



Meeting Agenda

Planning and Zoning / Local Planning Agency

Wednesday, September 2, 2020

6:00 PM

Cocoa City Council Chambers

I. CALL TO ORDER

ROLL CALL

PLEDGE OF ALLEGIANCE

II. APPROVAL OF AGENDA AND MINUTES:

AGENDA:

[20-578](#)

Planning & Zoning Board / Local Planning Agency approval of the Agenda for the Special Meeting of September 2, 2020, as written or with amendments.

MINUTES:

Minutes for the meeting of August 5, 2020 will be provided at the start of the meeting.

III: OLD BUSINESS:

IV: NEW BUSINESS:

[20-576](#)

Approval of a LARGE-SCALE SITE PLAN consistent with Appendix A, Zoning, Article XIII, Section 1, to construct a total of 268 apartment units in fourteen (14) apartment buildings, along with a clubhouse with pool, playground, dog park, carwash and maintenance building with conditions.

Attachments:

[Exhibit A - Cocoa Grand - Site Plan.pdf](#)

[Exhibit B - Cocoa Grand - Lighting Plan.pdf](#)

[Exhibit C - Cocoa Grand - Location Map.pdf](#)

[Exhibit D - Cocoa Grand - Elevations.pdf](#)

[Legal Ad Proof \(PZ and CC\).pdf](#)

[20-577](#)

Approval of a Final pud / PReLIMINARY SUBDIVISION / LARGE SCALE SITE PLAN consistent with Chapter 18 Subdivisions and Appendix A Zoning of the City Code. The property owner desires to develop the existing vacant site as a single-family subdivision project containing 155 residential lots.

Attachments:

[Exhibit A - Civil Plans.pdf](#)

[Exhibit B - Preliminary Plat.pdf](#)

[Exhibit C - Location Map.pdf](#)

[Exhibit D - Proposed Amenity Schedule.pdf](#)

[Exhibit E - Drainage Analysis.pdf](#)

[Legal Ad Proof \(PZ and CC\).pdf](#)

V. UPDATES AND STAFF REPORTS:

Tree Board Update

Open Discussion by Board members

VI. NEXT MEETING DATE:

The next regularly scheduled meeting of the Planning & Zoning Board will be on Wednesday, October 7, 2020 at 6:00 PM at the Cocoa City Hall, 65 Stone Street, Cocoa, Florida.

VII. ADJOURNMENT

NOTICE TO THE PUBLIC:

Public Participation and Special COVID-19 Information:

Members of the public may view the meeting agenda, ordinances, project applications, supporting documents, and staff reports on the City's website at the following link prior to attending or commenting:

- City of Cocoa meeting calendar at <https://cocoa.legistar.com/Calendar.aspx>

These documents and information pertaining to the above may also be inspected at the Community Services Department, between 9:00 a.m. and 5:00 p.m., Monday through Friday, or by phoning (321) 433-8535.

Members of the public have several options to participate in the public hearings.

(1) In-person attendance. Due to the COVID-19 Emergency and the need to maintain social distancing, meetings in the City Hall Council Chambers are limited to eighteen (18) members in the audience at any one time. Members of the public may utilize the contact information provided below to contact the City Clerk and determine if restrictions on physical attendance at the City Council Chambers have been lifted prior to the date of the public hearings.

(2) Commenting in advance of the meeting. Interested persons are encouraged to provide written comments in advance of the hearings by emailing meetings@cocoafl.org or mailing to the following address:

City of Cocoa

Attn: Dodie Selig, Planning and Zoning Manager

65 Stone Street

Cocoa, FL 32922

Mailed comments must be received prior to 4:00 p.m. on the date of the hearing to be read into the record.

(3) Viewing and Commenting In Real Time. Interested persons are encouraged to view and listen to the hearings live by accessing the meetings at the following internet addresses:

- City of Cocoa meeting calendar at <https://cocoa.legistar.com/Calendar.aspx>
- City of Cocoa YouTube link at <https://www.youtube.com/channel/UCbWJK7XQyPVBmp15Fwoa4jA>

Interested persons may submit their written comments or questions during the hearings by email at: meetings@cocoafl.org. Interested persons who wish to provide public input during the meeting will also be able to do so by calling 321-433-8446 or by accessing the e-comment link for this meeting using the Legistar calendar link above. For more information about this CMT meeting or to provide information to be considered at this meeting, contact the City Clerk as provided below.

The City of Cocoa will be utilizing Communications Media Technology (CMT) for upcoming P&Z/LPA and City Council meetings pursuant to the Governor's Executive Order Number 20-69 and Florida Statutes, Section 120.54(5)(b)(2). Specifically, one or more members of the P&Z/LPA and City Council may attend and participate by speakerphone.

Special Information for Quasi-Judicial Hearings:

All items A through C are quasi-judicial matters. Any person that (1) can demonstrate that they may suffer special damages different in kind and degree from that of the general public at large; and (2) wishes to present factual or expert witnesses and/or evidence at the quasi-judicial hearing is highly encouraged to immediately contact Dodie Selig, Planning and Zoning Manager, at (321) 433-8510 or dselig@cocoafl.org, to make proper arrangements for presentation of witnesses and/or evidence. All witnesses must be identified and all evidentiary documents and exhibits that are intended to be distributed to the P&Z/LPA and City Council must be submitted to Ms. Selig via email or mail at least five (5) days prior to the hearing.

General Notice Information:

This is a public meeting. Interested parties are hereby advised that they may appear at said meeting

and be heard. The facility wherein this public meeting will be held is accessible to the physically handicapped. In accordance with the Americans With Disabilities Act, persons needing assistance to participate in any of these proceedings should contact the City Clerk of the City of Cocoa, listed below, at least 48 hours prior to the meeting: Carie Shealy, City Clerk, 65 Stone Street, Cocoa, by telephone at (321) 433-8484 or via email at cshealy@cocoafl.org.

Pursuant to Section 286.0105, Florida Statutes, the City hereby advises the public that if a person decides to appeal any decision made by the City Council with respect to any matter considered at its meeting or hearing, that person will need a record of the proceedings and for such purpose, affected persons may need to assure that a verbatim record of the proceedings is made, and such record shall include the testimony and evidence upon which the appeal is to be based. This notice does not constitute consent by the City for the introduction or admission into evidence of otherwise inadmissible or irrelevant evidence, nor does it authorize challenges or appeals otherwise not allowed by law.

The PZ Board/LPA meeting may include the attendance of one (1) or more members of the Cocoa City Council who may or may not participate in the Board discussions held at this public hearing. The Local Planning Agency and City Council reserve the right to continue or postpone hearings to a date certain without re-advertising.



Legislation Details (With Text)

File #: 20-578 **Version:** 1 **Name:**
Type: Agenda **Status:** Agenda Ready
File created: 8/28/2020 **In control:** Planning and Zoning / Local Planning Agency
On agenda: 9/2/2020 **Final action:**
Title: Planning & Zoning Board / Local Planning Agency approval of the Agenda for the Special Meeting of September 2, 2020, as written or with amendments.
Sponsors:
Indexes:
Code sections:
Attachments:

Date	Ver.	Action By	Action	Result
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PLANNING & ZONING BOARD/LOCAL PLANNING AGENCY AGENDA ITEM

Memo Date: August 28, 2020
Agenda Date: September 2, 2020
Prepared By: Dodie Selig, Planning & Zoning Manager
Through: Nancy A. Bunt, Community Services Director
Requested Action:
Planning & Zoning Board / Local Planning Agency approval of the Agenda for the Special Meeting of September 2, 2020, as written or with amendments.

BACKGROUND:

The Planning & Zoning Board / Local Planning Agency approves the agendas at the beginning of each meeting.

BUDGETARY IMPACT:

PREVIOUS ACTION:

N/A

RECOMMENDED MOTION:

Planning & Zoning Board / Local Planning Agency approval of the Agenda for the Special Meeting of September 2, 2020, as written or with amendments.



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Type: Agenda **Status:** Agenda Ready

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On agenda: 9/2/2020 **Final action:**

Title: Approval of a LARGE-SCALE SITE PLAN consistent with Appendix A, Zoning, Article XIII, Section 1, to construct a total of 268 apartment units in fourteen (14) apartment buildings, along with a clubhouse with pool, playground, dog park, carwash and maintenance building with conditions.

Sponsors:

Indexes:

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Attachments: [Exhibit A - Cocoa Grand - Site Plan.pdf](#)
[Exhibit B - Cocoa Grand - Lighting Plan.pdf](#)
[Exhibit C - Cocoa Grand - Location Map.pdf](#)
[Exhibit D - Cocoa Grand - Elevations.pdf](#)
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Agenda Date: September 2, 2020
Prepared By: Dodie Selig, Planning & Zoning Manager
Through: Nancy A. Bunt, Community Services Director
Requested Action:

APPROVAL OF A LARGE-SCALE SITE PLAN consistent with Appendix A, Zoning, Article XIII, Section 1, to construct a total of 268 apartment units in fourteen (14) apartment buildings, along with a clubhouse with pool, playground, dog park, carwash and maintenance building with conditions.

BACKGROUND:

Project Name:	Cocoa Grand
Project No:	PZ-19-00200015
Applicant:	Morgan & Associates Consulting Engineers, Surveyors, Inc. Andy Kirbach 504 N. Harbor City Blvd. Melbourne, FL 32935
Property Owner:	Cocoa Grand, LLC Juston Trimback PO Box 518 Phenix City, AL 36868

Project Location:	The subject property is located on the south side of State Road 520 approximately 0.25 miles east of Range Road. The property is identified by the Brevard County Property Appraiser's Office as Parcel ID number(s): 24-36-31-00-265.
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The applicant proposes to develop a 268 unit apartment project ([Exhibit A - Site Plan with Landscape Plan](#), [Exhibit B - Lighting Plan](#)) with amenities on the subject property which is located on the south side of SR 520 just east of Range Road ([Exhibit C - Location Map](#)). The parcel is 131.08 acres in size with a large area of wetlands along the eastern side of the property. The northern portion of the parcel zoned C-W (Wholesale Commercial) while the southern portion of the parcel is zoned RU-2-15 (Multi-Family Residential). The parcel is undeveloped land that was used as a borrow pit and construction spoils site during the widening of SR520. The wetlands will remain largely untouched. The uplands on the west side of the commercially zoned portion of the parcel fronting on SR520 will be developed at a later date, however a secondary emergency access roadway will be constructed over that portion of the parcel in conjunction with the apartments. There is an electric utility easement running east/west over the parcel that has been vacated by FPL. Also, there is a natural gas transmission line easement running north/south through the middle of the parcel. The Florida Gas Transmission Company (FGT) controls that easement and both the applicant and city staff have discussed the project with them. The applicant must secure an easement agreement with the FGT, however FGT won't issue the agreement until the applicant provides an approved site plan. Therefore, Staff has added a condition that the easement Encroachment Agreement between the developer and FGT be provided to the City prior to issuance of the first apartment building permit.

The proposed 268 units would be spread among 14 apartment buildings located in a ring around the central stormwater pond. The project consists of 24 one-bedroom units at a minimum of 1,180 sq.ft., 166 two-bedroom units at a minimum of 1,621 sq.ft., 72 three-bedroom units at a minimum of 1,859 sq.ft. and 4 three-bedroom units at 2,154 sq.ft. Amenities for the property will include a clubhouse with pool, grill area, playground, car wash, stormwater pond with walking trail and a dog park.

Development Agreement:

On March 14, 2019, City Council approved a Binding Development Agreement for this property which allowed the developer/owner to develop a multi-family apartment facility with up to 312 apartment units, a clubhouse, car wash and other buildings necessary to serve the project, subject to the following conditions:

- The apartment units shall meet the minimum living area requirements for apartments in the RU- 2- 15 District.
- The apartment and communal buildings shall be no more than thirty-five (35) feet in height.
- No development, other than buffer walls or fences, shall be permitted on the west side of the existing 16. 79- acre lake (former borrow pit).

Project Enhancements (to be provided by developer):

- Clubhouse with an exercise/workout room, business center, and "party room"
- Swimming Pool
- Playground
- Dog park
- Car wash

- Two (2) electric car charging stations
- Sidewalk around the interior retention pond
- Use of energy efficient lighting systems, insulation and ENERGY STAR rated windows, low-flow water fixtures, modern heat pumps, energy efficient HVAC systems, optional roof top solar panels and at least 2 electric car charging stations as described above
- Six foot (6') buffer wall along a portion of the southern boundary of the property and a portion of the northern boundary with a six foot (6') fence along the boundary in other areas not a part of the on-site wetland areas.
- Installation of full-cutoff, low-light emitting or LED streetlights and outdoor lighting fixtures.
- Reservation of a minimum of three two-bedroom apartment units for City law enforcement officers to be rented at a fifty percent discount rate to be made available on a first-come, first serve basis at the time of initial leasing until there are no other two-bedroom apartments available. In addition, the developer/owner shall provide a lease preference above other tenant applicants to City law enforcement officers and firefighters, along with EMS and local school teachers on a first-come, first serve basis as long as it does not violate Federal Fair Housing statutes.

Future Land Use Designation: Medium Density Residential and Commercial

Zoning District: RU-2-15 (Multiple Family Dwelling) and C-W (Wholesale Commercial)

Existing Land Use: Vacant Land (former borrow pit)

Council District: District 1 - Councilmember Alex Goins

Overview of Surrounding Area:

	Future Land Use Designation	Zoning Districts	Land Uses
North	Brevard Co. (CC)	Brevard County (BU-2)	Flex-space warehousing/office use and vacant land
South	Very Low Density Residential Co. (RES 4)	RU-1-7 and Brevard Co. (AU)	Single-Family Residential, Commercial and vacant land
East	Commercial and Low Density Residential	C-W and RU-1-7	Cocoa Honda, Agricultural and Single-Family Residential and vacant land
West	Commercial and Brevard Co. (CC)	C-W and Brevard Co. (GU and RR-1)	Brevard Co. School Bus Maintenance Facility, Single-Family Residential

II. Site Plan Analysis

Consistency with Code of the City of Cocoa

Consistent with Appendix A, Article XIII, Section 1(D), "All site plans shall be required to meet all current applicable code requirements."

City staff has reviewed the site plan and determined that it generally meets the minimum requirements of all applicable City Code requirements, with one exception as discussed below. In addition, the site plan meets the requirements of the Binding Development Agreement, as modified, with the same exception.

The site is 131.08 acres overall. The total impervious ratio is 9.4% (maximum 70%). The project density is 2.65 units per acre (maximum 15).

Building setbacks Required:	Provided:
Front (north) 25 feet	322.9 feet minimum
Side (east) 10 feet	1197.5 feet minimum
Side (west) 10 feet	919.5 feet minimum
Rear (south) 15 feet	117.3 feet minimum

The project is required to provide 524 regular parking spaces and 11 handicapped parking spaces. The site plan provides 589 regular parking spaces and 30 handicapped parking spaces.

Building Height issue:

The applicant has submitted elevations for the proposed apartment buildings (**Exhibit D - Elevations**) which show the three story buildings to be 47 feet in height from the finished grade to the highest peak of the roof.

The maximum building height for the RU-2-15 zoning district is thirty-five (35) feet. The zoning code measures building height as follows:

"BUILDING, HEIGHT OF. The vertical distance from the established average sidewalk or street grade or finished grade at the building line, whichever is the highest, to (a) the highest point of a flat roof; (b) the deck line of a mansard roof, or (c) the peak of gable, hip or gambrel roofs."

Given an average ceiling height per floor of 8 feet and a 1.5 foot space between floors for joists, a/c ducting, plumbing, etc., a three story apartment building would need 27 feet for the basic structure. Subtracting this from the max height leave 8 feet for a roof. If the building is very small in width and depth, an 8 foot roof height results in a steep roof pitch. If the building footprint is relatively small, the roof pitch will look moderate in proportion. However on a large building footprint such as the proposed structures, an 8 foot roof will look disproportionately short and flattened.

This issue first came to the attention of staff several months ago and is not unique to this project. That it has not been an issue in the past is likely due to the fact that no apartments have been built in the city that were over two stories in height. The condominiums and elderly housing buildings built to date are either in zoning districts with a 45 foot height limit or districts with no height limit. Another factor is that when the building heights were established the trend in building style was to flat roofs or low pitched roofs. Today however the esthetic has changed and apartment buildings presented to staff over the past 2-3 years have generally

proposed a steeper roofline than the existing code allows.

The developer could meet the 35 foot height limit by redesigning the building's roof truss system, but it would result in a considerably less appealing building style, either a flat roof or low-sloped roof, which benefits no one. The applicant will be requesting a modification of the existing development agreement as described below and staff are recommending that the site plan be approved with the condition that the modification is approved by City Council. Should Council not approve the modification to the agreement, the developer would have to reduce the building height to the 35 foot limit as described above.

Modification to the existing Development Agreement:

1. A variance to the building height limit from 35 feet to 48 feet.
2. The Developer shall provide an enhanced landscaping along the SR520 property boundary in front of the future commercial portion of the property and in front of the billboard lease portion of the property to be installed prior to issuance of the first certificate of occupancy.

Consistency with Comprehensive Plan Policies and Objectives

Objective 1.1.5: Neighborhood Protection. The City shall ensure that additional growth and development will be respectful of established neighborhoods that define much of the City's character.

Policy 1.1.5.1: More intense development such as commercial, mixed-use and industrial uses shall be designed to minimize the negative impacts on lower intensity land uses through such means as, for example, landscaping and appropriate transitional uses including low-scale professional offices or medium density residential development. In the absence of transitional land uses, potential adverse impacts to surrounding residential should be mitigated through the use of:

- A. Buffer areas that will provide a separation between commercial and single-family residential structures;
- B. Landscaping and/or trees separating the commercial and residential land use; and
- C. Walls and/or opaque vegetative screens separating the commercial and single-family residential land use.

Concurrency Management/Adequate Public Facilities

Wastewater

The Level of Service (LOS) for wastewater is 319 gallons per day per household, based on the 268 units, the projected demand on the wastewater system is 85,492 gallons per day.

The Sellers Plant is currently permitted to treat 4.5 mgd of wastewater per day, and is currently operating at 2.08 mgd. The maximum peak flow over the past twelve months was 4.56 mgd. Thus, there is sufficient capacity for Wastewater.

Stormwater Management

The Level of Service (LOS) for Stormwater Management is as follows:

Design Storm Event"	25-year frequency/24-hour duration event
On-site Stormwater Management:	Retention of the first one inch of rainfall for areas of more than one acre.

Stormwater Quantity:	Post development Stormwater runoff flow rates, quantities, peaks, and velocities shall be equal to or less than levels that existed prior to development.
Stormwater Quality:	No significant degradation of water quality in receiving water bodies.

A St Johns River Water Management District Permit has been provided by the applicant for this project.

Potable Water

The LOS for potable water is 122 gallons per capita per day (gpcd) per household. Based on the City of Cocoa EAR Population Projections report, the average permanent resident per dwelling unit is 2.35 per occupied unit. Thus, the average demand per household is estimated at 287 gpcd, and based on the 268 proposed dwelling units the overall demand is 76,916 gpcd.

The Dyal Plant provides potable for the City of Cocoa service area and it is currently permitted to operate at 48 million gallons per day (mgd). The maximum average daily flow over the past twelve months is 26.17 mgd. Thus, there is sufficient capacity for Potable Water.

Solid Waste

The Level of Service (LOS) for the City of Cocoa is 1.2 tons of solid waste disposal per capita per year, and residential collection LOS shall be 2 times per week per household with green waste and recyclables once per week. The City contracts with Waste Management for the provision of solid waste, and the projected solid waste generated will be collected consistent with the adopted level of service standards.

Roadways (Transportation)

The minimum LOS for SR520 is D.

The Space Coast TPO Traffic Counts Report for 2019 indicates that for the Range Road to Clearlake Road segment of SR520, the average annual daily traffic trips is 26,590 and it is classified as an Urban Principal Arterial. Based on the Current Maximum Acceptable Volume (41,790) established by the Space Coast TPO, there is sufficient capacity on SR524 to support this development.

Recreation

The Level of Service (LOS) for Recreation is 1.25 acres per 1,000 population.

Pursuant to the City of Cocoa Comprehensive Plan EAR (October 2010) Data and Analysis, there exists a surplus of 118.34 acres of parks, which was determined to be more than sufficient to meet the needs of the citizens through 2020. The City's current population is 18,833 which requires 23.54 acres of park and recreation facilities. The EAR identified the City as having 323.58 acres (including the 165.09 acres Cocoa Conservation Area) available for residents. Thus, the City has sufficient recreation/parks to support the project and maintain the adopted LOS.

Schools

A School Capacity Availability Determination Letter was received from the Brevard County School Board for this project. It indicates that at this time Saturn Elementary School and Rockledge High School are not projected to have enough capacity for the total projected number of students from this project. However, the adjacent schools concurrency service areas can provide sufficient capacity for the project.

RECOMMENDED MOTION:

Staff recommends **approval** of the Large-Scale Site Plan for Cocoa Grand Apartments with the following condition:

1. No building permits shall be issued for any building on this site with a height measured from finished grade to top of highest roof peak that is greater than thirty-five (35) feet unless or until a Modification to the Development Agreement allowing greater height is approved by City Council.
2. A copy of the signed/recorded Encroachment Agreement between the developer and the Florida Gas Transmission Company shall be provided prior to issuance of the first apartment building permit.
3. Provide a revised site plan set to include the following note:

“In areas that require additional soil borings, no additional clearing, grubbing, or excavation will be performed, except for what is required for the geotechnical equipment to gain access. The report, as a result of the additional Geotechnical work, shall be provided to the City of Cocoa, from the Engineer of Record, before the commencement of additional work in those areas. Upon approval from the City, Geotechnical Engineer, and EOR, the contractor may proceed with work.”

SHEET INDEX

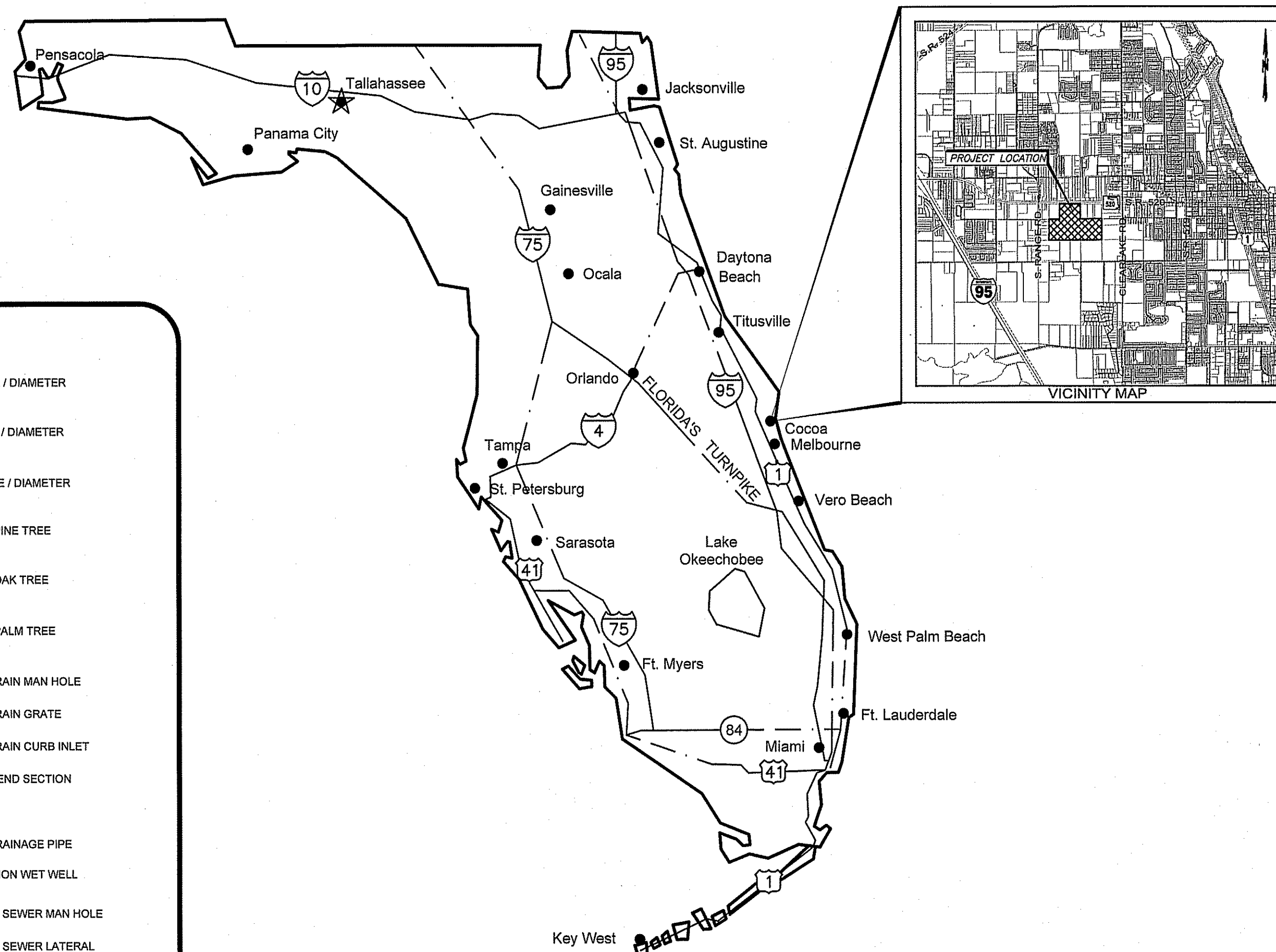
CIVIL
C-1 COVER SHEET
C-2 GENERAL NOTES
C-3 EXISTING CONDITIONS & EROSION CONTROL PLAN
C-4 DEMOLITION PLAN (TURN LANES)
C-5 OVERALL SITE PLAN
C-6 SITE PLAN (NORTH)
C-7 SITE PLAN (SOUTH)
C-8 SITE PLAN (ENTRANCE)
C-9 SITE PLAN (CLUBHOUSE)
C-10 SITE PLAN (TURN LANES)
C-11 PAVING, GRADING & DRAINAGE PLAN (NORTH)
C-12 PAVING, GRADING & DRAINAGE PLAN (SOUTH)
C-13 PAVING, GRADING & DRAINAGE PLAN (ENTRANCE)
C-14 PAVING, GRADING, DRAINAGE & UTILITY PLAN (TURN LANES)
C-15 PAVING, GRADING & DRAINAGE PLAN (CLUBHOUSE)
C-16 UTILITY PLAN (NORTH)
C-17 UTILITY PLAN (SOUTH)
C-18 UTILITY PLAN (ENTRANCE)
C-19 SEWER PROFILES (WEST)
C-20 SEWER PROFILES (WEST)
C-21 SEWER PROFILES (WEST)
C-22 SEWER PROFILES (EAST)
C-23 SEWER PROFILES (EAST)
C-24 SEWER PROFILES (EAST)
C-25 SEWER PROFILES (EAST)
C-26 CROSS SECTIONS
C-27 DETAILS
C-28 CITY OF COCOA WATER DETAILS
C-29 CITY OF COCOA SEWER AND FIRE SERVICE METER DETAILS
C-30 CONSTRUCTION DETAILS
C-31 LIFT STATION DETAILS
C-32 MAINTENANCE OF TRAFFIC DETAILS
C-33 CONSTRUCTION DETAILS
C-34 LANDSCAPE PLAN (NORTH)
C-35 LANDSCAPE PLAN (SOUTH)
C-36 LANDSCAPE PLAN (ENTRANCE)
C-37 LANDSCAPE PLAN (CLUBHOUSE)
C-38 IRRIGATION PLAN (NORTH)
C-39 IRRIGATION PLAN (SOUTH)
C-40 IRRIGATION PLAN (ENTRANCE)
C-41 IRRIGATION PLAN (CLUBHOUSE)

COCOA GRAND

LARGE SCALE SITE PLAN

ADDRESS NOT YET ASSIGNED

COCOA, FLORIDA



SITE INFORMATION:

GENERAL STATEMENT

CONSTRUCT A 268 UNIT RESIDENTIAL APARTMENT COMPLEX.

PROPERTY DETAILS

FLOOD ZONE: AE (MAP NUMBER 12009C0425G, REVISED MARCH 17, 2014.)
 GEOGRAPHIC AREA: SECTION 31, TOWNSHIP 24 SOUTH, RANGE 36E
 COUNTY: BREVARD
 ADDRESS: NOT YET ASSIGNED
 ACREAGE: ±131.08 ACRES

LEGAL DESCRIPTION

A PARCEL OF LAND LYING IN SECTION 31, TOWNSHIP 24 SOUTH, RANGE 36 EAST, BREVARD COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:
 COMMENCING AT THE NORTHWEST CORNER OF THE NORTHEAST ONE-QUARTER (1/4) OF SAID SECTION 31, RUN SOUTH 00 DEGREES 25 MINUTES 48 SECONDS EAST ALONG THE WEST LINE OF THE NORTHEAST ONE-QUARTER (1/4) OF SAID SECTION 31, A DISTANCE OF 1738.32 FEET TO THE SOUTH RIGHT OF WAY LINE OF STATE ROAD 520 AND THE POINT OF BEGINNING OF THE HEREIN DESCRIBED PARCEL; THENCE CONTINUE SOUTH 00 DEGREES 25 MINUTES 48 SECONDS EAST ALONG SAID WEST LINE A DISTANCE OF 939.18 FEET TO THE NORTHWEST CORNER OF THE SOUTHEAST ONE-QUARTER (1/4) OF SAID SECTION 31; THENCE RUN NORTH 89 DEGREES 07 MINUTES 50 SECONDS EAST ALONG THE NORTH LINE OF THE SOUTHEAST ONE-QUARTER (1/4) OF SAID SECTION 31, A DISTANCE OF 1341.81 FEET TO THE NORTHEAST CORNER OF THE NORTHWEST ONE-QUARTER (1/4) OF THE SOUTHEAST ONE-QUARTER (1/4) OF SAID SECTION 31; THENCE RUN SOUTH 00 DEGREES 10 MINUTES 04 SECONDS EAST ALONG THE EAST LINE OF THE NORTHWEST ONE-QUARTER (1/4) OF THE SOUTHEAST ONE-QUARTER (1/4) OF SAID SECTION 31, A DISTANCE OF 1347.17 FEET TO THE SOUTHEAST CORNER OF THE NORTHWEST ONE-QUARTER (1/4) OF THE SOUTHEAST ONE-QUARTER (1/4) OF SAID SECTION 31; THENCE RUN SOUTH 89 DEGREES 30 MINUTES 45 SECONDS WEST ALONG THE SOUTH LINE OF THE NORTHWEST ONE-QUARTER (1/4) OF THE SOUTHEAST ONE-QUARTER (1/4) OF SAID SECTION 31, A DISTANCE OF 1335.61 FEET TO THE SOUTHEAST CORNER OF THE NORTH ONE-HALF (1/2) OF THE SOUTHWEST ONE-QUARTER (1/4) OF SAID SECTION 31; THENCE RUN SOUTH 89 DEGREES 29 MINUTES 19 SECONDS WEST ALONG THE SOUTH LINE OF THE NORTH ONE-HALF (1/2) OF THE SOUTHWEST ONE-QUARTER (1/4) OF SAID SECTION 31, A DISTANCE OF 1997.91 FEET TO THE SOUTHWEST CORNER OF THE EAST THREE-QUARTERS (3/4) OF THE NORTH ONE-HALF (1/2) OF THE SOUTHWEST ONE-QUARTER (1/4) OF SAID SECTION 31; THENCE RUN NORTH 00 DEGREES 01 MINUTES 48 SECONDS EAST ALONG THE WEST LINE OF THE EAST THREE-QUARTERS (3/4) OF THE NORTH ONE-HALF (1/2) OF THE SOUTHWEST ONE-QUARTER (1/4) OF SAID SECTION 31, A DISTANCE OF 1325.85 FEET TO THE NORTHWEST CORNER OF THE EAST THREE-QUARTERS (3/4) OF THE NORTH ONE-HALF (1/2) OF THE SOUTHWEST ONE-QUARTER (1/4) OF SAID SECTION 31; THENCE RUN NORTH 89 DEGREES 07 MINUTES 50 SECONDS EAST ALONG THE NORTH LINE OF THE SOUTHWEST ONE-QUARTER (1/4) OF SAID SECTION 31, A DISTANCE OF 682.45 FEET TO THE SOUTHWEST CORNER OF THE SOUTHEAST ONE-QUARTER (1/4) OF THE NORTHEAST ONE-QUARTER (1/4) OF SAID SECTION 31; THENCE RUN NORTH 00 DEGREES 07 MINUTES 27 SECONDS WEST ALONG THE WEST LINE OF THE SOUTHEAST ONE-QUARTER (1/4) OF THE NORTHEAST ONE-QUARTER (1/4) OF SAID SECTION 31, A DISTANCE OF 963.81 FEET TO THE SOUTH RIGHT OF WAY LINE OF SAID STATE ROAD 520; THENCE RUN SOUTH 89 DEGREES 48 MINUTES 09 SECONDS EAST ALONG SAID SOUTH RIGHT OF WAY LINE, A DISTANCE OF 1319.79 FEET TO THE POINT OF BEGINNING.

BEING ONE AND THE SAME AS:

PARCEL 500: THE EAST 3/4 OF THE NORTH 1/2 OF SW 1/4 OF SECTION 31, TOWNSHIP 24 SOUTH, RANGE 36 EAST, BREVARD COUNTY, FLORIDA.

PARCEL 751: THE NW 1/4 OF THE SE 1/4 OF SECTION 31, TOWNSHIP 24 SOUTH, RANGE 36 EAST, BREVARD COUNTY, FLORIDA.

PARCEL 265: THE SE 1/4 OF THE NW 1/4, SOUTH OF STATE ROAD 520, IN SECTION 31, TOWNSHIP 24 SOUTH, RANGE 36 EAST, BREVARD COUNTY, FLORIDA.

CONTACTS:

DEVELOPER / OWNER:
 JUSTON TRIMBACK; THE COCOA GRAND, LLC
 P.O. BOX 518
 PHENIX CITY, AL 36868
 (334) 480-4001

ENGINEER & SURVEYOR
 MORGAN & ASSOCIATES CONSULTING ENGINEERS, INC.
 504 N. HARBOR CITY BLVD
 MELBOURNE, FL 32935
 PHONE: (321) 751-6088 | FAX: (321) 751-6089

WATER & WASTEWATER
 CITY OF COCOA UTILITIES
 351 SHEARER BLVD.
 COCOA, FL 32922
 (321) 433-8400

STORMWATER
 CITY OF COCOA PUBLIC WORKS DEPARTMENT
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 COCOA, FL 32922
 (321) 433-8770

ELECTRIC
 FLORIDA POWER & LIGHT
 DONNA SMITH - PROJECT MANAGER
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 MERRITT ISLAND, FL 32953
 (321) 455-6120

NATURAL GAS
 FLORIDA CITY GAS
 4045 NW 97TH AVE
 DORAL, FL 33178
 (800) 933-7546

~LEGEND~

(C) = CALCULATED (D) = DEED (R) = RECORD (M) = MEASURED (P) = PLAT A/C = AIR CONDITIONING BFP = BACKFLOW PREVENTER BFV = BUTTERFLY VALVE BO = BLOW OFF C.B.S. = CONCRETE BLOCK & STUCCO C = CENTERLINE CMP = CORRUGATED METAL PIPE CPP = CORRUGATED POLYETHYLENE PIPE CONC. = CONCRETE DBI = DITCH BOTTOM INLET DDC = DOUBLE DETECTOR CHECK-VALVE DP = DRAINAGE PIPE DS = DRAINAGE STRUCTURE EL = ELEVATION ESMT. = EASEMENT FDEP = FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION FDOT = FLORIDA DEPARTMENT OF TRANSPORTATION FFE = FINISHED FLOOR ELEVATION FL = FIRE HYDRANT FL = FLOW LINE FND = FOUND HDCP = HANDICAPPED HDPE = HIGH DENSITY POLYETHYLENE INV. = INVERT LB = LICENSED BUSINESS L.S./V.V. = LIFT STATION VALVE VAULT MH = MANHOLE M.E.G. = MATCH EXISTING GRADE MES = MITERED END SECTION N.A.V.D. = NORTH AMERICAN VERTICAL DATUM OF 1983 N.G.V.D. = NATIONAL GEODETIC VERTICAL DATUM 1929 N.T.S. = NOT TO SCALE O.R.B. = OFFICIAL RECORDS BOOK P.B. = PLAT BOOK P.C. = POINT OF CURVATURE P.C.P. = PERMANENT CONTROL POINT PG. = PAGE PLS = PROFESSIONAL LAND SURVEYOR P.I. = POINT OF INTERSECTION P.O.B. = POINT-OF-BEGINNING P.O.C. = POINT-OF-COMMENCEMENT P.R.C. = POINT OF REVERSE CURVE P.R.M. = PERMANENT REFERENCE MONUMENT P.T. = POINT OF TANGENCY P.U.&D.E. = PUBLIC UTILITY AND DRAINAGE EASEMENT PVC = POLYVINYL CHLORIDE PIPE PVI = POINT OF VERTICAL INTERSECTION R = RADIUS RCP = REINFORCED CONCRETE PIPE RW = RIGHT-OF-WAY SS = SANITARY SEWER SSMH = SANITARY SEWER MANHOLE TAN = TANGENT TOB = TOP OF BANK TOE = TOE OF SLOPE TYP. = TYPICAL	PROJECT BENCHMARK IRON ROD FOUND NAIL & DISK FOUND CONCRETE MONUMENT FOUND IRON ROD SET NAIL & DISK SET CONCRETE MONUMENT SET SPOT ELEVATION (HARD SURFACE) SPOT ELEVATION (SOFT SURFACE) PROPOSED SPOT ELEVATION UTILITY POLE UTILITY POLE W/ LIGHT GUY ANCHOR & WIRE LIGHT POLE METAL FLAG POLE CROSS WALK SIGNAL POLE TRAFFIC CONTROL HAND HOLE SIGN STREET SIGNAGE MAIL BOX GUARD RAIL PHONE / COMMUNICATIONS SERVICE UNDERGROUND T.V. CABLE PEDESTAL ELECTRICAL SERVICE TRANSFORMER WATER METER REUSE METER WELL GATE VALVE FIRE HYDRANT BACKFLOW PREVENTER = ASPHALT = CONCRETE	PINE TREE / DIAMETER OAK TREE / DIAMETER PALM TREE / DIAMETER REMOVE PINE TREE REMOVE OAK TREE REMOVE PALM TREE STORM DRAIN MAN HOLE STORM DRAIN GRATE STORM DRAIN CURB INLET MITERED END SECTION INLET STORM DRAINAGE PIPE LIFT STATION WET WELL SANITARY SEWER MAN HOLE SANITARY SEWER LATERAL DIRECTION OF FLOW RECLAIMED REUSE WATER SANITARY (GRAVITY) SANITARY (FORCE MAIN) TEE 90° BEND 45° BEND 22.5° BEND 11.25° BEND REDUCER SEWER CLEAN-OUT PLUG VALVE BLOW OFF MANUAL AIR RELEASE VALVE
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ENGINEER/SURVEYOR:
MORGAN & Associates
 Consulting Engineers, Inc.

Civil Engineers and Land Surveyors - E.B.#7903 / L.B.#7040
 504 N. Harbor City Blvd. Melbourne, FL 32935
 Phone (321) 751-6088 Fax (321) 751-6089

REVISIONS

△ PER CITY OF COCOA COMMENTS	MARCH 16, 2020
△ PER SJRWMD COMMENTS	MAY 12, 2020
△ PER CITY OF COCOA COMMENTS	MAY 27, 2020
△ PER CITY OF COCOA COMMENTS	AUGUST 13, 2020
△	
△	
△	



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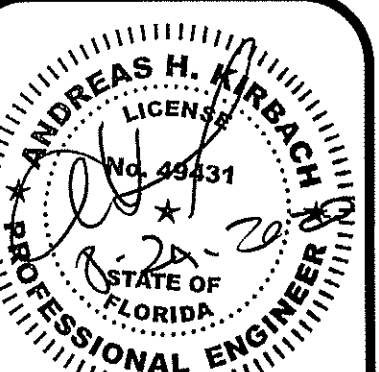
Scale:

Horiz. N/A

Vert. N/A

Sheet #:

C-1
 Sheet 1 of 41



Steven J. Morgan P.E. FL. Reg. #50633
 Andrew H. Kirby P.E. FL. Reg. #49431

DEFINITIONS

1. THE WORD "OWNER" SHALL MEAN " THE COCOA GRAND, LLC."
2. THE PHRASE "ENGINEER OF RECORD" SHALL REFER TO MORGAN & ASSOCIATES, INC.

GENERAL NOTES

1. **BOUNDARY & TOPOGRAPHIC SURVEY PREPARED BY MORGAN & ASSOCIATES CONSULTING ENGINEERS, INC. DATED AUGUST 20, 2019. ELEVATIONS SHOWN THEREON ARE BASED ON NAVD88.**
2. THE CONTRACTOR MUST THOROUGHLY REVIEW THIS PLAN SO AS TO BE PREPARED TO PRESENT HIS BID PRICES IN THE CONTRACT DOCUMENTS. THE PLAN SUFFICIENTLY DELINEATES THE SCOPE AND INTENT OF THE WORK TO BE COMPLETED. IT WILL THEREFORE BE INCUMBENT ON THE CONTRACTOR TO ADJUST HIS FEE TO REFLECT ANY AND ALL ITEMS WHICH MAY NOT BE INDICATED, BUT WHICH ARE NECESSARY TO SUCCESSFULLY COMPLETE THIS PROJECT WITHOUT ADDITIONAL COST TO THE OWNER.
3. EXISTING UTILITIES ARE TO BE PROTECTED BY THE CONTRACTOR. ANY UTILITIES DAMAGED BY THIS CONSTRUCTION WILL BE REPAIRED AT THE CONTRACTORS EXPENSE.
4. ALL INFORMATION DEPICTED ON THESE DRAWINGS ARE GRAPHIC REPRESENTATIONS ONLY AND SHOULD NOT BE SCALED.
5. CONTRACTOR SHALL NOTIFY UTILITY COMPANIES A MINIMUM OF 48 HOURS IN ADVANCE OF ANY EXCAVATION INVOLVING THEIR LINES SO THEIR OWNER'S REPRESENTATIVES MAY BE PRESENT PRIOR TO CONSTRUCTION.
6. CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES IN THE FIELD WITH UTILITY OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION. ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND PLAN CONDITIONS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION IMMEDIATELY.
7. UTILITIES ARE TO BE ADJUSTED BY THE CONTRACTOR UNLESS NOTED OTHERWISE. ALL UTILITIES WITHIN THE ROADWAY STABILIZATION ARE TO BE ADJUSTED BY UTILITY OWNERS. STEEL LINES MAY REMAIN IN PLACE. ADDITIONAL BASE PROTECTION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DETAIL PROVIDED IN THESE PLANS.
8. LANDSCAPING, OR ANY OTHER OBSTRUCTION, SHALL NOT BE LOCATED WITHIN 7.5' TO THE FRONT AND SIDES OR 4.5 FEET TO THE REAR OF ANY FIRE HYDRANT OR ANY FIRE DEPARTMENT CONNECTION.
9. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE LATEST REVISED AND APPROVED PLANS FROM THE DESIGN FIRM. ANY QUESTIONS AND OR DESIGN DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
10. THE CONTRACTOR IS RESPONSIBLE FOR CHECKING DIMENSIONS AND SITE CONDITIONS AND REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
11. ALL CONSTRUCTION MUST COMPLY WITH THE CURRENT FLORIDA BUILDING CODE AND SHALL BE IN ACCORDANCE WITH THE LATEST ADOPTED RULES AND ORDINANCES OF CITY OF COCOA. THE CONTRACTOR MUST OBTAIN ALL REQUIRED PERMITS BEFORE THE COMMENCEMENT OF CONSTRUCTION.
12. THE CONTRACTOR MUST NOTIFY THE ENGINEER IF SOIL OR SUBSURFACE CONDITIONS UNSUITABLE FOR CONSTRUCTION ARE ENCOUNTERED. ALL EXCAVATED MATERIALS DEEMED UNSUITABLE SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AT HIS OWN EXPENSE.
13. ITEMS IN CONFLICT WITH THE CONSTRUCTION OF THE DESIGN SUCH AS EXISTING SIDEWALKS, PAVEMENT, DRAINAGE STRUCTURES, AND EXCESS EXCAVATION ARE TO BE REMOVED BY THE CONTRACTOR. THE DISPOSAL OF SUCH ITEMS MUST BE DONE IN A LEGAL AND PROPER MANNER AWAY FROM THE JOB SITE.
14. WHEN REFERENCED TO F.D.O.T. REFERS TO FY 2019-20 FLORIDA DEPARTMENT OF TRANSPORTATION ROADWAY AND TRAFFIC DESIGN STANDARDS.
15. THE CONTRACTOR SHALL RESTORE ALL AREAS DISTURBED BY THIS CONSTRUCTION TO A CONDITION EQUAL TO, OR BETTER THAN EXISTING.
16. PROPERTY OWNERS AND BUSINESSES WITHIN THE AREA OF CONSTRUCTION SHALL BE GIVEN ACCESS TO THEIR PROPERTIES AT ALL TIMES THROUGHOUT THE DURATION OF CONSTRUCTION.
17. ALL PIPING TO DRAINAGE AND SANITARY SEWER STRUCTURES ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
18. ALL DISTURBED AREAS WITHIN THE RIGHT-OF-WAY SHALL BE SODDED, SEED & MULCH IS NOT ACCEPABLE.
19. ANY DAMAGE TO THE EXISTING INFRASTRUCTURE, INCLUDING SIDEWALKS, BY THE CONTRACTOR MUST BE REPLACED PRIOR TO FINAL INSPECTION. SIDEWALK PATCHING IS NOT ACCEPABLE.
20. ALL UTILITIES (ELECTRICAL, CABLE, TELEPHONE, ETC.) SHALL BE UNDERGROUND.
21. CONTRACTOR IS RESPONSIBLE TO PROTECT AND/OR REPLACE ALL SURVEY MONUMENTATION WITHIN THE PROJECT LIMITS BY A LICENSED SURVEYOR IN THE STATE OF FLORIDA.
22. SIDEWALK SHALL BE ADA ACCESSIBLE WITH RUNNING SLOPES NO STEEPER THAN 1:20, CROSS SLOPE 0.02 OR FLATTER, AND CONSTRUCTED IN ACCORDANCE WITH FDOT INDEX 522-002.
23. LIGHTING SHALL BE DESIGNED, INSTALLED, MAINTAINED, AND DIRECTED SO AS TO AVOID GLARE ON ADJOINING PROPERTIES AND RIGHTS-OF-WAY THROUGH THE USE OF SEMI- AND FULL-CUTOFF SHIELDS.
24. ALL ELEVATIONS SHOWN ON THE CONSTRUCTION DRAWINGS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), UNLESS OTHERWISE NOTED.
25. THE CONTRACTOR SHALL PERFORM HIS WORK IN ACCORDANCE WITH REQUIREMENTS OF THE VARIOUS PERMITS INCLUDED IN THE BID SPECIFICATIONS. ENVIRONMENTAL CONTROLS SHALL BE USED AT LOCATIONS DESIGNATED IN THE PLANS AND/OR DESIGNATED BY THE ENGINEER.
26. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE, AT ALL TIMES, ONE COPY OF THE CONTRACT DOCUMENTS INCLUDING PLANS, SPECIFICATIONS, AND ANY SPECIAL PROVISIONS, AND COPIES OF ANY REQUIRED CONSTRUCTION PERMITS.
27. THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ALL REQUIRED CONSTRUCTION PERMIT AND BONDS PRIOR TO CONSTRUCTION.
28. THE CONTRACTOR SHALL GRADE THE SITE TO THE ELEVATIONS INDICATED ON THE PLANS AND SHALL REGRADE WASHOUTS WHERE THEY OCCUR AFTER EVERY RAINFALL UNTIL A GRASS STAND IS WELL ESTABLISHED.
29. ALL CONSTRUCTION IN THE FDOT ROW SHALL CONFORM TO THE LATEST EDITIONS OF THE FDOT DESIGN STANDARD PLANS, FDOT DESIGN MANUAL, THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND THE FDOT UTILITY ACCOMMODATION MANUAL.

DEMOLITION NOTES

1. THE CONTRACTOR SHALL DETERMINE LOCATIONS AND INVERTS OF EXISTING UTILITIES AND TAKE PROTECTIVE MEASURES WHEN NECESSARY PRIOR TO PROCEEDING WITH THE DEMOLITION PLAN.
2. THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND AND OTHER UTILITIES IS BASED ON AVAILABLE RECORDS AND SURVEYS BUT IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR SHALL MAKE HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UTILITIES AS MAY BE NECESSARY TO

- AVOID DAMAGE THERETO AND IS RESPONSIBLE FOR COORDINATING UTILITY RELOCATION WITH PROJECT CONSTRUCTION. PRIOR TO ORDERING DRAINAGE STRUCTURES, THE CONTRACTOR SHALL DETERMINE IF DRAINAGE/UTILITY CONFLICTS EXIST. INFORMATION ON CONFLICTS IS TO BE SUBMITTED TO THE OWNER'S REPRESENTATIVE AS SOON AS POSSIBLE AFTER DISCOVERY FOR RESOLUTION.
3. ALL AREAS DISTURBED IN THE RIGHT OF WAY SHALL BE RETURNED TO ORIGINAL CONDITION OR BETTER.
 4. CONTRACTOR TO IMPLEMENT "STREET SWEEPING & VACUUMING" AS NEEDED. CLEAN DIRT FROM ROADWAYS DAILY.
 5. CONTRACTOR SHALL EMPLOY SAFETY AND ROADWAY ENTRY AND EXIT PLANS ON A DAILY/WEEKLY BASIS.
 6. WHEN CONTRACTOR UTILIZES CONSTRUCTION PHASES HE SHALL BE RESPONSIBLE FOR ADDITIONAL ON-SITE BMP'S AS DEEMED NECESSARY, AND MUST BE APPROVED BY JURISDICTIONAL AUTHORITIES.
 7. STOCK PILES SHALL BE ENCOMPASSED WITH SILT FENCE, NOT TO EXCEED 35' IN HEIGHT & NOT BE LOCATED NEAR SITE PERIMETER. LOCATION & SLOPE TO BE APPROVED BY MUNICIPAL INSPECTOR & OTHER JURISDICTIONAL AUTHORITIES AS REQUIRED.

EARTHWORK & SITE PREPARATION

1. PER NPDES REQUIREMENTS THE CONTRACTOR IS RESPONSIBLE FOR PROVIDED DESIGNATED WASHOUT AREAS FOR CONCRETE, STUCCO, ETC. THESE SHOULD BE DESIGNATED ON THE PLANS PRIOR TO CONSTRUCTION AND VERIFIED AT THE PRE-CONSTRUCTION MEETING.
2. ALL EXISTING TREES, BRUSH, ROOTS, WEEDS, WITHIN THE CONSTRUCTION LIMITS ARE TO BE REMOVED AS CLEARING AND GRUBBING UNLESS OTHERWISE DIRECTED. PERSONAL PROPERTY NOT CLAIMED BY HOMEOWNERS WITHIN R/W AFTER 2 WEEK NOTIFICATION BY CONTRACTOR SHALL BE REMOVED UNDER CLEARING AND GRUBBING PAY ITEM.
3. PROOF-ROLL THE CLEARED SURFACE TO LOCATE ANY UNFORESEEN SOFT AREAS OR UNSUITABLE SURFACE OR NEAR-SURFACE SOILS. TO INCREASE THE DENSITY OF THE VERY LOOSE TO LOOSE FINE SAND SOILS WITHIN THE TOP 3 TO 4 FEET, AND TO PREPARE THE EXISTING SURFACE FOR THE ADDITION OF THE FILL SOIL (AS REQUIRED), IF DEEMED NECESSARY, IN AREAS THAT CONTINUE TO "YIELD", REMOVE ALL DELETERIOUS MATERIAL AND REPLACE WITH CLEAN, COMPACTED SAND BACKFILL. THE PROOF-ROLLING SHOULD OCCUR AFTER CUTTING AND BEFORE FILLING.
4. A DENSITY EQUIVALENT TO 98 PERCENT OF THE STANDARD PROCTOR (ASTM D-698) MAXIMUM DRY DENSITY VALUE FOR A DEPTH OF 2 FEET IN THE CROSSING AREA MUST BE ACHIEVED BENEATH THE STRIPPED GROUND SURFACE. ADDITIONAL PASSES AND/OR OVER EXCAVATION AND RECOMPACTION MAY BE REQUIRED IF THESE MINIMUM DENSITY REQUIREMENTS ARE NOT ACHIEVED. THE SOIL MOISTURE SHOULD BE ADJUSTED AS NECESSARY DURING COMPACTION.
5. STRUCTURAL FILL SHOULD CONSIST OF INORGANIC, NON-PLASTIC, GRANULAR SOILS CONTAINING LESS THAN 10% (BY WEIGHT) OF MATERIAL PASSING THE #200 SIEVE (RELATIVELY CLEAN SAND WITH UNIFIED SOIL CLASSIFICATION OF SP, SP-SM, SW, OR SW-SM). THE EXISTING FINE SAND AND SLIGHTLY FINE SAND ARE CONSIDERED TO BE ACCEPTABLE FOR USE AS STRUCTURAL FILL, EXCLUDING ANY NEAR SURFACE TOPSOILS OR ORGANIC MATERIALS. BACKFILL MATERIAL PLACED IN LIFTS NOT TO EXCEED TWELVE (12) INCHES IN THICKNESS, AND COMPACTED TO A MINIMUM DENSITY OF 98% OF THE STANDARD PROCTOR (ASTM D-698) IF HAND HELD COMPACTION EQUIPMENT IS USED THE LIFT THICKNESS SHOULD BE REDUCED TO 6 INCHES. IF THE EXCAVATION EXTENDS BELOW THE GROUND WATER LEVEL, THE EXCAVATION SHOULD BE DEWATERED PRIOR TO BACKFILLING. THE DEWATERING OPERATION SHOULD BE A WELLPOINT OPERATION AND SHOULD OPERATE CONTINUOUSLY UNTIL THE FILL HAS BEEN BROUGHT TO AT LEAST TWO (2) FEET ABOVE THE ORIGINAL GROUND WATER LEVEL. PRIOR TO INITIATING COMPACTION, REPRESENTATIVE SAMPLES OF THE FILL MATERIALS TO BE USED, AS WELL AS ACCEPTABLE EXPOSED IN-PLACE SOILS, SHALL BE COLLECTED AND TESTED TO DETERMINE THEIR COMPACTION AND CLASSIFICATION CHARACTERISTICS.
6. WHEN DEWATERING IS REQUIRED, THE CONTRACTOR IS TO SUPPLY THE CITY OF COCOA STORMWATER DIVISION A COPY OF THE DEWATERING PERMIT, IF REQUIRED, A MINIMUM OF TWO (2) BUSINESS DAYS PRIOR TO ANY CONSTRUCTION ACTIVITY.
7. BASED ON THE GROUNDWATER CONDITIONS ENCOUNTERED, THE CONTROL OF THE GROUNDWATER WILL BE REQUIRED TO ACHIEVE THE NECESSARY STRIPPING AND SUBSEQUENT CONSTRUCTION, BACKFILLING, AND COMPACTION REQUIREMENTS PRESENTED IN THE PRECEDING SECTIONS. THE DEWATERING OPERATION SHALL DRAW DOWN THE WATER TABLE SUFFICIENTLY, 2 TO 3 FEET, BELOW THE BOTTOM OF ANY EXCAVATION OR COMPACTION SURFACE TO PRECLUDE "PUMPING" AND/OR COMPACTION-RELATED PROBLEMS WITH THE FOUNDATION SOILS. IF WELL POINT SYSTEM IS USED, ALL WELL POINT HOLES SHALL BE SANDED AND COMPACTED DURING AND AFTER WELL POINT USE. COST IS TO BE INCLUDED IN COST OF PIPE AND STRUCTURES.
8. A REPRESENTATIVE NUMBER OF IN-PLACE FIELD DENSITY TESTS SHOULD BE PERFORMED IN THE COMPACTED EXISTING SOILS AND IN EACH 1' LIFT OF FILL MATERIAL OR BACKFILL TO CONFIRM THAT THE REQUIRED DEGREE OF COMPACTION HAS BEEN ACHIEVED. AT LEAST ONE DENSITY TEST SHALL BE PERFORMED FOR EVERY 250 FEET OF COMPACTED EXISTING SOIL, SUBGRADE, AND EACH LIFT OF CONTROLLED FILL.
9. ANY DEEP EXCAVATIONS OR TRENCHES REQUIRED FOR THIS PROJECT SHALL BE ADEQUATELY SHORED TO PREVENT THE SANDY ON-SITE SOILS FROM COLLAPSING INTO THE EXCAVATIONS. ALL APPLICABLE OSHA STANDARDS AND REGULATIONS SHOULD BE ADHERED TO FOR THE SAFETY OF PROJECT CONSTRUCTION PERSONNEL. CONTRACTOR SHALL COMPLY WITH TRENCH SAFETY ACT. ALL COSTS PER SQUARE FOOT FOR SPECIAL SHORING REQUIREMENTS SHALL BE INCORPORATED INTO THE RELATED ITEMS ON THE BID FORMS.

PRECONSTRUCTION RESPONSIBILITIES

1. THE CONTRACTOR IS TO ARRANGE AND ATTEND A PRE-CONSTRUCTION MEETING WITH THE CITY OF COCOA PRIOR TO BEING ISSUED A NOTICE TO PROCEED AND PROVIDE A COPY OF THE NOIC/GP TO THE CITY OF COCOA STORMWATER DIVISION A MINIMUM OF TWO (2) BUSINESS DAYS PRIOR TO BEGINNING ANY CONSTRUCTION.
2. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE IN PLACE AND INSPECTED BY THE CITY OF COCOA STORMWATER DIVISION PRIOR TO ANY OTHER CLEARING, GRUBBING, OR DEMOLITION ACTIVITIES.
3. UPON THE RECEIPT OF THE "NOTICE TO PROCEED", THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD AND ARRANGE A PRE-CONSTRUCTION CONFERENCE TO INCLUDE ALL INVOLVED GOVERNMENTAL AGENCIES, UTILITY OWNERS, THE OWNER AND THE ENGINEER OF RECORD.
4. THE CONTRACTOR SHALL OBTAIN A SUNSHINE CERTIFICATION NUMBER AT LEAST 48 HOURS PRIOR TO BEGINNING ANY EXCAVATION, CALL 1-800-432-4770.
5. ALL UTILITY EASEMENTS TO BE SECURED PRIOR TO CONSTRUCTION (IF REQUIRED).

INSPECTIONS

1. THE CONTRACTOR IS TO CONTACT THE CITY OF COCOA'S PUBLIC WORKS DEPARTMENT AND ANY OTHER RELEVANT CITY DEPARTMENTS, AS REQUIRED, FOR THE INSPECTIONS IN ADDITION TO THE ENGINEER OF RECORD.
2. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD PRIOR TO BEGINNING CONSTRUCTION AND PRIOR TO THE INSPECTION OF THE FOLLOWING ITEMS, WHERE APPLICABLE:
 - 2.1. CLEARING AND FILLING
 - 2.2. STORM DRAINAGE SYSTEM
 - 2.3. LIMEROCK BASE, OR COQUINA BASE
 - 2.4. ASPHALTIC CONCRETE
 - 2.5. FINAL

SHOP DRAWINGS

1. PRIOR TO THEIR CONSTRUCTION OR INSTALLATION, SHOP DRAWINGS SHALL BE SUBMITTED TO BE APPROVED BY THE ENGINEER OF RECORD FOR THE FOLLOWING ITEMS: HEADWALLS, CATCH BASINS, PIPING, AND ALL REQUIRED ACCESSORIES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL OTHER AGENCY APPROVALS IF REQUIRED.

DRAINAGE NOTES

1. CONTRACTOR TO PROVIDE A PRE-CONSTRUCTION VIDEO SHOWING EXISTING CONDITIONS PER CITY OF COCOA REQUIREMENTS.
2. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL STORM DRAINAGE STRUCTURES TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL, PRIOR TO ORDERING MATERIALS.
3. ALL CONCRETE DRAINAGE STRUCTURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST REVISION OF THE FLORIDA DEPARTMENT OF TRANSPORTATION "ROADWAY AND TRAFFIC DESIGN STANDARDS".
4. PIPE LENGTHS INDICATED ON PLANS ARE FROM INSIDE WALL TO INSIDE WALL OF STRUCTURES, MITERED, AND FLARED END SECTIONS ARE NOT INCLUDED IN PIPE LENGTH.
5. ALL PAVEMENT CONSTRUCTION, MATERIALS, AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE TYPICAL PAVEMENT SECTION AS DEPICTED ON THE PLANS, AND THE LATEST REVISIONS OF THE FLORIDA DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
6. ALL INLET/MANHOLE - PIPE JOINTS SHALL BE FILLED WITH NON-SHRINK GROUT, COVERED WITH AN ASPHALTIC MASTIC COATING, AND WRAPPED WITH A FILTER FABRIC MATERIAL.
7. THE CONTRACTOR SHALL GRADE THE SITE TO THE ELEVATIONS INDICATED ON THE PLANS AND TO FDOT TOLERANCES AND SHALL REGRADE WASHOUTS WHERE THEY OCCUR AFTER EVERY RAINFALL UNTIL A GRASS STAND IS WELL ESTABLISHED.
8. ALL UNPAVED AREAS DISTURBED BY CONSTRUCTION SHALL BE REGRADED, SEED, AND MULCHED 5:1 SLOPES OR FLATTER, SOD STEEPER SLOPES, UNLESS OTHERWISE NOTED.
9. THE CONTRACTOR SHALL UTILIZE METHODS TO CONTROL SURFACE WATER DURING DEWATERING AND ROADWAY PREPARATION, INCLUDING TEMPORARY SUALES, BERMS, ETC., TO MINIMIZE THE IMPACT OF RAIN DELAYS ON THE PROJECT SCHEDULE.
10. SITE DRAINAGE AND CONSTRUCTION IMPROVEMENTS SHALL NOT ADVERSELY IMPACT ADJOINING PROPERTIES AND/OR ROADWAYS.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE EXISTING PUBLIC ROADWAY, CURBS, GUTTERS, SIDEWALKS, DRAINAGE SYSTEMS, AND UTILITIES AS A DIRECT RESULT OF NEW CONSTRUCTION. ROAD IMPROVEMENTS SUCH AS BUT NOT LIMITED TO RESURFACING MAYBE REQUIRED.

PAVING

1. ALL EXISTING PAVEMENT, CUT OR DAMAGED BY CONSTRUCTION, SHALL BE PROPERLY RESTORED AT THE CONTRACTOR'S EXPENSE.
2. WHERE ANY PROPOSED PAVEMENT IS TO BE CONNECTED TO EXISTING PAVEMENT, THE EXISTING EDGE OF PAVEMENT SHALL BE SAW CUT AND REMOVED 12 INCHES FROM THE EDGE OF THE TRAVEL LANE TO OFFSET THE ASPHALT/BASE COURSE JOINT.
3. BASE COURSE SHALL BE CRUSHED LIMEROCK IN ACCORDANCE WITH SECTION 200 OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2020.
4. ASPHALT SURFACES (ON SITE) SHALL BE TYPE SP-9.5 ASPHALTIC CONCRETE IN ACCORDANCE WITH SECTION 334 OF THE FDOT STANDARD SPECIFICATIONS, 2020 EDITION, UNLESS OTHERWISE SPECIFIED ON THE PLANS.
5. SUBGRADE FOR ROADWAY SHALL BE A MINIMUM 8 INCHES THICK (UNLESS OTHERWISE INDICATED) AND SHALL BE COMPACTED TO A MINIMUM OF 98% OF THE MAXIMUM DENSITY (AASHTO T-180), AND SHALL HAVE A MINIMUM LBR 40.
6. BASE COURSE MATERIAL FOR PAVED AREAS SHALL BE A MINIMUM THICKNESS OF 8" PLACED IN TWO - 4" LIFTS ON A SINGLE LAYER FOR STREETS. BASE COURSE MATERIAL SHALL HAVE A MINIMUM LBR 100, UNLESS OTHERWISE INDICATED.
7. BASE COURSE SHALL BE COMPACTED TO 98% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
8. INSTALLATION OF THE WEARING SURFACE SHALL CONFORM WITH THE REQUIREMENTS OF THE FDOT STANDARDS SPECIFICATIONS FOR TYPE S-II ASPHALTIC CONCRETE.
9. THE FINISHED SURFACE OF THE BASE COURSE AND THAT OF THE WEARING SURFACE SHALL NOT VARY MORE THAN 1/4" FROM THE TEMPLATE, NOR 0.1 FT. FROM PROPOSED FINISHED GRADE ELEVATIONS AS DEPICTED ON THE DESIGN DRAWINGS. ANY IRREGULARITIES EXCEEDING THESE LIMITS SHALL BE CORRECTED BY SCARIFYING TO A DEPTH OF THREE (3) INCHES, REMOVING OR ADDING ROCK AS MAY BE REQUIRED, AND WATERING, ROLLING AND COMPACTING THE SCARIFIED AREA.
10. ALL CONCRETE USED IN CONSTRUCTION SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI IN 28 DAYS. ALL CONCRETE SIDEWALKS SHALL HAVE CONTROL JOINTS CUT ON 5 FT CENTERS AND EXPANSION JOINTS PLACED ON 75 FT CENTERS.
11. DENSITY TESTS SHALL BE TAKEN BY AN INDEPENDENT TESTING LABORATORY CERTIFIED BY THE STATE OF FLORIDA.
12. ALL TESTING COSTS (PAVING) SHALL BE PAID FOR BY THE OWNER EXCEPT THOSE TESTS FAILING TO MEET THE SPECIFIED REQUIREMENTS WHICH ARE TO BE PAID BY THE CONTRACTOR.

EROSION CONTROL

1. THE CONTRACTOR MUST SELECT, IMPLEMENT, AND OPERATE ALL EROSION AND SEDIMENT CONTROL MEASURES REQUIRED TO RETAIN SEDIMENT ON-SITE AND TO PREVENT VIOLATIONS OF WATER QUALITY STANDARD PER STATE OF FLORIDA. THE CONTRACTOR IS ENCOURAGED TO USE APPROPRIATE BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROLS AS DESCRIBED IN THE FLORIDA LAND DEVELOPMENT MANUAL: A GUIDE TO SOUND LAND AND WATER MANAGEMENT (DER, 1988).
2. THE MINIMUM STANDARD FOR ESTABLISHED STABILIZED SOILS IS A 70% GRASS STAND. APPROVAL FROM THE CITY OF COCOA IS REQUIRED PRIOR TO REMOVING ANY STORMWATER OR EROSION CONTROL BMP'S.
3. TURBIDITY BARRIERS SHALL BE INSTALLED AT ALL OFFSITE DISCHARGE POINTS. ALL EROSION CONTROL/WATER QUALITY DEVICES SHALL BE LEFT IN PLACE UNTIL THE DISTURBED AREAS ARE COMPLETELY STABILIZED AND/OR VEGETATED.
4. THE CONTRACTOR SHALL MAINTAIN ADEQUATE SOIL MOISTURE TO PREVENT WIND GENERATED SOIL EROSION. ALL SURFACES 30 OR MORE DAYS SHALL BE VEGETATED WITH A TEMPORARY OR PERMANENT COVER.
5. SILT FENCE SHALL BE IN-PLACE AS SHOWN PRIOR TO CONSTRUCTION.
6. CONSTRUCTION ENTRANCE TO BE INSTALLED AND GRADED SO THAT NO SEDIMENT LEAVES THIS SITE.
7. ALL EXIT LOCATIONS INTENDED TO BE USED CONTINUOUSLY AND FOR A PERIOD OF TIME SHALL HAVE STABILIZED CONSTRUCTION ENTRANCE/EXIT BMPS (TC-1 "STABILIZED CONSTRUCTION ENTRANCE/EXIT" OR TC-2 "ENTRANCE/OUTLET TIRE WASH").
8. IF APPLICABLE, ROUTE RUNOFF FROM STABILIZED ENTRANCES THROUGH A SEDIMENT TRAPPING DEVICE BEFORE DISCHARGE.

9. THE LAND-DISTURBING ACTIVITY SHALL CONFORM TO EXISTING TOPOGRAPHY AND SOIL TYPE SO AS TO CREATE THE LOWEST PRACTICAL EROSION POTENTIAL.
10. LAND DISTURBING ACTIVITIES SHALL BE CONDUCTED IN A MANNER MINIMIZING EROSION.
11. THE DISTURBED AREA AND THE DURATION OF EXPOSURE TO EROSION ELEMENTS SHALL BE KEPT TO A PRACTICAL MINIMUM.
12. EROSION CONTROL MUST BE STRICTLY MAINTAINED DURING CUT AND FILL OPERATIONS.
13. DISTURBED SOIL SHALL BE STABILIZED AS QUICKLY AS PRACTICAL.
14. WHENEVER FEASIBLE, NATURAL VEGETATION SHALL BE RETAINED, PROTECTED AND SUPPLEMENTED.
15. TEMPORARY VEGETATION OR MULCHING SHALL BE EMPLOYED TO PROTECT EXPOSED CRITICAL AREAS DURING DEVELOPMENT.
16. PERMANENT VEGETATION AND STRUCTURAL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY DEMOLITION OR CONSTRUCTION ACTIVITY.
17. ADEQUATE PROVISIONS MUST BE PROVIDED TO MINIMIZE DAMAGE FROM SURFACE WATER TO CUT THE FACE OF EXCAVATIONS OR THE SLOPING SURFACE OF FILLS.
18. TO THE EXTENT NECESSARY, SEDIMENT IN RUNOFF WATER MUST BE TRAPPED BY THE USE OF DEBRIS BASINS, SEDIMENT BASINS, SILT TRAPS OR SIMILAR MEASURES UNTIL THE DISTURBED AREA IS STABILIZED.
19. CUTS AND FILLS MUST BE CONSTRUCTED IN SUCH A MANNER THAT EROSION AND RUNOFF FROM THE SITE DOES NOT ENCOUNTER ADJOINING PROPERTY.
20. CONTRACTOR TO PLACE SILT FENCE IN ALL AREAS WHERE THE POTENTIAL FOR OFFSITE EROSION EXISTS PER DETAIL SHOWN ON THIS SHEET.
21. CONTRACTOR WILL BE RESPONSIBLE FOR CLEANING UP ANY MATERIAL TRACKED ONTO ALL ROADWAYS IMMEDIATELY AND SHALL BE RESPONSIBLE FOR DUST CONTROL.

PROJECT CLOSEOUT

1. DURING CONSTRUCTION, THE PROJECT SITE AND ALL ADJACENT AREAS SHALL BE MAINTAINED IN A NEAT AND CLEAN MANNER, AND UPON FINAL CLEAN-UP, THE PROJECT SITE SHALL BE LEFT CLEAR OF ALL SURPLUS MATERIAL OR TRASH. THE PAVED AREAS SHALL BE BROOM SWEEP CLEAN.
2. WHERE MATERIAL OR DEBRIS HAS WASHED OR FLOWED INTO OR HAS BEEN PLACED IN WATER COURSES, DITCHES, DRAINS, CATCH BASINS, OR ELSEWHERE AS A RESULT OF THE CONTRACTOR'S OPERATIONS, SUCH MATERIAL OR DEBRIS SHALL BE REMOVED AND SATISFACTORILY DISPOSED OF DURING THE PROGRESS OF THE WORK, AND THE AREA KEPT IN A CLEAN AND NEAT CONDITION.
3. ALL UNPAVED SURFACES SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN THAT WHICH EXISTED BEFORE THE CONSTRUCTION.
4. DURING THE DAILY PROGRESS OF THE JOB, THE CONTRACTOR SHALL RECORD ON HIS SET OF CONSTRUCTION DRAWINGS, THE EXACT LOCATION, LENGTH, AND ELEVATION OF ANY FACILITY NOT BUILT EXACTLY ACCORDING TO PLANS.
5. UPON COMPLETION OF DRAINAGE IMPROVEMENTS AND LIMEROCK BASE CONSTRUCTION (AND BEFORE PLACING ASPHALT PAVEMENT) THE CONTRACTOR SHALL FURNISH THE ENGINEER OF RECORD AND THE CITY OF COCOA "AS-BUILT" PLANS FOR THESE IMPROVEMENTS, SHOWING THE LOCATIONS AND PERTINENT GRADES OF ALL DRAINAGE INSTALLATIONS AND THE FINISHED ROCK GRADES OF THE ROAD CROWN AND EDGES OF PAVEMENT AT 20 FOOT INTERVALS. THESE SHALL BE PROVIDED IN THE FORM OF HARD-COPY PAPER FORMAT AND AN ELECTRONIC VERSION.
6. UPON COMPLETION OF CONSTRUCTION, AND PRIOR TO FINAL PAYMENT, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER OF RECORD AND TO THE OWNER EACH, ONE COMPLETE SET OF ALL "AS-BUILT" CONTRACT DRAWINGS ON BLUELINE AND MYLAR. THESE DRAWINGS SHALL BE MARKED TO SHOW "AS-BUILT" CONSTRUCTION CHANGES, DIMENSIONS, LOCATIONS AND ELEVATIONS OF ALL IMPROVEMENTS. THE "AS-BUILT" DRAWINGS SHALL BE SIGNED AND SEALED BY A LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA.

SAFETY NOTES

1. DURING THE CONSTRUCTION AND/OR MAINTENANCE OF THIS PROJECT, ALL SAFETY REGULATIONS SHALL BE ENFORCED. THE CONTRACTOR OR HIS REPRESENTATIVE SHALL BE RESPONSIBLE FOR THE CONTROL AND SAFETY OF THE TRAVELING PUBLIC AND THE SAFETY OF HIS PERSONNEL.
2. LABOR SAFETY REGULATIONS SHALL CONFORM TO THE PROVISIONS SET FORTH BY OSHA IN THE FEDERAL REGISTER OF THE DEPARTMENT OF TRANSPORTATION.
3. THE MINIMUM STANDARDS AS SET FORTH IN THE CURRENT EDITION OF THE STATE OF FLORIDA, "ROADWAY AND TRAFFIC DESIGN STANDARDS" SHALL BE FOLLOWED IN THE DESIGN APPLICATION, INSTALLATION, MAINTENANCE AND REMOVAL OF ALL TRAFFIC CONTROL DEVICES, WARNING DEVICES AND BARRIERS NECESSARY TO PROTECT THE PUBLIC AND WORKMEN FROM HAZARDS WITHIN THE PROJECT.
4. ALL TRAFFIC CONTROL MARKINGS AND DEVICES SHALL CONFORM TO THE PROVISIONS SET FORTH IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" PREPARED BY THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION.
5. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY AND ENFORCE ALL APPLICABLE SAFETY REGULATIONS. THE ABOVE INFORMATION HAS BEEN PROVIDED FOR THE CONTRACTOR'S INFORMATION ONLY AND DOES NOT IMPLY THAT THE OWNER OR ENGINEER WILL INSPECT AND/OR ENFORCE SAFETY REGULATIONS.

REVISION	DATE	BY
1	AUGUST 13, 2020	REVISED PER CITY OF COCOA COMMENTS
2	MAY 27, 2020	PER CITY OF COCOA COMMENTS
3	MAY 12, 2020	PER SURVIMD COMMENTS
4	MARCH 16, 2020	PER CITY OF COCOA COMMENTS
5	06/11/2020	Designed: AK
6	06/11/2020	Drawn: DD
7	06/11/2020	Checked: AK

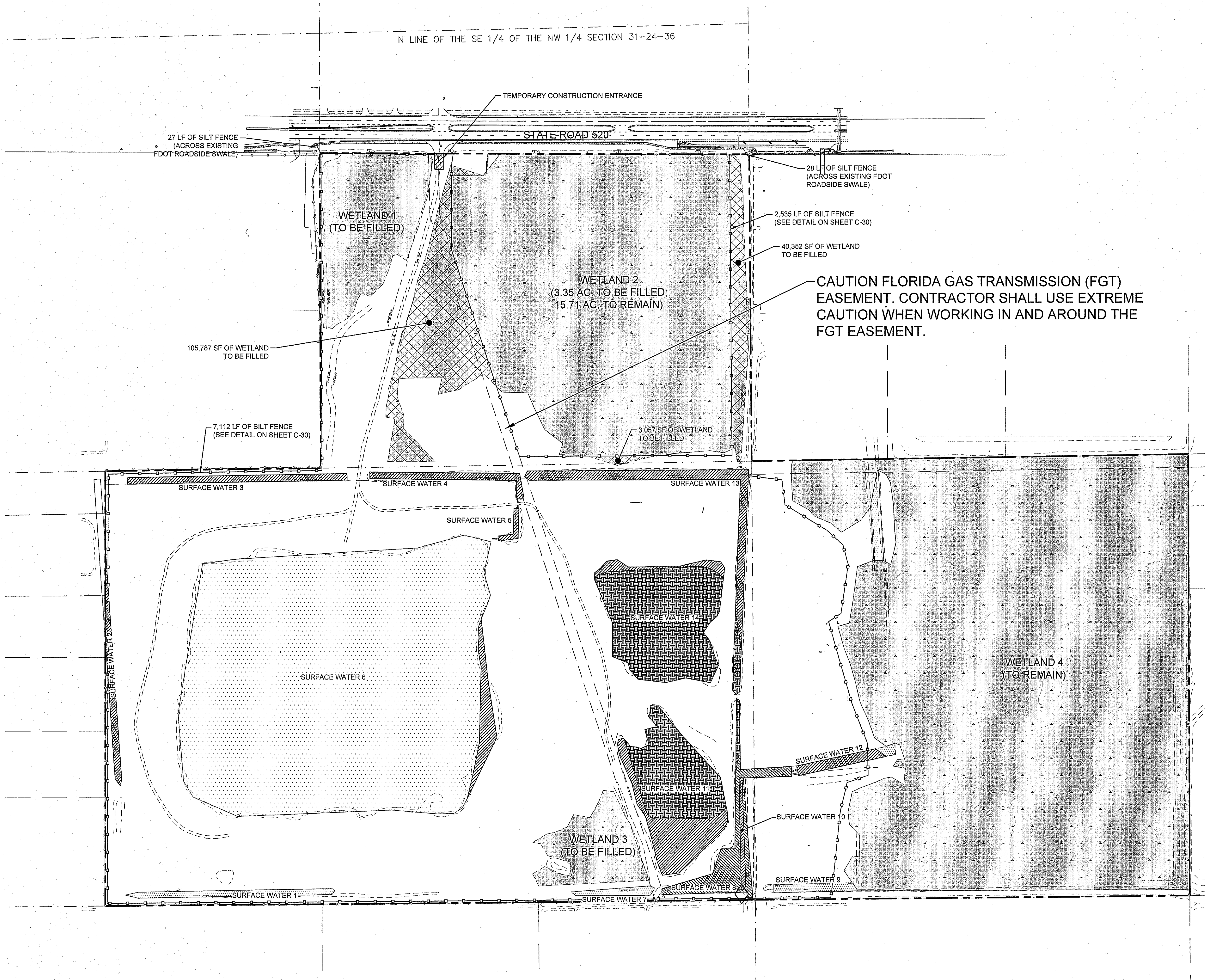
COCOA GRAND

GENERAL NOTES

MORGAN & Associates
Consulting Engineers, Inc.
Civil Engineers and Land Surveyors - E.B. #7993 / L.B. #7940
504 North Harbor City Blvd., Melbourne, FL 32955
Phone (321) 751-6088 Fax (321) 751-6089

Project #: 2018-077
Drawing #: CIVIL & DETAILS
Scale:
Horiz. _____
Vert. _____ N/A
Sheet #:
C-2
Sheet 2 of 41

ANDREAS H. KIRBACH
Professional Engineer
No. 49431
STATE OF FLORIDA
Steven J. Mullen #11111 Reg. #50632
Andreas H. Kirbach P.E. Fl. Reg. #49431
Date: _____



NOTES:

1. TOPOGRAPHIC SURVEY PREPARED BY MORGAN & ASSOCIATES CONSULTING ENGINEERS, INC. DATE 08-20-2019. ELEVATIONS SHOWN ARE BASED ON NORTH AMERICAN VERTICAL DATUM 1988 (N.A.V.D. 88).
2. THE CONTRACTOR SHALL PERFORM HIS WORK IN ACCORDANCE WITH REQUIREMENTS OF THE VARIOUS PERMITS. ENVIRONMENTAL CONTROLS SHALL BE USED AT LOCATIONS DESIGNATED IN THE PLANS AND/OR DESIGNATED BY THE ENGINEER/PERMITS.
3. THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND AND OTHER UTILITIES IS BASED ON AVAILABLE RECORDS AND SURVEYS BUT IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR SHALL MAKE HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO AND IS RESPONSIBLE FOR COORDINATING UTILITY RELOCATION WITH PROJECT CONSTRUCTION. PRIOR TO ORDERING DRAINAGE STRUCTURES, THE CONTRACTOR SHALL DETERMINE IF DRAINAGE/UTILITY CONFLICTS EXIST. INFORMATION ON CONFLICTS IS TO BE SUBMITTED TO THE OWNER'S REPRESENTATIVE AS SOON AS POSSIBLE AFTER DISCOVERY FOR RESOLUTION.
4. SEE WETLAND INFORMATION UNDER SEPARATE COVER PREPARED BY CARTER ENVIRONMENTAL SERVICES AND ATLANTIC ENVIRONMENTAL OF FLORIDA, LLC.
5. THE CONTRACTOR SHALL HAVE THE PROJECT AREA COMPLETELY SILT FENCED WITH NO GAPS/OPENINGS WITH LIMITED VEHICULAR/EQUIPMENT ACCESS POINT.
6. ALL DISTURBED AREAS WILL BE SEEDED AND MULCHED WITHIN 30 DAYS OF COMPLETION OF ACTIVITY IN THAT AREA. SLOPES STEEPER THAN 3:1 SHALL BE SODDED.
7. TOPSOIL SHALL BE SEGREGATED AND STORED FOR SUITABLE GROWING MEDIA.
8. SEE SHEET C-30 FOR SILT FENCE AND TEMPORARY CONSTRUCTION ENTRANCE DETAILS.
9. PLEASE NOTE THAT EXISTING CONDITIONS MAY CHANGE BASED ON PREVIOUS MASS GRADING PLAN.

WETLAND IMPACT

WETLAND	IMPACT	REMAINING
1	2.98 AC.	0 AC.
2	3.35 AC.	15.71 AC.
3	1.36 AC.	0 AC.
4	0 AC.	31.05 AC.

PROPOSED SURFACE WATER IMPACTS (DURING MASS GRADING)

	FILL	CUT	TO REMAIN
SURFACE WATER 1	0 AC.	0 AC.	0.256 AC.
SURFACE WATER 2	0 AC.	0.266 AC.	0 AC.
SURFACE WATER 3	0.310 AC.	0 AC.	0 AC.
SURFACE WATER 4	0.243 AC.	0 AC.	0 AC.
SURFACE WATER 5	0.048 AC.	0 AC.	0 AC.
SURFACE WATER 6	0.322 AC.	0 AC.	16.336 AC.
SURFACE WATER 7	0 AC.	0 AC.	0.115 AC.
SURFACE WATER 8	0.668 AC.	0.047 AC.	0 AC.
SURFACE WATER 9	0 AC.	0 AC.	0.143 AC.
SURFACE WATER 10	0.082 AC.	0 AC.	0 AC.
SURFACE WATER 11	0.763 AC.	1.455 AC.	0 AC.
SURFACE WATER 12	0.181 AC.	0 AC.	0.032 AC.
SURFACE WATER 13	0.700 AC.	0.097 AC.	0 AC.
SURFACE WATER 14	0.149 AC.	2.505 AC.	0 AC.
SURFACE WATER 15	0 AC.	0 AC.	0.155 AC.
	3.742 AC.	4.084 AC.	17.037 AC.

REVISION	DATE	BY	DATE	BY
1	AUGUST 13, 2020	REVISED PER CITY OF COCOA COMMENTS		
2	MAY 27, 2020	PER CITY OF COCOA COMMENTS		
3	MAY 12, 2020	PER SURVIMD COMMENTS		
4	MARCH 16, 2020	PER CITY OF COCOA COMMENTS		
5	09/11/2020	DESIGNED: AK	DATE:	
6	06/11/2020	DRAWN: DO	DATE:	
7	05/11/2020	CHECKED: AK	DATE:	

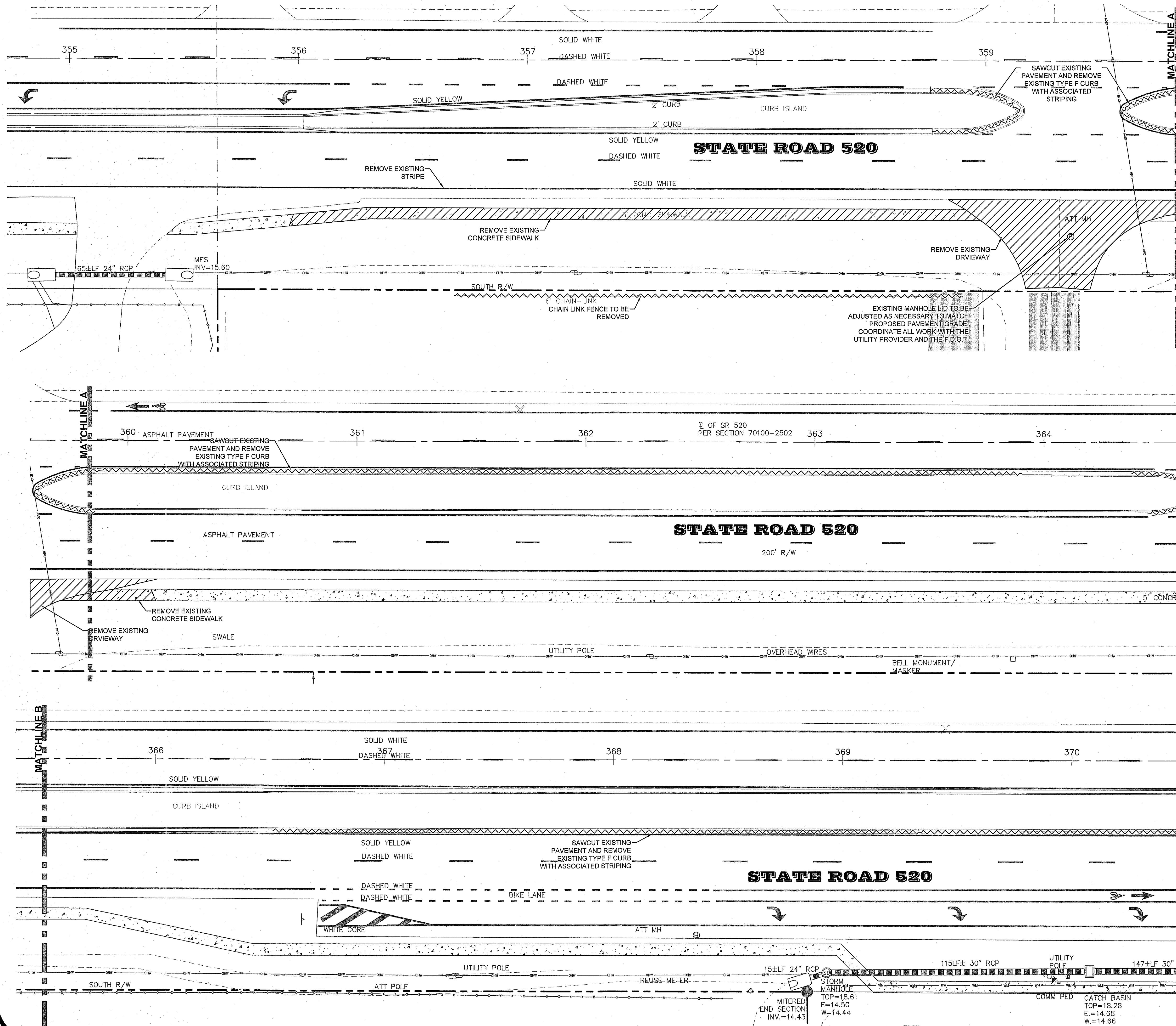
COCOA GRAND

EXISTING CONDITIONS & EROSION CONTROL PLAN

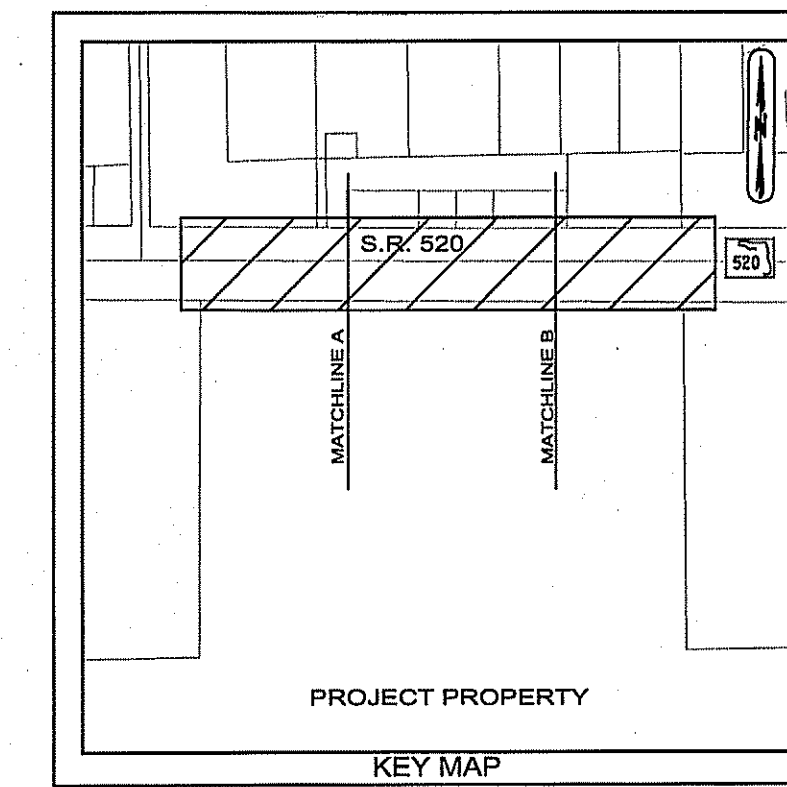
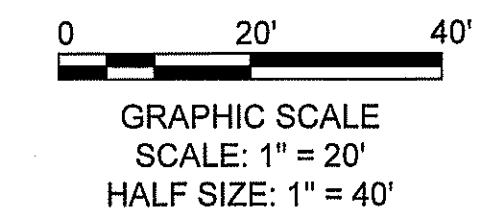
MORGAN & Associates
Consulting Engineers, Inc.
Civil Engineers and Land Surveyors - E.B. # 7903 / L.B. # 7040
504 North Harbor City Blvd., Melbourne, FL 32935
Phone (321) 751-6088 Fax (321) 751-6089

Project #: 2018-077
Drawing #: CIVIL & DETAILS
Scale:
Horiz. N/A
Vert. N/A
Sheet #:
C-3
Sheet 3 of 41

ANDREAS H. KIRBACH, P.E.
Professional Engineer
State of Florida
Reg. #50632
Steven J. Morgan
Reg. #50632
Date:



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Revision	By	Date
1	AK	08/22/2018
2	AK	06/11/2020
3	AK	03/16/2020
4	AK	05/27/2020
5	AK	08/13/2020

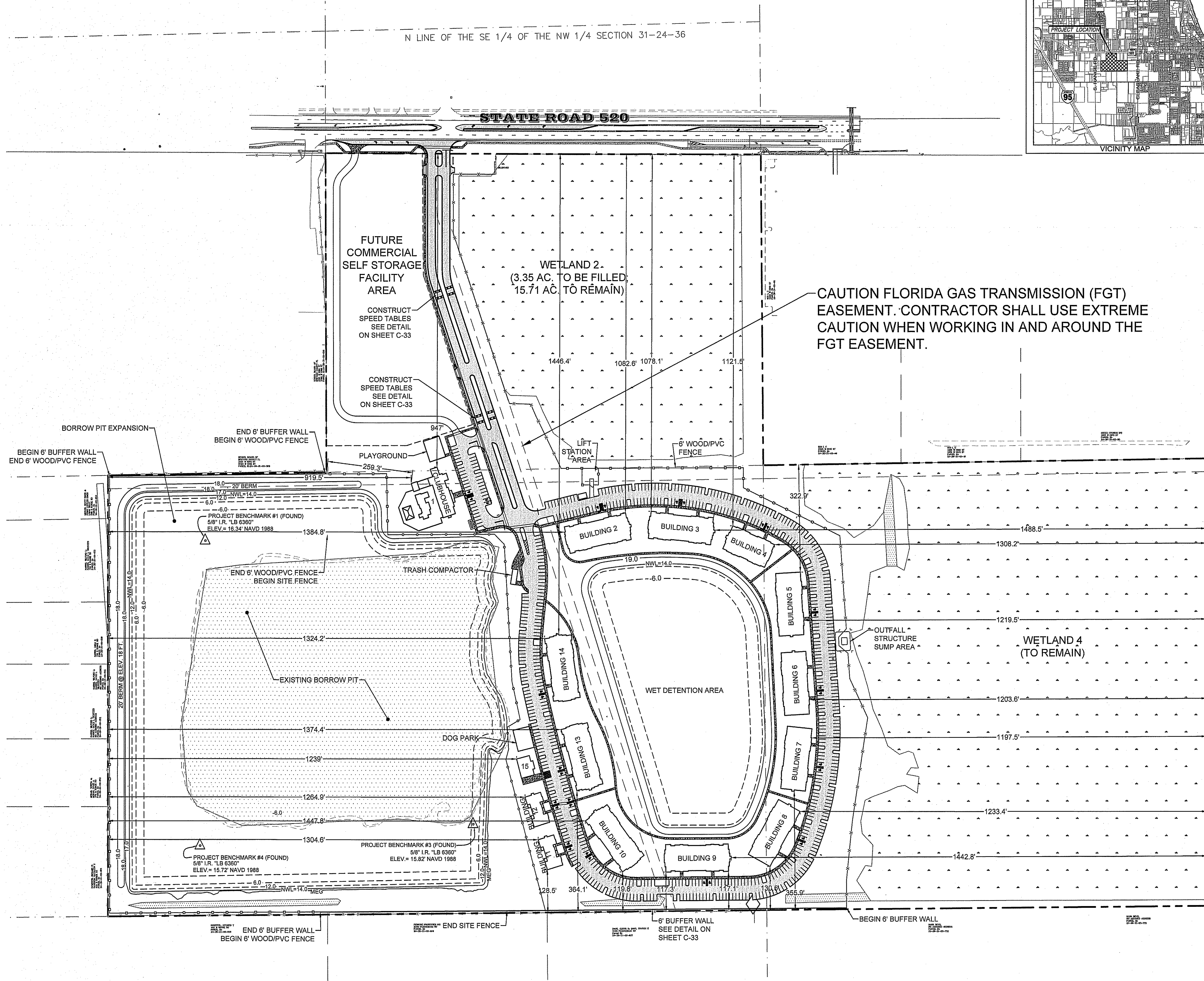
DESIGNED: AK
DRAWN: DD
CHECKED: AK

COCOA GRAND
DEMOLITION PLAN
(TURN LANES)

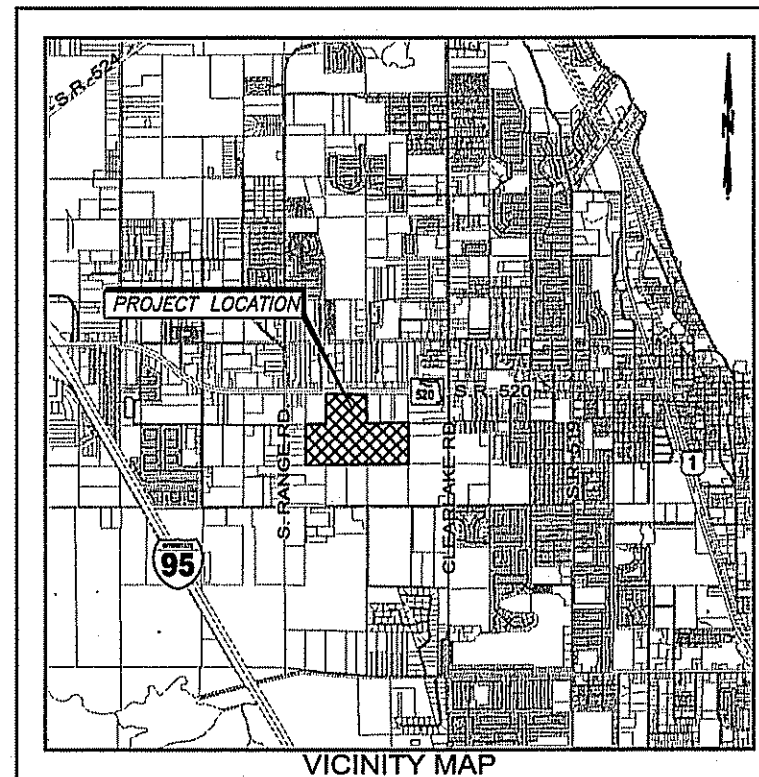
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Scale:
Horiz. N/A
Vert. N/A
Sheet #: **C-4**
Sheet 4 of 41

Steven J. Morgan, P.E., FL Reg. #50632
Andreas H. Kirbach, P.E., FL Reg. #49431
Date:



NOTE: SEE FLOOR PLAN DIMENSIONS ON SITE PLAN SHEETS (C6-C9).
SEE ARCHITECTURAL SHEETS FOR DETAILED BUILDING DIMENSIONS.



PROJECT CONTACTS:

OWNER:
JUSTIN TRIMBACK
THE COCOA GRAND, LLC
P.O. BOX 518
PHENIX CITY, AL 36868
PHONE: (334) 480-4001

ENGINEER & SURVEYOR:
MORGAN & ASSOCIATES
CONSULTING ENGINEERS, INC.
504 NORTH HARBOR CITY BLVD.
MELBOURNE, FL 32955
PHONE: (321) 751-6088

SITE DATA:

PROPERTY INFORMATION
ADDRESS: - NOT YET ASSIGNED -
COCOA, FLORIDA 32922
TOWNSHIP 24 SOUTH, RANGE 36 EAST, SECTION 31
PARCEL ID: 24-36-31-00-265
TAX ID: 2423993
ZONING: RU 2-15 AND C-W w/ BINDING DEVELOPMENT AGREEMENT
PARCEL AREA: ±131.08 ACRES (5,709,844.8 SF)
FUTURE LAND USE: COMMERCIAL AND LOW DENSITY RESIDENTIAL
FLOOD ZONE: AE, BASE FLOOD ELEVATION: 17.00 FT (NAVD89)
PROPOSED: ZONE X (ELEVATION CERTIFICATE)

BUILDING DATA:

BLDG #	1 BR UNITS (1,180 SF/UNIT)	2 BR UNITS (1,621 SF/UNIT)	3 BR UNITS (1,859 SF/UNIT)	3 BR 1 STORY (2,154 SF/UNIT)	TOTAL
2		12	12		24
3		12	12		24
4	24				24
5		24			24
6		24			24
7		24			24
8		24			24
9		12	12		24
10		12	12		24
11				2	2
12				2	2
13		12	12		24
14		12	12		24
TOTALS	24	168	72	4	268

TOTAL UNITS: 268
DENSITY = (268 UNITS / 131.08 ACRES) = 2.05 UNITS PER ACRE

BUILDING GROSS SQUARE FEET PER FLOOR

1 BEDROOM BUILDING (BLDG 4; 3 STORY)	10,812 SF / FLOOR
2 BEDROOM BUILDING (BLDG 5, 6, 7 & 8; 3 STORY)	12,968 SF / FLOOR
2 1/2 BEDROOM BUILDING (BLDG 2, 3, 9, 10, 13 & 14; 3 STORY)	13,512 SF / FLOOR
3 BEDROOM - 1 STORY (BLDG 11 & 12)	4,308 SF / FLOOR
CLUBHOUSE (BLDG 1)	7,452 SF / FLOOR
MAINTENANCE (BLDG 15)	2,500 SF / FLOOR
CAR WASH (BLDG 16)	408 SF / FLOOR
MAIL KIOSK (BLDG 17)	280 SF / FLOOR
POOL PAVILION BLDG	988 SF / FLOOR
GROSS FLOOR AREA	451,512 SF
FLOOR AREA RATIO: 0.79 (451,232 SF / 5,709,844.8 SF)	

PARKING DATA:

REQUIRED
1 BEDROOM UNIT 1.5 PARKING SPACES PER DWELLING
24 UNITS x 1.5 = 36 SPACES REQUIRED

2 BEDROOM UNIT 2 PARKING SPACES PER DWELLING
244 UNITS x 2 = 488 SPACES REQUIRED
TOTAL PARKING SPACES REQUIRED 524
(INCL. 3 VAN ACCESSIBLE HANDICAP SPACES)

PROVIDED
STANDARD PARKING SPACES 589
HANDICAPPED PARKING SPACES 30 (INCL. 3 VAN ACCESSIBLE SPACES)
TOTAL PARKING SPACES PROVIDED 619

STORMWATER AREA CALCULATIONS

PROJECT AREA	2,052,890 S.F.	47.13 AC.	100%
BUILDINGS	187,096 S.F.	4.30 AC.	9%
PAVEMENT & SIDEWALK	352,035 S.F.	8.08 AC.	17%
FUTURE IMPROVEMENTS (COMMERCIAL AREA)	224,600 S.F.	5.18 AC.	11%
TOTAL IMPERVIOUS AREA	763,731 S.F.	17.53 AC.	37%
TOTAL PERVIOUS AREA*	1,289,159 S.F.	29.60 AC.	63%
*INCLUDES OPEN/RECREATIONAL SPACE	207,116 S.F.	4.75 AC.	10%

BUILDING SETBACKS

BLDG #	NORTH	SOUTH	EAST	WEST	HEIGHT
1	947'	1,190.3'	2,276.1'	919.5'	28'
2	1,082.6'	1,079.5'	1,742.2'	1,384.8'	47'
3	1,078.1'	1,100.9'	1,488.5'	1,837.3'	47'
4	1,121.5'	1,031.5'	1,308.2'	1,864.7'	47'
5	322.9'	823.7'	1,219.5'	2,024.1'	47'
6	569.6'	584.5'	1,203.6'	2,040.8'	47'
7	786.7'	355.9'	1,197.5'	2,041.3'	47'
8	1,008.7'	130.5'	1,233.4'	1,942.1'	47'
9	2,079.7'	117.3'	1,442.8'	1,687.1'	47'
10	1,961.8'	119.8'	1,708.6'	1,447.8'	47'
11	2,052.4'	128.5'	1,953.5'	1,304.6'	22.8'
12	1,924.7'	256.8'	1,992.8'	1,264.9'	22.8'
13	1,715.1'	364.1'	1,831.1'	1,374.4'	47'
14	1,446.4'	634.2'	1,899.1'	1,324.2'	47'
15	1,814.1'	404'	2,037.3'	1,239.9'	26.5'

(SEE ARCHITECTURAL SHEETS
FOR ADDITIONAL DETAIL)

COCOA GRAND

OVERALL SITE PLAN

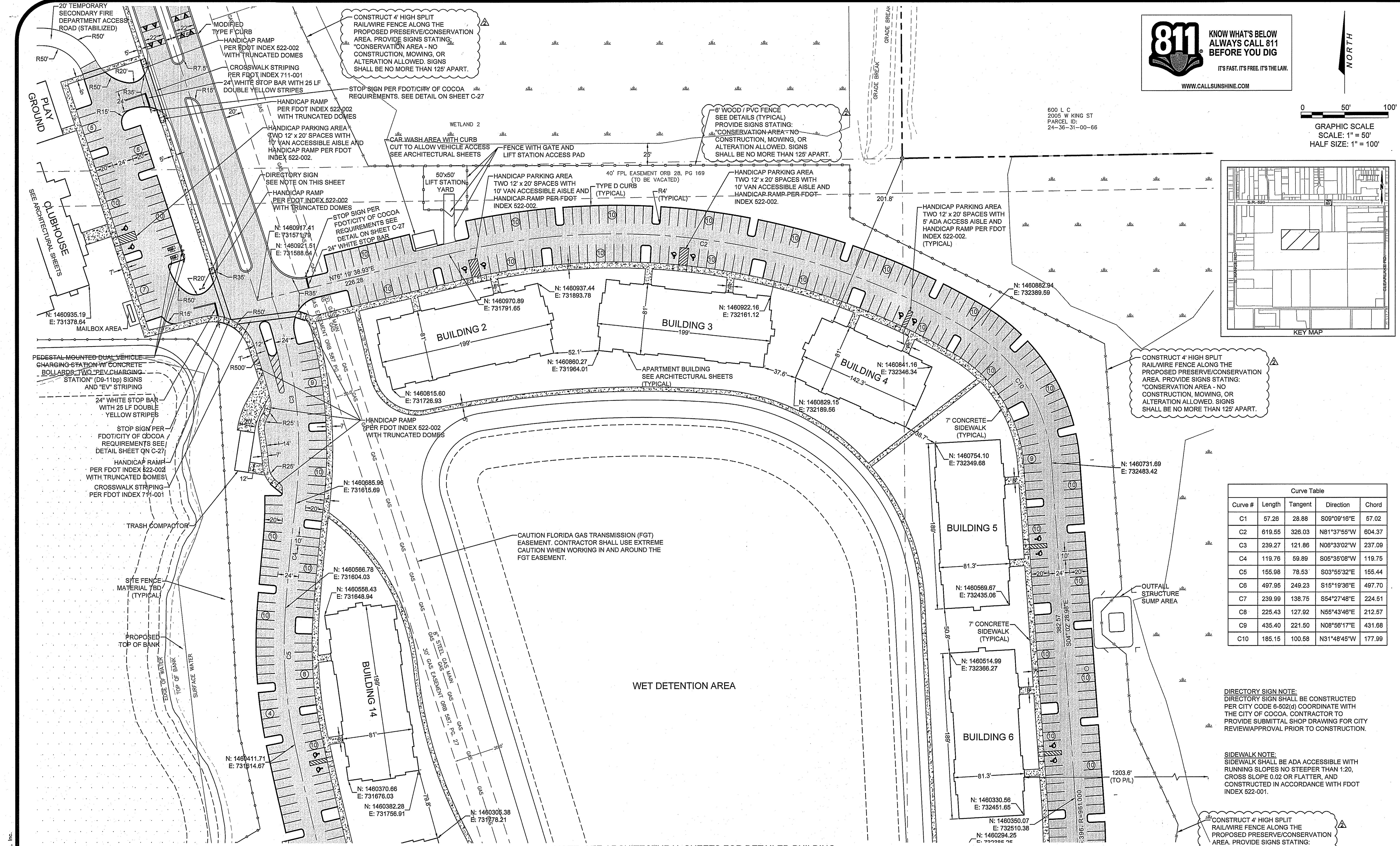
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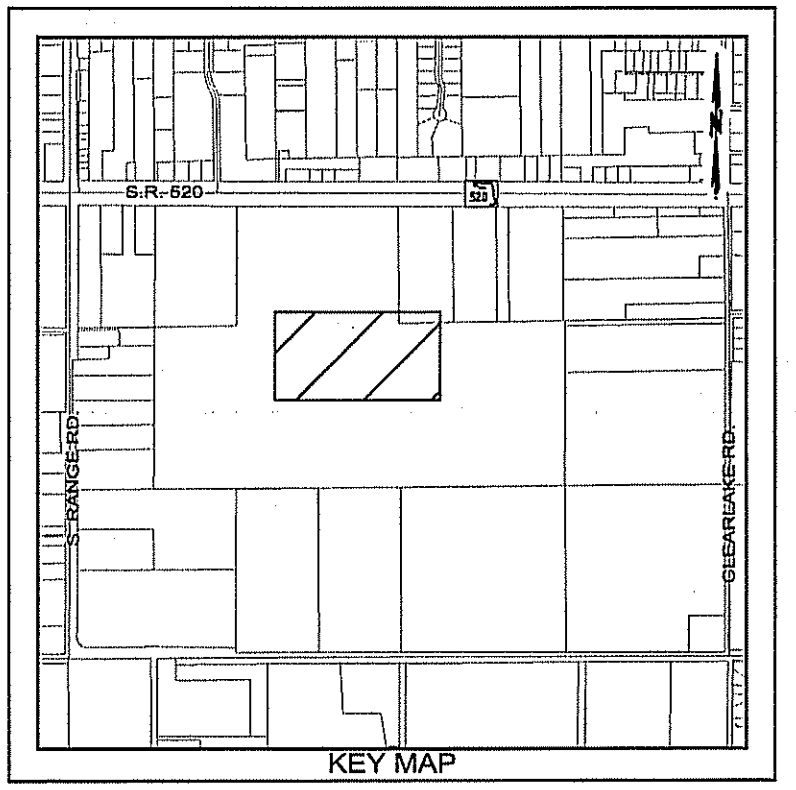
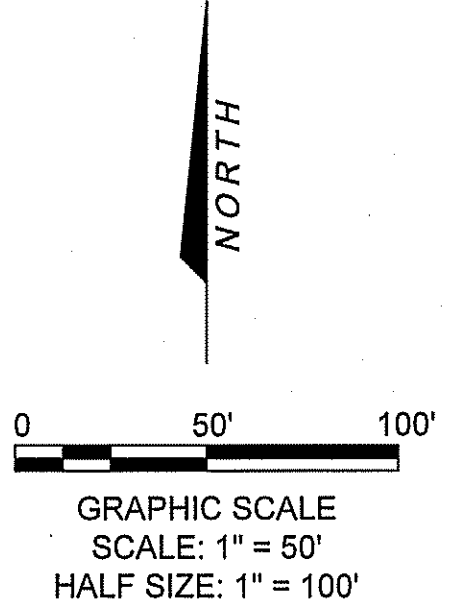
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Sheet #:
C-5
Sheet 5 of 41

ANDREAS H. KIRBACH
FLORIDA
PROFESSIONAL ENGINEER
No. 49431
Steven J. Morgan P.E. FL Reg. #50632
Andreas H. Kirbach P.E. FL Reg. #49431
Date:



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Curve Table				
Curve #	Length	Tangent	Direction	Chord
C1	57.26	28.88	S09°09'16"E	57.02
C2	619.55	326.03	N81°37'55"W	604.37
C3	239.27	121.86	N06°33'02"W	237.09
C4	119.76	59.89	S05°35'08"W	119.75
C5	155.98	78.53	S03°55'32"E	155.44
C6	497.95	249.23	S15°19'38"E	497.70
C7	239.99	138.75	S54°27'48"E	224.51
C8	225.43	127.92	N55°43'46"E	212.57
C9	435.40	221.50	N08°56'17"E	431.68
C10	185.15	100.58	N31°48'45"W	177.99

DIRECTORY SIGN NOTE:
DIRECTORY SIGN SHALL BE CONSTRUCTED PER CITY CODE 6-502(d) COORDINATE WITH THE CITY OF COCOA. CONTRACTOR TO PROVIDE SUBMITTAL SHOP DRAWING FOR CITY REVIEW/APPROVAL PRIOR TO CONSTRUCTION.

SIDEWALK NOTE:
SIDEWALK SHALL BE ADA ACCESSIBLE WITH RUNNING SLOPES NO STEEPER THAN 1:20, CROSS SLOPE 0.02 OR FLATTER, AND CONSTRUCTED IN ACCORDANCE WITH FDOT INDEX 522-001.

CONSTRUCT 4' HIGH SPLIT RAIL/WIRE FENCE ALONG THE PROPOSED PRESERVE/CONSERVATION AREA. PROVIDE SIGNS STATING: "CONSERVATION AREA - NO CONSTRUCTION, MOWING, OR ALTERATION ALLOWED. SIGNS SHALL BE NO MORE THAN 125' APART."

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NOTE: SEE ARCHITECTURAL SHEETS FOR DETAILED BUILDING DIMENSIONS. DIMENSIONS HAVE BEEN ROUNDED FOR CLARITY.

Revision		Revised Per City of Cocoa Comments	Date
1	REVISION	REVIS PER CITY OF COCOA COMMENTS	AUGUST 13, 2020
2	REVISION	PER CITY OF COCOA COMMENTS	MAY 12, 2020
3	REVISION	PER CITY OF COCOA COMMENTS	MAY 12, 2020
4	REVISION	PER CITY OF COCOA COMMENTS	MARCH 16, 2020
Designed: AK		Drawn: DD	Date: 06/11/2020
Checked: AK		Date: 06/11/2020	

COCOA GRAND
SITE PLAN (NORTH)

MORGAN & Associates
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Project #: 2018-077
Drawing #: CIVIL & DETAILS
Scale: Horiz. N/A
Sheet #: **C-6**
Sheet 6 of 41

ANDREAS H. KIRBACH
Professional Engineer
State of Florida
S. J. Morgan P.E. FL Reg. #50632
Andreas H. Kirbach P.E. FL Reg. #49431
Date: _____

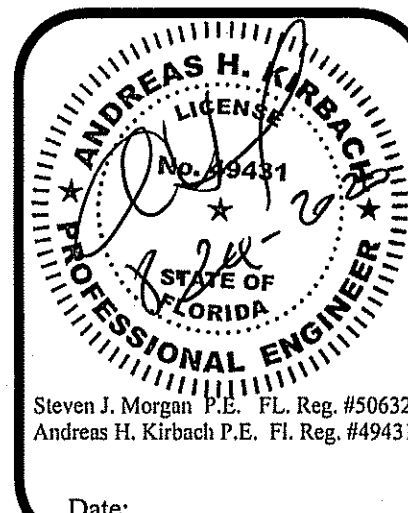


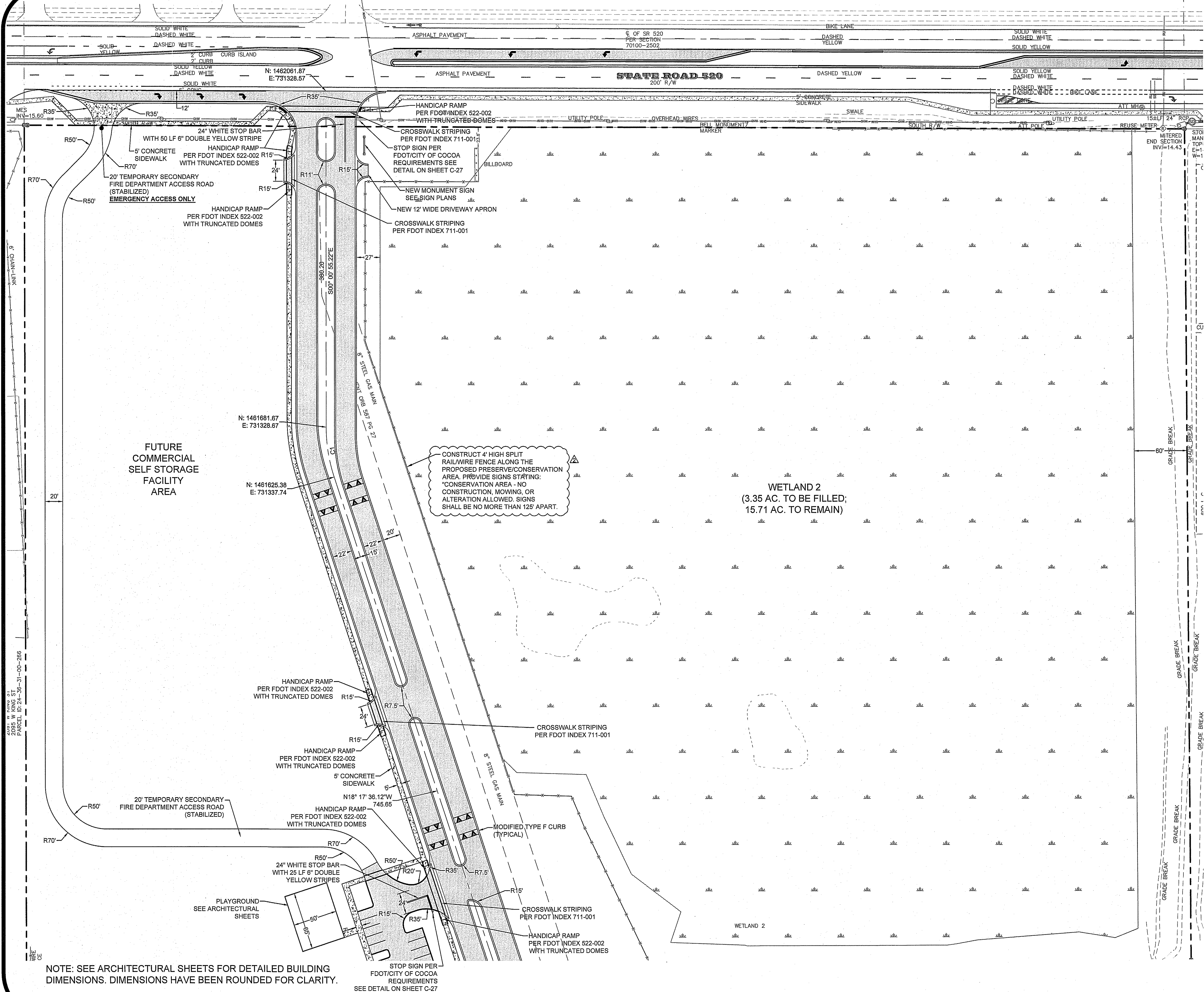
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CROSS SLOPE 0.02 OR FLATTER, AND
CONSTRUCTED IN ACCORDANCE WITH FDOT
INDEX 522-001.

27	Revision	Ⓐ	Ⓐ	REVISED PER CITY OF COCOA COMMENTS	AUGUST 13, 2020
		Ⓐ	Ⓐ	PER CITY OF COCOA COMMENTS	MAY 27, 2020
		Ⓐ	Ⓐ	PER SJRWMD COMMENTS	MAY 12, 2020
		Ⓐ	Ⓐ	PER CITY OF COCOA COMMENTS	MARCH 16, 2020
				Designed: AK	Date: 06/11/2020
				Drawn: DD	Date: 06/11/2020
				Checked: AK	Date: 06/11/2020

SITE PLAN (SOUTH)

Project #: 2018-077
Drawing #: CIVIL & DETAILS
Scale:
 Horiz.
 Vert. N/A
Sheet #:
C-7
Sheet 7 of 41





NOTE: SEE ARCHITECTURAL SHEETS FOR DETAILED BUILDING DIMENSIONS. DIMENSIONS HAVE BEEN ROUNDED FOR CLARITY.

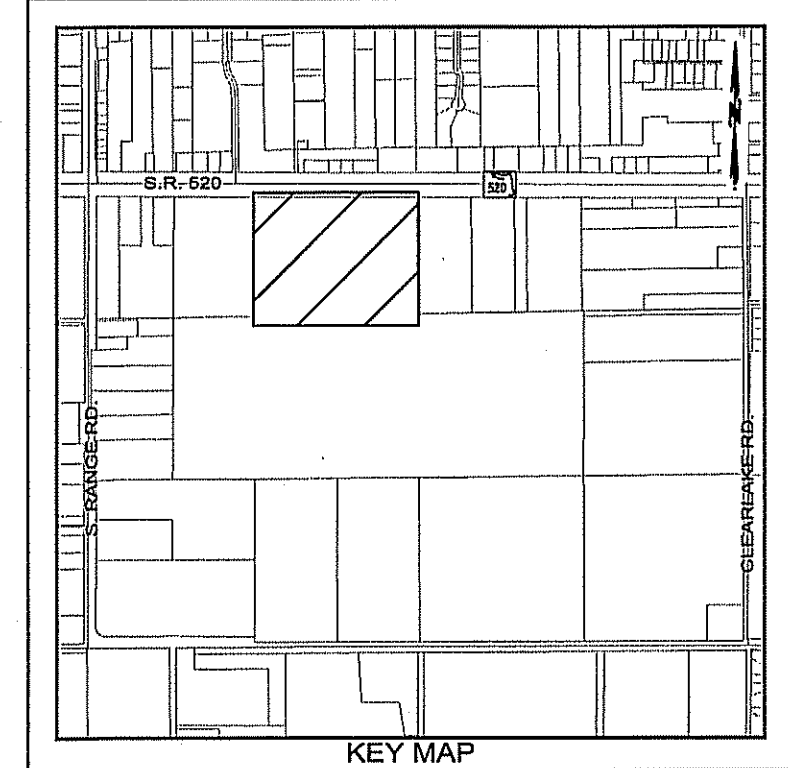
STOP SIGN PER FDOT/CITY OF COCOA REQUIREMENTS SEE DETAIL ON SHEET C-27

0 50' 100'
GRAPHIC SCALE
SCALE: 1" = 50'
HALF SIZE: 1" = 100'



KNOW WHAT'S BELOW
ALWAYS CALL 811
BEFORE YOU DIG
IT'S FAST. IT'S FREE. IT'S THE LAW.

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NOTES:

- SEE TURN LANE SHEET (C-10) FOR WORK WITHIN THE RIGHT OF WAY.

SIDEWALK NOTE:
SIDEWALK SHALL BE ADA ACCESSIBLE WITH RUNNING SLOPES NO STEEPER THAN 1:20, CROSS SLOPE 0.02 OR FLATTER, AND CONSTRUCTED IN ACCORDANCE WITH FDOT INDEX 522-001.

Curve Table				
Curve #	Length	Tangent	Direction	Chord
C1	57.26	28.88	S09°09'16"E	57.02
C2	619.55	326.03	N81°37'55"W	604.37
C3	239.27	121.86	N06°33'02"W	237.09
C4	119.76	59.89	S05°35'08"W	119.75
C5	155.98	78.53	S03°55'32"E	155.44
C6	497.95	249.23	S15°19'38"E	497.70
C7	239.99	138.75	S64°27'48"E	224.51
C8	225.43	127.92	N55°43'46"E	212.57
C9	435.40	221.50	N08°56'17"E	431.68
C10	185.15	100.58	N31°48'45"W	177.99

COCOA GRAND

SITE PLAN (ENTRANCE)

MORGAN & Associates
Consulting Engineers, Inc.
Civil Engineers and Land Surveyors - E.R. # 7903 / L.S. # 7040
504 North Harbor City Blvd., Melbourne, FL 32955
Phone (321) 751-6088 Fax (321) 751-6089

Project #: 2018-077

Drawing #: CIVIL & DETAILS

Scale:

Horiz.

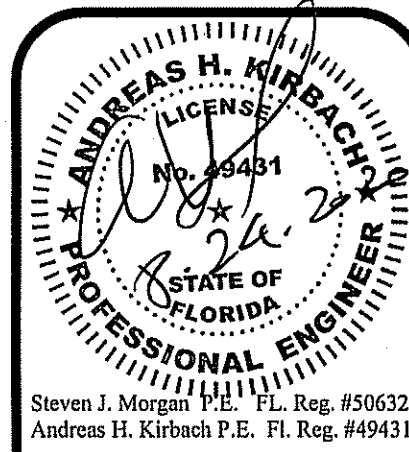
Vert.

N/A

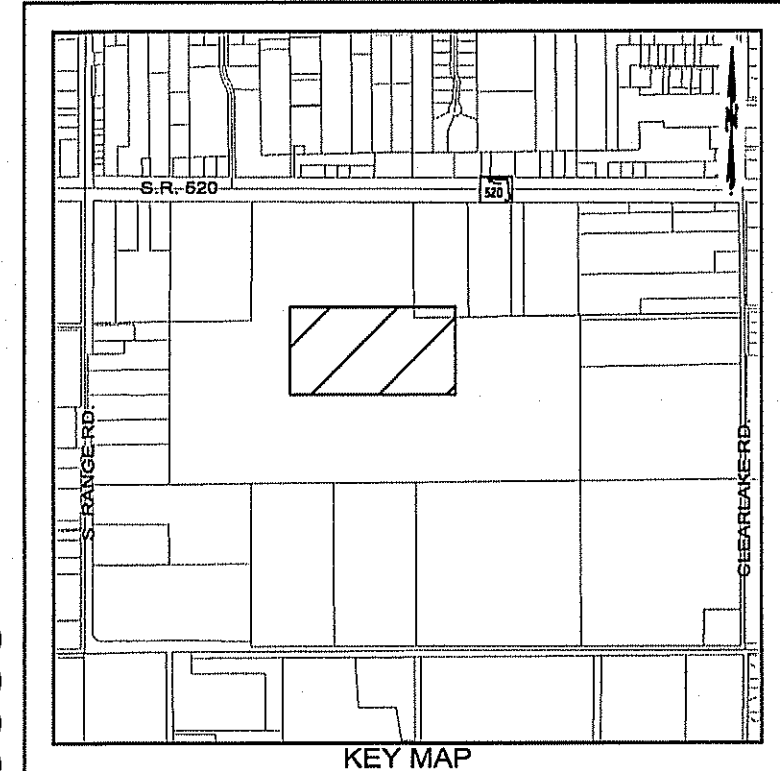
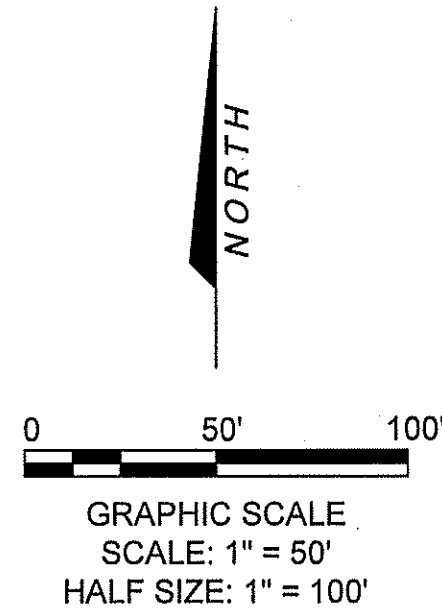
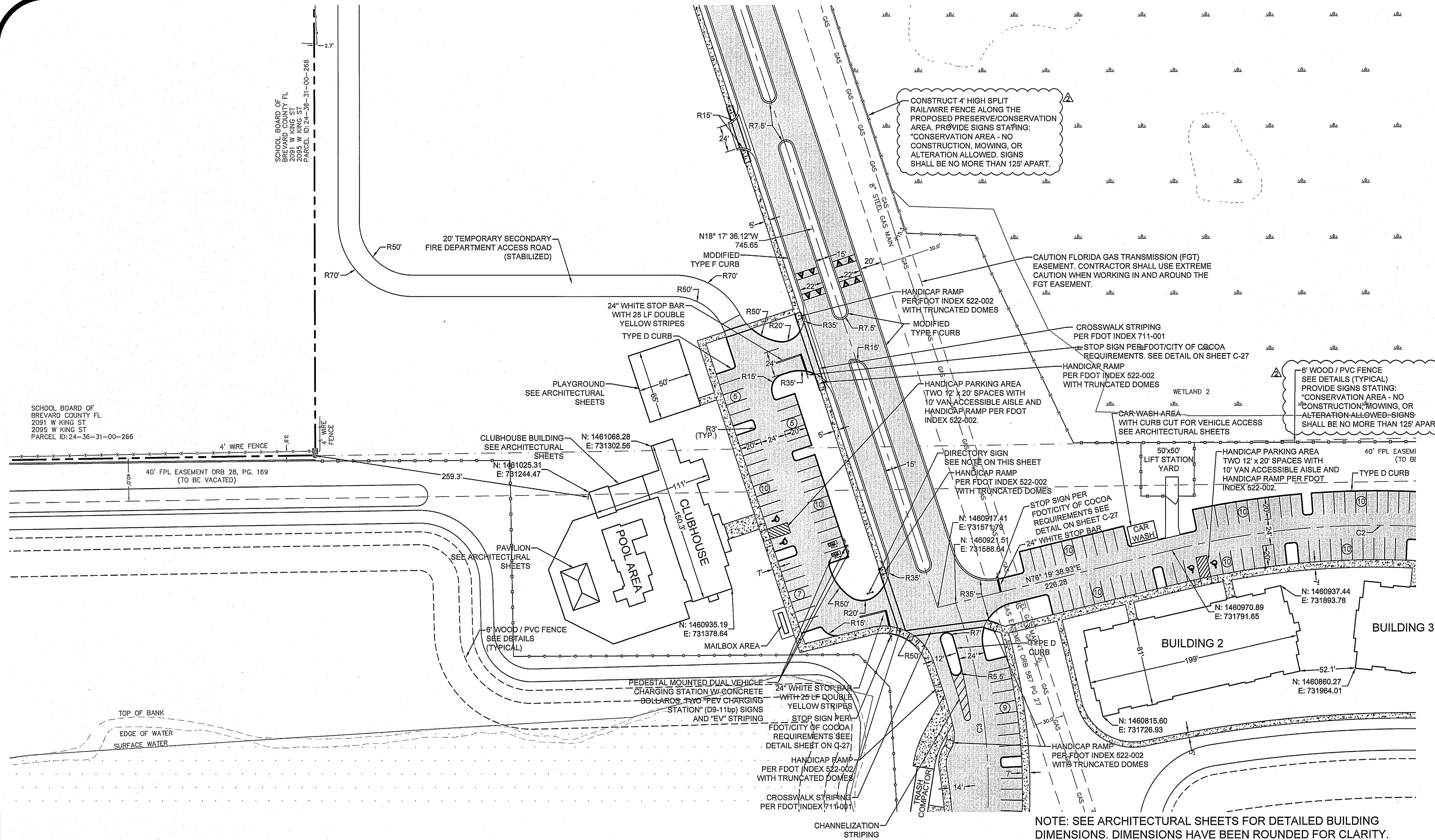
Sheet #:

C-8

Sheet 8 of 41



Date:



KNOW WHAT'S BELOW
ALWAYS CALL 811
BEFORE YOU DIG

IT'S FAST. IT'S FREE. IT'S THE LAW.

