 FEET MORE OR LESS, TO THE WEST LINE OF THAT CERTAIN PARCEL RECORDED IN O.R. BOOK 1873, PAGE 50 OF SAID PUBLIC RECORDS; THENCE DEPARTING SAID SOUTH RIGHT-OF-WAY LINE, RUN SOUTH 03°02'54" EAST, A DISTANCE OF 226.49 FEET TO THE POINT OF BEGINNING. CONTAINING 4.431 ACRES, MORE OR LESS

SUBJECT TO Taxes for 2004 and all subsequent years.

SUBJECT TO any and all easements and restrictions of record.

THIS DEED WAS PREPARED WITHOUT THE BENEFIT OF A TITLE SEARCH.

TAX PARCEL NUMBER: 03053-000-000

TOGETHER, with all tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

TO HAVE AND TO HOLD, the same in fee simple forever.

AND the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land, and hereby warrants the title to said land and will defend the same against the lawful claims of all persons claiming by, through or under the said grantor.

TO HAVE AND TO HOLD the said described property with all and singular rights, members and appurtenances thereunto appertaining unto the said Trustee, in Trust nevertheless, upon the conditions and for the uses and purposes set out in the said Trust Agreement, to which reference is made, and it is made a part hereof by reference.

Full power and authority is hereby granted to said Trustee and his/her successors to protect and conserve said property; to sell, contract to sell and grant options to purchase said property and any right, title or interest therein on any terms; to exchange said property or any part thereof for any other real or personal property upon any terms; to convey said property by deed or other conveyance to any grantee, with our without consideration; to mortgage, pledge or otherwise encumber said property or any part thereof; to lease, grant options to lease and renew, extend, amend and otherwise modify leases on said property or any part thereof from time to time, for any period of time, for any rental and upon any other terms and conditions; to release, convey or assign any other right, title or interest whatsoever, in, to or about said property or any part thereof.

No party dealing with said Trustee in relation to said property in any manner whatsoever, and (without limiting the foregoing) no party to whom said property or any part thereof or any interest therein shall be conveyed, contracted to be sold, leased, or mortgaged by said Trustee, shall be obliged (a) to see to the application of any purchase money, rent or money borrowed or otherwise advanced on said property, or (b) to see that the terms of this trust have been complied with, or (c) to inquire into the authority, necessity or expedience of any act of said Trust, or (d) be privileged to inquire into any of the terms of said Trust Agreement. Every deed, mortgage, lease or other instrument executed by said Trustee in relation to said property shall be conclusive evidence in favor of every person claiming any right, title or interest thereunder: (a) that at the time of delivery thereof this trust was in full force and effect, (b) that such instrument was executed in accordance with the trusts, terms and conditions, hereof and of said Trust Agreement and is binding upon all beneficiaries thereunder, (c) that said Trustee was duly authorized and empowered to execute and deliver every such instrument, and (d) if a conveyance has been made to a successor or successors in trust, that such successor or successors have been properly appointed and are fully vested with all the title estate, rights, powers, duties and obligations of its, his/her or their predecessor in trust.

INSTRUMENT # 2021095
3 PGS

IN WITNESS WHEREOF, the Grantor has executed this deed under seal on the day and year first above written.

Signed, sealed and delivered in
our presence as witnesses:

Rachel R. Rounsaville
Witness

RACHEL R. ROUNSAVILLE
printed name of witness signing above

Carol W. Overacker
Witness

CAROL W. OVERACKER
printed name of witness signing above

Sharleen O. Cavaceppi (Seal)
SHARLEEN O. CAVACEPPI, a/k/a
BILLIE SHARLEEN OWNBEY CAVACEPPI

ACKNOWLEDGMENT

STATE OF FLORIDA
COUNTY OF ALACHUA

The foregoing Special Warranty Deed was acknowledged before me this 11 day of March, 2004, by **SHARLEEN O. CAVACEPPI, a/k/a BILLIE SHARLEEN OWNBEY CAVACEPPI.**

Carol W. Overacker
MY COMMISSION # CC904037 EXPIRES
March 28, 2004
BONDED THRU TROY FAIN INSURANCE, INC.

Carol W. Overacker
Notary Public
Printed Name: _____
Commission No.: _____

Personally known ✓ OR Produced Identification _____

Type of Identification Produced: _____

RECORDED IN OFFICIAL RECORDS
INSTRUMENT # 3077293 4 PG(S)
8/22/2017 3:17 PM
BOOK 4540 PAGE 604
J.K.'JESS' IRBY
Clerk of the Court, Alachua County, Florida
ERECORDED Receipt # 788103
Doc Stamp-Mort: $0.00
Doc Stamp-Deed: $2,349.90
Intang. Tax: $0.00

Prepared by and return to:
Lizete M. Raiford

Community Title, LLC
175 NW 138th Ter., Ste. 100
Newberry, FL 32669
352-331-0817
File Number: CT-17-1376

Parcel Identification No. Part of Parcel# 03054-001-000

[Space Above This Line For Recording Data]

Warranty Deed

(STATUTORY FORM - SECTION 689.02, F.S.)

This Indenture made this 14th day of August, 2017 between **Kenneth J. Fickett and Rebecca H. Fickett, husband and wife** whose post office address is **3001 NE 20th Way, Gainesville, FL 32606** of the County of **Alachua**, State of **Florida**, grantor*, and **SARCAV, LLC, a Florida limited liability company** whose post office address is **2567 River Enclave Lane, Jacksonville, FL 32226** of the County of **Duval**, State of **Florida**, grantee*,

Witnesseth that said grantor, for and in consideration of the sum of TEN AND NO/100 DOLLARS ($10.00) and other good and valuable considerations to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, has granted, bargained, and sold to the said grantee, and grantee's heirs and assigns forever, the following described land, situate, lying and being in **Alachua County, Florida**, to-wit:

WEST PARCEL: A PARCEL OF LAND SITUATED IN FRACTIONAL SECTION 9, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:
COMMENCE AT A CONCRETE MONUMENT AT THE SOUTHEAST CORNER OF SAID FRACTIONAL SECTION 9, TOWNSHIP 8 SOUTH, RANGE 18 EAST, FOR A POINT OF REFERENCE AND RUN SOUTH 01 DEG. 54'57" WEST, A DISTANCE OF 3.76 FEET TO A CONCRETE MONUMENT ON THE SOUTHERLY RIGHT OF WAY LINE OF THE ABANDONED SEABOARD COASTLINE RAILROAD (200 FOOT RIGHT OF WAY); THENCE RUN NORTH 87 DEG. 08'33" WEST, ALONG SAID SOUTHERLY RIGHT OF WAY LINE A DISTANCE OF 1090.74 FEET TO A CONCRETE MONUMENT AT THE INTERSECTION OF SAID SOUTHERLY RIGHT OF WAY LINE WITH THE WESTERLY RIGHT OF WAY LINE OF STATE ROAD NO. 93, ALSO KNOWN AS INTERSTATE HIGHWAY NO. 75 (300 FOOT RIGHT OF WAY); THENCE RUN NORTH 05 DEG. 41'41" EAST ALONG SAID WESTERLY RIGHT OF WAY LINE, A DISTANCE OF 100.12 FEET TO A 5/8" STEEL ROD AND CAP STAMPED CHW INC (LB5075) AT THE CENTERLINE OF AFOREMENTIONED ABANDONED SEABOARD COASTLINE RAILROAD; THENCE RUN NORTH 87 DEG. 10'32" WEST, ALONG SAID CENTERLINE OF ABANDONED RAILROAD, A DISTANCE OF 1480.76 FEET TO A 1/2" STEEL ROD AND CAP STAMPED ACLS (LB2903) AT THE POINT OF CURVATURE OF A CURVE CONCAVE SOUTHERLY AND HAVING A RADIUS OF 2864.79 FEET; THENCE RUN 516.84 FEET ALONG THE ARC OF SAID CURVE TO THE LEFT, THROUGH A CENTRAL ANGLE OF 10 DEG. 20'12" AND SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 87 DEG. 41'02" WEST, 516.14 FEET TO IT'S INTERSECTION WITH THE WEST LINE OF A PROPOSED 100 FOOT WIDE ROADWAY AND THE POINT OF BEGINNING; SAID INTERSECTION BEING ON THE ARC OF A CURVE CONCAVE EASTERLY AND HAVING A RADIUS OF 1000.00 FEET; THENCE RUN ALONG SAID WEST LINE, 403.53 FEET ALONG THE ARC OF SAID NON-TANGENT CURVE TO THE RIGHT, THROUGH A CENTRAL ANGLE OF 23 DEG. 07'14" AND SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 04 DEG. 16'58" EAST, 400.80 FEET TO A NON-TANGENT POINT OF REVERSE CURVATURE ON THE ARC OF A CURVE CONCAVE WESTERLY AND HAVING A RADIUS

OF 3209.14 FEET; THENCE CONTINUE ALONG SAID WEST LINE, 205.38 FEET ALONG THE ARC OF SAID CURVE TO THE LEFT, THROUGH A CENTRAL ANGLE OF 03 DEG. 40'01" AND SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 13 DEG. 59'34" EAST, 205.34 FEET TO A POINT OF TANGENCY; THENCE CONTINUE ALONG SAID WEST LINE, NORTH 12 DEG. 09'34" EAST, A DISTANCE OF 49.08 FEET TO IT'S INTERSECTION WITH THE SOUTH RIGHT OF WAY LINE OF NW 162nd LANE, (A 60 FOOT WIDE RIGHT OF WAY); THENCE RUN NORTH 78 DEG. 09'10" WEST, ALONG SAID SOUTH RIGHT OF WAY, A DISTANCE OF 399.27 FEET TO A 2" IRON PIPE AT THE NORTHWEST CORNER OF LANDS IN OFFICIAL RECORDS BOOK 3731 AT PAGE 123 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA; THENCE RUN SOUTH 00 DEG. 39'20" EAST ALONG THE BOUNDS OF SAID LANDS, A DISTANCE OF 782.79 FEET TO A 5/8" STEEL ROD AND CAP STAMPED (LB2903) MARKING THE POINT OF INTERSECTION WITH THE AFOREMENTIONED CENTERLINE OF THE ABANDONED SEABOARD COASTLINE RAILROAD AND THE SOUTHWEST CORNER OF SAID LANDS, SAID POINT BEING ON THE ARC OF A CURVE CONCAVE SOUTHERLY AND HAVING A RADIUS OF 2864.79 FEET; THENCE RUN ALONG SAID CENTERLINE, 296.95 FEET ALONG THE ARC OF SAID CURVE TO THE RIGHT, THROUGH A CENTRAL ANGLE OF 05 DEG. 56'20" AND SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 79 DEG. 32'46" EAST, 296.81 FEET TO THE POINT OF BEGINNING.

TOGETHER WITH WEST ROADWAY PARCEL:

A PARCEL OF LAND SITUATED IN FRACTIONAL SECTION 9, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCE AT A CONCRETE MONUMENT AT THE SOUTHEAST CORNER OF SAID FRACTIONAL SECTION 9, TOWNSHIP 8 SOUTH, RANGE 18 EAST, FOR A POINT OF REFERENCE AND RUN SOUTH 01 DEG. 54'57" WEST, A DISTANCE OF 3.76 FEET TO A CONCRETE MONUMENT ON THE SOUTHERLY RIGHT OF WAY LINE OF THE ABANDONED SEABOARD COASTLINE RAILROAD (200 FOOT RIGHT OF WAY); THENCE RUN NORTH 87 DEG. 08'33" WEST, ALONG SAID SOUTHERLY RIGHT OF WAY LINE A DISTANCE OF 1090.74 FEET TO A CONCRETE MONUMENT AT THE INTERSECTION OF SAID SOUTHERLY RIGHT OF WAY LINE WITH THE WESTERLY RIGHT OF WAY LINE OF STATE ROAD NO. 93, ALSO KNOWN AS INTERSTATE HIGHWAY NO. 75 (300 FOOT RIGHT OF WAY); THENCE RUN NORTH 05 DEG. 41'41" EAST ALONG SAID WESTERLY RIGHT OF WAY LINE, A DISTANCE OF 100.12 FEET TO A 5/8" STEEL ROD AND CAP STAMPED CHW INC (LB5075) AT THE CENTERLINE OF AFOREMENTIONED ABANDONED SEABOARD COASTLINE RAILROAD; THENCE RUN NORTH 87 DEG. 10'32" WEST, ALONG SAID CENTERLINE OF ABANDONED RAILROAD, A DISTANCE OF 1480.76 FEET TO 1/2" STEEL ROD AND CAP STAMPED ACLS (LB2903) AT THE POINT OF CURVATURE OF A CURVE CONCAVE SOUTHERLY AND HAVING A RADIUS OF 2864.79 FEET; THENCE RUN 466.83 FEET ALONG THE ARC OF SAID CURVE TO THE LEFT, THROUGH A CENTRAL ANGLE OF 9 DEG. 20'12" AND SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 88 DEG. 11 '02" WEST, 466.32 FEET TO IT'S INTERSECTION WITH THE CENTERLINE OF A PROPOSED 100 FOOT WIDE ROADWAY AND THE POINT OF BEGINNING; THENCE CONTINUE ALONG THE SAID CENTERLINE OF THE ABANDONED RAILROAD, ALONG A CURVE CONCAVE SOUTHERLY AND HAVING A RADIUS OF 2864.79 FEET, AN ARC LENGTH OF 50.00 FEET, THROUGH A CENTRAL ANGLE OF 01 DEG.00'00" AND SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 83 DEG. 00'56" WEST, 50.00 FEET TO IT'S INTERSECTION WITH THE WEST LINE OF SAID PROPOSED 100 FOOT WIDE ROADWAY, SAID INTERSECTION BEING ON THE ARC OF A CURVE CONCAVE EASTERLY AND HAVING A RADIUS OF 1000.00 FEET; THENCE RUN ALONG SAID WEST LINE, 403.53 FEET ALONG THE ARC OF SAID NON-TANGENT CURVE TO THE RIGHT, THROUGH A CENTRAL ANGLE OF 23 DEG. 07'14" AND SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 04 DEG. 16'58" EAST, 400.80 FEET TO A NON-TANGENT POINT OF REVERSE CURVATURE ON THE ARC OF A CURVE CONCAVE WESTERLY AND HAVING A RADIUS OF 3209.14 FEET; THENCE CONTINUE ALONG SAID WEST LINE, 205.38 FEET ALONG THE ARC OF SAID CURVE TO THE LEFT, THROUGH A CENTRAL ANGLE OF 03 DEG. 40'01" AND SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 13 DEG.

59'34" EAST, 205.34 FEET TO A POINT OF TANGENCY; THENCE CONTINUE ALONG SAID WEST LINE, NORTH 12 DEG. 09'34" EAST, A DISTANCE OF 49.08 FEET TO IT'S INTERSECTION WITH THE SOUTH RIGHT OF WAY LINE OF NW 162nd LANE, (A 60 FOOT WIDE RIGHT OF WAY); THENCE RUN SOUTH 78 DEG. 09'10" EAST, ALONG SAID SOUTH RIGHT OF WAY, A DISTANCE OF 50.00 FEET TO IT'S INTERSECTION WITH THE CENTERLINE OF SAID PROPOSED 100 FOOT WIDE ROADWAY; THENCE RUN SOUTH 12 DEG. 09'34" WEST, ALONG SAID CENTERLINE, A DISTANCE OF 49.36 FEET TO A POINT OF CURVATURE OF A CURVE CONCAVE WESTERLY, HAVING A RADIUS OF 3259.14 FEET; THENCE RUN ALONG SAID CENTERLINE, 209.02 FEET ALONG THE ARC OF SAID CURVE TO THE RIGHT, THROUGH A CENTRAL ANGLE OF 03 DEG. 40'29" AND SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 13 DEG. 59'49" WEST, 208.99 FEET TO A NON-TANGENT POINT OF REVERSE CURVATURE ON THE ARC OF A CURVE CONCAVE EASTERLY, HAVING A RADIUS OF 950.00 FEET; THENCE CONTINUE ALONG SAID CENTERLINE, 383.18 FEET ALONG THE ARC OF SAID CURVE TO THE LEFT, THROUGH A CENTRAL ANGLE OF 23 DEG. 06'36" AND SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 04 DEG. 15'43" WEST, 380.59 FEET TO IT'S POINT OF INTERSECTION WITH THE AFOREMENTIONED CENTERLINE OF THE ABANDONED SEABOARD COASTLINE RAILROAD AND THE POINT OF BEGINNING.

Subject to taxes for 2017 and subsequent years; covenants, conditions, restrictions, easements, reservations and limitations of record, if any.

and said grantor does hereby fully warrant the title to said land, and will defend the same against lawful claims of all persons whomsoever.

* "Grantor" and "Grantee" are used for singular or plural, as context requires.

In Witness Whereof, grantor has hereunto set grantor's hand and seal the day and year first above written.

Signed, sealed and delivered in our presence:

Witness Name: RAMONA MCHANEE

Kenneth J. Fickett

Witness Name: Jennifer C. Reid

Rebecca H. Fickett

State of Florida
County of Alachua

The foregoing instrument was acknowledged before me this 14th day of August, 2017 by Kenneth J. Fickett and Rebecca H. Fickett, who [ ] is personally known or [X] has produced a driver's license as identification.

[Notary Seal]

Notary Public

Printed Name: RAMONA M CHANCE

My Commission Expires: 2.23.19

RAMONA M CHANCE
Notary Public - State of Florida
My Comm. Expires Feb 23, 2019
Commission # FF 174925
Bonded through National Notary Assn.

RECORDED IN OFFICIAL RECORDS
INSTRUMENT # 2207220 2 PGS
2006 JAN 18 04:18 PM BK 3299 PG 210
J. K. "BUDDY" IRBY
CLERK OF CIRCUIT COURT
ALACHUA COUNTY, FLORIDA
CLERK12 Receipt#268482
Doc Stamp-Deed: 0.70

Prepared by Charles M. Gadd, Jr.
Clayton-Johnston, P.A.
18 NW 33rd Court
Gainesville, FL 32607

Parcel ID Number: 03873-000-000

Warranty Deed

This Indenture, Made this 18th day of January, 2006 A.D., **Between** William J. Shively

of the County of Alachua, State of Florida, **grantor,** and Tomoka Hills Farms, Inc., a corporation existing under the laws of the State of Florida

whose address is: P.O. Box 147018, Gainesville, FL 32614

of the County of Alachua, State of Florida, **grantee.**

Witnesseth that the GRANTOR, for and in consideration of the sum of ----------TEN DOLLARS ($10)---------- DOLLARS, and other good and valuable consideration to GRANTOR in hand paid by GRANTEE, the receipt whereof is hereby acknowledged, has granted, bargained and sold to the said GRANTEE and GRANTEE'S heirs, successors and assigns forever, the following described land, situate, lying and being in the County of Alachua State of Florida to wit:

Those certain lands as are more particularly described in the attached Exhibit "A" which is made apart hereof by reference.

Subject to taxes for 2006 and subsequent years.

Subject to restrictions and easements of record.

This deed is being given by the grantor to a corporation which he owns one hundred percent of the outstanding stock in and is a transfer of unencumbered property to a corporation wholey owned by grantor and is exempt from Florida Documentary Stamp Tax.

The grantor covenants and warrants that the above described property is neither his homestead nor his residence.

2207220

and the grantor does hereby fully warrant the title to said land, and will defend the same against lawful claims of all persons whomsoever.

In Witness Whereof, the grantor has hereunto set his hand and seal the day and year first above written.

Signed, sealed and delivered in our presence:

Printed Name: Charles M. Gadd, Jr.
Witness

Printed Name: Jeannie Brazy
Witness

William J. Shively (Seal)
P.O. Address: P.O. Box 147018, Gainesville, Florida 32614-7018

STATE OF Florida
COUNTY OF Alachua

The foregoing instrument was acknowledged before me this 18th day of January, 2006 by William J. Shively

he is personally known to me or he has produced his Florida driver's license as identification.

Comm. number DD235053
Expires: Aug 16, 2007

Printed Name: Charles M. Gadd, Jr.
Notary Public
My Commission Expires:

Notary Public State of Florida

A50761

Laser Generated by © Display Systems, Inc., 2003 (863) 763-5555 Form FLWD-1

EXHIBIT "A"

A tract of land situated in Fractional Section 16 and the William Garvin Grant, Township 8 South, Range 18 East, Alachua County, Florida, said tract of lane being more particularly described as follows:

Commence at a concrete monument at the Northeast corner of the aforementioned Fractional Section 16, Township 8 South, Range 18 East for a point of reference and run South 00 degs., 27 mins., 55 secs. West, a distance of 3.76 feet to the South right of way line of the Seaboard Coastline Railroad (200 foot right of way abandoned); thence run North 88 degs., 37 mins., 15 secs. West, along said right of way line of Interstate Highway No. 75 (300 foot tight of way); thence run South 04 degs., 11 mins., 43 secs. West along said right of way line , a distance of 1090.69 feet to the West right of way line of Interstate No. 75 a distance pf 1200.36 feet to a concrete monument at the intersection of the South line of that certain parcel of land described in Official Records Book 1195, at page 66 of the Public Records of Alachua County, Florida with said West right of way line, of Interstate Highway No.75 and the True Point of Beginning; thence continue South 04 degs., 11 mins., 43 secs. West, along said right of way line, a distance of 1257.04 feet to a concrete monument at the point of curvature of a 00 degs., 58 mins., 28 sec. curve, having a radius of 5879.58 feet, a total internal angle of 28 degs., 38 mins., 28 secs. and being concave to an Easterly direction; thence run Southeasterly, along the arc of the said right of way curve, an arc distance of 1734.82 feet to a concrete monument, said concrete monument being the Southeast corner of the certain parcel of land described in Official Records Book 742, at page 153 of the Public Records of Alachua County, Florida; thence run North 72 degs., 29 mins., 54 secs. West, along the South line of said parcel of land recorded in Official Records Book 742, at page 153, a distance of 2775.69 feet to a concrete monument; thence run South 17 degs., 05 mins., 50 secs. West, along said South line, a distance of 592.04 feet to a concrete monument; thence run South 89 degs., 04 mins., 44 secs. West, along said South line, a distance of 725.63 feet to the East right of way line of State Road No. S-235-A (100 foot right of way); thence run North 01 degs., 59 mins., 55 secs. West, along said right of way line, a distance of 2164.71 feet to a concrete monument at the Southwest corner of said parcel of land described in Official Records Book 1195, at page 66; thence ruin North 88 degs., 29 mins., 13 secs. East, along the South line of said parcel of land, a distance of 2807.17 feet to a concrete monument; thence run North 58 degs., 14 mins., 10 secs. East, along said South line, a distance of 917.09 feet to the True Point of Beginning.

INSTRUMENT # 2207220
2 PGS

RECORDED IN OFFICIAL RECORDS
INSTRUMENT # 3077291 4 PG(S)
8/22/2017 3:16 PM
BOOK 4540 PAGE 598
J.K.'JESS' IRBY
Clerk of the Court, Alachua County, Florida
ERECORDED Receipt # 788101
Doc Stamp-Mort: $0.00
Doc Stamp-Deed: $7,100.80
Intang. Tax: $0.00

Prepared by and return to:
Lizete M. Raiford

Community Title, LLC
175 NW 138th Ter., Ste. 100
Newberry, FL 32669
352-331-0817
File Number: **CT-17-1147**

Parcel Identification No. **Part of Parcel# 03054-001-000**

[Space Above This Line For Recording Data]

Warranty Deed

(STATUTORY FORM - SECTION 689.02, F.S.)

This Indenture made this **14th** day of **August, 2017** between **Kenneth J. Fickett and Rebecca H. Fickett, husband and wife** whose post office address is **3001 NE 20th Way, Gainesville, FL 32606** of the County of **Alachua**, State of **Florida**, grantor*, and **Tomoka Hills Farms, Inc., a Florida corporation** whose post office address is **7201 NW 11th Pl, Gainesville, FL 32605** of the County of **Alachua**, State of **Florida**, grantee*,

Witnesseth that said grantor, for and in consideration of the sum of TEN AND NO/100 DOLLARS ($10.00) and other good and valuable considerations to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, has granted, bargained, and sold to the said grantee, and grantee's heirs and assigns forever, the following described land, situate, lying and being in **Alachua County, Florida**, to-wit:

EAST PARCEL: A PARCEL OF LAND SITUATED IN FRACTIONAL SECTION 9 AND THE WILLIAM GARVIN GRANT, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:
COMMENCE AT A CONCRETE MONUMENT AT THE SOUTHEAST CORNER OF SAID FRACTIONAL SECTION 9, TOWNSHIP 8 SOUTH, RANGE 18 EAST, FOR A POINT OF REFERENCE AND RUN SOUTH 01 DEG. 54'57" WEST, A DISTANCE OF 3.76 FEET TO A CONCRETE MONUMENT ON THE SOUTHERLY RIGHT OF WAY LINE OF THE ABANDONED SEABOARD COASTLINE RAILROAD (200 FOOT RIGHT OF WAY); THENCE RUN NORTH 87 DEG. 08'33" WEST, ALONG SAID SOUTHERLY RIGHT OF WAY LINE A DISTANCE OF 1090.74 FEET TO A CONCRETE MONUMENT AT THE INTERSECTION OF SAID SOUTHERLY RIGHT OF WAY LINE WITH THE WESTERLY RIGHT OF WAY LINE OF STATE ROAD NO. 93, ALSO KNOWN AS INTERSTATE HIGHWAY NO. 75 (300 FOOT RIGHT OF WAY); THENCE RUN NORTH 05 DEG. 41'41" EAST ALONG SAID WESTERLY RIGHT OF WAY LINE, A DISTANCE OF 100.12 FEET TO A 5/8" STEEL ROD AND CAP STAMPED CHW INC. (LB 5075) AT THE CENTERLINE OF AFOREMENTIONED ABANDONED SEABOARD COASTLINE RAILROAD AND THE POINT OF BEGINNING; THENCE RUN NORTH 87 DEG. 10'32" WEST, ALONG SAID CENTERLINE OF ABANDONED RAILROAD, A DISTANCE OF 1480.76 FEET TO A 1/2" STEEL ROD AND CAP STAMPED ACLS (LB2903) AT THE POINT OF CURVATURE OF A CURVE CONCAVE SOUTHERLY AND HAVING A RADIUS OF 2864.79 FEET; THENCE RUN 416.82 FEET ALONG THE ARC OF SAID CURVE TO THE LEFT, THROUGH A CENTRAL ANGLE OF 8 DEG. 20'11" AND SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 88 DEG. 41'02" WEST, 416.45 FEET TO IT'S INTERSECTION WITH THE EAST LINE OF A PROPOSED 100 FOOT WIDE ROADWAY SAID INTERSECTION BEING ON THE ARC OF A CURVE CONCAVE EASTERLY AND HAVING A RADIUS OF 900.00 FEET; THENCE RUN ALONG SAID EAST LINE, 364.58 FEET ALONG THE ARC OF SAID NON-TANGENT CURVE TO THE RIGHT, THROUGH A CENTRAL ANGLE 23 DEG. 12'35" AND SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 04 DEG. 14'21" EAST, 362.09 FEET TO A NON-TANGENT POINT OF REVERSE CURVATURE ON THE ARC OF A CURVE CONCAVE WESTERLY AND HAVING A RADIUS OF 3309.14 FEET; THENCE CONTINUE ALONG SAID EAST LINE, 211.79 FEET ALONG THE ARC OF SAID CURVE TO THE LEFT, THROUGH A CENTRAL ANGLE OF 03 DEG. 40'01" AND

SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 13 DEG. 59'35" EAST, 211.76 FEET TO A POINT OF TANGENCY; THENCE CONTINUE ALONG SAID EAST LINE, NORTH 12 DEG. 09'34" EAST, A DISTANCE OF 49.63 FEET TO IT'S INTERSECTION WITH THE SOUTH RIGHT OF WAY LINE OF NW 162nd LANE, (A 60 FOOT WIDE RIGHT OF WAY); THENCE RUN SOUTH 78 DEG. 09'10" EAST, ALONG SAID SOUTH RIGHT OF WAY LINE, A DISTANCE OF 798.74 FEET TO A 4" SQUARE CONCRETE MONUMENT (NO IDENTIFICATION), MARKING THE NORTHWEST CORNER OF LANDS AS DESCRIBED AND RECORDED IN OFFICIAL RECORDS BOOK 4281 AT PAGE 128 OF THE PUBLIC RECORDS OF ALACHUA COUNTY FLORIDA; THENCE RUN ALONG THE BOUNDS OF SAID LANDS THE FOLLOWING THREE (3) COURSES;

1) SOUTH 12 DEG. 02'06" WEST, A DISTANCE OF 217.73 FEET TO A 4" SQUARE CONCRETE MONUMENT AND DISK STAMPED (PLS 2228);

2) SOUTH 78 DEG. 08'35" EAST, A DISTANCE OF 399.95 FEET TO A 4" SQUARE CONCRETE MONUMENT AND DISK STAMPED (PLS2228);

3) NORTH 12 DEG. 02'06" EAST, A DISTANCE OF 217.80 TO A 5/8" STEEL ROD AND CAP STAMPED CHW INC (LB 5075)

SAID POINT BEING THE NORTHEAST CORNER OF SAID LANDS AND A POINT ON THE AFOREMENTIONED SOUTH RIGHT OF WAY LINE OF NW 162nd LANE; THENCE RUN SOUTH 78 DEG. 09'10" EAST, ALONG SAID SOUTH RIGHT OF WAY LINE, A DISTANCE OF 677.36 FEET TO IT'S INTERSECTION WITH THE AFOREMENTIONED WESTERLY RIGHT OF WAY LINE OF STATE ROAD NO. 93; THENCE RUN SOUTH 05 DEG. 41'04" WEST, ALONG SAID WESTERLY RIGHT OF WAY LINE, A DISTANCE OF 294.78 FEET TO THE POINT OF BEGINNING.

TOGETHER WITH EAST ROADWAY PARCEL:

A PARCEL OF LAND SITUATED IN FRACTIONAL SECTION 9, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT A CONCRETE MONUMENT AT THE SOUTHEAST CORNER OF SAID FRACTIONAL SECTION 9, TOWNSHIP 8 SOUTH, RANGE 18 EAST, FOR A POINT OF REFERENCE AND RUN SOUTH 01 DEG. 54'57" WEST, A DISTANCE OF 3.76 FEET TO A CONCRETE MONUMENT ON THE SOUTHERLY RIGHT OF WAY LINE OF THE ABANDONED SEABOARD COASTLINE RAILROAD (200 FOOT RIGHT OF WAY); THENCE RUN NORTH 87 DEG. 08'33" WEST, ALONG SAID SOUTHERLY RIGHT OF WAY LINE A DISTANCE OF 1090.74 FEET TO A CONCRETE MONUMENT AT THE INTERSECTION OF SAID SOUTHERLY RIGHT OF WAY LINE WITH THE WESTERLY RIGHT OF WAY LINE OF STATE ROAD NO. 93, ALSO KNOWN AS INTERSTATE HIGHWAY NO. 75 (300 FOOT RIGHT OF WAY); THENCE RUN NORTH 05 DEG. 41'41" EAST ALONG SAID WESTERLY RIGHT OF WAY LINE, A DISTANCE OF 100.12 FEET TO A 5/8" STEEL ROD AND CAP STAMPED CHW INC (LB5075) AT THE CENTERLINE OF AFOREMENTIONED ABANDONED SEABOARD COASTLINE RAILROAD; THENCE RUN NORTH 87 DEG. 10'32" WEST, ALONG SAID CENTERLINE OF ABANDONED RAILROAD, A DISTANCE OF 1480.76 FEET TO A 1/2" STEEL ROD AND CAP STAMPED ACLS(LB2903) AT THE POINT OF CURVATURE OF A CURVE CONCAVE SOUTHERLY AND HAVING A RADIUS OF 2864.79 FEET; THENCE RUN 416.82 FEET ALONG THE ARC OF SAID CURVE TO THE LEFT, THROUGH A CENTRAL ANGLE OF 8 DEG. 20'11" AND SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 88 DEG. 41'02" WEST, 416.45 FEET TO IT'S INTERSECTION WITH THE EAST LINE OF A PROPOSED 100 FOOT WIDE ROADWAY AND THE POINT OF BEGINNING, SAID INTERSECTION BEING ON THE ARC OF A CURVE CONCAVE EASTERLY AND HAVING A RADIUS OF 900.00 FEET; THENCE RUN ALONG SAID EAST LINE, 364.58 FEET ALONG THE ARC OF SAID NON-TANGENT CURVE TO THE RIGHT, THROUGH A CENTRAL ANGLE 23 DEG. 12'35" AND SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 04 DEG. 14'21" EAST, 362.09 FEET TO A NON-TANGENT POINT OF REVERSE CURVATURE ON THE ARC OF A CURVE CONCAVE WESTERLY AND HAVING A RADIUS OF 3309.14 FEET; THENCE CONTINUE ALONG SAID EAST LINE, 211.79 FEET ALONG THE ARC OF SAID CURVE TO THE LEFT, THROUGH A CENTRAL ANGLE OF 03 DEG. 40'01" AND SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 13 DEG. 59'35" EAST, 211.76 FEET TO A POINT OF TANGENCY; THENCE CONTINUE ALONG SAID EAST LINE, NORTH 12 DEG. 09'34" EAST, A DISTANCE OF 49.63 FEET TO IT'S INTERSECTION WITH

THE SOUTH RIGHT OF WAY LINE OF NW 162nd LANE, (A 60 FOOT WIDE RIGHT OF WAY); THENCE RUN NORTH 78 DEG. 09'10" WEST, ALONG SAID SOUTH RIGHT OF WAY, A DISTANCE OF 50.00 FEET TO IT'S INTERSECTION WITH THE CENTERLINE OF SAID PROPOSED 100 FOOT WIDE ROADWAY; THENCE RUN SOUTH 12 DEG. 09'34" WEST, ALONG SAID CENTERLINE, A DISTANCE OF 49.36 FEET TO A POINT OF CURVATURE OF A CURVE CONCAVE TO WESTERLY, HAVING A RADIUS OF 3259.14 FEET; THENCE RUN ALONG SAID CENTERLINE, 209.02 FEET ALONG THE ARC OF SAID CURVE TO THE RIGHT, THROUGH A CENTRAL ANGLE OF 03 DEG. 40'29" AND SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 13 DEG. 59'49" WEST, 208.99 FEET TO A NON-TANGENT POINT OF REVERSE CURVATURE ON THE ARC OF A CURVE CONCAVE EASTERLY, HAVING A RADIUS OF 950.00 FEET; THENCE CONTINUE ALONG SAID CENTERLINE, 383.18 FEET ALONG THE ARC OF SAID CURVE TO THE LEFT, THROUGH A CENTRAL ANGLE OF 23 DEG. 06'36" AND SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 04 DEG. 15'43" WEST, 380.59 FEET TO IT'S POINT OF INTERSECTION WITH THE AFOREMENTIONED CENTERLINE OF THE ABANDONED SEABOARD COASTLINE RAILROAD, SAID INTERSECTION BEING ON THE ARC OF A CURVE CONCAVE SOUTHERLY AND HAVING A RADIUS OF 2864.79 FEET; THENCE RUN ALONG SAID CENTERLINE OF ABANDONED RAILROAD, 50.01 FEET ALONG THE ARC OF SAID CURVE TO THE RIGHT, THROUGH A CENTRAL ANGLE OF 01 DEG. 00'01" AND SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 84 DEG. 00'56" EAST, 50.01 FEET TO THE POINT OF BEGINNING.

Subject to taxes for 2017 and subsequent years; covenants, conditions, restrictions, easements, reservations and limitations of record, if any.

and said grantor does hereby fully warrant the title to said land, and will defend the same against lawful claims of all persons whomsoever.

* "Grantor" and "Grantee" are used for singular or plural, as context requires.

In Witness Whereof, grantor has hereunto set grantor's hand and seal the day and year first above written.

Signed, sealed and delivered in our presence:

Witness Name: RAMONA McHANCE

Witness Name: Jennifer Creed

Kenneth J. Fickett

Rebecca H. Fickett

DoubleTime®

State of Florida
County of Alachua

The foregoing instrument was acknowledged before me this 14th day of August, 2017 by Kenneth J. Fickett and Rebecca H. Fickett, who [ ] are personally known or [X] have produced a driver's license as identification.

[Notary Seal]

RAMONA M CHANCE
Notary Public - State of Florida
My Comm. Expires Feb 23, 2019
Commission # FF 174925
Bonded through National Notary Assn.

Notary Public

Printed Name: RAMONA M CHANCE

My Commission Expires: 2-23-19

DoubleTime®

Record 15.00
Doc. Stamps 6,384.00
Int.Tax
Total 6,399.00

CIRCUIT COURT CLERK
J.K. "Buddy" Irby
ALACHUA COUNTY, FL
Date 01/25/1999 16:28
Document ID 1587372
Book/Page 2213/ 1501

DTAX 6,384.00

Prepared by and return to:
Philip A. DeLaney
Attorney at Law
Scruggs & Carmichael, P.A.
3426 N.W. 43rd Street, Suite B
Gainesville, Florida 32606
352-374-4120
File No.: **98-3148**

[Space Above This Line For Recording Data]

Warranty Deed

This Warranty Deed made this **22nd** day of **January**, **1999** between

New Life Corporation of America, a Tennessee corporation
whose Social Security/FEIN Number is: [redacted]
whose post office address is
123 Walnut Drive, Hendersonville, Tennessee 37075
grantor, and

Tomoka Hills Farms, Inc., a Florida corporation
whose Social Security/FEIN Number(s) are: 59-3551165
whose post office address is
Post Office Box 141150, Gainesville, Florida 32614
grantee:

(Whenever used herein the terms "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives, and assigns of individuals, and the successors and assigns of corporations, trusts and trustees)

WITNESSETH, that said grantor, for and in consideration of the sum of TEN AND NO/100 DOLLARS ($10.00) and other good and valuable considerations to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, has granted, bargained, and sold to the said grantee, and grantee's heirs and assigns forever, the following described land, situate, lying and being in **Alachua County, Florida** to-wit:

Legal Description Labeled Exhibit "A" Attached Hereto and By Reference Incorporated Herein

Parcel Identification Number: 03873-001-000

Subject to taxes for 1999 and subsequent years; covenants, conditions, restrictions, easements, reservations and limitations of record, if any.

TOGETHER WITH: Double Wide Mobile Home MVID numbers GEO729214 and GEO729215, which is permanently affixed to, a part of, and being sold with the real property described above.

TOGETHER with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

TO HAVE AND TO HOLD, the same in fee simple forever.

AND the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land; that the grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever; and that said land is free of all encumbrances, except taxes accruing subsequent to December 31, 1998 .

IN WITNESS WHEREOF, grantor has hereunto set grantor's hand and seal the day and year first above written.

Signed, sealed and delivered in our presence:

New Life Corporation of America
a Tennessee corporation

Witness Name: _____

By: _____
Norvell Olive
Executive Director

Witness Name: _____

(Corporate Seal)

STATE OF Tennessee
COUNTY OF DAVIDSON

The foregoing instrument was acknowledged before me this 21st day of January, 1999 by Norvell Olive, Executive Director of New Life Corporation of America, a Tennessee corporation, on behalf of the corporation. He/she is personally known to me or has produced a Driver's License as identification.

[Notary Seal]

Notary Public
Printed Name: Ronald L. Stone
My Commission Expires: 03-25-2000

Exhibit A

A tract of land situated in Fractional Sections 9 & 16 and Section 37 (William Garvin Grant), Township 8 South, Range 18 East, Alachua County, Florida, said tract of land being more particularly described as follows:

Commence at a concrete monument at the Southeast corner of the aforementioned Fractional Section 9, Township 8 South, Range 18 East for a point of reference and run S. 01° 54'57" W., a distance of 3.76 feet to a concrete monument on the Southerly right of way line of the abandoned Seaboard Coastline Railroad (200 foot right of way); thence run N. 87°08'33" W., along said Southerly right of way line, a distance of 1090.74 feet to a concrete monument on the Westerly right of way line of State Road No. 93, also known as Interstate Highway No. 75 (300 foot right of way); thence run N. 05°41'41" E., along said Westerly right of way line, a distance of 100.12 feet to an iron pipe on the centerline of said railroad right of way and the True Point of Beginning; thence run N. 87°08'33" W., along said centerline, a distance of 1480.63 feet to an iron pipe at the point of curvature of a curve concave Southerly, said curve having a radius of 2864.79 feet, a central angle of 34°35'30", and a chord bearing and distance of S. 75°33'42" W., 1703.44 feet respectively; thence run Southwesterly, with said curve and along said centerline, an arc distance of 1729.58 feet to an iron pipe at the point of tangency of said curve; thence run S. 58°15'57" W., along said centerline, a distance of 716.12 feet to a concrete monument on the Easterly right of way line of County Road No. 235A (100 foot right of way); thence run S. 00°30'42" E., along said right of way line, a distance of 1030.00 feet to a concrete monument; thence run N. 89°58'49" E., a distance of 2807.17 feet to a concrete monument; thence run N. 59°41'41" E., a distance of 917.50 feet to a concrete monument on said Westerly right of way line of State Road No. 93; thence run N. 05°41'41" E., along said right of way line, a distance of 1300.00 feet to the True Point of Beginning.

TOGETHER WITH rights of the "parent tract" (dominant tenement) set forth in the easement recorded in O. R. Book 1195, at Page 68, of the Public Records of Alachua County, Florida.

ALATB15081F

John Power TAX COLLECTOR Serving Alachua County

2022 PAID REAL ESTATE 107846

NOTICE OF AD VALOREM TAXES AND NON-AD VALOREM ASSESSMENTS

ACCOUNT NUMBER	PROPERTY ADDRESS	MILLAGE CODE
03054 001 002	UNASSIGNED LOCATION RE	1700

TOMOKA HILLS FARMS INC
1301 DIXIANA DOMINO RD
LEXINGTON, KY 40511

EXEMPTIONS:

SCAN TO PAY ONLINE

AD VALOREM TAXES

TAXING AUTHORITY	MILLAGE RATE	ASSESSED VALUE	EXEMPTION(S)	TAXABLE VALUE	TAXES LEVIED
COUNTY GENERAL	7.7662	592,961	0	592,961	4,605.05
LIBRARY GENERAL	1.0565	592,961	0	592,961	626.46
SCHOOL CAP PROJECT	1.5000	592,961	0	592,961	889.44
SCHOOL DISCRNRY & CN	0.7480	592,961	0	592,961	443.53
SCHOOL GENERAL	3.2500	592,961	0	592,961	1,927.12
SCHOOL VOTED	1.0000	592,961	0	592,961	592.96
CHILDREN'S TRUST	0.4612	592,961	0	592,961	273.47
SUWANNEE RIVER WATER MGT DIST	0.3368	592,961	0	592,961	199.71
CITY OF ALACHUA	5.3900	592,961	0	592,961	3,196.06

TOTAL MILLAGE 21.5087 AD VALOREM TAXES $12,753.80

LEGAL DESCRIPTION

COM SE COR SEC S 01 DEG 54 MIN 57 SEC W 3.76 FT N 87 DEG 08 MIN 33 SEC W 1090.74
See Additional Legal on Tax Roll

NON-AD VALOREM ASSESSMENTS

LEVYING AUTHORITY	UNIT	RATE	AMOUNT
550 COUNTY FIRE SERVICES	1.000	Varies	90.69

NON-AD VALOREM ASSESSMENTS $90.69

PAY ONLY ONE AMOUNT.

COMBINED TAXES AND ASSESSMENTS $12,844.49

IF PAID BY	Nov 30, 2022				
PLEASE PAY	$0.00				

Please Retain this Portion for your Records. Receipt Available Online.

JOHN POWER, CFC
ALACHUA COUNTY TAX COLLECTOR

2022 PAID REAL ESTATE 107846

NOTICE OF AD VALOREM TAXES AND NON-AD VALOREM ASSESSMENTS

PLEASE PAY IN U.S. FUNDS TO JOHN POWER, TAX COLLECTOR • P.O. Box 44310 • Jacksonville, FL 32231-4310

ACCOUNT NUMBER	PROPERTY ADDRESS
03054 001 002	UNASSIGNED LOCATION RE

TOMOKA HILLS FARMS INC
1301 DIXIANA DOMINO RD
LEXINGTON, KY 40511

PAY ONLY ONE AMOUNT

	IF PAID BY	PLEASE PAY
☐	Nov 30, 2022	$0.00
☐		
☐		
☐		
☐		

WANT TO RECEIVE YOUR BILL ELECTRONICALLY NEXT YEAR? VISIT www.AlachuaCollector.com AND SIGN UP FOR E-BILLS!

Receipt # 22-0021072 $12,330.71 Paid 11/16/2022

ALATB15081F

John Power TAX COLLECTOR Serving Alachua County

2022 PAID REAL ESTATE 15089

NOTICE OF AD VALOREM TAXES AND NON-AD VALOREM ASSESSMENTS

ACCOUNT NUMBER	PROPERTY ADDRESS	MILLAGE CODE
03873 001 000	15403 NW 173RD ST	1700

TOMOKA HILLS FARMS INC
1301 DIXIANA DOMINO RD
LEXINGTON, KY 40511

EXEMPTIONS:

SCAN TO PAY ONLINE

AD VALOREM TAXES

TAXING AUTHORITY	MILLAGE RATE	ASSESSED VALUE	EXEMPTION(S)	TAXABLE VALUE	TAXES LEVIED
COUNTY GENERAL	7.7662	450,850	0	450,850	3,501.39
LIBRARY GENERAL	1.0565	450,850	0	450,850	476.32
SCHOOL CAP PROJECT	1.5000	450,850	0	450,850	676.28
SCHOOL DISCRNRY & CN	0.7480	450,850	0	450,850	337.24
SCHOOL GENERAL	3.2500	450,850	0	450,850	1,465.26
SCHOOL VOTED	1.0000	450,850	0	450,850	450.85
CHILDREN'S TRUST	0.4612	450,850	0	450,850	207.93
SUWANNEE RIVER WATER MGT DIST	0.3368	450,850	0	450,850	151.85
CITY OF ALACHUA	5.3900	450,850	0	450,850	2,430.08

TOTAL MILLAGE 21.5087 AD VALOREM TAXES $9,697.20

LEGAL DESCRIPTION

TRACT IN FRAC SECTIONS 9 16 TWP 8 RNG 18 AND GARVIN GRANT COM SE COR OF SEC 9-8-
See Additional Legal on Tax Roll

NON-AD VALOREM ASSESSMENTS

LEVYING AUTHORITY	UNIT	RATE	AMOUNT
710 BOCC SOLID WASTE MGMT	4.000	@ 20.7800	83.12
550 COUNTY FIRE SERVICES	1.000	Varies	747.18

NON-AD VALOREM ASSESSMENTS $830.30

PAY ONLY ONE AMOUNT.

COMBINED TAXES AND ASSESSMENTS $10,527.50

IF PAID BY	Nov 30, 2022				
PLEASE PAY	$0.00				

Please Retain this Portion for your Records. Receipt Available Online.

JOHN POWER, CFC
ALACHUA COUNTY TAX COLLECTOR

2022 PAID REAL ESTATE 15089
NOTICE OF AD VALOREM TAXES AND NON-AD VALOREM ASSESSMENTS

PLEASE PAY IN U.S. FUNDS TO JOHN POWER, TAX COLLECTOR • P.O. Box 44310 • Jacksonville, FL 32231-4310

ACCOUNT NUMBER	PROPERTY ADDRESS
03873 001 000	15403 NW 173RD ST

TOMOKA HILLS FARMS INC
1301 DIXIANA DOMINO RD
LEXINGTON, KY 40511

PAY ONLY ONE AMOUNT

	IF PAID BY	PLEASE PAY
☐	Nov 30, 2022	$0.00
☐		
☐		
☐		
☐		

WANT TO RECEIVE YOUR BILL ELECTRONICALLY NEXT YEAR? VISIT www.AlachuaCollector.com AND SIGN UP FOR E-BILLS!

Receipt # 22-0021072 $10,106.40 Paid 11/16/2022

ALATB15081F

John Power TAX COLLECTOR Serving Alachua County

2022 PAID REAL ESTATE 15088

NOTICE OF AD VALOREM TAXES AND NON-AD VALOREM ASSESSMENTS

ACCOUNT NUMBER	PROPERTY ADDRESS	MILLAGE CODE
03873 000 000	UNASSIGNED LOCATION RE	1700

TOMOKA HILLS FARMS INC
1301 DIXIANA DOMINO RD
LEXINGTON, KY 40511

EXEMPTIONS:

SCAN TO PAY ONLINE

AD VALOREM TAXES

TAXING AUTHORITY	MILLAGE RATE	ASSESSED VALUE	EXEMPTION(S)	TAXABLE VALUE	TAXES LEVIED
COUNTY GENERAL	7.7662	60,780	0	60,780	472.03
LIBRARY GENERAL	1.0565	60,780	0	60,780	64.21
SCHOOL CAP PROJECT	1.5000	60,780	0	60,780	91.17
SCHOOL DISCRNRY & CN	0.7480	60,780	0	60,780	45.46
SCHOOL GENERAL	3.2500	60,780	0	60,780	197.54
SCHOOL VOTED	1.0000	60,780	0	60,780	60.78
CHILDREN'S TRUST	0.4612	60,780	0	60,780	28.03
SUWANNEE RIVER WATER MGT DIST	0.3368	60,780	0	60,780	20.47
CITY OF ALACHUA	5.3900	60,780	0	60,780	327.60

TOTAL MILLAGE 21.5087 AD VALOREM TAXES $1,307.29

LEGAL DESCRIPTION

FRAC SEC & GARVIN GRT COM NE COR SEC S 3.76 FT TO S R/W ACL RR (ABANDONED) W ALG
See Additional Legal on Tax Roll

NON-AD VALOREM ASSESSMENTS

LEVYING AUTHORITY	UNIT	RATE	AMOUNT

NON-AD VALOREM ASSESSMENTS $0.00

PAY ONLY ONE AMOUNT.

COMBINED TAXES AND ASSESSMENTS $1,307.29

IF PAID BY PLEASE PAY	Nov 30, 2022 $0.00				

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JOHN POWER, CFC
ALACHUA COUNTY TAX COLLECTOR

2022 PAID REAL ESTATE 15088

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ACCOUNT NUMBER	PROPERTY ADDRESS
03873 000 000	UNASSIGNED LOCATION RE

TOMOKA HILLS FARMS INC
1301 DIXIANA DOMINO RD
LEXINGTON, KY 40511

PAY ONLY ONE AMOUNT

	IF PAID BY	PLEASE PAY
☐	Nov 30, 2022	$0.00
☐		
☐		
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ALATB15081F

John Power TAX COLLECTOR Serving Alachua County

2022 PAID REAL ESTATE 12660

NOTICE OF AD VALOREM TAXES AND NON-AD VALOREM ASSESSMENTS

ACCOUNT NUMBER	PROPERTY ADDRESS	MILLAGE CODE
03053 000 000	UNASSIGNED LOCATION RE	1700

CAVACEPPI SHARLEEN O TRUSTEE
PO BOX 1325
ALACHUA, FL 32616

EXEMPTIONS:

SCAN TO PAY ONLINE

AD VALOREM TAXES

TAXING AUTHORITY	MILLAGE RATE	ASSESSED VALUE	EXEMPTION(S)	TAXABLE VALUE	TAXES LEVIED
COUNTY GENERAL	7.7662	1,402	0	1,402	10.89
LIBRARY GENERAL	1.0565	1,402	0	1,402	1.48
SCHOOL CAP PROJECT	1.5000	1,402	0	1,402	2.10
SCHOOL DISCRNRY & CN	0.7480	1,402	0	1,402	1.05
SCHOOL GENERAL	3.2500	1,402	0	1,402	4.56
SCHOOL VOTED	1.0000	1,402	0	1,402	1.40
CHILDREN'S TRUST	0.4612	1,402	0	1,402	0.65
SUWANNEE RIVER WATER MGT DIST	0.3368	1,402	0	1,402	0.47
CITY OF ALACHUA	5.3900	1,402	0	1,402	7.56

TOTAL MILLAGE 21.5087 AD VALOREM TAXES $30.16

LEGAL DESCRIPTION

E 18 CHS OF W 37.70 CHS S OF US 441 & N OF OLD SR 20 OR 503/107 INCLUDES COM SE
See Additional Legal on Tax Roll

NON-AD VALOREM ASSESSMENTS

LEVYING AUTHORITY	UNIT	RATE	AMOUNT

NON-AD VALOREM ASSESSMENTS $0.00

PAY ONLY ONE AMOUNT.

COMBINED TAXES AND ASSESSMENTS $30.16

IF PAID BY	Nov 30, 2022				
PLEASE PAY	$0.00				

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JOHN POWER, CFC

ALACHUA COUNTY TAX COLLECTOR

2022 PAID REAL ESTATE 12660

NOTICE OF AD VALOREM TAXES AND NON-AD VALOREM ASSESSMENTS

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ACCOUNT NUMBER	PROPERTY ADDRESS
03053 000 000	UNASSIGNED LOCATION RE

CAVACEPPI SHARLEEN O TRUSTEE
PO BOX 1325
ALACHUA, FL 32616

PAY ONLY ONE AMOUNT

	IF PAID BY	PLEASE PAY
☐	Nov 30, 2022	$0.00
☐		
☐		
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2022 PAID REAL ESTATE 12722

NOTICE OF AD VALOREM TAXES AND NON-AD VALOREM ASSESSMENTS

ACCOUNT NUMBER	PROPERTY ADDRESS	MILLAGE CODE
03054 001 000	UNASSIGNED LOCATION RE	1700

SARCAV LLC
C/O SILVIO CAVACEPPI
8303 AUTUMNWIND DR
JACKSONVILLE, FL 32218

EXEMPTIONS:

SCAN TO PAY ONLINE

AD VALOREM TAXES

TAXING AUTHORITY	MILLAGE RATE	ASSESSED VALUE	EXEMPTION(S)	TAXABLE VALUE	TAXES LEVIED
COUNTY GENERAL	7.7662	2,341	0	2,341	18.18
LIBRARY GENERAL	1.0565	2,341	0	2,341	2.47
SCHOOL CAP PROJECT	1.5000	2,341	0	2,341	3.51
SCHOOL DISCRNRY & CN	0.7480	2,341	0	2,341	1.75
SCHOOL GENERAL	3.2500	2,341	0	2,341	7.61
SCHOOL VOTED	1.0000	2,341	0	2,341	2.34
CHILDREN'S TRUST	0.4612	2,341	0	2,341	1.08
SUWANNEE RIVER WATER MGT DIST	0.3368	2,341	0	2,341	0.79
CITY OF ALACHUA	5.3900	2,341	0	2,341	12.62

TOTAL MILLAGE 21.5087 AD VALOREM TAXES $50.35

LEGAL DESCRIPTION

COM SE COR SEC S 01 DEG 54 MIN 57 SEC W 3.76 FT N 87 DEG 08 MIN 33 SEC W 1090.74
See Additional Legal on Tax Roll

NON-AD VALOREM ASSESSMENTS

LEVYING AUTHORITY	UNIT	RATE	AMOUNT

NON-AD VALOREM ASSESSMENTS $0.00

PAY ONLY ONE AMOUNT.

COMBINED TAXES AND ASSESSMENTS $50.35

IF PAID BY PLEASE PAY	Nov 30, 2022 $0.00				

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JOHN POWER, CFC
ALACHUA COUNTY TAX COLLECTOR

2022 PAID REAL ESTATE 12722
NOTICE OF AD VALOREM TAXES AND NON-AD VALOREM ASSESSMENTS

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ACCOUNT NUMBER	PROPERTY ADDRESS
03054 001 000	UNASSIGNED LOCATION RE

SARCAV LLC
C/O SILVIO CAVACEPPI
8303 AUTUMNWIND DR
JACKSONVILLE, FL 32218

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☐	Nov 30, 2022	$0.00
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Traffic Impact Analysis



Date: 4/17/2023
PN#: 21-0025
PM: Brian Snyder, PE

Brian Richard Snyder
State of Florida
Professional Engineer, License No. 74607

This item has been digitally signed and sealed by Brian Richard Snyder, PE, on the date indicated here.

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

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- Appendix I: US HWY 441 Proposed Access Improvements

1. EXECUTIVE SUMMARY

CHW has prepared this Traffic Impact Analysis (TIA) for the proposed Tomoka Hills development. The site is located south of US HWY 441 and east of NW 173rd Street, in Alachua, Florida.

For purpose of the traffic analysis, this site is separated into two phases as described below:

Phase 1 2024 (Tower Hill Headquarters)

- 71 KSF – General Office Building

Design Year 2044 (Full Buildout of Tomoka Hills)

- 72 DU – Single-Family Detached Housing
- 300 DU – Multifamily Housing (Low-Rise)
- 130 DU – Hotel
- 140 KSF – General Office 40 KSF
- 235 KSF – Shopping Center

The Design Year 2044 is based on a 20-year life of the configuration improvements being proposed at the US HWY 441/NW167th Street intersection.

The purpose of this TIA is to:

- Determine all deficiencies caused by the Phase 1 project traffic and provide mitigation strategies to correct the deficiencies;
- Demonstrate that a connection to the existing HWY 441/NW 167th Boulevard signalized intersection operates successfully through the 2044 design year with full buildout of the site;
- Determine the needed improvements required at the proposed connection with the HWY 441/NW 167th Boulevard intersection to accommodate the anticipated 2044 design year traffic; and

A conceptual plan for the Phase 1 development is provided in **Figure 1**.

A conceptual layout plan for the full buildout of the site is provided in **Figure 2**. Though a conceptual layout plan is provided for the full buildout, many of the land uses are unknown at this time since there are no immediate plans for development. Therefore, it is premature to recommend specific off-site improvements based on the full buildout development at this time. The 2044 full buildout volumes are forecasted for the purpose

of analyzing the main site connection at the US HWY 441/NW 167th Boulevard intersection, to determine the needed configuration and determine other needed access improvements that are needed for this intersection to operate successfully during the 2044 design year. Updates to this analysis or separate TIA's should be required by the City of Alachua and FDOT for future developments within Tomoka Hills.

A methodology letter was provided on October 12, 2021, along with revisions and correspondence with FDOT in February of 2022, as provided in **Appendix A**.

Since the methodology there has been discussion with the City of Alachua, FDOT, and CHW regarding alternative designs considered at the US HWY 441/NW 167th Blvd intersection. FDOT has expressed concern about how this intersection will operate in the future and has suggested limiting additional phases to this intersection. This TIA reviews this intersection in depth and provides the transportation improvements needed to maintain an acceptable level of service under the 2044 design year.

The Conclusion and Recommendations section provides the improvements recommended to support this project.

Figure 1 – Phase 1 Concept Plan

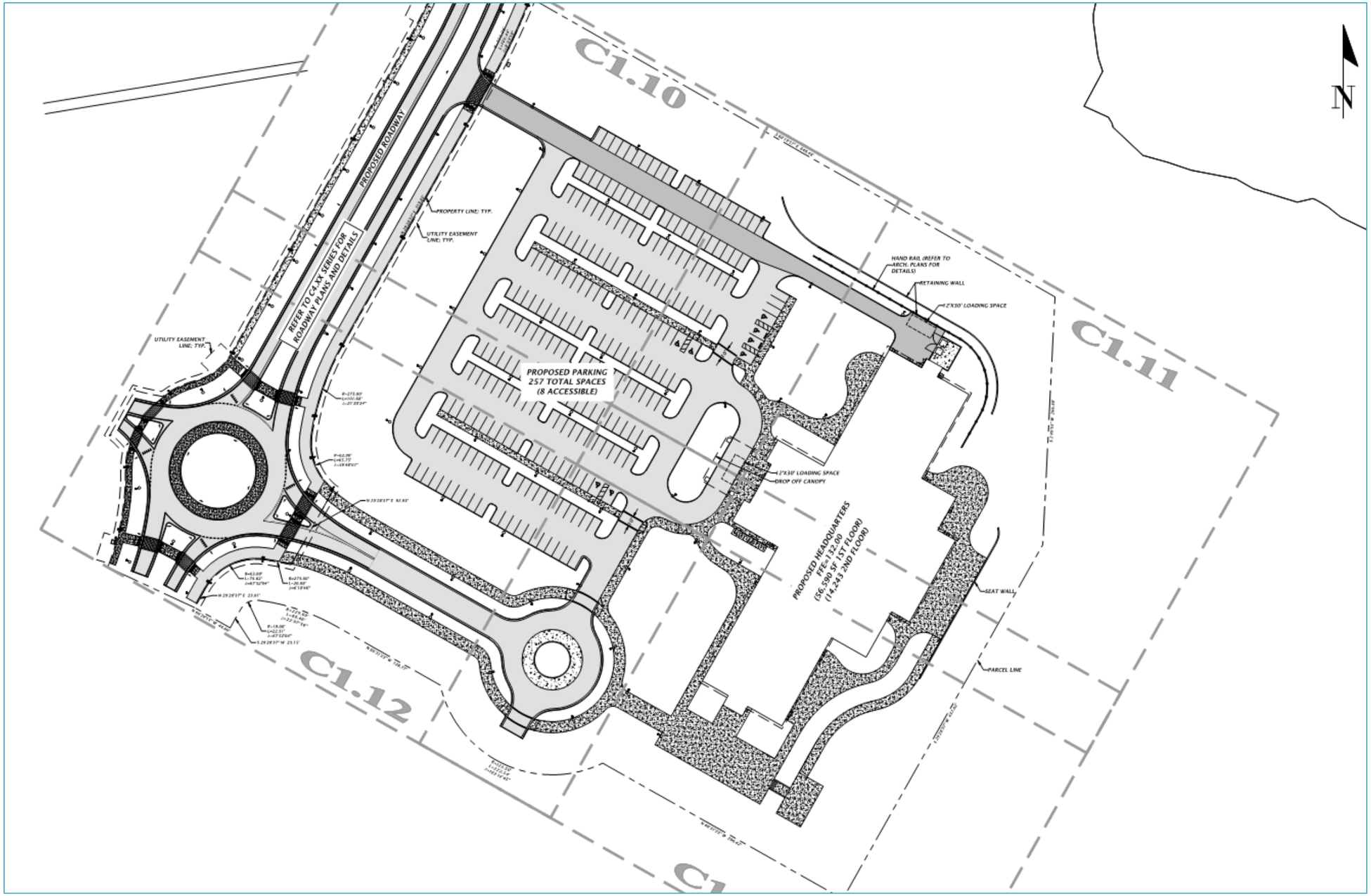


Figure 2 – Full Buildout Layout Concept



2. STUDY INTERSECTIONS

The Phase 1 study intersections consists of the following and are illustrated in **Figure 3**:

- US HWY 441/NW 173rd Street intersection;
- US HWY 441/Santa Fe Driveway east site access intersection;
- US HWY 441/NW 167th Boulevard intersection;
- US HWY 441/NW 161st Terrace intersection;
- NW 173rd Street/NW 162nd Lane intersection; and
- NW 162nd Lane/NW 167th Boulevard intersection.

The study intersections for the 2044 design year consist of the proposed future access along HWY 441 along with a proposed future directional eastbound left at the existing Publix Shopping Center right-in/right out connection. The study intersections for the 2044 design year are illustrated in **Figure 4**.

Figure 3 – Phase 1 Study Intersections



Figure 4 – 2044 Design Year Study Intersections



3. TRIP GENERATION

The Institute of Transportation Engineer's (ITE) Trip Generation Manual, 11th Edition was used to develop the trip generation for the site. The trip generation for Phase 1 is provided in **Table 1**. The trip generation for the full buildout of the Tomoka Hills site is provided in **Table 2**. The documentation for the trip generation, pass-by rates, and internal capture are provided in **Appendix B**.

Table 1 | Phase 1 Trip Generation

Phase 1 Trip Generation										
Land Use	ITE LU Code	Variable Type	Variable Quantity	Daily	AM Peak			PM Peak		
					Total	In	Out	Total	In	Out
Phase 1 - 2024										
General Office Building	710	KSF	71.000	861	125	110	15	125	21	104

Table 2 | Full Buildout Trip Generation

Full Buildout Trip Generation										
Land Use	**ITE LU Code**	**Variable Type**	**Variable Quantity**	**Daily**	**AM Peak**			**PM Peak**		
					Total	**In**	**Out**	**Total**	**In**	**Out**
Single-Family Detached Housing	210	DU	72	746	55	14	41	73	46	27
Multifamily Housing (Low-Rise)	220	DU	300	1,998	116	28	88	150	95	55
Total Residential				2,744	171	42	129	223	141	82
Total Residential with Internal Capture Reduction				2,349	167	41	126	164	91	73
Hotel	310	Rooms	130	986	58	32	26	68	35	33
Hotel with Internal Capture Reduction				815	49	32	17	55	27	28
General Office Building	710	KSF	140.000	1,555	224	197	27	220	37	183
Office with Internal Capture Reduction				1,351	201	181	20	185	22	163
Shopping Center (>150K)	820	KSF	235.000	12,000	272	169	103	1,044	501	543
Shopping Center (Retail) with Internal Capture Reduction				11,042	252	157	95	954	475	479
Shopping Center Pass-by 29%[1]				3,202	74	46	28	277	138	139
Gross New Trips				***17,285***	***725***	***440***	***285***	***1,555***	***714***	***841***
Gross New Trips with Internal Capture Reduction				***15,557***	***669***	***411***	***258***	***1,358***	***615***	***743***
Net New Trips (pass-by applied)				***12,355***	***595***	***365***	***230***	***1,081***	***477***	***604***

(1) The ITE Trip Generation Manual 11th Edition does not provide Shopping Center pass-by rates for AM and Daily, therefore, the PM Peak pass-by rate of 29% is used for all scenarios.

4. DATA COLLECTION

Turning movement counts at the study area intersections were performed during the AM and PM peak hours on April 6, 2022. The raw count data is provided in **Appendix C**.

The count data was adjusted based on the seasonal adjustment factor. **Figure 5** provides the existing (peak season) turning movements at all study area intersections.

Growth rates were determined based on historical ADT where available to derive the 2024 and 2044 Design Year background volumes. A minimum of 1.0% yearly growth rate was used for roadways with historical growth rates less than 1.0%. **Appendix D** provides the data used to determine the peak season and background traffic volumes. **Appendix E** provides the peak season and background turning movements at all study area intersections in tabular form. **Figures 6 and 7** illustrate the background conditions for 2024 and 2044 Design Year, at all study area intersections.

Figure 5 | Existing (Peak Season) Conditions

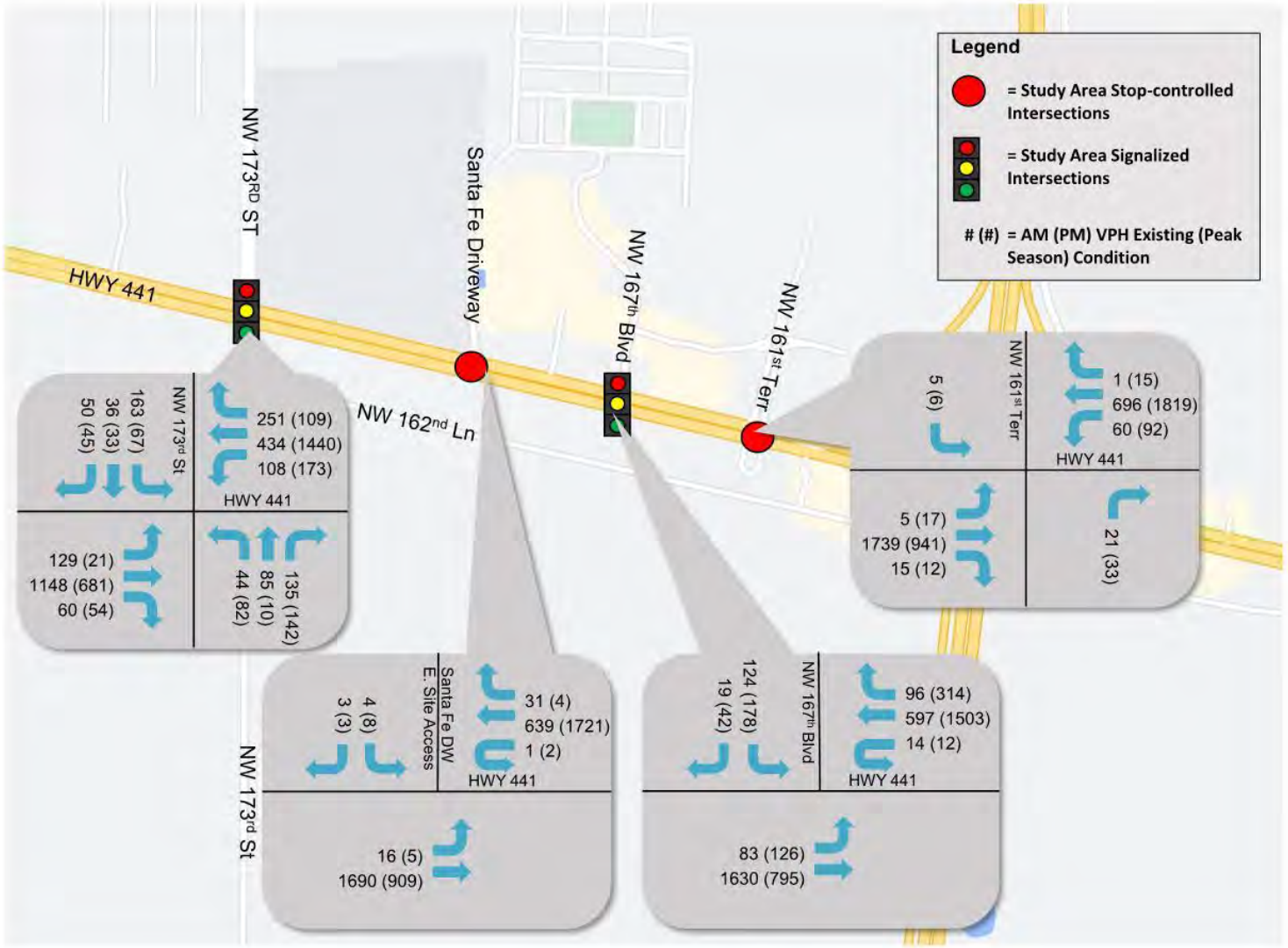


Figure 6 | 2024 Background Conditions

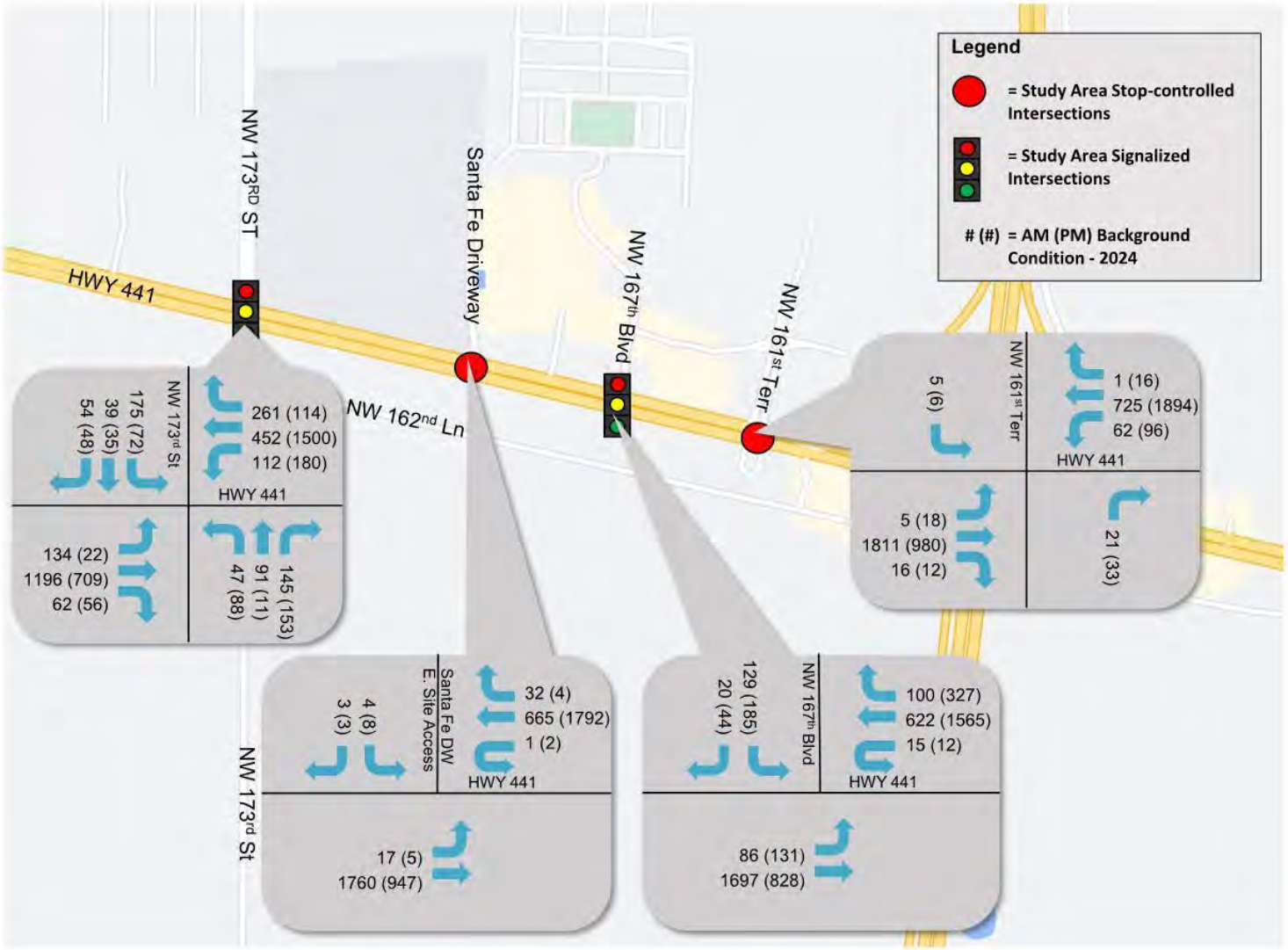
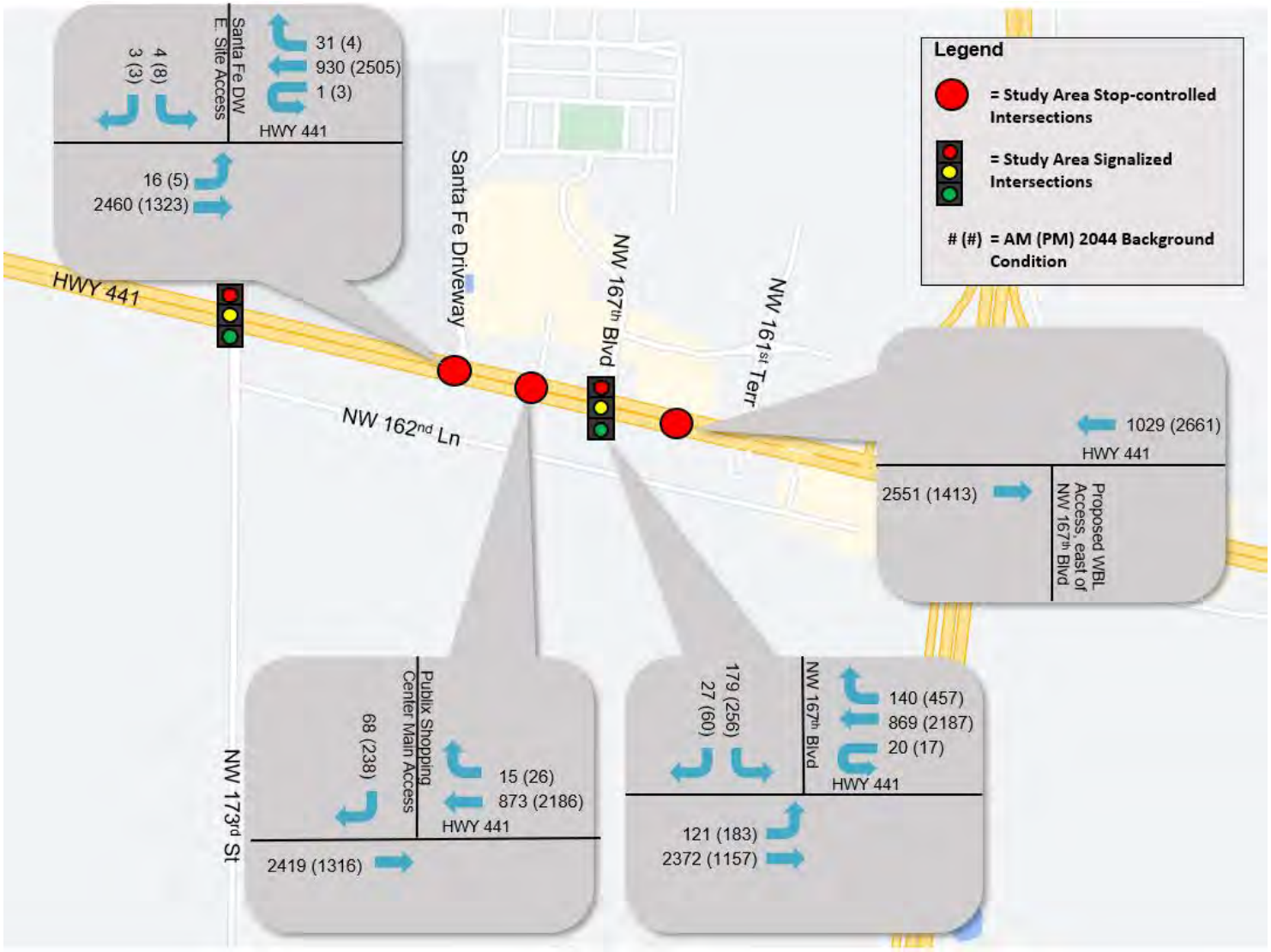


Figure 7 | 2044 Background Conditions



5. TRIP DISTRIBUTION

The project trip distribution is based on the actual trips, to and from the Publix Shopping Center and adjacent land uses. The existing traffic entering and exiting the Publix Shopping Center was used as the basis for the distribution because the Publix Shopping Center and the Tomoka Hills proposal have a mixture of retail as the main trip generator. With similar land uses, the distribution of trips throughout the network can be expected to be similar.

Turning movement counts at both the right-in/right-out Publix Shopping Center access and HWY 441/NW 167th Boulevard intersection, were used to determine the project trips. The trip distribution at the HWY 441/NW 173rd Street intersection and HWY 441/NW 161st Terrace intersection was determined based on the raw count data from these intersections.

The trip distribution is listed below and illustrated in **Figure 5**. **Appendix F** provides the trip distribution calculations.

- To/from NW 173rd Street (South) = 4%
- To/from NW 173rd Street (North) = 3%
- To/from HWY 441 (West) = 30%
- To/from NW 167th Blvd (North) = 15%
- To/from Burger King Driveway (South) = 1%
- To/from HWY 441 (East) = 47%

The trip distribution at each access point along US UWY 441 under the full buildout scenario, is provided in **Figure 11**.

Figures 8 through **12** illustrate the trip distributions, project trip turning movements and build-out conditions for Phase 1 and the 2044 Design Year with full buildout.