WWW.CALLSUNSHINE.COM

Curve Table				
Curve #	Length	Tangent	Direction	Chord
C1	57.26	28.88	S09°09'16"E	57.02
C2	619.55	326.03	N81°37'55"W	604.37
C3	239.27	121.86	N06°33'02"W	237.09
C4	119.76	59.89	S06°35'08"W	119.75
C5	155.98	78.53	S03°55'32"E	155.44
C6	497.95	249.23	S15°19'36"E	497.70
C7	239.99	138.75	S54°27'48"E	224.51
C8	225.43	127.92	N55°43'46"E	212.57
C9	435.40	221.50	N08°56'17"E	431.68
C10	185.15	100.58	N31°48'45"W	177.99

DIRECTORY SIGN NOTE:
DIRECTORY SIGN SHALL BE CONSTRUCTED PER CITY CODE 6-502(d) COORDINATE WITH THE CITY OF COCOA. CONTRACTOR TO PROVIDE SUBMITTAL SHOP DRAWING FOR CITY REVIEW/APPROVAL PRIOR TO CONSTRUCTION.

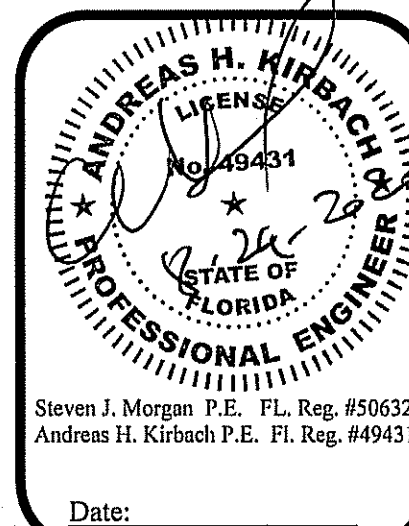
SIDEWALK NOTE:
SIDEWALK SHALL BE ADA ACCESSIBLE WITH RUNNING SLOPES NO STEEPER THAN 1:20, CROSS SLOPE 0.02 OR FLATTER, AND CONSTRUCTED IN ACCORDANCE WITH FDOT INDEX 522-001.

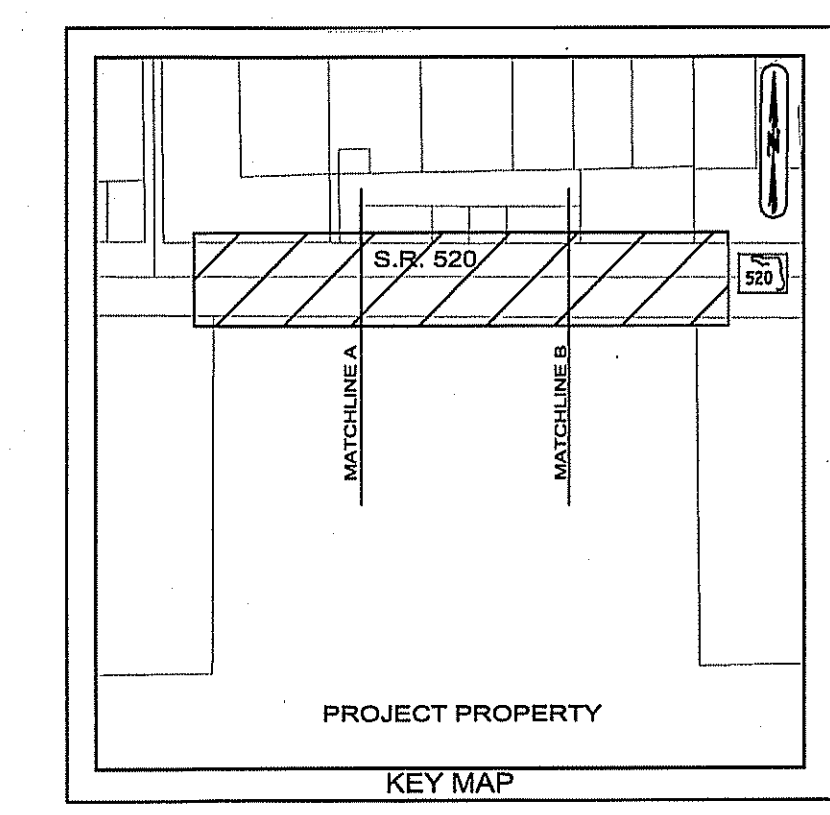
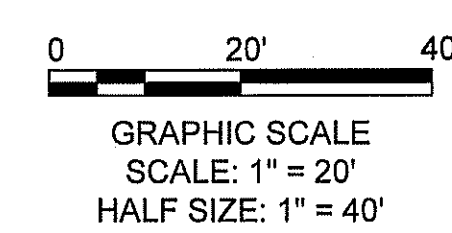
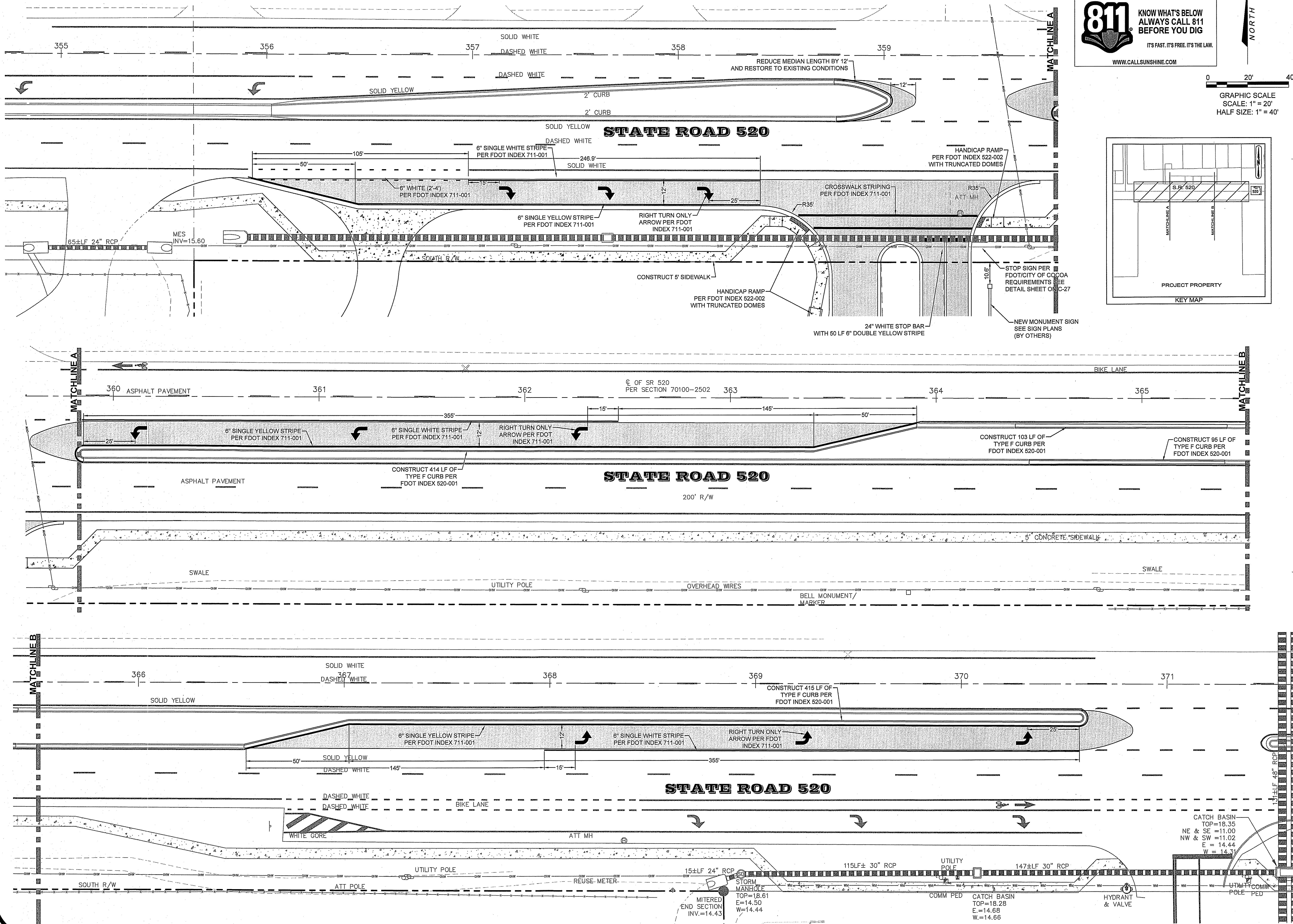
COCOA GRAND

SITE PLAN (CLUBHOUSE)

MORGAN & Associates
Consulting Engineers, Inc.
Civil Engineers and Land Surveyors - E.E. # 7903 L.B. # 7040
504 North Harbor City Blvd., Melbourne, FL 32935
Phone (321) 751-6088 Fax (321) 751-6089

Project # 2018-077
Drawing # CIVIL & DETAILS
Scale:
Horiz.
Vert. N/A
Sheet #
C-9
Sheet 9 of 41





Revision	By	Date
1	AK	08/11/2020
2	AK	08/11/2020
3	AK	08/11/2020
4	AK	08/11/2020
5	AK	08/11/2020
6	AK	08/11/2020
7	AK	08/11/2020
8	AK	08/11/2020
9	AK	08/11/2020
10	AK	08/11/2020

COCOA GRAND
SITE PLAN (TURN LANES)

MORGAN & Associates
Consulting Engineers, Inc.
Civil Engineers and Land Surveyors - E.R. #7903 L.R. #7940
504 North Harbor City Blvd., Melbourne, FL 32955
Phone (321) 751-6088 Fax (321) 751-6089

Project #: 2018-077
Drawing #: CIVIL & DETAILS
Scale: Horiz. N/A
Vert. N/A
Sheet #: **C-10**
Sheet 10 of 41

ANDREAS H. KIRKACH
Professional Engineer
No. 48481
FLORIDA
Steven J. Morgan P.E. FL Reg. #50632
Andreas H. Kirkach P.E. FL Reg. #49431
Date:



PIPE TABLE				
NAME	SIZE	LENGTH	SLOPE	MATERIAL
STP-01	24"	256 LF	0.00%	RCP
STP-02	24"	206 LF	6.33%	RCP
STP-03	24"	127 LF	0.00%	RCP
STP-05	24"	248 LF	0.20%	RCP
STP-06	30"	167 LF	0.60%	RCP
STP-07	30"	61 LF	0.00%	RCP
STP-08	24"	251 LF	0.40%	RCP
STP-09A	36"	305 LF	0.00%	RCP
STP-09B	36"	305 LF	0.00%	RCP
STP-10	24"	63 LF	0.40%	RCP
STP-11	24"	272 LF	0.00%	RCP
STP-12	15"	468 LF	0.21%	RCP
STP-13	15"	251 LF	0.20%	RCP
STP-14	24"	175 LF	7.73%	RCP
STP-15	24"	70 LF	1.07%	RCP
STP-16	24"	80 LF	0.62%	RCP
STP-17	24"	137 LF	0.00%	RCP
STP-18	24"	136 LF	0.00%	RCP
STP-19	24"	174 LF	0.29%	RCP
STP-20A	36"	275 LF	0.00%	RCP
STP-20B	36"	275 LF	0.00%	RCP
STP-21	24"	224 LF	0.22%	RCP
STP-22	30"	141 LF	0.71%	RCP
STP-23	30"	117 LF	11.13%	RCP
STP-24	24"	148 LF	0.34%	RCP
STP-25	15"	70 LF	0.71%	RCP
STP-26	24"	51 LF	0.46%	RCP
STP-27	30"	187 LF	0.03%	RCP
STP-28	30"	240 LF	0.06%	RCP
STP-29	24"	120 LF	1.25%	RCP
STP-30	15"	63 LF	0.40%	RCP
STP-31	15"	76 LF	0.26%	RCP
STP-32	15"	70 LF	0.26%	RCP
STP-33	15"	61 LF	0.41%	RCP

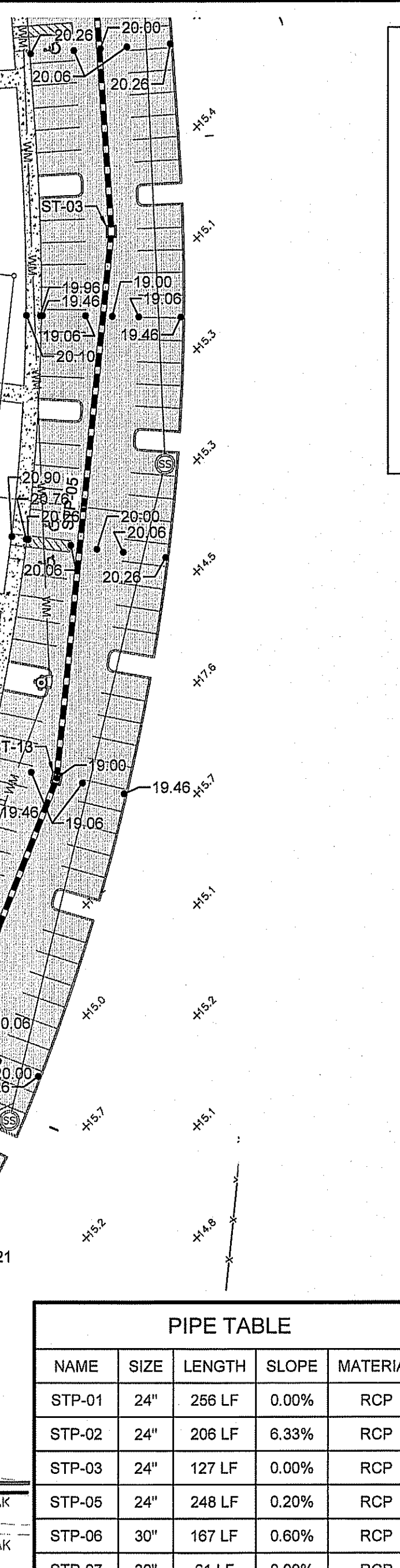
NOTES:

1. STORM STRUCTURES ARE PER FDOT INDEXES 425-010, 425-001, 425-020 AND 430-021.
2. CURB INLETS ARE TYPE 4 ALT. A, TYPE P, 4' DIA.
3. SEE SHEET C-27 FOR OUTFALL STRUCTURE DETAIL

STRUCTURE TABLE				
NAME	STRUCTURE	NORTHING / EASTING	RIM	INVERTS
ST-14	TYPE H-4 INLET OUTFALL STRUCTURE	N: 1460536.17 E: 732279.42	RIM= 16.00	E. INV. = 12.00 (STP-20A) E. INV. = 12.00 (STP-20B)
ST-14A	TYPE H-4 INLET	N: 1460670.19 E: 731797.38	RIM= 14.75	W. INV. = 6.00 (STP-09B) W. INV. = 6.00 (STP-09A)
ST-15	TYPE D INLET	N: 1460534.04 E: 732497.34	RIM= 19.00	S. INV. = 13.00 (STP-21)
ST-16	TYPE D INLET	N: 1460982.51 E: 731937.70	RIM= 19.00	E. INV. = 13.00 (STP-11) S. INV. = 13.00 (STP-22)
ST-17	TYPE 4 INLET	N: 1461877.09 E: 731387.16	RIM= 19.50	W. INV. = 16.50 (STP-31) S. INV. = 16.50 (STP-32)
ST-18	TYPE 4 INLET	N: 1461230.05 E: 731505.27	RIM= 19.50	N. INV. = 15.50 (STP-12) W. INV. = 15.50 (STP-32) S. INV. = 15.50 (STP-13)
ST-19	TYPE 4 INLET	N: 1460970.11 E: 731517.50	RIM= 19.77	NW. INV. = 15.50 (STP-33) E. INV. = 16.50 (STP-25)
ST-20	STORM MANHOLE	N: 1460851.53 E: 731946.12	RIM= 20.00	N. INV. = 12.00 (STP-22) S. INV. = 12.00 (STP-23)
ST-21	STORM MANHOLE	N: 1459872.67 E: 732412.84	RIM= 20.00	SW. INV. = 12.00 (STP-03) N. INV. = 12.00 (STP-02)
ST-23	STORM MANHOLE	N: 1459953.19 E: 732222.67	RIM= 20.00	SE. INV. = 12.00 (STP-06) SW. INV. = 12.00 (STP-07)

STRUCTURE TABLE				
NAME	STRUCTURE	NORTHING / EASTING	RIM	INVERTS
ST-24	STORM MANHOLE	N: 1460084.83 E: 731841.14	RIM= 20.00	W. INV.= 12.00 (STP-17) E. INV.= 9.20 (STP-18)
ST-25	STORM MANHOLE	N: 1460825.77 E: 731608.29	RIM= 19.50	N. INV.= 14.25 (STP-15) S. INV.= 14.25 (STP-26) E. INV.= 14.25 (STP-10)
ST-26	MITERED END SECTION	N: 1462034.50 E: 730999.62	N/A	E. INV.= 15.00 (STP-27)
ST-27	TYPE D INLET	N: 1462034.04 E: 731186.38	RIM= 18.75	W. INV.= 14.95 (STP-27) E. INV.= 14.95 (STP-28)
ST-28	MITERED END SECTION	N: 1462033.22 E: 731426.57	N/A	W. INV.= 14.80 (STP-28)
ST-29	TYPE D INLET	N: 1461072.43 E: 731464.37	RIM= 19.40	S. INV.= 16.00 (STP-30)
ST-30	TYPE D INLET	N: 1460940.59 E: 731667.15	RIM= 19.00	W. INV.= 14.00 (STP-10) S. INV.= 14.00 (STP-29)
ST-31	TYPE 4 INLET	N: 1461676.70 E: 731290.82	RIM= 19.50	E. INV.= 16.70 (STP-31)
ST-32	TYPE 4 INLET	N: 1461208.07 E: 731438.83	RIM= 19.40	E. INV.= 15.70 (STP-32)
ST-33	TYPE D INLET	N: 1461012.90 E: 731474.06	RIM= 19.50	SE. INV.= 15.75 (STP-33)

SIDEWALK NOTE:
SIDEWALK SHALL BE ADA ACCESSIBLE WITH
RUNNING SLOPES NO STEEPER THAN 1:20,
CROSS SLOPE 0.02 OR FLATTER, AND
CONSTRUCTED IN ACCORDANCE WITH FDOT
INDEX 522-001.



Revision	By	Date

COCOA GRAND

**PAVING, GRADING &
DRAINAGE PLAN (SOUTH)**

MORGAN & Associates

Consulting Engineers, Inc.

Civil Engineers and Land Surveyors - E.B. # 7093 / L.B. #7040

504 North Harbor City Blvd. Melbourne, FL 32925

Phone: (321) 751-6088, Fax: (321) 751-6089

Project #: 2018-0777

Drawing #: CIVIL & DETAILS

Scale: _____

Horiz. _____

Vert. _____ N/A

Sheet #: _____

C-12

Sheet 12 of 41



Steven J. Morgan P.E. Fl. Reg. #50632
 Andreas H. Kirbach P.E. Fl. Reg. #49483

Date: _____

**MORGAN
& Associates**
Consulting Engineers, Inc.
Civil Engineers and Land Surveyors • E.B. #703 / L.B. #740
504 North Harbor City Blvd. Melbourne, FL 32935
Phone (321) 751-6088 Fax (321) 751-6080

Steven J. Morgan P.E. FL. Reg. #50632
 Andreas H. Kirbach P.E. Fl. Reg. #4943

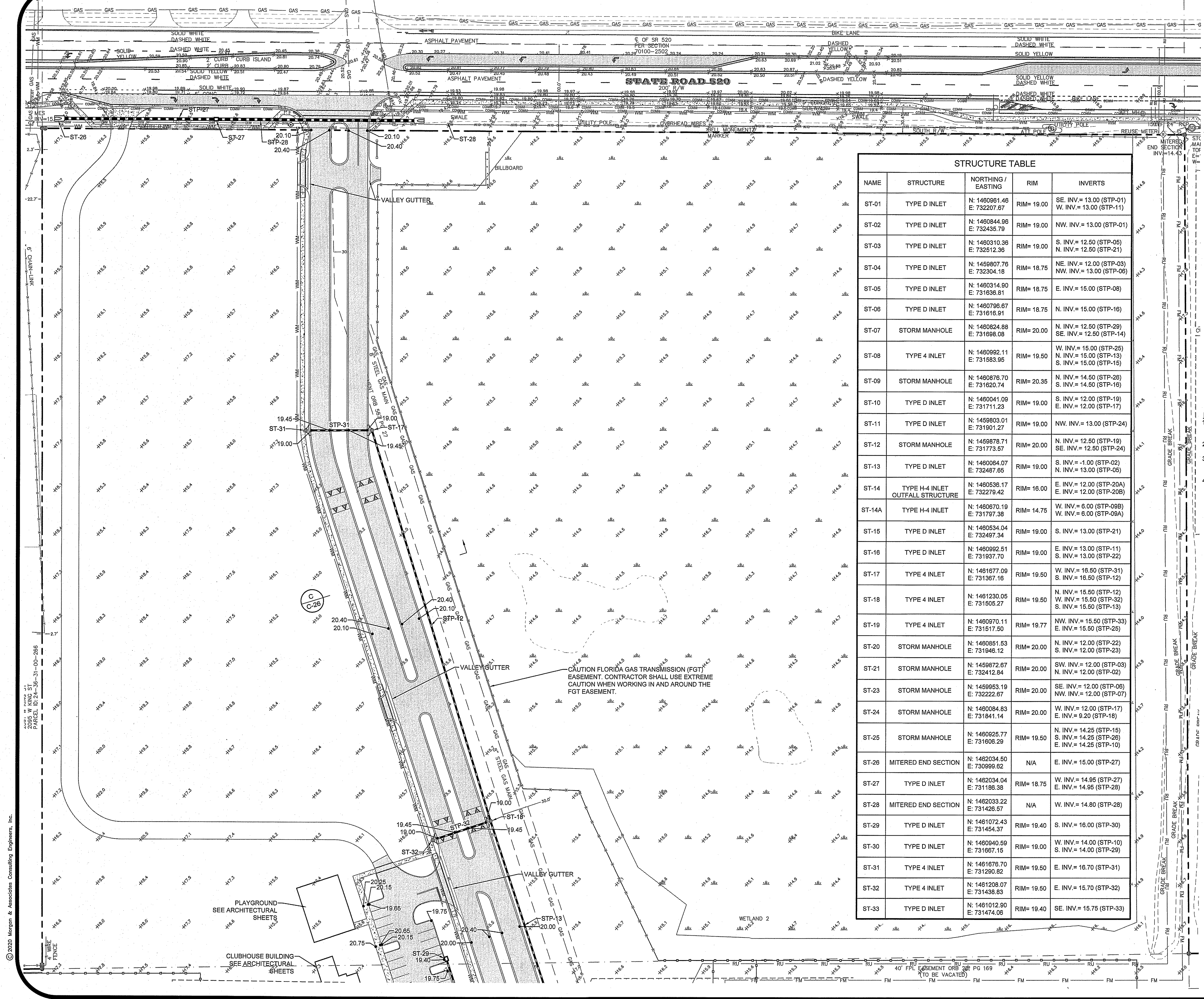
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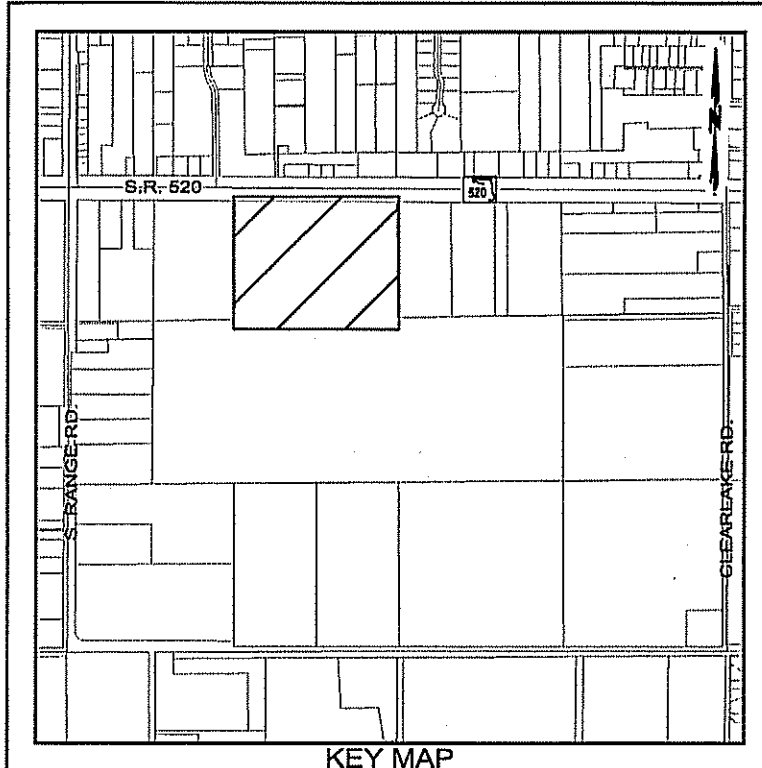
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- NOTES:
- STORM STRUCTURES ARE PER FDOT INDEXES 425-010, 425-001, 425-020 AND 430-021.
 - CURB INLETS ARE TYPE 4 ALT. A, TYPE P, 4' DIA.
 - SEE TURN LANE SHEET (C-13) FOR GRADING AND STORM STRUCTURES WITHIN THE RIGHT OF WAY.
 - SEE SHEET C-27 FOR OUTFALL STRUCTURE DETAIL.

STRUCTURE TABLE				
NAME	STRUCTURE	NORTHING / EASTING	RIM	INVERTS
ST-01	TYPE D INLET	N: 1460961.46 E: 732207.67	RIM= 19.00	SE. INV.= 13.00 (STP-01) W. INV.= 13.00 (STP-11)
ST-02	TYPE D INLET	N: 1460844.98 E: 732435.79	RIM= 19.00	NW. INV.= 13.00 (STP-01)
ST-03	TYPE D INLET	N: 1460310.38 E: 732512.36	RIM= 19.00	S. INV.= 12.50 (STP-05) N. INV.= 12.50 (STP-21)
ST-04	TYPE D INLET	N: 1459807.76 E: 732304.18	RIM= 18.75	NE. INV.= 12.00 (STP-03) NW. INV.= 13.00 (STP-06)
ST-05	TYPE D INLET	N: 1460314.90 E: 731636.81	RIM= 18.75	E. INV.= 15.00 (STP-08)
ST-06	TYPE D INLET	N: 1460796.67 E: 731616.91	RIM= 18.75	N. INV.= 15.00 (STP-16)
ST-07	STORM MANHOLE	N: 1460824.88 E: 731698.08	RIM= 20.00	N. INV.= 12.50 (STP-29) SE. INV.= 12.50 (STP-14)
ST-08	TYPE 4 INLET	N: 1460992.11 E: 731583.95	RIM= 19.50	W. INV.= 15.00 (STP-25) N. INV.= 15.00 (STP-13) S. INV.= 15.00 (STP-15)
ST-09	STORM MANHOLE	N: 1460876.70 E: 731620.74	RIM= 20.35	N. INV.= 14.50 (STP-26) S. INV.= 14.50 (STP-16)
ST-10	TYPE D INLET	N: 1460041.09 E: 731711.23	RIM= 19.00	S. INV.= 12.00 (STP-19) E. INV.= 12.00 (STP-17)
ST-11	TYPE D INLET	N: 1459803.01 E: 731901.27	RIM= 19.00	NW. INV.= 13.00 (STP-24)
ST-12	STORM MANHOLE	N: 1459878.71 E: 731773.67	RIM= 20.00	N. INV.= 12.50 (STP-19) SE. INV.= 12.50 (STP-24)
ST-13	TYPE D INLET	N: 1460084.07 E: 732487.65	RIM= 19.00	S. INV.= -1.00 (STP-02) N. INV.= 13.00 (STP-05)
ST-14	TYPE H-4 INLET OUTFALL STRUCTURE	N: 1460536.17 E: 732279.42	RIM= 16.00	E. INV.= 12.00 (STP-20A) E. INV.= 12.00 (STP-20B)
ST-14A	TYPE H-4 INLET	N: 1460870.19 E: 731797.38	RIM= 14.75	W. INV.= 6.00 (STP-09B) W. INV.= 6.00 (STP-09A)
ST-15	TYPE D INLET	N: 1460534.04 E: 732497.34	RIM= 19.00	S. INV.= 13.00 (STP-21)
ST-16	TYPE D INLET	N: 1460992.51 E: 731937.70	RIM= 19.00	E. INV.= 13.00 (STP-11) S. INV.= 13.00 (STP-22)
ST-17	TYPE 4 INLET	N: 1461677.09 E: 731367.16	RIM= 19.50	W. INV.= 16.50 (STP-31) S. INV.= 16.50 (STP-12)
ST-18	TYPE 4 INLET	N: 1461230.05 E: 731505.27	RIM= 19.50	N. INV.= 16.50 (STP-12) W. INV.= 15.50 (STP-32) S. INV.= 15.50 (STP-13)
ST-19	TYPE 4 INLET	N: 1460970.11 E: 731517.50	RIM= 19.77	NW. INV.= 15.50 (STP-33) E. INV.= 15.50 (STP-25)
ST-20	STORM MANHOLE	N: 1460851.53 E: 731946.12	RIM= 20.00	N. INV.= 12.00 (STP-22) S. INV.= 12.00 (STP-23)
ST-21	STORM MANHOLE	N: 1459872.67 E: 732412.84	RIM= 20.00	SW. INV.= 12.00 (STP-03) N. INV.= 12.00 (STP-02)
ST-23	STORM MANHOLE	N: 1459953.19 E: 732222.67	RIM= 20.00	SE. INV.= 12.00 (STP-06) NW. INV.= 12.00 (STP-07)
ST-24	STORM MANHOLE	N: 1460084.83 E: 731841.14	RIM= 20.00	W. INV.= 12.00 (STP-17) E. INV.= 9.20 (STP-18)
ST-25	STORM MANHOLE	N: 1460925.77 E: 731606.29	RIM= 19.50	N. INV.= 14.25 (STP-15) S. INV.= 14.25 (STP-26) E. INV.= 14.25 (STP-10)
ST-26	MITERED END SECTION	N: 1462034.50 E: 730999.62	N/A	E. INV.= 15.00 (STP-27)
ST-27	TYPE D INLET	N: 1462034.04 E: 731186.38	RIM= 18.75	W. INV.= 14.95 (STP-27) E. INV.= 14.95 (STP-20)
ST-28	MITERED END SECTION	N: 1462033.22 E: 731426.67	N/A	W. INV.= 14.80 (STP-28)
ST-29	TYPE D INLET	N: 1461072.43 E: 731454.37	RIM= 19.40	S. INV.= 16.00 (STP-30)
ST-30	TYPE D INLET	N: 1460940.59 E: 731667.15	RIM= 19.00	W. INV.= 14.00 (STP-10) S. INV.= 14.00 (STP-29)
ST-31	TYPE 4 INLET	N: 1461678.70 E: 731290.82	RIM= 19.50	E. INV.= 16.70 (STP-31)
ST-32	TYPE 4 INLET	N: 1461208.07 E: 731438.83	RIM= 19.50	E. INV.= 15.70 (STP-32)
ST-33	TYPE D INLET	N: 1461012.90 E: 731474.06	RIM= 19.40	SE. INV.= 15.75 (STP-33)

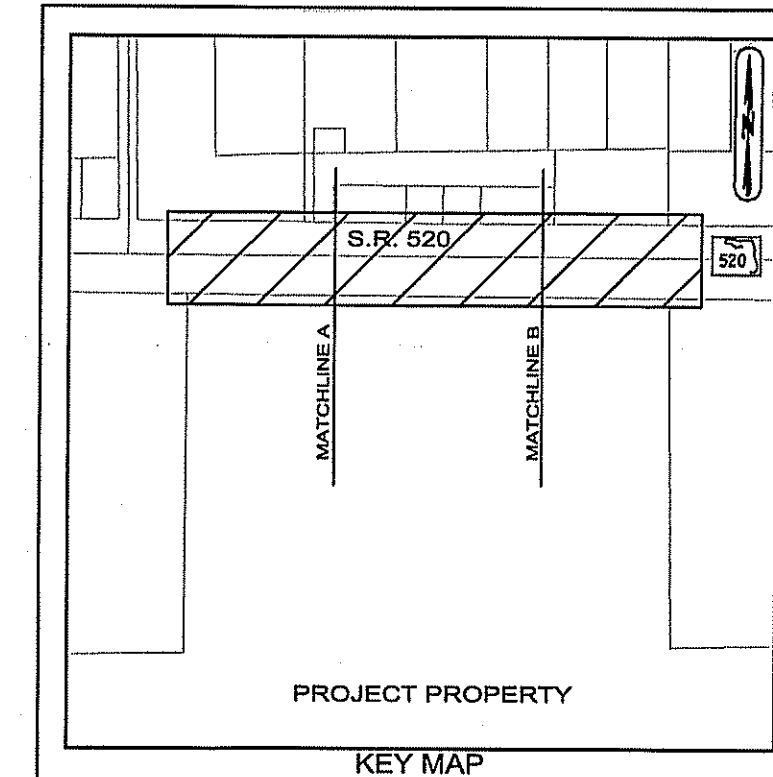
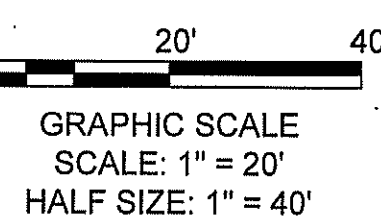
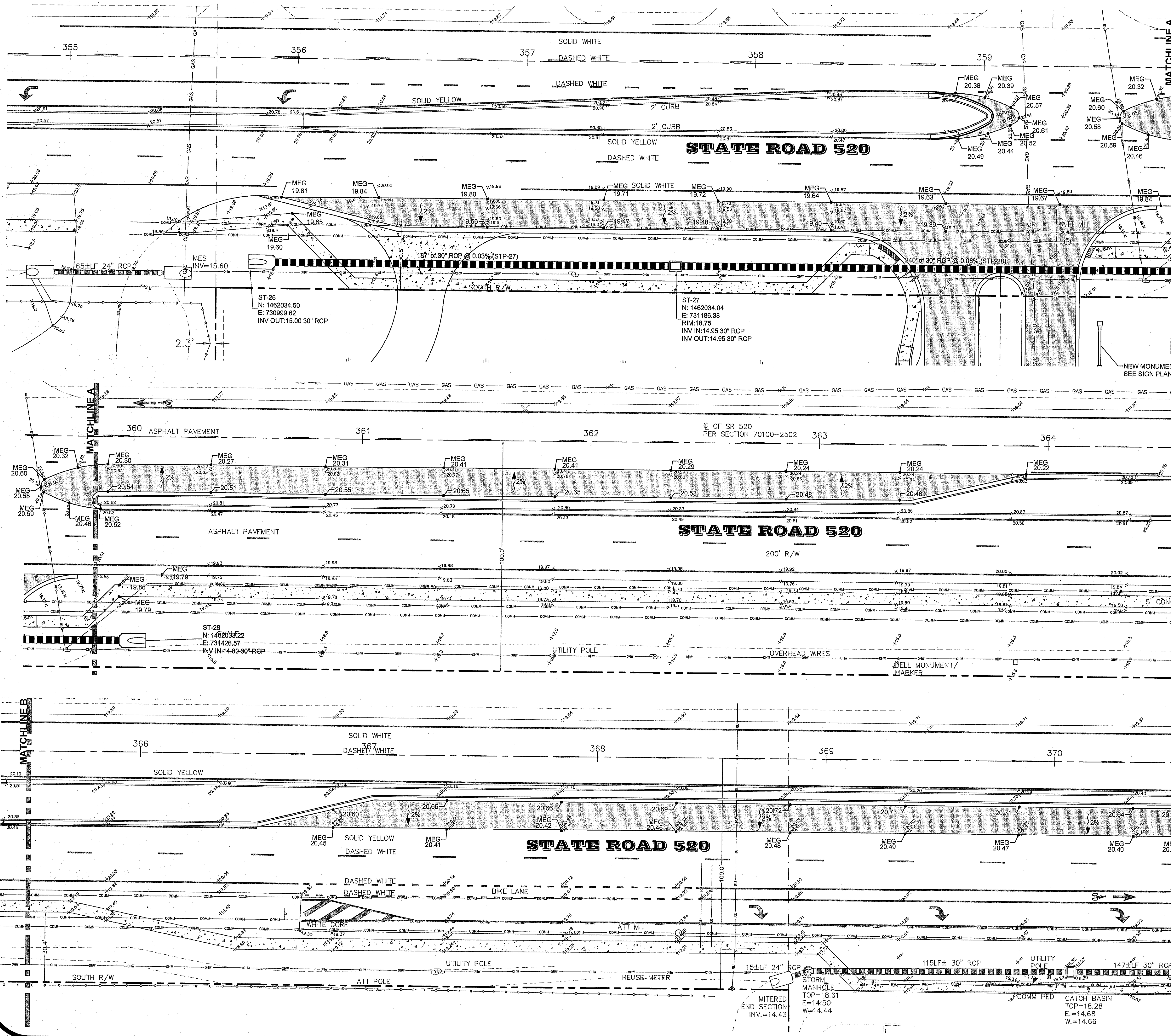
PIPE TABLE				
NAME	SIZE	LENGTH	SLOPE	MATERIAL
STP-01	24"	256 LF	0.00%	RCP
STP-02	24"	208 LF	6.33%	RCP
STP-03	24"	127 LF	0.00%	RCP
STP-05	24"	248 LF	0.20%	RCP
STP-06	30"	167 LF	0.60%	RCP
STP-07	30"	61 LF	0.00%	RCP
STP-08	24"	251 LF	0.40%	RCP
STP-09A	36"	305 LF	0.00%	RCP
STP-09B	36"	305 LF	0.00%	RCP
STP-10	24"	63 LF	0.40%	RCP
STP-11	24"	272 LF	0.00%	RCP
STP-12	15"	468 LF	0.21%	RCP
STP-13	15"	251 LF	0.20%	RCP
STP-14	24"	175 LF	7.73%	RCP
STP-15	24"	70 LF	1.07%	RCP
STP-16	24"	80 LF	0.62%	RCP
STP-17	24"	137 LF	0.00%	RCP
STP-18	24"	136 LF	0.00%	RCP
STP-19	24"	174 LF	0.26%	RCP
STP-20A	36"	275 LF	0.00%	RCP
STP-20B	36"	275 LF	0.00%	RCP
STP-21	24"	224 LF	0.22%	RCP
STP-22	30"	141 LF	0.71%	RCP
STP-23	30"	117 LF	11.13%	RCP
STP-24	24"	148 LF	0.34%	RCP
STP-25	15"	70 LF	0.71%	RCP
STP-26	24"	51 LF	0.49%	RCP
STP-27	30"	187 LF	0.03%	RCP
STP-28	30"	240 LF	0.06%	RCP
STP-29	24"	120 LF	1.25%	RCP
STP-30	15"	63 LF	0.40%	RCP
STP-31	15"	76 LF	0.26%	RCP
STP-32	15"	70 LF	0.29%	RCP
STP-33	15"	61 LF	0.41%	RCP

Project #: 2018-077
Drawing #: CIVIL & DETAILS
Scale:
Horiz. N/A
Vert. N/A
Sheet #:
C-13
Sheet 13 of 41

MORGAN & Associates
Consulting Engineers, Inc.
Civil Engineers and Land Surveyors - E.R. # 7903 / L.R. # 77040
504 North Harbor City Blvd. Melbourne, FL 32955
Phone (321) 751-0088 Fax (321) 751-0089

Steven J. Morgan P.E. FL. Reg. #50632
Andreas H. Kirbach P.E. FL. Reg. #49431
Date:

Revised Per City of Cocoa Comments
August 13, 2020
Per City of Cocoa Comments
May 27, 2020
Per City of Cocoa Comments
March 16, 2020
Per City of Cocoa Comments
March 16, 2020
Drawn: DD
Checked: AK
Date: 08/12/2020
Date: 08/12/2020



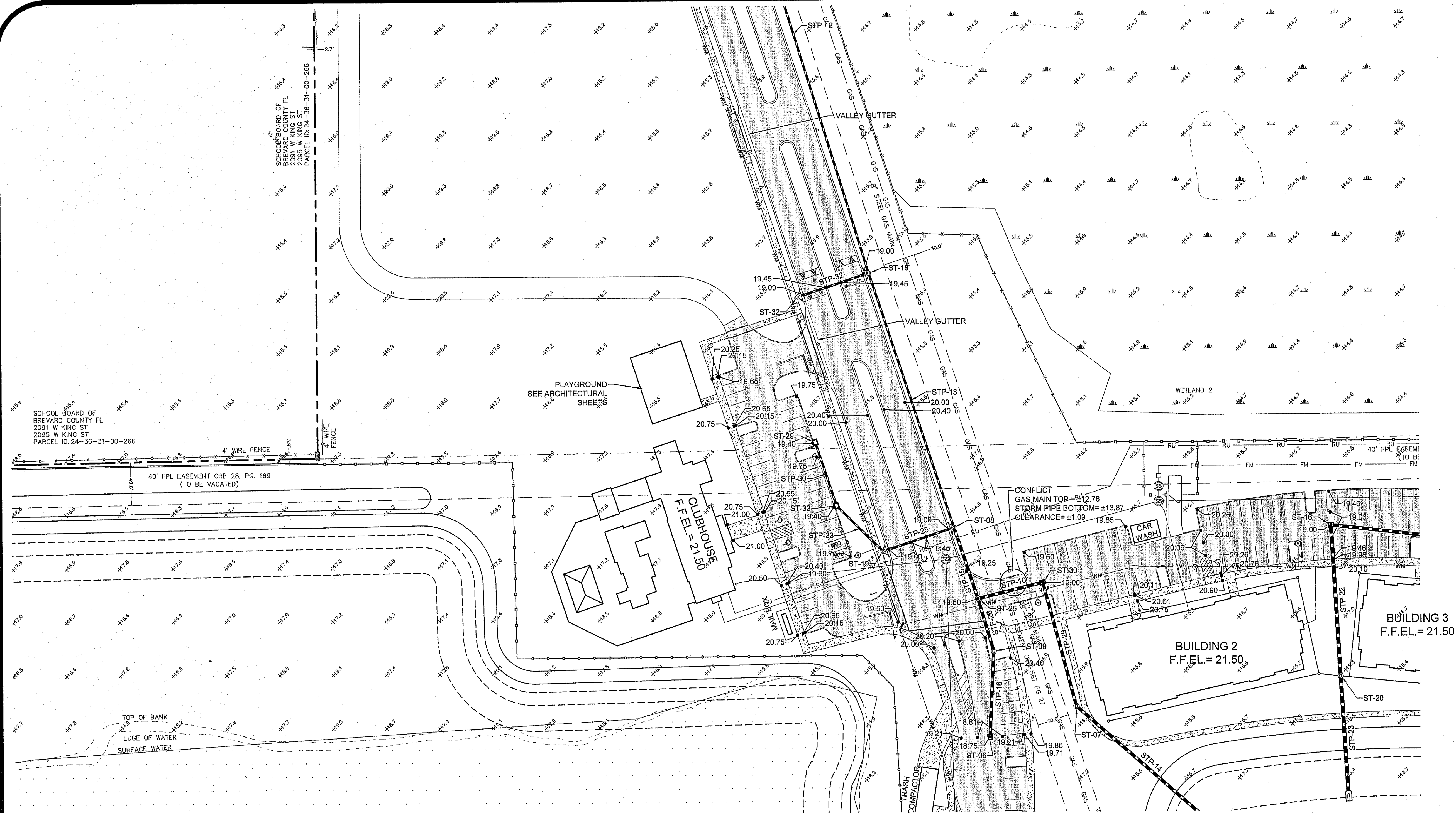
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REVISED PER CITY OF COCOA COMMENTS	AUGUST 13, 2020	
REVISED PER CITY OF COCOA COMMENTS	MAY 27, 2020	
REVISED PER CITY OF COCOA COMMENTS	MAY 12, 2020	
REVISED PER CITY OF COCOA COMMENTS	MARCH 16, 2020	
DESIGNED	DATE	BY
AK	06/11/2020	
CHECKED	DATE	BY
AK	06/11/2020	

COCOA GRAND
PAVING, GRADING, DRAINAGE
& UTILITY PLAN (TURN LANES)

MORGAN & ASSOCIATES
Consulting Engineers, Inc.
Civil Engineers and Land Surveyors - E.B. #7903 / L.B. #7940
504 North Harbor City Blvd., Melbourne, FL 32955
Phone (321) 751-6088 Fax (321) 751-6089

Project #: 2018-077
Drawing #: CIVIL & DETAILS
Scale: Horiz. N/A
Vert. N/A
Sheet #: **C-14**
Sheet 14 of 41

ANDREAS H. KIRBACH
Professional Engineer
Steven J. Morgan P.E. FL Reg. #50632
Andreas H. Kirbach P.E. FL Reg. #49431
Date:



SIDEWALK NOTE:
SIDEWALK SHALL BE ADA ACCESSIBLE WITH
RUNNING SLOPES NO STEEPER THAN 1:20,
CROSS SLOPE 0.02 OR FLATTER, AND
CONSTRUCTED IN ACCORDANCE WITH FDOT
INDEX 522-001.

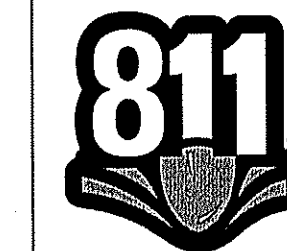
STRUCTURE TABLE				
NAME	STRUCTURE	NORTHING / EASTING	RIM	INVERTS
ST-01	TYPE D INLET	N: 1460961.46 E: 732207.67	RIM= 19.00	SE. INV.= 13.00 (STP-01) W. INV.= 13.00 (STP-11)
ST-02	TYPE D INLET	N: 1460844.96 E: 732435.79	RIM= 19.00	NW. INV.= 13.00 (STP-01)
ST-03	TYPE D INLET	N: 1460310.36 E: 732512.36	RIM= 19.00	S. INV.= 12.50 (STP-05) N. INV.= 12.50 (STP-21)
ST-04	TYPE D INLET	N: 1459807.76 E: 732304.18	RIM= 18.75	NE. INV.= 12.00 (STP-03) NW. INV.= 13.00 (STP-06)
ST-05	TYPE D INLET	N: 1460314.90 E: 731636.81	RIM= 18.75	E. INV.= 15.00 (STP-08)
ST-06	TYPE D INLET	N: 1460796.67 E: 731616.91	RIM= 18.75	N. INV.= 15.00 (STP-16)
ST-07	STORM MANHOLE	N: 1460824.88 E: 731698.08	RIM= 20.00	N. INV.= 12.50 (STP-29) SE. INV.= 12.50 (STP-14)
ST-08	TYPE 4 INLET	N: 1460992.11 E: 731583.95	RIM= 19.50	W. INV.= 15.00 (STP-25) N. INV.= 15.00 (STP-13) S. INV.= 15.00 (STP-15)
ST-09	STORM MANHOLE	N: 1460876.70 E: 731620.74	RIM= 20.35	N. INV.= 14.50 (STP-26) S. INV.= 14.50 (STP-16)
ST-10	TYPE D INLET	N: 1460041.09 E: 731711.23	RIM= 19.00	S. INV.= 12.00 (STP-19) E. INV.= 12.00 (STP-17)
ST-11	TYPE D INLET	N: 1459803.01 E: 731901.27	RIM= 19.00	NW. INV.= 13.00 (STP-24)
ST-12	STORM MANHOLE	N: 1459878.71 E: 731773.57	RIM= 20.00	N. INV.= 12.50 (STP-19) SE. INV.= 12.50 (STP-24)
ST-13	TYPE D INLET	N: 1460064.07 E: 732487.65	RIM= 19.00	S. INV.= -1.00 (STP-02) N. INV.= 13.00 (STP-05)

STRUCTURE TABLE				
NAME	STRUCTURE	NORTHING / EASTING	RIM	INVERTS
ST-14	TYPE H-4 INLET OUTFALL STRUCTURE	N: 1460536.17 E: 732279.42	RIM= 16.00	E. INV.= 12.00 (STP-20A) E. INV.= 12.00 (STP-20B)
ST-14A	TYPE H-4 INLET	N: 1460670.19 E: 731797.38	RIM= 14.75	W. INV.= 6.00 (STP-09B) W. INV.= 6.00 (STP-09A)
ST-15	TYPE D INLET	N: 1460534.04 E: 732497.34	RIM= 19.00	S. INV.= 13.00 (STP-21)
ST-16	TYPE D INLET	N: 1460992.51 E: 731937.70	RIM= 19.00	E. INV.= 13.00 (STP-11) S. INV.= 13.00 (STP-22)
ST-17	TYPE 4 INLET	N: 1461677.09 E: 731367.16	RIM= 19.50	W. INV.= 16.50 (STP-31) S. INV.= 16.50 (STP-12)
ST-18	TYPE 4 INLET	N: 1461230.05 E: 731946.12	RIM= 19.50	N. INV.= 15.50 (STP-12) W. INV.= 15.50 (STP-32) S. INV.= 15.50 (STP-13)
ST-19	TYPE 4 INLET	N: 1460970.11 E: 731517.50	RIM= 19.77	NW. INV.= 15.50 (STP-33) E. INV.= 15.50 (STP-25)
ST-20	STORM MANHOLE	N: 1460851.53 E: 731946.12	RIM= 20.00	N. INV.= 12.00 (STP-22) S. INV.= 12.00 (STP-23)
ST-21	STORM MANHOLE	N: 1459872.67 E: 732412.84	RIM= 20.00	SW. INV.= 12.00 (STP-03) N. INV.= 12.00 (STP-02)
ST-23	STORM MANHOLE	N: 1459953.19 E: 732222.67	RIM= 20.00	SE. INV.= 12.00 (STP-06) NW. INV.= 12.00 (STP-07)
ST-24	STORM MANHOLE	N: 1460084.83 E: 731841.14	RIM= 20.00	W. INV.= 12.00 (STP-17) E. INV.= 9.20 (STP-18)
ST-25	STORM MANHOLE	N: 1460925.77 E: 731606.29	RIM= 19.50	N. INV.= 14.25 (STP-15) S. INV.= 14.25 (STP-26) E. INV.= 14.25 (STP-10)

STRUCTURE TABLE				
NAME	STRUCTURE	NORTHING / EASTING	RIM	INVERTS
ST-26	MITERED END SECTION	N: 1462034.50 E: 730999.62	N/A	E. INV.= 15.00 (STP-27)
ST-27	TYPE D INLET	N: 1462034.04 E: 731168.38	RIM= 18.75	W. INV.= 14.95 (STP-27) E. INV.= 14.95 (STP-28)
ST-28	MITERED END SECTION	N: 1462033.22 E: 731426.57	N/A	W. INV.= 14.80 (STP-28)
ST-29	TYPE D INLET	N: 1461072.43 E: 731454.37	RIM= 19.40	S. INV.= 16.00 (STP-30)
ST-30	TYPE D INLET	N: 1460940.59 E: 731667.15	RIM= 19.00	W. INV.= 14.00 (STP-10) S. INV.= 14.00 (STP-29)
ST-31	TYPE 4 INLET	N: 1461676.70 E: 731290.82	RIM= 19.50	E. INV.= 16.70 (STP-31)
ST-32	TYPE 4 INLET	N: 1461208.07 E: 731438.83	RIM= 19.50	E. INV.= 15.70 (STP-32)
ST-33	TYPE D INLET	N: 1461012.90 E: 731474.05	RIM= 19.40	SE. INV.= 15.75 (STP-33)

NOTES:

- STORM STRUCTURES ARE PER FDOT INDEXES 425-010, 425-001, 425-020 AND 430-021.
- CURB INLETS ARE TYPE 4 ALT. A, TYPE P, 4' DIA.
- SEE SHEET C-27 FOR OUTFALL STRUCTURE DETAIL



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PIPE TABLE				
NAME	SIZE	LENGTH	SLOPE	MATERIAL
STP-01	24"	256 LF	0.00%	RCP
STP-02	24"	206 LF	6.33%	RCP
STP-03	24"	127 LF	0.00%	RCP
STP-05	24"	248 LF	0.20%	RCP
STP-06	30"	167 LF	0.80%	RCP
STP-07	30"	61 LF	0.00%	RCP
STP-08	24"	251 LF	0.40%	RCP
STP-09A	36"	305 LF	0.00%	RCP
STP-09B	36"	305 LF	0.00%	RCP
STP-10	24"	63 LF	0.40%	RCP
STP-11	24"	272 LF	0.00%	RCP
STP-12	15"	468 LF	0.21%	RCP
STP-13	15"	251 LF	0.20%	RCP
STP-14	24"	175 LF	7.73%	RCP
STP-15	24"	70 LF	1.07%	RCP
STP-16	24"	80 LF	0.62%	RCP
STP-17	24"	137 LF	0.00%	RCP
STP-18	24"	136 LF	0.00%	RCP
STP-19	24"	174 LF	0.28%	RCP
STP-20A	36"	275 LF	0.00%	RCP
STP-20B	36"	275 LF	0.00%	RCP
STP-21	24"	224 LF	0.22%	RCP
STP-22	30"	141 LF	0.71%	RCP
STP-23	30"	117 LF	11.13%	RCP
STP-24	24"	148 LF	0.34%	RCP
STP-25	15"	70 LF	0.71%	RCP
STP-26	24"	51 LF	0.49%	RCP
STP-27	30"	187 LF	0.03%	RCP
STP-28	30"	240 LF	0.06%	RCP
STP-29	24"	120 LF	1.25%	RCP
STP-30	15"	63 LF	0.40%	RCP
STP-31	15"	76 LF	0.26%	RCP
STP-32	15"	70 LF	0.29%	RCP
STP-33	15"	61 LF	0.41%	RCP

COCOA GRAND
PAVING, GRADING &
DRAINAGE PLAN (CLUBHOUSE)

MORGAN & ASSOCIATES
Consulting Engineers, Inc.
Civil Engineers and Land Surveyors - E.R. # 7993 / L.R. # 77040
504 North Harbor City Blvd., Melbourne, FL 32955
Phone (321) 751-6088 Fax (321) 751-6089

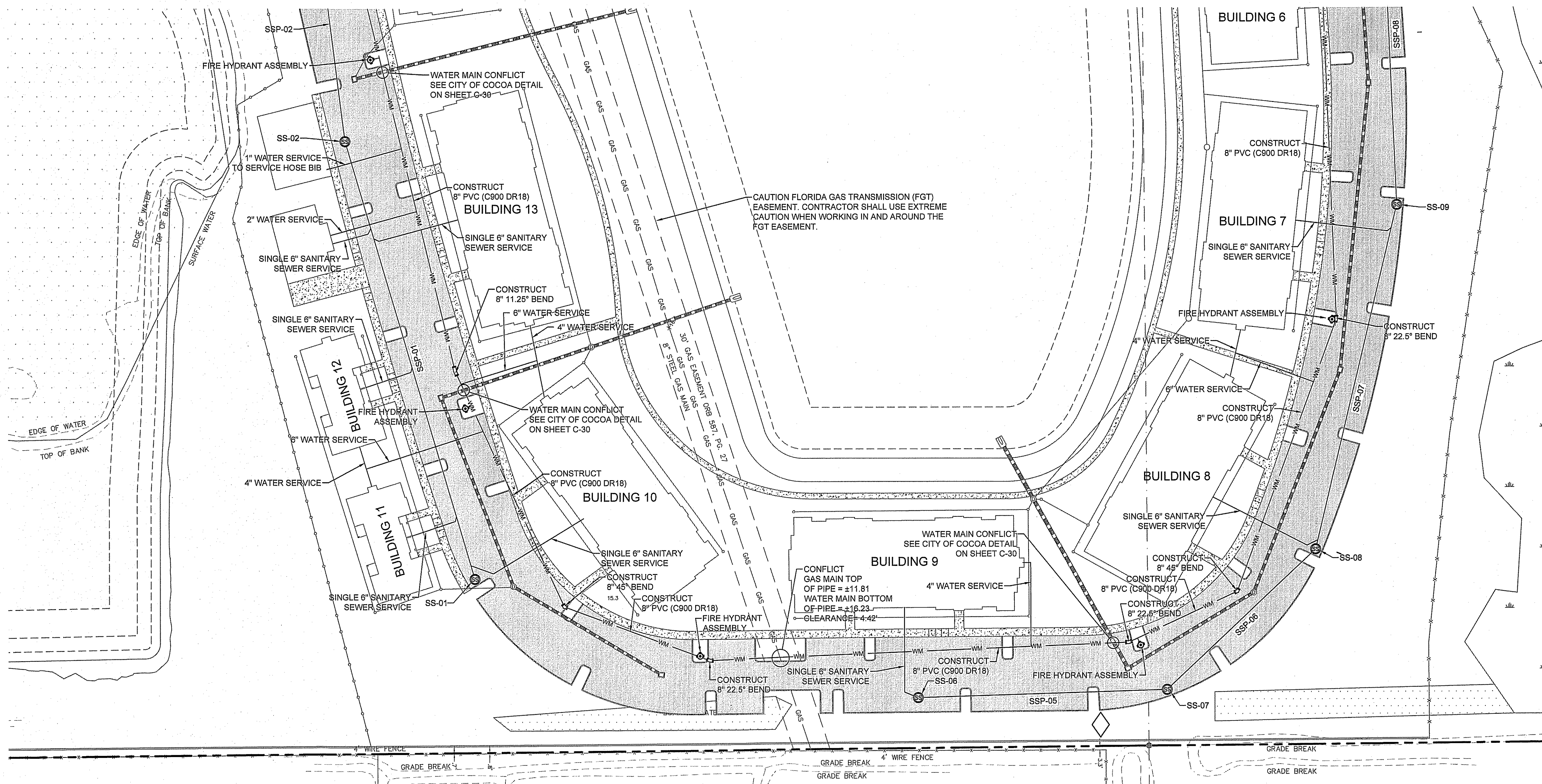
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Drawing #: CIVIL & DETAILS

Scale:
Horiz. N/A
Vert. N/A

Sheet #:
C-15
Sheet 15 of 41

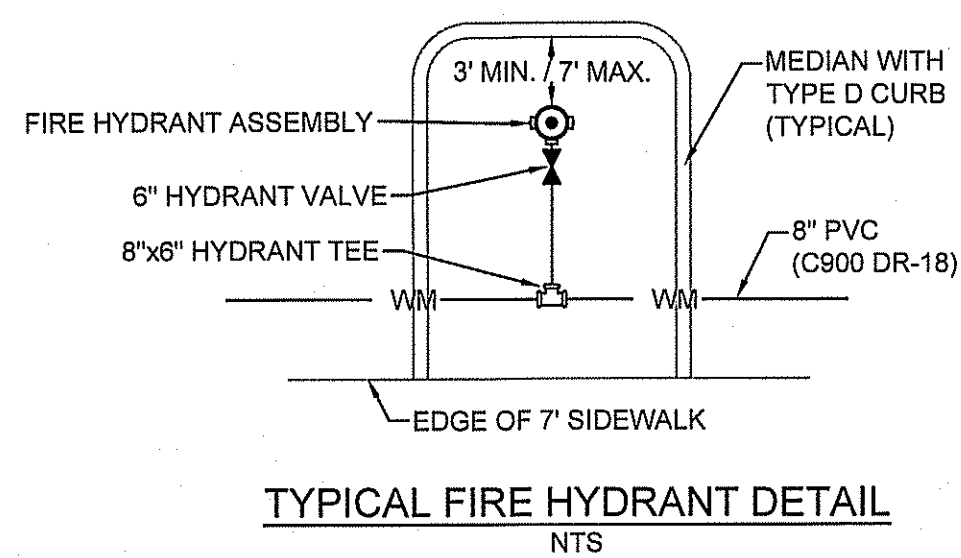
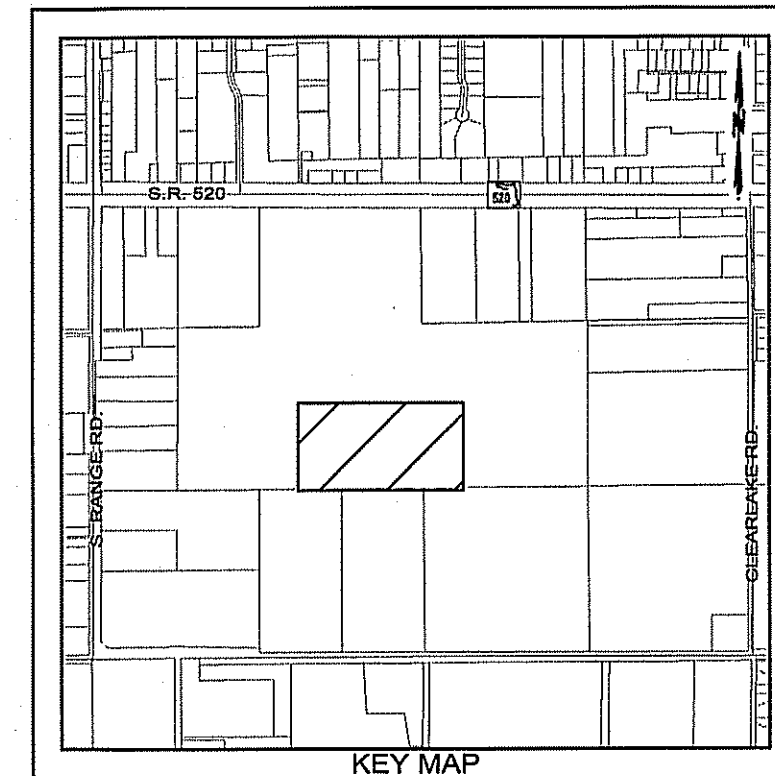
ANDREAS H. KIRKACH
LICENSE
49431
STATE OF FLORIDA
PROFESSIONAL ENGINEER
Steven J. Morgan P.E. FL. Reg. #50632
Andreas H. Kirkach P.E. FL. Reg. #49431
Date:

REVISION
AUGUST 13, 2020 REVISED PER CITY OF COCOA COMMENTS
MAY 27, 2020 PER CITY OF COCOA COMMENTS
MAY 12, 2020 PER SJRWMD COMMENTS
MARCH 16, 2020 PER CITY OF COCOA COMMENTS
Date: 08/11/2020
Drawn: DD
Checked: AK
Date: 08/11/2020



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UTILITY NOTES:

1. CONTRACTOR TO COORDINATE SEWER FORCE MAIN TIE IN WITH CITY OF COCOA SEWER FIELD OPERATION DEPARTMENT.
2. ALL HYDRANT VALVES AND TEES ARE NOT SHOWN ON THIS SHEET DUE TO THE SCALE. PLEASE SEE DETAIL BELOW FOR TYPICAL HYDRANT VALVE AND TEE LOCATIONS.
3. ALL PVC USED FOR WATER MAINS SHALL BE C-900 DR-18.
4. SEE SHEET C-28 FOR CITY OF COCOA WATER DETAILS AND POTABLE WATER DISTRIBUTION SYSTEM NOTES.
5. ALL SANITARY SEWER SERVICES SHALL BE PVC (SDR35).
6. SEE SHEET C-30 FOR UTILITY CROSSINGS AND SEPARATION DETAILS PER CITY OF COCOA TECHNICAL STANDARDS.
7. ALL PRIVATE WATERLINES AND FIRE PROTECTION APPURTENANCES WILL BE PERMITTED, INSPECTED, AND APPROVED BY LOCAL FIRE JURISDICTION AUTHORITY PRIOR TO FINAL CLEARANCE.
8. HDD INSTALLED UNDER FDOT ROADWAYS SHALL CONFORM TO THE LATEST FDOT ROAD AND BRIDGE CONSTRUCTION DESIGN STANDARDS.
9. ONLY DIP AND FUSIBLE PVC MAY BE HORIZONTAL DIRECTIONAL DRILLED (HDD) UNDER PAVEMENT OR SURFACE WATERWAY CROSSINGS.
10. THE HDD CONTRACTOR SHALL SUBMIT A BORE PLAN TO THE ENGINEERING DIVISION FOR APPROVAL.

STRUCTURE TABLE

NAME	STRUCTURE	NORTHING / EASTING	RIM	INVERTS
LS-01	48" MANHOLE	N: 1461029.69 E: 731776.29	RIM= 22.00	S. INV.= 6.10 (SSP-13)
SS-01	48" MANHOLE	N: 1459884.95 E: 731740.40	RIM= 20.05	N. INV.= 15.28 (SSP-01)
SS-02	48" MANHOLE	N: 1460261.10 E: 731628.52	RIM= 19.73	S. INV.= 13.87 (SSP-01) N. INV.= 13.77 (SSP-02)
SS-03	48" MANHOLE	N: 1460577.89 E: 731588.08	RIM= 20.31	S. INV.= 12.81 (SSP-02) N. INV.= 12.51 (SSP-03)
SS-04	48" MANHOLE	N: 1460962.65 E: 731576.31	RIM= 19.25	S. INV.= 11.12 (SSP-03) E. INV.= 9.44 (SSP-04)
SS-05	48" MANHOLE	N: 1461015.48 E: 731776.40	RIM= 22.00	W. INV.= 8.70 (SSP-04) E. INV.= 6.15 (SSP-12) N. INV.= 6.15 (SSP-13)
SS-06	48" MANHOLE	N: 1459782.93 E: 732123.10	RIM= 19.98	E. INV.= 15.20 (SSP-05)
SS-07	48" MANHOLE	N: 1459789.63 E: 732338.05	RIM= 19.26	W. INV.= 14.43 (SSP-05) NE. INV.= 14.33 (SSP-06)
SS-08	48" MANHOLE	N: 1459910.00 E: 732466.27	RIM= 20.06	SW. INV.= 13.70 (SSP-06) N. INV.= 13.60 (SSP-07)
SS-09	48" MANHOLE	N: 1460205.63 E: 732536.64	RIM= 19.82	S. INV.= 12.51 (SSP-07) N. INV.= 12.41 (SSP-08)
SS-10	48" MANHOLE	N: 1460497.14 E: 732523.53	RIM= 19.48	S. INV.= 11.36 (SSP-08) N. INV.= 10.36 (SSP-09)
SS-11	48" MANHOLE	N: 1460814.28 E: 732500.09	RIM= 20.00	S. INV.= 9.22 (SSP-09) NW. INV.= 9.14 (SSP-10)
SS-12	48" MANHOLE	N: 1460937.54 E: 732344.35	RIM= 20.21	SE. INV.= 8.43 (SSP-10) W. INV.= 8.33 (SSP-11)
SS-13	48" MANHOLE	N: 1461018.69 E: 732040.03	RIM= 20.11	E. INV.= 7.20 (SSP-11) W. INV.= 7.10 (SSP-12)

PIPE TABLE

NAME	SIZE	LENGTH	SLOPE	MATERIAL
SSP-01	8"	392 LF	0.36%	8" PVC (SDR 35)
SSP-02	8"	319 LF	0.36%	8" PVC (SDR 35)
SSP-03	8"	385 LF	0.36%	8" PVC (SDR 35)
SSP-04	8"	207 LF	0.36%	8" PVC (SDR 35)
SSP-05	8"	216 LF	0.36%	8" PVC (SDR 35)
SSP-06	8"	178 LF	0.36%	8" PVC (SDR 35)
SSP-07	8"	304 LF	0.36%	8" PVC (SDR 35)
SSP-08	8"	292 LF	0.36%	8" PVC (SDR 35)
SSP-09	8"	318 LF	0.36%	8" PVC (SDR 35)
SSP-10	8"	189 LF	0.36%	8" PVC (SDR 35)
SSP-11	8"	315 LF	0.36%	8" PVC (SDR 35)
SSP-12	8"	264 LF	0.36%	8" PVC (SDR 35)
SSP-13	8"	14 LF	0.35%	8" PVC (SDR 35)

COCOA GRAND

UTILITY PLAN (SOUTH)

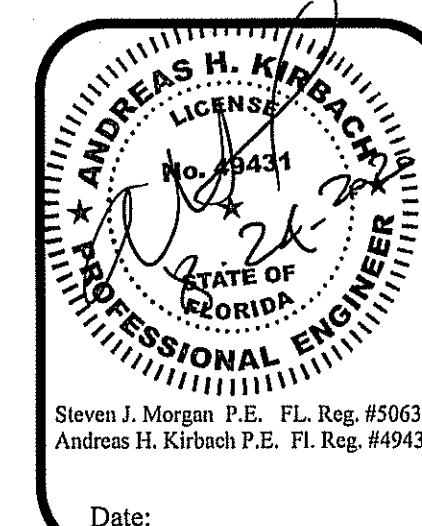
MORGAN & Associates
Consulting Engineers, Inc.
Civil Engineers and Land Surveyors - E.B. # 7983 / L.B. # 77040
304 North Harbor City Blvd., Melbourne, FL 32955
Phone (321) 751-6088 Fax (321) 751-6089

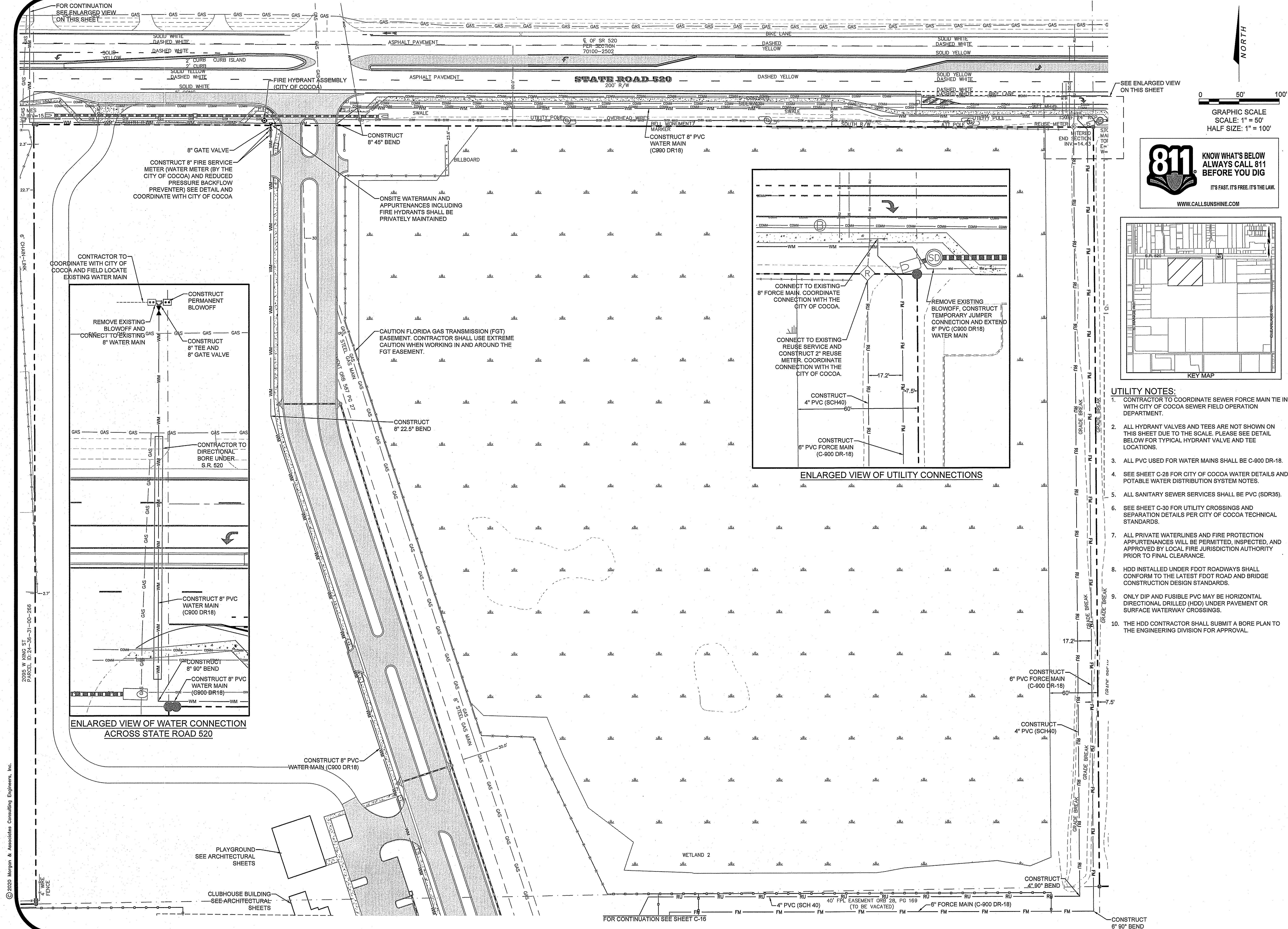
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Drawing #: CIVIL & DETAILS

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Vert. N/A

Sheet #:

C-17
Sheet 17 of 41





Revision	August 13, 2020
REVISED PER CITY OF COCOA COMMENTS	
Revision	May 27, 2020
PER CITY OF COCOA COMMENTS	
Revision	May 12, 2020
PER SURVIMD COMMENTS	
Revision	March 16, 2020
PER CITY OF COCOA COMMENTS	
Design: AK	Date: 06/11/2020
Drawn: DD	Date: 06/11/2020
Checked: AK	Date: 06/11/2020

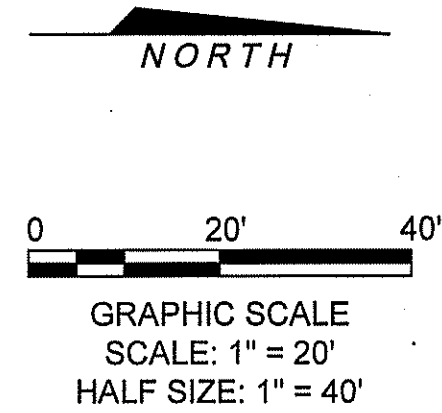
COCOA GRAND

UTILITY PLAN (ENTRANCE)

MORGAN & Associates, Inc.
Consulting Engineers, Inc.
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Project #: 2018-077
Drawing #: CIVIL & DETAILS
Scale:
Horiz. N/A
Vert. N/A
Sheet #:
C-18
Sheet 18 of 41

Steven J. Morgan, P.E. License No. 49434
Professional Engineer
Date:



Revision	Date	By	Check
1	AUGUST 13, 2020	AK	AK
2	MAY 27, 2020	AK	AK
3	MAY 12, 2020	AK	AK
4	MARCH 16, 2020	AK	AK
5	06/11/2020	AK	AK
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7	06/11/2020	AK	AK

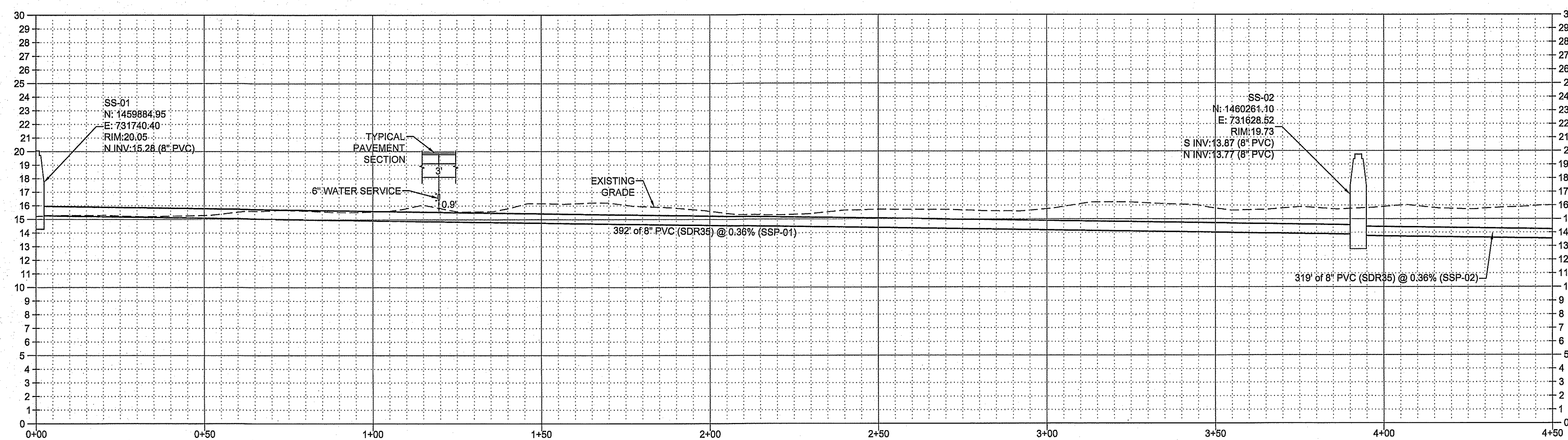
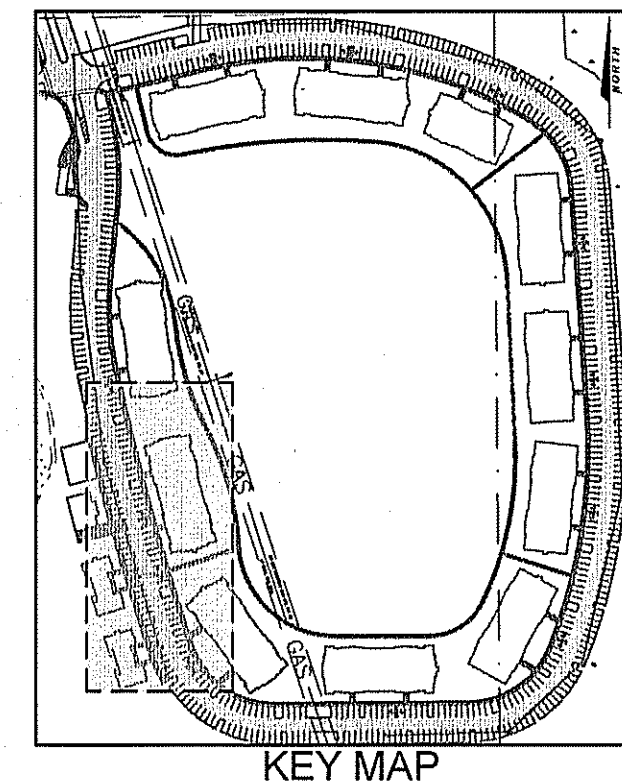
COCOA GRAND

SEWER PROFILE (WEST)

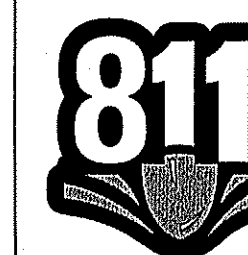
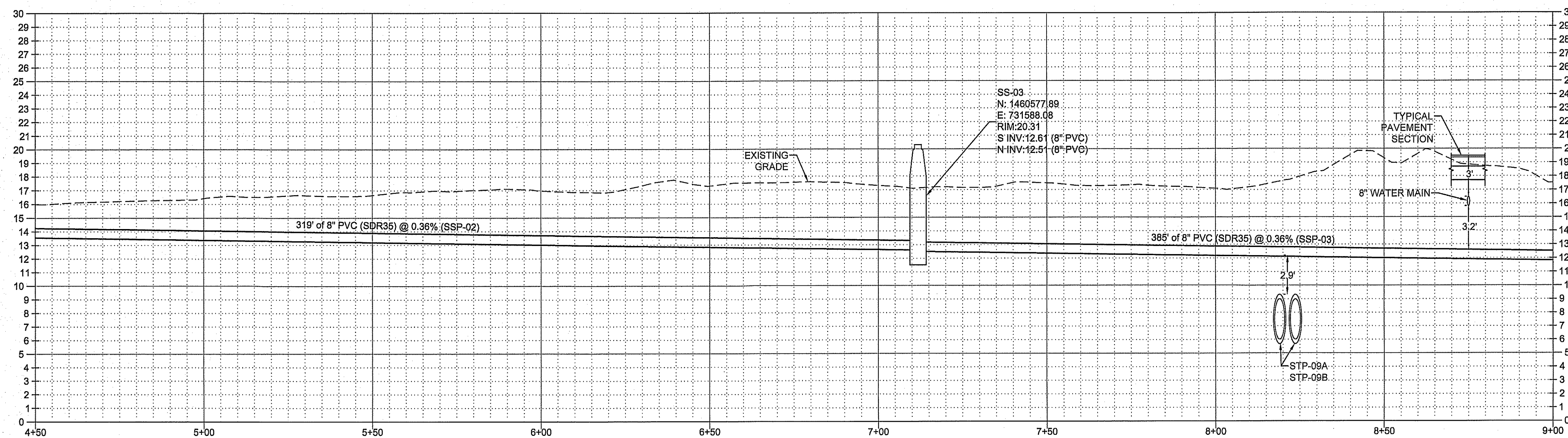
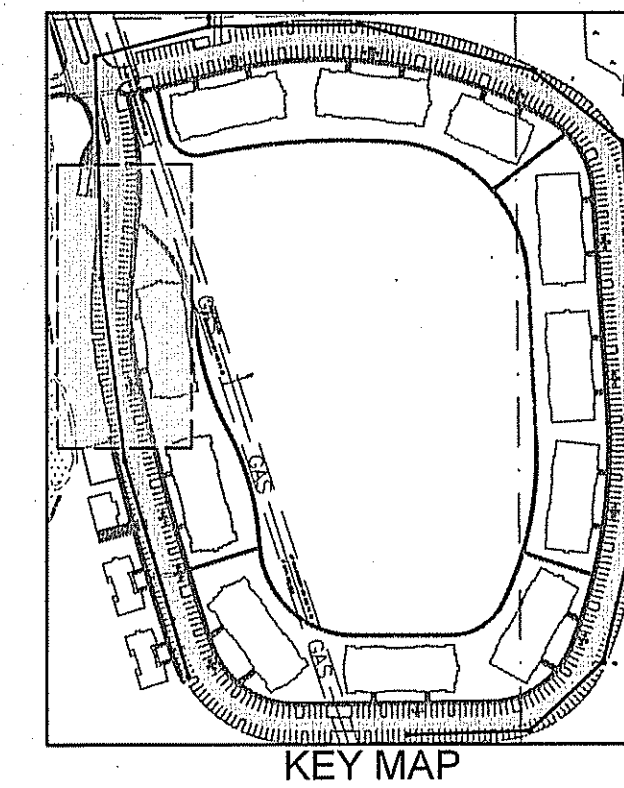
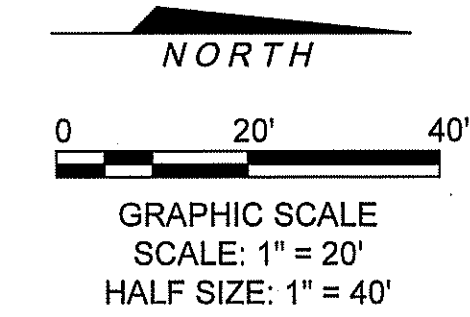
MORGAN & Associates
Consulting Engineers, Inc.
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Phone (321) 751-6088 Fax (321) 751-6089

Project #: 2018-077
Drawing #: CIVIL & DETAILS
Scale:
Horiz. N/A
Vert. N/A
Sheet #: **C-19**
Sheet 19 of 41

ANDREAS H. KIRBACH
P.E. 49431
STATE OF FLORIDA
PROFESSIONAL ENGINEER
Steven J. Morgan
P.E. Reg. #50632
Andreas H. Kirbach P.E. FL Reg. #49431
Date:



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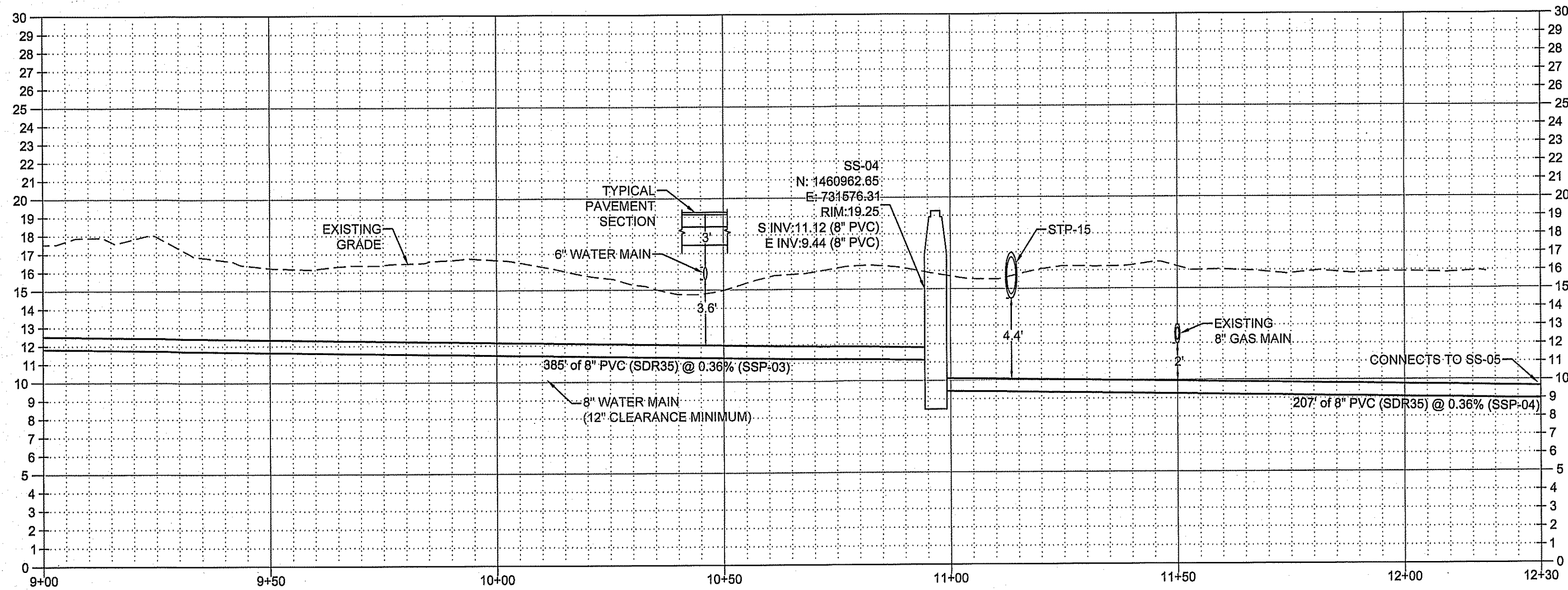
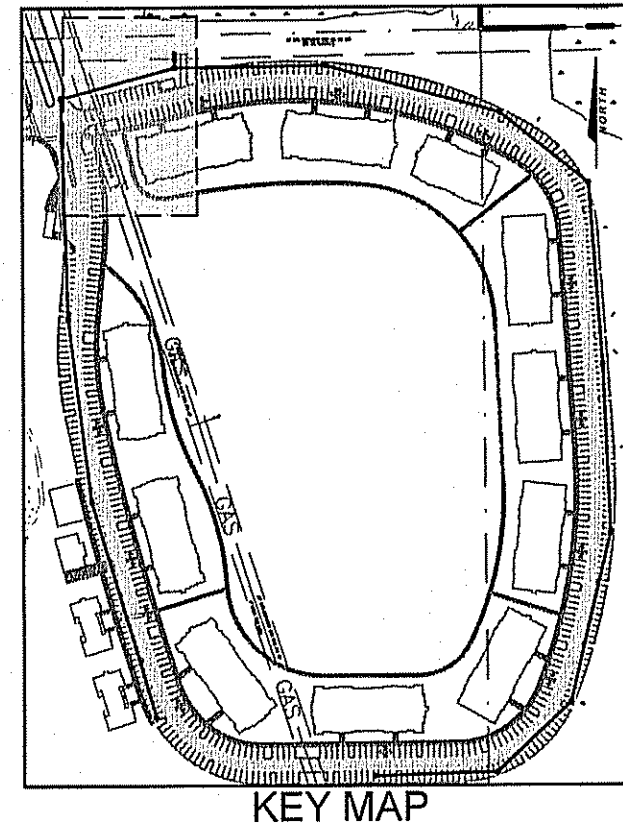
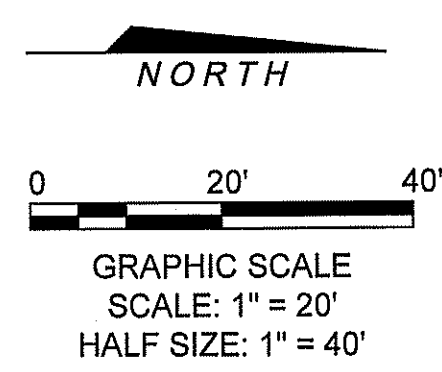
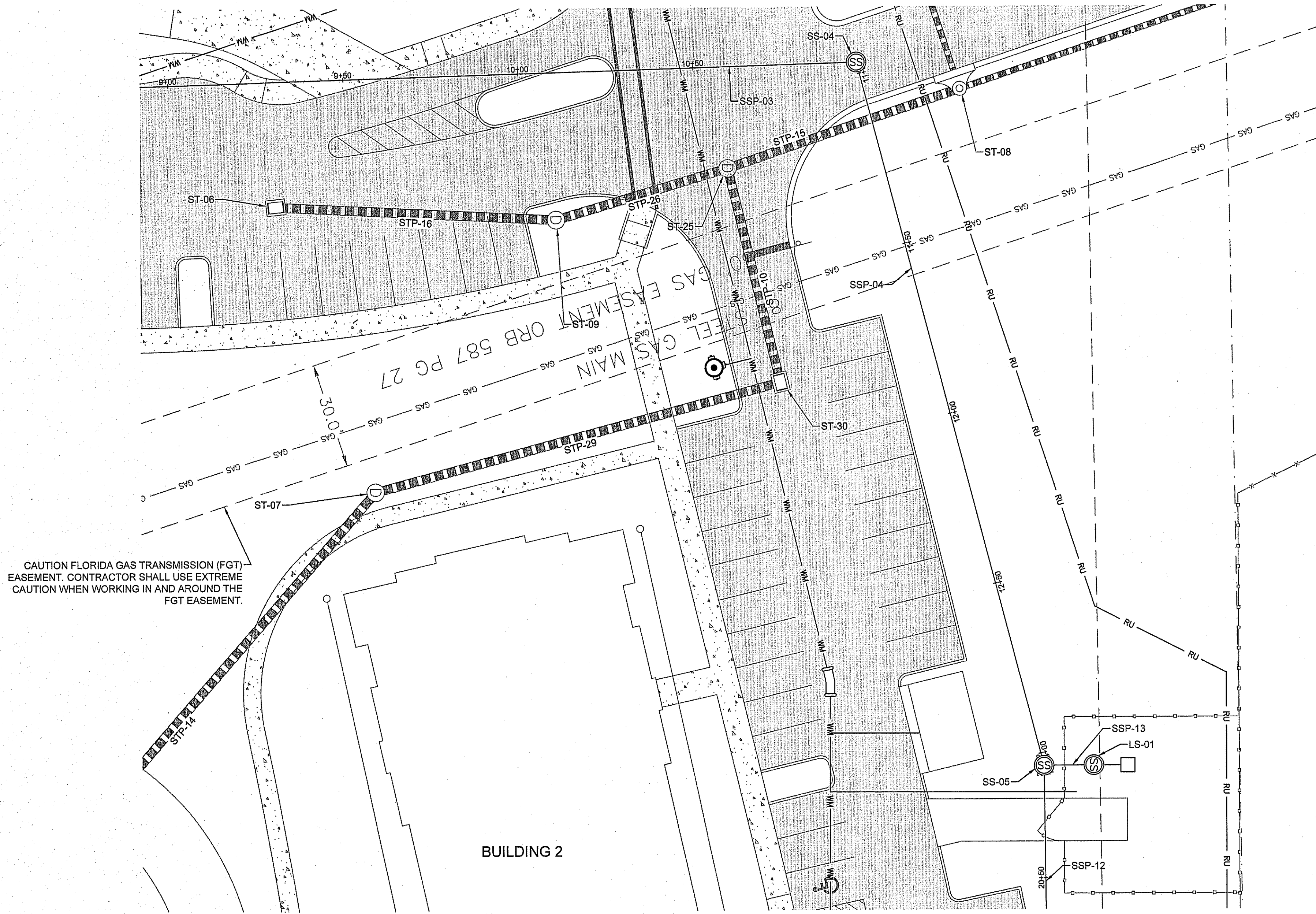
COCOA GRAND
SEWER PROFILE (WEST)

MORGAN & Associates
Consulting Engineers, Inc.
Civil Engineers and Land Surveyors - E.B. # 7903 L.B. # 7040
504 North Harbor City Blvd. Melbourne, FL 32955
Phone (321) 751-6088 Fax (321) 751-6089

Project #: 2018-077
Drawing #: CIVIL & DETAILS
Scale:
Horiz. N/A
Vert. N/A
Sheet #: **C-20**
Sheet 20 of 41

ANDREAS H. KIRBACH
LICENSE
P.E. # 49431
PROFESSIONAL ENGINEER
Steven J. Morgan P.E. FL Reg. #50532
Andreas H. Kirbach P.E. FL Reg. #49431
Date:

REVISION	DATE	BY
REVISED PER CITY OF COCOA COMMENTS	AUGUST 13, 2020	AK
PER CITY OF COCOA COMMENTS	MAY 27, 2020	DD
PER SURVMD COMMENTS	MAY 12, 2020	AK
PER CITY OF COCOA COMMENTS	MARCH 16, 2020	AK
Designated	AK	DD
Drawn	DD	AK
Checked	AK	AK



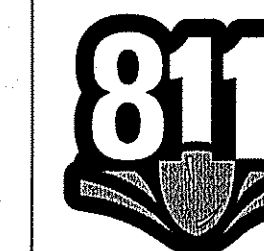
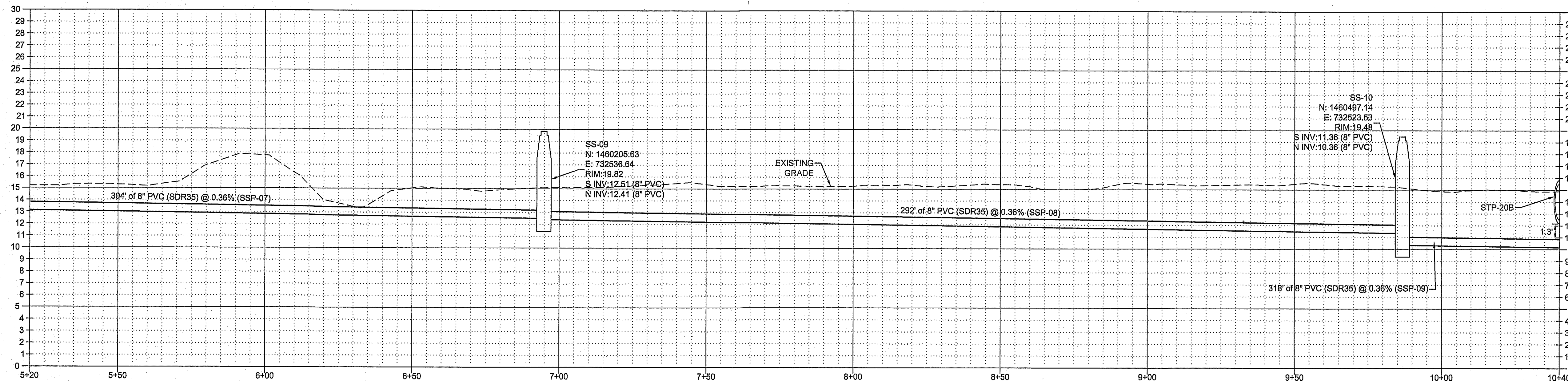
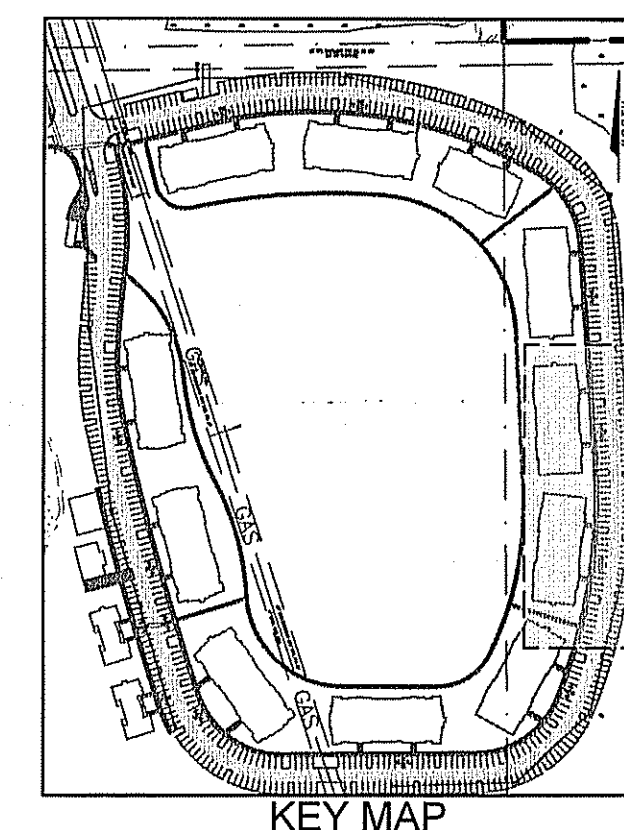
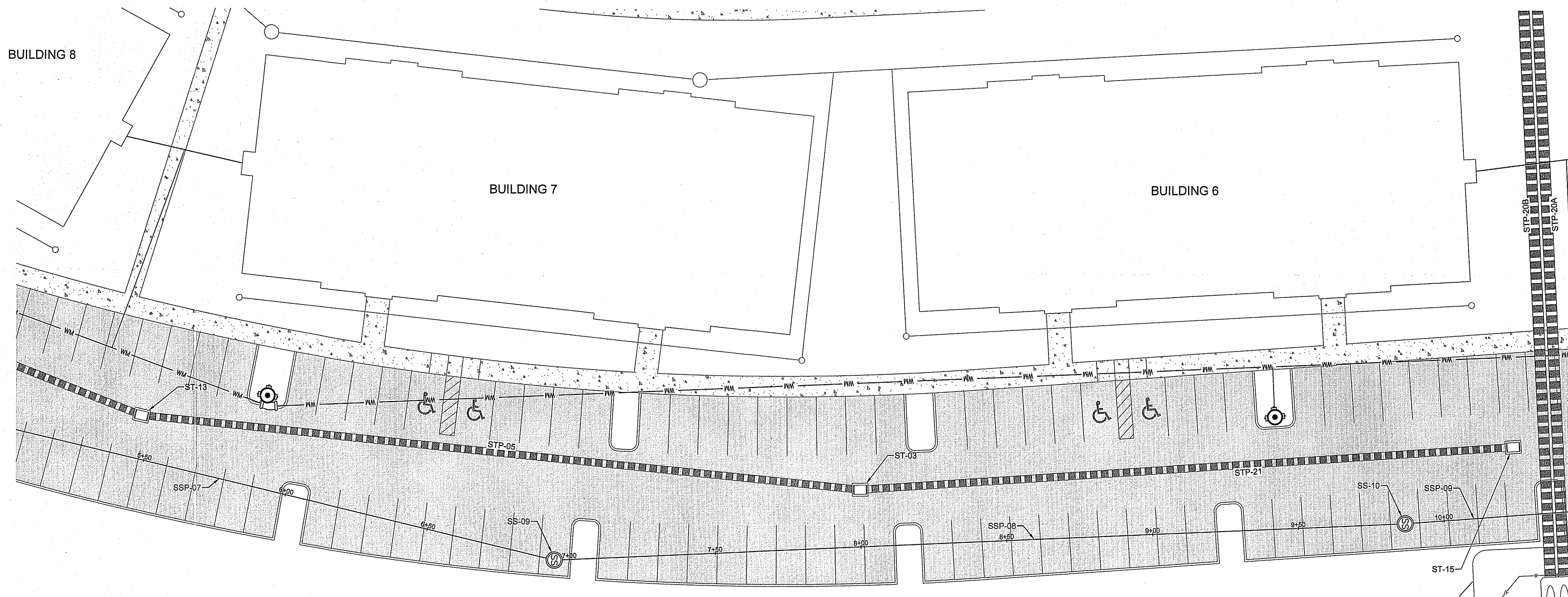
COCOA GRAND
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Project #: 2018-077
Drawing #: CIVIL & DETAILS
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Horiz. N/A
Vert. N/A
Sheet #:
C-21
Sheet 21 of 41

ANDREAS H. KIRBACH
LICENSED PROFESSIONAL ENGINEER
STATE OF FLORIDA
Steven J. Morgan P.E. FL. Reg. #50632
Andreas H. Kirbach P.E. FL. Reg. #49431
Date: _____

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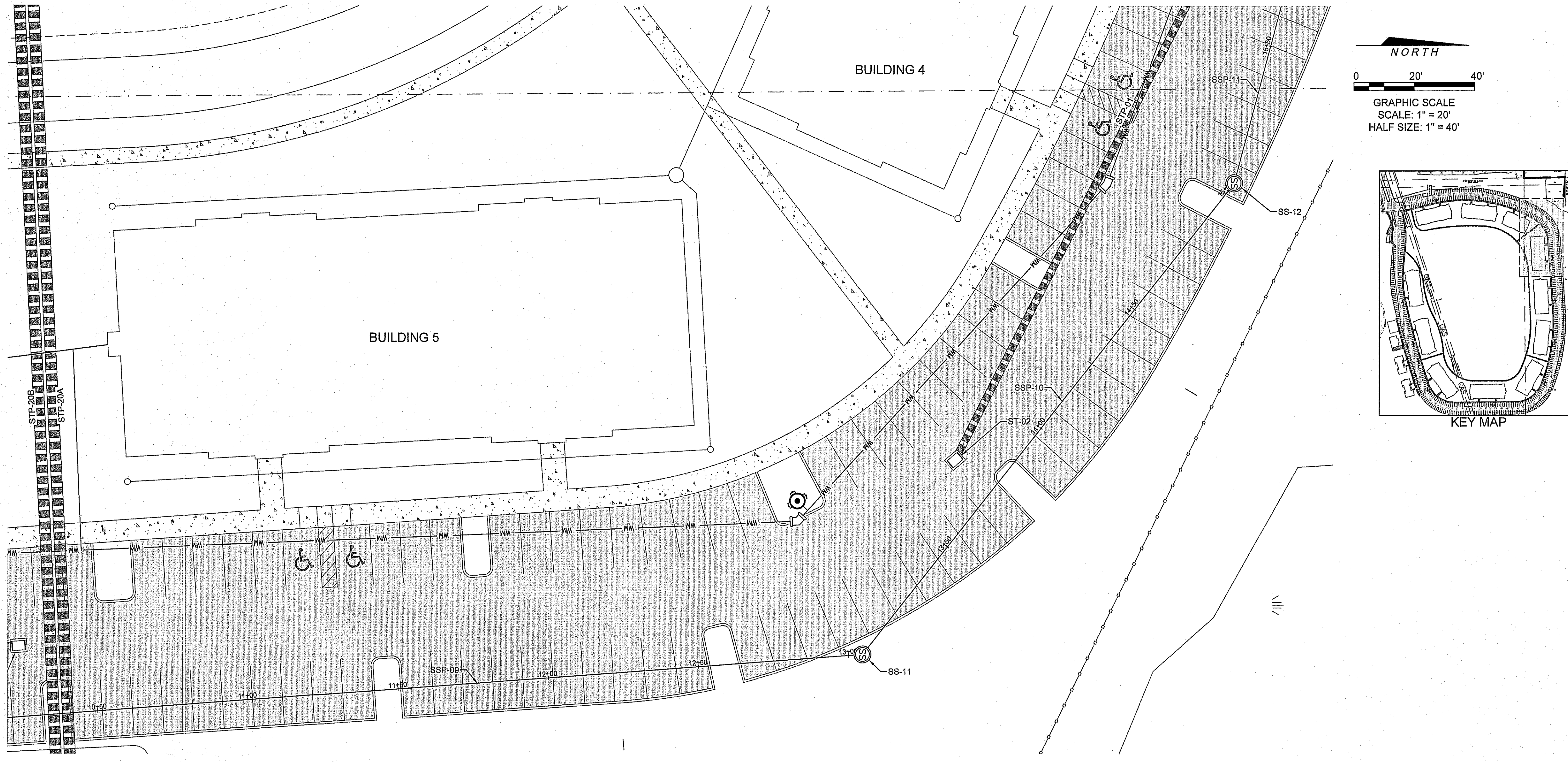
COCOA GRAND
SEWER PROFILE (EAST)

MORGAN & ASSOCIATES
Consulting Engineers, Inc.
Civil Engineers and Land Surveyors
904 North Harbor City Blvd., Melbourne, FL 32955
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Project #: 2016-077
Drawing #: CIVIL & DETAILS
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Vert. _____
Sheet #:
C-23
Sheet 23 of 41

ANDREAS H. KIRCHACK
Professional Engineer
State of Florida
No. 49434
Steven J. Morgan P.E. FL Reg. #50632
Andreas H. Kirchack P.E. FL Reg. #49434
Date: _____

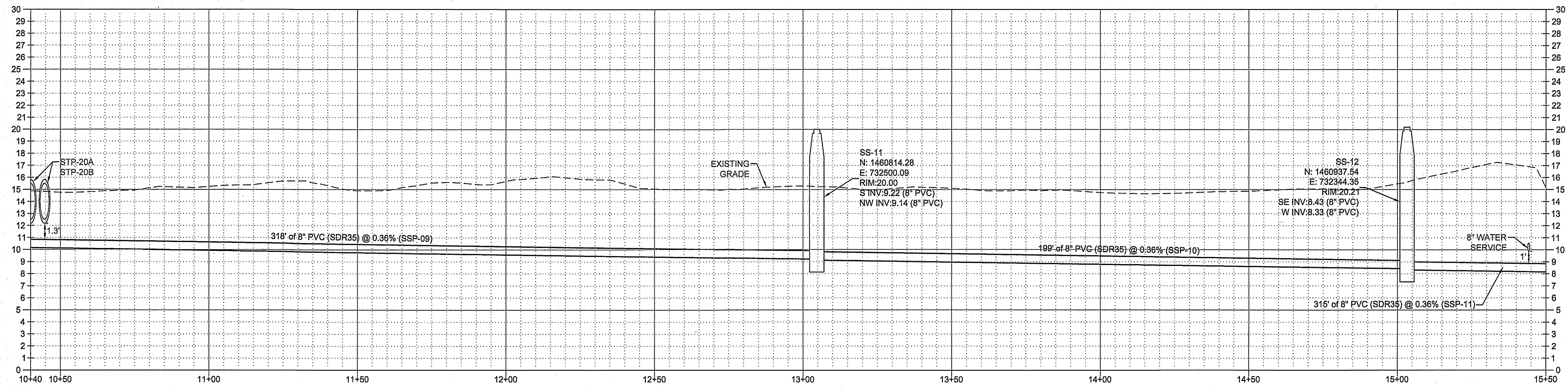
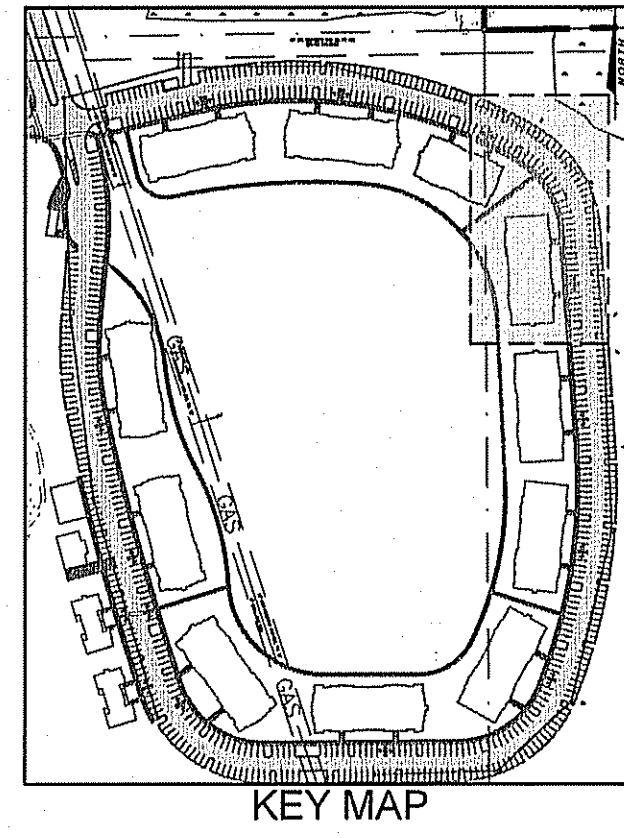
REVISION	REVISION PER CITY OF COCOA COMMENTS	DATE
A	REVISED PER CITY OF COCOA COMMENTS	AUGUST 13, 2020
B	PER CITY OF COCOA COMMENTS	MAY 27, 2020
C	PER SJRWMD COMMENTS	MAY 12, 2020
D	PER CITY OF COCOA COMMENTS	MARCH 16, 2020
Drawn:	AK	Date: 08/11/2020
Checked:	AK	Date: 08/11/2020



NORTH

0 20' 40'

GRAPHIC SCALE
SCALE: 1" = 20'
HALF SIZE: 1" = 40'



REVISION	DATE	BY	CHKD	APP'D
1	AUGUST 13, 2020			
2	MAY 27, 2020			
3	MAY 12, 2020			
4	MARCH 16, 2020			
5	09/11/2020			
6	09/11/2020			
7	09/11/2020			

COCOA GRAND

SEWER PROFILE (EAST)

MORGAN & ASSOCIATES
Consulting Engineers, Inc.
Civil Engineers and Land Surveyors P.E. # 2903 / L.B. # 77040
504 North Harbor City Blvd., Melbourne, FL 32935
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Project #: 2018-077
Drawing #: CIVIL & DETAILS
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Vert. N/A
Sheet #: **C-24**
Sheet 24 of 41

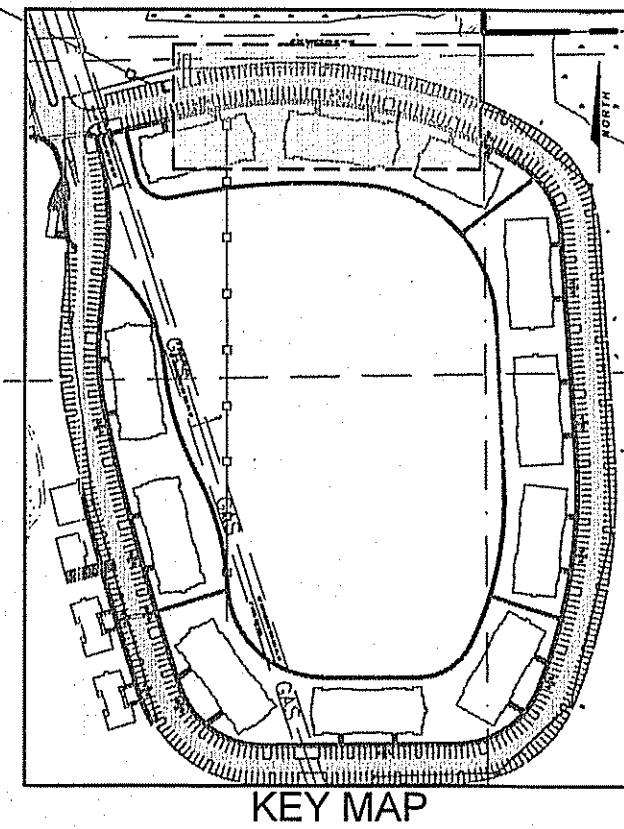
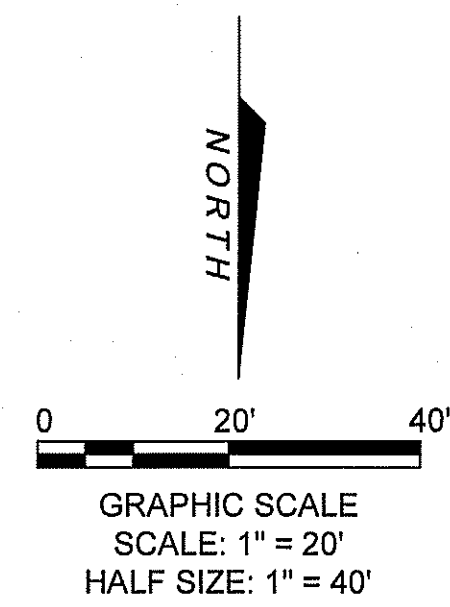
ANDREAS H. KIRBACH
P.E. # 49431
FLORIDA
PROFESSIONAL ENGINEER
Date:

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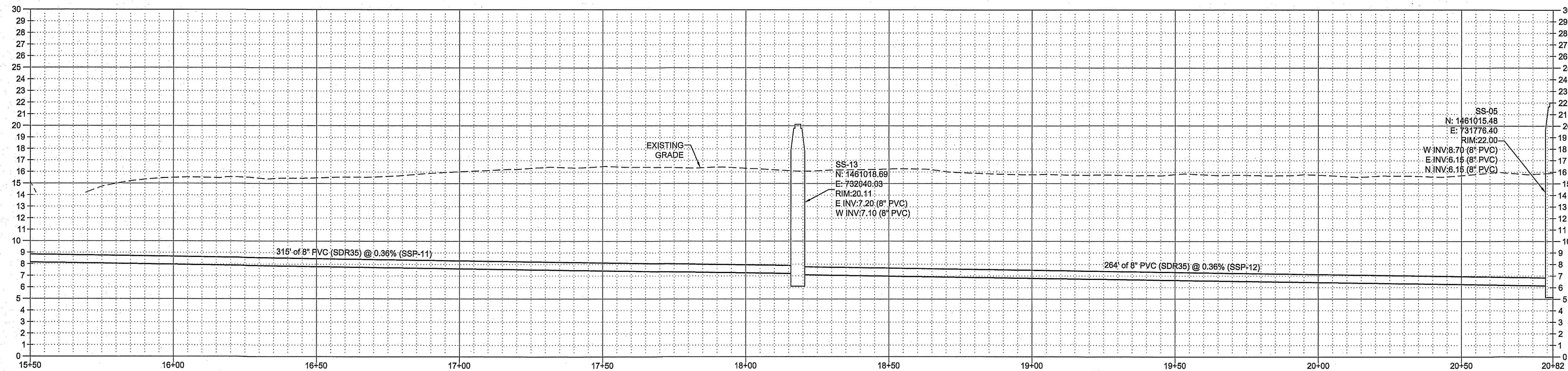
BUILDING 4

BUILDING 3

BUILDING 2



40' FFL EASEMENT ORR 28, PG 169
(TO BE VACATED)



REVISION	DATE	BY	CHKD	APP'D
1	AUGUST 13, 2020	AK		
2	MAY 27, 2020	AK		
3	MAY 12, 2020	AK		
4	MARCH 16, 2020	AK		
5	06/11/2020	AK		
6	06/11/2020	AK		
7	06/11/2020	AK		

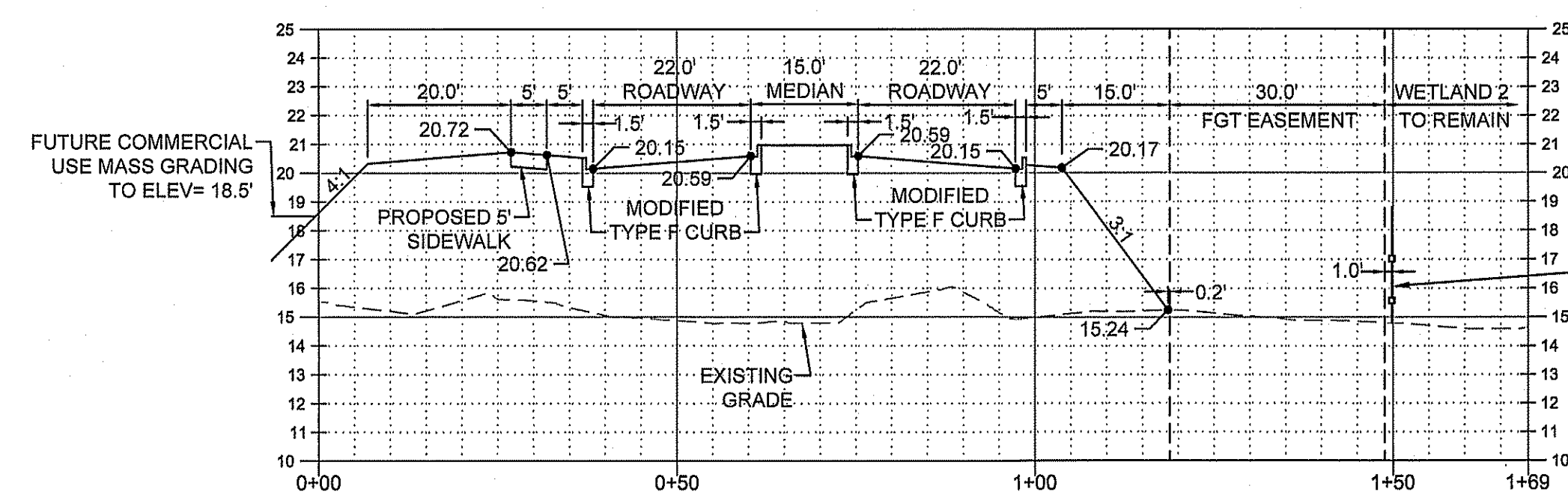
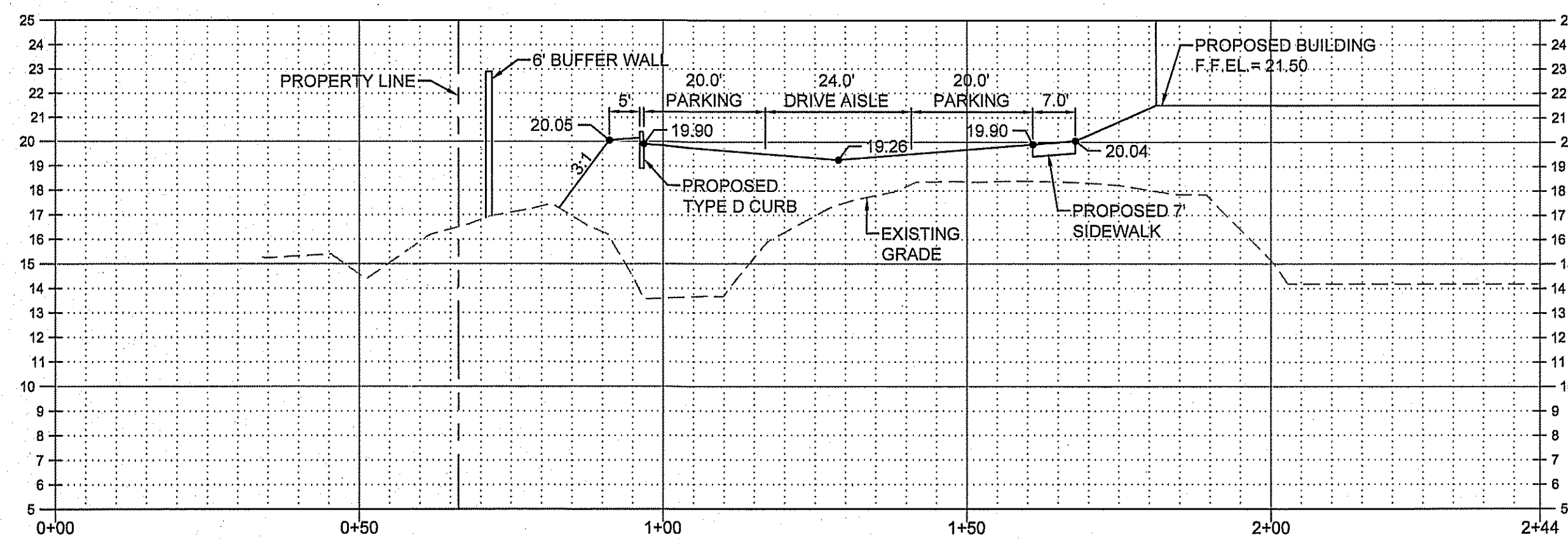
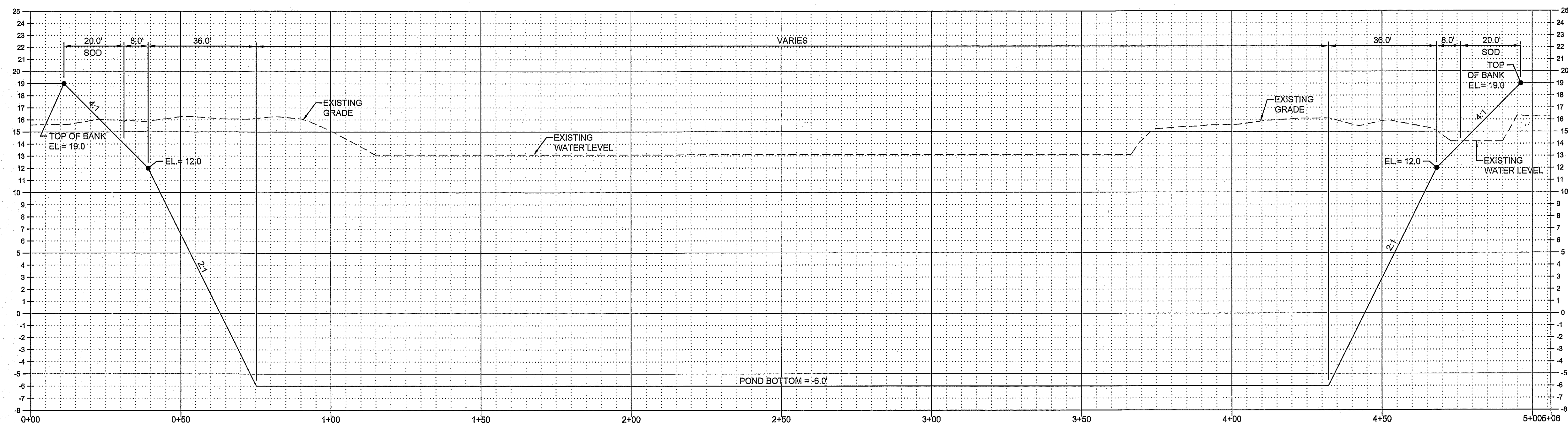
COCOA GRAND
SEWER PROFILE (EAST)

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Civil Engineers and Land Surveyors P.E. #2903 L.B. #7000
504 North Harbor City Blvd., Melbourne, FL 32935
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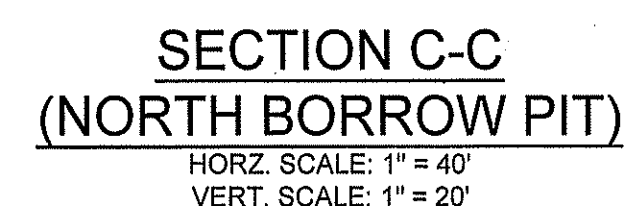
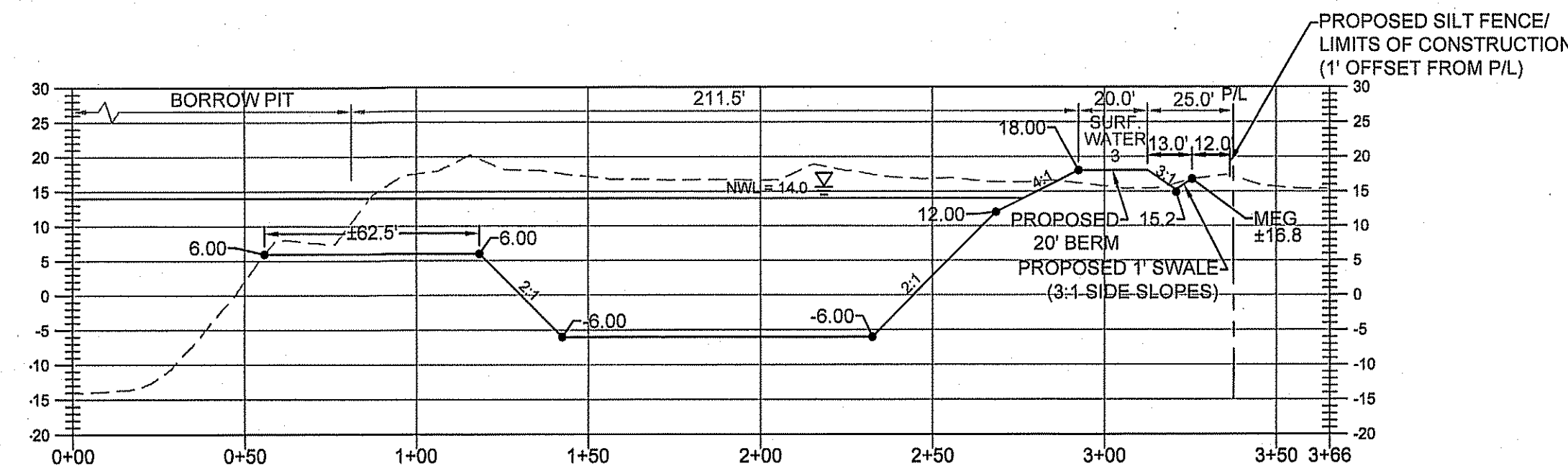
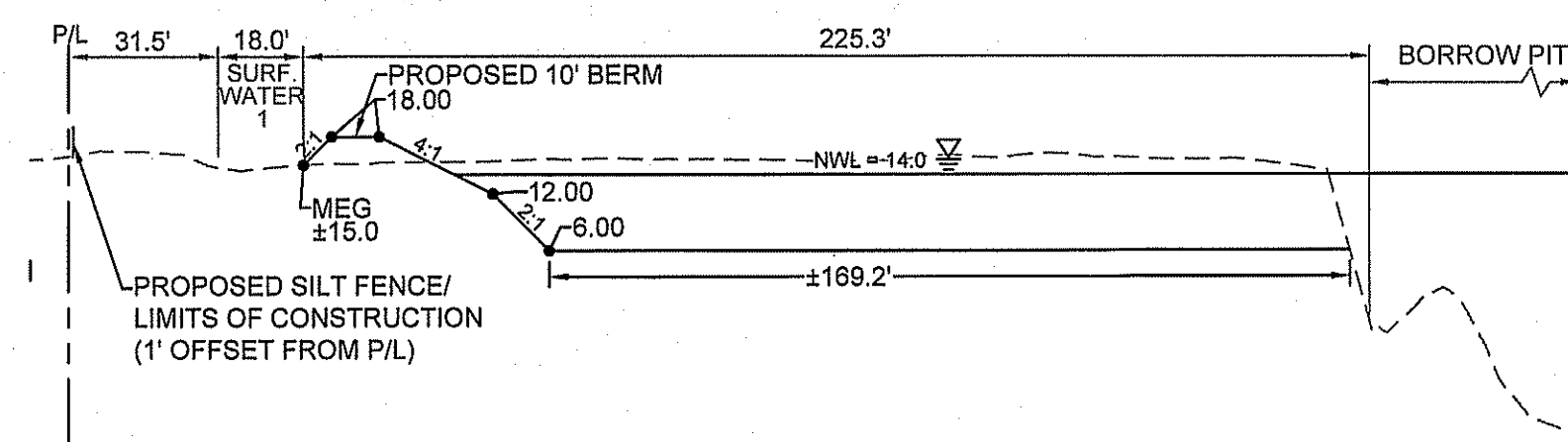
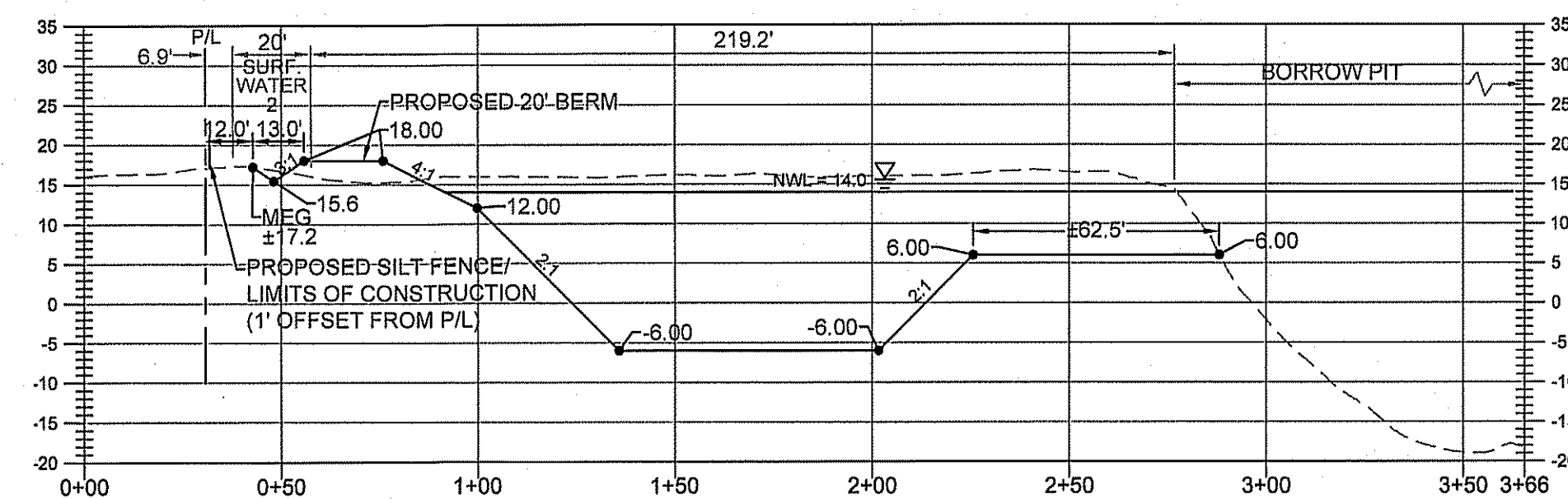
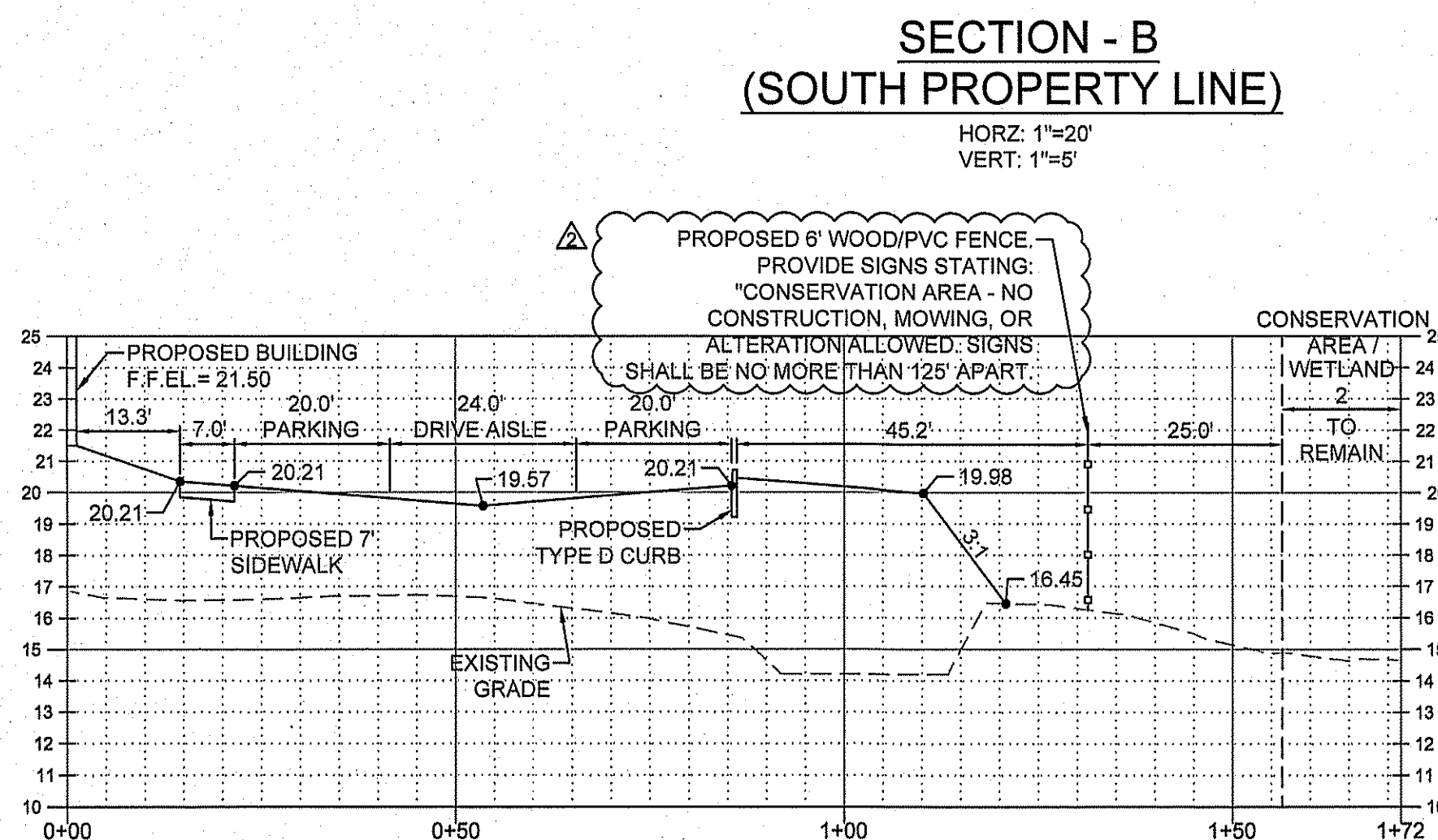
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Drawing #: CIVIL & DETAILS
Scale:
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Sheet #:
C-25
Sheet 25 of 41

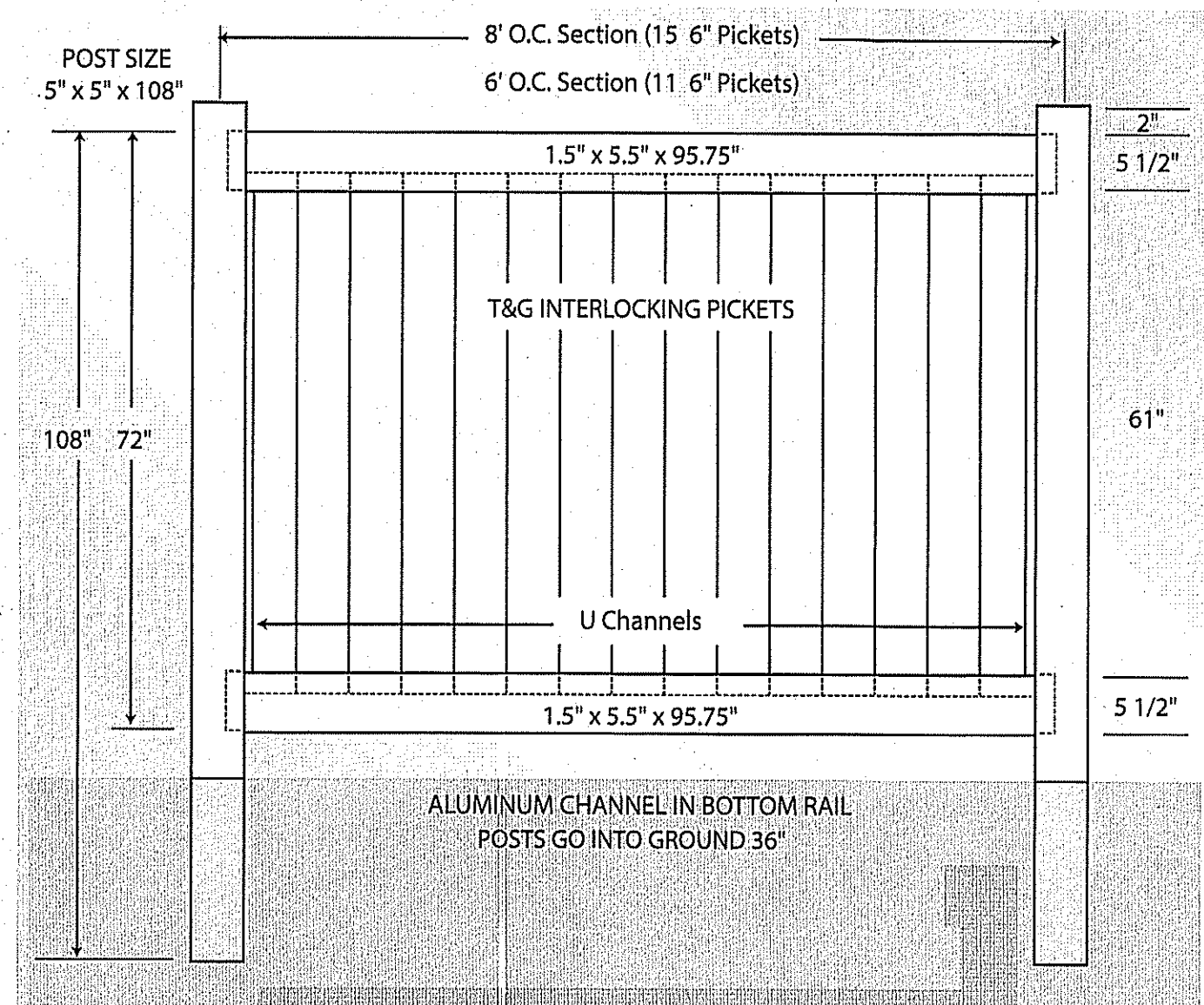
ANDREAS H. KIRBACH
P.E. #49431
STATE OF FLORIDA
PROFESSIONAL ENGINEER
Steven J. Morgan P.E. FL Reg. #50632
Andreas H. Kirbach P.E. FL Reg. #49431
Date:

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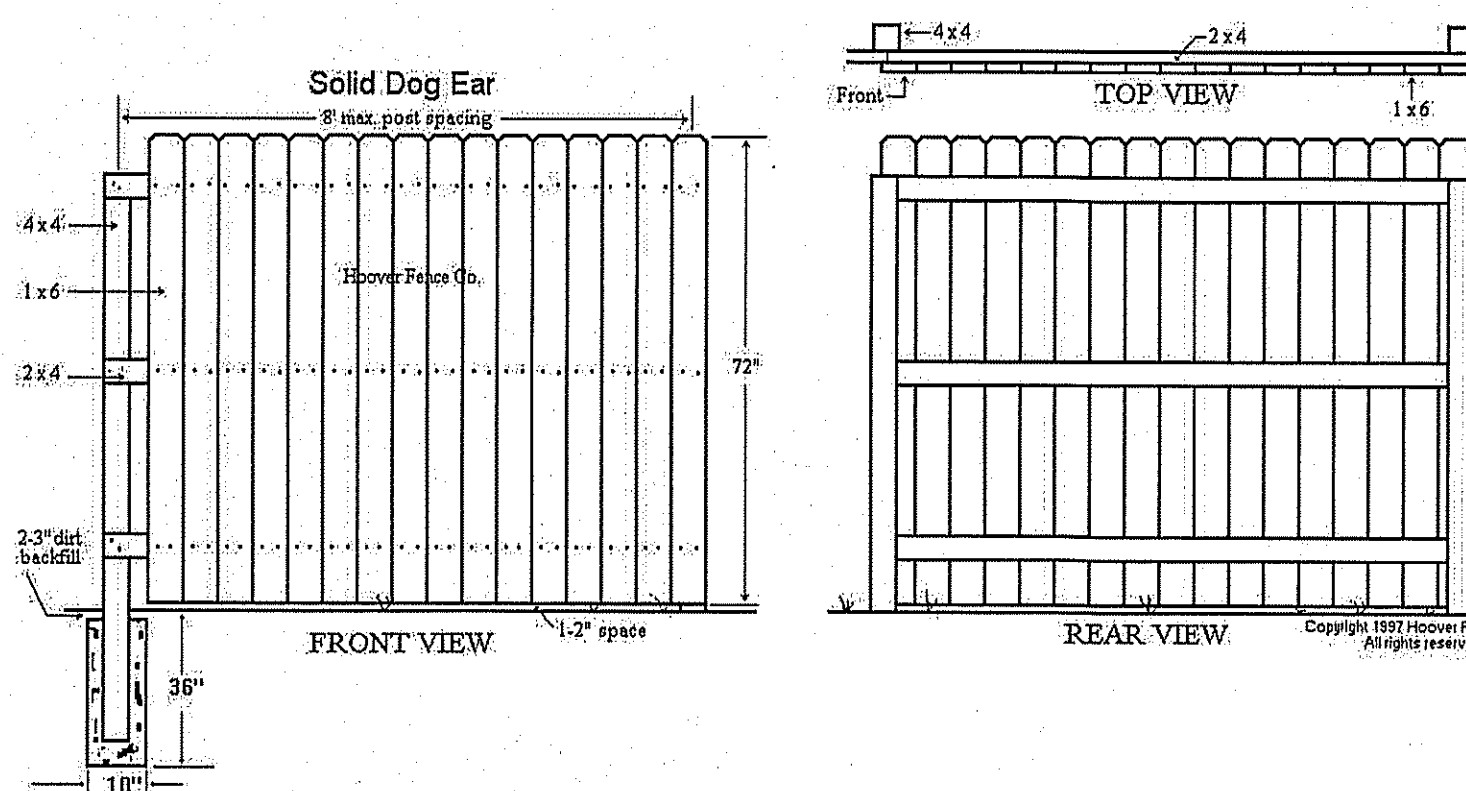


CONSTRUCT 4' HIGH SPLIT
RAIL/WIRE FENCE ALONG THE
PROPOSED PRESERVE/CONSERVATION
AREA. PROVIDE SIGNS STATING:
"CONSERVATION AREA - NO
CONSTRUCTION, MOWING, OR
ALTERATION ALLOWED. SIGNS
SHALL BE NO MORE THAN 125' APART.