Figure 8 | Project Trip Distribution

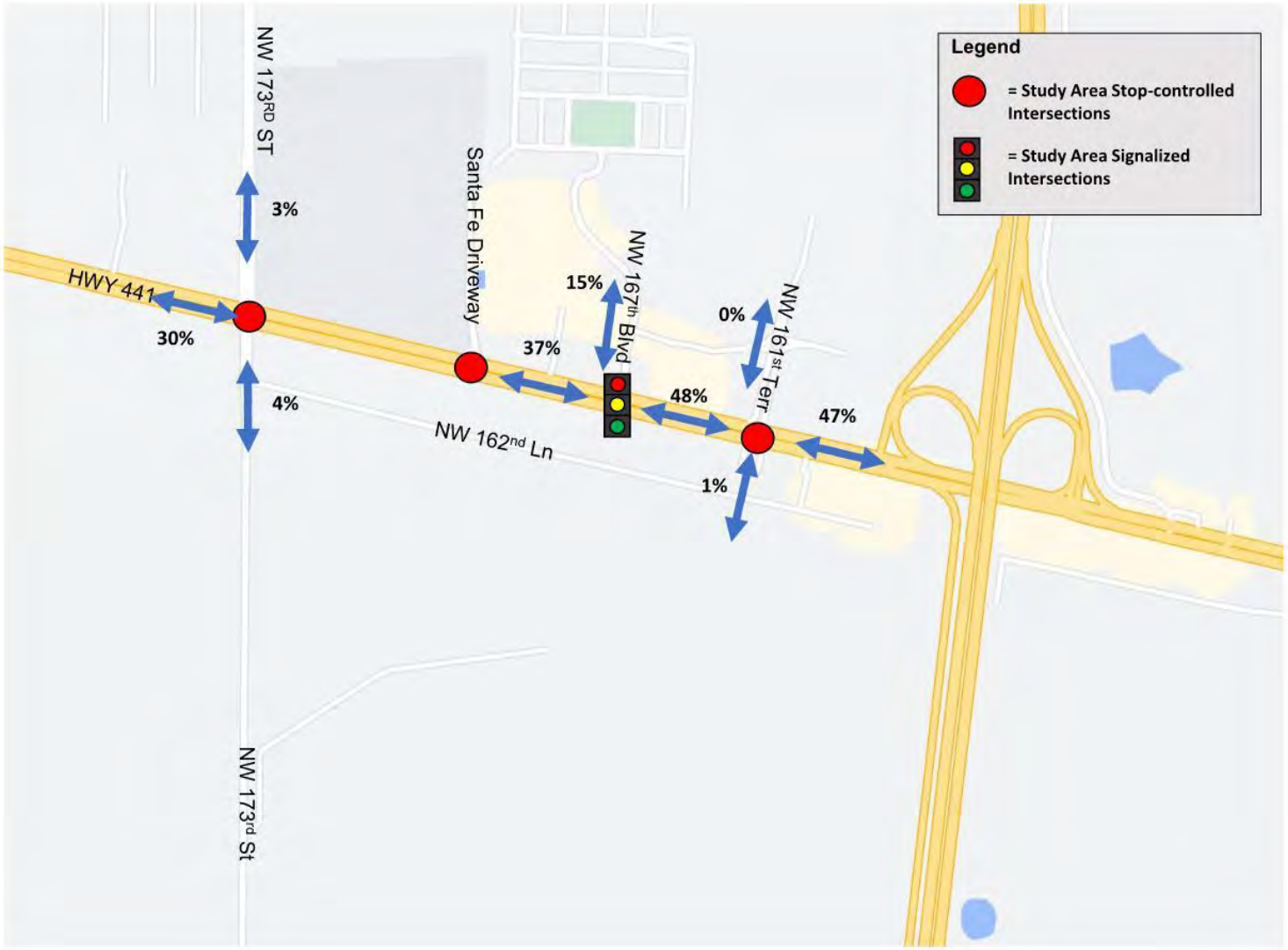


Figure 9 | Phase 1 Project Trip Turning Movements

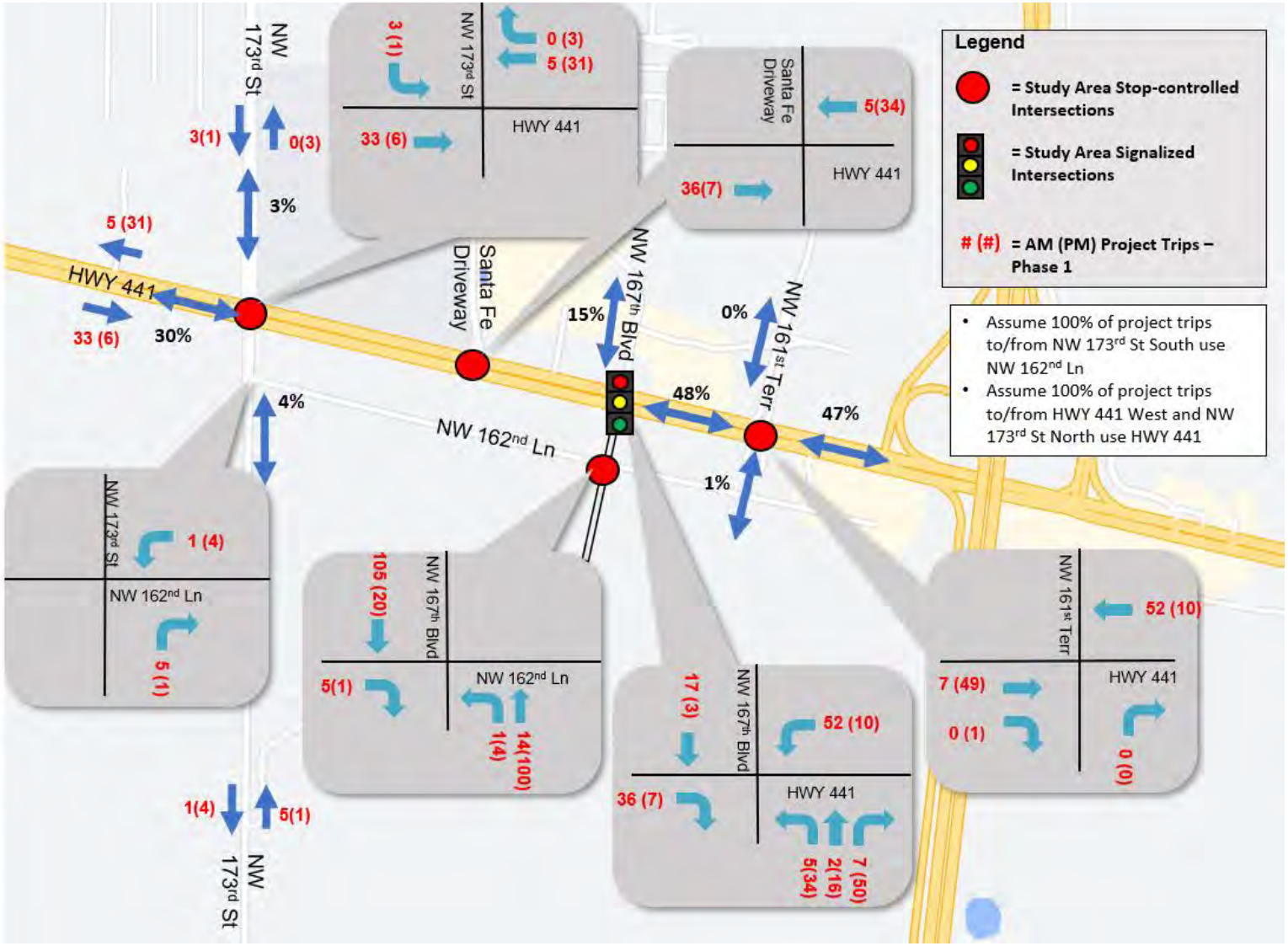


Figure 10 | Phase 1 Build-Out Condition

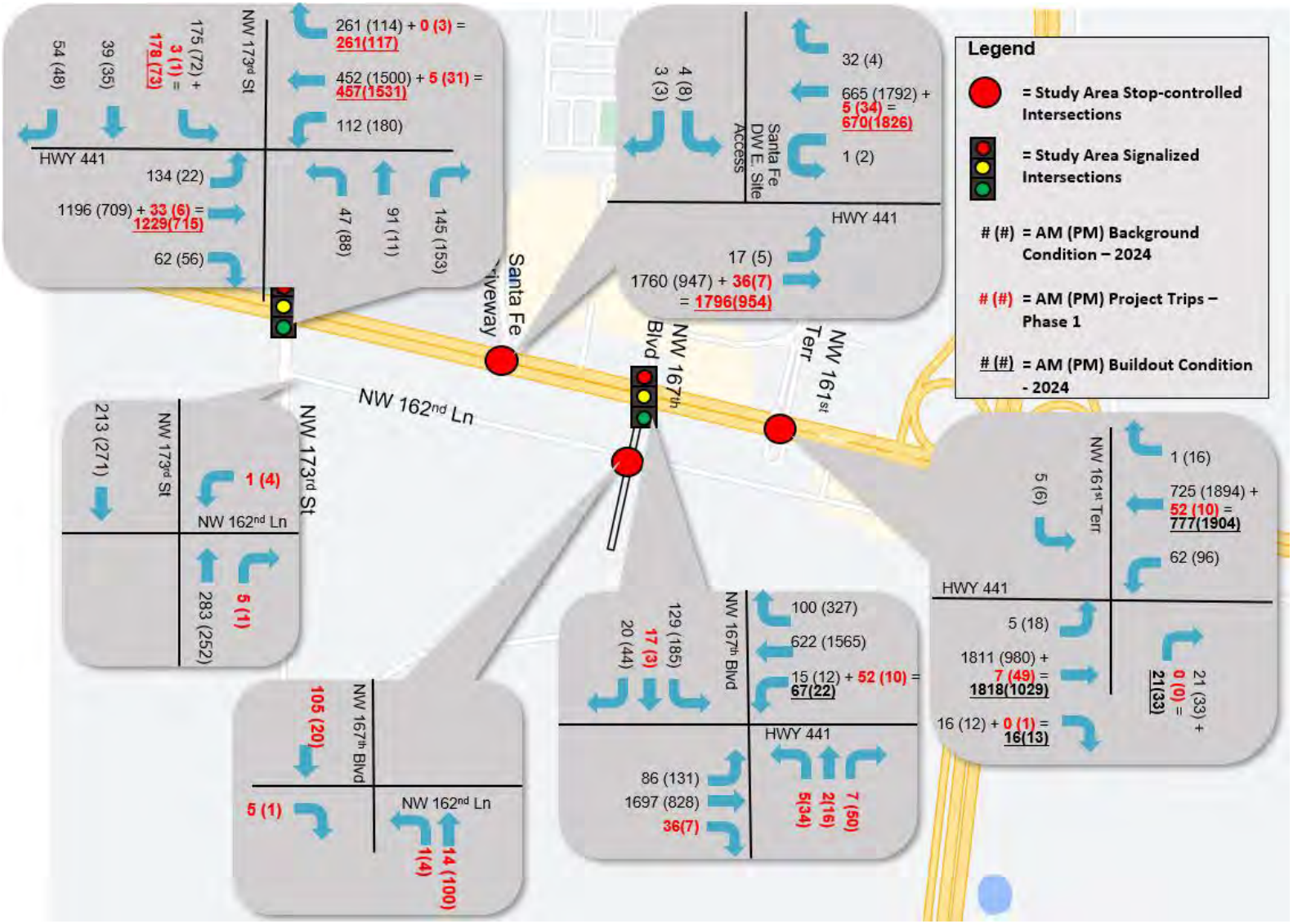


Figure 11 | Full Buildout Trip Turning Movements

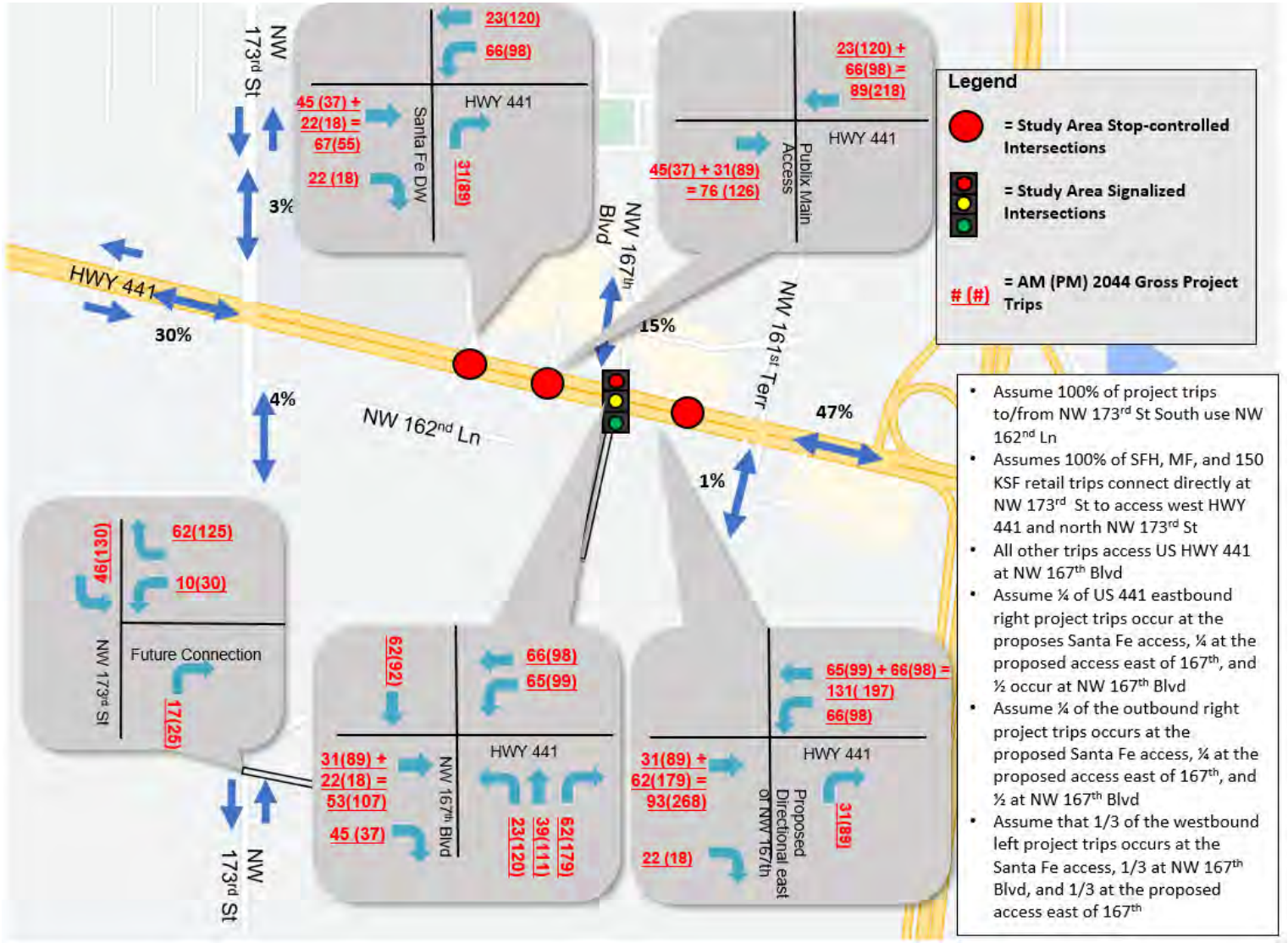
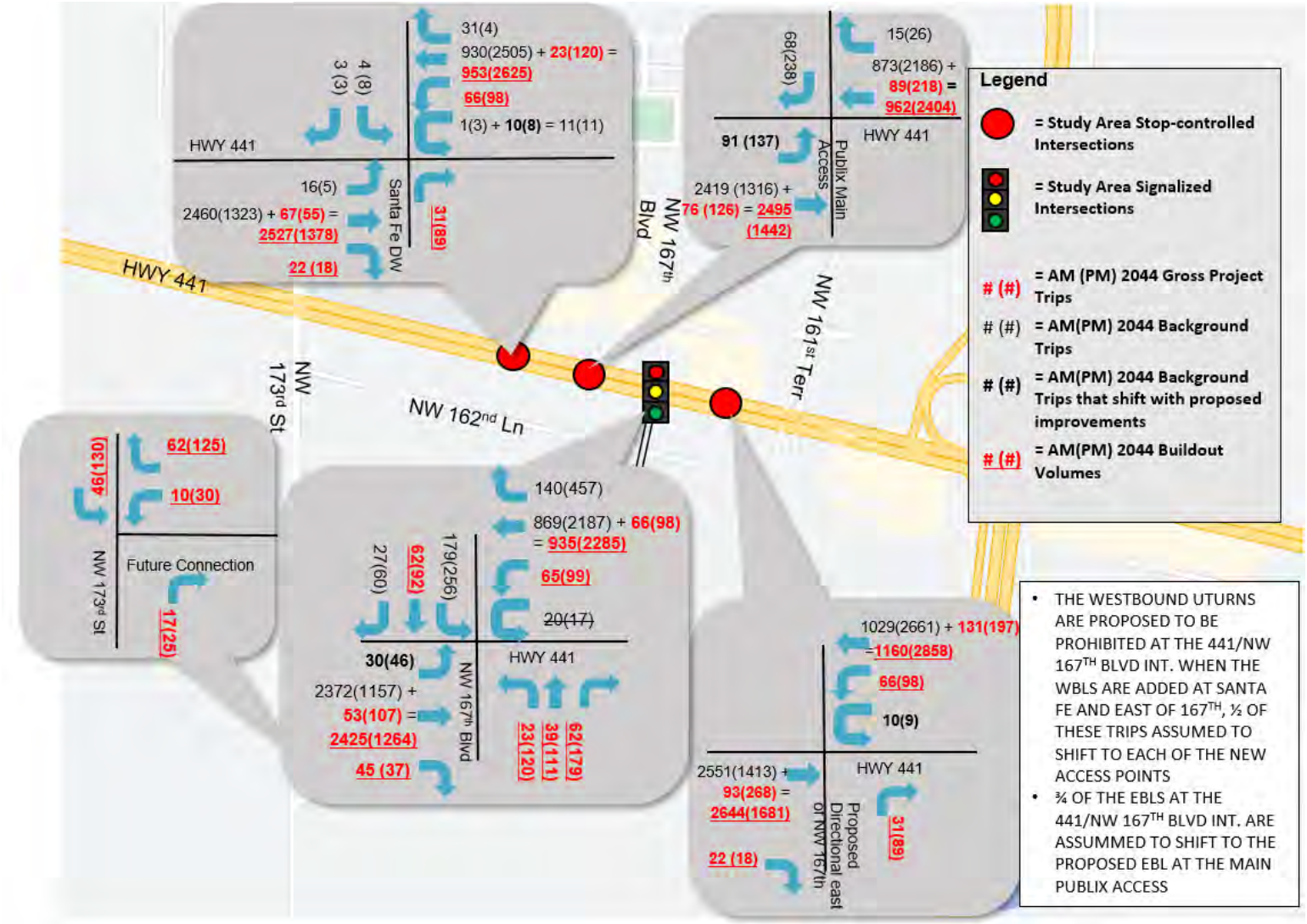


Figure 12 | 2044 Design Year Build-out Condition



6. ANALYSIS

Section 6 provides an evaluation of access management along HWY 441 in accordance with FDOT guidelines, a right-turn lane warrant analysis for the eastbound traffic at the US HWY 441/NW 167th Boulevard intersection, and an intersection analysis of all study area intersections.

6.1. Access Management Evaluation

The FDOT adheres to access management standards to reduce conflicts along the roadway system. The FDOT access management standards are provided in Chapter 14-97 of the Florida Administrative Code. Spacing standards are provided based on the access class and posted roadway speeds. According to the straight-line diagram provided in **Appendix G**, US HWY 441 is a class 3 roadway.

Based on this access class designation and a posted speed of 45 MPH, Chapter 14-97 provides the spacing standards shown in **Table 3**.

Table 3: FDOT Class 3 Access Management Standards

Access Type	Spacing Standard (FT)
Full Median Opening	2,640
Directional Median Opening	1,320
Signalized Intersections	2,640
Connections (≤ 45 MPH posted)	440

The project proposes the following improvements to improve operations along US HWY 441, specifically at the signalized intersection of US HWY 441 and NW 167th Boulevard.

- An access aligned with the Santa Fe High School Bus access. This is currently a full median opening located approximately 1,250 FT from NW 173rd Street and 800 FT from NW 167th Blvd. Consideration should be given to converting this intersection to a directional opening to better meet the spacing standard of 1,320 FT.

- An eastbound left directional is proposed at the existing Publix Shopping Center right-in/right-out access. This proposed directional median opening would be approximately 400 FT from the Santa Fe access and 400 FT from NW 167th Boulevard. Though the connection does not meet access spacing, it greatly improves the operations at the US HWY 441/NW 167th Boulevard Intersection by reducing the green time needed for the westbound lefts.

- A westbound left directional is proposed between NW 167th Boulevard and NW 161st Terrace, approximately 375 FT from the intersections. Though the connection does not meet access spacing, it greatly improves the operations at the US HWY 441/NW 167th Boulevard intersection by reducing the green time for the westbound lefts.

A conceptual plan is provided for the improvements proposed above in **Appendix I.** The proposed access and spacing is recommended to alleviate congestion along US HWY 441 by allowing additional left-in access points and not concentrating these movements at a single location.

6.2. Right-turn Lane Warrant Analysis

A right-turn lane warrant analysis, based on guidelines from the "*FDOT Access Management Guidebook 2019",* was performed for the eastbound right-turn movement at the HWY 441/NW 167th Boulevard intersection. Based on **Table 4** and given the posted speed limit of 45 MPH along HWY 441, the threshold for warranting a right-turn lane is 80 vehicles per hour. As shown in the 2044 Design Year buildout condition **Figures 12**, the maximum eastbound right turn volume is 45 vehicles per hour. Therefore, an eastbound right-turn lane is not warranted. However, providing an eastbound right turn lane provides an operational improvement to the intersection and is therefore recommended to minimize queue length and delay for the US HWY 441 eastbound approach.

Table 4 | Right-turn Lane Warrant Thresholds

Roadway Posted Speed Limit	Number of Right Turns Per Hour
45 mph or less	80 – 125[1]
Over 45 mph	35 – 55[2]
Note: A posted speed limit of 45 mph may be used with these thresholds if the operating speeds are known to be over 45 mph during the time of peak right turn demand.	
Note on traffic projections: Projecting turning volumes is, at best, a knowledgeable estimate. Keep this in mind especially if the projections of right turns are close to meeting the guidelines. In that case, consider requiring the turn lane.	
[1] The lower threshold of 80 right-turn vehicles per hour would be most used for higher volume (greater than 600 vehicles per hour, per lane in one direction on the major roadway) or two-lane roads where lateral movement is restricted. The 125 right-turn vehicles per hour upper threshold would be most appropriate on lower volume roadways, multilane highways, or driveways with a large entry radius (50 feet or greater).	
[2] The lower threshold of 35 right-turn vehicles per hour would be most appropriately used on higher volume two-lane roadways where lateral movement is restricted. The 55 right-turn vehicles per hour upper threshold would be most appropriate on lower volume roadways, multilane highways, or driveways with large entry radius (50 feet or greater).	

Source: NCHRP Report 420 (Impacts of Access Management Techniques)

6.3. Intersection Analysis

During Phase 1, a connection is proposed on HWY 441 aligned with NW 167th Boulevard. This connection provides the fourth leg to the signalized intersection. This improvement, which is provided in the City of Alachua's 2036 Long Range Transportation Plan, allows drivers to safely and efficiently enter and exit the project site. The signal at the HWY 441/NW 167th Boulevard is part of a coordinated signalized system that starts at the HWY 441/NW 173rd Street intersection and continues through the City of Alachua to the traffic signal at NW 140th Street.

During Phase 1, NW 167th Boulevard is proposed to extend through NW 162nd Lane to the proposed offices to the south. The NW 167th Boulevard/NW162nd Lane intersection is proposed as a two-way stop-controlled intersection, where the eastbound and westbound movements are stop controlled.

During the 2044 Design Year, multiple improvements are proposed to provide acceptable operations along US HWY 441, with the added background and project traffic.

The following improvements are proposed by full build-out of the site. All improvements at the US HWY 441/NW 167th Boulevard intersection are recommended with the initial construction and are analyzed under the 2024 Phase 1 Buildout and 2044 Design Year conditions. The proposed directional lefts on US HWY 441 are not needed at this time and should be considered/analyzed with future developments within the site.

- Westbound left-turn lane at the Santa Fe bus access. The site access at this location is proposed as a northbound right only. (Recommended prior to full buildout)
- Eastbound left directional at the existing Publix Shopping Center right-in/right-out.(Recommended prior to full buildout)
- Westbound left directional located between NW 167th Boulevard and NW 161st Street. (Recommended prior to full buildout)
- Improvements at the US HWY 441/NW 167th Boulevard intersection. (Recommended concurrent with Phase 1 development)
    - Northbound left turn lane
    - Northbound thru lane
    - Dual northbound right turn lanes
    - Eastbound right turn lane
    - Southbound left/right converted to a through/right lane
    - Dual southbound left turn lanes
    - Northbound protected/overlap signal timing
    - Prohibit westbound U-turns

The improvements provided above are illustrated in **Appendix I** and modeled in the buildout conditions of the analysis.

All study area intersections were analyzed during the AM and PM peak hour. HCS was used to analyze the stop-controlled intersections and Synchro 11 was used to analyze the signalized intersections. **Table 5** and **Table 6** provide the Level of Service (LOS), delay, volume to capacity (v/c) ratio, and 95th percentile queue length of the study area intersection movements.

The following intersection movement deficiencies are highlighted in **Tables 5** and **6:**

- Main Street movements or total intersection operating with a LOS of F;
- V/C ratios exceeding 1.0; and
- 95th percentile queue lengths exceeding the available storage.

The yellow highlight indicates a deficiency that occurs as a result of background traffic, a red highlight indicates a deficiency that occurs as a result of project trips added to the intersection and the blue highlight indicates that a deficiency occurs during the buildout condition, however the background condition was not analyzed.

The Synchro and HCS reports are provided in **Appendix H.**

Table 5: PM Intersection Analysis Summary

Intersection	Movement	Avail. Storage (ft)	Existing (Peak Season)				Background (2024)				Build-out (2024)				Buildout (2044) with Directional Left			
			LOS	Delay(s)	v/c	95% Queue	LOS	Delay(s)	v/c	95% Queue	LOS	Delay(s)	v/c	95% Queue	LOS	Delay(s)	v/c	95% Queue
Stop-Controlled Intersections																		
HWY 441 and Santa Fe Driveway East Site Access	EBL	350	C	15.6	0.01	0	C	16.4	0.02	0	C	16.7	0.02	0	D	34.7	0.04	25
	WBL/T	625	A	9.9	0.00	0	B	10.1	0.00	0	B	10.1	0.00	0				
	WBL	N/A													C	21.4	0.35	50
	NBR	N/A													C	19	0.27	50
	SBL	N/A	F	68.3	0.12	25	F	70.4	0.13	25	F	74.7	0.14	25	F	1365.5	1.47	50
	SBR	N/A	C	17.9	0.01	0	C	18.7	0.01	0	C	19.1	0.01	0	E	36.7	0.03	25
	Int. Total			0.5				0.3				0.3				3.6		
HWY 441 and Proposed Directional at Publix Main Access	EBL	N/A													F	120	0.96	200
	SBR	N/A													F	410.1	1.74	475
	Int. Total															26.8		
HWY 441 and Proposed Directional east of NW 167th Blvd	WBL	N/A													D	34	0.49	75
	NBR	N/A													D	25.2	0.35	50
	Int. Total															1.2		
HWY 441 and NW 161st Terr	EBL/T/R	380	C	17.8	0.06	25	C	19.1	0.07	25	C	19.2	0.07	25				
	WBL/T/R	180	B	11.6	0.15	25	B	11.3	0.15	25	B	11.7	0.16	25				
	NBR	N/A	B	13.0	0.07	25	B	12.8	0.07	25	B	13.2	0.07	25				
	SBR	N/A	C	19.1	0.02	25	C	20.0	0.03	25	C	20.1	0.03	25				
	Int. Total			0.7				0.6				0.6						
NW 167th Blvd and NW 162nd Lane	EBL/T/R	N/A									A	8.4	0.00	0				
	WBL/T/R	N/A																
	NBL/T/R	N/A									A	7.3	0.00	0				
	SBL/T/R	N/A									A	7.4	0.00	0				
	Int. Total											N/A						
NW 173rd Street at NW 162nd Lane	WBL/R	N/A									B	12.3	0.01	0				
	SBL/T/R	N/A									A	7.8	0.00	0				
	Int. Total											0.1						
Signalized Intersections																		
HWY 441 and NW 173rd St	EBL	380	F	81.2	0.29	75	F	81.5	0.29	75	F	81.5	0.29	75				
	EBT	N/A	C	22.8	0.40	325	C	23.5	0.42	325	C	23.6	0.43	350				
	EBR	270	A	0.1	0.07	0	A	0.1	0.07	0	A	0.1	0.07	0				
	WBL	460	E	74.7	0.79	275	E	75.4	0.82	300	E	70.2	0.82	250				
	WBT	N/A	D	36.1	0.66	925	D	38.7	0.69	975	D	39.1	0.71	1025				
	WBR	1000	A	8.7	0.11	75	A	9.5	0.11	75	A	7.1	0.12	50				
	NBL	190	E	66.8	0.55	150	E	69.4	0.60	150	E	69.4	0.60	150				
	NBT	N/A	B	16.9	0.55	25	B	16.8	0.57	25	B	16.8	0.57	25				
	SBL	410	E	60.2	0.40	125	E	61.1	0.43	125	E	61.2	0.44	125				
	SBT	N/A	E	77.9	0.72	125	F	81.1	0.75	150	F	81.1	0.75	150				
	Int. Total		D	35.4			D	37.2			D	37.0						
HWY 441 and NW 167th Blvd	EBL	275	D	38.8	0.58	125	D	47.4	0.62	150	E	70.9	0.52	175	E	57.2	0.64	25
	EBT	N/A	A	2.8	0.32	100	A	2.9	0.33	100	A	5.1	0.37	100	A	9.2	0.58	250
	EBR	N/A									A	0.0	0.01	0	A	0.1	0.04	0
	WBL	250	A	1.3	0.03	25	A	1.4	0.03	25	A	4.5	0.06	25	A	2	0.43	25
	WBT	N/A	A	6.7	0.66	50	A	7.5	0.70	75	C	23.6	0.85	900	B	11.9	1.00	75
	WBR	290	A	0.8	0.28	0	A	0.9	0.30	0	A	5.3	0.36	100	A	0.1	0.41	0
	NBL	N/A									D	53.9	0.21	75	F	108.3	0.88	225
	NBT	N/A									E	74.1	0.15	50	F	164.5	1.04	300
	NBR	N/A									A	1.5	0.19	0	C	25.2	0.38	100
	SBL	300	E	73.3	0.69	175	E	75.0	0.72	175	E	78.7	0.68	150	F	218.6	1.31	275
	SBT/R	300									B	18.9	0.28	50	F	127.8	0.99	350
	Int. Total		B	12.4			B	13.4			C	22.8			C	33.3		

Yellow highlight = deficiency occurring without project traffic

Red highlight = deficiency occurs due to added project trips

Blue highlight = deficiency occurs, background scenario not analyzed

Table 6: PM Intersection Analysis Summary																		
Intersection	Movement	Avail. Storage (ft)	Existing (Peak Season)				Background (2024)				Build-out (2024)				Buildout (2044) with Directional Left Improvements			
			LOS	Delay(s)	v/c	95% Queue (FT)	LOS	Delay(s)	v/c	95% Queue (FT)	LOS	Delay(s)	v/c	95% Queue (FT)	LOS	Delay(s)	v/c	95% Queue (FT)
Stop-Controlled Intersections																		
HWY 441 and Santa Fe Driveway East Site Access	EBL	350	C	15.6	0.01	0	C	16.4	0.02	0	C	16.7	0.02	0	D	34.7	0.04	25
	WBL/T	625	A	9.9	0.00	0	B	10.1	0.00	0	B	10.1	0.00	0				
	WBL	N/A													C	21.4	0.35	50
	NBR	N/A													C	19	0.27	50
	SBL	N/A	F	68.3	0.12	25	F	70.4	0.13	25	F	74.7	0.14	25	F	1365.5	1.47	50
	SBR	N/A	C	17.9	0.01	0	C	18.7	0.01	0	C	19.1	0.01	0	E	36.7	0.03	25
	Int. Total			0.5				0.3				0.3				3.6		
HWY 441 and Proposed Directional at Publix Main Access	EBL	N/A													F	120	0.96	200
	SBR	N/A													F	410.1	1.74	475
	Int. Total															26.8		
HWY 441 and Proposed Directional east of NW 167th Blvd	WBL	N/A													D	34	0.49	75
	NBR	N/A													D	25.2	0.35	50
	Int. Total															1.2		
HWY 441 and NW 161st Terr	EBL/T/R	380	C	17.8	0.06	25	C	19.1	0.07	25	C	19.2	0.07	25				
	WBL/T/R	180	B	11.6	0.15	25	B	11.3	0.15	25	B	11.7	0.16	25				
	NBR	N/A	B	13.0	0.07	25	B	12.8	0.07	25	B	13.2	0.07	25				
	SBR	N/A	C	19.1	0.02	25	C	20.0	0.03	25	C	20.1	0.03	25				
	Int. Total			0.7				0.6				0.6						
NW 167th Blvd and NW 162nd Lane	EBL/T/R	N/A									A	8.4	0.00	0				
	WBL/T/R	N/A																
	NBL/T/R	N/A									A	7.3	0.00	0				
	SBL/T/R	N/A									A	7.4	0.00	0				
	Int. Total											N/A						
NW 173rd Street at NW 162nd Lane	WBL/R	N/A									B	12.3	0.01	0				
	SBL/T/R	N/A									A	7.8	0.00	0				
	Int. Total											0.1						
Signalized Intersections																		
HWY 441 and NW 173rd St	EBL	380	F	81.2	0.29	75	F	81.5	0.29	75	F	81.5	0.29	75				
	EBT	N/A	C	22.8	0.40	325	C	23.5	0.42	325	C	23.6	0.43	350				
	EBR	270	A	0.1	0.07	0	A	0.1	0.07	0	A	0.1	0.07	0				
	WBL	460	E	74.7	0.79	275	E	75.4	0.82	300	E	70.2	0.82	250				
	WBT	N/A	D	36.1	0.66	925	D	38.7	0.69	975	D	39.1	0.71	1025				
	WBR	1000	A	8.7	0.11	75	A	9.5	0.11	75	A	7.1	0.12	50				
	NBL	190	E	66.8	0.55	150	E	69.4	0.60	150	E	69.4	0.60	150				
	NBT	N/A	B	16.9	0.55	25	B	16.8	0.57	25	B	16.8	0.57	25				
	SBL	410	E	60.2	0.40	125	E	61.1	0.43	125	E	61.2	0.44	125				
	SBT	N/A	E	77.9	0.72	125	F	81.1	0.75	150	F	81.1	0.75	150				
	Int. Total		D	35.4			D	37.2			D	37.0						
HWY 441 and NW 167th Blvd	EBL	275	D	38.8	0.58	125	D	47.4	0.62	150	E	70.9	0.52	175	E	57.2	0.64	25
	EBT	N/A	A	2.8	0.32	100	A	2.9	0.33	100	A	5.1	0.37	100	A	9.2	0.58	250
	EBR	N/A									A	0.0	0.01	0	A	0.1	0.04	0
	WBL	250	A	1.3	0.03	25	A	1.4	0.03	25	A	4.5	0.06	25	A	2	0.43	25
	WBT	N/A	A	6.7	0.66	50	A	7.5	0.70	75	C	23.6	0.85	900	B	11.9	1.00	75
	WBR	290	A	0.8	0.28	0	A	0.9	0.30	0	A	5.3	0.36	100	A	0.1	0.41	0
	NBL	N/A									D	53.9	0.21	75	F	108.3	0.88	225
	NBT	N/A									E	74.1	0.15	50	F	164.5	1.04	300
	NBR	N/A									A	1.5	0.19	0	C	25.2	0.38	100
	SBL	300	E	73.3	0.69	175	E	75.0	0.72	175	E	78.7	0.68	150	F	218.6	1.31	275
	SBT/R	300									B	18.9	0.28	50	F	127.8	0.99	350
	Int. Total		B	12.4			B	13.4			C	22.8			C	33.3		

Yellow highlight = deficiency occurring without project traffic | Red highlight = deficiency occurs due to added project trips | Blue highlight = deficiency occurs, background scenario not analyzed

As indicated in **Tables 5 and 6** there are no deficiencies that occur due to the project trips under the Phase 1 2024 condition.

As indicated in **Tables 5 and 6**, the US HWY 441/NW 167th Blvd intersection operates with a level of service of C during both the AM and the PM peaks of the 2044 design year. Even with the proposed improvements, the US HWY 441 through movements are just at capacity. Since the directional background volumes along US HWY 441 are forecasted at approximately 2,500 VPH which far exceeds an acceptable level of service of D (1,580 VPH), provided in the 2020 FDOT LOS tables, it is expected that all major intersections along this section of US HWY 441 will also be nearing or exceeding capacity, so widening to a 6-lane road should be considered prior to 2044.

The 95th percentile queue lengths under the AM and PM 2044 Design Year analysis note that the queue length is metered by upstream vehicles. To have a better understanding of this queue length, SimTraffic was used, which provides a microscopic simulation of vehicle interaction based on the volumes and signal timing inputs that are provided. A total of four simulations were run during the AM 2044 Design Year and four simulations were run during the PM 2044 Design Year. The average of the 95th percentile queue lengths are provided in **Table 7**.

Table 7: 2044 - 95th% Queue Lengths at the US HWY 441/NW 167th Blvd Int.

Movement	AM - 95th % Average Queue Length	PM - 95th % Average Queue Length
EBL	50	125
EBT	275	250
WBL	75	75
WBT	100	175
WBR	25	50
NBL	75	250
NBT	100	250
NBR	75	175
SBL	225	325
SBT/R	175	325

As shown in **Table 7**, the 95th percentile queue lengths are not significantly long. The eastbound and westbound through movements do not exceed 300 FT and will not impact the adjacent intersections.

During the AM peak of the 2044 Design Year Analysis, the proposed westbound lefts at the Santa Fe access and the proposed access east of NW 167th Boulevard operate with V/C exceeding 1.0, however, the 95th percentile queue lengths of 175 FT and 200 FT can be stored in the left turn lane and will not impact the US HW 441 through lanes. Therefore, no improvements are recommended to mitigate this condition.

7. CONCLUSIONS AND RECOMMENDATIONS

Based on the findings from this TIA, providing a full access connection to the HWY 441/NW 167th Boulevard signalized intersection, is recommended with Phase 1 of the development. As indicated in **Tables 5 and 6**, this intersection operates well with a C level of service during the AM and PM peaks of the 2044 Design Year, given the recommended improvements provided below, and illustrated in **Appendix I**.

- Westbound left-turn lane at the Santa Fe bus access. The site access at this location is proposed as a northbound right only, since the full median opening does not meet FDOT spacing standards.
- Eastbound left directional at the existing Publix Shopping Center right-in/right-out
- Westbound left directional located between NW 167th Boulevard and NW 161st Street
- Improvements at the US HWY 441/NW 167th Boulevard intersection
    - Northbound left turn lane
    - Northbound thru lane
    - Dual northbound right turn lanes
    - Eastbound right turn lane
    - Southbound left/right converted to a through/right lane
    - Dual southbound left turn lanes
    - Northbound protected/overlap signal timing
    - Prohibit westbound U-turns

The US HWY 441/NW 167th Boulevard recommended improvements should be provided with the initial design. The proposed directional lefts on US HWY 441 are not needed at this time and should be considered/analyzed with future developments within the site.

Appendix A
Methodology Correspondence and Approval

October 12, 2021

Mr. Tom Cavin, PE
Jacksonville Studies Engineer
Florida Department of Transportation
2198 Edison Avenue, MS2815

Re: NW 167th Boulevard Extension, Alachua, FL

Dear Mr. Cavin,

CHW is preparing a Traffic Impact Analysis (TIA) for proposed developments located between US HWY 441 and NW 162nd Lane, south of NW 167th Boulevard in Alachua, Florida. The full build-out will provide uses such as medical office, fast-food, retail, and hotel, as provided in the **Table 1**. As part of the site development, an extension of NW 167th Boulevard is proposed from US HWY 441 to NW 162nd Lane.

To serve the proposed developments a south leg is being proposed at the intersection of US HWY 441 and NW 167th Boulevard. The preliminary site locations and proposed connection to the intersection of US HYW 441 and NW 167th Boulevard are provided in **Attachment A**. The main goal of the study is to determine the allowable level of development based on the capacity of the proposed south leg of the intersection and to recommend the needed improvements for this connection.

In addition to the connection proposed at US HWY 441 and NW 167th Boulevard, a connection to US HWY 441 aligned with the median opening that serves the east driveway at Santa Fe High School, is also being proposed. All other access will be along NW 162nd Lane or the frontage road that parallels US HWY 441.

Please review the methodology and either provide comment for the purposes of modification/ clarification or provide acceptance.

Study Area

The study area will consist of the following intersections:

- US 441 and the Santa Fe Driveway East Site Access
- US 441 and NW 167th Boulevard

Land Use and Trip Generation

Table 1 provides the trip generation for the proposed and under construction/permitted land uses that will utilize the US HWY 441 and proposed NW 167th Boulevard extension. The study considers the anticipated land uses and sizes provided in **Table 1** as a base point for the purpose of analysis, it is understood that the development's being proposed may generate volumes that exceed the NW 167th Boulevard south leg that is being proposed. If this occurs, the study will recommend a development smaller in size. The trip generation is based on the Institute of Transportation Engineer's (ITE) Trip Generation Manual, 10th Edition.

Trip Generation										
Land Use	ITE LU Code	Variable Type	Variable Quantity	Daily	AM Peak			PM Peak		
					Total	In	Out	Total	In	Out
Existing										
Fast Food Restaurant with Drive-Through Window - BK Existing	934	KSF	2.928	1,379	118	60	58	1,960	1,019	941
Fast-Food Pass-by Trips, AM=49%, PM=50%, Weekday=49.5%[1]				683	58	29	28	980	510	471
Under Construction/Permitted										
Fast Food Restaurant with Drive-Through Window - KFC Under Construction	934	KSF	1.904	897	77	39	38	1,274	662	612
Fast-Food Pass-by Trips, AM=49%, PM=50%, Weekday=49.5%[1]				444	38	19	19	637	331	306
Proposed										
Hotel	310	Rooms	130	1,087	61	36	25	78	40	38
Medical-Dental Office Building	720	KSF	4.250	76	13	10	3	16	4	12
Shopping Center	820	KSF	5.000	784	154	95	59	59	28	31
Shopping Center Pass-by 34%[2]				267	52	32	20	20	10	11
Fast-Food Restaurant with Drive-Through Window	934	KSF	4.663	2,196	187	95	92	3,104	1,614	1,490
Fast-Food Pass-by Trips, AM=49%, PM=50%, Weekday=49.5%[1]				1,087	92	47	45	1,552	807	745
Gross New Trips				*6,419*	*610*	*335*	*275*	*6,491*	*3,367*	*3,124*
Net New Trips (pass-by applied)				*3,938*	*370*	*208*	*163*	*3,302*	*1,709*	*1,591*

(1) The ITE Tirp Generation Manual provides a Fast-Food pass-by trip rate of 49 for the AM peak hour and 50 for the PM peak hour, but does not provide a pass-by rate for daily trips. The daily trip pass-by rate was estimated as the average of the AM and PM rates or 49.5%.

(2) The ITE Trip Generation Manual does not provide Shopping Center pass-by rates for AM and weekday, therefore, the PM pass-by rate of 34% is used for all scenarios.

Data Collection

Turning movement counts will be performed at the following intersections during the AM and PM peak two hours. Counts will be collected on a Tuesday, Wednesday, or Thursday. The counts will include pedestrians and trucks, in addition to passenger vehicles. The counts will be performed at the following intersections:

- US 441 and the Santa Fe Driveway East Site Access
- US 441 and the right-in/right-out access serving the Publix Shopping Center
- US 441 and NW 167th Boulevard

A peak season factor and historical growth rate will be derived from FDOT Traffic Online data and applied to the study area intersections to estimate the background traffic. A historical growth rate will be applied to the US HWY 441 project trips based on a 2026 final design year. A minimum 1% growth rate will be applied if the historical growth rate is less than 1%. The project trips to/from the HighPoint Crossing Development will be added to the NW 167th Boulevard north leg, based on the projected volumes from the "*TIA for HighPoint Crossing*" dated June 1, 2017. Additionally, reserved trips for permitted developments, based on the City of Alachua records, will be added to the roadway network.

Trip Distribution

We propose deriving the project trip distribution based on the actual trips, to and from the Publix Shopping Center. Turning movement counts at both the right-in/right-out Publix Shopping Center access and NW 167th Boulevard will be used to determine these project trips.

Analysis

Intersection Analysis

An intersection analysis will be performed at the study area intersections during the following conditions:

- Existing (Peak Season) Condition
- 2026 Background Condition
- 2026 Build-out Condition - The build-out condition intersection analysis will be performed as described below

The analysis will establish a trip distribution as described above. An intersection analysis will be performed at the intersection of US HWY 441 and NW 167th Boulevard which will determine the maximum trip generation that can occur. With this trip generation known, the study will provide recommendations on the size of development that should be permitted, up to the proposed development provided. This maximum build-out volume will then be applied to the proposed access aligned with the east Santa Fe Access.

US HWY 441 at NW 167th Boulevard Signal Improvements

With the proposed south leg at this intersection, adjustments such as signal retiming, and signal head additions will be required. The study will provide the recommended northbound left-turn treatment, signal head types, signal retiming, and all other major improvements that need to be incorporated in the signal modification design.

Access Management Review

The study will review the FDOT Spacing Standards with the proposed access at the Santa Fe High School east access and provide recommendations regarding the location of the access and the access type.

Turn Lane Warrant Analysis

The study will include a turn-lane warrant analysis for the following movements:

- Eastbound right-turn at the intersection of US HWY 441 and NW 167th Boulevard
- Eastbound right-turn at the Santa Fe Driveway East Site Access
- Westbound left-turn at the Santa Fe Driveway East Site Access

Report

A draft report, including, as a minimum, the following will be submitted for review and comment.

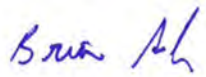
- Study Area Map
- Existing Conditions
- Trip Generation
- Data Collection
- Trip Distribution
- Analysis
  - AM and PM Intersection LOS, Delay, V/C and 95th Percentile Queue Length Analysis
  - US HWY 441 at NW 167th Boulevard Signal Improvements
  - Turn Lane Warrant Analysis
  - Access Management Review
- Conclusion and Recommendations
- Appendices with Supporting Documentation

Following any revisions, based upon staff comments, we will prepare a final signed and sealed report.

If your office concurs with this methodology, please find the appropriate signature block below and sign as such or provide your approval by email.

Thank you for your review and consideration.

Sincerely,
CHW



Brian Snyder, P.E.
Project Manager

I concur with the traffic study methodology presented for the proposed NW 167th Extension Traffic Study.

Tom Cavin, PE Date

Attachment A
Development Concept and Existing Sites


PROPOSED CONNECTION
PROPOSED CONNECTION
M L King Blvd
US-441 S
NW 162 Ln
NW 173rd St
NW 161st Terrace
Ellianos Coffee Company
Takeout • Delivery
RaceWay Of Alachua
El Patio
Takeout
Mobil
Americas Best Value Inn Alachua
Zaxby's C & Buffalo
Takeout
Circle K
Convenience store
Royal Inn
3051-4
3051
3055
3055-1-3
3055-1
3055-1-1
3055-1-4
3871
3056
3056-1
3056-1-1
3056-1-2
3058
3054-1
3053-1-8
3053-1-6
3053-1-3
3053-1-1
3053-1-2
3053-2-1
3049-3
3061-4-1
3061-4
3061
3054-1-1
1.0 ACRES
MEDICAL DENTAL OFFICE
4,250 SF
1.15 ACRES
2,000 SF
1.15 ACRES
2,663 SF
1.3 ACRES
SHOPPING CENTER
2,740 SF (ESTIMATED)
1.3 ACRES
SHOPPING CENTER
2,740 SF (ESTIMATED)
1.3 ACRES
SHOPPING CENTER
2,740 SF (ESTIMATED)
.76 ACRES
SHOPPING CENTER
1,600 SF (ESTIMATED)
1.02 ACRES
SHOPPING CENTER
2,150 SF (ESTIMATED)
1.01 ACRES
1,904 SF
1.28 ACRES
2,928 SF
1.28 ACRES
6.1 ACRES
HOTEL
130 ROOMS
FAST-FOOD RESTAURANT W/ DRIVE-THRU
FAST-FOOD RESTAURANT W/ DRIVE-THRU
FAST-FOOD RESTAURANT W/ DRIVE-THRU (KFC)
FAST-FOOD RESTAURANT W/ DRIVE-THRU (BURGER KING)
ESTIMATED DEVELOPMENT FACTOR BASED ON KFC AND BURGER KING
= (1,904 SF + 2,928 SF) / (1.01 + 1.28)
4832/2.29 = 2,110 SF/AC

From: Cavin, Tom <Tom.Cavin@dot.state.fl.us>
Sent: Monday, February 14, 2022 4:39 PM
To: Brian Snyder <brians@chw-inc.com>
Subject: FW: NW 167th Blvd Extension

Brian,

Thanks for the heads up. No big issue for me. 😊

Tom Cavin, P.E.
Jacksonville Studies Engineer
Florida Department of Transportation
2198 Edison Avenue, MS2815
Tom.cavin@dot.state.fl.us
904-360-5641



From: Brian Snyder <brians@chw-inc.com>
Sent: Monday, February 14, 2022 3:47 PM
To: Cavin, Tom <Tom.Cavin@dot.state.fl.us>
Cc: Doyle, Adam <Adam.Doyle@dot.state.fl.us>; Emmons, Robert <Robert.Emmons@dot.state.fl.us>; James Harriott

<jamesh@chw-inc.com>
Subject: RE: NW 167th Blvd Extension

Tom,

I have been informed that we will be doing the TIA only and providing the data to Jim Knight and his office will do any necessary /required ICE. Please contact Jim Knight if you need more information on that.

Thank you,

BRIAN SNYDER, PE | Project Manager
d: (386) 518-5154 | **c:** (352) 339-2938
e: brians@chw-inc.com
w: www.chw-inc.com

JACKSONVILLE.GAINESVILLE.OCALA
t: (904) 619-6521 | 8563 Argyle Business Loop, Suite 3, Jacksonville, FL 32244
t: (352) 331-1976 | 11801 Research Drive, Alachua, FL 32615
t: (352) 414-4621 | 101 NE 1st Avenue, Ocala, FL 34470
PLANNING.DESIGN.SURVEYING.ENGINEERING.CONSTRUCTION.

From: Cavin, Tom <Tom.Cavin@dot.state.fl.us>
Sent: Monday, February 14, 2022 10:59 AM
To: Brian Snyder <brians@chw-inc.com>
Cc: Doyle, Adam <Adam.Doyle@dot.state.fl.us>; Emmons, Robert <Robert.Emmons@dot.state.fl.us>; James Harriott <jamesh@chw-inc.com>
Subject: RE: NW 167th Blvd Extension

Brian,

In order to add a new leg to the existing signalized intersection, an ICE Analysis will be required for this proposal. You can include it as part of the traffic study if you like (as you did with Sandia).

Tom Cavin, P.E.
Jacksonville Studies Engineer
Florida Department of Transportation
2198 Edison Avenue, MS2815
Tom.cavin@dot.state.fl.us
904-360-5641

From: Brian Snyder <brians@chw-inc.com>
Sent: Friday, February 11, 2022 11:05 AM
To: Cavin, Tom <Tom.Cavin@dot.state.fl.us>
Cc: Doyle, Adam <Adam.Doyle@dot.state.fl.us>; Emmons, Robert <Robert.Emmons@dot.state.fl.us>; James Harriott <jamesh@chw-inc.com>
Subject: FW: NW 167th Blvd Extension

EXTERNAL SENDER: Use caution with links and attachments.

Tom,

This project has gained some traction so we will be starting the TIA soon. There is a proposed 55 KSF office that has been included, that will be located approximately 2,000 FT south of US 441 and will connect via the NW 167th Blvd Extension.

Also, because of the added land use, we will analyze additional intersections. The updated study area is provided below.

- HWY 441 and NW 173rd Street
- HWY 441 and the Santa Fe Driveway East Site Access
- HWY 441 and NW 167th Boulevard
- HWY 441 and NW 161st Terrace

Thank you,

BRIAN SNYDER, PE | Project Manager
d: (386) 518-5154 | **c:** (352) 339-2938
e: brians@chw-inc.com
w: www.chw-inc.com

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t: (352) 414-4621 | 101 NE 1st Avenue, Ocala, FL 34470
PLANNING.DESIGN.SURVEYING.ENGINEERING.CONSTRUCTION.

From: Brian Snyder
Sent: Tuesday, October 12, 2021 10:46 AM
To: tom.cavin@dot.state.fl.us
Cc: James Harriott <jamesh@chw-inc.com>
Subject: NW 167th Blvd Extension

Tom,

Please see the NW 167th Blvd Extension methodology.

I did not include an ICE but we can discuss at tomorrow's meeting.

Thanks

BRIAN SNYDER | Project Manager
d: (386) 518-5154 | **c:** (352) 339-2938
e: brians@chw-inc.com
w: www.chw-inc.com

Appendix B
Trip Generation Documentation

Single-Family Detached Housing
(210)

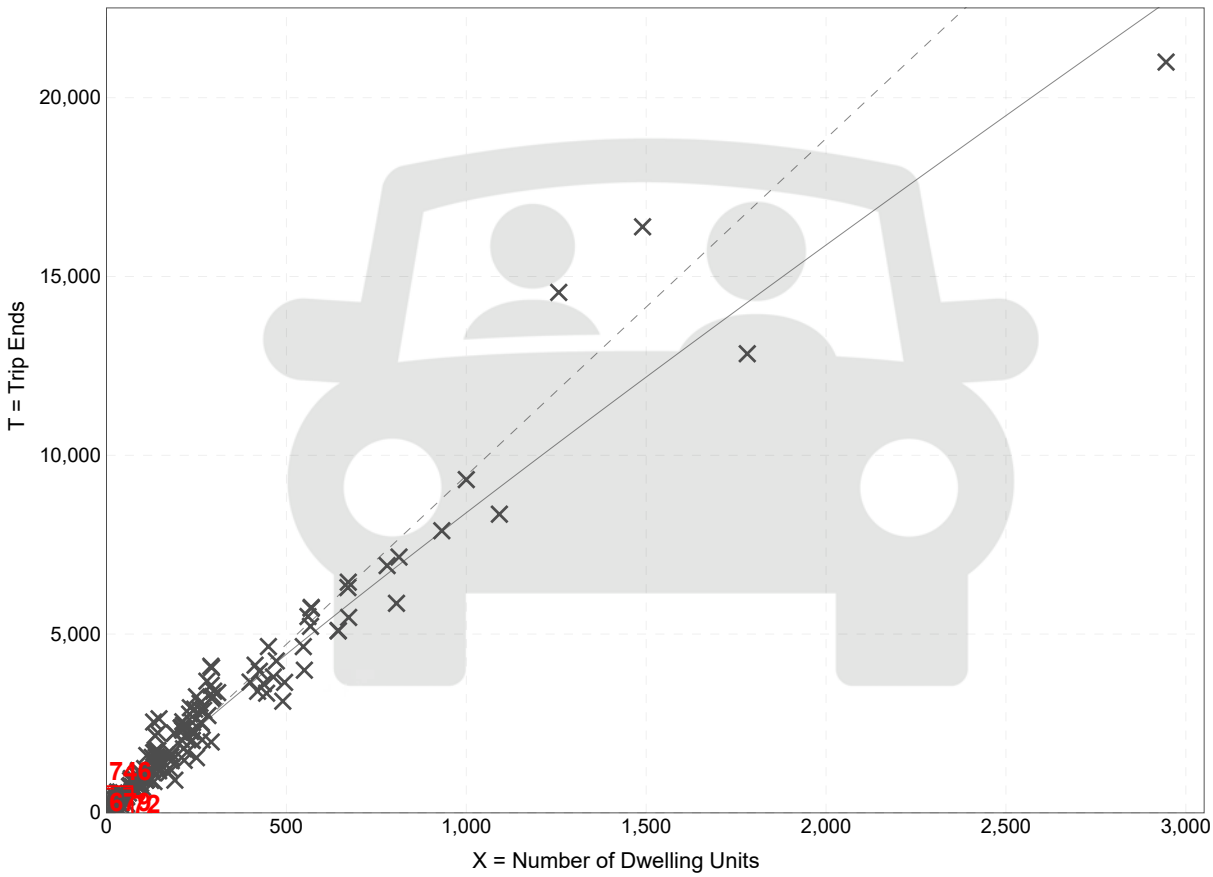
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 174
Avg. Num. of Dwelling Units: 246
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
9.43	4.45 - 22.61	2.13

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.92 Ln(X) + 2.68 **R^2= 0.95**

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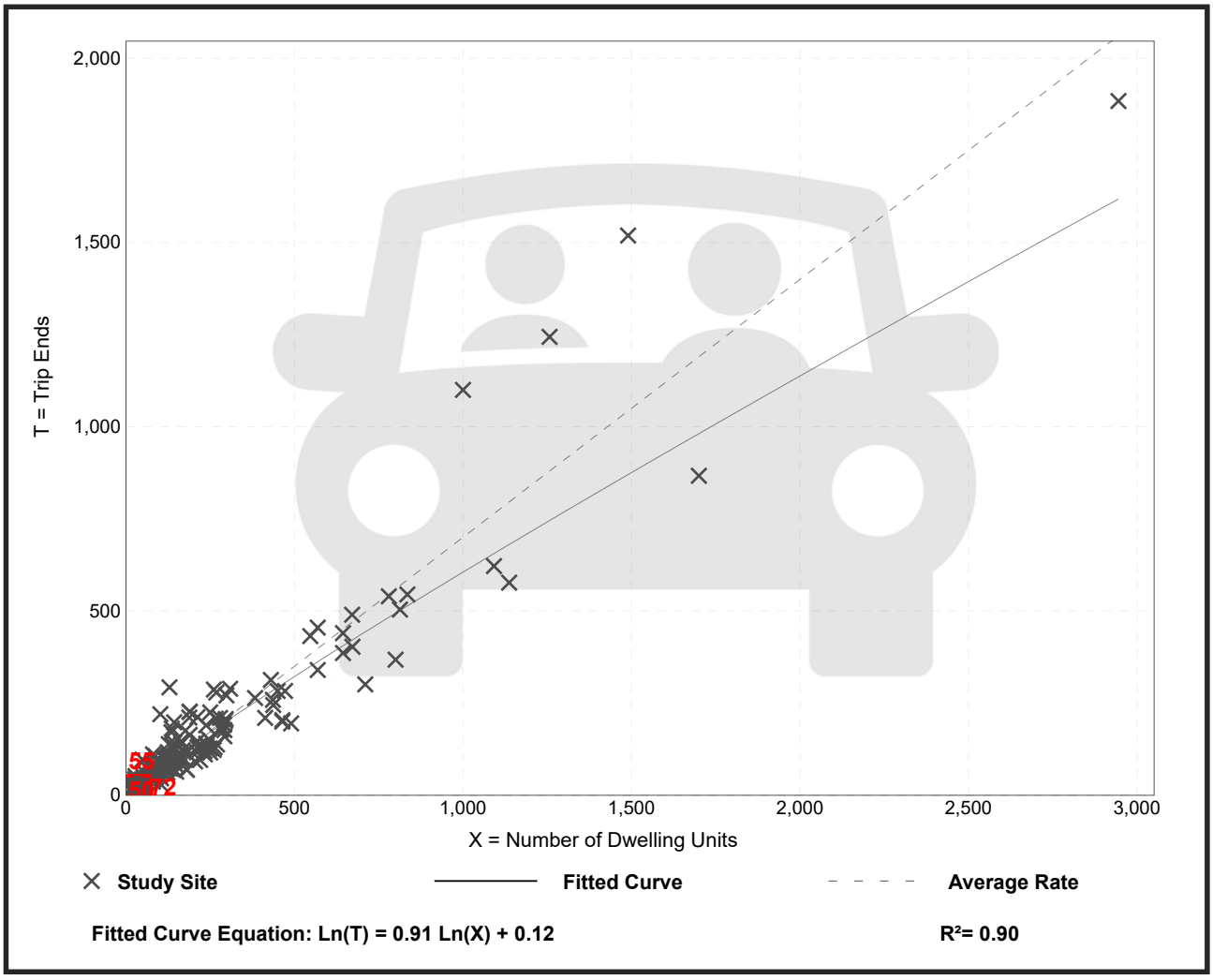
Single-Family Detached Housing
(210)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 192
Avg. Num. of Dwelling Units: 226
Directional Distribution: 25% entering, 75% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.70	0.27 - 2.27	0.24

Data Plot and Equation



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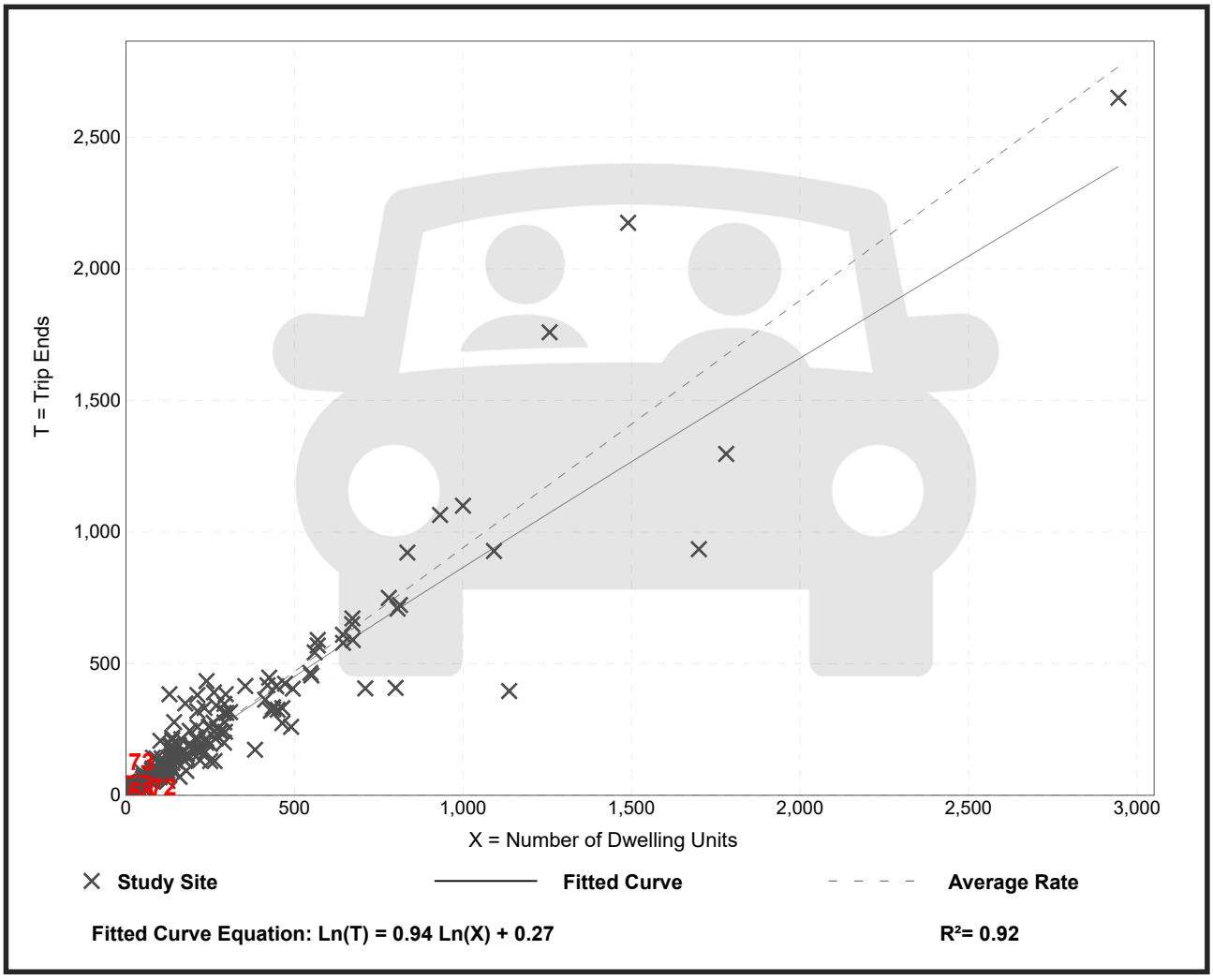
Single-Family Detached Housing
(210)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 208
Avg. Num. of Dwelling Units: 248
Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.94	0.35 - 2.98	0.31

Data Plot and Equation



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Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

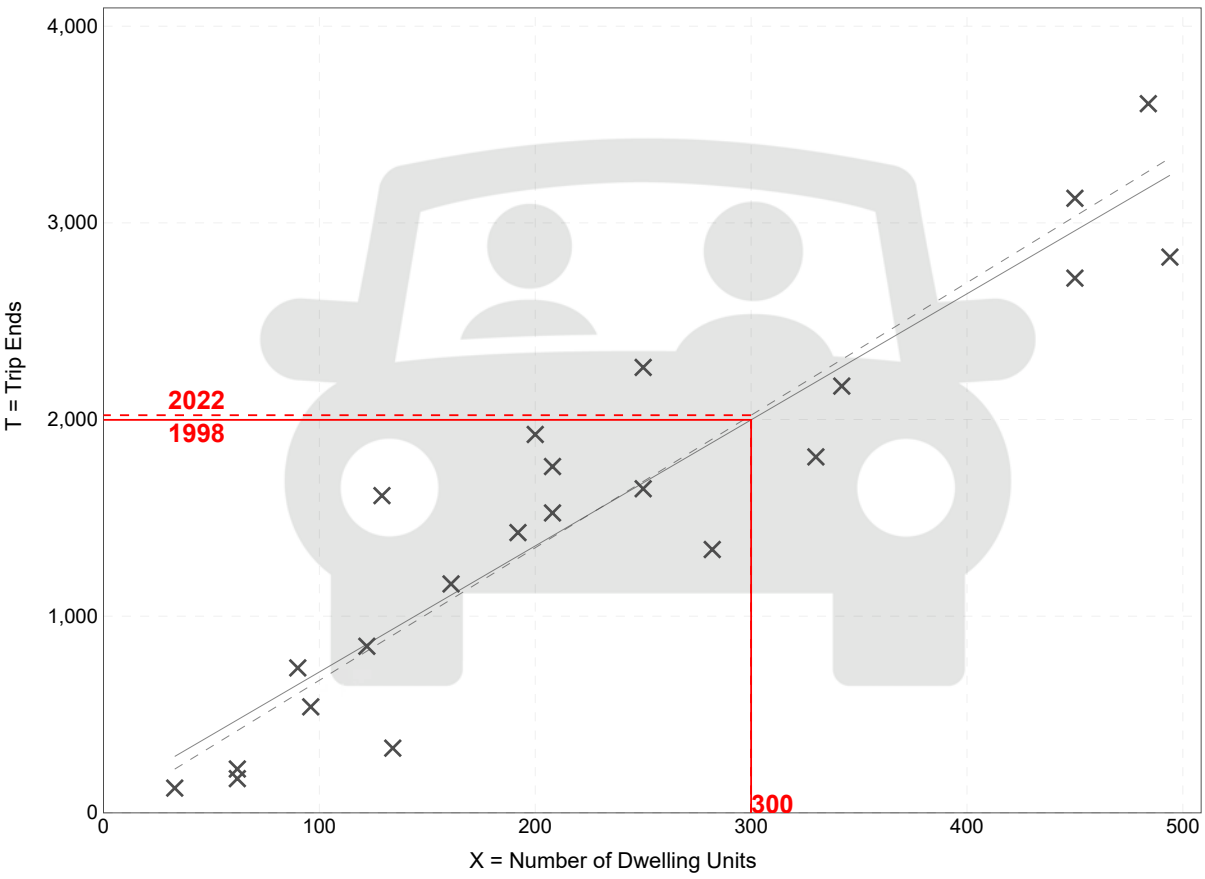
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 22
Avg. Num. of Dwelling Units: 229
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
6.74	2.46 - 12.50	1.79

Data Plot and Equation



Fitted Curve Equation: T = 6.41(X) + 75.31

R^2= 0.86

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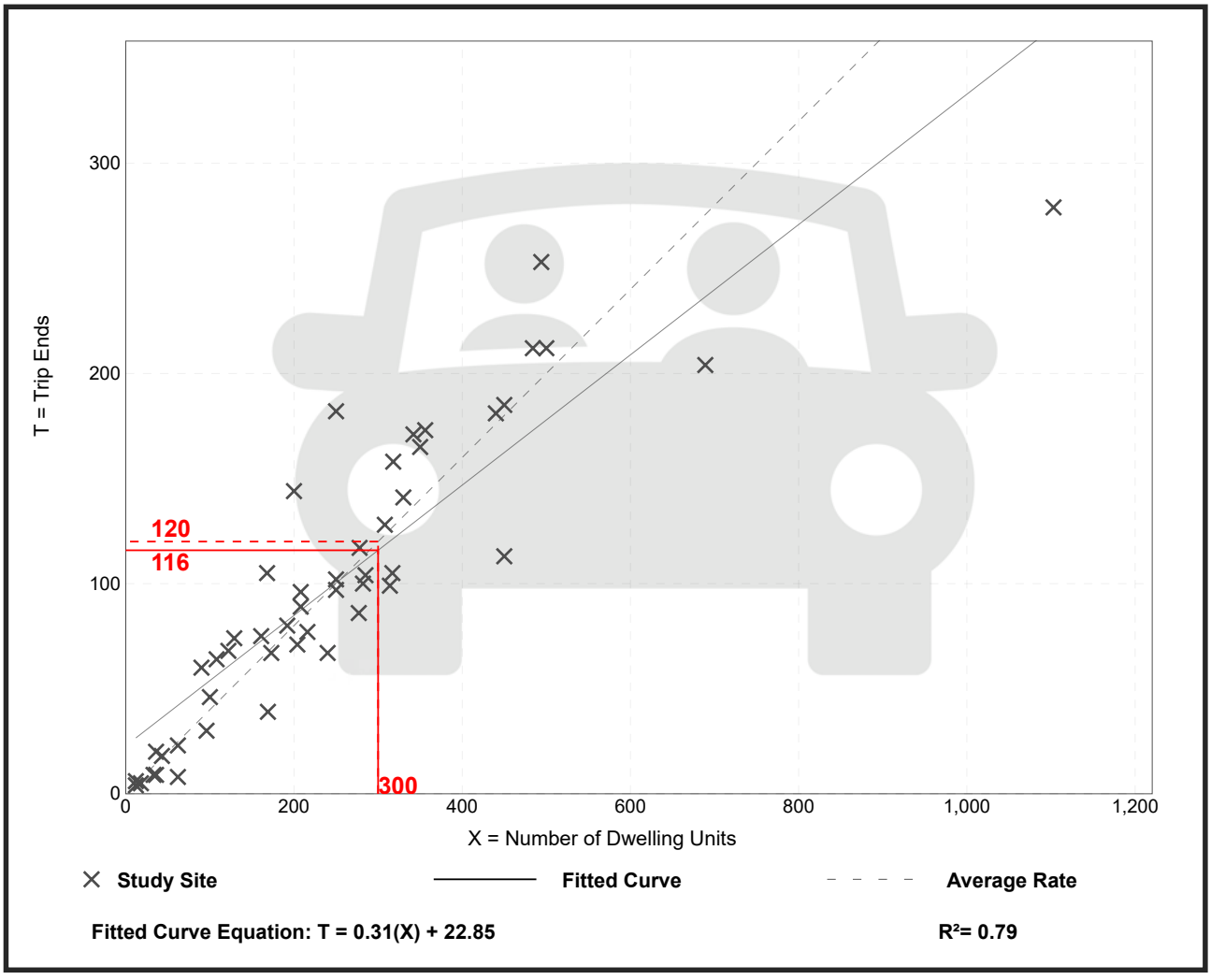
Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 49
Avg. Num. of Dwelling Units: 249
Directional Distribution: 24% entering, 76% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.40	0.13 - 0.73	0.12

Data Plot and Equation



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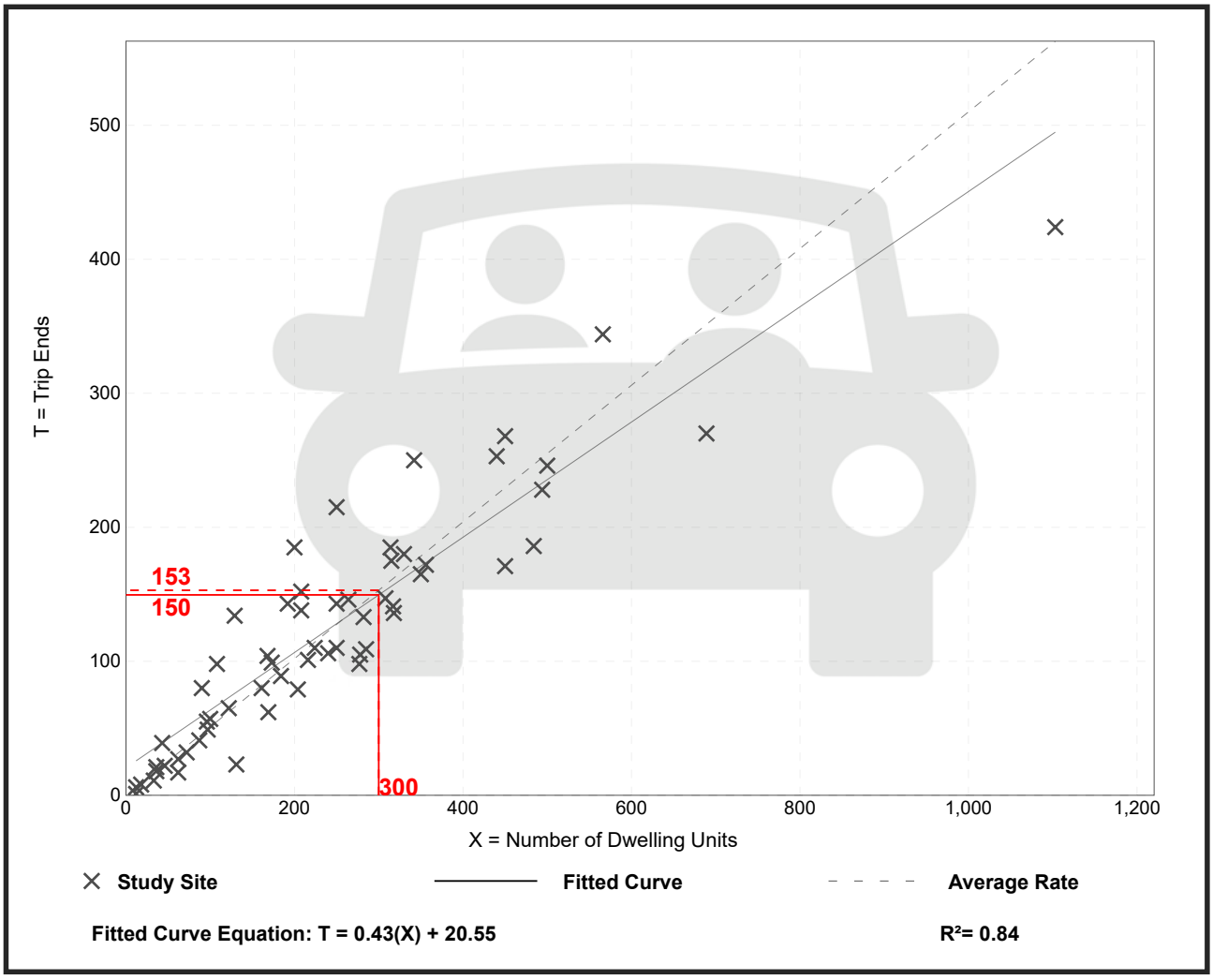
Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 59
Avg. Num. of Dwelling Units: 241
Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.51	0.08 - 1.04	0.15

Data Plot and Equation



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Hotel
(310)

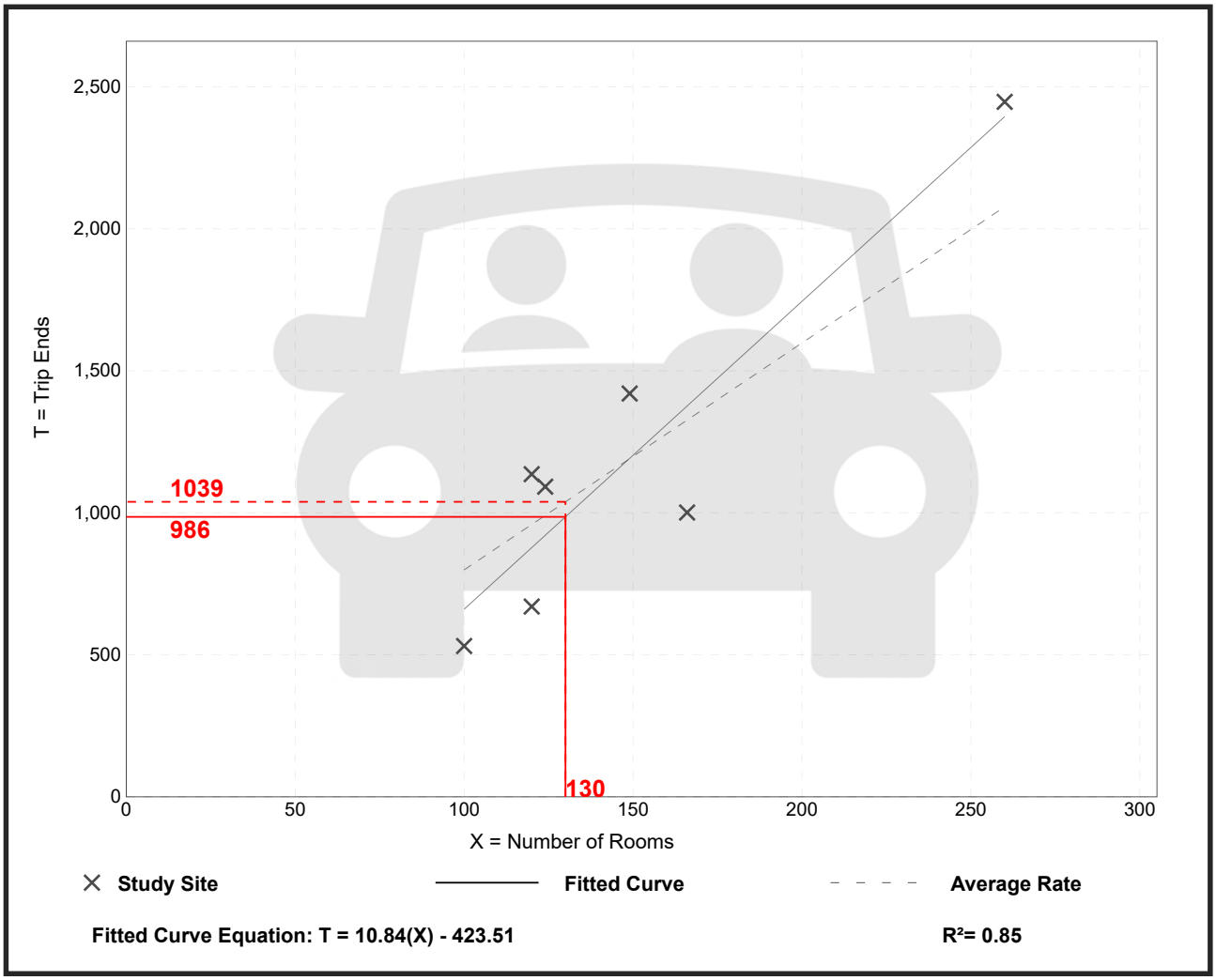
Vehicle Trip Ends vs: **Rooms**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 7
Avg. Num. of Rooms: 148
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Room

Average Rate	Range of Rates	Standard Deviation
7.99	5.31 - 9.53	1.92

Data Plot and Equation



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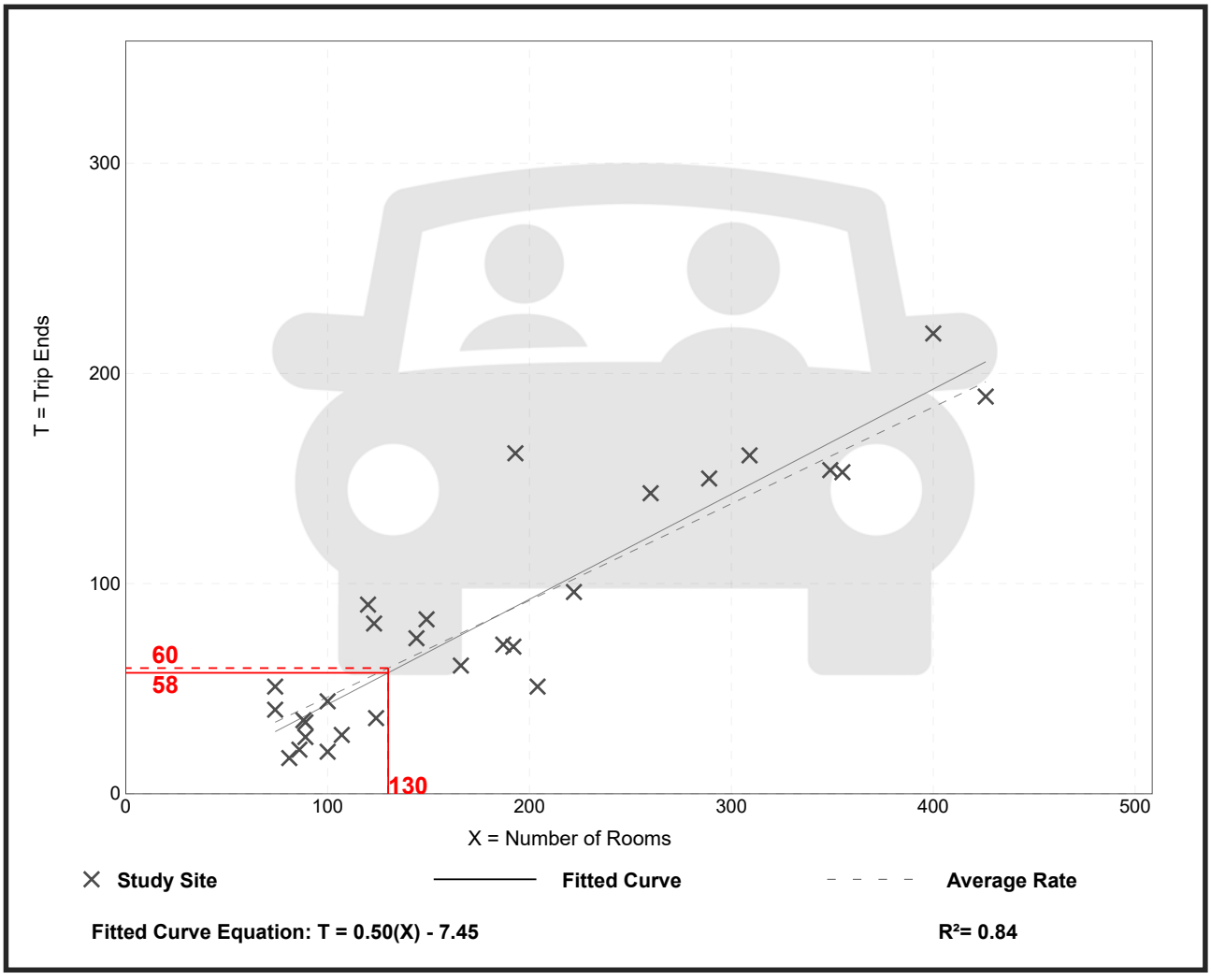
Hotel
(310)

Vehicle Trip Ends vs: **Rooms**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 28
Avg. Num. of Rooms: 182
Directional Distribution: 56% entering, 44% exiting