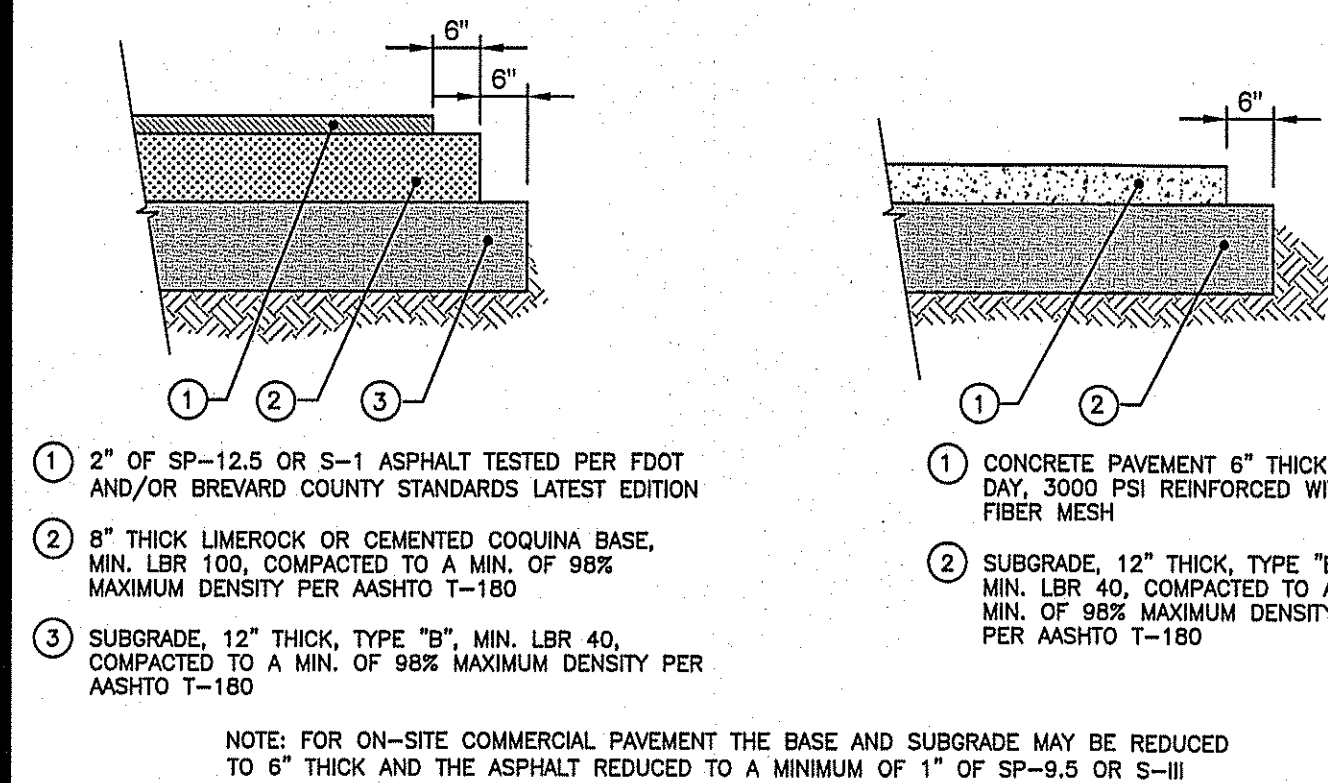




VINYL PRIVACY FENCE DETAIL
NTS



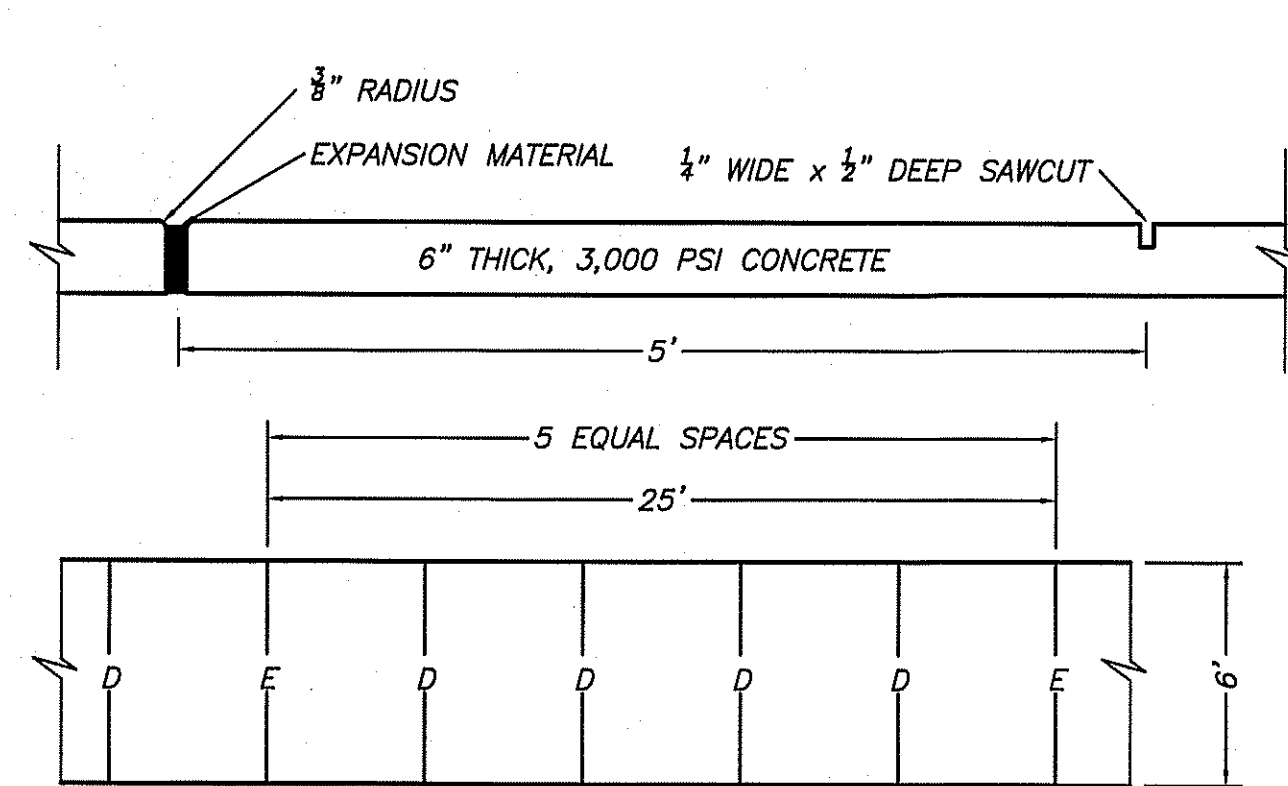
WOOD PRIVACY FENCE DETAIL
NTS



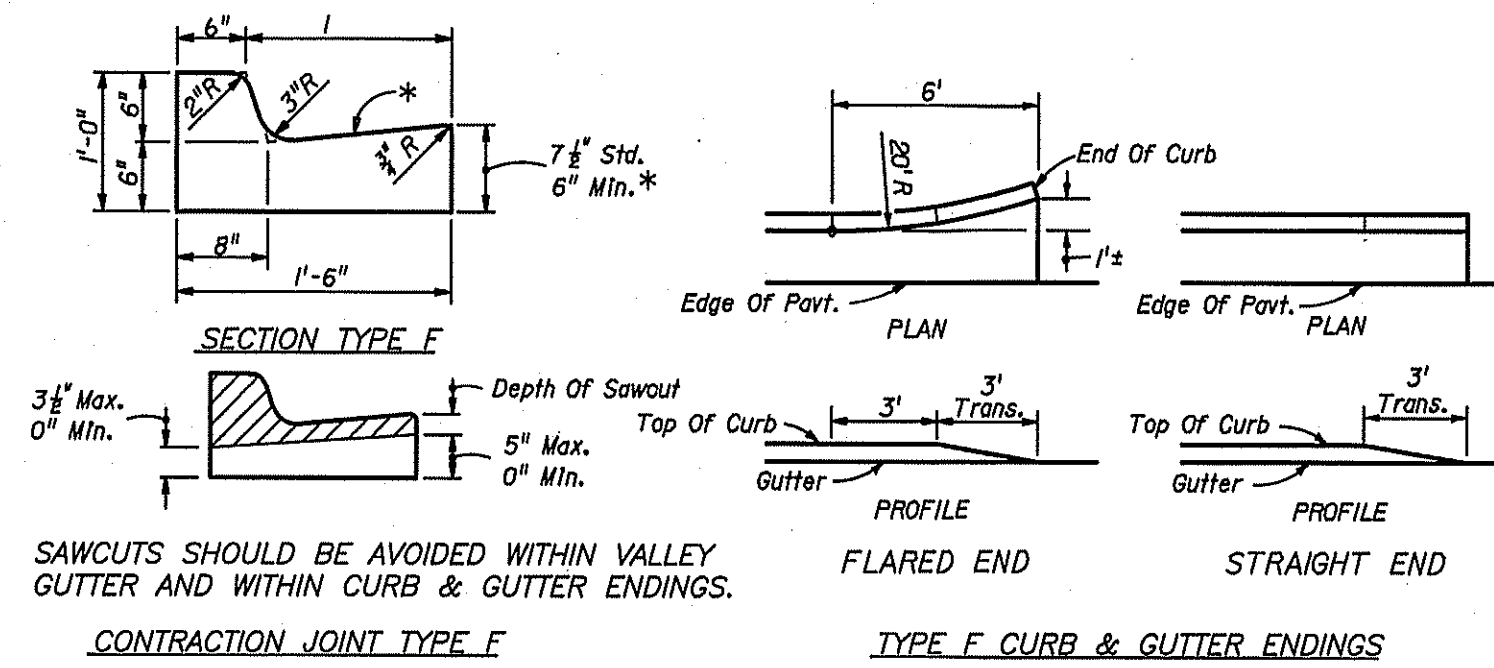
COMMERCIAL ON-SITE AND COUNTY R/W DRIVEWAY CONCRETE PAVEMENT SECTION

REQUIREMENTS FOR COMMERCIAL PARKING AND DRIVEWAYS

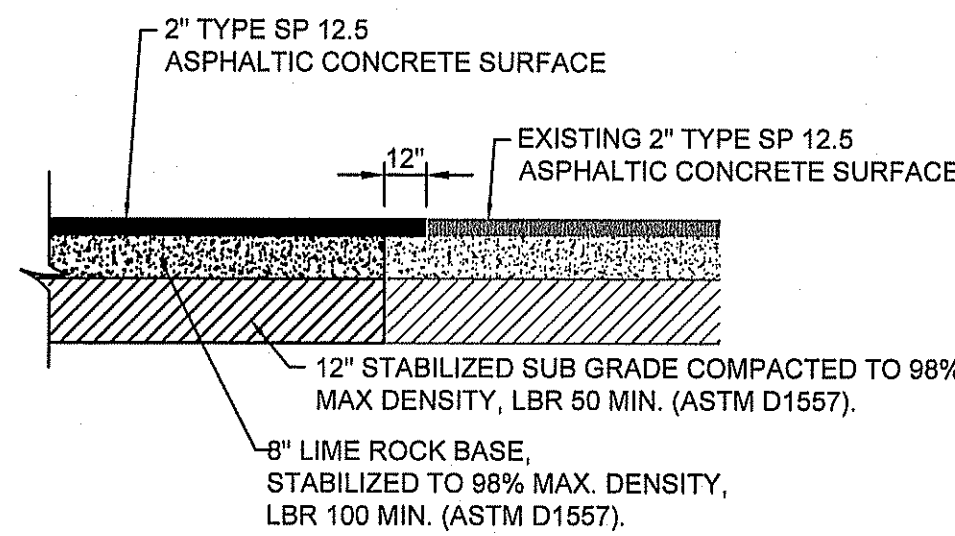
- CONCRETE PAVEMENT SHALL BE CONSTRUCTED OF 28 DAY, 3000 PSI, CLASS 1 CONCRETE.
- CONTRACTION JOINTS SHALL BE 1/8 INCH WIDE AND SAW-CUT OR TOOLED.
- CONSTRUCTION JOINTS ARE REQUIRED WHEN CONSTRUCTING ADJACENT FRESH CONCRETE POURS.
- EXPANSION JOINTS ARE REQUIRED ALONG ALL OTHER ADJACENT PAVEMENTS, AT EACH SIDE OF STORM INLET STRUCTURES, AND AT ALL RADIUS POINTS.
- EXPANSION JOINTS SHALL BE 1/2 INCH WIDE (WITH 1/2 INCH PREMOLDED JOINT MATERIAL) AND SHALL BE FULL DEPTH OF THE PAVEMENT.
- JOINT MATERIAL SHALL BE IN ACCORDANCE WITH FDOT STANDARD SPECIFICATIONS, SECTION 932, LATEST EDITION.
- THE SUBGRADE SHALL BE COMPACTED TO A MIN. OF 98% MAXIMUM DENSITY PER AASHTO T-180 AND SHALL EXTEND 6 INCHES (MINIMUM) BEYOND EDGE OF PAVEMENT.
- DRIVEWAYS SHALL BE OF UNIFORM WIDTH FROM THE RIGHT OF WAY LINE TO THE EDGE OF PAVEMENT.
- COMMERCIAL DRIVEWAYS SHALL HAVE A MINIMUM RADIUS AS FOLLOWS:
 - 35' STD. RADIUS
 - 50' MIN. RADIUS FOR LARGE TRUCKS (WB 40 AND WB 50)
- CONSTRUCT DROP CURB AS PER FDOT INDEX 300 ACROSS COMMERCIAL DRIVEWAYS WHERE CURB AND GUTTER EXISTS.



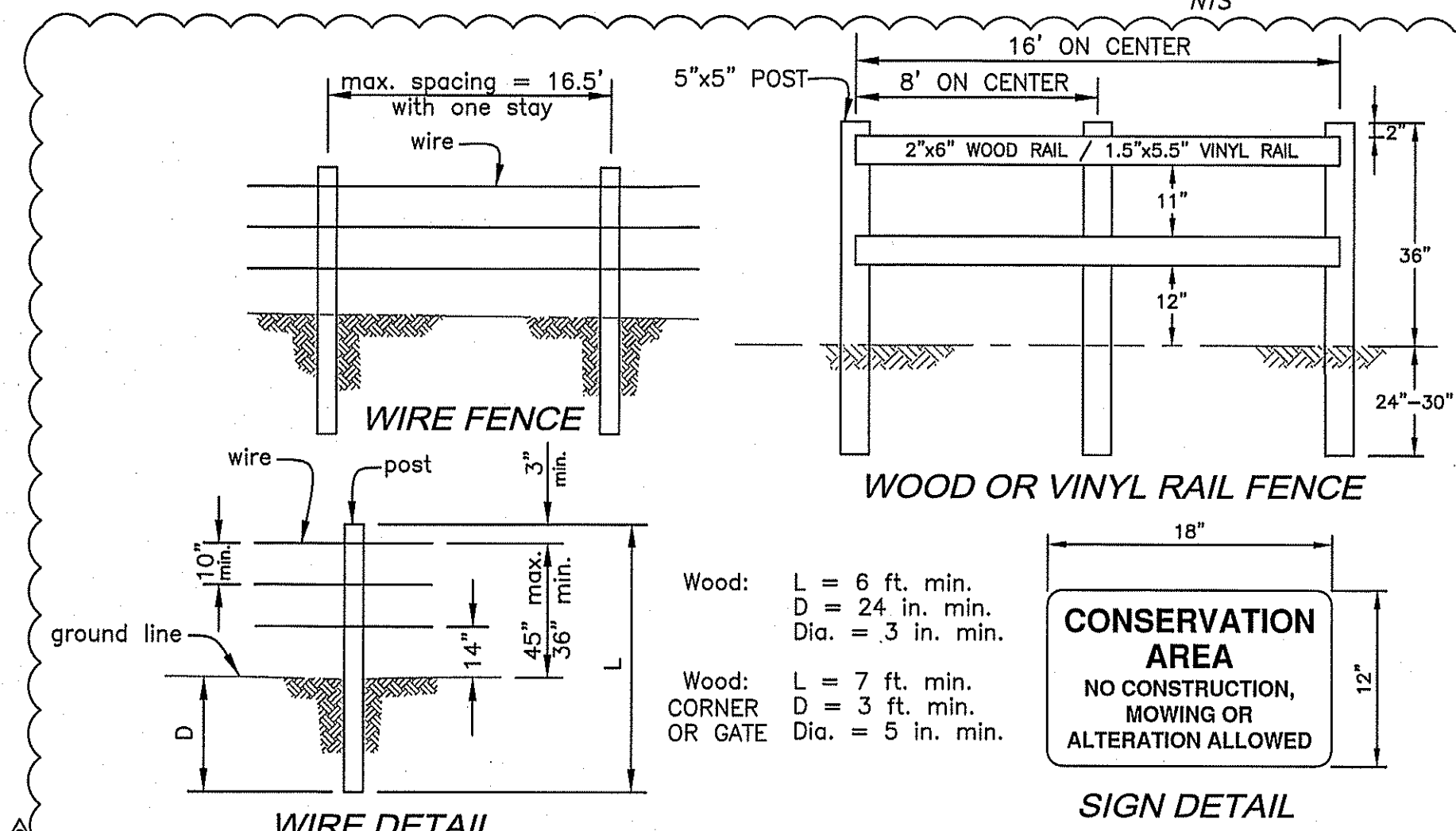
CONTROL JOINT DETAIL
NTS



MODIFIED TYPE F CURB DETAIL



TYPICAL PAVEMENT SECTION
NTS



CONSERVATION FENCE AND SIGN DETAIL
NTS

STREET NAME SIGN NOTES:

- SIGNS IN PUBLIC R.O.W. SHALL BE GREEN WITH 5/8\"/>

STREET NAME SIGN LETTERING (MUTCD DESIGNATION D3-1):

- CONVENTIONAL STREETS: 6\"/>

LOCAL STREETS 25 MPH OR LESS:

- 4\"/>

MULTI-LANE STREETS GREATER THAN 40 MPH:

- 8\"/>

4\"/>

7\"/>

ANCHOR PLATE

- MIN. DIMENSIONS SHOWN, LARGER SIZE MAY BE ACCEPTED

12 FT. MIN. CLEARANCE

- 12 FT. MIN. CLEARANCE FROM 8\"/>

2\"/>

- 2\"/>

2\"/>

- 2\"/>

2\"/>

- 2\"/>

2\"/>

- 2\"/>

2\"/>

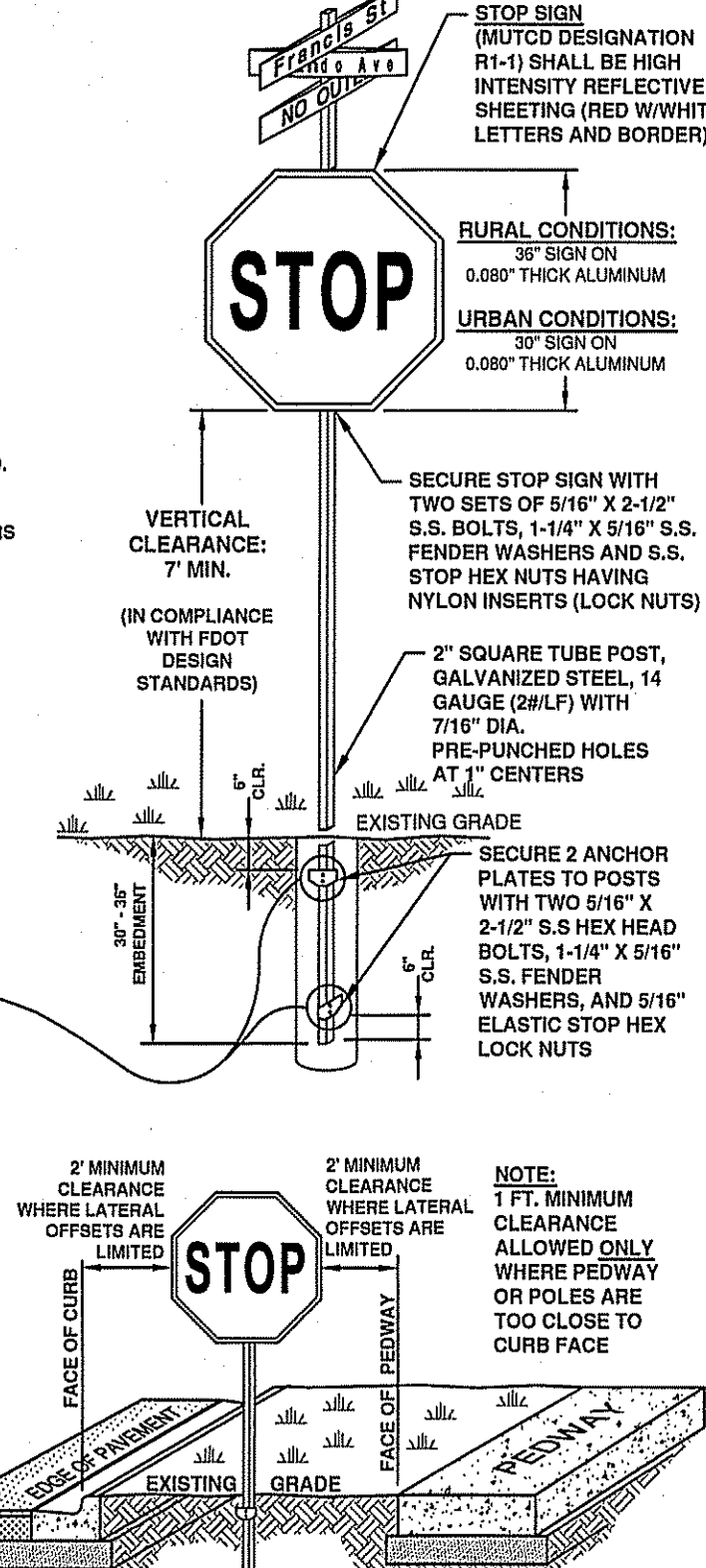
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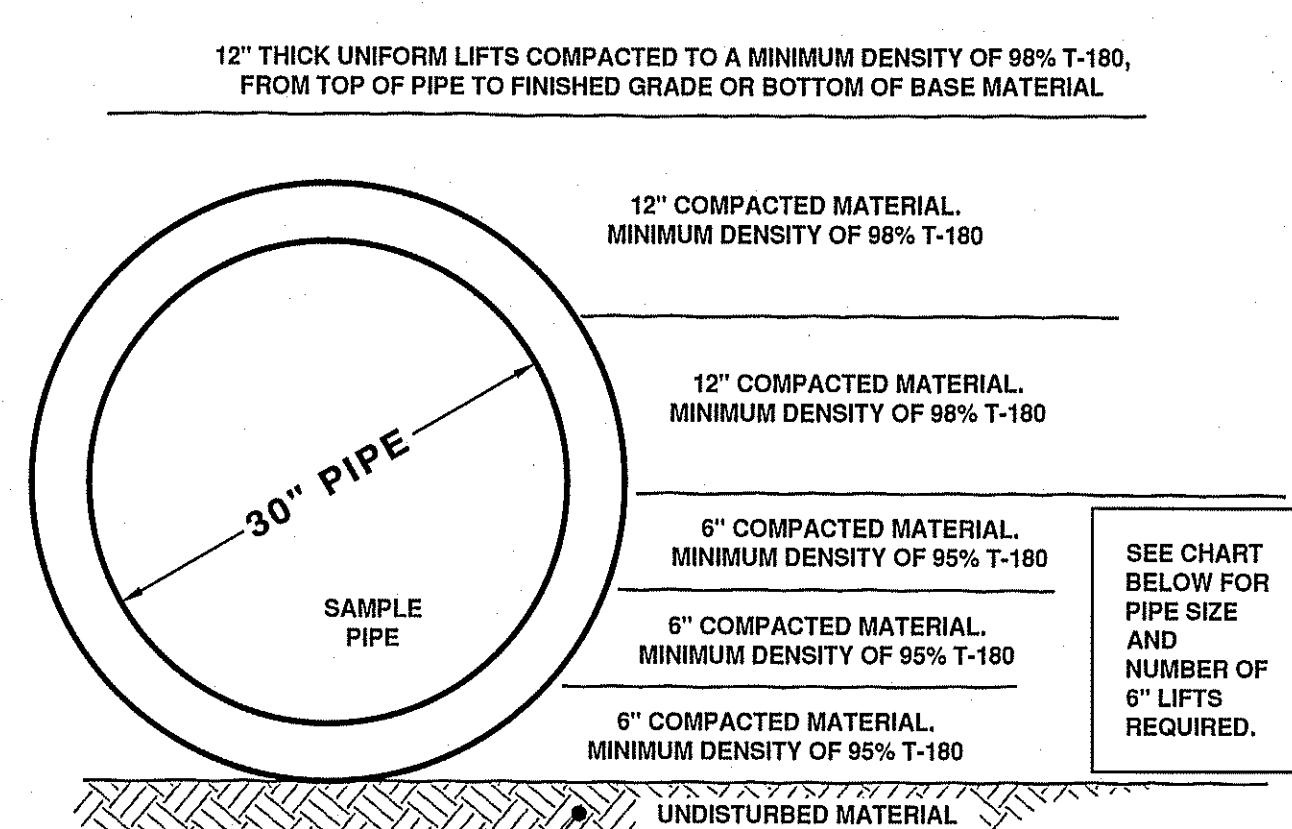
- 2\"/>

2\"/>

- 2\"/>



STOP SIGN AND STREET MARKER DETAILS



STORMWATER PIPE INSTALLATION BACKFILL REQUIREMENTS

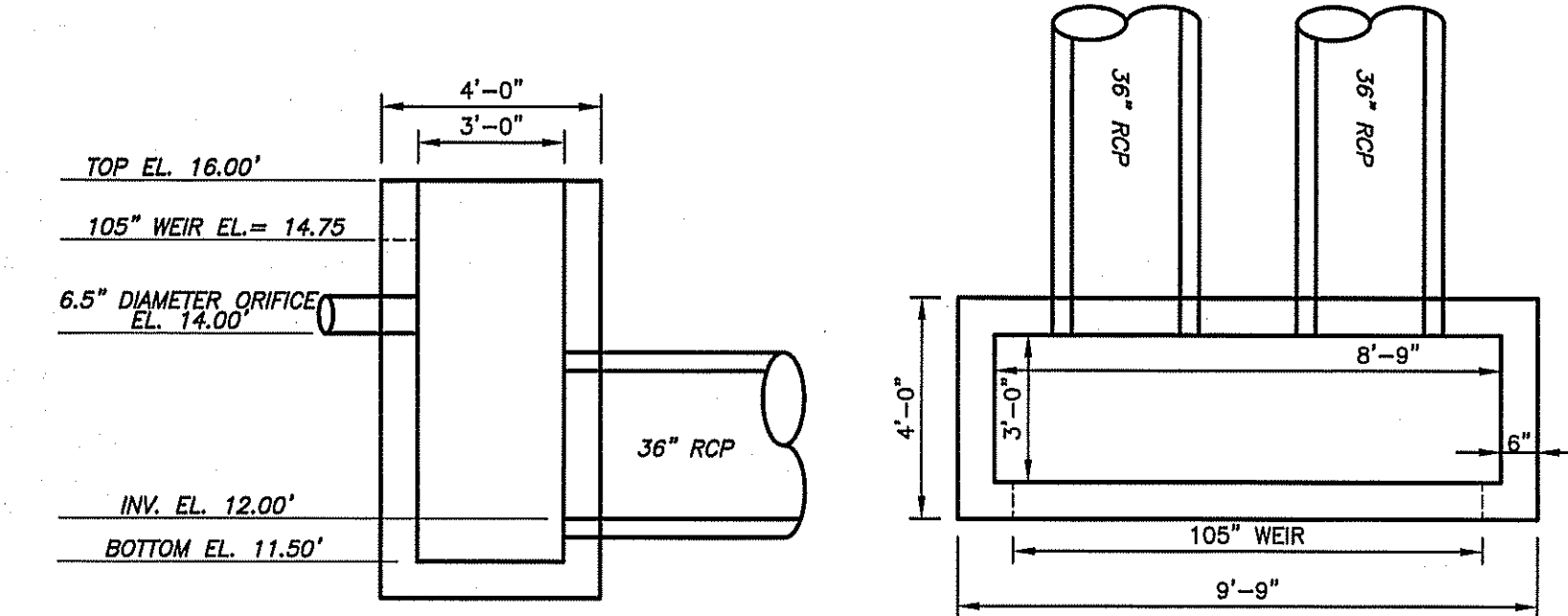
NOTES:

- NUMBER OF LIFTS REQUIRED FOR PIPE SIZES IN EXCESS OF THOSE SHOWN IN CHART SHALL BE APPROVED BY THE ENGINEER OF RECORD AND BREVARD COUNTY ENGINEERING, IN WRITING, PRIOR TO INSTALLATION.
- THESE REQUIREMENTS APPLY TO ALL STORMWATER PIPE INSTALLATIONS IN SUBDIVISIONS, PUBLIC OR PRIVATE, DRAINAGE EASEMENTS, PUBLIC OR PRIVATE, ALL COUNTY RIGHTS-OF-WAY, AND FOR ANY OTHER STORMWATER PIPE INSTALLATIONS THAT WILL BECOME COUNTY MAINTAINED INFRASTRUCTURE.
- BACKFILL AROUND STORMWATER STRUCTURES SHALL BE COMPACTED IN 12\"/>

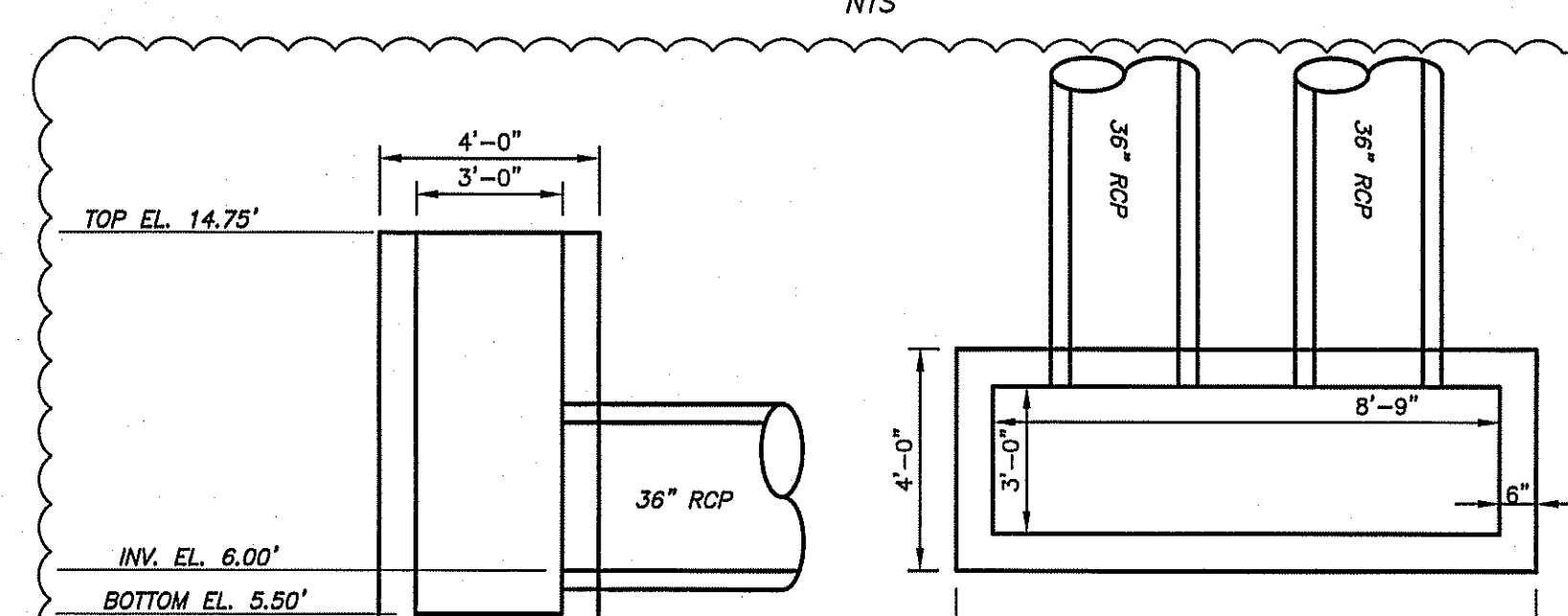
PIPE SIZE	NUMBER OF LIFTS
15"	2
18"	2
24"	2
30"	3
36"	4
42"	5
48"	5
54"	6
60"	6
66"	7
72"	7

PIPE SIZE	NUMBER OF 6\"/>
11\"/>	2
14\"/>	2
19\"/>	2
24\"/>	2
29\"/>	4
34\"/>	4
38\"/>	4
43\"/>	5
48\"/>	5
58\"/>	6

PEDWAY CONSTRUCTION DETAILS
NTS



CONTROL STRUCTURE (ST-14) DETAIL FDOT TYPE H-4 INLET
NTS



CONTROL STRUCTURE (ST-14A) DETAIL FDOT TYPE H-4 INLET
NTS

PEDWAY CONSTRUCTION REQUIREMENTS

- PEDESTRIAN WAY SHALL BE CONSTRUCTED OF FDOT CLASS I, 3000 PSI FIBER REINFORCED CONCRETE. NO UNDER TOLERANCE WILL BE ACCEPTED. IF 28 DAY BREAKS FALL BELOW STRENGTH, CONTRACTOR SHALL REMOVE AND RECONSTRUCT PEDWAY.
- SIDEWALKS CONSTRUCTED ACROSS DRIVEWAYS SHALL MEET THE REQUIREMENTS OF FDOT DESIGN STANDARDS, LATEST EDITION, INDEX 515 "TURNOUTS".
- SIDEWALK SLOPES AND RAMPS SHALL MEET ADA REQUIREMENTS AND THOSE OF FDOT INDEX 304.
- ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE SODDED TO MATCH PREVIOUS CONDITION OR BETTER, BY CONTRACTOR.
- CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORATION OF ANY ITEMS DAMAGED DURING CONSTRUCTION PROCESS, TO ORIGINAL CONDITION OR BETTER.
- CONTRACTION JOINTS SHALL BE SAW CUT 1/2\"/>

- CONCRETE: 6\"/>
- SUBGRADE: 6\"/>
- CONT. 12\"/>
- 1 1/2\"/>
- 8\"/>
- 8\"/>

COCOA GRAND

DETAILS

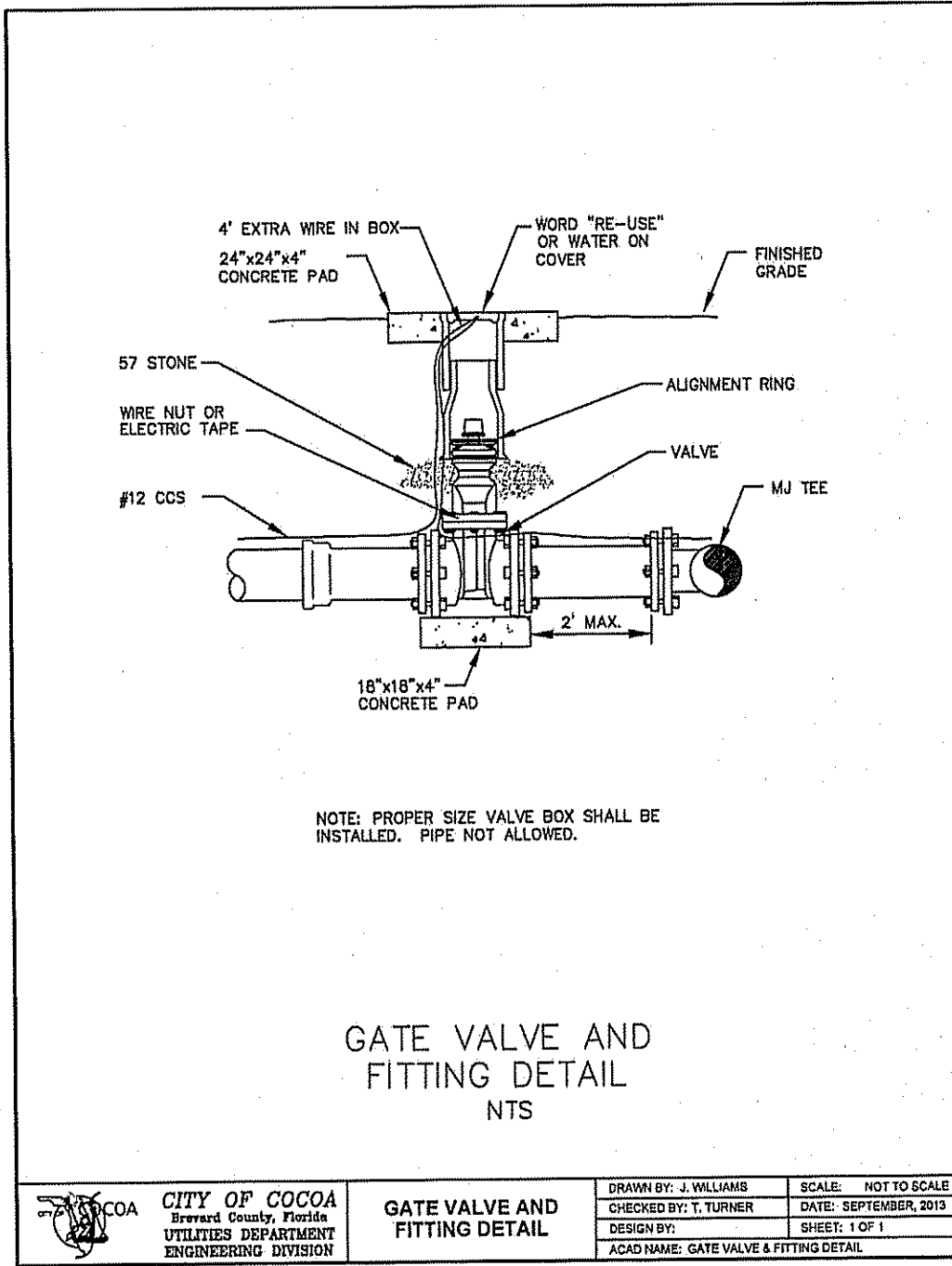
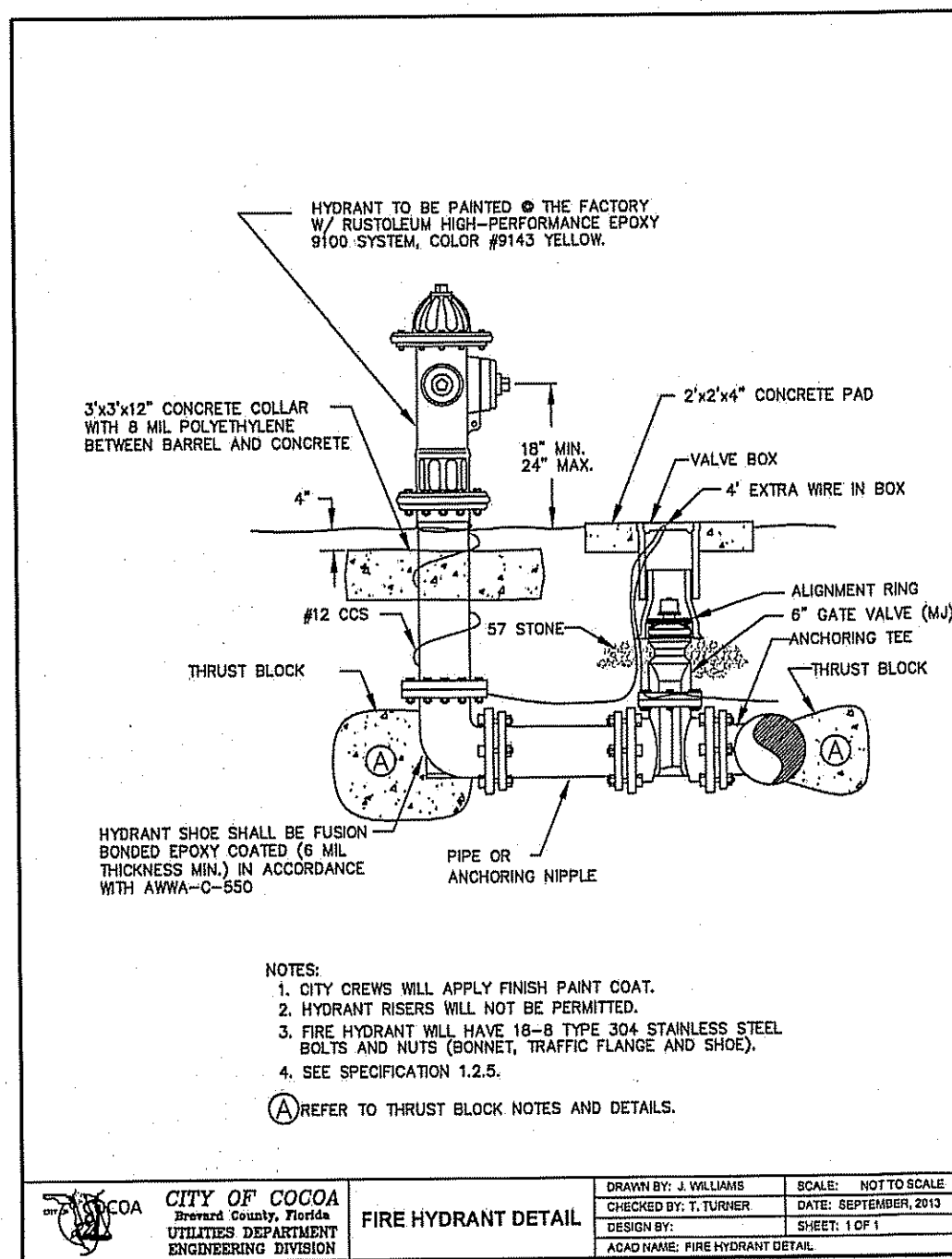
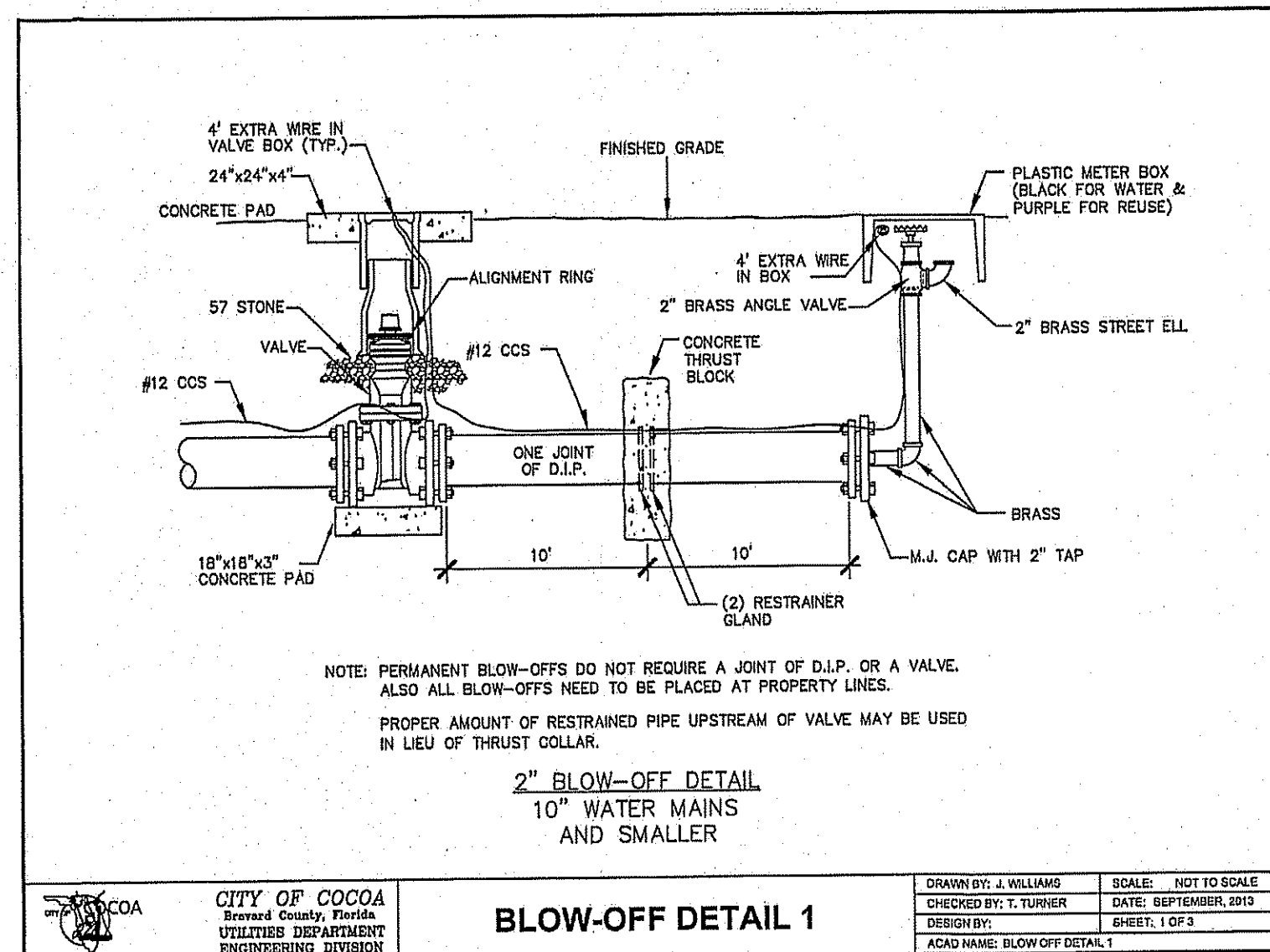
MORGAN & Associates, Inc.
Consulting Engineers, Inc.
Civil Engineers and Land Surveyors
E.R. # 7903 / L.R. # 7700
594 North Harbor City Blvd., Melbourne, FL 32955
Phone (321) 751-6088 Fax (321) 751-6089

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Drawing #: CIVIL & DETAILS

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Sheet #:
C-27
Sheet 27 of 41

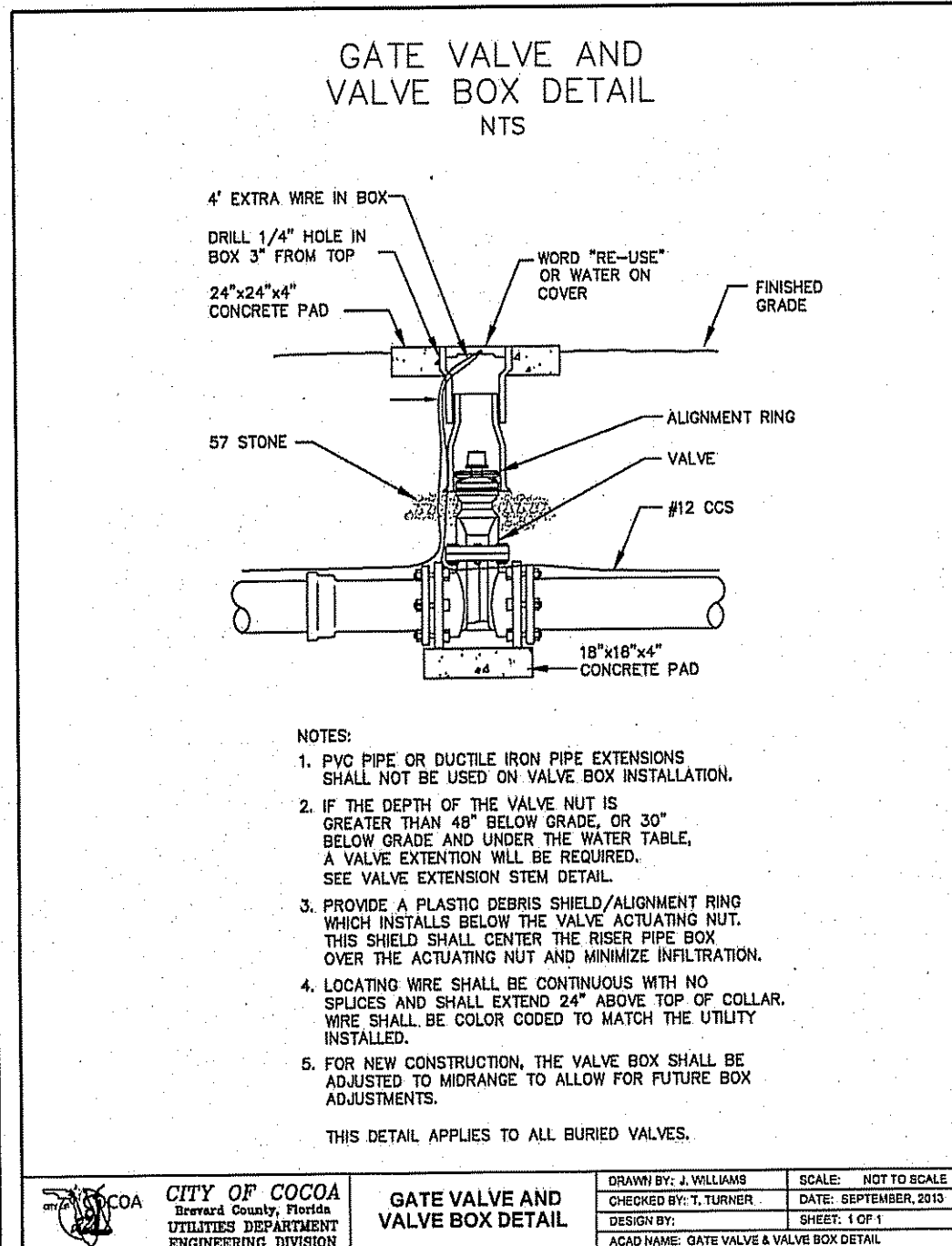
ANDREAS H. KIRCH
Professional Engineer
No. 45433
State of Florida
Steven J. Morgan P.E., FL Reg. #50632
Andreas H. Kirch P.E., FL Reg. #49431

Date:



POTABLE WATER DISTRIBUTION SYSTEM NOTES

- WATER DISTRIBUTION SYSTEM CONSTRUCTION SHALL COMPLY WITH CITY OF COCOA LATEST SPECIFICATIONS AND THE APPROVED PLANS. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL WATER MAINS, SERVICES, AND APPURTENANCES IN ACCORDANCE WITH SAID SPECIFICATIONS. COPIES OF WHICH SHALL BE KEPT AT THE JOB SITE AT ALL TIMES. THE CONTRACTOR SHALL NOTIFY THE CITY OF COCOA UTILITIES ENGINEERING DEPARTMENT 24 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- INSTALLATION OF WATERLINES SHALL BE IN ACCORDANCE WITH ANSI/AWWA C 900 (MANUAL M23) FOR PVC PRESSURE PIPE, AND C 600 FOR DUCTILE IRON PIPE.
- PVC PRESSURE PIPES SIZE 4" THROUGH 12" SHALL BE CAST IRON PIPE EQUIVALENT OUTSIDE DIAMETER CLASS 150 (DR 18) AND COMPLY WITH AWWA C-900 STANDARD AND MEET THE REQUIREMENTS OF ASTM D2241. ALL JOINTS SHALL BE OF THE ELASTOMERIC-GASKET TYPE WITH THICKENED, INTEGRAL SOLID-WALL BELL OR COUPLING WITH THE SAME DR AS THE BARREL. SOLVENT-CEMENT JOINTS WILL NOT BE ACCEPTED. ALL PVC PRESSURE PIPE USED FOR WATER DISTRIBUTION SYSTEMS SHALL BE BLUE IN COLOR HAVING BEEN IMPREGNATED INTO THE STRUCTURAL RESIN AT THE PIPE MANUFACTURING PLANT.
- ALL WATER MAINS TO HAVE A MINIMUM COVER OF 36" UNLESS OTHERWISE NOTED.
- HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORM WATER FORCE MAINS, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS.
 - NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER, STORM WATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
 - NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER.
 - NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO THREE FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER.
 - NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E-6.002, F.A.C.
- VERTICAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORM WATER FORCE MAINS, AND RECLAIMED WATER PIPELINES.
 - NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY- OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES, AND PREFERABLY 12 INCHES, ABOVE OR AT LEAST 12 INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
 - NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
 - AT THE UTILITY CROSSINGS DESCRIBED IN PARAGRAPHS (A) AND (B) ABOVE, ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT SUCH CROSSINGS, THE PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORM WATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY- OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.



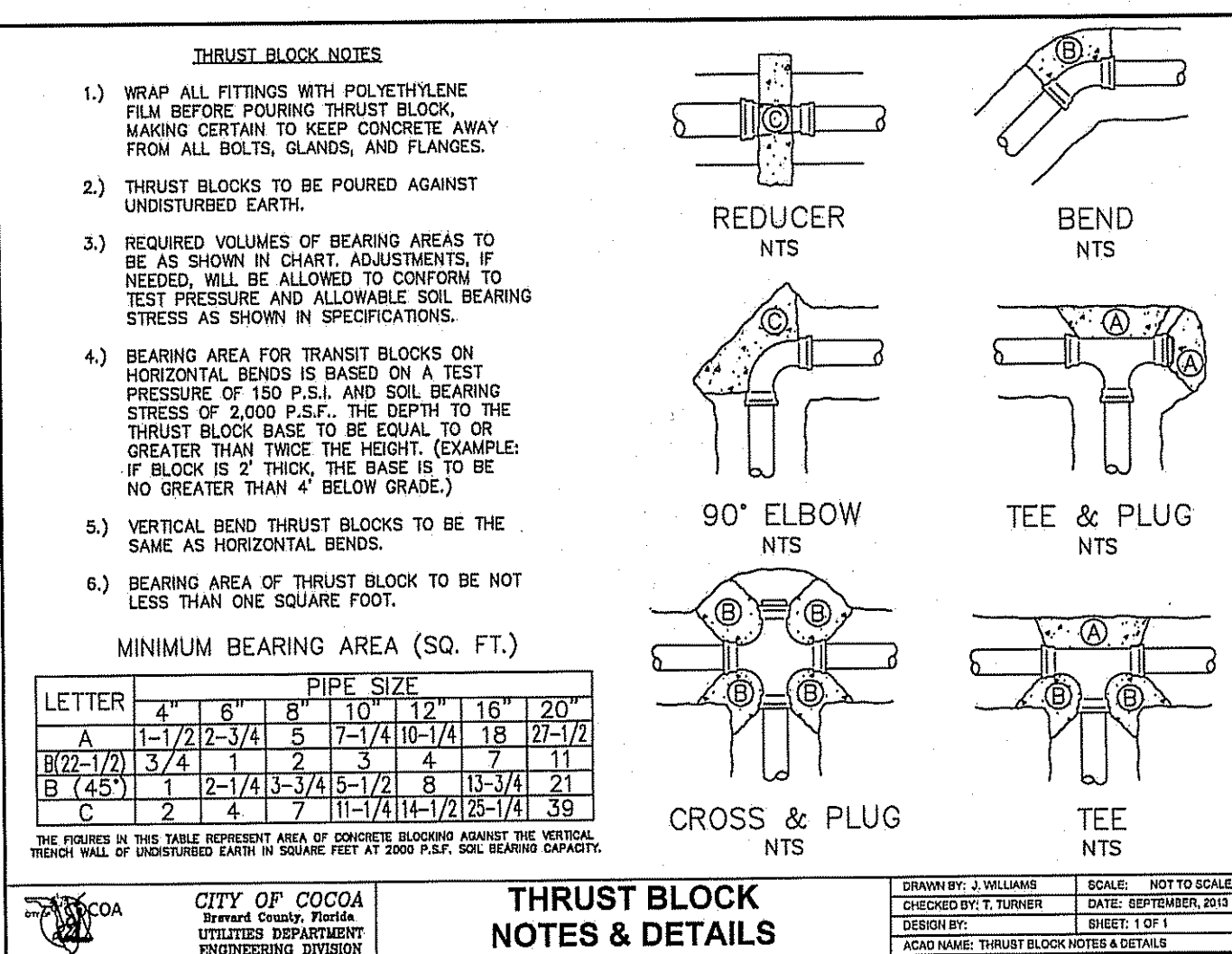
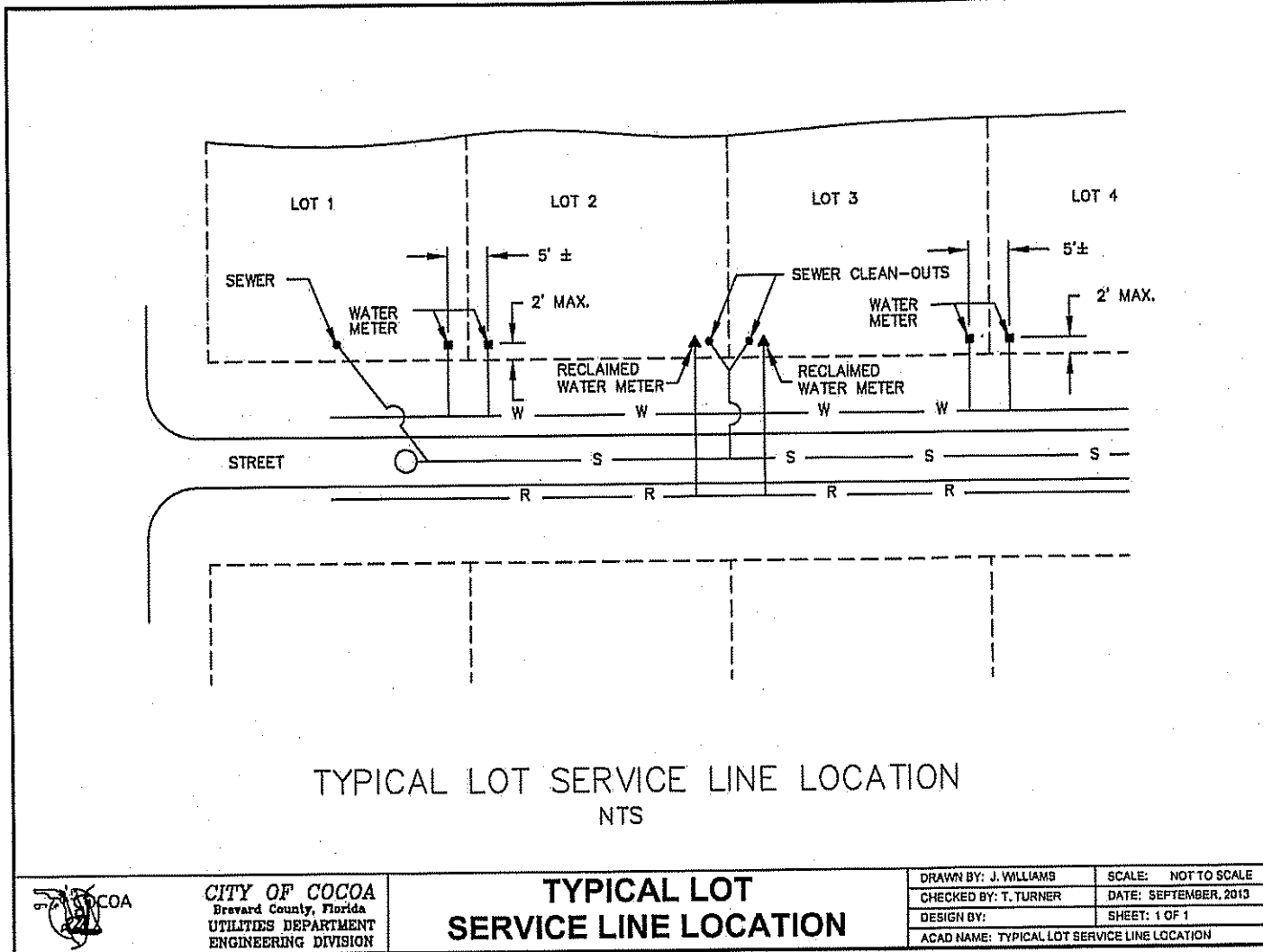
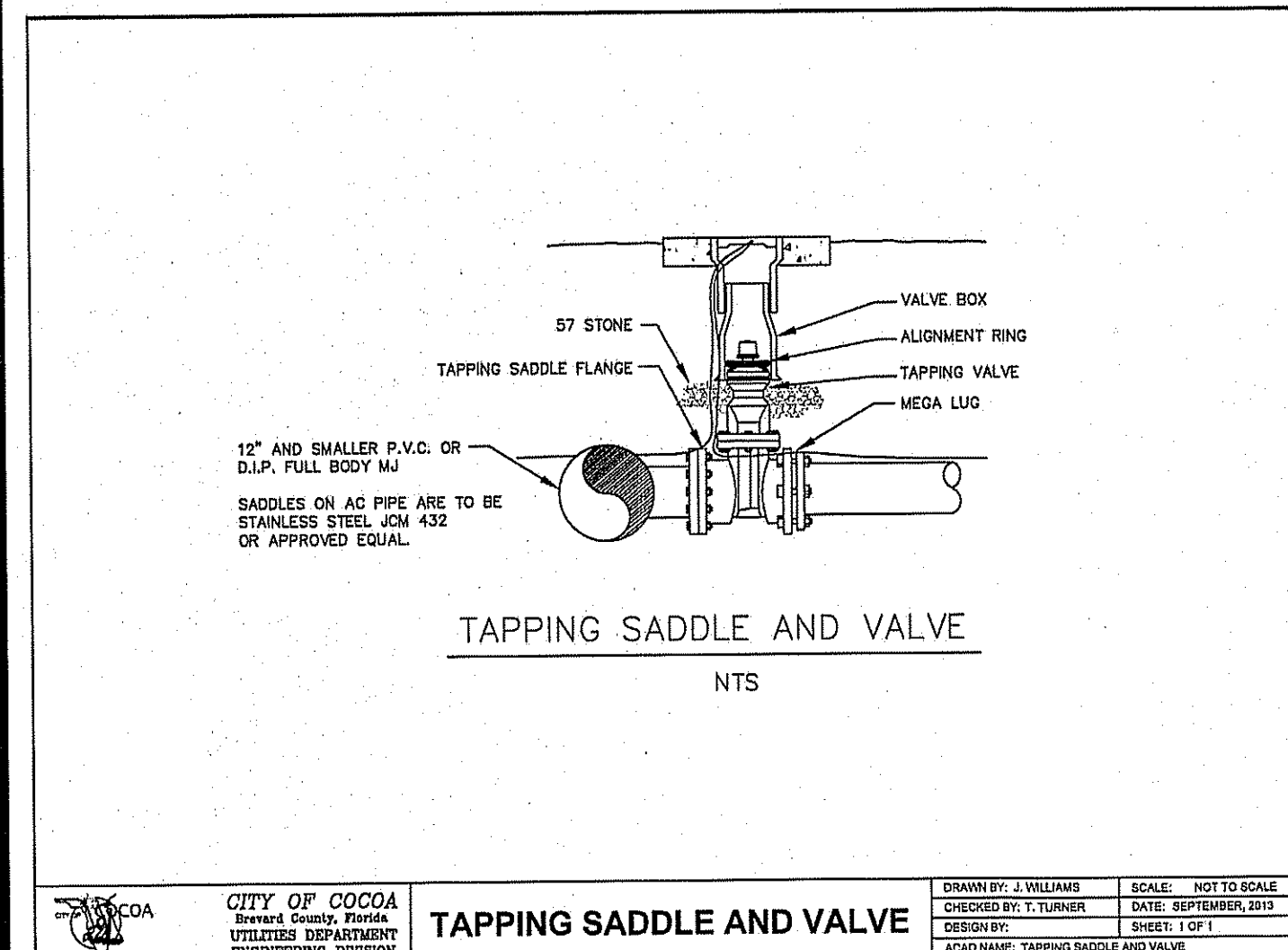
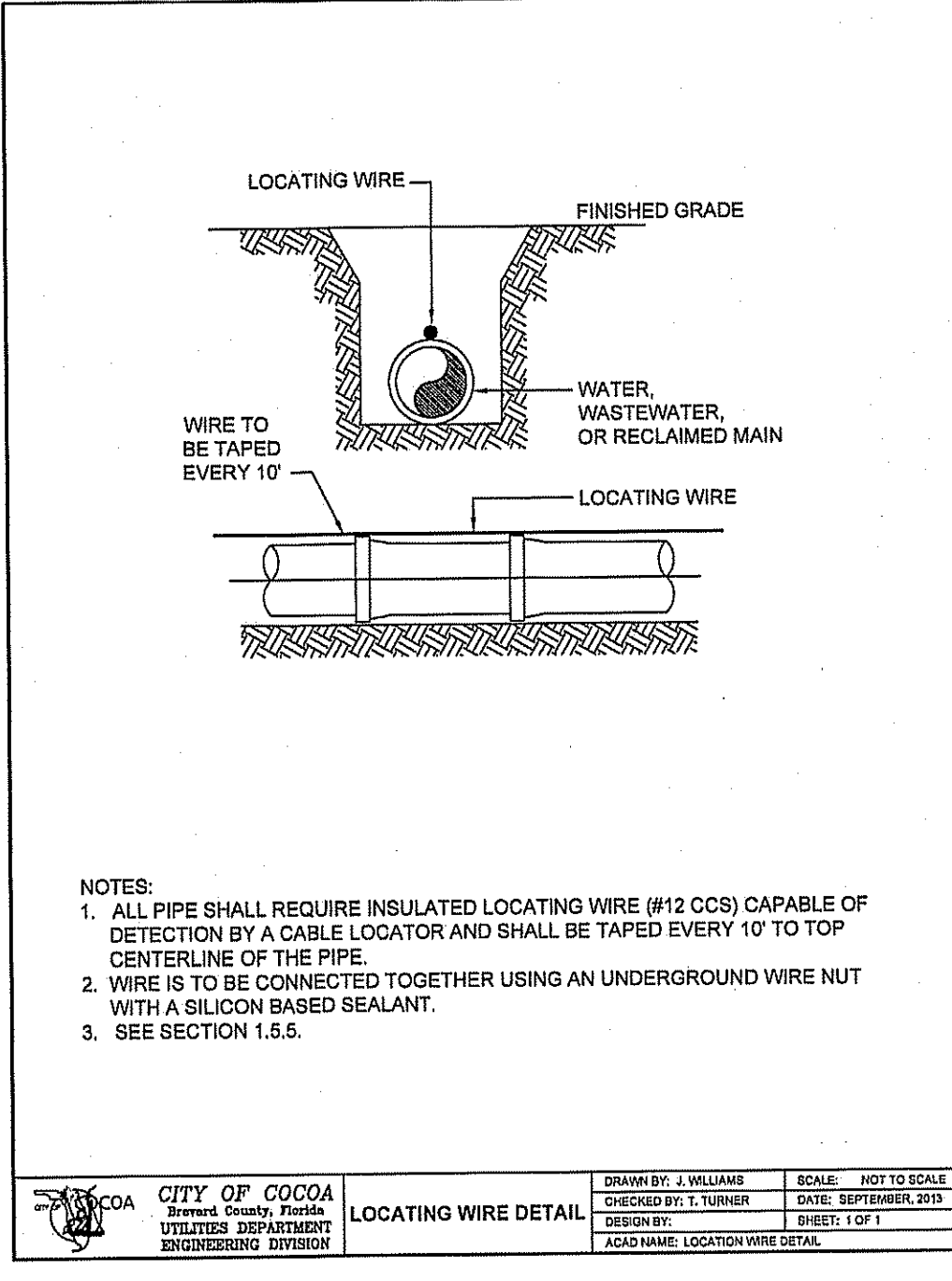
**RESTRAINED PIPE TABLE
WATER AND RECLAIMED WATER MAINS**

TYPE	MINIMUM LENGTH (FT) TO BE RESTRAINED ON EACH SIDE OF FITTING(S)										
	4"	6"	8"	10"	12"	16"	20"	24"	30"	36"	48"
90° BEND	21	29	38	45	53	66	79	91			
45° BEND	9	12	16	19	22	45	33	38			
22-1/2° BEND	5	6	8	9	11	14	16	19			
11-1/4° BEND	3	3	4	5	6	7	8	9			
PLUG, BRANCH OF TEE, VALVE	58	82	107	128	151	193	234	273			

NOTES:

- FITTINGS SHALL BE RESTRAINED JOINTS.
- INSTALL FULL LENGTH JOINTS WITH TOTAL LENGTH EQUAL TO OR GREATER THAN SHOWN IN THE TABLE.
- WHERE TWO OR MORE FITTINGS ARE TOGETHER, USE FITTING WHICH YIELDS GREATEST LENGTH OF RESTRAINED PIPE.
- ALL LINE VALVES AND THROUGH RUN OF TEES SHALL BE RESTRAINED.
- LENGTHS SHOWN IN THE TABLE HAVE BEEN CALCULATED IN ACCORDANCE WITH THE PROCEDURE OUTLINED IN "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" AS PUBLISHED BY DIPRA, WITH THE FOLLOWING ASSUMPTIONS:
WORKING PRESSURE: 150 PSI
SOIL DESIGNATION: SM (SAND SILT)
LAYING CONDITIONS: 3
- TABLE IS FOR PVC AND WRAPPED DUCTILE IRON.

DRIVEN BY: J. WILLIAMS
CHECKED BY: T. TURNER
DATE: SEPTEMBER, 2013
DESIGN BY: T. TURNER
SHEET: 1 OF 1
ACAD NAME: RESTRAINED PIPE TABLE WATER AND RECLAIMED



Revision	Revised Per City of Cocoa Comments	Date
1	REVISED PER CITY OF COCOA COMMENTS	AUGUST 13, 2020
2	PER CITY OF COCOA COMMENTS	MAY 27, 2020
3	PER SJRWMD COMMENTS	MAY 12, 2020
4	PER CITY OF COCOA COMMENTS	MARCH 16, 2020
5	PER CITY OF COCOA COMMENTS	08/11/2020
6	PER CITY OF COCOA COMMENTS	08/11/2020
7	PER CITY OF COCOA COMMENTS	08/11/2020
8	PER CITY OF COCOA COMMENTS	08/11/2020
9	PER CITY OF COCOA COMMENTS	08/11/2020
10	PER CITY OF COCOA COMMENTS	08/11/2020

COCOA GRAND

CITY OF COCOA WATER DETAILS

MORGAN & Associates

Consulting Engineers, Inc.

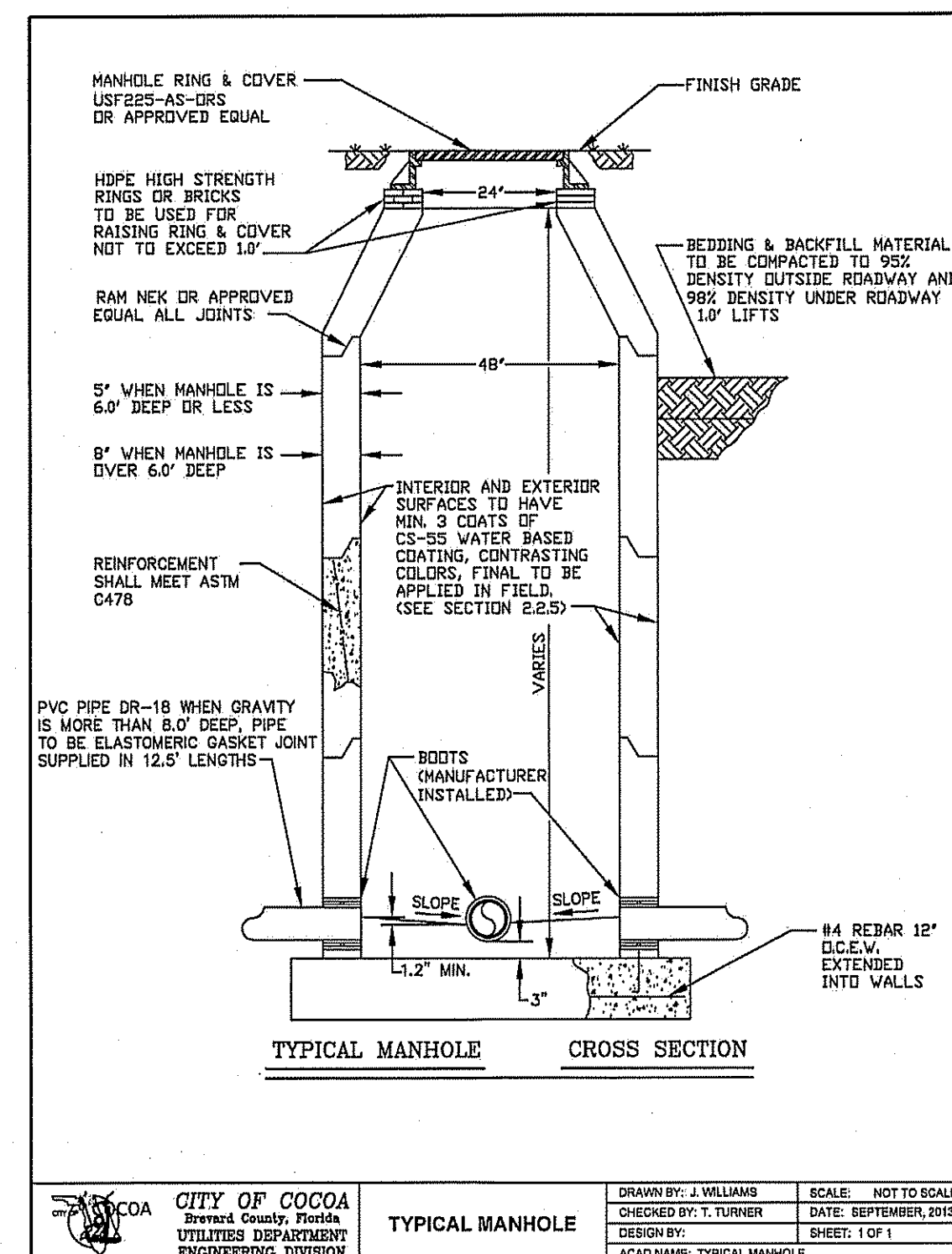
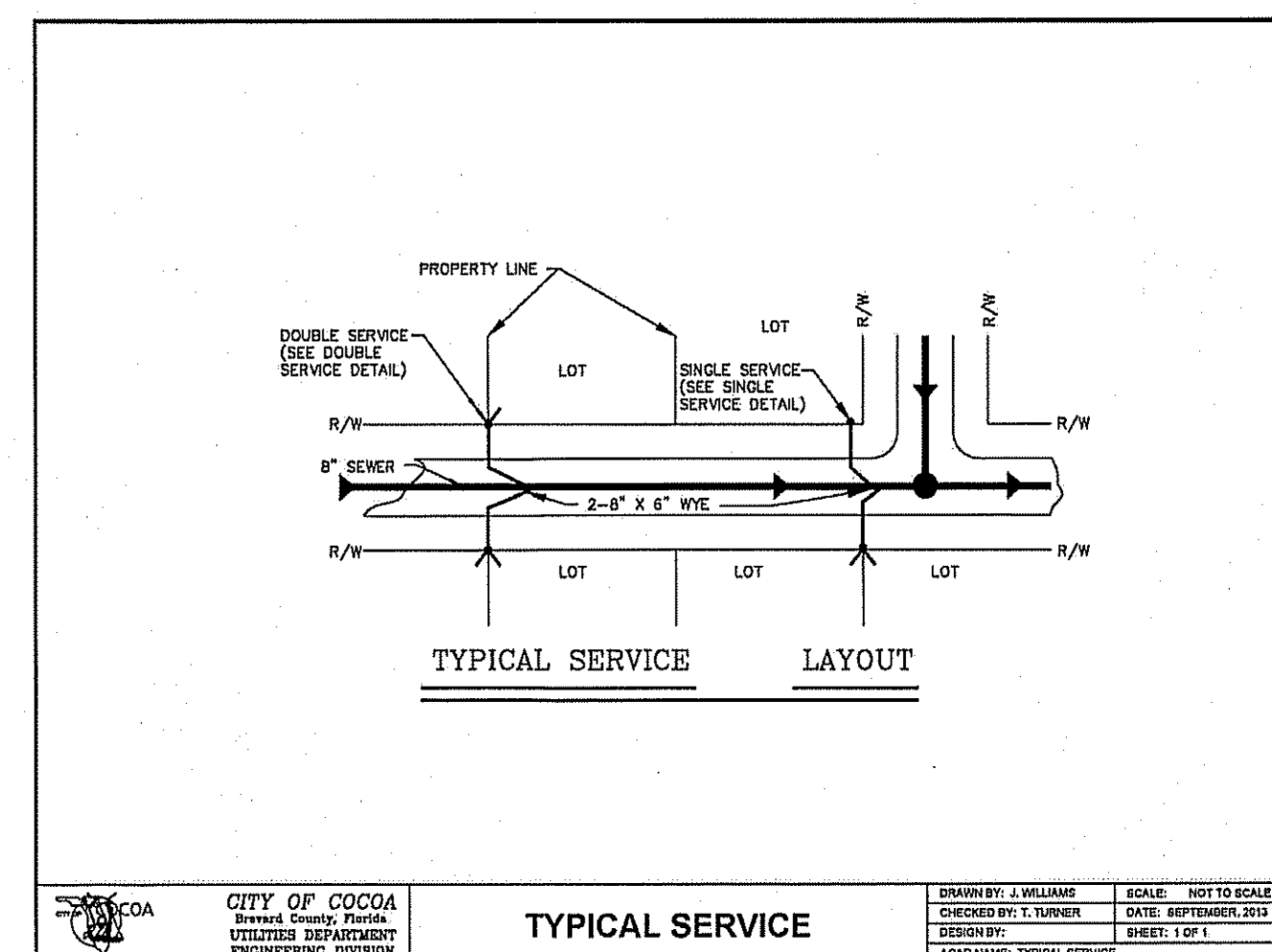
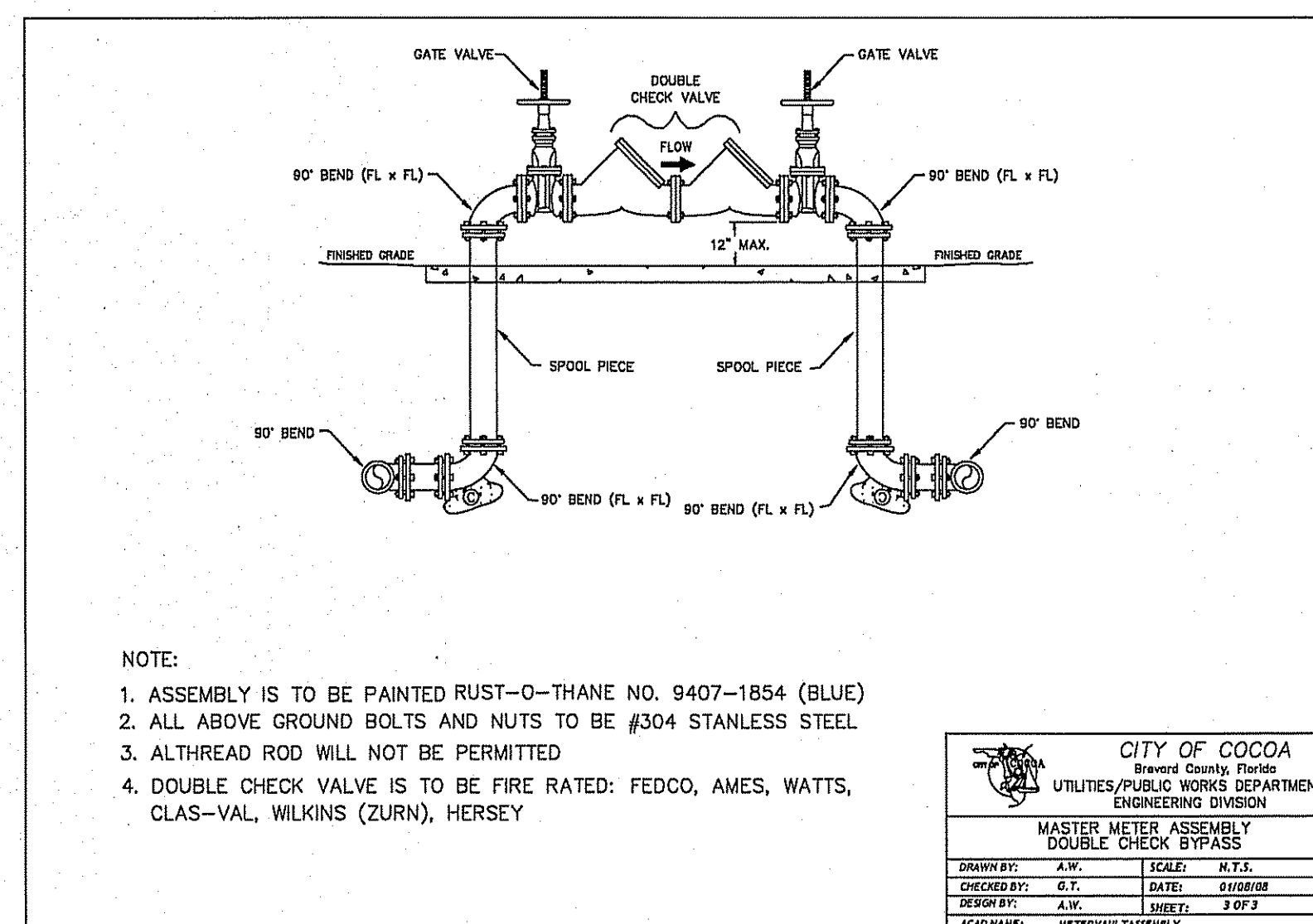
Civil Engineers and Land Surveyors • E.L.R.#7903 / L.B.#7040
504 North Harbor City Blvd., Melbourne, FL 32905
Phone (321) 751-6088 Fax (321) 751-6089

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Drawing #: CIVIL & DETAILS
Scale: Horiz. N/A
Sheet #: C-28
Sheet 28 of 41

ANDREAS H. KIRKSH

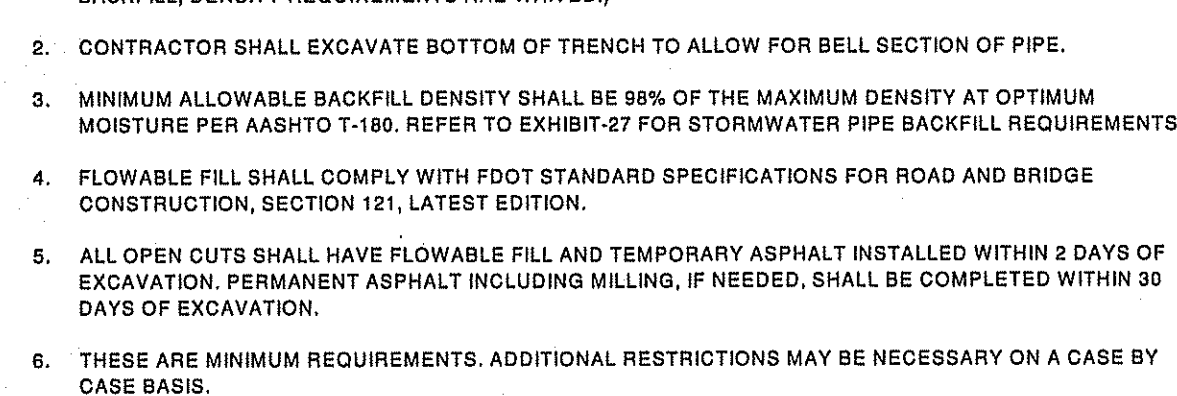
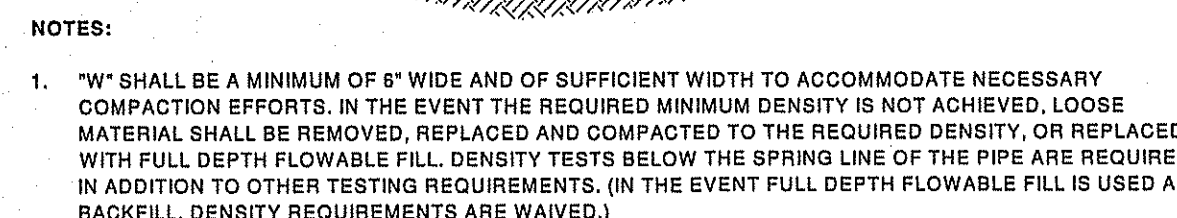
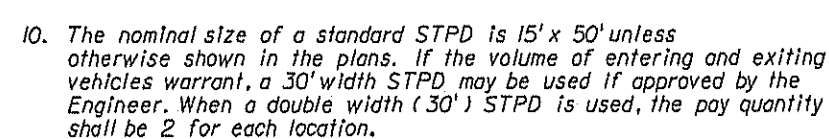
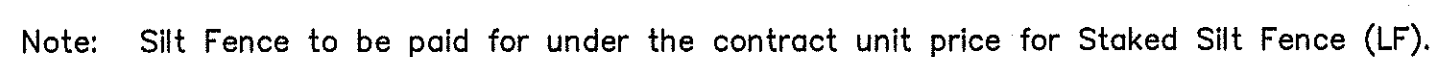
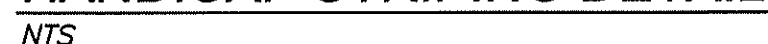
Professional Engineer

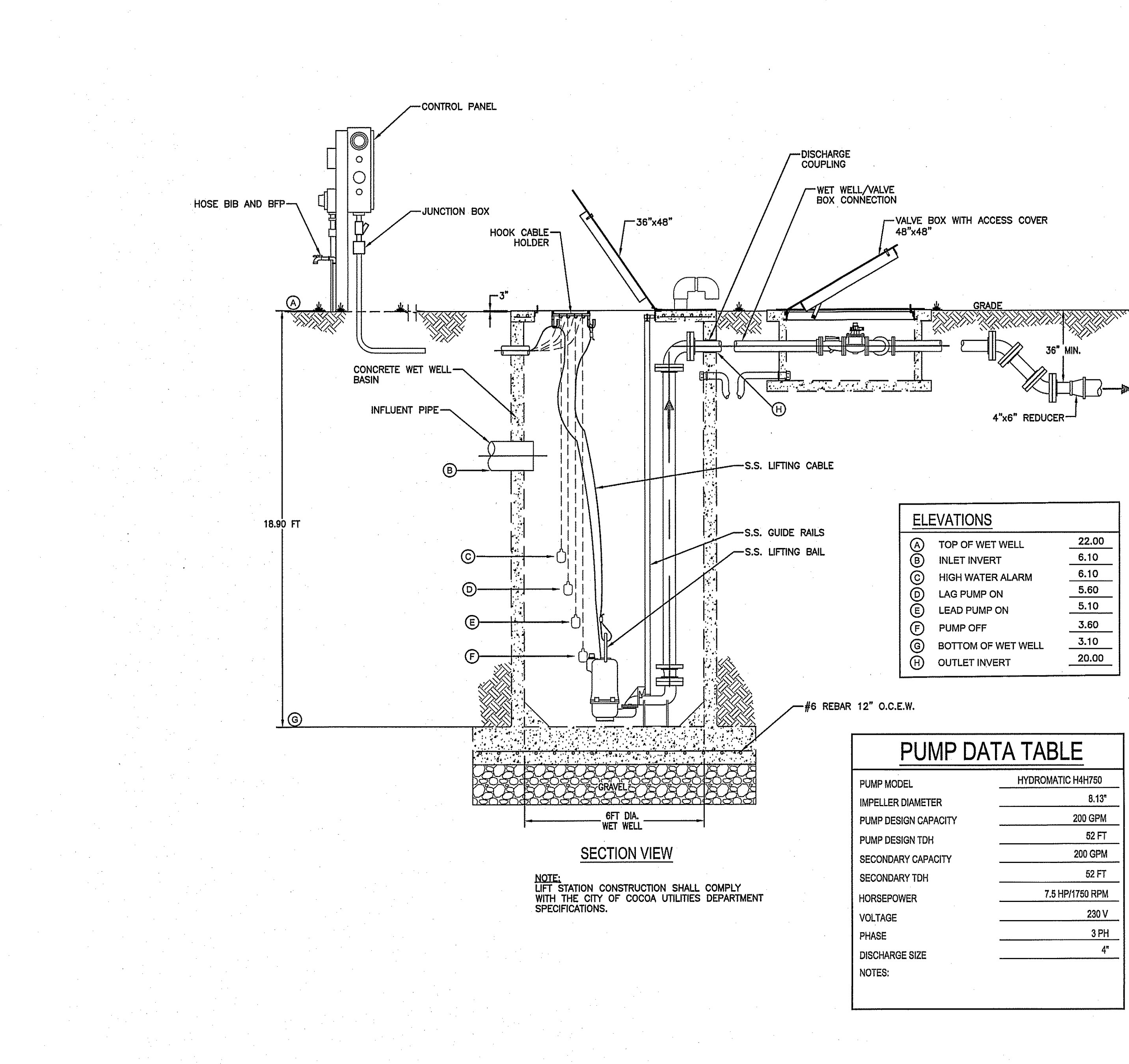
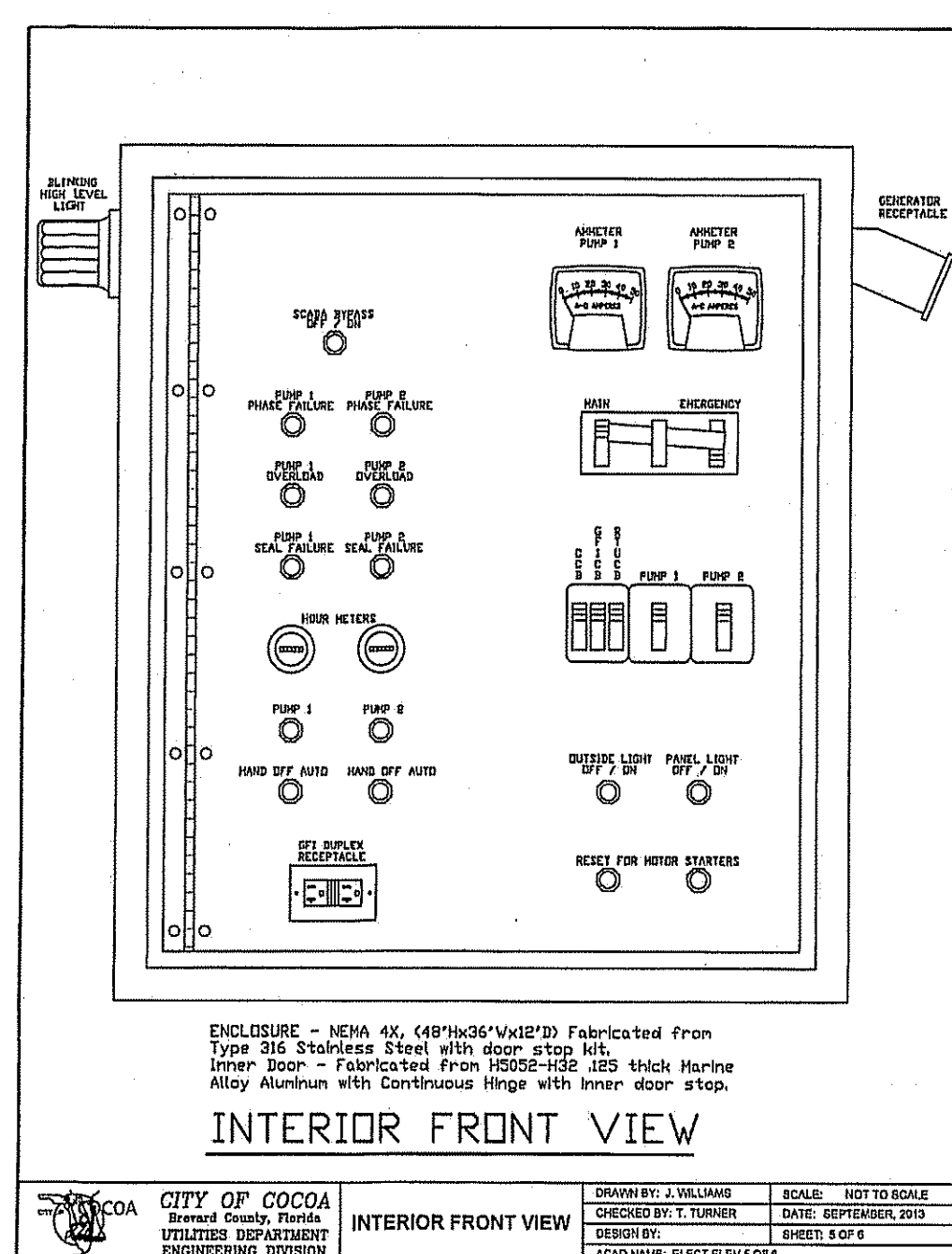
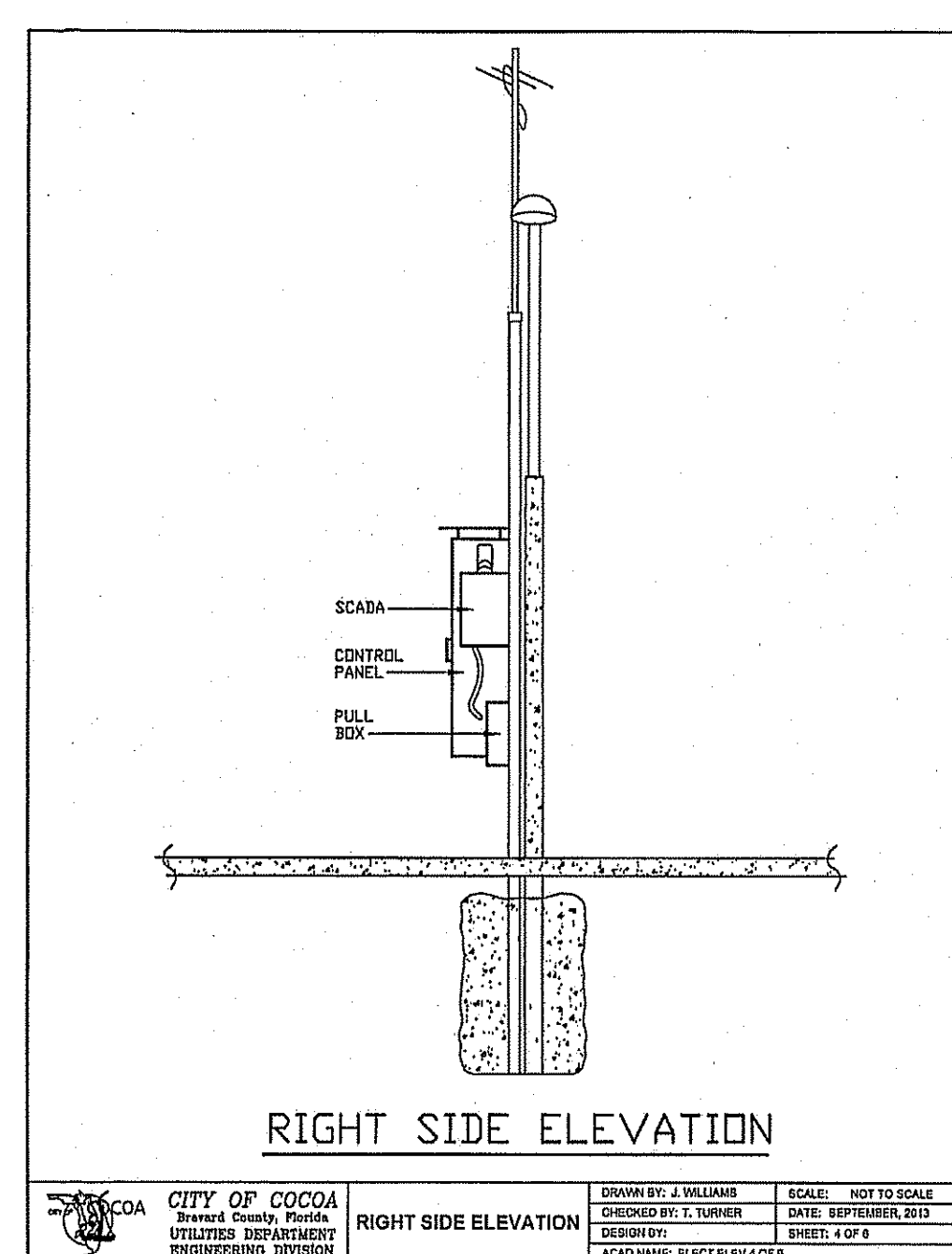
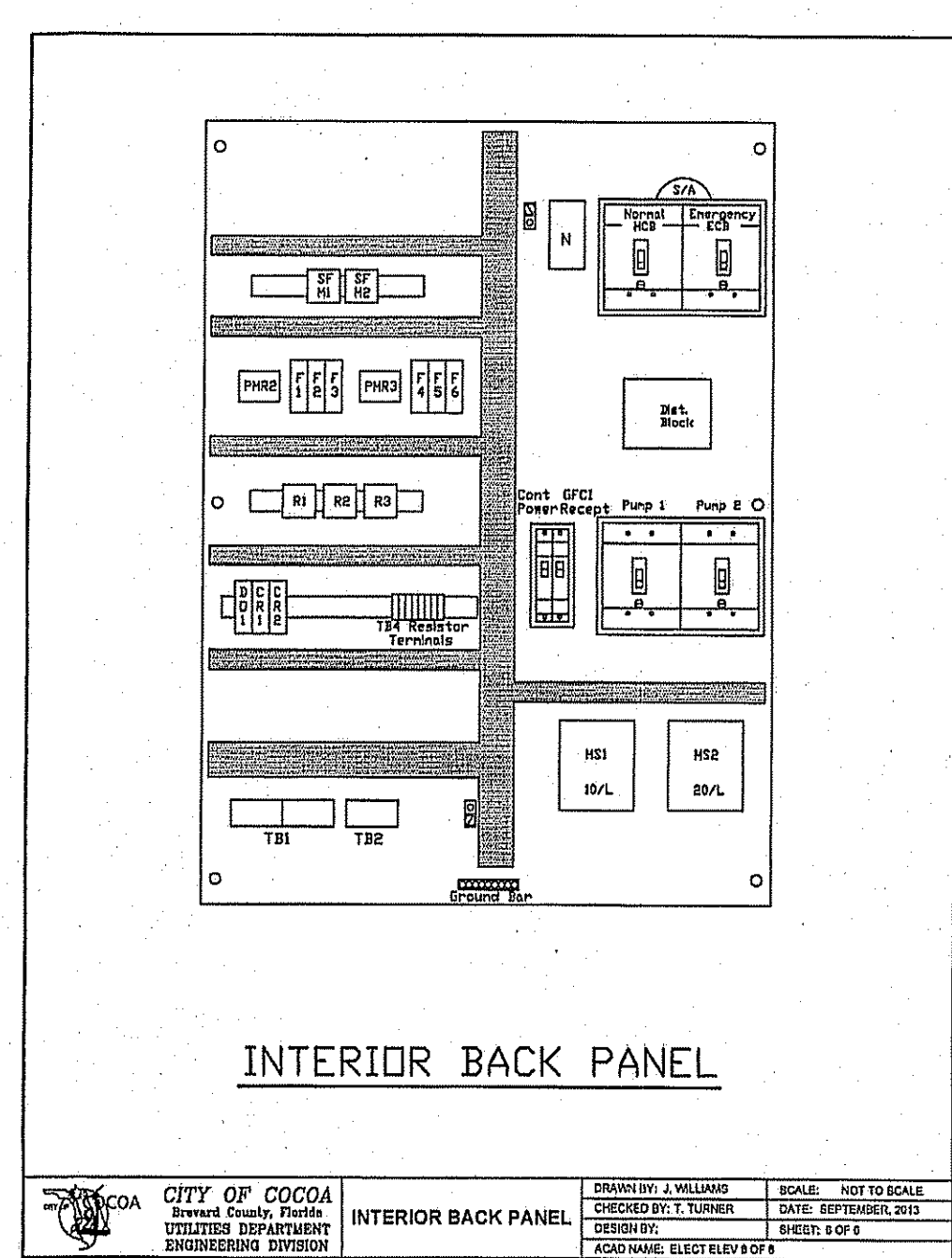
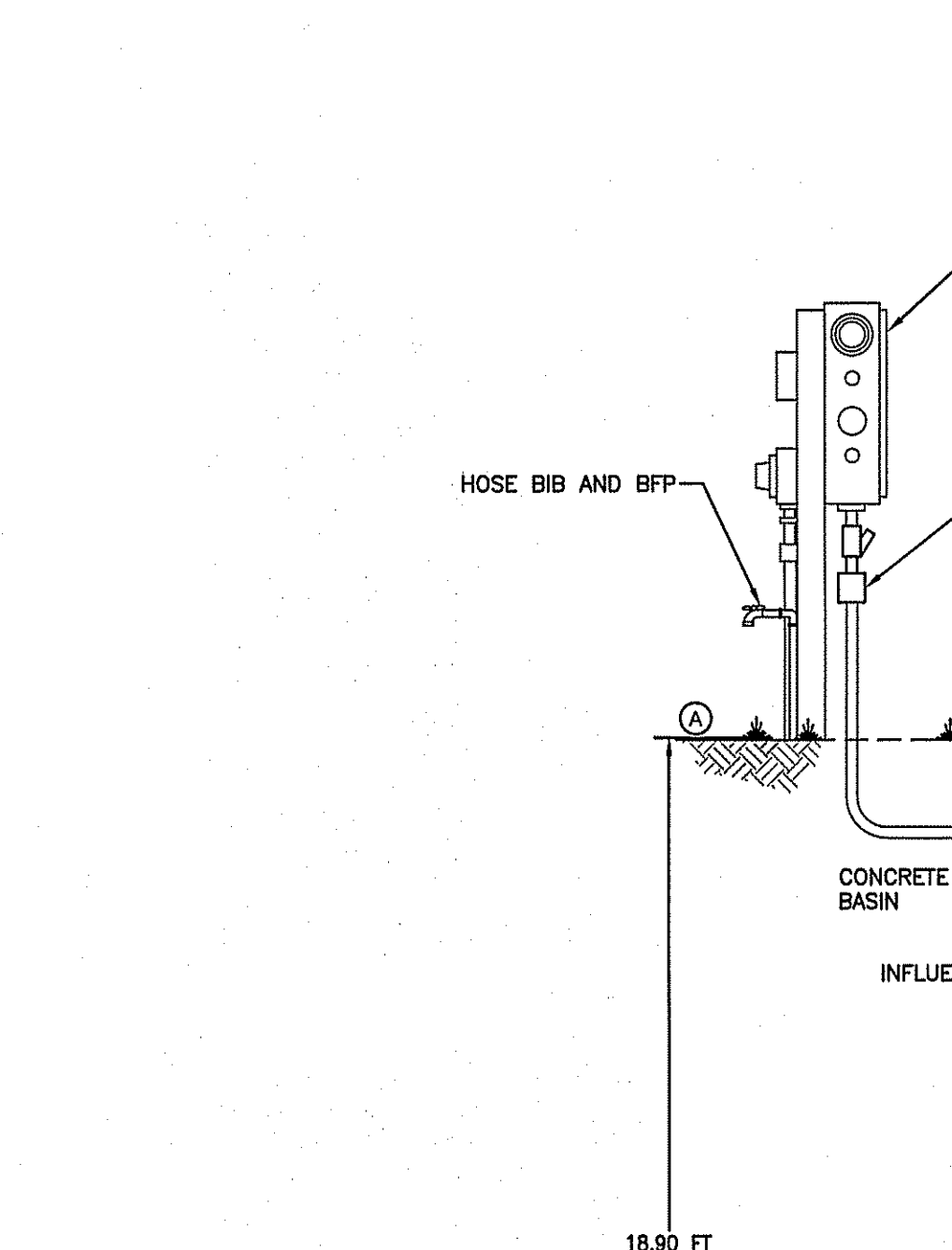
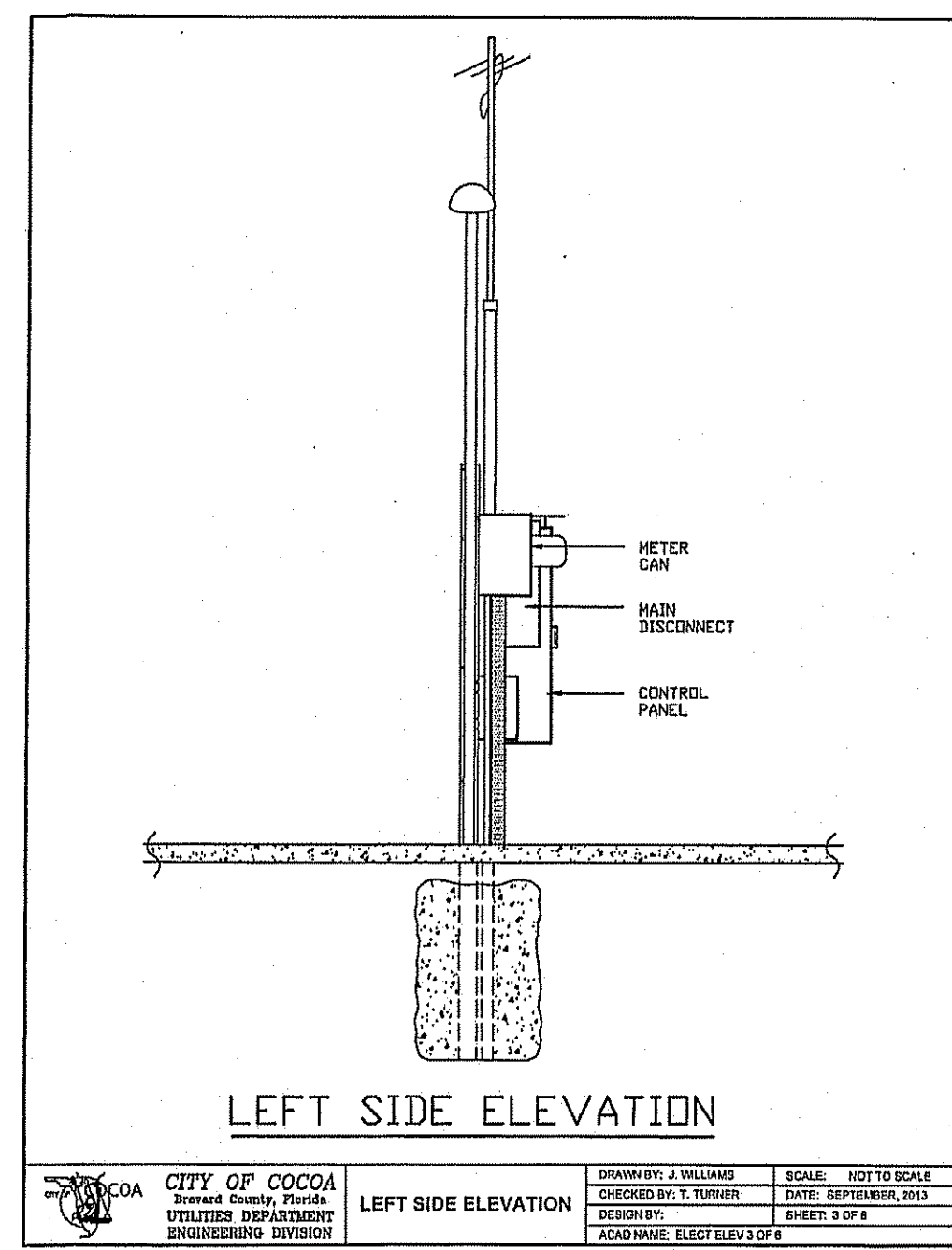
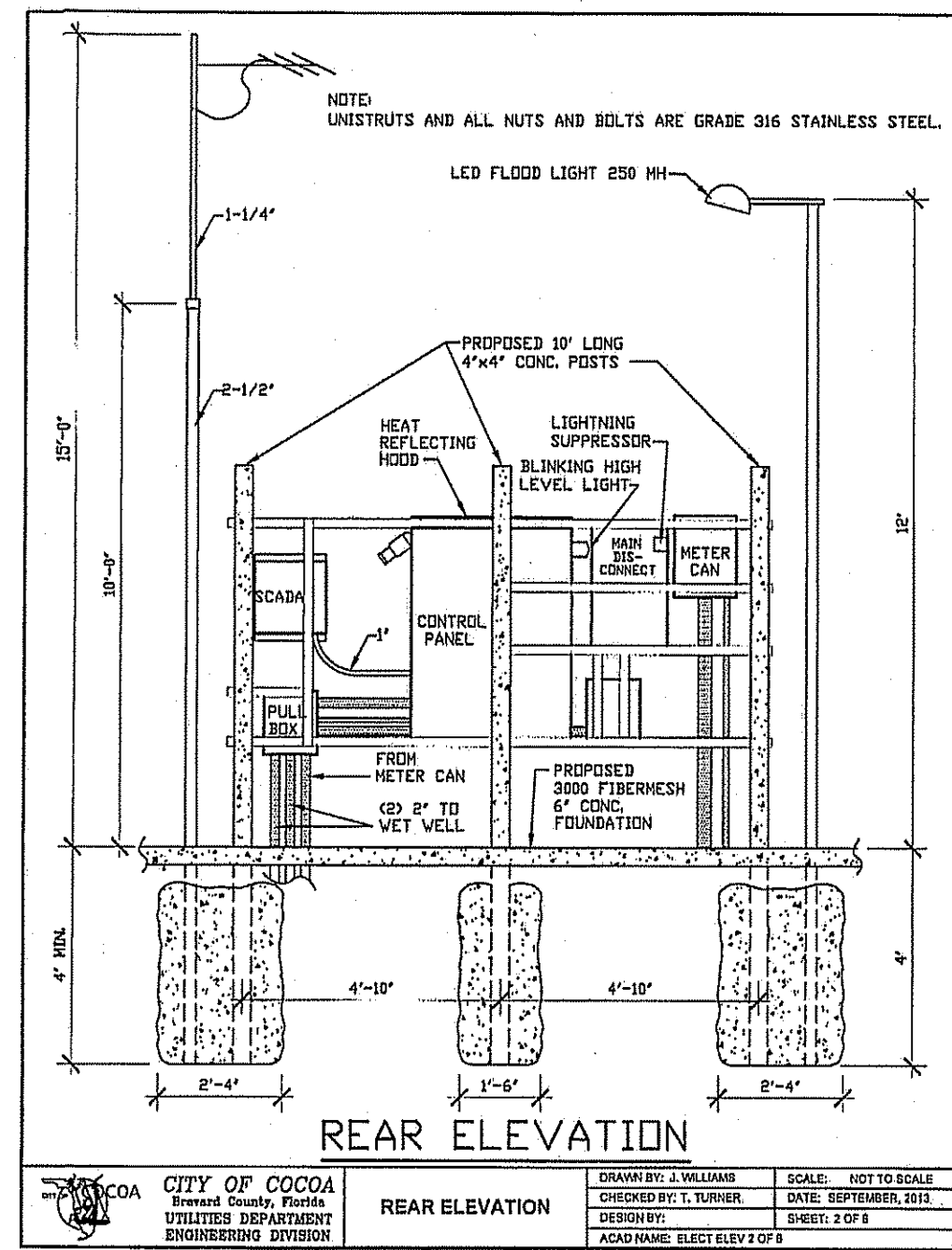
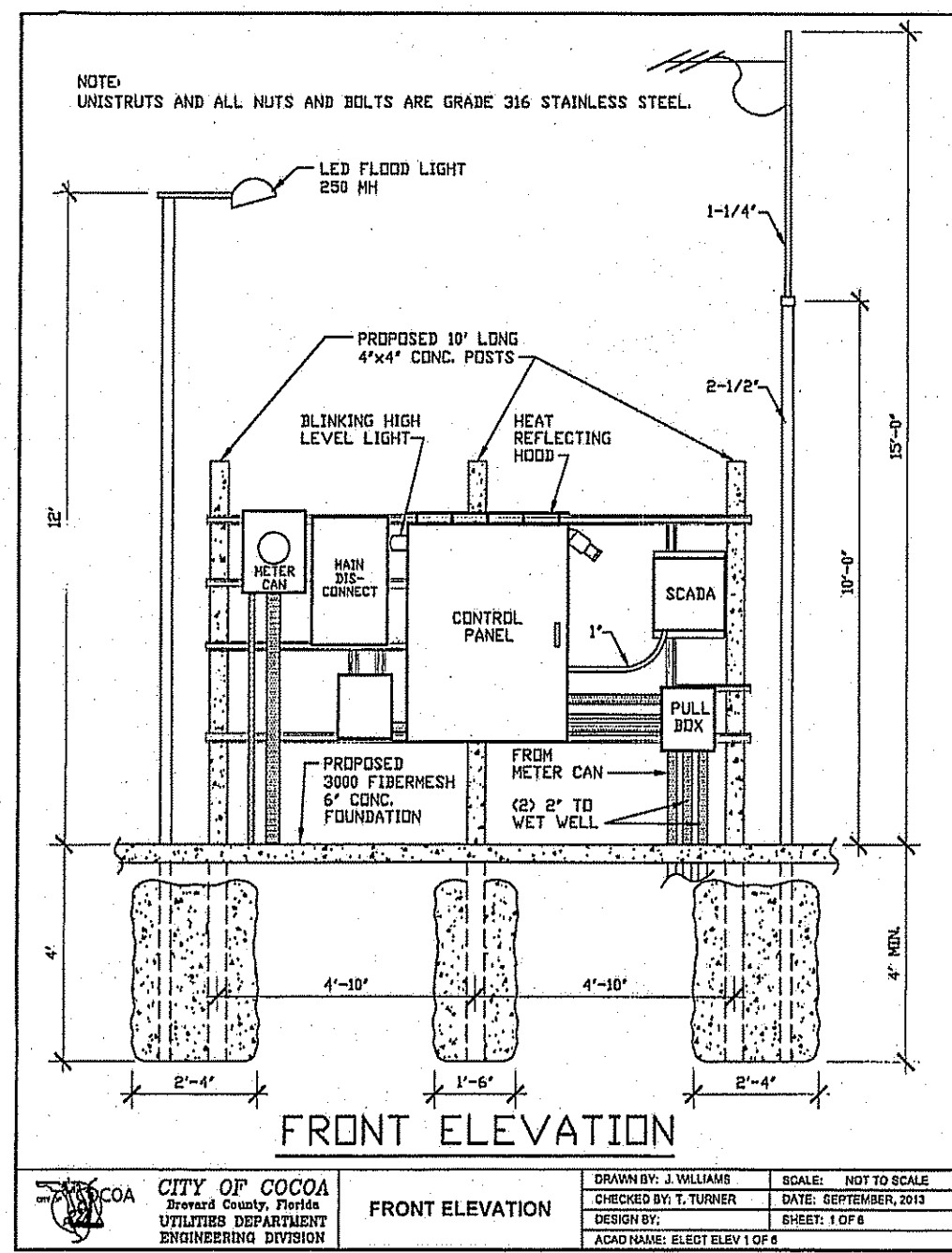
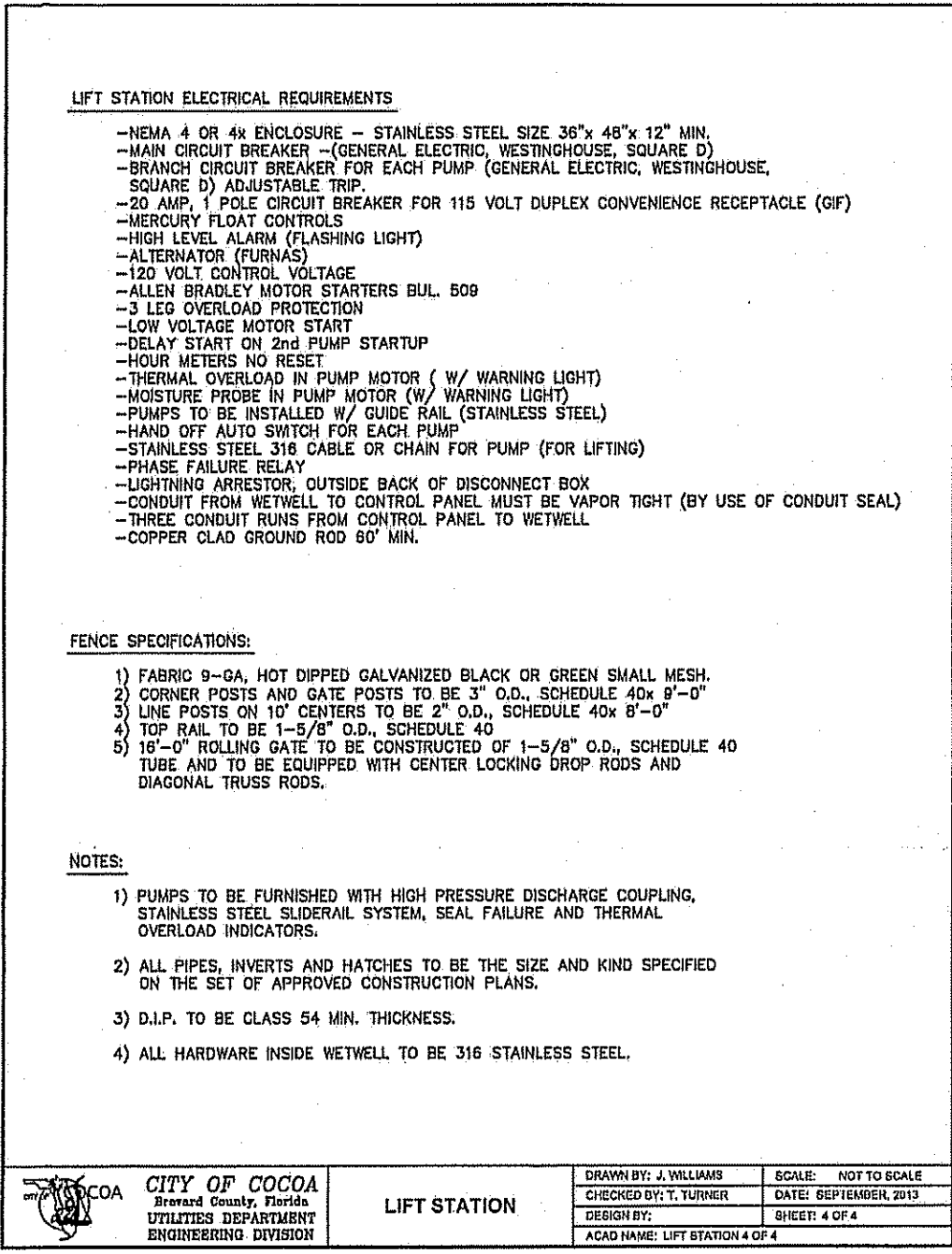
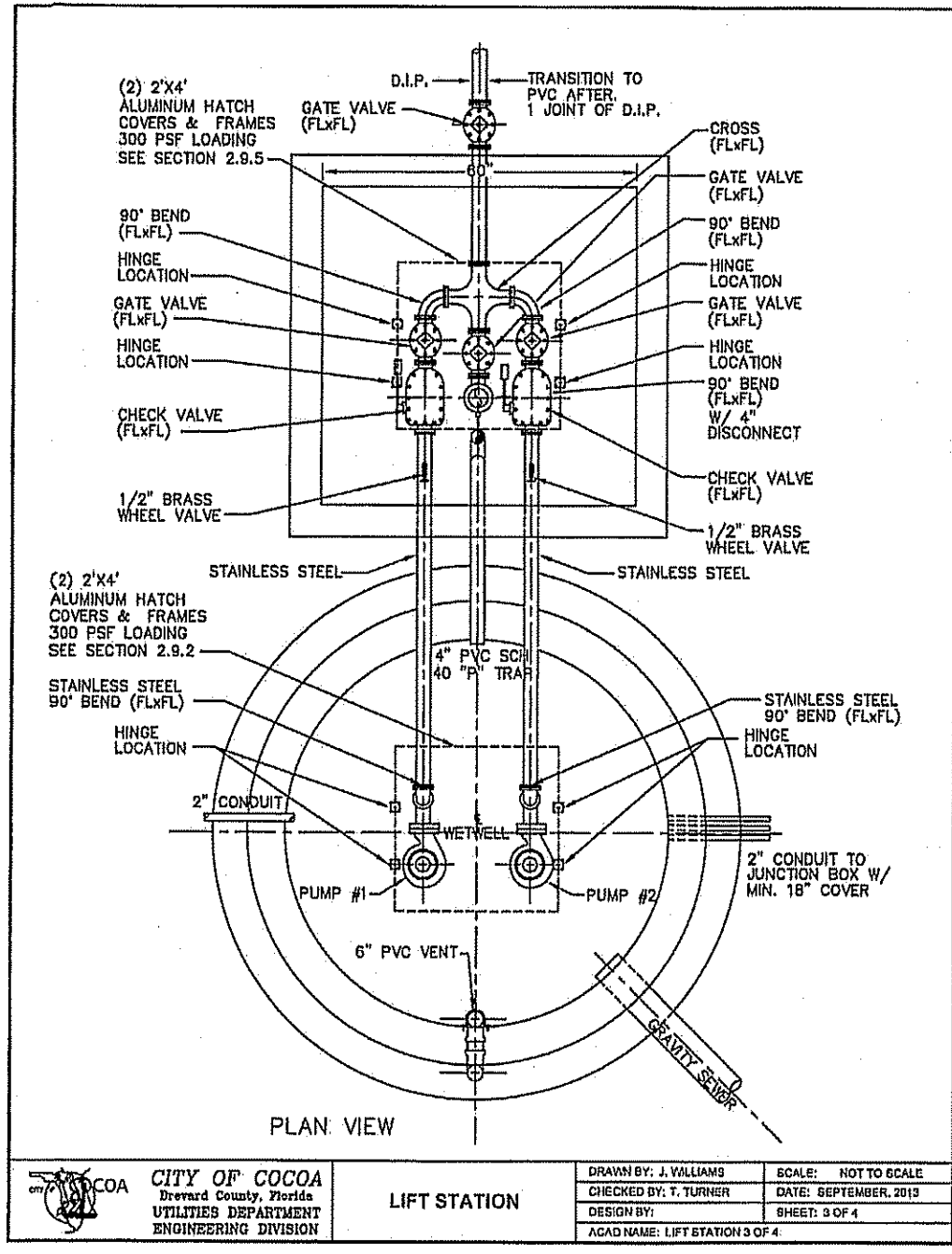
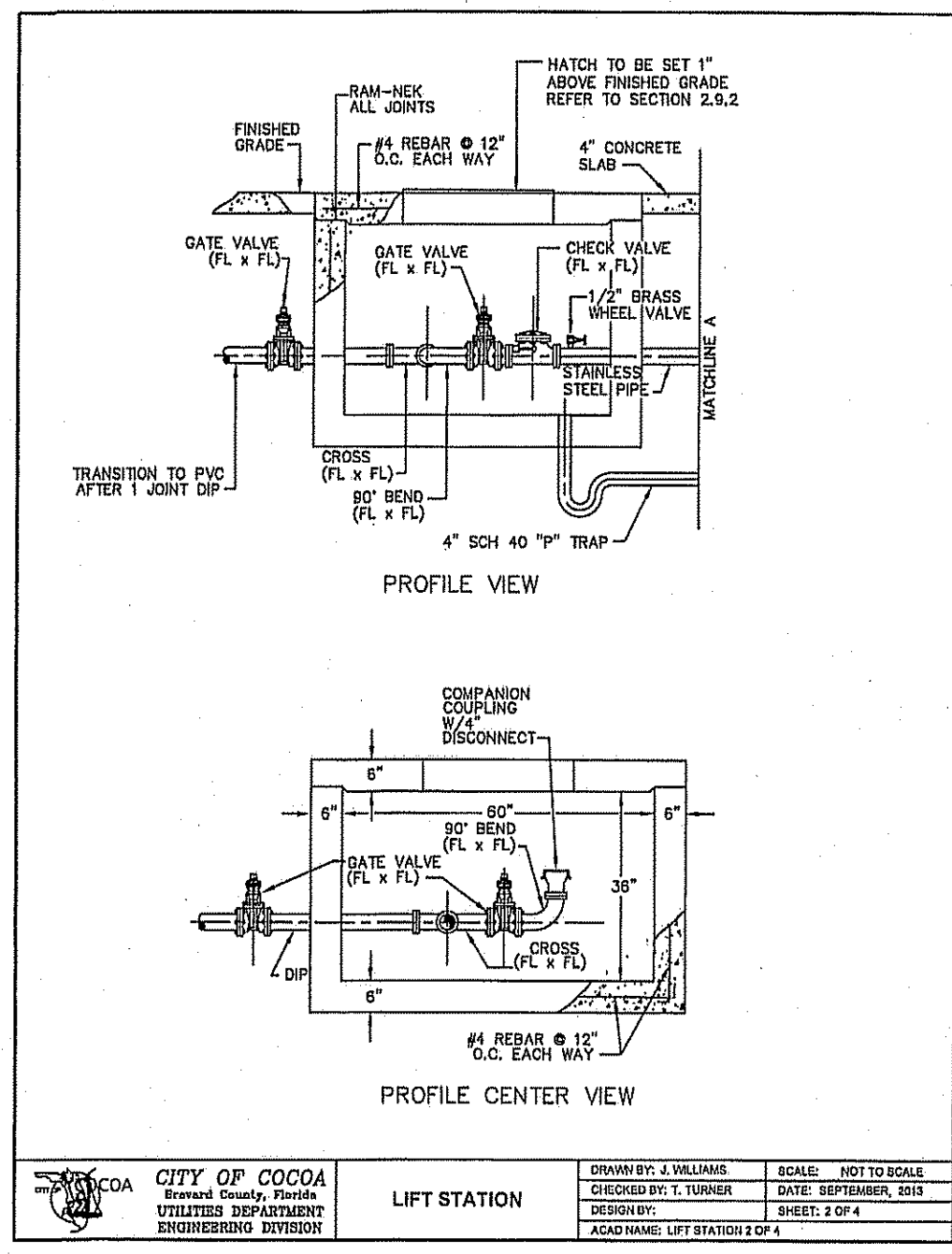
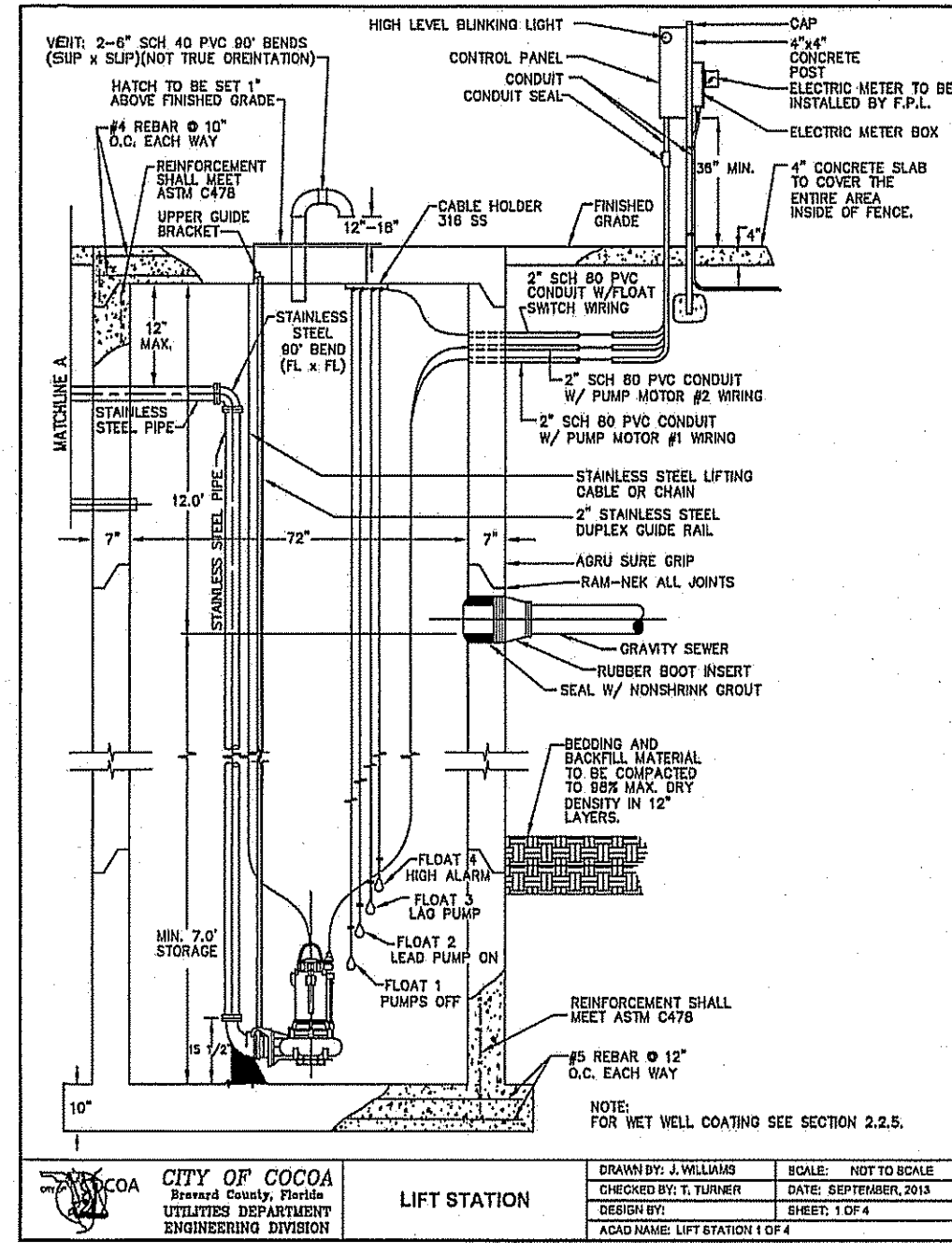
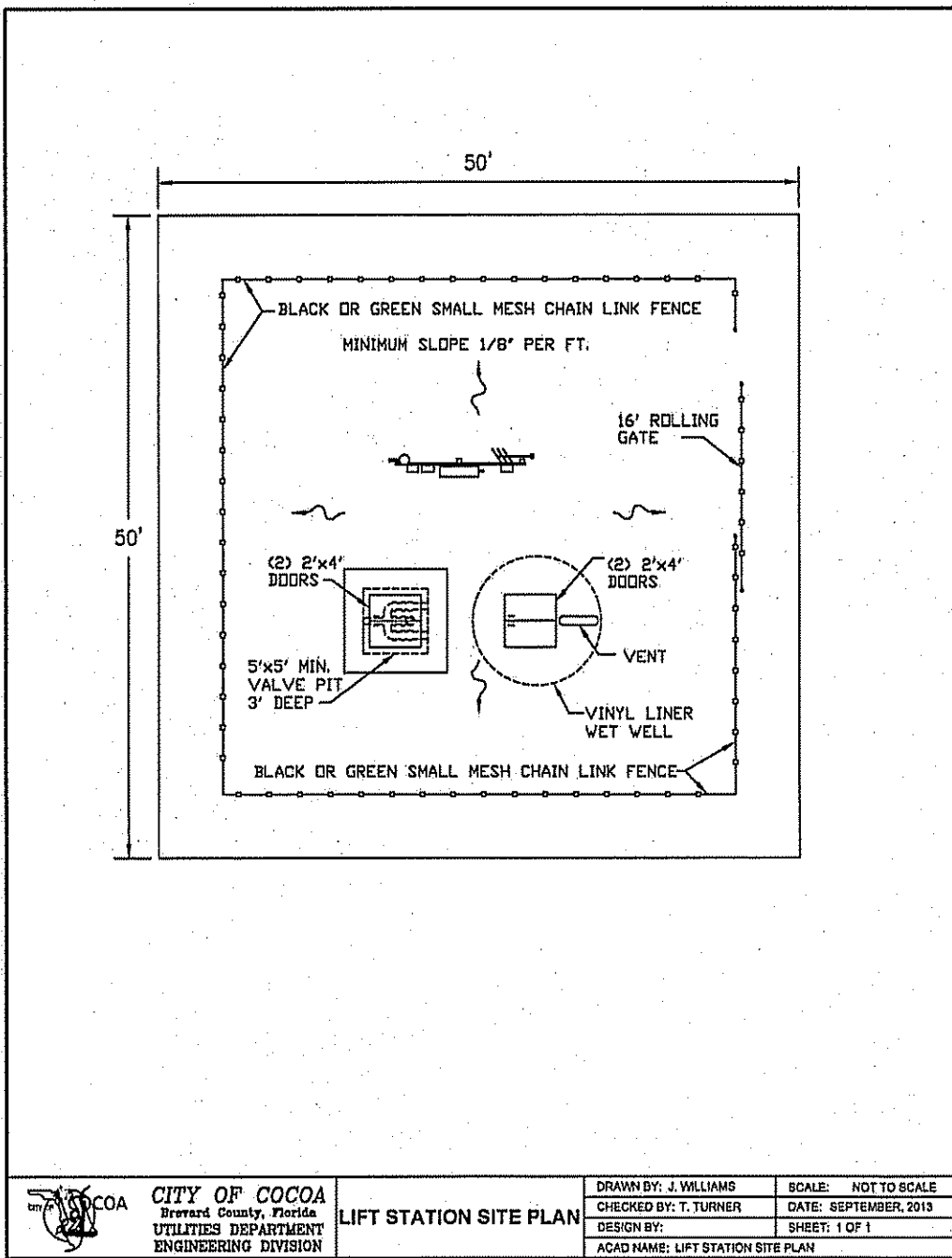
Steven J. Morgan P.E. FL. Reg. #50632
Andreas H. Kirksh P.E. FL. Reg. #49431



Steven J. Morgan P.E. FL. Reg. #50632
 Andreas H. Kirbach P.E. FL. Reg. #4943

Date:





ELEVATIONS	
A TOP OF WET WELL	22.00
B INLET INVERT	6.10
C HIGH WATER ALARM	6.10
D LAG PUMP ON	5.60
E LAG PUMP OFF	5.10
F PUMP OFF	3.60
G BOTTOM OF WET WELL	3.10
H OUTLET INVERT	20.00

PUMP DATA TABLE	
PUMP MODEL	HYDROMATIC HH4750
IMPELLER DIAMETER	6.13"
PUMP DESIGN CAPACITY	200 GPM
PUMP DESIGN TDH	62 FT
SECONDARY CAPACITY	200 GPM
SECONDARY TDH	52 FT
HORSEPOWER	7.5 HP/1750 RPM
VOLTAGE	230 V
PHASE	3 PH
DISCHARGE SIZE	4"

COCOA GRAND

LIFT STATION DETAILS

MORGAN & Associates

Consulting Engineers, Inc.

Civil Engineers and Land Surveyors - E.B. #7903 (L.B. #7040)

904 North Harbor City Blvd. Melbourne, FL 32955

Phone (321) 751-0888 Fax (321) 751-0889

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Vert. N/A

Sheet #:

C-31

Sheet 31 of 41

August 13, 2020

May 27, 2020

May 12, 2020

March 18, 2020

06/11/2020

06/11/2020

Revised Per City of Cocoa Comments

Per City of Cocoa Comments

Per SJRWMD Comments

Per City of Cocoa Comments

Drawn: AK

Checked: AK

City of Cocoa

Revised County, Florida

Utilities Department

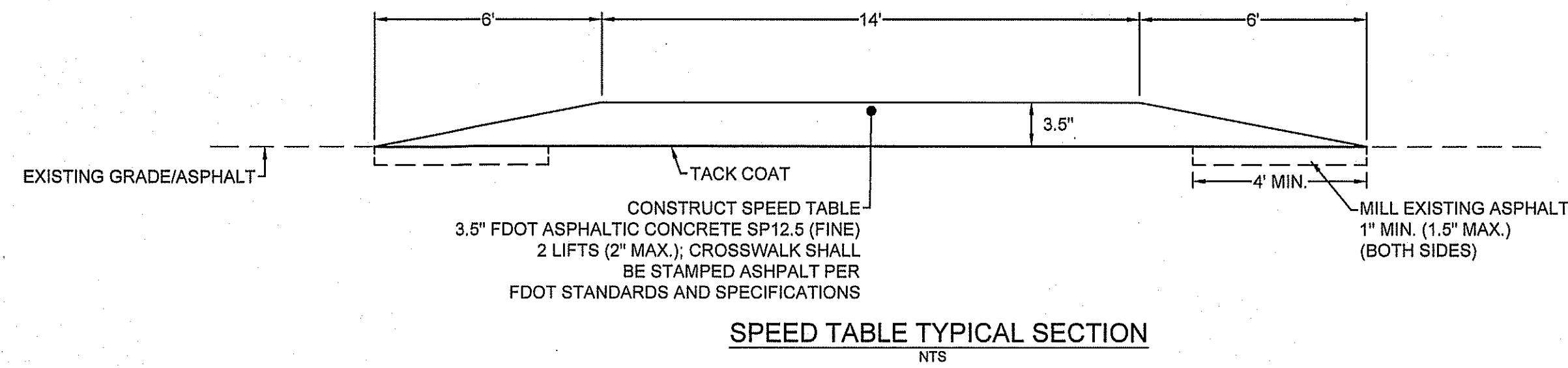
Engineering Division

Steven J. Morgan P.E. FL Reg. #50632

Andreas H. Kirbach P.E. FL Reg. #49431

1. THE CONTRACTOR SHALL PROVIDE A MAINTENANCE OF TRAFFIC (MOT) PLAN OR ROADWAY CLOSURE MOT/DETOUR PLAN. THE MOT PLAN SHALL BE IN ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND FDOT STANDARD INDEX 102-600 SERIES, FDOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE SECTION 102 AND BREVARD COUNTY LAND DEVELOPMENT EXHIBITS.
2. THE CONTRACTOR SHALL VERIFY ALL DATA MEETS FDOT 2019-20 EDITION.
3. ALL DRIVEWAYS ARE TO REMAIN OPEN EXCEPT WHEN PERIODIC LANE CLOSURES REQUIRE DRIVEWAY CLOSURE.
4. ALL SIGNING, PAVEMENT MARKINGS, BARRICADES AND WARNING LIGHTS NECESSARY FOR MOT SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (MUTCD), LATEST EDITION.
5. INSTALL CONSTRUCTION SIGNING PRIOR TO COMMENCEMENT OF CONSTRUCTION AND MAINTAIN SIGNS IN ACCORDANCE WITH MUTCD.
6. TEMPORARY VEHICULAR ACCESS TO RESIDENCES AND BUSINESSES ALONG THE CONSTRUCTION ROUTE SHALL BE MAINTAINED AT ALL TIMES.
7. CONTRACTOR TO ADJUST MOT TO ACCOMMODATE SCHOOL TRAFFIC AS NECESSARY.

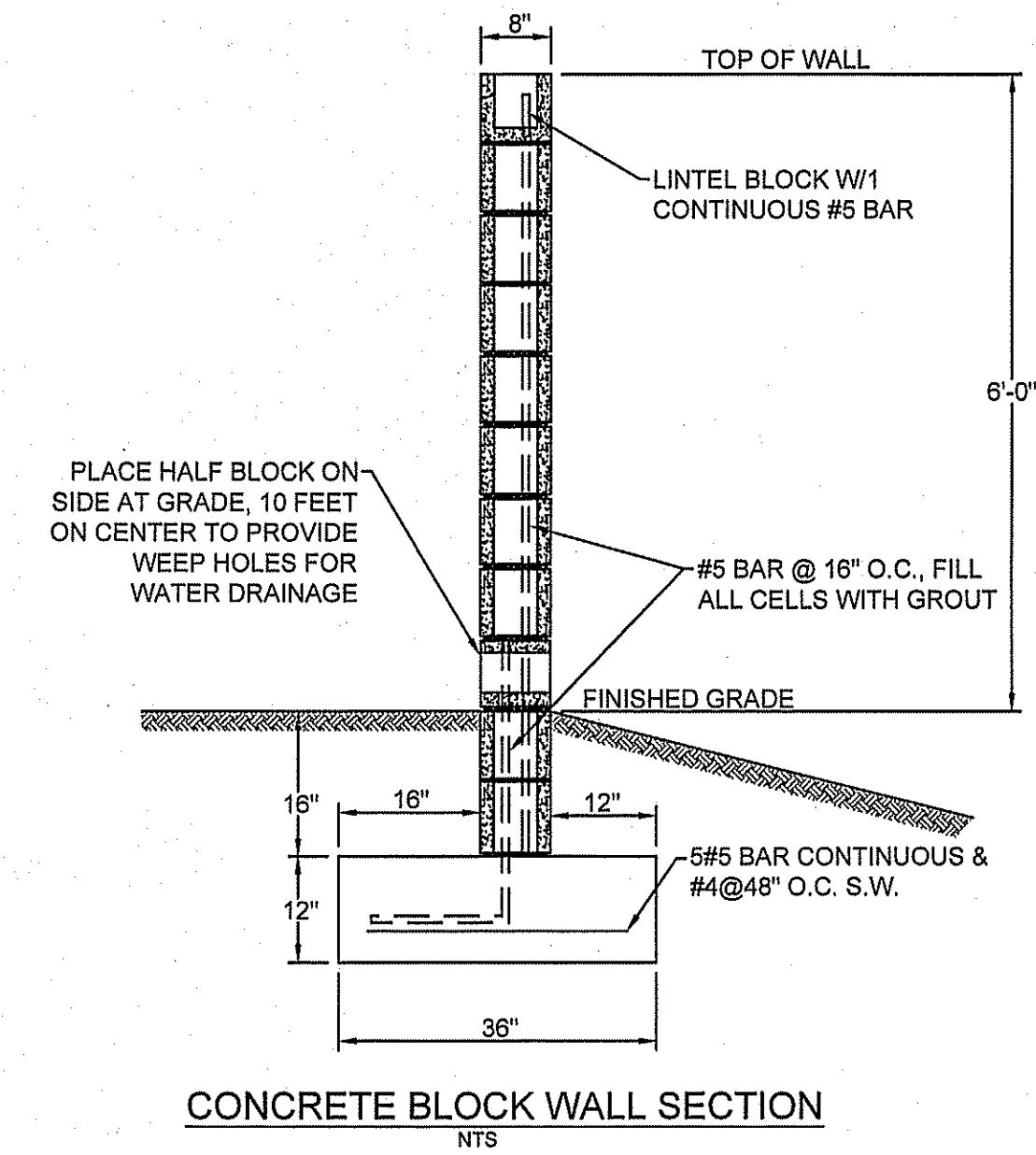
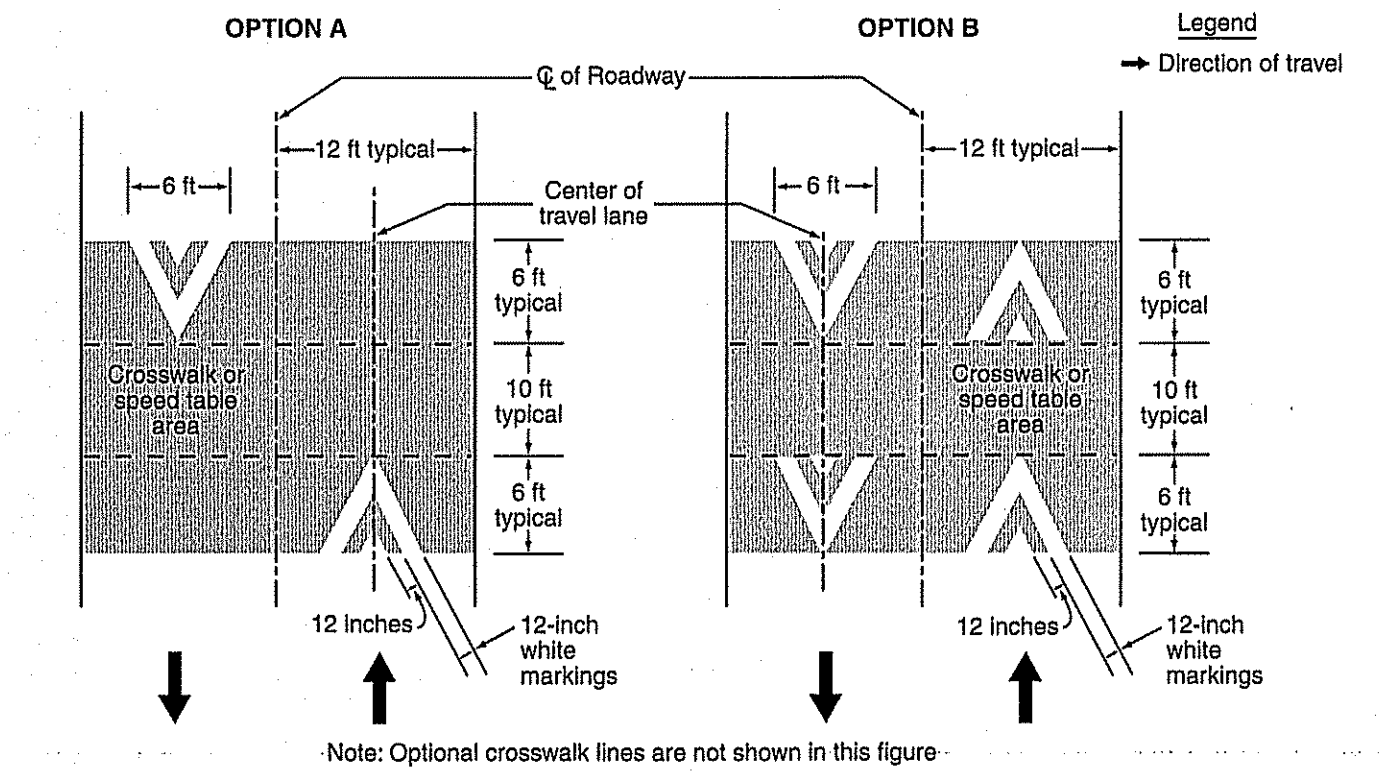
1. ALL WORK PERFORMED WITHIN THE FDOT RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE FDOT DESIGN STANDARDS, 2019 SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND THE LATEST UTILITY ACCOMMODATION MANUAL.
2. ALL EXCAVATIONS WITHIN TEN (10) FEET OF THE TRAVEL LANES AND GREATER THAN THREE (3) INCHES DEEP MUST BE FILLED IN OR HAVE A SHOULDER TREATMENT PLACED AT THE DROP-OFF PER INDEX NO. 102-600 AT THE END OF THE WORK DAY.
3. ALL UNPAVED AREAS THAT HAVE BEEN DISTURBED BY CONSTRUCTION WITHIN THE FDOT RIGHT-OF-WAY SHALL BE SODDED WITH COMMON BERMUDA OR BAHIA SOD.
4. ALL RAISED PAVEMENT MARKERS (RPM) INSTALLED WITHIN THE FDOT RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH FDOT DESIGN STANDARDS, INDEX NO. 705-001 AND 2020 FDOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION SECTION 706.



2009 Edition

Page 397

Figure 3B-30. Pavement Markings for Speed Tables or Speed Humps with Crosswalks



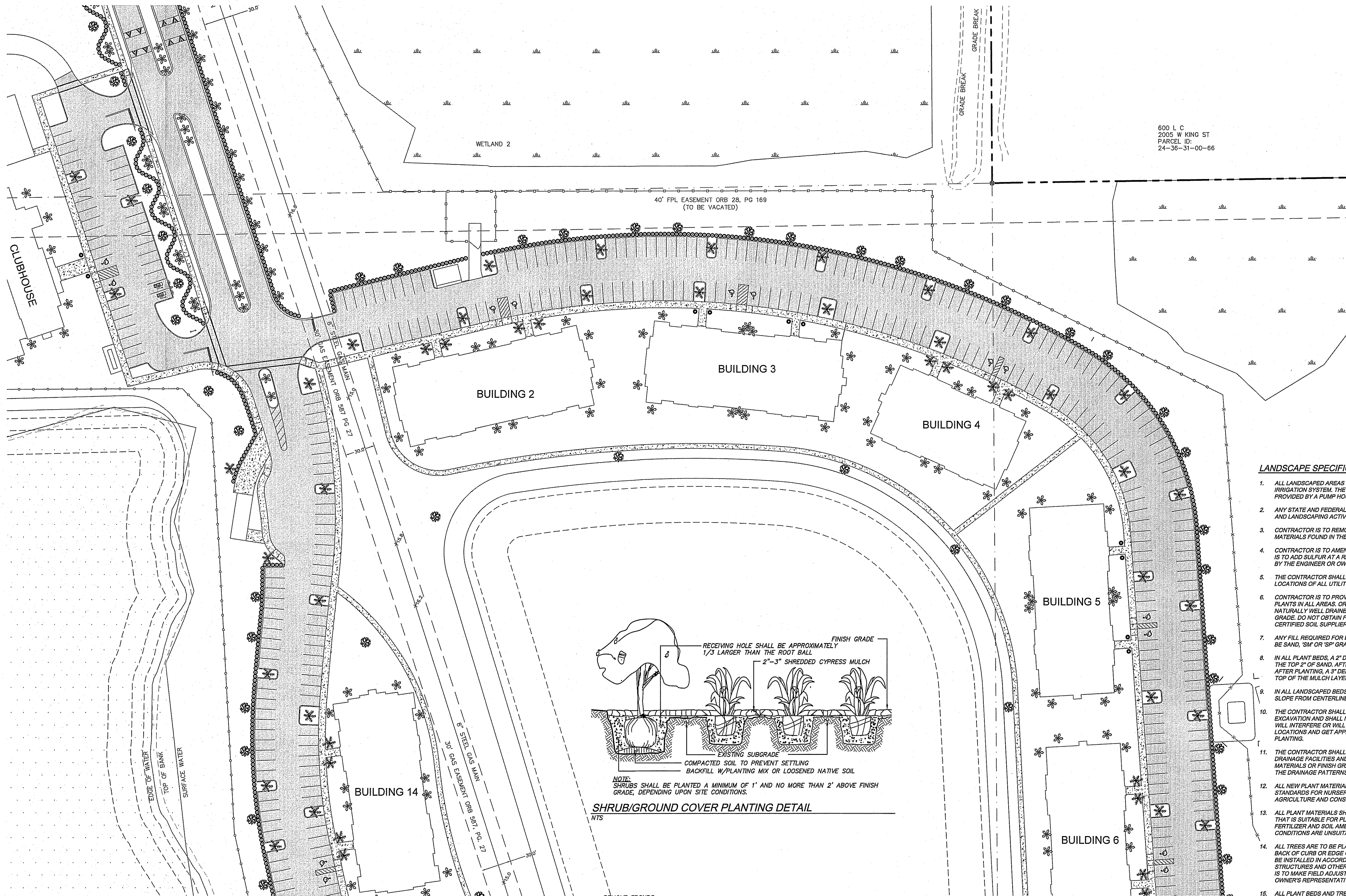
COCOA GRAND

CONSTRUCTION DETAILS

MORGAN & ASSOCIATES
Consulting Engineers, Inc.
Civil Engineers and Land Surveyors - F.B. # 7905 / L.B. # 7040
504 North Harbor City Blvd. Melbourne, FL 32955
Phone (321) 751-6088 Fax (321) 751-6089

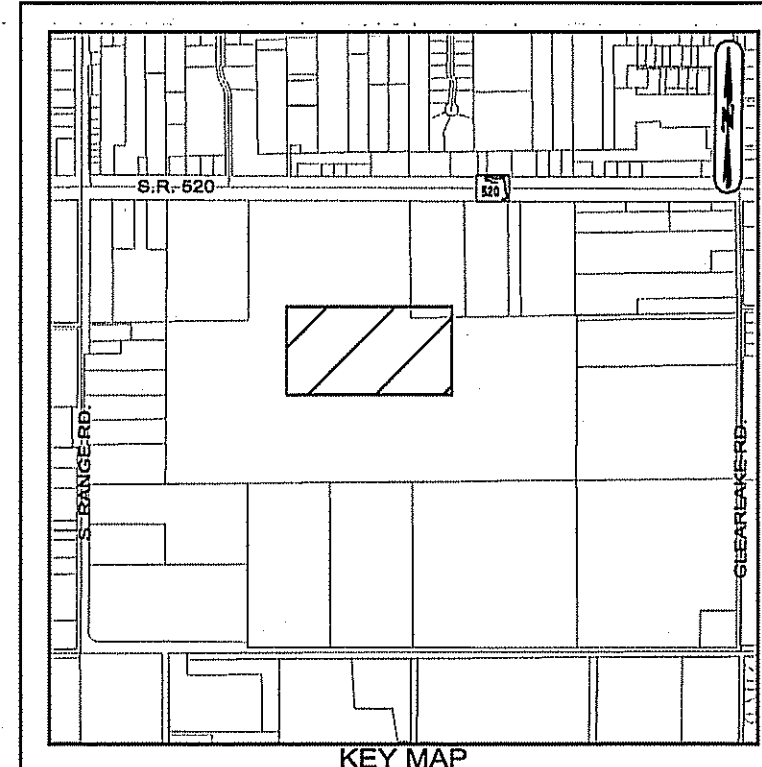
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Vert. N/A
Sheet #:
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Sheet 33 of 41

ANDREAS H. KIRBACH
P.E.
No. 49431
STATE OF FLORIDA
PROFESSIONAL ENGINEER
Steven J. Morgan P.E. FL Reg. #50632
Andreas H. Kirbach P.E. FL Reg. #49431
Date:



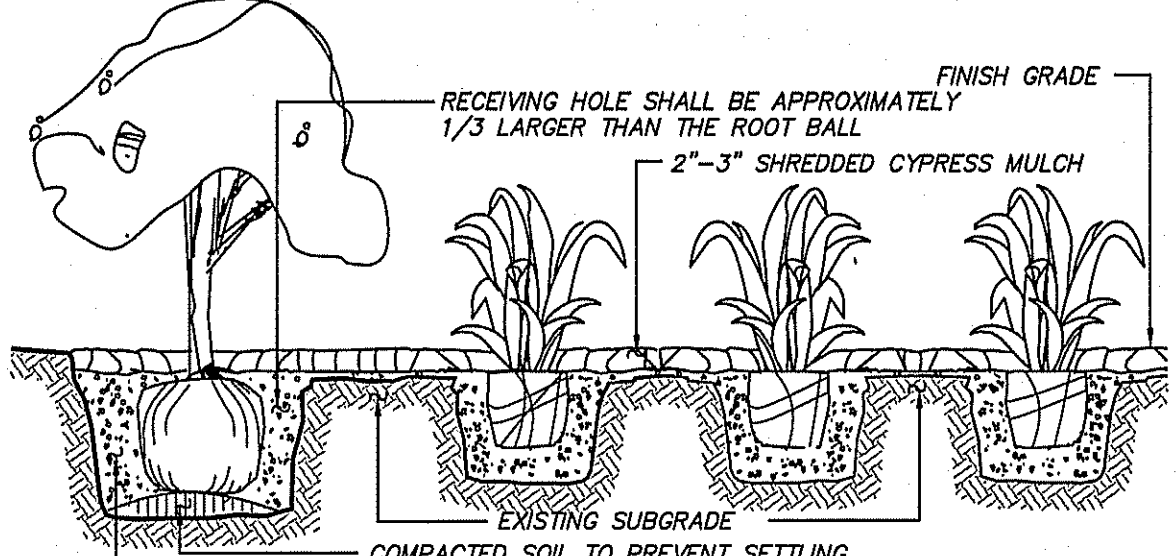
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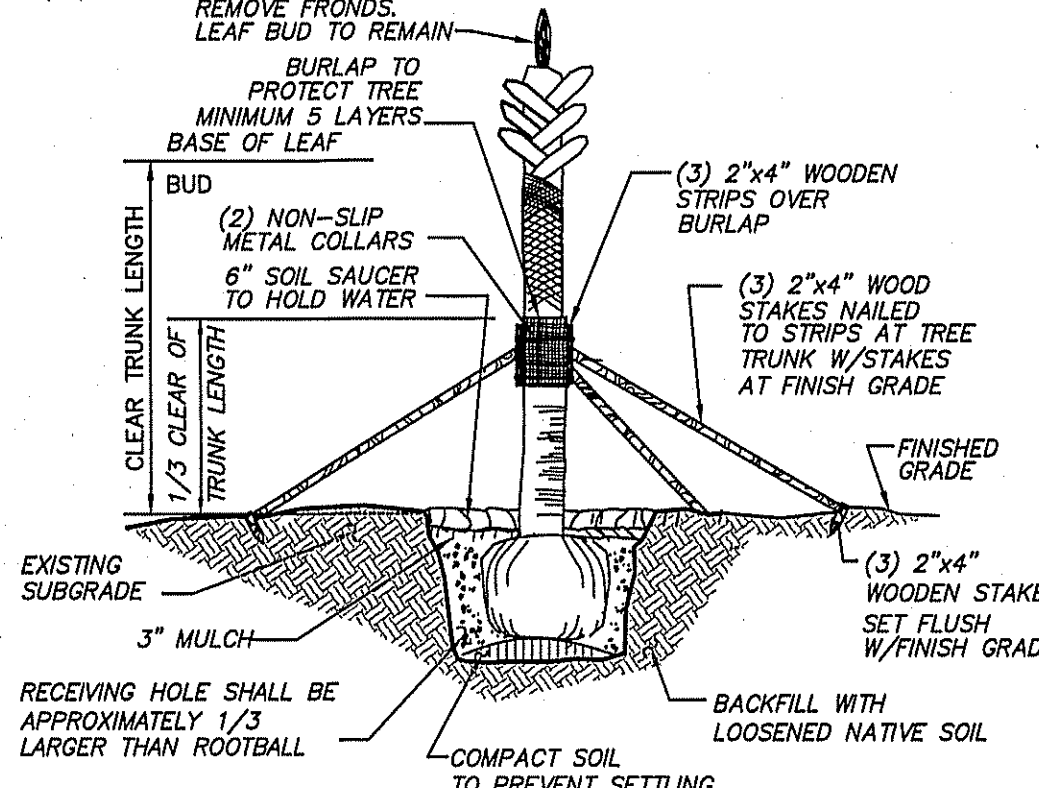
- ALL LANDSCAPED AREAS TO BE IRRIGATED WITH 100% COVERAGE WITH AN AUTOMATIC IRRIGATION SYSTEM. THE METHOD OF IRRIGATION FOR PLANTS ON THIS SITE WILL BE PROVIDED BY A PUMP HOUSE WITHIN THE PROPOSED WET DETENTION POND.
- ANY STATE AND FEDERAL PERMITS THAT MAY BE REQUIRED AS A RESULT OF LAND CLEARING AND LANDSCAPING ACTIVITIES ARE THE RESPONSIBILITY OF THE OWNER OR DESIGNER.
- CONTRACTOR IS TO REMOVE ALL EXISTING VEGETATIVE COVER AND ANY DELETERIOUS MATERIALS FOUND IN THE EXISTING SOIL IN ANY PLANTING OR SOD AREA.
- CONTRACTOR IS TO AMEND THE PH OF THE ROUGH GRADE SOIL IN SOD AREAS. CONTRACTOR IS TO ADD SULFUR AT A RATE OF ONE POUND OF SULFUR PER 100 SQ. FT., OR AS DIRECTED BY THE ENGINEER OR OWNER'S REPRESENTATIVE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS AND THE LOCATIONS OF ALL UTILITIES.
- CONTRACTOR IS TO PROVIDE IMPORTED ORGANIC SOIL FOR FILL AND FOR BACKFILLING OF PLANTS IN ALL AREAS. ORGANIC SOIL IS TO BE A FLORIDA PEAT EXCAVATED FROM A NATURALLY WELL DRAINED SITE AND TO A DEPTH OF NO MORE THAN 12 INCHES FROM GRADE. DO NOT OBTAIN FROM BOGS OR MARSHES. OBTAIN ORGANIC SOIL FROM A STATE CERTIFIED SOIL SUPPLIER.
- ANY FILL REQUIRED FOR LANDSCAPED AREAS, BESIDES THE SPECIFIED ORGANIC SOIL, IS TO BE SAND, 'SM' OR 'SP' GRADE IN THE UNIFIED SYSTEM.
- IN ALL PLANT BEDS, A 2" DEEP LAYER OF ORGANIC SOIL IS TO BE SPREAD AND MIXED WITH THE TOP 2" OF SAND. AFTER THIS MIXING, AN ADDITIONAL 2" LAYER OF SOIL IS TO BE SPREAD. AFTER PLANTING, A 3" DEPTH OF MULCH IS TO BE ADDED SO THAT AFTER COMPACTION THE TOP OF THE MULCH LAYER IS 1" BELOW TOP OF SIDEWALK, CURB OR OTHER PAVEMENT.
- IN ALL LANDSCAPED BEDS, CONTRACTOR IS TO INSTALL A FINISH GRADE WITH GENTLE (2-3%) SLOPE FROM CENTERLINE OF PLANTINGS DOWN TO BACK OF CURB OR SIDEWALK.
- THE CONTRACTOR SHALL LOCATE ALL EXISTING OR PROPOSED UTILITIES PRIOR TO ANY EXCAVATION AND SHALL NOT PLANT ANY MATERIALS OR FINISH GRADE IN ANY LOCATION THAT WILL INTERFERE OR WILL GROW TO INTERFERE WITH THOSE UTILITIES. STAKE TREE LOCATIONS AND GET APPROVAL OF THE ENGINEER OR OWNER'S REPRESENTATIVE BEFORE PLANTING.
- THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING AND PROPOSED STORM DRAINAGE FACILITIES AND PATTERNS PRIOR TO ANY EXCAVATION AND SHALL NOT PLANT ANY MATERIALS OR FINISH GRADE THAT WILL DISRUPT THE INTENDED STORMWATER FACILITIES OR THE DRAINAGE PATTERNS.
- ALL NEW PLANT MATERIALS SHALL BE FLORIDA #1 GRADE OR BETTER AS DEFINED IN GRADE STANDARDS FOR NURSERY PLANTS, 1986 REVISED EDITION, PUBLISHED BY FLORIDA DEPT. OF AGRICULTURE AND CONSUMER SERVICES, DIVISION OF PLANT INDUSTRY.
- ALL PLANT MATERIALS SHALL BE INSTALLED WITH SOUND HORTICULTURAL PRACTICE, IN SOIL THAT IS SUITABLE FOR PLANT GROWTH, WITH ADEQUATE DRAINAGE, AND WITH SPECIFIED FERTILIZER AND SOIL AMENDMENTS. CONTRACTOR IS TO NOTIFY OWNER'S REPRESENTATIVE IF CONDITIONS ARE UNSUITABLE FOR PLANT GROWTH.
- ALL TREES ARE TO BE PLANTED SO THAT THEIR CENTER POINT IS NO CLOSER THAN 2' FROM BACK OF CURB OR EDGE OF OTHER PAVEMENT OR UTILITY EQUIPMENT. ALL PLANTS ARE TO BE INSTALLED IN ACCORDANCE WITH SPECIFICATIONS FOR MINIMUM SPACING FROM STRUCTURES AND OTHER PLANTS. SEE PLANT SPACING DETAIL ON THIS SHEET. CONTRACTOR IS TO MAKE FIELD ADJUSTMENTS AS REQUIRED AND AS APPROVED BY THE ENGINEER OR OWNER'S REPRESENTATIVE.
- ALL PLANT BEDS AND TREE HOLES ARE TO BE EXCAVATED TO A MINIMUM WIDTH OF 1/3 LARGER THAN THE ROOT BALL AND BACK-FILLED WITH A WELL BLENDED MIXTURE OF 33% IMPORTED ORGANIC SOIL AND 66% SAND. USE SAND FILL IF EXISTING SOIL IS NOT CLEAN NATIVE SAND THAT IS FREE FROM 1" OR LARGER ROCK, CONSTRUCTION DEBRIS OR OTHER EXTRANEIOUS MATTER.
- THE CONTRACTOR IS TO BE RESPONSIBLE FOR LANDSCAPE MAINTENANCE UNTIL 90 DAYS AFTER FINAL ACCEPTANCE. CONTRACTOR IS TO MAINTAIN ALL PLANTS AND SOD UNTIL FINAL ACCEPTANCE. THE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL, EQUIPMENT, AND WORKMANSHIP FOR TWO YEARS AFTER FINAL APPROVAL.
- UPON FINAL INSPECTION, ANY PLANT THAT APPEARS TO BE DAMAGED OR IN SHOCK SO THAT IT IS NO LONGER FLORIDA GRADE #1 WILL BE REMOVED AND REPLACED WITH A HEALTHY PLANT OF THE SAME SPECIFIED TYPE AND SIZE.
- IN ALL SOD AREAS, A 2" DEPTH LAYER OF ORGANIC SOIL IS TO BE SPREAD AND MIXED WITH THE TOP 4" DEPTH OF ROUGH GRADE. AFTER THIS MIXING, AN ADDITIONAL 2" LAYER OF SOIL IS TO BE SPREAD AS REQUIRED TO ACHIEVE FINISH GRADE. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR OWNER'S REPRESENTATIVE A MINIMUM OF 24 HOURS PRIOR TO APPLYING SOD.
- ALL LANDSCAPING TO BE PLACED A MINIMUM 2' FROM BACK OF CURBING.
- LANDSCAPING OR ANY OTHER OBSTRUCTION SHALL NOT BE LOCATED WITHIN 7.5' TO THE FRONT AND SIDES OR 4.5 FEET TO THE REAR OF ANY FIRE HYDRANT OR ANY FIRE DEPARTMENT CONNECTION.



NOTE: SHRUBS SHALL BE PLANTED A MINIMUM OF 1' AND NO MORE THAN 2' ABOVE FINISH GRADE, DEPENDING UPON SITE CONDITIONS.

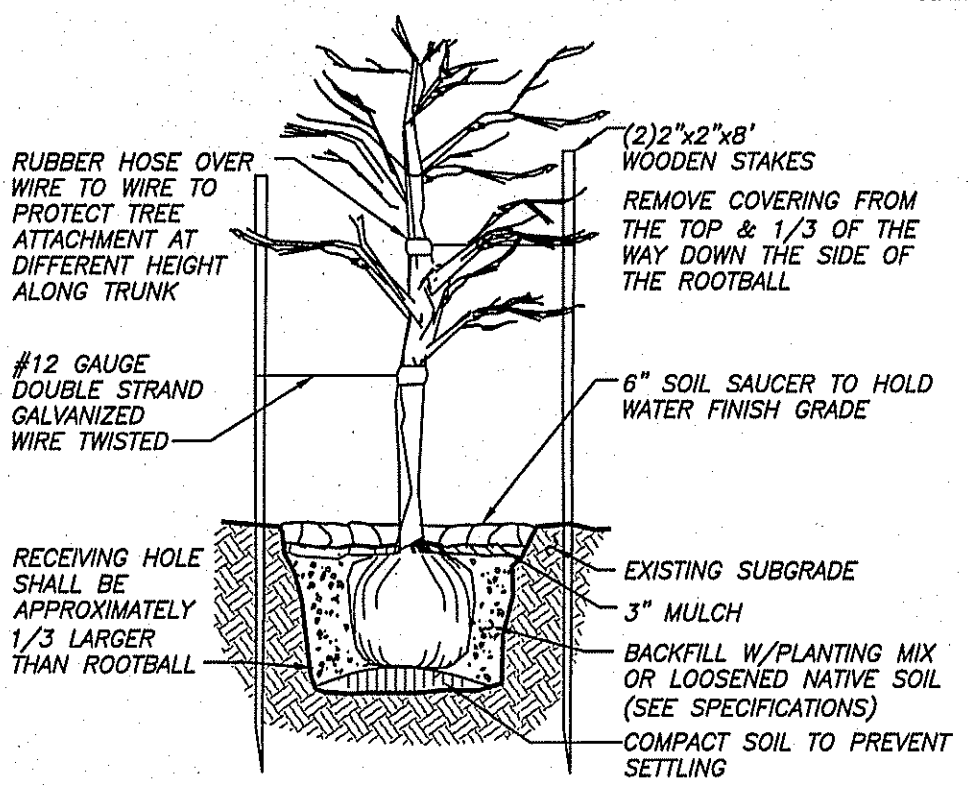
SHRUB/GROUND COVER PLANTING DETAIL

NTS



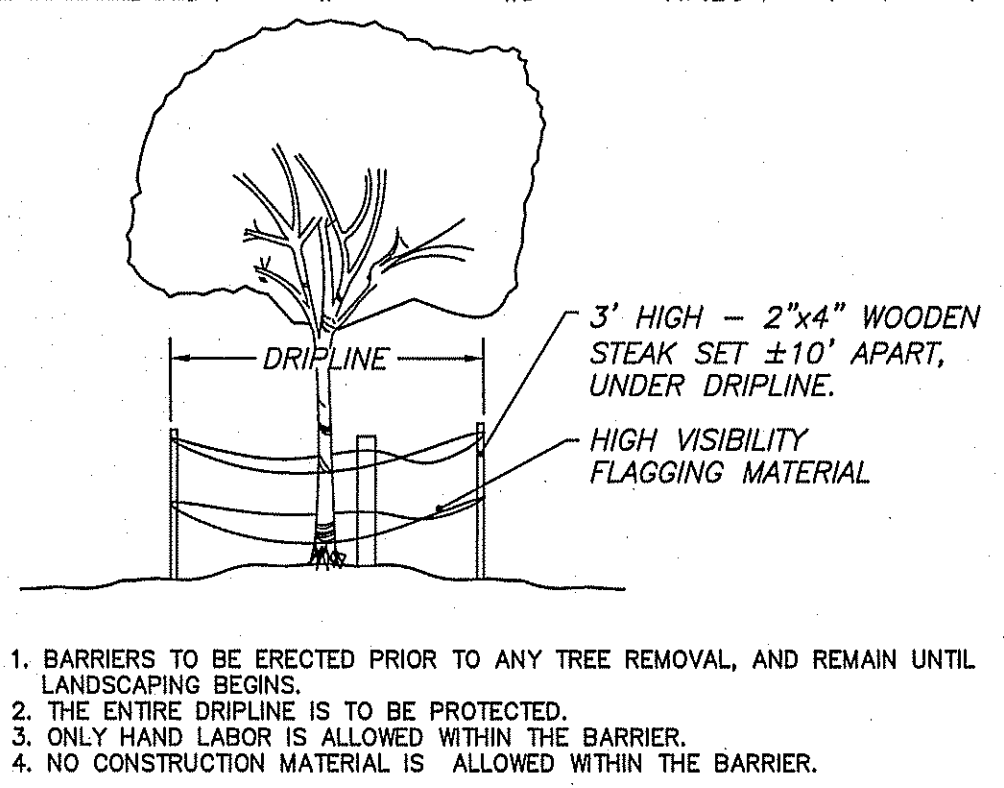
PALM TREE PLANTING/STAKING DETAIL

NTS



SMALL TREE PLANTING/STAKING DETAIL

NTS



TREE PROTECTION BARRIER

NTS

PLANTING SCHEDULE - TREES						
ABBREVIATION	TREE SIZE	SYMBOL	BOTANICAL NAME	COMMON NAME	SPECIFICATIONS	QUANTITY
QV	LARGE		QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	12" TALL, 6" CLEAR TRUNK, 2.5" CALIPER, 5' SPREAD	91
EP	MEDIUM		ILEX ATTENUATA	EAST PALATKA HOLLY	12" TALL, 3" CALIPER, 6' SPREAD	92
SP	MEDIUM		SABAL PALMETTO	CABBAGE PALM	10" CLEAR TRUNK, 1.5" CALIPER, 3' SPREAD	285

PLANTING SCHEDULE - SHRUBS & GROUND COVER						
ABBREVIATION	QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SPECIFICATIONS	
WV	1380		VIBURNUM OBOVATUM	WALTERS VIBURNUM	36" HEIGHT, 3 GALLON, 48" O.C.	
LG	30		LIGUSTRUM RECURVE	LIGUSTRUM	15"-18" HEIGHT, 3 GALLON, 36" O.C.	

COCOA GRAND

LANDSCAPE PLAN (NORTH)

MORGAN & Associates
Consulting Engineers, Inc.
Civil Engineers and Land Surveyors - E.R. #7903 / L.R. #7040
594 North Harbor City Blvd., Melbourne, FL 32955
Phone (321) 751-6088 Fax (321) 751-6089

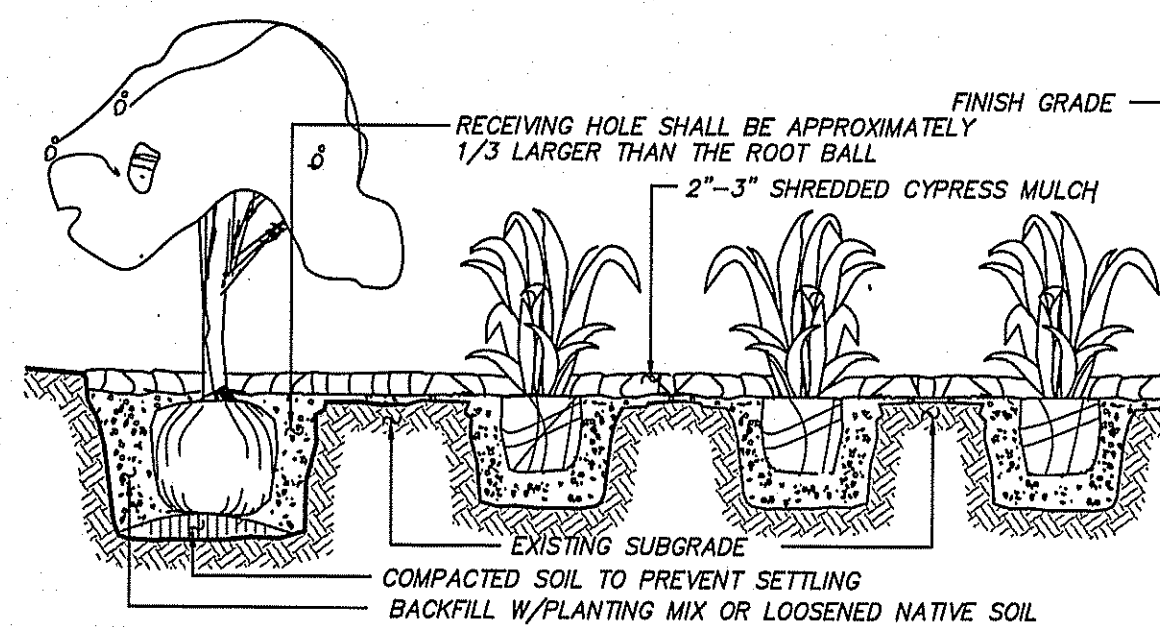
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Drawing #: CIVIL & DETAILS

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Vertical: N/A
Sheet #:
C-34
Sheet 34 of 41

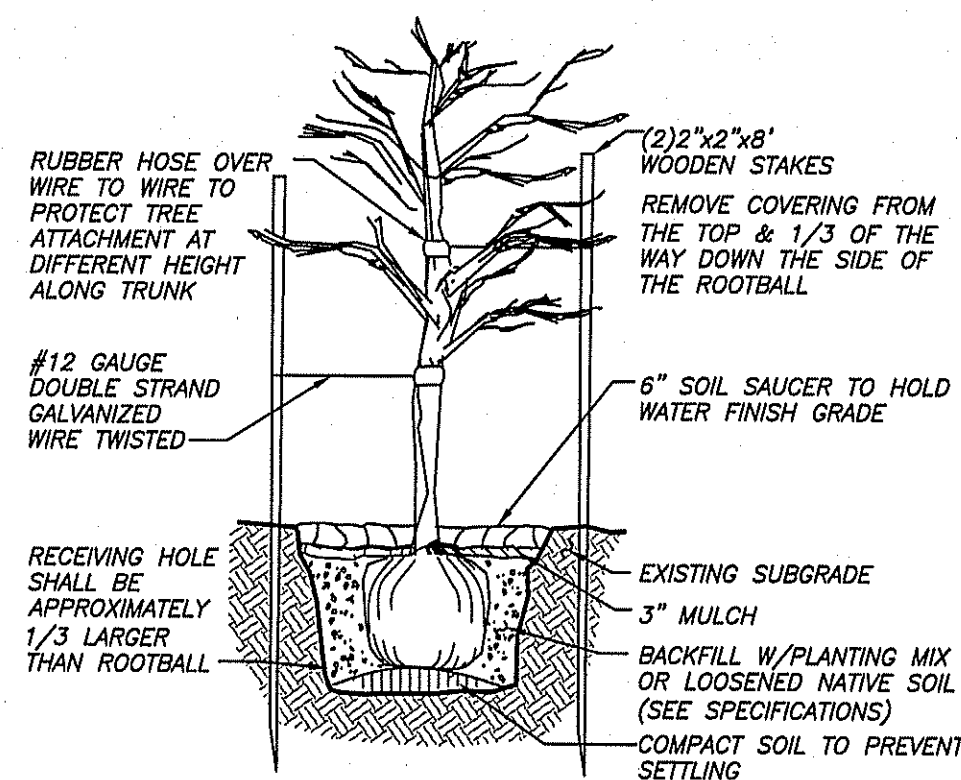
ANDREAS H. KIRBACH
Professional Engineer
No. 125331
Steven J. Morgan, P.E.
Andreas H. Kirbach, P.E.
Date:

LANDSCAPE SPECIFICATIONS:

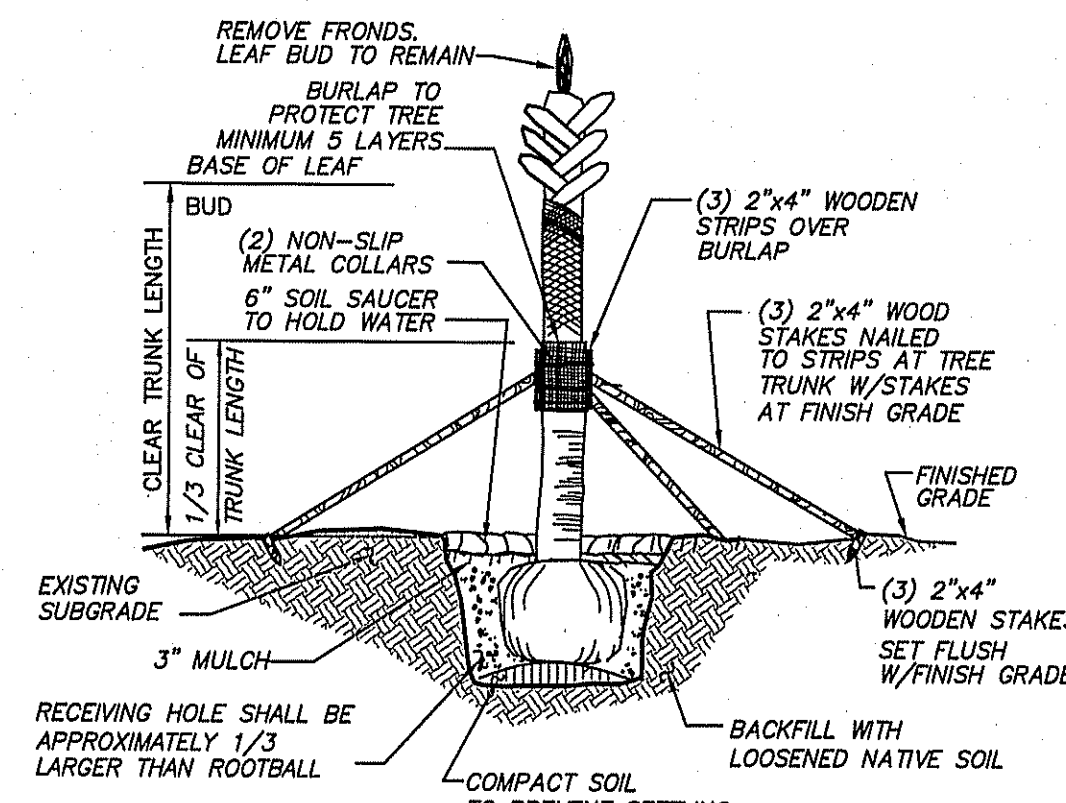
- ALL LANDSCAPED AREAS TO BE IRRIGATED WITH 100% COVERAGE WITH AN AUTOMATIC IRRIGATION SYSTEM. THE METHOD OF IRRIGATION FOR PLANTS ON THIS SITE WILL BE PROVIDED BY A PUMP HOUSE WITHIN THE PROPOSED WET DETENTION POND.
- ANY STATE AND FEDERAL PERMITS THAT MAY BE REQUIRED AS A RESULT OF LAND CLEARING AND LANDSCAPING ACTIVITIES ARE THE RESPONSIBILITY OF THE OWNER OR DESIGNEE.
- CONTRACTOR IS TO REMOVE ALL EXISTING VEGETATIVE COVER AND ANY DELETERIOUS MATERIALS FOUND IN THE EXISTING SOIL IN ANY PLANTING OR SOD AREA.
- CONTRACTOR IS TO AMEND THE PH OF THE ROUGH GRADE SOIL IN SOD AREAS. CONTRACTOR IS TO ADD SULFUR AT A RATE OF ONE POUND OF SULFUR PER 100 SQ. FT., OR AS DIRECTED BY THE ENGINEER OR OWNER'S REPRESENTATIVE.
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- ANY FILL REQUIRED FOR LANDSCAPED AREAS, BESIDES THE SPECIFIED ORGANIC SOIL, IS TO BE SAND, 'SM' OR 'SP' GRADE IN THE UNIFIED SYSTEM.
- IN ALL PLANT BEDS, A 2" DEEP LAYER OF ORGANIC SOIL IS TO BE SPREAD AND MIXED WITH THE TOP 2" OF SAND. AFTER THIS MIXING, AN ADDITIONAL 2" LAYER OF SOIL IS TO BE SPREAD. AFTER PLANTING, A 3" DEPTH OF MULCH IS TO BE ADDED SO THAT AFTER COMPACTION THE TOP OF THE MULCH LAYER IS 1" BELOW TOP OF SIDEWALK, CURB OR OTHER PAVEMENT.
- IN ALL LANDSCAPED BEDS, CONTRACTOR IS TO INSTALL A FINISH GRADE WITH GENTLE (2-3%) SLOPE FROM CENTERLINE OF PLANTINGS DOWN TO BACK OF CURB OR SIDEWALK.
- THE CONTRACTOR SHALL LOCATE ALL EXISTING OR PROPOSED UTILITIES PRIOR TO ANY EXCAVATION AND SHALL NOT PLANT ANY MATERIALS OR FINISH GRADE IN ANY LOCATION THAT WILL INTERFERE OR WILL GROW TO INTERFERE WITH THOSE FACILITIES. STAKE TREE LOCATIONS AND GET APPROVAL OF THE ENGINEER OR OWNER'S REPRESENTATIVE BEFORE PLANTING.
- THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING AND PROPOSED STORM DRAINAGE FACILITIES AND PATTERNS PRIOR TO ANY EXCAVATION AND SHALL NOT PLANT ANY MATERIALS OR FINISH GRADE THAT WILL DISRUPT THE INTENDED STORMWATER FACILITIES OR THE DRAINAGE PATTERNS.
- ALL NEW PLANT MATERIALS SHALL BE FLORIDA #1 GRADE OR BETTER AS DEFINED IN GRADE STANDARDS FOR NURSERY PLANTS, 1999 REVISED EDITION, PUBLISHED BY FLORIDA DEPT. OF AGRICULTURE AND CONSUMER SERVICES, DIVISION OF PLANT INDUSTRY.
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- ALL TREES ARE TO BE PLANTED SO THAT THEIR CENTER POINT IS NO CLOSER THAN 2' FROM BACK OF CURB OR EDGE OF OTHER PAVEMENT OR UTILITY EQUIPMENT. ALL PLANTS ARE TO BE INSTALLED IN ACCORDANCE WITH SPECIFICATIONS FOR MINIMUM SPACING FROM STRUCTURES AND OTHER PLANTS. SEE PLANT SPACING DETAIL ON THIS SHEET. CONTRACTOR IS TO MAKE FIELD ADJUSTMENTS AS REQUIRED AND AS APPROVED BY THE ENGINEER OR OWNER'S REPRESENTATIVE.
- ALL PLANT BEDS AND TREE HOLES ARE TO BE EXCAVATED TO A MINIMUM WIDTH OF 1/3 LARGER THAN THE ROOT BALL AND BACK-FILLED WITH A WELL BLENDED MIXTURE OF 33% IMPORTED ORGANIC SOIL AND 66% SAND. USE SAND FILL IF EXISTING SOIL IS NOT CLEAN NATIVE SAND THAT IS FREE FROM 1" OR LARGER ROCK, CONSTRUCTION DEBRIS OR OTHER EXTRANEOUS MATTER.
- THE CONTRACTOR IS TO BE RESPONSIBLE FOR LANDSCAPE MAINTENANCE UNTIL 90 DAYS AFTER FINAL ACCEPTANCE. CONTRACTOR IS TO MAINTAIN ALL PLANTS AND SOD UNTIL FINAL ACCEPTANCE. THE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL, EQUIPMENT, AND WORKMANSHIP FOR TWO YEARS AFTER FINAL APPROVAL.
- UPON FINAL INSPECTION, ANY PLANT THAT APPEARS TO BE DAMAGED OR IN SHOCK SO THAT IT IS NO LONGER FLORIDA GRADE #1 WILL BE REMOVED AND REPLACED WITH A HEALTHY PLANT OF THE SAME SPECIFIED TYPE AND SIZE.
- IN ALL SOD AREAS, A 2" DEPTH LAYER OF ORGANIC SOIL IS TO BE SPREAD AND MIXED WITH THE TOP 4" DEPTH OF ROUGH GRADE. AFTER THIS MIXING, AN ADDITIONAL 2" LAYER OF SOIL IS TO BE SPREAD AS REQUIRED TO ACHIEVE FINISH GRADE. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR OWNER'S REPRESENTATIVE A MINIMUM OF 24 HOURS PRIOR TO APPLYING SOD.
- ALL LANDSCAPING TO BE PLACED A MINIMUM 2' FROM BACK OF CURBING.
- LANDSCAPING OR ANY OTHER OBSTRUCTION SHALL NOT BE LOCATED WITHIN 7.5' TO THE FRONT AND SIDES OR 4.5 FEET TO THE REAR OF ANY FIRE HYDRANT OR ANY FIRE DEPARTMENT CONNECTION.

**SHRUB/GROUND COVER PLANTING DETAIL**

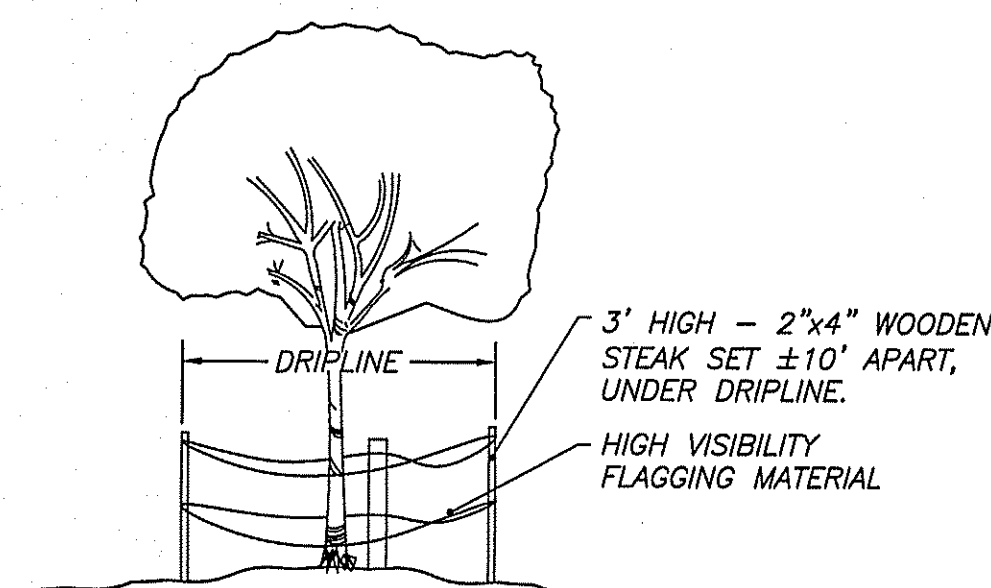
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**SMALL TREE PLANTING/STAKING DETAIL**

NTS

**PALM TREE PLANTING/STAKING DETAIL**

NTS



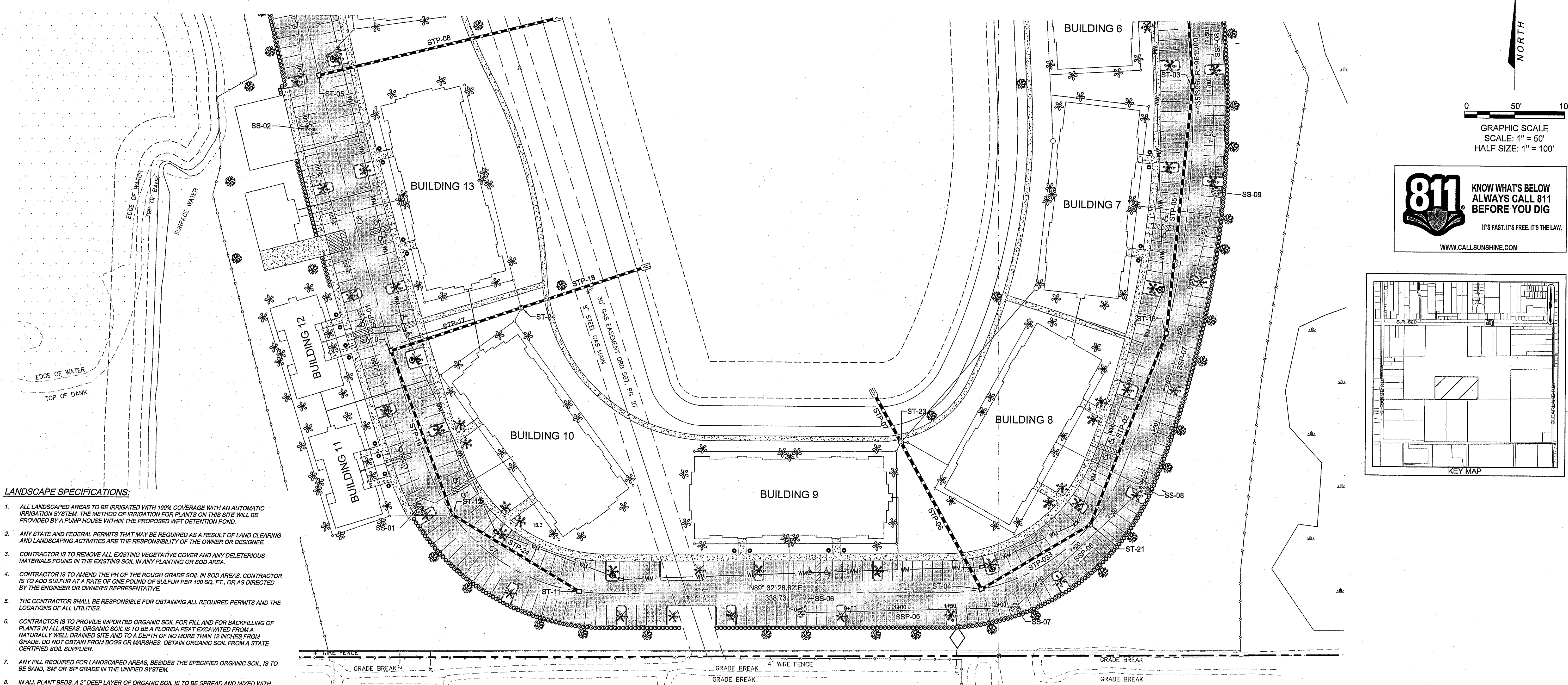
- BARRIERS TO BE ERECTED PRIOR TO ANY TREE REMOVAL, AND REMAIN UNTIL LANDSCAPING BEGINS.
- THE ENTIRE DRIPLINE IS TO BE PROTECTED.
- ONLY HAND LABOR IS ALLOWED WITHIN THE BARRIER.
- NO CONSTRUCTION MATERIAL IS ALLOWED WITHIN THE BARRIER.

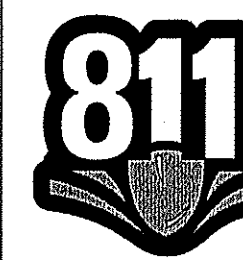
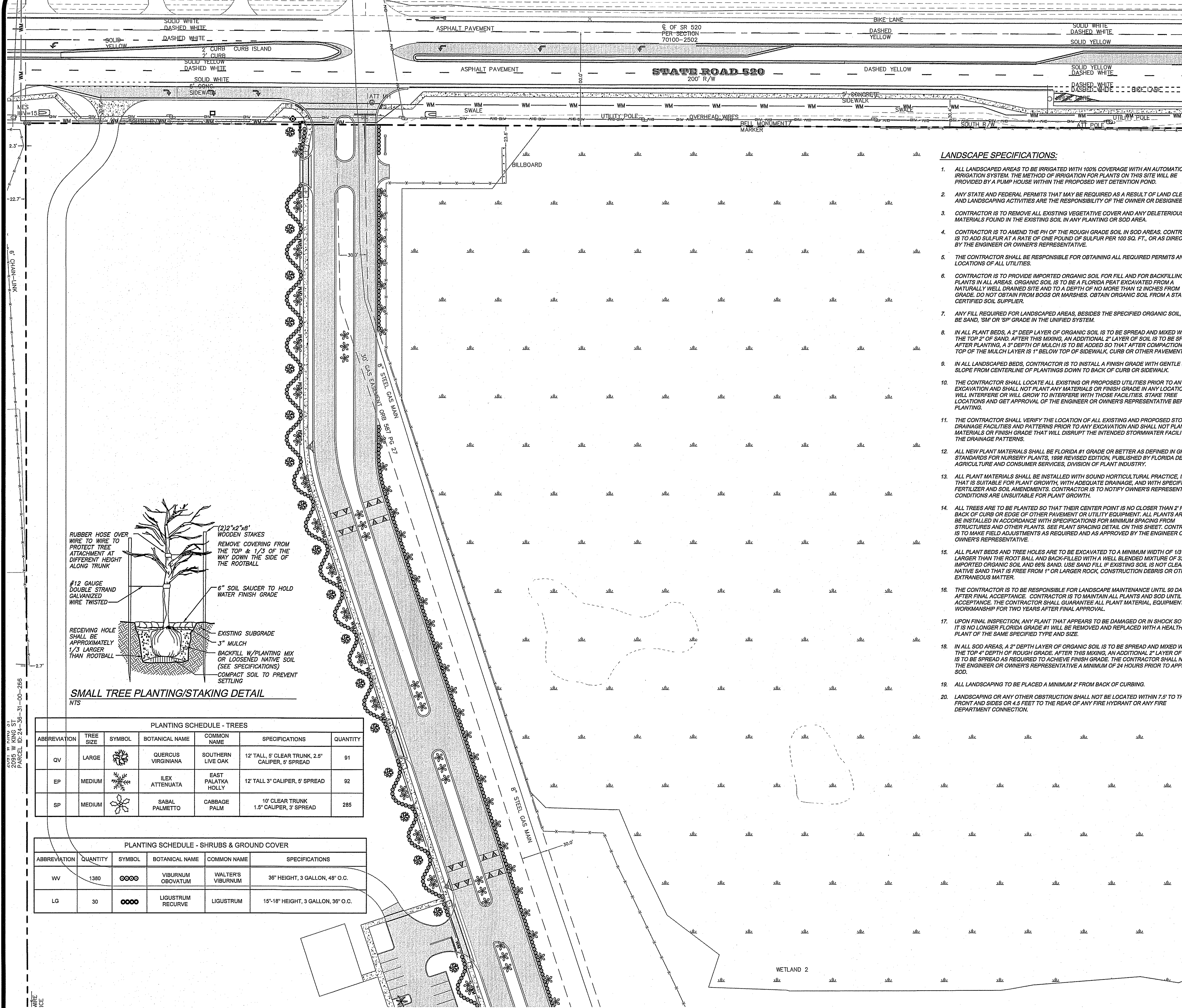
TREE PROTECTION BARRIER

NTS

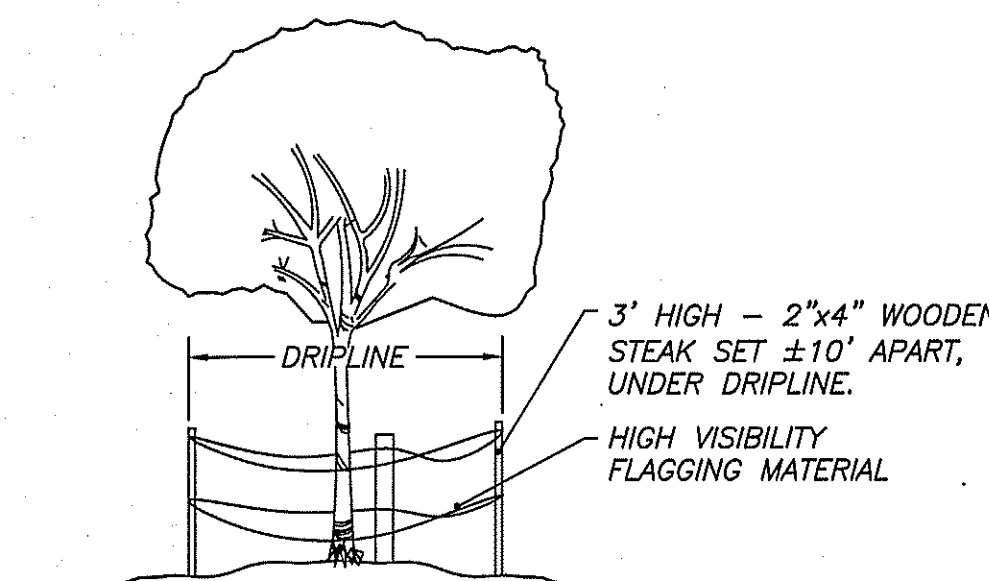
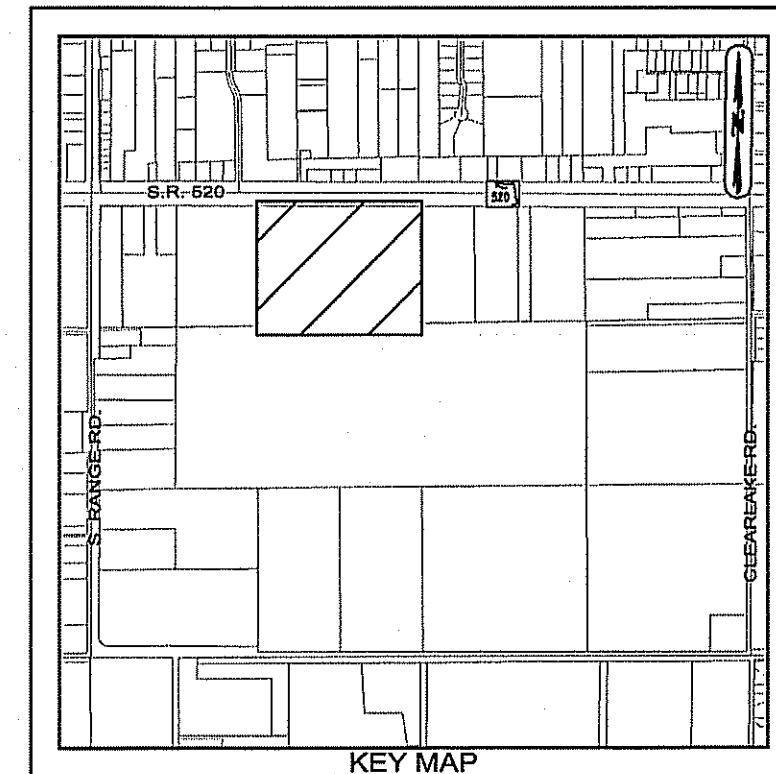
PLANTING SCHEDULE - TREES						
ABBREVIATION	TREE SIZE	SYMBOL	BOTANICAL NAME	COMMON NAME	SPECIFICATIONS	QUANTITY
QV	LARGE		QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	12' TALL, 5" CLEAR TRUNK, 2.5" CALIPER, 5' SPREAD	91
EP	MEDIUM		ILEX ATTENUATA	EAST PALATKA HOLLY	12' TALL 3" CALIPER, 5' SPREAD	92
SP	MEDIUM		SABAL PALMETTO	CABBAGE PALM	10' CLEAR TRUNK 1.5" CALIPER, 3' SPREAD	285

PLANTING SCHEDULE - SHRUBS & GROUND COVER						
ABBREVIATION	QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SPECIFICATIONS	
WV	1380		VIBURNUM OBOVATUM	WALTER'S VIBURNUM	36" HEIGHT, 3 GALLON, 48" O.C.	
LG	30		LIGUSTRUM RECURVE	LIGUSTRUM	15"-18" HEIGHT, 3 GALLON, 36" O.C.	



KNOW WHAT'S BELOW
ALWAYS CALL 811
BEFORE YOU DIG
IT'S FAST. IT'S FREE. IT'S THE LAW.

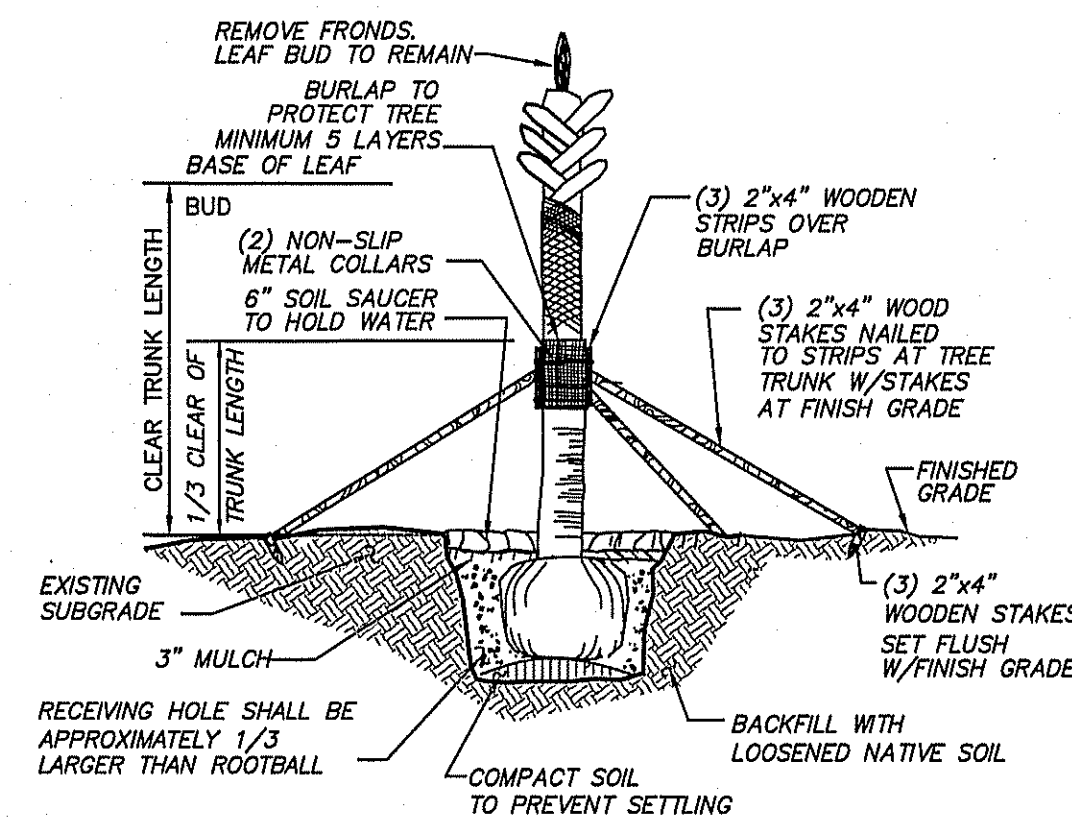
WWW.CALLSUNSHINE.COM

0 50' 100'
GRAPHIC SCALE
SCALE: 1" = 50'
HALF SIZE: 1" = 100'

1. BARRIERS TO BE ERRECTED PRIOR TO ANY TREE REMOVAL, AND REMAIN UNTIL LANDSCAPING BEGINS.
2. THE ENTIRE DRIPLINE IS TO BE PROTECTED.
3. ONLY HAND LABOR IS ALLOWED WITHIN THE BARRIER.
4. NO CONSTRUCTION MATERIAL IS ALLOWED WITHIN THE BARRIER.

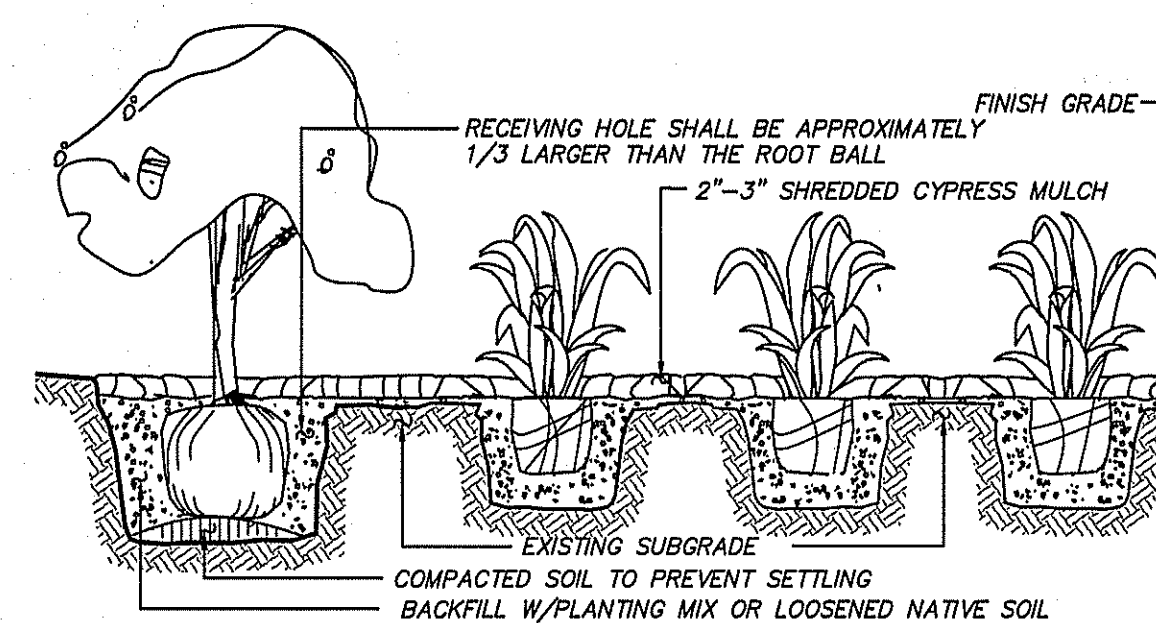
TREE PROTECTION BARRIER

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PALM TREE PLANTING/STAKING DETAIL

NTS



NOTE: SHRUBS SHALL BE PLANTED A MINIMUM OF 1' AND NO MORE THAN 2' ABOVE FINISH GRADE, DEPENDING UPON SITE CONDITIONS.

SHRUB/GROUND COVER PLANTING DETAIL

NTS

LANDSCAPE SPECIFICATIONS:

1. ALL LANDSCAPED AREAS TO BE IRRIGATED WITH 100% COVERAGE WITH AN AUTOMATIC IRRIGATION SYSTEM. THE METHOD OF IRRIGATION FOR PLANTS ON THIS SITE WILL BE PROVIDED BY A PUMP HOUSE WITHIN THE PROPOSED WET DETENTION POND.
2. ANY STATE AND FEDERAL PERMITS THAT MAY BE REQUIRED AS A RESULT OF LAND CLEARING AND LANDSCAPING ACTIVITIES ARE THE RESPONSIBILITY OF THE OWNER OR DESIGNEE.
3. CONTRACTOR IS TO REMOVE ALL EXISTING VEGETATIVE COVER AND ANY DELETERIOUS MATERIALS FOUND IN THE EXISTING SOIL IN ANY PLANTING OR SOD AREA.
4. CONTRACTOR IS TO AMEND THE PH OF THE ROUGH GRADE SOIL IN SOD AREAS. CONTRACTOR IS TO ADD SULFUR AT A RATE OF ONE POUND OF SULFUR PER 100 SQ. FT., OR AS DIRECTED BY THE ENGINEER OR OWNER'S REPRESENTATIVE.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS AND THE LOCATIONS OF ALL UTILITIES.
6. CONTRACTOR IS TO PROVIDE IMPORTED ORGANIC SOIL FOR FILL AND FOR BACKFILLING OF PLANTS IN ALL AREAS. ORGANIC SOIL IS TO BE A FLORIDA PEAT EXCAVATED FROM A NATURALLY WELL DRAINED SITE AND TO A DEPTH OF NO MORE THAN 12 INCHES FROM GRADE. DO NOT OBTAIN FROM BOGS OR MARSHES. OBTAIN ORGANIC SOIL FROM A STATE CERTIFIED SOIL SUPPLIER.
7. ANY FILL REQUIRED FOR LANDSCAPED AREAS, BESIDES THE SPECIFIED ORGANIC SOIL, IS TO BE SAND, 'SM' OR 'SP' GRADE IN THE UNIFIED SYSTEM.
8. IN ALL PLANT BEDS, A 2" DEEP LAYER OF ORGANIC SOIL IS TO BE SPREAD AND MIXED WITH THE TOP 2" OF SAND. AFTER THIS MIXING, AN ADDITIONAL 2" LAYER OF SOIL IS TO BE SPREAD. AFTER PLANTING, A 3" DEPTH OF MULCH IS TO BE ADDED SO THAT AFTER COMPACTION THE TOP OF THE MULCH LAYER IS 1" BELOW TOP OF SIDEWALK, CURB OR OTHER PAVEMENT.
9. IN ALL LANDSCAPED BEDS, CONTRACTOR IS TO INSTALL A FINISH GRADE WITH GENTLE (2-3%) SLOPE FROM CENTERLINE OF PLANTINGS DOWN TO BACK OF CURB OR SIDEWALK.
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14. ALL TREES ARE TO BE PLANTED SO THAT THEIR CENTER POINT IS NO CLOSER THAN 2' FROM BACK OF CURB OR EDGE OF OTHER PAVEMENT OR UTILITY EQUIPMENT. ALL PLANTS ARE TO BE INSTALLED IN ACCORDANCE WITH SPECIFICATIONS FOR MINIMUM SPACING FROM STRUCTURES AND OTHER PLANTS. SEE PLANT SPACING DETAIL ON THIS SHEET. CONTRACTOR IS TO MAKE FIELD ADJUSTMENTS AS REQUIRED AND AS APPROVED BY THE ENGINEER OR OWNER'S REPRESENTATIVE.
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16. THE CONTRACTOR IS TO BE RESPONSIBLE FOR LANDSCAPE MAINTENANCE UNTIL 90 DAYS AFTER FINAL ACCEPTANCE. CONTRACTOR IS TO MAINTAIN ALL PLANTS AND SOD UNTIL FINAL ACCEPTANCE. THE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL, EQUIPMENT, AND WORKMANSHIP FOR TWO YEARS AFTER FINAL APPROVAL.
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19. ALL LANDSCAPING TO BE PLACED A MINIMUM 2' FROM BACK OF CURBING.
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PLANTING SCHEDULE - TREES

ABBREVIATION	TREE SIZE	SYMBOL	BOTANICAL NAME	COMMON NAME	SPECIFICATIONS	QUANTITY
QV	LARGE		QUERUS VIRGINIANA	SOUTHERN LIVE OAK	12' TALL, 5" CLEAR TRUNK, 2.5" CALIPER, 5' SPREAD	91
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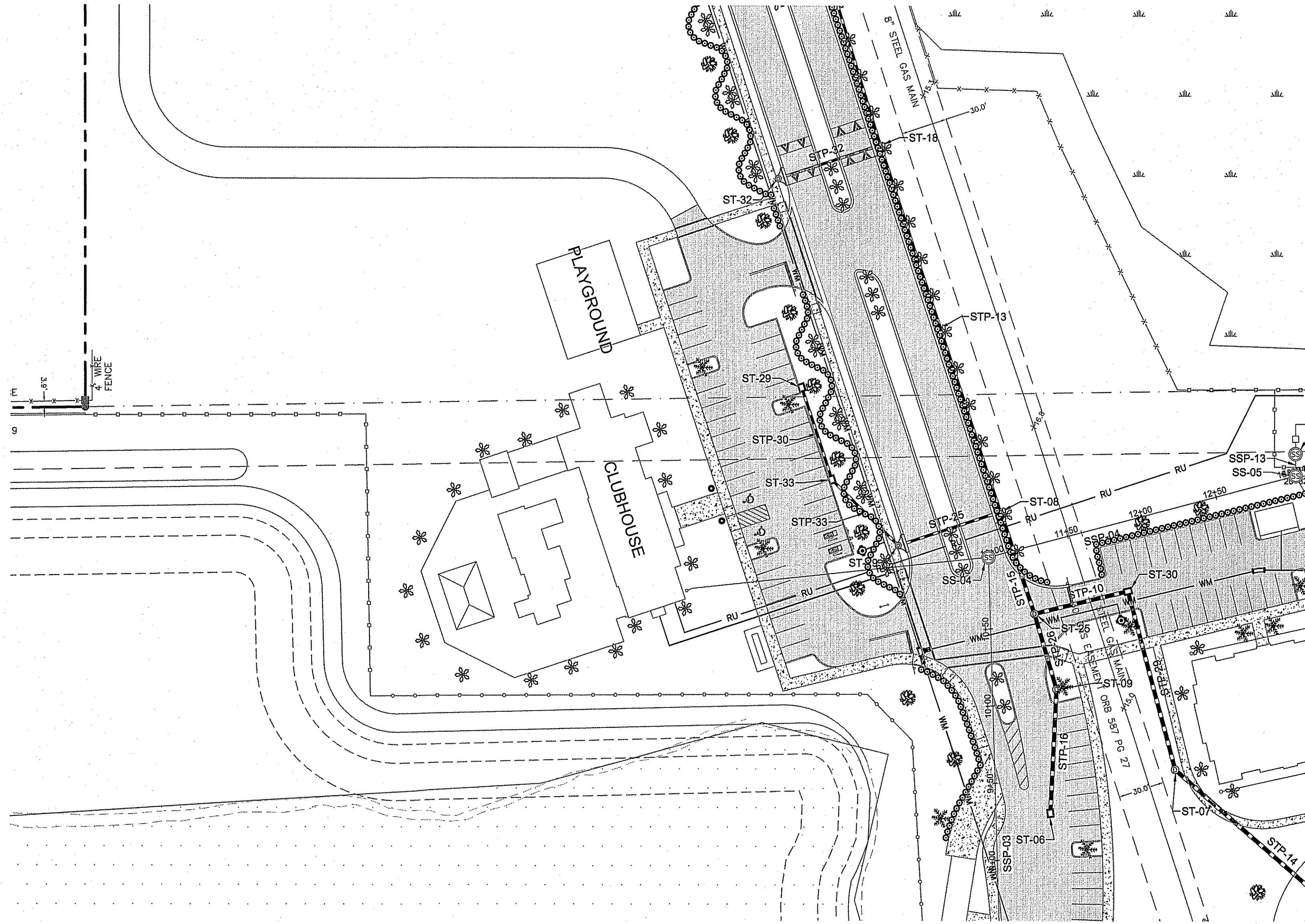
PLANTING SCHEDULE - SHRUBS & GROUND COVER

ABBREVIATION	QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SPECIFICATIONS
WV	1380		VIBURNUM OBOVATUM	WALTER'S VIBURNUM	36" HEIGHT, 3 GALLON, 48" O.C.
LG	30		LIGUSTRUM RECURVE	LIGUSTRUM	15"-18" HEIGHT, 3 GALLON, 36" O.C.

COCOA GRAND
LANDSCAPE PLAN (ENTRANCE)**MORGAN & Associates**
Consulting Engineers, Inc.
Civil Engineers and Land Surveyors - E.R. #7903 / L.R. #7740
304 North Harbor City Blvd., Melbourne, FL 32955
Phone: (321) 751-6088 Fax: (321) 751-6089Project #: 2018-077
Drawing #: CIVIL & DETAILSScale:
Horiz. N/A
Vert. N/A
Sheet #:C-36
Sheet 36 of 41**ANDREAS H. KIRBACH**
Professional Engineer
FLORIDA
Steven J. Morgan P.E. FL Reg. #50632
Andreas H. Kirbach P.E. FL Reg. #49431
Date:

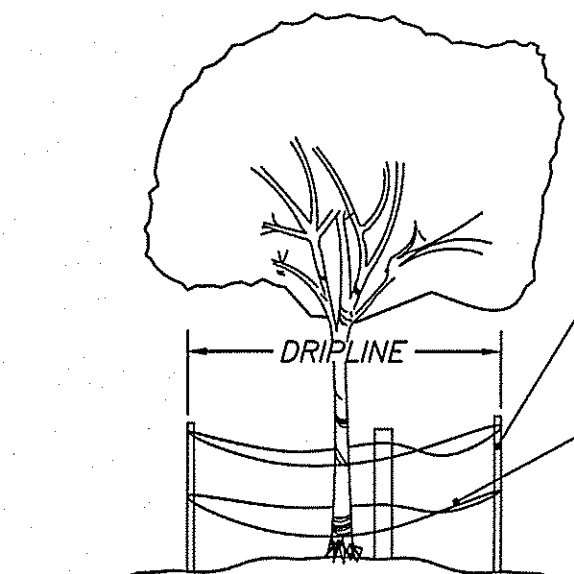
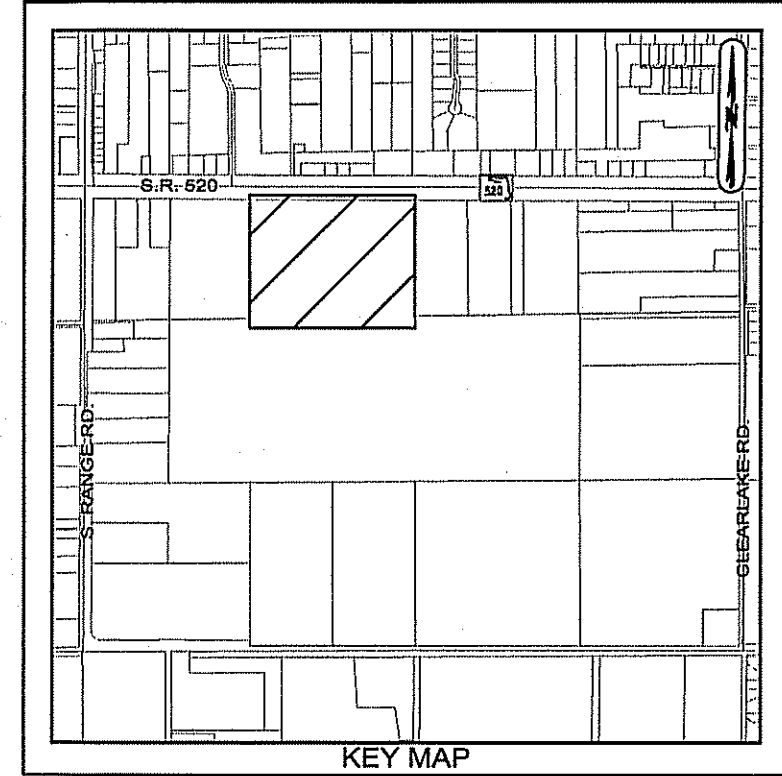
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IT'S FAST. IT'S FREE. IT'S THE LAW.

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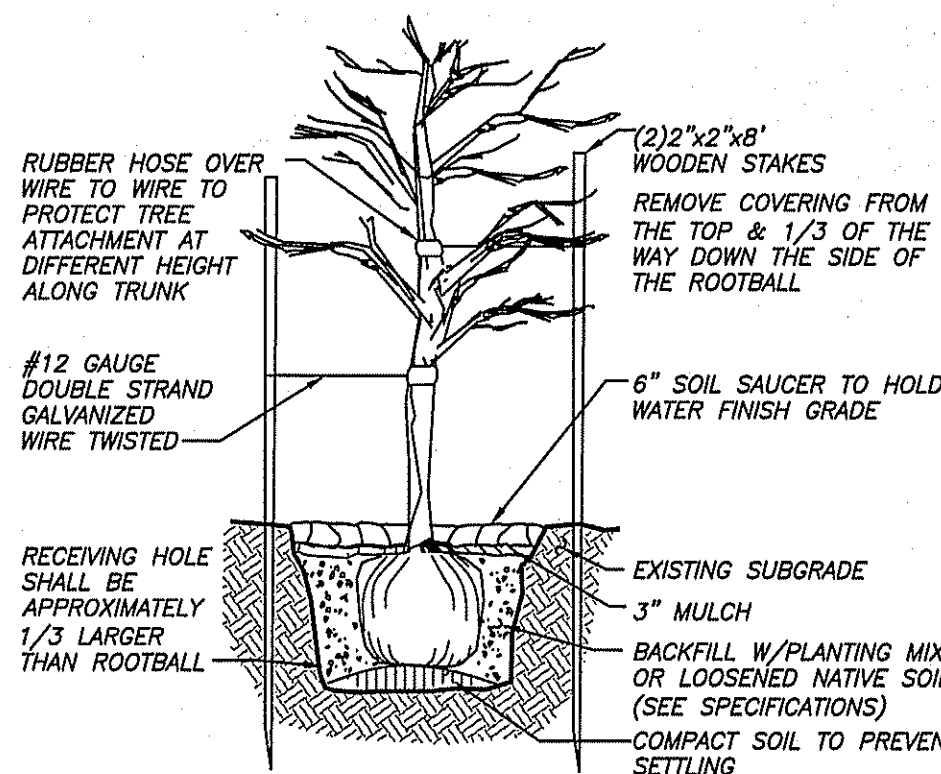
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TREE PROTECTION BARRIER

NTS

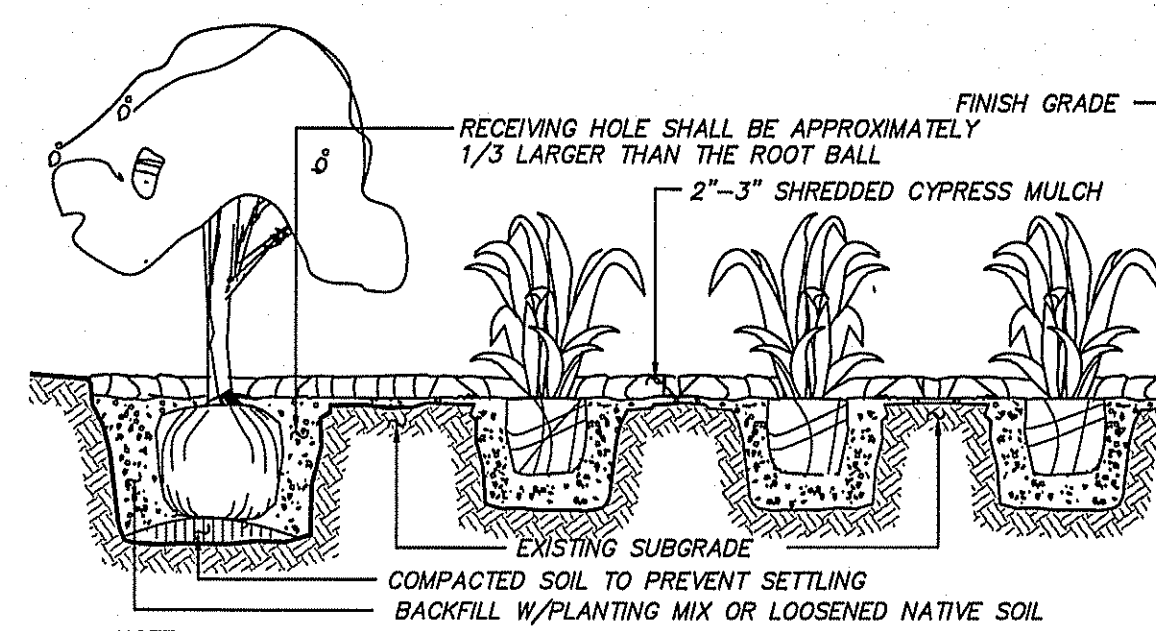
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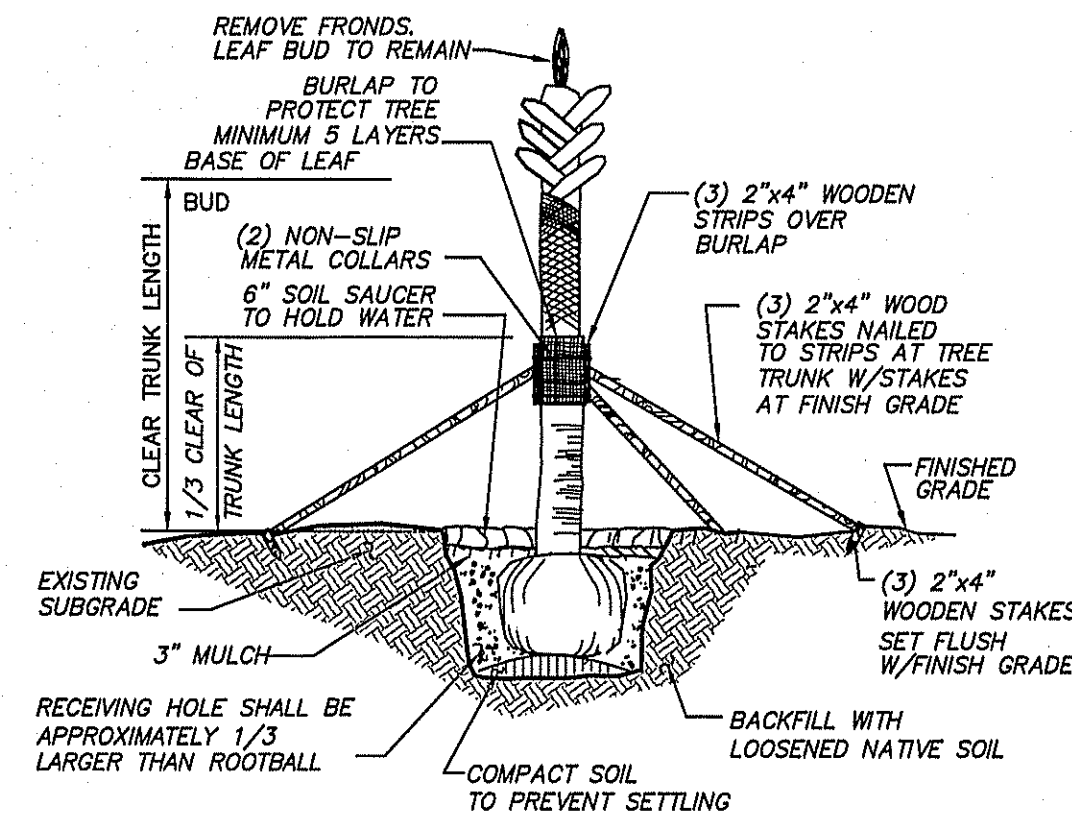
SMALL TREE PLANTING/STAKING DETAIL

NTS



SHRUB/GROUND COVER PLANTING DETAIL

NTS



PALM TREE PLANTING/STAKING DETAIL

NTS

COCOA GRAND

LANDSCAPE PLAN (CLUBHOUSE)

MORGAN & Associates
Consulting Engineers, Inc.
Civil Engineers and Land Surveyors - E.R. # 7093 / L.R. # 7040
504 North Harbor City Blvd., Melbourne, FL 32955
Phone (321) 751-6088 Fax (321) 751-6089

Project #: 2018-077

Drawing #: CIVIL & DETAILS

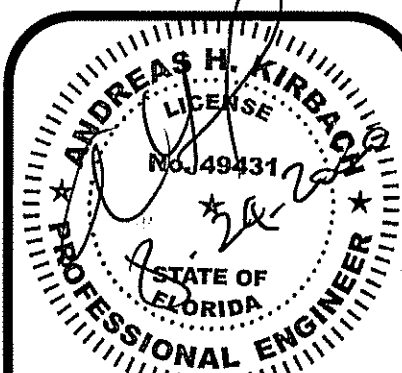
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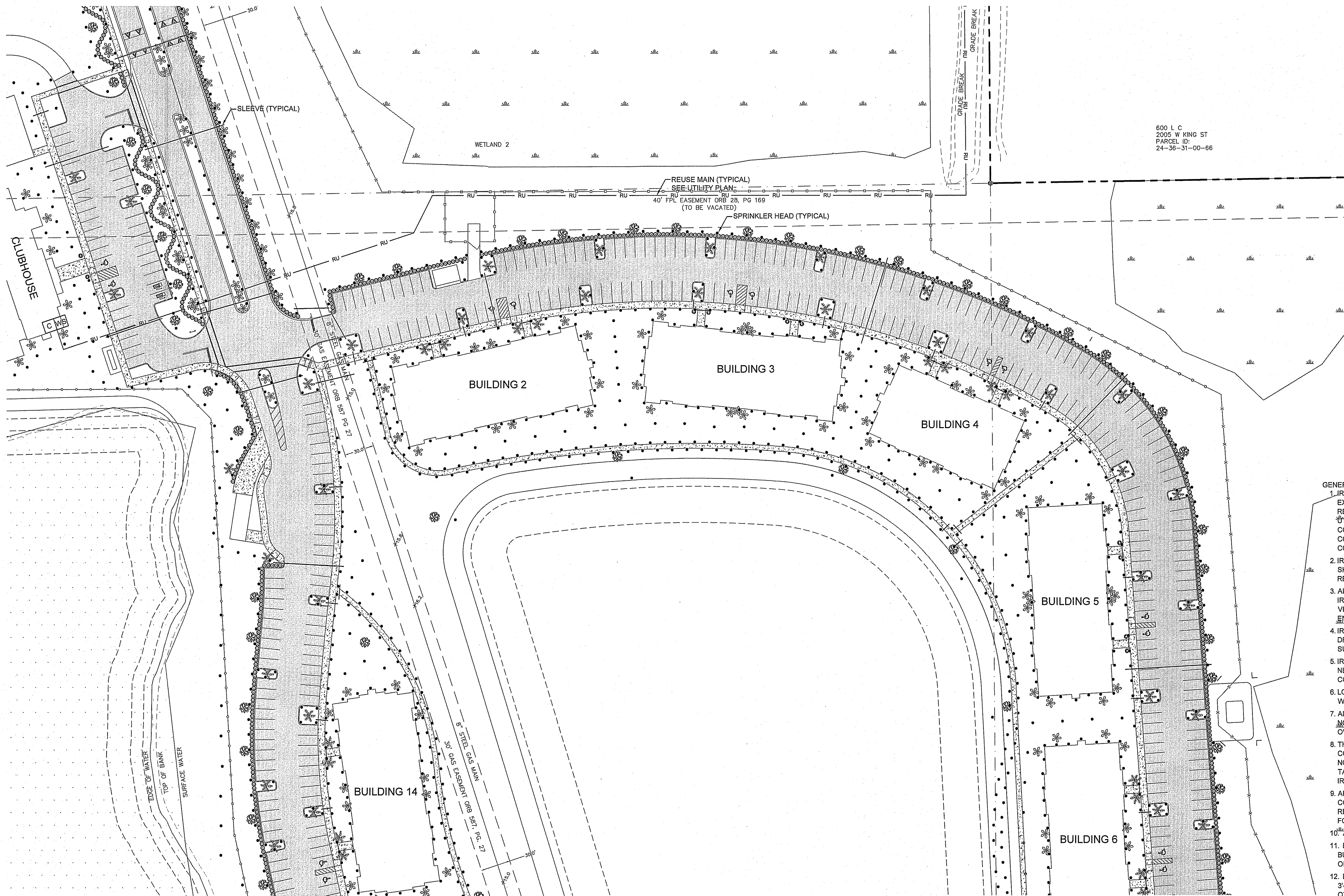
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Sheet 37 of 41



Steven J. Morgan P.E. FL. Reg. #50632
Andreus H. Kirbach P.E. FL. Reg. #49431

Date:



LEGEND

- IRRIGATION CONTROLLER
- WIRELESS RAIN AND FREEZE SENSOR COMBO. INCLUDES 1 RECEIVER AND 1 RAIN/FREEZE SENSOR TRANSMITTER.
- SLEEVE
- SPRINKLER HEAD

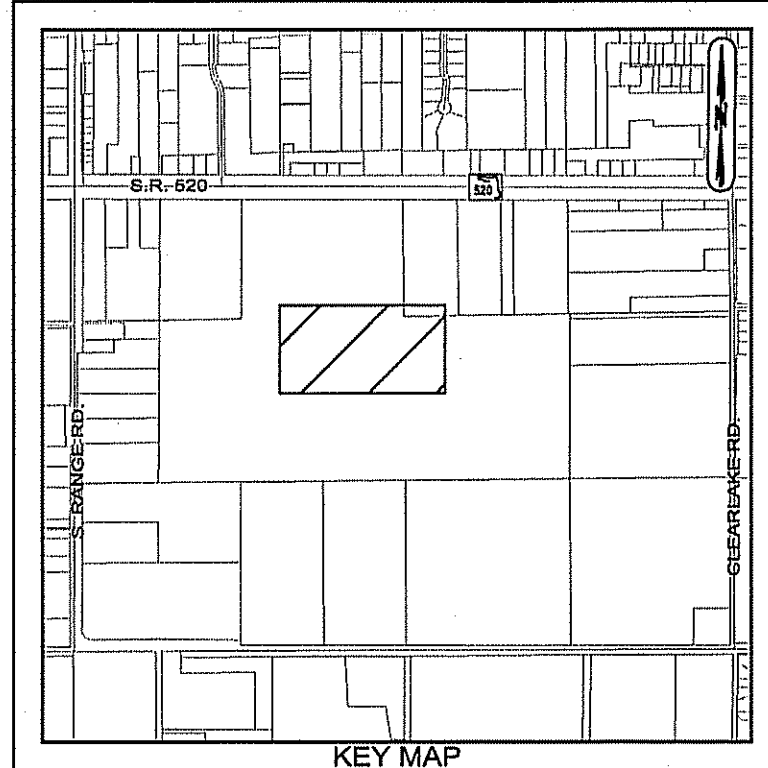
IRRIGATION NOTES:

1. ALL IRRIGATION SHALL COMPLY WITH ALL PREVAILING LOCAL CODES, ORDINANCE REGULATIONS AND PRACTICES FOR THE TRADE.
2. IRRIGATION SHALL BE INSTALLED BY A LICENSED CONTRACTOR FOR CITY OF COCOA AND BREVARD COUNTY.
3. HUNTER OR EQUAL CONTROLLER, SOLINOID VALVES AND HEADS WILL BE USED.
4. SCH. 40 SLEEVES 2 SIZES LARGER THAN THE PIPE TO BE INSTALLED, AS NEEDED.
5. RECLAIMED WATER WILL BE THE SUPPLY SOURCE.
6. LOCATION OF HEADS WILL BE ADJUSTED TO FIELD CONDITION.
7. ALL MATERIALS AND LABOR WILL BE GUARANTEED FOR 1 YEAR.
8. ALL PIPE, HEADS, VALVE BOXES SHALL BE PURPLE IN COLOR FOR RECLAIMED WATER IDENTIFICATION.
9. INSTALL SIGNS AS NEEDED TO INDICATE RECLAIMED WATER USAGE.
10. PROVIDE 100% COVERAGE TO ALL AREAS AS NEEDED.
11. INSTALL RAINSENSOR.
12. IRRIGATION SYSTEM SHALL BE ZONED AS REQUIRED BY OWNER/USER.
13. DRIP IRRIGATION SHALL BE UTILIZED IN ALL INVENTORY AREAS. COORDINATE EX LOCATIONS WITH GENERAL CONTRACTOR/OWNER/USER.