Vehicle Trip Generation per Room

Average Rate	Range of Rates	Standard Deviation
0.46	0.20 - 0.84	0.14

Data Plot and Equation



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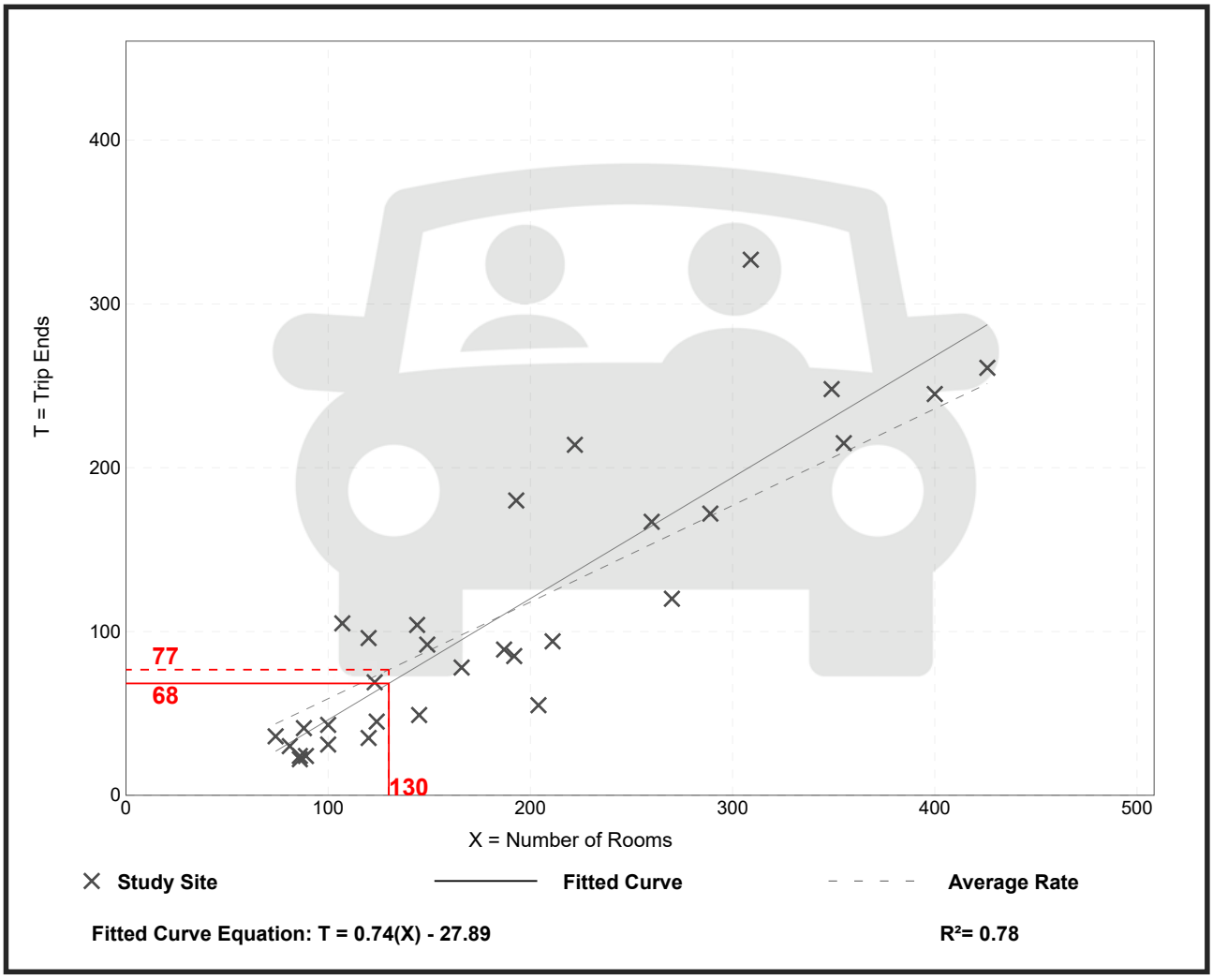
Hotel
(310)

Vehicle Trip Ends vs: **Rooms**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 31
Avg. Num. of Rooms: 186
Directional Distribution: 51% entering, 49% exiting

Vehicle Trip Generation per Room

Average Rate	Range of Rates	Standard Deviation
0.59	0.26 - 1.06	0.22

Data Plot and Equation



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General Office Building
(710)

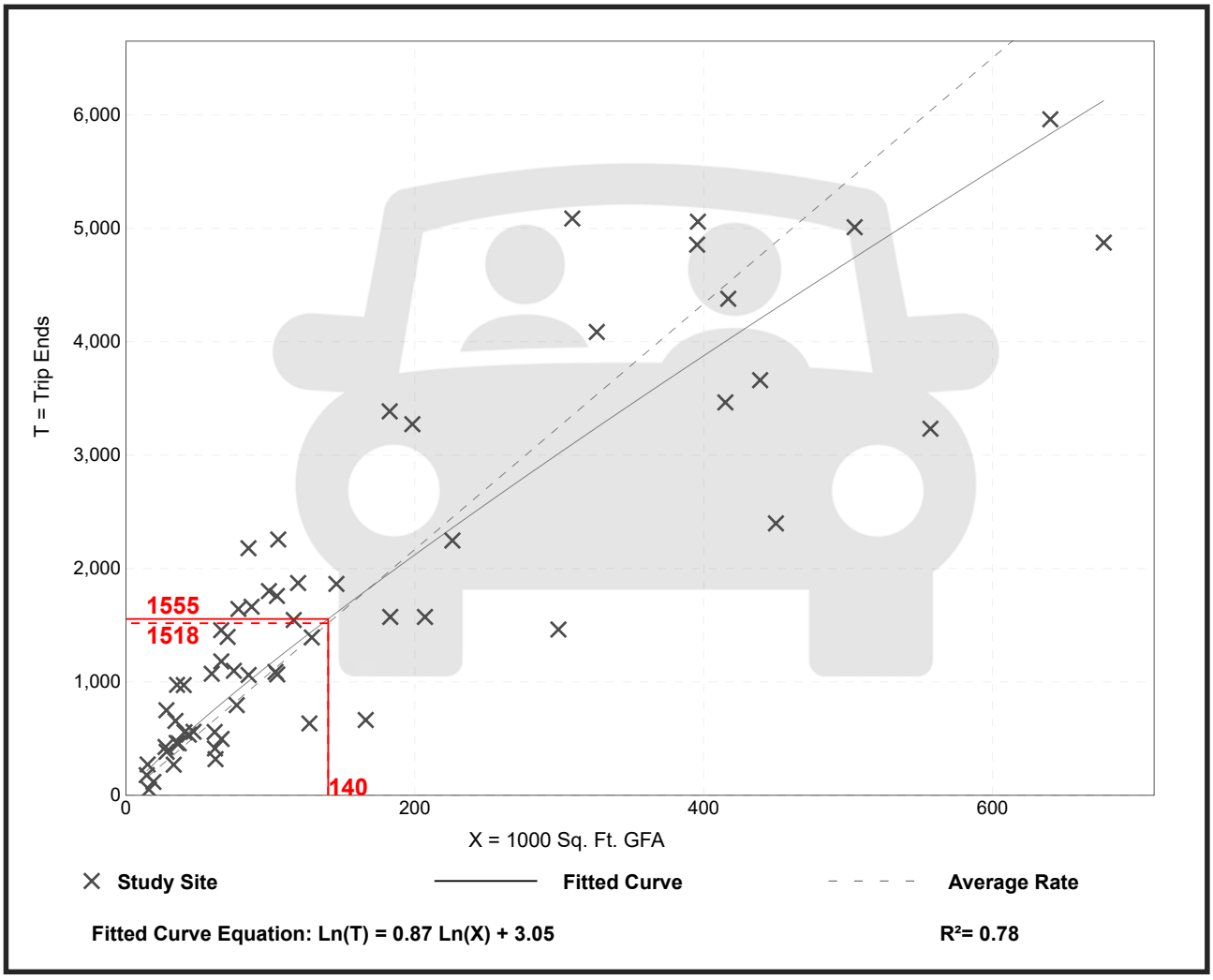
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 59
Avg. 1000 Sq. Ft. GFA: 163
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
10.84	3.27 - 27.56	4.76

Data Plot and Equation



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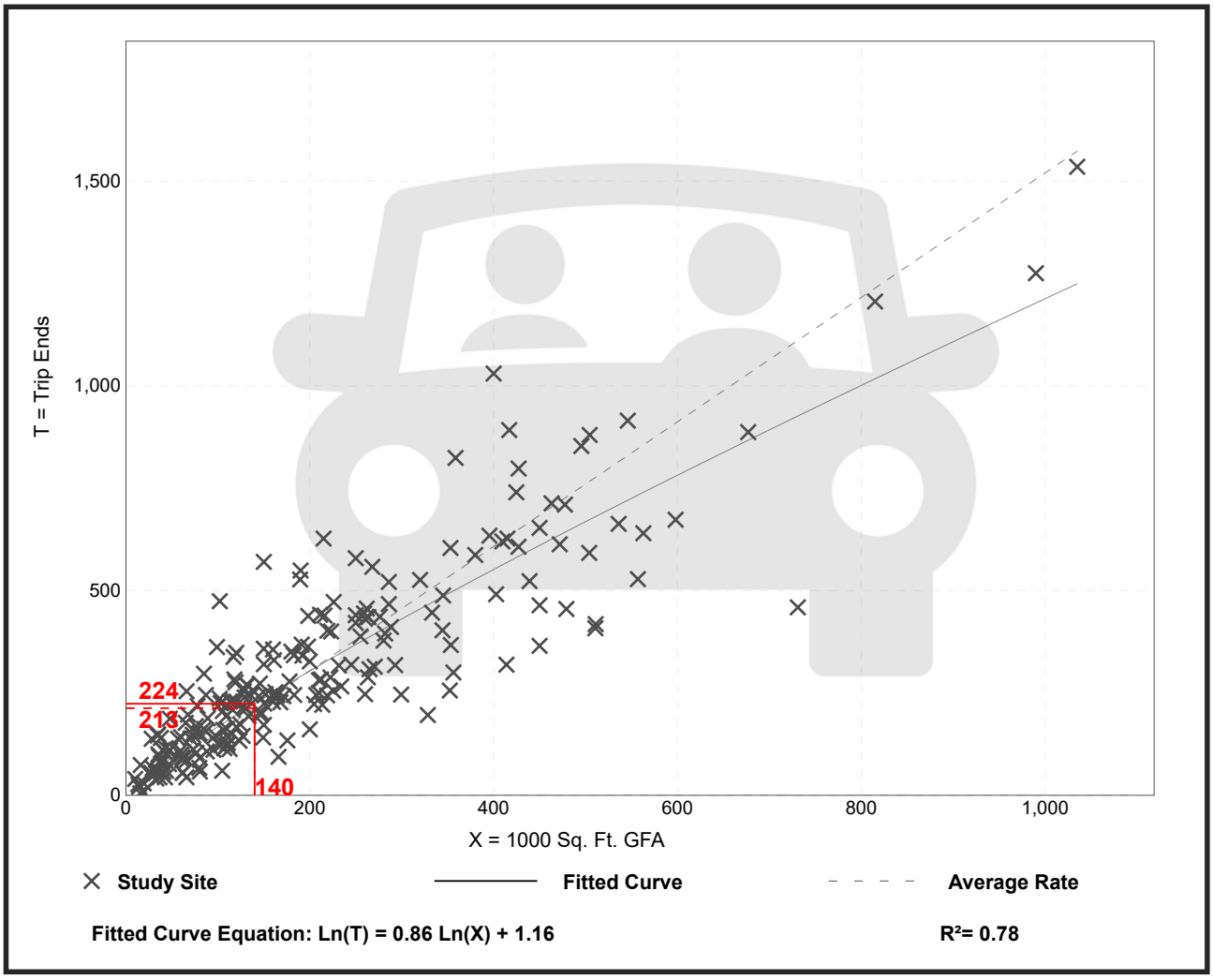
General Office Building
(710)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 221
Avg. 1000 Sq. Ft. GFA: 201
Directional Distribution: 88% entering, 12% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.52	0.32 - 4.93	0.58

Data Plot and Equation



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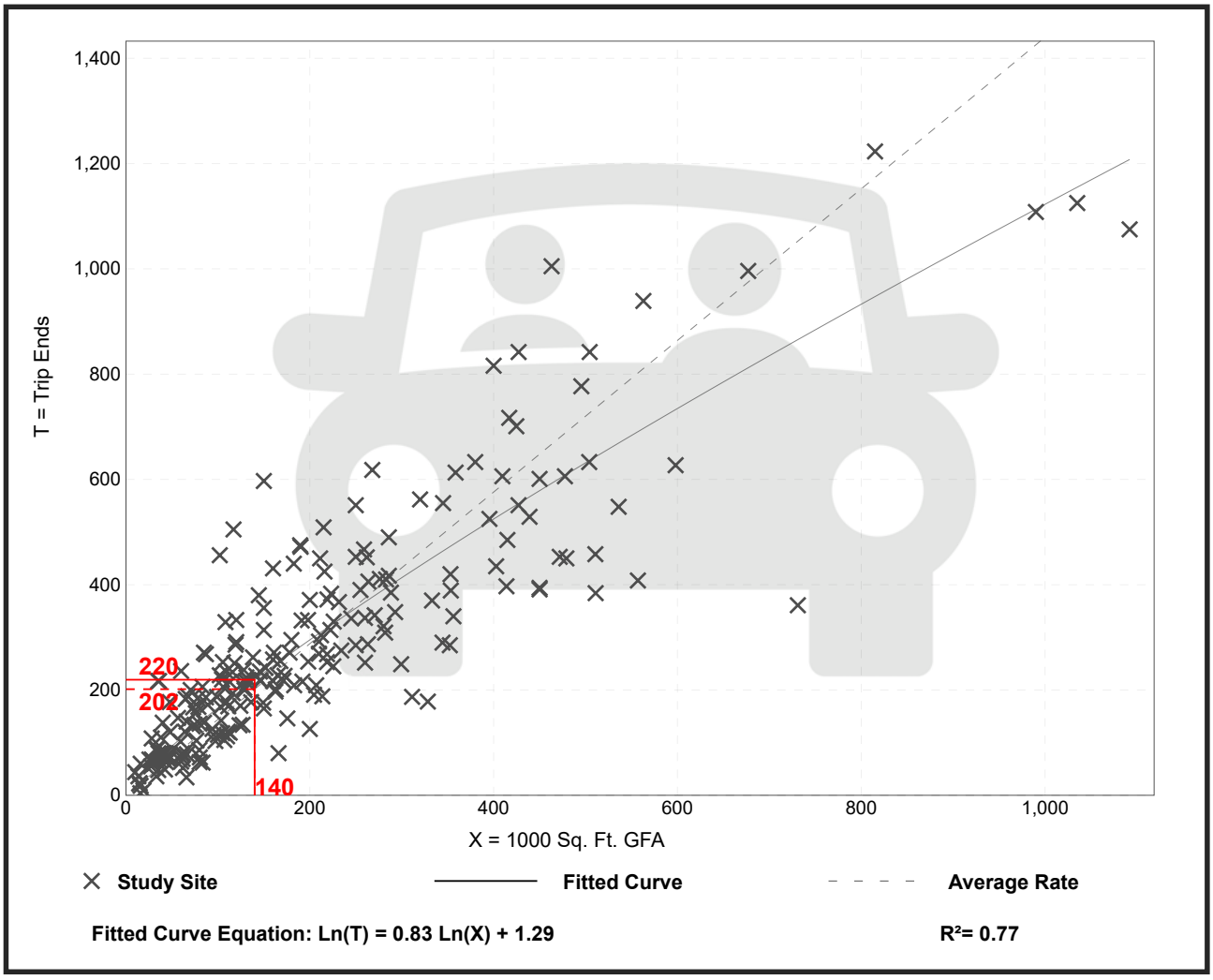
General Office Building
(710)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 232
Avg. 1000 Sq. Ft. GFA: 199
Directional Distribution: 17% entering, 83% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.44	0.26 - 6.20	0.60

Data Plot and Equation



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Shopping Center (>150k)
(820)

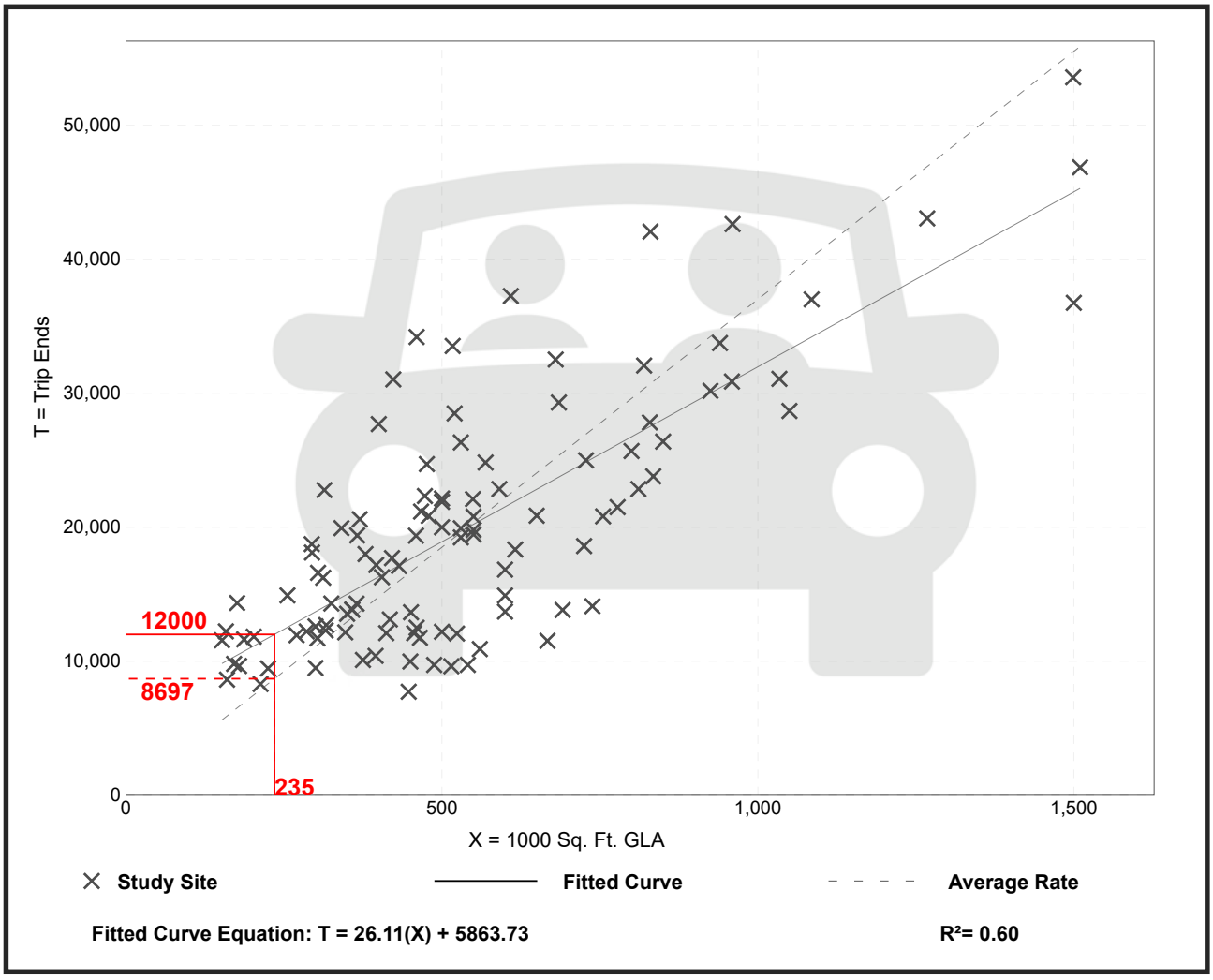
Vehicle Trip Ends vs: **1000 Sq. Ft. GLA**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 108
Avg. 1000 Sq. Ft. GLA: 538
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
37.01	17.27 - 81.53	12.79

Data Plot and Equation



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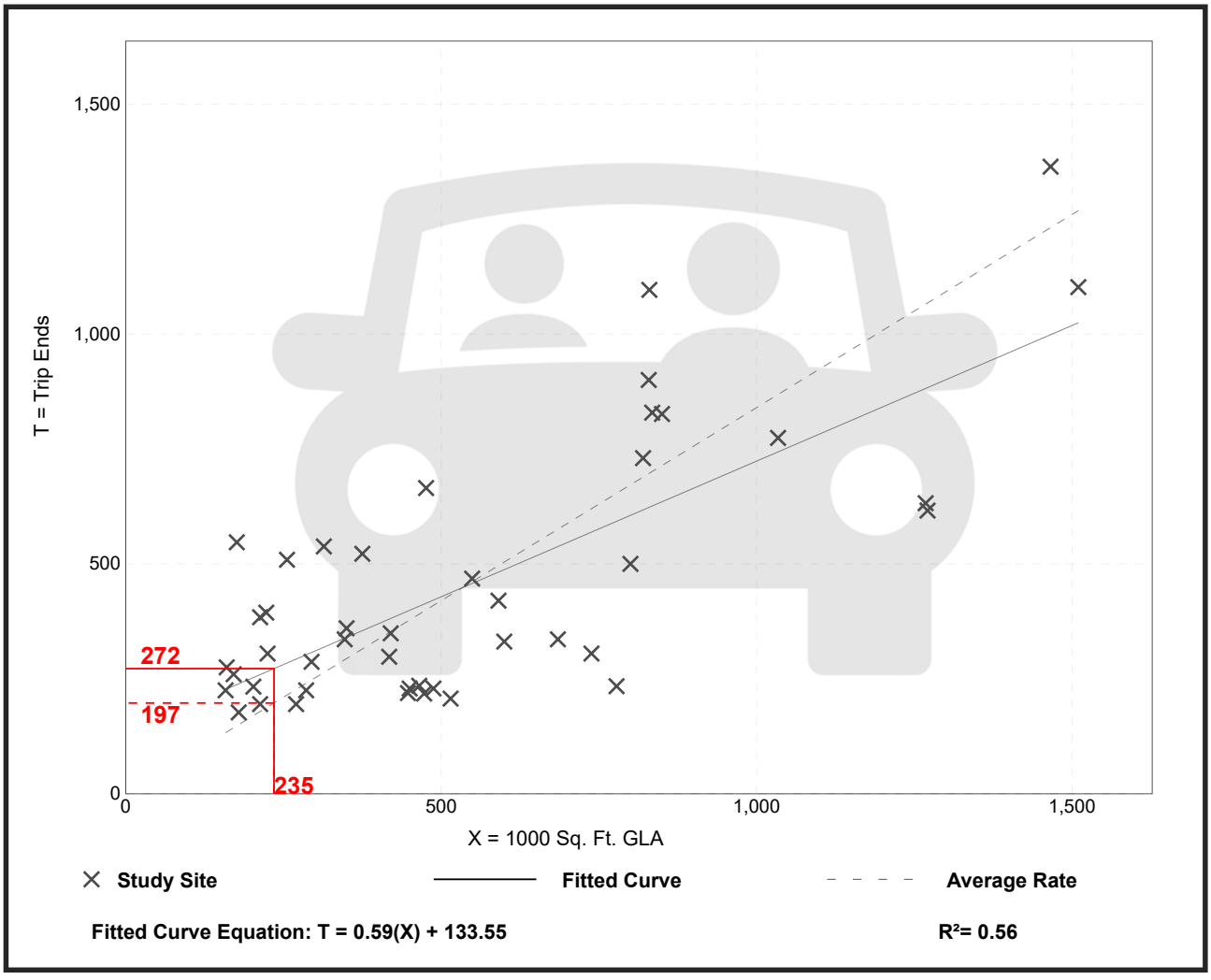
Shopping Center (>150k)
(820)

Vehicle Trip Ends vs: **1000 Sq. Ft. GLA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 44
Avg. 1000 Sq. Ft. GLA: 546
Directional Distribution: 62% entering, 38% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
0.84	0.30 - 3.11	0.42

Data Plot and Equation



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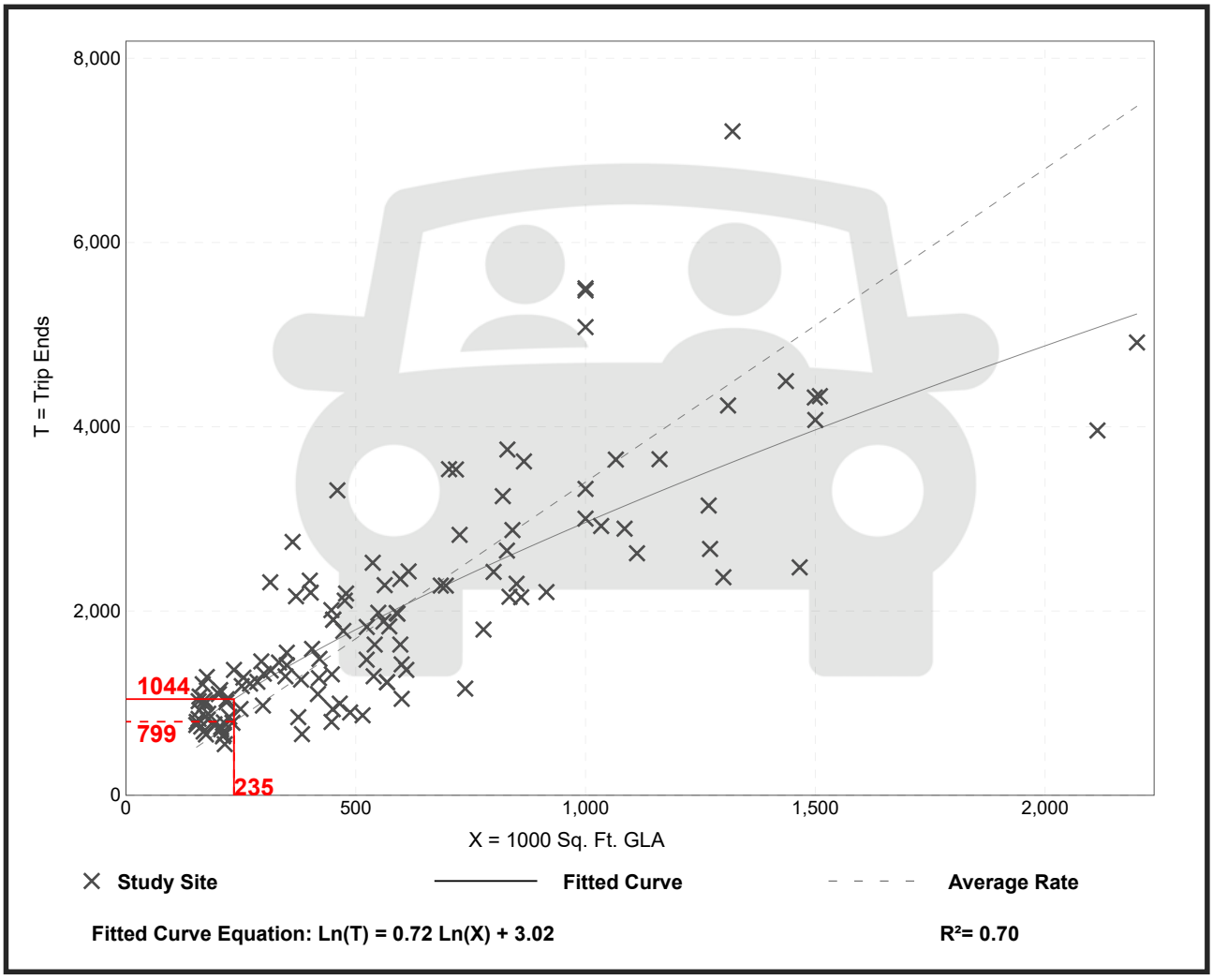
Shopping Center (>150k)
(820)

Vehicle Trip Ends vs: **1000 Sq. Ft. GLA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 126
Avg. 1000 Sq. Ft. GLA: 581
Directional Distribution: 48% entering, 52% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
3.40	1.57 - 7.58	1.26

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	Tomoka Hills	**Organization:**	CHW
Project Location:	NW 167th Blvd, Alachua FL	**Performed By:**	Deborah Cueva
Scenario Description:		**Date:**	10/12/2022
Analysis Year:	2044	**Checked By:**	
Analysis Period:	**AM Street Peak Hour**	**Date:**	

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office					197	27
Retail				272	169	103
Restaurant				0		
Cinema/Entertainment				0		
Residential				171	42	129
Hotel				58	32	26
All Other Land Uses[2]				0		
				501	440	285

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office	1.06	0%	0%	1.06	0%	0%
Retail	1.17	0%	0%	1.16	0%	0%
Restaurant						
Cinema/Entertainment						
Residential	1.13	0%	0%	1.09	0%	0%
Hotel	1.26	0%	0%	1.26	0%	0%
All Other Land Uses[2]						

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		8	0	0	0	0
Retail	8		0	0	1	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	3	1	0	0		0
Hotel	6	5	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	816	494	322
Internal Capture Percentage	8%	6%	10%
External Vehicle-Trips[5]	669	411	258
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	8%	28%
Retail	7%	8%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	2%	3%
Hotel	0%	33%

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Project Name:	Tomoka Hills
Analysis Period:	**AM Street Peak Hour**

Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-A (D): Entering Trips			Table 7-A (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.06	197	209	1.06	27	29
Retail	1.17	169	198	1.16	103	119
Restaurant	1.00	0	0	1.00	0	0
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.13	42	47	1.09	129	141
Hotel	1.26	32	40	1.26	26	33

Table 8-A (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		8	18	0	0	0
Retail	35		15	0	17	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	3	1	28	0		0
Hotel	25	5	3	0	0	

Table 8-A (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		63	0	0	0	0
Retail	8		0	0	1	0
Restaurant	29	16		0	2	2
Cinema/Entertainment	0	0	0		0	0
Residential	6	34	0	0		0
Hotel	6	8	0	0	0	

Table 9-A (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	17	192	209	181	0	0
Retail	14	184	198	157	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	1	46	47	41	0	0
Hotel	0	40	40	32	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-A (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	8	21	29	20	0	0
Retail	9	110	119	95	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	4	137	141	126	0	0
Hotel	11	22	33	17	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	Tomoka Hills	**Organization:**	CHW
Project Location:	NW 167th Blvd, Alachua FL	**Performed By:**	Deborah Cueva
Scenario Description:		**Date:**	10/12/2022
Analysis Year:	2044	**Checked By:**	
Analysis Period:	**PM Street Peak Hour**	**Date:**	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				220	37	183
Retail				1,044	501	543
Restaurant				0		
Cinema/Entertainment				0		
Residential				223	141	82
Hotel				68	35	33
All Other Land Uses[2]				0		
				1,555	714	841

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office	1.11	0%	0%	1.07	0%	0%
Retail	1.21	0%	0%	1.18	0%	0%
Restaurant						
Cinema/Entertainment						
Residential	1.15	0%	0%	1.21	0%	0%
Hotel	1.31	0%	0%	1.30	0%	0%
All Other Land Uses[2]						

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		1700			2800	
Retail					3000	
Restaurant						
Cinema/Entertainment						
Residential		3000				
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		20	0	0	2	0
Retail	13		0	0	55	8
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	4	4	0	0		3
Hotel	0	7	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	1,834	855	979
Internal Capture Percentage	13%	14%	12%
External Vehicle-Trips[5]	1,358	615	743
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	41%	11%
Retail	5%	12%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	35%	11%
Hotel	24%	16%

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Project Name:	Tomoka Hills
Analysis Period:	**PM Street Peak Hour**

Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-P (D): Entering Trips			Table 7-P (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.11	37	41	1.07	183	196
Retail	1.21	501	606	1.18	543	641
Restaurant	1.00	0	0	1.00	0	0
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.15	141	162	1.21	82	99
Hotel	1.31	35	46	1.30	33	43

Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		20	8	0	2	0
Retail	13		186	26	55	32
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	4	4	21	0		3
Hotel	0	7	29	0	1	

Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		24	0	0	6	0
Retail	13		0	0	75	8
Restaurant	12	303		0	26	33
Cinema/Entertainment	2	24	0		6	0
Residential	23	6	0	0		6
Hotel	0	12	0	0	0	

Table 9-P (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	17	24	41	22	0	0
Retail	31	575	606	475	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	57	105	162	91	0	0
Hotel	11	35	46	27	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-P (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	22	174	196	163	0	0
Retail	76	565	641	479	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	11	88	99	73	0	0
Hotel	7	36	43	28	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

Table 7.1a Adjusted Internal Trip Capture Rates for Trip Origins within a Multi-Use Development			
Land Use Pairs		Weekday	
		AM Peak Hour	PM Peak Hour
From OFFICE	To Office	0.0%	0.0%
	To Retail	28.0%	10.0%
	To Restaurant	63.0%	4.0%
	To Cinema/Entertainment	0.0%	0.0%
	To Residential	1.0%	0.8%
	To Hotel	0.0%	0.0%
From RETAIL	To Office	29.0%	2.0%
	To Retail	0.0%	0.0%
	To Restaurant	13.0%	29.0%
	To Cinema/Entertainment	0.0%	4.0%
	To Residential	14.0%	8.6%
	To Hotel	0.0%	5.0%
From RESTAURANT	To Office	31.0%	3.0%
	To Retail	14.0%	41.0%
	To Restaurant	0.0%	0.0%
	To Cinema/Entertainment	0.0%	8.0%
	To Residential	4.0%	18.0%
	To Hotel	3.0%	7.0%
From CINEMA/ENTERTAINMENT	To Office	0.0%	2.0%
	To Retail	0.0%	21.0%
	To Restaurant	0.0%	31.0%
	To Cinema/Entertainment	0.0%	0.0%
	To Residential	0.0%	8.0%
	To Hotel	0.0%	2.0%
From RESIDENTIAL	To Office	2.0%	4.0%
	To Retail	1.0%	4.2%
	To Restaurant	20.0%	21.0%
	To Cinema/Entertainment	0.0%	0.0%
	To Residential	0.0%	0.0%
	To Hotel	0.0%	3.0%
From HOTEL	To Office	75.0%	0.0%
	To Retail	14.0%	16.0%
	To Restaurant	9.0%	68.0%
	To Cinema/Entertainment	0.0%	0.0%
	To Residential	0.0%	2.0%
	To Hotel	0.0%	0.0%

Table 7.2a Adjusted Internal Trip Capture Rates for Trip Destinations within a Multi-Use Development			
Land Use Pairs		Weekday	
		AM Peak Hour	PM Peak Hour
To OFFICE	From Office	0.0%	0.0%
	From Retail	4.0%	31.0%
	From Restaurant	14.0%	30.0%
	From Cinema/Entertainment	0.0%	6.0%
	From Residential	3.0%	57.0%
	From Hotel	3.0%	0.0%
To RETAIL	From Office	32.0%	4.0%
	From Retail	0.0%	0.0%
	From Restaurant	8.0%	50.0%
	From Cinema/Entertainment	0.0%	4.0%
	From Residential	17.0%	1.0%
	From Hotel	4.0%	2.0%
To RESTAURANT	From Office	23.0%	2.0%
	From Retail	50.0%	29.0%
	From Restaurant	0.0%	0.0%
	From Cinema/Entertainment	0.0%	3.0%
	From Residential	20.0%	14.0%
	From Hotel	6.0%	5.0%
To CINEMA/ENTERTAINMENT	From Office	0.0%	1.0%
	From Retail	0.0%	26.0%
	From Restaurant	0.0%	32.0%
	From Cinema/Entertainment	0.0%	0.0%
	From Residential	0.0%	0.0%
	From Hotel	0.0%	0.0%
To RESIDENTIAL	From Office	0.0%	4.0%
	From Retail	2.0%	46.0%
	From Restaurant	5.0%	16.0%
	From Cinema/Entertainment	0.0%	4.0%
	From Residential	0.0%	0.0%
	From Hotel	0.0%	0.0%
To HOTEL	From Office	0.0%	0.0%
	From Retail	0.0%	17.0%
	From Restaurant	4.0%	71.0%
	From Cinema/Entertainment	0.0%	1.0%
	From Residential	0.0%	12.0%
	From Hotel	0.0%	0.0%

Vehicle Pass-By Rates by Land Use

Source: ITE *Trip Generation Manual* , 11th Edition

Land Use Code	820								
Land Use	Shopping Center (> 150k)								
Setting	General Urban/Suburban								
Time Period	Weekday PM Peak Period								
# Data Sites	8 Sites with GLA between 150 and 300k				16 Sites with GLA between 300 and 900k				
Average Pass-By Rate	29% for Sites with GLA between 150 and 300k				19% for Sites with GLA between 300 and 900k				
	Pass-By Characteristics for Individual Sites								
		Survey		Pass-By	Non-Pass-By Trips			Adj Street Peak	
GLA (000)	State or Province	Year	# Interviews	Trip (%)	Primary (%)	Diverted (%)	Total (%)	Hour Volume	Source
213	Florida	1990	312	28	31	41	72	—	33
225	Illinois	1994	264	35	32	33	65	1970	24
227.9	Kentucky	1993	—	34	35	31	66	—	34
235	Kentucky	1993	211	35	29	36	65	2593	2
255	Iowa	1994	222	23	38	39	77	3706	24
256	Connecticut	1994	208	27	51	22	73	3422	24
293	Illinois	1994	282	24	70	6	76	4606	13
294	Pennsylvania	1994	213	24	48	18	76	4055	24
350	Massachusetts	1994	224	18	45	37	82	2112	24
361	Virginia	1994	315	17	54	29	83	2034	24
375	North Carolina	1994	214	29	48	23	71	2053	24
413	Texas	1994	228	28	51	21	72	589	24
418	Maryland	1994	281	20	50	30	80	5610	24
450	California	1994	321	23	49	28	77	2787	24
476	Washington	1994	234	25	53	22	75	3427	24
488	Texas	1994	257	12	75	13	88	1094	13
560	Virginia	1994	437	19	49	32	81	3051	24
581	Colorado	1994	296	18	53	29	82	2939	24
598	Colorado	1994	205	17	55	28	83	3840	24
633	Texas	1994	257	10	64	26	90	—	24

667	Illinois	1994	200	16	53	31	84	2770	24
738	New Jersey	1994	283	13	75	12	87	8059	24
800	California	1994	205	21	51	28	79	7474	24
808	California	1994	240	13	73	14	87	4035	24

Appendix C
Turning Movement Counts

US HWY 441 at NW 173rd St

Peggy Malone & Associates
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File Name : 1 US 441 & NW 173rd St AM
Site Code :
Start Date : 4/6/2022
Page No : 1

Groups Printed- Cars

	NW 173rd St Southbound					US 441 Westbound					NW 173rd St Northbound					US 441 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:45 AM	1	3	16	0	20	6	75	10	0	91	10	2	5	0	17	14	274	2	0	290	418
Total	1	3	16	0	20	6	75	10	0	91	10	2	5	0	17	14	274	2	0	290	418
07:00 AM	2	1	18	0	21	4	68	16	0	88	23	4	16	0	43	17	361	4	0	382	534
07:15 AM	8	4	20	0	32	9	98	21	0	128	31	4	19	0	54	17	379	2	0	398	612
07:30 AM	5	2	28	0	35	13	108	21	0	142	19	4	15	0	38	12	431	10	0	453	668
07:45 AM	14	3	25	0	42	21	106	22	0	149	35	7	15	0	57	17	353	18	0	388	636
Total	29	10	91	0	130	47	380	80	0	507	108	19	65	0	192	63	1524	34	0	1621	2450
08:00 AM	8	7	29	0	44	31	110	17	0	158	30	14	11	0	55	6	261	18	0	285	542
08:15 AM	18	7	46	0	71	71	94	22	0	187	19	24	8	0	51	12	271	33	0	316	625
08:30 AM	11	18	62	0	91	120	88	13	0	221	16	41	5	0	62	16	228	60	0	304	678
Grand Total	67	45	244	0	356	275	747	142	0	1164	183	100	94	0	377	111	2558	147	0	2816	4713
Apprch %	18.8	12.6	68.5	0		23.6	64.2	12.2	0		48.5	26.5	24.9	0		3.9	90.8	5.2	0		
Total %	1.4	1	5.2	0	7.6	5.8	15.8	3	0	24.7	3.9	2.1	2	0	8	2.4	54.3	3.1	0	59.7	

	NW 173rd St Southbound				US 441 Westbound				NW 173rd St Northbound				US 441 Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	14	3	25	42	21	106	22	149	35	7	15	57	17	353	18	388	636
08:00 AM	8	7	29	44	31	110	17	158	30	14	11	55	6	261	18	285	542
08:15 AM	18	7	46	71	71	94	22	187	19	24	8	51	12	271	33	316	625
08:30 AM	11	18	62	91	120	88	13	221	16	41	5	62	16	228	60	304	678
Total Volume	51	35	162	248	243	398	74	715	100	86	39	225	51	1113	129	1293	2481
% App. Total	20.6	14.1	65.3		34	55.7	10.3		44.4	38.2	17.3		3.9	86.1	10		
PHF	.708	.486	.653	.681	.506	.905	.841	.809	.714	.524	.650	.907	.750	.788	.538	.833	.915

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File Name : 1 US 441 & NW 173rd St AM
Site Code :
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Groups Printed- Trucks

	NW 173rd St Southbound					US 441 Westbound					NW 173rd St Northbound					US 441 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:45 AM	2	0	2	0	4	1	1	6	0	8	5	1	1	0	7	0	3	0	0	3	22
Total	2	0	2	0	4	1	1	6	0	8	5	1	1	0	7	0	3	0	0	3	22
07:00 AM	0	0	3	0	3	0	6	5	0	11	11	0	0	0	11	0	12	0	0	12	37
07:15 AM	0	0	0	0	0	1	8	9	0	18	9	0	1	0	10	2	11	0	0	13	41
07:30 AM	1	1	0	0	2	0	9	3	0	12	7	1	4	0	12	0	6	0	0	6	32
07:45 AM	0	0	0	0	0	1	6	10	0	17	10	0	0	0	10	2	11	0	0	13	40
Total	1	1	3	0	5	2	29	27	0	58	37	1	5	0	43	4	40	0	0	44	150
					4					86					41					58	
08:00 AM	0	0	2	0	2	1	13	10	0	24	8	0	2	0	10	1	10	1	0	12	48
08:15 AM	0	0	1	0	1	4	7	8	0	19	11	0	2	0	13	3	12	0	0	15	48
08:30 AM	0	1	0	0	1	5	14	7	0	26	7	0	1	0	8	4	14	0	0	18	53
Grand Total	3	2	8	0	13	13	64	58	0	135	68	2	11	0	81	12	79	1	0	92	321
Apprch %	23.1	15.4	61.5	0		9.6	47.4	43	0		84	2.5	13.6	0		13	85.9	1.1	0		
Total %	0.9	0.6	2.5	0	4	4	19.9	18.1	0	42.1	21.2	0.6	3.4	0	25.2	3.7	24.6	0.3	0	28.7	

	NW 173rd St Southbound				US 441 Westbound				NW 173rd St Northbound				US 441 Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	0	0	0	1	6	10	17	10	0	0	10	2	11	0	13	40
08:00 AM	0	0	2	2	1	13	10	24	8	0	2	10	1	10	1	12	48
08:15 AM	0	0	1	1	4	7	8	19	11	0	2	13	3	12	0	15	48
08:30 AM	0	1	0	1	5	14	7	26	7	0	1	8	4	14	0	18	53
Total Volume	0	1	3	4	11	40	35	86	36	0	5	41	10	47	1	58	189
% App. Total	0	25	75		12.8	46.5	40.7		87.8	0	12.2		17.2	81	1.7		
PHF	.000	.250	.375	.500	.550	.714	.875	.827	.818	.000	.625	.788	.625	.839	.250	.806	.892

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File Name : 1 US 441 & NW 173rd St AM
Site Code :
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Groups Printed- Bicycles on Crosswalk

	NW 173rd St Southbound					US 441 Westbound					NW 173rd St Northbound					US 441 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

	NW 173rd St Southbound					US 441 Westbound					NW 173rd St Northbound					US 441 Eastbound					
Start Time	Right	Thru	Left	App. Total		Right	Thru	Left	App. Total		Right	Thru	Left	App. Total		Right	Thru	Left	App. Total		Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 06:45 AM																					
06:45 AM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0
07:00 AM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0
07:15 AM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0
07:30 AM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0
Total Volume	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0
% App. Total	0	0	0			0	0	0			0	0	0			0	0	0			
PHF	.000	.000	.000	.000		.000	.000	.000	.000		.000	.000	.000	.000		.000	.000	.000	.000		.000

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File Name : 1 US 441 & NW 173rd St AM
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Groups Printed- Pedestrians

	NW 173rd St Southbound					US 441 Westbound					NW 173rd St Northbound					US 441 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

	NW 173rd St Southbound				US 441 Westbound				NW 173rd St Northbound				US 441 Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 06:45 AM																	
06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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Groups Printed- Combined

	NW 173rd St Southbound					US 441 Westbound					NW 173rd St Northbound					US 441 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:45 AM	3	3	18	0	24	7	76	16	0	99	15	3	6	0	24	14	277	2	0	293	440
Total	3	3	18	0	24	7	76	16	0	99	15	3	6	0	24	14	277	2	0	293	440
07:00 AM	2	1	21	0	24	4	74	21	0	99	34	4	16	0	54	17	373	4	0	394	571
07:15 AM	8	4	20	0	32	10	106	30	0	146	40	4	20	0	64	19	390	2	0	411	653
07:30 AM	6	3	28	0	37	13	117	24	0	154	26	5	19	0	50	12	437	10	0	459	700
07:45 AM	14	3	25	0	42	22	112	32	0	166	45	7	15	0	67	19	364	18	0	401	676
Total	30	11	94	0	135	49	409	107	0	565	145	20	70	0	235	67	1564	34	0	1665	2600
08:00 AM	8	7	31	0	46	32	123	27	0	182	38	14	13	0	65	7	271	19	0	297	590
08:15 AM	18	7	47	0	72	75	101	30	0	206	30	24	10	0	64	15	283	33	0	331	673
08:30 AM	11	19	62	0	92	125	102	20	0	247	23	41	6	0	70	20	242	60	0	322	731
Grand Total	70	47	252	0	369	288	811	200	0	1299	251	102	105	0	458	123	2637	148	0	2908	5034
Apprch %	19	12.7	68.3	0		22.2	62.4	15.4	0		54.8	22.3	22.9	0		4.2	90.7	5.1	0		
Total %	1.4	0.9	5	0	7.3	5.7	16.1	4	0	25.8	5	2	2.1	0	9.1	2.4	52.4	2.9	0	57.8	

	NW 173rd St Southbound				US 441 Westbound				NW 173rd St Northbound				US 441 Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	14	3	25	42	22	112	32	166	45	7	15	67	19	364	18	401	676
08:00 AM	8	7	31	46	32	123	27	182	38	14	13	65	7	271	19	297	590
08:15 AM	18	7	47	72	75	101	30	206	30	24	10	64	15	283	33	331	673
08:30 AM	11	19	62	92	125	102	20	247	23	41	6	70	20	242	60	322	731
Total Volume	51	36	165	252	254	438	109	801	136	86	44	266	61	1160	130	1351	2670
% App. Total	20.2	14.3	65.5		31.7	54.7	13.6		51.1	32.3	16.5		4.5	85.9	9.6		
PHF	.708	.474	.665	.685	.508	.890	.852	.811	.756	.524	.733	.950	.763	.797	.542	.842	.913

TRUCK % 4/252 = 2% 86/801 = 11% 41/266 = 15% 58/1351 = 4%

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Groups Printed- Cars

	NW 173rd St Southbound					US 441 Westbound					NW 173rd St Northbound					US 441 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:15 PM	2	0	11	0	13	20	274	26	0	320	36	6	21	0	63	13	157	7	0	177	573
04:30 PM	5	8	18	0	31	22	322	36	0	380	71	7	18	0	96	9	158	9	0	176	683
04:45 PM	6	4	12	0	22	25	336	35	0	396	52	2	21	0	75	8	162	5	0	175	668
Total	13	12	41	0	66	67	932	97	0	1096	159	15	60	0	234	30	477	21	0	528	1924
05:00 PM	13	12	18	0	43	31	347	50	0	428	23	5	21	0	49	23	181	8	0	212	732
05:15 PM	12	12	17	0	41	25	390	43	0	458	22	1	23	0	46	14	152	5	0	171	716
05:30 PM	14	4	21	0	39	28	365	25	0	418	20	2	16	0	38	9	174	2	0	185	680
05:45 PM	6	4	23	0	33	26	354	24	0	404	12	2	13	0	27	19	152	3	0	174	638
Total	45	32	79	0	156	110	1456	142	0	1708	77	10	73	0	160	65	659	18	0	742	2766
06:00 PM	3	2	12	0	17	27	276	14	0	317	20	3	11	0	34	18	144	7	0	169	537
Grand Total	61	46	132	0	239	204	2664	253	0	3121	256	28	144	0	428	113	1280	46	0	1439	5227
Apprch %	25.5	19.2	55.2	0		6.5	85.4	8.1	0		59.8	6.5	33.6	0		7.9	89	3.2	0		
Total %	1.2	0.9	2.5	0	4.6	3.9	51	4.8	0	59.7	4.9	0.5	2.8	0	8.2	2.2	24.5	0.9	0	27.5	

	NW 173rd St Southbound				US 441 Westbound				NW 173rd St Northbound				US 441 Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 06:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	5	8	18	31	22	322	36	380	71	7	18	96	9	158	9	176	683
04:45 PM	6	4	12	22	25	336	35	396	52	2	21	75	8	162	5	175	668
05:00 PM	13	12	18	43	31	347	50	428	23	5	21	49	23	181	8	212	732
05:15 PM	12	12	17	41	25	390	43	458	22	1	23	46	14	152	5	171	716
Total Volume	36	36	65	137	103	1395	164	1662	168	15	83	266	54	653	27	734	2799
% App. Total	26.3	26.3	47.4		6.2	83.9	9.9		63.2	5.6	31.2		7.4	89	3.7		
PHF	.692	.750	.903	.797	.831	.894	.820	.907	.592	.536	.902	.693	.587	.902	.750	.866	.956

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Groups Printed- Trucks

	NW 173rd St Southbound					US 441 Westbound					NW 173rd St Northbound					US 441 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:15 PM	0	0	1	0	1	1	7	6	0	14	7	0	0	0	7	0	5	3	0	8	30
04:30 PM	0	0	2	0	2	0	4	5	0	9	3	1	0	0	4	0	2	0	0	2	17
04:45 PM	0	0	0	0	0	1	2	4	0	7	5	0	1	0	6	0	8	0	0	8	21
Total	0	0	3	0	3	2	13	15	0	30	15	1	1	0	17	0	15	3	0	18	68
					1					40					28					21	
05:00 PM	0	1	0	0	1	0	6	6	0	12	4	0	0	0	4	0	4	1	0	5	22
05:15 PM	0	0	0	0	0	0	5	6	0	11	8	0	1	0	9	1	2	0	0	3	23
05:30 PM	0	0	0	0	0	0	4	6	0	10	9	0	0	0	9	0	5	0	0	5	24
05:45 PM	0	0	0	0	0	0	4	5	0	9	4	0	0	0	4	0	6	0	0	6	19
Total	0	1	0	0	1	0	19	23	0	42	25	0	1	0	26	1	17	1	0	19	88
06:00 PM	0	0	0	0	0	0	3	9	0	12	3	1	0	0	4	0	4	0	0	4	20
Grand Total	0	1	3	0	4	2	35	47	0	84	43	2	2	0	47	1	36	4	0	41	176
Apprch %	0	25	75	0		2.4	41.7	56	0		91.5	4.3	4.3	0		2.4	87.8	9.8	0		
Total %	0	0.6	1.7	0	2.3	1.1	19.9	26.7	0	47.7	24.4	1.1	1.1	0	26.7	0.6	20.5	2.3	0	23.3	

	NW 173rd St Southbound				US 441 Westbound				NW 173rd St Northbound				US 441 Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 06:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	0	1	1	1	7	6	14	7	0	0	7	0	5	3	8	30
04:30 PM	0	0	2	2	0	4	5	9	3	1	0	4	0	2	0	2	17
04:45 PM	0	0	0	0	1	2	4	7	5	0	1	6	0	8	0	8	21
05:00 PM	0	1	0	1	0	6	6	12	4	0	0	4	0	4	1	5	22
Total Volume	0	1	3	4	2	19	21	42	19	1	1	21	0	19	4	23	90
% App. Total	0	25	75		4.8	45.2	50		90.5	4.8	4.8		0	82.6	17.4		
PHF	.000	.250	.375	.500	.500	.679	.875	.750	.679	.250	.250	.750	.000	.594	.333	.719	.750

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Groups Printed- Bicycles on Crosswalk

	NW 173rd St Southbound					US 441 Westbound					NW 173rd St Northbound					US 441 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

	NW 173rd St Southbound					US 441 Westbound					NW 173rd St Northbound					US 441 Eastbound					
Start Time	Right	Thru	Left	App. Total		Right	Thru	Left	App. Total		Right	Thru	Left	App. Total		Right	Thru	Left	App. Total		Int. Total
Peak Hour Analysis From 04:15 PM to 06:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0
04:30 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0
04:45 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0
05:00 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0
Total Volume	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0
% App. Total	0	0	0			0	0	0			0	0	0			0	0	0			
PHF	.000	.000	.000	.000		.000	.000	.000	.000		.000	.000	.000	.000		.000	.000	.000	.000		.000

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Groups Printed- Pedestrians

	NW 173rd St Southbound					US 441 Westbound					NW 173rd St Northbound					US 441 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

	NW 173rd St Southbound					US 441 Westbound					NW 173rd St Northbound					US 441 Eastbound					
Start Time	Right	Thru	Left	App. Total		Right	Thru	Left	App. Total		Right	Thru	Left	App. Total		Right	Thru	Left	App. Total		Int. Total
Peak Hour Analysis From 04:15 PM to 06:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0
04:30 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0
04:45 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0
05:00 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0
Total Volume	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0
% App. Total	0	0	0			0	0	0			0	0	0			0	0	0			
PHF	.000	.000	.000	.000		.000	.000	.000	.000		.000	.000	.000	.000		.000	.000	.000	.000		.000

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Groups Printed- Combined

	NW 173rd St Southbound					US 441 Westbound					NW 173rd St Northbound					US 441 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:15 PM	2	0	12	0	14	21	281	32	0	334	43	6	21	0	70	13	162	10	0	185	603
04:30 PM	5	8	20	0	33	22	326	41	0	389	74	8	18	0	100	9	160	9	0	178	700
04:45 PM	6	4	12	0	22	26	338	39	0	403	57	2	22	0	81	8	170	5	0	183	689
Total	13	12	44	0	69	69	945	112	0	1126	174	16	61	0	251	30	492	24	0	546	1992
05:00 PM	13	13	18	0	44	31	353	56	0	440	27	5	21	0	53	23	185	9	0	217	754
05:15 PM	12	12	17	0	41	25	395	49	0	469	30	1	24	0	55	15	154	5	0	174	739
05:30 PM	14	4	21	0	39	28	369	31	0	428	29	2	16	0	47	9	179	2	0	190	704
05:45 PM	6	4	23	0	33	26	358	29	0	413	16	2	13	0	31	19	158	3	0	180	657
Total	45	33	79	0	157	110	1475	165	0	1750	102	10	74	0	186	66	676	19	0	761	2854
06:00 PM	3	2	12	0	17	27	279	23	0	329	23	4	11	0	38	18	148	7	0	173	557
Grand Total	61	47	135	0	243	206	2699	300	0	3205	299	30	146	0	475	114	1316	50	0	1480	5403
Apprch %	25.1	19.3	55.6	0		6.4	84.2	9.4	0		62.9	6.3	30.7	0		7.7	88.9	3.4	0		
Total %	1.1	0.9	2.5	0	4.5	3.8	50	5.6	0	59.3	5.5	0.6	2.7	0	8.8	2.1	24.4	0.9	0	27.4	

	NW 173rd St Southbound				US 441 Westbound				NW 173rd St Northbound				US 441 Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 06:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	6	4	12	22	26	338	39	403	57	2	22	81	8	170	5	183	689
05:00 PM	13	13	18	44	31	353	56	440	27	5	21	53	23	185	9	217	754
05:15 PM	12	12	17	41	25	395	49	469	30	1	24	55	15	154	5	174	739
05:30 PM	14	4	21	39	28	369	31	428	29	2	16	47	9	179	2	190	704
Total Volume	45	33	68	146	110	1455	175	1740	143	10	83	236	55	688	21	764	2886
% App. Total	30.8	22.6	46.6		6.3	83.6	10.1		60.6	4.2	35.2		7.2	90.1	2.7		
PHF	.804	.635	.810	.830	.887	.921	.781	.928	.627	.500	.865	.728	.598	.930	.583	.880	.957

TRUCK % 1/146 = 1% 40/1740 = 2% 28/236 = 12% 21/764 = 3%

US HWY 441 at Santa Fe HS Driveway

Peggy Malone & Associates

904-992-8072

File Name : 2 US 441 & Santa Fe HS Driveway AM
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Groups Printed- Cars

	Santa Fe Highschool Entrance/Exit Southbound				US 441 Westbound					US 441 Eastbound				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
06:45 AM	0	0	0	0	0	91	0	0	91	298	1	0	299	390
Total	0	0	0	0	0	91	0	0	91	298	1	0	299	390
07:00 AM	0	1	0	1	1	91	1	0	93	403	1	0	404	498
07:15 AM	0	1	0	1	1	127	0	0	128	425	4	0	429	558
07:30 AM	0	0	0	0	5	138	0	0	143	482	3	0	485	628
07:45 AM	1	0	0	1	12	150	1	0	163	405	8	0	413	577
Total	1	2	0	3	19	506	2	0	527	1715	16	0	1731	2261
08:00 AM	1	3	0	4	12	159	0	0	171	323	0	0	323	498
08:15 AM	2	5	0	7	6	184	0	0	190	334	6	0	340	537
08:30 AM	1	1	0	2	7	219	1	0	227	309	10	0	319	548
Grand Total	5	11	0	16	44	1159	3	0	1206	2979	33	0	3012	4234
Apprch %	31.2	68.8	0		3.6	96.1	0.2	0		98.9	1.1	0		
Total %	0.1	0.3	0	0.4	1	27.4	0.1	0	28.5	70.4	0.8	0	71.1	

	Santa Fe Highschool Entrance/Exit Southbound			US 441 Westbound				US 441 Eastbound			
Start Time	Right	Left	App. Total	Right	Thru	Left	App. Total	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 07:00 AM											
07:00 AM	0	**1**	**1**	1	91	**1**	93	403	1	404	498
07:15 AM	0	1	1	1	127	0	128	425	4	429	558
07:30 AM	0	0	0	5	138	0	143	**482**	3	**485**	**628**
07:45 AM	**1**	0	1	**12**	**150**	1	**163**	405	**8**	413	577
Total Volume	1	2	3	19	506	2	527	1715	16	1731	2261
% App. Total	33.3	66.7		3.6	96	0.4		99.1	0.9		
PHF	.250	.500	.750	.396	.843	.500	.808	.890	.500	.892	.900

Peggy Malone & Associates

904-992-8072

File Name : 2 US 441 & Santa Fe HS Driveway AM
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Groups Printed- Trucks

	Santa Fe Highschool Entrance/Exit Southbound				US 441 Westbound					US 441 Eastbound				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
06:45 AM	0	0	0	0	0	9	0	0	9	11	0	0	11	20
Total	0	0	0	0	0	9	0	0	9	11	0	0	11	20
07:00 AM	0	0	0	0	1	12	0	0	13	25	0	0	25	38
07:15 AM	0	0	0	0	0	16	0	0	16	21	0	0	21	37
07:30 AM	0	0	0	0	0	14	0	0	14	11	0	0	11	25
07:45 AM	1	0	0	1	1	17	0	0	18	21	0	0	21	40
Total	1	0	0	1	2	59	0	0	61	78	0	0	78	140
08:00 AM	0	0	0	0	0	24	0	0	24	19	1	0	20	44
08:15 AM	3	2	0	5	2	17	0	0	19	21	4	0	25	49
08:30 AM	3	2	0	5	5	22	0	0	27	23	0	0	23	55
Grand Total	7	4	0	11	9	131	0	0	140	152	5	0	157	308
Apprch %	63.6	36.4	0		6.4	93.6	0	0		96.8	3.2	0		
Total %	2.3	1.3	0	3.6	2.9	42.5	0	0	45.5	49.4	1.6	0	51	

1 72 73

	Santa Fe Highschool Entrance/Exit Southbound			US 441 Westbound				US 441 Eastbound			
Start Time	Right	Left	App. Total	Right	Thru	Left	App. Total	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 07:45 AM											
07:45 AM	1	0	1	1	17	0	18	21	0	21	40
08:00 AM	0	0	0	0	**24**	0	24	19	1	20	44
08:15 AM	**3**	**2**	**5**	2	17	0	19	21	**4**	**25**	49
08:30 AM	3	2	5	**5**	22	0	**27**	**23**	0	23	**55**
Total Volume	7	4	11	8	80	0	88	84	5	89	188
% App. Total	63.6	36.4		9.1	90.9	0		94.4	5.6		
PHF	.583	.500	.550	.400	.833	.000	.815	.913	.313	.890	.855

Peggy Malone & Associates

904-992-8072

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Groups Printed- Bicycles on Crosswalk

	Santa Fe Highschool Entrance/Exit Southbound				US 441 Westbound					US 441 Eastbound				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	1	1	0	0	0	0	0	0	0	0	0	1
Apprch %	0	0	100		0	0	0	0		0	0	0		
Total %	0	0	100	100	0	0	0	0	0	0	0	0	0	

	Santa Fe Highschool Entrance/Exit Southbound			US 441 Westbound				US 441 Eastbound			
Start Time	Right	Left	App. Total	Right	Thru	Left	App. Total	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 06:45 AM											
06:45 AM	0	0	0	0	0	0	0	0	0	0	0
07:00 AM	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peggy Malone & Associates

904-992-8072

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Groups Printed- Pedestrians

	Santa Fe Highschool Entrance/Exit Southbound				US 441 Westbound					US 441 Eastbound				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0		0	0	0	0		0	0	0		
Total %														

	Santa Fe Highschool Entrance/Exit Southbound			US 441 Westbound				US 441 Eastbound			
Start Time	Right	Left	App. Total	Right	Thru	Left	App. Total	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 06:45 AM											
06:45 AM	0	0	0	0	0	0	0	0	0	0	0
07:00 AM	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peggy Malone & Associates

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Groups Printed- Combined

	Santa Fe Highschool Entrance/Exit Southbound				US 441 Westbound					US 441 Eastbound				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
06:45 AM	0	0	0	0	0	100	0	0	100	309	1	0	310	410
Total	0	0	0	0	0	100	0	0	100	309	1	0	310	410
07:00 AM	0	1	0	1	2	103	1	0	106	428	1	0	429	536
07:15 AM	0	1	0	1	1	143	0	0	144	446	4	0	450	595
07:30 AM	0	0	0	0	5	152	0	0	157	493	3	0	496	653
07:45 AM	2	0	0	2	13	167	1	0	181	426	8	0	434	617
Total	2	2	1 0	4	21	565	2	0 0	588	1793	16	0 0	1809	2401
08:00 AM	1	3	1	5	12	183	0	0	195	342	1	0	343	543
08:15 AM	5	7	0	12	8	201	0	0	209	355	10	0	365	586
08:30 AM	4	3	0	7	12	241	1	0	254	332	10	0	342	603
Grand Total	12	15	1	28	53	1290	3	0	1346	3131	38	0	3169	4543
Apprch %	42.9	53.6	3.6		3.9	95.8	0.2	0		98.8	1.2	0		
Total %	0.3	0.3	0	0.6	1.2	28.4	0.1	0	29.6	68.9	0.8	0	69.8	

	Santa Fe Highschool Entrance/Exit Southbound			US 441 Westbound				US 441 Eastbound			
Start Time	Right	Left	App. Total	Right	Thru	Left	App. Total	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 07:15 AM											
07:15 AM	0	1	1	1	143	0	144	446	4	450	595
07:30 AM	0	0	0	5	152	0	157	**493**	3	**496**	**653**
07:45 AM	**2**	0	2	**13**	167	**1**	181	426	**8**	434	617
08:00 AM	1	**3**	**4**	12	**183**	0	**195**	342	1	343	542
Total Volume	3	4	7	31	645	1	677	1707	16	1723	2407
% App. Total	42.9	57.1		4.6	95.3	0.1		99.1	0.9		
PHF	.375	.333	.438	.596	.881	.250	.868	.866	.500	.868	.922

TRUCK % 1/7 = 14%

72/677 = 11%

73/1723 = 4%

Peggy Malone & Associates

904-992-8072

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Groups Printed- Cars

	Santa Fe Highschool Entrance/Exit Southbound				US 441 Westbound					US 441 Eastbound				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
04:15 PM	0	2	0	2	0	308	0	0	308	211	0	0	211	521
04:30 PM	1	0	0	1	1	371	1	0	373	250	4	0	254	628
04:45 PM	0	2	0	2	2	427	1	0	430	224	0	0	224	656
Total	1	4	0	5	3	1106	2	0	1111	685	4	0	689	1805
05:00 PM	1	0	0	1	1	399	1	0	401	237	4	0	241	643
05:15 PM	0	3	0	3	0	438	0	0	438	200	0	0	200	641
05:30 PM	1	3	0	4	0	435	0	0	435	212	1	0	213	652
05:45 PM	2	6	0	8	1	381	2	0	384	191	1	0	192	584
Total	4	12	0	16	2	1653	3	0	1658	840	6	0	846	2520
06:00 PM	0	4	0	4	2	324	1	0	327	175	0	0	175	506
Grand Total	5	20	0	25	7	3083	6	0	3096	1700	10	0	1710	4831
Apprch %	20	80	0		0.2	99.6	0.2	0		99.4	0.6	0		
Total %	0.1	0.4	0	0.5	0.1	63.8	0.1	0	64.1	35.2	0.2	0	35.4	

	Santa Fe Highschool Entrance/Exit Southbound			US 441 Westbound				US 441 Eastbound			
Start Time	Right	Left	App. Total	Right	Thru	Left	App. Total	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 06:00 PM - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 04:45 PM											
04:45 PM	0	2	2	**2**	427	**1**	430	224	0	224	**656**
05:00 PM	**1**	0	1	1	399	1	401	**237**	**4**	**241**	643
05:15 PM	0	**3**	3	0	**438**	0	**438**	200	0	200	641
05:30 PM	1	3	**4**	0	435	0	435	212	1	213	652
Total Volume	2	8	10	3	1699	2	1704	873	5	878	2592
% App. Total	20	80		0.2	99.7	0.1		99.4	0.6		
PHF	.500	.667	.625	.375	.970	.500	.973	.921	.313	.911	.988

Peggy Malone & Associates

904-992-8072

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Groups Printed- Trucks

	Santa Fe Highschool Entrance/Exit Southbound				US 441 Westbound					US 441 Eastbound				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
04:15 PM	0	0	0	0	0	13	0	0	13	14	0	0	14	27
04:30 PM	0	0	0	0	0	9	0	0	9	6	0	0	6	15
04:45 PM	1	0	0	1	1	7	0	0	8	12	0	0	12	21
Total	1	0	0	1	1	29	0	0	30	32	0	0	32	63
05:00 PM	0	0	0	1 0	0	13	0	0	40 13	8	0	0	45 8	21
05:15 PM	0	0	0	0	0	8	0	0	8	12	0	0	12	20
05:30 PM	0	0	0	0	0	11	0	0	11	13	0	0	13	24
05:45 PM	0	0	0	0	0	8	0	0	8	11	0	0	11	19
Total	0	0	0	0	0	40	0	0	40	44	0	0	44	84
06:00 PM	0	0	0	0	0	13	0	0	13	6	0	0	6	19
Grand Total	1	0	0	1	1	82	0	0	83	82	0	0	82	166
Apprch %	100	0	0		1.2	98.8	0	0		100	0	0		
Total %	0.6	0	0	0.6	0.6	49.4	0	0	50	49.4	0	0	49.4	

	Santa Fe Highschool Entrance/Exit Southbound			US 441 Westbound				US 441 Eastbound			
Start Time	Right	Left	App. Total	Right	Thru	Left	App. Total	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 06:00 PM - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 04:45 PM											
04:45 PM	**1**	0	**1**	**1**	7	0	8	12	0	12	21
05:00 PM	0	0	0	0	**13**	0	**13**	8	0	8	21
05:15 PM	0	0	0	0	8	0	8	12	0	12	20
05:30 PM	0	0	0	0	11	0	11	**13**	0	**13**	**24**
Total Volume	1	0	1	1	39	0	40	45	0	45	86
% App. Total	100	0		2.5	97.5	0		100	0		
PHF	.250	.000	.250	.250	.750	.000	.769	.865	.000	.865	.896

Peggy Malone & Associates

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Groups Printed- Bicycles on Crosswalk

	Santa Fe Highschool Entrance/Exit Southbound				US 441 Westbound					US 441 Eastbound				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0		0	0	0	0		0	0	0		
Total %														

	Santa Fe Highschool Entrance/Exit Southbound			US 441 Westbound				US 441 Eastbound			
Start Time	Right	Left	App. Total	Right	Thru	Left	App. Total	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 06:00 PM - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 04:15 PM											
04:15 PM	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peggy Malone & Associates

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Groups Printed- Pedestrians

	Santa Fe Highschool Entrance/Exit Southbound				US 441 Westbound					US 441 Eastbound				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0		0	0	0	0		0	0	0		
Total %														

	Santa Fe Highschool Entrance/Exit Southbound			US 441 Westbound				US 441 Eastbound			
Start Time	Right	Left	App. Total	Right	Thru	Left	App. Total	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 06:00 PM - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 04:15 PM											
04:15 PM	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peggy Malone & Associates

904-992-8072

File Name : 2 US 441 & Santa Fe HS Driveway PM
Site Code :
Start Date : 4/6/2022
Page No : 1

Groups Printed- Combined

	Santa Fe Highschool Entrance/Exit Southbound				US 441 Westbound					US 441 Eastbound				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
04:15 PM	0	2	0	2	0	321	0	0	321	225	0	0	225	548
04:30 PM	1	0	0	1	1	380	1	0	382	256	4	0	260	643
04:45 PM	1	2	0	3	3	434	1	0	438	236	0	0	236	677
Total	2	4	0	6	4	1135	2	0	1141	717	4	0	721	1868
05:00 PM	1	0	0	1	1	412	1	0	414	245	4	0	249	664
05:15 PM	0	3	0	3	0	446	0	0	446	212	0	0	212	661
05:30 PM	1	3	0	4	0	446	0	0	446	225	1	0	226	676
05:45 PM	2	6	0	8	1	389	2	0	392	202	1	0	203	603
Total	4	12	0	16	2	1693	3	0	1698	884	6	0	890	2604
06:00 PM	0	4	0	4	2	337	1	0	340	181	0	0	181	525
Grand Total	6	20	0	26	8	3165	6	0	3179	1782	10	0	1792	4997
Apprch %	23.1	76.9	0		0.3	99.6	0.2	0		99.4	0.6	0		
Total %	0.1	0.4	0	0.5	0.2	63.3	0.1	0	63.6	35.7	0.2	0	35.9	

	Santa Fe Highschool Entrance/Exit Southbound			US 441 Westbound				US 441 Eastbound			
Start Time	Right	Left	App. Total	Right	Thru	Left	App. Total	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 06:00 PM - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 04:45 PM											
04:45 PM	**1**	2	3	**3**	434	**1**	438	236	0	236	**677**
05:00 PM	1	0	1	1	412	1	414	**245**	**4**	**249**	664
05:15 PM	0	**3**	3	0	**446**	0	**446**	212	0	212	661
05:30 PM	1	3	**4**	0	446	0	446	225	1	226	676
Total Volume	3	8	11	4	1738	2	1744	918	5	923	2678
% App. Total	27.3	72.7		0.2	99.7	0.1		99.5	0.5		
PHF	.750	.667	.688	.333	.974	.500	.978	.937	.313	.927	.989

TRUCK % 1/11 = 9% 40/1744 = 2% 45/923 = 5%

US HWY 441 at
Publix Entrance

Peggy Malone & Associates

904-992-8072

File Name : 3 US 441 & Publix Entrance
Site Code :
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Groups Printed- Cars

	Publix Entrance Southbound				US Highway 441 Westbound				US Highway 441 Eastbound				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
06:00 AM	2	0	0	2	1	38	0	39	166	0	0	166	207
06:15 AM	2	0	0	2	0	46	0	46	235	0	0	235	283
06:30 AM	10	0	0	10	2	64	0	66	273	0	0	273	349
06:45 AM	5	0	0	5	0	87	0	87	295	0	0	295	387
Total	19	0	0	19	3	235	0	238	969	0	0	969	1226
07:00 AM	10	0	0	10	2	83	0	85	398	0	0	398	493
07:15 AM	21	0	0	21	2	105	0	107	420	0	0	420	548
07:30 AM	16	0	0	16	5	128	0	133	471	0	0	471	620
07:45 AM	13	0	0	13	1	150	0	151	405	0	0	405	569
Total	60	0	0	60	10	466	0	476	1694	0	0	1694	2230
08:00 AM	18	0	0	18	5	152	0	157	319	0	0	319	494
08:15 AM	16	0	0	16	6	172	0	178	336	0	0	336	530
08:30 AM	25	0	0	25	7	200	0	207	308	0	0	308	540
08:45 AM	16	0	0	16	4	146	0	150	300	0	0	300	466
Total	75	0	0	75	22	670	0	692	1263	0	0	1263	2030
09:00 AM	23	0	0	23	4	106	0	110	226	0	0	226	359
09:15 AM	15	0	0	15	7	111	0	118	236	0	0	236	369
09:30 AM	24	0	0	24	3	122	0	125	222	0	0	222	371
09:45 AM	19	0	0	19	4	109	0	113	231	0	0	231	363
Total	81	0	0	81	18	448	0	466	915	0	0	915	1462
10:00 AM	29	0	0	29	4	115	0	119	196	0	0	196	344
10:15 AM	24	0	0	24	4	117	0	121	191	0	0	191	336
10:30 AM	26	0	0	26	5	151	0	156	194	0	0	194	376
10:45 AM	30	0	0	30	7	141	0	148	198	0	0	198	376
Total	109	0	0	109	20	524	0	544	779	0	0	779	1432
11:00 AM	34	0	0	34	1	157	0	158	186	0	0	186	378
11:15 AM	33	0	0	33	5	144	0	149	173	0	0	173	355
11:30 AM	33	0	0	33	3	174	0	177	219	0	0	219	429
11:45 AM	25	0	0	25	6	176	0	182	213	0	0	213	420
Total	125	0	0	125	15	651	0	666	791	0	0	791	1582
12:00 PM	33	0	0	33	4	197	0	201	225	0	0	225	459
12:15 PM	27	0	0	27	6	172	0	178	181	0	0	181	386
12:30 PM	26	0	0	26	7	174	0	181	195	0	0	195	402
12:45 PM	37	0	0	37	4	162	0	166	193	0	0	193	396
Total	123	0	0	123	21	705	0	726	794	0	0	794	1643
01:00 PM	43	0	0	43	5	199	0	204	206	0	0	206	453
01:15 PM	41	0	0	41	5	182	0	187	190	0	0	190	418
01:30 PM	29	0	0	29	9	192	0	201	206	0	0	206	436
01:45 PM	25	0	0	25	3	221	0	224	202	0	0	202	451
Total	138	0	0	138	22	794	0	816	804	0	0	804	1758
02:00 PM	41	0	0	41	2	183	0	185	189	0	0	189	415
02:15 PM	32	0	0	32	3	207	0	210	212	0	0	212	454
02:30 PM	29	0	0	29	8	194	0	202	207	0	0	207	438
02:45 PM	49	0	0	49	6	213	0	219	191	0	0	191	459
Total	151	0	0	151	19	797	0	816	799	0	0	799	1766
03:00 PM	41	0	0	41	11	208	0	219	243	0	0	243	503
03:15 PM	59	0	0	59	8	250	0	258	269	0	0	269	586
03:30 PM	53	0	0	53	10	272	0	282	237	0	0	237	572
03:45 PM	45	0	0	45	8	281	0	289	211	0	0	211	545
Total	198	0	0	198	37	1011	0	1048	960	0	0	960	2206
04:00 PM	50	0	0	50	3	298	0	301	200	0	0	200	551
04:15 PM	41	0	0	41	4	262	0	266	206	0	0	206	513
04:30 PM	60	0	0	60	11	309	0	320	247	0	0	247	627
04:45 PM	45	0	0	45	7	391	0	398	238	0	0	238	681
Total	196	0	0	196	25	1260	0	1285	891	0	0	891	2372
05:00 PM	69	0	0	69	9	334	0	343	220	0	0	220	632
05:15 PM	65	0	0	65	6	367	0	373	195	0	0	195	633
05:30 PM	60	0	0	60	4	386	0	390	213	0	0	213	663
05:45 PM	66	0	0	66	6	314	0	320	204	0	0	204	590
Total	260	0	0	260	25	1401	0	1426	832	0	0	832	2518

Peggy Malone & Associates
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File Name : 3 US 441 & Publix Entrance
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Groups Printed- Cars

	Publix Entrance Southbound				US Highway 441 Westbound				US Highway 441 Eastbound				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
06:00 PM	40	0	0	40	1	281	0	282	176	0	0	176	498
06:15 PM	49	0	0	49	8	232	0	240	183	0	0	183	472
06:30 PM	39	0	0	39	4	245	0	249	147	0	0	147	435
06:45 PM	32	0	0	32	3	167	0	170	125	0	0	125	327
Total	160	0	0	160	16	925	0	941	631	0	0	631	1732
07:00 PM	41	0	0	41	5	165	0	170	114	0	0	114	325
07:15 PM	38	0	0	38	1	158	0	159	112	0	0	112	309
07:30 PM	27	0	0	27	1	158	0	159	114	0	0	114	300
07:45 PM	23	0	0	23	3	139	0	142	81	0	0	81	246
Total	129	0	0	129	10	620	0	630	421	0	0	421	1180
Grand Total	1824	0	0	1824	263	10507	0	10770	12543	0	0	12543	25137
Apprch %	100	0	0		2.4	97.6	0		100	0	0		
Total %	7.3	0	0	7.3	1	41.8	0	42.8	49.9	0	0	49.9	

	Publix Entrance Southbound			US Highway 441 Westbound			US Highway 441 Eastbound			
Start Time	Right	Left	App. Total	Right	Thru	App. Total	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 11:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	**21**	0	**21**	2	105	107	420	0	420	548
07:30 AM	16	0	16	**5**	128	133	**471**	0	**471**	**620**
07:45 AM	13	0	13	1	150	151	405	0	405	569
08:00 AM	18	0	18	5	**152**	**157**	319	0	319	494
Total Volume	68	0	68	13	535	548	1615	0	1615	2231
% App. Total	100	0		2.4	97.6		100	0		
PHF	.810	.000	.810	.650	.880	.873	.857	.000	.857	.900
Peak Hour Analysis From 12:00 PM to 07:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	45	0	45	7	**391**	**398**	**238**	0	**238**	**681**
05:00 PM	**69**	0	**69**	**9**	334	343	220	0	220	632
05:15 PM	65	0	65	6	367	373	195	0	195	633
05:30 PM	60	0	60	4	386	390	213	0	213	663
Total Volume	239	0	239	26	1478	1504	866	0	866	2609
% App. Total	100	0		1.7	98.3		100	0		
PHF	.866	.000	.866	.722	.945	.945	.910	.000	.910	.958

Peggy Malone & Associates

904-992-8072

File Name : 3 US 441 & Publix Entrance
Site Code :
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Groups Printed- Trucks

	Publix Entrance Southbound				US Highway 441 Westbound				US Highway 441 Eastbound				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
06:00 AM	0	0	0	0	0	5	0	5	23	0	0	23	28
06:15 AM	1	0	0	1	0	11	0	11	11	0	0	11	23
06:30 AM	0	0	0	0	0	10	0	10	15	0	0	15	25
06:45 AM	0	0	0	0	0	9	0	9	10	0	0	10	19
Total	1	0	0	1	0	35	0	35	59	0	0	59	95
07:00 AM	1	0	0	1	0	12	0	12	26	0	0	26	39
07:15 AM	0	0	0	0	0	17	0	17	19	0	0	19	36
07:30 AM	0	0	0	0	0	14	0	14	11	0	0	11	25
07:45 AM	0	0	0	0	0	18	0	18	18	0	0	18	36
Total	1	0	0	1	0	61	0	61	74	0	0	74	136
08:00 AM	1	0	0	1	2	22	0	24	16	0	0	16	41
08:15 AM	1	0	0	1	0	18	0	18	25	0	0	25	44
08:30 AM	0	0	0	0	0	27	0	27	18	0	0	18	45
08:45 AM	0	0	0	0	0	18	0	18	25	0	0	25	43
Total	2	0	0	2	2	85	0	87	84	0	0	84	173
09:00 AM	0	0	0	0	0	18	0	18	19	0	0	19	37
09:15 AM	0	0	0	0	0	20	0	20	10	0	0	10	30
09:30 AM	0	0	0	0	0	20	0	20	21	0	0	21	41
09:45 AM	1	0	0	1	2	17	0	19	22	0	0	22	42
Total	1	0	0	1	2	75	0	77	72	0	0	72	150
10:00 AM	1	0	0	1	1	13	0	14	13	0	0	13	28
10:15 AM	0	0	0	0	1	10	0	11	24	0	0	24	35
10:30 AM	0	0	0	0	0	13	0	13	22	0	0	22	35
10:45 AM	0	0	0	0	0	13	0	13	18	0	0	18	31
Total	1	0	0	1	2	49	0	51	77	0	0	77	129
11:00 AM	0	0	0	0	0	22	0	22	8	0	0	8	30
11:15 AM	0	0	0	0	0	18	0	18	13	0	0	13	31
11:30 AM	0	0	0	0	0	20	0	20	18	0	0	18	38
11:45 AM	1	0	0	1	1	13	0	14	14	0	0	14	29
Total	1	0	0	1	1	73	0	74	53	0	0	53	128
12:00 PM	1	0	0	1	0	11	0	11	19	0	0	19	31
12:15 PM	1	0	0	1	0	21	0	21	22	0	0	22	44
12:30 PM	0	0	0	0	0	18	0	18	18	0	0	18	36
12:45 PM	0	0	0	0	0	21	0	21	29	0	0	29	50
Total	2	0	0	2	0	71	0	71	88	0	0	88	161
01:00 PM	0	0	0	0	0	15	0	15	12	0	0	12	27
01:15 PM	0	0	0	0	0	14	0	14	21	0	0	21	35
01:30 PM	0	0	0	0	0	11	0	11	26	0	0	26	37
01:45 PM	0	0	0	0	0	5	0	5	28	0	0	28	33
Total	0	0	0	0	0	45	0	45	87	0	0	87	132
02:00 PM	0	0	0	0	0	15	0	15	15	0	0	15	30
02:15 PM	0	0	0	0	0	17	0	17	11	0	0	11	28
02:30 PM	0	0	0	0	0	16	0	16	9	0	0	9	25
02:45 PM	2	0	0	2	0	20	0	20	13	0	0	13	35
Total	2	0	0	2	0	68	0	68	48	0	0	48	118
03:00 PM	0	0	0	0	0	19	0	19	21	0	0	21	40
03:15 PM	0	0	0	0	1	18	0	19	27	0	0	27	46
03:30 PM	0	0	0	0	0	12	0	12	13	0	0	13	25
03:45 PM	1	0	0	1	0	14	0	14	9	0	0	9	24
Total	1	0	0	1	1	63	0	64	70	0	0	70	135
04:00 PM	0	0	0	0	0	15	0	15	14	0	0	14	29
04:15 PM	0	0	0	0	0	14	0	14	14	0	0	14	28
04:30 PM	1	0	0	1	0	8	0	8	7	0	0	7	16
04:45 PM	0	0	0	0	0	8	0	8	12	0	0	12	20
Total	1	0	0	1	0	45	0	45	47	0	0	47	93
05:00 PM	0	0	0	0	0	12	0	12	8	0	0	8	20
05:15 PM	1	0	0	1	0	8	0	8	13	0	0	13	22
05:30 PM	0	0	0	0	0	11	0	11	14	0	0	14	25
05:45 PM	0	0	0	0	0	9	0	9	10	0	0	10	19
Total	1	0	0	1	0	40	0	40	45	0	0	45	86