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GENERAL NOTES

1. IRRIGATION CONTRACTOR SHALL LOCATE AND VERIFY ALL EXISTING UTILITIES IN THE FIELD WITH UTILITY OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION. EXISTING UTILITIES ARE TO BE PROTECTED BY IRRIGATION CONTRACTOR. ANY UTILITIES DAMAGED BY THIS CONSTRUCTION SHALL BE REPAIRED AT THE IRRIGATION CONTRACTOR'S EXPENSE.
2. IRRIGATION DESIGN IS SCHEMATIC ONLY. SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW BY THE OWNER'S REPRESENTATIVE.
3. ALL QUANTITIES AND CALCULATIONS ARE SCHEMATIC ONLY. IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF FINAL QUANTITIES AND CALCULATIONS TO ENSURE SYSTEM IS FULLY OPERATIONAL.
4. IRRIGATION CONTRACTOR SHALL PROVIDE "AS-BUILT" DRAWINGS OF THE FINAL INSTALLATION TO OWNER AT SUBSTANTIAL COMPLETION.
5. IRRIGATION CONTRACTOR SHALL SECURE ANY AND ALL NECESSARY PERMITS FOR THE WORK PRIOR TO COMMENCEMENT.
6. LOCATE ALL COMPONENTS WITHIN LANDSCAPE AREAS WHENEVER POSSIBLE.
7. ALL LINES UNDER PAVEMENT MUST BE SLEEVED. MAINS SHALL NOT BE CONSTRUCTED WITHOUT PRIOR APPROVAL OF THE OWNER REPRESENTATIVE.
8. THE IRRIGATION CONTRACTOR SHALL INSTALL A COLOR CODED METAL DETECTABLE MARKING TAPE WHICH CLEARLY NOTES: "CAUTION: IRRIGATION LINE BURIED BELOW." THE TAPE SHALL BE INSTALLED THE FULL LENGTH OF THE IRRIGATION MAIN.
9. ALL VALVES, SPLICES WITHIN CONTROL LINES, AND QUICK COUPLERS SHALL BE LOCATED WITHIN VALVE BOXES, RECTANGULAR 12"x17" HEAVY DUTY BOX WITH PURPLE COVER FOR REUSE.
10. ALL PIPES SHALL BE 1/2" UNLESS OTHERWISE NOTED ON PLAN.
11. EACH TREE AND PALM SHALL HAVE ONE ADJUSTABLE BUBBLER. SUCH HEADS SHALL BE ON MINIMUM 5'-0" LENGTH OF FLEXIBLE PIPE.
12. LOCATE ALL VALVES IN PLANTING BEDS WITH A MINIMUM OF 3'-0" FROM BACK OF CURB OR EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED.
13. IRRIGATION CONTRACTOR TO COORDINATE WITH OWNER FOR CONTROLLER LOCATIONS.
14. CONTRACTOR SHALL PERFORM HYDROSTATIC TEST. DRIP TUBING IN BEDS TO BE INSTALLED AFTER FINAL APPROVAL OF THE HYDROSTATIC TEST.
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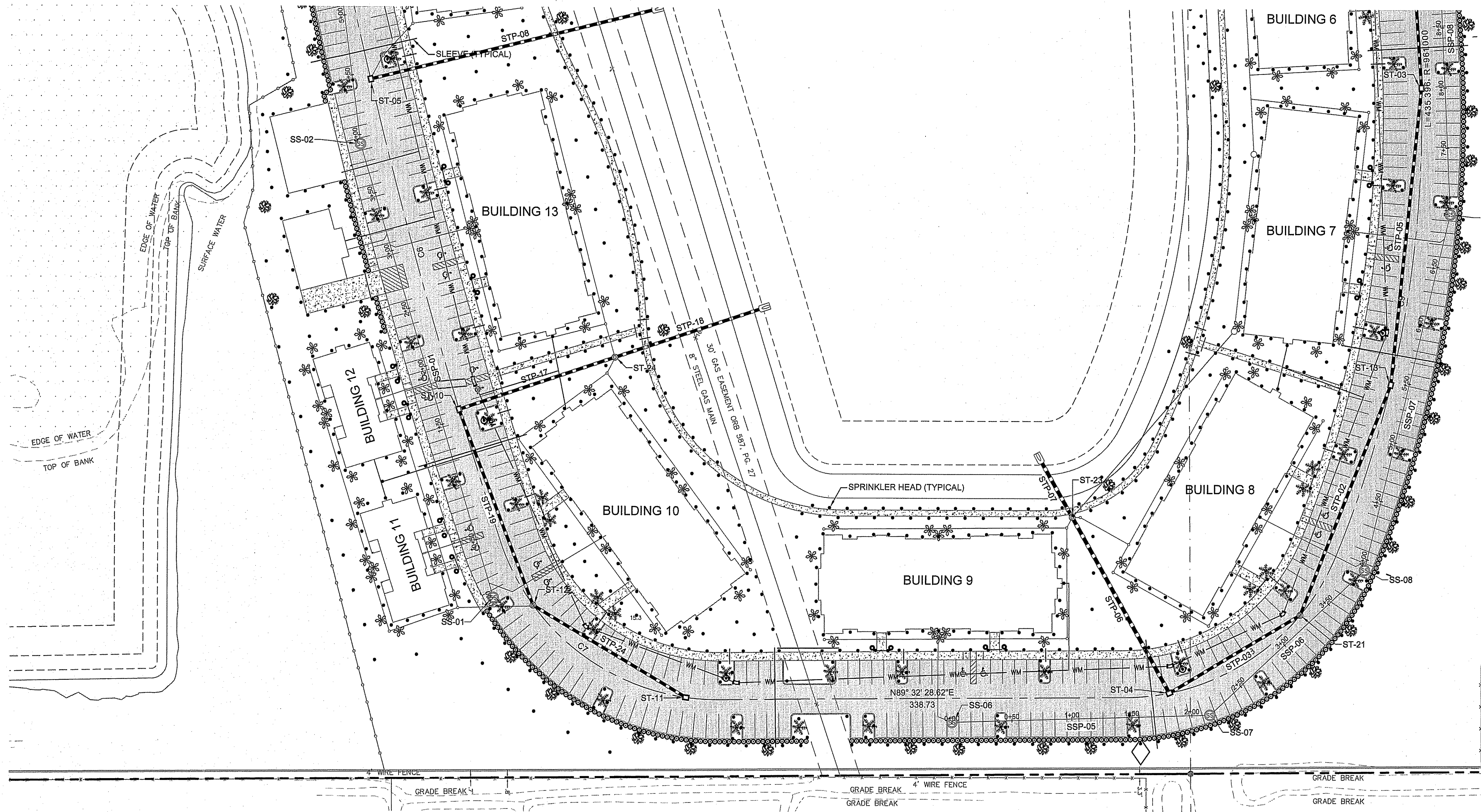
COCOA GRAND
IRRIGATION PLAN (NORTH)

MORGAN & Associates, Inc.
Consulting Engineers, Inc.
Civil Engineers and Land Surveyors - C.E.R. # 7993 / L.S. # 7040
594 North Harbor City Blvd., Melbourne, FL 32955
Phone (321) 751-6088 Fax (321) 751-6089

Project #: 2018-077
Drawing #: CIVIL & DETAILS
Scale:
Horiz. N/A
Vert. N/A
Sheet #:
C-38
Sheet 38 of 41

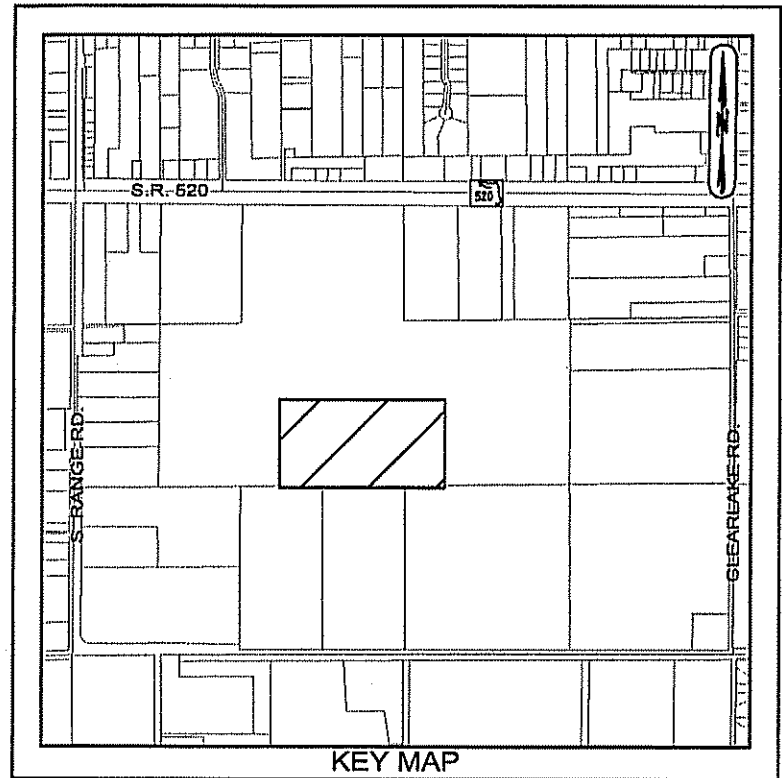
ANDREAS H. KIRBACH
LICENSE
No. 49431
STATE OF FLORIDA
PROFESSIONAL ENGINEER
Steven J. Morgan P.E., FL. Reg. #50632
Andreas H. Kirbach P.E., FL. Reg. #49431

Date:



GRAPHIC SCALE
SCALE: 1" = 50'
HALF SIZE: 1" = 100'

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COCOA GRAND

IRRIGATION PLAN (SOUTH)

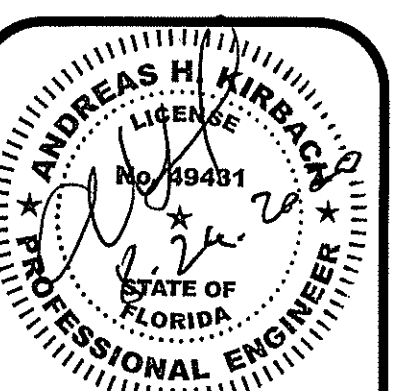
MORGAN & Associates
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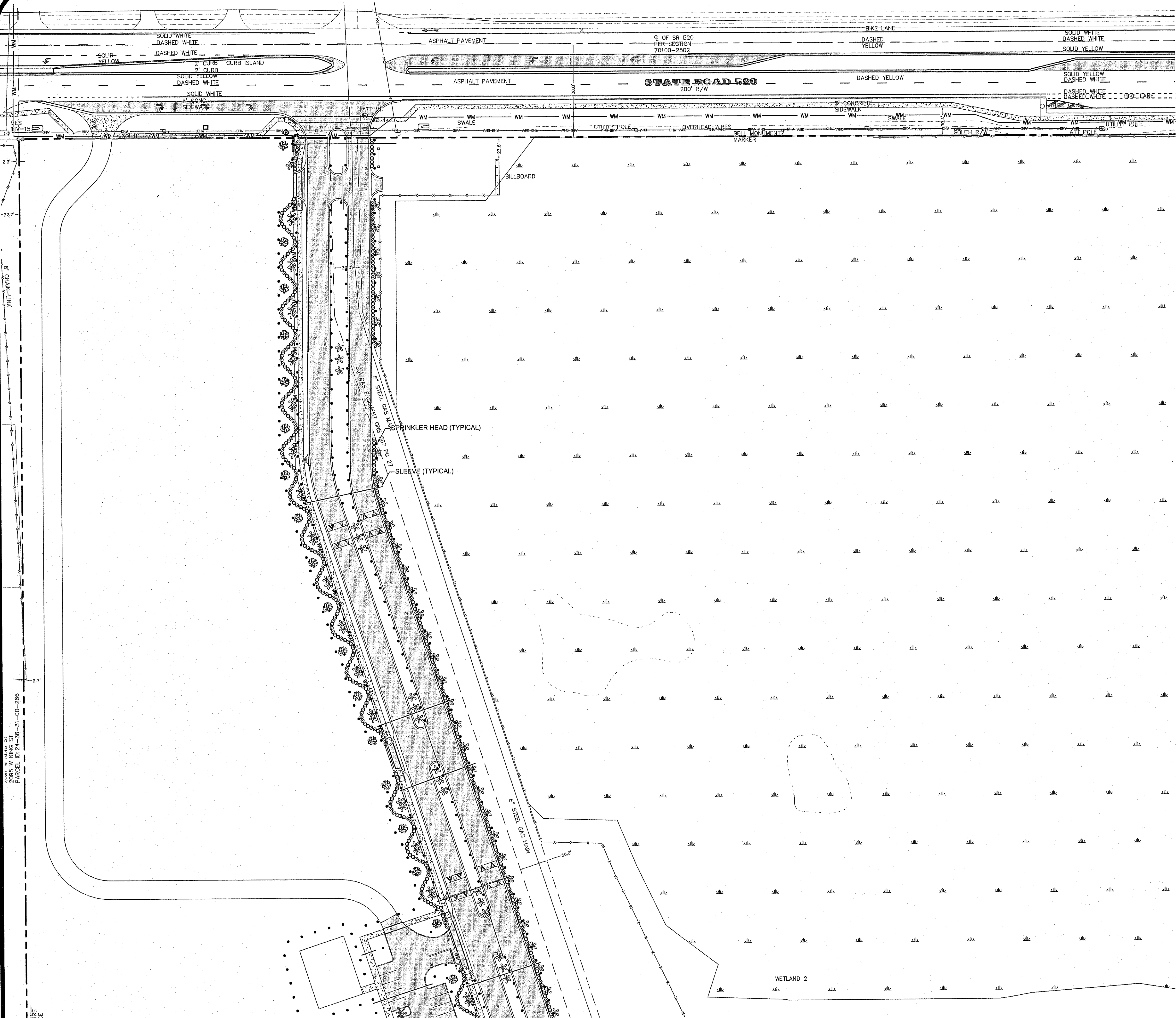
Sheet #:

C-39
Sheet 39 of 41



Steven J. Morgan, P.E., Reg. #50632
Andreas H. Kirbach P.E., FL Reg. #49431

Date:



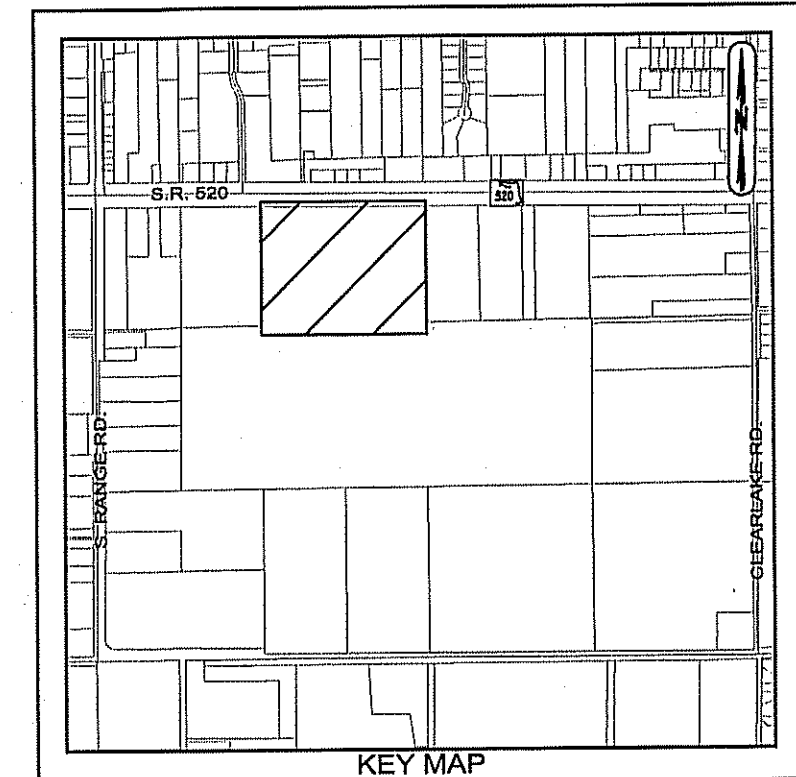
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BEFORE YOU DIG

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NORTH

0 50' 100'
GRAPHIC SCALE
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- WIRELESS RAIN AND FREEZE SENSOR COMBO. INCLUDES 1 RECEIVER AND 1 RAIN/FREEZE SENSOR TRANSMITTER.
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- SPRINKLER HEAD

COCOA GRAND

IRRIGATION PLAN (ENTRANCE)

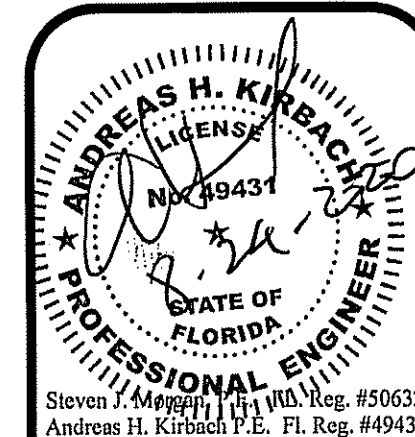
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Phone (321) 751-6088 Fax (321) 751-6089

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Horiz. N/A
Vert. N/A

Sheet #:

C-40
Sheet 40 of 41



Date:

ELECTRICAL NOTES:

- IT IS THE INTENT OF THESE CONTRACT DRAWINGS TO PROVIDE A COMPLETE AND WORKABLE FACILITY.
- DESIGN DRAWINGS ARE DIAGRAMMATIC AND DO NOT SHOW ALL OFFSETS, BENDS, ELBOWS, OR OTHER SPECIFIC ELEMENTS THAT MAY BE REQUIRED FOR PROPER INSTALLATION OF THE WORK. SUCH WORK SHALL BE VERIFIED AT THE SITE. ADDITIONAL BENDS, OFFSETS, AND CONDUIT AS REQUIRED BY VERTICAL AND HORIZONTAL EQUIPMENT LOCATIONS OR OTHER JOB CONDITIONS, SHALL BE PROVIDED TO COMPLETE THE WORK AT NO ADDITIONAL COST TO THE CLIENT.
- EXCEPT WHERE SHOWN IN DIMENSIONAL DETAIL, THE LOCATIONS OF EQUIPMENT SHOWN ON PLANS ARE APPROXIMATE. SUCH ITEMS SHALL BE PLACED TO ELIMINATE INTERFERENCE WITH OTHER EQUIPMENT. THE EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD.
- ALL WORK SHALL BE IN ACCORDANCE WITH THE 2014 EDITION OF THE NATIONAL ELECTRICAL CODE (NFPA 70), AND THE 6TH EDITION (2017) OF THE FLORIDA BUILDING CODE - ENERGY CONSERVATION.
- MATERIALS SHALL BE LISTED BY THE UNDERWRITER'S LABORATORIES, INC. OR ANOTHER APPROVED/CERTIFIED TESTING LABORATORY. SHOULD PLANS AND CODES CONFLICT, CONTACT THE CONTRACTING OFFICER. MAKE NO CHANGES, EVEN IN CASE OF CONFLICT, WITHOUT FIRST OBTAINING THE APPROVAL OF THE ENGINEER.
- A GREEN, COPPER GROUND WIRE SHALL BE INSTALLED IN ALL CONDUIT SYSTEMS AND SHALL BE BONDED TO ALL ENCLOSURES, BOXES, AND EQUIPMENT. RECEPTACLES WITH GREEN WIRE SHALL BE BONDED TO BOX THEN TO RECEPTACLE SUCH THAT REMOVAL OF RECEPTACLE DEVICE SHALL NOT INTERRUPT GREEN WIRE BOND TO METALLIC BOX OR ENCLOSURE.
- BONDING JUMPERS SHALL BE USED TO BOND CONDUIT TO ENCLOSURES, BOXES, AND EQUIPMENT WHERE CONCENTRIC OR ECCENTRIC KNOCKOUTS ARE USED.
- EQUIPMENT SIZES INDICATED ARE MINIMUM, BEFORE INSTALLING ANY WIRE OR CONDUIT, THE CONTRACTOR SHALL OBTAIN THE EXACT EQUIPMENT REQUIREMENTS AND SHALL INSTALL WIRE, CONDUIT, CIRCUIT BREAKERS AND OTHER ITEMS OF THE CORRECT SIZE FOR THE EQUIPMENT ACTUALLY INSTALLED. HOWEVER, WIRE AND CONDUIT SIZES FOR THE EQUIPMENT SHALL BE TAKEN AS A MINIMUM AND SHALL NOT BE REDUCED WITHOUT WRITTEN APPROVAL.
- THE CONTRACTOR SHALL INSTALL HIS WORK IN SUCH A MANNER AND AT SUCH A TIME AS WILL REQUIRE A MINIMUM OF CUTTING AND PATCHING OF THE BUILDING STRUCTURE.
- THE WORD 'PROVIDE', AS USED HERE ON THE DRAWINGS, IS AN ALL-INCLUSIVE TERM REQUIRING CONTRACTOR TO FURNISH, INSTALL, WIRE, AND CONNECT ALL SPECIFIED EQUIPMENT AS WELL AS COMPONENTS, ACCESSORIES, WIRING, AND MOUNTING HARDWARE TO INSURE THAT SPECIFIED EQUIPMENT FUNCTIONS TO MEET SYSTEM(S) REQUIREMENTS.
- WHERE NEW-TO-EXISTNG CONNECTIONS ARE INDICATED, THE CONTRACTOR SHALL PROVIDE ALL MATERIALS (JUNCTION BOXES, CONDUIT, WIRE, AND CONNECTIONS) AND LABOR REQUIRED TO MAKE THE CONNECTIONS.
- UNLESS OTHERWISE NOTED, ALL LOW VOLTAGE CONDUCTORS SHALL BE COPPER AND MINIMUM #12AWG. CONDUITS SHALL BE 3/4" MINIMUM.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT EXISTING UTILITIES FROM DAMAGE. THE CONTRACTOR SHALL BEAR ALL EXPENSE FOR REPAIR OR REPLACEMENT OF THE UTILITIES OR OTHER PROPERTY DAMAGED BY OPERATIONS IN CONJUNCTION WITH THE COMPLETION OF THIS WORK.
- ALL BOLTS, NUTS, WASHERS, ETC. USED FOR GROUNDING AND BONDING CONNECTIONS SHALL BE COPPER. CONTRACTOR SHALL UTILIZE CONNECTORS TO PREVENT GALVANIC ACTION.
- FINAL ACCEPTANCE WILL DEPEND UPON SATISFACTORY PERFORMANCE OF EQUIPMENT. NO CONDUCTOR SHALL BE ENERGIZED UNTIL THE INSTALLATION HAS BEEN APPROVED.
- ALL EXPOSED ELECTRICAL CONDUIT VULNERABLE TO MECHANICAL DAMAGE SHALL BE RIGID GALVANIZED STEEL, UNLESS NOTED OTHERWISE. ALL OTHER CONDUIT INSIDE FACILITY SHALL BE ELECTRICAL METALLIC TUBE (EMT).
- IN ACCORDANCE WITH NFPA 70, GROUND EXPOSED, NON CURRENT CARRYING METALLIC PARTS OF ELECTRICAL EQUIPMENT, METALLIC RACEWAY SYSTEMS, GROUNDING CONDUCTOR IN METALLIC RACEWAYS.
- FASTEN CONDUITS TO SHEET METAL BOXES AND CABINETS WITH TWO LOCKNUTS WHERE REQUIRED BY NFPA 70, WHERE INSULATED BUSHINGS ARE USED, AND WHERE BUSHINGS CANNOT BE BROUGHT INTO FIRM CONTACT WITH THE BOX; OTHERWISE, USE MINIMUM SINGLE LOCKNUT AND BUSHING. LOCKNUTS SHALL HAVE SHARP EDGES FOR DIGGING INTO WALLS OF METAL ENCLOSURE. INSTALL BUSHINGS ON ENDS OF CONDUITS, AND PROVIDE INSULATING TYPE WHERE REQUIRED BY NFPA 70.

ABBREVIATIONS:

(ALL MAY NOT BE USED)

A	-	AMPERE, AMPS
AFC	-	AVAILABLE FAULT CURRENT
AFF	-	ABOVE FINISHED FLOOR
AFG	-	ABOVE FINISHED GRADE
AIC	-	AMPS INTERRUPTING CAPACITY
C	-	CONDUIT
CB	-	CIRCUIT BREAKER
CF	-	COMPACT FLUORESCENT
CKT	-	CIRCUIT
CLG	-	CEILING
CONC	-	CONCRETE
CONT	-	CONTINUED, CONTINUATION, CONTROL
CU	-	COPPER
DIM	-	DIMENSION
DISC	-	DISCONNECT
DWG	-	DRAWING
EA	-	EACH
EL	-	ELEVATION
ELEC	-	ELECTRIC
EMT	-	ELECTRICAL METALLIC TUBING
EXH	-	EXHAUST
FA	-	FIRE ALARM
FACP	-	FIRE ALARM CONTROL PANEL
FL	-	FLOOR
FLA	-	FULL LOAD AMPS
FLEX	-	FLEXIBLE
FT	-	FEET
GFI	-	GROUND FAULT INDICATOR
GND	-	GROUND
HP	-	HORSEPOWER
I	-	CURRENT
kV, KV	-	KILOVOLTS
KW	-	KILOWATT
LF	-	LINEAR FEET
LPS	-	LOW PRESSURE SODIUM
LV	-	LOW VOLTAGE
MH	-	MANHOLE
NC	-	NORMALLY CLOSED
NIC	-	NOT IN CONTRACT
NO	-	NORMALLY OPEN
OVHD	-	OVERHEAD
PNL	-	PANEL, PANELBOARD
PVC	-	POLYVINYL CHLORIDE
REF	-	REFERENCE
SE	-	SERVICE ENTRANCE
SW	-	SWITCH
TXF	-	TRANSFORMER
TTB	-	TELEPHONE TERMINAL BOARD
TYP	-	TYPICAL
UF	-	UNDER FLOOR
UG	-	UNDERGROUND
W	-	WATT
WH	-	WATER HEATER
WP	-	WEATHERPROOF

ELECTRICAL LEGEND:

	CIRCUIT BREAKER
	TRANSFORMER (DIAGRAM)
	TRANSFORMER (PLAN)
	SWITCH
	FUSE
	POLE MOUNTED LIGHT FIXTURE
	WALL MOUNTED LIGHT FIXTURE
	GROUNDING ELECTRODE
	SPLICE, SINGLE CONDUCTOR TO SINGLE CONDUCTOR
	PHOTOCELL FOR LIGHT CONTROL
	DISCONNECT
	PANELBOARD OR ELECTRICAL SERVICE EQUIPMENT
---FPL---	FLORIDA POWER AND LIGHT UNDERGROUND PRIMARY CONDUIT
---S---	UNDERGROUND SERVICE FROM TRANSFORMER TO BUILDING
---COM---	TELECOMM UTILITY UNDERGROUND CONDUIT
---□---	TELECOMM UTILITY PROPOSED HAND HOLE
-----	GENERAL PURPOSE UNDERGROUND FEEDER

COCOA GRAND

ELECTRICAL SPECIFICATIONS

MORGAN & Associates
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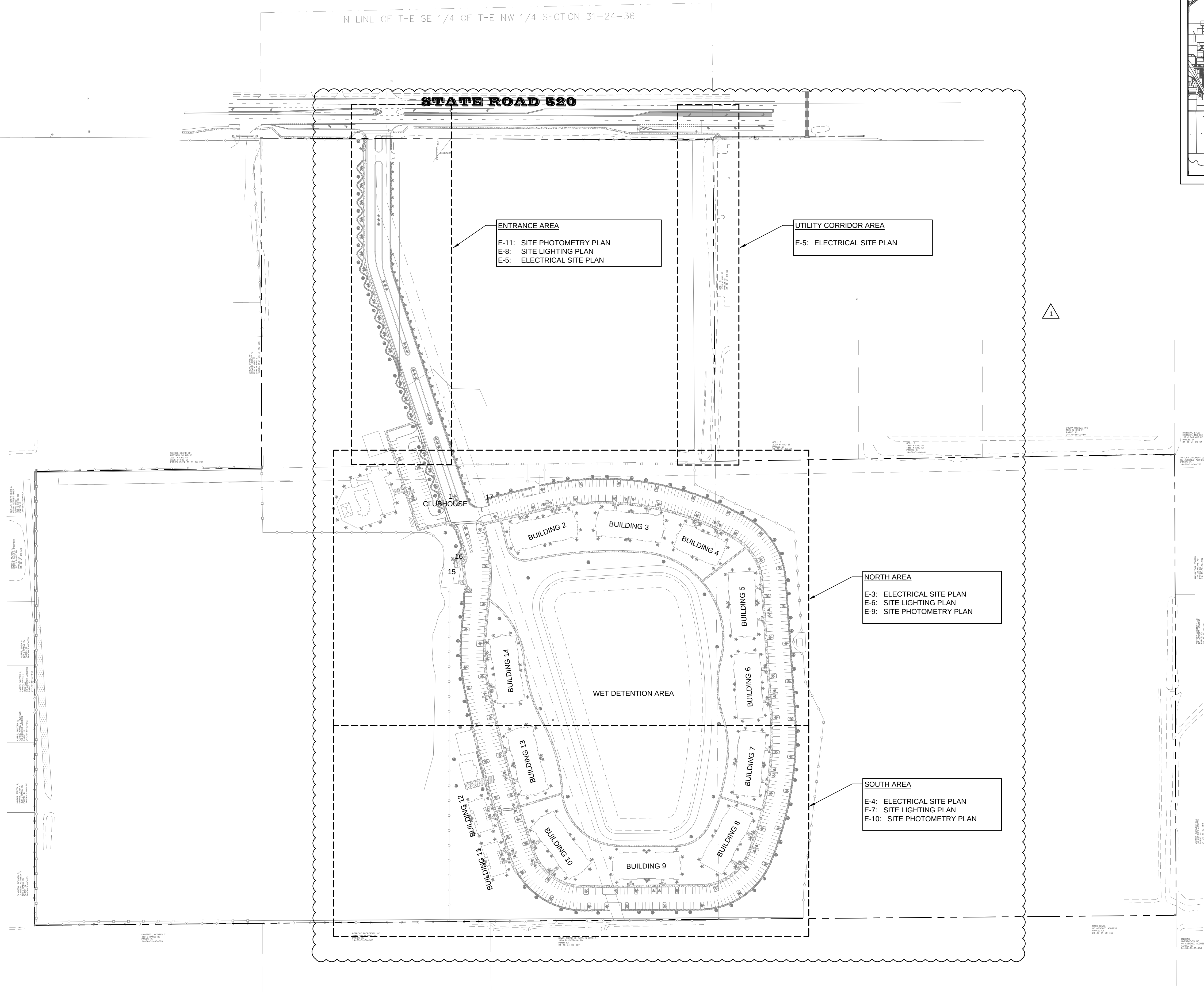
Project #: 2018-077

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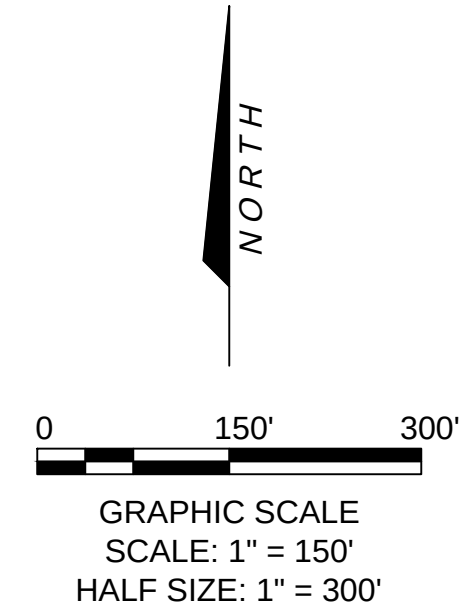
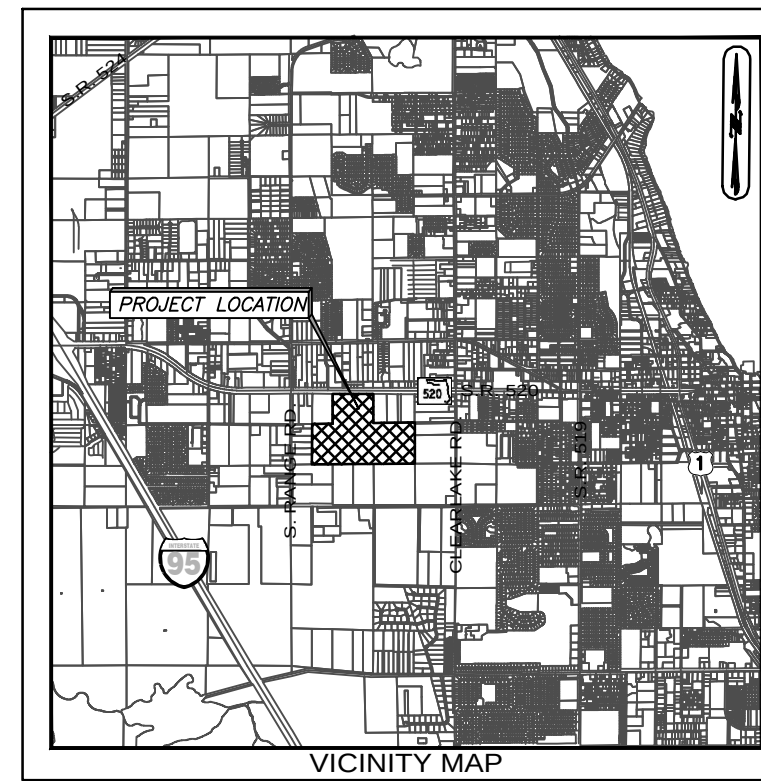
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Michael Pilo P.E. FL Reg. #50067

Date: 4/21/20



OVERALL ELECTRICAL KEY PLAN
SCALE: 1" = 150'



REVISION		BUILDING DEPARTMENT COMMENTS	DATE
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2			4/15/2020
3			10/21/2019
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COCOA GRAND
ELECTRICAL KEY PLAN

MORGAN & Associates
Consulting Engineers, Inc.
Civil Engineers and Land Surveyors - E.B. # 7903 / L.B. # 7040
504 North Harbor City Blvd., Melbourne, FL 32935
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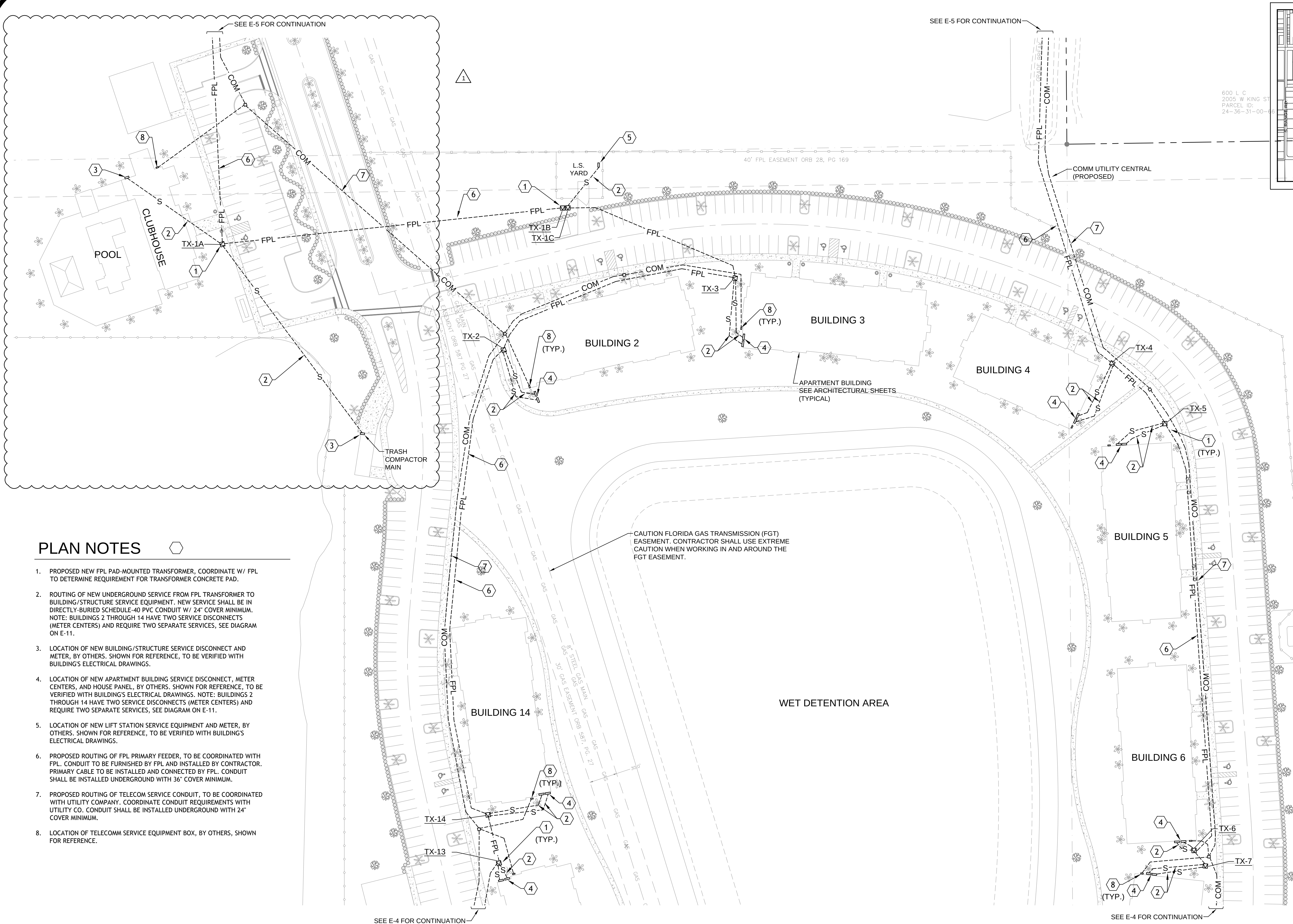
Project #: 2018-077

Sheet #:
E-2

Michael Pilo P.E. FL Reg. #50067



Date: 4/21/20

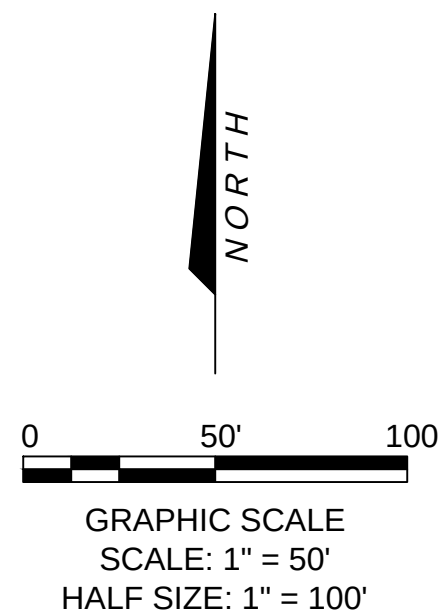


PLAN NOTES

1. PROPOSED NEW FPL PAD-MOUNTED TRANSFORMER, COORDINATE W/ FPL TO DETERMINE REQUIREMENT FOR TRANSFORMER CONCRETE PAD.
2. ROUTING OF NEW UNDERGROUND SERVICE FROM FPL TRANSFORMER TO BUILDING/STRUCTURE SERVICE EQUIPMENT. NEW SERVICE SHALL BE IN DIRECTLY-BURIED SCHEDULE-40 PVC CONDUIT W/ 24" COVER MINIMUM. NOTE: BUILDINGS 2 THROUGH 14 HAVE TWO SERVICE DISCONNECTS (METER CENTERS) AND REQUIRE TWO SEPARATE SERVICES, SEE DIAGRAM ON E-11.
3. LOCATION OF NEW BUILDING/STRUCTURE SERVICE DISCONNECT AND METER, BY OTHERS. SHOWN FOR REFERENCE, TO BE VERIFIED WITH BUILDING'S ELECTRICAL DRAWINGS.
4. LOCATION OF NEW APARTMENT BUILDING SERVICE DISCONNECT, METER CENTERS, AND HOUSE PANEL, BY OTHERS. SHOWN FOR REFERENCE, TO BE VERIFIED WITH BUILDING'S ELECTRICAL DRAWINGS. NOTE: BUILDINGS 2 THROUGH 14 HAVE TWO SERVICE DISCONNECTS (METER CENTERS) AND REQUIRE TWO SEPARATE SERVICES, SEE DIAGRAM ON E-11.
5. LOCATION OF NEW LIFT STATION SERVICE EQUIPMENT AND METER, BY OTHERS. SHOWN FOR REFERENCE, TO BE VERIFIED WITH BUILDING'S ELECTRICAL DRAWINGS.
6. PROPOSED ROUTING OF FPL PRIMARY FEEDER, TO BE COORDINATED WITH FPL. CONDUIT TO BE FURNISHED BY FPL AND INSTALLED BY CONTRACTOR. PRIMARY CABLE TO BE INSTALLED AND CONNECTED BY FPL. CONDUIT SHALL BE INSTALLED UNDERGROUND WITH 36" COVER MINIMUM.
7. PROPOSED ROUTING OF TELECOM SERVICE CONDUIT, TO BE COORDINATED WITH UTILITY COMPANY. COORDINATE CONDUIT REQUIREMENTS WITH UTILITY CO. CONDUIT SHALL BE INSTALLED UNDERGROUND WITH 24" COVER MINIMUM.
8. LOCATION OF TELECOMM SERVICE EQUIPMENT BOX, BY OTHERS, SHOWN FOR REFERENCE.

PARTIAL ELECTRICAL SITE PLAN (NORTH)

SCALE: 1" = 50'



COCOA GRAND

ELECTRICAL SITE PLAN (NORTH)

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Project #: 2018-077

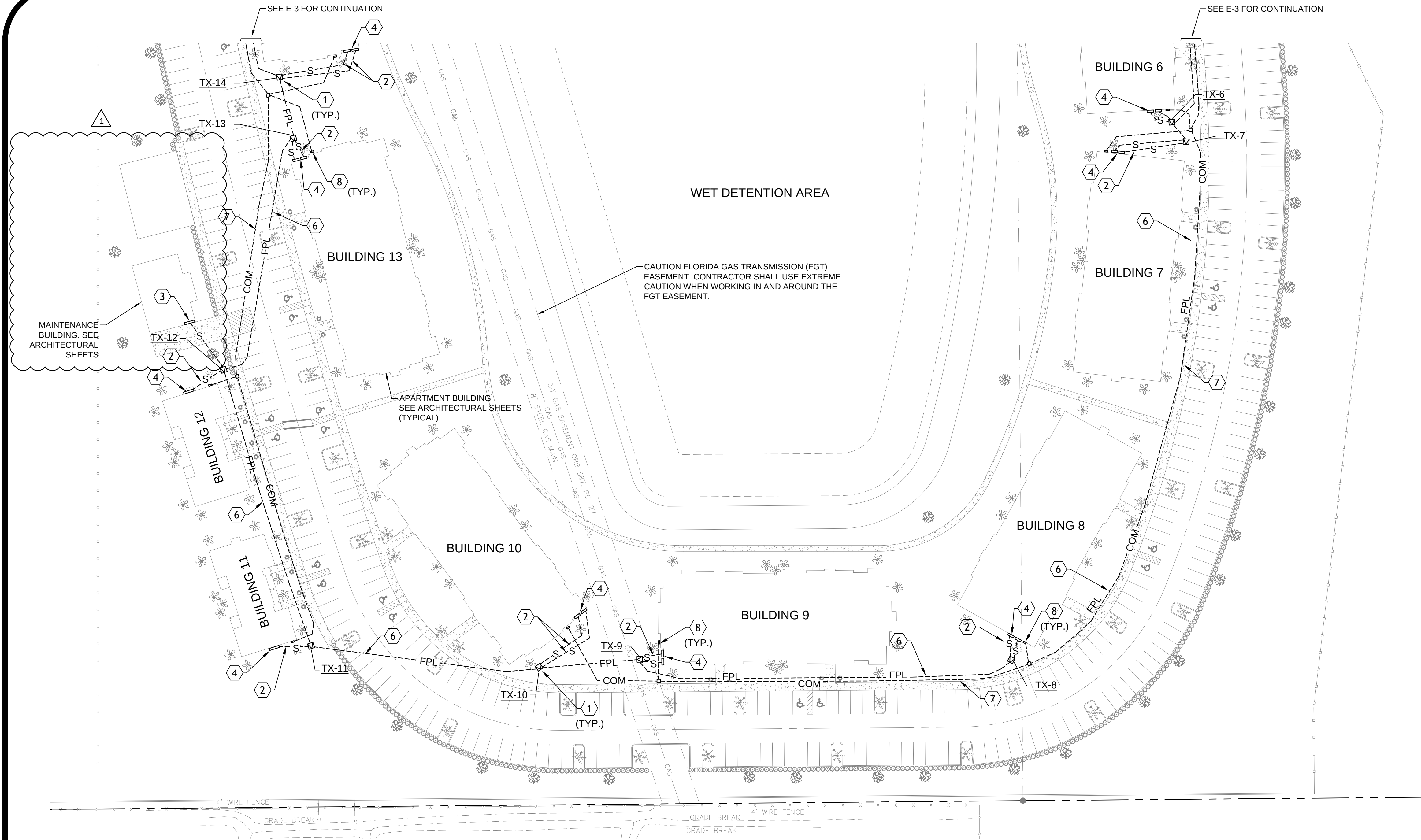
Sheet #:

E-3

Michael Pilo P.E. FL Reg. #50067

Date: 4/21/20

Revision	Building Department Comments	Date
1	DESIGN CHANGES	6/10/2020
2	DESIGN CHANGES	4/15/2020
3	DESIGN CHANGES	10/21/2019
4	DESIGN CHANGES	10/21/2019
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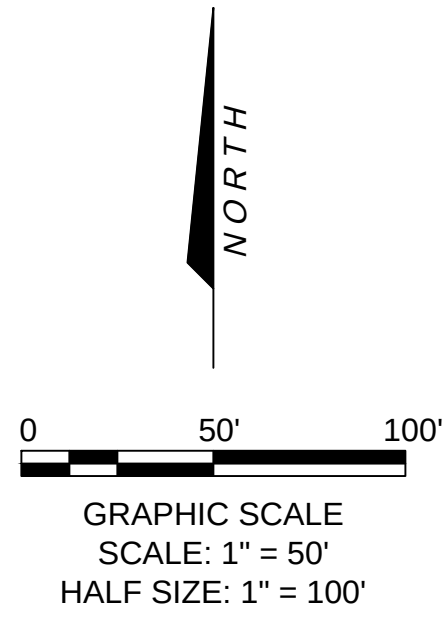
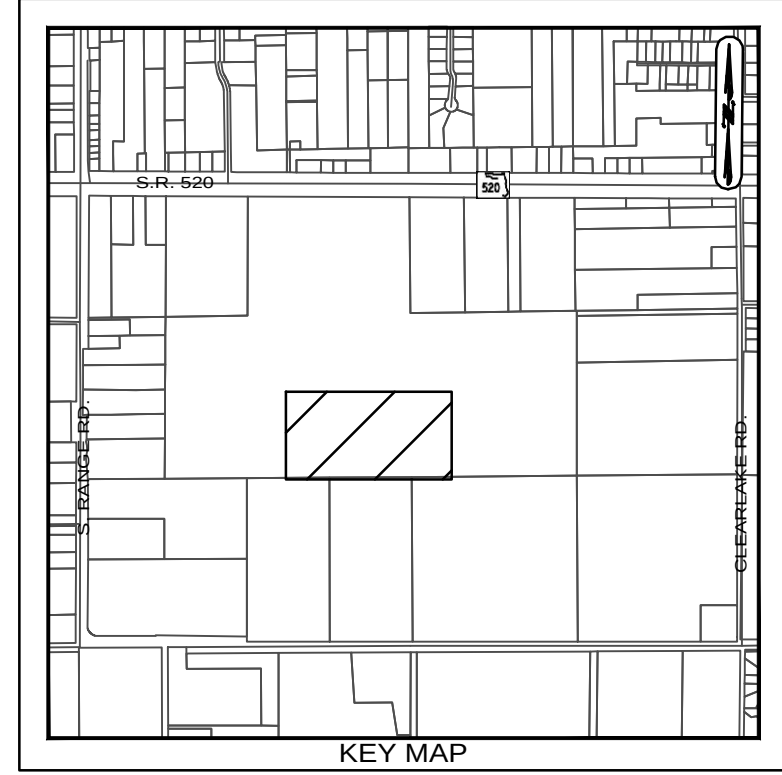


PLAN NOTES

1. PROPOSED NEW FPL PAD-MOUNTED TRANSFORMER, COORDINATE W/ FPL TO DETERMINE REQUIREMENT FOR TRANSFORMER CONCRETE PAD.
2. ROUTING OF NEW UNDERGROUND SERVICE FROM FPL TRANSFORMER TO BUILDING SERVICE EQUIPMENT. NEW SERVICE SHALL BE IN DIRECTLY BURIED SCHEDULE-40 PVC CONDUIT W/ 24" COVER MINIMUM. NOTE: BUILDINGS 2 THROUGH 14 HAVE TWO SERVICE DISCONNECTS (METER CENTERS) AND REQUIRE TWO SEPARATE SERVICES, SEE DIAGRAM ON E-11.
3. LOCATION OF NEW BUILDING/STRUCTURE SERVICE DISCONNECT AND METER, BY OTHERS. SHOWN FOR REFERENCE, TO BE VERIFIED WITH BUILDING'S ELECTRICAL DRAWINGS.
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5. (NOT USED).
6. PROPOSED ROUTING OF FPL PRIMARY FEEDER, TO BE COORDINATED WITH FPL. CONDUIT TO BE FURNISHED BY FPL AND INSTALLED BY CONTRACTOR. PRIMARY CABLE TO BE INSTALLED AND CONNECTED BY FPL. CONDUIT SHALL BE INSTALLED UNDERGROUND WITH 36" COVER MINIMUM.
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8. LOCATION OF TELECOMM SERVICE EQUIPMENT BOX, BY OTHERS, SHOWN FOR REFERENCE.

PARTIAL ELECTRICAL SITE PLAN (SOUTH)

SCALE: 1" = 50'



COCOA GRAND

ELECTRICAL SITE PLAN (SOUTH)

MORGAN & Associates
Consulting Engineers, Inc.
Civil Engineers and Land Surveyors - E.B. # 7903 / L.B. # 7040
504 North Harbor City Blvd., Melbourne, FL 32935
Phone (321) 251-6088 Fax (321) 251-6089

Project #: 2018-077

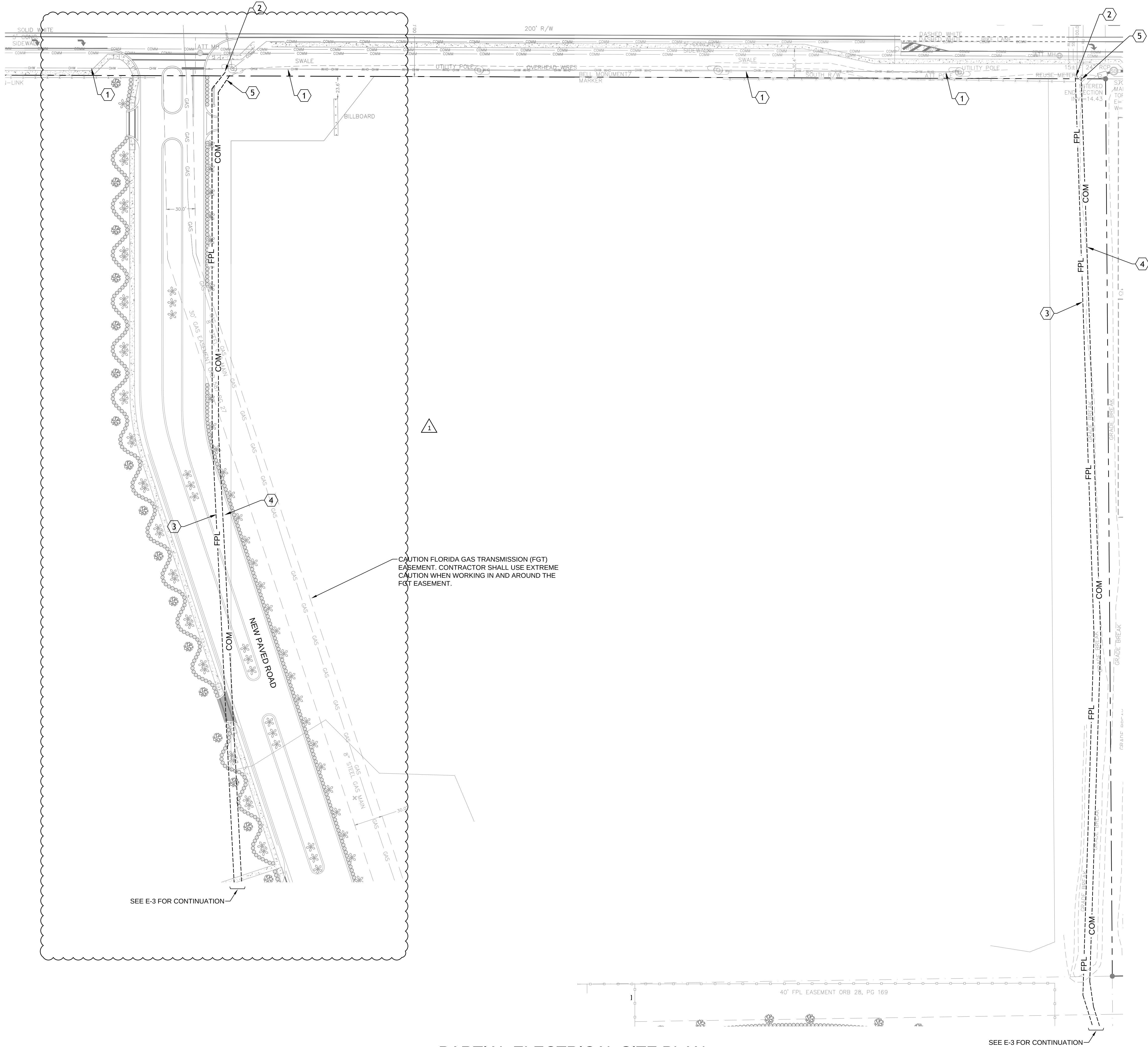
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E-4

Michael Pilo P.E. FL. Reg. #50067



Date: 4/21/20

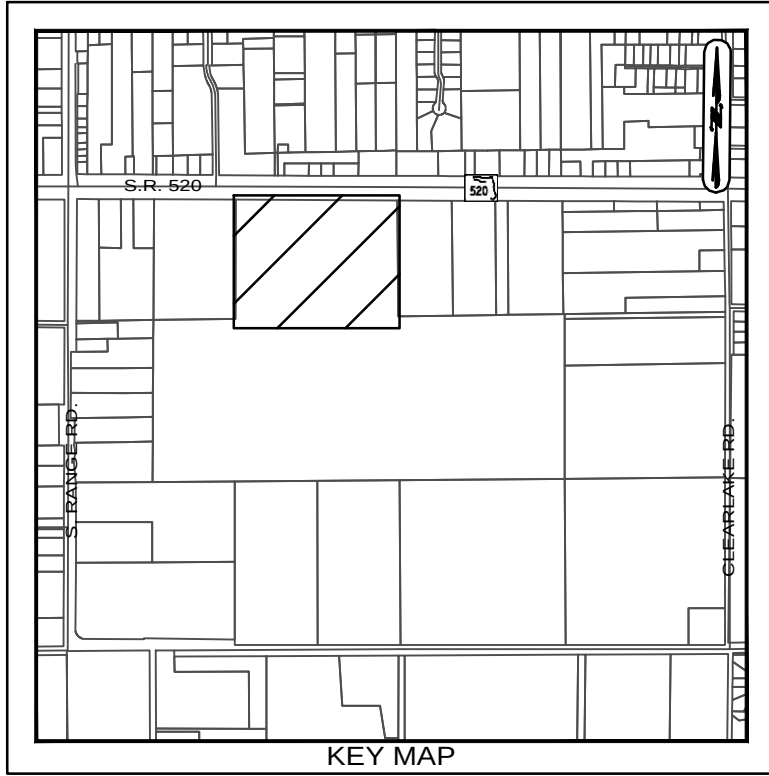


PARTIAL ELECTRICAL SITE PLAN

SCALE: 1" = 50'

PLAN NOTES

- EXISTING FPL OVERHEAD LINE.
- PROPOSED CONNECTION POINT OF PRIMARY SERVICE LOOP, COORDINATE WITH FPL FOR REQUIRED WORK.
- PROPOSED ROUTING OF FPL PRIMARY FEEDER, TO BE COORDINATED WITH FPL. CONDUIT TO BE FURNISHED BY FPL AND INSTALLED BY CONTRACTOR. PRIMARY CABLE TO BE INSTALLED AND CONNECTED BY FPL. CONDUIT SHALL BE INSTALLED UNDERGROUND WITH 36" COVER MINIMUM.
- PROPOSED ROUTING OF TELECOM SERVICE CONDUIT, TO BE COORDINATED WITH UTILITY COMPANY. COORDINATE CONDUIT REQUIREMENTS WITH UTILITY CO. CONDUIT SHALL BE INSTALLED UNDERGROUND WITH 24" COVER MINIMUM.
- PROPOSED CONNECTION POINT TO TELECOM UTILITY SERVICE, COORDINATE WITH UTILITY CO. FOR REQUIREMENTS.



GRAPHIC SCALE
SCALE: 1" = 50'
HALF SIZE: 1" = 100'

NORTH

COCOA GRAND

ELEC/LIGHT PLAN - PARTIAL

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504 North Harbor City Blvd., Melbourne, FL 32935
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Project #: 2018-077

Sheet #:

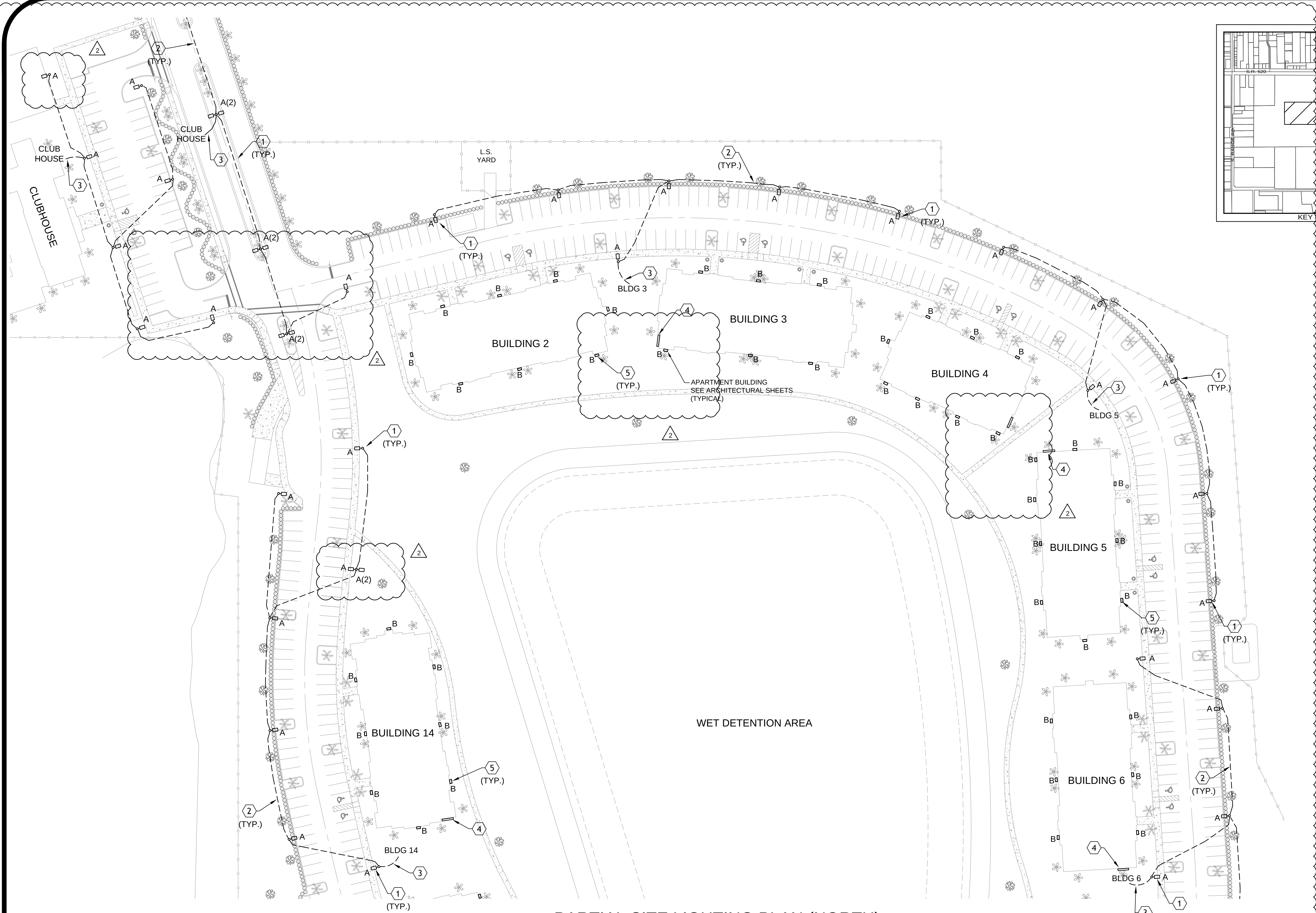
E-5

Michael Pilo P.E. FL. Reg. #50067

PILO ENGINEERING
540 N. BISCAYNE BLVD.
MELBOURNE, FL 32935
(321) 427-3644
MPE-PILOENGINEERING.COM
FL C.E. # 26294

Date: 4/21/20

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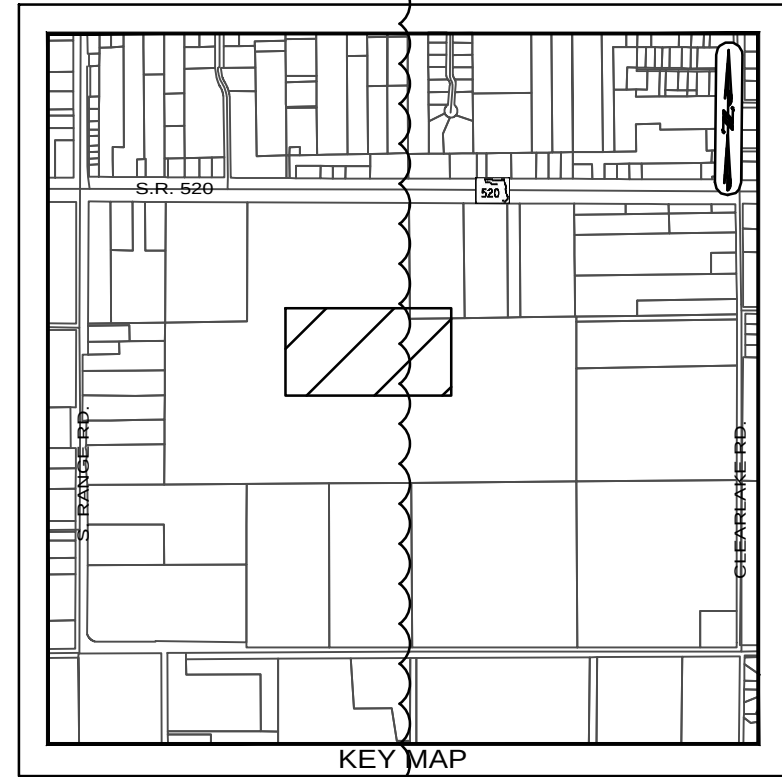
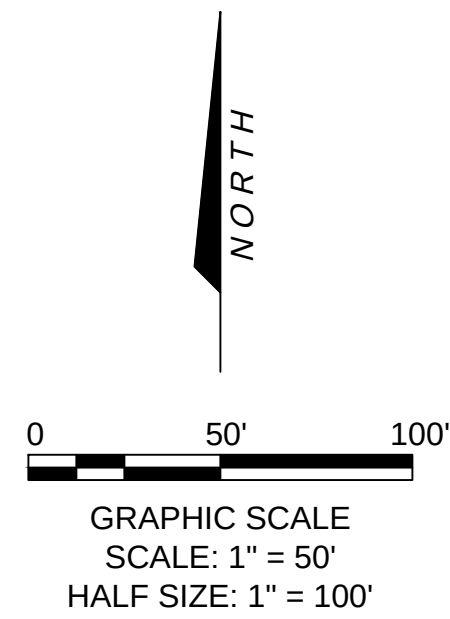


PLAN NOTES

1. PROPOSED POLE MOUNTED LIGHT FIXTURE TYPE "A", SEE E-11 FOR DETAIL AND LIGHT FIXTURE SPECIFICATION. "A(2)" INDICATES TWO FIXTURES PER POLE.
2. AREA LIGHTING LIGHT FIXTURE FEEDERS SHALL BE INSTALLED UNDERGROUND IN SCHEDULE 40 PVC CONDUIT, WITH 24" COVER MINIMUM. COORDINATE WITH CIVIL DRAWINGS FOR INTERFERENCE WITH OTHER UTILITIES. FEEDER SHALL BE 2#8 AWG COPPER WIRE (THWN) WITH 1#8 GROUND, IN 1" CONDUIT.
3. PROPOSED LIGHT FEEDER HOMERUN TO HOUSE PANEL.
4. PROPOSED LOCATION OF BUILDING HOUSE PANEL, TO BE PROVIDED BY OTHERS, EXACT LOCATION TO BE COORDINATED WITH BUILDING ELECTRICAL DRAWINGS. PROVIDE ONE TWO-POLE, 20 AMP CIRCUIT BREAKER AND PHOTOCELL TO SERVE AND CONTROL SITE LIGHTING CIRCUIT.
5. PROPOSED WALL MOUNTED LIGHT FIXTURE TYPE "B", SEE E-11 FOR FIXTURE SPECIFICATION. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION AND CONNECTION/CIRCUITING TO HOUSE PANEL. MOUNTING HEIGHT APPROX 20'.

PARTIAL SITE LIGHTING PLAN (NORTH)

SCALE: 1" = 50'



Revision	BUILDING DEPARTMENT COMMENTS		Date:	6/10/2020
	DESIGN CHANGES		Date:	4/15/2020
Drawn:	MP		Date:	10/21/2019
	Checked:		Date:	10/21/2019

COCOA GRAND

SITE LIGHTING PLAN (NORTH)

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504 North Harbor City Blvd., Melbourne, FL 32955
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Project #: 2018-077

Sheet #:

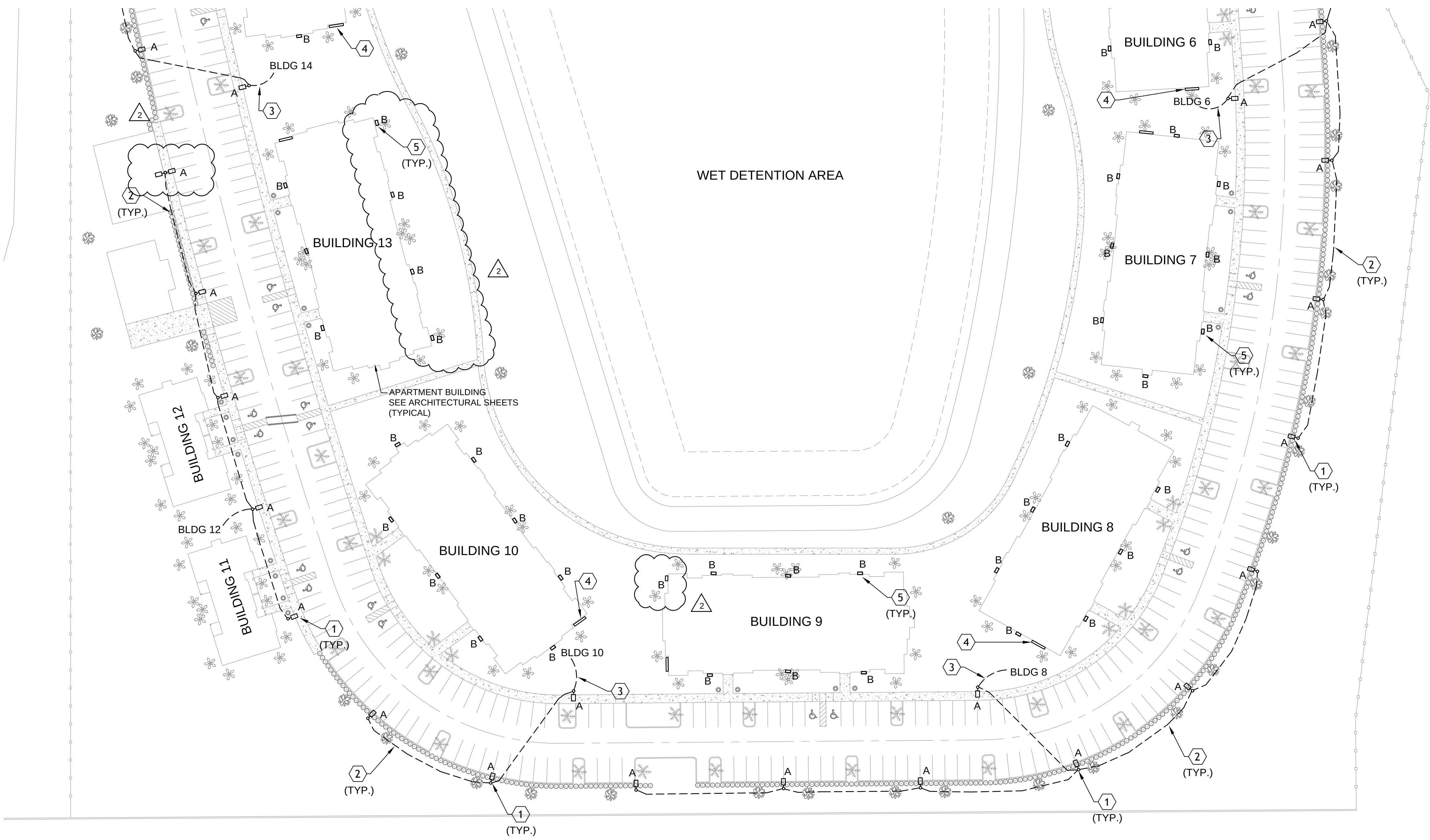
E-6

Michael Pilo P.E. FL. Reg. #50067



Date: 4/21/20

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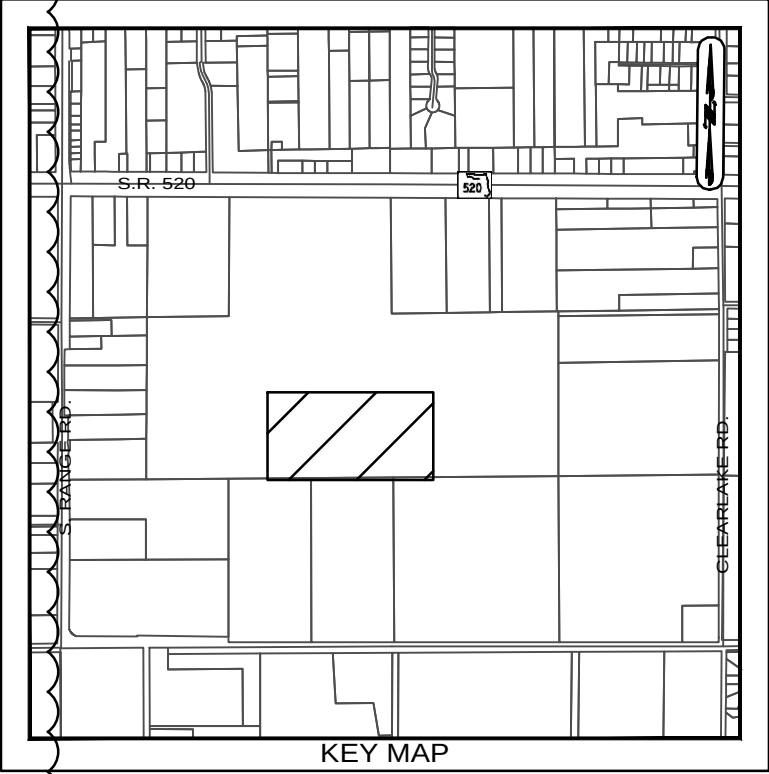
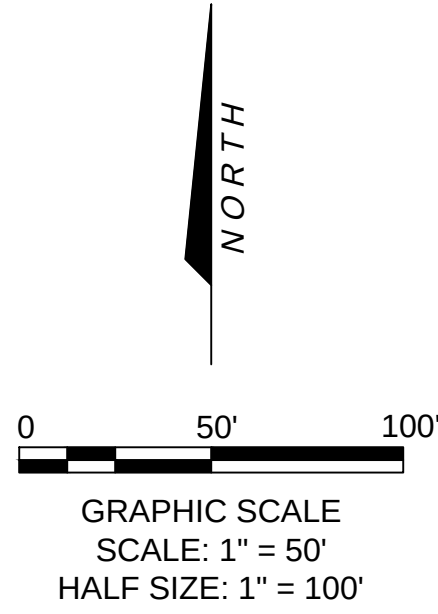


PLAN NOTES

1. PROPOSED POLE MOUNTED LIGHT FIXTURE TYPE "A", SEE E-11 FOR DETAIL AND LIGHT FIXTURE SPECIFICATION. "A(2)" INDICATES TWO FIXTURES PER POLE.
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3. PROPOSED LIGHT FEEDER HOMERUN TO HOUSE PANEL.
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5. PROPOSED WALL MOUNTED LIGHT FIXTURE TYPE "B", SEE E-11 FOR FIXTURE SPECIFICATION. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION AND CONNECTION/CIRCUITING TO HOUSE PANEL. MOUNTING HEIGHT APPROX 20'.

PARTIAL SITE LIGHTING PLAN (SOUTH)

SCALE: 1" = 50'



COCOA GRAND

SITE LIGHTING PLAN (SOUTH)

MORGAN & Associates
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504 North Harbor City Blvd., Melbourne, FL 32935
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Project #: 2018-077

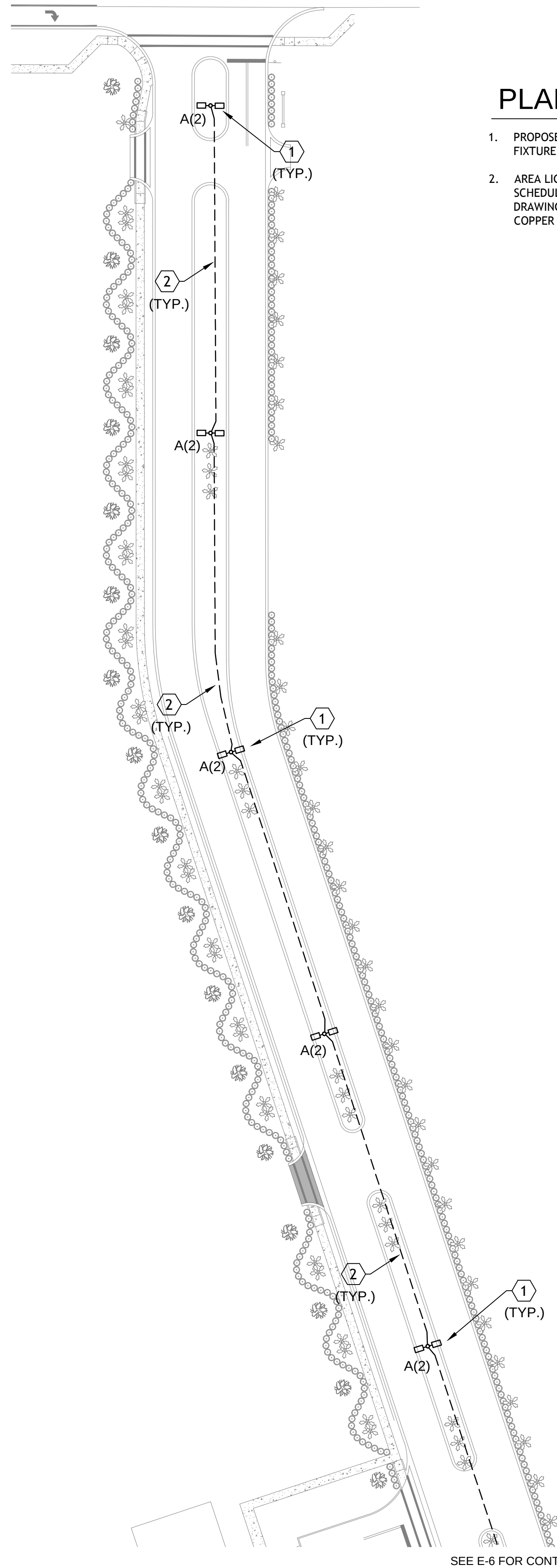
Sheet #:

E-7

Michael Pilo P.E. FL. Reg. #50067



Date: 4/21/20



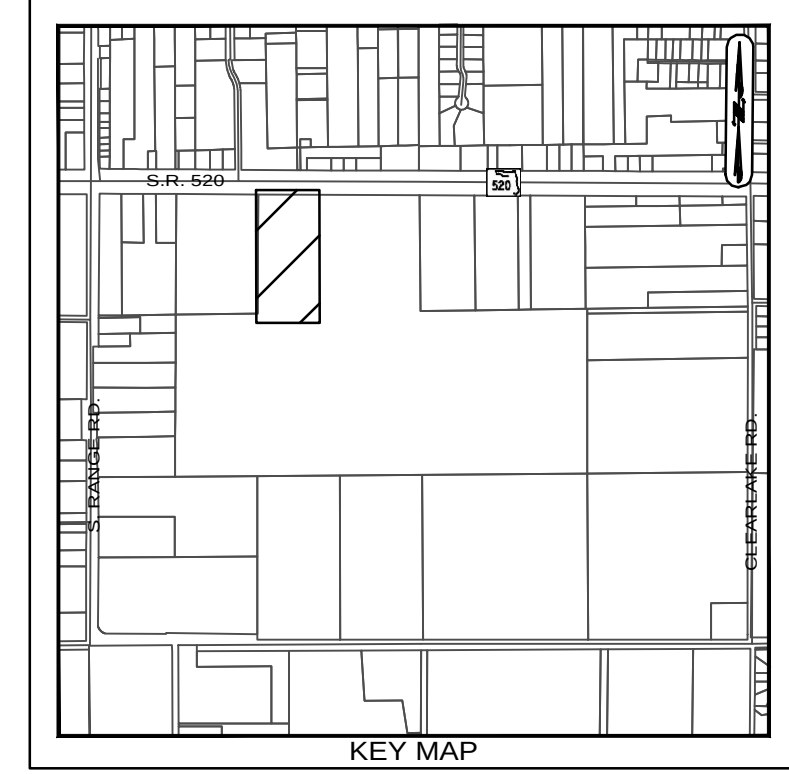
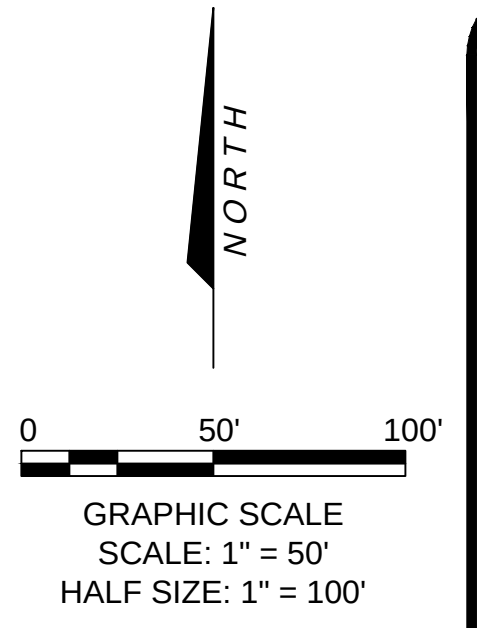
PLAN NOTES

1. PROPOSED POLE MOUNTED LIGHT FIXTURE TYPE "A", SEE E-11 FOR DETAIL AND LIGHT FIXTURE SPECIFICATION. "A(2)" INDICATES TWO FIXTURES PER POLE.
2. AREA LIGHTING LIGHT FIXTURE FEEDERS SHALL BE INSTALLED UNDERGROUND IN SCHEDULE 40 PVC CONDUIT, WITH 24" COVER MINIMUM. COORDINATE WITH CIVIL DRAWINGS FOR INTERFERENCE WITH OTHER UTILITIES. FEEDER SHALL BE 2#8 AWG COPPER WIRE (THWN) WITH 1#8 GROUND, IN 1" CONDUIT.

SEE E-6 FOR CONT

PARTIAL SITE LIGHTING PLAN (ENTRANCE)

SCALE: 1" = 50'



	Revision
	BUILDING DEPARTMENT COMMENTS
	DESIGN CHANGES
Date:	6/10/2020
Date:	4/15/2020
Designed:	MP
Drawn:	MP
Checked:	MP
Date:	10/21/2019
Date:	10/21/2019

COCOA GRAND

SITE LIGHT. PLAN (ENTRANCE)

**MORGAN
& Associates**
Consulting Engineers, Inc.
Civil Engineers and Land Surveyors • E.B. #7032 / I.B. #7100
504 Northchase Court Blvd., Melbourne, FL 32905

Project #: 2018-077

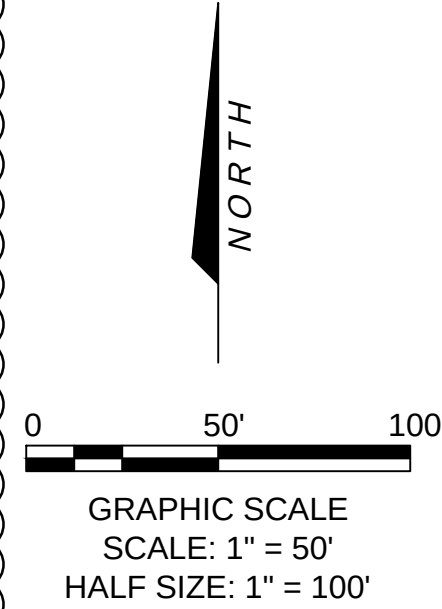
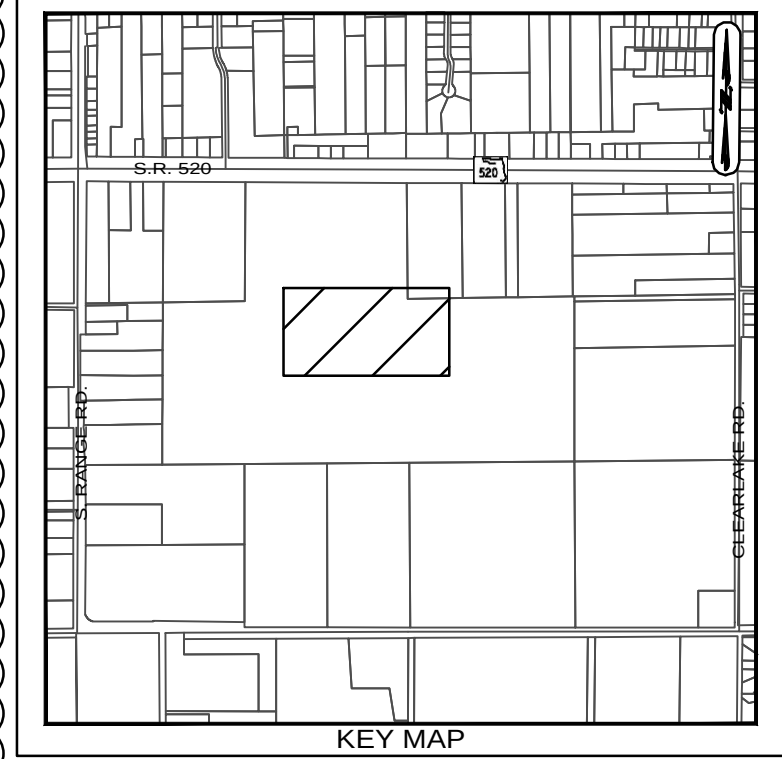
Sheet #:

E-8

Michael Pilo P.E. FL. Reg. #50067



Date: 4/21/20



REVISION		BUILDING DEPARTMENT COMMENTS	DATE
Δ	Δ	DESIGN CHANGES	6/10/2020
Δ	Δ	MP	4/15/2020
Δ	Δ	MP	10/21/2019
Δ	Δ	MP	10/21/2019
Δ	Δ	MP	10/21/2019

COCOA GRAND

SITE PHOTOMETRY (NORTH)

MORGAN & Associates
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Civil Engineers and Land Surveyors - E.B. # 7903 / L.B. # 7040
504 North Harbor City Blvd., Melbourne, FL 32935
Phone (321) 251-6088 Fax (321) 251-6089

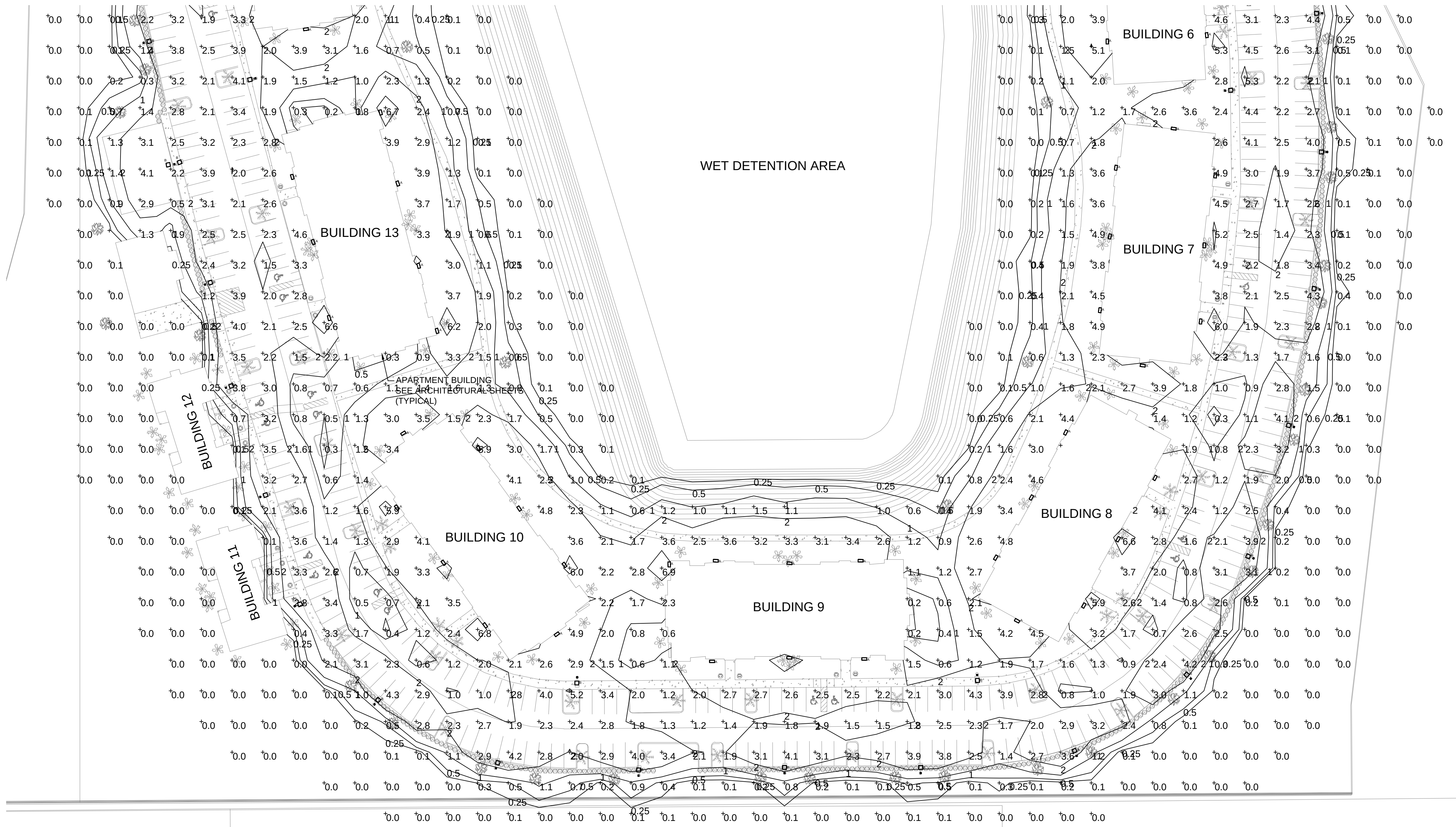
Project #: 2018-077

Sheet #:

E-9

Michael Pilo P.E. FL. Reg. #50067

Date: 4/21/20



PARTIAL PHOTOMETRY PLAN (SOUTH)

SCALE: 1" = 50'

PLAN NOTES

1. SEE E-11 FOR FIXTURE SPECIFICATION AND SCHEDULE.

COCOA GRAND
SITE LIGHTING PLAN (SOUTH)

MORGAN & Associates
Consulting Engineers, Inc.
Civil Engineers and Land Surveyors - E.B. # 7903 / L.S. # 7040
504 North Harbor City Blvd., Melbourne, FL 32935
Phone (321) 251-6088 Fax (321) 251-6089

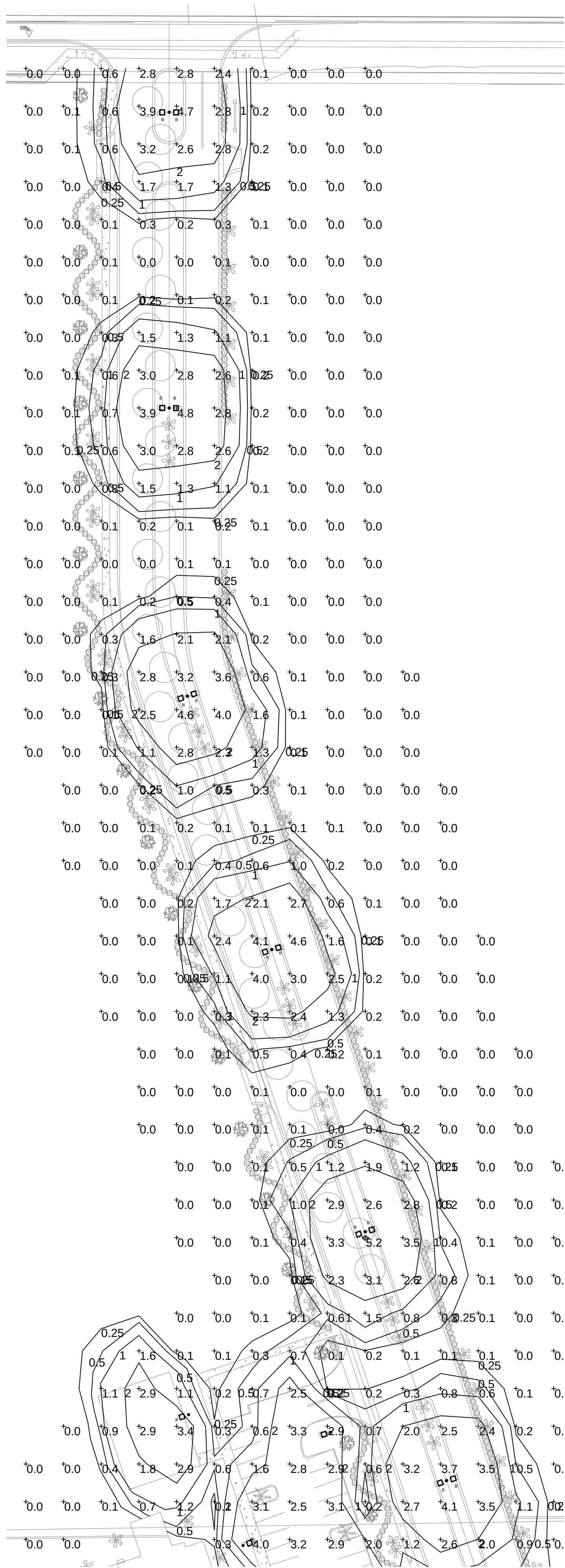
Project #: 2018-077

Sheet #:

E-10

Michael Pilo P.E. FL. Reg. #50067

Date: 4/21/20



PARTIAL PHOTOMETRY PLAN (ENTRANCE)
SCALE: 1" = 50'



WDGE3 LED
Architectural Wall Sconce

Specifications
Depth (D1): 8"
Depth (D2): 1.5"
Height: 9"
Width: 18"
Weight: 19.5 lbs (without options)

WDGE LED Family Overview

Luminaire	Standard EM, 0°C	Cold EM, 20°C	Sensor	Lumens (4000K)					
				P1	P2	P3	P4	P5	P6
WDGE1 LED	4W	--	--	1,200	2,000	--	--	--	--
WDGE2 LED	10W	10W	Standalone / nLight	1,200	2,000	3,000	4,500	6,000	--
WDGE3 LED	15W	10W	Standalone / nLight	7,500	8,500	10,000	12,000	--	--
WDGE4 LED	--	--	Standalone / nLight	12,000	16,000	18,000	20,000	22,000	25,000

Ordering Information

Series	Package	Color Temperature	CRI	Distribution	Voltage	Mounting	Shipped included	Shipped separately		
WDGE3 LED	P1	30K 3000K	70CRI	R2 Type 2	MVOLT 347 ¹ 480 ²	SRM Surface mounting bracket	SRM Surface mounting bracket	AWS 3-Bench Architectural wall spacer		
	P2	40K 4000K		R3 Type 3					ICW Indirect Canopy/Ceiling Water-tight (dry/damp locations only) ³	BBW Premium surface-mounted back box (top, left, right conduit entry)
	P3	50K 5000K		R4 Type 4						
	P4	--		RFT Forward Throw						

Options

Options	Finish
E15WH Emergency battery backup, CCC compliant (15W, 5°C min)	DDBD Dark bronze
E20WC Emergency battery backup, CCC compliant (10W, -20°C min)	DBLD Black
PE ¹ Photocell, Button Type	DNAD Natural aluminum
DMG ¹ 0-10V dimming wires pulled outside fixture (for use with an external control, ordered separately)	DWHD White
BCE Bottom conduit entry for premium back box (P8BW), Total of 4 entry points.	DBLD Textured dark bronze
SPD10KV 10kV Surge pack	DNAD Textured natural aluminum
	DWHD Textured white

Accessories
Dimensional independent accessories

WDGEAWS DDBD U	WDGE 3-Bench Architectural Wall Spacer (specify finish)
WDGE3P8BW DDBD U	WDGE3 Premium surface-mounted back box (specify finish)
WDGE3BW DDBD U	Surface-mounted back box (specify finish)

NOTES
1 247V and 480V not available with E15WH and E20WC.
2 PE not available in 480V and with sensors/controls.
3 DMG option not available with sensors/controls.
4 Not qualified for DCL. Not available with emergency battery backup or sensors/controls.

LITHONIA LIGHTING COMMERCIAL OUTDOOR One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.lithonia.com
© 2019-2020 Acuity Brands Lighting, Inc. All rights reserved. WDGE3 LED Rev. 04/15/20



CSX1 LED
LED Area Luminaire

Specifications
EPA: 0.7 ft² (0.07 m²)
Length: 23-1/2" (603 mm)
Width: 18-1/2" (468 mm)
Height: 5-7/8" (149 mm)
Weight (max): 37 lbs (16.8 kg)

CSX1 LED 60C 700 40K T3M HS

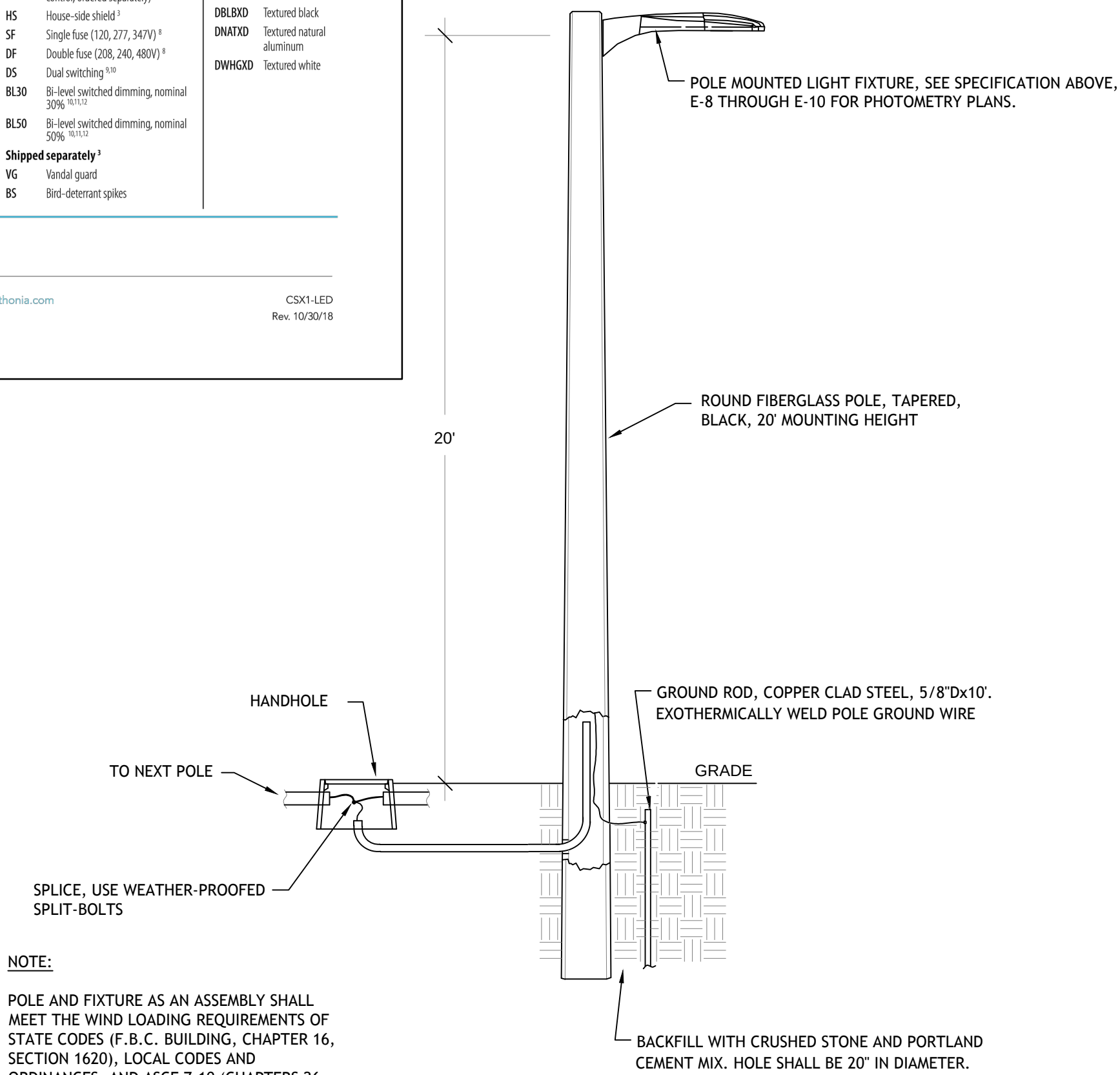
Ordering Information

Series	LEDs	Drive current	Color temperature	Distribution	Voltage	Mounting	Options	Finish (standard)
CSX1 LED	60C 60 LEDs	700 700 mA (1 A)	40K 4000 K 50K 5000 K	T2M Type II	MVOLT ¹ 120 ¹ 208 ^{1,2} 240 ^{1,2} 277 ¹ 347 480 ²	Shipped included SPA Square pole mounting Round pole mounting Wall bracket	Shipped installed P8B NEMA twist-lock receptacle only (no controls) DCR Dimmable and controllable via ROAM™ (no controls) ³ DMG 0-10V dimming wires pulled outside fixture (for use with an external control, ordered separately) ⁴ HS House-side shield ¹ SF Single fuse (120, 277, 347V) ¹ DF Double fuse (208, 240, 480V) ¹ DS Dual switching ^{1,5} BL30 8-level switched dimming, nominal 30% ^{10,11,12} BLS0 8-level switched dimming, nominal 50% ^{10,11,12}	DDBD Dark bronze DBLD Black DNAD Natural aluminum DWHD White DBHD Textured dark bronze DBLD Textured black DNAD Textured natural aluminum DWHG0 Textured white
				T3M Type III				
				T4M Type IV				
				T5M Type V				
TFM Forward throw								

Shipped separately¹
KMA8 DDBD U Max arm mounting bracket adapter (specify finish)¹

Shipped separately¹
VG Vandal guard BS Bird-deterrent spikes

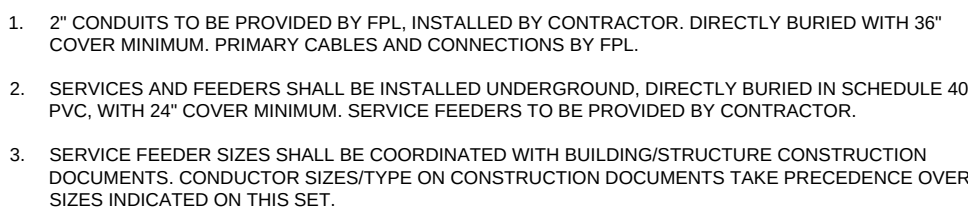
LITHONIA LIGHTING One Lithonia Way • Conyers, Georgia 30012 • Phone: 800-279-8041 • www.lithonia.com
© 2012-2018 Acuity Brands Lighting, Inc. All rights reserved. CSX1-LED Rev. 10/30/18



LIGHT POLE DETAIL
SCALE: NTS

REVISION	BUILDING DEPARTMENT COMMENTS	DATE:
△	DESIGN CHANGES	6/10/2020
△	Design: MP	Date: 4/15/2020
△	Draw: MP	Date: 10/21/2019
△	Checked: MP	Date: 10/21/2019
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COCOA GRAND
ELEC/LIGHT PLAN (ENTRANCE)



Revision	Date:	Building Department Comments
△	6/10/2020	
△	4/15/2020	DESIGN CHANGES
△	10/21/2019	Designed: MP
△	10/21/2019	Drawn: MP
△	10/21/2019	Checked: MP

COCOA GRAND

ELECTRICAL DIAGRAM

**MORGAN
& Associates**
Consulting Engineers, Inc.

Engineers and Land Surveyors - E.B. # 7903 / L.B. #7040
North Harbor City Blvd. Melbourne, FL 32935
Phone (321) 751-6088 Fax (321) 751-6089

Project #: 2018-077

Sheet #:

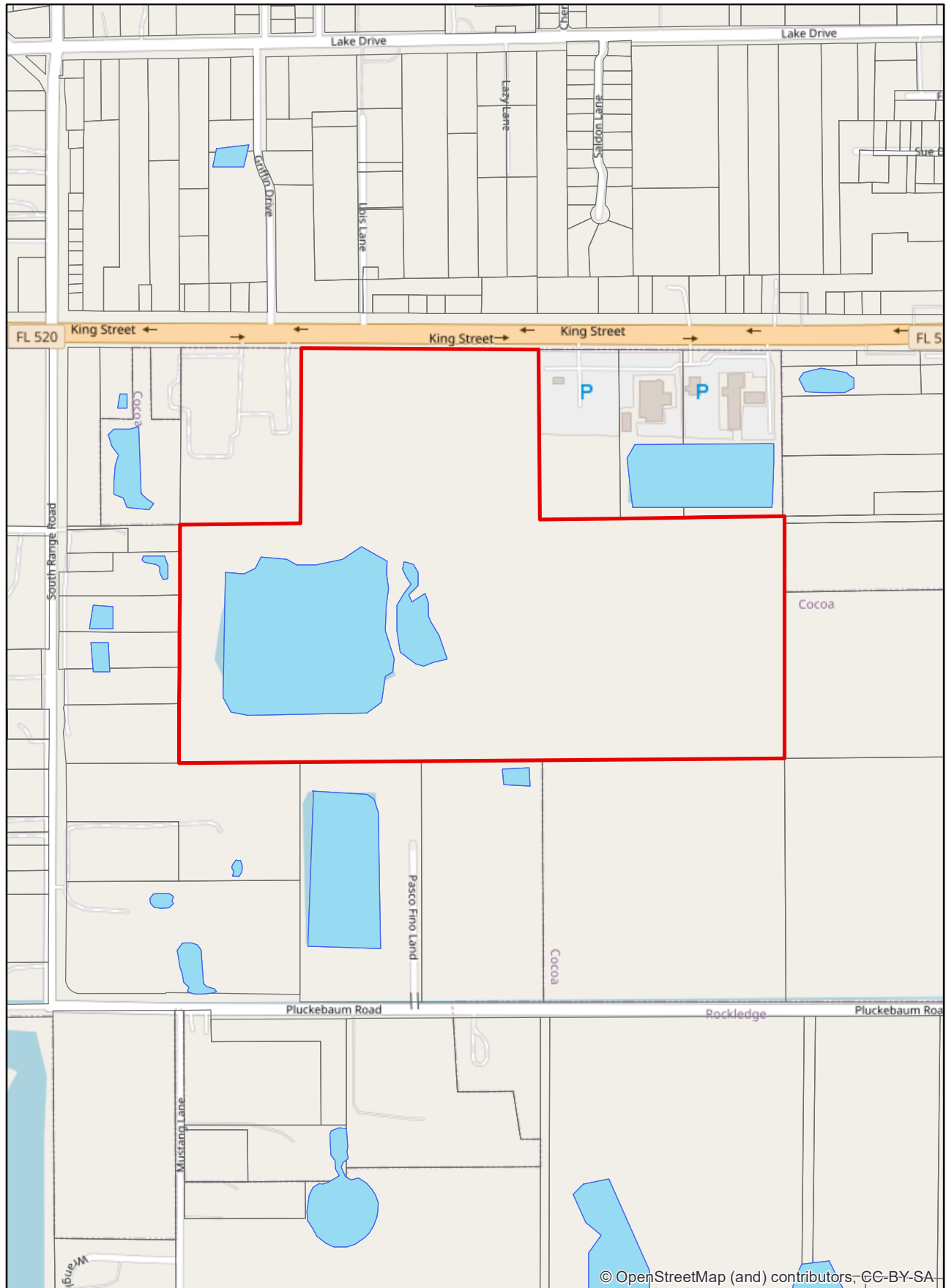
E-12

Michael Pilo P.E. FL. Reg. #50067

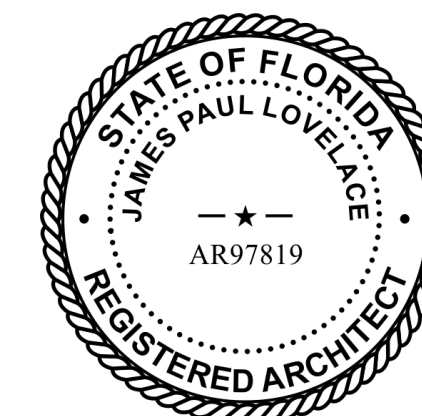
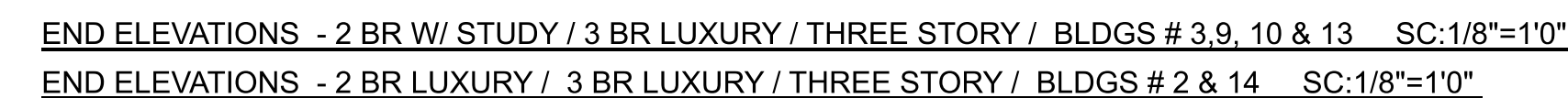
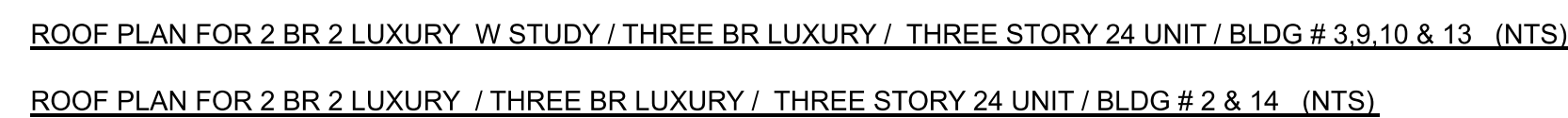


Date: 4/21/20

Exhibit C - Cocoa Grand Location Map



JAMES P. LOVELACE ~ ARCHITECT
2305 SOUTH ANDREW CIRCLE (706) 577-4215
P.O. BOX 1353 COLUMBUS GA. 31902



COCOA GRAND
WEST KING ST. COCOA, FLORIDA 32926

DATE	JULY 22, 2019
SCALE	AS NOTED
DRAWN	RDJ/JPL
JOB	2019-GR-04

SHEET

A.3.2



Classified Ad Receipt
(For Info Only - NOT A BILL)

Customer: CITY OF COCOA - TE

Ad No.: 0004334217

Address: 65 STONE ST
COCOA FL 32922
USA

Pymt Method Invoice

Net Amt: \$551.08

Run Times: 1

No. of Affidavits: 1

Run Dates: 08/19/20

Text of Ad:

Ad4334217 08/19/2020
CITY OF COCOA
NOTICE OF PUBLIC HEARING AND
ZONING MAP AMENDMENT
NOTICE IS HEREBY GIVEN THAT
THE PLANNING & ZONING BOARD/LOCAL
PLANNING AGENCY
AND THE COCOA CITY COUNCIL
PROPOSE TO CONSIDER THE
FOLLOWING:

For "Cocoa Grand Apartments":
A. APPROVAL OF A LARGE SCALE SITE
PLAN (Cocoa Grand Apartments) consist-
ent with Appendix A Zoning, Article
XIII, Section 1, of the City Code to con-
struct a total of 268 apartment units in
fourteen (14) apartment buildings,
along with a clubhouse with pool, main-
tenance building, playground and dog
park on one (1) parcel located on the
south side of State Road 520, and 0.25
miles east of Range Road. Parcel ID num-
ber: 24-36-31-00-265.

For "Adamson Creek Phase 1C":
B. AN ORDINANCE OF THE CITY
COUNCIL OF THE CITY OF COCOA, BRE-
VARD COUNTY, FLORIDA: AMENDING
THE ADAMSON CREEK PLANNED UNIT
DEVELOPMENT FINAL DEVELOPMENT
PLAN FOR PHASE ONE-C; CHANGING
THE ZONING MAP DESIGNATION OF ONE
(1) PARCEL OF REAL PROPERTY, TOTAL-
ING 14.3 ACRES, MORE OR LESS, AND
GENERALLY LOCATED DIRECTLY WEST
OF I-95, IN COCOA, FLORIDA, MORE
PARTICULARLY DEPICTED AND LEGALLY
DESCRIBED ON EXHIBIT "A" ATTACHED
HERETO, FROM BREVARD COUNTY G-U
(GENERAL USE DISTRICT) TO CITY OF
COCOA PUD (PLANNED UNIT DEVELOP-
MENT DISTRICT) AND INCORPORATING
THE PARCEL INTO THE ADAMSON CREEK
FINAL DEVELOPMENT PLAN FOR PHASE
ONE-C; PROVIDING FOR THE REPEAL OF
PRIOR INCONSISTENT ORDINANCES AND
RESOLUTIONS, SEVERABILITY, AND AN
EFFECTIVE DATE. (PARCEL ID: 24-35-22-
00-10).

C. APPROVAL OF A PRELIMINARY SUBDI-
VISION / LARGE SCALE SITE PLAN (Adam-
son Creek Phase 1C) consistent with
Chapter 18 Subdivisions and Appendix A
Zoning of the City Code. The property
owner desires to develop the existing va-
cant parcels as a single family subdivi-
sion and planned unit development proj-
ect containing 155 residential lots. The
subject property is an expansion of an
existing subdivision/PUD located on the
east side of Adamson Road, approxi-
mately 1 mile north of State Road 520
and contains +/- 62.40 acres. The prop-
erty is identified as Parcel #'s: 24-35-22-
25-3, 24-35-22-00-257, and 24-35-22-00-
10.

PLANNING & ZONING BOARD/ LOCAL
PLANNING AGENCY
PUBLIC HEARING WILL BE HELD ON
September 2, 2020
AT 6:00 P.M. OR SOON THEREAFTER IN
THE COCOA CITY HALL COUNCIL CHAM-
BERS LOCATED AT
65 STONE STREET, COCOA, FL
CITY COUNCIL WILL CONSIDER ALL
ITEMS (EXCEPT THE LARGE SCALE SITE
PLANS FOR ITEMS A & C) ON
September 23, 2020
AT 6:00 P.M. OR SOON THEREAFTER IN
THE COCOA CITY HALL COUNCIL CHAM-
BERS LOCATED AT
65 STONE STREET, COCOA, FL

Public Participation and Special COVID-
19 Information:
Members of the public may view the
meeting agenda, ordinances, project ap-
plications, supporting documents, and
staff reports on the City's website at the
following link prior to attending or com-
menting:
• City of Cocoa meeting calendar at <http://cocoa.legistar.com/Calendar.aspx>
These documents and information per-
taining to the above may also be in-
spected at the Community Services De-

partment, between 9:00 a.m. and 5:00 p.m., Monday through Friday, or by phoning (321) 433-8535.

Members of the public have several options to participate in the public hearings.

(1) In-person attendance. Due to the COVID-19 Emergency and the need to maintain social distancing, meetings in the City Hall Council Chambers are limited to eighteen (18) members in the audience at any one time. Members of the public may utilize the contact information provided below to contact the City Clerk and determine if restrictions on physical attendance at the City Council Chambers have been lifted prior to the date of the public hearings.

(2) Commenting in advance of the meeting. Interested persons are encouraged to provide written comments in advance of the hearings by emailing meetings@cocoafl.org or mailing to the following address:

City of Cocoa
Attn: Dodie Selig, Planning and Zoning Manager
65 Stone Street
Cocoa, FL 32922

Mailed comments must be received prior to 4:00 p.m. on the date of the hearing to be read into the record.

(3) Viewing and Commenting In Real Time. Interested persons are encouraged to view and listen to the hearings live by accessing the meetings at the following internet addresses:

- City of Cocoa meeting calendar at <http://cocoa.legistar.com/Calendar.aspx>

- City of Cocoa YouTube link at <https://www.youtube.com/channel/UCbWJK7XQyPVBmp15Fwoa4JA>

Interested persons may submit their written comments or questions during the hearings by email at: meetings@cocoafl.org. Interested persons who wish to provide public input during the meeting will also be able to do so by calling 321-433-8446 or by accessing the e-comment link for this meeting using the Legistar calendar link above. For more information about this CMT meeting or to provide information to be considered at this meeting, contact the City Clerk as provided below.

The City of Cocoa will be utilizing Communications Media Technology (CMT) for upcoming P&Z/LPA and City Council meetings pursuant to the Governor's Executive Order Number 20-69 and Florida Statutes, Section 120.54(5)(b)(2). Specifically, one or more members of the P&Z/LPA and City Council may attend and participate by speakerphone.

Special Information for Quasi-Judicial Hearings:

All items A through C are quasi-judicial matters. Any person that (1) can demonstrate that they may suffer special damages different in kind and degree from that of the general public at large; and (2) wishes to present factual or expert witnesses and/or evidence at the quasi-judicial hearing is highly encouraged to immediately contact Dodie Selig, Planning and Zoning Manager, at (321) 433-8510 or dselig@cocoafl.org, to make proper arrangements for presentation of witnesses and/or evidence. All witnesses must be identified and all evidentiary documents and exhibits that are intended to be distributed to the P&Z/LPA and City Council must be submitted to Ms. Selig via email or mail at least five (5) days prior to the hearing.

General Notice Information:

This is a public meeting. Interested parties are hereby advised that they may appear at said meeting and be heard. The facility wherein this public meeting will be held is accessible to the physically handicapped. In accordance with the Americans With Disabilities Act, persons needing assistance to participate in any of these proceedings should contact the City Clerk of the City of Cocoa, listed below, at least 48 hours prior to the meeting: Carrie Shealy, City Clerk, 65 Stone Street, Cocoa, by telephone at (321) 433-8484 or via email at cshealy@cocoafl.org.

Pursuant to Section 286.0105, Florida Statutes, the City hereby advises the public that if a person decides to appeal any decision made by the City Council with respect to any matter considered at its meeting or hearing, that person will need a record of the proceedings and for such purpose, affected persons may need to assure that a verbatim record of the proceedings is made, and such record shall include the testimony and evidence upon which the appeal is to be based. This notice does not constitute consent by the City for the introduction or admission into evidence of otherwise inadmissible or irrelevant evidence, nor does it authorize challenges or appeals otherwise not allowed by law.

The PZ Board/LPA meeting may include the attendance of one (1) or more members of the Cocoa City Council who may or may not participate in the Board discussions held at this public hearing. The Local Planning Agency and City Council reserve the right to continue or postpone hearings to a date certain without re-advertising.



Legislation Details (With Text)

File #:	20-577	Version:	1	Name:	
Type:	Agenda	Status:		Agenda Ready	
File created:	8/28/2020	In control:		Planning and Zoning / Local Planning Agency	
On agenda:	9/2/2020	Final action:			
Title:	Approval of a Final pud / PReLIMINARY SUBDIVISION / LARGE SCALE SITE PLAN consistent with Chapter 18 Subdivisions and Appendix A Zoning of the City Code. The property owner desires to develop the existing vacant site as a single-family subdivision project containing 155 residential lots.				
Sponsors:					
Indexes:					
Code sections:					
Attachments:	Exhibit A - Civil Plans.pdf Exhibit B - Preliminary Plat.pdf Exhibit C - Location Map.pdf Exhibit D - Proposed Amenity Schedule.pdf Exhibit E - Drainage Analysis.pdf Legal Ad Proof (PZ and CC).pdf				

Date	Ver.	Action By	Action	Result
------	------	-----------	--------	--------

PLANNING & ZONING BOARD/LOCAL PLANNING AGENCY AGENDA ITEM

Memo Date: August 28, 2020
Agenda Date: September 2, 2020
Prepared By: Dodie Selig, Planning & Zoning Manager
Through: Nancy A. Bunt, Community Services Director
Requested Action:

APPROVAL OF A FINAL PUD / PRELIMINARY SUBDIVISION / LARGE SCALE SITE PLAN consistent with Chapter 18 Subdivisions and Appendix A Zoning of the City Code. The property owner desires to develop the existing vacant site as a single-family subdivision project containing 155 residential lots.

BACKGROUND:

Project Name:	Adamson Creek Phase 1C
Project No:	PZ-20-00100001
Applicant:	Daniel Liparini D.R. Horton, Inc. 1430 Culver Dr. NE Palm Bay, FL 32907
Property Owner:	Daniel Liparini D.R. Horton, Inc. 1430 Culver Dr. NE Palm Bay, FL 32907

Project Location:	The subject property is located on the east side of Adamson Road, approximately 1.25 miles north of State Road 524 and contains +/- 62.5 acres. The property is identified by Parcel #'s: 24-35-22-25-3, 24-35-22-00-257, and 24-35-22-00-10
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I. Project Information

These three applications for Phase 1C ([Exhibit A - Civil Plans](#) and [Exhibit B - Preliminary Plat](#)) are part of a larger project known as Adamson Creek. The project is located on the east side of Adamson Road and to the east of the previously developed phases 1A and 1B. ([Exhibit C - Location Map](#)) The project was first developed as a Planned Unit Development (PUD) in 2005 consisting of 431 single-family homes on 178 acres with 44 acres of open space and amenities. Phase 1 was approved and recorded in 2006. Due to a slowdown in the market triggered by the recession, Phase 1 was later broken down into 3 phases (1A, 1B and 1C) of which phase 1A was recorded in 2007 with 154 single-family homes.

On October 13, 2015 the City approved a Preliminary Subdivision for Phases 1B and 1C. The site work did not occur within the 1 year timeframe that the application was valid for. The property changed hands in April 2016 and again in January 2018 when the present owners, DR Horton, Inc., purchased the property. They resubmitted the subdivision for Phase 1B which was recorded on August 29, 2019. This application will include Phase 1C from the original Phase 1 along with an additional parcel of land containing 14.3 acres that was originally known as Phase 3.

Project Details:

This Phase 1C of the project contains 62.4 acres overall, with 55.55 acres of developable land (streets, houses, stormwater ponds and amenities) and 6.85 acres of wetland area and related buffer zone in Tract V. This phase will include 155 single-family homes on two streets wrapping around a stormwater pond in Tract H, which will be stocked with fish and have a dock/viewing platform along the west side. Also provided in this phase are a 10 station fitness course along a walking trail that runs the length of the west side of the stormwater pond in Tract I, an observation deck at the north end of the stormwater pond in Tract I, and a new walking trail around the south, east and north sides of Tract I. Three new tracts have been created: M-1 is open space, V is an area of wetlands, and W which is behind the lift station on Tract U.)

A revised amenities schedule for phase 1C ([Exhibit D - Proposed Amenities Schedule](#)) will need to be further revised to reflect the most recent changes and then approved by Council. The schedule lists all amenities in phases A, B and C along with completion timeframes. Two of the larger amenities tracts (Tract M and Tract L) are physically located in phase A but were allowed to be constructed once the developer began phase 1C. These are indicated on the schedule and the Phase 1C plans.

Future Land Use Designation: VLDR (Very Low Density Residential) and Conservation

Zoning District: PUD (Planned Unit Development)

Existing Land Use: Vacant Land

Council District: District 3 - Councilmember Don Boisvert

Overview of Surrounding Area:

	Future Land Use Designation	Zoning Districts	Land Uses
North	RES 2 (Brevard County)	AU and RR1 (Brevard County)	Single-Family Residential and Vacant Land
South	Low Density Residential and Medium Density Residential (City)	PUD (City)	Single-Family Residential (Adamson Creek Phase 1A)
East	Low Density Residential and Medium Density Residential (City)	PUD (City) and GU (Brevard County)	Single-Family Residence and Vacant Land (Adamson Creek Phase 1C)
West	RES 2 and PUB (Brevard County)	GML(H) (Brevard County)	Single-Family Residential and Vacant Land (Brevard County Land Fill)

II. Preliminary Subdivision / Large Scale Site Plan Analysis

Consistency with Code of the City of Cocoa

The submitted application and plans have been reviewed by City staff for consistency with Chapter 18 Subdivisions and with Appendix A Zoning of the City of Cocoa Code and found to be in substantial compliance although a few issues remain to be addressed as detailed below.

The majority of the lots created by this subdivision are 50 feet in width and 120 feet in depth which equates to 6,000 sq.ft. of lot area. Lots on roadway curves are allowed a minimum width of 25 feet, and corner lots are required to be 15% larger than interior lots. This subdivision plat meets these requirements. There is no minimum lot size under PUD zoning. Minimum setbacks and distance separation between structures will be addressed when a building permit is applied for.

Floodplain and compensatory storage requirements were reviewed by Geosyntec Consultants on behalf of the City who have determined that the Phase 1C plans are in compliance with the City's Comprehensive Plan and Code.

A condition of the original PUD approval was the addition of lighting along the wetland trail and boardwalk in Tract M. The applicant has requested that they be allowed to not provide lighting along the walking path, which is now also around the stormwater pond in Tract I, as it represents a liability they do not wish to assume. They propose instead to post signage at the entrance to the trail indicating that it is only open from dawn to dusk. Staff has discussed the issue with the applicant and understands the concerns. As long as such signs are clearly posted at the access points to the trail, staff has no objection to requesting that Council remove that condition of the original approval.

Another issue that was actually identified during the platting of phase 1B is also being resolved at this time. That pertained to the streets in Phase 1A, which were originally to be private roadways but were actually platted as public streets. No drainage easement was provided on that original 1A plat, therefore a new drainage easement has been provided to correct that oversight.

During the approval process of Phase 1B concerns were raised regarding water flow impacts on the property at 1685 Adamson Road. The applicant's engineer, Kenneth Ludwa, P.E. with B.S.E. Consultants, Inc. provided the City with a memorandum of analysis determining that the property would not be adversely impacted by stormwater runoff. (**Exhibit E - Drainage Analysis**)

The Assistant City Attorney has identified several items which need to be addressed. These have been added as conditions of approval.

Consistency with Comprehensive Plan Policies and Objectives

Policy 1.1.10.3: Innovative land use development patterns, including PUDs and Cluster Zoning shall be permitted and encouraged in appropriate areas, as defined in the land development regulations.

Concurrency Management/Adequate Public Facilities

Wastewater

This project is connected to Brevard County sewer. The applicant provided notice from the County that the Brevard County South Central Regional WWTP has sufficient capacity for the proposed phases of Adamson Creek.

Stormwater Management

The Level of Service (LOS) for Stormwater Management is as follows:

Design Storm Event"	25-year frequency/24-hour duration event
On-site Stormwater Management:	Retention of the first one inch of rainfall for areas of more than one acre.
Stormwater Quantity:	Post development Stormwater runoff flow rates, quantities, peaks, and velocities shall be equal to or less than levels that existed prior to development.
Stormwater Quality:	No significant degradation of water quality in receiving water bodies.

A St Johns River Water Management District Permit for this project was issued on March 13, 2018 and a copy was provided to the City. This permit is valid through March 11, 2023.

Potable Water

The LOS for potable water is 122 gallons per capita per day (gpcd) per household. Based on the City of Cocoa EAR Population Projections report, the average permanent resident per dwelling unit is 2.35 per occupied unit. Thus, the average demand per household is estimated at 287 gpcd, and based on the 155 proposed dwelling units the overall demand is 44,485 gpcd.

The Dyal Plant provides potable for the City of Cocoa service area and it is currently permitted to operate at 48 million gallons per day (mgd). The maximum provision over the past twelve months is 34 mgd. Thus, there is sufficient capacity for Potable Water.

Solid Waste

The Level of Service (LOS) for the City of Cocoa is 1.2 tons of solid waste disposal per capita per year, and residential collection LOS shall be 2 times per week per household with green waste and recyclables once per week. The City contracts with Waste Management for the provision of solid waste, and the projected solid waste generated will be collected consistent with the adopted level of service standards.

Roadways (Transportation)

The minimum LOS for SR501 (Adamson Road) is D.

The Space Coast TPO Traffic Counts Report for 2018 indicates that for the SR524 to Pine Rd segment of Adamson Road, the average annual daily traffic trips is 6,100 and it is classified as Urban Minor Collector. Based on the Current Maximum Acceptable Volume (17,700) established by the Space Coast TPO, there is sufficient capacity on Adamson Road to support this development.

Recreation

The Level of Service (LOS) for Recreation is 1.25 acres per 1,000 population.

Pursuant to the City of Cocoa Comprehensive Plan EAR (October 2010) Data and Analysis, there exists a surplus of 118.34 acres of parks, which was determined to be more than sufficient to meet the needs of the citizens through 2020. The City's current population is 18,833 which requires 23.54 acres of park and recreation facilities. The EAR identified the City as having 323.58 acres (including the 165.09 acres Cocoa Conservation Area) available for residents. Thus, the City has sufficient recreation/parks to support the project and maintain the adopted LOS.

Schools

A School Capacity Availability Determination Letter was received from the Brevard County School Board for this project. It indicates that there is sufficient capacity at both Fairglen Elementary and Cocoa Junior/Senior High School.

RECOMMENDED MOTION:

Staff recommends the Planning & Zoning Board recommend **approval** to City Council of the Final PUD and the Preliminary Subdivision for Adamson Creek Phase 1C with the conditions set forth below, and

Staff recommends **approval** of the Large-Scale Site Plan with the conditions set forth below:

1. The Large-Scale Site Plan shall not be effective until and unless the Final PUD/Preliminary Subdivision has been approved by City Council.
2. Provide a revised Title Opinion with no date limitation to the search for property information.
3. Revise Plat note #5.C to read "An easement to the City of Cocoa and Brevard County for emergency access and maintenance over all private road rights-of-way, private drainage easement and storm water management tracts."
4. Revise Plat note #9 to eliminate the last two sentences.
5. Revise Plat note #15 as dedication should be to Brevard County not the City.
6. Revise the Open Space calculations table (Plat and Civil plans) to remove the line "Required Open Space (25% of 62.4 acres) - 15.6". Add a line indicating that 33.83 acres were provided in Phase 1A and

B or provide the full open space table.

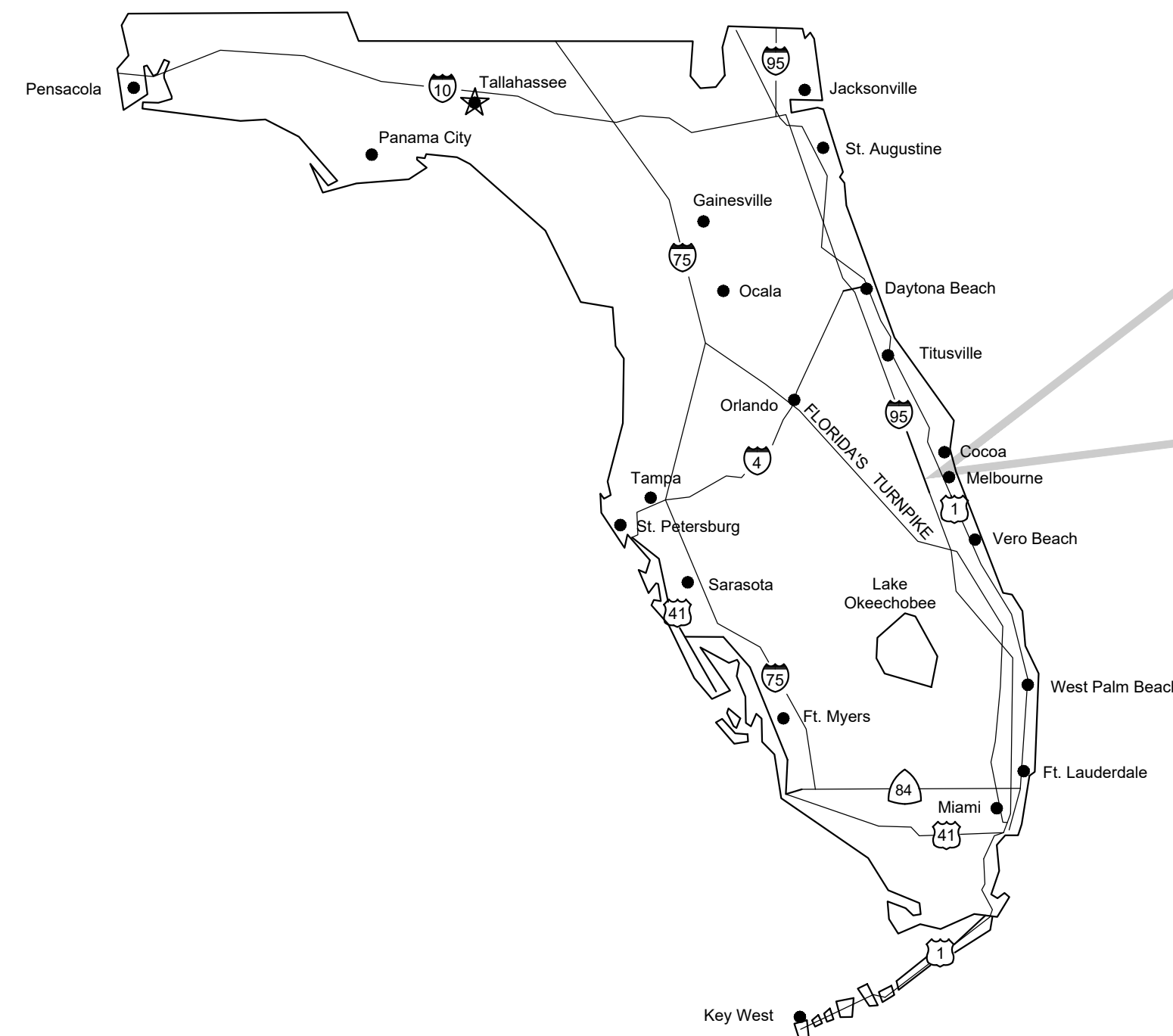
7. Provide a revised amenities schedule updating changes and including new tracts.
8. Remove the required condition from the original PUD approval that lighting be provided along the walking trail and boardwalk in Tracts M and I.
9. Provide drawing(s) of signage indicating that the walking trail around the stormwater pond in Tract I and in Tract M will only be open from dawn to dusk. Show location of said signs on civil plans.

ADAMSON CREEK

PHASE ONE-C

***PRELIMINARY SUBDIVISION/FINAL PUD/LARGE SCALE SITE PLAN
SECTION 22, TOWNSHIP 24 SOUTH, RANGE 35 EAST
CITY OF COCOA, BREVARD COUNTY, FLORIDA***

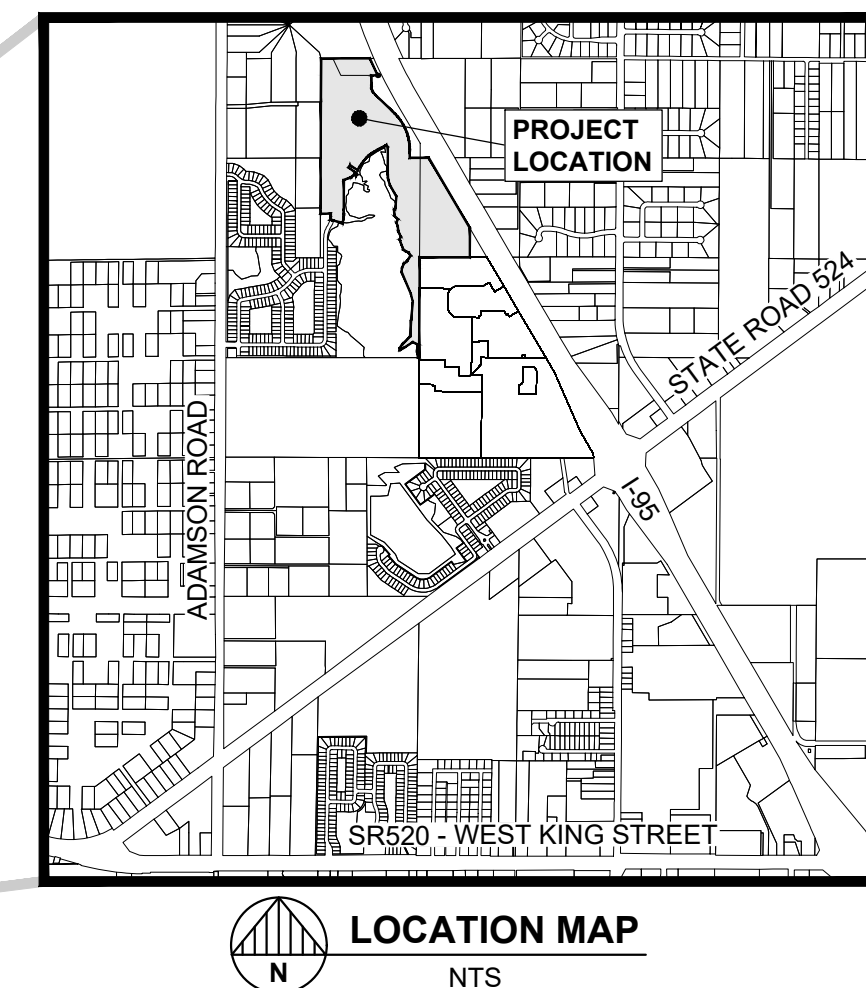
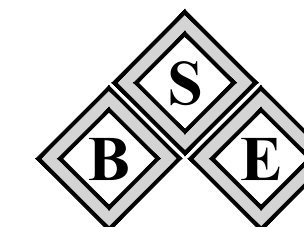
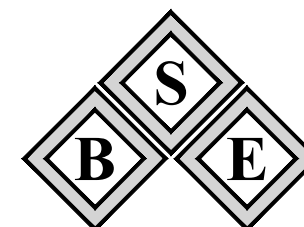
SHEET #	DRAWING #	SHEET TITLE
1	1145302_400_001	COVER SHEET
2	1145302_400_002	SYMBOLS AND ABBREVIATIONS
3	1145302_400_003	EXISTING CONDITIONS PLAN
3A	1145302_400_003A	OVERALL SITE PLAN WITH AMENITIES
3B	1145302_400_003B	AMENITIES DETAILS
4	1145302_400_004	OVERALL DRAINAGE PLAN
5	1145302_400_005	PAVING, GRADING, DRAINAGE AND AMENITIES PLAN
6	1145302_400_006	PAVING, GRADING, DRAINAGE AND AMENITIES PLAN
7	1145302_400_007	PAVING, GRADING, DRAINAGE AND AMENITIES PLAN
8	1145302_400_008	PAVING, GRADING, DRAINAGE AND AMENITIES PLAN
8A	1145302_400_008A	PAVING, GRADING, DRAINAGE AND AMENITIES PLAN
9	1145302_400_009	PAVING, GRADING, DRAINAGE AND AMENITIES ENLARGEMENT DETAILS
9A	1145302_400_09A	PAVING, GRADING, DRAINAGE AND AMENITIES ENLARGEMENT DETAILS
10	1145302_400_010	OVERALL UTILITY PLAN
11	1145302_400_011	UTILITY PLAN
12	1145302_400_012	UTILITY PLAN
13	1145302_400_013	UTILITY PLAN
13A	1145302_400_013A	UTILITY PLAN
14	1145302_400_014	ROADWAY PLAN AND PROFILE
15	1145302_400_015	ROADWAY PLAN AND PROFILE
16	1145302_400_016	ROADWAY PLAN AND PROFILE
17	1145302_400_017	ROADWAY PLAN AND PROFILE
18	1145302_400_018	GENERAL DETAILS
19	1145302_400_019	GENERAL DETAILS
20	1145302_400_020	FDOT DETAILS
21	1145302_400_021	FDOT DETAILS
22	1145302_400_022	BREVARD COUNTY PUBLIC WORKS ENGINEERING STANDARD DEVELOPMENT NOTES
23	1145302_400_023	BREVARD COUNTY DETAILS
24	1145302_400_024	SANITARY SEWER LIFT STATION PUMP SPECIFICATIONS
25	1145302_400_025	CITY OF COCOA WATER TECHNICAL PROVISIONS
29	1145302_400_029	CITY OF COCOA WATER DETAILS
27	1145302_400_027	CITY OF COCOA WATER TECHNICAL PROVISIONS
28	1145302_400_028	CITY OF COCOA WATER DETAILS
29	1145302_400_029	CITY OF COCOA WATER DETAILS
30	1145302_400_030	STORM WATER POLLUTION PREVENTION PLAN (SWPPP)
PRELIMINARY PLAT		
1	1145302_300_001	PRELIMINARY PLAT
2	1145302_300_002	PRELIMINARY PLAT
4	1145302_300_004	PRELIMINARY PLAT
4	1145302_300_004	PRELIMINARY PLAT
5	1145302_300_005	PRELIMINARY PLAT
BOUNDARY SURVEY		
1	1145302_100_001	BOUNDARY SURVEY
LANDSCAPE PLAN		
1	1145302_401_LS1	COVER SHEET
2	1145302_401_LS2	GENERAL LANDSCAPE PLAN AND NOTES
3	1145302_401_LS3	GENERAL LANDSCAPE PLAN
4	1145302_401_LS4	GENERAL LANDSCAPE PLAN AND DETAILS



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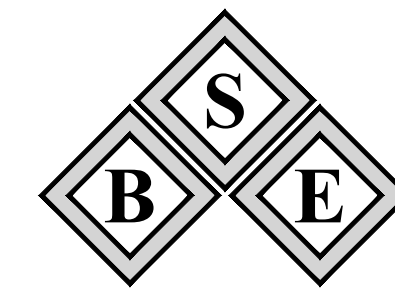
- PREPARED BY -

B.S.E. CONSULTANTS, INC.
CONSULTING - ENGINEERING - LAND SURVEYING
 312 SOUTH HARBOR CITY BOULEVARD, SUITE 4 MELBOURNE, FLORIDA 32901
 PHONE: (321) 725-3674 / FAX: (321) 723-1159
 CERTIFICATE OF PROFESSIONAL ENGINEERS BUSINESS AUTHORIZATION: 4905



TRACT DATA TABLE / OPEN SPACE CALCULATION				
TRACT	AREA (±ACRES)	AREA (±PERCENT)	USE	COMMON OPEN SPACE CREDIT (±ACRES)
A-C	1.30	0.67%	LANDSCAPE AMENITIES	0.77
A	0.09	0.05%	LANDSCAPE AMENITIES	0.09
B	1.14	0.59%	LANDSCAPE AMENITIES	0.61
C	0.07	0.04%	LANDSCAPE AMENITIES	0.07
D-I	36.95	19.15%	STORMWATER MANAGEMENT, OPEN SPACE AND RECREATIONAL AMENITIES	24.12
D	1.59	0.82%	STORMWATER MANAGEMENT, OPEN SPACE AND RECREATIONAL AMENITIES	1.59
E	4.05	2.10%	STORMWATER MANAGEMENT, OPEN SPACE AND RECREATIONAL AMENITIES *50% OF 48.26 = 24.13 (TOTAL USABLE POND)	4.05
F	2.44	1.26%	STORMWATER MANAGEMENT, OPEN SPACE AND RECREATIONAL AMENITIES *50% OF 48.26 = 24.13 (TOTAL USABLE POND)	2.44
G	4.23	2.19%	STORMWATER MANAGEMENT, OPEN SPACE AND RECREATIONAL AMENITIES *50% OF 48.26 = 24.13 (TOTAL USABLE POND)	4.23
H	3.84	1.99%	STORMWATER MANAGEMENT, OPEN SPACE AND RECREATIONAL AMENITIES *50% OF 48.26 = 24.13 (TOTAL USABLE POND)	3.84
I	20.80	10.78%	STORMWATER MANAGEMENT, OPEN SPACE AND RECREATIONAL AMENITIES *50% OF 48.26 = 24.13 (TOTAL USABLE POND)	7.97
J-W	9.19	4.76%	OPEN SPACE AND RECREATIONAL AMENITIES	6.78
J	0.34	0.18%	OPEN SPACE AND RECREATIONAL AMENITIES	0.34
K	0.30	0.16%	OPEN SPACE AND RECREATIONAL AMENITIES	0.30
L	0.96	0.50%	OPEN SPACE AND RECREATIONAL AMENITIES	0.96
M	7.14	3.70%	OPEN SPACE AND RECREATIONAL AMENITIES	4.73
M-1	0.16	0.08%	DRAINAGE, OPEN SPACE AND RECREATION AMENITIES	0.16
N	0.15	0.08%	OPEN SPACE AND RECREATIONAL AMENITIES	0.15
O	0.14	0.07%	OPEN SPACE AND RECREATIONAL AMENITIES	0.14
W	0.05	0.03%	OPEN SPACE AND RECREATIONAL AMENITIES	0.05
P-V	65.79	34.10%	CONSERVATION OF PRESERVED WETLANDS AND UPLANDS/PASSIVE RECREATIONAL USE	16.57
P	3.55	1.84%	UPLAND AND WETLAND OPEN SPACE	1.96
Q	6.29	3.26%	UPLAND AND WETLAND OPEN SPACE	1.57
R	45.05	23.35%	UPLAND AND WETLAND OPEN SPACE	8.94
S	4.05	2.10%	UPLAND AND WETLAND OPEN SPACE	2.00
V	6.85	3.55%	UPLAND AND WETLAND OPEN SPACE	2.10
T-U	1.14	0.07%	LIFT STATIONS	0.00
T	0.10	0.05%	LIFT STATIONS	0.00
U	0.04	0.02%	LIFT STATIONS	0.00
1	0.69	0.36%	RETAINED BY THE DEVELOPER	0.00
1	0.69	0.36%	RETAINED BY THE DEVELOPER	0.00
N/A	63.46	32.89%	RESIDENTIAL DEVELOPMENT (406 LOTS)	0.00
N/A	15.44	8.00%	ROAD RIGHT-OF-WAY	0.00
	48.24	25.00%	TOTAL RECREATION COMMON OPEN SPACE	48.24
	192.98	100.00%	TOTAL PUD BOUNDARY	192.98
		25.00%	REQUIRED OPEN SPACE (25% OF 192.98 AC = 48.24 acres)	48.24
		25.00%	PROVIDED COMMON OPEN SPACE	48.24
*50% OF 48.24 = 24.12 (TOTAL USABLE POND)				

VERTICAL DATUM: NGVD29
CONVERSION FROM NGVD29 TO NAVD88: SUBTRACT 1.38' FROM NGVD29



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STATE OF FLORIDA, No. 33659 No. 4151

HASSAN A. KAMAL, P.E.
STATE OF FLORIDA, No. 41951

DATE:	07/13/20
DESIGN/DRAWN:	SMG/RME

PROJECT TITLE

**ADAMSON CREEK
PHASE ONE-C**

SHEET TITLE

COVER SHEET

PROJECT NO

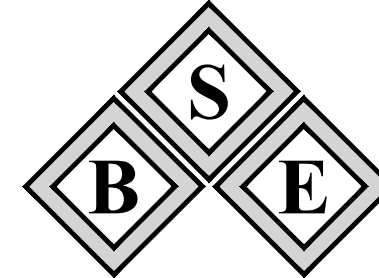
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DRAWING NO.

1145302 400 001

SHEET

1 of 35



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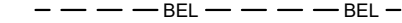
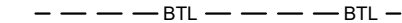
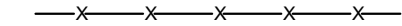
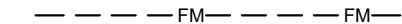
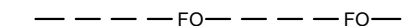
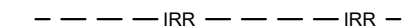
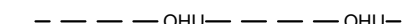
LANDSCAPE SYMBOL LEGEND

- | | |
|---|-------------------|
|  | CABBAGE PALM TREE |
|  | PALM TREE |
|  | PINE TREE |
|  | OAK TREE |
|  | TREE LINE |
|  | SHRUB 1 |
|  | SHRUB 2 |

IRRIGATION SYMBOL LEGEND

- | | |
|---|---------------|
|  | SPRINKLER |
|  | RAINBIRD 1/4 |
|  | RAINBIRD 1/2 |
|  | RAINBIRD 3/4 |
|  | RAINBIRD FULL |

LINE TYPES

- | | |
|---|---|
|  | EXISTING BURIED ELECTRIC |
|  | EXISTING BURIED TELEPHONE |
|  | EXISTING CABLE TV |
|  | FENCE (TYPE, HEIGHT AS NOTED) |
|  | EXISTING FORCE MAIN (SIZE, TYPE AS NOTED) |
|  | EXISTING FIBER OPTIC |
|  | EXISTING GAS LINE |
|  | EXISTING IRRIGATION (SIZE, TYPE AS NOTED) |
|  | EXISTING OVERHEAD ELECTRIC |
|  | EXISTING OVERHEAD UTILITY |
|  | EXISTING REUSE MAIN (SIZE, TYPE AS NOTED) |
|  | SILT FENCE |
|  | EXISTING SANITARY SEWER (SIZE, TYPE AS NOTED) |
|  | EXISTING WATER MAIN (SIZE, TYPE AS NOTED) |
|  | CENTERLINE |
|  | BASIN BOUNDARY |
|  | COLUMN / WALL |
|  | GUARD RAIL |
|  | TREE LINE |
|  | DRAINAGE PIPE (SIZE, TYPE AS NOTED) |

SYMBOL LEGEND

-  EXISTING SANITARY MANHOLE
 EXISTING MANHOLE (TYPE NOTED)
 PROPOSED MANHOLE
 TYPE 2 INLET
 TYPE 3 INLET
 TYPE 4 INLET
 TYPE 5 INLET
 CATCH BASIN
 YARD DRAIN
 FLARED END SECTION
 MITERED END SECTION
 EXISTING GATE VALVE
 PROPOSED GATE VALVE
 EXISTING FIRE HYDRANT
 PROPOSED FIRE HYDRANT
 EXISTING BLOW-OFF
 PROPOSED BLOW-OFF ASSEMBLY WITH
 EXISTING FIRE DEPT. CONNECTION
 PROPOSED FIRE DEPT. CONNECTION
 EXISTING WATER METER
 PROPOSED WATER METER
 EXISTING WATER SERVICE
 PROPOSED WATER SERVICE
 EXISTING REUSE SERVICE
 PROPOSED REUSE SERVICE
 SANITARY SERVICE
 STUB OUT
 EXISTING AIR RELEASE VALVE
 AIR RELEASE VALVE
 EXISTING CLEAN OUT
 CLEAN OUT
 CROSS TEE
 TEE
 BACK FLOW PREVENTION DEVICE
 REDUCER
 POST INDICATOR VALVE
 UTILITY RISER
 CONCRETE POWER POLE
 WOOD UTILITY POLE
 GUY WIRE
 GUY POLE
 EXISTING LIGHT POLE
 PROPOSED LIGHT POLE
 EXISTING SIGN
 PROPOSED SIGN
 DIRT PAD ELEVATION
 FINISHED FLOOR ELEVATION
 TYPE A LOT DRAINAGE
 TYPE B LOT DRAINAGE
 LOT NUMBER
 FLOW ARROW

ABBREVIATIONS

- | | |
|--------|--------------------------------------|
| . | MINUTES/FEET |
| ^ | SECONDS/INCHES |
| ° | DEGREES |
| (C) | CALCULATED DIMENSION |
| (D) | DEED DIMENSION |
| (F) | FIELD MEASURED DIMENSION |
| (M) | METER(S) |
| (NR) | NOT RADIAL |
| (P) | PLAT DIMENSION |
| A/C | AIR CONDITIONER |
| AC | ACRES |
| ADS | ADVANCED DRAINAGE SYSTEMS (C/P) |
| AL | ARC LENGTH |
| ARV | AIR RELEASE VALVE |
| AVE | AVENUE |
| BLVD | BOULEVARD |
| BM | BENCH MARK |
| BVC | BEGIN VERTICAL CURVE |
| BVP | BEGIN VERTICAL PROFILE |
| CL | CENTERLINE |
| C/O | CLEAN OUT |
| CA | CENTRAL ANGLE |
| CATV | CABLE TELEVISION |
| CB | CHORD BEARING |
| CBS | CONCRETE BLOCK STRUCTURE |
| CH | CHORD LENGTH |
| CM | CONCRETE MONUMENT |
| CMP | CORRUGATED METAL PIPE |
| CONC | CONCRETE |
| COR | CORNER |
| CPP | CORRUGATED PLASTIC PIPE |
| DE | DRAINAGE EASEMENT |
| DEL | DELTA/CENTRAL ANGLE |
| DI | DITCH INLET/ CATCH BASIN |
| DIP | DUCTILE IRON PIPE |
| DS | DRAINAGE STRUCTURE |
| E | EAST |
| EG | EXISTING GROUND |
| ELEC | ELECTRIC |
| ELELEV | ELEVATION |
| EOP | EDGE OF PAVEMENT |
| EW | EDGE OF WATER |
| ERCP | ELLIPTICAL REINFORCED CONCRETE PIPE |
| ESMT | EASEMENT |
| EVC | END VERTICAL CURVE |
| EVP | END VERTICAL PROFILE |
| EX | EXISTING |
| FD | FOUND |
| FDC | FIRE DEPARTMENT CONNECTION |
| FDOT | FLORIDA DEPARTMENT OF TRANSPORTATION |
| FES | FLARED END SECTION |
| FFE | FINISHED FLOOR ELEVATION |
| FH | FIRE HYDRANT |
| FL | FLOW LINE |
| FM | FORCE MAIN |
| FPL | FLORIDA POWER AND LIGHT |
| FT | FEET |
| GLO | GENERAL LAND OFFICE |
| GR | GROUND |
| GV | GATE VALVE(S) |
| HIC | HANDICAP |
| HP | HIGH POINT |
| HWY | HIGHWAY |
| ID# | IDENTIFICATION NUMBER |
| INV | INVERT |
| IP | IRON PIPE |
| IPC | IRON PIPE AND CAP |
| IR | IRON ROD |
| IRC | IRON ROD AND CAP |
| JCT | JUNCTION |
| LF | LINEAR FEET |
| L | LEFT |
| LP | LOW POINT |

ABBREVIATIONS

- | | |
|--------|---------------------------------------|
| LS | LANDSCAPE |
| LWP | LIGHTER WOOD POST |
| MAX | MAXIMUM |
| MES | MITERED END SECTION |
| MH | MANHOLE |
| MHW | MEAN HIGH WATER |
| MI | MILE(S) |
| MIN | MINIMUM |
| N | NORTH |
| N&D | NAIL AND DISK |
| NAV088 | NORTH AMERICAN VERTICAL DATUM 1988 |
| NGVD29 | NATIONAL GEODETIC VERTICAL DATUM 1929 |
| NG | NATURAL GROUND |
| NIC | NOT IN CONTRACT |
| NTS | NOT TO SCALE |
| NWL | NORMAL WATER LEVEL |
| OHE | OVERHEAD ELECTRIC/ UTILITY |
| OR/ORB | OFFICIAL RECORDS BOOK |
| PL | PROPERTY LINE |
| PAVT | PAVEMENT |
| PB | PLAT BOOK |
| PC | POINT OF CURVATURE |
| PCC | POINT OF COMPOUND CURVATURE |
| PCP | PERMANENT CONTROL POINT |
| PD&UE | PUBLIC DRAINAGE AND UTILITY EASEMENT |
| PDE | PUBLIC DRAINAGE EASEMENT |
| PG(S) | PAGE(S) |
| PGL | PROPOSED GRADE LINE |
| PK | PARKER-KALEN |
| POB | POINT OF BEGINNING |
| POC | POINT OF COMMENCEMENT |
| POL | POINT ON LINE |
| PP | POWER/UTILITY POLE |
| PR | PRIVATE |
| PRC | POINT OF REVERSE CURVATURE |
| PT | POINT OF TANGENCY |
| PVC | POLYVINYL CHLORIDE PIPE |
| PVI | POINT OF VERTICAL INTERSECTION |
| R | RADIUS/RIGHT |
| RW | RIGHT-OF-WAY |
| RAD | RADIAL |
| RB | RADIAL BEARING |
| RCP | REINFORCED CONCRETE PIPE |
| REF | REFERENCE |
| RGE | RANGE |
| RM | REUSE MAIN |
| RND | ROUND |
| RPB | ROAD PLAT BOOK |
| RR | RAILROAD |
| S | SOUTH |
| SEC | SECTION |
| SF | SQUARE FOOT |
| SMH | SEWER MANHOLE |
| SPK | SPIKE |
| SS | SANITARY SEWER |
| ST | STREET |
| STA | STATION |
| SVC | SERVICE |
| SW | SIDEWALK |
| TEL | TELEPHONE |
| TOB | TOP OF BANK |
| TOE | TOE OF SLOPE |
| TWP | TOWNSHIP |
| TYP | TYPICAL |
| UE | UTILITY EASEMENT |
| UG | UNDERGROUND |
| UTIL | UTILITY |
| W | WEST |
| WM | WATER MAIN |

DATE: 07/13/2012

DESIGN/DRAWN: SMG/RMI

PROJECT TITLE

**ADAMSON CREEK
PHASE ONE-C**

SHEET TITLE

SYMBOLS AND ABBREVIATIONS

PROJECT NO.

11453.02

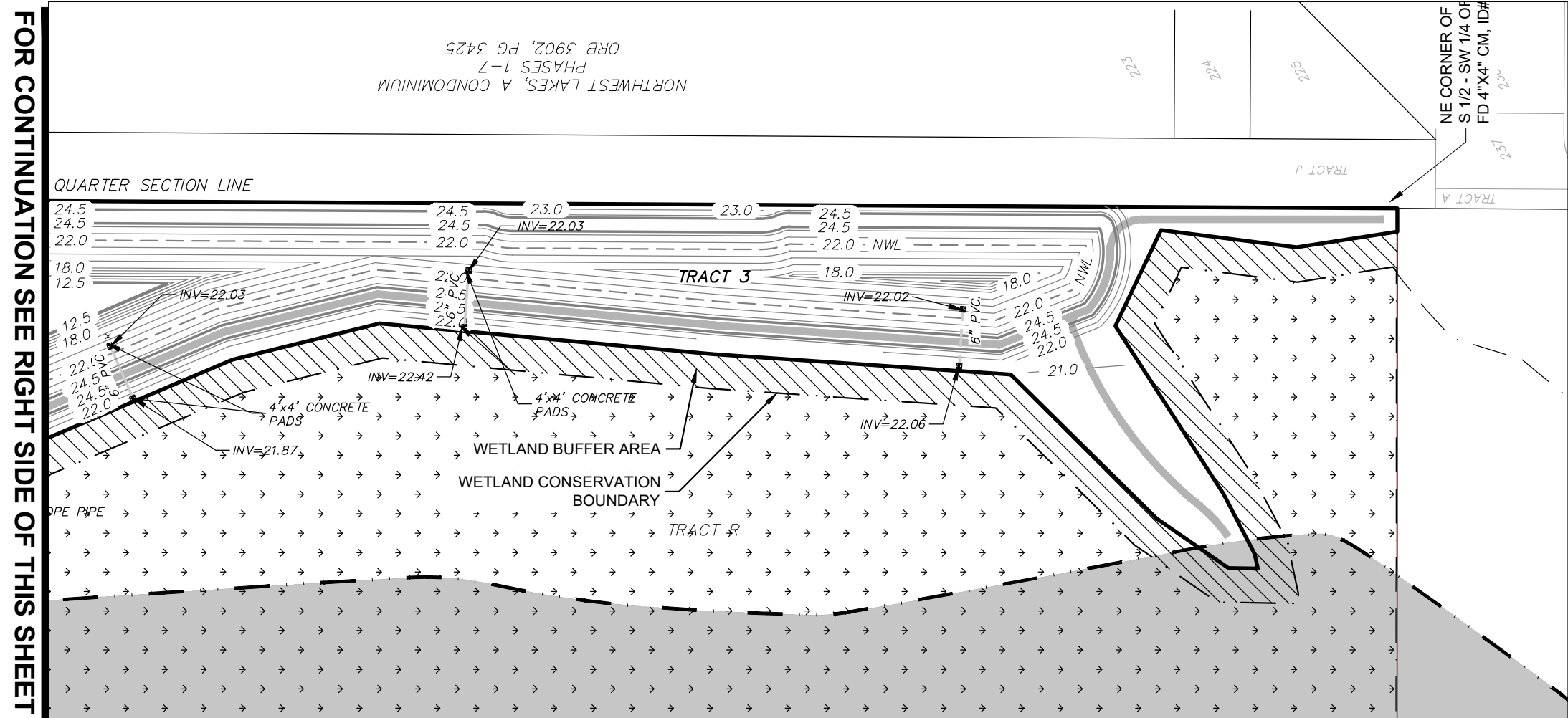
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SHEET

2 of 35

FOR CONTINUATION SEE RIGHT SIDE OF THIS SHEET

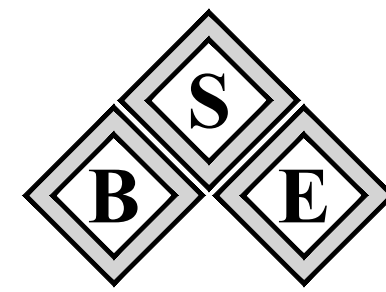


NOTES:

- PONDS 5 AND 6 HAVE BEEN CONSTRUCTED DURING PHASE ONE-A.
- NO CLEARING OR CONSTRUCTION IS ALLOWED WITHIN THE WETLAND CONSERVATION AREA.
- INSTALL INLET PROTECTION ON ALL INLETS.
- CITY OF COCOA ZONING: ARTICLE XI, SECTION 17 - PLANNED UNIT DEVELOPMENT DISTRICT (PUD)
- TOTAL ACRES = 62.4 AC
- REFER TO DRAINAGE STRUCTURE TABLE ON SHEET 9 FOR INFORMATION ON EXISTING DRAINAGE STRUCTURES WITHIN PHASE 1C SUBDIVISION.
- REFER TO SHEETS 6-8 FOR INFORMATION ON EXISTING DRAINAGE STRUCTURES IN POND #5.

LEGEND

- STORM SEWER
- WATER MAIN
- REUSE MAIN
- SANITARY MAIN
- SANITARY FORCE MAIN
- BOUNDARY LINE
- FLOOD ZONE
- WETLAND AREA / CONSERVATION AREA
- WETLAND BUFFER AREA / CONSERVATION AREA
- COMMON CONCRETE SIDEWALK
- FLOOD ZONE
- LOT NUMBER
- EXISTING ELEVATION
- NORMAL WATER LEVEL

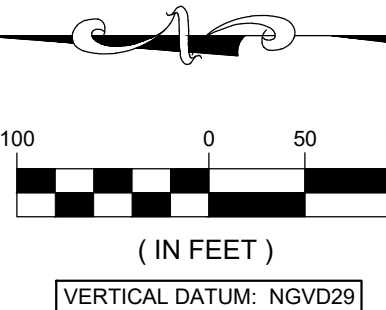
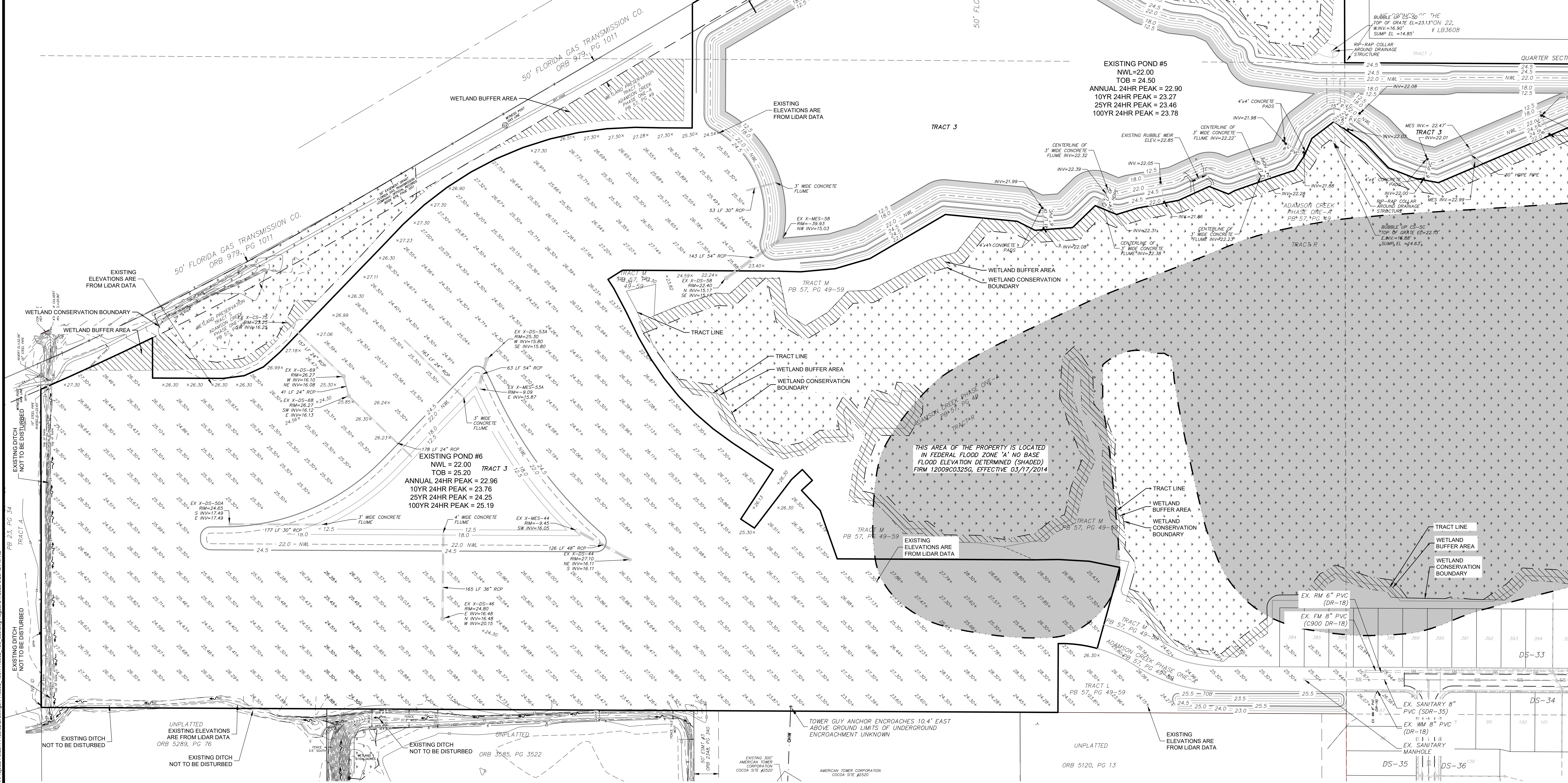


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CERTIFICATE OF LAND SURVEYING
BUSINESS AUTHORIZATION: LB0004005

SCOTT M. GLAUBITZ, P.E. & P.L.S.
STATE OF FLORIDA, No. 38659 No. 4151

HASSAN A. KAMAL, P.E.
STATE OF FLORIDA, No. 41951

FOR CONTINUATION SEE TOP LEFT OF THIS SHEET



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PROJECT TITLE

**ADAMSON CREEK
PHASE ONE-C**

SHEET TITLE

**EXISTING
CONDITIONS PLAN**

PROJECT NO.

11453.02

DRAWING NO.

1145302_400_003

SHEET

3 of 35

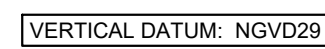
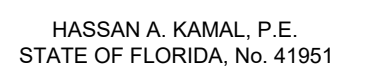
SYMBOLS SHOWN ARE GRAPHIC IN NATURE; DUE TO SCALE. ALL DESIGN ELEMENTS ARE NOT NECESSARILY SHOWN ON PLAN VIEWS. THE CONTRACTOR SHALL ALSO REFER TO SPECIFICATION AND DETAIL SHEETS AS WELL AS THE COMPLETE PLAN SET.

10-STATION FITNESS COURSE SHALL BE SUPERIOR PLAYGROUNDS
MODEL 60019400XX OR EQUIVALENT, INCLUDING THREE LARGE
INSTRUCTIONAL SIGNS AND THE FOLLOWING STATIONS.

- F61 VERTICAL LADDER
- F62 BEAM JUMP
- F63 STRETCHING POST
- F64 PULL-UP AND CHIN-UP BARS
- F65 JUMP TOUCH BEAM
- F66 PARALLEL BARS
- F67 SIT-UP BENCH
- F68 SPRING-UP BARS
- F69 HORIZONTAL LADDER
- F610 BALANCE BEAM

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3. INSTALL INLET PROTECTION ON ALL INLETS.
4. SEE SHEET 18 FOR PAVEMENT DETAILS.
5. SEE SHEET 19 FOR TYPICAL LOT GRADING DETAILS.
6. SEE SHEET 20 FOR FDOT DRAINAGE STRUCTURE DETAILS.
7. SEE ENLARGEMENT DETAILS ON SHEET 9 FOR SIGNAGE AND PAVEMENT MARKING CALLOUTS.
8. SEE SHEET 9 FOR DRAINAGE STRUCTURE TABLE.
9. SEE SHEET 3B FOR ADDITIONAL AMENITIES INFORMATION.

	PROPOSED STORM SEWER
	EXISTING STORM SEWER
	PROPOSED WATER MAIN
	PROPOSED REUSE MAIN
	PROPOSED SANITARY FORCE MAIN
	LOT NUMBER
	DRAINAGE BASIN LINE
	PROPERTY LINE
	BUILDING SETBACK
	SILT FENCE
	WETLAND CONSERVATION AREA
	WETLAND BUFFER CONSERVATION AREA
	COMMON AREA CONCRETE SIDEWALKS SHALL BE CONSTRUCTED AS PART OF INFRASTRUCTURE IMPROVEMENTS
	HOME BUILDER AREA CONCRETE SIDEWALKS SHALL BE CONSTRUCTED AS PART OF HOME CONSTRUCTION
	RECREATIONAL AREA SIDEWALKS SHALL BE CONSTRUCTED AS PART OF INFRASTRUCTURE IMPROVEMENTS
	RECREATIONAL AREA MULCH PATH SHALL BE CONSTRUCTED AS PART OF INFRASTRUCTURE IMPROVEMENTS
	PROPOSED ELEVATION
	MATCH EXISTING GROUND
	DRAINAGE EASEMENT
	DESIGN HIGH WATER
	DRAINAGE STRUCTURE
	ELEVATION
	GRADE BREAK
	HIGH POINT
	LOW POINT
	NORMAL WATER LEVEL
	POINT OF VERTICAL INTERSECTION
	STORM WATER MANAGEMENT
	VERTICAL CURVE
	FITNESS STATION



TE:	07/13/
SIGN/DRAWN:	SMG/RM

**DAMSON CREEK
PHASE ONE-C**

OVERALL SITE PLAN WITH AMENITIES

3A of 35

VERTICAL DATUM: NGVD29
CONVERSION FROM NGVD29 TO NAVD88: SUBTRACT 1.38' FROM NGVD29

SYMBOLS SHOWN ARE GRAPHIC IN NATURE; DUE TO SCALE, ALL DESIGN ELEMENTS ARE NOT NECESSARILY SHOWN ON PLAN VIEWS. THE CONTRACTOR SHALL ALSO REFER TO SPECIFICATION AND DETAIL SHEETS AS WELL AS THE COMPLETE PLAN SET.

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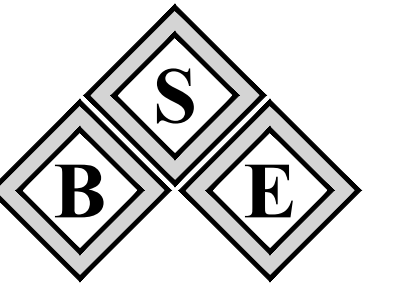
FOR CONTINUATION SEE BELOW RIGHT

STORM PIPE NOTES:

1. FOR RCP, THE LAST TWO (2) JOINTS AT THE PIPE END SECTIONS SHALL INCLUDE PIPE END TIE BARS; SEE SHEET 11 FOR DETAILS.
2. HP STORM PIPE (HIGH-PERFORMANCE POLYPROPYLENE PIPE) MAY BE USED IN LIEU OF REINFORCED CONCRETE PIPE (RCP).
3. SEE SHEET 9 FOR DRAINAGE STRUCTURE TABLE.

LEGEND

- PROPOSED STORM SEWER
- EXISTING STORM SEWER
- PROPOSED WATER MAIN
- PROPOSED REUSE MAIN
- PROPOSED SANITARY FORCE MAIN
- LOT NUMBER
- DRAINAGE BASIN LINE
- PROPERTY LINE
- BUILDING SETBACK
- SILT FENCE
- WETLAND CONSERVATION AREA
- WETLAND BUFFER CONSERVATION AREA
- COMMON AREA CONCRETE SIDEWALKS SHALL BE CONSTRUCTED AS PART OF INFRASTRUCTURE IMPROVEMENTS
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- RECREATIONAL AREA MULCH PATH SHALL BE CONSTRUCTED AS PART OF INFRASTRUCTURE IMPROVEMENTS
- PROPOSED ELEVATION
- MATCH EXISTING GROUND
- DRAINAGE EASEMENT
- DESIGN HIGH WATER
- DRAINAGE STRUCTURE
- ELEVATION
- GRADE BREAK
- HIGH POINT
- LOW POINT
- NORMAL WATER LEVEL
- POINT OF VERTICAL INTERSECTION
- STORM WATER MANAGEMENT
- VERTICAL CURVE
- FITNESS STATION

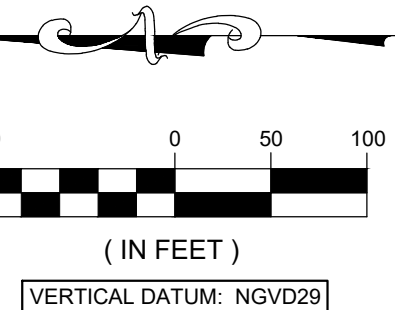


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BUSINESS AUTHORIZATION: LB0004005

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STATE OF FLORIDA, No. 33659 No. 4151

HASSAN A. KAMAL, P.E.
STATE OF FLORIDA, No. 41951



NOTES:

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PROJECT TITLE

**ADAMSON CREEK
PHASE ONE-C**

SHEET TITLE

**OVERALL
DRAINAGE PLAN**

PROJECT NO.

11453.02

DRAWING NO.

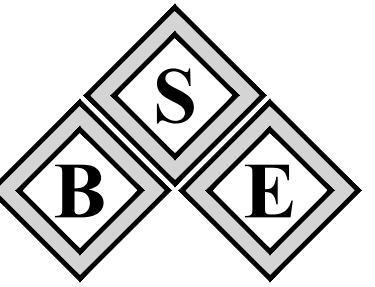
1145302_400_004

SHEET

4 of 35

VERTICAL DATUM: NGVD29 CONVERSION FROM NGVD29 TO NAVD88: SUBTRACT 1.38' FROM NGVD29

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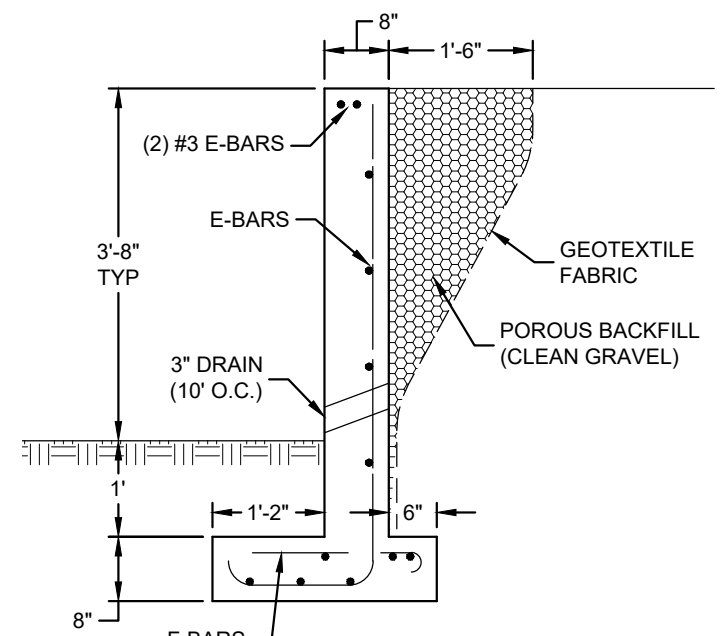


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LAND SURVEYING

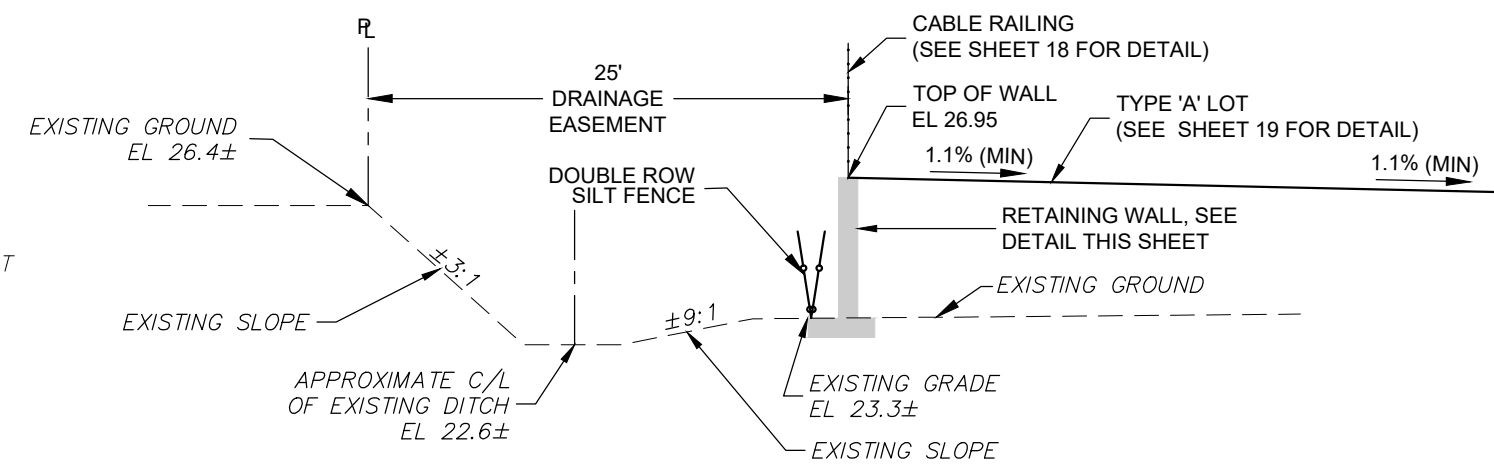
312 SOUTH HARBOR CITY BOULEVARD, SUITE 4
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CERTIFICATE OF LAND SURVEYING
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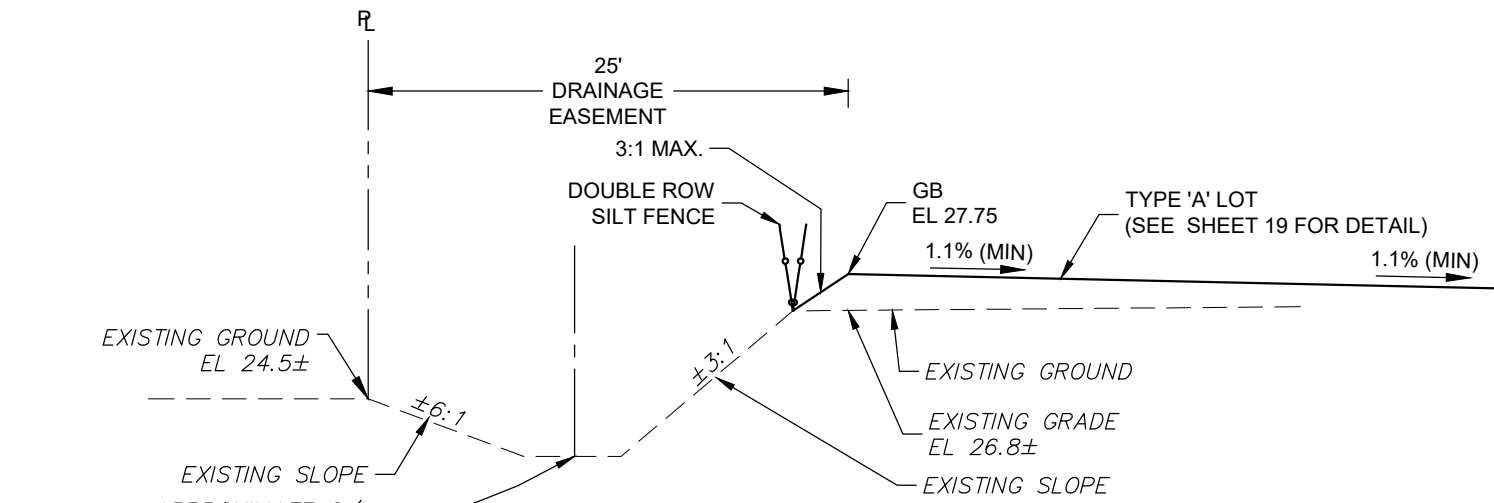
HASSAN A. KAMAL, P.E.
STATE OF FLORIDA, No. 41951



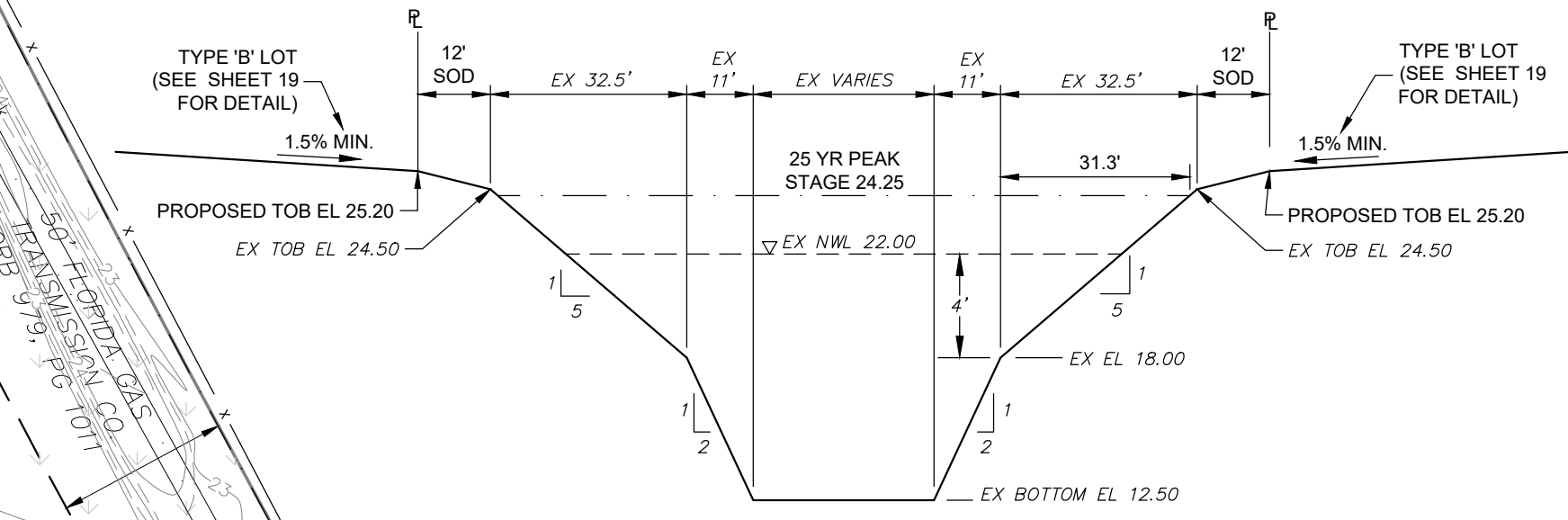
RETAINING WALL DETAIL
N.T.S.



SECTION D-D
N.T.S.



SECTION E-E
N.T.S.



SECTION F-F
(EX POND #6)
N.T.S.

BUILDING SETBACKS
FRONT: 25'
REAR: 25' (FROM PERIMETER OF THE PUD)
SIDE: 5'
SIDE (CORNER): 25'
REFER TO PLAT FOR LOT DIMENSIONS

LEGEND

- PROPOSED STORM SEWER
- EXISTING STORM SEWER
- PROPOSED WATER MAIN
- PROPOSED REUSE MAIN
- PROPOSED SANITARY FORCE MAIN
- GRADE BREAK LINE
- LOT NUMBER
- PROPERTY LINE
- BUILDING SETBACK
- SILT FENCE
- WETLAND CONSERVATION AREA
- WETLAND BUFFER CONSERVATION AREA
- COMMON AREA CONCRETE SIDEWALKS
SHALL BE CONSTRUCTED AS PART OF
INFRASTRUCTURE IMPROVEMENTS
- HOME BUILDER AREA CONCRETE
SIDEWALKS SHALL BE CONSTRUCTED
AS PART OF HOME CONSTRUCTION
- RECREATIONAL AREA SIDEWALKS
SHALL BE CONSTRUCTED AS PART OF
INFRASTRUCTURE IMPROVEMENTS
- RECREATIONAL AREA MULCH PATH
SHALL BE CONSTRUCTED AS PART OF
INFRASTRUCTURE IMPROVEMENTS
- FINISHED CENTERLINE OF ROAD
ELEVATION
- TYPE 'A' LOT
LOT DRAINS REAR TO FRONT
- TYPE 'B' LOT
LOT WITH SPLIT DRAINAGE
- TYPE 'C' LOT
LOT DRAINS FRONT TO REAR
- FINISHED FLOOR ELEVATION (FFE)
- DIRT PAD ELEVATION
- EXISTING GROUND SPOT ELEVATION
- DESIGN SPOT ELEVATION
- MATCH EXISTING GROUND
- DRAINAGE EASEMENT
- DESIGN HIGH WATER
- DRAINAGE STRUCTURE
- ELEVATION
- GRADE BREAK
- HIGH POINT
- LOW POINT
- NORMAL WATER LEVEL
- POINT OF VERTICAL INTERSECTION
- VERTICAL CURVE
- PROPOSED LIGHT POLE
- FITNESS STATION

NOTES:

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PROJECT TITLE

**ADAMSON CREEK
PHASE ONE-C**

SHEET TITLE

**PAVING,
GRADING,
DRAINAGE AND
AMENITIES PLAN**

PROJECT NO.

11453.02

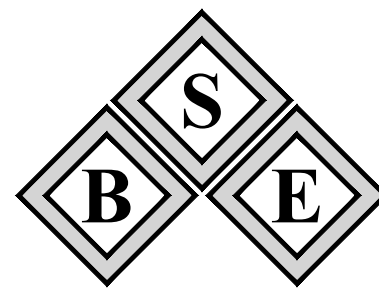
DRAWING NO.

1145302_400_005

SHEET

5 of 35

FOR CONTINUATION SEE SHEET 6

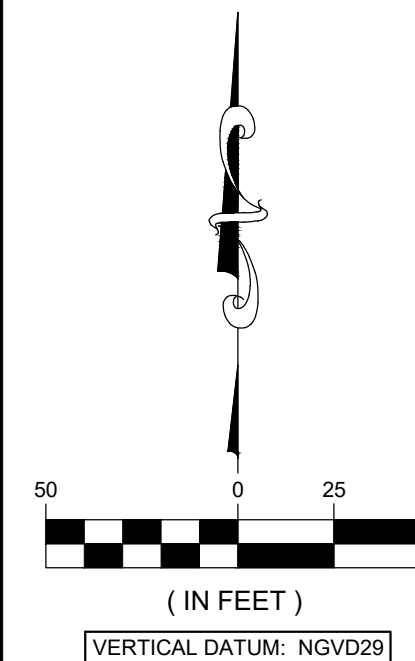


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BUSINESS AUTHORIZATION: #05
CERTIFICATE OF LAND SURVEYING
BUSINESS AUTHORIZATION: LB000405

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HASSAN A. KAMAL, P.E.
STATE OF FLORIDA, No. 41951



REVISION	DATE	DESCRIPTION
1	08/19/20	CITY COMMENTS
2	08/13/20	CITY COMMENTS
3	07/31/20	CITY COMMENTS

DATE: 07/13/20
DESIGN/DRAWN: SMG/RMB

PROJECT TITLE

**ADAMSON CREEK
PHASE ONE-C**

SHEET TITLE

**PAVING,
GRADING,
DRAINAGE AND
AMENITIES PLAN**

PROJECT NO.

11453.02

DRAWING NO.

1145302_400_006

SHEET

6 of 35

FOR CONTINUATION SEE SHEET 5

FOR CONTINUATION SEE SHEET 8A

LEGEND

- PROPOSED STORM SEWER
- EXISTING STORM SEWER
- PROPOSED WATER MAIN
- PROPOSED REUSE MAIN
- PROPOSED SANITARY FORCE MAIN
- GRADE BREAK LINE
- LOT NUMBER
- PROPERTY LINE
- BUILDING SETBACK
- SILT FENCE
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- RECREATIONAL AREA MULCH PATH SHALL BE CONSTRUCTED AS PART OF INFRASTRUCTURE IMPROVEMENTS
- FINISHED CENTERLINE OF ROAD ELEVATION
- TYPE 'A' LOT LOT DRAINS REAR TO FRONT
- TYPE 'B' LOT LOT WITH SPLIT DRAINAGE
- TYPE 'C' LOT LOT DRAINS FRONT TO REAR
- FINISHED FLOOR ELEVATION (FFE)
- DIRT PAD ELEVATION
- EXISTING GROUND SPOT ELEVATION
- DESIGN SPOT ELEVATION
- MATCH EXISTING GROUND DRAINAGE EASEMENT
- DESIGN HIGH WATER DRAINAGE STRUCTURE ELEVATION
- GRADE BREAK
- HIGH POINT
- LOW POINT
- NORMAL WATER LEVEL
- POINT OF VERTICAL INTERSECTION
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- PROPOSED LIGHT POLE
- FITNESS STATION

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FOR CONTINUATION SEE SHEET 7

EXISTING POND #5
NW=22.00
TOB = 24.50
ANNUAL 24HR PEAK = 22.90
10YR 24HR PEAK = 23.27
25YR 24HR PEAK = 23.46
100YR 24HR PEAK = 23.78

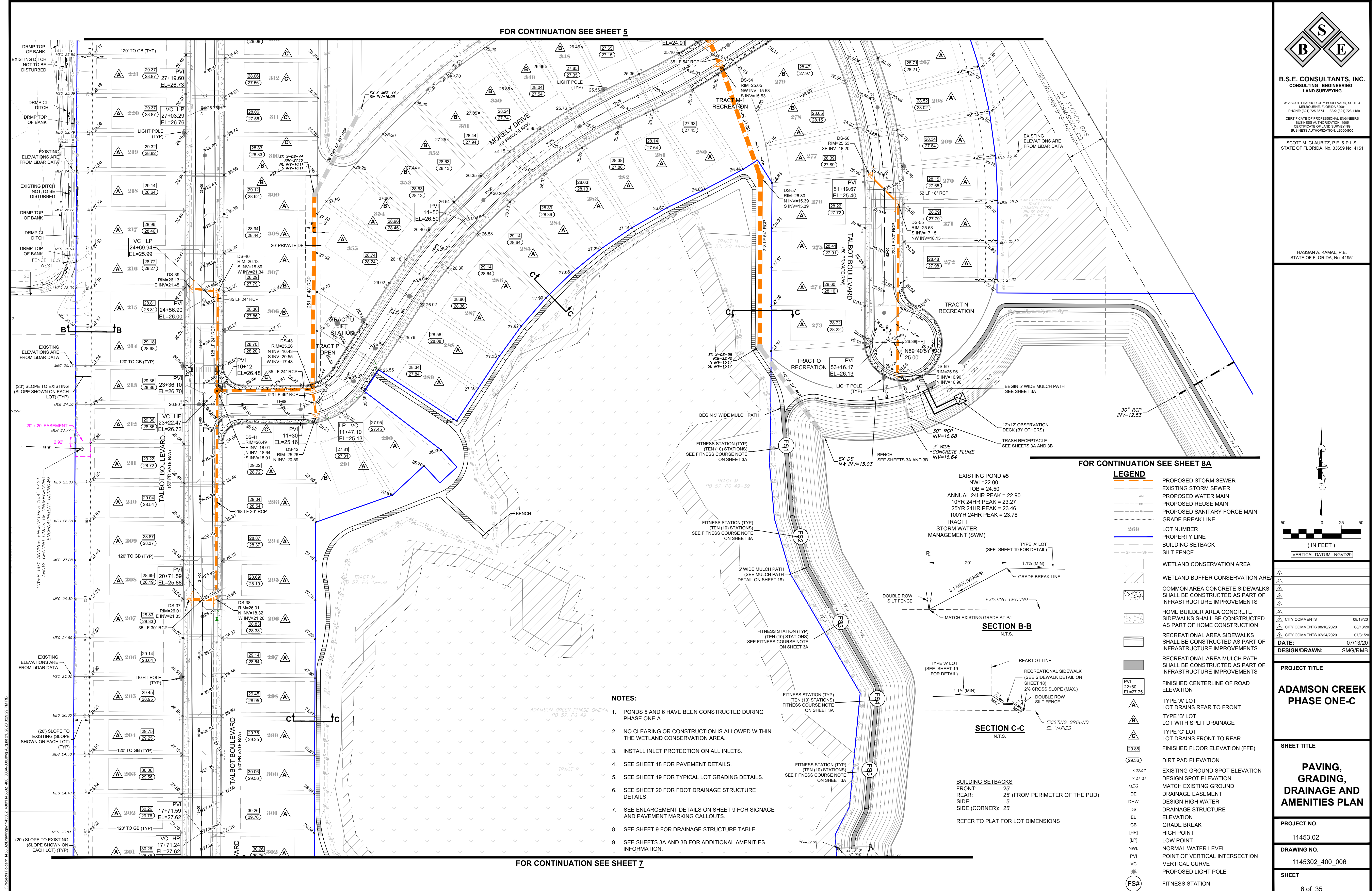
STORM WATER
MANAGEMENT (SWM)

SECTION B-B N.T.S.

SECTION C-C N.T.S.

BUILDING SETBACKS
FRONT: 25'
REAR: 25' (FROM PERIMETER OF THE PUD)
SIDE: 5'
SIDE (CORNER): 25'

REFER TO PLAT FOR LOT DIMENSIONS



ADAMSON CREEK PHASE ONE-C

PAVING, GRADING, DRAINAGE AND AMENITIES PLAN

PROJECT NO. 11453.02
DRAWING NO.

LEGEND:

- EXISTING STORM SEWER
- PROPOSED WATER MAIN
- PROPOSED REUSE MAIN
- PROPOSED SANITARY FORCE MAIN
- GRADE BREAK LINE
- LOT NUMBER
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- MATCH EXISTING GROUND
- DRAINAGE EASEMENT
- DESIGN HIGH WATER
- DRAINAGE STRUCTURE
- ELEVATION
- GRADE BREAK
- [HP] HIGH POINT
- [LP] LOW POINT
- NWL NORMAL WATER LEVEL
- PVI POINT OF VERTICAL INTERSECTION
- VC VERTICAL CURVE
- PROPOSED LIGHT POLE
- FITNESS STATION

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FOR CONTINUATION SEE SHEET 8A

N.T.S.	9. SEE SHEETS 3A AND 3B FOR ADDITIONAL AMENITIES INFORMATION.	SHEET
--------	---	-------

INFORMATION.

N.T.S.	9. SEE SHEETS 3A AND 3B FOR ADDITIONAL AMENITIES INFORMATION.	SHEET
--------	---	-------

25YR 24HR PEAK = 23.46
25' (FROM PERIMETER OF THE PUD)

100% R 24" R FEAR - 23.16

SIDE: 5'

SIDE (CONV): 25'

PHASE ONE C

391

- The figure consists of three main parts: a site plan on the left, a detailed cross-section of a pond on the right, and a project information table on the far right.

Site Plan (Left)

 - A rectangular wetland conservation area is shown with a grid of points labeled 99, 100, 392, 393, and 394.
 - To the right of the wetland is a paved area with a diagonal hatched pattern.
 - Below the wetland, a horizontal line indicates the boundary between this sheet and Sheet 8.

Pond Cross-Section (Right)

SECTION A-A

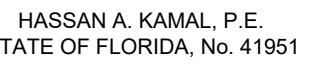
This diagram shows a cross-section of Pond #5. Key features include:

 - WETLAND BUFFER LINE:** Indicated by a dashed line with arrows pointing towards the wetland.
 - EX GROUND:** The existing ground level before construction.
 - TOP OF BERM; EL. 24.5:** The highest point of the earthen embankment surrounding the pond.
 - 25YR 24 HR ELEV. 23.70:** The elevation of the 25-year return period flood event.
 - NWL 22.00:** The Normal Water Level.
 - POND #5:** The body of water.
 - GRADE BREAK EL. 18.0:** A change in the bottom slope of the pond.
 - POND BOTTOM EL. 12.5:** The lowest point of the pond.
 - SLOPES:** Various slopes are indicated, including 6%, 1%, 4:1 (MIN.), 5:1, and 2:1.
 - STORM WATER MANAGEMENT (SWM):** Labeled at the top right of the section.
 - M/S INV.=22.00:** Mean Sea Level Invert = 22.00 feet.
 - CONCRETE PAVING:** Shown as a hatched area along the edge of the pond.

Project Information Table (Far Right)

SHEET TITLE	
PAVING, GRADING, DRAINAGE AND AMENITIES PLAN	
PROJECT NO. 11453.02	
DRAWING NO. 1145302_400_007	
SHEET	

17

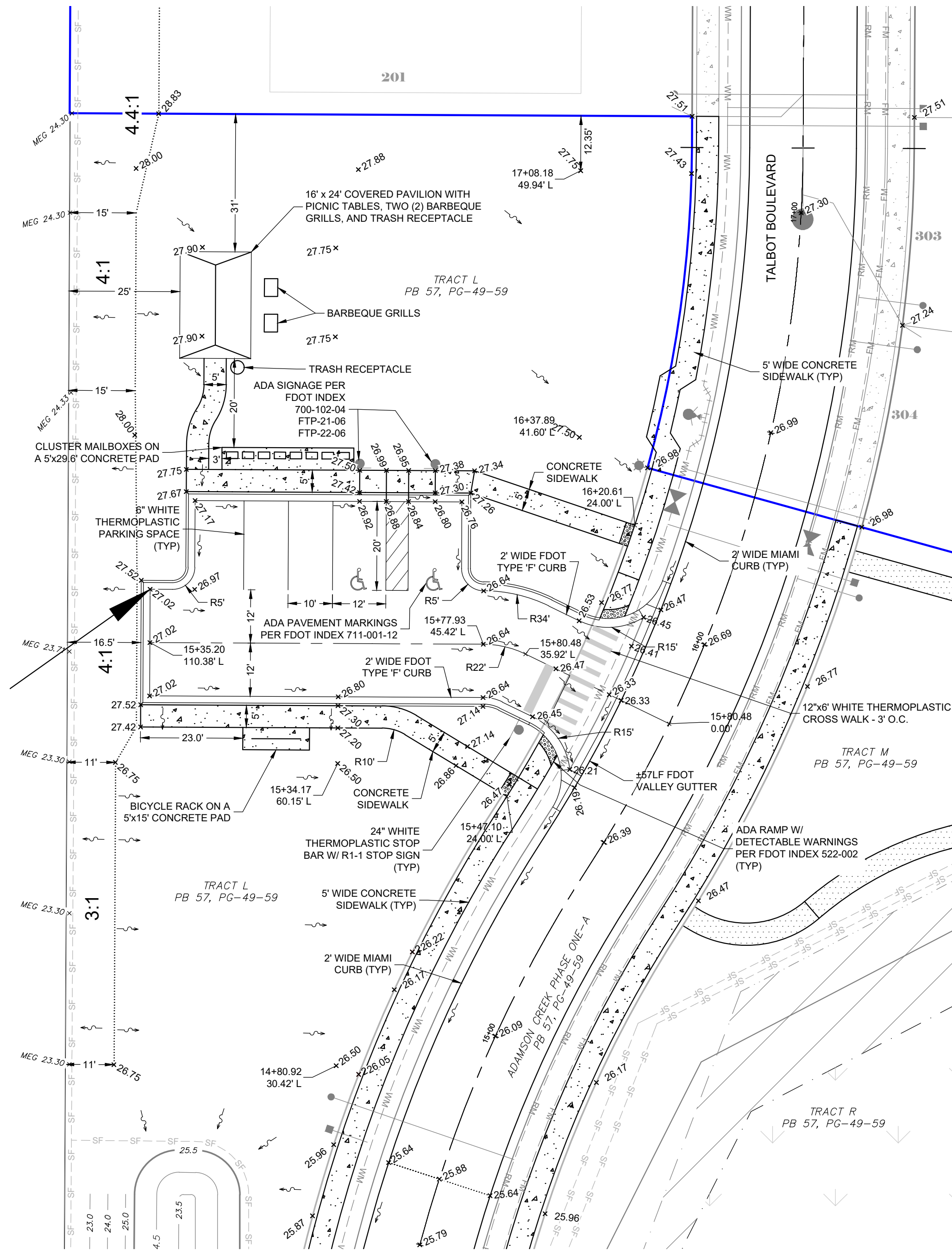


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9. SEE SHEETS 3A AND 3B FOR ADDITIONAL AMENITIES INFORMATION.

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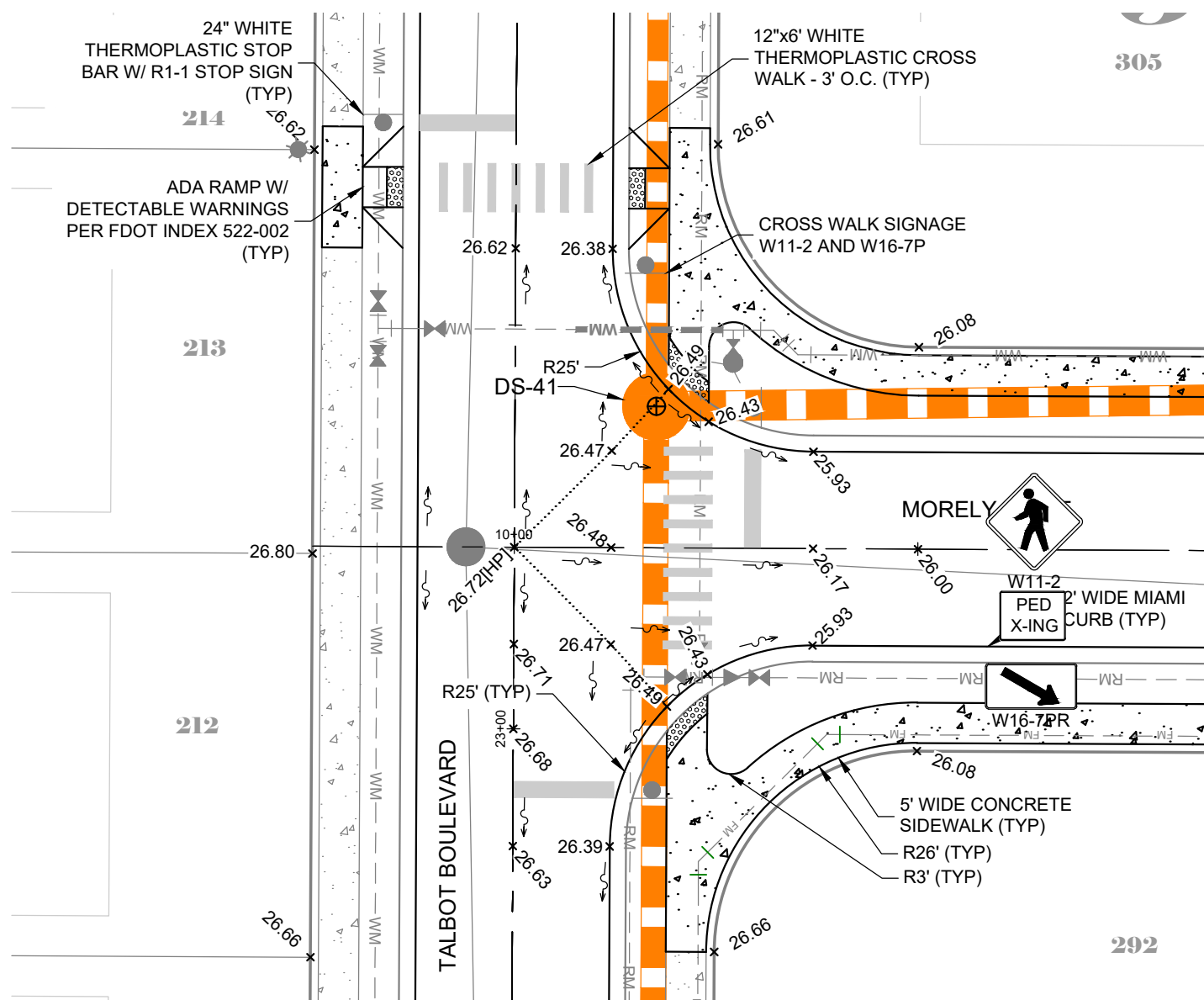
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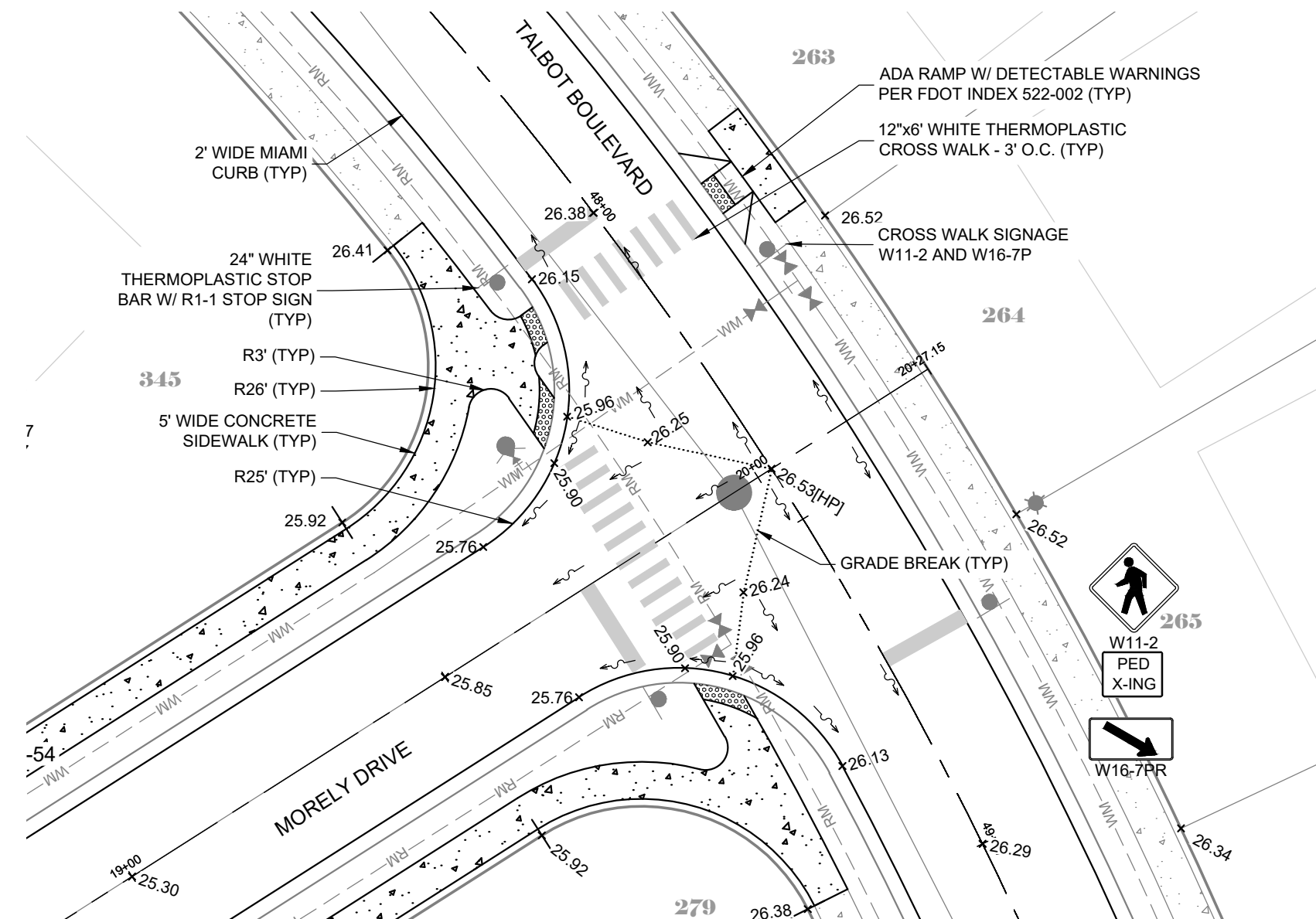
TRACT L - RECREATION AREA ENLARGEMENT DETAIL
SCALE 1" = 20'

DRAINAGE STRUCTURE TABLE						
NAME	DESCRIPTION	TOP ELEVATION	INVERTS	SIZE	PIPE LENGTH (FEET)	TO
DS-34	TYPE H 2 GRATE	24.77	N = 19.00	30" RCP	130	DS-35
DS-35	JUNCTION BOX	25.80	E = 18.41 S = 18.41	24" RCP	90	DS-36
DS-36	TYPE E	22.00	W = 18.00			
DS-37	TYPE 2	26.01	E = 21.35	30" RCP	35	DS-38
DS-38	TYPE 2	26.01	N = 18.32 W = 21.26	30" RCP	268	DS-41
DS-39	TYPE 2	26.13	E = 21.45	24" RCP	35	DS-40
DS-40	TYPE 2	26.13	S = 18.89 W = 21.34	24" RCP	128	DS-41
DS-41	JUNCTION BOX	26.49	E = 18.01 N = 18.64 S = 18.01	36" RCP	123	DS-43
DS-42	TYPE 4	25.26	N = 20.59	24" RCP	35	DS-43
DS-43	TYPE 4	25.26	E = 16.43 S = 20.55 W = 17.43	48" RCP	251	X-DS-44
DS-45	TYPE 2	24.83	E = 20.34	24" RCP	37	X-DS-46
DS-47	TYPE 2	25.37	E = 16.57 N = 19.67	24" RCP	35	DS-48
DS-47A	TYPE 3 RIGHT	26.07	S = 21.57	18" RCP	190	DS-47
DS-48	TYPE 2	25.37	S = 16.48 W = 16.48	30" RCP	405	X-DS-46
DS-49	TYPE 2	25.31	N = 20.61 W = 18.01	24" RCP	36	DS-50
DS-49A	TYPE 3 LEFT	26.00	S = 21.50	18" RCP	179	DS-49
DS-50	TYPE 2	25.31	E = 17.83 W = 17.83	30" RCP	134	X-DS-50A
DS-51	TYPE 2	25.67	W = 21.25	24" RCP	39	DS-52
DS-52	TYPE 2	25.67	SW = 20.70 E = 21.13	24" RCP	163	CONNECT TO EX 24" RCP PIPE

DRAINAGE STRUCTURE TABLE						
NAME	DESCRIPTION	TOP ELEVATION	INVERTS	SIZE	PIPE LENGTH (FEET)	TO
DS-53	TYPE 2	25.05	NW = 15.57 SE = 15.57	54" RCP	35	DS-54
DS-54	TYPE 2	25.05	NW = 15.53 S = 15.53	54" RCP	152	DS-57
DS-55	TYPE 2	25.53	S = 17.15 NW = 18.15	30" RCP	224	DS-59
DS-56	TYPE 2	25.53	SE = 18.20	18" RCP	52	DS-55
DS-57	JUNCTION BOX	26.80	N = 15.39 S = 15.39	54" RCP	218	X-DS-58
DS-59	TYPE 4	25.96	S = 16.90 N = 16.90	30" RCP	53	CONNECT TO EX 30" RCP PIPE
X-DS-75	TYPE C	23.25	SW = 16.25	24" RCP	157	X-DS-69
X-DS-44	JUNCTION BOX	27.10	NE = 16.11 S = 16.11	48" RCP	126	X-MES-44
X-DS-46	JUNCTION BOX	24.80	E = 16.48 N = 16.48 W = 20.15	36" RCP	165	REMOVE TEMP TOP
X-DS-50A	JUNCTION BOX	24.65	S = 17.49 E = 17.49	30" RCP	177	ADJUST TOP TO EL 24.65
X-DS-53A	JUNCTION BOX	25.30	W = 15.80 SE = 15.80	54" RCP	136	DS-53
X-DS-58	JUNCTION BOX	22.40	N = 15.17 SE = 15.17	54" RCP	143	X-MES-58
X-DS-68	JUNCTION BOX	26.27	SW = 16.12 E = 16.13	24" RCP	178	ADJUST TOP TO EL 26.27
X-DS-69	JUNCTION BOX	26.27	W = 16.10 NE = 16.08	24" RCP	41	X-DS-68
X-MES-44	MES		SW = 16.05			
X-MES-53A	MES		E = 15.87	54" RCP	63	X-DS-53A
X-MES-58	MES		NW = 15.03			



INTERSECTION ENLARGEMENT DETAIL
SCALE 1" = 20'



INTERSECTION ENLARGEMENT DETAIL
SCALE 1" = 20'

NOTES

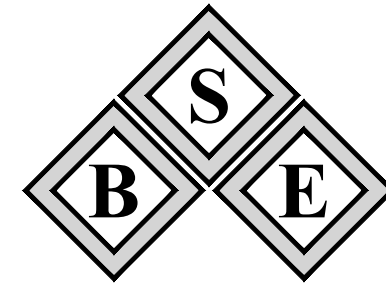
- ALL STRIPING SHALL BE THERMOPLASTIC PER FDOT STANDARDS. SEE DETAILS ON SHEET 21.
- ALL SIGNAGE SHALL FOLLOW MUTCD STANDARDS.
- ALL STOP-CONTROLLED INTERSECTIONS SHALL HAVE STOP BARS, SIGNS AND CROSSWALKS.

LEGEND

	PROPOSED STORM SEWER
	EXISTING STORM SEWER
	PROPOSED WATER MAIN
	PROPOSED REUSE MAIN
	PROPOSED SANITARY FORCE MAIN
	GRADE BREAK LINE
	LOT NUMBER
	PROPERTY LINE
	BUILDING SETBACK
	SILT FENCE
	WETLAND AREA
	WETLAND BUFFER AREA
	COMMON AREA CONCRETE SIDEWALKS SHALL BE CONSTRUCTED AS PART OF INFRASTRUCTURE IMPROVEMENTS
	HOME BUILDER AREA CONCRETE SIDEWALKS SHALL BE CONSTRUCTED AS PART OF HOME CONSTRUCTION
	RECREATIONAL AREA SIDEWALKS SHALL BE CONSTRUCTED AS PART OF INFRASTRUCTURE IMPROVEMENTS
	FINISHED CENTERLINE OF ROAD ELEVATION
	TYPE 'A' LOT LOT DRAINS REAR TO FRONT
	TYPE 'B' LOT LOT WITH SPLIT DRAINAGE
	TYPE 'C' LOT LOT DRAINS FRONT TO REAR
	FINISHED FLOOR ELEVATION (FFE)
	DIRT PAD ELEVATION
	EXISTING GROUND SPOT ELEVATION
	DESIGN SPOT ELEVATION
	MATCH EXISTING GROUND
	DRAINAGE EASEMENT
	DESIGN HIGH WATER
	DRAINAGE STRUCTURE
	ELEVATION
	GRADE BREAK
	HIGH POINT
	LOW POINT
	NORMAL WATER LEVEL
	POINT OF VERTICAL INTERSECTION
	VERTICAL CURVE
	PROPOSED LIGHT POLE

NOTES:

- PONDS 5 AND 6 HAVE BEEN CONSTRUCTED DURING PHASE ONE-A.
- NO CLEARING OR CONSTRUCTION IS ALLOWED WITHIN THE WETLAND CONSERVATION AREA.
- INSTALL INLET PROTECTION ON ALL INLETS.
- SEE SHEET 18 FOR PAVEMENT DETAILS.
- SEE SHEET 19 FOR TYPICAL LOT GRADING DETAILS.
- SEE SHEET 20 FOR FDOT DRAINAGE STRUCTURE DETAILS.
- SEE ENLARGEMENT DETAILS ON SHEET 9 FOR SIGNAGE AND PAVEMENT MARKING CALLOUTS.
- SEE SHEET 9 FOR DRAINAGE STRUCTURE TABLE.
- SEE SHEETS 3A AND 3B FOR ADDITIONAL AMENITIES INFORMATION.

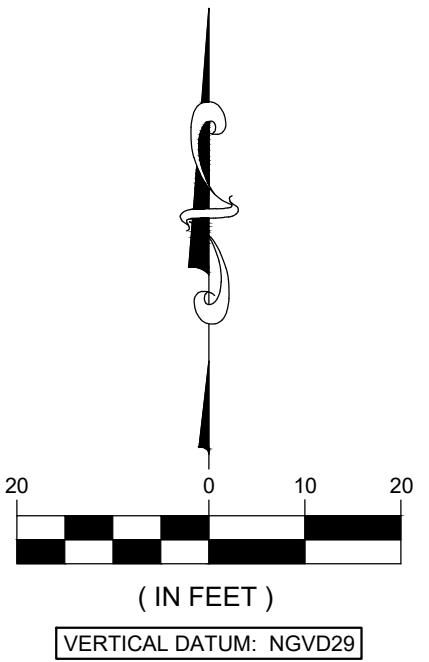


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HASSAN A. KAMAL, P.E.
STATE OF FLORIDA, No. 41951



	CITY COMMENTS	08/19/20
	CITY COMMENTS 08/10/2020	08/13/20
	CITY COMMENTS 07/24/2020	07/31/20
DATE: 07/13/20		
DESIGN/DRAWN: SMG/RMB		

PROJECT TITLE

ADAMSON CREEK
PHASE ONE-C

SHEET TITLE

PAVING, GRADING,
DRAINAGE AND
AMENITIES
ENLARGEMENT
DETAILS

PROJECT NO.

11453.02

DRAWING NO.

1145302_400_009

SHEET

9 of 35

SANITARY SEWER STRUCTURE TABLE			
NAME	TOP ELEVATION	INVERTS	COMMENT
SMH1	26.00	W =22.00	
SMH2	26.16	E =20.81 SW =20.71	
SMH3	25.94	NE =20.47 S =20.37	
SMH4	25.60	N =19.19 S =19.09	
SMH5	25.00	N =17.65 S =17.55	
SMH6	26.57	N =16.45 S =16.35	
SMH7	27.30	N =23.40	
SMH8	26.00	N =18.25 S =19.89	
SMH9	26.60	N =15.07 E =14.97 S =16.89	
SMH10	25.05	W =14.44 NE =14.34	
SMH11	25.20	SW =14.03 NE =13.93	5' DIA.
SMH12	25.62	S =21.62	
SMH13	25.40	N =20.72 SE =20.62	

SANITARY SEWER STRUCTURE TABLE			
NAME	TOP ELEVATION	INVERTS	COMMENT
SMH14	25.80	NW =20.17 SE =20.07	
SMH15	26.00	NW =18.47 SE =18.37	
SMH16	26.00	N =21.80	
SMH17	25.70	S =20.64 NW =20.54	
SMH18	26.40	NW =17.80 SW =17.70 SE =19.60	
SMH19	24.95	NE =17.16 SW =12.35	
SMH20	25.70	NE =11.48 SW =11.38	
SMH21	26.35	NE =10.76 SW =10.66	
SMH22	25.82	NE =10.04 SW =9.94	5' DIA.
SMH23	25.44	NW =9.52 NE =9.62	5' DIA.
SMH24	27.00	SE =9.29	6' DIA. WW

(WW) = WET WELL

CITY OF COCOA GENERAL NOTES:

- ALL WATER MAIN CONSTRUCTION SHALL BE PER CITY OF COCOA CRITERIA.
- VALVE AND TEE LOCATIONS ARE SHOWN FOR GRAPHIC CLARITY ONLY. PER CITY OF COCOA CRITERIA, ALL VALVES SHALL BE LOCATED ADJACENT TO TEES (WITHIN 2') WHEREVER POSSIBLE, UNLESS SPECIFICALLY LOCATED OTHERWISE.
- WHERE APPLICABLE ALL BLOW-OFFS TO BE PLACED AT PROPERTY LINE. IF OTHER FACILITIES CONFLICT (I.E. STORM DRAINAGE) BLOW-OFFS TO BE SET WITHIN 3' OF PROPERTY LINE. ALL BLOWOFFS SHALL BE BRASS PER THE CITY OF COCOA CRITERIA.
- THE FIRE HYDRANT ASSEMBLIES SHALL CONSIST OF A HYDRANT TEE, GATE VALVE, AND FIRE HYDRANT. THE GATE VALVE IS TO BE PLACED AT THE HYDRANT TEE. THIS NOTE ALSO APPLIES TO THOSE LOCATIONS WHERE THE HYDRANT IS LOCATED ACROSS THE STREET FROM THE MAIN LINE.
- ANY SERVICE LINE LONGER THAN 60 FEET IN LENGTH WILL NEED TO BE 1". ALL OTHER SERVICE LINES SHALL BE 3/4".
- SERVICE LINE SHALL CONSIST OF A BRONZE SERVICE SADDLE, CORPORATION STOP, TYPE "K" COPPER, AND CURB STOP.
- UNLESS OTHERWISE NOTED ALL POTABLE WATER SERVICES TO BE 1" COPPER.
- WATER FOR FIRE FIGHTING SHALL BE AVAILABLE FOR USE PRIOR TO COMBUSTIBLE MATERIALS BEING BROUGHT ON SITE.
- ALL WATER MAINS SHALL BE SWABBED PER CITY OF COCOA CRITERIA.
- TEMPORARY BLOW-OFF TO CONSIST OF GATE VALVE, 20 LF OF MJ DIP, AND 2" (PIPE SIZE 2"-10") OR 4" (PIPE SIZE 12" AND LARGER) BLOW-OFF. SEE CITY OF COCOA DETAIL.
- FIRE HYDRANTS SHALL BE AMERICAN FLOW CONTROL MODEL #B-84-B; 6". AMERICAN DARLING 5 1/4". MUELLER SUPER CENTURION 250 5 1/4" OR CLOW MEDALLION 5 1/4".
- A TAPPING CONTRACTOR ACCEPTABLE TO THE CITY OF COCOA IS REQUIRED FOR TAPS.
- A UTILITY CONTRACTOR IS REQUIRED FOR WATER MAIN INSTALLATION.
- ALL 2" BLOW-OFFS SHALL BE CONSTRUCTED OF BRASS PER CITY OF COCOA CRITERIA.

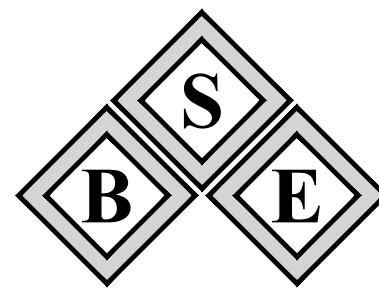
PIPE DEFLECTIONS
ALL PIPE DEFLECTIONS SHALL BE PER THE MANUFACTURER'S RECOMMENDATIONS AND AWWA REQUIREMENTS FOR MAXIMUM DEFLECTION. CONTRACTOR SHALL INCORPORATE THE APPROPRIATE FITTINGS ON PIPE DEFLECTIONS IN ACCORDANCE WITH PIPE MANUFACTURER'S RECOMMENDATIONS TO COMPLETE THE INSTALLATION OF ALL REUSE MAIN, FORCE MAIN, AND WATER MAIN PIPES CONSISTENT WITH THE LOCATIONS DEPICTED UPON THESE PLANS.

GENERAL NOTES:

- NO CONSTRUCTION IS ALLOWED WITHIN THE WETLAND CONSERVATION AREA.
- SEE SHEET 23 FOR BREVARD COUNTY SANITARY SEWER DETAILS.
- SEE SHEETS 25-27 FOR CITY OF COCOA TECHNICAL PROVISIONS.
- SEE SHEETS 28-29 FOR CITY OF COCA WATER MAIN DETAILS.
- SEE SHEETS 3A, 3B, 9 AND 9A FOR AMENITIES INFORMATION.

LEGEND

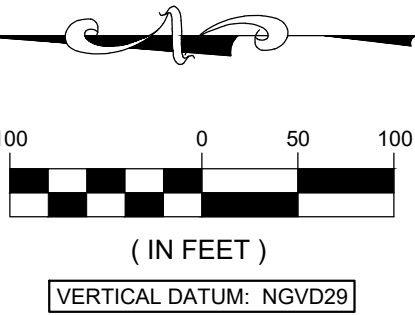
- PROPOSED STORM SEWER
- EXISTING STORM SEWER
- PROPOSED WATER MAIN
- PROPOSED REUSE MAIN
- PROPOSED SANITARY FORCE MAIN
- LOT NUMBER
- PROPERTY LINE
- WETLAND AREA
- WETLAND BUFFER AREA
- COMMON CONCRETE SIDEWALK
- HOME BUILDER CONCRETE SIDEWALK
- RECREATIONAL SIDEWALK
- ELEVATION
- NWL
- SWM
- WW
- HYDRANT LOCATION
- PROPOSED LIGHT POLE
- FITNESS STATION



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BUSINESS AUTHORIZATION: LB0004005

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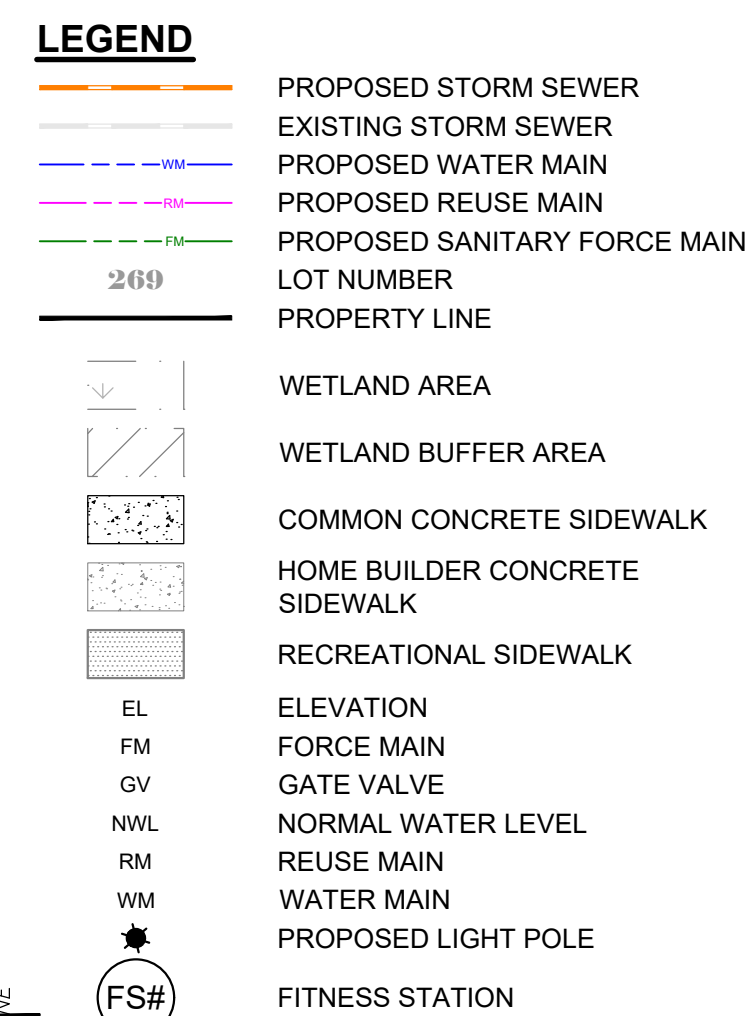
DATE:	07/13/20
DESIGN/DRAWN:	SMG/RMB

PROJECT TITLE
ADAMSON CREEK
PHASE ONE-C

SHEET TITLE
OVERALL UTILITY PLAN

PROJECT NO.
11453.02
DRAWING NO.
1145302_400_010
SHEET
10 of 35

FOR CONTINUATION SEE SHEET 13A

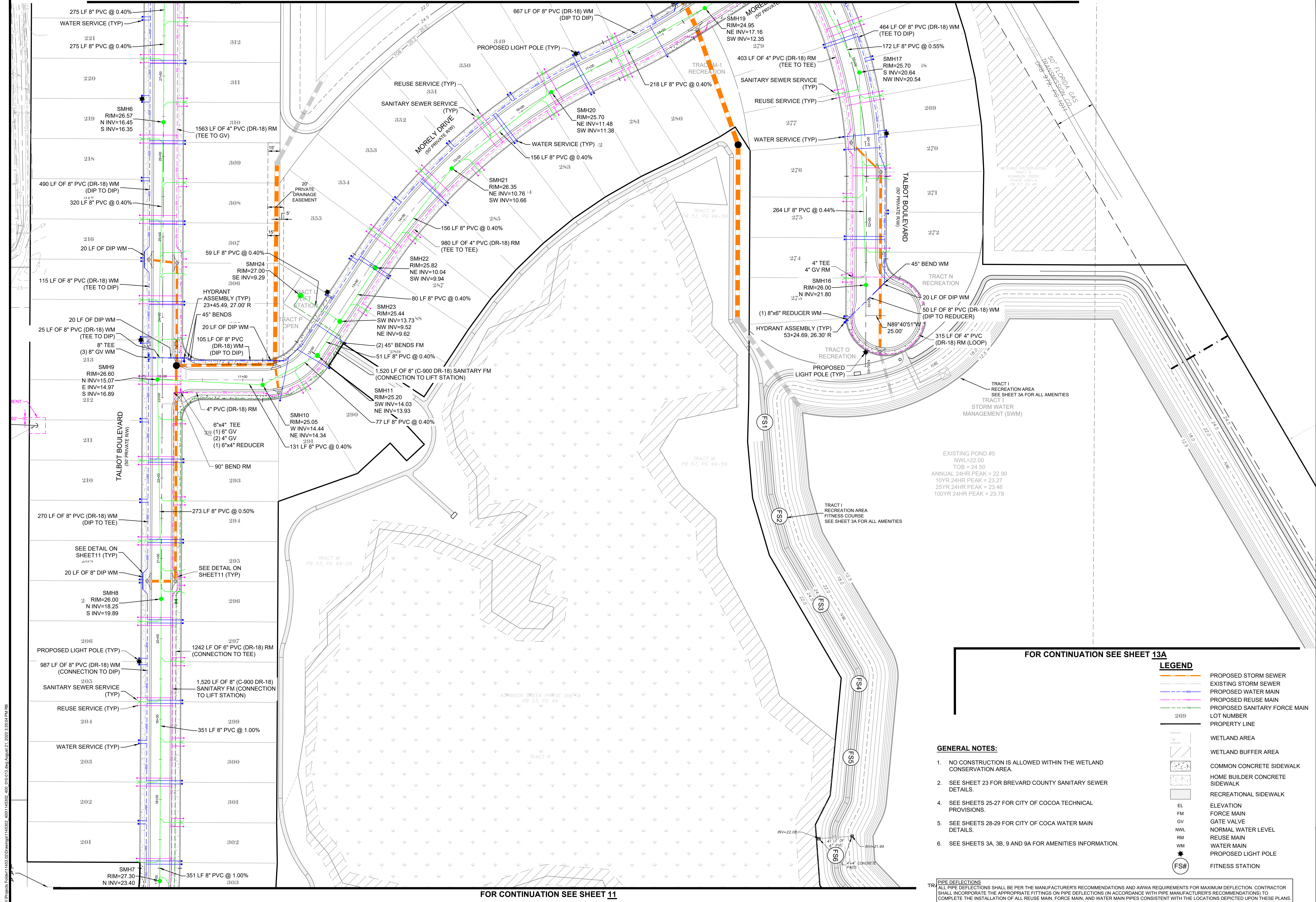


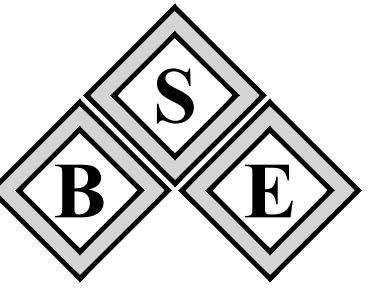
FOR CONTINUATION SEE SHEET 13A

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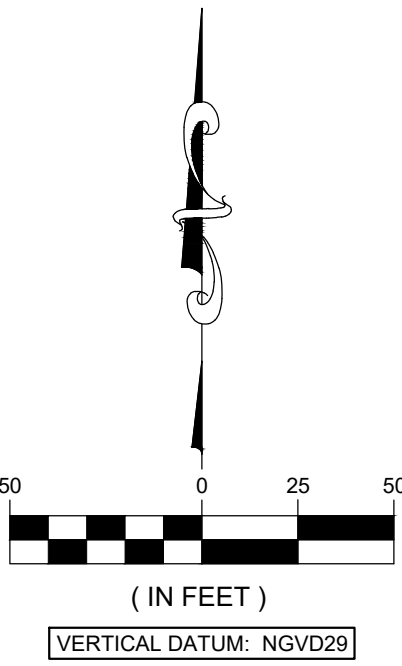


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LEGEND

- PROPOSED STORM SEWER
- EXISTING STORM SEWER
- PROPOSED WATER MAIN
- PROPOSED REUSE MAIN
- PROPOSED SANITARY FORCE MAIN
- LOT NUMBER
- PROPERTY LINE
- WETLAND AREA
- WETLAND BUFFER AREA
- COMMON CONCRETE SIDEWALK
- HOME BUILDER CONCRETE SIDEWALK
- RECREATIONAL SIDEWALK
- ELEVATION
- FORCE MAIN
- GATE VALVE
- NORMAL WATER LEVEL
- REUSE MAIN
- WATER MAIN
- PROPOSED LIGHT POLE
- FITNESS STATION

GENERAL NOTES:

- NO CONSTRUCTION IS ALLOWED WITHIN THE WETLAND CONSERVATION AREA.
- SEE SHEET 23 FOR BREVARD COUNTY SANITARY SEWER DETAILS.
- SEE SHEETS 25-27 FOR CITY OF COCOA TECHNICAL PROVISIONS.
- SEE SHEETS 28-29 FOR CITY OF COCA WATER MAIN DETAILS.
- SEE SHEETS 3A, 3B, 9 AND 9A FOR AMENITIES INFORMATION.

PIPE DEFLECTIONS
ALL PIPE DEFLECTIONS SHALL BE PER THE MANUFACTURER'S RECOMMENDATIONS AND AWWA REQUIREMENTS FOR MAXIMUM DEFLECTION. CONTRACTOR SHALL INCORPORATE THE APPROPRIATE FITTINGS ON PIPE DEFLECTIONS (IN ACCORDANCE WITH PIPE MANUFACTURER'S RECOMMENDATIONS) TO COMPLETE THE INSTALLATION OF ALL REUSE MAIN, FORCE MAIN, AND WATER MAIN PIPES CONSISTENT WITH THE LOCATIONS DEPICTED UPON THESE PLANS.

FOR CONTINUATION SEE SHEET 12

PROJECT TITLE
ADAMSON CREEK
PHASE ONE-C

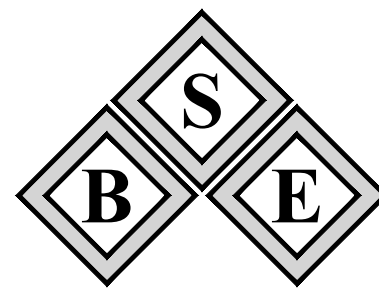
SHEET TITLE
UTILITY PLAN

PROJECT NO.
11453.02

DRAWING NO.
1145302_400_013

SHEET
13 of 35

SYMBOLS SHOWN ARE GRAPHIC IN NATURE; DUE TO SCALE. ALL DESIGN ELEMENTS ARE NOT NECESSARILY SHOWN ON PLAN VIEWS. THE CONTRACTOR SHALL ALSO REFER TO SPECIFICATION AND DETAIL SHEETS AS WELL AS THE COMPLETE PLAN SET.

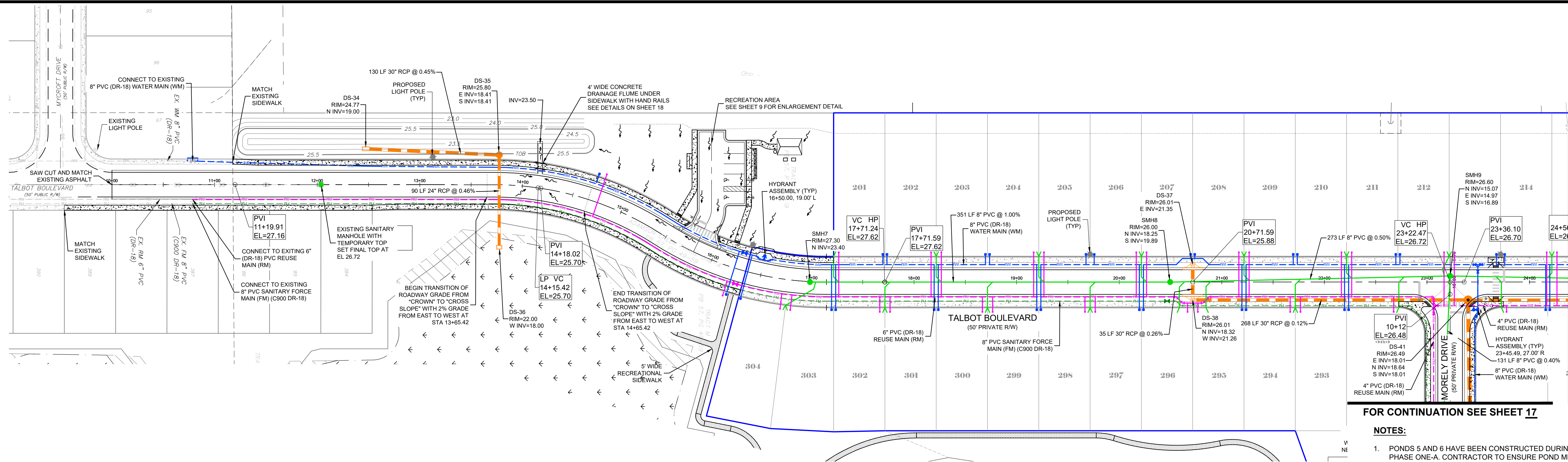


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FOR CONTINUATION SEE SHEET 15

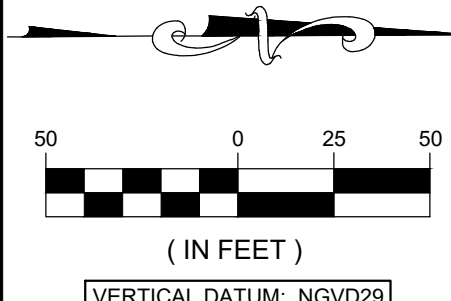
FOR CONTINUATION SEE SHEET 17

LEGEND

- PROPOSED STORM SEWER
- EXISTING STORM SEWER
- PROPOSED WATER MAIN
- PROPOSED REUSE MAIN
- PROPOSED SANITARY FORCE MAIN
- GRADE BREAK LINE
- LOT NUMBER
- PROPERTY LINE
- WETLAND AREA
- WETLAND BUFFER AREA
- COMMON AREA CONCRETE SIDEWALKS SHALL BE CONSTRUCTED AS PART OF INFRASTRUCTURE IMPROVEMENTS
- HOME BUILDER AREA CONCRETE SIDEWALKS SHALL BE CONSTRUCTED AS PART OF HOME CONSTRUCTION
- RECREATIONAL AREA SIDEWALKS SHALL BE CONSTRUCTED AS PART OF INFRASTRUCTURE IMPROVEMENTS
- BREVARD COUNTY UTILITY SERVICES
- BEGIN VERTICAL CURVE
- ELEVATION
- END VERTICAL CURVE
- FORCE MAIN
- GRADE BREAK
- HIGH POINT
- LOW POINT
- NORMAL WATER LEVEL
- POINT OF VERTICAL INTERSECTION
- RECLAIM WATER MAIN
- VERTICAL CURVE
- WATER MAIN
- PROPOSED LIGHT POLE

NOTES:

- PONDS 5 AND 6 HAVE BEEN CONSTRUCTED DURING PHASE ONE-A. CONTRACTOR TO ENSURE POND MEETS CURRENT DESIGN CRITERIA.
- NO CLEARING OR CONSTRUCTION IS ALLOWED WITHIN THE WETLAND CONSERVATION AREA.
- INSTALL INLET PROTECTION ON ALL INLETS.
- SEE SHEET 18 FOR PAVEMENT DETAILS.
- SEE SHEET 19 FOR TYPICAL LOT GRADING DETAILS.
- SEE SHEET 20 FOR FDOT DRAINAGE STRUCTURE DETAILS.
- SEE ENLARGEMENT DETAILS ON SHEET 9 FOR SIGNAGE AND PAVEMENT MARKING CALLOUTS.
- MAINTAIN 36" TYPICAL COVER OVER WATER MAIN, RECLAIM WATER MAIN AND FORCE MAIN. PER CITY DETAIL, ("TYPICAL REQUIRED SEPARATION") 30" MINIMUM COVER FOR PVC PIPE AND MINIMUM 24" COVER FOR DUCTILE IRON PIPE. SEE DETAIL SHEET 29.
- WHEN WATER AND OR RECLAIM MAIN CROSSES OVER STORM PIPE MAINTAIN A 6" MINIMUM SEPARATION AT CROSSING, 12" OR GREATER IS PREFERRED PER CITY DETAIL, STORM DRAIN CROSSING. SEE DETAIL SHEET 29.
- WHEN WATER AND OR RECLAIM MAIN CONFLICTS WITH STORM PIPE THE WATER AND OR RECLAIMED MAIN SHALL BE DEFLECTED UNDER STORM PIPE, MAINTAIN A 12" MINIMUM SEPARATION PER CITY DETAIL, STORM DRAIN CROSSING. SEE DETAIL SHEET 29.
- FOR SANITARY AND STORM SEWER PIPE CROSSINGS REFER TO BREVARD COUNTY UTILITY SERVICES DETAILS US-60 AND US-66 ON SHEET 23.

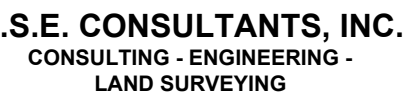


DATE:	07/13/20
DESIGN/DRAWN:	SMG/RMB
CITY COMMENTS	08/19/20
CITY COMMENTS	08/19/20
CITY COMMENTS	07/31/20

PROJECT TITLE
ADAMSON CREEK
PHASE ONE-C

SHEET TITLE
ROADWAY PLAN
AND PROFILE
TALBOT BLVD
CL STA 10+00 TO 24+00

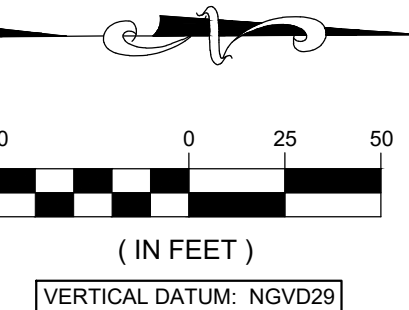
PROJECT NO.
11453.02
DRAWING NO.
1145302_400_014
SHEET



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STATE OF FLORIDA, No. 41951



CITY COMMENTS	08/19/2020
CITY COMMENTS' 08/10/2020	08/13/2020
CITY COMMENTS 07/24/2020	07/31/2020
DATE:	07/13/2020
DESIGN/DRAWN:	SMG/RME

PROJECT TITLE

**DAMSON CREEK
PHASE ONE-C**

SHEET TITLE

ROADWAY PLAN AND PROFILE TALBOT BLVD L STA 24+00 TO 39+00

PROJECT NO.

11453.02

1145302_400_015

SHEET

5 of 35



312 SOUTH HARBOR CITY BOULEVARD, SUITE 4
MELBOURNE, FLORIDA 32901
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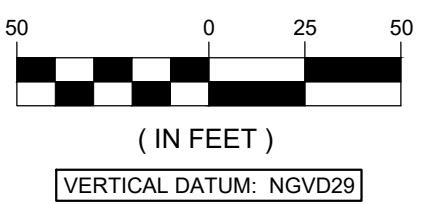
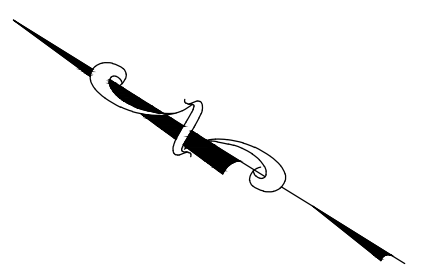
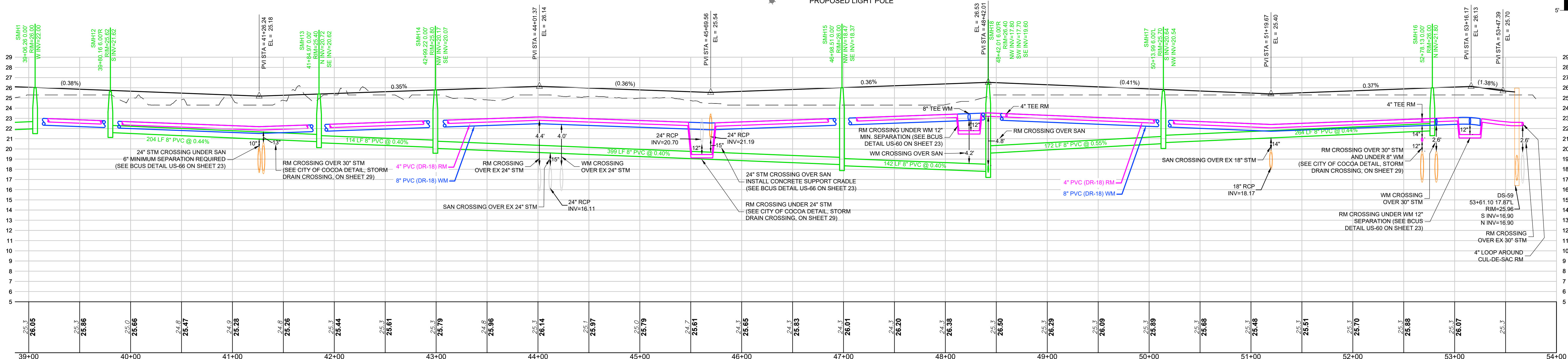
CERTIFICATE OF PROFESSIONAL ENGINEERS
BUSINESS AUTHORIZATION: 4905
CERTIFICATE OF LAND SURVEYING
BUSINESS AUTHORIZATION: LB0004905

SCOTT M. GLAUBITZ, P.E. & P.L.S.
STATE OF FLORIDA, No. 33659 No. 4151

HASSAN A. KAMAL, P.E.
STATE OF FLORIDA, No. 41951



1. PONDS 5 AND 6 HAVE BEEN CONSTRUCTED DURING PHASE ONE-A. CONTRACTOR TO ENSURE POND MEETS CURRENT DESIGN CRITERIA.
2. NO CLEARING OR CONSTRUCTION IS ALLOWED WITHIN THE WETLAND CONSERVATION AREA.
3. INSTALL INLET PROTECTION ON ALL INLETS.
4. SEE SHEET 18 FOR PAVEMENT DETAILS.
5. SEE SHEET 19 FOR TYPICAL LOT GRADING DETAILS.
6. SEE SHEET 20 FOR FDOT DRAINAGE STRUCTURE DETAILS.
7. SEE ENLARGEMENT DETAILS ON SHEET 9 FOR SIGNAGE AND PAVEMENT MARKING CALLOUTS.
8. MAINTAIN 36" TYPICAL COVER OVER WATER MAIN, RECLAIM WATER MAIN AND FORCE MAIN PER CITY DETAIL, ("TYPICAL REQUIRED SEPARATION") 30" MINIMUM COVER FOR PVC PIPE AND MINIMUM 24" COVER FOR DUCTILE IRON PIPE. SEE DETAIL SHEET 29.
9. WHEN WATER AND OR RECLAIM MAIN CROSSES OVER STORM PIPE MAINTAIN A 6" MINIMUM SEPARATION AT CROSSING, 12" OR GREATER IS PREFERRED PER CITY DETAIL, STORM DRAIN CROSSING. SEE DETAIL SHEET 29.
10. WHEN WATER AND OR RECLAIM MAIN CONFLICTS WITH STORM PIPE, THE WATER MAIN OR RECLAIM MAIN SHALL BE DEFLECTED UNDER STORM PIPE, MAINTAIN A 12" MINIMUM SEPARATION PER CITY DETAIL, STORM DRAIN CROSSING. SEE DETAIL SHEET 29.
11. FOR SANITARY AND STORM SEWER PIPE CROSSINGS REFER TO BREVARD COUNTY UTILITY SERVICES DETAILS US-60 AND US-66 ON SHEET 23.



CITY COMMENTS	08/19/2020
CITY COMMENTS 08/10/2020	08/13/2020
CITY COMMENTS 07/24/2020	07/31/2020

DATE:	07/13/20
DESIGN/DRAWN:	SMG/RME

PROJECT TITLE

**ADAMSON CREEK
PHASE ONE-C**

SHEET TITLE

**ROADWAY PLAN
AND PROFILE
TALBOT BLVD
CL STA 39+00 TO 54+00**

PROJECT NO.

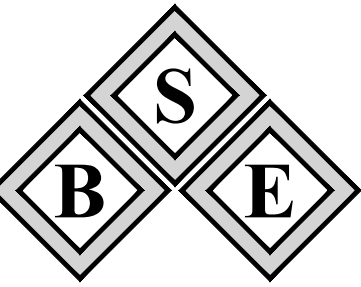
DRAWING NO.

SHEET

16 of 35

SYMBOLS SHOWN ARE GRAPHIC IN NATURE. DUE TO SCALE, ALL DESIGN ELEMENTS ARE NOT NECESSARILY SHOWN ON PLAN VIEWS. THE CONTRACTOR SHALL ALSO REFER TO SPECIFICATION AND DETAIL SHEETS AS WELL AS THE COMPLETE PLAN SET.

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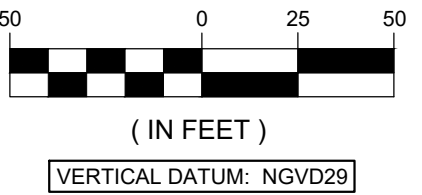
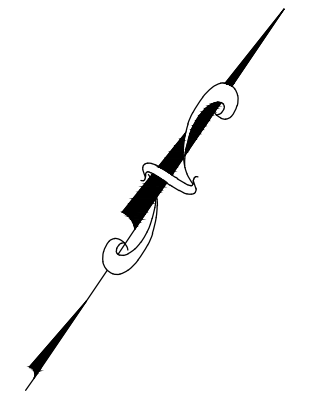


B.S.E. CONSULTANTS, INC.
CONSULTING - ENGINEERING -
LAND SURVEYING

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BUSINESS AUTHORIZATION: LB0004005

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HASSAN A. KAMAL, P.E.
STATE OF FLORIDA, No. 41951



△	CITY COMMENTS	08/19/20
△	CITY COMMENTS 08/10/2020	08/13/20
△	CITY COMMENTS 07/24/2020	07/31/20

DATE: 07/13/20
DESIGN/DRAWN: SMG/RMB

PROJECT TITLE

ADAMSON CREEK
PHASE ONE-C

SHEET TITLE

ROADWAY PLAN
AND PROFILE
MORELY DRIVE
CL STA 10+00 TO
20+02.15

PROJECT NO.
11453.02

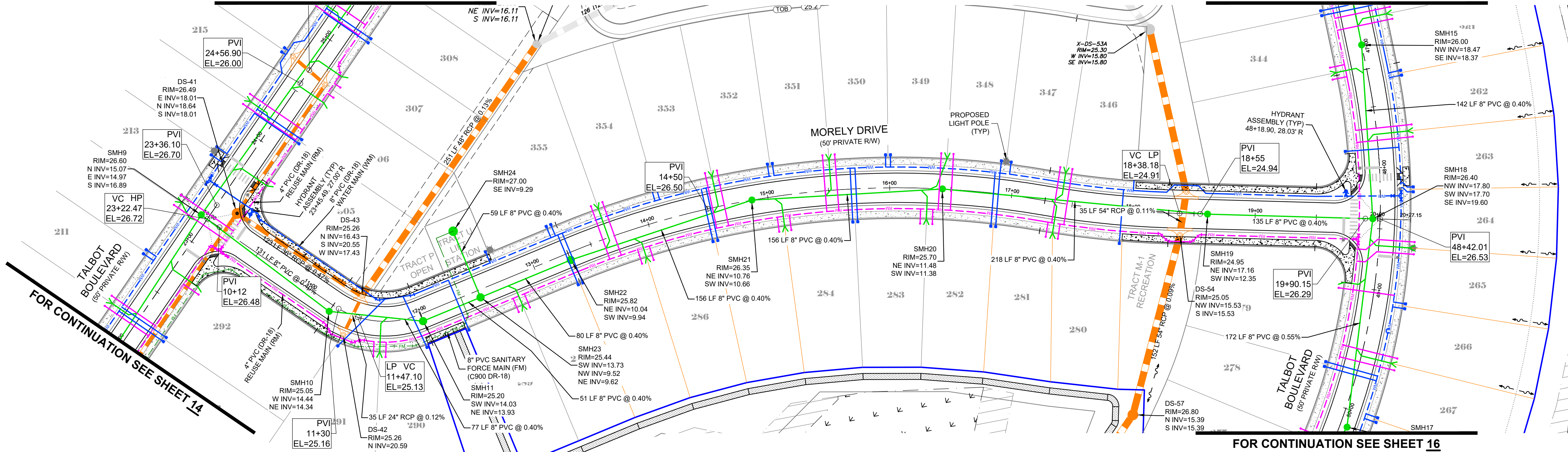
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SHEET

17 of 35

FOR CONTINUATION SEE SHEET 15

FOR CONTINUATION SEE SHEET 16



NOTES:

- PONDS 5 AND 6 HAVE BEEN CONSTRUCTED DURING PHASE ONE-A. CONTRACTOR TO ENSURE POND MEETS CURRENT DESIGN CRITERIA.
- NO CLEARING OR CONSTRUCTION IS ALLOWED WITHIN THE WETLAND CONSERVATION AREA.
- INSTALL INLET PROTECTION ON ALL INLETS.
- SEE SHEET 18 FOR PAVEMENT DETAILS.
- SEE SHEET 19 FOR TYPICAL LOT GRADING DETAILS.
- SEE SHEET 20 FOR FDOT DRAINAGE STRUCTURE DETAILS.
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- FOR SANITARY AND STORM SEWER PIPE CROSSINGS REFER TO BREVARD COUNTY UTILITY SERVICES DETAILS US-60 AND US-66 ON SHEET 23.

LEGEND

	PROPOSED STORM SEWER
	EXISTING STORM SEWER
	PROPOSED WATER MAIN
	PROPOSED REUSE MAIN
	PROPOSED SANITARY FORCE MAIN
	GRADE BREAK LINE
	LOT NUMBER
	PROPERTY LINE
	WETLAND AREA
	WETLAND BUFFER AREA
	COMMON AREA CONCRETE SIDEWALKS SHALL BE CONSTRUCTED AS PART OF INFRASTRUCTURE IMPROVEMENTS
	HOME BUILDER AREA CONCRETE SIDEWALKS SHALL BE CONSTRUCTED AS PART OF HOME CONSTRUCTION
	RECREATIONAL AREA SIDEWALKS SHALL BE CONSTRUCTED AS PART OF INFRASTRUCTURE IMPROVEMENTS
	BREVARD COUNTY UTILITY SERVICES
	BEGIN VERTICAL CURVE
	ELEVATION
	END VERTICAL CURVE
	FORCE MAIN
	GRADE BREAK
	HIGH POINT
	LOW POINT
	NORMAL WATER LEVEL
	POINT OF VERTICAL INTERSECTION
	RECLAIM WATER MAIN
	VERTICAL CURVE
	WATER MAIN
	PROPOSED LIGHT POLE

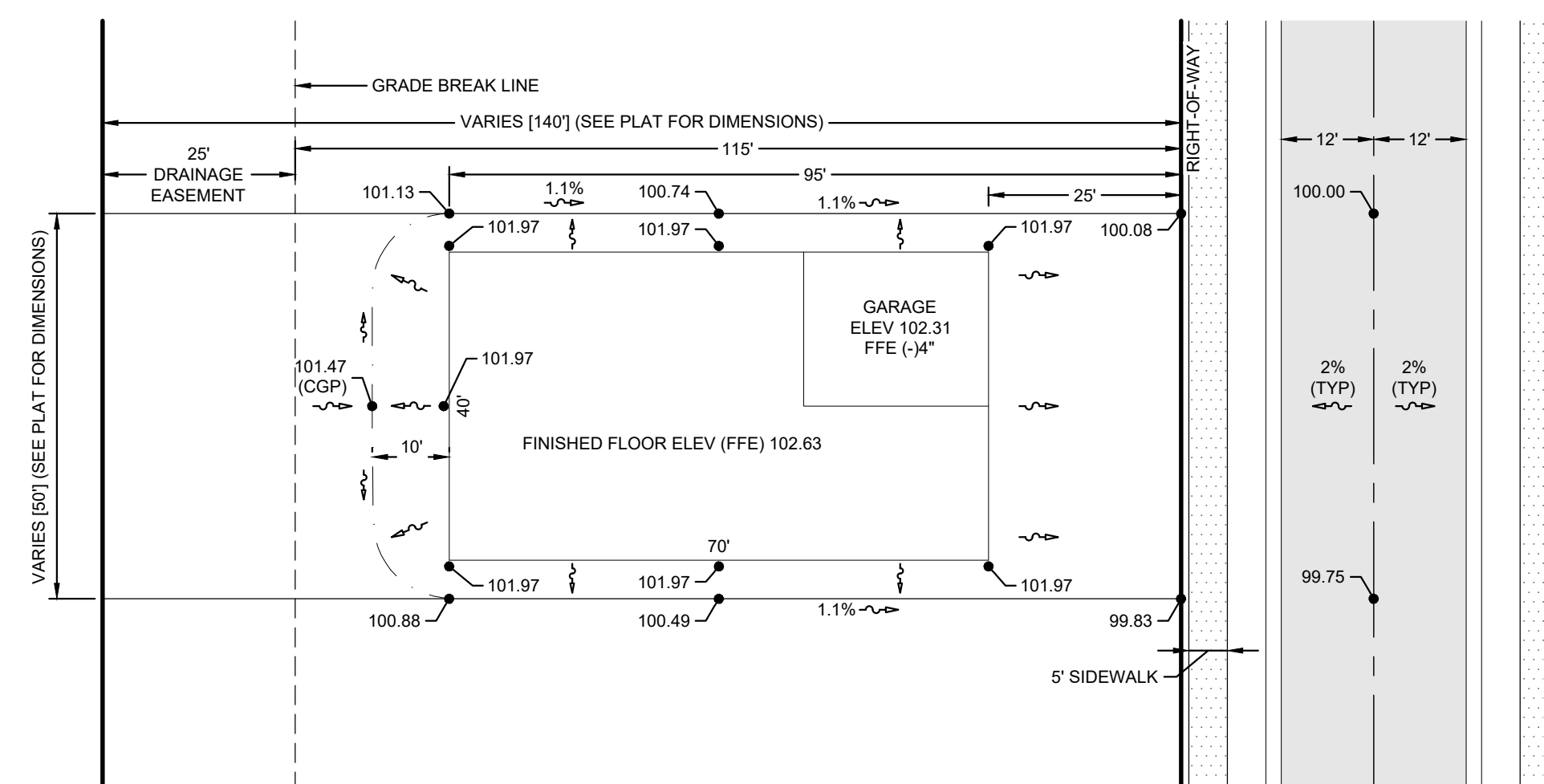
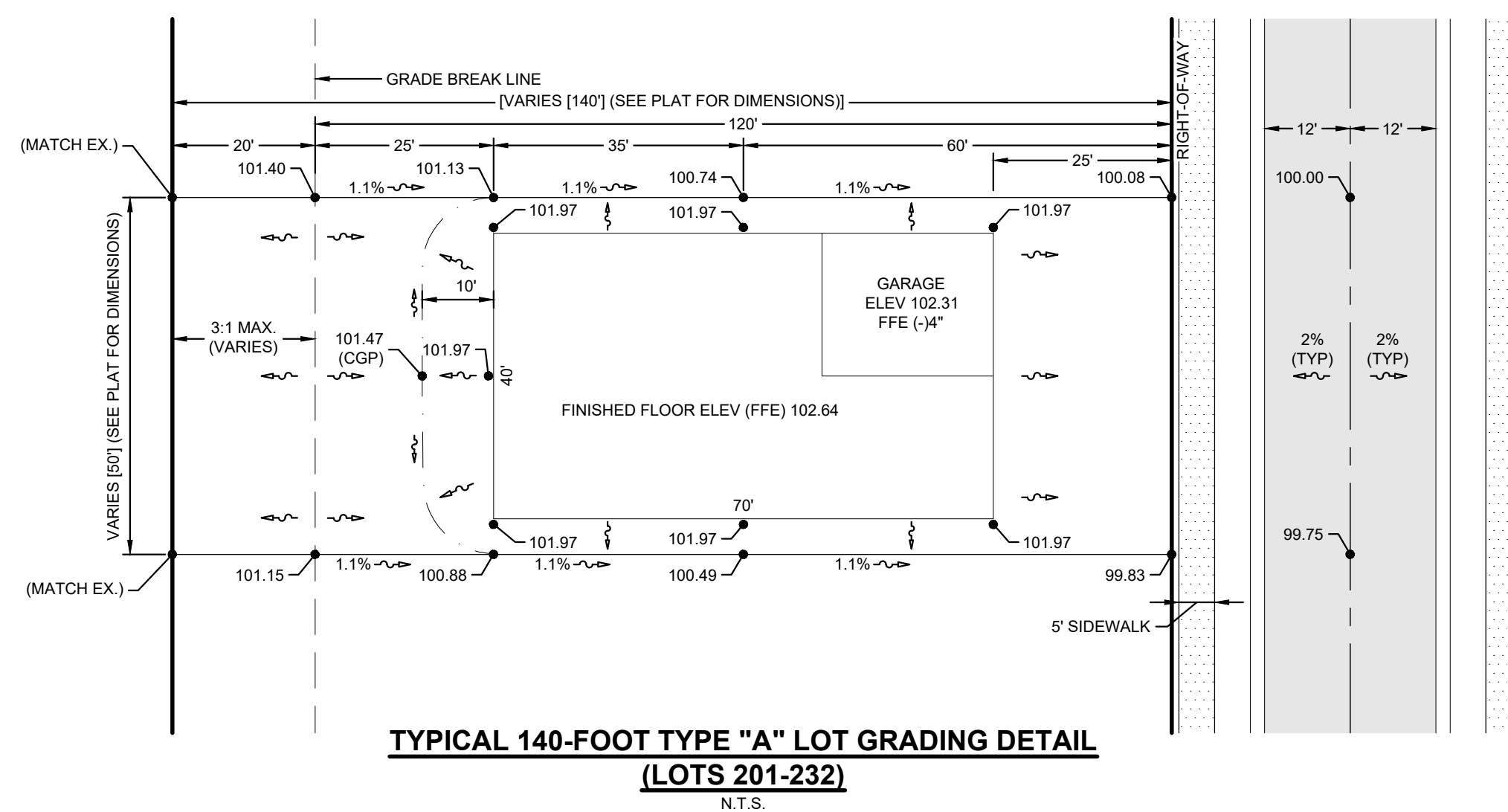


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BUSINESS AUTHORIZATION: 4905
CERTIFICATE OF LAND SURVEYING
BUSINESS AUTHORIZATION: LB0004905

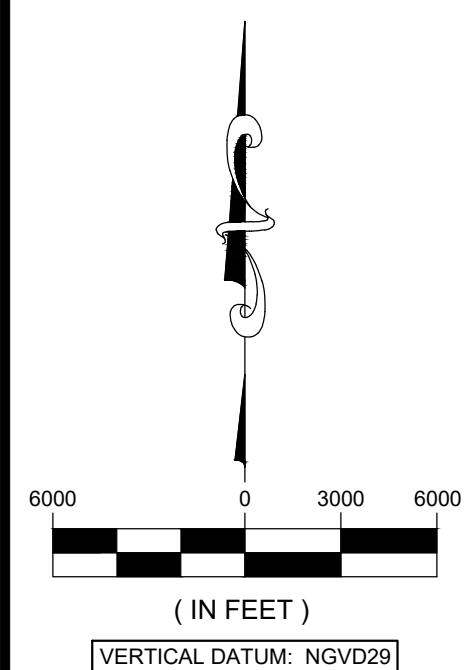
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STATE OF FLORIDA, No. 33659 No. 4151

HASSAN A. KAMAL, P.E.
STATE OF FLORIDA, No. 41951



LOT GRADING DESIGN PARAMETERS:

- BUILDABLE AREA = 40' x 70'
- SIDE YARD SWALE:
 - TYPE "A" LOT: 1.1% MIN.
 - TYPE "B" LOT: 1.5% MIN.
 - TYPE "C" LOT: 1.1% MIN.
- BUILDING DIRT PAD: 6' BELOW F.F.E.
- GRADE ADJUSTMENT TO HOME: 8" BELOW F.F.E. (6" + 2" TO ALLOW FOR SOD PLACEMENT)
- MINIMUM SLOPE AWAY FROM HOME AT REAR: 5% TO CENTRAL GRADE POINT (CGP) 10' FROM BUILDING



PROJECT TITLE

**ADAMSON CREEK
PHASE ONE-C**

SHEET TITLE

GENERAL DETAILS

PROJECT NO.