Peggy Malone & Associates
904-992-8072

File Name : 3 US 441 & Publix Entrance
Site Code :
Start Date : 4/6/2022

Groups Printed- Trucks

	Publix Entrance Southbound				US Highway 441 Westbound				US Highway 441 Eastbound				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
06:00 PM	0	0	0	0	0	13	0	13	7	0	0	7	20
06:15 PM	0	0	0	0	1	10	0	11	7	0	0	7	18
06:30 PM	0	0	0	0	0	6	0	6	3	0	0	3	9
06:45 PM	1	0	0	1	0	4	0	4	5	0	0	5	10
Total	1	0	0	1	1	33	0	34	22	0	0	22	57
07:00 PM	1	0	0	1	0	9	0	9	5	0	0	5	15
07:15 PM	0	0	0	0	0	13	0	13	8	0	0	8	21
07:30 PM	0	0	0	0	0	9	0	9	11	0	0	11	20
07:45 PM	0	0	0	0	0	8	0	8	2	0	0	2	10
Total	1	0	0	1	0	39	0	39	26	0	0	26	66
Grand Total	16	0	0	16	9	782	0	791	852	0	0	852	1659
Apprch %	100	0	0		1.1	98.9	0		100	0	0		
Total %	1	0	0	1	0.5	47.1	0	47.7	51.4	0	0	51.4	

	Publix Entrance Southbound			US Highway 441 Westbound			US Highway 441 Eastbound			
Start Time	Right	Left	App. Total	Right	Thru	App. Total	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 11:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	**1**	0	**1**	**2**	22	24	16	0	16	41
08:15 AM	1	0	1	0	18	18	**25**	0	**25**	44
08:30 AM	0	0	0	0	**27**	**27**	18	0	18	**45**
08:45 AM	0	0	0	0	18	18	25	0	25	43
Total Volume	2	0	2	2	85	87	84	0	84	173
% App. Total	100	0		2.3	97.7		100	0		
PHF	.500	.000	.500	.250	.787	.806	.840	.000	.840	.961
Peak Hour Analysis From 12:00 PM to 07:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 12:00 PM										
12:00 PM	**1**	0	**1**	0	11	11	19	0	19	31
12:15 PM	1	0	1	0	**21**	**21**	22	0	22	44
12:30 PM	0	0	0	0	18	18	18	0	18	36
12:45 PM	0	0	0	0	21	21	**29**	0	**29**	**50**
Total Volume	2	0	2	0	71	71	88	0	88	161
% App. Total	100	0		0	100		100	0		
PHF	.500	.000	.500	.000	.845	.845	.759	.000	.759	.805

Peggy Malone & Associates

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File Name : 3 US 441 & Publix Entrance
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Groups Printed- Bicycles on Crosswalk

	Publix Entrance Southbound				US Highway 441 Westbound				US Highway 441 Eastbound				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
06:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0

Peggy Malone & Associates
904-992-8072

File Name : 3 US 441 & Publix Entrance
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Groups Printed- Bicycles on Crosswalk

	Publix Entrance Southbound				US Highway 441 Westbound				US Highway 441 Eastbound				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
06:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0		0	0	0		0	0	0		
Total %													

	Publix Entrance Southbound			US Highway 441 Westbound			US Highway 441 Eastbound			
Start Time	Right	Left	App. Total	Right	Thru	App. Total	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 11:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 06:00 AM										
06:00 AM	0	0	0	0	0	0	0	0	0	0
06:15 AM	0	0	0	0	0	0	0	0	0	0
06:30 AM	0	0	0	0	0	0	0	0	0	0
06:45 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Peak Hour Analysis From 12:00 PM to 07:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 12:00 PM										
12:00 PM	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peggy Malone & Associates

904-992-8072

File Name : 3 US 441 & Publix Entrance
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Groups Printed- Pedestrians

	Publix Entrance Southbound				US Highway 441 Westbound				US Highway 441 Eastbound				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
06:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	1
06:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	1	0	0	0	0	0	0	0	0	1
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30 PM	0	0	1	1	0	0	0	0	0	0	0	0	1
01:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	1	0	0	0	0	0	0	0	0	1
02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	0	1	1	0	0	0	0	0	0	0	0	1
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	1	0	0	0	0	0	0	0	0	1
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0

Peggy Malone & Associates
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File Name : 3 US 441 & Publix Entrance
Site Code :
Start Date : 4/6/2022

Groups Printed- Pedestrians

	Publix Entrance Southbound				US Highway 441 Westbound				US Highway 441 Eastbound				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
06:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	3	3	0	0	0	0	0	0	0	0	3
Apprch %	0	0	100		0	0	0		0	0	0		
Total %	0	0	100	100	0	0	0	0	0	0	0	0	

	Publix Entrance Southbound			US Highway 441 Westbound			US Highway 441 Eastbound			
Start Time	Right	Left	App. Total	Right	Thru	App. Total	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 11:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 06:00 AM										
06:00 AM	0	0	0	0	0	0	0	0	0	0
06:15 AM	0	0	0	0	0	0	0	0	0	0
06:30 AM	0	0	0	0	0	0	0	0	0	0
06:45 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Peak Hour Analysis From 12:00 PM to 07:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 12:00 PM										
12:00 PM	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peggy Malone & Associates

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File Name : 3 US 441 & Publix Entrance
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Groups Printed- Combined

	Publix Entrance Southbound				US Highway 441 Westbound				US Highway 441 Eastbound				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
06:00 AM	2	0	1	3	1	43	0	44	189	0	0	189	236
06:15 AM	3	0	0	3	0	57	0	57	246	0	0	246	306
06:30 AM	10	0	0	10	2	74	0	76	288	0	0	288	374
06:45 AM	5	0	0	5	0	96	0	96	305	0	0	305	406
Total	20	0	1	21	3	270	0	273	1028	0	0	1028	1322
07:00 AM	11	0	0	11	2	95	0	97	424	0	0	424	532
07:15 AM	21	0	0	21	2	122	0	124	439	0	0	439	584
07:30 AM	16	0	0	16	5	142	0	147	482	0	0	482	645
07:45 AM	13	0	0	13	1	168	0	169	423	0	0	423	605
Total	61	0	0	61	10	527	0	537	1768	0	0	1768	2366
08:00 AM	19	0	0	19	7	174	0	181	335	0	0	335	535
08:15 AM	17	0	0	17	6	190	0	196	361	0	0	361	574
08:30 AM	25	0	0	25	7	227	0	234	326	0	0	326	585
08:45 AM	16	0	0	16	4	164	0	168	325	0	0	325	509
Total	77	0	0	77	24	755	0	779	1347	0	0	1347	2203
09:00 AM	23	0	0	23	4	124	0	128	245	0	0	245	396
09:15 AM	15	0	0	15	7	131	0	138	246	0	0	246	399
09:30 AM	24	0	0	24	3	142	0	145	243	0	0	243	412
09:45 AM	20	0	0	20	6	126	0	132	253	0	0	253	405
Total	82	0	0	82	20	523	0	543	987	0	0	987	1612
10:00 AM	30	0	0	30	5	128	0	133	209	0	0	209	372
10:15 AM	24	0	0	24	5	127	0	132	215	0	0	215	371
10:30 AM	26	0	0	26	5	164	0	169	216	0	0	216	411
10:45 AM	30	0	0	30	7	154	0	161	216	0	0	216	407
Total	110	0	0	110	22	573	0	595	856	0	0	856	1561
11:00 AM	34	0	0	34	1	179	0	180	194	0	0	194	408
11:15 AM	33	0	0	33	5	162	0	167	186	0	0	186	386
11:30 AM	33	0	0	33	3	194	0	197	237	0	0	237	467
11:45 AM	26	0	0	26	7	189	0	196	227	0	0	227	449
Total	126	0	0	126	16	724	0	740	844	0	0	844	1710
12:00 PM	34	0	0	34	4	208	0	212	244	0	0	244	490
12:15 PM	28	0	0	28	6	193	0	199	203	0	0	203	430
12:30 PM	26	0	0	26	7	192	0	199	213	0	0	213	438
12:45 PM	37	0	0	37	4	183	0	187	222	0	0	222	446
Total	125	0	0	125	21	776	0	797	882	0	0	882	1804
01:00 PM	43	0	0	43	5	214	0	219	218	0	0	218	480
01:15 PM	41	0	0	41	5	196	0	201	211	0	0	211	453
01:30 PM	29	0	1	30	9	203	0	212	232	0	0	232	474
01:45 PM	25	0	0	25	3	226	0	229	230	0	0	230	484
Total	138	0	1	139	22	839	0	861	891	0	0	891	1891
02:00 PM	41	0	0	41	2	198	0	200	204	0	0	204	445
02:15 PM	32	0	0	32	3	224	0	227	223	0	0	223	482
02:30 PM	29	0	0	29	8	210	0	218	216	0	0	216	463
02:45 PM	51	0	0	51	6	233	0	239	204	0	0	204	494
Total	153	0	0	153	19	865	0	884	847	0	0	847	1884
03:00 PM	41	0	0	41	11	227	0	238	264	0	0	264	543
03:15 PM	59	0	1	60	9	268	0	277	296	0	0	296	633
03:30 PM	53	0	0	53	10	284	0	294	250	0	0	250	597
03:45 PM	46	0	0	46	8	295	0	303	220	0	0	220	569
Total	199	0	1	200	38	1074	0	1112	1030	0	0	1030	2342
04:00 PM	50	0	0	50	3	313	0	316	214	0	0	214	580
04:15 PM	41	0	0	41	4	276	0	280	220	0	0	220	541
04:30 PM	61	0	0	61	11	317	0	328	254	0	0	254	643
04:45 PM	45	0	0	45	7	399	0	406	250	0	0	250	701
Total	197	0	0	197	25	1305	0	1330	938	0	0	938	2465
05:00 PM	69	0	0	69	9	346	0	355	228	0	0	228	652
05:15 PM	66	0	0	66	6	375	0	381	208	0	0	208	655
05:30 PM	60	0	0	60	4	397	0	401	227	0	0	227	688
05:45 PM	66	0	0	66	6	323	0	329	214	0	0	214	609
Total	261	0	0	261	25	1441	0	1466	877	0	0	877	2604

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File Name : 3 US 441 & Publix Entrance
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Groups Printed- Combined

	Publix Entrance Southbound				US Highway 441 Westbound				US Highway 441 Eastbound				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
06:00 PM	40	0	0	40	1	294	0	295	183	0	0	183	518
06:15 PM	49	0	0	49	9	242	0	251	190	0	0	190	490
06:30 PM	39	0	0	39	4	251	0	255	150	0	0	150	444
06:45 PM	33	0	0	33	3	171	0	174	130	0	0	130	337
Total	161	0	0	161	17	958	0	975	653	0	0	653	1789
07:00 PM	42	0	0	42	5	174	0	179	119	0	0	119	340
07:15 PM	38	0	0	38	1	171	0	172	120	0	0	120	330
07:30 PM	27	0	0	27	1	167	0	168	125	0	0	125	320
07:45 PM	23	0	0	23	3	147	0	150	83	0	0	83	256
Total	130	0	0	130	10	659	0	669	447	0	0	447	1246
Grand Total	1840	0	3	1843	272	11289	0	11561	13395	0	0	13395	26799
Apprch %	99.8	0	0.2		2.4	97.6	0		100	0	0		
Total %	6.9	0	0	6.9	1	42.1	0	43.1	50	0	0	50	

	Publix Entrance Southbound			US Highway 441 Westbound			US Highway 441 Eastbound			
Start Time	Right	Left	App. Total	Right	Thru	App. Total	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 11:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	**21**	0	**21**	2	122	124	439	0	439	584
07:30 AM	16	0	16	5	142	147	**482**	0	**482**	**645**
07:45 AM	13	0	13	1	168	169	423	0	423	605
08:00 AM	19	0	19	**7**	**174**	**181**	335	0	335	535
Total Volume	69	0	69	15	606	621	1679	0	1679	2369
% App. Total	100	0		2.4	97.6		100	0		
PHF	.821	.000	.821	.536	.871	.858	.871	.000	.871	.918
Peak Hour Analysis From 12:00 PM to 07:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	45	0	45	7	**399**	**406**	**250**	0	**250**	**701**
05:00 PM	**69**	0	**69**	**9**	346	355	228	0	228	652
05:15 PM	66	0	66	6	375	381	208	0	208	655
05:30 PM	60	0	60	4	397	401	227	0	227	688
Total Volume	240	0	240	26	1517	1543	913	0	913	2696
% App. Total	100	0		1.7	98.3		100	0		
PHF	.870	.000	.870	.722	.951	.950	.913	.000	.913	.961

US HWY 441 at NW 167th Blvd

Peggy Malone & Associates

904-992-8072

File Name : 4 US 441 & NW 167th Blvd
Site Code :
Start Date : 4/6/2022
Page No : 1

Groups Printed- Cars

	167th Blvd Southbound				US 441 Westbound					US 441 Eastbound				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
06:00 AM	3	15	0	18	9	36	0	0	45	164	6	0	170	233
06:15 AM	1	13	0	14	7	45	0	0	52	233	14	0	247	313
06:30 AM	0	15	0	15	4	66	1	0	71	280	9	0	289	375
06:45 AM	1	14	0	15	12	86	2	0	100	309	8	0	317	432
Total	5	57	0	62	32	233	3	0	268	986	37	0	1023	1353
07:00 AM	4	27	0	31	17	80	2	0	99	394	17	0	411	541
07:15 AM	8	29	0	37	22	100	3	0	125	409	23	0	432	594
07:30 AM	2	34	0	36	19	131	4	0	154	475	13	0	488	678
07:45 AM	4	19	0	23	28	147	5	0	180	387	25	0	412	615
Total	18	109	0	127	86	458	14	0	558	1665	78	0	1743	2428
08:00 AM	4	40	0	44	27	155	2	0	184	305	20	0	325	553
08:15 AM	5	20	0	25	28	174	4	0	206	318	20	0	338	569
08:30 AM	3	22	0	25	22	202	3	0	227	280	27	0	307	559
08:45 AM	4	40	0	44	29	146	2	0	177	291	26	0	317	538
Total	16	122	0	138	106	677	11	0	794	1194	93	0	1287	2219
09:00 AM	4	31	0	35	22	105	4	0	131	209	19	0	228	394
09:15 AM	8	21	0	29	31	107	1	0	139	213	19	0	232	400
09:30 AM	5	20	0	25	28	121	3	0	152	214	17	0	231	408
09:45 AM	0	20	0	20	28	112	0	0	140	203	26	0	229	389
Total	17	92	0	109	109	445	8	0	562	839	81	0	920	1591
10:00 AM	4	21	0	25	35	115	3	0	153	172	24	0	196	374
10:15 AM	2	32	0	34	33	116	1	0	150	176	20	0	196	380
10:30 AM	8	26	0	34	33	149	0	0	182	167	21	0	188	404
10:45 AM	2	29	0	31	40	147	1	0	188	168	32	0	200	419
Total	16	108	0	124	141	527	5	0	673	683	97	0	780	1577
11:00 AM	6	28	0	34	38	152	3	0	193	154	23	0	177	404
11:15 AM	3	36	0	39	44	145	8	0	197	145	26	0	171	407
11:30 AM	3	28	0	31	45	170	5	0	220	190	25	0	215	466
11:45 AM	9	45	0	54	48	171	2	0	221	186	25	0	211	486
Total	21	137	0	158	175	638	18	0	831	675	99	0	774	1763
12:00 PM	8	35	0	43	50	184	5	0	239	194	30	0	224	506
12:15 PM	7	35	0	42	46	167	3	0	216	168	27	0	195	453
12:30 PM	8	45	0	53	46	168	5	0	219	184	25	0	209	481
12:45 PM	6	47	0	53	48	162	3	0	213	179	20	0	199	465
Total	29	162	0	191	190	681	16	0	887	725	102	0	827	1905
01:00 PM	7	67	0	74	51	190	5	0	246	199	33	0	232	552
01:15 PM	4	41	0	45	37	186	1	0	224	190	19	0	209	478
01:30 PM	9	43	0	52	46	187	1	0	234	195	28	0	223	509
01:45 PM	6	30	0	36	40	217	3	0	260	197	26	0	223	519
Total	26	181	0	207	174	780	10	0	964	781	106	0	887	2058
02:00 PM	5	31	0	36	40	183	6	0	229	159	23	0	182	447
02:15 PM	8	32	0	40	57	203	1	0	261	187	24	0	211	512
02:30 PM	4	42	0	46	51	198	5	0	254	173	28	0	201	501
02:45 PM	6	32	0	38	46	214	3	0	263	157	27	0	184	485
Total	23	137	0	160	194	798	15	0	1007	676	102	0	778	1945
03:00 PM	7	41	0	48	57	208	3	0	268	206	54	0	260	576
03:15 PM	9	57	0	66	69	243	4	0	316	255	31	0	286	668
03:30 PM	10	44	0	54	61	268	4	0	333	213	34	0	247	634
03:45 PM	8	45	0	53	60	279	6	0	345	192	39	0	231	629
Total	34	187	0	221	247	998	17	0	1262	866	158	0	1024	2507
04:00 PM	8	38	0	46	63	287	2	0	352	166	33	0	199	597
04:15 PM	8	33	0	41	54	263	5	0	322	183	26	0	209	572
04:30 PM	9	43	0	52	69	315	4	0	388	220	34	0	254	694
04:45 PM	8	39	0	47	87	402	1	0	490	198	35	0	233	770
Total	33	153	0	186	273	1267	12	0	1552	767	128	0	895	2633
05:00 PM	15	59	0	74	65	327	7	0	399	203	28	0	231	704
05:15 PM	8	45	0	53	78	371	3	0	452	172	27	0	199	704
05:30 PM	11	35	0	46	83	378	1	0	462	186	36	0	222	730
05:45 PM	8	62	0	70	66	310	3	0	379	174	22	0	196	645
Total	42	201	0	243	292	1386	14	0	1692	735	113	0	848	2783

Peggy Malone & Associates
904-992-8072

File Name : 4 US 441 & NW 167th Blvd
Site Code :
Start Date : 4/6/2022

Groups Printed- Cars

	167th Blvd Southbound				US 441 Westbound					US 441 Eastbound				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
06:00 PM	10	45	0	55	57	260	5	0	322	163	15	0	178	555
06:15 PM	14	29	0	43	49	215	3	0	267	169	16	0	185	495
06:30 PM	9	29	0	38	50	225	1	0	276	135	12	0	147	461
06:45 PM	9	46	0	55	32	159	4	0	195	107	20	0	127	377
Total	42	149	0	191	188	859	13	0	1060	574	63	0	637	1888
07:00 PM	2	24	0	26	47	167	4	0	218	96	20	0	116	360
07:15 PM	5	27	0	32	40	155	5	0	200	93	22	0	115	347
07:30 PM	11	29	0	40	48	147	4	0	199	99	17	0	116	355
07:45 PM	6	30	0	36	37	135	2	0	174	70	14	0	84	294
Total	24	110	0	134	172	604	15	0	791	358	73	0	431	1356
Grand Total	346	1905	0	2251	2379	10351	171	0	12901	11524	1330	0	12854	28006
Apprch %	15.4	84.6	0		18.4	80.2	1.3	0		89.7	10.3	0		
Total %	1.2	6.8	0	8	8.5	37	0.6	0	46.1	41.1	4.7	0	45.9	

	167th Blvd Southbound			US 441 Westbound				US 441 Eastbound			
Start Time	Right	Left	App. Total	Right	Thru	Left	App. Total	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 11:45 AM - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 07:15 AM											
07:15 AM	**8**	29	37	22	100	3	125	409	23	432	594
07:30 AM	2	34	36	19	131	4	154	**475**	13	**488**	**678**
07:45 AM	4	19	23	**28**	147	**5**	180	387	**25**	412	615
08:00 AM	4	**40**	**44**	27	**155**	2	**184**	305	20	325	553
Total Volume	18	122	140	96	533	14	643	1576	81	1657	2440
% App. Total	12.9	87.1		14.9	82.9	2.2		95.1	4.9		
PHF	.563	.763	.795	.857	.860	.700	.874	.829	.810	.849	.900
Peak Hour Analysis From 12:00 PM to 07:45 PM - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 04:45 PM											
04:45 PM	8	39	47	**87**	**402**	1	**490**	198	35	**233**	**770**
05:00 PM	**15**	**59**	**74**	65	327	**7**	399	**203**	28	231	704
05:15 PM	8	45	53	78	371	3	452	172	27	199	704
05:30 PM	11	35	46	83	378	1	462	186	**36**	222	730
Total Volume	42	178	220	313	1478	12	1803	759	126	885	2908
% App. Total	19.1	80.9		17.4	82	0.7		85.8	14.2		
PHF	.700	.754	.743	.899	.919	.429	.920	.935	.875	.950	.944

Peggy Malone & Associates

904-992-8072

File Name : 4 US 441 & NW 167th Blvd
Site Code :
Start Date : 4/6/2022
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Groups Printed- Trucks

	167th Blvd Southbound				US 441 Westbound					US 441 Eastbound				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
06:00 AM	0	1	0	1	2	5	0	0	7	23	0	0	23	31
06:15 AM	0	0	0	0	0	11	0	0	11	13	0	0	13	24
06:30 AM	0	0	0	0	1	10	0	0	11	16	0	0	16	27
06:45 AM	1	1	0	2	0	8	0	0	8	11	0	0	11	21
Total	1	2	0	3	3	34	0	0	37	63	0	0	63	103
07:00 AM	0	0	0	0	0	12	0	0	12	25	0	0	25	37
07:15 AM	0	0	0	0	0	16	0	0	16	20	0	0	20	36
07:30 AM	0	0	0	0	1	13	0	0	14	13	1	0	14	28
07:45 AM	0	2	0	2	0	18	0	0	18	19	2	0	21	41
Total	0	2	0	4 2	1	59	0	0	71 60	77	3	0	73 80	142
08:00 AM	1	1	0	2	0	23	0	0	23	18	0	0	18	43
08:15 AM	0	2	0	2	0	18	0	0	18	22	1	0	23	43
08:30 AM	0	1	0	1	2	27	0	0	29	19	1	0	20	50
08:45 AM	0	5	0	5	2	19	0	0	21	24	0	0	24	50
Total	1	9	0	10	4	87	0	0	91	83	2	0	85	186
09:00 AM	0	1	0	1	1	18	0	0	19	17	0	0	17	37
09:15 AM	1	0	0	1	0	19	0	0	19	10	0	0	10	30
09:30 AM	0	1	0	1	0	21	0	0	21	17	0	0	17	39
09:45 AM	0	0	0	0	1	19	1	0	21	21	0	0	21	42
Total	1	2	0	3	2	77	1	0	80	65	0	0	65	148
10:00 AM	0	0	0	0	0	14	0	0	14	13	0	0	13	27
10:15 AM	0	1	0	1	0	11	0	0	11	23	0	0	23	35
10:30 AM	0	0	0	0	0	13	0	0	13	23	0	0	23	36
10:45 AM	0	1	0	1	0	13	0	0	13	19	0	0	19	33
Total	0	2	0	2	0	51	0	0	51	78	0	0	78	131
11:00 AM	0	1	0	1	0	23	1	0	24	11	1	0	12	37
11:15 AM	0	0	0	0	0	18	0	0	18	14	0	0	14	32
11:30 AM	0	1	0	1	2	20	0	0	22	21	0	0	21	44
11:45 AM	0	1	0	1	1	13	0	0	14	18	0	0	18	33
Total	0	3	0	3	3	74	1	0	78	64	1	0	65	146
12:00 PM	1	2	0	3	2	9	1	0	12	21	0	0	21	36
12:15 PM	0	0	0	0	2	21	0	0	23	23	0	0	23	46
12:30 PM	0	2	0	2	1	18	0	0	19	19	0	0	19	40
12:45 PM	1	0	0	1	2	21	0	0	23	27	0	0	27	51
Total	2	4	0	6	7	69	1	0	77	90	0	0	90	173
01:00 PM	1	1	0	2	0	13	0	0	13	11	1	0	12	27
01:15 PM	1	0	0	1	0	14	0	0	14	20	0	0	20	35
01:30 PM	0	0	0	0	1	11	0	0	12	26	0	0	26	38
01:45 PM	0	1	0	1	2	5	0	0	7	23	0	0	23	31
Total	2	2	0	4	3	43	0	0	46	80	1	0	81	131
02:00 PM	1	2	0	3	2	14	0	0	16	15	0	0	15	34
02:15 PM	1	0	0	1	1	16	0	0	17	9	0	0	9	27
02:30 PM	0	1	0	1	1	16	0	0	17	10	0	0	10	28
02:45 PM	0	3	0	3	2	20	0	0	22	14	0	0	14	39
Total	2	6	0	8	6	66	0	0	72	48	0	0	48	128
03:00 PM	1	1	0	2	3	18	0	0	21	21	0	0	21	44
03:15 PM	0	0	0	0	0	20	0	0	20	26	0	0	26	46
03:30 PM	1	0	0	1	1	13	0	0	14	14	0	0	14	29
03:45 PM	0	2	0	2	0	14	0	0	14	10	0	0	10	26
Total	2	3	0	5	4	65	0	0	69	71	0	0	71	145
04:00 PM	1	0	0	1	0	13	0	0	13	16	0	0	16	30
04:15 PM	0	0	0	0	0	13	1	0	14	13	0	0	13	27
04:30 PM	0	0	0	0	1	8	0	0	9	7	0	0	7	16
04:45 PM	0	1	0	1	0	8	0	0	8	12	0	0	12	21
Total	1	1	0	2	1	42	1	0	44	48	0	0	48	94
05:00 PM	0	0	0	2 0	2	13	0	0	44 15	7	1	0	45 8	23
05:15 PM	0	1	0	1	0	8	0	0	8	11	0	0	11	20
05:30 PM	0	0	0	0	2	11	0	0	13	14	0	0	14	27
05:45 PM	1	0	0	1	0	8	0	0	8	11	0	0	11	20
Total	1	1	0	2	4	40	0	0	44	43	1	0	44	90

Peggy Malone & Associates
904-992-8072

File Name : 4 US 441 & NW 167th Blvd
Site Code :
Start Date : 4/6/2022

Groups Printed- Trucks

	167th Blvd Southbound				US 441 Westbound					US 441 Eastbound				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
06:00 PM	0	2	0	2	0	14	0	0	14	6	0	0	6	22
06:15 PM	0	0	0	0	0	11	0	0	11	7	0	0	7	18
06:30 PM	0	0	0	0	1	6	0	0	7	3	0	0	3	10
06:45 PM	0	1	0	1	1	4	0	0	5	5	0	0	5	11
Total	0	3	0	3	2	35	0	0	37	21	0	0	21	61
07:00 PM	0	0	0	0	0	10	0	0	10	5	1	0	6	16
07:15 PM	0	0	0	0	0	13	0	0	13	8	0	0	8	21
07:30 PM	0	1	0	1	0	9	0	0	9	11	0	0	11	21
07:45 PM	0	0	0	0	0	9	0	0	9	2	0	0	2	11
Total	0	1	0	1	0	41	0	0	41	26	1	0	27	69
Grand Total	13	41	0	54	40	783	4	0	827	857	9	0	866	1747
Apprch %	24.1	75.9	0		4.8	94.7	0.5	0		99	1	0		
Total %	0.7	2.3	0	3.1	2.3	44.8	0.2	0	47.3	49.1	0.5	0	49.6	

	167th Blvd Southbound			US 441 Westbound				US 441 Eastbound			
Start Time	Right	Left	App. Total	Right	Thru	Left	App. Total	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 11:45 AM - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 08:00 AM											
08:00 AM	**1**	1	2	0	23	0	23	18	0	18	43
08:15 AM	0	2	2	0	18	0	18	22	**1**	23	43
08:30 AM	0	1	1	**2**	**27**	0	**29**	19	1	20	**50**
08:45 AM	0	**5**	**5**	2	19	0	21	**24**	0	**24**	50
Total Volume	1	9	10	4	87	0	91	83	2	85	186
% App. Total	10	90		4.4	95.6	0		97.6	2.4		
PHF	.250	.450	.500	.500	.806	.000	.784	.865	.500	.885	.930
Peak Hour Analysis From 12:00 PM to 07:45 PM - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 12:00 PM											
12:00 PM	**1**	**2**	**3**	**2**	9	**1**	12	21	0	21	36
12:15 PM	0	0	0	2	**21**	0	**23**	23	0	23	46
12:30 PM	0	2	2	1	18	0	19	19	0	19	40
12:45 PM	1	0	1	2	21	0	23	**27**	0	**27**	**51**
Total Volume	2	4	6	7	69	1	77	90	0	90	173
% App. Total	33.3	66.7		9.1	89.6	1.3		100	0		
PHF	.500	.500	.500	.875	.821	.250	.837	.833	.000	.833	.848

Peggy Malone & Associates

904-992-8072

File Name : 4 US 441 & NW 167th Blvd
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Groups Printed- Bicycles on Crosswalk

	167th Blvd Southbound				US 441 Westbound					US 441 Eastbound				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
06:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peggy Malone & Associates
904-992-8072

File Name : 4 US 441 & NW 167th Blvd
Site Code :
Start Date : 4/6/2022

Groups Printed- Bicycles on Crosswalk

	167th Blvd Southbound				US 441 Westbound					US 441 Eastbound				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
06:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0		0	0	0	0		0	0	0		
Total %														

	167th Blvd Southbound			US 441 Westbound				US 441 Eastbound			
Start Time	Right	Left	App. Total	Right	Thru	Left	App. Total	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 11:45 AM - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 06:00 AM											
06:00 AM	0	0	0	0	0	0	0	0	0	0	0
06:15 AM	0	0	0	0	0	0	0	0	0	0	0
06:30 AM	0	0	0	0	0	0	0	0	0	0	0
06:45 AM	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Peak Hour Analysis From 12:00 PM to 07:45 PM - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 12:00 PM											
12:00 PM	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peggy Malone & Associates

904-992-8072

File Name : 4 US 441 & NW 167th Blvd
Site Code :
Start Date : 4/6/2022
Page No : 1

Groups Printed- Pedestrians

	167th Blvd Southbound				US 441 Westbound					US 441 Eastbound				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
06:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	1
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	1	0	0	0	0	0	0	0	0	0	1
04:00 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	1	0	0	0	0	0	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peggy Malone & Associates
904-992-8072

File Name : 4 US 441 & NW 167th Blvd
Site Code :
Start Date : 4/6/2022
Page No : 2

Groups Printed- Pedestrians

	167th Blvd Southbound				US 441 Westbound					US 441 Eastbound				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
06:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	2	2	0	0	0	0	0	0	0	0	0	2
Apprch %	0	0	100		0	0	0	0		0	0	0		
Total %	0	0	100	100	0	0	0	0	0	0	0	0	0	

	167th Blvd Southbound			US 441 Westbound				US 441 Eastbound			
Start Time	Right	Left	App. Total	Right	Thru	Left	App. Total	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 11:45 AM - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 06:00 AM											
06:00 AM	0	0	0	0	0	0	0	0	0	0	0
06:15 AM	0	0	0	0	0	0	0	0	0	0	0
06:30 AM	0	0	0	0	0	0	0	0	0	0	0
06:45 AM	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Peak Hour Analysis From 12:00 PM to 07:45 PM - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 12:00 PM											
12:00 PM	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peggy Malone & Associates

904-992-8072

File Name : 4 US 441 & NW 167th Blvd
Site Code :
Start Date : 4/6/2022
Page No : 1

Groups Printed- Combined

	167th Blvd Southbound				US 441 Westbound					US 441 Eastbound				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
06:00 AM	3	16	0	19	11	41	0	0	52	187	6	0	193	264
06:15 AM	1	13	0	14	7	56	0	0	63	246	14	0	260	337
06:30 AM	0	15	0	15	5	76	1	0	82	296	9	0	305	402
06:45 AM	2	15	0	17	12	94	2	0	108	320	8	0	328	453
Total	6	59	0	65	35	267	3	0	305	1049	37	0	1086	1456
07:00 AM	4	27	0	31	17	92	2	0	111	419	17	0	436	578
07:15 AM	8	29	0	37	22	116	3	0	141	429	23	0	452	630
07:30 AM	2	34	0	36	20	144	4	0	168	488	14	0	502	706
07:45 AM	4	21	0	25	28	165	5	0	198	406	27	0	433	656
Total	18	111	0	129	87	517	14	0	618	1742	81	0	1823	2570
08:00 AM	5	41	0	46	27	178	2	0	207	323	20	0	343	596
08:15 AM	5	22	0	27	28	192	4	0	224	340	21	0	361	612
08:30 AM	3	23	0	26	24	229	3	0	256	299	28	0	327	609
08:45 AM	4	45	0	49	31	165	2	0	198	315	26	0	341	588
Total	17	131	0	148	110	764	11	0	885	1277	95	0	1372	2405
09:00 AM	4	32	0	36	23	123	4	0	150	226	19	0	245	431
09:15 AM	9	21	0	30	31	126	1	0	158	223	19	0	242	430
09:30 AM	5	21	0	26	28	142	3	0	173	231	17	0	248	447
09:45 AM	0	20	0	20	29	131	1	0	161	224	26	0	250	431
Total	18	94	0	112	111	522	9	0	642	904	81	0	985	1739
10:00 AM	4	21	0	25	35	129	3	0	167	185	24	0	209	401
10:15 AM	2	33	0	35	33	127	1	0	161	199	20	0	219	415
10:30 AM	8	26	0	34	33	162	0	0	195	190	21	0	211	440
10:45 AM	2	30	0	32	40	160	1	0	201	187	32	0	219	452
Total	16	110	0	126	141	578	5	0	724	761	97	0	858	1708
11:00 AM	6	29	0	35	38	175	4	0	217	165	24	0	189	441
11:15 AM	3	36	0	39	44	163	8	0	215	159	26	0	185	439
11:30 AM	3	29	0	32	47	190	5	0	242	211	25	0	236	510
11:45 AM	9	46	0	55	49	184	2	0	235	204	25	0	229	519
Total	21	140	0	161	178	712	19	0	909	739	100	0	839	1909
12:00 PM	9	37	0	46	52	193	6	0	251	215	30	0	245	542
12:15 PM	7	35	0	42	48	188	3	0	239	191	27	0	218	499
12:30 PM	8	47	0	55	47	186	5	0	238	203	25	0	228	521
12:45 PM	7	47	0	54	50	183	3	0	236	206	20	0	226	516
Total	31	166	0	197	197	750	17	0	964	815	102	0	917	2078
01:00 PM	8	68	0	76	51	203	5	0	259	210	34	0	244	579
01:15 PM	5	41	0	46	37	200	1	0	238	210	19	0	229	513
01:30 PM	9	43	0	52	47	198	1	0	246	221	28	0	249	547
01:45 PM	6	31	0	37	42	222	3	0	267	220	26	0	246	550
Total	28	183	0	211	177	823	10	0	1010	861	107	0	968	2189
02:00 PM	6	33	0	39	42	197	6	0	245	174	23	0	197	481
02:15 PM	9	32	0	41	58	219	1	0	278	196	24	0	220	539
02:30 PM	4	43	0	47	52	214	5	0	271	183	28	0	211	529
02:45 PM	6	35	0	41	48	234	3	0	285	171	27	0	198	524
Total	25	143	0	168	200	864	15	0	1079	724	102	0	826	2073
03:00 PM	8	42	0	50	60	226	3	0	289	227	54	0	281	620
03:15 PM	9	57	1	67	69	263	4	0	336	281	31	0	312	715
03:30 PM	11	44	0	55	62	281	4	0	347	227	34	0	261	663
03:45 PM	8	47	0	55	60	293	6	0	359	202	39	0	241	655
Total	36	190	1	227	251	1063	17	0	1331	937	158	0	1095	2653
04:00 PM	9	38	1	48	63	300	2	0	365	182	33	0	215	628
04:15 PM	8	33	0	41	54	276	6	0	336	196	26	0	222	599
04:30 PM	9	43	0	52	70	323	4	0	397	227	34	0	261	710
04:45 PM	8	40	0	48	87	410	1	0	498	210	35	0	245	791
Total	34	154	1	189	274	1309	13	0	1596	815	128	0	943	2728
05:00 PM	15	59	0	74	67	340	7	0	414	210	29	0	239	727
05:15 PM	8	46	0	54	78	379	3	0	460	183	27	0	210	724
05:30 PM	11	35	0	46	85	389	1	0	475	200	36	0	236	757
05:45 PM	9	62	0	71	66	318	3	0	387	185	22	0	207	665
Total	43	202	0	245	296	1426	14	0	1736	778	114	0	892	2873

Peggy Malone & Associates
904-992-8072

File Name : 4 US 441 & NW 167th Blvd
Site Code :
Start Date : 4/6/2022

Groups Printed- Combined

	167th Blvd Southbound				US 441 Westbound					US 441 Eastbound				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
06:00 PM	10	47	0	57	57	274	5	0	336	169	15	0	184	577
06:15 PM	14	29	0	43	49	226	3	0	278	176	16	0	192	513
06:30 PM	9	29	0	38	51	231	1	0	283	138	12	0	150	471
06:45 PM	9	47	0	56	33	163	4	0	200	112	20	0	132	388
Total	42	152	0	194	190	894	13	0	1097	595	63	0	658	1949
07:00 PM	2	24	0	26	47	177	4	0	228	101	21	0	122	376
07:15 PM	5	27	0	32	40	168	5	0	213	101	22	0	123	368
07:30 PM	11	30	0	41	48	156	4	0	208	110	17	0	127	376
07:45 PM	6	30	0	36	37	144	2	0	183	72	14	0	86	305
Total	24	111	0	135	172	645	15	0	832	384	74	0	458	1425
Grand Total	359	1946	2	2307	2419	11134	175	0	13728	12381	1339	0	13720	29755
Apprch %	15.6	84.4	0.1		17.6	81.1	1.3	0		90.2	9.8	0		
Total %	1.2	6.5	0	7.8	8.1	37.4	0.6	0	46.1	41.6	4.5	0	46.1	

	167th Blvd Southbound			US 441 Westbound				US 441 Eastbound			
Start Time	Right	Left	App. Total	Right	Thru	Left	App. Total	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 11:45 AM - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 07:15 AM											
07:15 AM	**8**	29	37	22	116	3	141	429	23	452	630
07:30 AM	2	34	36	20	144	4	168	**488**	14	**502**	**706**
07:45 AM	4	21	25	**28**	165	**5**	198	406	**27**	433	656
08:00 AM	5	**41**	**46**	27	**178**	2	**207**	323	20	343	596
Total Volume	19	125	144	97	603	14	714	1646	84	1730	2588
% App. Total	13.2	86.8		13.6	84.5	2		95.1	4.9		
PHF	.594	.762	.783	.866	.847	.700	.862	.843	.778	.862	.916
Peak Hour Analysis From 12:00 PM to 07:45 PM - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 04:45 PM											
04:45 PM	8	40	48	**87**	**410**	1	**498**	**210**	35	**245**	**791**
05:00 PM	**15**	**59**	**74**	67	340	**7**	414	210	29	239	727
05:15 PM	8	46	54	78	379	3	460	183	27	210	724
05:30 PM	11	35	46	85	389	1	475	200	**36**	236	757
Total Volume	42	180	222	317	1518	12	1847	803	127	930	2999
% App. Total	18.9	81.1		17.2	82.2	0.6		86.3	13.7		
PHF	.700	.763	.750	.911	.926	.429	.927	.956	.882	.949	.948

AM TRUCK % 4/144 = 3% 71/714 = 10% 73/1730 = 4%

PM TRUCK % 2/222 = 1% 44/1847 = 2% 45/930 = 5%

US HWY 441 at NW 161st St

Peggy Malone & Associates

904-992-8072

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Groups Printed- Cars

	161st St Southbound					US 441 Westbound					Burger King Entrance Northbound					US 441 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:45 AM	2	0	0	0	2	0	101	11	0	112	5	0	0	0	5	4	310	0	0	314	433
Total	2	0	0	0	2	0	101	11	0	112	5	0	0	0	5	4	310	0	0	314	433
07:00 AM	0	0	0	0	0	0	97	12	0	109	1	0	0	0	1	0	415	0	0	415	525
07:15 AM	2	0	0	0	2	0	122	18	0	140	3	0	0	0	3	2	443	0	0	445	590
07:30 AM	1	0	0	0	1	0	153	17	0	170	6	0	0	0	6	5	505	1	0	511	688
07:45 AM	1	0	0	0	1	1	175	15	0	191	4	0	0	0	4	2	396	4	0	402	598
Total	4	0	0	0	4	1	547	62	0	610	14	0	0	0	14	9	1759	5	0	1773	2401
08:00 AM	1	0	0	0	1	0	181	10	0	191	7	0	0	0	7	6	342	0	0	348	547
08:15 AM	3	0	0	0	3	1	203	16	0	220	9	0	0	0	9	4	340	0	0	344	576
08:30 AM	3	0	0	0	3	3	224	22	0	249	9	0	0	0	9	4	303	0	0	307	568
Grand Total	13	0	0	0	13	5	1256	121	0	1382	44	0	0	0	44	27	3054	5	0	3086	4525
Apprch %	100	0	0	0		0.4	90.9	8.8	0		100	0	0	0		0.9	99	0.2	0		
Total %	0.3	0	0	0	0.3	0.1	27.8	2.7	0	30.5	1	0	0	0	1	0.6	67.5	0.1	0	68.2	

	161st St Southbound					US 441 Westbound					Burger King Entrance Northbound					US 441 Eastbound					
Start Time	Right	Thru	Left	App. Total		Right	Thru	Left	App. Total		Right	Thru	Left	App. Total		Right	Thru	Left	App. Total		Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	**2**	0	0	**2**		0	122	**18**	140		3	0	0	3		2	443	0	445		590
07:30 AM	1	0	0	1		0	153	17	170		6	0	0	6		5	**505**	1	**511**		**688**
07:45 AM	1	0	0	1		**1**	175	15	**191**		4	0	0	4		2	396	**4**	402		598
08:00 AM	1	0	0	1		0	**181**	10	191		**7**	0	0	**7**		**6**	342	0	348		547
Total Volume	5	0	0	5		1	631	60	692		20	0	0	20		15	1686	5	1706		2423
% App. Total	100	0	0			0.1	91.2	8.7			100	0	0			0.9	98.8	0.3			
PHF	.625	.000	.000	.625		.250	.872	.833	.906		.714	.000	.000	.714		.625	.835	.313	.835		.880

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Groups Printed- Trucks

	161st St Southbound					US 441 Westbound					Burger King Entrance Northbound					US 441 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:45 AM	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	12	0	0	12	20
Total	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	12	0	0	12	20
07:00 AM	0	0	0	0	0	0	13	0	0	13	0	0	0	0	0	0	25	0	0	25	38
07:15 AM	0	0	0	0	0	0	16	0	0	16	0	0	0	0	0	0	20	0	0	20	36
07:30 AM	0	0	0	0	0	0	16	0	0	16	1	0	0	0	1	0	12	0	0	12	29
07:45 AM	0	0	0	0	0	0	18	1	0	19	0	0	0	0	0	0	21	0	0	21	40
Total	0	0	0	0	0	0	63	1	0	64	1	0	0	0	1	0	78	0	0	78	143
08:00 AM	0	0	0	0	0	0	22	0	0	22	0	0	0	0	0	0	18	0	0	18	40
08:15 AM	0	0	0	0	0	0	19	0	0	19	0	0	0	0	0	0	24	0	0	24	43
08:30 AM	0	0	0	0	0	0	28	0	0	28	0	0	0	0	0	0	21	0	0	21	49
Grand Total	0	0	0	0	0	0	140	1	0	141	1	0	0	0	1	0	153	0	0	153	295
Apprch %	0	0	0	0		0	99.3	0.7	0		100	0	0	0		0	100	0	0		
Total %	0	0	0	0	0	0	47.5	0.3	0	47.8	0.3	0	0	0	0.3	0	51.9	0	0	51.9	

	161st St Southbound				US 441 Westbound				Burger King Entrance Northbound				US 441 Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	0	0	0	0	18	**1**	19	0	0	0	0	0	21	0	21	40
08:00 AM	0	0	0	0	0	22	0	22	0	0	0	0	0	18	0	18	40
08:15 AM	0	0	0	0	0	19	0	19	0	0	0	0	0	**24**	0	**24**	43
08:30 AM	0	0	0	0	0	**28**	0	**28**	0	0	0	0	0	21	0	21	**49**
Total Volume	0	0	0	0	0	87	1	88	0	0	0	0	0	84	0	84	172
% App. Total	0	0	0		0	98.9	1.1		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.777	.250	.786	.000	.000	.000	.000	.000	.875	.000	.875	.878

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Groups Printed- Bicycles on Crosswalk

	161st St Southbound					US 441 Westbound					Burger King Entrance Northbound					US 441 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

	161st St Southbound				US 441 Westbound				Burger King Entrance Northbound				US 441 Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 06:45 AM																	
06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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Groups Printed- Pedestrians

	161st St Southbound					US 441 Westbound					Burger King Entrance Northbound					US 441 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

	161st St Southbound				US 441 Westbound				Burger King Entrance Northbound				US 441 Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 06:45 AM																	
06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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Groups Printed- Combined

	161st St Southbound					US 441 Westbound					Burger King Entrance Northbound					US 441 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:45 AM	2	0	0	0	2	0	109	11	0	120	5	0	0	0	5	4	322	0	0	326	453
Total	2	0	0	0	2	0	109	11	0	120	5	0	0	0	5	4	322	0	0	326	453
07:00 AM	0	0	0	0	0	0	110	12	0	122	1	0	0	0	1	0	440	0	0	440	563
07:15 AM	2	0	0	0	2	0	138	18	0	156	3	0	0	0	3	2	463	0	0	465	626
07:30 AM	1	0	0	0	1	0	169	17	0	186	7	0	0	0	7	5	517	1	0	523	717
07:45 AM	1	0	0	0	1	1	193	16	0	210	4	0	0	0	4	2	417	4	0	423	638
Total	4	0	0	0	4	1	610	63	0	674	15	0	0	0	15	9	1837	5	0	1851	2544
08:00 AM	1	0	0	0	1	0	203	10	0	213	7	0	0	0	7	6	360	0	0	366	587
08:15 AM	3	0	0	0	3	1	222	16	0	239	9	0	0	0	9	4	364	0	0	368	619
08:30 AM	3	0	0	0	3	3	252	22	0	277	9	0	0	0	9	4	324	0	0	328	617
Grand Total	13	0	0	0	13	5	1396	122	0	1523	45	0	0	0	45	27	3207	5	0	3239	4820
Apprch %	100	0	0	0		0.3	91.7	8	0		100	0	0	0		0.8	99	0.2	0		
Total %	0.3	0	0	0	0.3	0.1	29	2.5	0	31.6	0.9	0	0	0	0.9	0.6	66.5	0.1	0	67.2	

	161st St Southbound					US 441 Westbound					Burger King Entrance Northbound					US 441 Eastbound					
Start Time	Right	Thru	Left	App. Total		Right	Thru	Left	App. Total		Right	Thru	Left	App. Total		Right	Thru	Left	App. Total		Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	**2**	0	0	**2**		0	138	**18**	156		3	0	0	3		2	463	0	465		626
07:30 AM	1	0	0	1		0	169	17	186		**7**	0	0	**7**		5	**517**	1	**523**		**717**
07:45 AM	1	0	0	1		**1**	193	16	210		4	0	0	4		2	417	**4**	423		638
08:00 AM	1	0	0	1		0	**203**	10	**213**		7	0	0	7		**6**	360	0	366		587
Total Volume	5	0	0	5		1	703	61	765		21	0	0	21		15	1757	5	1777		2568
% App. Total	100	0	0			0.1	91.9	8			100	0	0			0.8	98.9	0.3			
PHF	.625	.000	.000	.625		.250	.866	.847	.898		.750	.000	.000	.750		.625	.850	.313	.849		.895

TRUCK % 0/5 = 0% 73/765 = 10% 1/21 = 5% 71/1777 = 4%

Peggy Malone & Associates

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Groups Printed- Cars

	161st St Southbound					US 441 Westbound					Burger King Entrance Northbound					US 441 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:15 PM	2	0	0	0	2	4	326	29	0	359	10	0	0	0	10	6	212	4	0	222	593
04:30 PM	1	0	0	0	1	1	382	21	0	404	17	0	0	0	17	5	255	4	0	264	686
04:45 PM	2	0	0	0	2	1	474	29	0	504	10	0	0	0	10	4	220	3	0	227	743
Total	5	0	0	0	5	6	1182	79	0	1267	37	0	0	0	37	15	687	11	0	713	2022
05:00 PM	2	0	0	0	2	4	399	21	0	424	8	0	0	0	8	3	251	5	0	259	693
05:15 PM	1	0	0	0	1	6	433	20	0	459	8	0	0	0	8	3	217	5	0	225	693
05:30 PM	1	0	0	0	1	4	487	23	0	514	5	0	0	0	5	1	218	4	0	223	743
05:45 PM	2	0	0	0	2	4	378	15	0	397	6	0	0	0	6	2	234	1	0	237	642
Total	6	0	0	0	6	18	1697	79	0	1794	27	0	0	0	27	9	920	15	0	944	2771
06:00 PM	2	0	0	0	2	0	323	30	0	353	5	0	0	0	5	1	204	1	0	206	566
Grand Total	13	0	0	0	13	24	3202	188	0	3414	69	0	0	0	69	25	1811	27	0	1863	5359
Apprch %	100	0	0	0		0.7	93.8	5.5	0		100	0	0	0		1.3	97.2	1.4	0		
Total %	0.2	0	0	0	0.2	0.4	59.7	3.5	0	63.7	1.3	0	0	0	1.3	0.5	33.8	0.5	0	34.8	

	161st St Southbound				US 441 Westbound				Burger King Entrance Northbound				US 441 Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 06:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**2**	0	0	**2**	1	474	**29**	504	**10**	0	0	**10**	**4**	220	3	227	**743**
05:00 PM	2	0	0	2	4	399	21	424	8	0	0	8	3	**251**	**5**	**259**	693
05:15 PM	1	0	0	1	**6**	433	20	459	8	0	0	8	3	217	5	225	693
05:30 PM	1	0	0	1	4	**487**	23	**514**	5	0	0	5	1	218	4	223	743
Total Volume	6	0	0	6	15	1793	93	1901	31	0	0	31	11	906	17	934	2872
% App. Total	100	0	0		0.8	94.3	4.9		100	0	0		1.2	97	1.8		
PHF	.750	.000	.000	.750	.625	.920	.802	.925	.775	.000	.000	.775	.688	.902	.850	.902	.966

Peggy Malone & Associates

904-992-8072

File Name : 5 US 441 & NW 161st St PM
Site Code :
Start Date : 4/6/2022
Page No : 1

Groups Printed- Trucks

	161st St Southbound					US 441 Westbound					Burger King Entrance Northbound					US 441 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:15 PM	0	0	0	0	0	0	13	0	0	13	0	0	0	0	0	0	14	0	0	14	27
04:30 PM	0	0	0	0	0	0	8	0	0	8	1	0	0	0	1	0	5	1	0	6	15
04:45 PM	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	12	0	0	12	20
Total	0	0	0	0	0	0	29	0	0	29	1	0	0	0	1	0	31	1	0	32	62
					0					44					2					46	
05:00 PM	0	0	0	0	0	0	15	0	0	15	2	0	0	0	2	0	7	0	0	7	24
05:15 PM	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	13	0	0	13	21
05:30 PM	0	0	0	0	0	0	13	0	0	13	0	0	0	0	0	1	13	0	0	14	27
05:45 PM	0	0	0	0	0	0	9	1	0	10	1	0	0	0	1	0	10	0	0	10	21
Total	0	0	0	0	0	0	45	1	0	46	3	0	0	0	3	1	43	0	0	44	93
06:00 PM	0	0	0	0	0	0	12	0	0	12	0	0	0	0	0	0	7	0	0	7	19
Grand Total	0	0	0	0	0	0	86	1	0	87	4	0	0	0	4	1	81	1	0	83	174
Apprch %	0	0	0	0		0	98.9	1.1	0		100	0	0	0		1.2	97.6	1.2	0		
Total %	0	0	0	0	0	0	49.4	0.6	0	50	2.3	0	0	0	2.3	0.6	46.6	0.6	0	47.7	

	161st St Southbound				US 441 Westbound				Burger King Entrance Northbound				US 441 Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 06:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	**15**	0	**15**	**2**	0	0	**2**	0	7	0	7	24
05:15 PM	0	0	0	0	0	8	0	8	0	0	0	0	0	**13**	0	13	21
05:30 PM	0	0	0	0	0	13	0	13	0	0	0	0	**1**	13	0	**14**	**27**
05:45 PM	0	0	0	0	0	9	**1**	10	1	0	0	1	0	10	0	10	21
Total Volume	0	0	0	0	0	45	1	46	3	0	0	3	1	43	0	44	93
% App. Total	0	0	0		0	97.8	2.2		100	0	0		2.3	97.7	0		
PHF	.000	.000	.000	.000	.000	.750	.250	.767	.375	.000	.000	.375	.250	.827	.000	.786	.861

Peggy Malone & Associates

904-992-8072

File Name : 5 US 441 & NW 161st St PM
Site Code :
Start Date : 4/6/2022
Page No : 1

Groups Printed- Bicycles on Crosswalk

	161st St Southbound					US 441 Westbound					Burger King Entrance Northbound					US 441 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1
Apprch %	0	0	0	0		0	0	0	0		0	0	0	100		0	0	0	0		
Total %	0	0	0	0	0	0	0	0	0	0	0	0	0	100	100	0	0	0	0	0	

	161st St Southbound				US 441 Westbound				Burger King Entrance Northbound				US 441 Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 06:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peggy Malone & Associates
904-992-8072

File Name : 5 US 441 & NW 161st St PM
Site Code :
Start Date : 4/6/2022
Page No : 1

Groups Printed- Pedestrians

	161st St Southbound					US 441 Westbound					Burger King Entrance Northbound					US 441 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

	161st St Southbound				US 441 Westbound				Burger King Entrance Northbound				US 441 Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 06:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peggy Malone & Associates

904-992-8072

File Name : 5 US 441 & NW 161st St PM
Site Code :
Start Date : 4/6/2022
Page No : 1

Groups Printed- Combined

	161st St Southbound					US 441 Westbound					Burger King Entrance Northbound					US 441 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:15 PM	2	0	0	0	2	4	339	29	0	372	10	0	0	1	11	6	226	4	0	236	621
04:30 PM	1	0	0	0	1	1	390	21	0	412	18	0	0	0	18	5	260	5	0	270	701
04:45 PM	2	0	0	0	2	1	482	29	0	512	10	0	0	0	10	4	232	3	0	239	763
Total	5	0	0	0	5	6	1211	79	0	1296	38	0	0	1	39	15	718	12	0	745	2085
05:00 PM	2	0	0	0	2	4	414	21	0	439	10	0	0	0	10	3	258	5	0	266	717
05:15 PM	1	0	0	0	1	6	441	20	0	467	8	0	0	0	8	3	230	5	0	238	714
05:30 PM	1	0	0	0	1	4	500	23	0	527	5	0	0	0	5	2	231	4	0	237	770
05:45 PM	2	0	0	0	2	4	387	16	0	407	7	0	0	0	7	2	244	1	0	247	663
Total	6	0	0	0	6	18	1742	80	0	1840	30	0	0	0	30	10	963	15	0	988	2864
06:00 PM	2	0	0	0	2	0	335	30	0	365	5	0	0	0	5	1	211	1	0	213	585
Grand Total	13	0	0	0	13	24	3288	189	0	3501	73	0	0	1	74	26	1892	28	0	1946	5534
Apprch %	100	0	0	0		0.7	93.9	5.4	0		98.6	0	0	1.4		1.3	97.2	1.4	0		
Total %	0.2	0	0	0	0.2	0.4	59.4	3.4	0	63.3	1.3	0	0	0	1.3	0.5	34.2	0.5	0	35.2	

	161st St Southbound					US 441 Westbound					Burger King Entrance Northbound					US 441 Eastbound					
Start Time	Right	Thru	Left	App. Total		Right	Thru	Left	App. Total		Right	Thru	Left	App. Total		Right	Thru	Left	App. Total		Int. Total
Peak Hour Analysis From 04:15 PM to 06:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	**2**	0	0	**2**		1	482	**29**	512		**10**	0	0	**10**		**4**	232	3	239		763
05:00 PM	2	0	0	2		4	414	21	439		10	0	0	10		3	**258**	**5**	**266**		717
05:15 PM	1	0	0	1		**6**	441	20	467		8	0	0	8		3	230	5	238		714
05:30 PM	1	0	0	1		4	**500**	23	**527**		5	0	0	5		2	231	4	237		**770**
Total Volume	6	0	0	6		15	1837	93	1945		33	0	0	33		12	951	17	980		2964
% App. Total	100	0	0			0.8	94.4	4.8			100	0	0			1.2	97	1.7			
PHF	.750	.000	.000	.750		.625	.919	.802	.923		.825	.000	.000	.825		.750	.922	.850	.921		.962

TRUCK % 4/6 = 2% 86/1945 = 11% 41/33 = 15% 58/980 = 4%

Appendix D
Seasonal Adjustment Factor and Historical Growth Rates

2019 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL

CATEGORY: 2600 ALACHUA COUNTYWIDE

MOCF: 0.97

WEEK	DATES	SF	PSCF
1	01/01/2019 - 01/05/2019	1.05	1.08
2	01/06/2019 - 01/12/2019	1.04	1.07
3	01/13/2019 - 01/19/2019	1.03	1.06
4	01/20/2019 - 01/26/2019	1.02	1.05
5	01/27/2019 - 02/02/2019	1.01	1.04
6	02/03/2019 - 02/09/2019	0.99	1.02
* 7	02/10/2019 - 02/16/2019	0.98	1.01
* 8	02/17/2019 - 02/23/2019	0.97	1.00
* 9	02/24/2019 - 03/02/2019	0.97	1.00
*10	03/03/2019 - 03/09/2019	0.96	0.99
*11	03/10/2019 - 03/16/2019	0.96	0.99
*12	03/17/2019 - 03/23/2019	0.96	0.99
*13	03/24/2019 - 03/30/2019	0.96	0.99
*14	03/31/2019 - 04/06/2019	0.96	0.99
*15	04/07/2019 - 04/13/2019	0.96	0.99
*16	04/14/2019 - 04/20/2019	0.96	0.99
*17	04/21/2019 - 04/27/2019	0.97	1.00
*18	04/28/2019 - 05/04/2019	0.98	1.01
*19	05/05/2019 - 05/11/2019	0.99	1.02
20	05/12/2019 - 05/18/2019	1.00	1.03
21	05/19/2019 - 05/25/2019	1.00	1.03
22	05/26/2019 - 06/01/2019	1.01	1.04
23	06/02/2019 - 06/08/2019	1.02	1.05
24	06/09/2019 - 06/15/2019	1.03	1.06
25	06/16/2019 - 06/22/2019	1.03	1.06
26	06/23/2019 - 06/29/2019	1.04	1.07
27	06/30/2019 - 07/06/2019	1.04	1.07
28	07/07/2019 - 07/13/2019	1.05	1.08
29	07/14/2019 - 07/20/2019	1.06	1.09
30	07/21/2019 - 07/27/2019	1.04	1.07
31	07/28/2019 - 08/03/2019	1.03	1.06
32	08/04/2019 - 08/10/2019	1.01	1.04
33	08/11/2019 - 08/17/2019	1.00	1.03
34	08/18/2019 - 08/24/2019	0.99	1.02
35	08/25/2019 - 08/31/2019	0.99	1.02
36	09/01/2019 - 09/07/2019	0.99	1.02
37	09/08/2019 - 09/14/2019	0.99	1.02
38	09/15/2019 - 09/21/2019	0.99	1.02
39	09/22/2019 - 09/28/2019	0.99	1.02
40	09/29/2019 - 10/05/2019	0.98	1.01
41	10/06/2019 - 10/12/2019	0.98	1.01
42	10/13/2019 - 10/19/2019	0.98	1.01
43	10/20/2019 - 10/26/2019	0.99	1.02
44	10/27/2019 - 11/02/2019	1.00	1.03
45	11/03/2019 - 11/09/2019	1.01	1.04
46	11/10/2019 - 11/16/2019	1.03	1.06
47	11/17/2019 - 11/23/2019	1.03	1.06
48	11/24/2019 - 11/30/2019	1.04	1.07
49	12/01/2019 - 12/07/2019	1.04	1.07
50	12/08/2019 - 12/14/2019	1.05	1.08
51	12/15/2019 - 12/21/2019	1.05	1.08
52	12/22/2019 - 12/28/2019	1.04	1.07
53	12/29/2019 - 12/31/2019	1.03	1.06

* PEAK SEASON

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2020 HISTORICAL AADT REPORT

COUNTY: 26 - ALACHUA

SITE: 0435 - CR 235A .2 MI. S. OF SR 25/US 441

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	5000 C	N 2600	S 2400	9.50	58.00	24.20
2019	4800 C	N 2500	S 2300	9.50	58.00	22.60
2018	4700 C	N 2400	S 2300	9.50	57.90	19.20
2017	4600 C	N 2300	S 2300	9.50	53.80	23.40
2016	4200 C	N 2100	S 2100	9.50	53.60	23.70
2015	3400 C	N 1700	S 1700	9.50	57.00	27.00
2014	3600 C	N 1800	S 1800	9.50	57.40	26.50
2013	3300 C	N 1700	S 1600	9.50	57.80	24.50
2012	3300 C	N 1700	S 1600	9.50	58.40	24.40
2011	3500 C	N 1800	S 1700	9.50	58.80	26.10
2010	3800 C	N 1900	S 1900	10.13	59.87	23.80
2009	4000 C	N 2000	S 2000	10.04	57.81	23.70
2008	4000 C	N 2000	S 2000	10.17	57.73	23.00
2007	3600 C	N 1800	S 1800	10.22	58.44	21.40
2006	3200 C	N 1600	S 1600	9.98	59.05	17.00
2005	2500 C	N 1300	S 1200	10.10	58.20	11.80

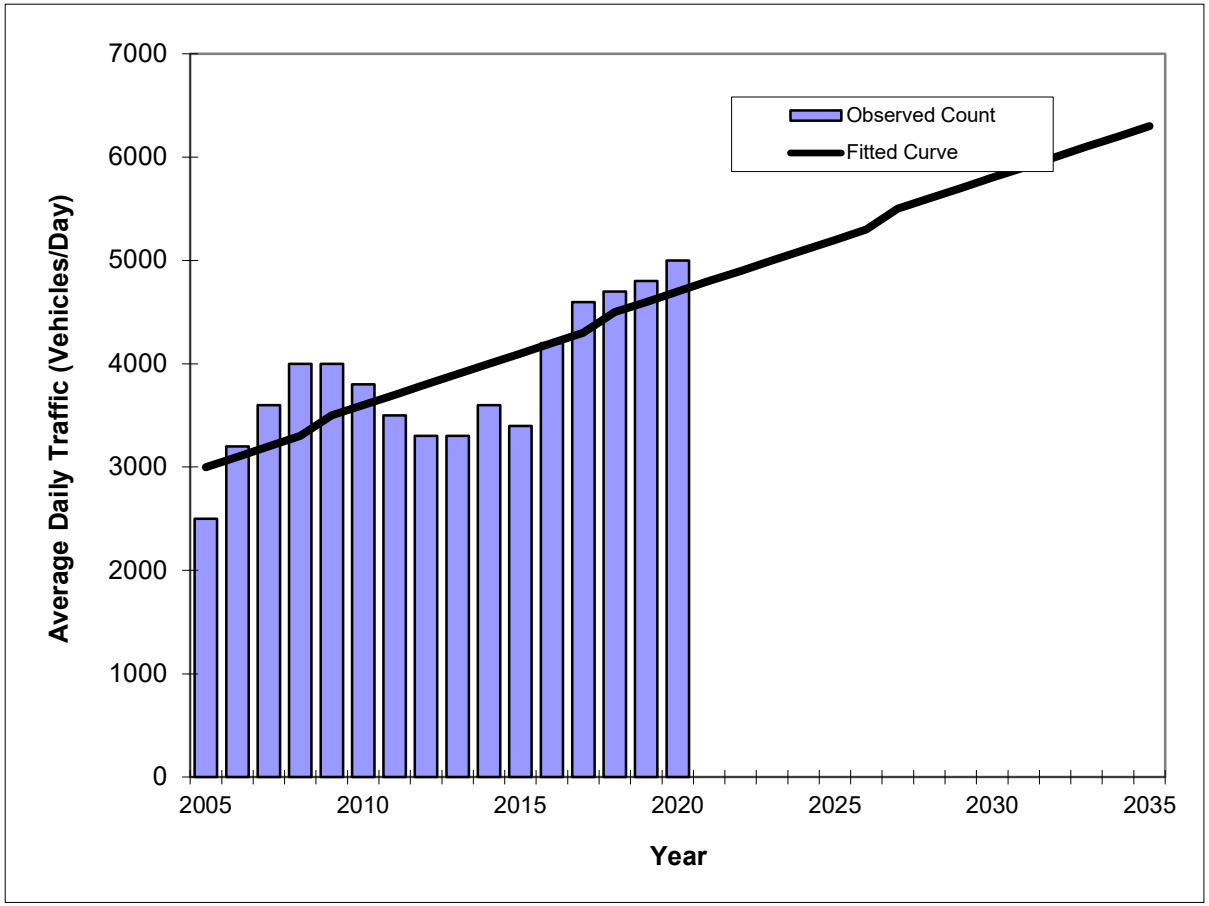
AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

Traffic Trends - V03.a

CR 235A --

FIN#	429193-1
Location	1

County:	Alachua (26)
Station #:	0435
Highway:	CR 235A



Year	Traffic (ADT/AADT) Count*	Trend**
2005	2500	3000
2006	3200	3100
2007	3600	3200
2008	4000	3300
2009	4000	3500
2010	3800	3600
2011	3500	3700
2012	3300	3800
2013	3300	3900
2014	3600	4000
2015	3400	4100
2016	4200	4200
2017	4600	4300
2018	4700	4500
2019	4800	4600
2020	5000	4700
2024 Opening Year Trend		
2024	N/A	5100
2025 Mid-Year Trend		
2025	N/A	5200
2026 Design Year Trend		
2026	N/A	5300
TRANPLAN Forecasts/Trends		

**** Annual Trend Increase:**	111
Trend R-squared:	60.05%
Trend Annual Historic Growth Rate:	3.78%
Trend Growth Rate (2020 to Design Year):	2.13%
Printed:	27-Apr-22

Straight Line Growth Option

***Axle-Adjusted**

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2020 HISTORICAL AADT REPORT

COUNTY: 26 - ALACHUA

SITE: 0461 - SR 20 .2 MI. NW OF SR 93

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	28000 C	N 14000	S 14000	9.50	58.00	5.60
2019	30000 C	N 15000	S 15000	9.50	58.00	5.60
2018	28000 C	N 14000	S 14000	9.50	57.90	4.90
2017	29500 C	N 14500	S 15000	9.50	53.80	4.60
2016	26000 C	N 13000	S 13000	9.50	53.60	4.90
2015	24500 C	N 12500	S 12000	9.50	57.00	5.20
2014	23500 C	N 11500	S 12000	9.50	57.40	5.40
2013	23000 C	N 11500	S 11500	9.50	57.80	5.00
2012	21000 C	N 10500	S 10500	9.50	58.40	4.90
2011	21500 C	N 10500	S 11000	9.50	58.80	5.50
2010	21000 C	N 10500	S 10500	10.13	59.87	5.10
2009	24000 C	N 12000	S 12000	10.04	57.81	6.20
2008	22500 C	N 11000	S 11500	10.17	57.73	7.30
2007	26000 C	N 13000	S 13000	10.22	58.44	5.70
2006	24500 C	N 12000	S 12500	9.98	59.05	6.70
2005	21000 C	N 10500	S 10500	10.10	58.20	19.60

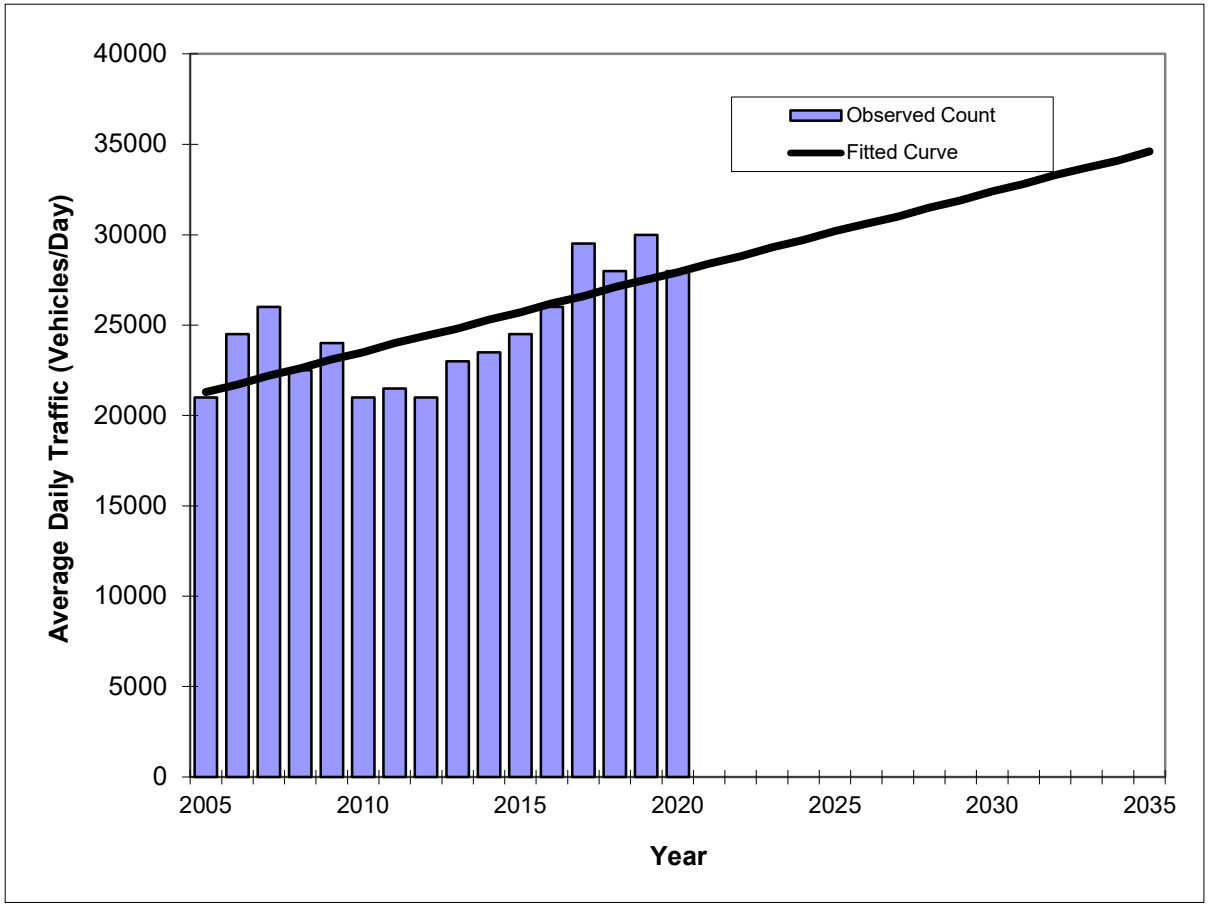
AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

Traffic Trends - V03.a

SR 20 --

FIN#	429193-1
Location	1

County:	Alachua (26)
Station #:	0461
Highway:	SR 20



Year	Traffic (ADT/AADT) Count*	Trend**
2005	21000	21300
2006	24500	21700
2007	26000	22200
2008	22500	22600
2009	24000	23100
2010	21000	23500
2011	21500	24000
2012	21000	24400
2013	23000	24800
2014	23500	25300
2015	24500	25700
2016	26000	26200
2017	29500	26600
2018	28000	27100
2019	30000	27500
2020	28000	27900
2024 Opening Year Trend		
2024	N/A	29700
2025 Mid-Year Trend		
2025	N/A	30200
2026 Design Year Trend		
2026	N/A	30600
TRANPLAN Forecasts/Trends		

**** Annual Trend Increase:**	443
Trend R-squared:	48.54%
Trend Annual Historic Growth Rate:	2.07%
Trend Growth Rate (2020 to Design Year):	1.61%
Printed:	27-Apr-22

Straight Line Growth Option

***Axle-Adjusted**

Appendix E
Background Tables

US HWY 441 and NW 173rd St

Growth Rate Data - US HWY 441 and NW 173rd St			
Peak Season Factor			0.99
Growth Rate			
Approach	Historical Growth Rate	Growth Rate Used	2024 Growth Factor
West and East on US HWY 441	2.07%	2.07%	1.041
NW 173rd St	3.78%	3.78%	1.076

AM Peak Hour Background Traffic Volumes - US HWY 441 and NW 173rd St												
Scenario	US HWY 441			US HWY 441			NW 173rd St			NW 173rd St		
	Eastbound			Westbound			Northbound			Southbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Observed Turning Movement Counts	130	1160	61	109	438	254	44	86	136	165	36	51
Existing (Peak Season) Turning Movements	129	1148	60	108	434	251	44	85	135	163	36	50
Background Turning Movements (2024)	134	1196	62	112	452	261	47	91	145	175	39	54
Peak Hour Factor (Int total = 0.91)	0.84			0.81			0.95			0.69		
Truck Percentages	4%			11%			15%			2%		
Pedestrian Volumes	0			0			0			0		

PM Peak Hour Background Traffic Volumes - US HWY 441 and NW 173rd St												
Scenario	US HWY 441			US HWY 441			NW 173rd St			NW 173rd St		
	Eastbound			Westbound			Northbound			Southbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Observed Turning Movement Counts	21	688	55	175	1455	110	83	10	143	68	33	45
Existing (Peak Season) Turning Movements	21	681	54	173	1440	109	82	10	142	67	33	45
Background Turning Movements (2024)	22	709	56	180	1500	114	88	11	153	72	35	48
Peak Hour Factor (Int total = 0.96)	0.88			0.93			0.73			0.83		
Truck Percentages	3%			2%			12%			1%		
Pedestrian Volumes	0			0			0			0		

AM Pk Hour Background -NW 173rd at NW 162nd Ln		
Scenario	NW 173rd St	NW 173rd St
	Northbound	Southbound
	Thru	Thru
Observed Turning Movement Counts	266	206
Existing (Peak Season) Turning Movements	264	204
Background Turning Movements (2024)	283	213
Peak Hour Factor (0.91)	0.95	0.69
Truck Percentages	15%	2%
Pedestrian Volumes	0	0

PM Pk Hour Background -NW 173rd at NW 162nd Ln		
Scenario	NW 173rd St	NW 173rd St
	Northbound	Southbound
	Thru	Thru
Observed Turning Movement Counts	236	263
Existing (Peak Season) Turning Movements	234	260
Background Turning Movements (2024)	252	271
Peak Hour Factor (0.96)	0.73	0.83
Truck Percentages	12%	1%
Pedestrian Volumes	0	0

US HWY 441 and Santa Fe Driveway East Site Access

Growth Rate Data - US HWY 441 and Santa Fe Driveway East Site Access				
Peak Season Factor			0.99	
Growth Rate				
Approach	**Historical Growth Rate**	**Growth Rate Used**	**2024 Growth Factor**	**2044 Growth Factor**
West and East on US HWY 441	2.07%	2.07%	1.041	1.455

AM Peak Hour Background Traffic Volumes - US HWY 441 and Santa Fe Driveway East Site Access							
Scenario	US HWY 441		US HWY 441			Santa Fe Driveway East Site Access	
	Eastbound		Westbound			Southbound	
	Left	Thru	U-Turn	Thru	Right	Left	Right
Observed Turning Movement Counts	16	1707	1	645	31	4	3
Existing (Peak Season) Turning Movements	16	1690	1	639	31	4	3
Background Turning Movements (2024)	16	1760	1	665	31	4	3
Background Turning Movements (2044)	16	2460	1	930	31	4	3
Peak Hour Factor (Int total = 0.92)	0.87		0.87			0.44	
Truck Percentages	4%		11%			14%	
Pedestrian Volumes	0		0			1	

PM Peak Hour Background Traffic Volumes - US HWY 441 and Santa Fe Driveway East Site Access							
Scenario	US HWY 441		US HWY 441			NW 173rd St	
	Eastbound		Westbound			Southbound	
	Left	Thru	U-Turn	Thru	Right	Left	Right
Observed Turning Movement Counts	5	918	2	1738	4	8	3
Existing (Peak Season) Turning Movements	5	909	2	1721	4	8	3
Background Turning Movements (2024)	5	947	2	1792	4	8	3
Background Turning Movements (2044)	5	1323	3	2505	4	8	3
Peak Hour Factor (Int total = 0.99)	0.93		0.98			0.69	
Truck Percentages	5%		2%			9%	
Pedestrian Volumes	0		0			0	

US HWY 441 and Publix Main Access RIRO

Growth Rate Data - US HWY 441 and Santa Fe Driveway East Site Access	
Peak Season Factor	0.99

Growth Rate				
Approach	**Historical Growth Rate**	**Growth Rate Used**	**2024 Growth Factor**	**2044 Growth Factor**
West and East on US HWY 441	2.07%	2.07%	1.041	1.455

AM Peak Hour Background Traffic Volumes - US HWY 441 and Publix Main Access (RIRO)				
Scenario	US HWY 441	US HWY 441		Publix Main Access
	Eastbound	Westbound		Southbound
	Thru	Thru	Right	Right
Observed Turning Movement Counts	1679	606	15	69
Existing (Peak Season) Turning Movements	1662	600	15	68
Background Turning Movements (2044)	2419	873	15	68
Peak Hour Factor (Int total = 0.92)	0.87	0.86		0.82
Truck Percentages	4%	12%		1%
Pedestrian Volumes	0	0		0

PM Peak Hour Background Traffic Volumes - US HWY 441 and Publix Main Access (RIRO)				
Scenario	US HWY 441	US HWY 441		Publix Main Access
	Eastbound	Westbound		Southbound
	Thru	Thru	Right	Right
Observed Turning Movement Counts	913	1517	26	240
Existing (Peak Season) Turning Movements	904	1502	26	238
Background Turning Movements (2044)	1316	2186	26	238
Peak Hour Factor (Int total = 0.96)	0.91	0.95		0.87
Truck Percentages	5%	3%		0%
Pedestrian Volumes	0	0		0

* Since the Publix Shopping Center is built out, no growth is added to the the trips in and out of Publix.