11453.02

DRAWING NO.

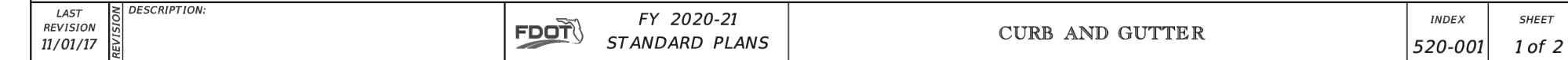
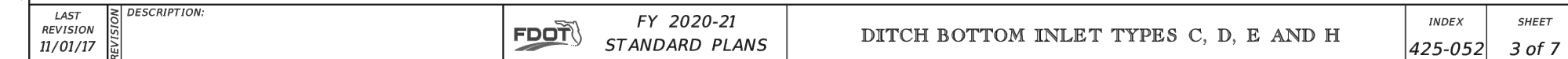
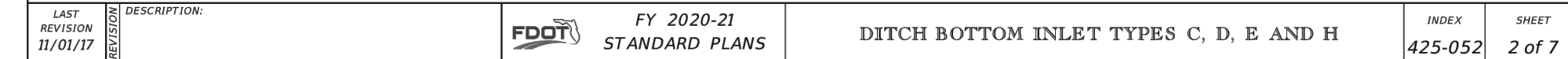
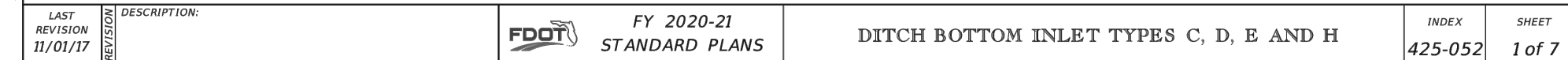
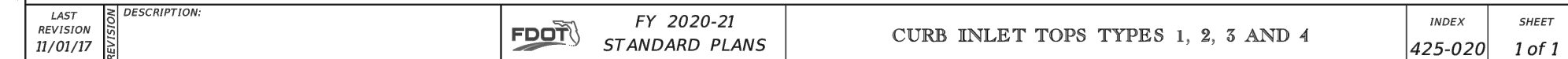
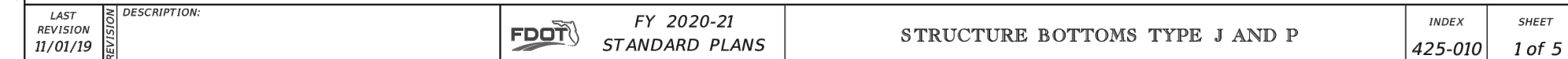
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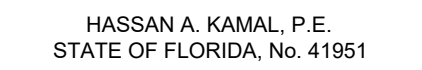
SHEET

19 of 35



SCOTT M. GLAUBITZ, P.E. & P.L.S.
STATE OF FLORIDA, No. 33659 No. 4151



21 of 35

SYMBOLS SHOWN ARE GRAPHIC IN NATURE; DUE TO SCALE, ALL DESIGN ELEMENTS ARE NOT NECESSARILY SHOWN ON PLAN VIEWS. THE CONTRACTOR SHALL ALSO REFER TO SPECIFICATION AND DETAIL SHEETS AS WELL AS THE COMPLETE PLAN SET.

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CERTIFICATE OF LAND SURVEYING
BUSINESS AUTHORIZATION: LB0004905

HASSAN A. KAMAL, P.E.
STATE OF FLORIDA, No. 41951

1. ALL CONSTRUCTION SHALL CONFORM TO FDOT DESIGN STANDARDS (LATEST EDITION), FDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION (LATEST EDITION), BREVARD COUNTY UTILITY SERVICES CRITERIA FOR WATER AND SANITARY SEWER SYSTEMS, AND BREVARD COUNTY CODE OF ORDINANCES.
2. **ISSUANCE OF CERTIFICATE OF COMPLETION:** UPON COMPLETION OF CONSTRUCTION OF THE PROJECT AND PRIOR TO SCHEDULING OF THE FINAL INSPECTION, THE APPLICANT OR THEIR AUTHORIZED REPRESENTATIVE, SHALL PROVIDE THE FOLLOWING DOCUMENTATION TO BREVARD COUNTY PUBLIC WORKS ENGINEERING:

- ### TRAFFIC CONTROL

- ## DRAINAGE - ROADWAYS

3. **LANE CLOSURES:** THE CONTRACTOR SHALL NOTIFY BREVARD COUNTY TRAFFIC OPERATIONS (321-633-2077) A MINIMUM OF ONE (1) WEEK IN ADVANCE OF THE PROPOSED START DATE OF CONSTRUCTION WITHIN THE RIGHT-OF-WAY. CONSTRUCTION SHALL NOT BEGIN UNTIL THE MOT PLAN IS APPROVED AND NOTIFICATIONS HAVE BEEN SENT TO AFFECTED AGENCIES. NO LANE CLOSURES WILL BE PERMITTED DURING PEAK HOUR TRAFFIC VOLUMES.
4. ALL TRAFFIC CONTROL DEVICES SHALL MEET THE REQUIREMENTS OF THE MUTCD FOR STREETS AND HIGHWAYS, FDOT STANDARDS (LATEST EDITIONS), AND BREVARD COUNTY LAND DEVELOPMENT EXHIBIT #26.

1. ALL DRAINAGE SYSTEM CONSTRUCTION SHALL CONFORM TO FDOT STANDARD SPECIFICATIONS AND FDOT DESIGN STANDARDS, (LATEST EDITIONS).
2. ALL RETICULATED STEEL GRATES SHALL BE HOT DIPPED GALVANIZED AND HAVE A TRAFFIC BEARING H-20 LOAD RATING.
3. ALL GRATES UTILIZED WITHIN THE COUNTY RIGHT-OF-WAY SHALL BE TRAFFIC BEARING H-20 LOADING.
4. ALL STORMWATER PIPING WITHIN THE ROAD RIGHT-OF-WAY, REGARDLESS OF PUBLIC OR PRIVATE, OR STORMWATER PIPING THAT CONVEYS STORMWATER UNDER THE ROADWAY BETWEEN STORMWATER TREATMENT PONDS, SHALL BE INSPECTED PER SECTIONS 430-4.8, 430-4.8.1, AND 430-4.8.2 OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, (LATEST EDITION). A COPY OF THE PIPE VIDEO SHALL BE PROVIDED TO THE COUNTY AS PART OF THE SUBMITTAL OF THE CERTIFICATION OF COMPLETION REQUEST FOR FINAL INSPECTION. THE COUNTY SHALL BE NOTIFIED ONE WEEK PRIOR TO THE START OF THE PIPE VIDEO INSPECTION PROCESS.
5. ALL OPEN CUTS SHALL CONFORM TO LAND DEVELOPMENT EXHIBIT #25. FOR ALL OPEN CUTS, THE FLOWABLE FILL AND TEMPORARY ASPHALT SHALL BE INSTALLED WITHIN TWO (2) DAYS OF THE EXCAVATION (UNLESS OTHERWISE APPROVED IN WRITING BY BREVARD COUNTY PUBLIC WORKS ENGINEERING). PERMANENT ASPHALT INCLUDING MILLING AND RESURFACING, IF NEEDED, SHALL BE COMPLETED WITHIN THIRTY (30) DAYS OF EXCAVATION.
6. THE CONTRACTOR SHALL REMOVE THE SHOULDER OF THE ROADWAY TO A POINT WHERE THE BASE MATERIAL OF THE EXISTING ROADWAY MEETS THE MINIMUM THICKNESS OF THE PROPOSED ROADWAY/COMMERCIAL DRIVEWAY CONNECTION.

1. ALL DRIVEWAYS SHALL BE CONSTRUCTED PER FDOT INDEX 515 AND/OR BREVARD COUNTY STANDARD EXHIBITS UNLESS OTHERWISE NOTED.
2. ALL CONCRETE SHALL MEET FDOT DESIGN MIX AND SPECIFICATIONS. CURING METHOD SHALL BE IN ACCORDANCE WITH THE FDOT SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, (LATEST EDITION).
3. ALL SIDEWALKS WITHIN THE COUNTY RIGHT-OF-WAY OR WITHIN A PUBLIC SIDEWALK EASEMENT SHALL BE CONSTRUCTED OF 6-INCH THICK, 3000-PSI CONCRETE WITH FIBER MESH REINFORCEMENT. CONCRETE SIDEWALKS (OR PEDWAYS) AND CONCRETE DRIVEWAY APRONS SHALL BE CONSTRUCTED OVER SOILS COMPACTED TO 98% DENSITY, OF AASHTO T -180. SHOULD EXISTING SOILS BE FOUND UNSUITABLE FOR COMPACTION, ADDITIONAL COMPATIBLE MATERIALS SHALL BE BROUGHT TO THE SITE FOR USE AS SUBGRADE. ALTERNATE METHODS OF COMPACTION MAY BE REQUIRED TO AVOID DAMAGE TO SURROUNDING PROPERTIES.
4. CONSTRUCT SIDEWALK JOINTS PURSUANT TO FDOT INDEX 310 (LATEST EDITION). EXPANSION JOINTS SHALL BE EVERY 50 FEET, AND BETWEEN NEW AND OLD CONCRETE.
5. TWO BY FOUR FORM BOARDS SHALL NOT BE USED FOR SIDEWALK/DRIVEWAY CONSTRUCTION. FORM BOARDS SHALL MATCH PROPOSED CONCRETE THICKNESS. SLIP FORMS SHALL NOT BE USED FOR SIDEWALK CONSTRUCTION. FIXED FORMWORK SHALL BE REQUIRED PER FDOT INDEX 300.
6. THE CONTRACTOR SHALL PROVIDE A 3-FOOT CURB TRANSITION AT ALL CURB TERMINATIONS.
7. ALL SIDEWALK AND ACCESS RAMP CONSTRUCTION SHALL COMPLY WITH THE DEPARTMENT OF JUSTICE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN, FDOT DESIGN STANDARDS (LATEST EDITION), AND BREVARD COUNTY DEVELOPMENT REQUIREMENTS.

THE FOLLOWING TESTING REQUIREMENTS APPLY TO:

- a. ALL PUBLIC AND PRIVATE SUBDIVISION PROJECTS PERMITTED THROUGH BREVARD COUNTY PLANNING AND DEVELOPMENT;
- b. ALL SITE PLAN PROJECTS PERMITTED THROUGH BREVARD COUNTY PLANNING AND DEVELOPMENT REQUIRING WORK IN THE COUNTY RIGHT-OF-WAY;
- c. ALL PROJECTS PERMITTED THROUGH BREVARD COUNTY PUBLIC WORKS FOR WORK WITHIN THE COUNTY RIGHT-OF-WAY.

SECTIONS WITHIN THE FDOT STANDARD SPECIFICATIONS LIMITING TESTING REQUIREMENTS BASED ON LOT SIZE, SUB-LOT SIZE, TONNAGE, MINIMUM THICKNESS, OR SPREAD RATE WILL NOT APPLY TO THE PROJECTS LISTED ABOVE. AT A MINIMUM, ONE SET OF TESTS WILL BE REQUIRED FOR ALL PAVING PROJECTS LARGER THAN 50 TONS TOTAL AND ADDITIONAL TESTING MAY BE REQUIRED ON A CASE BY CASE EVALUATION OF THE PROJECT. TESTING REQUIREMENTS AT THE ASPHALT PLANT WILL NOT APPLY.

FOR S-TYPE ASPHALT AS SPECIFIED IN THE 2000-2004 FDOT STANDARD SPECIFICATION :

1. THE CONTRACTOR SHALL PROVIDE A DESIGN MIX SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF FLORIDA AND APPROVED BY THE ENGINEER OF RECORD FOR THE PROJECT TO PUBLIC WORKS ENGINEERING FIVE BUSINESS DAYS PRIOR TO PAVING. THE MIX DESIGN SHALL MEET FDOT MINIMUM REQUIREMENTS AS OUTLINED IN SECTION 331-4 (2000). DESIGN MIXES BY FDOT CERTIFIED MIX DESIGNERS WILL NOT BE ACCEPTED.
2. THE CONTRACTOR SHALL PROVIDE EXTRACTION/GRADATION TESTS IN ACCORDANCE WITH SECTION 331-4.4.2 (2000).
3. THE CONTRACTOR SHALL PROVIDE MARSHALL STABILITY TESTING IN ACCORDANCE WITH SECTION 331-5.5.1 (2000).
4. PAVEMENT SURFACE SHALL MEET ALL REQUIREMENTS SPECIFIED IN SECTION 330-13 (2000).
5. THE CONTRACTOR SHALL PROVIDE SURFACE TOLERANCE TESTING FOR ROADWAYS WITH DESIGN SPEEDS OF 35 MPH OR GREATER IN ACCORDANCE WITH SECTION 330-13.3 (2000).
6. QUALITY CONTROL CORE BORINGS SHALL BE OBTAINED FOR THICKNESS PER SECTION 330-2.2 ROADWAY, (2004) AND DENSITY PER SECTION 330-11, TABLE 330-3 (2000).
7. ASPHALT TEST RESULTS FOR EACH CORE TAKEN ARE REVIEWED ON AN INDIVIDUAL BASIS FOR THICKNESS AND DENSITY. THICKNESS AND DENSITY AVERAGES WILL NOT BE ACCEPTED. NO UNDER TOLERANCE FOR THE THICKNESS OF EACH ASPHALT CORE WILL BE ALLOWED.

FOR SUPERPAVE (SP) ASPHALT AS SPECIFIED IN THE 2010 FDOT STANDARD SPECIFICATION :

1. THE CONTRACTOR SHALL PROVIDE AN FDOT APPROVED DESIGN MIX, APPROVED BY THE ENGINEER OF RECORD FOR THE PROJECT, TO PUBLIC WORKS ENGINEERING FIVE BUSINESS DAYS PRIOR TO PAVING. THE MIX DESIGN SHALL MEET FDOT MINIMUM REQUIREMENTS AS OUTLINED IN SECTION 334-2 & 334-3 (2010). DESIGN MIXES BY FDOT CERTIFIED MIX DESIGNERS THAT ARE NOT FDOT APPROVED WILL NOT BE ACCEPTED.
2. THE CONTRACTOR SHALL PROVIDE GRADATION AND BINDER CONTENT TESTING IN ACCORDANCE WITH SECTION 334-5, (2010) HOWEVER THE SAMPLE(S) MAY BE TAKEN AT THE PROJECT LOCATION IN LIEU OF AT THE ASPHALT PLANT AS SPECIFIED. RESULTS MUST BE PROVIDED TO THE COUNTY WITHIN ONE WEEK AFTER THE COMPLETION OF PAVING.
3. THE CONTRACTOR SHALL PROVIDE QUALITY CONTROL, DENSITY, AND THICKNESS TESTING IN ACCORDANCE WITH SECTIONS 334-3, 334-4, 334-5, AND 334-5.2.3 (2010).
4. ASPHALT TESTING RESULTS FOR EACH CORE TAKEN ARE REVIEWED ON AN INDIVIDUAL BASIS FOR THICKNESS AND DENSITY. THICKNESS AND DENSITY AVERAGES, AS NOTED IN TABLE 334-5, NOTE 2, OF SECTION 334-5 (2010) WILL NOT BE ACCEPTED. NO UNDER TOLERANCE FOR THE THICKNESS OF EACH ASPHALT CORE WILL BE ALLOWED.
5. PAVEMENT SURFACE SHALL MEET ALL REQUIREMENTS SPECIFIED IN SECTION 330-12 (2010).
6. THE CONTRACTOR SHALL PROVIDE QUALITY CONTROL SURFACE TOLERANCE TESTING FOR ROADWAYS WITH DESIGN SPEEDS OF 35 MPH OR GREATER IN ACCORDANCE WITH 330-12 (2010).

FOR FRICTION COURSE FC-5 AS SPECIFIED IN THE 2010 FDOT STANDARD SPECIFICATION :

1. THE CONTRACTOR SHALL PROVIDE AN FDOT APPROVED DESIGN MIX, APPROVED BY THE ENGINEER OF RECORD FOR THE PROJECT, TO PUBLIC WORKS ENGINEERING FIVE BUSINESS DAYS PRIOR TO PAVING. THE MIX DESIGN SHALL MEET FDOT MINIMUM REQUIREMENTS AS OUTLINED IN SECTION 337-4 (2010). DESIGN MIXES BY FDOT CERTIFIED MIX DESIGNERS THAT ARE NOT FDOT APPROVED WILL NOT BE ACCEPTED.
2. THE CONTRACTOR SHALL PROVIDE GRADATION AND BINDER CONTENT TESTING IN ACCORDANCE WITH SECTION 337-5 & 337-6 (2010). THE SAMPLE(S) MAY BE TAKEN AT THE PROJECT LOCATION IN LIEU OF AT THE ASPHALT PLANT AS SPECIFIED. RESULTS MUST BE PROVIDED TO THE COUNTY WITHIN ONE WEEK AFTER THE COMPLETION OF PAVING.
3. PAVEMENT SURFACE SHALL MEET ALL REQUIREMENTS SPECIFIED IN SECTION 330-12 (2010).
4. QUALITY CONTROL CORE BORINGS SHALL BE OBTAINED FOR THICKNESS TESTING USING SECTION 334-5.2.3 (2010).
5. THE CONTRACTOR SHALL PROVIDE QUALITY CONTROL SURFACE TOLERANCE TESTING FOR ROADWAYS WITH DESIGN SPEEDS OF 35 MPH OR GREATER IN ACCORDANCE WITH SECTION 330-12 (2010).

FOR SUPERPAVE FRICTION COURSES FC-9.5 & FC-12.5 AS SPECIFIED IN THE 2010 FDOT STANDARD SPECIFICATIONS:

1. THE CONTRACTOR SHALL PROVIDE AN FDOT APPROVED DESIGN MIX, APPROVED BY THE ENGINEER OF RECORD FOR THE PROJECT, TO PUBLIC WORKS ENGINEERING FIVE BUSINESS DAYS PRIOR TO PAVING. THE MIX DESIGN SHALL MEET FDOT MINIMUM REQUIREMENTS AS OUTLINED IN SECTION 337-4 (2010). DESIGN MIXES BY FDOT CERTIFIED MIX DESIGNERS THAT ARE NOT FDOT APPROVED WILL NOT BE ACCEPTED.
2. THE CONTRACTOR SHALL PROVIDE GRADATION AND BINDER CONTENT TESTING IN ACCORDANCE WITH SECTION 337-5 & 337-6 (2010). THE SAMPLE(S) MAY BE TAKEN AT THE PROJECT LOCATION IN LIEU OF AT THE ASPHALT PLANT, AS SPECIFIED. RESULTS MUST BE PROVIDED TO THE COUNTY WITHIN ONE WEEK AFTER THE COMPLETION OF PAVING.
3. THE CONTRACTOR SHALL PROVIDE QUALITY CONTROL, DENSITY, AND THICKNESS TESTING IN ACCORDANCE WITH SECTIONS 337-1, 337-3, 337-4, 337-6, 337-8, AND 334-5.2.3 (2010).
4. ASPHALT TESTING RESULTS FOR EACH CORE TAKEN ARE REVIEWED ON AN INDIVIDUAL BASIS FOR THICKNESS AND DENSITY. THICKNESS AND DENSITY AVERAGES, AS NOTED IN TABLE 334-5, NOTE 2, OF SECTION 334-5 (2010) WILL NOT ACCEPTED. NO UNDER TOLERANCE FOR THE THICKNESS OF EACH ASPHALT CORE WILL BE ALLOWED.
5. PAVEMENT SURFACE SHALL MEET ALL REQUIREMENTS SPECIFIED IN SECTION 330-12 (2010).
6. THE CONTRACTOR SHALL PROVIDE QUALITY CONTROL SURFACE TOLERANCE TESTING FOR ROADWAYS WITH DESIGN SPEEDS OF 35 MPH OR GREATER IN ACCORDANCE WITH 330-12 (2010).

1. ALL CONSTRUCTION SHALL COMPLY WITH FDOT DESIGN STANDARDS (LATEST EDITION), FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION), AND BREVARD COUNTY STANDARDS.
2. PRIOR TO START OF CONSTRUCTION, THE SITE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING STRUCTURAL ENGINEERING DRAWINGS (SIGNED & SEALED BY A PROFESSIONAL ENGINEER LICENSED & REGISTERED IN THE STATE OF FLORIDA) FOR ALL COMPONENTS OF THE CONCRETE BOX CULVERTS, INCLUDING WINGWALLS, TOE SLAB & CUTOFF WALLS, AND HEADWALLS. THE DRAWINGS SHALL INCLUDE QUANTITIES TABULATIONS FOR CLASS IV CONCRETE (CUBIC YARDS), AND REINFORCING STEEL (POUNDS). THE DESIGN MUST BE BASED ON FDOT'S LOAD & RESISTANCE FACTOR DESIGN (LRFD) PROGRAM. SEPARATE DRAWINGS ARE REQUIRED FOR ALL WINGWALLS, TOE SLABS & CUTOFF WALLS, AND HEADWALLS, WHICH MUST BE CAST-IN-PLACE PER FDOT SPECIFICATIONS.
3. ALL BOX CULVERT MATERIALS THAT ARE TO BE INSTALLED UNDER ROADWAYS AND/OR DRIVEWAYS ARE TO BE DELIVERED TO SITE (AND PASS INITIAL INSPECTIONS) PRIOR TO START OF DEMOLITION OF EXISTING SYSTEM.
4. CONCRETE (PRECAST OR CAST-IN-PLACE) REQUIREMENTS: CLASS IV (5500 PSI).
5. REINFORCING STEEL REQUIREMENTS: ASTM A615 GRADE 60 DEFORMED BAR UNLESS OTHERWISE NOTED, WITH A MINIMUM CLEARANCE OF 3" (THREE INCHES), UNLESS OTHERWISE SHOWN. EQUAL AREA SUBSTITUTION OF WELDED WIRE (WWR) REINFORCEMENT IS PERMITTED.
6. REFER TO FDOT INDEX 292 FOR PRECAST CONCRETE BOX CULVERT SLAB & WALL THICKNESSES, REINFORCEMENT AREAS, GENERAL NOTES (SHEET 2 OF 14), AND WELDED WIRE REINFORCEMENT BENDING DIAGRAMS (SHEET 14 OF 14).
7. REFER TO FDOT INDEX 289 FOR CONCRETE BOX CULVERT DETAILS RELATED TO LRFD.
8. REFER TO FDOT INDEX 291 FOR SUPPLEMENTAL DETAILS FOR PRECAST CONCRETE BOX CULVERTS.
9. IF REQUIRED, BY-PASS PUMPING AND/OR PIPING SHALL BE APPROVED BY BREVARD COUNTY PUBLIC WORKS PRIOR TO THE START OF CONSTRUCTION.

ADAMSON CREEK PHASE ONE-C

PROJECT NO.

11453.02

DRAWING NO.

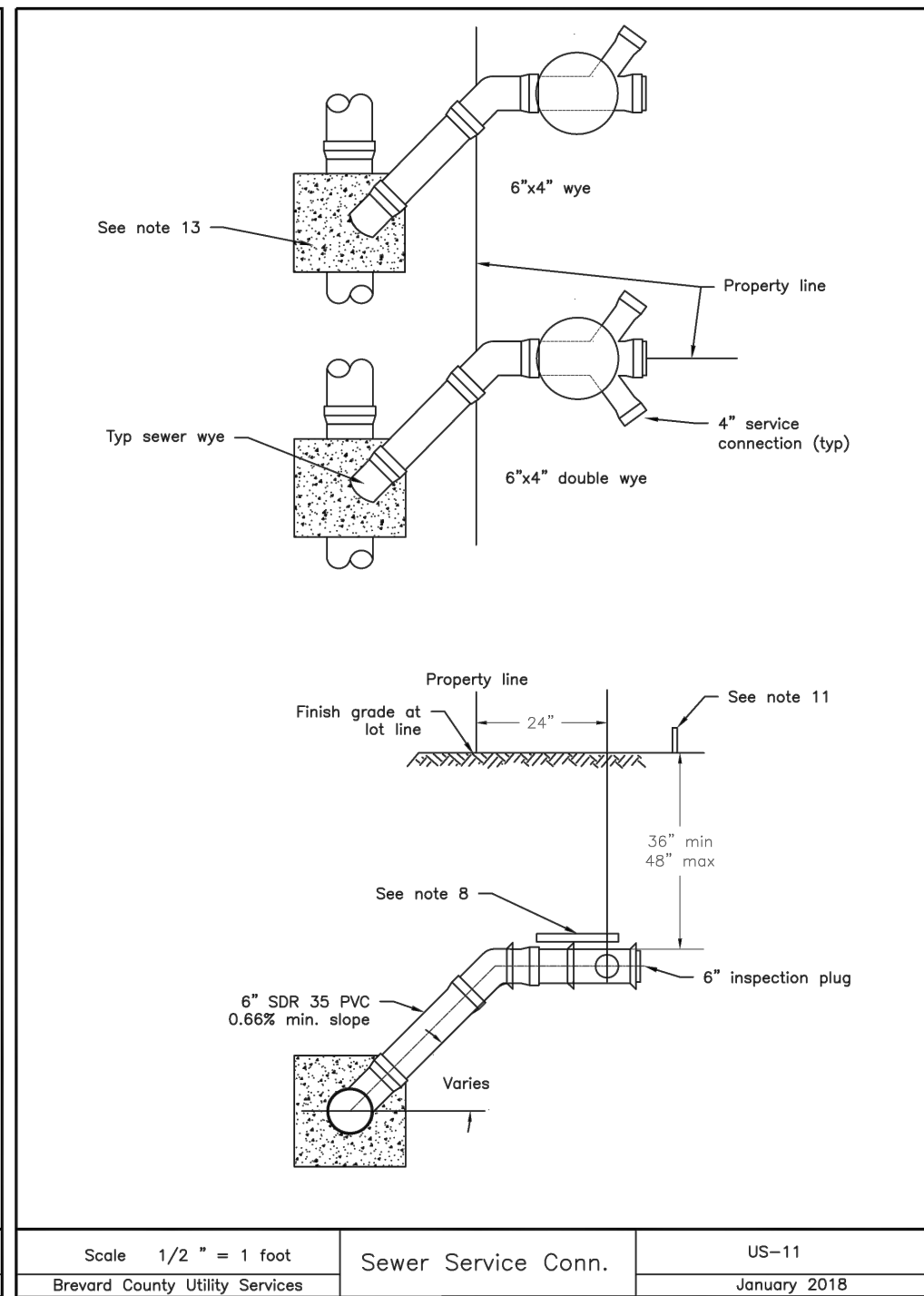
1145302 400 022

SHEET

22 of 35

PROJECT NAME/DWG DESIGNED/DRAWN BY:	DATE:	REVISION:	BY:	PREPARED BY:  PUBLIC WORKS DEPARTMENT ENGINEERING PROGRAM BREVARD COUNTY BOARD OF COUNTY COMMISSIONERS 2725 JUDGE FRAN JAMIESON WAY, RM. 204, BLDG. A, VIERA, FL 32940 Ph. (321) 637-5437, Fx. (321) 633-2083	DATE: OCTOBER 2012	APPROVED BY: RICHARD B. SZPYRKA, P.E. ENGINEERING PROGRAM MANAGER	BREVARD COUNTY PUBLIC WORKS ENGINEERING STANDARD DEVELOPMENT NOTES	SHEET 1 OF 1	
	1.	FOR DISTRIBUTION 10-10-12							
	2.								
	3.								
	4.								
CHECKED BY: RBS									

Notes:	
1. Service laterals must be located in front of the property to be served. 2. Service laterals shall extend two feet inside the property and shall be constructed regardless of benefit to or ownership of adjacent lots or parcels. 3. Service laterals are to be located in side property easements. 4. Service laterals shall be located to avoid conflict with other utilities. 5. Number and location of service laterals for large parcels shall be determined on a case-by-case basis. 6. Service lateral shall be located at the opposite property line when in conflict with storm drainage systems. 7. Service lateral locations shall be marked along the outside edge of curb with a sawcut "S" or by a metal tab set into the pavement for roadways without curb. 8. Electronic marker disks are required. 9. Pipe and fittings for service laterals must be of the same material as the main and shall meet the requirements of ASTM D1784. 10. Each service shall be staked prior to installation by an engineer or surveyor registered in the State of Florida or an employee under his direct supervision. 11. Location and finished grade of ground shall be staked where the lateral crosses the right of way line prior to installation. 12. Service laterals shall be provided for sewer service to adjacent lots and parcels when a gravity sewer main is constructed. 13. Concrete encasement required for all piping except PVC. PVC connections will be made with a standard PVC sewer eye and a gasketed slip-on fitting. 14. All services shall be a minimum of six inches in diameter.	
Notes US-10 Sewer Service Conn. January 2018	
Brevard County Utility Services	



Notes:

1. Precast concrete—Type II cement per ASTM C-150.
2. Allow 40 psi minimum concrete compressive strength at 28 day cure time.
3. Rind and cover to be set flush with finished pavement.
4. Six inch compacted FDOT #57 stone shall extend six inches beyond edge of monolithic base.
5. Exterior coating: Three coats (red, grey, then black) of factory applied CS-55 water based acrylic coating (12 mils total thickness) or EW-1 water based epoxy coating (12 mils total thickness). Field touch up required after installation of structure.
6. Interior coating: Three coats (red, black, then grey) of factory applied CS-55 water based acrylic coating (12 mils total thickness) or DK-1 water based epoxy coating (12 mils total thickness). One coat of red will be applied to the complete interior of the structure prior to final acceptance.
7. US Furniture 225 "Tag Legacy." See Monolithic Cover detail for lettering requirements.
8. Resilient boot connectors shall be used where PVC pipe penetrates monolithic walls. Boots shall be cemented inside with waterproof non-shrinking grout. Boots shall be watertight and manufactured of materials resistant to decay caused by the sanitary sewer environment or ambient soil conditions. All hardware inside monoliths to be 316 stainless steel.
9. All openings shall be sealed with non-shrinking grout.
10. Reinforcement shall meet ASTM C-478.
11. Manhole steps are not permitted.
12. Minimum pipe penetration hole diameter equals pipe O.D. plus four inches.
13. Monoliths deeper than twelve feet from finished grade shall have a minimum inside diameter of five feet.
14. Tongue and groove joint may be oriented up or down.
15. The cone, riser, iron frame shall be encapsulated with an exterior heat shrink wrap with a minimum thickness of 100 mils and minimum width of 12 inches regardless of location above or below the water table. Joints shall require a minimum wrap width of 9 inches. Exterior heat shrink wrap must be centered on the joint. Exterior heat shrink wrap to be Wrapsol sold or approved equal. Adhesive wraps are permitted. Applicators must be factory trained in the application of the wrap.
16. Joints shall be assembled using non-sag grade of polyurethane filler material meeting Federal Specification SSS-210A Type 1 and AASHTO Specification M198 Type B. Each joint shall be trimmed after assembly.
17. Each manhole shall have a minimum of three lifting loops (not rebar). Loops shall be cut off and grouted over prior to completion of the structure installation. Lifting holes must have a minimum of 2-1/2 inches of cover on the interior wall. Lifting holes must be acid washed and sealed with non-shrink grout.
18. Precast structures off-loaded by the use of pallet forks will be rejected.
19. Structures dropped during handling will be rejected.

Largest pipe in structure	Minimum I.D. of structure	Min. wall thickness of structure	Min. Base thickness
Up to 15"	4'-0"	8"	8"
16" and larger	Outside pipe diameter + 3'-0"	Per ASTM C-478 (8" minimum)	

Manholes—
General Notes

Breard County Utility Services

US-20
January 2018

1 of 2

Notes:

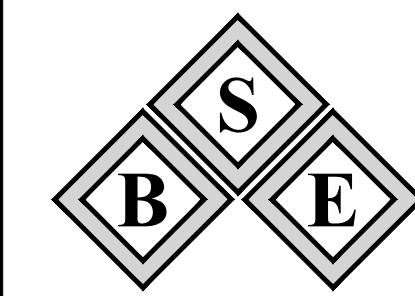
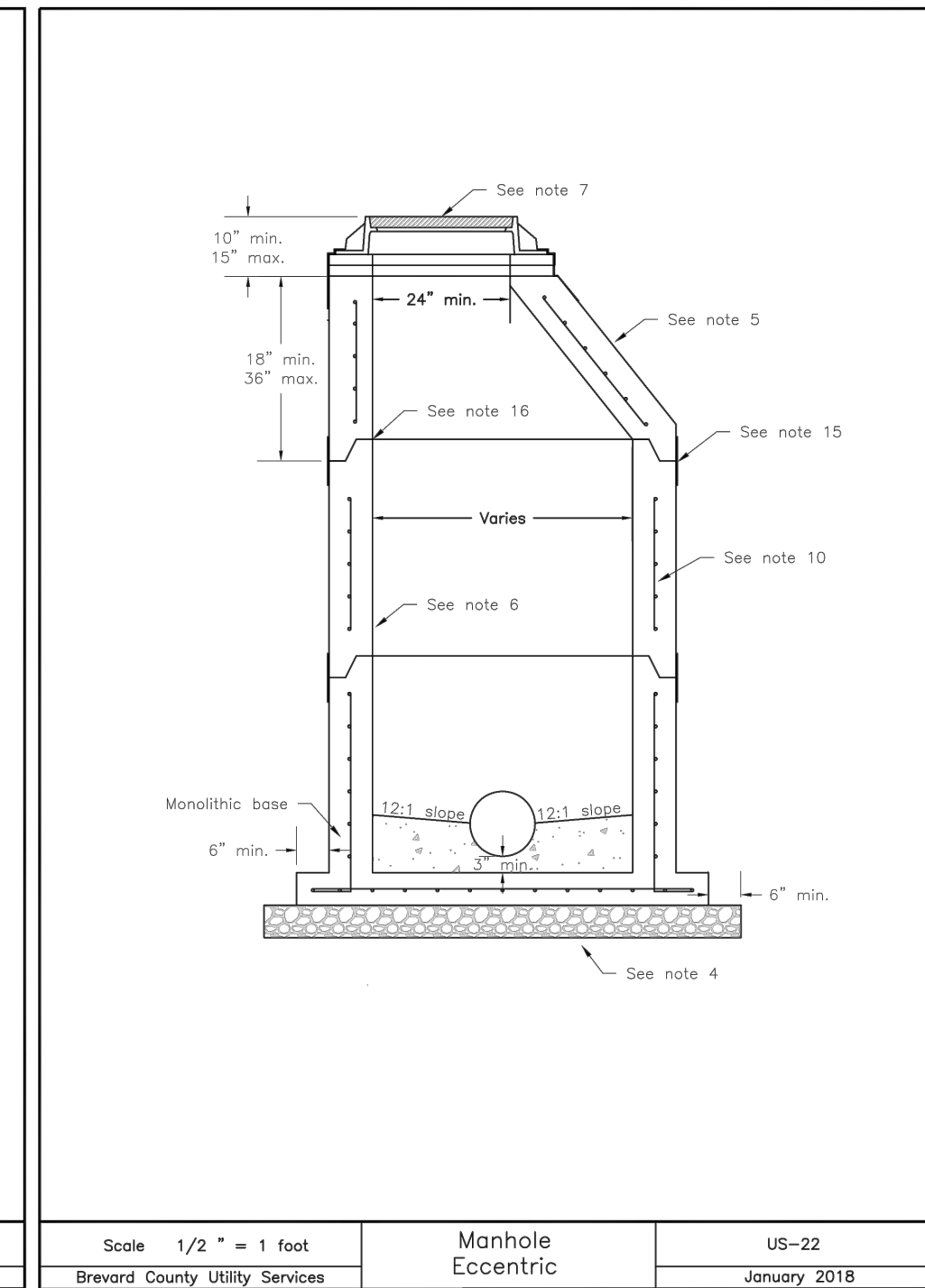
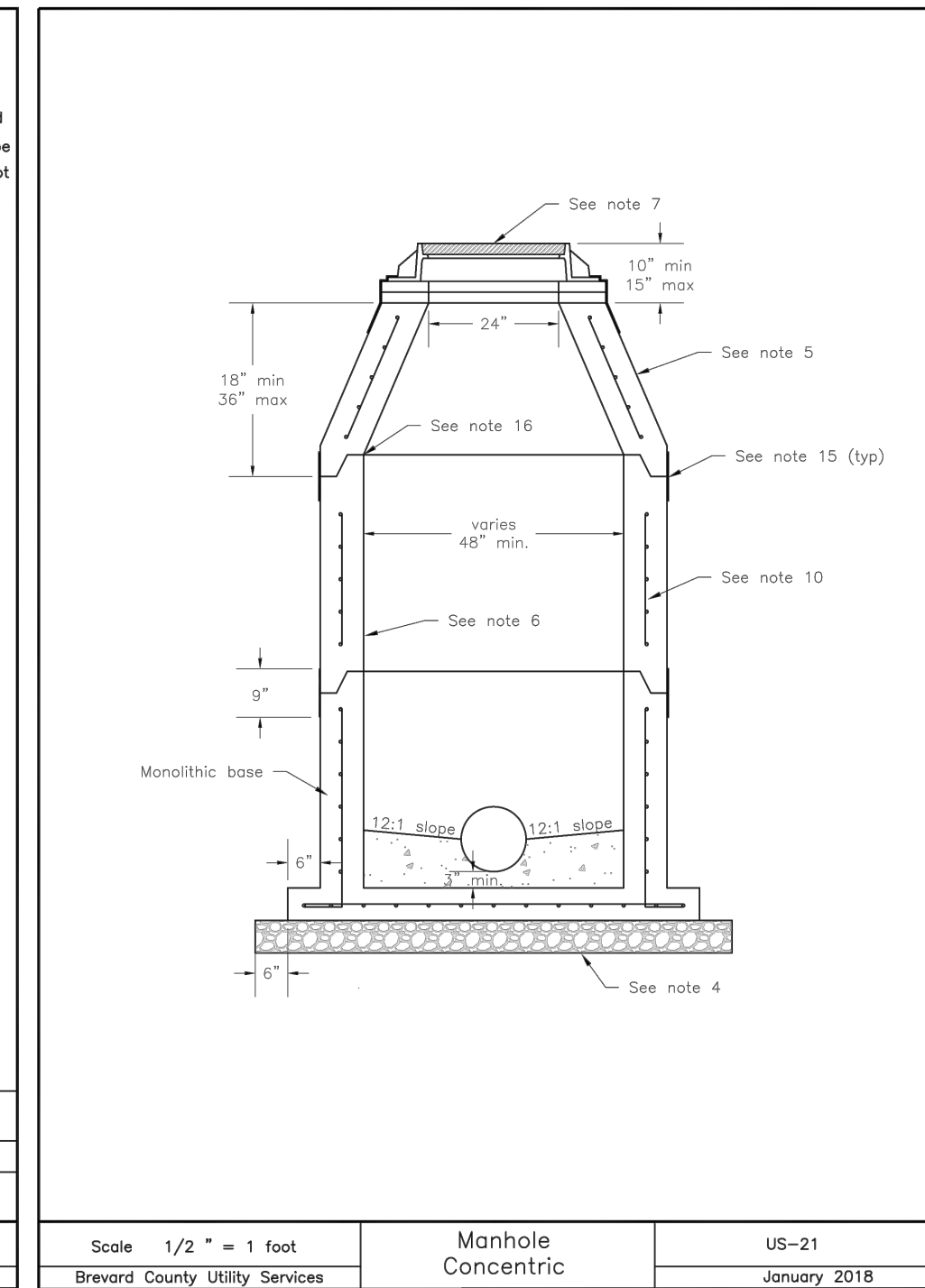
20. Pipes protruding into the manhole shall extend approximately 1/2 inch inside the inner wall measured at the horizontal midsection points of the pipe. Pipe thirty inches and larger inside diameter shall be contoured such that the maximum protrusion into the manhole at any point around the pipe shall not exceed five inches.

21. Use of HDPE adjustment rings with butyl rubber sealant that meet H-20 loading requirements are approved.

22. Service connections shall not terminate directly into a manhole.

Largest pipe in structure	Minimum I.D. of structure	Min. wall thickness of structure	Min. Base thickness
Up to 15"	4'-0"	8"	6"
18" and larger	Outside pipe diameter + 3'-0"	Per ASTM C-478 (8" minimum)	

	Manholes— General Notes	US-20 2 of 2 January 2018
Brevard County Utility Services		



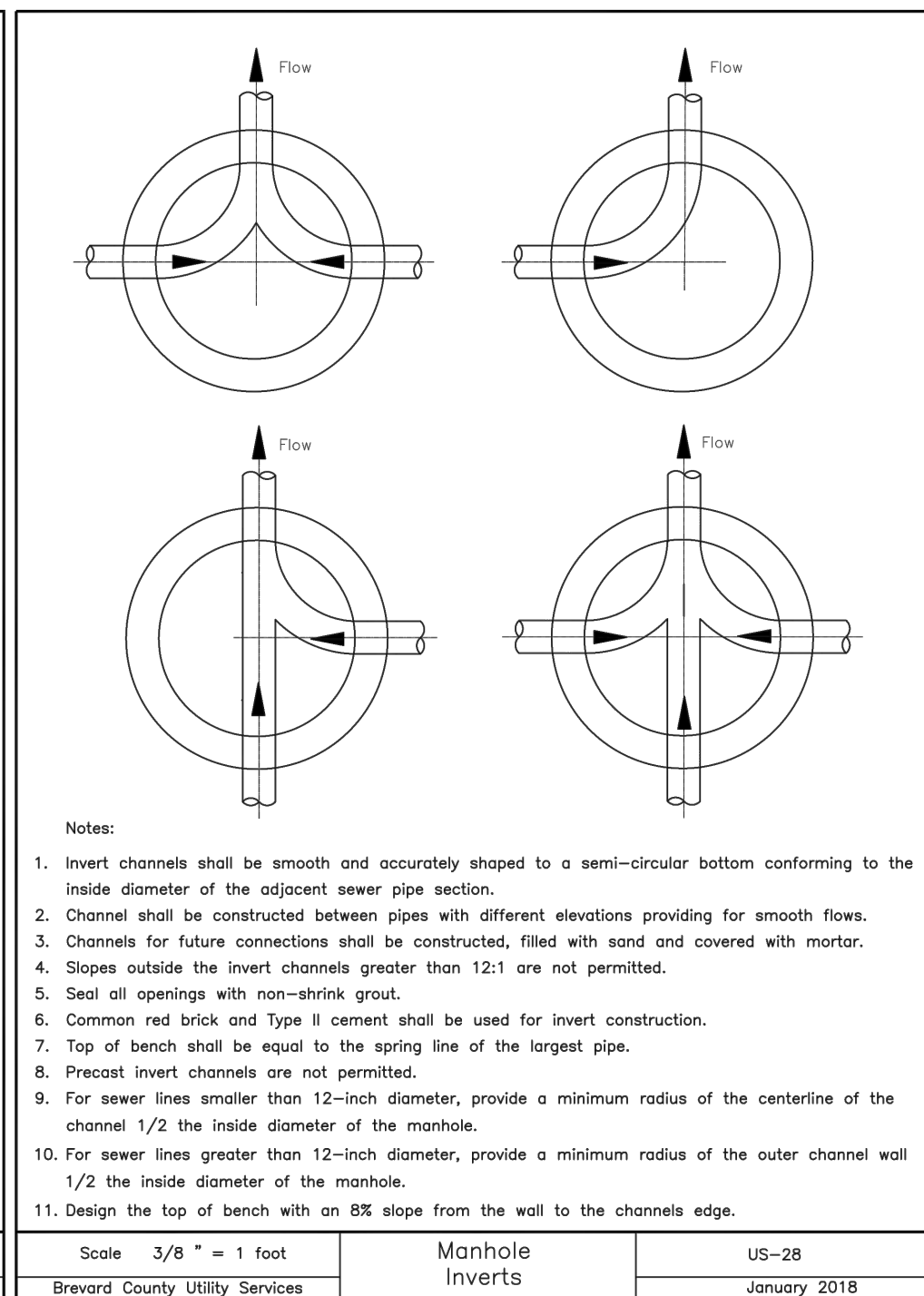
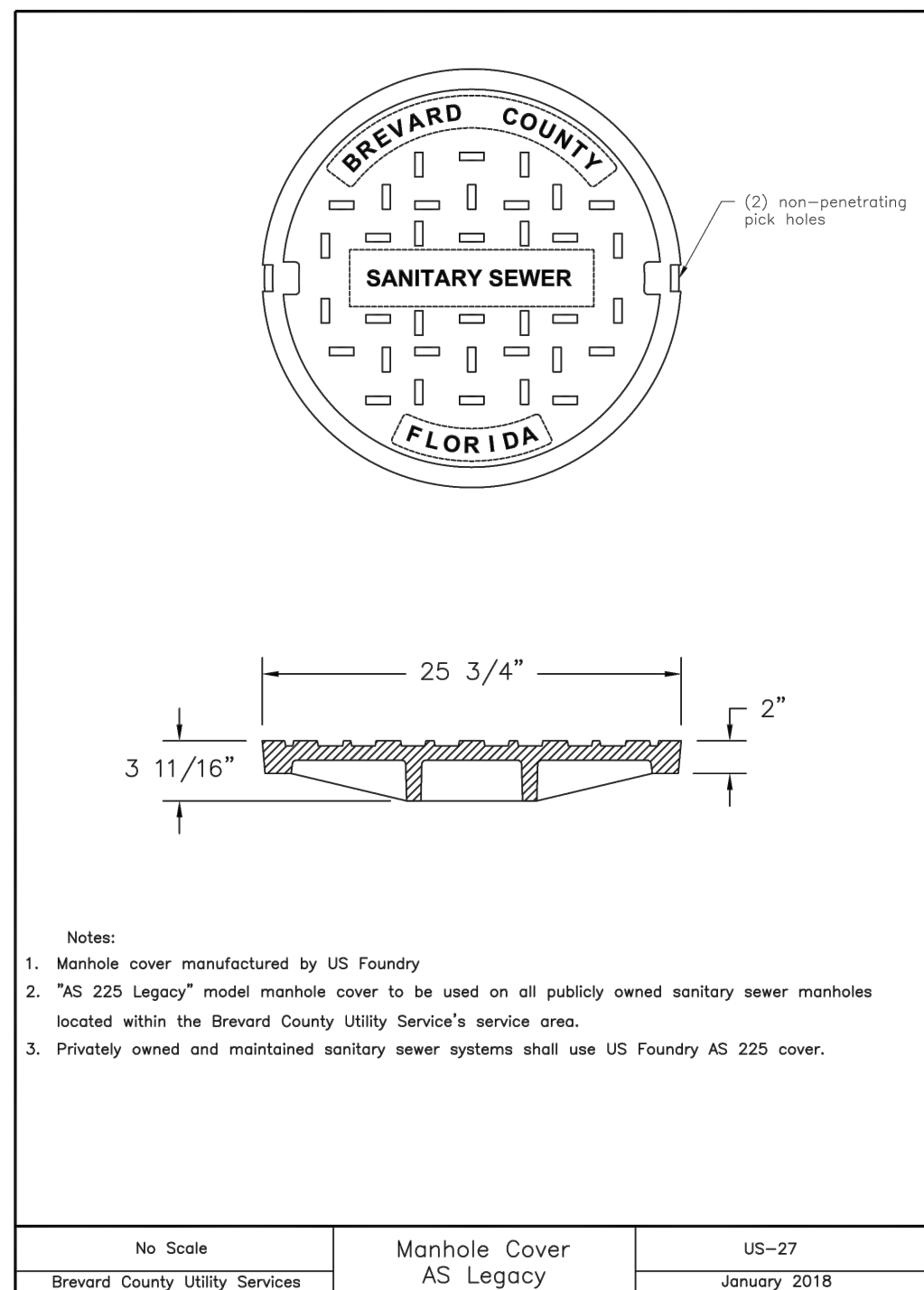
B.S.E. CONSULTANTS, INC
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LAND SURVEYING

312 SOUTH HARBOR CITY BOULEVARD, SUITE 4
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PHONE: (321) 725-3674 FAX: (321) 723-1159

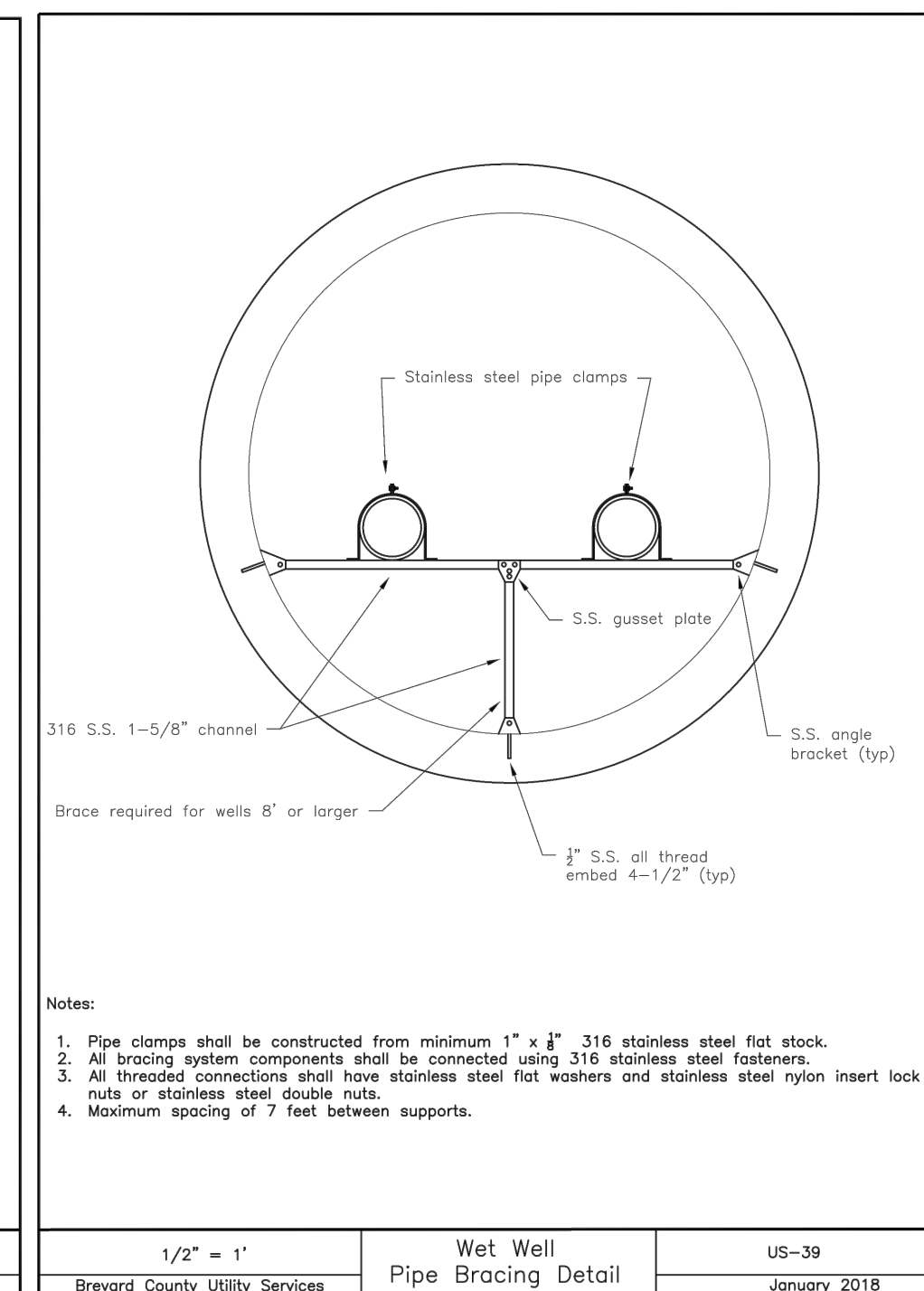
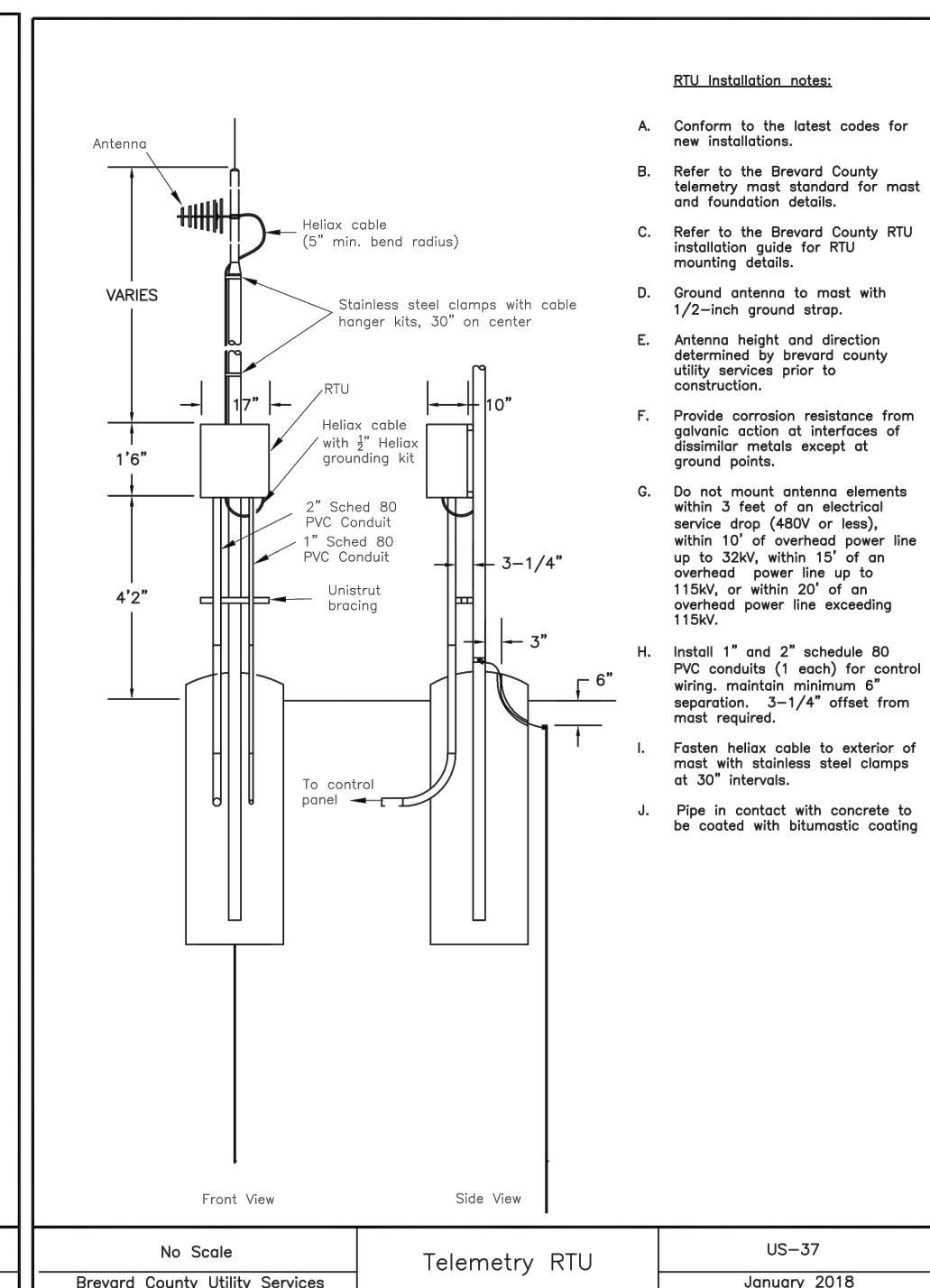
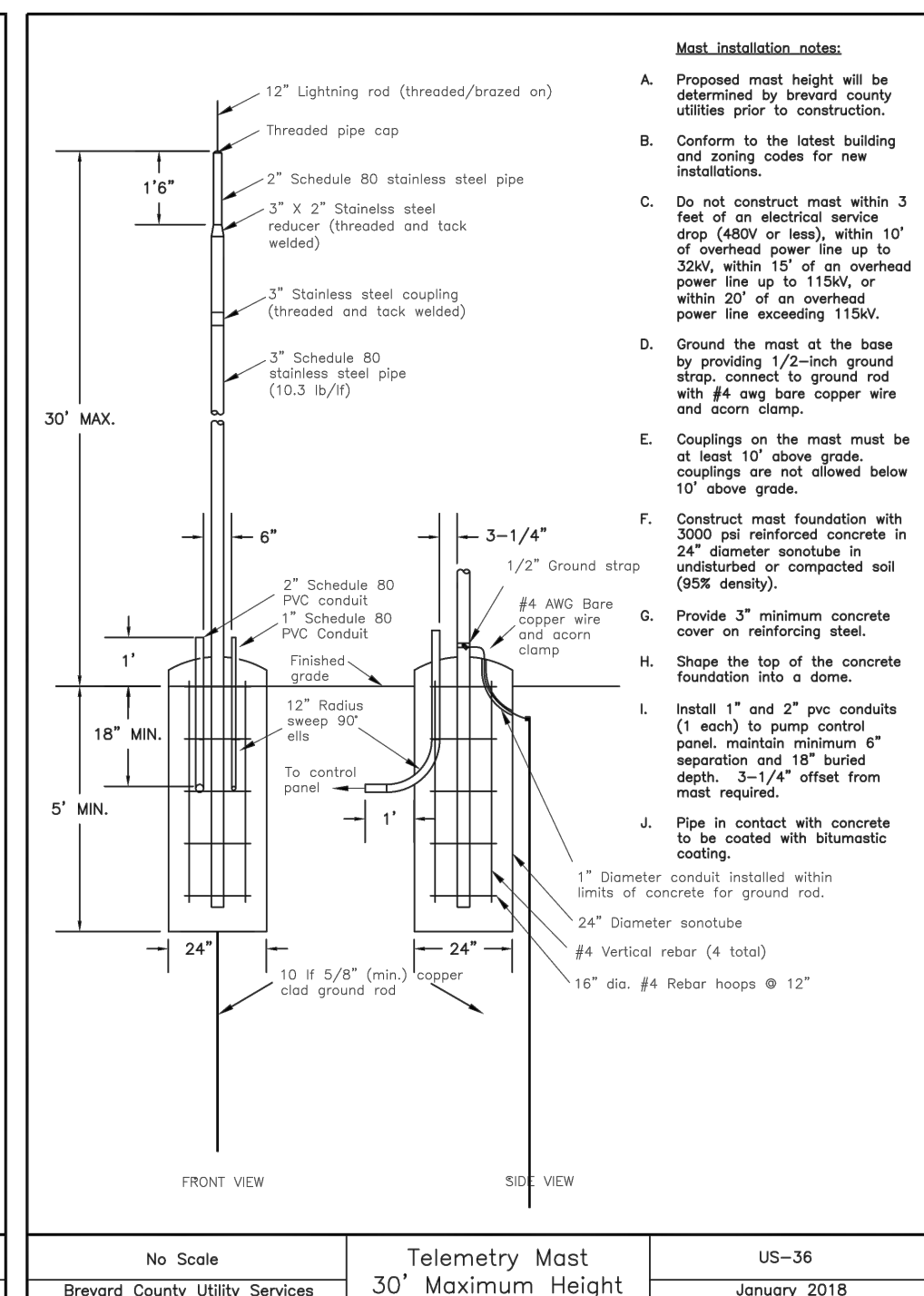
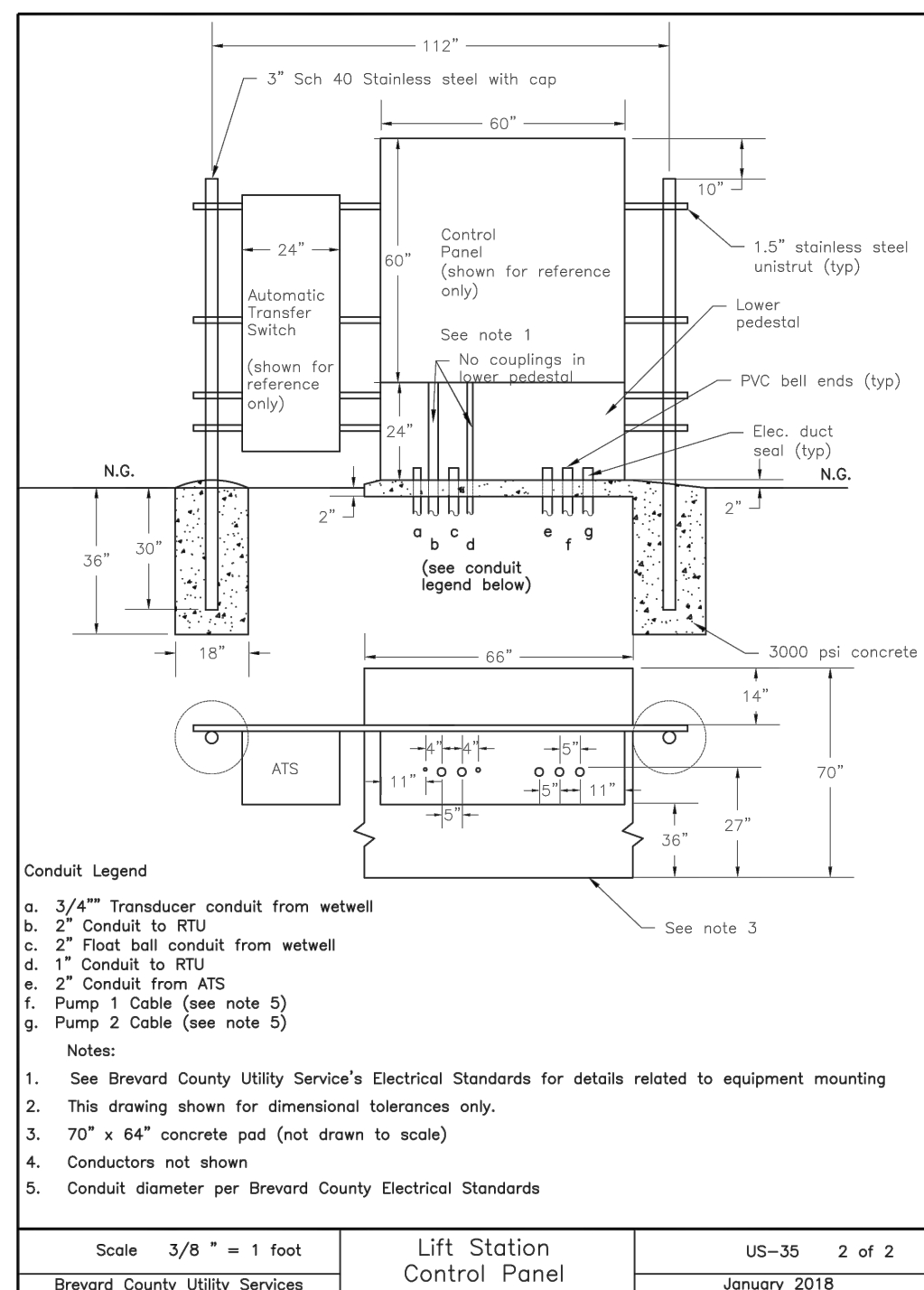
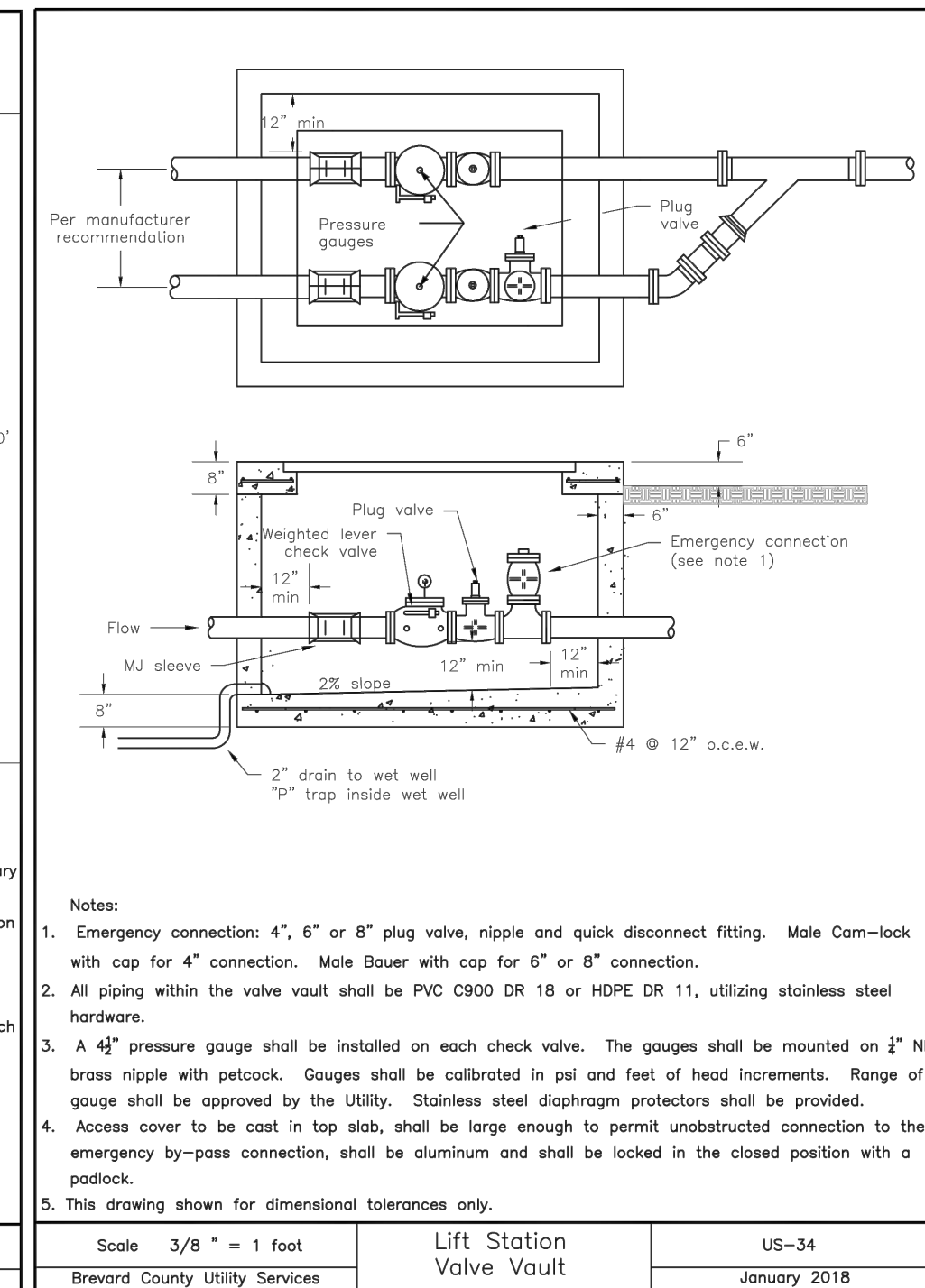
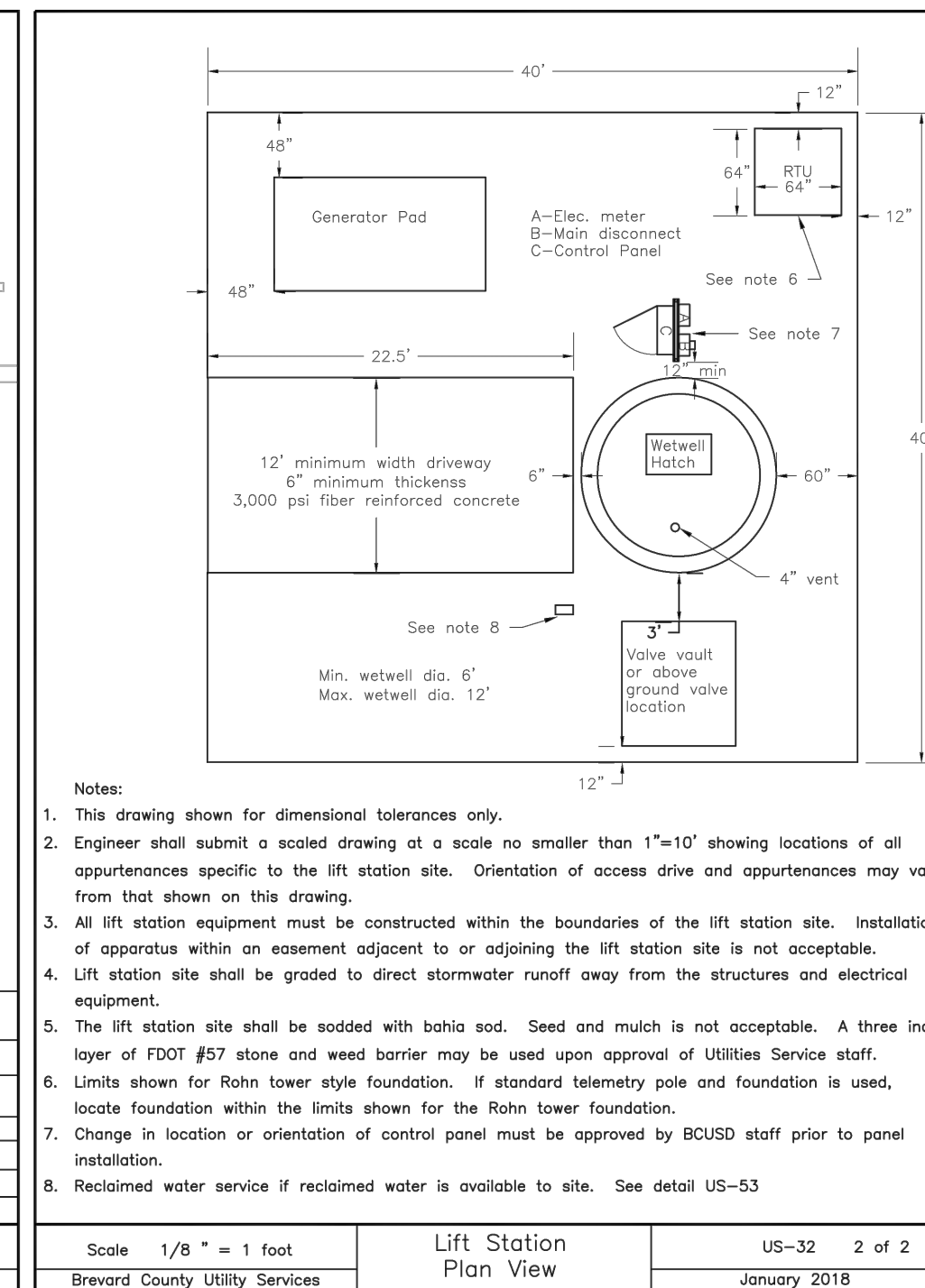
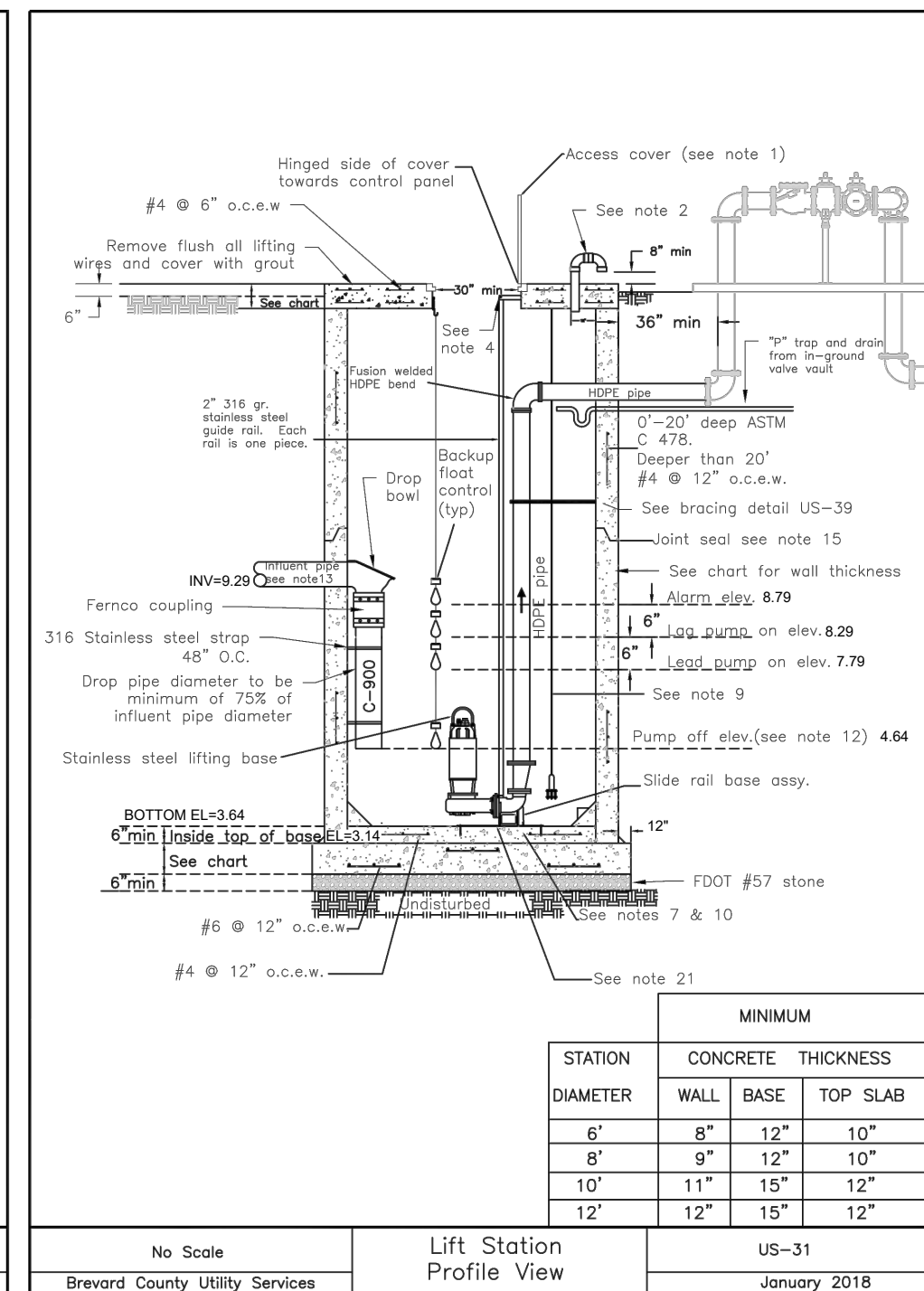
CERTIFICATE OF PROFESSIONAL ENGINEERS
BUSINESS AUTHORIZATION: 4905
CERTIFICATE OF LAND SURVEYING
BUSINESS AUTHORIZATION: LB0004905

SCOTT M. GLAUBITZ, P.E. & P.L.S.
STATE OF FLORIDA, No. 33659 No. 4151

HASSAN A. KAMAL, P.E.
STATE OF FLORIDA, No. 41951



- Notes:
1. Access cover to be cast in top slab, shall be minimum 30" x 48" aluminum cover with provisions for internal locking with a padlock and stainless steel anchor in integral two level full through protection system.
2. Vent pipe shall be 4" diameter sch 40 PVC with stainless steel screen. Vent shall have 8" clearance from top of the lift station slab.
3. Heavy bonded concrete from the ground around outside of base. Base and first riser unit shall be cast monolithically for 5' I.D. wet wells. Larger diameter wet wells shall have a provision to ensure a water tight joint between the base and first riser, such as a water stop or tongue and groove joint.
4. Stainless steel upper vent bracket shall be attached to access cover cast into the slab.
5. Stainless steel guide rolls shall be of a one-piece construction, regardless of wet well depth.
6. All penetrations through wet wells shall be sealed with a non-shrinking grout except where flexible manifold connectors are used. No penetrations are permitted for lifting purposes.
7. Anchor bolts shall be stainless steel. Anchor type and method of installation shall be as recommended by the pump manufacturer.
8. Liner shall be installed for interior walls, underside of the top slab and any exposed concrete surfaces within the wet well.
9. A submersible pressure transducer shall be provided for manufacturer's cable mounting installation instructions. A single stainless steel hook shall be provided for transducer installation.
10. A six-inch minimum layer of concrete shall be installed after center line of access is determined. Contractors shall set anchor bolt locations as required by the pump manufacturer off center line of concrete cover. Sump shall be shipped per pump manufacturer's requirements.
11. Minimum inside diameter of wet well shall be six inch.
12. Storage volume between "load pump on" and "pumps off" elevation shall equal or exceed the volume of pump can discharge in 10 minutes with no flow entering the wet well. Low water level shall be set as recommended by the pump manufacturer to provide adequate cooling of the motor and to prevent venting and cavitation from occurring.
13. C-900 pipe shall be installed from the wet well to the first upstream manhole(s).
14. Three coats (black over grey over red) of factory applied CS-55 water based acrylic coating or EW-1 water based epoxy coating (12 mil total thickness) shall be applied to the exterior only. Field touch up will be required after installation.
15. Joint and seal shall be applied.
16. Wrapped Seal shall be applied to exterior joints. Minimum of 12" wide wrap required for all lift station joints. Applicators must be factory trained in application of the wrap.
17. Floods and transducer shall be installed in an area where flow turbulence is minimal.
18. All discharge piping in the wet well shall be HDPE DR 11.
19. A linear terminal manifold is required within twenty feet of the wet well.
20. All exposed concrete penetrations to be lined or coated with approved materials.
21. Pumps to be installed with base plate provided by the pump manufacturer.
22. Vertical pump shall be considered out of tolerance if greater than 1" horizontal for each 5' vertical height of precast or colson wetwell structure.



PIPE SEPARATION TABLE 1		UPPER PIPE (or at same elevation)				
		WATER	GRAVITY SEWER	FORCE MAIN	RECLAIMED WATER	STORM WATER
LOWER PIPE	WATER	H) 3 ft Note H	H) 10 ft Note A	H) 10 ft Note A	H) 3 ft Note D	H) 3 ft Note D
			V) 18 in Note J	V) 12 in Note D	V) 12 in Note E	V) 2 ft Note E
	GRAVITY SEWER	H) 10 ft Notes A,B	H) 3 ft Note H	H) 3 ft Note H	H) 6 ft Note F	H) 3 ft Note H
		V) 12 in Note D		V) 6 in Note J	V) 6 in Note J	V) 2 ft Note E
	FORCE MAIN	H) 10 ft Note A	H) 3 ft Note H	H) 3 ft Note H	H) 3 ft Note G	H) 3 ft Note H
		V) 12 in Note D	V) 6 in Note J		V) 6 in Note J	V) 2 ft Note E
	RECLAIMED WATER	H) 3 ft Note D	H) 3 ft Note G	H) 3 ft Note G	H) 3 ft Note H	H) 3 ft Note H
		V) 12 in Note D	V) 18 in Note G	V) 18 in Note G		V) 2 ft Note E
	STORM WATER	H) 3 ft Note D	H) 3 ft Note H	H) 3 ft Note H	H) 3 ft Note H	
		V) 12 in Note C	V) 6 in Note J	V) 6 in Note J	V) 6 in Note J	

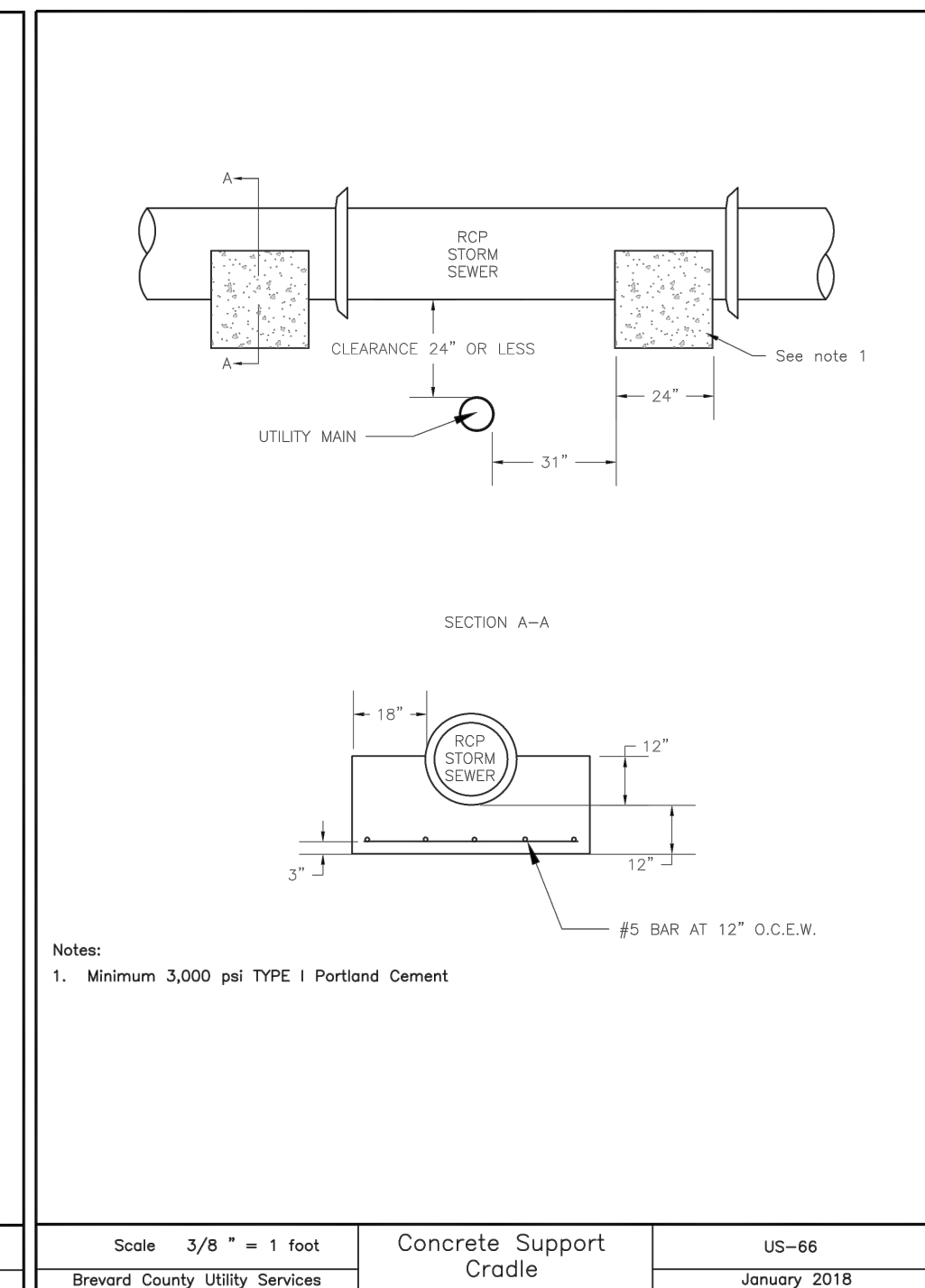
Legend:

H = Denotes minimum horizontal clearance between pipes (outside to outside)
V = Denotes minimum vertical clearance between pipes (outside to outside)

Notes:

A. 6 foot minimum separation (62--555.314 FAC)
B. May be 3 feet if the water line is 6 inches above the gravity sewer (62--555.314 FAC)
C. 6 inch minimum separation (62--555.314 FAC)
D. 62--555.314 FAC
E. If less than 2 feet clearance is provided, support cradles are needed (US-66)
F. May be 3 feet if the region line is 12 inches above the gravity sewer.
G. Section 62--804.400 (2) (h), (i) FAC
H. Or best engineering judgment
J. Minimum for repair purposes

Brevard County Utility Services	Pipe Separation Table	US-60
		January 2018



DATE:	07/13/2011
DESIGN/DRAWN:	SMG/RM

PROJECT TITLE

**ADAMSON CREEK
PHASE ONE-C**

SHEET TITLE

BREVARD COUNTY DETAILS

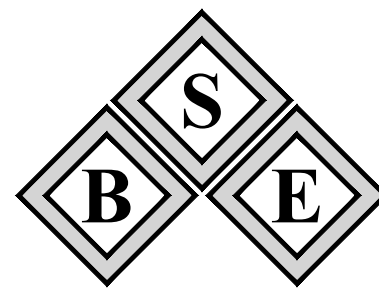
PROJECT NO

DRAWING NO.

1145302_400_023

SHEET

23 of 35



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SCOTT M. GLAUBITZ, P.E. & P.L.S.
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STATE OF FLORIDA, No. 41951

PROJECT TITLE

**ADAMSON CREEK
PHASE ONE-C**

SHEET TITLE

**CITY OF COCOA
WATER
TECHNICAL
PROVISIONS**

PROJECT NO.

11453.02

DRAWING NO.

1145302_400_025

SHEET

25 of 35

1.1 GENERAL

These Technical Provisions and Standard Details identifies design, installation, inspection, and acceptance specifications to be used for water, wastewater, and reclaimed water systems that will be maintained and operated by the City of Cocoa. All potable water, wastewater, and reclaimed water mains and appurtenances must be installed in accordance with this Manual, the City of Cocoa Cross Connection Control Program Manual, the City of Cocoa Utilities Handbook, and the approved plans.

Contractor requirements include:

Furnishing all labor, materials, tools and equipment necessary or incidental to the construction.

Obtaining and paying for all permits, inspections, and other official fees in connection with the work.

Arranging a pre-construction conference with the Engineering Inspection Division. **All fees must be paid prior to the pre-construction meeting.** It is required that the pre-construction meeting be held prior to ordering materials.

Scheduling materials inspection (24-hour notice), open ditch inspection, pressure/leakage test, and final inspection.

Provide all documents per the project requirement letter, including but not limited to As Built Drawings, Bills of Sale, Easements, etc.

Make certain that no public water/wastewater lines are placed on private property.

Any deviation from these requirements must be approved in writing by the Utilities Director or his designee prior to commencement of construction.

Fees charged by the City are set by City Council by resolution and are listed on the appendix "Water Service Rates and Charges" made a part of the Utilities Handbook. Fees are subject to change without notice. The most current fees will be charged.

The Utilities Department and Engineering Division are located at 351 Shearer Blvd., Cocoa, Florida, 32922. The telephone number is (321) 433-8701; facsimile number is (321) 433-8708.

1.2 DEFINITIONS

The term "approved equal" is used to mean a part or item that has been approved in writing by the Technical Provision and Standard Details Advisory Committee or the Utilities Director. A written request must be made in order to have an item accepted as an approved equal. Written specifications on the part or item must be furnished with the request.

Approved Tapping/Linestop Contractor - A Contractor who has been approved by the Engineering Division to perform taps or linestops within the Cocoa Water System. A current list is maintained and available through the Engineering Division.

Backflow Preventer Assembly - A backflow preventer assembly, also called a cross connection control (CCC) device, is a mechanical or non-mechanical device used to prevent the flow of water from a non-potable source to the potable water distribution system. Approved backflow preventers are testable assemblies composed of two independently acting, approved check valves, including tightly closing resilient seated shutoff valves attached at each end of the assembly, and fitted with properly located resilient seated test cocks.

Canal - A trench, the bottom of which is normally covered by water, with the upper edges of its two sides normally above water.

City - Means the City of Cocoa.

Collection Mains - Wastewater gravity mains.

Competent Person - A person who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

Distribution Main - Any water main twelve inches (12") and smaller.

Domestic - Means made or manufactured in the USA.

Drainage Ditch or Irrigation Ditch - A man-made trench which is dug for the purpose of draining water from the land or for transporting water for use on the land and which is not built for navigational purposes.

Force Main - Wastewater main under pressure.

Manual - City of Cocoa Utilities Technical Specification and Standard Details Manual

Normal Working Day - Monday through Friday, excluding CITY holidays.

Normal Working Hours - Hours are between the hours of 8:00 a.m. to 5:00 p.m. of a NORMAL WORKING DAY.

Passivated - Treated or coated metal to reduce the chemical reactivity of its surface.

Stainless Steel - A steel alloy with a minimum of 10.5% to 11% chromium.

Substantial Completion - The point when the construction project has been finished to the point that the City of Cocoa can use the project for the purpose it was intended.

Swale - A manmade trench which:

- Has a top width-to-depth ratio of the cross-section equal to or greater than 6:1, or side slopes equal to or greater than three feet horizontal to one foot vertical;
- Contains contiguous areas of standing or flowing water only following a rainfall event; C. Is planted with or has stabilized vegetation suitable for soil stabilization, stormwater treatment, and nutrient uptake;
- Is designed to take into account the soil erodibility, soil percolation, slope, slope length, and drainage area to prevent erosion and reduce pollutant concentration of any discharge.

Technical Provision and Standard Details Committee - Committee whose members shall consist of the manager, or their designee, of the following UTILITIES staff: Engineering, Inspections, Water Field Operations, and Sewer Field Operations. The committee evaluates and proposes revisions for the design standards, specifications, drawings, products and procedures for the Manual.

Transmission Main - Any water main sixteen inch (16") and larger. Fourteen-inch (14") pipelines are not acceptable.

Utilities - Utilities Department of the City of Cocoa, Cocoa, Florida, and/or its designated representative(s).

Utilities Handbook - The City of Cocoa Utilities Handbook produced by the Customer Service Division of the Finance Department.

Whenever a specification from a specific source is cited, the most current revision of that specification will be used. **The word "shall" is mandatory, and the word "may" is permissive.**

Unless otherwise specified, "City" means City of Cocoa; "Utilities Department" means City of Cocoa Utilities Department; "Engineering Division" means City of Cocoa Utilities Engineering Division; "Inspections or Inspector" means City of Cocoa Utilities Engineering Inspections Division.

1.3 ABBREVIATIONS

American Association of State Highway and Transportation Officials - AASHTO
Asbestos Cement - AC

Association of PVC Pipe Manufacturers - Uni-Bell American National Standards Institute - ANSI American Society of Civil Engineers -

ASCE American Society of Mechanical Engineers - ASME American Society for Testing and Materials - ASTM American Water Works Association - AWWA

American Water Works Association Tapered Thread - CC American Society of Sanitary Engineers - ASSE

Automatic Transfer Switch - ATS

City of Cocoa - CoC Cooper Clad Steel - CCS

Copper Development Association - CDA Cross Connection Control - CCC Dimension Ratio - DR

Double Check Backflow Assembly - DC Double Check Detector Assemblies - DCDA Dry Film Thickness - DFT

Ductile Iron Pipe Research Association - DIPRA Ductile Iron Pipe - DIP

Engineer of Record - EOR

Florida Administrative Code - FAC

Florida Department of Environmental Protection - FDEP Florida Department of Transportation - FDOT

Florida East Coast Rail Road - FECRR Foundation for Cross-Connection Control and Hydraulic Research - FCCCHR Flange - FL

Factory Mutual - FM

High-Density Polyethylene - HDPE Horizontal Directional Drilling - HDD Jack and Bore - J&B

Maintenance of Traffic - MOT

Manual on Uniform Traffic Control Devices - MUTCD National Association of Corrosion Engineers - NACE National Fire Protection Association - NFPA

National Sanitation Foundation - NSF National Standard Thread - NST

Non-rising stem - NRS

Original Equipment Manufacturer - OEM Outside Screw and Yoke - OS&Y

National Pollution Discharge Elimination System - NPDES Plain End - PE

Polyvinylchloride - PVC

Precautionary Boll Water Notice - PBWN Portable Changeable Message Signs - PCMS

Pre-stressed Concrete Cylinder Pressure Pipe - PCCP Project Manager - PM

Pounds per Square Inch - PSI Raised Pavement Marker - RPM

Reduced Pressure Backflow Assembly - RP Reduced Pressure Detector Assembly- RPDA Reinforced Concrete Pressure Pipe - RCP Stainless Steel - SS

Technical Provision and Standard Details - TPSTD Traffic Control Plan - TCP

Underwriters Laboratories - UL Unified Numbering System - UNS Variable Frequency Drive - VFD

2.1 WATER MAIN CROSSINGS

2.1.1 GENERAL

In all cases where sanitary gravity or force mains cross water mains the crossing shall meet the vertical and horizontal separation requirements of FAC Rule 62-555.314. When separation requirements cannot be met, the Engineer of Record must propose an alternative solution that meets the requirements of FAC 62-555.314 for approval by the Engineering Division. The water main should cross above the sanitary main, when the water main must cross below the sanitary main, the minimum separation shall be 12 inches.

2.2 MATERIALS SPECIFICATIONS

2.2.1 PIPE

2.2.1.1 Polyvinyl Chloride Pressure Pipe, 4" - 12"

Polyvinyl chloride pressure pipe (sizes 4" through 12") will be cast iron pipe equivalent outside diameter Class 235 (DR 18) conforming to the American Water Works Association's (AWWA) specification C900 and will be blue or white in color. Pipe will be in standard 20-foot lengths. All joints will be of the elastomeric-gasket type with thickened, integral solid-wall bell or coupling with the same DR as the barrel. All PVC pipe and couplings will bear the UL label and NSF approval for potable water.

2.2.1.2 Fusible Polyvinyl Chloride Pipe, 4" - 12"

Polyvinyl chloride pressure pipe (size 4" through 12") will be cast iron pipe equivalent outside diameter and a pressure rating of 235 PSI (DR 18) conforming to AWWA specification C900 and will be blue or white in color. Fusible PVC pipe shall be supplied by Underground Solutions, Inc. It shall be installed in accordance with the suppliers' specifications. All PVC pipe will bear the UL label and NSF approval for potable water.

2.2.1.3 Ductile Iron Pipe

Ductile iron pipe will be cement-lined pressure Class 350 for 12-inch diameter and smaller and Class 250 for 16-inch and larger conforming to AWWA specification C151. Water main and storm drain crossing conflicts will be properly designed by the project engineer and approved by the Utilities Department prior to installation. Water mains that are less than 10 feet apart from building foundations or other permanent objects will be ductile iron pipe. In no case will water mains be located less than 5 feet from foundations. The above distances will be doubled for water mains larger than 8" in diameter. Polyethylene sleeve conforming to AWWA specification C105 will be provided for all installations. The polyethylene sleeve will be sealed with tape and shall be blue for water mains.

2.2.1.4 High Density Polyethylene (HDPE) Pipe

HDPE pipe is generally not accepted in the City of Cocoa water system, except as a carrier pipe for a pressurized utility main.

2.2.1.5 Reclaimed Water

PVC pipe installed in reclaimed water systems will be Class 235 (DR 18) conforming to AWWA specification C900 and will be purple in color. Ductile iron pipe installed in the reclaimed water system will be pressure Class 350 for 12" and smaller and pressure Class 250 for 16" and larger, provided 3 feet of cover can be maintained. Where cover is less than 3 feet, pressure Class 350 is required. Polyethylene sleeve conforming to AWWA specification C105 will be provided for all installations. The polyethylene sleeve will be sealed with tape and shall be purple for reclaimed water mains.

2.2.2 VALVES, VALVE BOXES, AND VALVE EXTENSIONS

2.2.2.1 Resilient Seat Gate Valves, 4" - 36"

Resilient seat gate valves will have mechanical joint ends as manufactured by **American Flow Control**, **AWK**, **M&H**, **U.S. Pipe**, **Clow**, **Mueller** or an approved equal. The resilient seat gate valves must conform to AWWA specification C509 or C515 and be manufactured in the U.S.A. Resilient seats will be of natural or synthetic rubber and be fully encapsulated to gate. Valves will have 18-8 Type 304 Stainless Steel bolts and nuts. The interior and exterior of the valve body will be fusion-bonded epoxy coated in accordance with AWWA specification C550 in order to provide a corrosion-resistant seat. The coating must be applied in a manner to withstand the action of line fluids and operation of the sealing gate under long-term service. Valve seats must seal by compression only. Wedging or sliding of the resilient seat is not acceptable. Valves will be supplied with 2" square operating nuts and be designed to provide a bubble tight seal regardless of direction of flow. Opening the valve will be in the counterclockwise direction. Valves 16" and larger will have Bevel Gear Operators. For gate valves 16" and larger to be stood up straight, the 2" operating nut must have 12" of cover. Engineer of Record or Contractor must demonstrate the 12" of cover over the 2" operating nut can be achieved by showing all pertinent dimensions. Tapping valves shall have a centering ring.

2.2.2.2 Butterfly Valves, 16" and Larger

Butterfly valves shall be used for above ground service. Butterfly valves shall have flanged ends, be rubber seated, 900 tight closing type, short body. The interior and exterior will be fusion-bonded epoxy coated in accordance with AWWA specification C550. The valve shaft will be of 316 Stainless Steel. Body dimensions and minimum shaft diameter will be in accordance with Tables 1 and 3 of AWWA specification C504. The valve seat will be of molded natural or synthetic rubber, will be mechanically secured to the disc or to the valve body, and will mate against a stainless-steel seat surface. The gear ratio will be such as to require not more than 50-foot pounds of input torque to operate the valve against the worst case of a water flow velocity of 10 feet per second at a pressure of 100 psi differential. A torque-limiting device will be supplied if the allowable operator input is less than 450 foot-pounds. Butterfly valves will have a factory installed hand wheel. The valve will open when the operator nut is turned counterclockwise. **Butterfly valves will not be used for buried service.**

2.2.2.3 Valves, 2"

Two-inch valves for use with the 2" blow-off gate valve will be rated at 125 SWP or 200 WOG. All 2" gate valves must meet all EPA and DEP requirements regarding lead and zinc contents. Brass fittings and 2" brass wheel valves are shall be used on blow-offs. All valves must be manufactured in the U.S.A.

2.2.2.4 Valve Boxes

Valve boxes and lids must be manufactured in the U.S.A. Boxes and lids must be structurally equal to those produced by **East Jordan Iron Works** or **Tyler** and must have 5-1/4" minimum inside diameter. Cast iron valve boxes will consist of a circular cast iron top and bottom section. The depth must be determined, and the appropriate valve box must be installed. No PVC or Ductile is permitted in the valve box. Boxes must be set flush with finished ground surface in such a manner as to permit easy use of a valve wrench and to prevent surface loads from being transmitted to the valve or pipe. Box sections must be telescopic and adjustable. Valve box lids should have the word "WATER" or "SEWER" or "REUSE", as appropriate, cast on the top. A concrete pad (24" x 24" W x 4" D) will be poured around all boxes at finished grade level unless the valve is located in a paved roadway or parking lot. A Valve identification plate engraved to indicate the type, size, and number of turns will be securely anchored to the concrete pad. Valve identification plates for valves 12" and larger will also indicate the torque necessary for actuation.

2.2.2.5 Valve Extensions

If the depth of the valve nut is greater than 48" below grade, or 30" below grade and under the water table, a valve extension stem will be required. The extension will have a centering collar and will be mechanically attached to the valve operating nut, such as extensions manufactured by the General Engineering Company, Model #4840-0001-3, or an approved equal to be determined by the Engineering Supervisor or his/her designee.

2.2.2.6 Valve Box Debris Shield

All buried valves 4-inch through 12-inch requiring a valve box shall be furnished with a valve box shield (alignment device). The device shall minimize debris infiltration and center the valve box over the operating nut. The device shall be of HDPE or plastic and colored white or black. It shall be furnished in two pieces that will lock together under the operating nut without requiring the removal of the operating nut. The device shall not affect the operation of the valve. No one-piece device will be accepted. The device shall be **Box Lok**, **American** or approved equal.

2.2.2.7 Insert Valve Specification

The Insert Valve shall conform to the following:

The Ductile Iron 250 p.s.i.g. Insert Valve shall be a Resilient Wedge Gate Valve designed for use in potable water, raw water, reclaimed water, wastewater and backflow control systems. The host pipe shall not be a permanent component of the Insert Valve. The ductile iron body, bonnet, and wedge provide resistance and a pressure rating that meets or exceeds the requirements of AWWA C515. Insert Valve shall be ductile iron construction meeting ASTM A536 Grade 65-45-12.Sizes 12" and smaller must be capable of working on Cast/Grey Iron or Ductile Iron Class A, B, C and D, IPS PVC, C900 and C909 PVC, Steel, AC pipe diameters without changing either top or bottom portion of split valve body. The Insert Valve shall have a 250 psig maximum working pressure. The pressure rating markings must be cast into the body of the insert valve. The construction of the Resilient Wedge shall comply with AWWA C509 requirements. The ductile iron wedge shall be fully encapsulated with EPDM rubber by a high pressure and high temperature compression or injection mold process. The resilient wedge shall seat on the valve body and not the pipe to obtain the optimum seating and flow control results. The resilient wedge shall be totally independent of the carrier pipe. The resilient wedge shall not come into contact with the carrier pipe or depend on the carrier pipe to create a seal. The Resilient wedge must ride inside the body channels to maintain wedge alignment throughout its travel. The insert valve is fully epoxy coated on the interior and the exterior. Valve shall be coated with a minimum of 10 mils epoxy in compliance with AWWA C550 and certified to ANSI/NSF-61. The stuffing box, operating stem and resilient wedge (complete bonnet and all moving parts) shall be removable, repairable and or replaceable under pressure.

See "Appendix A" Approved Materials for approved Insert Gate Valves.

2.2.3 BACKFLOW PREVENTERS

2.2.3.1 General

All connections to the City of Cocoa potable water system shall contain a backflow preventer assembly as required in the "City of Cocoa Cross Connection Control Program Manual". Backflow preventer assemblies shall be in accordance with AWWA specification C510, ASSE 1048, UL 1469, and as listed in "Appendix A" of this document. All backflow preventers shall be listed per Standard Details in "Appendix B". Backflow preventers on fire line and commercial services shall have test certifications submitted and approved prior to final inspection.

Backflow preventers will have interior fusion bonded epoxy coating 5 to 12 mils and will be installed above grade in accordance with manufacturer's recommendations on a concrete slab adjacent to the meter. Check valves must have bronze seats.

Commercial Services: Cross connection control device required for commercial service, including multi-family residences, shall be a reduced pressure (RP) backflow preventer unless otherwise approved by the Engineering Division.

Residential Services: Cross connection control device required for residential service shall be a dual check backflow preventer.

Construction Sites: Cross connection control device required for temporary construction jumpers shall be a double check backflow preventer. The Contractor shall provide test certifications on the jumper backflow preventer before the jumper is placed into service.

2.2.3.2 Fire Services

Cross connection control devices for fire line systems shall be double check detector assemblies (DCDA) or reduced pressure detector assemblies (RPDA). DCDA and RPDA shall meet the requirements of the Florida Building Code and must be supplied with a K-inch or larger bypass assembly. DCDA will be accepted as a complete approved assembly in accordance with the section on "Backflow Prevention and Cross-Connection Control" in the Utilities Handbook. The Engineering Division will inspect the interior of the DCDA prior to installation. DCDA must be installed horizontally above ground in a grassed or non-traffic area. The DCDA will be installed with 24" minimum and 30" maximum clearance from finished grade. "N" shaped DCDA will be accepted on a case-by-case basis. Fire lines requiring an RP2 will be handled on a case-by-case base. The Engineering Division shall paint the DCDA, to be paid for by the Developer/Contractor.

2.2.3.3 Meter Station Backflow Preventer

Backflow Preventers for the large meter stations (3-inch and larger) are the Reduced Pressure Zone Assembly and manufactured in accordance with AWWA C511. The assembly will be installed so as the relief valve opening will be a minimum of 12" above concrete slab. If the meter station is in a planter, the top of the planter is considered the flood rim and the relief valve opening shall be 12" above the concrete slab. The Engineering Division shall paint the meter station assembly, to be paid for by the Developer/Contractor.

2-inch meter stations may be allowed on a case-by-case basis as approved by the Engineering Division.

2.2.3.4 Backflow Preventer Certification Test

The Contractor will provide test certifications on the jumper backflow preventer before jumper is placed into service. Backflow preventers on fire-line and meter stations will have test certifications submitted and approved prior to final inspection.

2.2.4 FITTINGS

All fittings must be of the mechanical joint type with an approved joint restraint, or push-on joint with a gasket joint field restraint system. All fittings must be manufactured in the U.S.A.

2.2.4.1 Cast Iron

Cast iron fittings will be AWWA specification C110; Class 250, cement lined with inside seal coating. The fittings will be bituminous coated on the outside and be wrapped with 6 mil polyethylene (sealed with tape). Cast iron fittings are only to be used in larger applications where ductile iron fittings are not available.

2.2.4.2 Ductile Iron, 4" - 16"

Ductile iron compact fittings (sizes 4" through 16") must conform to AWWA specification C153. Ductile iron compact fittings will be mechanical joint with an interior cement lining with seal coating and an exterior bituminous coating. All fittings will be wrapped with 6 mil polyethylene (sealed with tape).

2.2.4.3 Bolts

All buried mechanical joint bolts and nuts must be CORTEN Steel. All above ground bolts and nuts for flanged fittings must be 18-8 Type 304 stainless steel. Never-seize/Anti-seize shall be applied to all SS bolts and nuts.

2.2.4.4 Tapping Sleeve

Tapping sleeves on mains 4" to 12" in diameter will be all Stainless Steel Sleeves.

The All Stainless Steel Sleeve shall be fabricated from 304 Stainless Steel. They shall have a pass through bolt design and full circumferential gasket to provide 360° seal around the pipe. The tapping sleeve is to be fully passivated to return the stainless steel to its highest corrosion resistance stage.

Sleeves on mains 16" to 24" in diameter will be fabricated steel with O-ring seal, fusion bonded, epoxy coated with 304 stainless steel nuts and bolts or M.J. ductile iron body. Sleeves on mains larger than 24" will be handled on a case-by-case basis.

Tapping Sleeves for reinforced concrete mains will be handled on a case-by-case basis. The sleeves will have a fusion-bonded epoxy coating on the entire body and throat assembly. The straps and bolts shall be 18-8 Type 304 stainless steel.

The tapping valve must have centering ring and conform to Section 2.2.2.1 "Resilient Seat Gate Valves" in these Technical Provisions.

Tapping saddles to be placed on asbestos concrete (AC) pipe shall be a **JCM A432** All Stainless-Steel Sleeve or equal.

2.2.4.5 Line Stop Sleeve Specifications

Sizes 4" through 12"

Sleeve/Body

The entire Line Stop sleeve shall be fabricated from 304 Stainless Steel. They shall have a pass-through bolt design and provide 360° seal around the pipe. The line stop sleeve is to be fully passivated to return the stainless steel to its highest corrosion resistance stage. Outlet on sleeve will be full port, i.e. on 8" sleeve, outlet will be 8", on 6" sleeve, outlet will be 6".

Bolts, Nuts & Washers

18-8 Type 304 Stainless Steel, the bolts shall be track head type and furnished with permanently lubricated heavy-hex nuts and stainless washers.

Gasket

The full circumferential gasket shall be molded of synthetic rubber compounded for use with water salt solutions, mild acids, bases and sewage. The gasket shall have a gridded surface, be a full 1/4" thick with 304 stainless steel bridge plates molded flush into the gasket and have a raised hydromechanical outlet seal to seal against line surges and water hammer.

Pressure Rating

The sleeves shall be rated at 150 PSI hydrostatic with a test pressure of 200 PSI on pipe with a full circumferential break.

Line Stop Sleeves shall be a **JCM A440 Line Stop Sleeve** or approved equal.

2.2.5 FIRE HYDRANTS

Fire hydrants must be manufactured in accordance with AWWA specification C502. Hydrants must have bronze-to-bronze main seat threading surfaces. They will be traffic type with drain holes plugged at the factory. Fire hydrants will have 18-8 Type 304 Stainless Steel bolts and nuts (bonnet, traffic flange and shoe).

Hydrants will have a minimum 5-1/4" main valve opening, with one 4-1/2" pumper nozzle, and two 2-1/2" hose nozzles. Nozzles to have NST threads. Stem couplings are to be cast iron or stainless steel. The upper valve plate must be bronze. The hydrant shoe will be coated inside with fusion-bonded epoxy, 6 mil minimum. All hydrants will be painted at the factory with Rustoleum high-performance epoxy 9100 system, non-lead, dry film thickness 5 to 8 mils, color #9143 Yellow. City crews will apply finish paint to each new fire hydrant after the Contractor has paid the appropriate fees.

Finish grade is to be established and the proper length hydrant is to be installed by the Contractor prior to acceptance by the City. All nozzles will be a minimum of 18" and a maximum of 24" above finished grade. A 6" mechanical joint hydrant connection will be provided using a hydrant valve-anchoring tee with integrally cast standard mechanical joint gland on 6" plain end branch. The Contractor will not be allowed to install risers on hydrants. At final inspection, if it is determined that a fire hydrant is not at grade, the Contractor shall purchase a proper length hydrant and install it under the direction of the Engineering Division.

2.2.6 SERVICE CONNECTIONS, 3/4" - 2"

All service connections will be single connections. Services that are 3/4" and 1" are to be type K annealed temper soft copper. All connections are to be of the flare type. 1-1/2" and 2" services are to be of type K annealed temper in straight lengths or annealed temper if furnished in coils. Absolutely no lead-based solder joints will be accepted. Any repairs of service lines will be by flare-to-flare coupling. No compression fittings will be accepted. Taps in the pipe will be the same nominal diameter as the service line. Service taps in PVC pipe will be drilled with a shellcuter designed to cut PVC pipe, and the PVC plug will be removed.

Brass goods furnished under this specification shall be new and unused. All fittings shall conform to ANSI/AWWA Standard C800, latest revision.

All brass components in contact with potable water must be made from either CDA/UNS Brass Alloys C89520 or C89833 with a maximum lead content of .25% by weight. Brass alloys not listed in ANSI/AWWA C800 Paragraph 4.1.2 are not approved. All service fittings shall be certified as suitable for contact with drinking water by an ANSI accredited organization in accordance with ANSI/NSF Standard 61. All fittings shall be stamped or embossed with a mark or name indicating that the product is manufactured from the low-lead alloy as specified above.

Brass saddles shall be made from CDA/UNS C83600 and are exempt from the "no lead" requirement.

2.2.6.1 Saddles

Saddles must be used for all connections to PVC, AC and

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2.2.6.3 Corporation Stops, 3/4" - 2"

All corporation stops for water service 3/4" thru 2" will be brass and have "CC" inlet threads and copper flare outlet. 2" Corporation stops for "jumpers" will be "CC"-by-F.I.P.

2.2.6.4 Meter Boxes

Meter boxes for traditional meters are to be plastic with an iron flipper lid with a full pin hinge. Meter boxes for radio-read meters must have a lid compatible with City's AMR meter antennae (4-1/2" round). Service locations will be permanently cut and painted on concrete curb or the street with a blue "M" for potable water or a purple "R" for reclaimed. Reclaimed services will be located at the opposite lot corner from water services where practical or with five feet minimum separation.

For larger 1-1/2 and 2-inch meters, 17" x 30" meter boxes shall be used.

For areas that are anticipated for high traffic areas, a traffic rate H-20-meter box shall be used. Reclaimed Water services will be set in purple meter boxes of materials per above. They are also required to have a 3" x 5" permanent plastic tag, secured to the curb stop with a nylon tie wrap, which will be supplied. Tags will be inscribed, "RECLAIMED WATER DO NOT DRINK".

2.3 PROTECTION OF PROPERTY AND OBSTRUCTIONS

2.3.1 PROTECTION

Temporary supports and/or adequate protection and maintenance must be provided on all underground and surface structures encountered in the progress of the work. Structures that have been disturbed will be restored to a condition equal to their original state upon completion of the work.

2.3.2 OBSTRUCTIONS

All utility owners must be notified prior to beginning construction. Any known obstructions will be shown on the plans; however, Contractor is solely responsible for field verifying existing conditions. The utmost caution will be taken in all operations to avoid damage to existing obstructions whether or not shown on the plans. Damage to other utilities will be at the Contractor's expense.

If the Contractor encounters any unforeseen obstructions during construction, the Contractor shall immediately cease work in that area and notify the Engineer of Record (EOR). The EOR shall design and provide detailed drawings to correct the situation. The drawings shall be submitted to the Engineering Division for approval. After approval by the Engineering Division, a set of approved drawings will be given to the contractor and they may resume work.

2.3.3 EXISTING ASBESTOS CEMENT WATERMAINS

In areas where asbestos cement water mains are existing, water main relocations or replacements may be necessary. If new construction of facilities is over, under, or near asbestos cement water mains, it shall require that the asbestos cement water main be changed out to polyvinyl chloride pipe or ductile iron pipe. All asbestos cement pipe that is replaced shall be removed and disposed of by the contractor unless specifically directed in writing by the City to abandon in place. New pipe material shall depend upon the type and location of the facilities being constructed. The Developers Engineer shall design the replacement and submit it for the Engineering Division approval. The Developer is responsible for all design, materials, labor, equipment, testing, and costs for the replacement. Contractor shall remove and dispose of AC pipe in accordance with FAC Codes 62-204.800 and 62-257.

2.3.4 ABANDONMENT OF ASBESTOS CEMENT PIPE

Where asbestos cement water mains have been directed by the City to be abandoned in place they shall be filled with a sand/cement grout by the contractor. Grout shall be injected within the pipe sections to be abandoned where the ends of the sections shall be capped and or plugged. The grouting program shall consist of pumping sand-cement grout with suitable chemical additives at pressures necessary to fill the pipe sections to prevent the potential for future collapse. The rate of pumping shall not exceed six (6) cubic feet per minute. The pumping pressures shall be in the range of 100 to 150 psi.

The Contractor shall provide standpipes and/or additional means of visual inspections as required by the City to determine if adequate grout material has filled the entire pipe section(s).

2.4 TRENCH PREPARATION

2.4.1 EXCAVATION

A trench will be opened so that the pipe can be installed to the alignment and depth required. It will be excavated only so far in advance of pipe placement as necessary. The trench will be excavated to the depth required to provide a uniform and continuous bearing support for the pipe or undisturbed ground. Bell holes will be provided at each joint to permit jointing to be made and inspected properly.

During excavation, if ashes, cinders, muck or other organic material considered unsuitable is discovered at the bottom of the trench sub-grade, unsuitable material will be removed and backfilled with approved material. This material will be compacted in layers to provide a uniform and continuous bearing characteristic of that area's soil condition. Where the bottom of the trench at sub-grade consists of unstable material to such a degree that it cannot be removed and replaced with an approved material to support the pipe properly, a suitable foundation must be constructed. Excavated material will be piled in such a manner that it will not endanger work or obstruct natural watercourses, sidewalks or driveways. Fire hydrants under pressure, valve boxes, or other utility controls will be left unobstructed and accessible at all times. Gutters will be kept clear or other satisfactory provisions will be made for street drainage.

2.4.2 SHORING AND BRACING

Open cut trenches must be sloped, shored or braced as required by all governing State law, municipal ordinances, OSHA Standards, and as may be necessary to protect life, property, or the work. Trench bracing may be removed after backfilling has been completed or has been brought up to such an elevation as to permit its safe removal. The use of a trenching box may be used in place of sheeting and bracing where appropriate. The Contractor is required to have a Competent Person designated and in charge at all times while workers are in the trench.

2.4.3 DE-WATERING

Excess water must not be allowed in the trench at any time. An adequate supply of well points, headers or pumps, all in first-class operating condition, may be used to remove the water. The use of gravel and pumps will also be an acceptable means of removing the water. The trench will be excavated no more than the available pumping facilities are capable of de-watering. Discharge from pumps will be accommodated in accordance with the St. Johns River Water Management District's requirements. The Contractor is responsible for obtaining all de-watering permits such as NPDES permit.

2.5 PIPE LINE CONSTRUCTION

2.5.1 GENERAL

All water mains, service lines, and appurtenances must be installed as specified on the approved plans and in accordance with the Standard Detail Sheet. Installation will conform to AWWA specification C600 except as modified herein.

Domestic water service can only come from a Distribution main. When water service is requested and the only water main available is a Transmission main, a large tap and section of pipe shall be installed on the Transmission Main for the water service.

The minimum size tap on a Transmission Main shall be a six (6) inch.

2.5.2 MATERIAL HANDLING

2.5.2.1 Precautions

Every precaution will be taken to prevent damage to pipe and piping materials during transportation and delivery to the work site. Under no condition will pipe be dropped, bumped, dragged or picked up by inserting forks into end of pipe. Pipe lifted by placing forks into pipe shall be removed from job site.

2.5.2.2 Damaged Materials

If in the process of transportation, unloading or handling, any pipe or fitting is damaged, it will be rejected and removed from the site.

2.5.2.3 Storage

Pipe fittings and specials will be stored in a manner which will assure the protection of the material from damage and which will keep it clean.

2.5.3 INSPECTION OF MATERIALS

Materials delivered to the job site will be subject to inspection by the Engineering Division prior to installation. Contractor shall notify inspections 24 hours in advance. All materials found to be defective or not meeting specifications during inspection or during the progress of the work will be rejected and removed from the job site without delay. All materials delivered to the job site will be in accordance with the materials specifications. Materials not inspected by the Engineering Division prior to installation will be uncovered by the Contractor at their expense to verify compliance with these specifications. The Contractor will furnish copies of the packing list(s) for materials upon demand.

2.5.4 PIPE PLACEMENT

The bottom of the trench will not be excavated below the specified grade. If undercutting occurs, the bottom of the trench will be brought up to the original grade with approved material and thoroughly compacted, as directed by the Engineering Division. Before placing pipe into the trench, the outside of the spigot and the inside of the bell will be wiped clean, dry, and free from oil and grease. Every precaution will be taken to prevent foreign material from entering the pipe. During placement operation, no debris, tools, clothing or other material will be placed in the pipe.

All mechanical joints will be made up in strict accordance with the manufacturer's specifications. Beveled ends will be removed from PVC pipe entering a mechanical joint. The bell will be carefully cleaned before the gasket is inserted. Gaskets must be evenly seated, the gland placed in position with the bolts, and evenly tightened. All slip joints will be made up in strict accordance with the manufacturer's specifications.

After placing a length of pipe in the trench, the spigot end will be centered in the bell, the pipe forced home, brought to correct alignment, and covered with an approved backfill material. Ductile iron pipe will be backfilled to the centerline of the pipe and compacted to ninety-five percent (95%) of standard Proctor 1-99.

PVC pipe will be backfilled in accordance with the manufacturer's recommendations for the laying conditions.

Pipe will be installed with 30" minimum cover. Maximum cover of 42" will be accepted. Cover depth will be determined from proposed finish grade as indicated on the plans. At times when pipe placement is not in progress, the open ends of pipe must be closed by a watertight plug or other approved means. This provision will apply during the lunch hour as well as overnight. If water is in the trench, the seal will remain in place until the trench is pumped completely dry.

All underground water main shall meet the horizontal and vertical separation requirements in FAC 62-555.314 as related to sanitary force main and gravity main, reclaim mains, and storm water gravity and force mains.

Pipe installed under swales shall be D.I. and have 3 feet minimum cover. D.I. pipe to be installed on swale. If more than one joint of pipe is necessary, restrained joint pipe is required. See "Swale Crossing" detail and definitions.

Pipe installed under canal or drainage ditch shall conform to all FDEP requirements. Pipe shall be restrained joint D.I. pipe with gate valves on both sides of canal/ditch. D.I. pipe shall have 5 feet minimum cover with a concrete cap. See "Canal or Drainage Ditch Crossing" detail and definitions.

2.5.5 LOCATING WIRE

A UF 14 Copper Wire that allows for the location of the pipe using an induced current line locator will be installed on all potable water, reclaimed water, and wastewater mains. The wire must be placed on the top of the pipe and taped approximately every ten feet. A run of wire must run from the main to each hydrant. Each fire hydrant must have one wrap of the wire around the barrel located at final grade.

Wire color shall be blue for water, green for wastewater, and purple for reclaimed.

A run of wire will also be brought up in each valve box. The wire will have 18 inches of excess length. Wire is to be connected together using an underground wire nut with a **silicone-based sealant**.

The CCS wire shall meet the following requirements. HDPE insulation of 30 mils, #14 AWG conductor, maximum Ohms resistance of 8.28 ohms per 1000 ft., breaking load 256 lbs.

When directional drilling is used, one continuous #10 CCS **extra high strength** locator wire shall be installed. The CCS wire shall meet the following requirements. HDPE insulation of 45 mils, #10 AWG conductor, maximum Ohms resistance of 0.999 ohms per 1000 ft., breaking load 1150 lbs.

2.5.6 SERVICE LINE LOCATION

Service lines will be located at alternating lot lines outside the sidewalk within two feet of the right-of-way line as shown on approved plans or in a grassed area behind the curb if located in other than a subdivision.

Reclaimed service line is to be located adjacent to sewer cleanouts.

2.5.7 BACKFILLED MATERIAL AND INSPECTION

All backfilling material will be free from cinders, ashes, refuse, vegetable or organic material, boulders, rocks, stones, or other material which is considered unsuitable. When backfill material is not specified on the plans, backfilling with the excavated material may be acceptable provided that such material is suitable for backfilling. Pipe should be backfilled as soon as possible to minimize the length of open trench. Pipe joints, valves, fittings, and thrust blocks will be left uncovered until inspection by the Engineering Division has been completed.

2.5.8 VALVES AND FITTINGS

All valves and fittings will be set and joined to the pipe in the proper location as shown on the plans. Valves should be installed outside of the pavement where practical. A roadway valve box will be provided for every valve. This valve box must not transmit shock or stress to the valve. Valve will have alignment ring installed and valve box centered and plumb over the wrench nut of the valve. The box cover is to be flush with the surface of the finished pavement or grade level as specified in the plans. A 24" square concrete pad 4" in thickness will be poured around the valve box when it is located outside of pavement. A bronze or stainless-steel disc will be cast into the pad for all valves 12" or larger. Valve nomenclature to be stamped into the disc will include the valve size, type, manufacturer's initials, number of turns, and direction to open the valve. (Example: 12" G.V. U.S.P. 20 c.c.w.)

All valves will be located within two feet of the tee, see detail "Gate Valve and Fitting."

When solid sleeves or couplings are used to join/tie-in pipelines, a Spacer Piece shall be installed if there is a gap in the pipeline.

2.5.9 FIRE HYDRANTS

All fire hydrants (hydrants) will be located as shown on the plans and marked on the pavement with a blue reflector. On unpaved streets, a blue reflector will be affixed to a post and placed as close to the edge of the road as feasible to be easily visible. The hydrants will be located in such a manner as to provide complete accessibility and in a manner so that the possibility of damage from vehicles or injury to pedestrians will be minimized. All hydrants must stand plumb and the bury line of the hydrant at the finished grade. Hydrants installed in State highway rights-of-way will be placed in accordance with any F.D.O.T. requirements. Contractors shall not turn or add risers to hydrants. All hydrants will be connected to the main in the manner shown on the Standard Detail Sheet. If the installation of the hydrant requires the hydrant to be greater than 40 ft. away from the fire hydrant valve, an additional valve shall be installed. If the fire hydrant valve ends up in asphalt of a major road (not subdivision) an additional hydrant valve regardless of distance shall be installed.

2.5.10 RESTRAINED PIPE JOINTS

The Engineer of Record shall provide a restrained joint detail on drawings submitted to the City for approval. Restraining is to apply to all new fittings installed as part of the job, including tapping saddles.

2.5.11 THRUST BLOCKS AND COLLARS

Restrained joint systems are the preferred method. Thrust blocks may only be used with the City's prior approval at bends, fire hydrants, and as specified on the plans, in accordance with the Standard Detail Sheet. Metal harnesses, tie rods, or clamps of adequate strength to prevent movement may be installed at locations where thrust blocks are not practical. Rods and clamps will be stainless steel. A 20-foot length of ductile iron pipe will be installed at all main endings and a concrete thrust collar will be poured around the pipe at a distance of 10 feet from the end of the joint. In lieu of concrete thrust collar, restrained pipe upstream of the proposed concrete thrust collar may be used.

2.5.12 JACK AND BORE, PIPE INSTALLED IN CASINGS

Pipe to be installed under pavement where open trenching is not permitted will be installed through a steel casing that has been jacked and bored. The casing pipe will be six to eight inches larger than the outside diameter of the bells on the Ductile Iron pipe. The Engineer of Record will design the casing and bore to meet FDOT or FECRR requirements.

Ductile iron pipe of the appropriate Class will be installed in the casing. Water mains must be pushed or pulled through the casing on stainless steel casing spacers with polyethylene skids attached to the pipe with stainless steel straps. The stainless-steel casing spacers with polyethylene skids will be placed in accordance with manufacturer's recommendations. Casing structures must be manufactured by Cascade or an approved equal. Restrained joints are required on mains installed inside casings.

JACK AND BORE

J&B installed under FDOT roadways shall conform to the latest FDOT Road and Bridge Construction design standards. J&B installed under FECRR shall conform to FECRR requirements.

2.5.13 HORIZONTAL DIRECTIONAL DRILLING

Only DIP and Fusible PVC may be horizontal directional drilled (HDD) under pavement or surface roadway crossings. The HDD pipe shall only extend to 10 feet on each side of the crossing. Then the piping will change to the standard piping material.

HDD installed under FDOT roadways shall conform to the latest FDOT Road and Bridge Construction design standards.

ENGINEERING PROCEDURE HORIZONTAL DIRECTIONAL DRILLS

PRECONSTRUCTION CONFERENCE

- A preconstruction conference will be required. The preferred attendees for the preconstruction shall be but not limited to:

The directional bore contractor (preferably the Field Superintendent) The permitting agency
Engineer of Record
City Engineering Division Representative
Inspector for the project

HDD CONTRACTOR

- Approval required prior to the HDD, the HDD contractor shall submit a bore plan (see sample drawing in "Appendix B") to the Engineering Division for approval. The bore plan shall be a scaled drawing or computer generated drawing showing the following information but not limited to: (see drawing "Typical Bore Plan")

The entrance and exit location
Profile of the bored pipe
All utilities including their depths and clearances from reamer
Width of the right of way
Pavement width
Length of the bore

The bore plan shall be signed by the responsible person in charge of the bore.

- The HDD contractor shall follow the minimum clearances as shown below from the bottom of the water main to the top of the reamer:

Water mains 12" and greater minimum clearance is 18" Water mains 10" and less minimum clearance is 12"
- The HDD contractor will be responsible for obtaining locates for all utilities in accordance with Chapter 556 of the Florida Statutes.
- The HDD contractor shall notify the City of Cocoa Inspection Division 48 hours in advance of the bore and notify the appropriate permitting agency per the conditions of the permit.