US HWY 441 and NW 167th Blvd

Growth Rate Data - US HWY 441 and NW 167th Blvd				
Peak Season Factor			0.99	
Growth Rate				
Approach	**Historical Growth Rate**	**Growth Rate Used**	**2024 Growth Factor**	**2044 Growth Factor**
West and East on US HWY 441	2.07%	2.07%	1.041	1.455
NW 167th Blvd	N/A	2.00%	1.040	1.440

AM Peak Hour Background Traffic Volumes - US HWY 441 and NW 167th Blvd							
Scenario	US HWY 441		US HWY 441			NW 167th Blvd	
	Eastbound		Westbound			Southbound	
	Left	Thru	U-Turn	Thru	Right	Left	Right
Observed Turning Movement Counts	84	1646	14	603	97	125	19
Existing (Peak Season) Turning Movements	83	1630	14	597	96	124	19
Background Turning Movements (2024)	86	1697	15	622	100	129	20
Background Turning Movements (2044)	121	2372	20	869	140	179	27
Peak Hour Factor (Int total = 0.92)	0.86		0.86			0.78	
Truck Percentages	4%		10%			3%	
Pedestrian Volumes	0		0			0	

PM Peak Hour Background Traffic Volumes - US HWY 441 and NW 167th Blvd							
Scenario	US HWY 441		US HWY 441			NW 167th Blvd	
	Eastbound		Westbound			Southbound	
	Left	Thru	U-Turn	Thru	Right	Left	Right
Observed Turning Movement Counts	127	803	12	1518	317	180	42
Existing (Peak Season) Turning Movements	126	795	12	1503	314	178	42
Background Turning Movements (2024)	131	828	12	1565	327	185	44
Background Turning Movements (2044)	183	1157	17	2187	457	256	60
Peak Hour Factor (Int total = 0.95)	0.95		0.93			0.75	
Truck Percentages	5%		2%			1%	
Pedestrian Volumes	0		0			0	

AM Pk Hr B.G. Traffic Volumes - US HWY 441 and Prop. Access East of NW 167th Blvd		
Scenario	US HWY 441	
	Eastbound	Westbound
	Thru	Thru
Observed Turning Movement Counts	1771	714
Existing (Peak Season) Turning Movements	1754	707
Background Turning Movements (2044)	2551	1029
Peak Hour Factor (Int total = 0.92)	0.86	0.86
Truck Percentages	4%	10%
Pedestrian Volumes	0	0

AM Pk Hr B.G. Traffic Volumes - US HWY 441 and Prop. Access east of NW 167th Blvd		
Scenario	US HWY 441	
	Eastbound	Westbound
	Thru	Thru
Observed Turning Movement Counts	983	714
Existing (Peak Season) Turning Movements	973	707
Background Turning Movements (2044)	1413	2661
Peak Hour Factor (Int total = 0.95)	0.95	0.93
Truck Percentages	5%	2%
Pedestrian Volumes	0	0

US HWY 441 and NW 161st Terr

Growth Rate Data - US HWY 441 and NW 173rd St			
Peak Season Factor			0.99
Growth Rate			
Approach	**Historical Growth Rate**	**Growth Rate Used**	**2024 Growth Factor**
West and East on US HWY 441	2.07%	2.07%	1.041
NW 161st Terr	N/A	2.00%	1.040

AM Peak Hour Background Traffic Volumes - US HWY 441 and NW 173rd St								
Scenario	US HWY 441			US HWY 441			Burger King DW	NW 161st Terr
	Eastbound			Westbound			Northbound	Southbound
	Left	Thru	Right	Left	Thru	Right	Right	Right
Observed Turning Movement Counts	5	1757	15	61	703	1	21	5
Existing (Peak Season) Turning Movements	5	1739	15	60	696	1	21	5
Background Turning Movements (2024)	5	1811	16	62	725	1	21	5
Peak Hour Factor (Int total = 0.90)	0.85			0.90			0.75	0.63
Truck Percentages	4%			10%			5%	0%
Pedestrian Volumes	0			0			0	0

PM Peak Hour Background Traffic Volumes - US HWY 441 and NW 173rd St								
Scenario	US HWY 441			US HWY 441			Burger King DW	NW 161st Terr
	Eastbound			Westbound			Northbound	Southbound
	Left	Thru	Right	Left	Thru	Right	Right	Right
Observed Turning Movement Counts	17	951	12	93	1837	15	33	6
Existing (Peak Season) Turning Movements	17	941	12	92	1819	15	33	6
Background Turning Movements (2024)	18	980	12	96	1894	16	33	6
Peak Hour Factor (Int total = 0.96)	0.92			0.92			0.83	0.75
Truck Percentages	5%			2%			6%	0%
Pedestrian Volumes	0			0			0	0

Appendix F
Trip Distribution Calculations

Peggy Malone & Associates

904-992-8072

File Name : 4 US 441 & NW 167th Blvd
Site Code :
Start Date : 4/6/2022
Page No : 1

Groups Printed- Combined

	167th Blvd Southbound				US 441 Westbound					US 441 Eastbound				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
06:00 AM	3	16	0	19	11	41	0	0	52	187	6	0	193	264
06:15 AM	1	13	0	14	7	56	0	0	63	246	14	0	260	337
06:30 AM	0	15	0	15	5	76	1	0	82	296	9	0	305	402
06:45 AM	2	15	0	17	12	94	2	0	108	320	8	0	328	453
Total	6	59	0	65	35	267	3	0	305	1049	37	0	1086	1456
07:00 AM	4	27	0	31	17	92	2	0	111	419	17	0	436	578
07:15 AM	8	29	0	37	22	116	3	0	141	429	23	0	452	630
07:30 AM	2	34	0	36	20	144	4	0	168	488	14	0	502	706
07:45 AM	4	21	0	25	28	165	5	0	198	406	27	0	433	656
Total	18	111	0	129	87	517	14	0	618	1742	81	0	1823	2570
08:00 AM	5	41	0	46	27	178	2	0	207	323	20	0	343	596
08:15 AM	5	22	0	27	28	192	4	0	224	340	21	0	361	612
08:30 AM	3	23	0	26	24	229	3	0	256	299	28	0	327	609
08:45 AM	4	45	0	49	31	165	2	0	198	315	26	0	341	588
Total	17	131	0	148	110	764	11	0	885	1277	95	0	1372	2405
09:00 AM	4	32	0	36	23	123	4	0	150	226	19	0	245	431
09:15 AM	9	21	0	30	31	126	1	0	158	223	19	0	242	430
09:30 AM	5	21	0	26	28	142	3	0	173	231	17	0	248	447
09:45 AM	0	20	0	20	29	131	1	0	161	224	26	0	250	431
Total	18	94	0	112	111	522	9	0	642	904	81	0	985	1739
10:00 AM	4	21	0	25	35	129	3	0	167	185	24	0	209	401
10:15 AM	2	33	0	35	33	127	1	0	161	199	20	0	219	415
10:30 AM	8	26	0	34	33	162	0	0	195	190	21	0	211	440
10:45 AM	2	30	0	32	40	160	1	0	201	187	32	0	219	452
Total	16	110	0	126	141	578	5	0	724	761	97	0	858	1708
11:00 AM	6	29	0	35	38	175	4	0	217	165	24	0	189	441
11:15 AM	3	36	0	39	44	163	8	0	215	159	26	0	185	439
11:30 AM	3	29	0	32	47	190	5	0	242	211	25	0	236	510
11:45 AM	9	46	0	55	49	184	2	0	235	204	25	0	229	519
Total	21	140	0	161	178	712	19	0	909	739	100	0	839	1909
12:00 PM	9	37	0	46	52	193	6	0	251	215	30	0	245	542
12:15 PM	7	35	0	42	48	188	3	0	239	191	27	0	218	499
12:30 PM	8	47	0	55	47	186	5	0	238	203	25	0	228	521
12:45 PM	7	47	0	54	50	183	3	0	236	206	20	0	226	516
Total	31	166	0	197	197	750	17	0	964	815	102	0	917	2078
01:00 PM	8	68	0	76	51	203	5	0	259	210	34	0	244	579
01:15 PM	5	41	0	46	37	200	1	0	238	210	19	0	229	513
01:30 PM	9	43	0	52	47	198	1	0	246	221	28	0	249	547
01:45 PM	6	31	0	37	42	222	3	0	267	220	26	0	246	550
Total	28	183	0	211	177	823	10	0	1010	861	107	0	968	2189
02:00 PM	6	33	0	39	42	197	6	0	245	174	23	0	197	481
02:15 PM	9	32	0	41	58	219	1	0	278	196	24	0	220	539
02:30 PM	4	43	0	47	52	214	5	0	271	183	28	0	211	529
02:45 PM	6	35	0	41	48	234	3	0	285	171	27	0	198	524
Total	25	143	0	168	200	864	15	0	1079	724	102	0	826	2073
03:00 PM	8	42	0	50	60	226	3	0	289	227	54	0	281	620
03:15 PM	9	57	1	67	69	263	4	0	336	281	31	0	312	715
03:30 PM	11	44	0	55	62	281	4	0	347	227	34	0	261	663
03:45 PM	8	47	0	55	60	293	6	0	359	202	39	0	241	655
Total	36	190	1	227	251	1063	17	0	1331	937	158	0	1095	2653
04:00 PM	9	38	1	48	63	300	2	0	365	182	33	0	215	628
04:15 PM	8	33	0	41	54	276	6	0	336	196	26	0	222	599
04:30 PM	9	43	0	52	70	323	4	0	397	227	34	0	261	710
04:45 PM	8	40	0	48	87	410	1	0	498	210	35	0	245	791
Total	34	154	1	189	274	1309	13	0	1596	815	128	0	943	2728
05:00 PM	15	59	0	74	67	340	7	0	414	210	29	0	239	727
05:15 PM	8	46	0	54	78	379	3	0	460	183	27	0	210	724
05:30 PM	11	35	0	46	85	389	1	0	475	200	36	0	236	757
05:45 PM	9	62	0	71	66	318	3	0	387	185	22	0	207	665
Total	43	202	0	245	296	1426	14	0	1736	778	114	0	892	2873

Peggy Malone & Associates
904-992-8072

File Name : 4 US 441 & NW 167th Blvd
Site Code :
Start Date : 4/6/2022

Groups Printed- Combined

	167th Blvd Southbound				US 441 Westbound					US 441 Eastbound				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
06:00 PM	10	47	0	57	57	274	5	0	336	169	15	0	184	577
06:15 PM	14	29	0	43	49	226	3	0	278	176	16	0	192	513
06:30 PM	9	29	0	38	51	231	1	0	283	138	12	0	150	471
06:45 PM	9	47	0	56	33	163	4	0	200	112	20	0	132	388
Total	42	152	0	194	190	894	13	0	1097	595	63	0	658	1949
07:00 PM	2	24	0	26	47	177	4	0	228	101	21	0	122	376
07:15 PM	5	27	0	32	40	168	5	0	213	101	22	0	123	368
07:30 PM	11	30	0	41	48	156	4	0	208	110	17	0	127	376
07:45 PM	6	30	0	36	37	144	2	0	183	72	14	0	86	305
Total	24	111	0	135	172	645	15	0	832	384	74	0	458	1425
Grand Total	359	1946	2	2307	2419	11134	175	0	13728	12381	1339	0	13720	29755
Apprch %	15.6	84.4	0.1		17.6	81.1	1.3	0		90.2	9.8	0		
Total %	1.2	6.5	0	7.8	8.1	37.4	0.6	0	46.1	41.6	4.5	0	46.1	

	167th Blvd Southbound			US 441 Westbound				US 441 Eastbound			
Start Time	Right	Left	App. Total	Right	Thru	Left	App. Total	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 11:45 AM - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 07:15 AM											
07:15 AM	**8**	29	37	22	116	3	141	429	23	452	630
07:30 AM	2	34	36	20	144	4	168	**488**	14	**502**	**706**
07:45 AM	4	21	25	**28**	165	**5**	198	406	**27**	433	656
08:00 AM	5	**41**	**46**	27	**178**	2	**207**	323	20	343	596
Total Volume	19	125	144	97	603	14	714	1646	84	1730	2588
% App. Total	13.2	86.8		13.6	84.5	2		95.1	4.9		
PHF	.594	.762	.783	.866	.847	.700	.862	.843	.778	.862	.916
Peak Hour Analysis From 12:00 PM to 07:45 PM - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 04:45 PM											
04:45 PM	8	40	48	**87**	**410**	1	**498**	**210**	35	**245**	**791**
05:00 PM	**15**	**59**	**74**	67	340	**7**	414	210	29	239	727
05:15 PM	8	46	54	78	379	3	460	183	27	210	724
05:30 PM	11	35	46	85	389	1	475	200	**36**	236	757
Total Volume	42	180	222	317	1518	12	1847	803	127	930	2999
% App. Total	18.9	81.1		17.2	82.2	0.6		86.3	13.7		
PHF	.700	.763	.750	.911	.926	.429	.927	.956	.882	.949	.948

AM TRUCK % 4/144 = 3% 71/714 = 10% 73/1730 = 4%

PM TRUCK % 2/222 = 1% 44/1847 = 2% 45/930 = 5%

DISTRIBUTION CALCULATIONS

PERCENTAGE OF TRIPS THAT ENTER THE PUBLIX SHOPPING CENTER AND RESIDENTIAL (EITHER ACCESS)

DIST%

VOLUME ENTERING P. = 272 + 2,419 + 1,339 = 4,030 15%

VOLUME NOT ENTERING P. = 11,134 + 12,381 = 23,515

TOTAL = 27,545

FROM PUBLIX SHOPPING CENTER RIGHT-IN/RIGHT-OUT

	SBR				WBR			
Grand Total	1840	0	3	1843	272	11289	0	11561
Apprch %	99.8	0	0.2		2.4	97.6	0	
Total %	6.9	0	0	6.9	1	42.1	0	43.1

REMAINING DIST% (NOT TO/FROM PUBLIX SHOPPING CENTER)

DIST%

TOTAL TRIPS TO AND FROM WEST = 1,840 + 359 + 1,339 = 3,538 43% X 85% = 37%

TOTAL TRIPS TO AND FROM EAST = 272 + 1,946 + 2,419 = 4,637 57% X 85% = 48%

TOTAL = 8,175

Peggy Malone & Associates
(888) 247-8602

File Name : 1 US 441 & NW 173rd St AM
Site Code :
Start Date : 4/6/2022
Page No : 1

Groups Printed- Combined

	NW 173rd St Southbound					US 441 Westbound					NW 173rd St Northbound					US 441 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:45 AM	3	3	18	0	24	7	76	16	0	99	15	3	6	0	24	14	277	2	0	293	440
Total	3	3	18	0	24	7	76	16	0	99	15	3	6	0	24	14	277	2	0	293	440
07:00 AM	2	1	21	0	24	4	74	21	0	99	34	4	16	0	54	17	373	4	0	394	571
07:15 AM	8	4	20	0	32	10	106	30	0	146	40	4	20	0	64	19	390	2	0	411	653
07:30 AM	6	3	28	0	37	13	117	24	0	154	26	5	19	0	50	12	437	10	0	459	700
07:45 AM	14	3	25	0	42	22	112	32	0	166	45	7	15	0	67	19	364	18	0	401	676
Total	30	11	94	0	135	49	409	107	0	565	145	20	70	0	235	67	1564	34	0	1665	2600
08:00 AM	8	7	31	0	46	32	123	27	0	182	38	14	13	0	65	7	271	19	0	297	590
08:15 AM	18	7	47	0	72	75	101	30	0	206	30	24	10	0	64	15	283	33	0	331	673
08:30 AM	11	19	62	0	92	125	102	20	0	247	23	41	6	0	70	20	242	60	0	322	731
Grand Total	70	47	252	0	369	288	811	200	0	1299	251	102	105	0	458	123	2637	148	0	2908	5034
Apprch %	19	12.7	68.3	0		22.2	62.4	15.4	0		54.8	22.3	22.9	0		4.2	90.7	5.1	0		
Total %	1.4	0.9	5	0	7.3	5.7	16.1	4	0	25.8	5	2	2.1	0	9.1	2.4	52.4	2.9	0	57.8	

	NW 173rd St Southbound				US 441 Westbound				NW 173rd St Northbound				US 441 Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	14	3	25	42	22	112	32	166	45	7	15	67	19	364	18	401	676
08:00 AM	8	7	31	46	32	123	27	182	38	14	13	65	7	271	19	297	590
08:15 AM	18	7	47	72	75	101	30	206	30	24	10	64	15	283	33	331	673
08:30 AM	11	19	62	92	125	102	20	247	23	41	6	70	20	242	60	322	731
Total Volume	51	36	165	252	254	438	109	801	136	86	44	266	61	1160	130	1351	2670
% App. Total	20.2	14.3	65.5		31.7	54.7	13.6		51.1	32.3	16.5		4.5	85.9	9.6		
PHF	.708	.474	.665	.685	.508	.890	.852	.811	.756	.524	.733	.950	.763	.797	.542	.842	.913

TRUCK % 4/252 = 2% 86/801 = 11% 41/266 = 15% 58/1351 = 4%

Peggy Malone & Associates
(888) 247-8602

File Name : 1 US 441 & NW 173rd St PM
Site Code :
Start Date : 4/6/2022
Page No : 1

Groups Printed- Combined

	NW 173rd St Southbound					US 441 Westbound					NW 173rd St Northbound					US 441 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:15 PM	2	0	12	0	14	21	281	32	0	334	43	6	21	0	70	13	162	10	0	185	603
04:30 PM	5	8	20	0	33	22	326	41	0	389	74	8	18	0	100	9	160	9	0	178	700
04:45 PM	6	4	12	0	22	26	338	39	0	403	57	2	22	0	81	8	170	5	0	183	689
Total	13	12	44	0	69	69	945	112	0	1126	174	16	61	0	251	30	492	24	0	546	1992
05:00 PM	13	13	18	0	44	31	353	56	0	440	27	5	21	0	53	23	185	9	0	217	754
05:15 PM	12	12	17	0	41	25	395	49	0	469	30	1	24	0	55	15	154	5	0	174	739
05:30 PM	14	4	21	0	39	28	369	31	0	428	29	2	16	0	47	9	179	2	0	190	704
05:45 PM	6	4	23	0	33	26	358	29	0	413	16	2	13	0	31	19	158	3	0	180	657
Total	45	33	79	0	157	110	1475	165	0	1750	102	10	74	0	186	66	676	19	0	761	2854
06:00 PM	3	2	12	0	17	27	279	23	0	329	23	4	11	0	38	18	148	7	0	173	557
Grand Total	61	47	135	0	243	206	2699	300	0	3205	299	30	146	0	475	114	1316	50	0	1480	5403
Apprch %	25.1	19.3	55.6	0		6.4	84.2	9.4	0		62.9	6.3	30.7	0		7.7	88.9	3.4	0		
Total %	1.1	0.9	2.5	0	4.5	3.8	50	5.6	0	59.3	5.5	0.6	2.7	0	8.8	2.1	24.4	0.9	0	27.4	

	NW 173rd St Southbound				US 441 Westbound				NW 173rd St Northbound				US 441 Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 06:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	6	4	12	22	26	338	39	403	57	2	22	81	8	170	5	183	689
05:00 PM	13	13	18	44	31	353	56	440	27	5	21	53	23	185	9	217	754
05:15 PM	12	12	17	41	25	395	49	469	30	1	24	55	15	154	5	174	739
05:30 PM	14	4	21	39	28	369	31	428	29	2	16	47	9	179	2	190	704
Total Volume	45	33	68	146	110	1455	175	1740	143	10	83	236	55	688	21	764	2886
% App. Total	30.8	22.6	46.6		6.3	83.6	10.1		60.6	4.2	35.2		7.2	90.1	2.7		
PHF	.804	.635	.810	.830	.887	.921	.781	.928	.627	.500	.865	.728	.598	.930	.583	.880	.957

TRUCK % 1/146 = 1% 40/1740 = 2% 28/236 = 12% 21/764 = 3%

TRIP DISTRIBUTION CALCULATIONS

		DIST%	PROJECT TRIP DIST%
TO/FROM THE NORTH ON NW 173rd ST	252 + 288 + 135 + 206 = 881	9% X 37%	= 3%
TO/FROM THE WEST ON US HWY 441	811 + 2,637 + 2,699 + 1,316 = 7,463	80% X 37%	= 30%
TO/FROM THE SOUTH ON NW 173rd ST	200 + 251 + 300 + 299 = 1,050	11% X 37%	= 4%

TOTAL = 9,394

Peggy Malone & Associates

904-992-8072

File Name : 5 US 441 & NW 161st St AM
Site Code :
Start Date : 4/6/2022
Page No : 1

Groups Printed- Combined

	161st St Southbound					US 441 Westbound					Burger King Entrance Northbound					US 441 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:45 AM	2	0	0	0	2	0	109	11	0	120	5	0	0	0	5	4	322	0	0	326	453
Total	2	0	0	0	2	0	109	11	0	120	5	0	0	0	5	4	322	0	0	326	453
07:00 AM	0	0	0	0	0	0	110	12	0	122	1	0	0	0	1	0	440	0	0	440	563
07:15 AM	2	0	0	0	2	0	138	18	0	156	3	0	0	0	3	2	463	0	0	465	626
07:30 AM	1	0	0	0	1	0	169	17	0	186	7	0	0	0	7	5	517	1	0	523	717
07:45 AM	1	0	0	0	1	1	193	16	0	210	4	0	0	0	4	2	417	4	0	423	638
Total	4	0	0	0	4	1	610	63	0	674	15	0	0	0	15	9	1837	5	0	1851	2544
08:00 AM	1	0	0	0	1	0	203	10	0	213	7	0	0	0	7	6	360	0	0	366	587
08:15 AM	3	0	0	0	3	1	222	16	0	239	9	0	0	0	9	4	364	0	0	368	619
08:30 AM	3	0	0	0	3	3	252	22	0	277	9	0	0	0	9	4	324	0	0	328	617
Grand Total	13	0	0	0	13	5	1396	122	0	1523	45	0	0	0	45	27	3207	5	0	3239	4820
Apprch %	100	0	0	0		0.3	91.7	8	0		100	0	0	0		0.8	99	0.2	0		
Total %	0.3	0	0	0	0.3	0.1	29	2.5	0	31.6	0.9	0	0	0	0.9	0.6	66.5	0.1	0	67.2	

	161st St Southbound					US 441 Westbound					Burger King Entrance Northbound					US 441 Eastbound					
Start Time	Right	Thru	Left	App. Total		Right	Thru	Left	App. Total		Right	Thru	Left	App. Total		Right	Thru	Left	App. Total		Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	**2**	0	0	**2**		0	138	**18**	156		3	0	0	3		2	463	0	465		626
07:30 AM	1	0	0	1		0	169	17	186		**7**	0	0	**7**		5	**517**	1	**523**		**717**
07:45 AM	1	0	0	1		**1**	193	16	210		4	0	0	4		2	417	**4**	423		638
08:00 AM	1	0	0	1		0	**203**	10	**213**		7	0	0	7		**6**	360	0	366		587
Total Volume	5	0	0	5		1	703	61	765		21	0	0	21		15	1757	5	1777		2568
% App. Total	100	0	0			0.1	91.9	8			100	0	0			0.8	98.9	0.3			
PHF	.625	.000	.000	.625		.250	.866	.847	.898		.750	.000	.000	.750		.625	.850	.313	.849		.895

TRUCK % 0/5 = 0% 73/765 = 10% 1/21 = 5% 71/1777 = 4%

TRIP DISTRIBUTION CALCULATIONS

SINCE THIS INTERSECTION IS A DIRECTIONAL MEDIAN OPENING ONLY EASTBOUND TRIPS ARE CONSIDERED.

		DIST% PROJECT TRIP DIST%
TO THE NORTH ON NW 161ST TERRACE	5	0% X 48% = 0%
TO THE EAST US HWY 441	3207	99% X 48% = 47%
TO THE SOUTH BURGER KING DRIVEWAY	27	1% X 48% = 1%

TOTAL = 3,239

Appendix G
Straight-Line Diagram

	5 YR INV	SLD REV	BMP	EMP	INV	SLD REV
DATE	11/17/2020	11/30/2020				
BY	PECS	PECS				

FLORIDA DEPARTMENT OF TRANSPORTATION

STRAIGHT LINE DIAGRAM OF ROAD INVENTORY

SECTION STATUS	INT. or US ROUTE NO.	STATE ROAD NO.	COUNTY	DISTRICT	ROADWAY ID	SHEET NO:
12	US 441/US 41	CR 329/SR 20/SR 25	ALACHUA	02	26020000	4 OF 5

18.0 | 19.0 | 20.0 | 21.0

ROADWAY FEATURES

18.000: INSIDE CITY, NOT URBAN; * ALACHUA; *|<=US-441 N/MLK MEM HWY; *|<SR 20/SR 25; *|<US 441

N MAIN 18.075 | NW 142 TER 18.164 | NW 144 WAY 18.294 | DR 18.481 | NW 149 TER 18.676 | NW 158 LN 18.676

ST/NW 141 ST 18.075 | NW 154TH AVE 18.222 | NW 144 ST 18.294 | NW 147TH 18.481

88.0' - 48.0'; 4 - 12.0' RDWY; 20.0 CB&VEG MED; 2 - 2.0' CRG INSHLD1; 2 - 6.0' PVD SHLD1; 6.0' LWN SHLD2 - LT; 2.0' C&G SHLD2 - RT

SR-93 19.337; 26260033 SB ON

APRIL BLVD 19.097 | NB ON 26260031 19.169 | NB OFF 26260032 19.200 | I-75/ | SB ON 26260030 19.373 | SB OFF 26260029 19.407 | UNSIGNED 19.535

19.677: INSIDE CITY, NOT URBAN; * ALACHUA; *|<=US-441 N; *|<SR 20/SR 25; *|<US 441

NW 167TH BLVD 19.677 | SHOPPING ENT 19.747 | SCHOOL ENT 19.828

CR-235A/ NW 173 ST 20.076 | NW CR-235A 20.076 | NW 174 DR 20.217 | NW 164 LN 20.432 | FROM NW 164 LN 20.476

84.0' - 48.0'; 4 - 12.0' RDWY; 20.0 CB&VEG MED; 2 - 2.0' CRG INSHLD1; 2 - 6.0' PVD SHLD1; 2 - 2.0' C&G SHLD2

96.0' - 48.0'; 4 - 12.0' RDWY; 20.0 CB&VEG MED; 2 - 2.0' CRG INSHLD1; 2 - 4.0' PVD SHLD1; 2 - 10.0' LWN SHLD2

112.0' - 48.0'; 4 - 12.0' RDWY; 40.0 VEG MED; 2 - 4.0' PVD SHLD1; 2 - 8.0' LWN SHLD2

105.0' - 48.0'; 4 - 12.0' RDWY; 41.0 CB&VEG MED; 2 - 2.0' CRG INSHLD1; 2 - 4.0' PVD SHLD1; 2 - 4.0' LWN SHLD2

112.0' - 48.0'; 4 - 12.0' RDWY; 40.0 VEG MED; 2 - 2.0' PVD INSHLD1; 2 - 4.0' PVD SHLD1; 2 - 8.0' LWN SHLD2

ROADWAY COMPOSITION

28/FC-12.5

28/FC-12.5

HORIZONTAL ALIGNMENT

CURVE DATA NOT FIELD VERIFIED

Δ=23°10'00.00"; D=2°00'; PC=18.544; PI=18.656; PT=18.764

B=N55°50'42"W

B=N79°00'42"W

STRUCTURE DESCRIPTION

18.580 — 1 - 15" X 52° CC

18.661 — 1 - 24" X 135° CC - LT; 1 - 24" X 135° CC - RT

18.764 — 1 - 24" X 147° CC - LT; 1 - 24" X 147° CC - RT

18.842 — 1 - 15" X 72° CC

19.078 — 1 - 30" X 144° CC - LT; 1 - 30" X 14° CC - RT

19.174 — 1 - 15" X 41° CC

19.283 — #0073 63.4' UP

19.295 / 19.297 — #0065 63.4' UP

19.309

19.362 — 1 - 36" X 209° CC

19.422 — 2 - 24" X 333° CC

20.100 — 1 - 18" X 71° CC

20.207 — 1 - 18" X 73° CC

20.341 — 1 - 18" X 73° CC

20.423 — 1 - 18" X 76° CC

20.620 — 1 - 24" X 149° CC - LT; 1 - 24" X 149° CC - RT

20.678 — 1 - 18" X 74° CC

20.909 — 1 - 18" X 74° CC

DISTRICT USE

SIS

FUN CLASS

RURAL PRIN ART OTHER

SPEED LIMIT

45MPH | 19.748 45MPH | 20.178 55MPH | 20.339 65MPH

AC MAN CLS

ACCESS CLASS05 | ACCESS CLASS05 | ACCESS CLASS03

21.0 | 22.0 | 23.0 | 24.0

ROADWAY FEATURES

21.000: INSIDE CITY, NOT URBAN; * ALACHUA; *|<=US-441 N; *|<SR 20/SR 25; *|<US 441

ST 21.137 | 21.138: INSIDE CITY, NOT URBAN; * HIGH SPRINGS; *|<=US-441 N; *|<SR 20/SR 25; *|<US 441

OAK RIDGE 21.356 | NW 194 ST 21.553 | FIRE DEPT ENT 21.921 | 21.965 NW 170 ST

NW 188 21.138 | NW 202 22.135 | ST 22.135

22.475: INSIDE CITY, NOT URBAN; * HIGH SPRINGS; *|<=E SANTA FE BLVD; *|<SR 20/SR 25; *|<US 441

NW 207 TER 22.475 | MEMORIAL PARK 22.711 | NW 218TH TER 23.222 | NW 222 ST 23.462

112.0' - 48.0'; 4 - 12.0' RDWY; 40.0 VEG MED; 2 - 2.0' PVD INSHLD1; 2 - 4.0' PVD SHLD1; 2 - 8.0' LWN SHLD2

89.0' - 48.0'; 4 - 12.0' RDWY; 17.0 CB&VEG MED; 2 - 2.0' C&G INSHLD1; 2 - 4.0' PVD SHLD1; 2 - 8.0' LWN SHLD2

ROADWAY COMPOSITION

28/FC-12.5

28/FC-12.5

HORIZONTAL ALIGNMENT

CURVE DATA NOT FIELD VERIFIED

PC=22.072; PI=22.200; PT=22.328; Δ=13°41'00.00"; D=1°00'

PC=23.908; PI=24.174; PT=24.451; Δ=28°39'00.00"; D=1°00'

B=N65°19'42"W

STRUCTURE DESCRIPTION

21.121 — 1 - 18" X 78° CC

21.330 — 1 - 18" X 146° CC - LT; 1 - 18" X 146° CC - RT

21.362 — 1 - 18" X 71° CC

21.550 — 1 - 18" X 70° CC

21.584 — 1 - 24" X 139° CC - LT; 1 - 24" X 139° CC - RT

21.760 — 1 - 18" X 74° CC

21.838 — 1 - 24" X 146° CC - LT; 1 - 24" X 146° CC - RT

22.003 — 1 - 18" X 66° CC

22.149 — 1 - 18" X 65° CC

22.257 — 1 - 18" X 66° CC

22.391 — 1 - 18" X 73° CC

22.793 — 1 - 18" X 74° CC

23.020 — 1 - 18" X 61° CC

23.197 — 1 - 24" X 142° CC - LT; 1 - 24" X 142° CC - RT

23.262 — 1 - 18" X 64° CC

23.551 — 1 - 18" X 144° CC

23.675 — 1 - 18" X 64° CC

23.745 — 1 - 36" X 142° CC - LT; 1 - 36" X 142° CC - RT

23.823 — 1 - 18" X 64° CC

23.930 — 1 - 18" X 65° CC

DISTRICT USE

SIS

FUN CLASS

RURAL PRIN ART OTHER

SPEED LIMIT

65MPH | 23.190 55MPH | 23.890 45MPH

AC MAN CLS

ACCESS CLASS03 | 23.476 ACCESS CLASS05

Version: 1.4.2.27 11/30/2020

Appendix H
Synchro and HCS Reports

AM Existing

HCS7 Two-Way Stop-Control Report

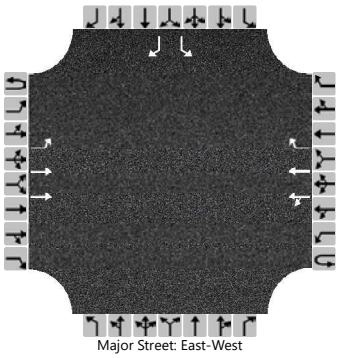
General Information

Analyst	Deborah Cueva
Agency/Co.	CHW
Date Performed	1/13/2022
Analysis Year	2022
Time Analyzed	AM Peak
Intersection Orientation	East-West
Project Description	Tomoka Hills

Site Information

Intersection	US HWY 441 at Santa Fe DW
Jurisdiction	Alachua County
East/West Street	US HWY 441
North/South Street	Santa Fe Driveway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	0	2	1		0	0	0		1	0	1
Configuration		L	T			LT	T	R						L		R
Volume (veh/h)	0	16	1690			1	639	31						4		3
Percent Heavy Vehicles (%)	4	4				11								14		14
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized						No								No		
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1								7.5		6.9
Critical Headway (sec)		4.18				4.32								7.78		7.18
Base Follow-Up Headway (sec)		2.2				2.2								3.5		3.3
Follow-Up Headway (sec)		2.24				2.31								3.64		3.44

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		17				1								4		3
Capacity, c (veh/h)		858				293								160		615
v/c Ratio		0.02				0.00								0.03		0.01
95% Queue Length, Q_{95} (veh)		0.1				0.0								0.1		0.0
Control Delay (s/veh)		9.3				17.3								28.1		10.9
Level of Service (LOS)		A				C								D		B
Approach Delay (s/veh)		0.1				0.1								20.7		
Approach LOS														C		

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HCS7 Two-Way Stop-Control Report

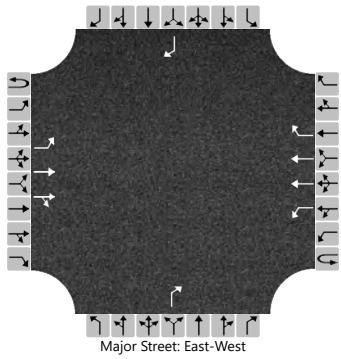
General Information

Analyst	Deborah Cueva
Agency/Co.	CHW
Date Performed	1/13/2022
Analysis Year	2022
Time Analyzed	AM Peak
Intersection Orientation	East-West
Project Description	Tomoka Hills

Site Information

Intersection	US HWY 441 at NW 161 TERR
Jurisdiction	Alachua County
East/West Street	US HWY 441
North/South Street	NW 161st Terr
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	1		0	0	1		0	0	1
Configuration		L	T	TR		L	T	R				R				R
Volume (veh/h)	0	5	1739	15	0	60	696	1				21				5
Percent Heavy Vehicles (%)	4	4			10	10						5				5
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized					No				No				No			
Median Type | Storage	Undivided															

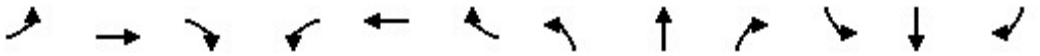
Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1						6.9				6.9
Critical Headway (sec)		4.18				4.30						7.00				7.00
Base Follow-Up Headway (sec)		2.2				2.2						3.3				3.3
Follow-Up Headway (sec)		2.24				2.30						3.35				3.35

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		6				67						23				6
Capacity, c (veh/h)		824				267						246				603
v/c Ratio		0.01				0.25						0.09				0.01
95% Queue Length, Q_{95} (veh)		0.0				1.0						0.3				0.0
Control Delay (s/veh)		9.4				22.9						21.2				11.0
Level of Service (LOS)		A				C						C				B
Approach Delay (s/veh)	0.0				1.8				21.2				11.0			
Approach LOS									C				B			

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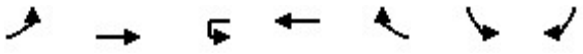
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	129	1148	60	108	434	251	44	85	135	163	36	50
Future Volume (vph)	129	1148	60	108	434	251	44	85	135	163	36	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	380		270	460		1000	190		250	410		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850			0.850		0.908			0.913	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1736	3471	1553	1626	3252	1455	1570	2850	0	1770	1701	0
Flt Permitted	0.950			0.950			0.677			0.301		
Satd. Flow (perm)	1736	3471	1553	1626	3252	1455	1119	2850	0	561	1701	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			185			310		142			37	
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		563			2079			648			626	
Travel Time (s)		8.5			31.5			9.8			9.5	
Peak Hour Factor	0.84	0.84	0.84	0.81	0.81	0.81	0.95	0.95	0.95	0.69	0.69	0.69
Heavy Vehicles (%)	4%	4%	4%	11%	11%	11%	15%	15%	15%	2%	2%	2%
Adj. Flow (vph)	154	1367	71	133	536	310	46	89	142	236	52	72
Shared Lane Traffic (%)												
Lane Group Flow (vph)	154	1367	71	133	536	310	46	231	0	236	124	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6	8			4		
Detector Phase	5	2	2	1	6	6	3	8		7	4	
Switch Phase												
Minimum Initial (s)	4.0	18.0	18.0	10.0	18.0	18.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	25.0	25.0	25.0	25.0	44.0	44.0	25.1	25.1		25.1	25.1	
Total Split (s)	22.0	76.0	76.0	30.0	84.0	84.0	22.0	22.0		22.0	22.0	
Total Split (%)	14.7%	50.7%	50.7%	20.0%	56.0%	56.0%	14.7%	14.7%		14.7%	14.7%	
Maximum Green (s)	15.0	69.0	69.0	23.2	77.0	77.0	14.9	14.4		15.2	14.4	
Yellow Time (s)	5.0	5.0	5.0	4.8	5.0	5.0	5.1	5.1		4.8	5.1	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.5		2.0	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0	7.0	6.8	7.0	7.0	7.1	7.6		6.8	7.6	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None		None	None	
Walk Time (s)					7.0	7.0						
Flash Dont Walk (s)					30.0	30.0						
Pedestrian Calls (#/hr)					0	0						
Act Effct Green (s)	16.7	79.1	79.1	17.3	79.6	79.6	19.6	10.2		31.5	18.6	
Actuated g/C Ratio	0.11	0.53	0.53	0.12	0.53	0.53	0.13	0.07		0.21	0.12	
v/c Ratio	0.80	0.75	0.08	0.71	0.31	0.34	0.27	0.71		0.98	0.51	
Control Delay	92.8	32.3	0.2	76.9	38.0	16.7	50.5	38.4		107.5	51.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	92.8	32.3	0.2	76.9	38.0	16.7	50.5	38.4		107.5	51.8	
LOS	F	C	A	E	D	B	D	D		F	D	
Approach Delay		36.7			36.6			40.4			88.3	
Approach LOS		D			D			D			F	
Queue Length 50th (ft)	147	537	0	127	228	73	37	44		210	82	
Queue Length 95th (ft)	#256	642	0	174	258	131	72	90		#216	105	
Internal Link Dist (ft)		483			1999			568			546	
Turn Bay Length (ft)	380		270	460		1000	190			410		
Base Capacity (vph)	194	1830	906	251	1724	917	235	401		240	243	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.79	0.75	0.08	0.53	0.31	0.34	0.20	0.58		0.98	0.51	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 69 (46%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.98			
Intersection Signal Delay: 42.8		Intersection LOS: D	
Intersection Capacity Utilization 79.3%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: NW 173rd St & HWY 441



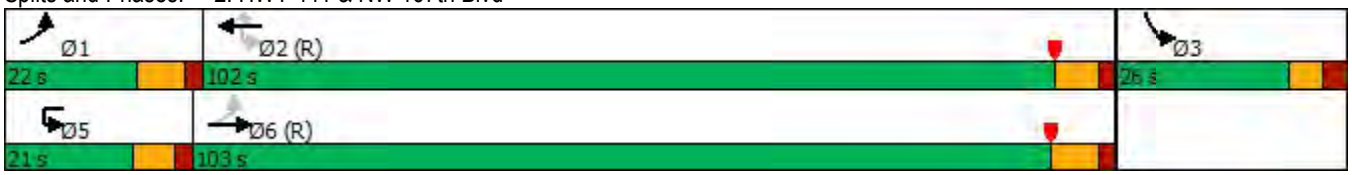


Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	83	1630	14	597	96	124	19
Future Volume (vph)	83	1630	14	597	96	124	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	270		250		290	150	0
Storage Lanes	1		1		1	1	0
Taper Length (ft)	25		25			25	
Lane Util. Factor	1.00	0.95	1.00	0.95	1.00	0.97	0.95
Frt					0.850	0.980	
Flt Protected	0.950		0.950			0.958	
Satd. Flow (prot)	1736	3471	1641	3282	1468	3360	0
Flt Permitted	0.350		0.070			0.958	
Satd. Flow (perm)	639	3471	121	3282	1468	3360	0
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)					112	9	
Link Speed (mph)		25		45		45	
Link Distance (ft)		2079		1449		667	
Travel Time (s)		56.7		22.0		10.1	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.78	0.78
Heavy Vehicles (%)	4%	4%	10%	10%	10%	3%	3%
Adj. Flow (vph)	97	1895	16	694	112	159	24
Shared Lane Traffic (%)							
Lane Group Flow (vph)	97	1895	16	694	112	183	0
Turn Type	pm+pt	NA	pm+pt	NA	Perm	Prot	
Protected Phases	1	6	5	2		3	
Permitted Phases	6		2		2		
Detector Phase	1	6	5	2	2	3	
Switch Phase							
Minimum Initial (s)	4.0	10.0	4.0	10.0	10.0	4.0	
Minimum Split (s)	12.2	39.2	11.8	38.8	38.8	24.7	
Total Split (s)	22.0	103.0	21.0	102.0	102.0	26.0	
Total Split (%)	14.7%	68.7%	14.0%	68.0%	68.0%	17.3%	
Maximum Green (s)	14.8	95.8	14.2	95.2	95.2	19.3	
Yellow Time (s)	5.2	5.2	4.8	4.8	4.8	3.8	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.9	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.2	7.2	6.8	6.8	6.8	6.7	
Lead/Lag	Lead	Lag	Lead	Lag	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max	None	C-Max	C-Max	Max	
Walk Time (s)		7.0		7.0	7.0		
Flash Dont Walk (s)		25.0		25.0	25.0		
Pedestrian Calls (#/hr)		0		0	0		
Act Effct Green (s)	115.0	111.6	108.4	102.6	102.6	19.3	
Actuated g/C Ratio	0.77	0.74	0.72	0.68	0.68	0.13	
v/c Ratio	0.18	0.73	0.11	0.31	0.11	0.42	
Control Delay	3.5	6.8	3.6	5.7	1.3	60.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	

Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Total Delay	3.5	6.8	3.6	5.7	1.3	60.3	
LOS	A	A	A	A	A	E	
Approach Delay		6.6		5.1		60.3	
Approach LOS		A		A		E	
Queue Length 50th (ft)	14	158	1	140	5	81	
Queue Length 95th (ft)	m20	m191	3	17	1	104	
Internal Link Dist (ft)		1999		1369		587	
Turn Bay Length (ft)	270		250		290	150	
Base Capacity (vph)	605	2582	237	2243	1039	440	
Starvation Cap Reductn	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	
Reduced v/c Ratio	0.16	0.73	0.07	0.31	0.11	0.42	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 139 (93%), Referenced to phase 2:WBTU and 6:EBTL, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 9.5		Intersection LOS: A	
Intersection Capacity Utilization 69.8%		ICU Level of Service C	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 2: HWY 441 & NW 167th Blvd



AM Background
2024

HCS7 Two-Way Stop-Control Report

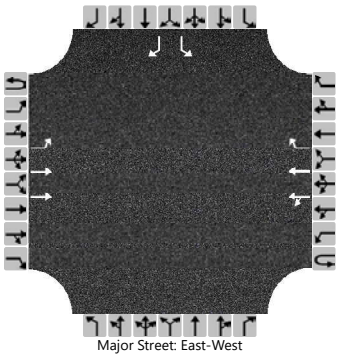
General Information

Analyst	Deborah Cueva
Agency/Co.	CHW
Date Performed	1/13/2022
Analysis Year	2024
Time Analyzed	AM Peak
Intersection Orientation	East-West
Project Description	Tomoka Hills

Site Information

Intersection	US HWY 441 at Santa Fe DW
Jurisdiction	Alachua County
East/West Street	US HWY 441
North/South Street	Santa Fe Driveway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	0	2	1		0	0	0		1	0	1
Configuration		L	T			LT	T	R						L		R
Volume (veh/h)	0	17	1760			1	665	32						4		3
Percent Heavy Vehicles (%)	4	4				11								14		14
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized						No								No		
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1								7.5		6.9
Critical Headway (sec)		4.18				4.32								7.78		7.18
Base Follow-Up Headway (sec)		2.2				2.2								3.5		3.3
Follow-Up Headway (sec)		2.24				2.31								3.64		3.44

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		18				1								4		3
Capacity, c (veh/h)		836				272								150		602
v/c Ratio		0.02				0.00								0.03		0.01
95% Queue Length, Q_{95} (veh)		0.1				0.0								0.1		0.0
Control Delay (s/veh)		9.4				18.3								29.6		11.0
Level of Service (LOS)		A				C								D		B
Approach Delay (s/veh)		0.1				0.1								21.7		
Approach LOS														C		

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HCS7 Two-Way Stop-Control Report

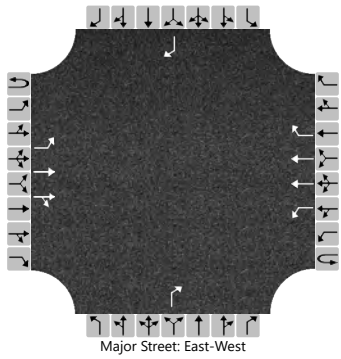
General Information

Analyst	Deborah Cueva
Agency/Co.	CHW
Date Performed	1/13/2022
Analysis Year	2024
Time Analyzed	AM Peak
Intersection Orientation	East-West
Project Description	Tomoka Hills

Site Information

Intersection	US HWY 441 at NW 161 TERR
Jurisdiction	Alachua County
East/West Street	US HWY 441
North/South Street	NW 161st Terr
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	1		0	0	1		0	0	1
Configuration		L	T	TR		L	T	R				R				R
Volume (veh/h)	0	5	1811	16	0	62	725	1				21				5
Percent Heavy Vehicles (%)	4	4			10	10						5				5
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized					No				No				No			
Median Type | Storage	Undivided															

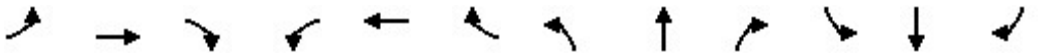
Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1						6.9				6.9
Critical Headway (sec)		4.18				4.30						7.00				7.00
Base Follow-Up Headway (sec)		2.2				2.2						3.3				3.3
Follow-Up Headway (sec)		2.24				2.30						3.35				3.35

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		6				69						23				6
Capacity, c (veh/h)		801				247						231				589
v/c Ratio		0.01				0.28						0.10				0.01
95% Queue Length, Q_{95} (veh)		0.0				1.1						0.3				0.0
Control Delay (s/veh)		9.5				25.1						22.3				11.2
Level of Service (LOS)		A				D						C				B
Approach Delay (s/veh)	0.0				2.0				22.3				11.2			
Approach LOS									C				B			

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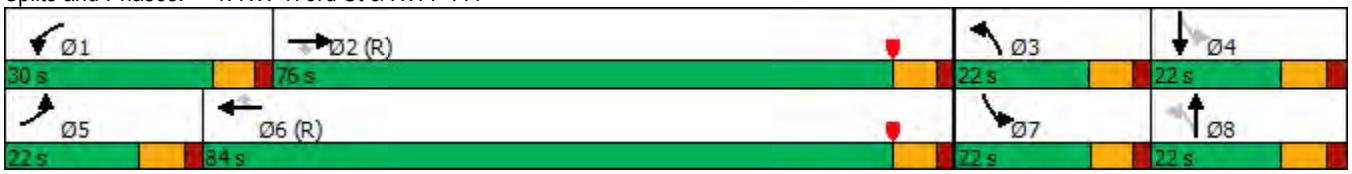


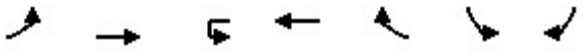
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	134	1196	62	112	452	261	47	91	145	175	39	54
Future Volume (vph)	134	1196	62	112	452	261	47	91	145	175	39	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	380		270	460		1000	190		250	410		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850			0.850		0.908			0.913	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1736	3471	1553	1626	3252	1455	1570	2850	0	1770	1701	0
Flt Permitted	0.950			0.950			0.671			0.277		
Satd. Flow (perm)	1736	3471	1553	1626	3252	1455	1109	2850	0	516	1701	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			185			322		153			36	
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		563			2079			648			626	
Travel Time (s)		8.5			31.5			9.8			9.5	
Peak Hour Factor	0.84	0.84	0.84	0.81	0.81	0.81	0.95	0.95	0.95	0.69	0.69	0.69
Heavy Vehicles (%)	4%	4%	4%	11%	11%	11%	15%	15%	15%	2%	2%	2%
Adj. Flow (vph)	160	1424	74	138	558	322	49	96	153	254	57	78
Shared Lane Traffic (%)												
Lane Group Flow (vph)	160	1424	74	138	558	322	49	249	0	254	135	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6	8			4		
Detector Phase	5	2	2	1	6	6	3	8		7	4	
Switch Phase												
Minimum Initial (s)	4.0	18.0	18.0	10.0	18.0	18.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	25.0	25.0	25.0	25.0	44.0	44.0	25.1	25.1		25.1	25.1	
Total Split (s)	22.0	76.0	76.0	30.0	84.0	84.0	22.0	22.0		22.0	22.0	
Total Split (%)	14.7%	50.7%	50.7%	20.0%	56.0%	56.0%	14.7%	14.7%		14.7%	14.7%	
Maximum Green (s)	15.0	69.0	69.0	23.2	77.0	77.0	14.9	14.4		15.2	14.4	
Yellow Time (s)	5.0	5.0	5.0	4.8	5.0	5.0	5.1	5.1		4.8	5.1	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.5		2.0	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0	7.0	6.8	7.0	7.0	7.1	7.6		6.8	7.6	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None		None	None	
Walk Time (s)					7.0	7.0						
Flash Dont Walk (s)					30.0	30.0						
Pedestrian Calls (#/hr)					0	0						
Act Effct Green (s)	17.0	78.5	78.5	17.7	79.0	79.0	20.1	10.4		31.6	18.7	
Actuated g/C Ratio	0.11	0.52	0.52	0.12	0.53	0.53	0.13	0.07		0.21	0.12	
v/c Ratio	0.82	0.78	0.08	0.72	0.33	0.35	0.28	0.73		1.08	0.56	
Control Delay	94.2	34.1	0.2	77.2	38.8	16.8	50.5	39.0		131.2	55.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	94.2	34.1	0.2	77.2	38.8	16.8	50.5	39.0		131.2	55.5	
LOS	F	C	A	E	D	B	D	D		F	E	
Approach Delay		38.4			37.1			40.9			104.9	
Approach LOS		D			D			D			F	
Queue Length 50th (ft)	153	583	0	132	240	78	39	48		~245	94	
Queue Length 95th (ft)	#270	684	0	180	270	135	75	95		#230	117	
Internal Link Dist (ft)		483			1999			568			546	
Turn Bay Length (ft)	380		270	460		1000	190			410		
Base Capacity (vph)	196	1816	900	251	1712	918	236	411		235	243	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.82	0.78	0.08	0.55	0.33	0.35	0.21	0.61		1.08	0.56	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 69 (46%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.08			
Intersection Signal Delay: 45.9		Intersection LOS: D	
Intersection Capacity Utilization 81.8%		ICU Level of Service D	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: NW 173rd St & HWY 441



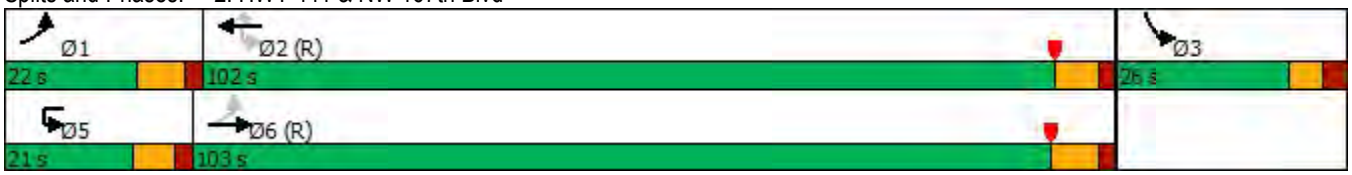


Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	86	1697	15	622	100	129	20
Future Volume (vph)	86	1697	15	622	100	129	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	270		250		290	150	0
Storage Lanes	1		1		1	1	0
Taper Length (ft)	25		25			25	
Lane Util. Factor	1.00	0.95	1.00	0.95	1.00	0.97	0.95
Frt					0.850	0.980	
Flt Protected	0.950		0.950			0.959	
Satd. Flow (prot)	1736	3471	1641	3282	1468	3363	0
Flt Permitted	0.337		0.060			0.959	
Satd. Flow (perm)	616	3471	104	3282	1468	3363	0
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)					116	10	
Link Speed (mph)		25		45		45	
Link Distance (ft)		2079		1449		667	
Travel Time (s)		56.7		22.0		10.1	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.78	0.78
Heavy Vehicles (%)	4%	4%	10%	10%	10%	3%	3%
Adj. Flow (vph)	100	1973	17	723	116	165	26
Shared Lane Traffic (%)							
Lane Group Flow (vph)	100	1973	17	723	116	191	0
Turn Type	pm+pt	NA	pm+pt	NA	Perm	Prot	
Protected Phases	1	6	5	2		3	
Permitted Phases	6		2		2		
Detector Phase	1	6	5	2	2	3	
Switch Phase							
Minimum Initial (s)	4.0	10.0	4.0	10.0	10.0	4.0	
Minimum Split (s)	12.2	39.2	11.8	38.8	38.8	24.7	
Total Split (s)	22.0	103.0	21.0	102.0	102.0	26.0	
Total Split (%)	14.7%	68.7%	14.0%	68.0%	68.0%	17.3%	
Maximum Green (s)	14.8	95.8	14.2	95.2	95.2	19.3	
Yellow Time (s)	5.2	5.2	4.8	4.8	4.8	3.8	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.9	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.2	7.2	6.8	6.8	6.8	6.7	
Lead/Lag	Lead	Lag	Lead	Lag	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max	None	C-Max	C-Max	Max	
Walk Time (s)		7.0		7.0	7.0		
Flash Dont Walk (s)		25.0		25.0	25.0		
Pedestrian Calls (#/hr)		0		0	0		
Act Effct Green (s)	115.0	111.6	108.3	102.5	102.5	19.3	
Actuated g/C Ratio	0.77	0.74	0.72	0.68	0.68	0.13	
v/c Ratio	0.19	0.76	0.13	0.32	0.11	0.43	
Control Delay	3.6	7.4	4.7	5.7	1.3	60.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	

Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Total Delay	3.6	7.4	4.7	5.7	1.3	60.5	
LOS	A	A	A	A	A	E	
Approach Delay		7.2		5.1		60.5	
Approach LOS		A		A		E	
Queue Length 50th (ft)	15	169	1	147	6	85	
Queue Length 95th (ft)	m20	m197	5	17	1	108	
Internal Link Dist (ft)		1999		1369		587	
Turn Bay Length (ft)	270		250		290	150	
Base Capacity (vph)	590	2582	226	2242	1039	441	
Starvation Cap Reductn	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	
Reduced v/c Ratio	0.17	0.76	0.08	0.32	0.11	0.43	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 139 (93%), Referenced to phase 2:WBTU and 6:EBTL, Start of Yellow			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 9.9		Intersection LOS: A	
Intersection Capacity Utilization 71.8%		ICU Level of Service C	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 2: HWY 441 & NW 167th Blvd



AM Build-out
2024

HCS Two-Way Stop-Control Report

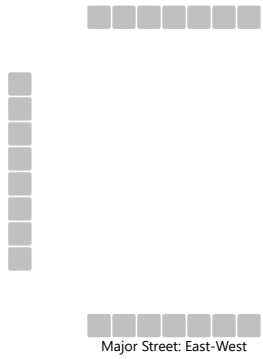
General Information

Analyst	Deborah Cueva
Agency/Co.	CHW
Date Performed	1/13/2022
Analysis Year	2024
Time Analyzed	AM Peak
Intersection Orientation	East-West
Project Description	Tomoka Hills- Buildout

Site Information

Intersection	US HWY 441 at Santa Fe DW
Jurisdiction	Alachua County
East/West Street	US HWY 441
North/South Street	Santa Fe Driveway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	0	2	1		0	0	0		1	0	1
Configuration		L	T			LT	T	R						L		R
Volume (veh/h)	0	17	1796			1	670	32						4		3
Percent Heavy Vehicles (%)	4	4				11								14		14
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized					No								No			
Median Type | Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1								7.5		6.9
Critical Headway (sec)		4.18				4.32								7.78		7.18
Base Follow-Up Headway (sec)		2.2				2.2								3.5		3.3
Follow-Up Headway (sec)		2.24				2.31								3.64		3.44

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		18				1								4		3
Capacity, c (veh/h)		832				263								145		584
v/c Ratio		0.02				0.00								0.03		0.01
95% Queue Length, Q_{95} (veh)		0.1				0.0								0.1		0.0
Control Delay (s/veh)		9.4				18.8	0.1							30.6		11.2
Level of Service (LOS)		A				C	A							D		B
Approach Delay (s/veh)	0.1				0.1								22.3			
Approach LOS	A				A								C			

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HCS Two-Way Stop-Control Report

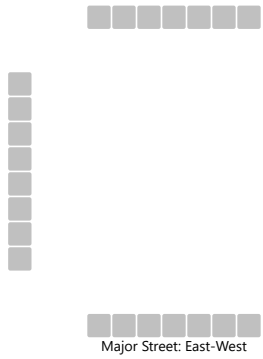
General Information

Analyst	Deborah Cueva
Agency/Co.	CHW
Date Performed	1/13/2022
Analysis Year	2024
Time Analyzed	AM Peak
Intersection Orientation	East-West
Project Description	Tomoka Hills - Buildout

Site Information

Intersection	US HWY 441 at NW 161 TERR
Jurisdiction	Alachua County
East/West Street	US HWY 441
North/South Street	NW 161st Terr
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	1		0	0	1		0	0	1
Configuration		L	T	TR		L	T	R				R				R
Volume (veh/h)	0	5	1818	16	0	62	777	1				21				5
Percent Heavy Vehicles (%)	4	4			10	10						5				5
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized					No				No				No			
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1						6.9				6.9
Critical Headway (sec)		4.18				4.30						7.00				7.00
Base Follow-Up Headway (sec)		2.2				2.2						3.3				3.3
Follow-Up Headway (sec)		2.24				2.30						3.35				3.35

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		6				69						23				6
Capacity, c (veh/h)		762				245						229				564
v/c Ratio		0.01				0.28						0.10				0.01
95% Queue Length, Q_{95} (veh)		0.0				1.1						0.3				0.0
Control Delay (s/veh)		9.8				25.3						22.5				11.5
Level of Service (LOS)		A				D						C				B
Approach Delay (s/veh)	0.0				1.9				22.5				11.5			
Approach LOS	A				A				C				B			

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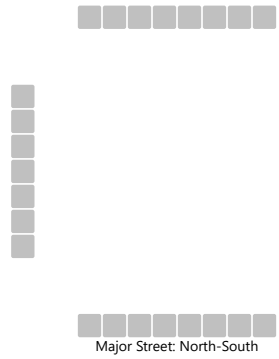
General Information

Analyst	Brian Snyder
Agency/Co.	CHW
Date Performed	5/2/2022
Analysis Year	2024
Time Analyzed	AM 2024 Build-out
Intersection Orientation	North-South
Project Description	Tomoka Hills

Site Information

Intersection	NW 167th Lane at NW 162nd
Jurisdiction	City of Alachua
East/West Street	NW 162nd Lane
North/South Street	NW 167th Lane
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	5		0	0	0		1	14	0		0	105	0
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			5				0			1				0		
Capacity, c (veh/h)			936				0			1469				1596		
v/c Ratio			0.01							0.00				0.00		
95% Queue Length, Q_{95} (veh)			0.0							0.0				0.0		
Control Delay (s/veh)			8.9							7.5	0.0	0.0		7.3	0.0	0.0
Level of Service (LOS)			A							A	A	A		A	A	A
Approach Delay (s/veh)		8.9								0.5				0.0		
Approach LOS		A								A				A		

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HCS Two-Way Stop-Control Report

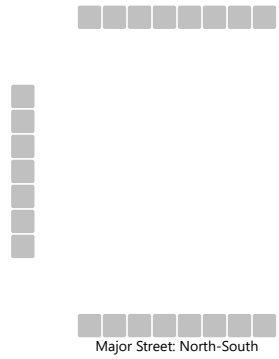
General Information

Analyst	Brian Snyder
Agency/Co.	CHW
Date Performed	5/8/2022
Analysis Year	2024
Time Analyzed	AM Phase1 Buildout
Intersection Orientation	North-South
Project Description	Tomoka Hills Phase 1

Site Information

Intersection	NW 173rd St at NW 162nd L
Jurisdiction	Alachua
East/West Street	NW 162nd Lane
North/South Street	NW 173rd St
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						1		0			283	5		0	213	
Percent Heavy Vehicles (%)						3		3						2		
Proportion Time Blocked																
Percent Grade (%)							0									
Right Turn Channelized																
Median Type | Storage							Undivided									

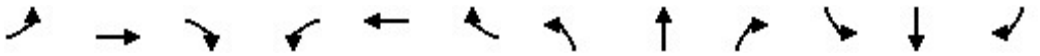
Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.43		6.23						4.12		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.53		3.33						2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							1							0		
Capacity, c (veh/h)							496							1244		
v/c Ratio							0.00							0.00		
95% Queue Length, Q_{95} (veh)							0.0							0.0		
Control Delay (s/veh)							12.3							7.9	0.0	
Level of Service (LOS)							B							A	A	
Approach Delay (s/veh)							12.3							0.0		
Approach LOS							B							A		

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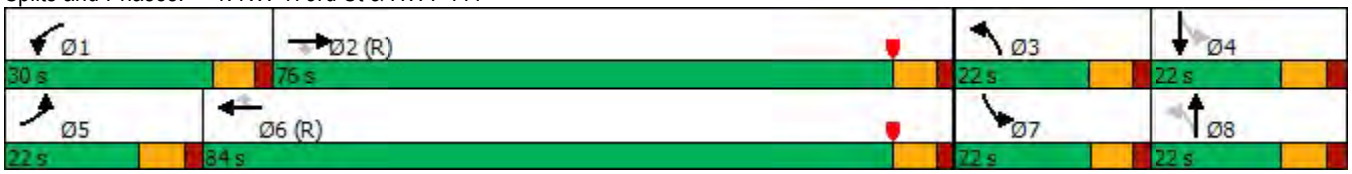
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	134	1229	62	112	457	261	47	91	145	178	39	54
Future Volume (vph)	134	1229	62	112	457	261	47	91	145	178	39	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	380		270	460		1000	190		250	410		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850		0.908			0.913	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1736	3471	1553	1626	3252	1455	1570	2850	0	1770	1701	0
Flt Permitted	0.950			0.950			0.671			0.277		
Satd. Flow (perm)	1736	3471	1553	1626	3252	1455	1109	2850	0	516	1701	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			185			322		153			36	
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		563			2079			648			626	
Travel Time (s)		8.5			31.5			9.8			9.5	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.84	0.84	0.84	0.81	0.81	0.81	0.95	0.95	0.95	0.69	0.69	0.69
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	11%	11%	11%	15%	15%	15%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	160	1463	74	138	564	322	49	96	153	258	57	78
Shared Lane Traffic (%)												
Lane Group Flow (vph)	160	1463	74	138	564	322	49	249	0	258	135	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6	8			4		
Detector Phase	5	2	2	1	6	6	3	8		7	4	
Switch Phase												
Minimum Initial (s)	4.0	18.0	18.0	10.0	18.0	18.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	25.0	25.0	25.0	25.0	44.0	44.0	25.1	25.1		25.1	25.1	
Total Split (s)	22.0	76.0	76.0	30.0	84.0	84.0	22.0	22.0		22.0	22.0	
Total Split (%)	14.7%	50.7%	50.7%	20.0%	56.0%	56.0%	14.7%	14.7%		14.7%	14.7%	
Maximum Green (s)	15.0	69.0	69.0	23.2	77.0	77.0	14.9	14.4		15.2	14.4	
Yellow Time (s)	5.0	5.0	5.0	4.8	5.0	5.0	5.1	5.1		4.8	5.1	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.5		2.0	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0	7.0	6.8	7.0	7.0	7.1	7.6		6.8	7.6	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	

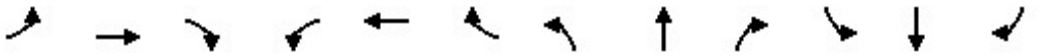
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None		None	None	
Walk Time (s)					7.0	7.0						
Flash Dont Walk (s)					30.0	30.0						
Pedestrian Calls (#/hr)					0	0						
Act Effct Green (s)	17.0	78.5	78.5	17.7	79.0	79.0	20.1	10.4		31.6	18.7	
Actuated g/C Ratio	0.11	0.52	0.52	0.12	0.53	0.53	0.13	0.07		0.21	0.12	
v/c Ratio	0.82	0.81	0.08	0.72	0.33	0.35	0.28	0.73		1.10	0.56	
Control Delay	94.2	35.0	0.2	75.8	30.1	12.3	50.5	39.0		136.0	55.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	94.2	35.0	0.2	75.8	30.1	12.3	50.5	39.0		136.0	55.5	
LOS	F	D	A	E	C	B	D	D		F	E	
Approach Delay		39.1			30.7			40.9			108.4	
Approach LOS		D			C			D			F	
Queue Length 50th (ft)	153	611	0	132	189	0	39	48		~254	94	
Queue Length 95th (ft)	#270	714	0	180	275	160	75	95		#236	117	
Internal Link Dist (ft)		483			1999			568			546	
Turn Bay Length (ft)	380		270	460		1000	190			410		
Base Capacity (vph)	196	1816	900	251	1712	918	236	411		235	243	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.82	0.81	0.08	0.55	0.33	0.35	0.21	0.61		1.10	0.56	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 69 (46%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.10
Intersection Signal Delay: 44.7 Intersection LOS: D
Intersection Capacity Utilization 82.9% ICU Level of Service E
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: NW 173rd St & HWY 441



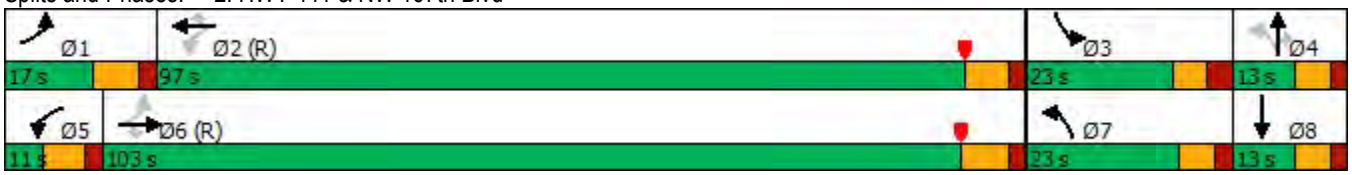


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	86	1697	36	57	622	100	5	2	7	129	17	20
Future Volume (vph)	86	1697	36	57	622	100	5	2	7	129	17	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	270		0	250		290	275		0	150		0
Storage Lanes	1		1	1		1	1		2	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	0.88	0.97	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850			0.850		0.911	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1736	3471	1583	1770	3282	1468	1770	1863	2787	3400	1687	0
Flt Permitted	0.337			0.048			0.889			0.950		
Satd. Flow (perm)	616	3471	1583	89	3282	1468	1656	1863	2787	3400	1687	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			120			120			129		26	
Link Speed (mph)		25			45			30			45	
Link Distance (ft)		2079			1449			336			667	
Travel Time (s)		56.7			22.0			7.6			10.1	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.86	0.86	0.92	0.92	0.86	0.86	0.92	0.92	0.92	0.78	0.92	0.78
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	2%	2%	10%	10%	2%	2%	2%	3%	2%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	100	1973	39	62	723	116	5	2	8	165	18	26
Shared Lane Traffic (%)												
Lane Group Flow (vph)	100	1973	39	62	723	116	5	2	8	165	44	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6		6	2		2	4		4			
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	10.0	10.0	10.0	10.0	4.0	10.0	
Minimum Split (s)	12.2	39.2	39.2	10.8	38.8	38.8	39.0	39.0	39.0	24.7	39.2	
Total Split (s)	17.0	103.0	103.0	11.0	97.0	97.0	23.0	13.0	13.0	23.0	13.0	
Total Split (%)	11.3%	68.7%	68.7%	7.3%	64.7%	64.7%	15.3%	8.7%	8.7%	15.3%	8.7%	
Maximum Green (s)	9.8	95.8	95.8	4.2	90.2	90.2	17.0	7.0	7.0	16.3	7.0	
Yellow Time (s)	5.2	5.2	5.2	4.8	4.8	4.8	4.0	4.0	4.0	3.8	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.9	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.2	7.2	7.2	6.8	6.8	6.8	6.0	6.0	6.0	6.7	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	
Flash Dont Walk (s)		25.0	25.0		25.0	25.0		25.0	25.0		25.0	
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	
Act Effct Green (s)	114.5	108.0	108.0	108.8	103.3	103.3	13.3	9.3	9.3	12.6	15.8	
Actuated g/C Ratio	0.76	0.72	0.72	0.73	0.69	0.69	0.09	0.06	0.06	0.08	0.11	
v/c Ratio	0.19	0.79	0.03	0.50	0.32	0.11	0.03	0.02	0.03	0.58	0.22	
Control Delay	4.1	10.2	0.0	44.0	6.4	2.2	51.6	67.5	0.1	74.0	33.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	4.1	10.2	0.0	44.0	6.4	2.2	51.6	67.5	0.1	74.0	33.2	
LOS	A	B	A	D	A	A	D	E	A	E	C	
Approach Delay		9.7			8.5			26.3			65.4	
Approach LOS		A			A			C			E	
Queue Length 50th (ft)	13	175	0	3	123	8	5	2	0	81	17	
Queue Length 95th (ft)	m21	m203	m0	#72	217	30	17	11	0	102	57	
Internal Link Dist (ft)		1999			1369			256			587	
Turn Bay Length (ft)	270			250		290	275			150		
Base Capacity (vph)	548	2500	1173	125	2260	1048	237	115	293	369	201	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.18	0.79	0.03	0.50	0.32	0.11	0.02	0.02	0.03	0.45	0.22	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 139 (93%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay: 13.1		Intersection LOS: B	
Intersection Capacity Utilization 77.3%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 2: HWY 441 & NW 167th Blvd



AM Build-out 2044 (With Improvements)

HCS Two-Way Stop-Control Report

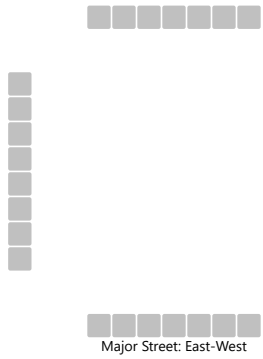
General Information

Analyst	Brian Snyder
Agency/Co.	CHW
Date Performed	3/30/2023
Analysis Year	2044
Time Analyzed	AM Peak
Intersection Orientation	East-West
Project Description	2044 Tomoka Hills Buildout - Santa Fe HS

Site Information

Intersection	HWY 441 at Santa Fe HS
Jurisdiction	City of Alachua
East/West Street	HWY 441
North/South Street	Santa Fe HS
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	1	0	1	2	1		0	0	1		1	0	1
Configuration		L	T	R		L	T	R				R		L		R
Volume (veh/h)	0	16	2527	22	11	66	953	31				31		4		3
Percent Heavy Vehicles (%)	3	3			3	3						3		14		14
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type | Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1			6.4	4.1						6.9		7.5		6.9
Critical Headway (sec)		4.16			6.46	4.16						6.96		7.78		7.18
Base Follow-Up Headway (sec)		2.2			2.5	2.2						3.3		3.5		3.3
Follow-Up Headway (sec)		2.23			2.53	2.23						3.33		3.64		3.44

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		17				84						34		4		3
Capacity, c (veh/h)		641				69						134		0		472
v/c Ratio		0.03				1.21						0.25				0.01
95% Queue Length, Q_{95} (veh)		0.1				6.6						0.9				0.0
Control Delay (s/veh)		10.8				278.6						40.6				12.7
Level of Service (LOS)		B				F						E				B
Approach Delay (s/veh)	0.1				20.2				40.6							
Approach LOS	A				F				E							

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HCS Two-Way Stop-Control Report

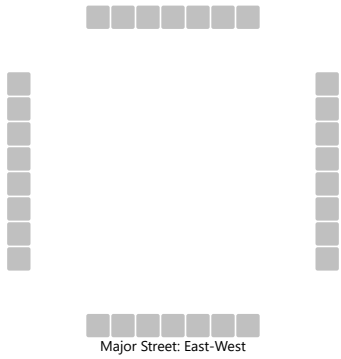
General Information

Analyst	Brian Snyder
Agency/Co.	CHW
Date Performed	3/30/2023
Analysis Year	2044
Time Analyzed	AM Peak
Intersection Orientation	East-West
Project Description	2044 Tomoka Hills Buildout - Directional at Publix

Site Information

Intersection	HWY 441 at Publix Main Access
Jurisdiction	City of Alachua
East/West Street	HWY 441
North/South Street	Publix Main Access
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	0	2	1		0	0	0		0	0	1
Configuration		L	T				T	R								R
Volume (veh/h)	0	91	2495				962	15								68
Percent Heavy Vehicles (%)	3	3														3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized					No								No			
Median Type | Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1														6.9
Critical Headway (sec)		4.16														6.96
Base Follow-Up Headway (sec)		2.2														3.3
Follow-Up Headway (sec)		2.23														3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		99														74
Capacity, c (veh/h)		646														496
v/c Ratio		0.15														0.15
95% Queue Length, Q_{95} (veh)		0.5														0.5
Control Delay (s/veh)		11.6														13.5
Level of Service (LOS)		B														B
Approach Delay (s/veh)	0.4												13.5			
Approach LOS	A												B			

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HCS Two-Way Stop-Control Report

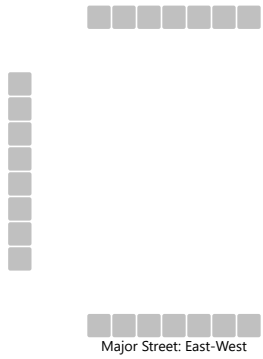
General Information

Analyst	Brian Snyder
Agency/Co.	CHW
Date Performed	3/30/2023
Analysis Year	2044
Time Analyzed	AM Peak
Intersection Orientation	East-West
Project Description	2044 Tomoka Hills Buildout - Prop Direct. East 167

Site Information

Intersection	HWY 441 at Prop Direct. E of 167
Jurisdiction	City of Alachua
East/West Street	HWY 441
North/South Street	Driveway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	1	0	1	2	0		0	0	1		0	0	0
Configuration			T	R		L	T					R				
Volume (veh/h)			2644	22	10	66	1160					31				
Percent Heavy Vehicles (%)					3	3						3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized			No							No						
Median Type | Storage			Left Only							1						

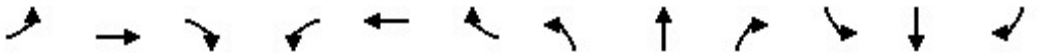
Critical and Follow-up Headways

Base Critical Headway (sec)					6.4	4.1						6.9				
Critical Headway (sec)					6.46	4.16						6.96				
Base Follow-Up Headway (sec)					2.5	2.2						3.3				
Follow-Up Headway (sec)					2.53	2.23						3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						83						34				
Capacity, c (veh/h)						60						121				
v/c Ratio						1.38						0.28				
95% Queue Length, Q_{95} (veh)						7.2						1.1				
Control Delay (s/veh)						360.0						45.6				
Level of Service (LOS)						F						E				
Approach Delay (s/veh)						22.1				45.6						
Approach LOS						F				E						

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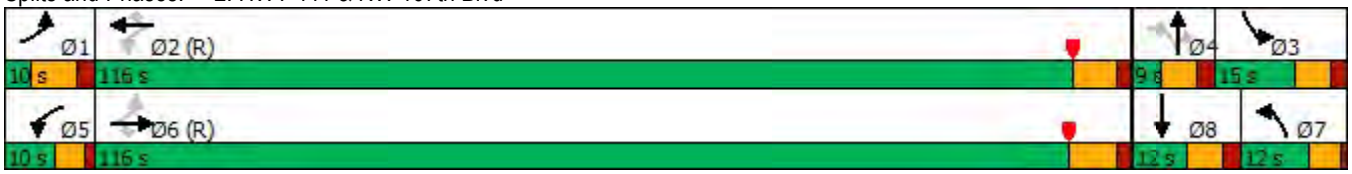


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	2425	45	65	935	140	23	39	62	179	62	27
Future Volume (vph)	30	2425	45	65	935	140	23	39	62	179	62	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	270		0	250		290	275		0	150		0
Storage Lanes	1		1	1		1	1		2	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	0.88	0.97	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850			0.850		0.948	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1719	3438	1583	1770	3539	1583	1770	1863	2787	3467	1772	0
Flt Permitted	0.258			0.037						0.950		
Satd. Flow (perm)	467	3438	1583	69	3539	1583	1863	1863	2787	3467	1772	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			118			151			127		13	
Link Speed (mph)		25			45			30			45	
Link Distance (ft)		2079			1449			336			667	
Travel Time (s)		56.7			22.0			7.6			10.1	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.92	0.92	0.93	0.93	0.92	0.92	0.92	0.75	0.92	0.75
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	2%	2%	2%	2%	2%	2%	2%	1%	2%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	32	2553	49	71	1005	151	25	42	67	239	67	36
Shared Lane Traffic (%)												
Lane Group Flow (vph)	32	2553	49	71	1005	151	25	42	67	239	103	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6		6	2		2	4		4			
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	
Switch Phase												
Minimum Initial (s)	3.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	
Minimum Split (s)	11.0	39.2	39.2	9.5	38.8	38.8	9.5	16.0	16.0	16.0	16.0	
Total Split (s)	10.0	116.0	116.0	10.0	116.0	116.0	12.0	9.0	9.0	15.0	12.0	
Total Split (%)	6.7%	77.3%	77.3%	6.7%	77.3%	77.3%	8.0%	6.0%	6.0%	10.0%	8.0%	
Maximum Green (s)	2.8	108.8	108.8	5.5	109.2	109.2	7.5	3.0	3.0	9.0	6.0	
Yellow Time (s)	5.2	5.2	5.2	3.5	4.8	4.8	3.5	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.2	7.2	7.2	4.5	6.8	6.8	4.5	6.0	6.0	6.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead	Lead	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	111.6	108.8	108.8	117.9	111.2	111.2	11.2	3.0	3.0	9.0	10.8	
Actuated g/C Ratio	0.74	0.73	0.73	0.79	0.74	0.74	0.07	0.02	0.02	0.06	0.07	
v/c Ratio	0.09	1.02	0.04	0.61	0.38	0.12	0.19	1.14	0.37	1.15	0.74	
Control Delay	0.6	29.5	0.0	42.5	7.7	1.1	61.4	251.5	5.8	167.8	86.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	0.6	29.5	0.0	42.5	7.7	1.1	61.4	251.5	5.8	167.8	86.5	
LOS	A	C	A	D	A	A	E	F	A	F	F	
Approach Delay		28.6			8.9			93.2			143.3	
Approach LOS		C			A			F			F	
Queue Length 50th (ft)	1	~1412	0	16	178	0	22	~47	0	~141	~112	
Queue Length 95th (ft)	m0	m24	m0	#83	212	19	53	#135	0	#176	#244	
Internal Link Dist (ft)		1999			1369			256			587	
Turn Bay Length (ft)	270			250		290	275			150		
Base Capacity (vph)	370	2493	1180	116	2623	1212	144	37	180	208	139	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.09	1.02	0.04	0.61	0.38	0.12	0.17	1.14	0.37	1.15	0.74	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 9 (6%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 145			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.15			
Intersection Signal Delay: 34.1		Intersection LOS: C	
Intersection Capacity Utilization 99.7%		ICU Level of Service F	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 2: HWY 441 & NW 167th Blvd



AM Build-out 2044 (SimTraffic Queue Results)

Intersection: 2: HWY 441 & NW 167th Blvd

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	T	L	T	T	R	L	T	R	L	L
Maximum Queue (ft)	28	38	150	85	78	73	25	48	47	26	289	269
Average Queue (ft)	11	20	55	49	34	33	5	28	25	15	243	207
95th Queue (ft)	34	41	138	92	85	78	22	49	60	36	318	290
Link Distance (ft)		1974	1974		1333	1333			280	280	610	610
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	270			250			290	275				
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 2: HWY 441 & NW 167th Blvd

Movement	SB
Directions Served	TR
Maximum Queue (ft)	144
Average Queue (ft)	99
95th Queue (ft)	169
Link Distance (ft)	610
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: HWY 441 & NW 167th Blvd

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	T	L	T	T	R	L	T	R	L	L
Maximum Queue (ft)	48	225	253	40	58	53	27	68	49	89	240	146
Average Queue (ft)	15	142	149	15	25	23	6	41	37	49	182	136
95th Queue (ft)	48	277	309	40	61	64	24	81	53	103	242	152
Link Distance (ft)		1974	1974		1333	1333			280	280	610	610
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	270			250			290	275				
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 2: HWY 441 & NW 167th Blvd

Movement	SB
Directions Served	TR
Maximum Queue (ft)	70
Average Queue (ft)	44
95th Queue (ft)	77
Link Distance (ft)	610
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: HWY 441 & NW 167th Blvd

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	T	T	R	L	T	T	R	L	T	R	R
Maximum Queue (ft)	50	644	696	578	65	124	137	29	69	136	47	22
Average Queue (ft)	16	139	154	116	38	55	73	17	35	80	40	4
95th Queue (ft)	49	556	601	497	78	136	158	38	73	144	54	19
Link Distance (ft)		1974	1974	1974		1333	1333			280	280	280
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	270				250			290	275			
Storage Blk Time (%)		3										
Queuing Penalty (veh)		1										

Intersection: 2: HWY 441 & NW 167th Blvd

Movement	SB	SB	SB
Directions Served	L	L	TR
Maximum Queue (ft)	179	156	90
Average Queue (ft)	134	96	56
95th Queue (ft)	176	158	94
Link Distance (ft)	610	610	610
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: HWY 441 & NW 167th Blvd

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	T	L	T	T	R	L	T	R	L	L
Maximum Queue (ft)	28	73	66	62	78	75	4	48	135	70	202	151
Average Queue (ft)	22	33	23	32	44	23	1	25	66	38	137	96
95th Queue (ft)	40	84	63	68	86	70	4	52	144	68	214	170
Link Distance (ft)		1974	1974		1333	1333			280	280	610	610
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	270			250			290	275				
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 2: HWY 441 & NW 167th Blvd

Movement	SB
Directions Served	TR
Maximum Queue (ft)	332
Average Queue (ft)	216
95th Queue (ft)	361
Link Distance (ft)	610
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

PM Existing

HCS7 Two-Way Stop-Control Report

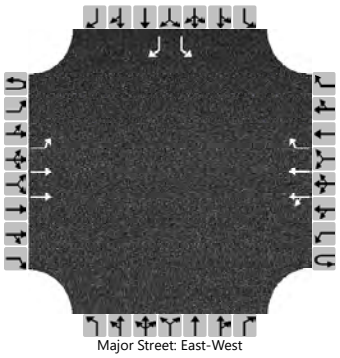
General Information

Analyst	Deborah Cueva
Agency/Co.	CHW
Date Performed	1/13/2022
Analysis Year	2022
Time Analyzed	PM Peak
Intersection Orientation	East-West
Project Description	Tomoka Hills

Site Information

Intersection	US HWY 441 at Santa Fe DW
Jurisdiction	Alachua County
East/West Street	US HWY 441
North/South Street	Santa Fe Driveway
Peak Hour Factor	0.99
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	0	2	1		0	0	0		1	0	1
Configuration		L	T			LT	T	R						L		R
Volume (veh/h)	0	5	909			2	1721	4						8		3
Percent Heavy Vehicles (%)	5	5				2								9		9
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized					No								No			
Median Type | Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1								7.5		6.9
Critical Headway (sec)		4.20				4.14								7.68		7.08
Base Follow-Up Headway (sec)		2.2				2.2								3.5		3.3
Follow-Up Headway (sec)		2.25				2.22								3.59		3.39

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		5				2								8		3
Capacity, c (veh/h)		344				739								65		281
v/c Ratio		0.01				0.00								0.12		0.01
95% Queue Length, Q_{95} (veh)		0.0				0.0								0.4		0.0
Control Delay (s/veh)		15.6				9.9								68.3		17.9
Level of Service (LOS)		C				A								F		C
Approach Delay (s/veh)	0.1				0.4								54.6			
Approach LOS													F			

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HCS7 Two-Way Stop-Control Report

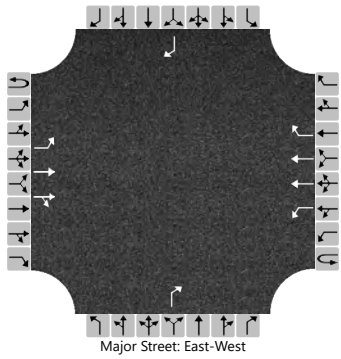
General Information

Analyst	Deborah Cueva
Agency/Co.	CHW
Date Performed	1/13/2022
Analysis Year	2022
Time Analyzed	PM Peak
Intersection Orientation	East-West
Project Description	Tomoka Hills

Site Information

Intersection	US HWY 441 at NW 161 TERR
Jurisdiction	Alachua County
East/West Street	US HWY 441
North/South Street	NW 161st Terr
Peak Hour Factor	0.96
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	1		0	0	1		0	0	1
Configuration		L	T	TR		L	T	R				R				R
Volume (veh/h)	0	17	941	12	0	92	1819	15				33				6
Percent Heavy Vehicles (%)	4	4			11	11						15				2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized					No				No				No			
Median Type | Storage	Undivided															

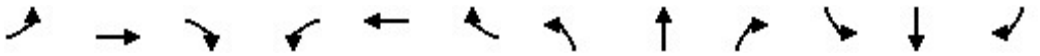
Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1						6.9				6.9
Critical Headway (sec)		4.18				4.32						7.20				6.94
Base Follow-Up Headway (sec)		2.2				2.2						3.3				3.3
Follow-Up Headway (sec)		2.24				2.31						3.45				3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		18				96						34				6
Capacity, c (veh/h)		299				640						486				262
v/c Ratio		0.06				0.15						0.07				0.02
95% Queue Length, Q_{95} (veh)		0.2				0.5						0.2				0.1
Control Delay (s/veh)		17.8				11.6						13.0				19.1
Level of Service (LOS)		C				B						B				C
Approach Delay (s/veh)	0.3				0.6				13.0				19.1			
Approach LOS									B				C			

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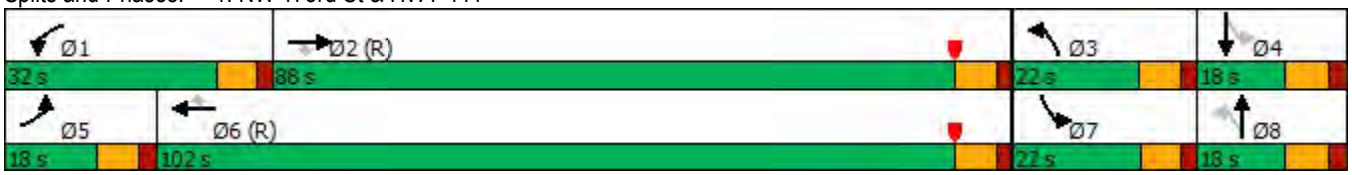


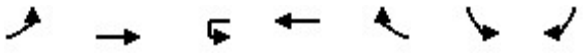
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	681	54	173	1440	109	82	10	142	67	33	45
Future Volume (vph)	21	681	54	173	1440	109	82	10	142	67	33	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	380		270	460		1000	190		250	410		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850			0.850		0.860			0.914	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	3505	1568	1770	3539	1583	1612	2772	0	1787	1719	0
Flt Permitted	0.950			0.950			0.522			0.621		
Satd. Flow (perm)	1752	3505	1568	1770	3539	1583	886	2772	0	1168	1719	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			174			128		195			32	
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		563			2079			648			626	
Travel Time (s)		8.5			31.5			9.8			9.5	
Peak Hour Factor	0.88	0.88	0.88	0.93	0.93	0.93	0.73	0.73	0.73	0.83	0.83	0.83
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	12%	12%	12%	1%	1%	1%
Adj. Flow (vph)	24	774	61	186	1548	117	112	14	195	81	40	54
Shared Lane Traffic (%)												
Lane Group Flow (vph)	24	774	61	186	1548	117	112	209	0	81	94	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6	8			4		
Detector Phase	5	2	2	1	6	6	3	8		7	4	
Switch Phase												
Minimum Initial (s)	4.0	18.0	18.0	10.0	18.0	18.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	25.0	25.0	25.0	25.0	44.0	44.0	25.1	25.1		25.1	25.1	
Total Split (s)	18.0	88.0	88.0	32.0	102.0	102.0	22.0	18.0		22.0	18.0	
Total Split (%)	11.3%	55.0%	55.0%	20.0%	63.8%	63.8%	13.8%	11.3%		13.8%	11.3%	
Maximum Green (s)	11.0	81.0	81.0	25.2	95.0	95.0	14.9	10.4		15.2	10.4	
Yellow Time (s)	5.0	5.0	5.0	4.8	5.0	5.0	5.1	5.1		4.8	5.1	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.5		2.0	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0	7.0	6.8	7.0	7.0	7.1	7.6		6.8	7.6	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None		None	None	
Walk Time (s)					7.0	7.0						
Flash Dont Walk (s)					30.0	30.0						
Pedestrian Calls (#/hr)					0	0						
Act Effct Green (s)	7.7	87.6	87.6	21.2	106.0	106.0	25.5	11.6		21.6	9.3	
Actuated g/C Ratio	0.05	0.55	0.55	0.13	0.66	0.66	0.16	0.07		0.14	0.06	
v/c Ratio	0.29	0.40	0.07	0.79	0.66	0.11	0.55	0.55		0.40	0.72	
Control Delay	81.2	22.8	0.1	74.7	36.1	8.7	66.8	16.9		60.2	77.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	81.2	22.8	0.1	74.7	36.1	8.7	66.8	16.9		60.2	77.9	
LOS	F	C	A	E	D	A	E	B		E	E	
Approach Delay		22.8			38.3			34.3			69.7	
Approach LOS		C			D			C			E	
Queue Length 50th (ft)	25	253	0	191	746	19	101	7		71	64	
Queue Length 95th (ft)	57	309	0	267	911	m64	131	21		113	117	
Internal Link Dist (ft)		483			1999			568			546	
Turn Bay Length (ft)	380		270	460		1000	190			410		
Base Capacity (vph)	120	1918	937	278	2345	1092	216	387		243	141	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.20	0.40	0.07	0.67	0.66	0.11	0.52	0.54		0.33	0.67	

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 27 (17%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay: 35.4		Intersection LOS: D	
Intersection Capacity Utilization 76.1%		ICU Level of Service D	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 1: NW 173rd St & HWY 441



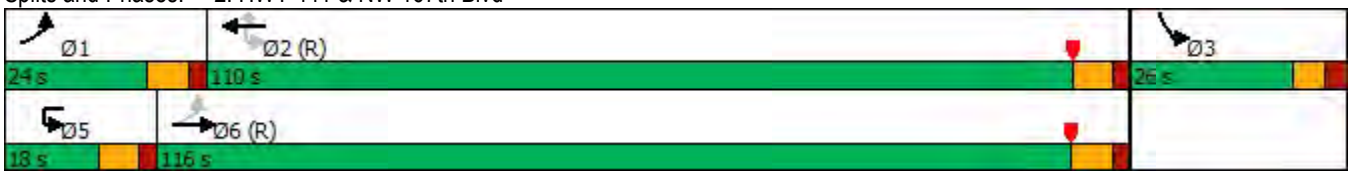


Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	126	795	12	1503	314	178	42
Future Volume (vph)	126	795	12	1503	314	178	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	270		250		290	150	0
Storage Lanes	1		1		1	1	0
Taper Length (ft)	25		25			25	
Lane Util. Factor	1.00	0.95	1.00	0.95	1.00	0.97	0.95
Frt					0.850	0.971	
Flt Protected	0.950		0.950			0.961	
Satd. Flow (prot)	1719	3438	1770	3539	1583	3405	0
Flt Permitted	0.095		0.337			0.961	
Satd. Flow (perm)	172	3438	628	3539	1583	3405	0
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)					317	15	
Link Speed (mph)		25		45		45	
Link Distance (ft)		2079		1449		667	
Travel Time (s)		56.7		22.0		10.1	
Peak Hour Factor	0.95	0.95	0.93	0.93	0.93	0.75	0.75
Heavy Vehicles (%)	5%	5%	2%	2%	2%	1%	1%
Adj. Flow (vph)	133	837	13	1616	338	237	56
Shared Lane Traffic (%)							
Lane Group Flow (vph)	133	837	13	1616	338	293	0
Turn Type	pm+pt	NA	pm+pt	NA	Perm	Prot	
Protected Phases	1	6	5	2		3	
Permitted Phases	6		2		2		
Detector Phase	1	6	5	2	2	3	
Switch Phase							
Minimum Initial (s)	4.0	10.0	4.0	10.0	10.0	4.0	
Minimum Split (s)	12.2	39.2	11.8	38.8	38.8	24.7	
Total Split (s)	24.0	116.0	18.0	110.0	110.0	26.0	
Total Split (%)	15.0%	72.5%	11.3%	68.8%	68.8%	16.3%	
Maximum Green (s)	16.8	108.8	11.2	103.2	103.2	19.3	
Yellow Time (s)	5.2	5.2	4.8	4.8	4.8	3.8	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.9	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.2	7.2	6.8	6.8	6.8	6.7	
Lead/Lag	Lead	Lag	Lead	Lag	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max	None	C-Max	C-Max	Max	
Walk Time (s)		7.0		7.0	7.0		
Flash Dont Walk (s)		25.0		25.0	25.0		
Pedestrian Calls (#/hr)		0		0	0		
Act Effct Green (s)	126.4	121.7	116.2	110.4	110.4	19.3	
Actuated g/C Ratio	0.79	0.76	0.73	0.69	0.69	0.12	
v/c Ratio	0.58	0.32	0.03	0.66	0.28	0.69	
Control Delay	38.8	2.8	1.3	6.7	0.8	73.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	

Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Total Delay	38.8	2.8	1.3	6.7	0.8	73.3	
LOS	D	A	A	A	A	E	
Approach Delay		7.7		5.7		73.3	
Approach LOS		A		A		E	
Queue Length 50th (ft)	38	31	1	459	21	146	
Queue Length 95th (ft)	106	80	m1	47	0	161	
Internal Link Dist (ft)		1999		1369		587	
Turn Bay Length (ft)	270		250		290	150	
Base Capacity (vph)	298	2614	557	2442	1190	423	
Starvation Cap Reductn	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	
Reduced v/c Ratio	0.45	0.32	0.02	0.66	0.28	0.69	

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 96 (60%), Referenced to phase 2:WBTU and 6:EBTL, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay: 12.4		Intersection LOS: B	
Intersection Capacity Utilization 72.2%		ICU Level of Service C	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 2: HWY 441 & NW 167th Blvd



PM Background
2024

HCS7 Two-Way Stop-Control Report

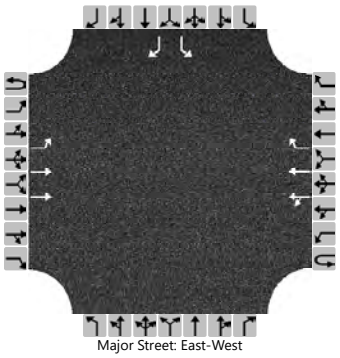
General Information

Analyst	Deborah Cueva
Agency/Co.	CHW
Date Performed	1/13/2022
Analysis Year	2024
Time Analyzed	PM Peak
Intersection Orientation	East-West
Project Description	Tomoka Hills

Site Information

Intersection	US HWY 441 at Santa Fe DW
Jurisdiction	Alachua County
East/West Street	US HWY 441
North/South Street	Santa Fe Driveway
Peak Hour Factor	0.99
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	0	2	1		0	0	0		1	0	1
Configuration		L	T			LT	T	R						L		R
Volume (veh/h)	0	5	947			2	1792	4						8		3
Percent Heavy Vehicles (%)	5	5				2								9		9
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized					No								No			
Median Type | Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1								7.5		6.9
Critical Headway (sec)		4.20				4.14								7.68		7.08
Base Follow-Up Headway (sec)		2.2				2.2								3.5		3.3
Follow-Up Headway (sec)		2.25				2.22								3.59		3.39

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		5				2								8		3
Capacity, c (veh/h)		322				715								63		266
v/c Ratio		0.02				0.00								0.13		0.01
95% Queue Length, Q_{95} (veh)		0.0				0.0								0.4		0.0
Control Delay (s/veh)		16.4				10.1								70.4		18.7
Level of Service (LOS)		C				B								F		C
Approach Delay (s/veh)	0.1				0.0								56.3			
Approach LOS													F			

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HCS7 Two-Way Stop-Control Report

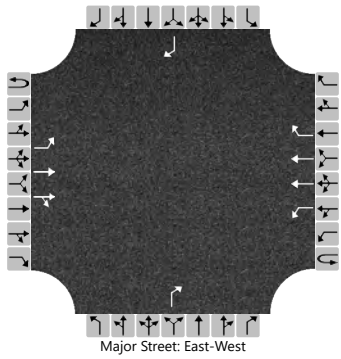
General Information

Analyst	Deborah Cueva
Agency/Co.	CHW
Date Performed	1/13/2022
Analysis Year	2024
Time Analyzed	PM Peak
Intersection Orientation	East-West
Project Description	Tomoka Hills

Site Information

Intersection	US HWY 441 at NW 161 TERR
Jurisdiction	Alachua County
East/West Street	US HWY 441
North/South Street	NW 161st Terr
Peak Hour Factor	0.96
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	1		0	0	1		0	0	1
Configuration		L	T	TR		L	T	R				R				R
Volume (veh/h)	0	18	980	12	0	96	1894	16				33				6
Percent Heavy Vehicles (%)	5	5			2	2						6				2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized					No				No				No			
Median Type | Storage	Undivided															

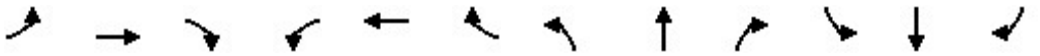
Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1						6.9				6.9
Critical Headway (sec)		4.20				4.14						7.02				6.94
Base Follow-Up Headway (sec)		2.2				2.2						3.3				3.3
Follow-Up Headway (sec)		2.25				2.22						3.36				3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		19				100						34				6
Capacity, c (veh/h)		274				668						493				247
v/c Ratio		0.07				0.15						0.07				0.03
95% Queue Length, Q_{95} (veh)		0.2				0.5						0.2				0.1
Control Delay (s/veh)		19.1				11.3						12.8				20.0
Level of Service (LOS)		C				B						B				C
Approach Delay (s/veh)	0.3				0.5				12.8				20.0			
Approach LOS									B				C			

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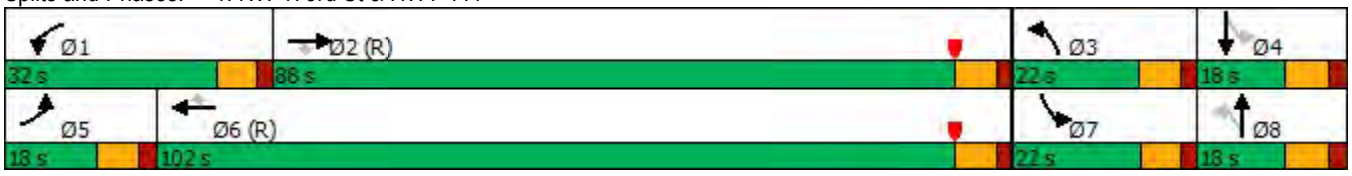


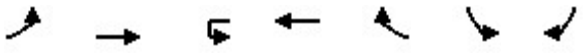
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	709	56	180	1500	114	88	11	153	72	35	48
Future Volume (vph)	22	709	56	180	1500	114	88	11	153	72	35	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	380		270	460		1000	190		250	410		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850			0.850		0.860			0.913	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	3505	1568	1770	3539	1583	1612	2772	0	1787	1718	0
Flt Permitted	0.950			0.950			0.488			0.570		
Satd. Flow (perm)	1752	3505	1568	1770	3539	1583	828	2772	0	1072	1718	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			174			128		210			33	
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		563			2079			648			626	
Travel Time (s)		8.5			31.5			9.8			9.5	
Peak Hour Factor	0.88	0.88	0.88	0.93	0.93	0.93	0.73	0.73	0.73	0.83	0.83	0.83
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	12%	12%	12%	1%	1%	1%
Adj. Flow (vph)	25	806	64	194	1613	123	121	15	210	87	42	58
Shared Lane Traffic (%)												
Lane Group Flow (vph)	25	806	64	194	1613	123	121	225	0	87	100	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6	8			4		
Detector Phase	5	2	2	1	6	6	3	8		7	4	
Switch Phase												
Minimum Initial (s)	4.0	18.0	18.0	10.0	18.0	18.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	25.0	25.0	25.0	25.0	44.0	44.0	25.1	25.1		25.1	25.1	
Total Split (s)	18.0	88.0	88.0	32.0	102.0	102.0	22.0	18.0		22.0	18.0	
Total Split (%)	11.3%	55.0%	55.0%	20.0%	63.8%	63.8%	13.8%	11.3%		13.8%	11.3%	
Maximum Green (s)	11.0	81.0	81.0	25.2	95.0	95.0	14.9	10.4		15.2	10.4	
Yellow Time (s)	5.0	5.0	5.0	4.8	5.0	5.0	5.1	5.1		4.8	5.1	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.5		2.0	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0	7.0	6.8	7.0	7.0	7.1	7.6		6.8	7.6	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None		None	None	
Walk Time (s)					7.0	7.0						
Flash Dont Walk (s)					30.0	30.0						
Pedestrian Calls (#/hr)					0	0						
Act Effct Green (s)	7.8	86.7	86.7	21.6	105.5	105.5	25.9	11.7		22.1	9.5	
Actuated g/C Ratio	0.05	0.54	0.54	0.14	0.66	0.66	0.16	0.07		0.14	0.06	
v/c Ratio	0.29	0.42	0.07	0.82	0.69	0.11	0.60	0.57		0.43	0.75	
Control Delay	81.5	23.5	0.1	75.4	38.7	9.5	69.4	16.8		61.1	81.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	81.5	23.5	0.1	75.4	38.7	9.5	69.4	16.8		61.1	81.1	
LOS	F	C	A	E	D	A	E	B		E	F	
Approach Delay		23.5			40.6			35.2			71.8	
Approach LOS		C			D			D			E	
Queue Length 50th (ft)	26	269	0	199	814	25	110	7		77	70	
Queue Length 95th (ft)	58	325	0	m282	968	m64	140	21		121	#132	
Internal Link Dist (ft)		483			1999			568			546	
Turn Bay Length (ft)	380		270	460		1000	190			410		
Base Capacity (vph)	120	1900	929	278	2334	1087	212	401		238	142	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.21	0.42	0.07	0.70	0.69	0.11	0.57	0.56		0.37	0.70	

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 27 (17%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay: 37.2		Intersection LOS: D	
Intersection Capacity Utilization 78.4%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 1: NW 173rd St & HWY 441



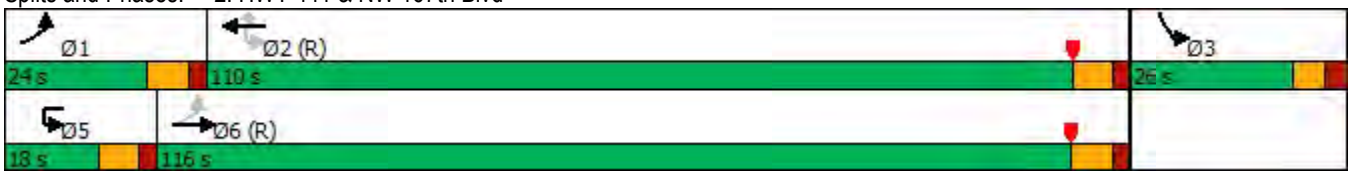


Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	131	828	12	1565	327	185	44
Future Volume (vph)	131	828	12	1565	327	185	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	270		250		290	150	0
Storage Lanes	1		1		1	1	0
Taper Length (ft)	25		25			25	
Lane Util. Factor	1.00	0.95	1.00	0.95	1.00	0.97	0.95
Frt					0.850	0.971	
Flt Protected	0.950		0.950			0.961	
Satd. Flow (prot)	1719	3438	1770	3539	1583	3405	0
Flt Permitted	0.083		0.325			0.961	
Satd. Flow (perm)	150	3438	605	3539	1583	3405	0
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)					317	15	
Link Speed (mph)		25		45		45	
Link Distance (ft)		2079		1449		667	
Travel Time (s)		56.7		22.0		10.1	
Peak Hour Factor	0.95	0.95	0.93	0.93	0.93	0.75	0.75
Heavy Vehicles (%)	5%	5%	2%	2%	2%	1%	1%
Adj. Flow (vph)	138	872	13	1683	352	247	59
Shared Lane Traffic (%)							
Lane Group Flow (vph)	138	872	13	1683	352	306	0
Turn Type	pm+pt	NA	pm+pt	NA	Perm	Prot	
Protected Phases	1	6	5	2		3	
Permitted Phases	6		2		2		
Detector Phase	1	6	5	2	2	3	
Switch Phase							
Minimum Initial (s)	4.0	10.0	4.0	10.0	10.0	4.0	
Minimum Split (s)	12.2	39.2	11.8	38.8	38.8	24.7	
Total Split (s)	24.0	116.0	18.0	110.0	110.0	26.0	
Total Split (%)	15.0%	72.5%	11.3%	68.8%	68.8%	16.3%	
Maximum Green (s)	16.8	108.8	11.2	103.2	103.2	19.3	
Yellow Time (s)	5.2	5.2	4.8	4.8	4.8	3.8	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.9	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.2	7.2	6.8	6.8	6.8	6.7	
Lead/Lag	Lead	Lag	Lead	Lag	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max	None	C-Max	C-Max	Max	
Walk Time (s)		7.0		7.0	7.0		
Flash Dont Walk (s)		25.0		25.0	25.0		
Pedestrian Calls (#/hr)		0		0	0		
Act Effct Green (s)	126.8	121.7	115.1	109.4	109.4	19.3	
Actuated g/C Ratio	0.79	0.76	0.72	0.68	0.68	0.12	
v/c Ratio	0.62	0.33	0.03	0.70	0.30	0.72	
Control Delay	47.4	2.9	1.4	7.5	0.9	75.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	

Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Total Delay	47.4	2.9	1.4	7.5	0.9	75.0	
LOS	D	A	A	A	A	E	
Approach Delay		9.0		6.3		75.0	
Approach LOS		A		A		E	
Queue Length 50th (ft)	48	35	1	515	25	153	
Queue Length 95th (ft)	127	85	m1	59	0	169	
Internal Link Dist (ft)		1999		1369		587	
Turn Bay Length (ft)	270		250		290	150	
Base Capacity (vph)	283	2614	537	2418	1182	423	
Starvation Cap Reductn	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	
Reduced v/c Ratio	0.49	0.33	0.02	0.70	0.30	0.72	

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 96 (60%), Referenced to phase 2:WBTU and 6:EBTL, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay: 13.4		Intersection LOS: B	
Intersection Capacity Utilization 74.4%		ICU Level of Service D	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 2: HWY 441 & NW 167th Blvd



PM Buildout
2024

HCS Two-Way Stop-Control Report

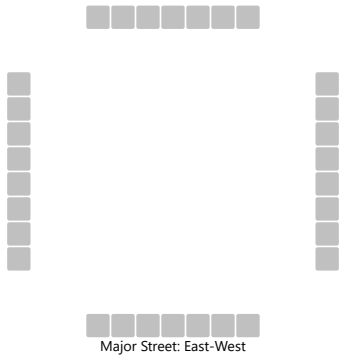
General Information

Analyst	Deborah Cueva
Agency/Co.	CHW
Date Performed	1/13/2022
Analysis Year	2024
Time Analyzed	PM Peak
Intersection Orientation	East-West
Project Description	Tomoka Hills - Buildout

Site Information

Intersection	US HWY 441 at Santa Fe DW
Jurisdiction	Alachua County
East/West Street	US HWY 441
North/South Street	Santa Fe Driveway
Peak Hour Factor	0.99
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	0	2	1		0	0	0		1	0	1
Configuration		L	T			LT	T	R						L		R
Volume (veh/h)	0	5	954			2	1826	4						8		3
Percent Heavy Vehicles (%)	5	5				2								9		9
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized					No								No			
Median Type | Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1								7.5		6.9
Critical Headway (sec)		4.20				4.14								7.68		7.08
Base Follow-Up Headway (sec)		2.2				2.2								3.5		3.3
Follow-Up Headway (sec)		2.25				2.22								3.59		3.39

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		5				2								8		3
Capacity, c (veh/h)		312				710								60		258
v/c Ratio		0.02				0.00								0.14		0.01
95% Queue Length, Q_{95} (veh)		0.0				0.0								0.4		0.0
Control Delay (s/veh)		16.7				10.1	0.0							74.7		19.1
Level of Service (LOS)		C				B	A							F		C
Approach Delay (s/veh)	0.1				0.1								59.5			
Approach LOS	A				A								F			

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HCS Two-Way Stop-Control Report

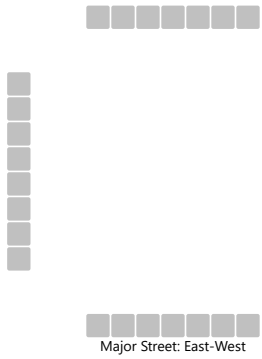
General Information

Analyst	Deborah Cueva
Agency/Co.	CHW
Date Performed	1/13/2022
Analysis Year	2024
Time Analyzed	PM Peak
Intersection Orientation	East-West
Project Description	Tomoka Hills - Buildout

Site Information

Intersection	US HWY 441 at NW 161 TERR
Jurisdiction	Alachua County
East/West Street	US HWY 441
North/South Street	NW 161st Terr
Peak Hour Factor	0.96
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	1		0	0	1		0	0	1
Configuration		L	T	TR		L	T	R				R				R
Volume (veh/h)	0	18	1029	13	0	96	1904	16				33				6
Percent Heavy Vehicles (%)	5	5			2	2						6				2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized					No				No				No			
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1						6.9				6.9
Critical Headway (sec)		4.20				4.14						7.02				6.94
Base Follow-Up Headway (sec)		2.2				2.2						3.3				3.3
Follow-Up Headway (sec)		2.25				2.22						3.36				3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		19				100						34				6
Capacity, c (veh/h)		272				638						474				245
v/c Ratio		0.07				0.16						0.07				0.03
95% Queue Length, Q_{95} (veh)		0.2				0.6						0.2				0.1
Control Delay (s/veh)		19.2				11.7						13.2				20.1
Level of Service (LOS)		C				B						B				C
Approach Delay (s/veh)	0.3				0.6				13.2				20.1			
Approach LOS	A				A				B				C			

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HCS Two-Way Stop-Control Report

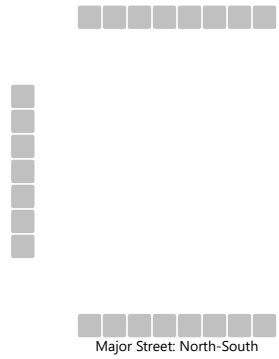
General Information

Analyst	Brian Snyder
Agency/Co.	CHW
Date Performed	5/2/2022
Analysis Year	2024
Time Analyzed	PM 2024 Build-out
Intersection Orientation	North-South
Project Description	Tomoka Hills

Site Information

Intersection	NW 167th Lane at NW 162nd
Jurisdiction	City of Alachua
East/West Street	NW 162nd Lane
North/South Street	NW 167th Lane
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	1		0	0	0		4	100	0		0	20	0
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			1				0			4				0		
Capacity, c (veh/h)			1053				0			1587				1476		
v/c Ratio			0.00							0.00				0.00		
95% Queue Length, Q_{95} (veh)			0.0							0.0				0.0		
Control Delay (s/veh)			8.4							7.3	0.0	0.0		7.4	0.0	0.0
Level of Service (LOS)			A							A	A	A		A	A	A
Approach Delay (s/veh)	8.4								0.3				0.0			
Approach LOS	A								A				A			

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HCS Two-Way Stop-Control Report

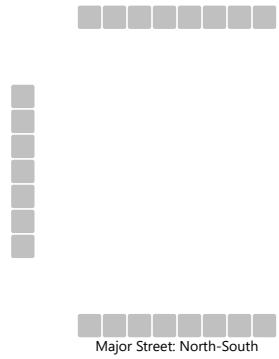
General Information

Analyst	Brian Snyder
Agency/Co.	CHW
Date Performed	5/8/2022
Analysis Year	2026
Time Analyzed	PM Phase 2 Buildout
Intersection Orientation	North-South
Project Description	Tomoka Hills Phase 2 with/without RIRO

Site Information

Intersection	NW 173rd St at NW 162nd L
Jurisdiction	Alachua
East/West Street	NW 162nd Lane
North/South Street	NW 173rd St
Peak Hour Factor	0.96
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						4		0			252	1		0	271	
Percent Heavy Vehicles (%)						3		3						1		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage		Undivided														

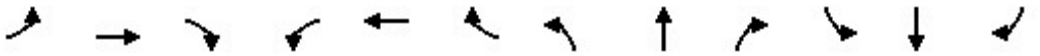
Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.43		6.23						4.11		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.53		3.33						2.21		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							4							0		
Capacity, c (veh/h)							497							1306		
v/c Ratio							0.01							0.00		
95% Queue Length, Q_{95} (veh)							0.0							0.0		
Control Delay (s/veh)							12.3							7.8	0.0	
Level of Service (LOS)							B							A	A	
Approach Delay (s/veh)						12.3								0.0		
Approach LOS						B								A		

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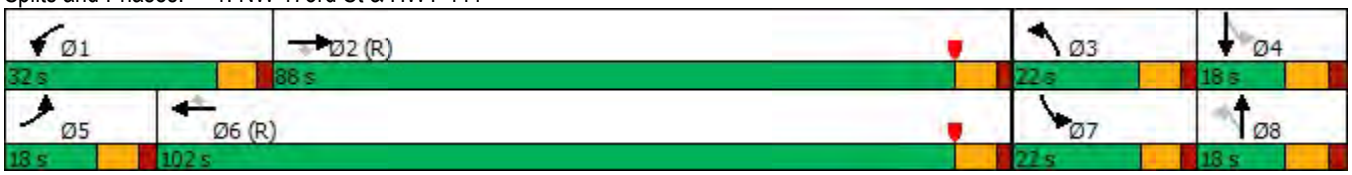


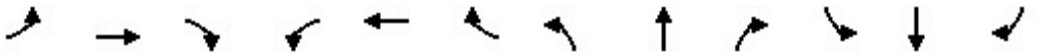
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	715	56	180	1531	117	88	11	153	73	35	48
Future Volume (vph)	22	715	56	180	1531	117	88	11	153	73	35	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	380		270	460		1000	190		250	410		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850		0.860			0.913	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	3505	1568	1770	3539	1583	1612	2772	0	1787	1718	0
Flt Permitted	0.950			0.950			0.488			0.570		
Satd. Flow (perm)	1752	3505	1568	1770	3539	1583	828	2772	0	1072	1718	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			174			128		210			33	
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		563			2079			648			626	
Travel Time (s)		8.5			31.5			9.8			9.5	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.88	0.88	0.88	0.93	0.93	0.93	0.73	0.73	0.73	0.83	0.83	0.83
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	12%	12%	12%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	25	813	64	194	1646	126	121	15	210	88	42	58
Shared Lane Traffic (%)												
Lane Group Flow (vph)	25	813	64	194	1646	126	121	225	0	88	100	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6	8			4		
Detector Phase	5	2	2	1	6	6	3	8		7	4	
Switch Phase												
Minimum Initial (s)	4.0	18.0	18.0	10.0	18.0	18.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	25.0	25.0	25.0	25.0	44.0	44.0	25.1	25.1		25.1	25.1	
Total Split (s)	18.0	88.0	88.0	32.0	102.0	102.0	22.0	18.0		22.0	18.0	
Total Split (%)	11.3%	55.0%	55.0%	20.0%	63.8%	63.8%	13.8%	11.3%		13.8%	11.3%	
Maximum Green (s)	11.0	81.0	81.0	25.2	95.0	95.0	14.9	10.4		15.2	10.4	
Yellow Time (s)	5.0	5.0	5.0	4.8	5.0	5.0	5.1	5.1		4.8	5.1	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.5		2.0	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0	7.0	6.8	7.0	7.0	7.1	7.6		6.8	7.6	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None		None	None	
Walk Time (s)					7.0	7.0						
Flash Dont Walk (s)					30.0	30.0						
Pedestrian Calls (#/hr)					0	0						
Act Effct Green (s)	7.8	86.7	86.7	21.6	105.5	105.5	25.8	11.7		22.1	9.5	
Actuated g/C Ratio	0.05	0.54	0.54	0.14	0.66	0.66	0.16	0.07		0.14	0.06	
v/c Ratio	0.29	0.43	0.07	0.82	0.71	0.12	0.60	0.57		0.44	0.75	
Control Delay	81.5	23.6	0.1	70.8	38.3	6.8	69.4	16.8		61.2	81.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	81.5	23.6	0.1	70.8	38.3	6.8	69.4	16.8		61.2	81.1	
LOS	F	C	A	E	D	A	E	B		E	F	
Approach Delay		23.5			39.5			35.2			71.8	
Approach LOS		C			D			D			E	
Queue Length 50th (ft)	26	273	0	179	937	37	110	7		78	70	
Queue Length 95th (ft)	58	328	0	m224	1015	m45	140	21		122	#132	
Internal Link Dist (ft)		483			1999			568			546	
Turn Bay Length (ft)	380		270	460		1000	190			410		
Base Capacity (vph)	120	1900	929	278	2334	1087	212	400		238	142	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.21	0.43	0.07	0.70	0.71	0.12	0.57	0.56		0.37	0.70	

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 27 (17%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay: 36.6		Intersection LOS: D	
Intersection Capacity Utilization 79.2%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 1: NW 173rd St & HWY 441





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	131	828	7	22	1565	327	34	16	50	185	3	44
Future Volume (vph)	131	828	7	22	1565	327	34	16	50	185	3	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	270		0	250		290	275		0	150		0
Storage Lanes	1		1	1		1	1		2	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	0.88	0.97	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850			0.850		0.857	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1719	3438	1583	1770	3539	1583	1770	1863	2787	3467	1611	0
Flt Permitted	0.042			0.325			0.717			0.950		
Satd. Flow (perm)	76	3438	1583	605	3539	1583	1336	1863	2787	3467	1611	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			108			184			116		59	
Link Speed (mph)		25			45			30			45	
Link Distance (ft)		2079			1449			336			667	
Travel Time (s)		56.7			22.0			7.6			10.1	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.92	0.92	0.93	0.93	0.92	0.92	0.92	0.75	0.92	0.75
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	2%	2%	2%	2%	2%	2%	2%	1%	2%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	138	872	8	24	1683	352	37	17	54	247	3	59
Shared Lane Traffic (%)												
Lane Group Flow (vph)	138	872	8	24	1683	352	37	17	54	247	62	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6		6	2		2	4		4			
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	
Minimum Split (s)	12.2	39.2	39.2	11.8	38.8	38.8	38.8	38.8	38.8	39.2	39.2	
Total Split (s)	13.0	71.0	71.0	11.0	69.0	69.0	39.0	39.0	39.0	39.0	39.0	
Total Split (%)	8.1%	44.4%	44.4%	6.9%	43.1%	43.1%	24.4%	24.4%	24.4%	24.4%	24.4%	
Maximum Green (s)	5.8	63.8	63.8	4.2	62.2	62.2	33.0	33.0	33.0	33.0	33.0	
Yellow Time (s)	5.2	5.2	5.2	4.8	4.8	4.8	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.2	7.2	7.2	6.8	6.8	6.8	6.0	6.0	6.0	6.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0	7.0	7.0	
Flash Dont Walk (s)		25.0	25.0		25.0	25.0		25.0	25.0	25.0	25.0	
Pedestrian Calls (#/hr)		0	0		0	0		0	0	0	0	
Act Effct Green (s)	117.3	109.3	109.3	96.0	89.9	89.9	18.2	10.0	10.0	16.7	16.5	
Actuated g/C Ratio	0.73	0.68	0.68	0.60	0.56	0.56	0.11	0.06	0.06	0.10	0.10	
v/c Ratio	0.52	0.37	0.01	0.06	0.85	0.36	0.21	0.15	0.19	0.68	0.28	
Control Delay	70.9	5.1	0.0	4.5	23.6	5.3	53.9	74.1	1.5	78.7	18.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	70.9	5.1	0.0	4.5	23.6	5.3	53.9	74.1	1.5	78.7	18.9	
LOS	E	A	A	A	C	A	D	E	A	E	B	
Approach Delay		13.9			20.2			30.9			66.7	
Approach LOS		B			C			C			E	
Queue Length 50th (ft)	98	51	0	4	768	122	32	17	0	130	3	
Queue Length 95th (ft)	167	94	m0	m5	876	85	64	45	0	143	50	
Internal Link Dist (ft)		1999			1369			256			587	
Turn Bay Length (ft)	270			250		290	275			150		
Base Capacity (vph)	267	2349	1115	407	1987	969	374	384	666	715	379	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.52	0.37	0.01	0.06	0.85	0.36	0.10	0.04	0.08	0.35	0.16	

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 96 (60%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 22.8		Intersection LOS: C	
Intersection Capacity Utilization 79.1%		ICU Level of Service D	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 2: HWY 441 & NW 167th Blvd



PM Buildout 2044 (With Improvements)

HCS Two-Way Stop-Control Report

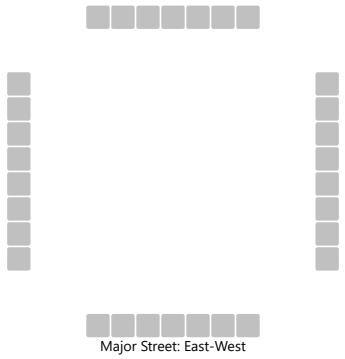
General Information

Analyst	Brian Snyder
Agency/Co.	CHW
Date Performed	3/30/2023
Analysis Year	2044
Time Analyzed	PM Peak
Intersection Orientation	East-West
Project Description	2044 Tomoka Hills Buildout - Santa Fe HS

Site Information

Intersection	HWY 441 at Santa Fe HS
Jurisdiction	City of Alachua
East/West Street	HWY 441
North/South Street	Santa Fe HS
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	1	0	1	2	1		0	0	1		1	0	1
Configuration		L	T	R		L	T	R				R		L		R
Volume (veh/h)	0	5	1378	18	11	98	2625	4				89		8		3
Percent Heavy Vehicles (%)	3	3			3	3						3		9		9
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type | Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1			6.4	4.1						6.9		7.5		6.9
Critical Headway (sec)		4.16			6.46	4.16						6.96		7.68		7.08
Base Follow-Up Headway (sec)		2.2			2.5	2.2						3.3		3.5		3.3
Follow-Up Headway (sec)		2.23			2.53	2.23						3.33		3.59		3.39

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		5				118						97		9		3
Capacity, c (veh/h)		127				336						352		6		117
v/c Ratio		0.04				0.35						0.27		1.47		0.03
95% Queue Length, Q_{95} (veh)		0.1				1.5						1.1		2.0		0.1
Control Delay (s/veh)		34.7				21.4						19.0		1365.5		36.7
Level of Service (LOS)		D				C						C		F		E
Approach Delay (s/veh)	0.1				0.9				19.0				1003.1			
Approach LOS	A				A				C				F			

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HCS Two-Way Stop-Control Report

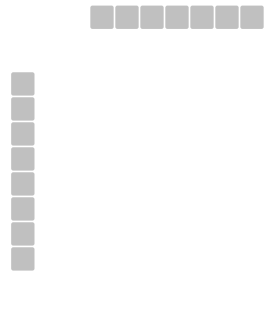
General Information

Analyst	Brian Snyder
Agency/Co.	CHW
Date Performed	3/30/2023
Analysis Year	2044
Time Analyzed	PM Peak
Intersection Orientation	East-West
Project Description	2044 Tomoka Hills Buildout - Directional at Publix

Site Information

Intersection	HWY 441 at Publix Main Access
Jurisdiction	City of Alachua
East/West Street	HWY 441
North/South Street	Publix Main Access
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	0	2	1		0	0	0		0	0	1
Configuration		L	T				T	R								R
Volume (veh/h)	0	137	1442				2404	26								238
Percent Heavy Vehicles (%)	3	3														3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized						No								No		
Median Type | Storage			Left Only								1					

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1														6.9
Critical Headway (sec)		4.16														6.96
Base Follow-Up Headway (sec)		2.2														3.3
Follow-Up Headway (sec)		2.23														3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		149														259
Capacity, c (veh/h)		155														149
v/c Ratio		0.96														1.74
95% Queue Length, Q_{95} (veh)		7.1														18.9
Control Delay (s/veh)		120.0														410.1
Level of Service (LOS)		F														F
Approach Delay (s/veh)		10.4												410.1		
Approach LOS		B												F		

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HCS Two-Way Stop-Control Report

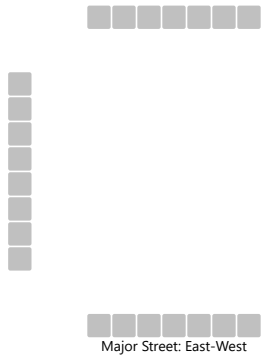
General Information

Analyst	Brian Snyder
Agency/Co.	CHW
Date Performed	3/30/2023
Analysis Year	2044
Time Analyzed	PM Peak
Intersection Orientation	East-West
Project Description	2044 Tomoka Hills Buildout - Prop Direct. East 167

Site Information

Intersection	HWY 441 at Prop Direct. E of 167
Jurisdiction	City of Alachua
East/West Street	HWY 441
North/South Street	Driveway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	1	0	1	2	0		0	0	1		0	0	0
Configuration			T	R		L	T					R				
Volume (veh/h)			1681	18	9	98	2858					89				
Percent Heavy Vehicles (%)					3	3						3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized			No							No						
Median Type | Storage			Left Only							1						

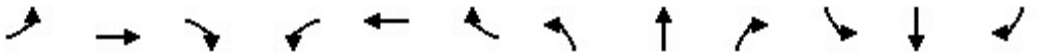
Critical and Follow-up Headways

Base Critical Headway (sec)					6.4	4.1						6.9				
Critical Headway (sec)					6.46	4.16						6.96				
Base Follow-Up Headway (sec)					2.5	2.2						3.3				
Follow-Up Headway (sec)					2.53	2.23						3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						116						97				
Capacity, c (veh/h)						237						274				
v/c Ratio						0.49						0.35				
95% Queue Length, Q_{95} (veh)						2.5						1.5				
Control Delay (s/veh)						34.0						25.2				
Level of Service (LOS)						D						D				
Approach Delay (s/veh)						1.2				25.2						
Approach LOS						A				D						

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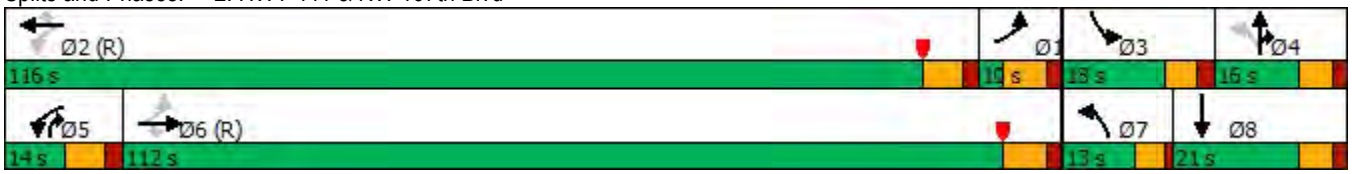
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	46	1246	37	99	2285	457	120	111	179	256	92	60
Future Volume (vph)	46	1246	37	99	2285	457	120	111	179	256	92	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	270		0	250		290	275		0	150		0
Storage Lanes	1		1	1		1	1		2	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	0.88	0.97	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850			0.850		0.933	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1719	3438	1583	1770	3539	1583	1770	1863	2787	3467	1746	0
Flt Permitted	0.039			0.141			0.400			0.950		
Satd. Flow (perm)	71	3438	1583	263	3539	1583	745	1863	2787	3467	1746	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			98			339			123		20	
Link Speed (mph)		25			45			30			45	
Link Distance (ft)		2079			1449			336			667	
Travel Time (s)		56.7			22.0			7.6			10.1	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.92	0.92	0.93	0.93	0.92	0.92	0.92	0.75	0.92	0.75
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	2%	2%	2%	2%	2%	2%	2%	1%	2%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	48	1312	40	108	2457	491	130	121	195	341	100	80
Shared Lane Traffic (%)												
Lane Group Flow (vph)	48	1312	40	108	2457	491	130	121	195	341	180	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	pt+ov	Prot	NA	
Protected Phases	1	6		5	2		7	4	4 5	3	8	
Permitted Phases	6		6	2		2	4					
Detector Phase	1	6	6	5	2	2	7	4	4 5	3	8	
Switch Phase												
Minimum Initial (s)	3.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	39.2	39.2	11.8	38.8	38.8	9.5	16.0		16.0	16.0	
Total Split (s)	10.0	112.0	112.0	14.0	116.0	116.0	13.0	16.0		18.0	21.0	
Total Split (%)	6.3%	70.0%	70.0%	8.8%	72.5%	72.5%	8.1%	10.0%		11.3%	13.1%	
Maximum Green (s)	2.8	104.8	104.8	7.2	109.2	109.2	8.5	10.0		12.0	15.0	
Yellow Time (s)	5.2	5.2	5.2	4.8	4.8	4.8	3.5	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	1.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.2	7.2	7.2	6.8	6.8	6.8	4.5	6.0		6.0	6.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None		None	None	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	104.9	104.9	104.9	111.2	111.2	111.2	20.0	10.0	23.9	12.0	15.0	
Actuated g/C Ratio	0.66	0.66	0.66	0.70	0.70	0.70	0.12	0.06	0.15	0.08	0.09	
v/c Ratio	0.64	0.58	0.04	0.43	1.00	0.41	0.88	1.04	0.38	1.31	0.99	
Control Delay	57.2	9.2	0.1	2.0	11.9	0.1	108.3	164.5	25.2	218.6	127.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	57.2	9.2	0.1	2.0	11.9	0.1	108.3	164.5	25.2	218.6	127.8	
LOS	E	A	A	A	B	A	F	F	C	F	F	
Approach Delay		10.6			9.7			87.2			187.2	
Approach LOS		B			A			F			F	
Queue Length 50th (ft)	18	443	0	5	~1414	0	121	~136	38	~235	171	
Queue Length 95th (ft)	m25	241	m0	m5	m54	m0	#208	#277	82	#261	#342	
Internal Link Dist (ft)		1999			1369			256			587	
Turn Bay Length (ft)	270			250		290	275			150		
Base Capacity (vph)	75	2254	1071	250	2459	1203	147	116	522	260	181	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.64	0.58	0.04	0.43	1.00	0.41	0.88	1.04	0.37	1.31	0.99	

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 102 (64%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow
Natural Cycle: 145
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.31
Intersection Signal Delay: 33.3 Intersection LOS: C
Intersection Capacity Utilization 104.8% ICU Level of Service G
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: HWY 441 & NW 167th Blvd



Intersection: 2: HWY 441 & NW 167th Blvd

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	T	T	R	L	T	T	R	L	T	R	R
Maximum Queue (ft)	56	171	244	44	40	224	210	54	277	284	135	124
Average Queue (ft)	36	48	84	9	33	80	84	18	200	237	98	66
95th Queue (ft)	70	158	248	38	47	226	227	53	346	317	173	158
Link Distance (ft)		1974	1974	1974		1333	1333			280	280	280
Upstream Blk Time (%)									29	28		
Queuing Penalty (veh)									0	0		
Storage Bay Dist (ft)	270				250			290	275			
Storage Blk Time (%)									29	28		
Queuing Penalty (veh)									32	34		

Intersection: 2: HWY 441 & NW 167th Blvd

Movement	SB	SB	SB
Directions Served	L	L	TR
Maximum Queue (ft)	429	399	392
Average Queue (ft)	304	246	304
95th Queue (ft)	481	445	465
Link Distance (ft)	610	610	610
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: HWY 441 & NW 167th Blvd

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	T	T	R	L	T	T	R	L	T	R	R
Maximum Queue (ft)	111	197	215	44	82	159	150	49	236	156	199	163
Average Queue (ft)	55	64	69	9	47	76	79	11	174	129	162	104
95th Queue (ft)	115	187	201	38	87	184	185	43	273	156	209	183
Link Distance (ft)		1974	1974	1974		1333	1333			280	280	280
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	270				250			290	275			
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 2: HWY 441 & NW 167th Blvd

Movement	SB	SB	SB
Directions Served	L	L	TR
Maximum Queue (ft)	392	377	299
Average Queue (ft)	342	246	203
95th Queue (ft)	430	385	316
Link Distance (ft)	610	610	610
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: HWY 441 & NW 167th Blvd

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB	SB
Directions Served	L	T	T	L	T	T	R	L	T	R	R	L
Maximum Queue (ft)	294	339	322	61	148	141	53	279	295	215	179	373
Average Queue (ft)	98	98	100	31	44	49	22	211	223	171	104	223
95th Queue (ft)	263	313	299	59	133	134	63	325	348	246	225	386
Link Distance (ft)		1974	1974		1333	1333			280	280	280	610
Upstream Blk Time (%)								24	23			
Queuing Penalty (veh)								0	0			
Storage Bay Dist (ft)	270			250			290	275				
Storage Blk Time (%)		3						24	23			
Queuing Penalty (veh)		1						26	28			

Intersection: 2: HWY 441 & NW 167th Blvd

Movement	SB	SB
Directions Served	L	TR
Maximum Queue (ft)	225	264
Average Queue (ft)	155	191
95th Queue (ft)	267	274
Link Distance (ft)	610	610
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

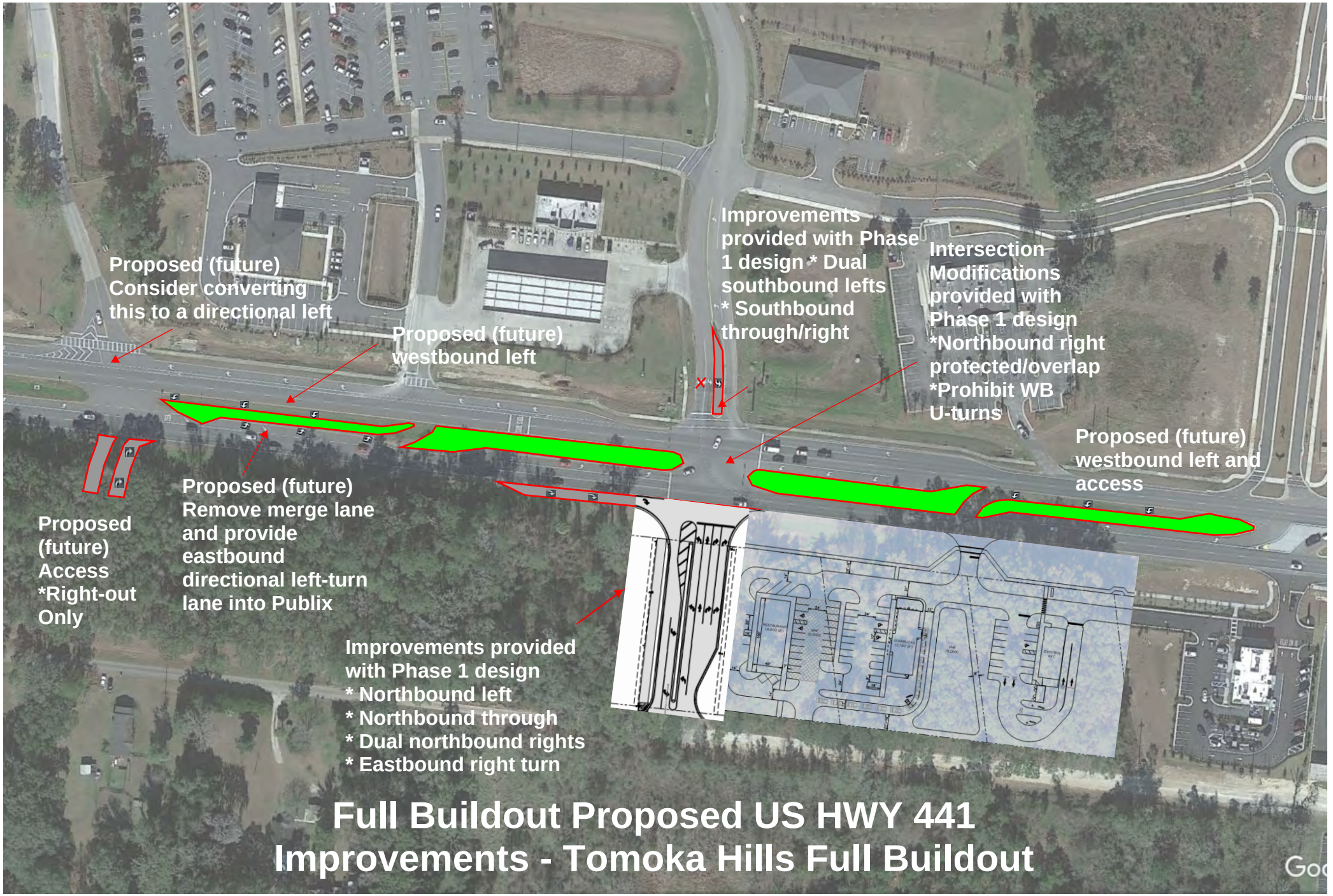
Intersection: 2: HWY 441 & NW 167th Blvd

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB	SB
Directions Served	L	T	T	L	T	T	R	L	T	R	R	L
Maximum Queue (ft)	29	160	222	61	164	199	30	197	203	155	46	217
Average Queue (ft)	11	68	87	28	74	71	22	125	155	99	14	187
95th Queue (ft)	34	189	262	62	165	185	41	211	219	152	45	221
Link Distance (ft)		1974	1974		1333	1333			280	280	280	610
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	270			250			290	275				
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 2: HWY 441 & NW 167th Blvd

Movement	SB	SB
Directions Served	L	TR
Maximum Queue (ft)	177	266
Average Queue (ft)	149	129
95th Queue (ft)	182	245
Link Distance (ft)	610	610
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Appendix I
US HWY 441
Proposed Access Improvements


Proposed (future) Consider converting this to a directional left
Proposed (future) westbound left
Improvements provided with Phase 1 design * Dual southbound lefts * Southbound through/right
Intersection Modifications provided with Phase 1 design *Northbound right protected/overlap *Prohibit WB U-turns
Proposed (future) westbound left and access
Proposed (future) Remove merge lane and provide eastbound directional left-turn lane into Publix
Proposed (future) Access *Right-out Only
Improvements provided with Phase 1 design * Northbound left * Northbound through * Dual northbound rights * Eastbound right turn
Full Buildout Proposed US HWY 441 Improvements - Tomoka Hills Full Buildout

Tower Hill

Alachua County, Florida

NATURAL RESOURCE INVENTORY/ENVIRONMENTAL RESOURCE ASSESSMENT

Prepared By

Environmental Resource Solutions
A Division of SES Energy Services LLC

3550 St. Johns Bluff Road South
Jacksonville, FL 32224

February 2023

APPENDIX

A Exhibits

Exhibit 1 – USGS Topographic Map

Exhibit 2 – FLUCFCS

Exhibit 3 – 100 Year Floodplain/Aquifer Recharge and Confinement

Exhibit 4 – Strategic Ecosystems

Exhibit 5 – Documented Occurrences of Protected Wildlife within 5 Miles

Exhibit 6 – Public Lands

Exhibit 7 – Sensitive Karst Areas

Exhibit 8 – Soils

Exhibit 9 – Recorded Historic Features

Exhibit 10 – Hazardous/Contamination Sites

EXECUTIVE SUMMARY

Environmental Resource Solutions (ERS), a division of SES Energy Services LLC, was contracted to conduct natural resource evaluation a parcel of land located south of Highway 441 and west of Interstate 75 in Alachua, Florida. This parcel is further identified Tomoka Hills Farms and as the Tower Hill property. This report details findings on a select portion of the overall property ("project area") that totals approximately 52.96 acres.

ERS evaluated the project area for the presence of regulated natural resources pursuant to city, county, state, and federal regulations. This evaluation included a review of available maps, GIS data, agency and non-profit public data, and site-specific field investigation. Information collected during the evaluation of the overall master tracts in which these improvements are proposed applies to the current report.

In general, the project area has been significantly altered from natural conditions. The majority of the project area is utilized as a horse farm. Several man-made borrow areas and ponds are found throughout the project area. These features have vegetated over time and are considered wetlands or other surface waters pursuant to 62-340, F.A.C.

No state or federally protected wildlife species or associated critical habitats were identified within the project area.

I hereby certify that, to the best of my knowledge, all information contained in this application is true and accurate.

Jonathan Summerfield, PWS
Senior Project Manager

1.0 Introduction and Overview

The project comprises approximately 52.96 acres and is located south of Highway 441 and west of Interstate 75 in Alachua County, Florida (Exhibit 1). The project area has been limited to a portion of the overall ownership's-controlled parcels. The proposed development includes a new commercial building, roads, parking, and surface water management areas. Authorization for development will be sought through the City of Alachua, Alachua County, Suwannee River Water Management District (SRWMD), and Florida Department of Environmental Protection (FDEP).

1.1 Parcel Description

The subject property is a small portion of a larger parcel currently owned by the applicant. The project area is regularly mowed and maintained and includes a farmhouse. The site has been historically used as a horse farm. Several small man-made wetlands are located within the project site.

1.2 Site Assessment Methodology

ERS biologists conducted a field assessment of the subject site on 6 April 2022 to document existing site conditions. The assessment was conducted by David Yow, CWB® (Authorized Gopher Tortoise Agent Permit No. GTA-09-00048F), Thomas Brumfield (Authorized Gopher Tortoise Agent Permit No. GTA-14-00043E), and Daniel Lambert (ISA Certified Arborist No. FL-9847A). Field staff walked pedestrian transects of the property to document general site conditions, vegetative communities, wildlife utilization, and to delineate on-site wetlands. On-site wetlands were delineated pursuant to FDEP and SRWMD methodologies, as outlined in Section 62-340, Florida Administrative Code (F.A.C.). Blue and red flagging tape and pin flags were utilized to demarcate the landward limits of jurisdictional wetlands and surface waters within the property.

2.0 NATURAL RESOURCE INVENTORY

2.1 Natural Communities/Land Use

All on-site land uses/classifications were classified in accordance with the Florida Department of Transportation *Florida Land Use, Cover, and Forms Classification System* (FLUCFCS, 1999). The locations of wetland boundaries were located in the field with a submeter rated Trimble GPS unit at the time of the delineation and later surveyed by CHW, Inc. On-site habitat mapping is depicted on Exhibit 2, Appendix A, of this report.

Improved Pasture (FLUCFCS 211) – On-site uplands are primarily dominated by Bahiagrass (*Paspalum notatum*), broomsedge (*Andropogon virginicus*), bracken fern (*Pteridium aquilinum*), and blackberry (*Rubus* spp.).

Mixed Hardwoods (FLUCFCS 438) – Forested uplands on the site are dominated by slash pine (*Pinus elliottii*), sweetgum (*Liquidambar styraciflua*), laurel oak (*Quercus laurifolia*), wax myrtle (*Morella cerifera*), chinaberry (*Melia azedarach*), elderberry (*Sambucus nigra*), bracken fern (*Pteridium aquilinum*), Virginia chainfern (*Woodwardia virginica*), cabbage palm (*Sabal palmetto*), and boxelder (*Acer negundo*).

Upland Cut Ditch (FLUCFCS 511) – An upland cut drainage feature extends from Interstate 75 into the project site from the east. This area is maintained as part of the pasture.

Lakes less than 10 acres (FLUCFCS 524) – A man-made agricultural pond is located within the southern portion of the proposed project area. This pond was constructed from uplands in association with the horse farm and is maintained as such.

Mixed Wetland Hardwoods (FLUCFCS 617) – The canopy strata of the forested wetlands include species such as red maple (*Acer rubrum*), slash pine, sweetgum, and wax myrtle. Groundcover species within the wetlands include Bahiagrass, softrush (*Juncus effusus*), virginia chainfern, netted chainfern (*Woodwardia areolata*), and cinnamon fern (*Osmunda cinnamomea*).

Roads and Highways (FLUCFCS 814) – This describes an existing on-site roadway that is part of the project area. This area is stabilized and maintained for vehicular use.

2.2 Wildlife

A preliminary survey for faunal species listed as endangered, threatened, or of special concern by the U.S. Fish and Wildlife Service (FWS) and/or the Florida Fish and Wildlife Conservation Commission (FWC) was conducted for the proposed project. The listed species survey also included the identification and mapping of habitat suitable for protected fauna. The preliminary survey also included FNAI listed species and non-listed species.

In preparation for the field inspection, a Geographic Information System (GIS) database search and map review was conducted for the project site and surrounding areas for the occurrence of protected species or their habitat. Data compiled by FNAI, which contains documented sightings of species listed by FWS and/or FWC, were reviewed. Attention was focused on those species listed by FWC (Chapter 68A-27, F.A.C.) and FWS (50 CFR 17.11-12), but includes FNAI listed species. The data used to search for documented occurrences listed by FWC, FWS, and FNAI is updated regularly to ensure accuracy. Table 1 summarizes all wildlife species observed or reported on-site during the 2022 site assessments. Further discussion regarding state and federally listed wildlife species can be found in Section 3.7 below.

Table 1. Observed Wildlife

Scientifc Name	Common Name
Anolis carolinensis	Green Anole
Buteo lineatus	Red-shoulder Hawk
Cardinalis cardinalis	Northern Cardinal
Coragyps atratus	Black Vulture
Corvus brachyrhynchos	American Crow
Dasypus novemcinctus	Nine-banded Armadillo
Lithobates pipiens	Leopard Frog
Thryothorus ludovicianus	Carolina Wren

3.0 ENVIRONMENTAL RESOURCE ASSESSMENT

3.1 Surface Waters (Ponds, Lakes, Streams, and Springs) and Buffers

A small man-made agricultural pond is located within the project limits. This pond was created as part of the agricultural management of the site.

3.2 Wetlands and Buffers

Three man-made wetlands are located within the project area. On-site wetlands were excavated for borrow material in the 1960s and again in approximately 2009. Wetland vegetation has established within these areas and hydric soil indicators have developed after several decades of hydrologic input.

Pursuant to Section 77.21(a)(11) of the Alachua County Water Quality Standards and Management Practices Code and Section 406.50(l) of the ULDC, activities within man-made, or "created", wetlands are exempt from consideration under Article II – Countywide Wetland Protection Code (Alachua County Water Quality Standard and Management Practices Code) and Article 6 – Surface Waters and Wetlands (ULDC).

No compensatory mitigation, conservation management areas, or buffers are proposed for these wetland areas. Impacts to these features will be addressed with Suwannee River Water Management District pursuant to Section 62-330, Florida Administrative Code.

3.3 100-Year Floodplain

According to the Federal Emergency Management Agency (FEMA), no portions of the subject site are within the 100-year Floodplain (Exhibit 3).

3.4 Special Area Study Resource Protection Areas

The subject site is not located within or adjacent to a Special Area Study Resource Protection Area.

3.5 Strategic Ecosystems

Pursuant to KBN/Golder Associates report, "Alachua County Environmental Inventory Project" (1996), the subject site is not within a Strategic Ecosystem. The Mill Creek Strategic Ecosystem is located approximately 1.80 miles northeast of the site, north of Martin Luther King Boulevard and east of Interstate 75 and NW 140th Street.

3.6 Significant Habitats

The majority of the site has been historically altered by agricultural use. On-site vegetation has been allowed to re-establish relatively naturally in some areas, but on-site communities are not significant or of high quality.

3.7 Listed Species and Listed Species Habitats

ERS conducted a protected wildlife assessment encompassing the entirety of the subject site while consulting available FNAI species observation data. A discussion for each state and federally listed wildlife species documented within Alachua County is included below. No state of federally listed plant species were observed during the 2022 site assessment.

Exhibit 5 depicts documented sightings of FWC, FWS, and FNAI listed wildlife species within five miles of the site. A discussion of all state and federally listed wildlife species documented within Alachua County is provided below by species.

1. American Alligator (*Alligator mississippiensis*): This species was once abundant throughout Florida but suffered declines in population mainly due to poaching and hunting for hides. Protection of this species has led to a reasonable recovery and has resulted in the opening of a restricted hunting harvest. Protection status of the once endangered alligator has been downgraded to a species of special concern (SSC) by the FWC. The American alligator is listed as threatened by the FWS based on its resemblance to the endangered Florida crocodile, which only resides in south Florida. On-site wetlands are hydrologically isolated and do not experience hydroperiods sufficient to support alligators for extended periods of time; alligators are not likely to be found on-site. Due to this species' mobility, it is not likely to be adversely affected by the development of the site.

2. Eastern Black Rail (*Laterallus jamaiscensis*): This species resides in tidal and non-tidal marsh communities on the eastern coast of Florida. FWS has listed this species as threatened throughout its range. No habitat suitable for the eastern black rail was observed on-site. No signs of eastern black rails have been documented within the project area. Due to the lack of on-site habitat and a lack of documented observations for the species, ERS concludes that the project would have no effect on this species.

3. Eastern Indigo Snake (*Drymarchon corais couperi*): This species frequents several habitat types, including pine flatwoods, scrubby flatwoods, high pine, dry prairie, tropical hardwood hammocks, edges of freshwater marshes, agricultural fields, coastal dunes, and human-altered habitats. Gopher tortoise (*Gopherus polyphemus*) burrows are commonly utilized as refuge from winter cold and/or desiccating conditions in xeric habitats; and hollowed root channels, hollow logs, or burrows of rodents and armadillo (*Dasypus novemcinctus*) provide shelter in wetter habitats. This species is listed by both FWS and FWC as threatened throughout its range. A recent survey of the project site found no gopher tortoise burrows in the project area. The density of development in the immediate area lowers the potential for this species to utilize the site. Adherence to the Eastern Indigo Snake Protection Measures should ensure that this species is not adversely affected by the development of the site.

4. Florida Burrowing Owl (*Athene cunicularia floridana*): This species is a small ground-dwelling owl. The burrowing owl resides in open pasture or field habitats with well-drained soils. FWC has listed this species as threatened. On-site pasture areas are suitable habitat for Florida burrowing owls. No evidence of burrowing owls, or their burrows were observed during field assessments; this species is not likely to be adversely affected by the development of the property.

5. Florida Pine Snake (*Pituophis melanoleucus mugitus*): This species is found throughout Florida and is listed as threatened by FWC. Its habitat includes longleaf pine woodlands, xerophytic oak woodlands, sand pine scrub, pine flatwoods on well-drained soils, and old fields on former sandhill sites. The pine snake avoids hammocks and forests that have a thick canopy. It burrows through the ground and moves around using paths left by pocket gophers (*Geomys* spp.) and gopher tortoises. Females have a home range of 70 to 75 acres, while males have a home range 2-8 times larger than that of females. On-site habitat is suitable for the pine snake. Similar to the eastern indigo snake, adherence to the Eastern Indigo Snake Protection Measures should ensure that this species is not adversely affected by the development of the site.

6. Florida Sandhill Crane (*Grus canadensis pratensis*): This species is listed by FWC as threatened. Florida sandhill cranes are grayish wading birds with long legs and necks. This species is easily identified by the typical red patch of skin on the top of the head. This species inhabits freshwater marshes, prairies, and pastures. Florida sandhill cranes may forage in on-site pastures. Due to its highly mobile nature, this species is not likely to be adversely affected by the development of the site.

7. Florida Scrub-jay (*Aphelocoma coerulescens*): The Florida scrub-jay is designated as threatened by both FWC and FWS. This blue and gray bird is roughly the size of a blue jay, but unlike blue jays, the scrub-jay does not have black markings or a crest. The Florida scrub-jay inhabits sand pine and xeric oak scrub and scrubby flatwoods. On-site communities are not suitable habitat for the Florida scrub-jay. The Florida scrub-jay is not likely to be adversely affected by the development of the site.

8. Frosted Flatwoods Salamander (*Ambystoma tigrinum*): The frosted flatwoods salamander is a long black salamander with white spots that resides in slash and longleaf pine flatwoods with wiregrass groundcover. These areas typically include scattered depressional wetlands. The primary threat to this species is loss of habitat due to agriculture and silviculture activities. This species is listed as threatened by both FWC and FWS. This species does not likely utilize the site and is unlikely to be adversely affected by the development of the site.

9. Gopher Tortoise (*Gopherus polyphemus*): The gopher tortoise is listed as threatened by FWC and permitting and relocation are required for any tortoises or burrows that are impacted by a project. The entirety of on-site uplands may be classified as suitable habitat for gopher tortoises. FWC Authorized Gopher Tortoise Agents performed a preliminary survey of the site and found no gopher tortoises or gopher tortoise burrows. The absence of gopher tortoises on the property is likely the result of the agricultural management practices over several decades. If gopher tortoises or gopher tortoise burrows are found on-site during any subsequent assessment events, gopher tortoise burrows that will be adversely affect by development activities will need to be excavated and captured tortoises relocated prior to the development of the site.

10. Little Blue Heron (*Egretta caerulea*): This small bluish-gray wading bird frequently forages in swamps, ponds, herbaceous wetlands, and ditches. On-site wetlands are suitable foraging habitat for the little blue heron during ponding events. While listed as threatened by FWC, no habitat protection plan exists for this species. Due to its highly mobile nature, this species is not likely to be adversely affected by the development of the site.

11. Red Cockaded Woodpecker (*Picoides borealis*): The project site is located within the FWS consultation area for map colonies of this species. Red cockaded woodpecker habitat typically incorporates mature pine woodlands (not wetlands). Optimal habitat is characterized as a broad savanna with a scattered overstory of large pines and a dense groundcover containing a diversity of grass and shrub species. Nesting and roosting occur in cavity trees that are almost exclusively old, living, flat-topped pine trees. On-site communities are not suitable habitat for red-cockaded woodpeckers and the development of the site is not likely to adversely affect this species.

12. Short-tailed Snake (*Lampropeltis extenuata*): The short-tailed snake is designated as threatened by FWC. This slender snake resides in dry upland habitats such as sandhill and xeric communities. On-site communities include suitable soils for the short-tailed snake's preferred habitat, but due to years of agricultural management and a lack of gopher tortoise burrows, on-site habitat is no longer optimal for this species. Similar to the eastern indigo snake, adherence to the Eastern Indigo Snake Protection Measures should ensure that this species is not adversely affected by the development of the site.

13. Snail Kite (*Rostrhamus sociabilis*): The snail kite, specifically the everglade subspecies, is designated as endangered by both FWC and FWS. This medium sized bird of prey feeds exclusively on apple snails and is found only in Florida within the United States. While the Everglades snail kite range does not extend to Alachua County, the Florida snail kite is frequently observed within the county. Due to a lack of habitat for the snail kite's food source within the site, the snail kite is not likely to be adversely affected by the development of the site.

14. Southeastern American Kestrel (*Falco sparverius paulus*): The kestrel is the smallest species of falcon in the United States. This species is known for its unique coloration. The kestrel's habitat includes open woodlands, sandhill, prairie, and pasture, typically nesting along tree lines. The primary threat to the kestrel is loss of habitat due to development and agriculture. Tree lines adjacent to on-site pasture provide suitable habitat for the kestrel. No kestrels or potential nests were observed during field assessments of the site; kestrels are not likely to be adversely affected by the development of the site.

15. Striped Newt (*Notophthalmus perstriatus*): The striped newt is designated as a candidate species for listing by FWC with full designation State designation to tentatively be finalized in 2022. Striped newts utilize sandhill and xeric habitat and pond areas with limited access for egg predation by fish. This species is highly dependent on a healthy fire regime within the utilized uplands and rarely utilize unburned habitat. Due to the lack of a fire regime within on-site uplands and a lack of suitable breeding ponds with sufficient hydroperiods, this species is not likely to be found on-site and is not likely to be adversely affected by the development of the site.

16. Suwannee Alligator Snapping Turtle (*Macrochelys suwanniensis*): The Suwannee alligator snapping turtle is designated as threatened by FWC and is proposed for listing by FWS. This subspecies of alligator snapping turtle is found in the Suwannee River basin in north Florida and south Georgia. The subject site is not located within the Suwannee River basin and on-site surface waters are not large enough to support this species. Suwannee alligator snapping turtles are not likely to be adversely affected by the development of the site.

17. Tricolored Heron (*Egretta tricolor*): This wading bird species forages in swamps, ponds, herbaceous wetlands, and ditches. On-site wetlands are suitable foraging habitat for the tricolored heron during ponding events. While listed as threatened by FWC, no habitat protection plan exists for this species. Due to its highly mobile nature, this species is not likely to be adversely affected by the development of the site.

18. Wood Stork (*Mycteria americana*): The wood stork is designated as threatened by both FWC and FWS. The project site is not located within the core foraging area (CFA) of any documented wood stork colonies. The ditched portions of on-site wetlands and the Freshwater Marsh community may provide marginal suitable foraging habitat (SFH) for wood storks. Because the site is located outside of wood stork CFA, ERS concludes that development of the site will have no adverse effect on this species.

Bald Eagle (*Haliaeetus leucocephalus*): Although the bald eagle has been delisted by FWS and FWC, restrictions regarding work around their nests are still in place. The closest FWC-documented bald eagle nest is approximately 5.5 miles southeast of the project site. This nest is identified by FWC as Nest ID #AL056 and was last documented as active in 2018. Since no nests lie within or immediately adjacent to the project site, the project is not expected to adversely affect the bald eagle.

3.8 Recreation / Conservation / Preservation Lands

San Felasco State Park is located approximately 2.99 miles southeast of the site (Exhibit 6). The Alachua Splash Park and Legacy Multipurpose Center are located approximately 1.16 miles southeast of the site. Both of these sites are on the east side of Interstate 75. Santa Fe Springs Conservation Area is located approximately 1.57 miles northwest of the site on the northern side of US 441 S. No other recreational lands were identified in close proximity to the site.

3.9 Significant Geological Resources

A significant portion of the site is mapped as Sensitive Karst Area (Exhibit 8). No sinkholes, springs, caves, stream bluffs, escarpments, outcroppings, or other karst features were identified on-site during field assessments.

3.10 Aquifer Recharge Areas

Pursuant to the Alachua County Floridan Aquifer High Recharge Area map (2009), the subject property is located in an area defined as “High Vulnerability” but is not located in a drainage area defined as “Stream to Sink”.

3.11 Wellfield Protection Areas

No wellfield protection areas occur on or immediately adjacent to the site.

3.12 Wells

No public supply wells are known to occur on or in the general vicinity of the site. Development of the property is not expected to result in adverse impacts to off-site wells.

3.13 Soils

According to *Soil Survey of Alachua County, Florida* (U.S. Department of Agriculture – Natural Resources Conservation Service), nine soil map units are present within the site boundary. On-site soils, along with their respective drainage characteristics, approximate depth to water table, and suitability for gopher tortoises, are listed in Table 2 and depicted on Exhibit 8. In general, the majority of on-site soils are sandy and well drained.

Table 2. NRCS Soils

Map Unit Symbol	Map Unit Name	Acres in Project	Drainage Class	Depth to Water Table	Gopher Tortoise Burrowing Suitability Rating
3	Arredondo fine sand, 0 to 5% slope	3.3	Well drained	>80"	Highly suited
4	Arredondo-Urban land complex, 0 to 5% slope	1.4	Well drained	>80"	Highly suited
5	Fort Meade fine sand, 0 to 5% slope	2.8	Well drained	>80"	Highly suited
30	Kendrick sand, 2 to 5% slope	2.0	Well drained	>80"	Moderately suited
35	Gainesville sand, 0 to 5% slope	18.2	Well drained	>80"	Highly suited
38	Pits and Dumps	16.4	-	-	Not rated
71	Millhopper sand, 5 to 8% slope	1.9	Moderately well drained	42-72"	Highly suited
73	Kendrick sand, 5 to 8% slope	7.0	Well drained	>80"	Moderately suited
78	Norfolk loamy fine sand, 5 to 8% slope	<0.1	Well drained	48-72"	Moderately suited

3.14 Mineral Resource Areas

The subject site does not lie within documented mineral resource areas identified in the Alachua County Comprehensive Plan.

3.15 Topography / Steep Slopes

In general, the site has varying elevations that gently transition between hills and depressions. Previously excavated areas associated within on-site wetlands include artificial steep slopes created during previous excavation efforts. These slopes are artificial and limited to the restricted basin of the excavated areas.

3.16 Historical and Paleontological Resources

No historical, cultural, or paleontological resources have been recorded or have been observed within the site. Multiple historic structures, predominantly residential properties constructed in the early 1900s (Exhibit 9). The majority of these structures are located east of Interstate 75. The closest structures are located immediately west of County Road 235A and are classified as Not Eligible for listing on the National Register of Historic Places. For more information, contact the Florida Department of State, Division of Historic Resources (DHR).

3.17 Hazardous Material Storage Facilities and Contamination

Available GIS layers for hazardous materials, underground tanks, dry cleaners, and documented petroleum spill and cleanup sites revealed no documented hazardous materials, conditions, or releases on-site. Documented Hazardous Waste Facilities, Petroleum Contamination Monitoring Discharge Sites, Solid Waste Facilities, and Storage Tank Contamination Monitoring sites are depicted on Exhibit 11. A Phase I Environmental Site Assessment (ESA) was not performed at this time, and the past history of the site was not researched.

4.0 SUMMARY AND CONCLUSIONS

The subject site contains minimal Natural Resources regulated under Section 406 of the Alachua County Land Development Code. Wetlands and surface waters within the project area are all man-made features from previous borrow and/or agricultural activities. On-site habitats are low quality and provide minimal functions and values to support species diversity and state and federally listed wildlife species. The majority of the site has been utilized for agricultural purposes for several decades and no naturally occurring communities remain.

No state or federally listed wildlife species were observed on-site.

The following resources were not observed on-site and no previously documented occurrences of these resources were identified:

- Floodplains
- Special Area Study Resource Protection Areas
- Strategic Ecosystems
- Significant Habitat
- Recreation/Conservation/Preservation Lands
- Significant Geologic Features
- High Aquifer Recharge Areas
- Wellfield Protection Areas
- Wells
- Mineral Resource Areas
- Historical and Paleontological Resources
- Hazardous Materials Storage Facilities
- Contamination

While these resources were not observed and were not previously documented on-site, resource-specific assessments, including a Phase I Environmental Site Assessment and Cultural Resource Assessment, were not performed.

APPENDIX A

Exhibit 1 – USGS Topographic Map

Exhibit 2 – FLUCFCS

Exhibit 3 – 100 Year Floodplain/Aquifer Recharge and Confinement

Exhibit 4 – Strategic Ecosystems

Exhibit 5 – Documented Occurrences of Protected Wildlife within 5 Miles

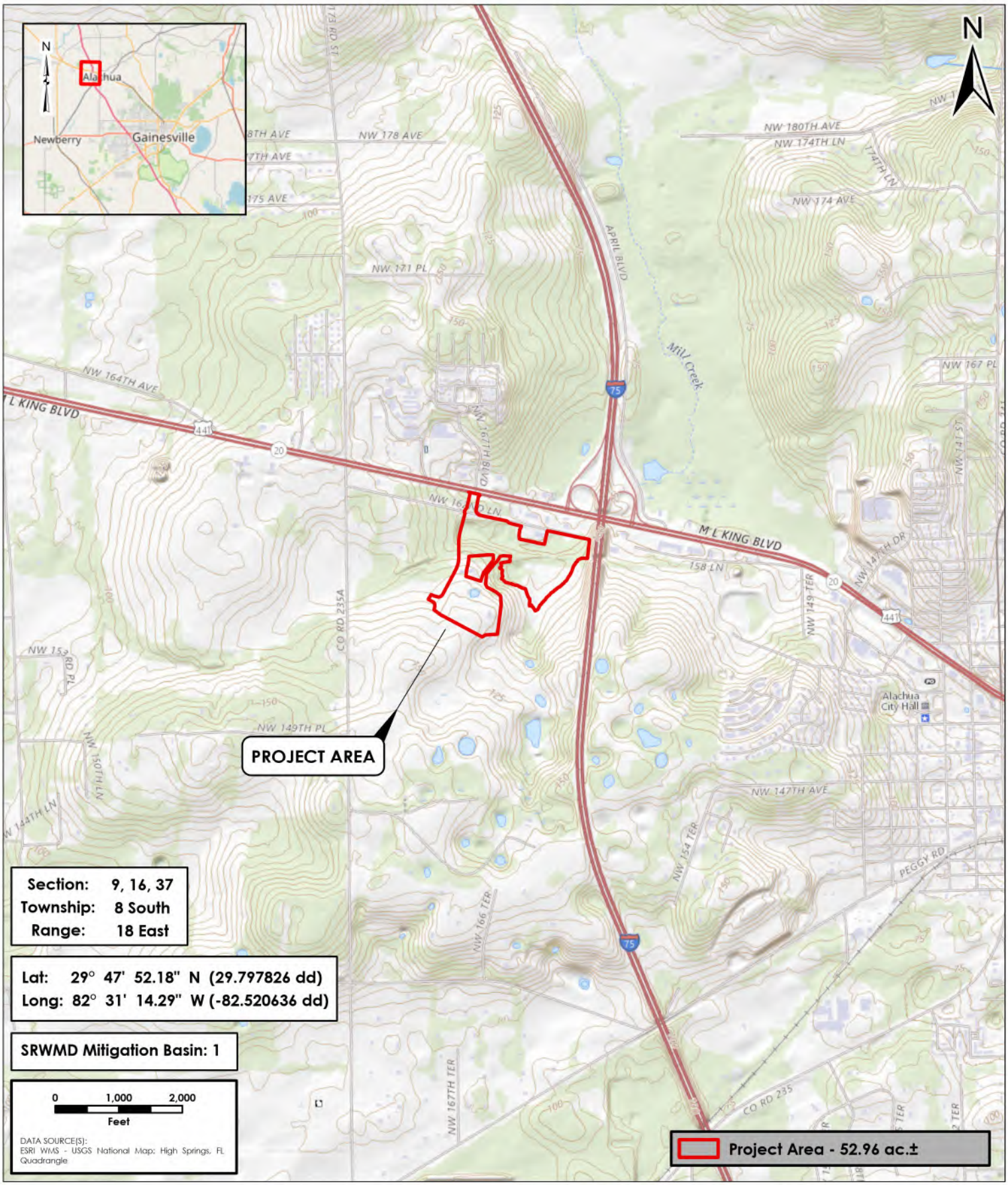
Exhibit 6 – Public Lands

Exhibit 7 – Sensitive Karst Areas

Exhibit 8 – Soils

Exhibit 9 – Recorded Historic Features

Exhibit 10 – Hazardous/Contamination Sites



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A Division of SES Energy Services LLC
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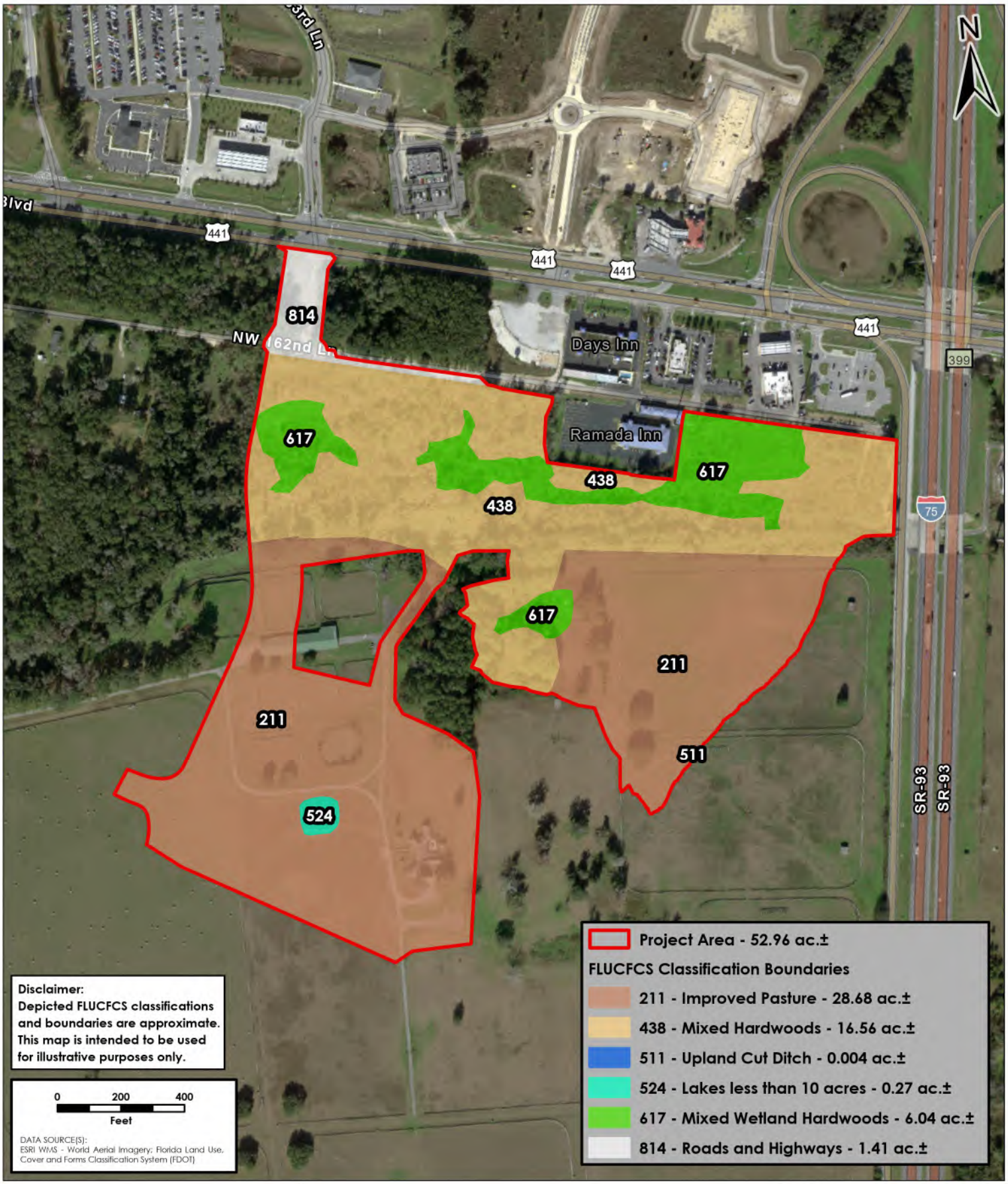
USGS Topographic Map

Tower Hill

Alachua, Alachua County, Florida

SES Project No:	1G001.8176.0001.18
ERS Project No:	22057
Date:	Feb 2023
Drawn By:	DF
Reviewed By:	MF
Approved By:	JS
EXHIBIT NUMBER	1

J:\ERS - Company\Projects\2022\22057_Tomoka\05-Graphics\mxd\22057_Tower Hill\22057_Tower Hill.aprx



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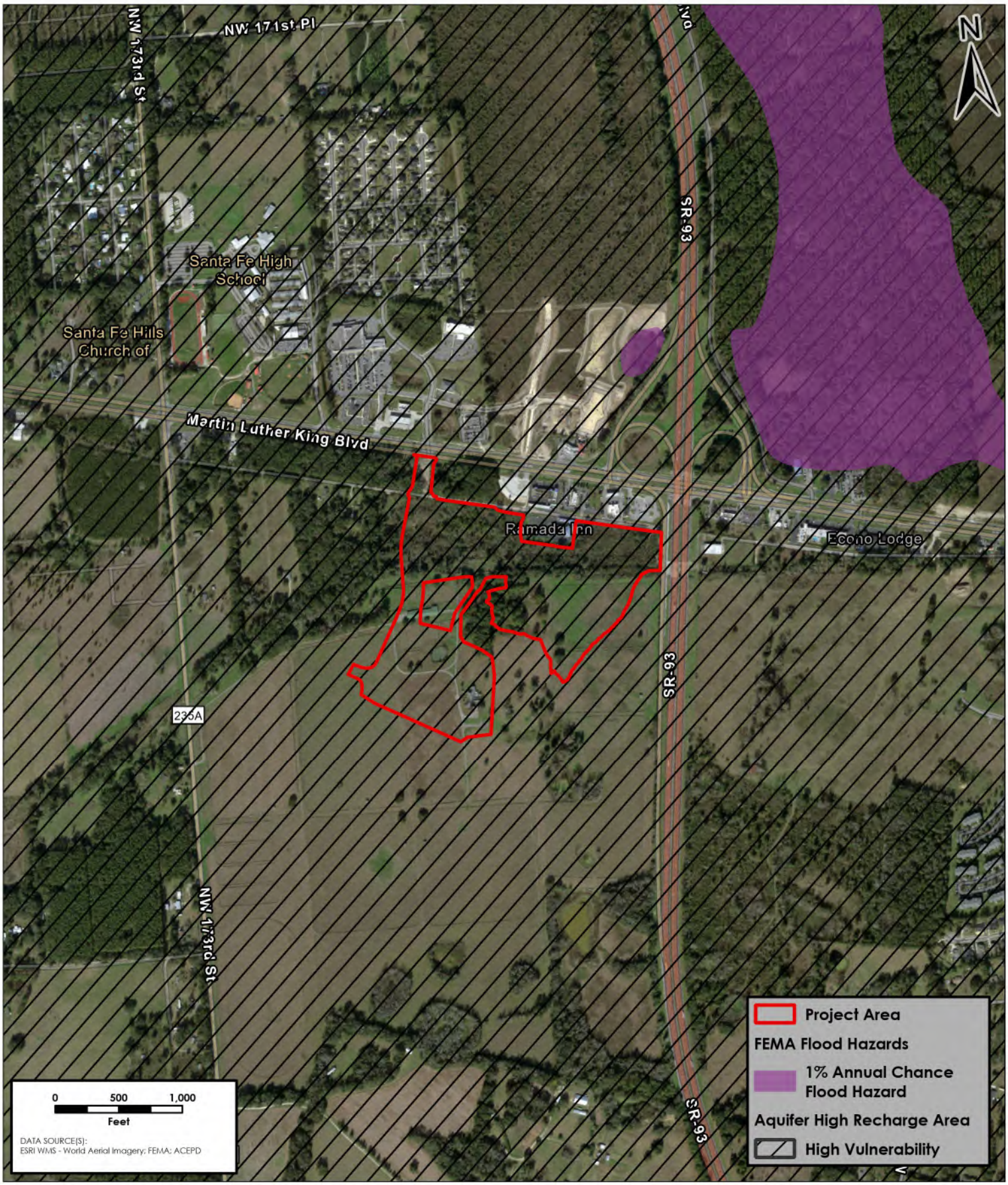
FLUCFCS

Tower Hill

Alachua, Alachua County, Florida

SES Project No:	1G001.8176.0001.18
ERS Project No:	22057
Date:	Feb 2023
Drawn By:	DF
Reviewed By:	MF
Approved By:	JS
EXHIBIT NUMBER	2

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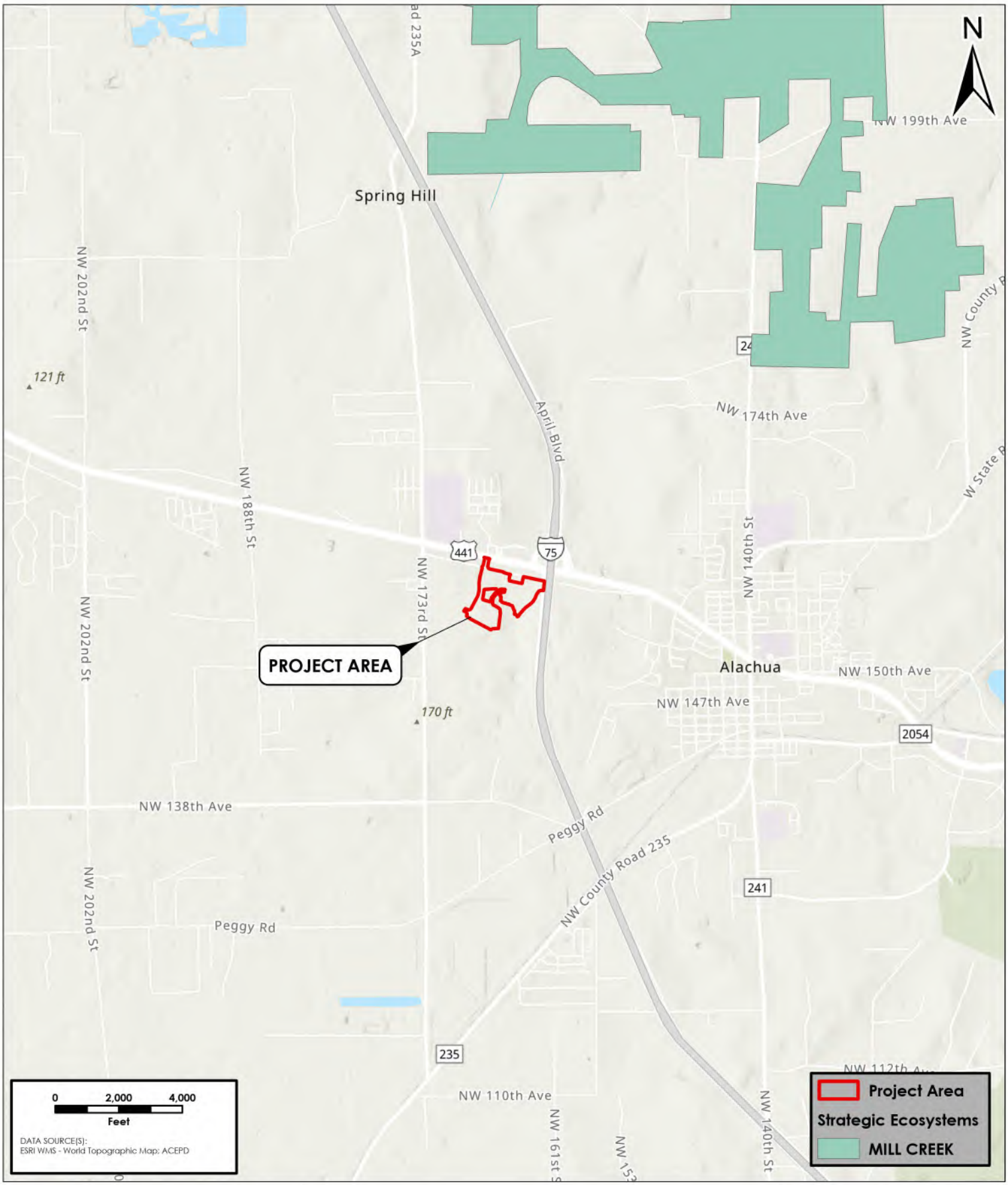
100 Year Floodplain / Aquifer Recharge and Confinement

Tower Hill

Alachua, Alachua County, Florida

SES Project No:	1G001.8176.0001.18
ERS Project No:	22057
Date:	Feb 2023
Drawn By:	DF
Reviewed By:	MF
Approved By:	JS
EXHIBIT NUMBER	3

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A Division of SES Energy Services LLC
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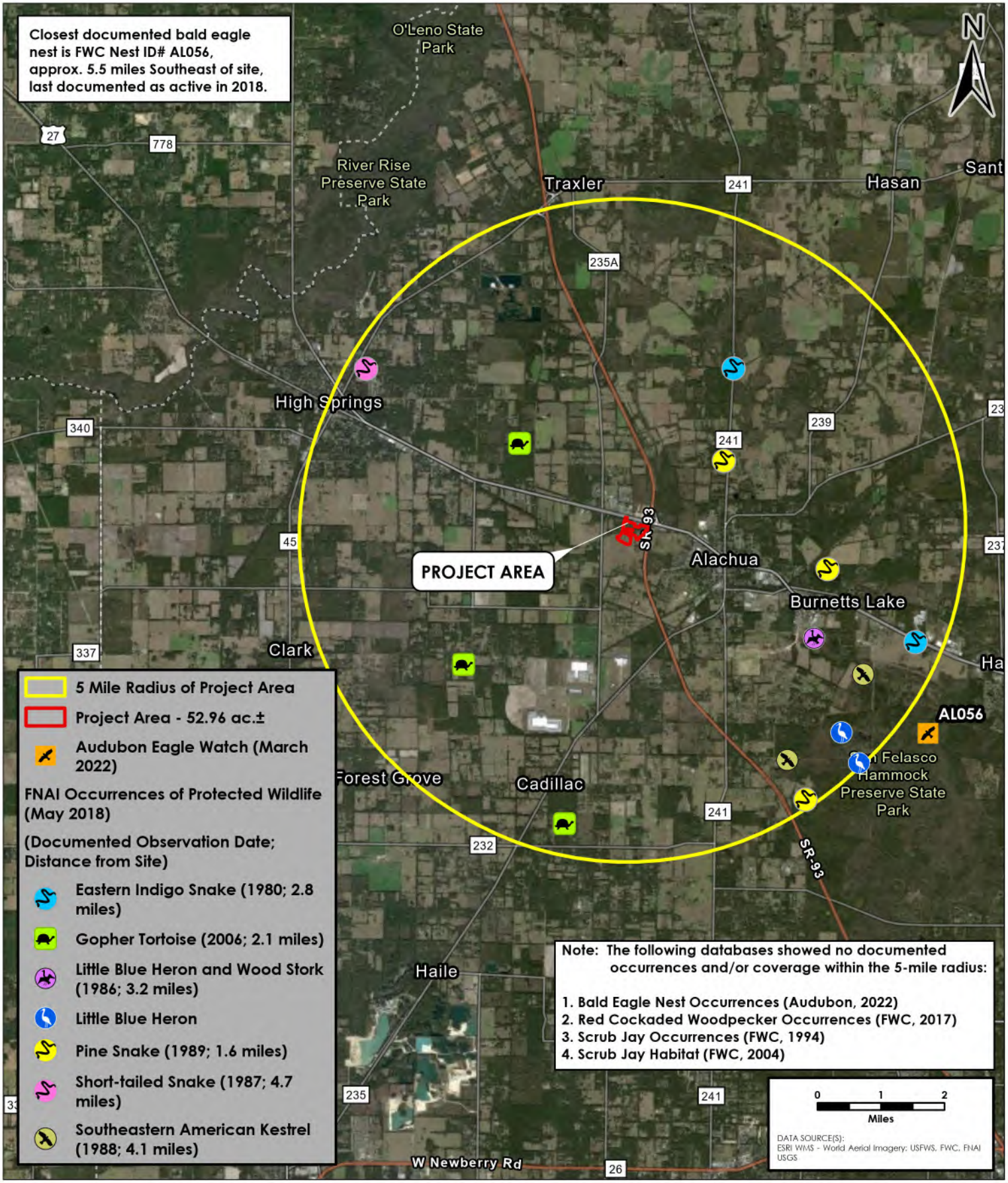
Strategic Ecosystems

Tower Hill

Alachua, Alachua County, Florida

SES Project No:	1G001.8176.0001.18
ERS Project No:	22057
Date:	Feb 2023
Drawn By:	DF
Reviewed By:	MF
Approved By:	JS
EXHIBIT NUMBER	4

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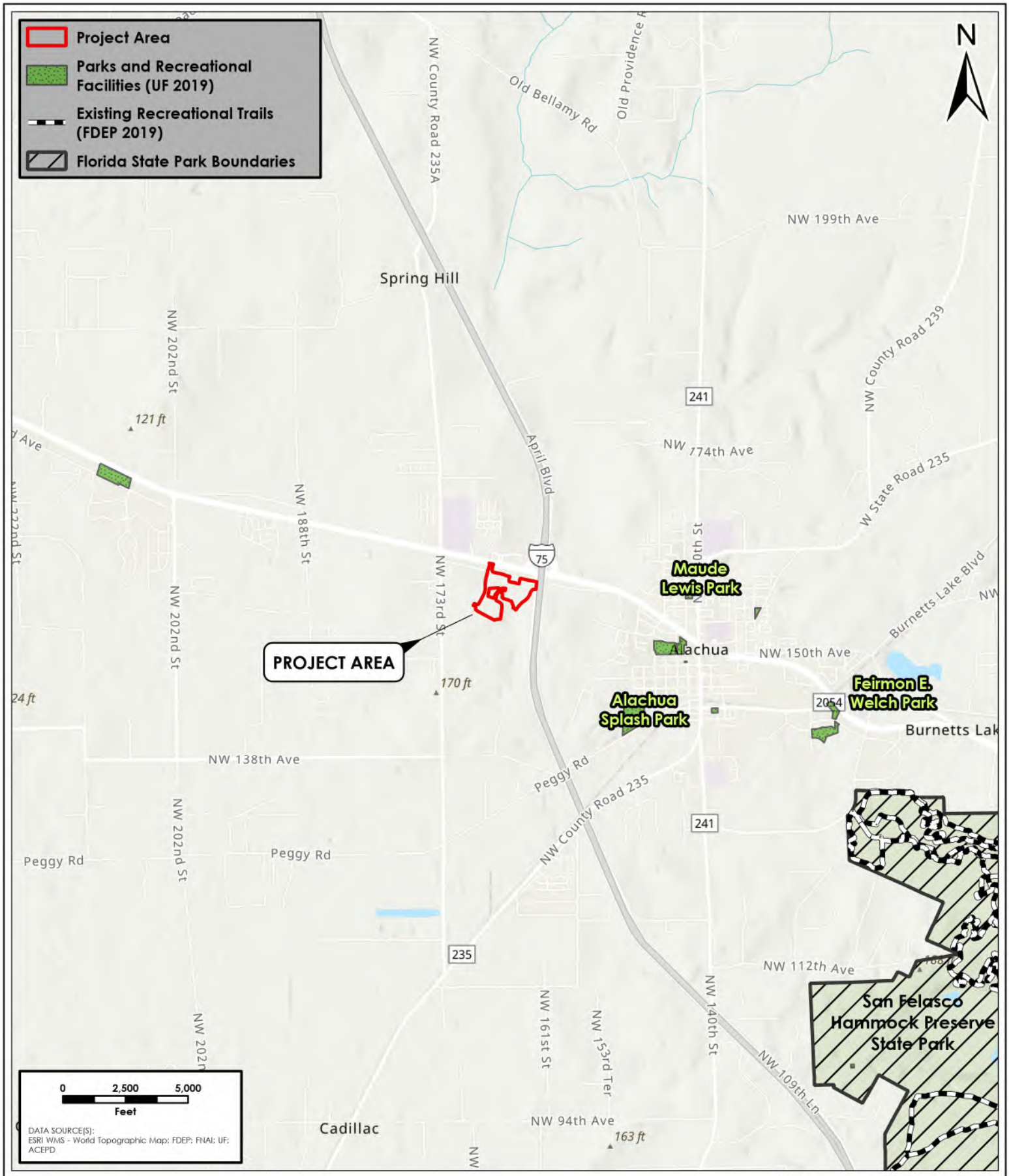
Documented Occurrences of Protected Wildlife Within 5 Miles

Tower Hill

Alachua, Alachua County, Florida

SES Project No:	1G001.8176.0001.18
ERS Project No:	22057
Date:	Feb 2023
Drawn By:	DF
Reviewed By:	MF
Approved By:	JS
EXHIBIT NUMBER	5

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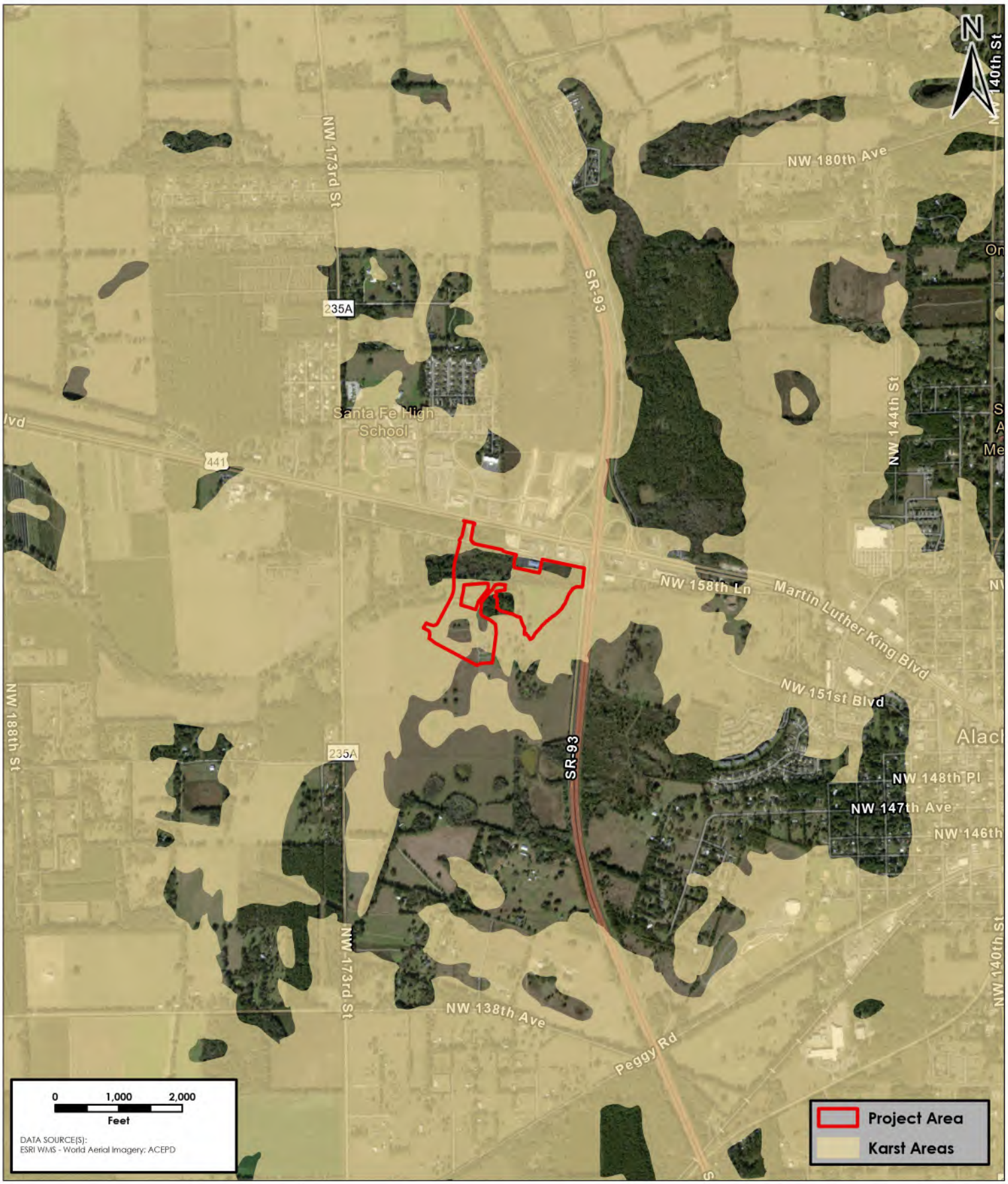
Public Lands

Tower Hill

Alachua, Alachua County, Florida

SES Project No:	1G001.8176.0001.18
ERS Project No:	22057
Date:	Feb 2023
Drawn By:	DF
Reviewed By:	MF
Approved By:	JS
EXHIBIT NUMBER	6

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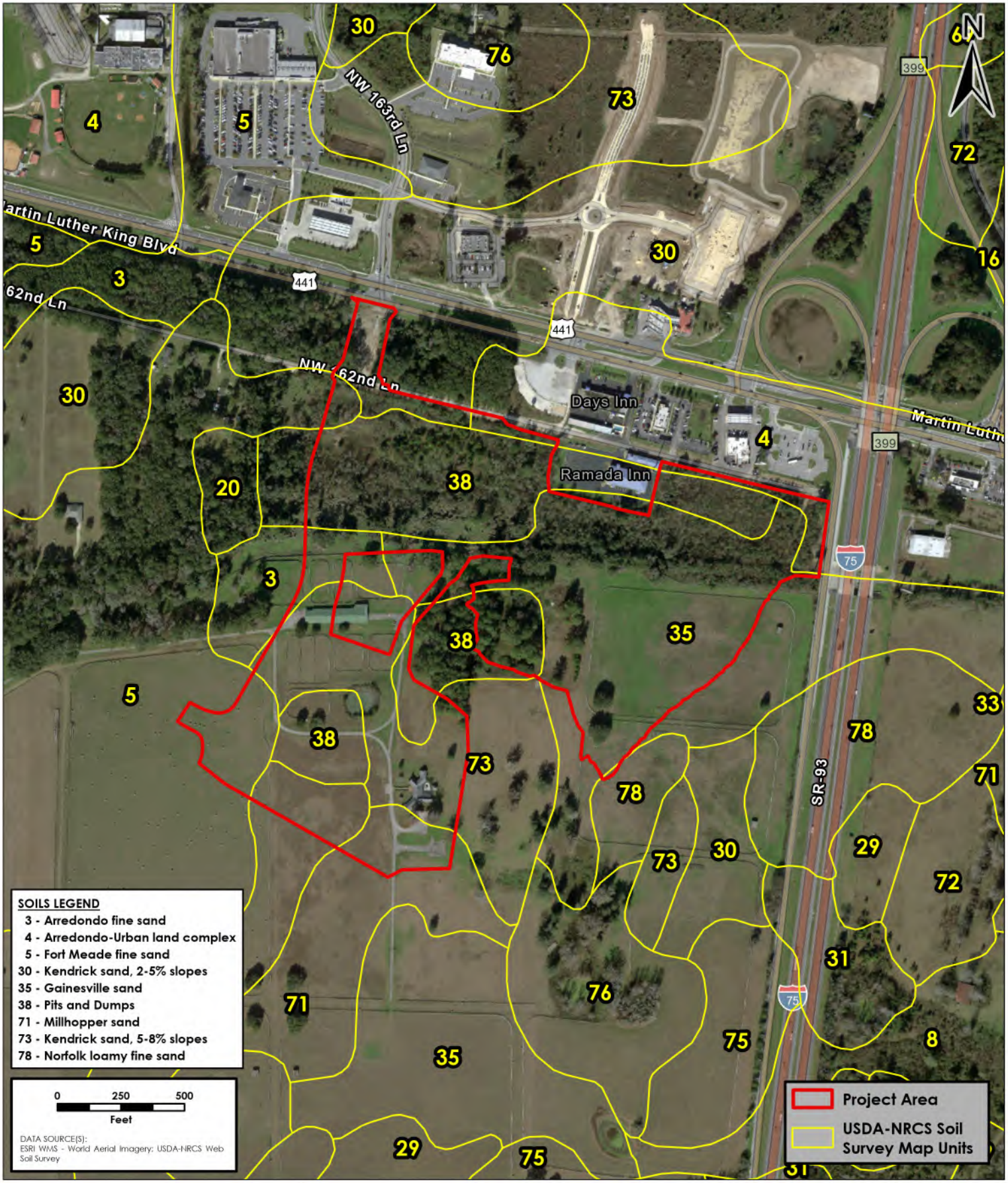
Sensitive Karst Areas

Tower Hill

Alachua, Alachua County, Florida

SES Project No:	1G001.8176.0001.18
ERS Project No:	22057
Date:	Feb 2023
Drawn By:	DF
Reviewed By:	MF
Approved By:	JS
EXHIBIT NUMBER	7

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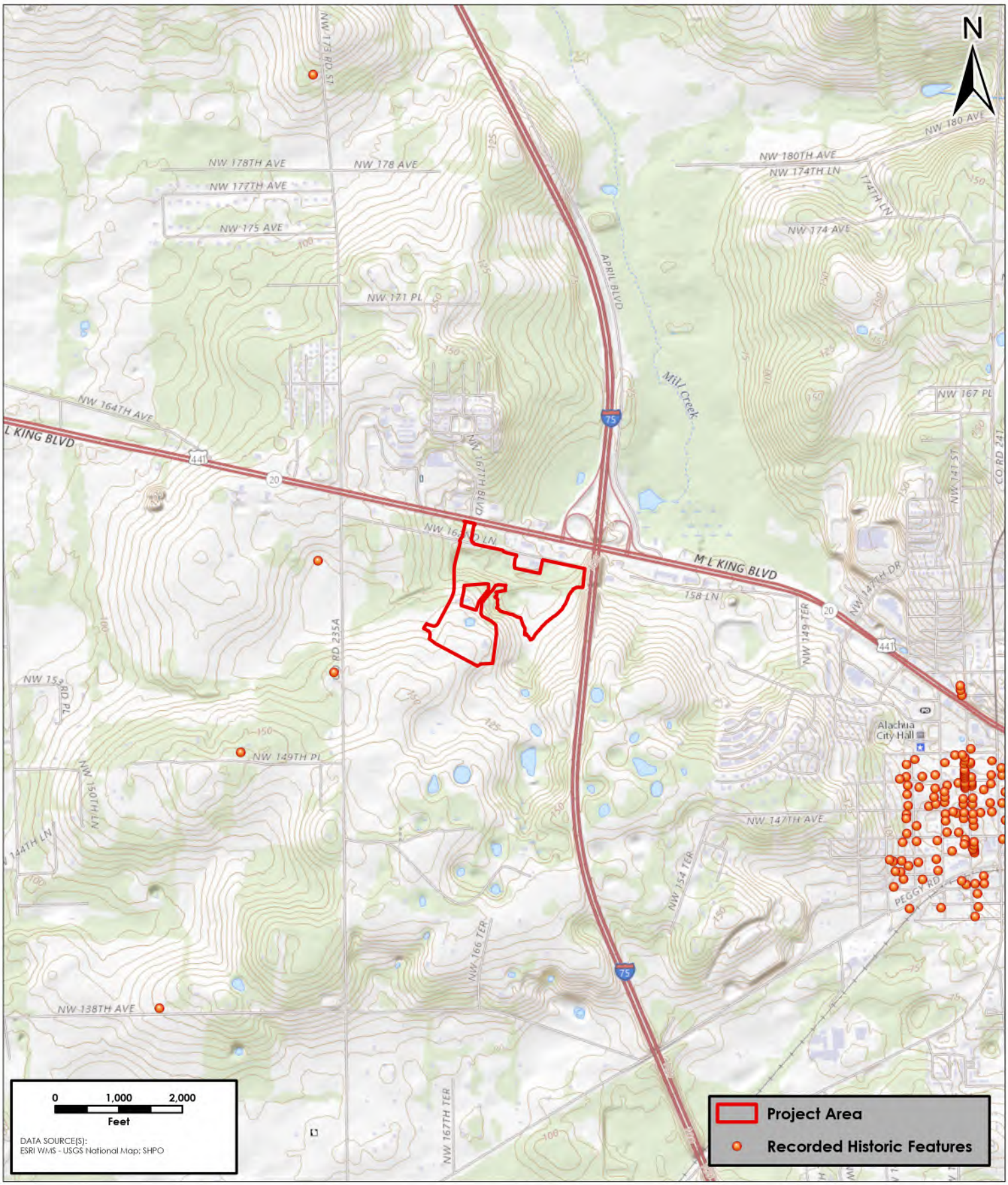
Soils

Tower Hill

Alachua, Alachua County, Florida

SES Project No:	1G001.8176.0001.18
ERS Project No:	22057
Date:	Feb 2023
Drawn By:	DF
Reviewed By:	MF
Approved By:	JS
EXHIBIT NUMBER	8

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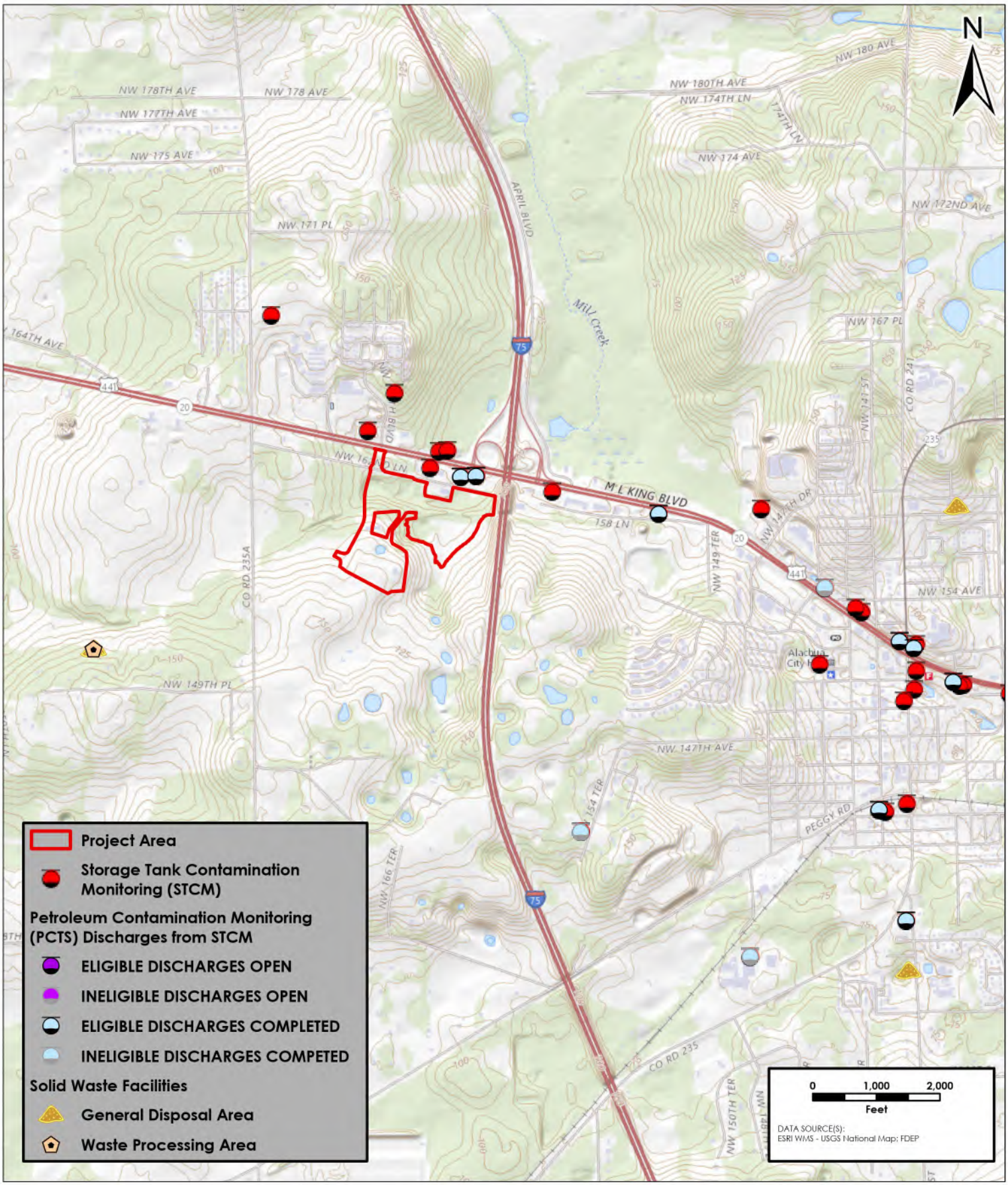
Recorded Historic Features

Tower Hill

Alachua, Alachua County, Florida

SES Project No:	1G001.8176.0001.18
ERS Project No:	22057
Date:	Feb 2023
Drawn By:	DF
Reviewed By:	MF
Approved By:	JS
EXHIBIT NUMBER	9

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Hazardous / Contamination Sites

Tower Hill

Alachua, Alachua County, Florida

SES Project No:	1G001.8176.0001.18
ERS Project No:	22057
Date:	Feb 2023
Drawn By:	DF
Reviewed By:	MF
Approved By:	JS
EXHIBIT NUMBER	10

J:\ERS - Company\Projects\2022\22057_Tomoka\05-Graphics\22057_Tower Hill.aprx

Environmental Resource Solutions
A Division of SES Energy Services LLC

13 April 2023

Mr. Justin Tabor, AICP
City of Alachua
PO Box 9
Alachua, Florida 32616-0009

RE: Tower Hill Headquarters
Alachua County, Florida
ERS Job No. 22057

Dear Mr. Tabor:

We are in receipt of your 23 March 2023 review comments for the Tower Hill Headquarters application. Environmental Resource Solutions has been asked to address comment 1.a. Please see our response below.

Comment 1.a. Environmental Assessment must address the provisions of Objective 1.10 of the Comprehensive Plan Conservation & Open Space Element and Section 6.9.5 of the LDRs. Environmental Assessment will be sent to outside consultant for review once this comment is addressed.

The proposed project is a phase within a larger overall plan of development. The project area includes man-made features that include the minimum requirements to be deemed wetlands under Chapter 62-340, F.A.C. Each of these areas was excavated as borrow pits or as agricultural ponds that have been allowed to revegetate. The majority of vegetation within these areas is transitional in nature and includes areas of exotic/nuisance vegetation such as primrose willow, Chinese tallow, and rattlebox.

Policy 1.10.b of the Comprehensive Plan Conservation & Open Space Element states that "The City shall conserve wetlands by prohibiting, where the alternative of clustering all structures in the non-wetland portion of the site exists, any development or dredging and filling which would alter their natural functions." Because all areas within the site that meet the wetland criteria are man-made; significantly disturbed by adjacent agricultural and/or commercial activities; are severed from significant wildlife corridors by adjacent roadways, development, and previous on-site activities; and include components of exotic vegetation, ERS proposes that these areas do not exhibit "natural functions" to be altered.

Section 6.9.5 of the LDRs states that its purpose is to "promote, preserve, and enhance the important hydrologic, biological, ecological, aesthetic, recreational, and educational functions that wetlands and associated riparian areas provide to the City." Because the on-site features are located within private property, not accessible to the public, they do not provide aesthetic, recreational, or educational functions to the city in general. In addition, because these features are located within an area that has limited wildlife access, they provide minimal functions and values to regional wildlife. In general, these areas are limited to providing hydrologic benefit to the City by providing flood management capacity and attenuation for the immediately surrounding contributing drainage area. The majority of these areas are proposed to be incorporated into a larger surface water management system that will provide these same functions to the City.

Environmental Resource Solutions
A Division of SES Energy Services LLC
3550 St. Johns Bluff Road South, Jacksonville, Florida 32224
T: (904) 285-1397, F: (904) 285-1929
Email: mail@ersenvironmental.com

In general, while these areas meet the criteria of Section 62-340, F.A.C., and may be classified as wetlands, these areas do not naturally provide any functions or values to the surrounding ecosystems and only exist as a result of man-made excavations to create fill material or as part of agricultural operations. The overall site includes larger natural systems to the south that are being avoided by the proposed project.

Please feel free to contact me if you have any questions regarding this project.

Sincerely,

ENVIRONMENTAL RESOURCE SOLUTIONS



Jonathan Summerfield, PWS
Senior Project Manager

LEGEND

POST-1:

AG-1:

AG-2:

EXISTING ROYAL INN SMF

PROPOSED BYPASS SWALE

SMF-1

SMF-2

N

11801 Research Drive
Alachua, FL 32615
(352) 331-1976
www.chw-inc.com

est. 1988 **FLORIDA** CA-5075

CHW
Professional Consultants

SCALE: 1"=200'

VERIFY SCALE
BAR IS ACCURATE
ORIGINAL DRAWING

0 1" IF NOT ONE INCH ON THIS SHEET ADJUST SCALES ACCORDINGLY

CONSTRUCTION/BID REVISIONS:

SUBMITTALS:

CLIENT: TOWER HILL
SCOTT ROWE

PROJECT: TOWER HILL HEADQUARTERS

SHEET TITLE: DRAINAGE BASIN EXHIBIT

TECHNICIAN: BG/TFC

DESIGNER: M. OMAR, P.E.

QA/QC CONTROL: W. OWEN, P.E.

PROJECT NUMBER: 21-0025

WALKER FAIN OWEN

FL PE No. 94201

SHEET NO.

EX-DB

Tech: nicolas Plot Date: Apr 13,2023 7:06am Filename: N:\2021\21-0025\Departments\04_Engineering\03_Drainage\3_DWG\Drainage Maps 1.dwg

ARCH. SALES & ILLUMINATION
250 John Knox Road, Suite 3
Tallahassee, FL 32303
Phone: 850-562-5332
Fax: 904-744-3444
Contact: Kittrell, Bruce

Tower Hill Ins Preliminary Site Ltg Submittals

23-51390-1

4/5/2023

Submission Type

- [x] Prior Approval
- [ ] Resubmittal for Approval
- [ ] Approval
- [ ] Corrections
- [ ] Your Use
- [ ] Other

Submitted To:
KPI ENGINEERING, INC., TAMPA, FL
PAUL STRESING ASSOCIATES, INC, ALACHUA, FL

Project 23-51390-1 Date 4/5/2023
Tower Hill Ins Preliminary Site Ltg Submittals

Submitted By
ARCH. SALES & ILLUMINATION

Type	Manufacturer/Brand	Catalog Number
OL2	Inter-Lux	LL-381103-W-00 LL-BON-BODB-RE -20-11-CC-30-GE
OL2	Inter-Lux	LL-E14931
OL2	Inter-Lux	IL-JB23-LED-90004-300-UNV-D040 SOLO100W-300
OL3	Inter-Lux	LL-E81725-W-88 LL-IR67-RGR-Z-24-13-CC-30-ZE
OL3	Inter-Lux	LL-E98112
OL3	Inter-Lux	IL-DB12-LED-50003-UNV-D010 SOLO50W-500
OL4	Inter-Lux	LL-E81728-W-88 LL-IR67-RGR-Z-32-20-CC-30-ZE
OL4	Inter-Lux	LL-E98112
OL4	Inter-Lux	IL-DB12-LED-50003-UNV-D010 SOLO50W-500
OL8	LUMINIS	BVA12W-L2L26-K30-TYP2
OL9	Precision Arch. Ltg.	ML5WL65-D-MO-K30-80-4'-J-VR-F01M-UNV-DIMX
OL11	US ARCHITECTURAL / SUN VALLEY	VPR-EA30-VLED-II-100LED-525MA -WW-480-PTB27-RAL-****-T
OL15	US ARCHITECTURAL / SUN VALLEY	VPR-EA30-VLED-VSQ-100LED-525MA-WW-480-PTB27-RAL-****-T
POLE	US ARCHITECTURAL / SUN VALLEY	RNTA-205-188-PT27-(5)STD FINISH

	Project 23-51390-1 Date 4/5/2023 Tower Hill Ins Preliminary Site Ltg Submittals Submitted By ARCH. SALES & ILLUMINATION	Catalog Number: LL-381103-W-00 LL-BON-BODB-RE-20-11-CC-30-GE Note:	Type OL2

Bond Pro

inter•lux

IP65

General: Bond Pro is a family of bollards whose discreetly elegant look makes them harmoniously fit within every environment. The light source hidden in the top of the bollard and screened by the round flange creates a full cutoff output (Dark Sky Compliant). This feature makes its output never invasive and a perfect blend with its surroundings. Bond Pro is available in three different sizes and multiple finishes.

Fixture Body: Corrosion Resistant 6060 Aluminum.
Diffuser: Polyethylene.
Mounting: Fixture comes with standard a Powder Coated Iron Base. Ground pegs available upon request.
Dimensions/Weight: 8.1" (4.19 lbs) – 19.9" (5.78 lbs) – 31.7" (8.31 lbs)

Driver: Remote, 120-277V Dimmable 0-10V.
Wattages: 11W (All Sizes)
Cable: Fixture comes with 3.28' of power cable.
Safety features: Fixture is equipped with Electrostatic discharge protection and Surge Protection.

IP rating: IP65 for protection against dust and moderate water jets from any angle.
IK rating: IK 07
ETL Certification: ETL, wet location

Optics: Fixed, Round Emission.
Color temperatures: 3000K – 4000K.
CRI: 80+
BUG Rating: B0-U0-G0 – Type VS Quadrilateral Symmetry

Lumen Maintenance: L70 projections tested at Tj 65° C and Ta 25°.
Warranty: 5-year Limited Warranty on fixtures. 1-year Limited Warranty on Remote Drivers.


8.1" (10.8W)


19.9" (10.8W)


31.7" (10.8W)

Delivered Lumens*	8.1"	19.9"	31.7"
GE	591	591	591

*Values shown for 3000K

Ordering Information

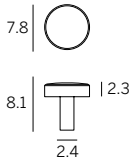
BON		RE		11 - CC		GE			
Product	**Finish**	**Type**	**Size**	**Wattage/Operation**	**Color Temp**	**Optic**	**+**	**Driver (Required)[1]**	**Accessory[1]**
BON = Bond Pro	BOBL = Bollard, Black BODB = Bollard, Dark Brown BOSS = Bollard, Stainless Steel BOGR = Bollard, Gray	RE = Round Emission	8 = 8.1" 20 = 19.9" 32 = 31.7"	11 CC = 10.8W / Constant Current (300 mA)	30 = 3000K 40 = 4000K	GE = General Illumination		ECO30W-300 SOLO50W-300 SOLO100W-300	Anchor Bolts E14931

[1] See page 2

Bond Pro

inter•lux

8.1" 10.8W 300mA

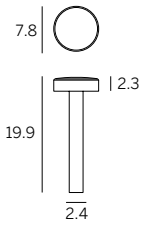


DRIVER OPTIONS (pick one)

C.C. Power supply options (remote only)

ECO30W-300	SOLO50W-300	SOLO100W-300
0-10V EldoLED ECOdrive 30W for 1 fixture	0-10V EldoLED SOLOdrive 50W for 1-2 fixtures	0-10V EldoLED SOLOdrive 100W for 1-4 fixtures

19.9" 10.8W 300mA

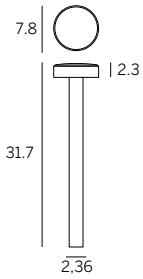


DRIVER OPTIONS (pick one)

C.C. Power supply options (remote only)

ECO30W-300	SOLO50W-300	SOLO100W-300
0-10V EldoLED ECOdrive 30W for 1 fixture	0-10V EldoLED SOLOdrive 50W for 1-2 fixtures	0-10V EldoLED SOLOdrive 100W for 1-4 fixtures

31.7" 10.8W 300mA



DRIVER OPTIONS (pick one)

C.C. Power supply options (remote only)

ECO30W-300	SOLO50W-300	SOLO100W-300
0-10V EldoLED ECOdrive 30W for 1 fixture	0-10V EldoLED SOLOdrive 50W for 1-2 fixtures	0-10V EldoLED SOLOdrive 100W for 1-4 fixtures

Accessories



E14931
Anchor Bolts

Bond Pro

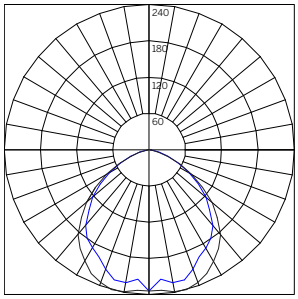
inter•lux

BON-BOSS-RE-...-GE...
Delivered Lumens - General Illumination

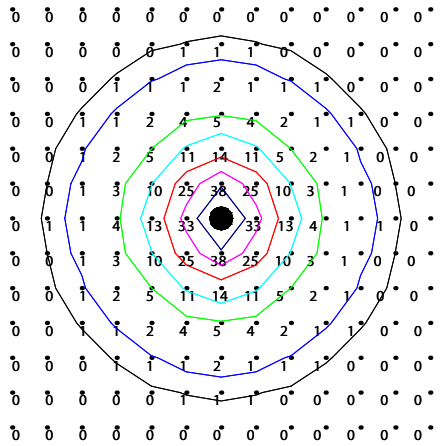
		Size [Wattage]		
		8 [11 CC]	20 [11 CC]	32 [11 CC]
CCT	30-	580	580	580
	40-	627	627	627

	Polar Plot / Cone Of Light Multiplier		
	8 [11 CC]	20 [11 CC]	32 [11 CC]
	1.00	1.00	1.00

BUG Rating: B0-U0-G0 – Type VS Quadrilateral Symmetry



ISOILLUMINANCE DIAGRAM - 20W 3000K
General Illumination[1]
BON-BOSS-RE-32-11-CC-30-GE



Value [Fc]	Color	Value [Fc]	Color
0.5		20	
1		30	
5		40	
10		50	

1 Illuminance values in foot-candles for the fixture part number noted. Illuminance points spaced 1'-0" on center.

	Project 23-51390-1 Date 4/5/2023 Tower Hill Ins Preliminary Site Ltg Submittals Submitted By ARCH. SALES & ILLUMINATION	Catalog Number: LL-E81725-W-88 LL-IR67-RGR-Z-24-13-CC-30-ZE Note:	Type OL3

Iris 67 Zoom Optics

inter·lux

IP67

General: Iris 67 is a family of outdoor flood lights that provides one of the most flexible landscape lighting solutions for trees, bushes, sculptures and building facades. Iris 67's main feature is the Zoom optics it comes equipped with, on every size. A Zoom Symmetric option allows to modify the beam spread at any time (15° to 45°), while an even more advanced Zoom Elliptic solution adds to the beam spread adjustability an outstanding beam shaping one, making it the most versatile lighting solution within the same fixture. Lastly, an IP67 rating for temporary submersion makes this flood light unique in its category.

Fixture Body: Open-pore Anodized and Powder Coated Die-Cast Aluminum.
Glass: Extra-clear Tempered glass.
Bracket: 316L Stainless Steel Bracket. Bracket pivots up to 270° on the vertical plane (no horizontal plane adjustment).
Mounting details: Fixture can be installed straight onto surfaces or by using mounting pegs available within the family.
Dimensions/Weight: 1.6" (0.46 lbs) – 2.4" (1.54 lbs) – 3.2" (2.65 lbs) – 3.9" (4.41 lbs)

Driver: Remote, 120-277V Dimmable 0-10V.
Wattages: 6W (1.6") – 13W (2.4") – 20W (3.2") – 30W (3.9")
Cable: Fixture comes with 3.28' of power cable and it's equipped with Acquastop safety system to prevent water and moisture from entering through the cable.

IP rating: IP67 for protection against dust and temporary submersion in water (up to 3' for as long as 30 minutes).
IK rating: IK 10
ETL Certification: ETL, wet location

Optics: Zoom Symmetric (beam spread adjustability) and Zoom Elliptic (beam shaping). Refer to Beam Spread/Shape Chart on this page for exact beam values.

Color temperatures: 2700K – 3000K – 4000K.
CRI: 80+

Lumen Maintenance: L70 projections tested at Tj 65° C and Ta 25°.
Warranty: 5-year Limited Warranty on fixtures. 1-year Limited Warranty on Remote Drivers.


1.6" (6W) ZS


2.4" (13W) ZE


3.2" (20W) ZS


3.9" (30W) ZE

Delivered Lumens*	1.6"	2.4"	3.2"	3.9"
ZS @ Max Angle	243	676	1362	2147
ZS @ Min Angle	138	343	818	1439
ZE @ Max Angle	123	594	884	1302
ZE @ Min Angle	78	318	595	1001

*Values shown for 3000K

Beam Spread/ Shape	1.6"	2.4"	3.2"	3.9"
ZS	15°-45°	15°-62°	16°-52°	15°-56°
ZE (Max)	46° x 39°	42° x 27°	44° x 36°	46° x 39°
ZE (Min)	40° x 14°	39° x 14°	40° x 16°	40° x 14°

Ordering Information

IR67		Z							
Product	**Trim/Finish**	**Type**	**Size**	**Wattage/Operation**	**Color Temp**	**Optic**	**+**	**Steel Pegs[1]**	**Driver (Required)[1]**
IR67 = Iris 67	RWH = Round White RBL = Round Black RGR = Round Gray	Z = Zoom optics	16 = 1.6"	6 CC = 6W / Constant Current (630mA)	27 = 2700K 30 = 3000K 40 = 4000K	ZS = Zoom Symmetric ZE = Zoom Elliptical		E84890 (9.84") E98112 (27.56")	ECO30W-XXX SOLO50W-XXX SOLO100W-XXX
			24 = 2.4"	13 CC = 13W / Constant Current (350mA)					
			32 = 3.2"	20 CC = 20W / Constant Current (580mA)					
			39 = 3.9"	30 CC = 30W / Constant Current (840mA)					

[1] See page 2

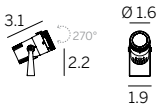
Iris 67 Zoom Optics

inter·lux

ZOOM SYMMETRIC

1.6" 6W 630mA





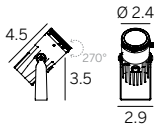
DRIVER OPTIONS (pick one)

C.C. Power supply options (remote only)

ECO30W-350 0-10V EldoLED ECOdrive 30W for 1-3 fixtures	**SOLO50W-350** 0-10V EldoLED SOLOdrive 50W for 1-6 fixtures	**SOLO100W-350** 0-10V EldoLED SOLOdrive 100W for 1-12 fixtures

2.4" 13W 350mA





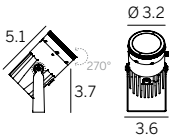
DRIVER OPTIONS (pick one)

C.C. Power supply options (remote only)

ECO30W-500 0-10V EldoLED ECOdrive 30W for 1 fixture	**SOLO50W-500** 0-10V EldoLED SOLOdrive 50W for 1-2 fixtures	**SOLO100W-500** 0-10V EldoLED SOLOdrive 100W for 1-4 fixtures

3.2" 20W 580mA





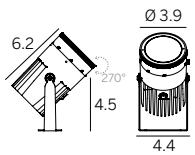
DRIVER OPTIONS (pick one)

C.C. Power supply options (remote only)

ECO30W-500 0-10V EldoLED ECOdrive 30W for 1 fixture	**SOLO50W-500** 0-10V EldoLED SOLOdrive 50W for 1-2 fixtures	**SOLO100W-500** 0-10V EldoLED SOLOdrive 100W for 1-4 fixtures

3.9" 30W 840mA





DRIVER OPTIONS (pick one)

SOLO50W-500 0-10V EldoLED SOLOdrive 50W for 1 fixture	**SOLO100W-500** 0-10V EldoLED SOLOdrive 100W for 1-2 fixtures

C.C. Power supply options (remote only)

Steel Pegs



E84890
9.84" Steel Peg



E98112
27.56" Steel Peg

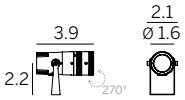
Iris 67 Zoom Optics

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ZOOM ELLIPTICAL

1.6" 6W 630mA





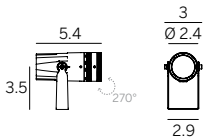
DRIVER OPTIONS (pick one)

C.C. Power supply options (remote only)

ECO30W-350 0-10V EldoLED ECOdrive 30W for 1-3 fixtures	**SOLO50W-350** 0-10V EldoLED SOLOdrive 50W for 1-6 fixtures	**SOLO100W-350** 0-10V EldoLED SOLOdrive 100W for 1-12 fixtures

2.4" 13W 350mA





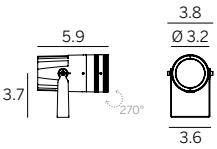
DRIVER OPTIONS (pick one)

C.C. Power supply options (remote only)

ECO30W-500 0-10V EldoLED ECOdrive 30W for 1 fixture	**SOLO50W-500** 0-10V EldoLED SOLOdrive 50W for 1-2 fixtures	**SOLO100W-500** 0-10V EldoLED SOLOdrive 100W for 1-4 fixtures

3.2" 20W 580mA





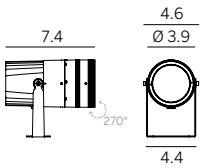
DRIVER OPTIONS (pick one)

C.C. Power supply options (remote only)

ECO30W-500 0-10V EldoLED ECOdrive 30W for 1 fixture	**SOLO50W-500** 0-10V EldoLED SOLOdrive 50W for 1-2 fixtures	**SOLO100W-500** 0-10V EldoLED SOLOdrive 100W for 1-4 fixtures

3.9" 30W 840mA





DRIVER OPTIONS (pick one)

SOLO50W-500 0-10V EldoLED SOLOdrive 50W for 1 fixture	**SOLO100W-500** 0-10V EldoLED SOLOdrive 100W for 1-2 fixtures

C.C. Power supply options (remote only)

Iris 67 Zoom Optics

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IRIS 67 ZOOM SYMMETRIC





IRIS 67 ZOOM ELLIPTICAL

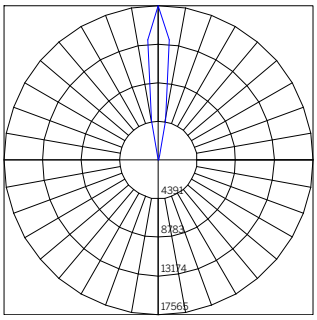
Iris 67 Zoom Optics

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IR67-RWH-Z-...-ZS...
DELIVERED LUMENS - Zoom Symmetric

		Size [Wattage]			
		16 [6 CC]	24 [13 CC]	32 [20 CC]	39 [30 CC]
CCT	27-	129	322	n/a	1388
	30-	243	676	2206	3633
	40-	263	726	2368	3633

	Polar Plot / Cone Of Light Multiplier			
	16 [6 CC]	24 [13 CC]	32 [20 CC]	39 [30 CC]
	0.07	0.19	0.61	1.00



Beam Angle (0-180) = 15.4
Beam Angle (90-270) = 15.0

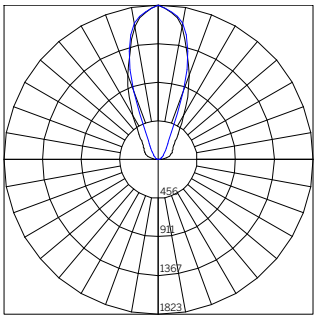
CONE OF LIGHT - 30W 3000K
Zoom Symmetric
IR67-RWH-Z-39-30-CC-30-ZS*

Throw Distance [Ft]	Illuminance [fc at max cd]	Beam Diameter [Ft]
20	119	5.4
18	147	4.9
16	186	4.3
14	243	3.8
12	330	3.2
10	475	2.7
8	743	2.2
6	1320	1.6
4	2971	1.1
2	11884	0.5

IR67-RWH-Z-...-ZE...
DELIVERED LUMENS - Zoom Elliptical

		Size [Wattage]			
		16 [6 CC]	24 [13 CC]	32 [20 CC]	39 [30 CC]
CCT	27-	123	594	555	1250
	30-	123	594	884	1302
	40-	133	639	592	1374

	Polar Plot / Cone Of Light Multiplier			
	16 [6 CC]	24 [13 CC]	32 [20 CC]	39 [30 CC]
	0.09	–	0.68	1.00



Beam Angle (0-180) = 15.4
Beam Angle (90-270) = 15.0

CONE OF LIGHT - 30W 3000K
Zoom Symmetric
IR67-RWH-Z-39-30-CC-30-ZS*

Throw Distance [Ft]	Illuminance [fc at max cd]	Beam Diameter [Ft]
20	5	17.0
18	6	15.3
16	7	13.6
14	9	11.9
12	13	10.2
10	18	8.5
8	28	6.8
6	51	5.1
4	114	3.4
2	456	1.7

*Polar Plot and Cone of Light are applicable to part number noted; use Multiplication Factor table to approximate other models or refer to online photometry.

	Project 23-51390-1 Date 4/5/2023 Tower Hill Ins Preliminary Site Ltg Submittals Submitted By ARCH. SALES & ILLUMINATION	Catalog Number: LL-E81728-W-88 LL-IR67-RGR-Z-32-20-CC-30-ZE Note:	Type OL4

Iris 67 Zoom Optics

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IP67

General: Iris 67 is a family of outdoor flood lights that provides one of the most flexible landscape lighting solutions for trees, bushes, sculptures and building facades. Iris 67's main feature is the Zoom optics it comes equipped with, on every size. A Zoom Symmetric option allows to modify the beam spread at any time (15° to 45°), while an even more advanced Zoom Elliptic solution adds to the beam spread adjustability an outstanding beam shaping one, making it the most versatile lighting solution within the same fixture. Lastly, an IP67 rating for temporary submersion makes this flood light unique in its category.

Fixture Body: Open-pore Anodized and Powder Coated Die-Cast Aluminum.
Glass: Extra-clear Tempered glass.
Bracket: 316L Stainless Steel Bracket. Bracket pivots up to 270° on the vertical plane (no horizontal plane adjustment).
Mounting details: Fixture can be installed straight onto surfaces or by using mounting pegs available within the family.
Dimensions/Weight: 1.6" (0.46 lbs) – 2.4" (1.54 lbs) – 3.2" (2.65 lbs) – 3.9" (4.41 lbs)

Driver: Remote, 120-277V Dimmable 0-10V.
Wattages: 6W (1.6") – 13W (2.4") – 20W (3.2") – 30W (3.9")
Cable: Fixture comes with 3.28' of power cable and it's equipped with Acquastop safety system to prevent water and moisture from entering through the cable.

IP rating: IP67 for protection against dust and temporary submersion in water (up to 3' for as long as 30 minutes).
IK rating: IK 10
ETL Certification: ETL, wet location

Optics: Zoom Symmetric (beam spread adjustability) and Zoom Elliptic (beam shaping). Refer to Beam Spread/Shape Chart on this page for exact beam values.

Color temperatures: 2700K – 3000K – 4000K.
CRI: 80+

Lumen Maintenance: L70 projections tested at Tj 65° C and Ta 25°.
Warranty: 5-year Limited Warranty on fixtures. 1-year Limited Warranty on Remote Drivers.


1.6" (6W) ZS


2.4" (13W) ZE


3.2" (20W) ZS


3.9" (30W) ZE

Delivered Lumens*	1.6"	2.4"	3.2"	3.9"
ZS @ Max Angle	243	676	1362	2147
ZS @ Min Angle	138	343	818	1439
ZE @ Max Angle	123	594	884	1302
ZE @ Min Angle	78	318	595	1001

*Values shown for 3000K

Beam Spread/ Shape	1.6"	2.4"	3.2"	3.9"
ZS	15°-45°	15°-62°	16°-52°	15°-56°
ZE (Max)	46° x 39°	42° x 27°	44° x 36°	46° x 39°
ZE (Min)	40° x 14°	39° x 14°	40° x 16°	40° x 14°

Ordering Information

IR67		Z							
Product	**Trim/Finish**	**Type**	**Size**	**Wattage/Operation**	**Color Temp**	**Optic**	**+**	**Steel Pegs[1]**	**Driver (Required)[1]**
IR67 = Iris 67	RWH = Round White RBL = Round Black RGR = Round Gray	Z = Zoom optics	16 = 1.6" 24 = 2.4" 32 = 3.2" 39 = 3.9"	6 CC = 6W / Constant Current (630mA) 13 CC = 13W / Constant Current (350mA) 20 CC = 20W / Constant Current (580mA) 30 CC = 30W / Constant Current (840mA)	27 = 2700K 30 = 3000K 40 = 4000K	ZS = Zoom Symmetric ZE = Zoom Elliptical		E84890 (9.84") E98112 (27.56")	ECO30W-XXX SOLO50W-XXX SOLO100W-XXX

[1] See page 2

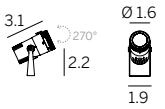
Iris 67 Zoom Optics

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ZOOM SYMMETRIC

1.6" 6W 630mA





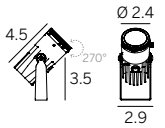
DRIVER OPTIONS (pick one)

C.C. Power supply options (remote only)

ECO30W-350 0-10V EldoLED ECOdrive 30W for 1-3 fixtures	**SOLO50W-350** 0-10V EldoLED SOLOdrive 50W for 1-6 fixtures	**SOLO100W-350** 0-10V EldoLED SOLOdrive 100W for 1-12 fixtures

2.4" 13W 350mA





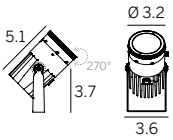
DRIVER OPTIONS (pick one)

C.C. Power supply options (remote only)

ECO30W-500 0-10V EldoLED ECOdrive 30W for 1 fixture	**SOLO50W-500** 0-10V EldoLED SOLOdrive 50W for 1-2 fixtures	**SOLO100W-500** 0-10V EldoLED SOLOdrive 100W for 1-4 fixtures

3.2" 20W 580mA





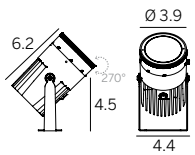
DRIVER OPTIONS (pick one)

C.C. Power supply options (remote only)

ECO30W-500 0-10V EldoLED ECOdrive 30W for 1 fixture	**SOLO50W-500** 0-10V EldoLED SOLOdrive 50W for 1-2 fixtures	**SOLO100W-500** 0-10V EldoLED SOLOdrive 100W for 1-4 fixtures

3.9" 30W 840mA





DRIVER OPTIONS (pick one)

SOLO50W-500 0-10V EldoLED SOLOdrive 50W for 1 fixture	**SOLO100W-500** 0-10V EldoLED SOLOdrive 100W for 1-2 fixtures

C.C. Power supply options (remote only)

Steel Pegs



E84890
9.84" Steel Peg



E98112
27.56" Steel Peg

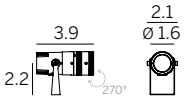
Iris 67 Zoom Optics

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ZOOM ELLIPTICAL

1.6" 6W 630mA





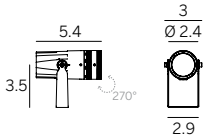
DRIVER OPTIONS (pick one)

C.C. Power supply options (remote only)

ECO30W-350 0-10V EldoLED ECOdrive 30W for 1-3 fixtures	**SOLO50W-350** 0-10V EldoLED SOLOdrive 50W for 1-6 fixtures	**SOLO100W-350** 0-10V EldoLED SOLOdrive 100W for 1-12 fixtures

2.4" 13W 350mA





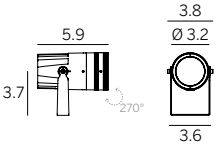
DRIVER OPTIONS (pick one)

C.C. Power supply options (remote only)

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3.2" 20W 580mA





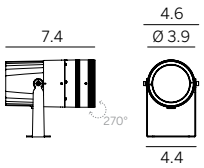
DRIVER OPTIONS (pick one)

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3.9" 30W 840mA





DRIVER OPTIONS (pick one)

SOLO50W-500 0-10V EldoLED SOLOdrive 50W for 1 fixture	**SOLO100W-500** 0-10V EldoLED SOLOdrive 100W for 1-2 fixtures

C.C. Power supply options (remote only)

Iris 67 Zoom Optics

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IRIS 67 ZOOM SYMMETRIC





IRIS 67 ZOOM ELLIPTICAL

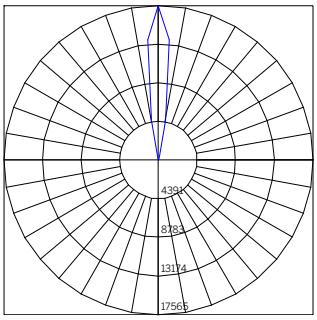
Iris 67 Zoom Optics

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IR67-RWH-Z-...-ZS...
DELIVERED LUMENS - Zoom Symmetric

		Size [Wattage]			
		16 [6 CC]	24 [13 CC]	32 [20 CC]	39 [30 CC]
CCT	27-	129	322	n/a	1388
	30-	243	676	2206	3633
	40-	263	726	2368	3633

	Polar Plot / Cone Of Light Multiplier			
	16 [6 CC]	24 [13 CC]	32 [20 CC]	39 [30 CC]
	0.07	0.19	0.61	1.00



Beam Angle (0-180) = 15.4
Beam Angle (90-270) = 15.0

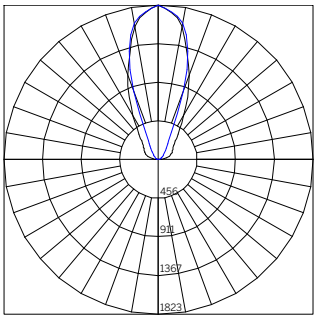
CONE OF LIGHT - 30W 3000K
Zoom Symmetric
IR67-RWH-Z-39-30-CC-30-ZS*

Throw Distance [Ft]	Illuminance [fc at max cd]	Beam Diameter [Ft]
20	119	5.4
18	147	4.9
16	186	4.3
14	243	3.8
12	330	3.2
10	475	2.7
8	743	2.2
6	1320	1.6
4	2971	1.1
2	11884	0.5

IR67-RWH-Z-...-ZE...
DELIVERED LUMENS - Zoom Elliptical

		Size [Wattage]			
		16 [6 CC]	24 [13 CC]	32 [20 CC]	39 [30 CC]
CCT	27-	123	594	555	1250
	30-	123	594	884	1302
	40-	133	639	592	1374

	Polar Plot / Cone Of Light Multiplier			
	16 [6 CC]	24 [13 CC]	32 [20 CC]	39 [30 CC]
	0.09	–	0.68	1.00



Beam Angle (0-180) = 15.4
Beam Angle (90-270) = 15.0

CONE OF LIGHT - 30W 3000K
Zoom Symmetric
IR67-RWH-Z-39-30-CC-30-ZS*

Throw Distance [Ft]	Illuminance [fc at max cd]	Beam Diameter [Ft]
20	5	17.0
18	6	15.3
16	7	13.6
14	9	11.9
12	13	10.2
10	18	8.5
8	28	6.8
6	51	5.1
4	114	3.4
2	456	1.7

*Polar Plot and Cone of Light are applicable to part number noted; use Multiplication Factor table to approximate other models or refer to online photometry.

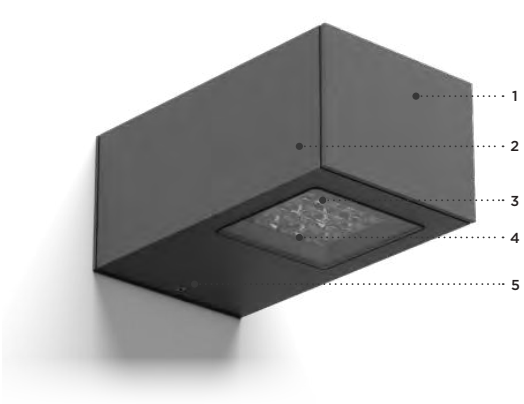
	Project 23-51390-1 Date 4/5/2023 Tower Hill Ins Preliminary Site Ltg Submittals Submitted By ARCH. SALES & ILLUMINATION	Catalog Number: BVA12W-L2L26-K30-TYP2 Note:	Type OL8

LUMINIS®

BVA11W/BVA12W SERIES
Bellevue
WALL MOUNT

TYPE: _____ QUANTITY: _____ PROJECT: _____

CATALOG NUMBER:								
	MODEL	LED LIGHT SELECTION	CCT	VOLTAGE	FINISH	OPTION	OPTION	OPTION



1- Front cover constructed of corrosion resistant aluminum.
2- 4.5" (114mm) x 6" (152mm) Extruded aluminum optical chamber.
3- Available in configurations of 9 LEDs or 18 LEDs
4- Clear tempered glass.
5- All stainless steel hardware.





MATERIALS
Bellevue wall mount is made of 6063-T6 extruded aluminum alloy.
LED board is assembled on a thick extruded aluminum profile and protected by a clear tempered glass. The acrylic optics provide a wide range of IES type distribution. The driver is mounted inside the fixture for ease of maintenance.

ELECTRICAL
DRIVER Standard driver is 120-277V multi-volt compatibility (50-60Hz), 0-10V dimming-ready (dims to 10%). Optional 347/480V, operating temperatures of -40°C/-40°F to 55°C/131°F, output over voltage protection, output over current protection, output short circuit protection with auto-recovery.

LED Type I, II, III, IV light distribution via high performance optical lenses. Offered in 2700K, 3000K, 3500K, 4000K / 80 CRI.

Optional true amber LED for turtle sensitive areas.

Wavelengths: 584.5nm to 597nm.

LIFETIME
60,000hrs $L_{70}B_{50}$ (based on LM-80 report for lumen maintenance)

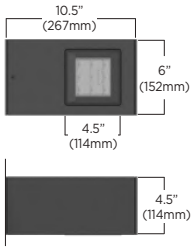
FINISH
Polyester powder coating is applied through an electrostatic process, and oven cured for long term finish.

CERTIFICATION
Certified and Approved as per CSA C22.2 No.: 250.0 standard and ANSI/UL 1598 standard, for wet location. Rated IP65. Rated IK10.

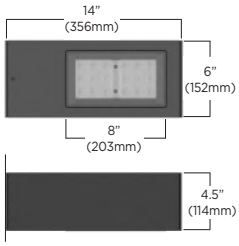
Photometric testing performed by an independent laboratory in accordance with IES LM-79-08 standards at 25°C. Lumen depreciation in accordance with IESNA LM80 standards.

MOUNTING
Maximum weight: 11 lbs (5.0 kg)
Bellevue wall mount is designed for ease of access and installation.
The head is secured on a mounting plate by one set screw. The mounting plate is designed to fit on a 4" (102mm) octagonal electrical box. Fixture lighting must point to the ground at all time.

BVA11W



BVA12W



July 2022 Rev. 4

	Project 23-51390-1 Date 4/5/2023 Tower Hill Ins Preliminary Site Ltg Submittals Submitted By ARCH. SALES & ILLUMINATION	Catalog Number: BVA12W-L2L26-K30-TYP2 Note:	Type OL8

BVA11W/BVA12W SERIES
Bellevue

LUMINAIRE SELECTION - BVA11W/BVA12W

1 MODEL | **2 LED LIGHT SELECTION** | **3 CCT °K LED** | **4 VOLTAGE[1]** | **5 FINISH**



☐ BVA11W

WHITE LED SELECTION

TYPE	SUFFIX	DELIVERED LUMENS*	INPUT WATTS
TYPE I	☐ L1L10-TYP1	1205	11W
	☐ L1L16-TYP1	1846	19W
	☐ L1L24-TYP1	2635	30W
TYPE II	☐ L1L10-TYP2	1072	11W
	☐ L1L16-TYP2	1643	19W
	☐ L1L24-TYP2	2345	30W
TYPE III	☐ L1L10-TYP3	977	11W
	☐ L1L16-TYP3	1497	19W
	☐ L1L24-TYP3	2137	30W
TYPE IV	☐ L1L10-TYP4	904	11W
	☐ L1L16-TYP4	1384	19W
	☐ L1L24-TYP4	1976	30W

*4000K / 80CRI

AMBER LED SELECTION - TURTLE FRIENDLY

TYPE	SUFFIX	DELIVERED LUMENS	INPUT WATTS
TYPE I	☐ L1LK2A-TYP1	349	8W
TYPE II	☐ L1LK2A-TYP2	311	8W
TYPE III	☐ L1LK2A-TYP3	283	8W
TYPE IV	☐ L1LK2A-TYP4	262	8W



☐ BVA12W

WHITE LED SELECTION

TYPE	SUFFIX	DELIVERED LUMENS*	INPUT WATTS
TYPE I	☐ L2L26-TYP1	2957	29W
	☐ L2L34-TYP1	3692	38W
	☐ L2L40-TYP1	4248	46W
TYPE II	☐ L2L26-TYP2	2632	29W
	☐ L2L34-TYP2	3285	38W
	☐ L2L40-TYP2	3780	46W
TYPE III	☐ L2L26-TYP3	2398	29W
	☐ L2L34-TYP3	2994	38W
	☐ L2L40-TYP3	3445	46W
TYPE IV	☐ L2L26-TYP4	2218	29W
	☐ L2L34-TYP4	2769	38W
	☐ L2L40-TYP4	3186	46W

*4000K / 80CRI

AMBER LED SELECTION - TURTLE FRIENDLY

TYPE	SUFFIX	DELIVERED LUMENS	INPUT WATTS
TYPE I	☐ L2LK2A-TYP1	698	16W
TYPE II	☐ L2LK2A-TYP2	621	16W
TYPE III	☐ L2LK2A-TYP3	566	16W
TYPE IV	☐ L2LK2A-TYP4	524	16W

TEMPERATURE*

☐ K27	2700K
☐ K30	3000K
☐ K35	3500K
☐ K40	4000K

*80CRI

STANDARD

- ☐ 120V
- ☐ 208V
- ☐ 240V
- ☐ 277V

OPTIONAL

- ☐ 347V
- ☐ 480V

STANDARD COLORS

☐ WHT	Snow white
☐ BKT	Jet black
☐ BZT	Bronze
☐ MST	Matte silver
☐ GRT	Titanium gray
☐ DGT	Gun metal
☐ CHT	Champagne
☐ SGT	Steel gray
☐ BGT	English cream

OPTIONAL COLORS

☐ CS	Custom color
☐ RAL	RAL# color

*Refer to color chart

For IDA certification compliance, luminaire must be ordered with 3000K or warmer.

BVA11W/BVA12W SERIES
Bellevue

OPTIONS

PHOTOCELL
☐ **PH** Thermal button photocell mounted on top casted housing (as shown on image). Instant turn-on, standard 5-10 second turn-off time delay.

FUSE SAFETY
☐ **FS** Fuse

SURGE PROTECTOR
☐ **SP** 10kV surge protector

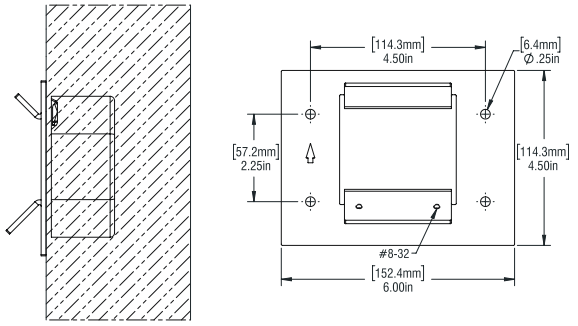
MOUNTING BOX
☐ **SWK** Surface wall mounting option for Ø4" weatherproof surface junction box (3/4" Conduit trade size) (weatherproof junction box, conduit and adaptor by others)
Supplied with 5x18AWG/36" lg. wiring (longer wires to be specified).

ENVIRONMENT
☐ **MG** Marine grade paint[2]
☐ **NT** Natatorium (only available in WHT and BKT)

NOTES

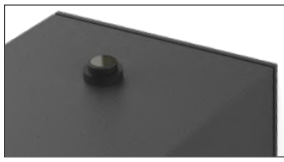
1- If no voltage is specified, luminaires are factory prewired by default for 120V. For other voltages, please specify with catalog number, or consult factory.
2- Marine grade paint for harsh, coastal environment and exposure to salt water. Longer lead time may apply please contact factory for info.

MOUNTING INFORMATION

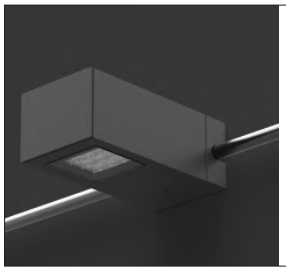


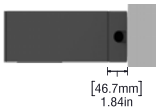
MOUNTING INFORMATION
Plate should be secured with a set of (4) 1/4"x 3" lg screws. Washers must not be bigger than 3/4" (19mm). (Hardwares and junction boxes by others)

OPTIONS DETAILS



PH
Button thermal photocontrol mounted on the top of the fixture as shown.



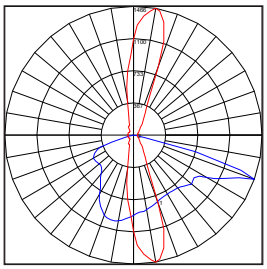


SWK
Surface wall mounting option with 3/4" NPT conduit adaptor.
(Conduit and adaptor by others)
Supplied with 5x18AWG/36" lg. wiring (longer wires to be specified).

	Project 23-51390-1 Date 4/5/2023 Tower Hill Ins Preliminary Site Ltg Submittals Submitted By ARCH. SALES & ILLUMINATION	Catalog Number: BVA12W-L2L26-K30-TYP2 Note:	Type OL8

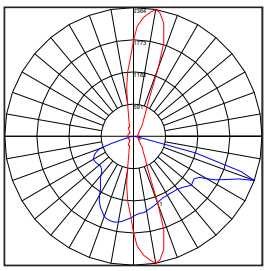
BVA11W/BVA12W SERIES
Bellevue

TYPICAL PHOTOMETRY SUMMARY



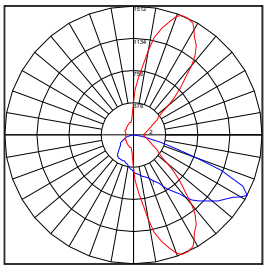
BVA11W-L1L24-TYP1

Delivered lumens : 2635 lumens
Power consumption 30.5W
Efficacy : 87 Lumens/Watt
Maximum Candela : 1466 @ 80ºH/70ºV
BUG : B1-U0-G1



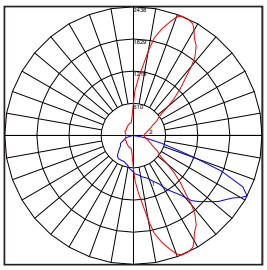
BVA12W-L2L40-TYP1

Delivered lumens : 4274 lumens
Power consumption 46.3W
Efficacy : 92 Lumens/Watt
Maximum Candela : 2364 @ 80ºH/70ºV
BUG : B2-U0-G1



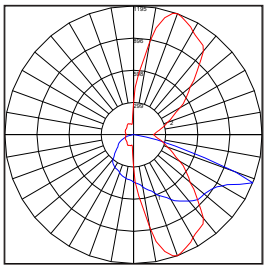
BVA11W-L1L24-TYP2

Delivered lumens : 2345 lumens
Power consumption 30.5W
Efficacy : 77 Lumens/Watt
Maximum Candela : 1195 @ 68ºH/62ºV
BUG : B1-U0-G0



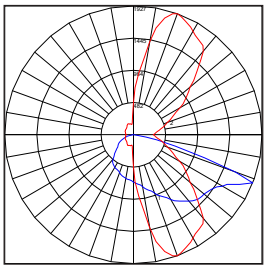
BVA12W-L2L40-TYP2

Delivered lumens : 3780 lumens
Power consumption 46.3W
Efficacy : 81 Lumens/Watt
Maximum Candela : 2438 @ 68ºH/62ºV
BUG : B1-U0-G1



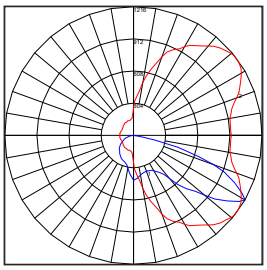
BVA11W-L1L24-TYP3

Delivered lumens : 2145 lumens
Power consumption 30.5W
Efficacy : 70 Lumens/Watt
Maximum Candela : 1195 @ 70ºH/68ºV
BUG : B1-U0-G0



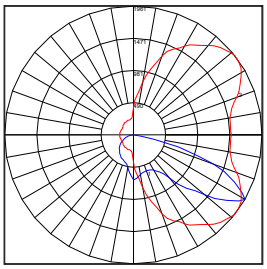
BVA12W-L2L40-TYP3

Delivered lumens : 3445 lumens
Power consumption 46.3W
Efficacy : 75 Lumens/Watt
Maximum Candela : 1937 @ 70ºH/68ºV
BUG : B1-U0-G1



BVA11W-L1L24-TYP4

Delivered lumens : 1976 lumens
Power consumption 30.5W
Efficacy : 65 Lumens/Watt
Maximum Candela : 1216 @ 38ºH/60ºV
BUG : B1-U0-G1



BVA12W-L2L40-TYP4

Delivered lumens : 3186 lumens
Power consumption 46.3W
Efficacy : 69 Lumens/Watt
Maximum Candela : 1961 @ 38ºH/60ºV
BUG : B1-U0-G1

LUMEN CONVERSION FACTOR (LCF)

CCT	LCF	CRI
2700K	0.91	80
3000K	0.94	80
3500K	0.98	80
4000K	1.00	80

All Photometry shown use the Standard 80CRI 4000K LEDs.
Please visit our web site www.luminis.com for complete I.E.S. formatted download data

	Project 23-51390-1 Date 4/5/2023 Tower Hill Ins Preliminary Site Ltg Submittals Submitted By ARCH. SALES & ILLUMINATION	Catalog Number: ML5WL65-D-MO-K30-80-4'-J-VR-F01M-UNV-DIMX Note:	Type OL9

Microlinea™ Series 5 Direct Wet Location-IP65

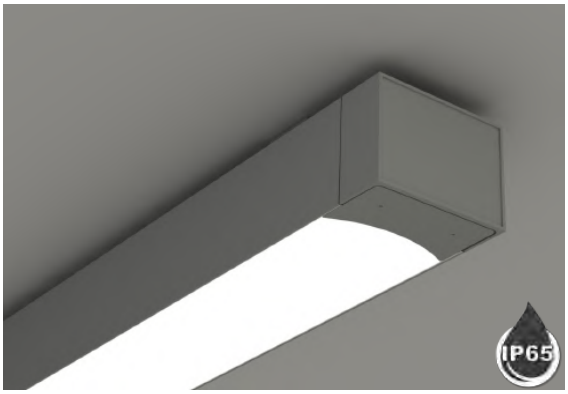
(Overall Width 5-7/16", Luminous Aperture 5-3/16")

Catalog Number	Type
Project Name	

ML5WL65-D IP65 Rated

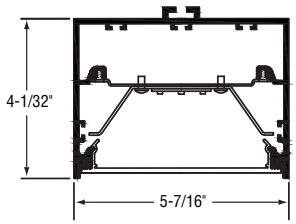
Suspended, Ceiling, Recessed or Wall Mount - Wet Location

5-7/16" x 4-1/32" Direct

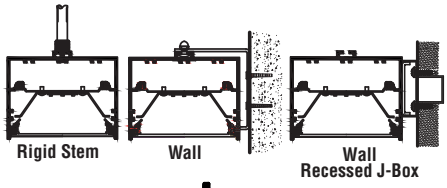


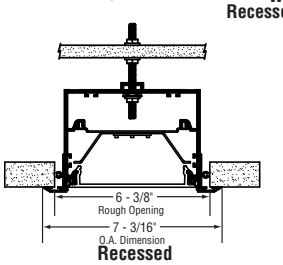
5 Year Limited Warranty LED Boards & Drivers

B.U.G. Ratings
(Backlight / Uplight / Glare)
High Output: B1 - U0 - G1
Medium Output: B1 - U0 - G1
(See Photometric Files for More Information)

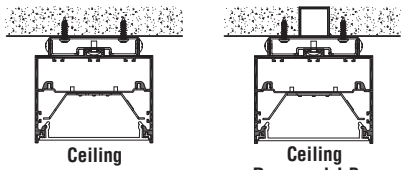


ML5WL65-D-HO
ML5WL65-D-MO





Recessed



S P E C I F I C A T I O N S

Housing
One piece .125 " thick extruded aluminum. Die-cast aluminum end caps are fully gasketed and secured with no visible fasteners. Standard lengths are nominal 2', 3', 4', 6' and 8'. Provisions may be made for continuous rows of virtually any length.

Internal Construction
All internal mechanical components, including fasteners, are aluminum or stainless steel.

Finish
Standard and custom finishes are baked powder coat electrostatically applied (2.0 mil minimum thickness) to assure aesthetics and durability.

Optical Control
- (LOH) .125" thick, high transmittance extruded acrylic lens, formulated for maximum diffusion of the LED light source. Lens is continuously gasketed and permanently sealed against dust and water intrusion.
- (VR) Vandal Resistant: .125" thick, high transmittance extruded 100% D.R. acrylic lens with tamper-resistant hardware.

Reflector/Heat Sink
.060" thick formed aluminum finished with a high reflectance white baked powder coat.

Driver
Power supply is UL/CUL recognized, 120-277 universal voltage. 347V also available.

Light Engine
LED light source available for 3000K, 3500K and 4000K CCT, in High and Medium outputs.

HO - High Output
*3226 Total Delivered Lms. at 41 System Watts (Values per 4 ' using 3500K LED modules)

MO - Medium Output
*1949 Total Delivered Lms. at 22 System Watts (Values per 4 ' using 3500K LED modules)

*Due to continued advancement in LED technology, lumen performance is subject to change. Please visit our website for the most up-to-date information.

Circuitry
All fixtures are factory pre-wired for a single circuit. Provision for multiple switching/circuiting is optional.

Wiring
All fixtures intended for continuous rows are provided with factory installed quick-connect wiring.

Mounting
All mounting components are aluminum or stainless steel. Standard finish for wall, recessed, and ceiling assemblies is matte black. Stem/Canopy assemblies are painted to match fixture housing.

Certifications
Fixtures are ETL listed for use in 'Wet Locations.' Ambient operating temperature rated from -30° C up to 50° C, and 0° C up to 50° C with battery back-up. IP-65 rated** IC rated (Recess Mount)

**The IP (or Ingress Protection) rating defines the degree of protection for a luminaire from outside elements.

Sample Catalog Number: **ML5WL65-D - HO - K40 - 80 - 4 - P - LOH - F01M - EF - 120 - DIM1 - OPTIONS**

ML5WL65-D - [ ] - [ ] - [ ] - [ ] - [ ] - [ ] - [ ] - [ ] - [ ] - [ ] - [ ] - [ ] - [ ]

PAL **ML5WL65-D Series 5 Direct - Wet Location**
Lumen Output / 4': **HO** - High Output = 3226 Total Lms. - 79 Lm/W
(Using 4000K) **MO** - Medium Output = 1949 Total Lms. - 87 Lm/W
CO - Custom Output (Contact factory for available output range)
CCT: **K30**-3000K, **K35**-3500K, **K40**-4000K
CRI: **80** (Standard)
Fixture Lengths: **2', 3', 4', 6', and 8'**
Mounting: **P** = Rigid Stem (Up to 24" Std.) **W** = Wall Mount **R** = Recessed Mount **J** = Ceiling Mount
WRJ = Wall Mount w/Recess J-Box **WRJ** = Wall Mount w/Recess J-Box
Direct Optical Control: **LOH** = LED Optimized Acrylic Gasketed Lens
VR = 100% D.R. Acrylic Lens with Tamper-Resist Hardware
Standard Finish: **F01M** Matte White **F10** Bronzed **F11** Textured Black **F12** Ultrasonic Clear **FCC** Custom Color
Power Feed Location: **EF** = End Feed **TF** = Top Feed (N/A for Recess or Ceiling Mount)
Voltage: **120V, 277V, 347V or UNV** (Universal Voltage)
Drivers: **DIMX** = Standard Driver - No Dimming **DIM1** = Standard Driver wired for Dimming - 100% to 1%
CWD = Cold Weather Driver, -40 Deg C Ambient Temp. Rating (High Output Only - 3' or Longer Fixtures) (N/A for 1% Dimming Option)
Options: **EMCKT** = Emergency Circuit (Separate Hot & Neutral) **EBPHST** = Self-Testing Emergency Battery Pack (10 Watt) (N/A for 2' Fixtures & N/A for 347V) **FS** = Fused Drivers

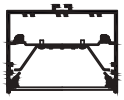
Precision Architectural Lighting 4830 Timber Creek Drive Houston, Texas 77017
Tel 713.946.4343 Fax 713.946.4441 www.pal-lighting.com

Made in America

	Project 23-51390-1 Date 4/5/2023 Tower Hill Ins Preliminary Site Ltg Submittals Submitted By ARCH. SALES & ILLUMINATION	Catalog Number: ML5WL65-D-MO-K30-80-4'-J-VR-F01M-UNV-DIMX Note:	Type OL9

Suspended/Ceiling/Recessed/Wall

ML5WL65-D-HO-K40-LOH

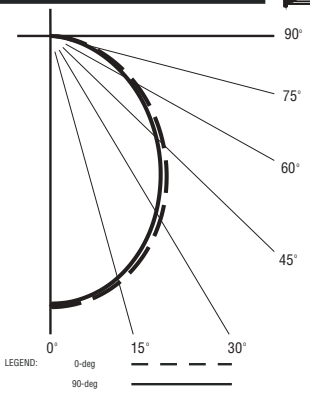


Wet Location Direct-High Output

LED Optimized High Transmittance Lens

Catalog Number: ML5W65L-D-HO-K40-4'-X-LOH-120
Report Number: UL#1094335.ies
Luminaire Description: Extruded Aluminum Housing with White Aluminum Reflector and LED Optimized Acrylic Lens
LED Module: Multiple White Low-Power Light Emitting Diodes (LEDs) in a precise layout.

Total Luminaire Efficacy = 78.7 Lm/W
Input Power / 4': 40.97 W
0% Up 100% Down
Color Rendering Index (CRI) = 83





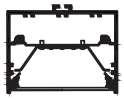
ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixture
0- 30	994	30.8
0- 40	1580	49.0
0- 60	2363	81.7
0- 90	3226	100.0
90- 180	0	0.0
0- 180	3226	100.0

CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0
0	1339	1339	1339	1339	1339
5	1345	1328	1323	1330	1328
15	1278	1258	1250	1252	1248
25	1145	1126	1113	1108	1102
35	971	951	933	922	914
45	774	756	737	722	713
55	574	557	540	524	517
65	379	367	352	338	332
75	197	192	182	170	166
85	54	50	41	33	31
90	0	0	0	0	0

ML5WL65-D-MO-K40-LOH

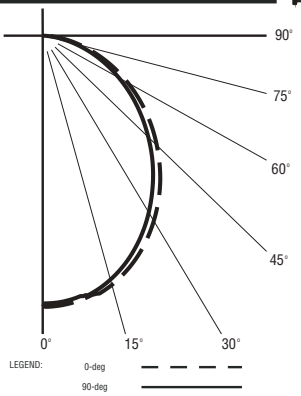


Wet Location Direct-Medium Output

LED Optimized High Transmittance Lens

Catalog Number: ML5WL65-D-MO-K40-4'-X-LOH-120
Report Number: **UL#1094336.ies**
Luminaire Description: Extruded Aluminum Housing with White Aluminum Reflector and LED Optimized Acrylic Lens
LED Module: Multiple White Low-Power Light Emitting Diodes (LEDs) in a precise layout.

Total Luminaire Efficacy = 86.9 Lm/W
Input Power / 4': 22.39 W
0% Up 100% Down
Color Rendering Index (CRI) = 83





ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixture
0- 30	602	30.8
0- 40	955	49.0
0- 60	1428	81.7
0- 90	1949	100.0
90- 180	0	0.0
0- 180	1949	100.0

CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0
0	803	803	803	803	803
5	806	796	793	797	796
15	772	761	756	758	756
25	693	682	673	671	667
35	588	576	565	558	553
45	468	457	446	436	431
55	347	337	326	317	312
65	229	221	213	204	200
75	119	116	110	102	99
85	33	30	25	20	18
90	0	0	0	0	0

For more information, visit our website at www.pal-lighting.com

	Project 23-51390-1 Date 4/5/2023 Tower Hill Ins Preliminary Site Ltg Submittals Submitted By ARCH. SALES & ILLUMINATION	Catalog Number: VPR-EA30-VLED-II-100LED-525MA-WW-480-PTB27-RAL-*** *-T Note:	Type OL11

PROJECT NAME:

FIXTURE TYPE:

SOLID STATE AREA LIGHTING

VPR-EA30 SERIES-LED

S P E C I F I C A T I O N S



VPR-EA30

PATENT PENDING

HOUSING

Heavy spun aluminum housing with four (4) extruded curved aluminum arms welded to a central mounting hub. Mounting hub fits 2 7/8" ø x 3" tenon and is secured to a pole tenon by 8 stainless steel hex socket recessed cap screws. Optical compartment is accessed through the hinged top. Minimum wall thickness is .188". All exposed hardware is stainless steel. Internal protected hardware is electro-zinc plated.

VLED® OPTICAL MODULE

Low copper A356 alloy (<.2% copper) cast aluminum housing. Integrated clear tempered glass lens sealed with a continuous silicone gasket protects emitters (LED's) and emitter Reflector-Prism optics, and seals the module from water intrusion and environmental contaminants. Module is sealed to meet an IP67 rating. Each emitter is optically controlled by a Reflector-Prism injection molded from H12 acrylic (3 types per module; one from 0° - 50°; one from 50° - 65°; one from 65° - 72°). Each Reflector-Prism has indexing pins for aiming and is secured to an optical plate made of matte black anodized aluminum. The optical plate locates every Reflector-Prism over an emitter. Reflector-Prisms are secured to the optical plate with a UV curing adhesive. The Reflector-Prisms are arrayed to produce IES Type II, III, IV, and V-SQ distributions. The entire Optical Module is field rotatable in 90° increments. Both module and drivers are factory wired using water resistant, insulated cord. Lens, module and drivers are field replaceable.

LED DRIVER

Drivers are UL and cUL recognized mounted on a single plate and factory prewired with quick-disconnect plugs. Constant current driver is electronic and has a power factor of >0.90 and a minimum operating temperature of -40°F. Drivers accept an input of 120-277V, 50/60Hz or 347-480V, 50/60Hz. (0 - 10V dimmable driver is standard. Driver has a minimum of 3KV internal surge protection. Luminaire supplied with 20KV surge protector for field accessible installation.)

AMBER LED's

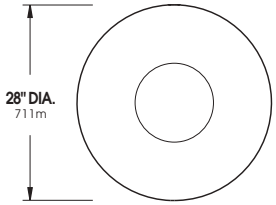
PCA (Phosphor Converted Amber) LED's utilize phosphors to create color output similar to LPS lamps and have a slight output in the blue spectral bandwidth. TRA (True Amber) LED's utilize material that emits light in the amber spectral bandwidth only without the use of phosphors.

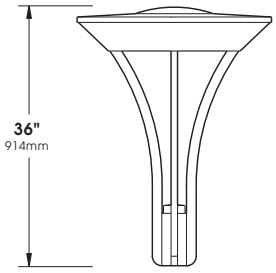
LED EMITTERS

High output LED's are utilized with drive currents ranging from 350mA to 1050mA. 70CRI Minimum. LED's are available in standard Neutral White (4000K), or optional Cool White (5000K) or Warm White (3000K). Consult Factory for other LED options.

FINISH

Electrostatically applied TGIC Polyester Powder Coat on substrate prepared with 20 PSI power wash at 140° F. Four step iron phosphate pretreatment for protection and paint adhesion. 400°F bake for maximum hardness and durability. Texture finish is standard.





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MADE IN THE USA

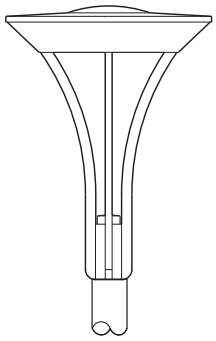
2018179

	Project 23-51390-1 Date 4/5/2023 Tower Hill Ins Preliminary Site Ltg Submittals Submitted By ARCH. SALES & ILLUMINATION	Catalog Number: VPR-EA30-VLED-II-100LED-525MA-WW-480-PTB27-RAL-*** *-T Note:	Type OL11

VPR-EA30 SERIES - LED

SPECIFICATIONS

MOUNTING STYLES

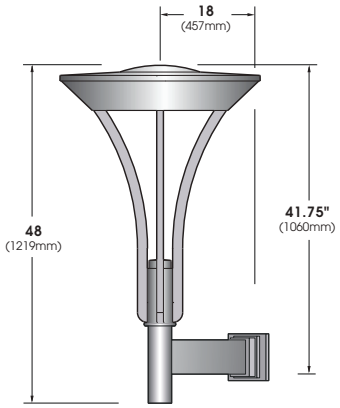


PTB

PTB27-TO FIT OVER 2 7/8"O.D. TENON.

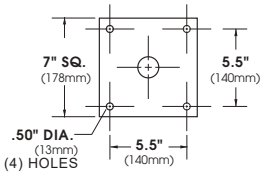
PTB23-TO FIT OVER 2 3/8" O.D. TENON.

WALL MOUNT

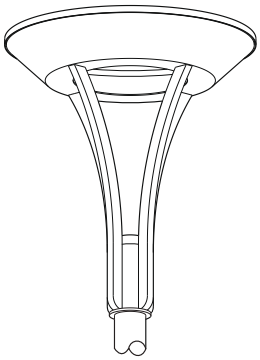


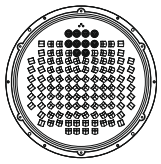
EXTRUDED ALUMINUM ARM AND CAST ALUMINUM WALL BRACKET ASSEMBLY PROVIDED WITH BUILT IN GASKETED WIRE ACCESS FOR FIXTURE/SUPPLY WIRE CONNECTION.

WALL PLATE



VLED® MODULES





100 LED Module

VPR-EA30 E.P.A.= 1.85
Available in:
100, 80 & 64
LED Module

Spec/Order Example: VPR-EA30/80LED/CW/240/PTB27/RAL-9003-S/EHS

SPEC / ORDERING INFORMATION

MODEL	OPTICS	LED MODE	MOUNTING	FINISH	OPTIONS

MODEL

☐ **VPR-EA30**

OPTICS

VLED® IES DISTRIBUTION TYPE

- ☐ TYPE II **VLED-II** . . . . .
- ☐ TYPE III **VLED-III** . . . . .
- ☐ TYPE IV **VLED-IV** . . . . . .
- ☐ TYPE VSQ **VLED-VSQ** . . .

LED MODE

No. LEDs

- ☐ **100LED**[1]
- ☐ **80LED**[1]
- ☐ **64LED**
- ☐ **48LED**

DRIVE CURRENT

- ☐ 350mA
- ☐ 525mA
- ☐ 700mA

COLOR

- ☐ **NW (4000K)*** *STANDARD
- ☐ **CW (5000K)**
- ☐ **WW (3000K)**

OTHER LED COLORS AVAILABLE CONSULT FACTORY

VOLTAGE

- ☐ 120
- ☐ 208
- ☐ 240
- ☐ 277
- ☐ 347
- ☐ 480

AMBER[2]

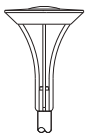
- ☐ PHOSPHOR CONVERTED AMBER **PCA**
- ☐ TRUE AMBER[3] **TRA**

NOTES:
1 - NOT AVAILABLE IN 700mA
2 - NARROW BAND AMBERS HAVE NO DEFINABLE CCT EQUIVALENT
3 - AVAILABLE IN 350mA & 525mA DRIVE CURRENTS ONLY

MOUNTING

ARM MOUNT

☐ **1** . . . . . ●



☐ **PTB23** (TO FIT 2 3/8" O.D.)

☐ **PTB27** (TO FIT 2 7/8" O.D.)

WALL MOUNT

☐ **WM** . . . . . ●

FINISH

STANDARD TEXTURED FINISH

- ☐ BLACK **RAL-9005-T**
- ☐ WHITE **RAL-9003-T**
- ☐ GREY **RAL-7004-T**
- ☐ DARK BRONZE **RAL-8019-T**
- ☐ GREEN **RAL-6005-T**

FOR SMOOTH FINISH REPLACE SUFFIX "T" WITH SUFFIX "S". (EXAMPLE: RAL-9500)

SEE USALTG.COM FOR ADDITIONAL COLORS

OPTIONS

- ☐ HOUSE SIDE SHIELDED REFLECTOR PRISMS . . **HS-VLED**
- ☐ PHOTO CELL + VOLTAGE (EXAMPLE: PC120V) . . **PC+V**
- ☐ TWIST LOCK RECEPTACLE ONLY . . . **TPR**
- ☐ 7-PIN TWIST LOCK RECEPTACLE ONLY . . **TPR7**
- ☐ SINGLE FUSE (120V., 277V) . . . . . **SF**
- ☐ DOUBLE FUSE (208V., 240V) . . . . . **DF**
- ☐ HIGH-LOW DIMMING FOR HARDWIRED SWITCHING OR NONINTEGRATED MOTION SENSOR . . . . . **HLSW**
- ☐ STEP DIM MOTION SENSOR (PROGRAMMED 50/100) **MS-F211**
- ☐ REMOTE MOTION SENSOR CONFIGURATOR **MS-FC10**

	Project 23-51390-1 Date 4/5/2023 Tower Hill Ins Preliminary Site Ltg Submittals Submitted By ARCH. SALES & ILLUMINATION	Catalog Number: VPR-EA30-VLED-II-100LED-525MA-WW-480-PTB27-RAL-*** *-T Note:	Type OL11

VIPER-EA30 SERIES - LED

LED/ELECTRICAL GUIDE

LED COUNT	SOURCE TYPE	SOURCE	INITIAL LUMENS - 4000K	INITIAL LUMENS - 3000K	INITIAL LUMENS - 5000K	L70 GREATER THAN (HR)	STARTING TEMP.	SYSTEM WATTS	VOLTS	MAX INPUT AMPS
48	LED	48 V LED® Optical Module - 350mA	4,812 – 5,401	4,571 – 5,130	5,052 – 5,671	60000+	-20°F	54	120 277 347	0.45 0.20 0.16
48	LED	48 V LED® Optical Module - 525mA	6,662 – 7,440	6,329 – 7,068	6,995 – 7,812	60,000+	-20°F	78	120 277 347	0.65 0.29 0.23
48	LED	48 V LED® Optical Module - 700mA	8,339 – 9,315	7,922 – 8,849	8,756 – 9,781	60,000+	-20°F	104	120 277 347	0.87 0.38 0.30
64	LED	64 V LED® Optical Module - 350mA	6,186 – 6,704	5,877 – 6,369	6,495 – 7,039	60,000+	-20°F	68	120 277 347	0.57 0.25 0.20
64	LED	64 V LED® Optical Module - 525mA	8,425 – 9,130	8,004 – 8,674	8,846 – 9,587	60,000+	-20°F	100	120 277 347	0.84 0.37 0.29
64	LED	64 V LED® Optical Module - 700mA	10,548 – 11,431	10,021 – 10,859	11,075 – 12,003	60,000+	-20°F	140	120 277 347	1.17 0.51 0.41
80	LED	80 V LED® Optical Module - 350mA	7,732 – 8,830	7,345 – 7,961	8,119 – 8,799	60000+	-20°F	87	120 277 347	0.73 0.35 0.26
80	LED	80 V LED® Optical Module - 525mA	10,531 – 11,413	10,004 – 10,842	11,058 – 11,984	60,000+	-20°F	130	120 277 347	1.09 0.47 0.38
100	LED	120V LED® Optical Module - 350mA	8,811– 9,550	8,370 – 9,073	9,252 – 10,028	60,000+	-20°F	109	120 277 347	0.91 0.40 0.32
100	LED	120V LED® Optical Module - 525mA	12,260 - 13,287	11,647 – 12,623	12,873 – 13,951	60,000+	-20°F	160	120 277 347	1.34 0.58 0.47

NOTES:

1. Max Input Amps is the highest of starting, operating, or open circuit currents
2. Lumen values for LED Modules vary according to the distribution type
3. System Watts includes the source watts and all driver components.
4. Fuse value should be sufficient to protect all wiring components. For electronic driver and LED component protection, use 10KV – 20KV surge suppressors.
5. L70(10K) – TM-21 6x rule applied

WARNING: All fixtures must be installed in accordance with local codes or the National Electrical Code. Failure to do so may result in serious personal injury.

660 West Avenue O, Palmdale, CA 93551
Phone (661) 233-2000 Fax (661) 233-2001
www.usaltg.com

	Project 23-51390-1 Date 4/5/2023 Tower Hill Ins Preliminary Site Ltg Submittals Submitted By ARCH. SALES & ILLUMINATION	Catalog Number: VPR-EA30-VLED-VSQ-100LED-525MA-WW-480-PTB27-RAL-****-T Note:	Type OL15

PROJECT NAME:

FIXTURE TYPE:

SOLID STATE AREA LIGHTING

VPR-EA30 SERIES-LED

S P E C I F I C A T I O N S



VPR-EA30

PATENT PENDING

HOUSING

Heavy spun aluminum housing with four (4) extruded curved aluminum arms welded to a central mounting hub. Mounting hub fits 2 7/8" ø x 3" tenon and is secured to a pole tenon by 8 stainless steel hex socket recessed cap screws. Optical compartment is accessed through the hinged top. Minimum wall thickness is .188". All exposed hardware is stainless steel. Internal protected hardware is electro-zinc plated.

VLED® OPTICAL MODULE

Low copper A356 alloy (<.2% copper) cast aluminum housing. Integrated clear tempered glass lens sealed with a continuous silicone gasket protects emitters (LED's) and emitter Reflector-Prism optics, and seals the module from water intrusion and environmental contaminants. Module is sealed to meet an IP67 rating. Each emitter is optically controlled by a Reflector-Prism injection molded from H12 acrylic (3 types per module; one from 0° - 50°; one from 50° - 65°; one from 65° - 72°). Each Reflector-Prism has indexing pins for aiming and is secured to an optical plate made of matte black anodized aluminum. The optical plate locates every Reflector-Prism over an emitter. Reflector-Prisms are secured to the optical plate with a UV curing adhesive. The Reflector-Prisms are arrayed to produce IES Type II, III, IV, and V-SQ distributions. The entire Optical Module is field rotatable in 90° increments. Both module and drivers are factory wired using water resistant, insulated cord. Lens, module and drivers are field replaceable.

LED DRIVER

Drivers are UL and cUL recognized mounted on a single plate and factory prewired with quick-disconnect plugs. Constant current driver is electronic and has a power factor of >0.90 and a minimum operating temperature of -40°F. Drivers accept an input of 120-277V, 50/60Hz or 347-480V, 50/60Hz. (0 - 10V dimmable driver is standard. Driver has a minimum of 3KV internal surge protection. Luminaire supplied with 20KV surge protector for field accessible installation.)

AMBER LED's

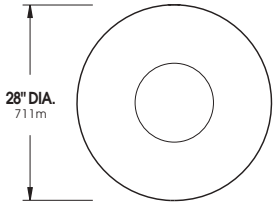
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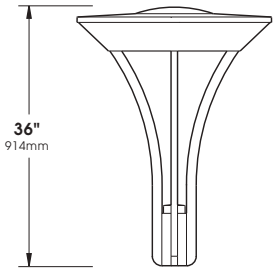
LED EMITTERS

High output LED's are utilized with drive currents ranging from 350mA to 1050mA. 70CRI Minimum. LED's are available in standard Neutral White (4000K), or optional Cool White (5000K) or Warm White (3000K). Consult Factory for other LED options.

FINISH

Electrostatically applied TGIC Polyester Powder Coat on substrate prepared with 20 PSI power wash at 140° F. Four step iron phosphate pretreatment for protection and paint adhesion. 400°F bake for maximum hardness and durability. Texture finish is standard.





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MADE IN THE USA

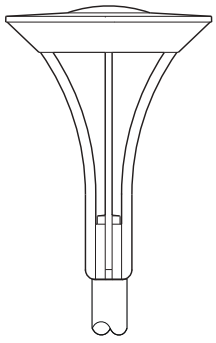
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	Project 23-51390-1 Date 4/5/2023 Tower Hill Ins Preliminary Site Ltg Submittals Submitted By ARCH. SALES & ILLUMINATION	Catalog Number: VPR-EA30-VLED-VSQ-100LED-525MA-WW-480-PTB27-RAL-****-T Note:	Type OL15

VPR-EA30 SERIES - LED

SPECIFICATIONS

MOUNTING STYLES

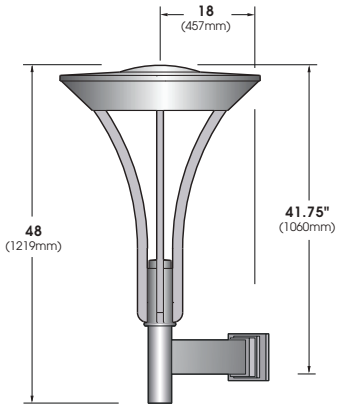


PTB

PTB27-TO FIT OVER 2 7/8"O.D. TENON.

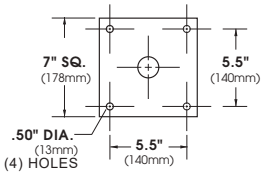
PTB23-TO FIT OVER 2 3/8" O.D. TENON.

WALL MOUNT

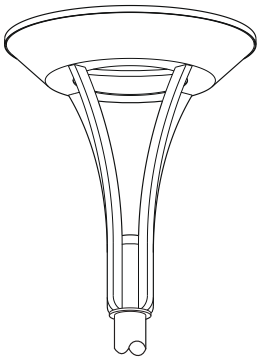


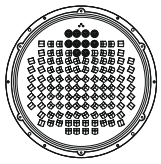
EXTRUDED ALUMINUM ARM AND CAST ALUMINUM WALL BRACKET ASSEMBLY PROVIDED WITH BUILT IN GASKETED WIRE ACCESS FOR FIXTURE/SUPPLY WIRE CONNECTION.

WALL PLATE



VLED® MODULES





100 LED Module

VPR-EA30 E.P.A.= 1.85
Available in:
100, 80 & 64
LED Module

Spec/Order Example: VPR-EA30/80LED/CW/240/PTB27/RAL-9003-S/EHS

SPEC / ORDERING INFORMATION

MODEL	OPTICS	LED MODE	MOUNTING	FINISH	OPTIONS

MODEL

☐ **VPR-EA30**

OPTICS

VLED® IES DISTRIBUTION TYPE

- ☐ TYPE II **VLED-II** . . . . .
- ☐ TYPE III **VLED-III** . . . . .
- ☐ TYPE IV **VLED-IV** . . . . . .
- ☐ TYPE VSQ **VLED-VSQ** . . .

LED MODE

No. LEDs

- ☐ **100LED**[1]
- ☐ **80LED**[1]
- ☐ **64LED**
- ☐ **48LED**

DRIVE CURRENT

- ☐ 350mA
- ☐ 525mA
- ☐ 700mA

COLOR

- ☐ **NW (4000K)*** *STANDARD
- ☐ **CW (5000K)**
- ☐ **WW (3000K)**

OTHER LED COLORS AVAILABLE CONSULT FACTORY

VOLTAGE

- ☐ 120
- ☐ 208
- ☐ 240
- ☐ 277
- ☐ 347
- ☐ 480

AMBER[2]

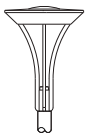
- ☐ PHOSPHOR CONVERTED AMBER **PCA**
- ☐ TRUE AMBER[3] **TRA**

NOTES:
1 - NOT AVAILABLE IN 700mA
2 - NARROW BAND AMBERS HAVE NO DEFINABLE CCT EQUIVALENT
3 - AVAILABLE IN 350mA & 525mA DRIVE CURRENTS ONLY

MOUNTING

ARM MOUNT

☐ 1 . . . . . ●



- ☐ **PTB23** (TO FIT 2 3/8" O.D.)
- ☐ **PTB27** (TO FIT 2 7/8" O.D.)

WALL MOUNT

☐ **WM** . . . . . ●

FINISH

STANDARD TEXTURED FINISH

- ☐ BLACK **RAL-9005-T**
- ☐ WHITE **RAL-9003-T**
- ☐ GREY **RAL-7004-T**
- ☐ DARK BRONZE **RAL-8019-T**
- ☐ GREEN **RAL-6005-T**

FOR SMOOTH FINISH REPLACE SUFFIX "T" WITH SUFFIX "S". (EXAMPLE: RAL-9500)

SEE USALTG.COM FOR ADDITIONAL COLORS

OPTIONS

- ☐ HOUSE SIDE SHIELDED REFLECTOR PRISMS . . **HS-VLED**
- ☐ PHOTO CELL + VOLTAGE (EXAMPLE: PC120V) . . **PC+V**
- ☐ TWIST LOCK RECEPTACLE ONLY . . . **TPR**
- ☐ 7-PIN TWIST LOCK RECEPTACLE ONLY . . **TPR7**
- ☐ SINGLE FUSE (120V., 277V) . . . . . **SF**
- ☐ DOUBLE FUSE (208V., 240V) . . . . . **DF**
- ☐ HIGH-LOW DIMMING FOR HARDWIRED SWITCHING OR NONINTEGRATED MOTION SENSOR . . . . . **HLSW**
- ☐ STEP DIM MOTION SENSOR (PROGRAMMED 50/100) **MS-F211**
- ☐ REMOTE MOTION SENSOR CONFIGURATOR **MS-FC10**

U.S. Architectural Lighting

660 West Avenue O, Palmdale, CA 93551
Phone (661) 233-2000 Fax (661) 233-2001
www.usaltg.com

U.S. ARCHITECTURAL LIGHTING

	Project 23-51390-1 Date 4/5/2023 Tower Hill Ins Preliminary Site Ltg Submittals Submitted By ARCH. SALES & ILLUMINATION	Catalog Number: VPR-EA30-VLED-VSQ-100LED-525MA-WW-480-PTB27-RAL-****-T Note:	Type OL15

VIPER-EA30 SERIES - LED

LED/ELECTRICAL GUIDE

LED COUNT	SOURCE TYPE	SOURCE	INITIAL LUMENS - 4000K	INITIAL LUMENS - 3000K	INITIAL LUMENS - 5000K	L70 GREATER THAN (HR)	STARTING TEMP.	SYSTEM WATTS	VOLTS	MAX INPUT AMPS
48	LED	48 V LED® Optical Module - 350mA	4,812 – 5,401	4,571 – 5,130	5,052 – 5,671	60000+	-20°F	54	120 277 347	0.45 0.20 0.16
48	LED	48 V LED® Optical Module - 525mA	6,662 – 7,440	6,329 – 7,068	6,995 – 7,812	60,000+	-20°F	78	120 277 347	0.65 0.29 0.23
48	LED	48 V LED® Optical Module - 700mA	8,339 – 9,315	7,922 – 8,849	8,756 – 9,781	60,000+	-20°F	104	120 277 347	0.87 0.38 0.30
64	LED	64 V LED® Optical Module - 350mA	6,186 – 6,704	5,877 – 6,369	6,495 – 7,039	60,000+	-20°F	68	120 277 347	0.57 0.25 0.20
64	LED	64 V LED® Optical Module - 525mA	8,425 – 9,130	8,004 – 8,674	8,846 – 9,587	60,000+	-20°F	100	120 277 347	0.84 0.37 0.29
64	LED	64 V LED® Optical Module - 700mA	10,548 – 11,431	10,021 – 10,859	11,075 – 12,003	60,000+	-20°F	140	120 277 347	1.17 0.51 0.41
80	LED	80 V LED® Optical Module - 350mA	7,732 – 8,830	7,345 – 7,961	8,119 – 8,799	60000+	-20°F	87	120 277 347	0.73 0.35 0.26
80	LED	80 V LED® Optical Module - 525mA	10,531 – 11,413	10,004 – 10,842	11,058 – 11,984	60,000+	-20°F	130	120 277 347	1.09 0.47 0.38
100	LED	120V LED® Optical Module - 350mA	8,811– 9,550	8,370 – 9,073	9,252 – 10,028	60,000+	-20°F	109	120 277 347	0.91 0.40 0.32
100	LED	120V LED® Optical Module - 525mA	12,260 - 13,287	11,647 – 12,623	12,873 – 13,951	60,000+	-20°F	160	120 277 347	1.34 0.58 0.47

NOTES:

1. Max Input Amps is the highest of starting, operating, or open circuit currents
2. Lumen values for LED Modules vary according to the distribution type
3. System Watts includes the source watts and all driver components.
4. Fuse value should be sufficient to protect all wiring components. For electronic driver and LED component protection, use 10KV – 20KV surge suppressors.
5. L70(10K) – TM-21 6x rule applied

WARNING: All fixtures must be installed in accordance with local codes or the National Electrical Code. Failure to do so may result in serious personal injury.

660 West Avenue O, Palmdale, CA 93551
Phone (661) 233-2000 Fax (661) 233-2001
www.usaltg.com

	Project 23-51390-1 Date 4/5/2023 Tower Hill Ins Preliminary Site Ltg Submittals Submitted By ARCH. SALES & ILLUMINATION	Catalog Number: RNTA-205-188-PT27-(5)STD FINISH Note:	Type POLE

ROUND STRAIGHT ALUMINUM POLE

RNTA 5"

PROJECT NAME:

PROJECT TYPE:

FEATURES

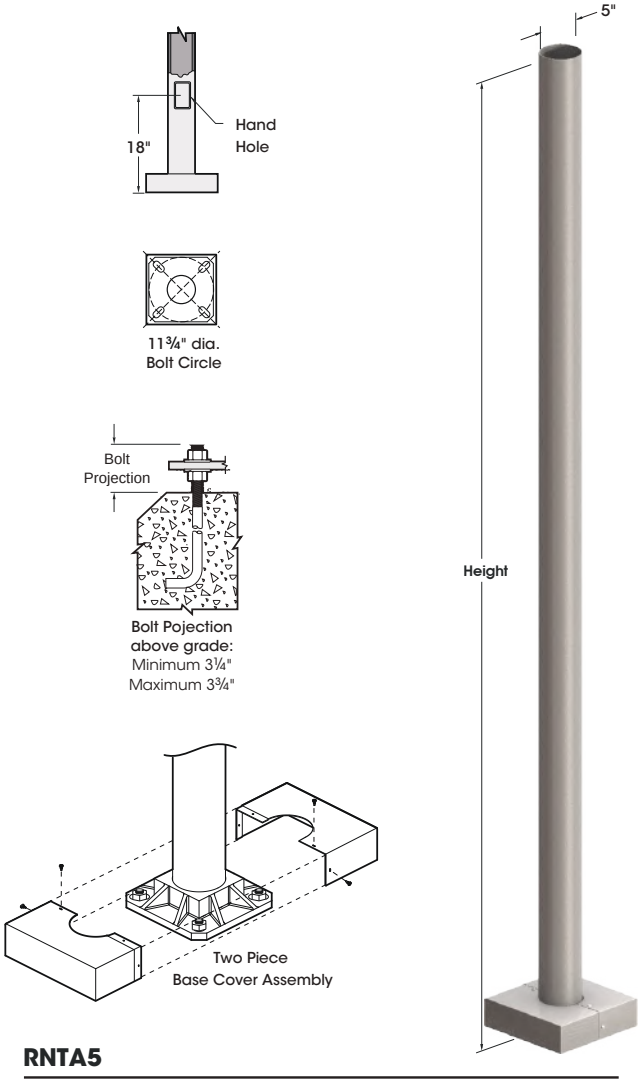
Shaft
5" diameter, extruded from 6063 alloy aluminum tubing. Heat treated to produce a T6 temper. Shaft includes a hand hole furnished with cover. Shaft is furnished with ground lugs located on cast aluminum base plate.

Base Plate
Cast aluminum constructed of A-356 aluminum alloy heat treated to produce a T6 temper. Structurally engineered base includes eight heavy wall reinforcing vertical gussets. Base telescopes and is circumferentially welded to shaft at both the outside top and inside bottom of the base.

Anchorage
(4) anchor bolts fabricated from hot rolled steel bar. Minimum yield strength of 50,000 P.S.I. bolts have "L" bend on one end and are threaded on the other. Bolts are fully galvanized and are furnished with two nuts and two washers.

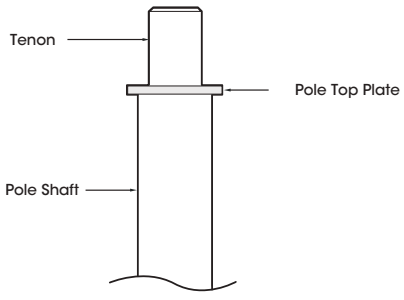
Base Cover
Fabricated from heavy wall aluminum construction. Two piece cover conceals base.

Finish
Electrostatically applied TGIC Polyester Powder Coat on substrate prepared with 20 PSI power wash at 140°F. Four step media blast and iron phosphate pretreatment for protection and paint adhesion. 400°F bake for maximum hardness and durability.

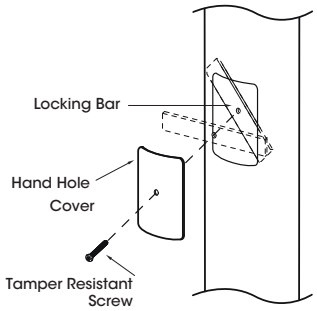


RNTA5

PT23 - 2⅜"X4" Tenon **PT27** - 2⅞"X4" Tenon



Hand hole cover with tamper resistant bolt assembly



	Project 23-51390-1 Date 4/5/2023 Tower Hill Ins Preliminary Site Ltg Submittals Submitted By ARCH. SALES & ILLUMINATION	Catalog Number: RNTA-205-188-PT27-(5)STD FINISH Note:	Type POLE

○ RNTA 5"

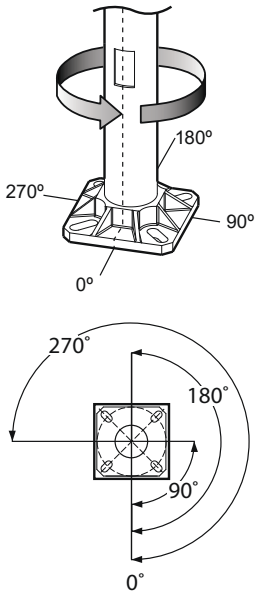
SPECIFICATIONS

Engineering Data
Maximum EPA - Square Feet

Model Number	Max. Fixture Weight	100 MPH	90 MPH	80 MPH	70 MPH
RNTA 105 - 125	175	8.7	10.8	13.9	18.8
RNTA 125 - 125	175	6.8	8.3	10.6	14.6
RNTA 145 - 125	175	4.4	5.5	7.1	9.9
RNTA 145 - 188	250	8.3	10.3	13.4	18.1
RNTA 165 - 125	100	3.2	4.0	5.2	7.3
RNTA 165 - 188	200	5.4	6.6	8.5	11.7
RNTA 185 - 125	100	2.2	2.9	3.8	5.6
RNTA 185 - 188	200	4.1	5.2	6.7	9.5
RNTA 205 - 188	200	3.1	4.0	5.2	7.6

All above design calculations are based on sustained wind forces plus additional 1.3 wind gust
(Example: Pole rated at 80 MPH withstands 104 MPH gusts)

Drilled Side Mount
Specify drilling location using codes below.



ORDERING INFORMATION

Spec/Order Example: RNTA145-125/1/RAL-7004-S/RBC

Pole Model Number - RNTA 5" | Mounting | Finish | Options

Pole Model Number - RNTA 5"

	Pole Height	Wall Thickness	Bolt Circle	Anchorage
☐ **RNTA 105 - 125**	10'	.125	11¾"	¾"X24"X3"
☐ **RNTA 125 - 125**	12'	.125	11¾"	¾"X24"X3"
☐ **RNTA 145 - 125**	14'	.125	11¾"	¾"X24"X3"
☐ **RNTA 145 - 188**	14'	.188	11¾"	¾"X24"X3"
☐ **RNTA 165 - 125**	16'	.125	11¾"	¾"X24"X3"
☐ **RNTA 165 - 188**	16'	.188	11¾"	¾"X24"X3"
☐ **RNTA 185 - 125**	18'	.125	11¾"	¾"X24"X3"
☐ **RNTA 185 - 188**	18'	.188	11¾"	¾"X24"X3"
☐ **RNTA 205 - 188**	20'	.188	11¾"	¾"X24"X3"

☐ Specify other heights _____

Mounting

Arm Mount

☐ **PT23**
2³/₈" X 4" Tenon

☐ **PT27**
2⁷/₈" X 4" Tenon

☐ Other Tenon Mt ____

Drill Mount

☐ 1 .....

☐ **2-180** .....

☐ **2-90** .....

☐ **3-90** .....

☐ **4-90** .....

☐ **3-120** .....

3-120 requires PT27 and T3120 Adapter

2-90, 3-90, 4-90 requires PT27 and T490 Adapter

Finish

Standard Textured Finish

☐ Black
RAL-9005-T

☐ White
RAL-9003-T

☐ Grey
RAL-7004-T

☐ Dark Bronze
RAL-8019-T

☐ Green
RAL-6005-T

For Smooth Finish replace suffix "T" with suffix "S"
(Example: RAL-9005-S)

See USALTG.COM for additional colors

Options

Receptacle

☐ Duplex Receptacle
DUP

☐ GFI Receptacle
GFI

☐ 3 Way Adapter
T3120

☐ 4 Way Adapter
T490

☐ Round Base Cover
RBC

Coupling

☐ ½" Coupling
CPLN1/2

☐ ¾" Coupling
CPLN3/4

☐ 2" Coupling
CPLN2

Specify Coupling location

Refer to the Accessories Section for other options

This is the Sun Screen we intend to use.

This is the Handrail we will be using

Sun Control Systems

- **Reduces Direct Sunlight While Maintaining View**
- **Many Outrigger and Blade Options Available**
- **Fascia Options Allow for Designs That Suit Your Building's Needs**

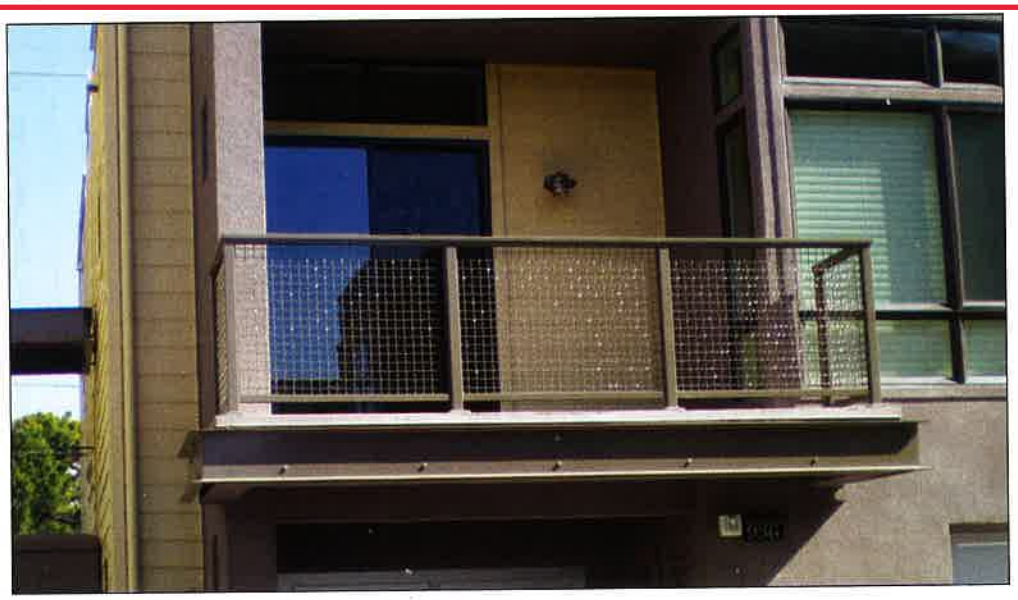
CRL Sun Control Systems project out from the building's face to provide a shading effect from above the windows without blocking the view. Our many styles of outriggers, blades, and fascia options will cover most building designs.



Hand Railing Infills

- **Prevent Objects From Passing or Falling Through Openings**
- **Improves the Design and Aesthetic Look**
- **A Large Panel Selection to Meet Most Needs**

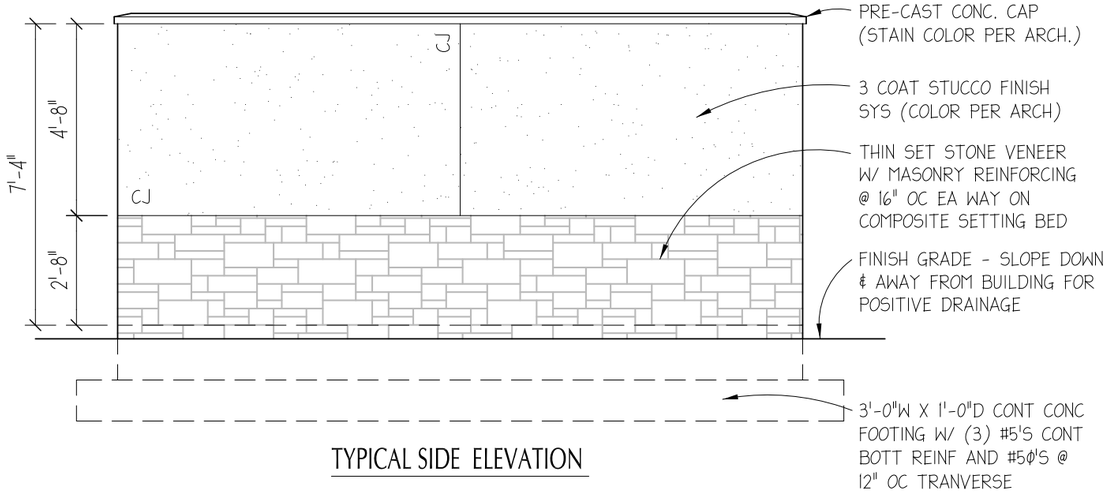
CRL Wire Mesh, Expanded Metal, and Perforated Panel Infills give you lots of options when designing a railing system. The small openings in the panels provide for additional safety by not allowing small objects to fall through, while at the same time allowing for a clear view.



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SKETCH 1
DUMPSTER GENERATOR ENCLOSURE DETAIL



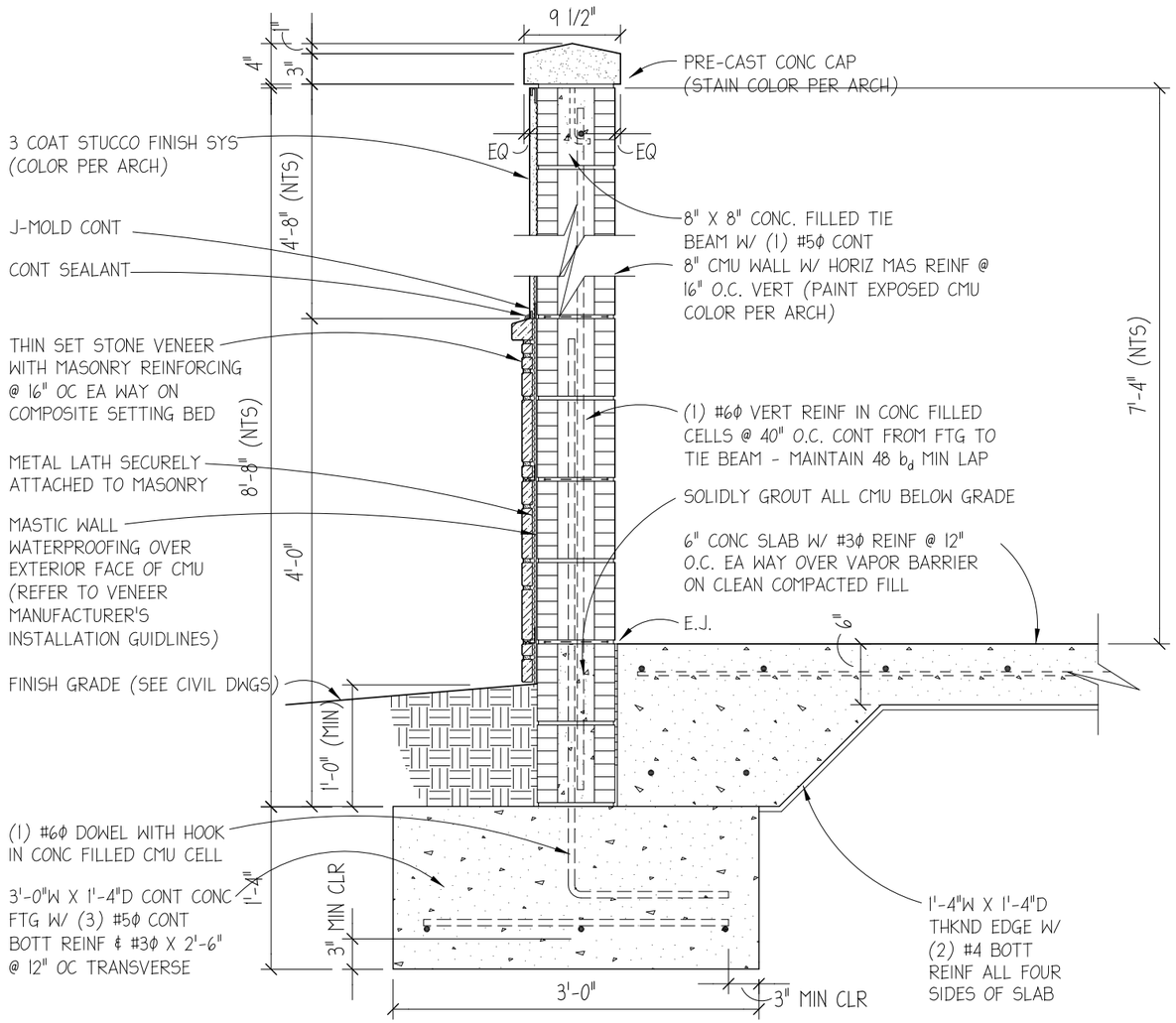
TYPICAL SIDE ELEVATION

SCREEN WALL ELEVATIONS

1/4" = 1'-0"

(NORTH SERVICE AREA)

2
A.15.1



DUMPSTER PAD SCREEN WALL

3/4" = 1'-0"

3
A.15.1

should separate the land and house from development for inclusion to and/or access from an adjacent property.

Also, prior to the issuance of the Certificate of Occupancy for the 151st home, the developer should have the infrastructure in place for the planned commercial properties.

Newberry is looking at its inventory of unpaved, rural roads. Recently, there has been an up-tick in conversation about paving a 2.6-mile segment of Southwest 30th Avenue between U.S. Highway 27/41 and Southwest 202nd Street, although paving this segment of Southwest 30th

work to survey the road and prepare deeds to convey the property from the adjacent landowners to the City. The work totals $125,600, or 2.8 percent of the estimated total construction cost of $5.3 million, which includes planning, survey, land acquisition, design, permitting, stormwater and


Music - Light Refreshments - Jewelry Sale
Rocks & Minerals - Gifts - Labyrinth
1-5 p.m., Saturday, May 13, 2023
High Springs Emporium
Rock Shop
19765 NW U.S. Highway 441
High Springs, Florida 32643

Alachua man killed in motorcycle crash

By C.M. WALKER
Today Reporter

ALACHUA – An 18-year-old Alachua man was killed on Sunday, April 23, in a collision between a motorcycle and a pickup truck crash. The 8:36 p.m. crash occurred at the intersection of West State Road 235 and County Road 237.

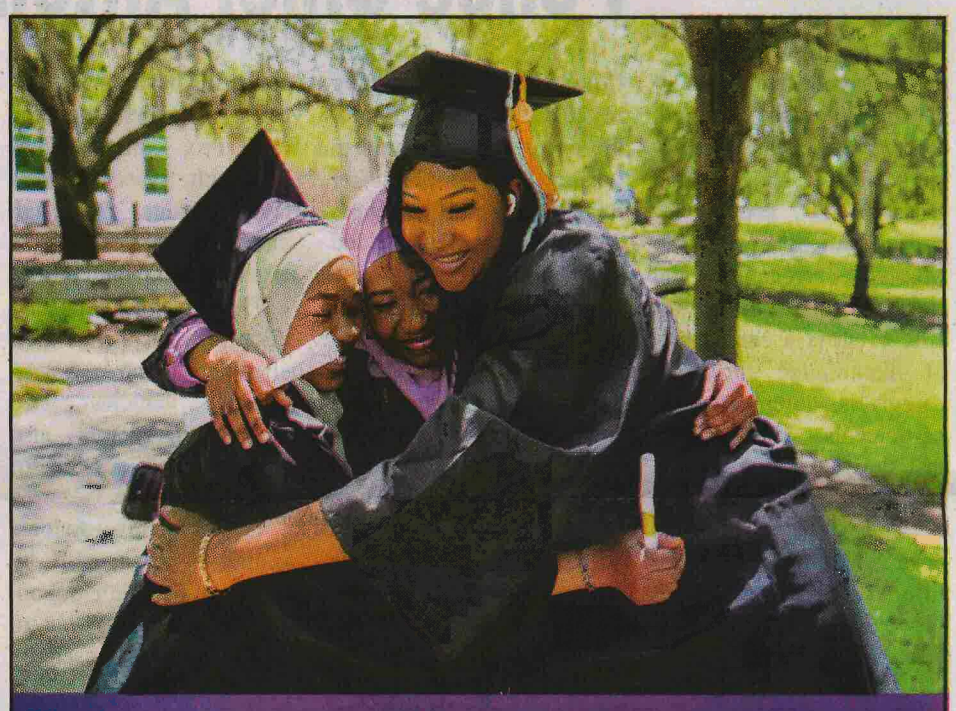
According to the Florida Highway Patrol (FHP), the pickup truck driven by a 45-year-old man from Lake Butler was pulling a trailer as he traveled north on CR 237. The truck collided with the motorcycle, which was traveling west on West SR 235.

The motorcycle rider, who was wearing a helmet at the time of the incident, sustained fatal injuries. According to FHP, the driver of the pickup truck was wearing a seatbelt at the time of the crash and sustained minor injuries.

The crash is currently under investigation by FHP.

# # #

Email cwalker@alachuatoday.com

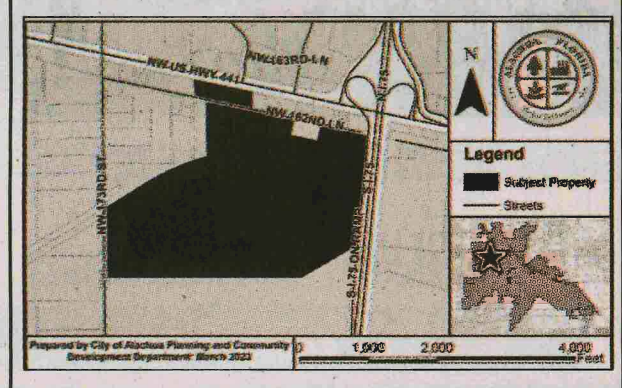

Congratulations
Spring Class of 2023!
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SF
SANTA FE COLLEGE

ALACHUA COUNTY TODAY is your ONLY weekly source for local news

City of ALACHUA

NOTICE OF PUBLIC HEARING BEFORE THE PLANNING AND ZONING BOARD OF THE CITY OF ALACHUA, FLORIDA

Notice is hereby given that the Planning and Zoning Board of the City of Alachua will hold a public hearing on May 16, 2023 at 6:00 p.m. The hearing will be held in the James A. Lewis Commission Chambers in City Hall, located at 15100 NW 142nd Terrace, Alachua, Florida, to consider the following: A request by Walker Owen, P.E., of Causseaux, Hewett, & Walpole, Inc., applicant and agent for Sharleen O Cavaceppi Trustee, Sarcav, LLC, and Tomoka Hill Farms, Inc., property owners, for consideration of a Site Plan proposing the construction of a ±71,533 square foot office building and associated site improvements as well as the construction of an entrance road that is approximately 2,000 linear feet in length from US 441 to the building site on a ±37.07 acre subject property; Tax Parcel Numbers 03053-000-000, 03054-001-000, 03054-001-002, and 03873-001-000; FLUM: Commercial and Community Commercial ; Zoning: Commercial Intensive (CI) and Community Commercial (CC).



At the public hearing, all interested parties may appear and be heard with respect to the application. Copies of the application are available for public inspection at the Planning and Community Development Department, 15100 NW 142nd Terrace, Alachua, Florida, on any regular business day between the hours of 7:30 a.m. to 6:00 p.m. Written comments on the application may be sent to the following address: City of Alachua, Planning and Community Development, P.O. Box 9, Alachua, FL 32616. Notice is given pursuant to Section 286.0105, Florida Statutes, that, in order to appeal any decision made at the public hearing, you will need a record of the proceedings, and that, for such purpose, you may need to ensure that a verbatim record of the proceedings is made, which includes the testimony and evidence upon which the appeal is to be based. In accordance with the Americans with Disabilities Act, any persons with a disability requiring reasonable accommodation in order to participate in this meeting should call the City Clerk at (386) 418-6100 x 1501 at least 48 hours prior to the public hearing.

(Published: Alachua County Today - May 4, 2023)

HORIZON REALTY of ALACHUA, INC.
info@HorizonRealtyFL.com
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SPANISH GATES! Sellers are willing to negotiate a credit to buy down the interest rate for the buyer. Prepare to be impressed by this custom-built home in High Springs! With 4 bedrooms plus a comfortable home office and the backyard totally fenced there is plenty of room to stretch out and take care of the garden that the sellers have started for you. You will appreciate the well-appointed kitchen with a spacious pantry overlooking the open concept dining area and living room. The kitchen features solid wood cabinets, Granite countertops, and Stainless-Steel Appliances! The spacious utility room even has a wash sink! The private owner's suite features an attached bath and split walk-in closet to fulfill any and all of your organizational needs. Luxury vinyl plank flooring and ceramic tile throughout the home makes cleaning less of a hassle. Walk through an entry foyer with built-in seating and coat racks that leads to the beautiful Great room. High ceilings throughout, custom light fixtures and fans PLUS a covered back porch, large privacy fenced backyard that even has room for a garden! What more could you ask for? Location, that's what! Located just minutes from everyday shopping, local dining, and four of north central Florida's most beloved natural springs! Schedule a showing before its too late to make this your next dream home! Sellers also have a survey and termite contract!
MLS GC509375

YOUR HOME TOWN REALTOR WITH GLOBAL CONNECTIONS

RESIDENTIAL

MUST SEE this absolutely gorgeous property to appreciate the almost 11 beautiful acres in historic High Springs. If you're looking for privacy and seclusion, this is the perfect location. Private driveway off county-maintained road that opens up to property. Two mobile homes on the property. First (1975) is used as living quarters with front and back decks to enjoy your morning coffee or an evening libation while watching the deer and turkey wander about. The second (1993) is used for storage. Well and two septic tanks. Multitude of trees and wildlife throughout the entire property. This home works for hunting lodge, building your dream home, or barn-dominium as it has plenty of cleared open area to build with woods around the property. It's worth the short drive to check out the scenery! MLS GC500812

You have found your new home in High Springs! This house is tucked into a neighborhood on a corner lot only minutes from Downtown High Springs and 10 minutes to Ginnie Springs! Corner lot home with driveways on the front and side of the home for plenty of parking. Enjoy some coffee on the front porch with the beautiful views of the tree farm across the street. This 3/2 home has plenty of space! In addition to the living room and cozy sitting area by the fireplace, the home includes a large closed in porch AND attached workshop room. With these cold days already here, the fireplace will keep the whole house warm without having to turn on the heater! The closed in porch would be great for entertaining with large windows overlooking the garden in the backyard. Step outside to the already established, thriving garden with irrigation system and a pergola. Garden has fruits, vegetables, and flowers from figs, olives, mulberry, lemon, pears, peaches, blueberries, blackberries, turmeric, ginger, moringa, sweet potatoes, kumquats, jasmine, and mint! Wow, talk about living off the land! Homesteaders dream with a chicken coop included! Home features a metal roof and solid wood cabinets! Appliances include a second fridge in workshop and a gas stove with an extra-large, FULL tank. Updates include flooring, new drain field, gutters, and electric. Owner has been making those small repairs including a new front door to truly make this home move-in ready! Come see it today! MLS GC509088

VACANT LAND

A convenient drive down Hwy 24 will lead you to the well-maintained private roads only minutes to the many springs and rivers in this area. A few minutes' drive will take you to your very own private 4.79 acre hideaway! Drive through your gated entrance on the lovely rock road. Be sure to stop and envision your new home on the other side of the circle driveway! Low Levy County taxes makes the steady breeze blowing through the towering pines sound even sweeter! Plus there are no rear neighbors to block the view of the gorgeous sunsets over the gently rolling hills in the backyard. A well is already in place and power is only a pole or two away plus there is a RV septic in place! A privacy fence stall around the well offers a place to shower under the stars on a hot summer night. This is a great property to build your next home, camp out, enjoy nature and build memories while building your dream home! The south and west property lines are fenced and the north and east property lines are cleared of all trees and stumps - ready to be fenced to fully enclose the lot if you want to! All this located on a dead-end road which brings low traffic - plus an easy drive to UF, Gainesville, shopping or wherever you want to go! the seller got this property ready for his plans, but situations changed so now it's your chance to enjoy all the extras! MLS #: GC504548

Two acres in the countryside of Williston! About 10 minutes from Goathe State Forest and less than 10 minutes to town! Great midpoint between Ocala and Gainesville. Property is less than 500 feet from paved road NE 20th Street. Highest elevation of property is located right in the center allowing for prime location to build your home! No HOA or deed restrictions! Located in Levy County allowing you to save on taxes! MLS GC507978

THINKING ABOUT A CAREER IN REAL ESTATE? CALL US TODAY!
386-462-4020 OR 1-866-455-2092

AFFIDAVIT FOR POSTED LAND USE SIGN

I April Dotson, POSTED THE LAND USE
(name)
SIGN ON 5/2/2023 FOR THE Tower Hill Headquarters Site Plan
(date) (state type of action and project name)
LAND USE ACTION.

AS PER ARTICLE 2.2.9 D OF THE LAND DEVELOPMENT REGULATIONS.

THIS WILL BE INCLUDED IN THE STAFF REPORT.

(signature)

8 (eight)
(number of signs)

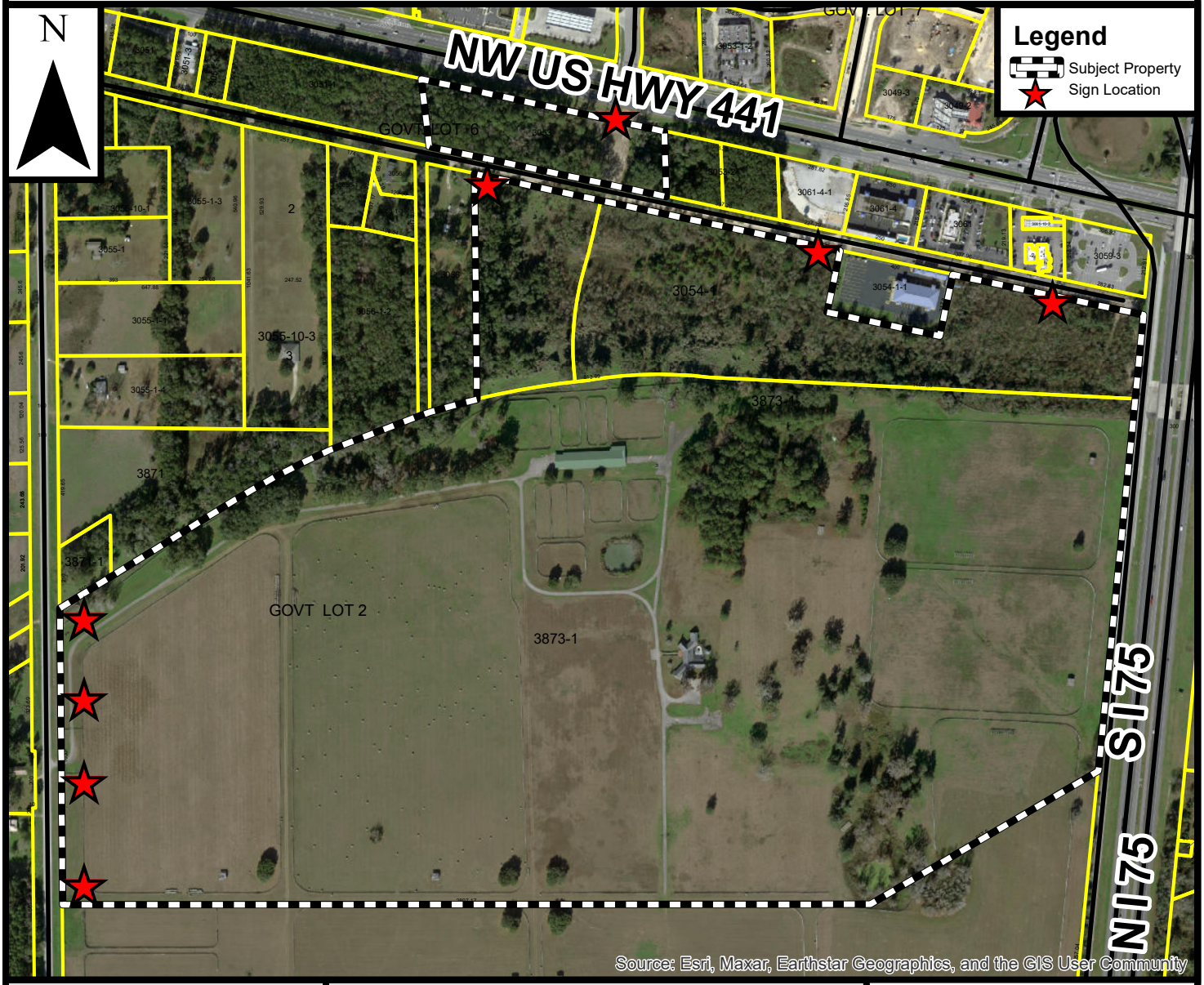
IMPORTANT INFORMATION REGARDING POSTED NOTICE SIGNS

Pursuant to Section 2.2.9(D) of the City's Land Development Regulations, posted notice signs must be placed on the land that is the subject of the application, along each street which is adjacent to or runs through the land in a manner that makes them clearly visible. Signs shall be posted at intervals of not more than 400 feet when the land subject to the application has less than 1,500 feet of road frontage. When the land subject to the application has 1,500 feet or more of road frontage, signs shall be posted at intervals of not more than 1,320 feet.

Signs shall be inspected by the City subsequent to their posting. The applicant shall be responsible for ensuring that the posted notice is maintained on the land subject to the application until the completion of the final public hearing on the application.

Signs must be removed by the applicant and returned to the City within ten days after the final decision on the application.

Tower Hill Headquarters
Site Plan



Prepared by the City of Alachua
Planning & Community Development Department

Prepared March 2023

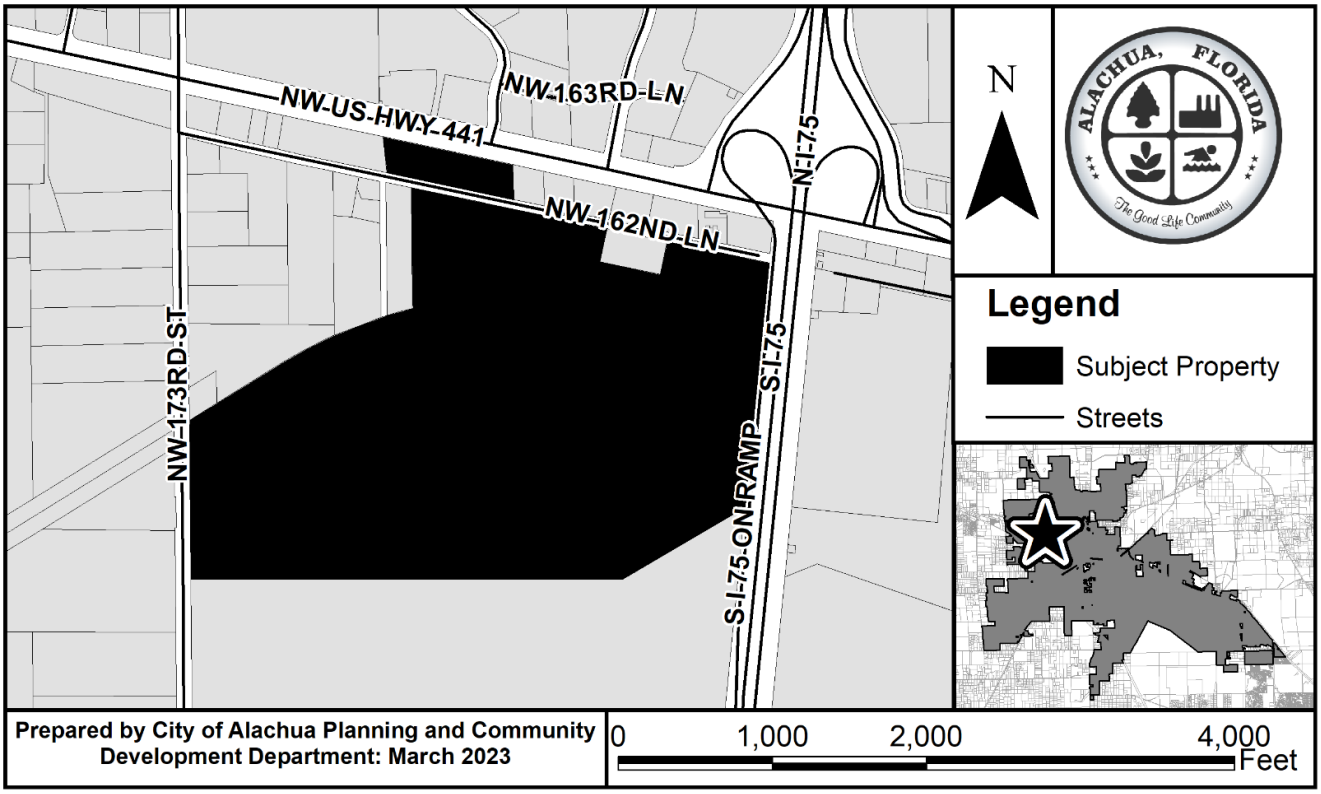
DISCLAIMER: Data is provided "as is" without warranty of any representation of accuracy, timeliness, or completeness. The burden of determining accuracy, timeliness, or completeness for use rests solely on the requestor. The City makes no warranties, expressed or implied, as to the use of the data. The requestor acknowledges and accepts the limitations of the data, including the fact that the data is dynamic and in a constant state of maintenance, correction, and update.

0 200 400 800 Feet

Mailed 5/2/2023

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P.O. Box 9 ♦ Alachua, Florida 32616-0009
Phone: (386) 418-6121 ♦ planning@cityofalachua.com

03042-052-005
M3 ALACHUA LLC
1276 MINNESOTA AVE
WINTER PARK, FL 32789

03042-052-006
M3 ALACHUA LLC
1276 MINNESOTA AVE
WINTER PARK, FL 32789

03051-001-000
SARCAV LLC
8303 AUTUMNWIND DR
JACKSONVILLE, FL 32218

03052-000-000
SCHOOL BOARD OF ALACHUA COUNTY
620 E UNIV AVE SANTA FE HIGH SCHOOL
GAINESVILLE, FL 32601

03053-000-000
CAVACEPPI SHARLEEN O TRUSTEE
PO BOX1325
ALACHUA, FL 32616

03053-001-001
ALACHUA GATEWAY CENTER SURFACEW
PO BOX969
ALACHUA, FL 32616

03053-001-002
TALAL PROPERTIES LTD & TAREK PROPERTIES LTD
1326 E LUMSDEN RD
BRANDON, FL 33511

03053-001-003
RACETRAC PETROLEUM INC
PO BOX2437
SMYRNA, GA 30081

03053-001-004
PUBLIX SUPER MARKETS INC
PO BOX32018
LAKELAND, FL 33802

03053-001-006
VYSTAR CREDIT UNION
PO BOX45085
JACKSONVILLE, FL 32232

03053-002-000
SARCAV LLC
C/O SILVIO CAVACEPPI
8303 AUTUMNWIND DR
JACKSONVILLE, FL 32218

03053-002-001
CATA LIGHTS CORP
630 VASSAR ST #2506
ORLANDO, FL 32804

03054-000-000
JP & KP LLC
11149 CONISTON WAY
WINDERMERE, FL 34786

03054-001-000
SARCAV LLC
C/O SILVIO CAVACEPPI
8303 AUTUMNWIND DR
JACKSONVILLE, FL 32218

03054-001-001
DWARKADHISH INVESTMENTS INC
1800 S ATLANTIC AVE
DAYTONA BEACH, FL 32118

03054-001-002
TOMOKA HILLS FARMS INC
1301 DIXIANA DOMINO RD
LEXINGTON, KY 40511

03055-001-004
ACKLEY ROBERT L & MARY J
15817 NW 173RD ST
ALACHUA, FL 32615

03055-010-003
TOMOKA HILLS FARMS INC
1301 DIXIANA DOMINO RD
LEXINGTON, KY 40511

03056-000-000
CAMPBELL MENZIE G
16903 NW 162ND LN
ALACHUA, FL 32615

03056-001-000
BRADLEY & WILLIAMS
16919 NW 162ND LN
ALACHUA, FL 32615

03056-001-001
CAMPBELL MENZIE G
16903 NW 162ND LN
ALACHUA, FL 32615

03056-001-002
LAMNECK EUGENE S JR & PEGGY E
2813 PLEASANT VALLEY RD
ROME, GA 30161

03058-000-000
GOOLSBY JEROME S & LYDIA
16807 NW 162ND LN
ALACHUA, FL 32615

03059-001-000
MCDONALD'S CORP (009/0551)
C/O JUAN PRADO
6625 VAN DYKE RD
LUTZ, FL 33558

03059-003-000
FDOT
% RIGHT OF WAY DEPT
MAIL STATION 2020 1109 S MARION AVE
LAKE CITY, FL 32025

03061-000-000
CHASING CHICKEN 2 INC
501 E TENNESSEE ST A
TALLAHASSEE, FL 32308

03061-004-000
DWARKADHISH INVESTMENTS INC
1800 S ATLANTIC AVE
DAYTONA BEACH, FL 32118

03061-004-001
IMPERIAL AIRPORT
489 CROCKER SPERRY DR
MONTECITO, CA 93108

03061-010-001
HOOVER RESTAURANTS LLC
4030 JOHNS CREEK PARKWAY
SUWANEE, GA 30024

03061-010-002
LE STORE LLC
22211 W NEWBERRY RD
NEWBERRY, FL 32669

03066-006-000
MOHAN-LERRA FAMILY PARTNERSHIP
16715 NW 129TH TER
ALACHUA, FL 32615

03066-007-000
ALL AMERICAN OIL LLC
380 COMMERCE PARKWAY
ROCKLEDGE, FL 32955

03066-008-002
JP & KP LLC
11149 CONISTON WAY
WINDERMERE, FL 34786

03863-000-000
ALACHUA HOLDINGS LTD
PO BOX 1990
ALACHUA, FL 32616

03863-100-000
MALBEC II LLC
100 S BISCAYNE BLVD SUITE 900
MIAMI, FL 33131

03869-000-000
FIRST STREET GROUP L C
PO BOX 1990
ALACHUA, FL 32616

03869-001-000
TLC PROPERTIES INC
2065 NW 57TH ST
OCALA, FL 34475

03869-002-000
HARKINS JAMES E JR & RENEE
PO BOX 6307
MARIANNA, FL 32447

03869-013-000
FIRST STREET GROUP LC
PO BOX 1990
ALACHUA, FL 32616

03870-000-000
CITY OF ALACHUA
PO BOX 9
ALACHUA, FL 32616

03871-000-000
TOMOKA HILLS FARMS INC
1301 DIXIANA DOMINO RD
LEXINGTON, KY 40511

03871-001-000
THOMAS & THOMAS & THOMAS HEIRS
312 MCBRIEN RD APT 423
CHATTANOOGA, TN 37411

03872-000-000
SHIRES CYNTHIA H
PO BOX 1259
ALACHUA, FL 32616

03873-000-000
TOMOKA HILLS FARMS INC
1301 DIXIANA DOMINO RD
LEXINGTON, KY 40511

03873-001-000
TOMOKA HILLS FARMS INC
1301 DIXIANA DOMINO RD
LEXINGTON, KY 40511

03874-000-000
VICKORY WILLIAM A & SUSAN S
15404 NW 173RD ST
ALACHUA, FL 32615

03874-001-000
VICKORY WILLIAM HENRY LIFE ESTATE
15310 NW 173RD ST
ALACHUA, FL 32615

03874-002-000
BURGESS & BURGESS
15008 NW 173RD ST
ALACHUA, FL 32615

03874-002-002
BURGESS & BURGESS
15008 NW 173RD ST
ALACHUA, FL 32615

03875-050-001
ALACHUA COUNTY
12 SE 1ST ST
GAINESVILLE, FL 32601

03876-000-000
DELOACH VIRGIL C & HOLLY H
PO BOX 532
FT WHITE, FL 32038

03876-001-000
MALLARD MITCHELL E & ESTHER R
14614 NW 173RD ST
ALACHUA, FL 32615

03876-002-000
MAKENNA PARKER HOMES LLC
2714 SW 130TH TER
ARCHER, FL 32618

03876-005-000
ALSPAUGH & BROWN TRUSTEE & DIXON &
% HIMMERLRICH AND COMPANY
898 SW 21ST ST
BOCA RATON, FL 33486

03876-100-000
ALACHUA COUNTY
12 SE 1ST ST
GAINESVILLE, FL 32601

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410 Turkey Creek
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23 Turkey Creek
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