ENGINEERING INSPECTOR

- An approved copy of the bore plan will be given to Engineering Inspection Division.
- The Inspector for the project will have a copy of the bore plan at the project site.
- Prior to the HDD the Inspector shall verify that the materials at the project site for the directional bore are in accordance with the City of Cocoa's latest technical provisions and standard details.
- The Inspector shall verify the following prior to the commencement of the HDD:
 - Verify that the HDD contractor has obtained his/her utility locates;
 - Verify that all utilities have been visually spotted by the HDD contractor;
 - Verify that the permitting agency has been notified of the HDD; and d. Witness the calibration of the sonde.
- The Inspector shall remain at the project site until completion of the HDD. Any discrepancies shall be immediately reported to the Engineering Division. Once the corrective action is determined, the proper authority will be notified.

COMPLETION OF THE BORE

- A bore log shall be submitted to the Engineering Division after completion of the bore.

2.5.14 BLOWOFFS

Flushing blow-offs are to be installed and constructed as shown on the Standard Detail Sheet. Blow-off materials include 2" brass for nipples, brass threaded fittings; 2" brass angle wheel valve, and plastic meter box (purple for reclaimed). The plastic meter box is to be installed at grade over the wheel valve. The angle wheel valve will be within six inches of finished grade and will be plugged with a brass plug. 4" blow-offs will be required on both potable water and reclaimed water mains 12" and larger and must be constructed as shown on the Standard Detail Sheet. A reclaimed tag will be installed on reclaimed main blow-offs in a reclaimed meter box.

Brass used in potable water shall meet the low lead requirements as set forth in Section 2.1.6, "Service Connections".

2.6 TIE-INS TO EXISTING SYSTEMS

2.6.1 GENERAL

The Contractor is not to operate any valve or remove any thrust block from City-owned mains except under direct supervision of an Inspector of the Engineering Division. The Contractor may need a post restraining the existing piping for the tie-in as required by the Engineering Division. All Contractors must follow the procedures listed below for connecting new mains to existing water systems.

2.6.1.1 Mains 8" and smaller

Existing tie-in valves will be operated and pressure tested to verify water tightness prior to the proposed tie-in. Existing system valves that are not water tight, shall have a new valve installed immediately adjacent (within 2') to the existing valve. The Contractor will provide a 2" tap on the new main and a 2" tap on the existing main at the tie-in valve. A 2" jumper equipped with a City supplied meter and contractor supplied backflow preventer (double check) will be installed. The jumper will be utilized for filling the main, flushing the main, providing water for bacteriological sampling, and maintaining pressure in the main after a successful bacteriological test. The proposed tie-in valve is not to be operated and the City's Engineer of Record will be required to provide an executed FDEP certificate of completion prior to clearance. After clearance, the tie-in valve will be opened, the jumper removed, and the main thoroughly flushed under the supervision of the Inspector. All other existing valves closed as part of the job will be opened by the contractor under the supervision of the Inspector.

2.6.1.2 Mains 10" and Larger

The same procedure as noted for mains 8" and smaller will be used for mains 10" and larger except that the jumper will be utilized only for filling the main, providing water for bacteriological sampling, and maintaining pressure in the main after a successful bacteriological test. The tie-in valve can be opened for flushing and during chlorination only under the supervision of the Engineering Inspection Division. The tie-in valve is not to be operated and the jumper is not to be removed until clearance has been obtained from FDEP and the City. After clearance, the tie-in valve will be opened, the jumper removed, and the main thoroughly flushed under the supervision of the Inspector. All other existing valves closed as part of the job will be opened by the contractor under the supervision of the Inspector.

2.7 TESTING

2.7.1 GENERAL

All newly installed pipe and services that have been backfilled must be tested in accordance with AWWA specification C651.

2.7.2 JUMPER METER ASSEMBLY

All filling, and flushing, must be accomplished through a jumper meter assembly. The jumper meter assembly shall consist of a meter (provided by the City, paid for by the Developer/Contractor), and a double check backflow preventer and galvanized piping (provided by the Contractor). The jumper meter assembly shall be installed by the Contractor under the direct supervision of the Engineering Division. After installation, the Contractor shall have the backflow preventer certified by a backflow technician, and a copy of the test report shall be provided to the Engineering Division.

- A temporary jumper connection is required at ALL connections between existing active water mains and proposed new water main improvements, per the City of Cocoa Utilities Handbook. The only exception is the installation of a new fire hydrant involving a tap and using an anchoring/swivel nipple. In this case, all fittings and fire hydrant SHALL be swabbed with a 100 ppm chlorine solution prior to installation.
- The details for filling any water main from existing active water mains and for flushing of new mains up to 8" diameter (2.5 FPS minimum velocity) and for pulling bacteriological samples from any new water main of any size can be found in **Section 2.7.3-Flushing and Swabbing**. The jumper connection shall be maintained until after filling, flushing, testing, and disinfection of the new main has been successfully completed and clearance for use from the Florida Department of Environmental

Protection (FDEP) and other pertinent agencies has been received. The jumper connection shall also be used to maintain pressure in the new mains all the time after disinfection and until the FDEP clearance letter is obtained. Adequate thrust blocking and/or restraints shall be provided temporarily, as required. Pipe and fittings used for connecting the new pipe to the existing pipe shall be disinfected prior to installation in accordance with AWWA C651. The tapping sleeve and the exterior of the main to be tapped shall be disinfected by spraying or swabbing per Section II of AWWA C651.

- Flushing of 10" diameter and larger water mains may be done through the tie-in valve, under the direct supervision of the Engineering Division. The Engineering Division will be notified in writing 48 hours prior to the flushing of said mains.

The following procedures shall be followed:

- The existing tie-in valves shall be operated and pressure tested in the presence of the Engineering Division or Engineer to verify water tightness prior to the proposed tie-in. Valves which are not watertight shall be replaced or a new valve installed immediately adjacent to the leaking valve.
- The temporary jumper connection shall be constructed as detailed. The jumper connection shall be used to fill the new water main and for providing water for bacteriological sampling of the new main as required by the FDEP permit.

- Flushing shall not be attempted during peak demand hours of the existing water main.
- All downstream valves in the new system must be open prior to opening the tie-in valve.
- Provide for and monitor the pressure at the tie-in point, the pressure in the existing main must not drop below 35 psi.
- Tie-in valve shall be opened a few turns only, ensuring a pressure drop across the valve is always greater than 10 psi.

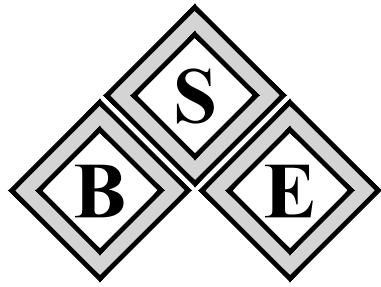
- The contractor shall provide documentation demonstrating that the double check backflow prevention device has been tested and is in good working order at the time of installation. The test shall be performed by a qualified backflow prevention technician.

- Except as required to flush lines of greater than 8" in diameter, the tie-in valve shall remain closed. The tie-in valve shall remain closed until the new system has been cleared for use by FDEP and all other pertinent agencies.

- Upon receipt of clearance for use from FDEP and all other pertinent agencies, the contractor shall remove the jumper connection. The corporation stops are to be closed and plugged with 2" brass plugs.

- All installation and maintenance of the temporary jumper connection and associated backflow prevention device fittings, valve, etc., shall be the responsibility of the contractor.

		CITY OF COCOA Brevard County, Florida UTILITIES DEPARTMENT	
WATER TECHNICAL PROVISIONS			
DRAWN BY:		SCALE:	
CHECKED BY:		DATE: APRIL 2020	
DRAWING No. :		SHEET: 2 OF 3	
ACAD NAME:			



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CONSULTING - ENGINEERING -
LAND SURVEYING

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STATE OF FLORIDA, No. 33659 No. 4151

HASSAN A. KAMAL, P.E.
STATE OF FLORIDA, No. 41951

	CITY COMMENTS	08/19/20
	CITY COMMENTS 08/10/2020	08/13/20
	CITY COMMENTS 07/24/2020	07/31/20

DATE: 07/13/20
DESIGN/DRAWN: SMG/RMB

PROJECT TITLE

**ADAMSON CREEK
PHASE ONE-C**

SHEET TITLE

**CITY OF COCOA
WATER
TECHNICAL
PROVISIONS**

PROJECT NO.

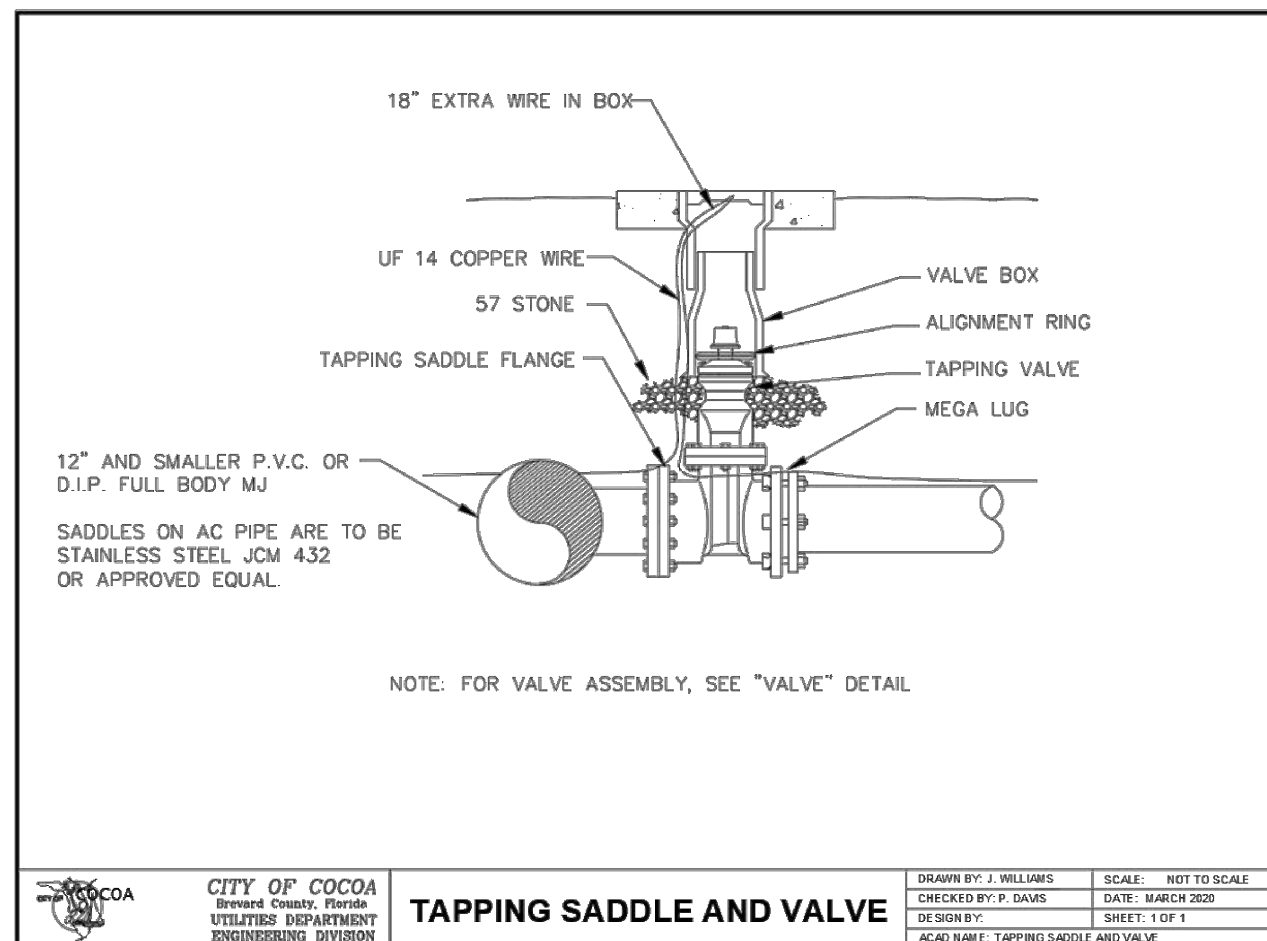
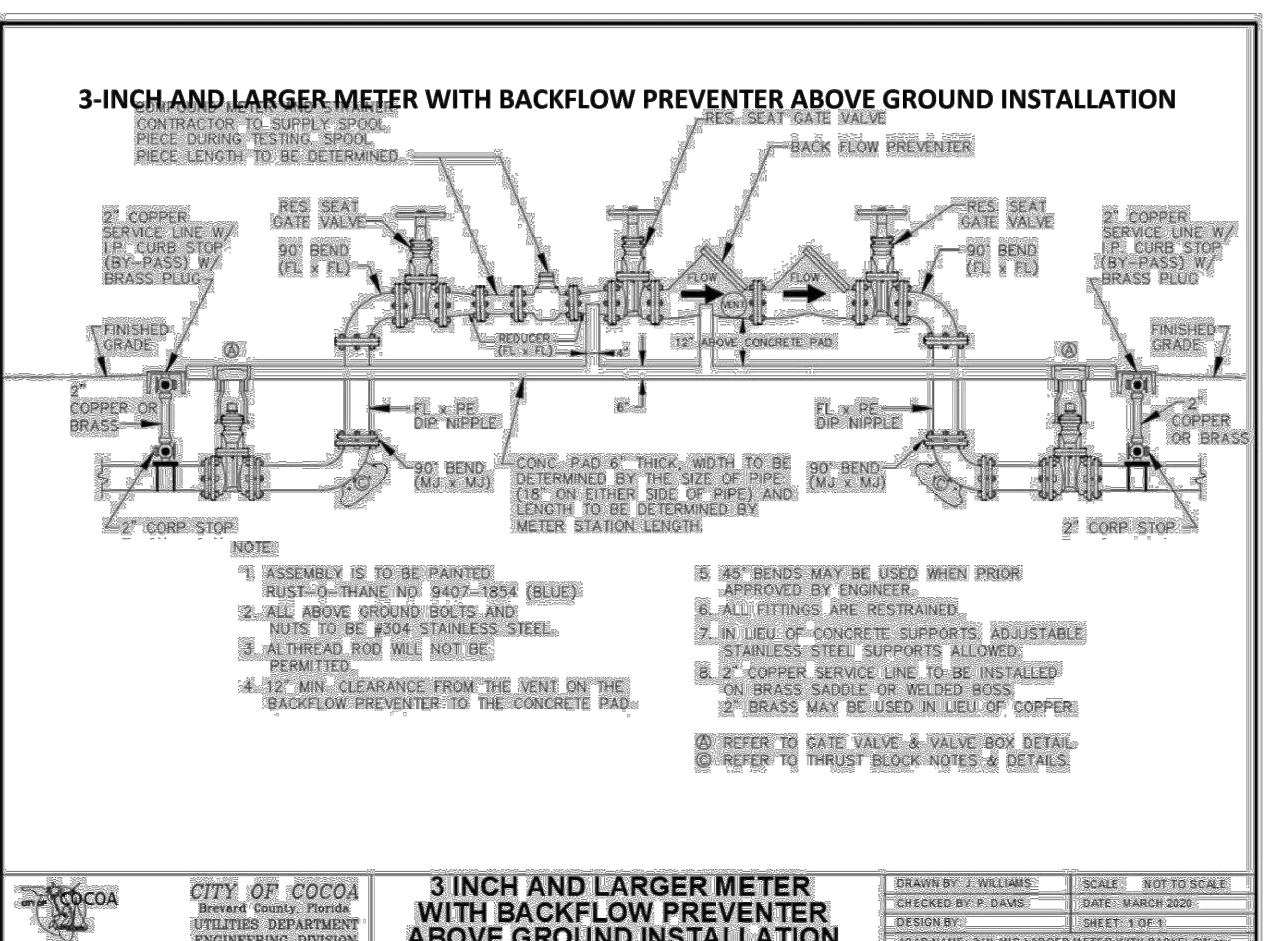
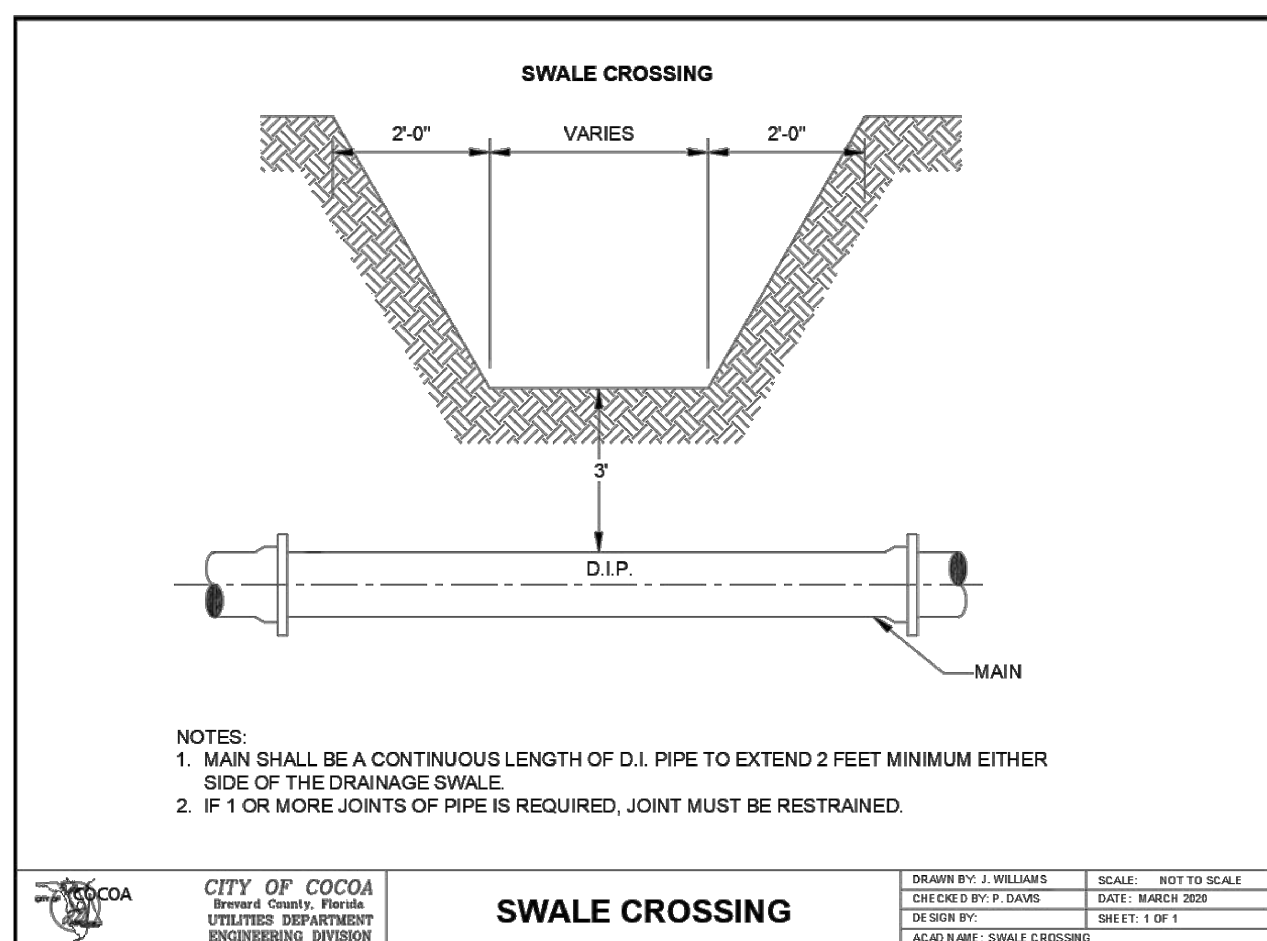
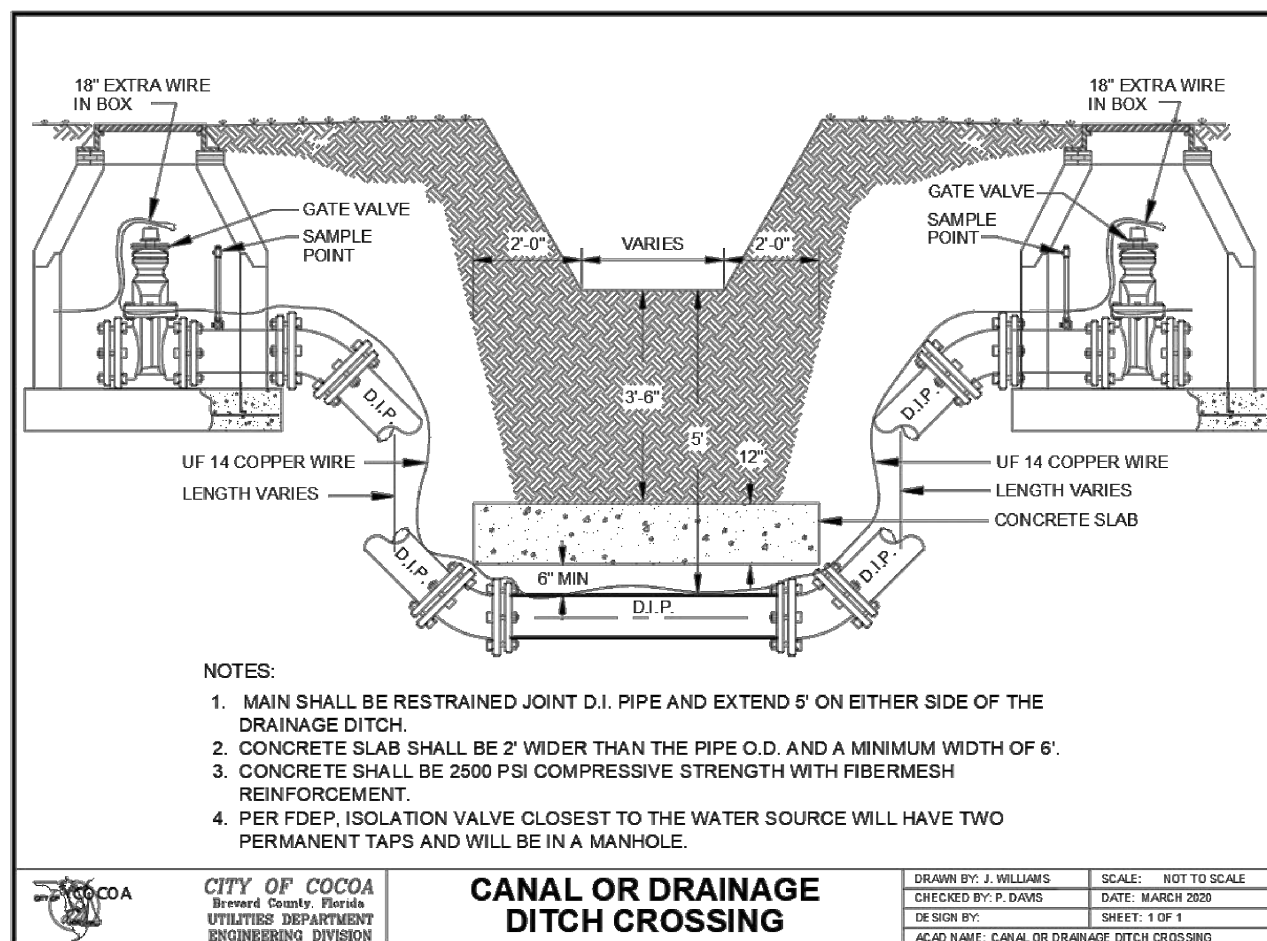
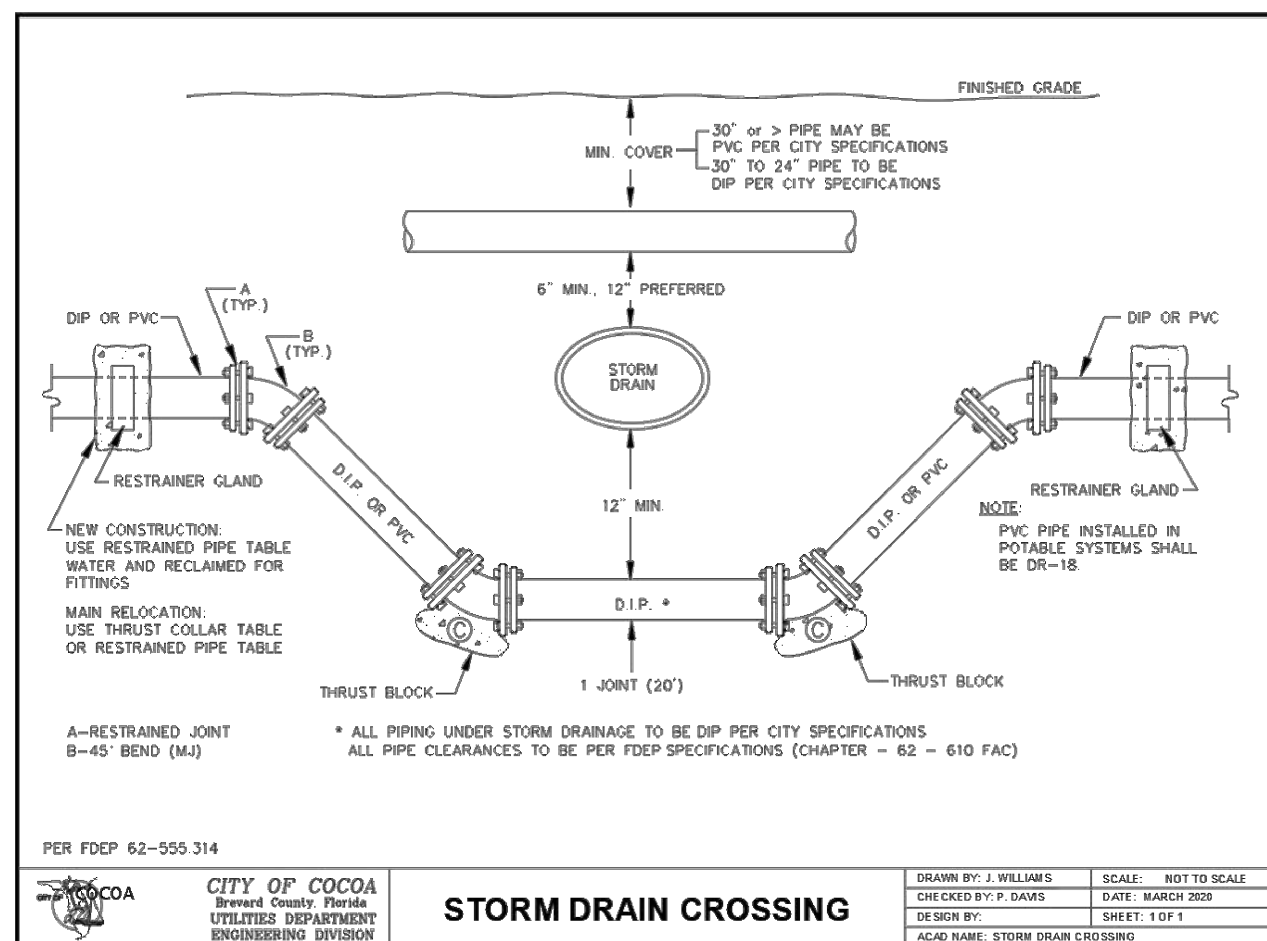
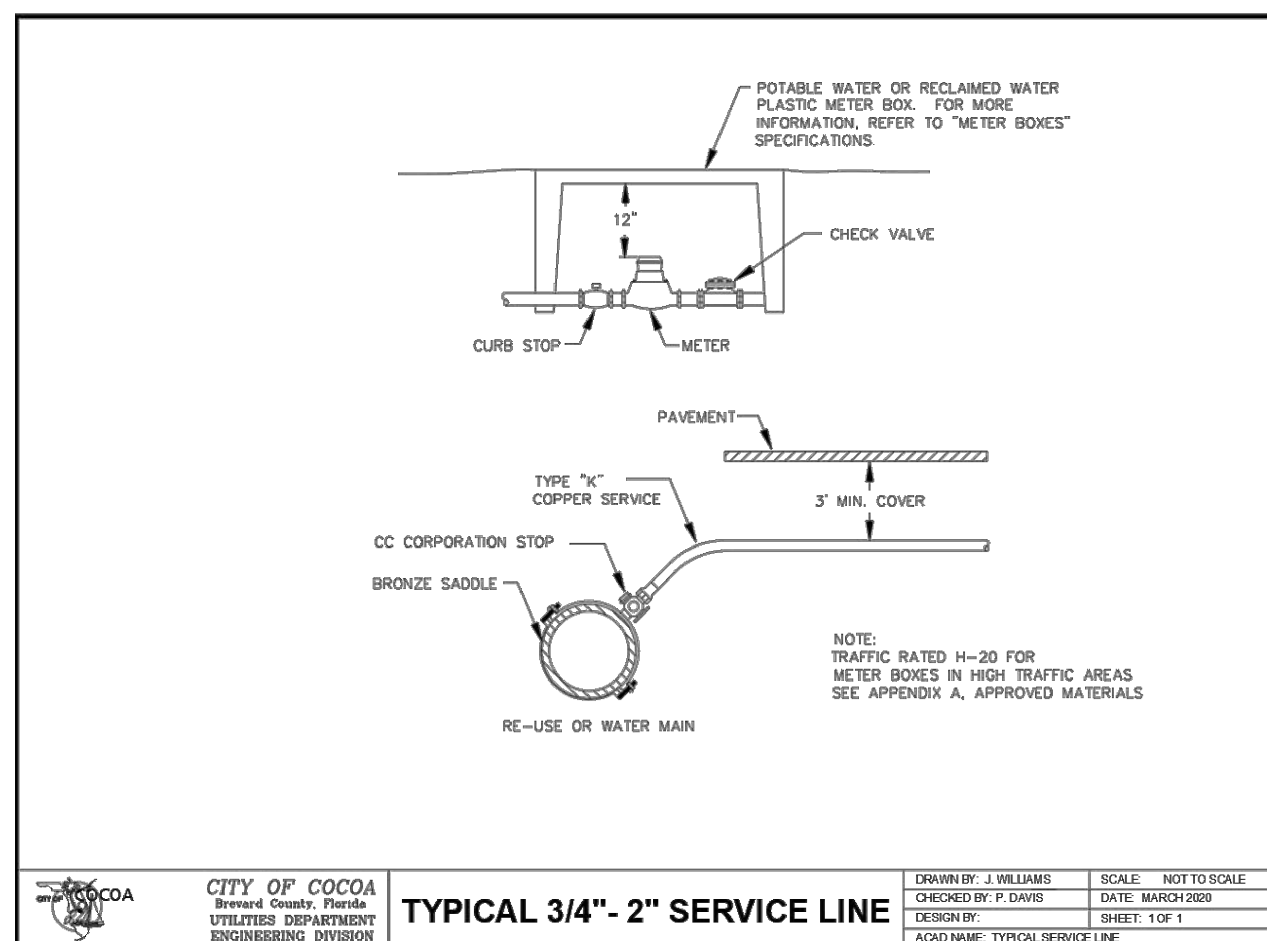
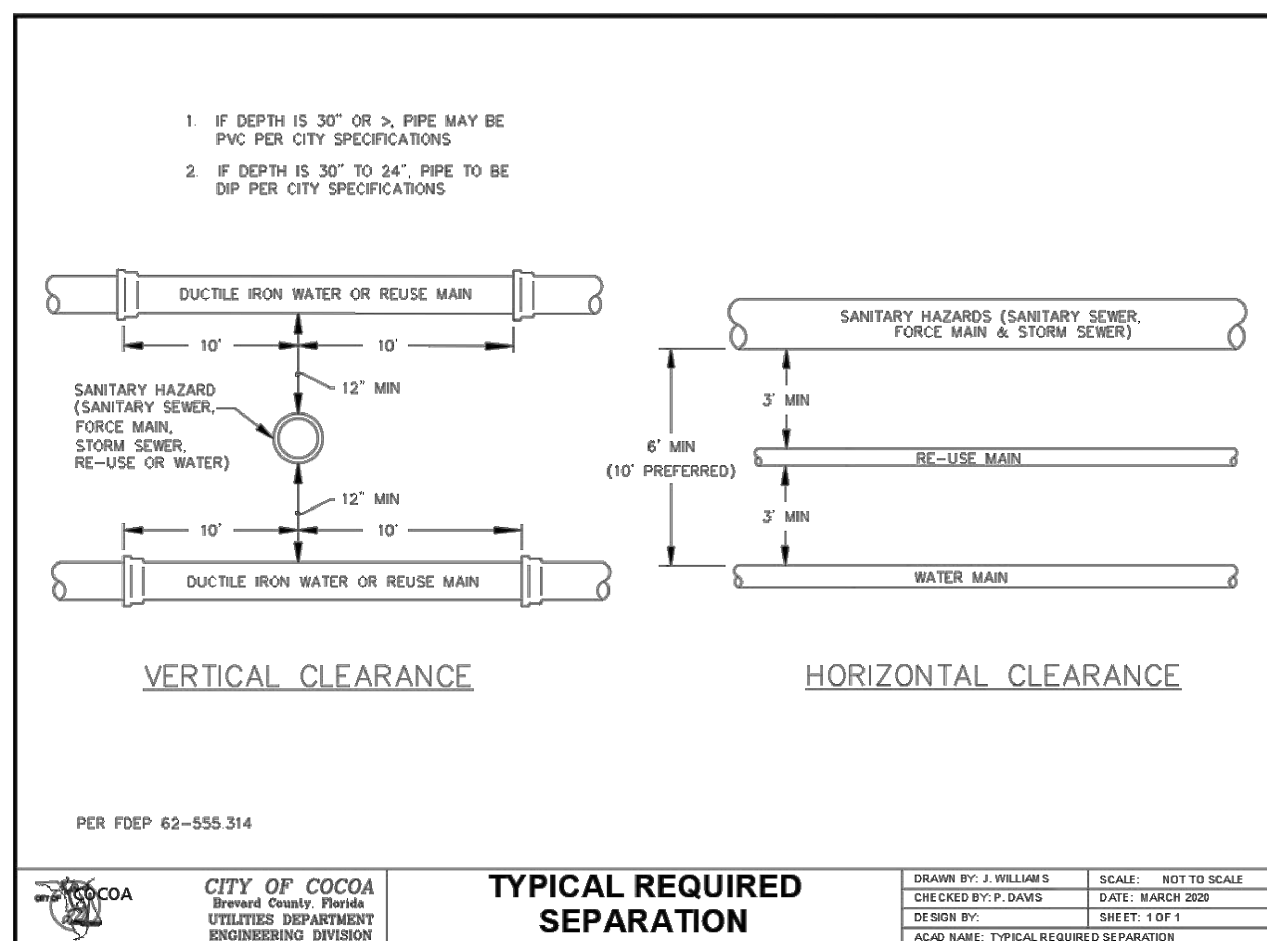
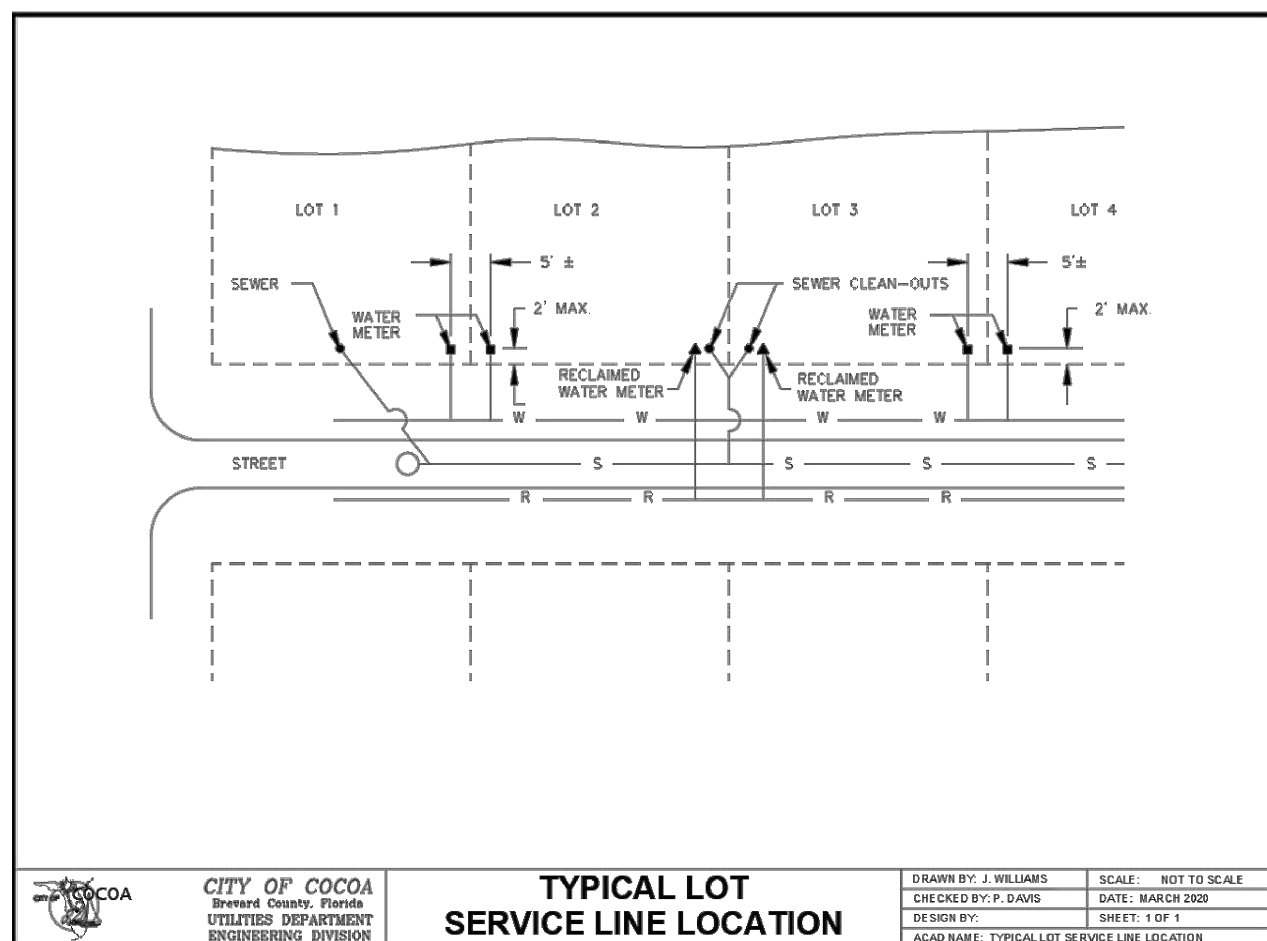
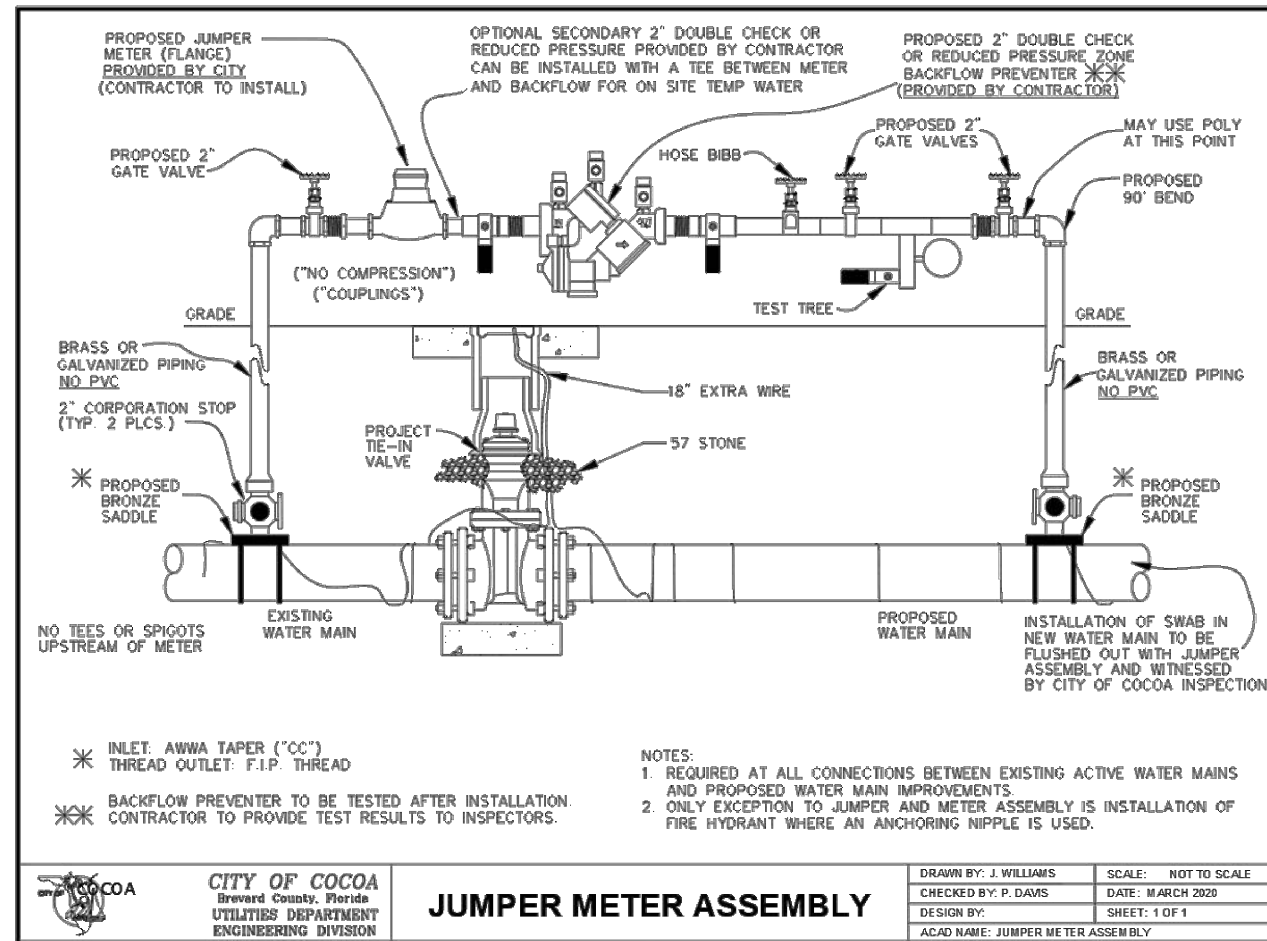
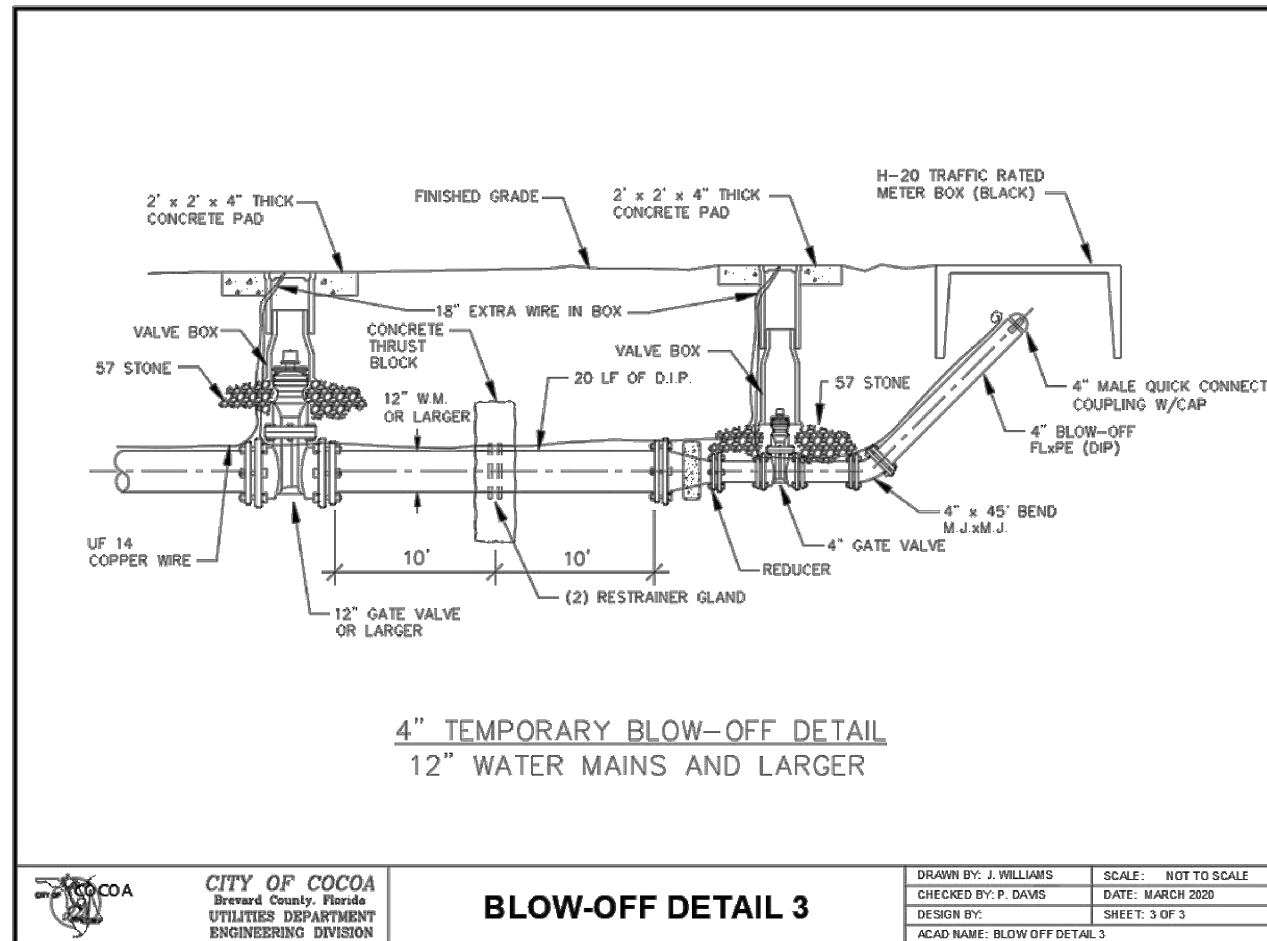
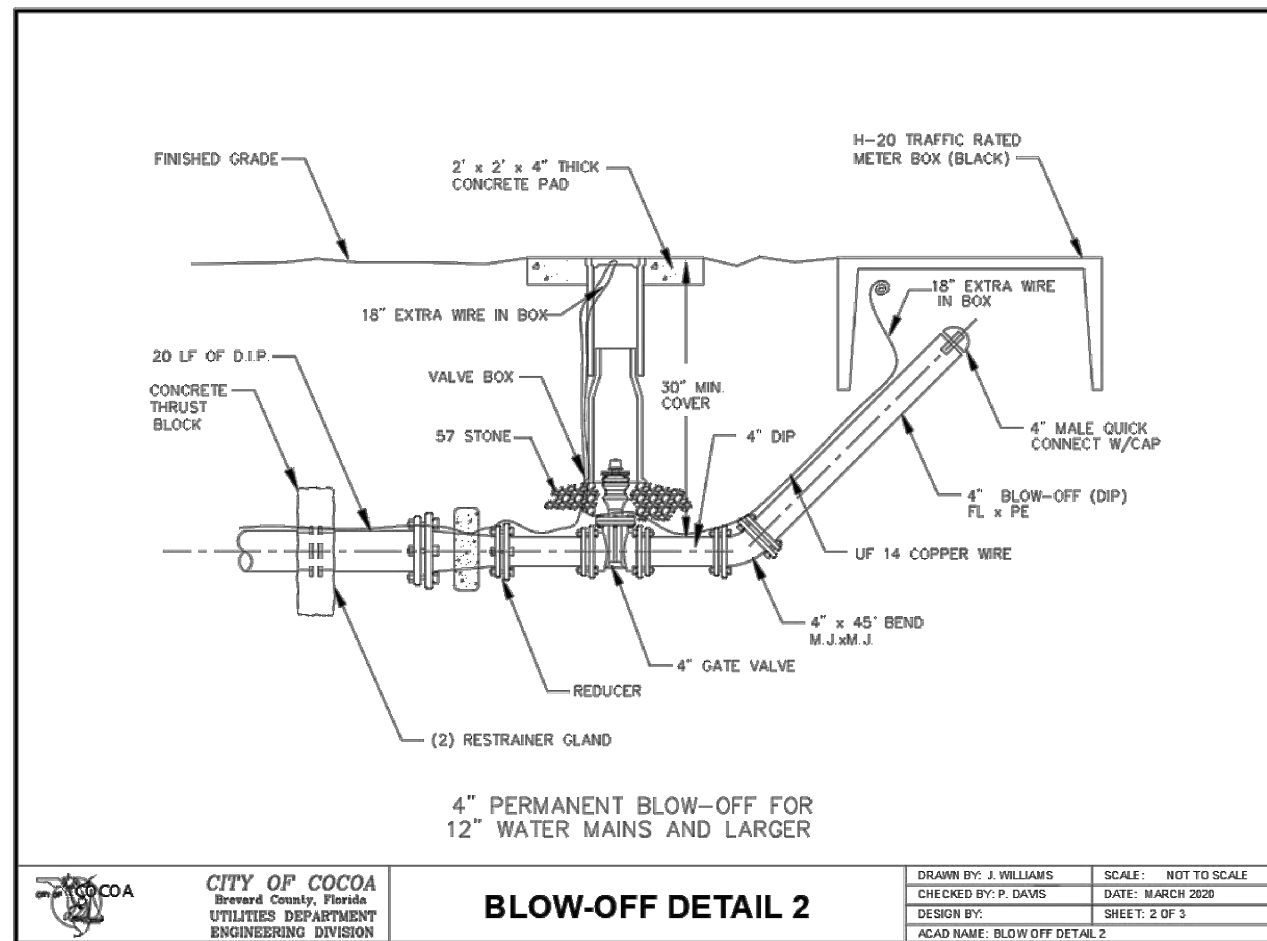
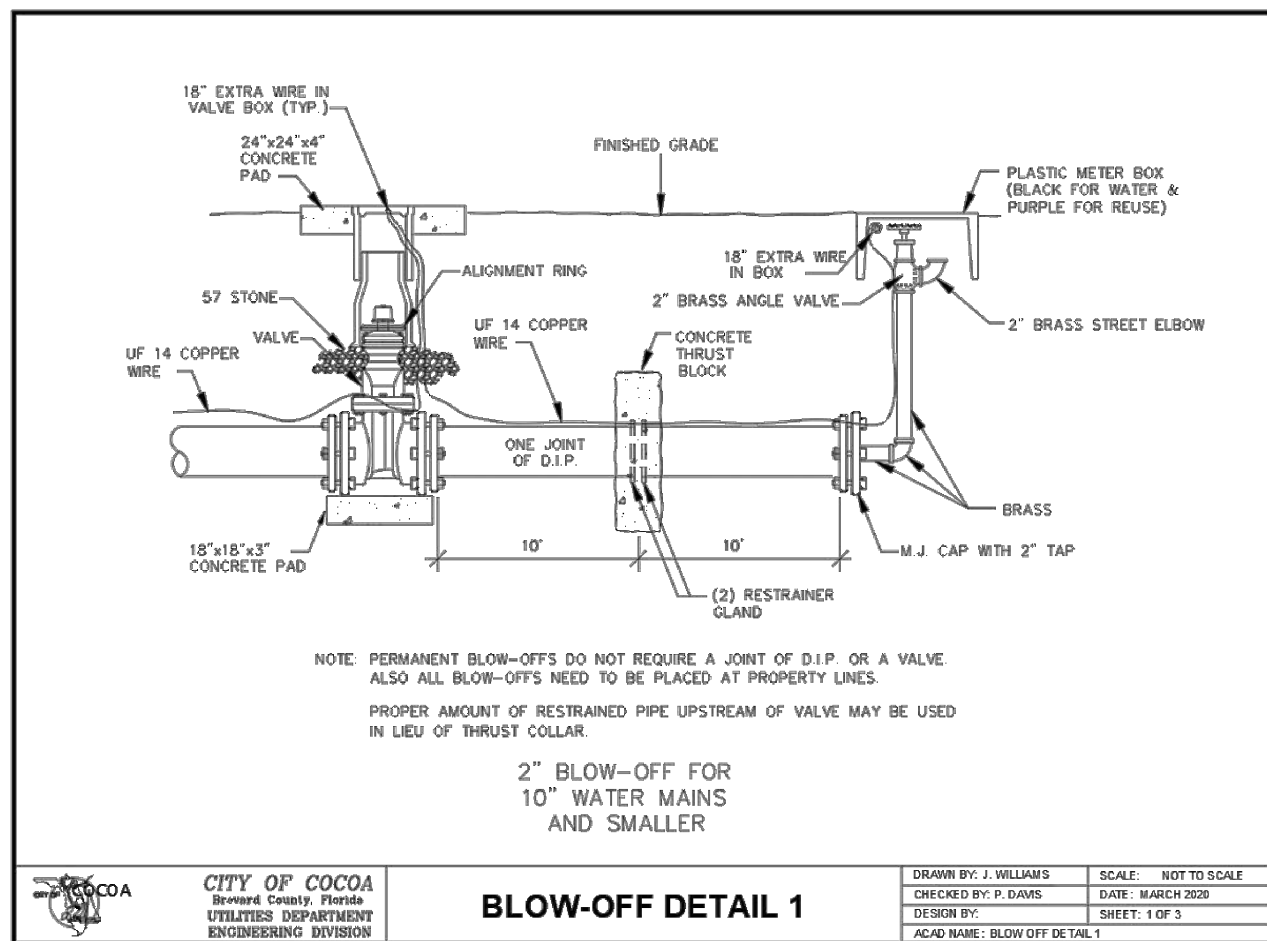
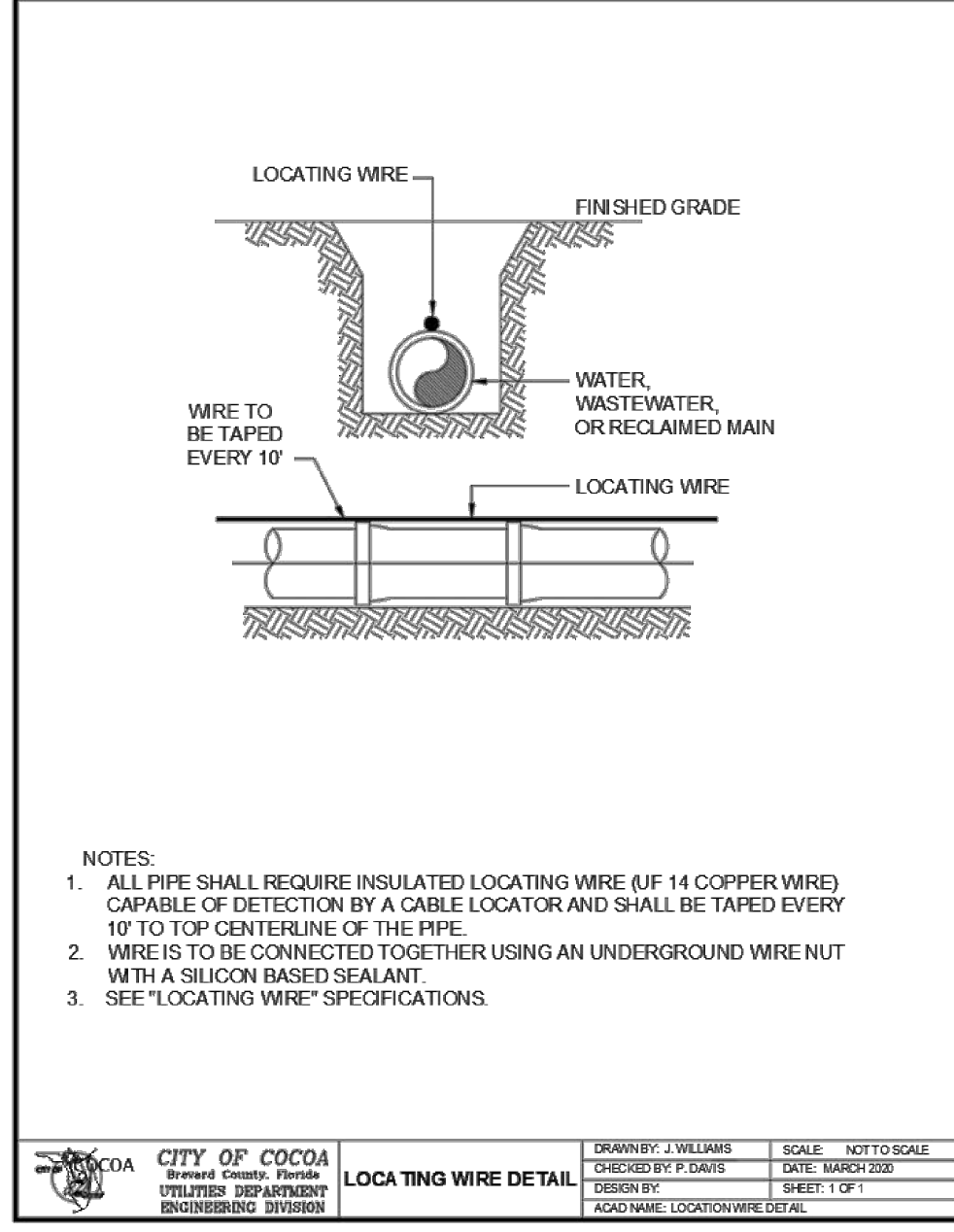
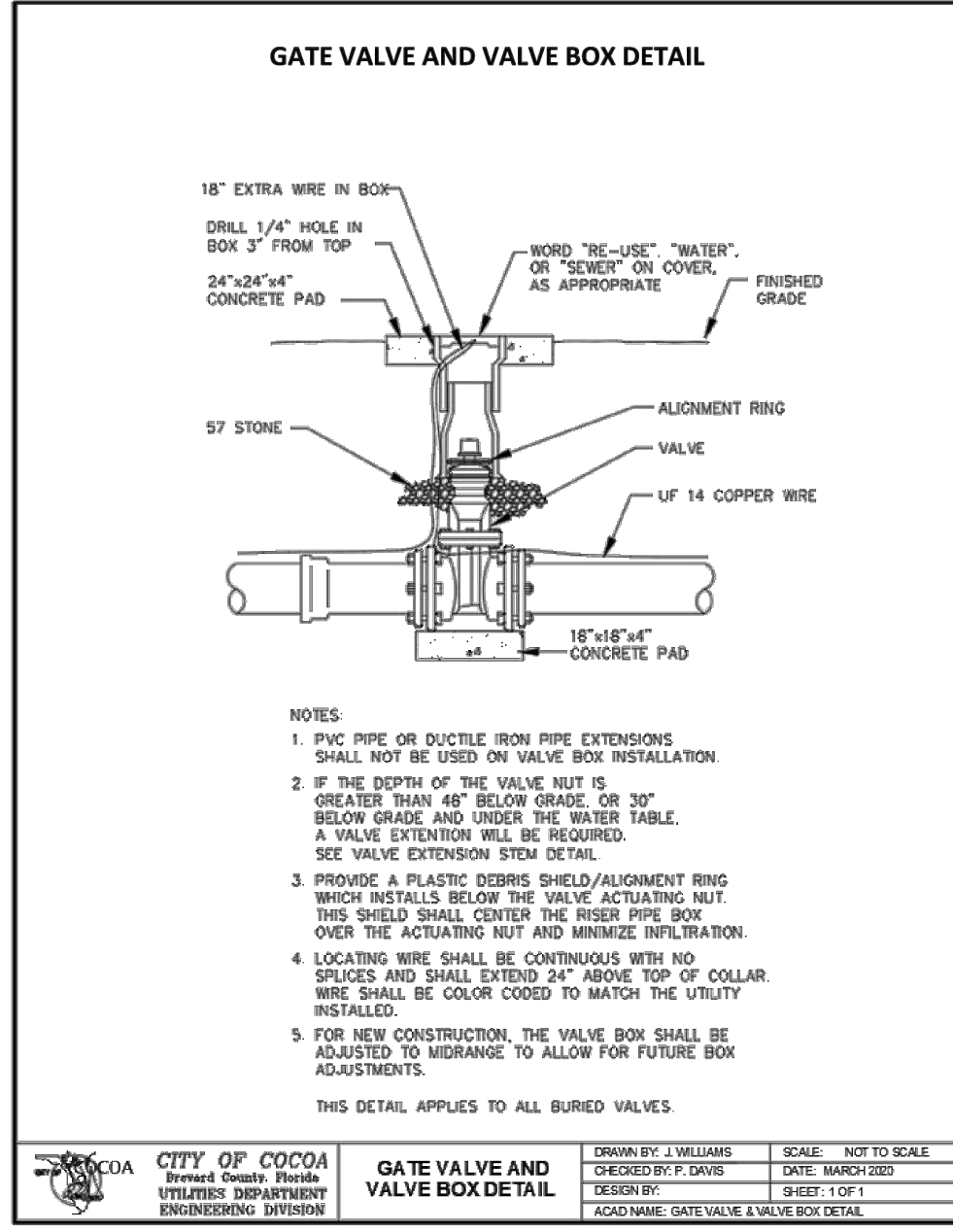
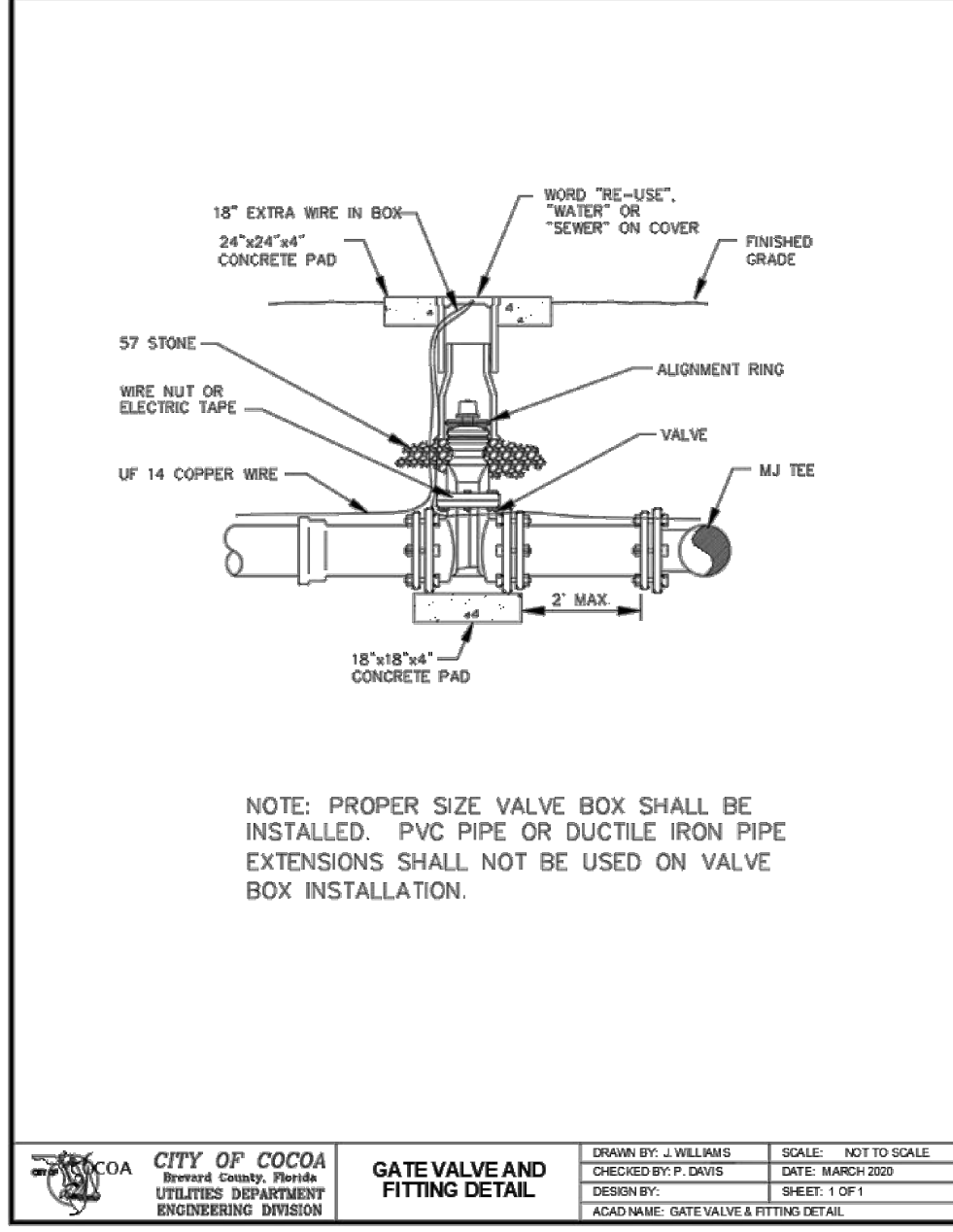
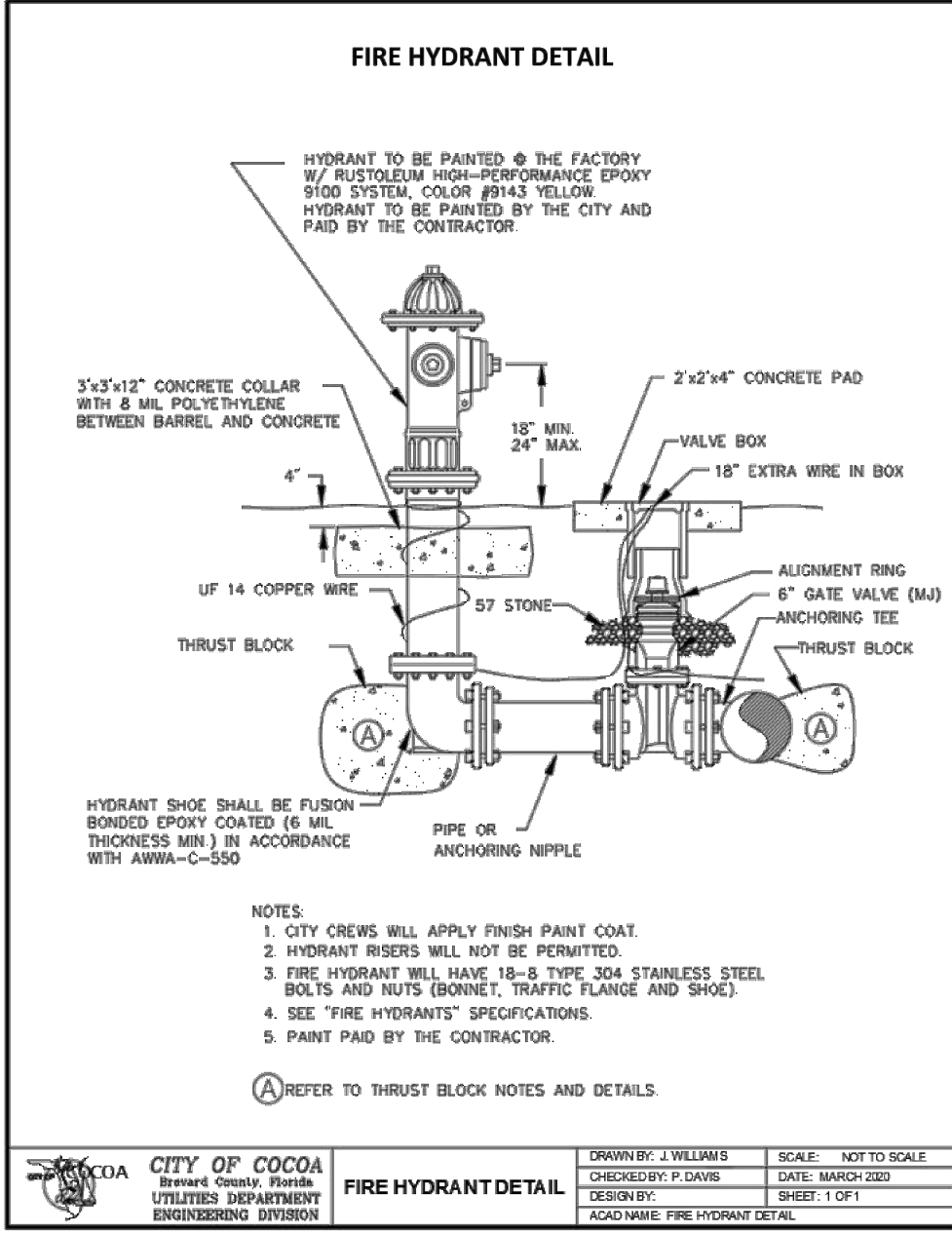
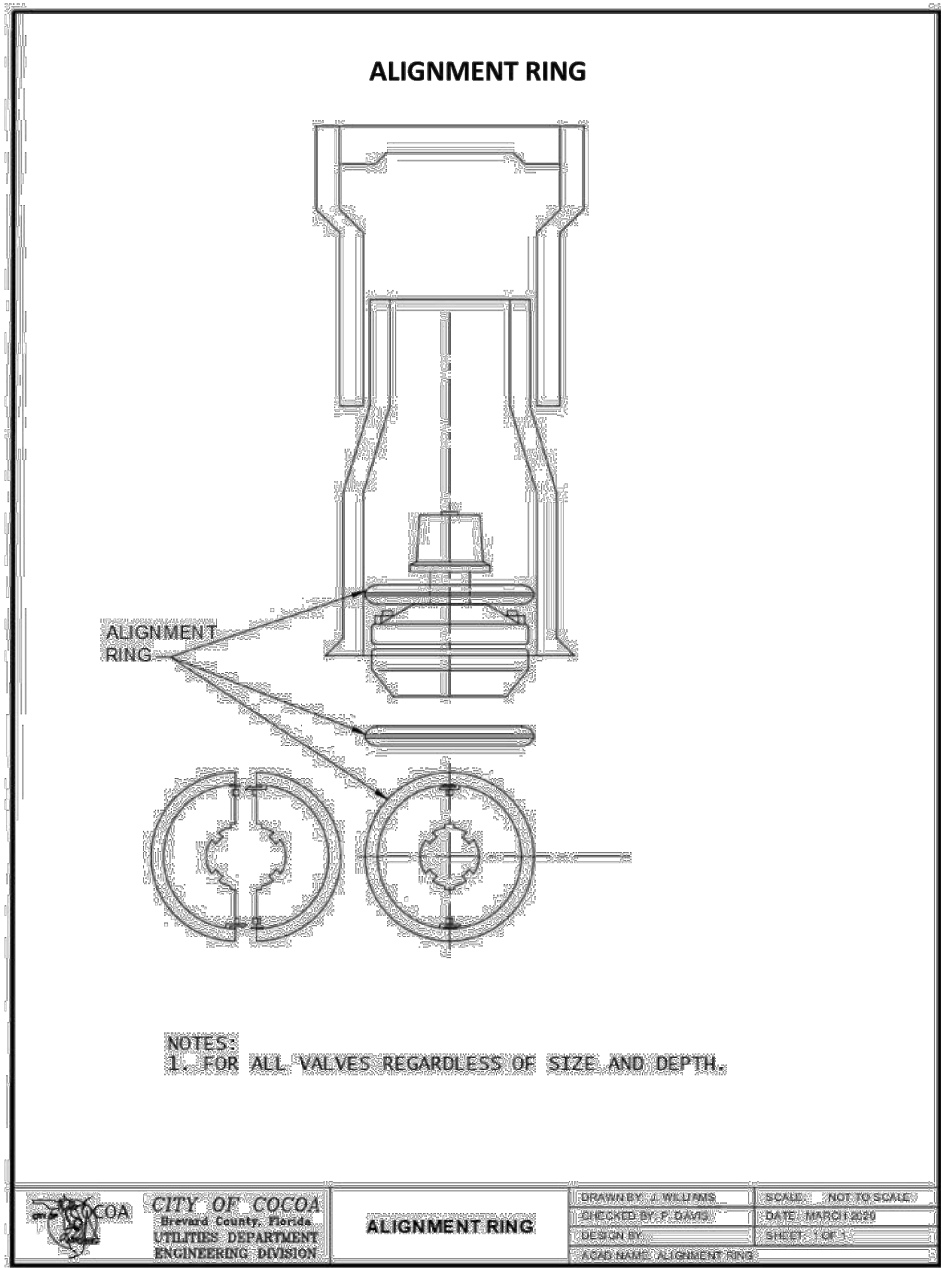
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B.S.E. CONSULTANTS, INC.
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NO.	REVISION	DATE	BY	CHKD.	APP'D.
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PROJECT TITLE

**ADAMSON CREEK
PHASE ONE-C**

SHEET TITLE

**CITY OF COCOA
WATER DETAILS**

PROJECT NO.

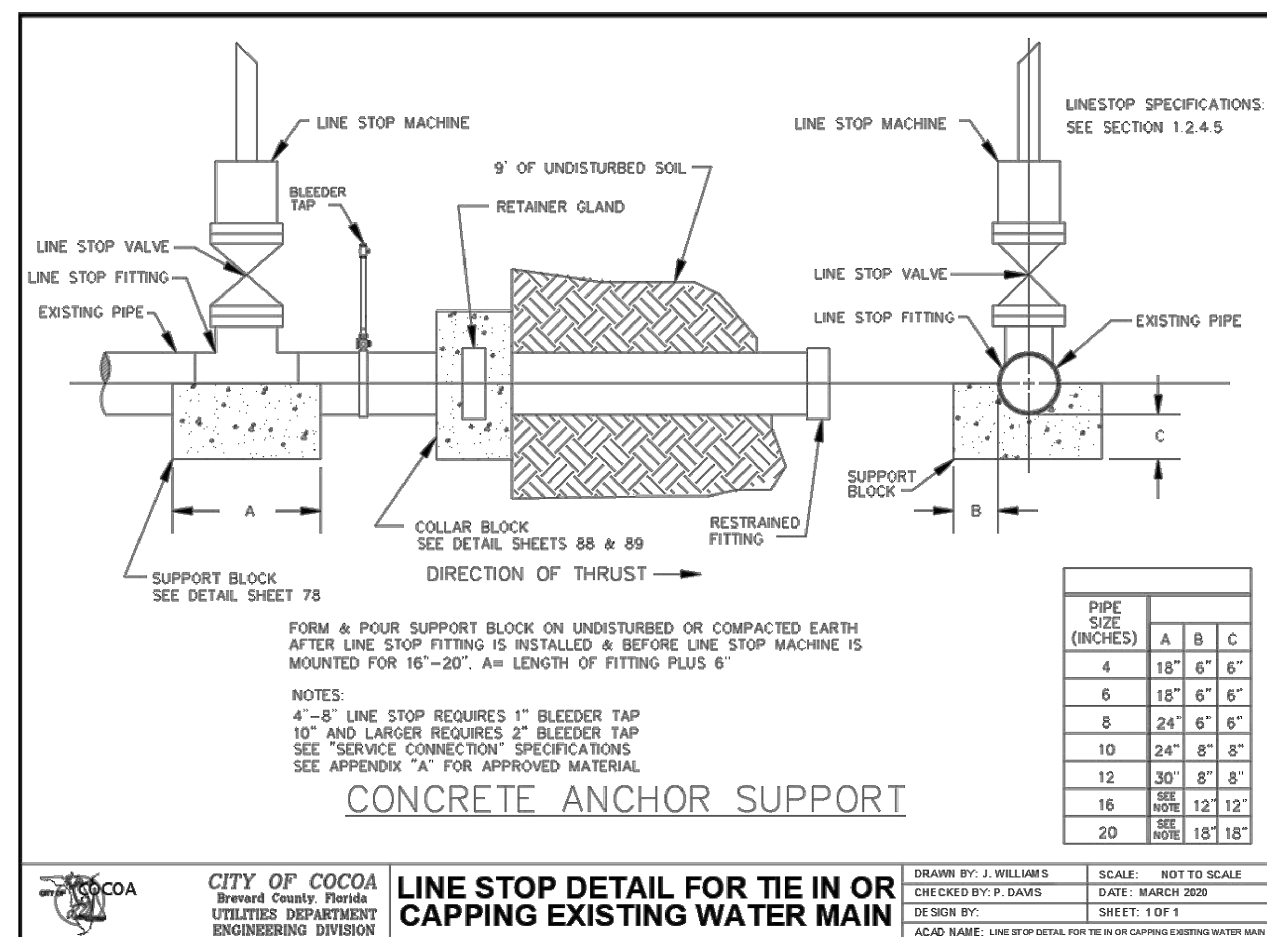
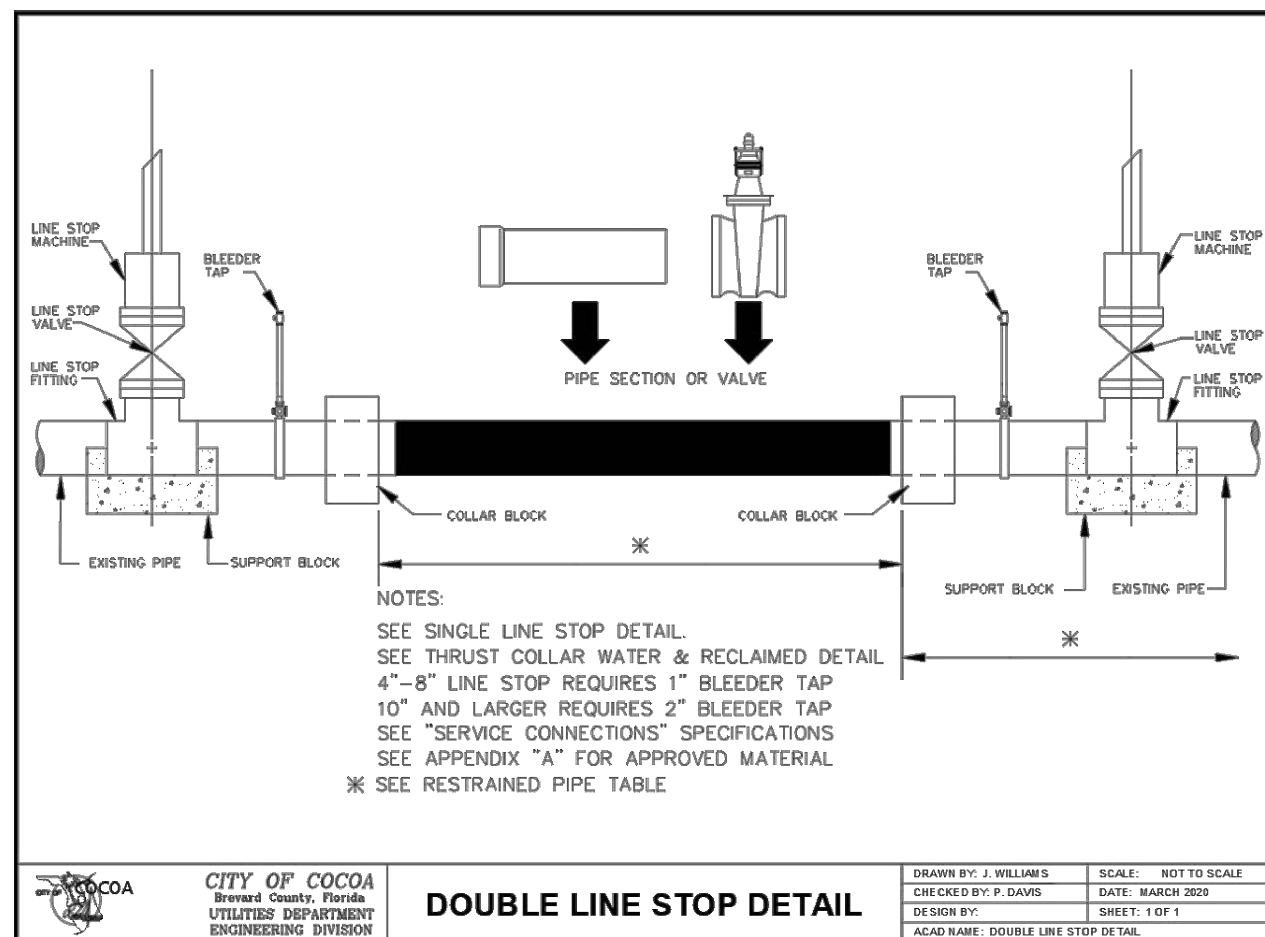
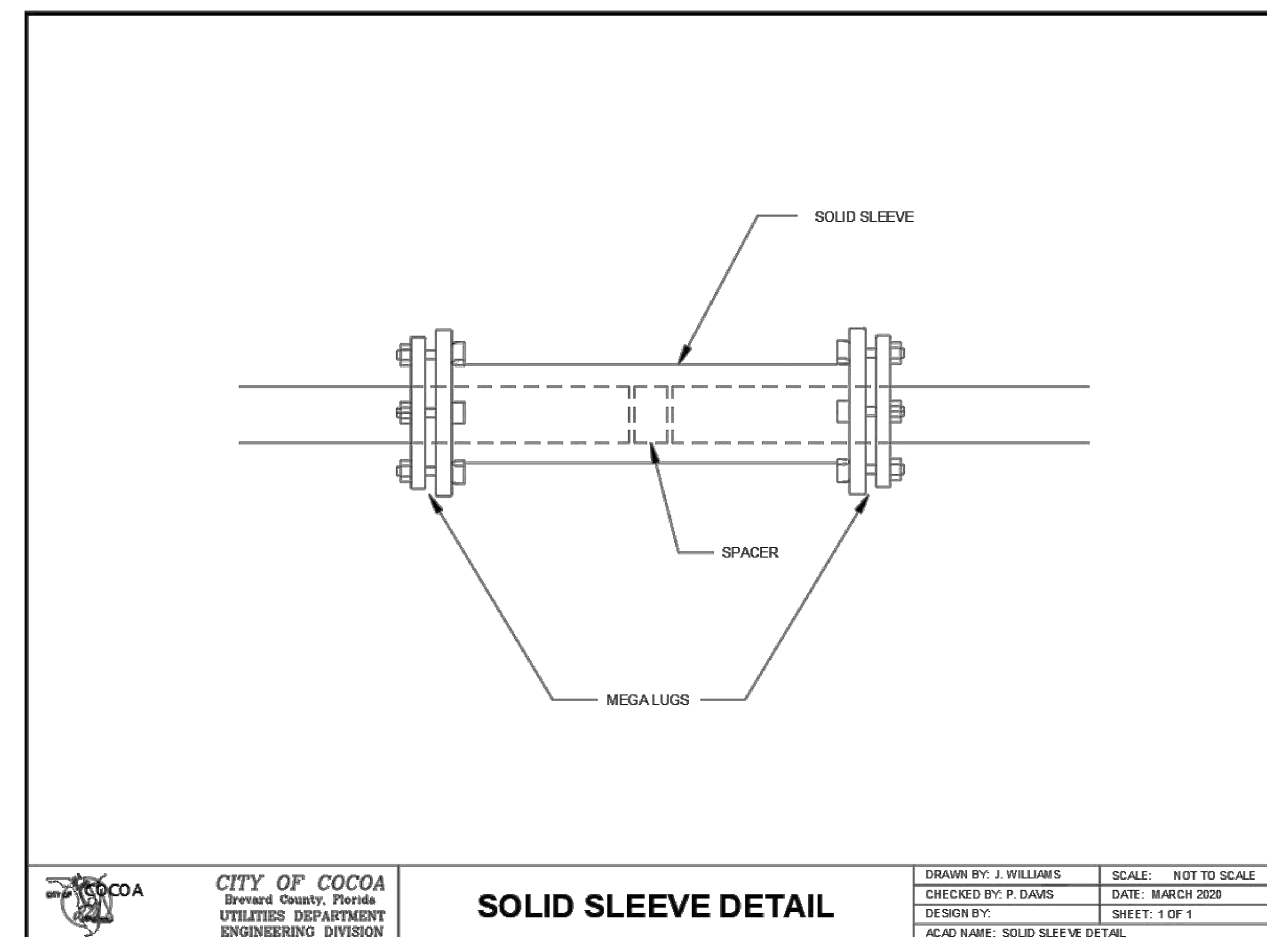
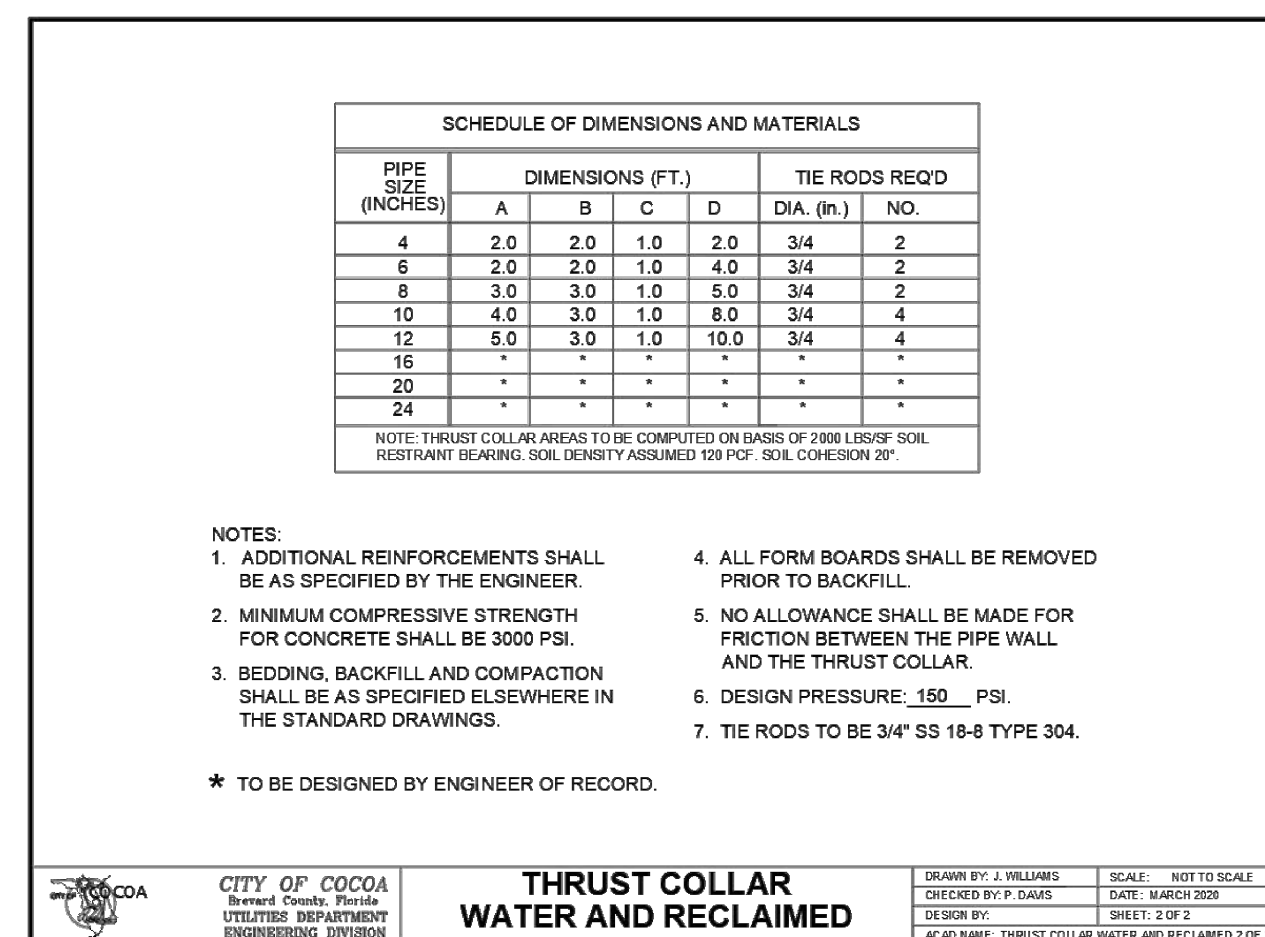
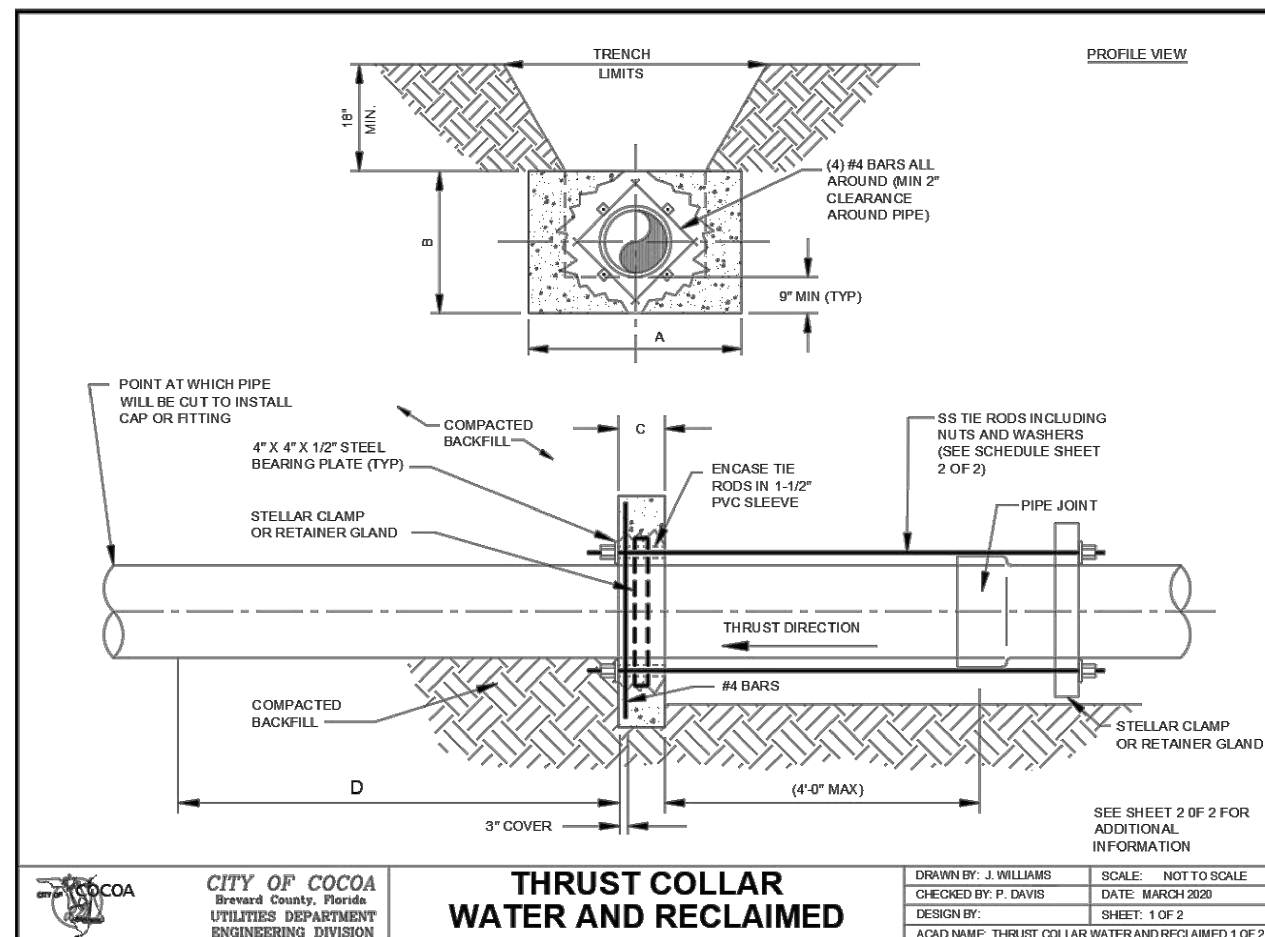
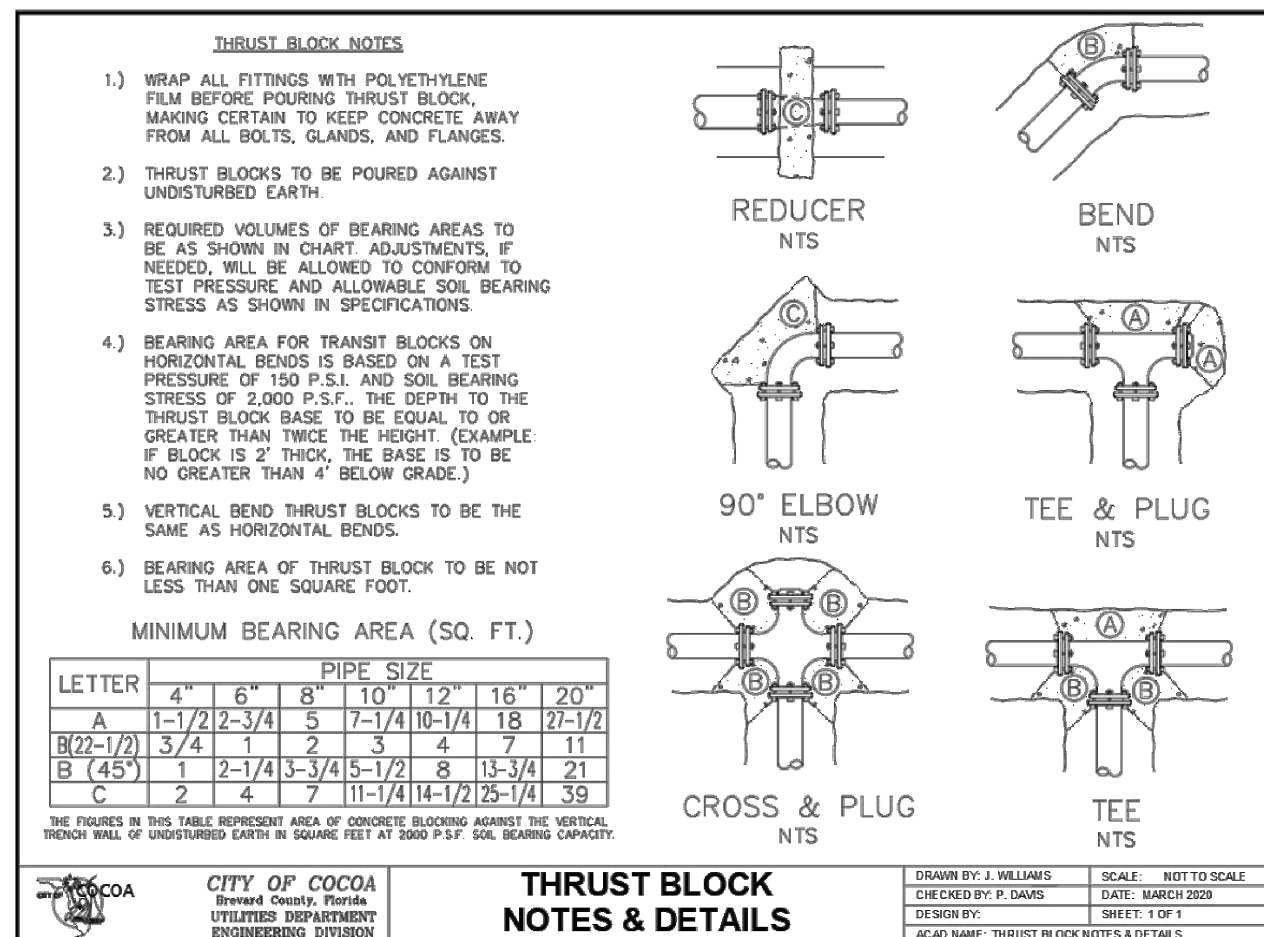
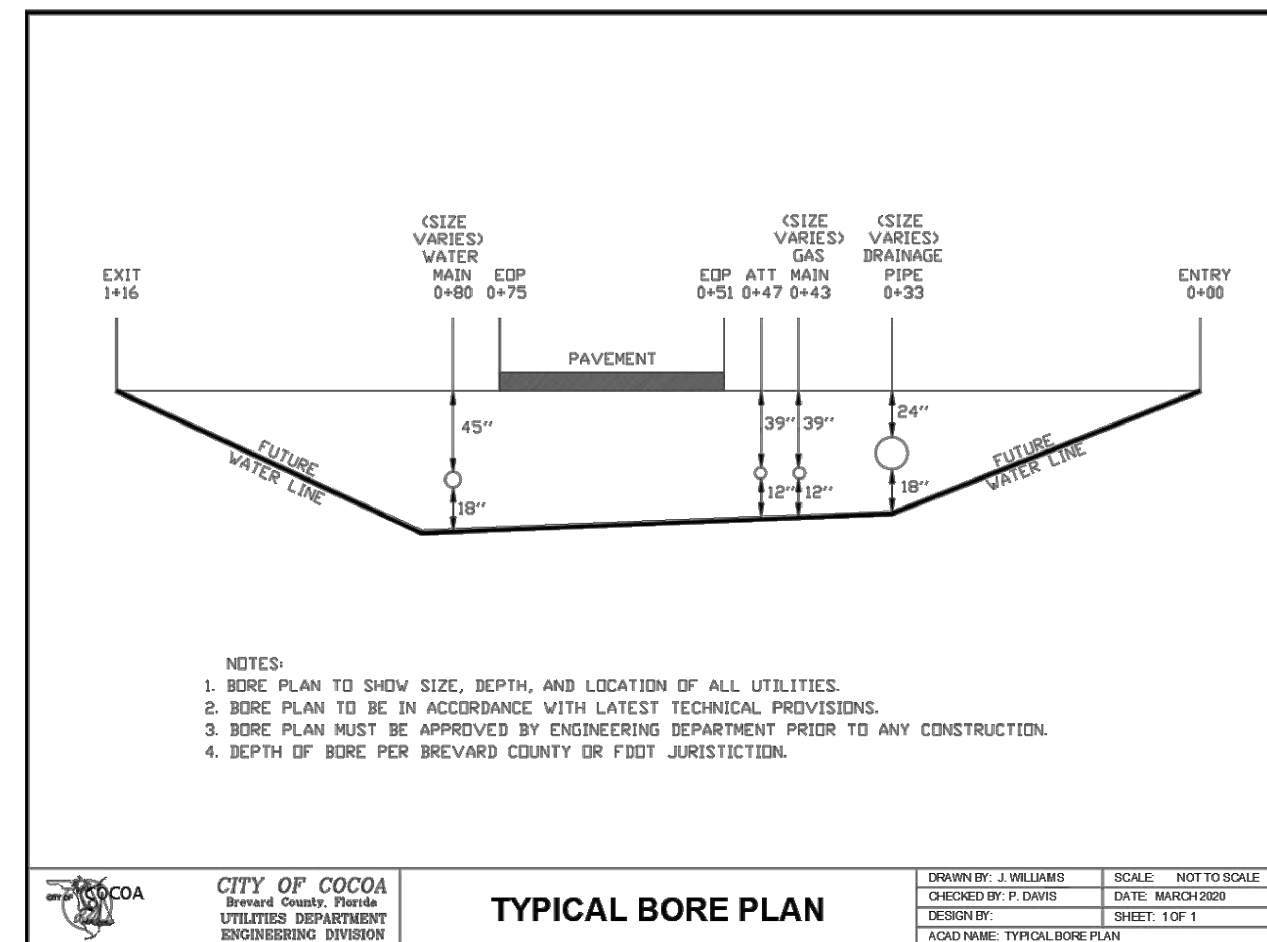
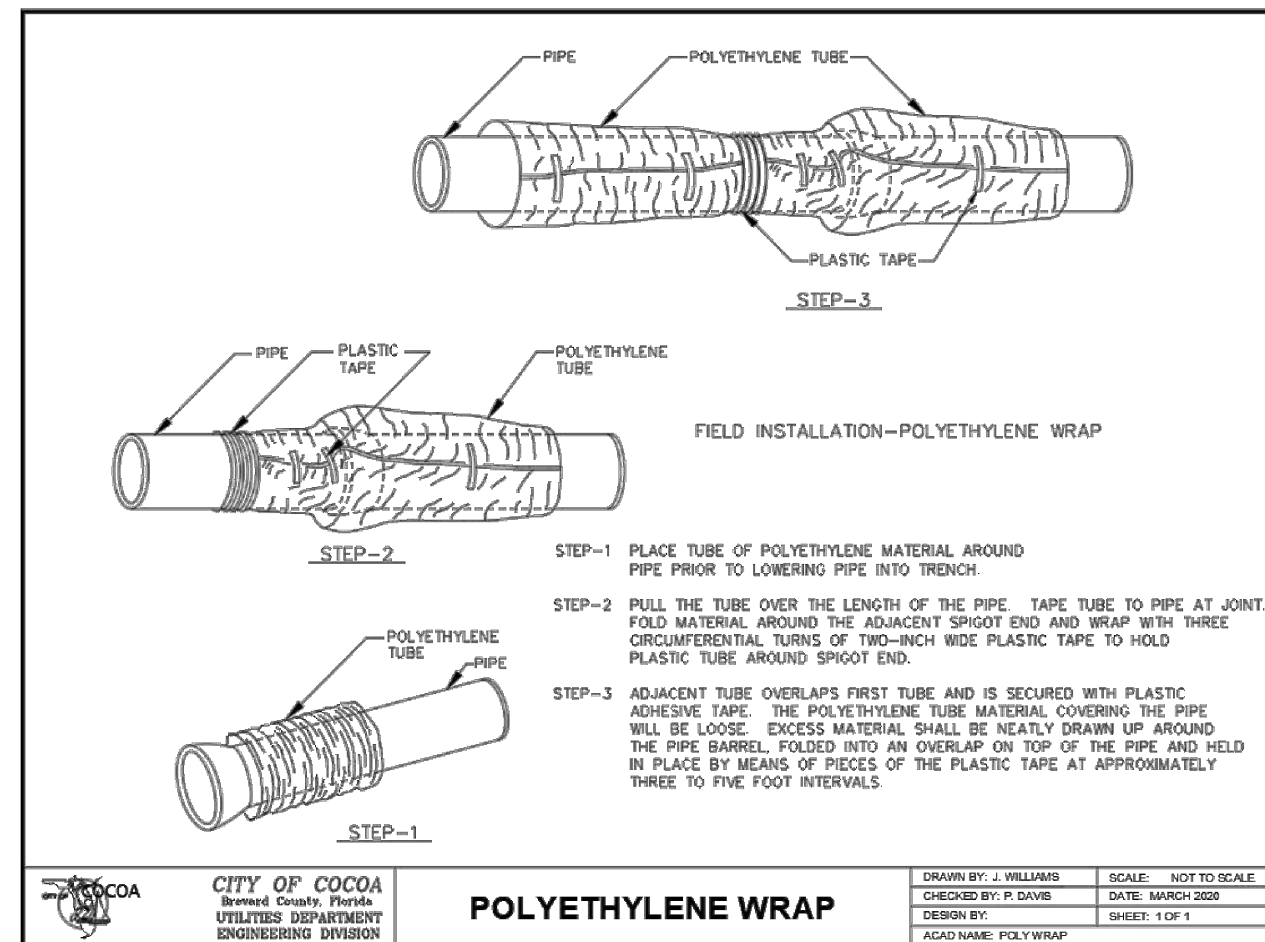
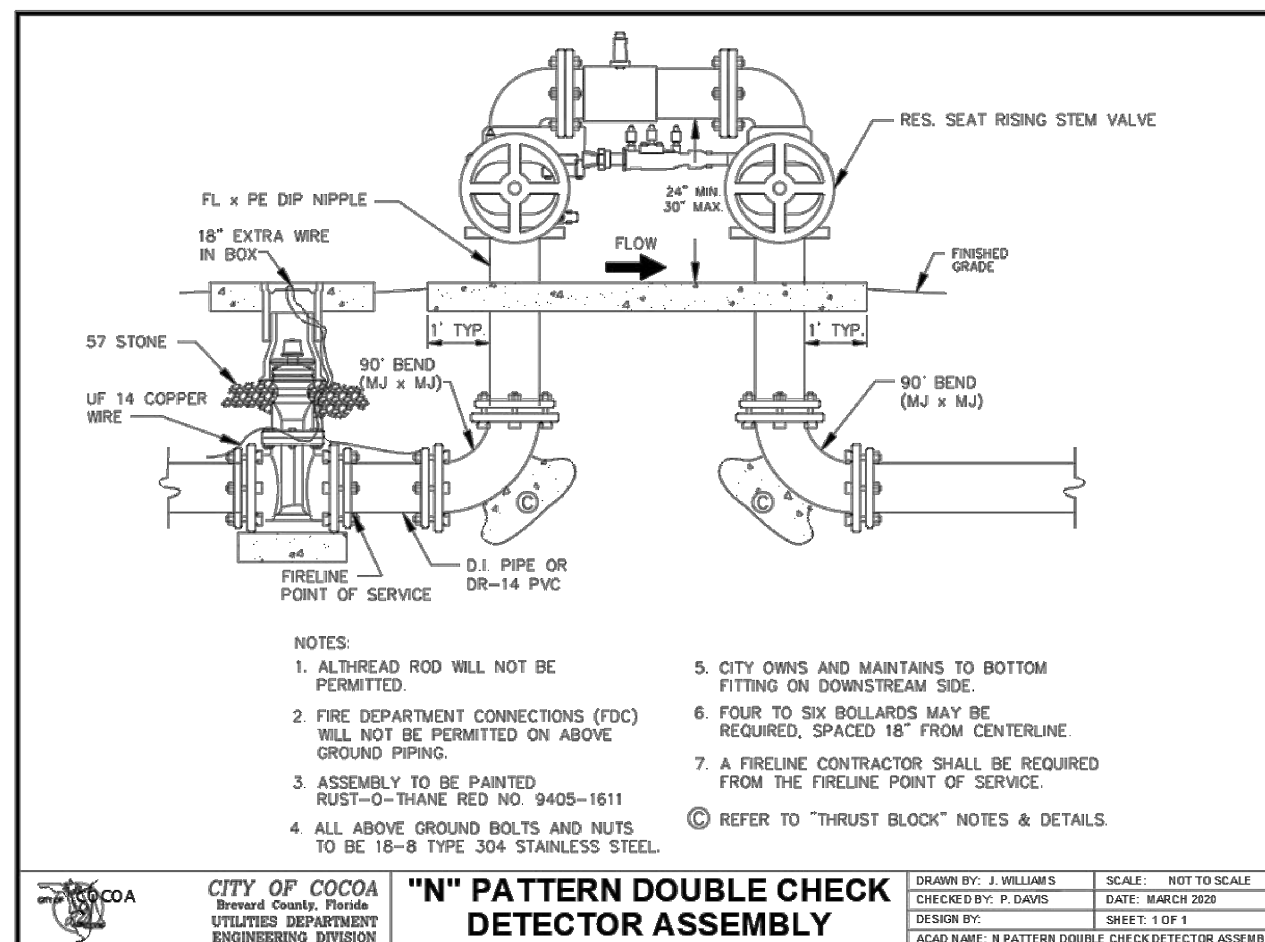
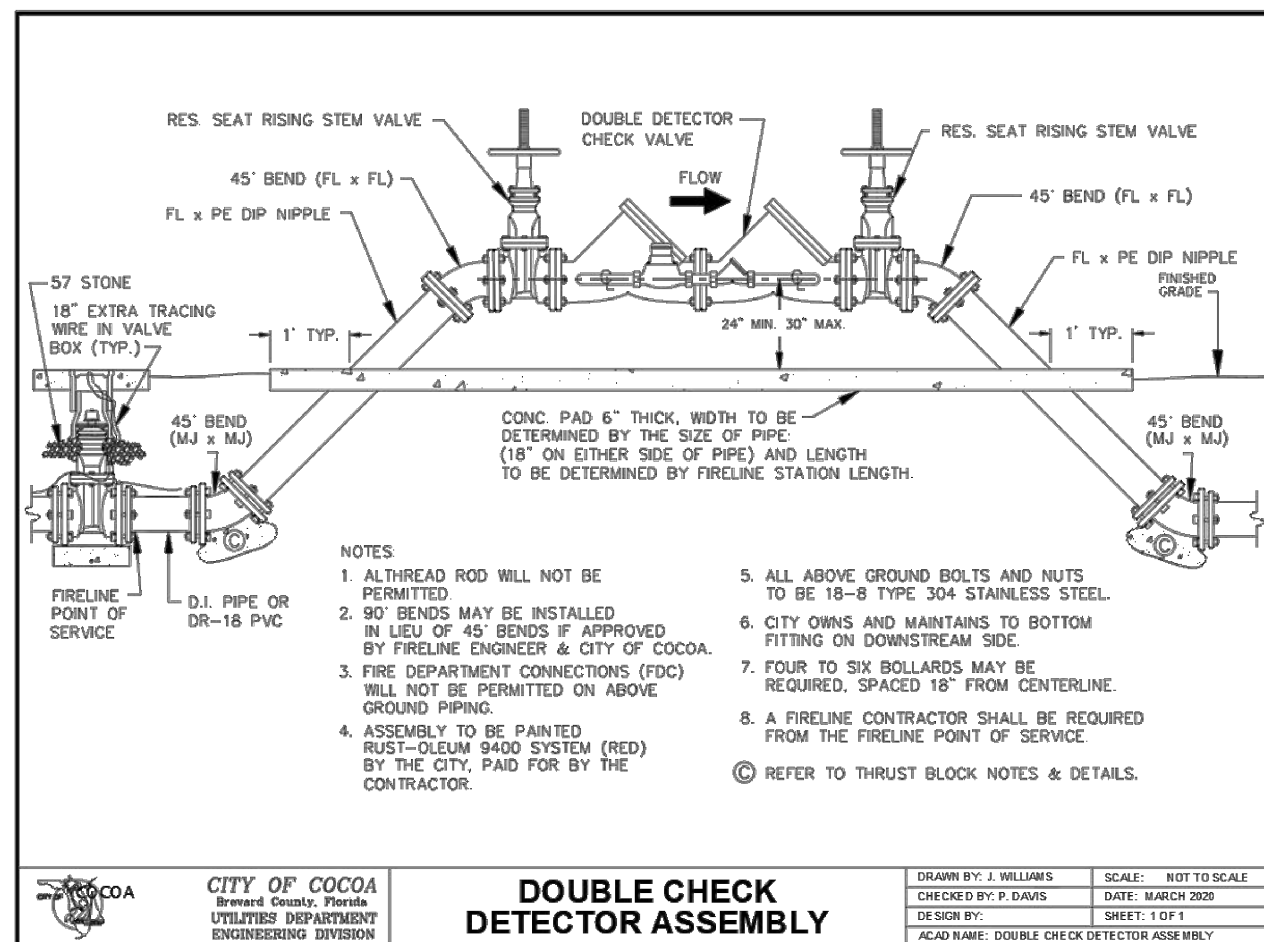
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28 of 35



ADAMSON CREEK PHASE ONE-C

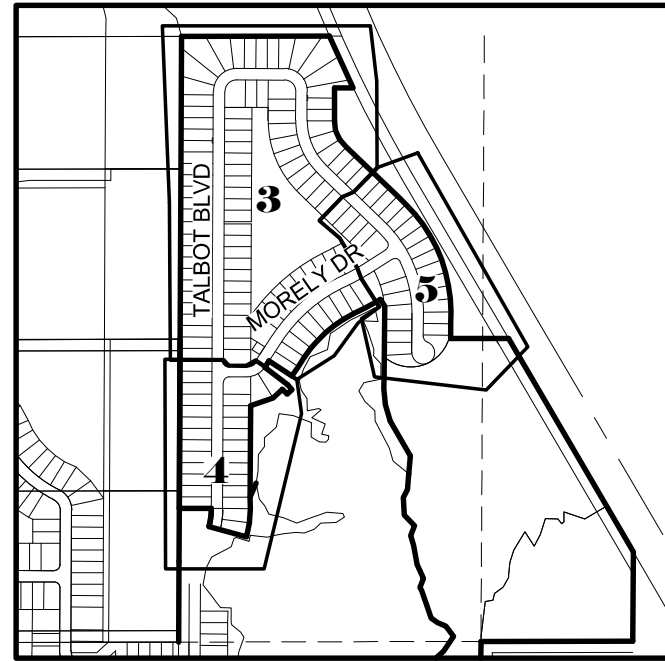
A REPLAT OF (TRACT 3, ADAMSON CREEK PHASE ONE-A, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 57, PAGE 49, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, TOGETHER WITH THAT CERTAIN PARCEL OF LAND DESCRIBED AS PARCEL 4 IN OFFICIAL RECORDS BOOK 8071, PAGE 1946, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, TOGETHER ALSO WITH THAT PART OF THE WEST 1/2 OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 22, TOWNSHIP 24 SOUTH, RANGE 35 EAST), CITY OF COCOA, BREVARD COUNTY, FLORIDA

PRELIMINARY PLAT

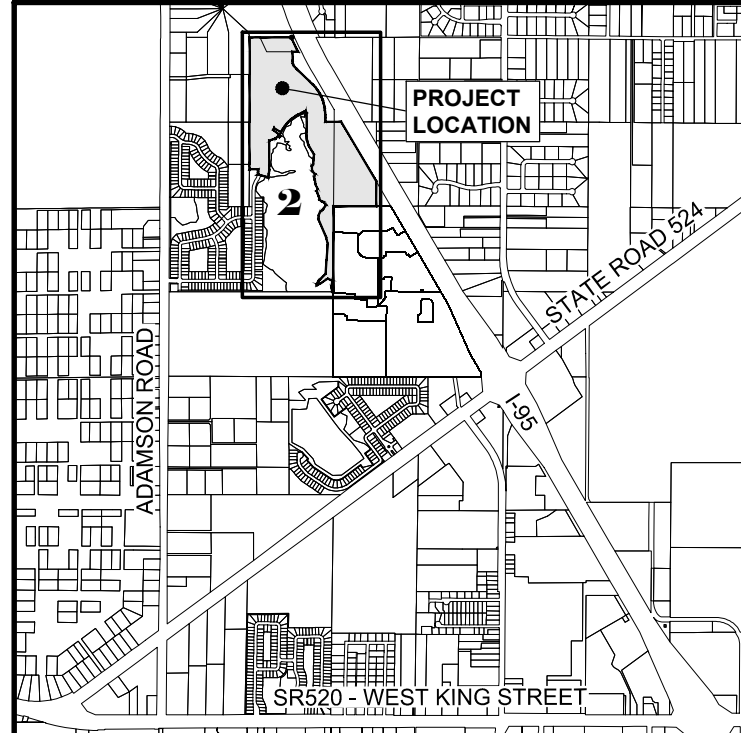
PLAT NOTES:

- BEARING REFERENCE: ASSUMED BEARING OF N00°16'59"E ON THE WEST LINE OF TRACT 3, ADAMSON CREEK PHASE ONE-A, RECORDED IN PLAT BOOK 57, PAGE 49, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA.
- SURVEY MONUMENTATION WITHIN THE SUBDIVISION SHALL BE SET IN ACCORDANCE WITH FLORIDA STATUTES, CHAPTER 177.091(8) AND 177.091(9).
- LOT LINES ARE RADIAL UNLESS OTHERWISE NOTED.
- ALL PLATTED PUBLIC UTILITY EASEMENTS SHALL ALSO BE EASEMENTS FOR THE CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION OF CABLE TELEVISION SERVICES; PROVIDED, HOWEVER, NO SUCH CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION OF CABLE TELEVISION SERVICES SHALL INTERFERE WITH THE FACILITIES AND SERVICES OF AN ELECTRIC, TELEPHONE, GAS, OR OTHER PUBLIC UTILITY. IN THE EVENT A CABLE TELEVISION COMPANY DAMAGES THE FACILITIES OF A PUBLIC UTILITY, IT SHALL BE SOLELY RESPONSIBLE FOR THE DAMAGES. THIS SECTION SHALL NOT APPLY TO THOSE PRIVATE EASEMENTS GRANTED TO OR OBTAINED BY A PARTICULAR ELECTRIC, TELEPHONE, GAS, OR OTHER PUBLIC UTILITY. SUCH CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION SHALL COMPLY WITH THE NATIONAL ELECTRICAL SAFETY CODE AS ADOPTED BY THE FLORIDA PUBLIC SERVICE COMMISSION.
- THE FOLLOWING EASEMENTS ARE HEREBY DEDICATED:
 - A PUBLIC EASEMENT 10.00 FOOT WIDE, ACROSS THE FRONT OF ALL LOTS AND TRACTS CONTIGUOUS WITH AND ADJACENT TO THE PRIVATE ROAD RIGHTS-OF-WAY DEDICATED BY THIS PLAT, IS RESERVED FOR THE INSTALLATION OF FLORIDA POWER AND LIGHT (FPL&) FACILITIES, POTABLE WATER, RECLAIMED WATER, PRIVATE DRAINAGE, AND OTHER PUBLIC UTILITIES UNLESS OTHERWISE NOTED.
 - A 5.00 FOOT WIDE PUBLIC UTILITY EASEMENT ALONG THE REAR AND SIDES OF EACH LOT. IN THE EVENT THAT ONE OR MORE LOTS, OR PARTS OF ONE OR MORE LOTS ARE USED AS A SINGLE BUILDING SITE, ONLY THE EXTERIOR BOUNDARIES OF THE BUILDING SITE SHALL CARRY THE SIDE EASEMENTS.
 - AN EASEMENT TO THE CITY OF COCOA AND BREVARD COUNTY FOR EMERGENCY ACCESS FOR INGRESS/EGRESS OVER ALL PRIVATE ROAD RIGHTS-OF-WAY, PRIVATE DRAINAGE EASEMENTS AND STORM WATER MANAGEMENT TRACTS.
 - AN EASEMENT TO THE FLORIDA DEPARTMENT OF TRANSPORTATION OVER AND ACROSS THE PRIVATE RIGHTS-OF-WAY OF TALBOT BOULEVARD AND MORELY DRIVE FOR EMERGENCY ACCESS TO THE STORMWATER POND LOCATED WITHIN TRACT I IN ACCORDANCE WITH THE REQUIREMENTS OF THE AMENDED STIPULATED ORDER OF TAKING NUNC PRO TUNC AND FINAL JUDGEMENT RECORDED IN OFFICIAL RECORDS BOOK 5842, PAGE 3822, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA.
 - AN EASEMENT TO THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT OVER ALL PRIVATE ROAD RIGHTS-OF-WAY, DRAINAGE EASEMENTS AND TRACTS FOR ACCESS TO ADJOINING CONSERVATION TRACTS AND CONSERVATION EASEMENTS.
- ALL LOT DRAINAGE IS PRIVATE AND IS THE RESPONSIBILITY OF THE INDIVIDUAL HOMEOWNER TO MAINTAIN SAID PRIVATE DRAINAGE WITHIN THEIR HOME SITE. THIS DOES NOT INCLUDE DRAINAGE PIPES WITHIN THE PRIVATE DRAINAGE EASEMENTS AS SHOWN HEREON.
- THE PRIVATE DRAINAGE EASEMENTS SHOWN HEREON ARE HEREBY DEDICATED TO THE ADAMSON CREEK HOMEOWNERS ASSOCIATION, INC., ITS SUCCESSORS AND/OR ASSIGNS FOR THE PURPOSES OF INSTALLATION, OPERATION, MAINTENANCE, REPAIR AND ACCESS TO THE STORM WATER FACILITIES WITHIN THE PLAT BOUNDARY.
- WHERE PRIVATE SIDEWALKS ARE LOCATED WITHIN LOTS OR TRACTS SHOWN HEREON, SUCH LOTS AND TRACTS SHALL BE SUBJECT TO A PRIVATE SIDEWALK EASEMENT HEREBY DEDICATED TO ADAMSON CREEK HOMEOWNERS ASSOCIATION, INC. TO ACCOMMODATE SUCH SIDEWALK, FOR THE SOLE PURPOSE OF MAINTAINING AND REPAIRING THE PRIVATE SIDEWALKS WITHIN SAID PRIVATE SIDEWALK EASEMENTS. NOTWITHSTANDING THE FOREGOING, ADAMSON CREEK HOMEOWNERS ASSOCIATION, INC. SHALL NOT BE RESPONSIBLE, OBLIGATED OR REQUIRED IN ANY MANNER TO CONSTRUCT SIDEWALKS IN WHOLE OR PART WITHIN THE LANDS PLATTED HEREUNDER. ADAMSON CREEK HOMEOWNERS ASSOCIATION, INC. SHALL NOT BE RESPONSIBLE FOR THE REPAIR OR THE REPLACEMENT OF ANY IRRIGATION FACILITIES OR LANDSCAPING WITHIN THE AREA BETWEEN THE PRIVATE RIGHT-OF-WAY AND THE PRIVATE SIDEWALK EASEMENT THAT MAY BE DAMAGED AS A RESULT OF MAINTENANCE AND REPAIR OF SIDEWALKS WITHIN SAID PRIVATE SIDEWALK EASEMENTS.
- TRACT H AND TRACT I ARE HEREBY DEDICATED TO, CONTROLLED BY, AND MAINTAINED BY THE ADAMSON CREEK HOMEOWNERS ASSOCIATION, INC., ITS SUCCESSORS AND/OR ASSIGNS FOR STORM WATER MANAGEMENT, DRAINAGE, OPEN SPACE, LANDSCAPE AND RECREATION AMENITIES.
- TRACT M-1 IS HEREBY DEDICATED TO, CONTROLLED BY, AND MAINTAINED BY THE ADAMSON CREEK HOMEOWNERS ASSOCIATION, INC., ITS SUCCESSORS AND/OR ASSIGNS FOR DRAINAGE, OPEN SPACE AND RECREATION AMENITIES.
- TRACT N IS HEREBY DEDICATED TO, CONTROLLED BY, AND MAINTAINED BY THE ADAMSON CREEK HOMEOWNERS ASSOCIATION, INC., ITS SUCCESSORS AND/OR ASSIGNS FOR UTILITIES, OPEN SPACE AND RECREATION AMENITIES.
- TRACT O IS HEREBY DEDICATED TO, CONTROLLED BY, AND MAINTAINED BY THE ADAMSON CREEK HOMEOWNERS ASSOCIATION, INC., ITS SUCCESSORS AND/OR ASSIGNS FOR DRAINAGE, UTILITIES, OPEN SPACE AND RECREATION AMENITIES.
- TRACT W IS HEREBY DEDICATED TO, CONTROLLED BY, AND MAINTAINED BY THE ADAMSON CREEK HOMEOWNERS ASSOCIATION, INC., ITS SUCCESSORS AND/OR ASSIGNS FOR OPEN SPACE AND RECREATION AMENITIES.
- TRACT U IS HEREBY DEDICATED TO THE CITY OF COCOA FOR A SANITARY LIFT STATION. THIS TRACT IS INTENDED TO BE CONVEYED TO BREVARD COUNTY BY THE CITY OF COCOA FOR THE OPERATION, MAINTENANCE, AND ACCESS TO THE SANITARY LIFT STATION. UPON TRANSFER OF THIS TRACT TO BREVARD COUNTY, THEY SHALL NO LONGER BE SUBJECT TO THE TERMS AND CONDITIONS OF THIS PLAT. IN THE EVENT THAT OWNERSHIP OF THIS TRACT IS NOT TRANSFERRED TO BREVARD COUNTY, IT SHALL BE OWNED AND MAINTAINED BY THE CITY OF COCOA.
- TRACT V IS HEREBY DEDICATED TO, CONTROLLED BY, AND MAINTAINED BY, THE ADAMSON CREEK HOMEOWNERS ASSOCIATION, INC., ITS SUCCESSORS AND/OR ASSIGNS FOR THE CONSERVATION OF PRESERVED WETLANDS AND UPLANDS AND PASSIVE RECREATIONAL USE. NO ALTERATION OR FILLING IS ALLOWED IN TRACT V. TRACT V IS SUBJECT TO A CONSERVATION EASEMENT IN FAVOR OF THE ST JOHNS RIVER WATER MANAGEMENT DISTRICT PURSUANT TO SECTION 704.06, FLORIDA STATUTES.
- THE PRIVATE RIGHTS-OF-WAY FOR TALBOT BOULEVARD AND MORELY DRIVE ARE HEREBY DEDICATED TO THE ADAMSON CREEK HOMEOWNERS ASSOCIATION, INC. FOR PRIVATE ROADS, AND ARE SUBJECT TO A NON-EXCLUSIVE PERPETUAL EASEMENT FOR THE PURPOSES OF VEHICULAR AND PEDESTRIAN INGRESS AND EGRESS FOR USE BY THE OWNERS OF THE LOTS PLATTED HEREIN, THEIR GUESTS AND INVITEES, ALL PRIVATE AND PUBLIC AGENCIES PROVIDING PUBLIC UTILITY SERVICES, PUBLIC SAFETY AND LAW ENFORCEMENT SERVICES AND GOVERNMENTAL SERVICES TO THE LANDS PLATTED HEREIN, PROVIDED FURTHER THAT A NON-EXCLUSIVE EASEMENT OVER, UNDER, ACROSS AND THROUGH SAID PRIVATE RIGHTS-OF-WAY IS DEDICATED TO ALL PUBLIC UTILITY PROVIDERS, INCLUDING BUT NOT LIMITED TO CABLE TELEVISION SERVICE PROVIDERS, FOR THE INSTALLATION, MAINTENANCE, ACCESS AND REPAIR OF THEIR RESPECTIVE FACILITIES WHICH PROVIDE SERVICE TO THE LANDS PLATTED HEREIN.
- THIS PLAT IS SUBJECT TO THE TERMS AND CONDITIONS OF THAT CERTAIN FOURTH MODIFICATION TO ADAMSON CREEK BINDING DEVELOPMENT AGREEMENT AS RECORDED IN OFFICIAL RECORDS BOOK 8595, PAGE 1034, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA
- THE TOWER GUY ANCHOR EASEMENT SHOWN ON LOTS 211 AND 212 IS HEREBY DEDICATED TO THE ADAMSON CREEK HOMEOWNERS ASSOCIATION, INC. ITS SUCCESSORS AND/OR ASSIGNS FOR THE PURPOSE OF A TOWER GUY ANCHOR AS DEPICTED HEREIN. IN THE EVENT THE EXISTING TOWER GUY ANCHOR SHOWN IS RELOCATED TO AN OFFSITE LOCATION, THIS EASEMENT WILL AUTOMATICALLY TERMINATE AND BE OF NO OTHER FORCE AND EFFECT.
- THIS PLAT IS SUBJECT TO THE RESTRICTIONS, RESERVATIONS AND COVENANTS AS SHOWN ON THE PLAT OF ADAMSON CREEK PHASE ONE-A, AS RECORDED IN PLAT BOOK 57, PAGE 49, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA

TRACT DATA TABLE / OPEN SPACE CALCULATION					
TRACT ID		AREA (±PERCENT)	TRACT USE	OWNERSHIP AND MAINTENANCE	COMMON OPEN SPACE CREDIT
H	3.84	6.15%	STORM WATER MANAGEMENT, DRAINAGE, OPEN SPACE, LANDSCAPE AND RECREATION AMENITIES	ADAMSON CREEK HOMEOWNERS ASSOCIATION, INC.	3.84
I	20.80	33.33%	STORM WATER MANAGEMENT, DRAINAGE, OPEN SPACE, LANDSCAPE AND RECREATION AMENITIES	ADAMSON CREEK HOMEOWNERS ASSOCIATION, INC.	7.97
M-1	0.16	0.26%	DRAINAGE, OPEN SPACE AND RECREATION AMENITIES	ADAMSON CREEK HOMEOWNERS ASSOCIATION, INC.	0.16
N	0.15	0.24%	UTILITIES, OPEN SPACE AND RECREATION AMENITIES	ADAMSON CREEK HOMEOWNERS ASSOCIATION, INC.	0.15
O	0.14	0.22%	DRAINAGE, UTILITIES, OPEN SPACE AND RECREATION AMENITIES	ADAMSON CREEK HOMEOWNERS ASSOCIATION, INC.	0.14
U	0.04	0.06%	SANITARY LIFT STATION	CITY OF COCOA	0.00
V	6.85	10.98%	WETLAND PRESERVATION, UPLAND BUFFER AND OPEN SPACE	ADAMSON CREEK HOMEOWNERS ASSOCIATION, INC.	2.10
W	0.05	0.08%	OPEN SPACE AND RECREATION AMENITIES	ADAMSON CREEK HOMEOWNERS ASSOCIATION, INC.	0.05
N/A	24.90	39.90%	RESIDENTIAL DEVELOPMENT (155 LOTS)		0.00
N/A	5.47	8.78%	PRIVATE RIGHT-OF-WAY	ADAMSON CREEK HOMEOWNERS ASSOCIATION, INC.	0.00
	62.40	100.00%	TOTAL PUD BOUNDARY PHASE ONE-C		
		25.00%	REQUIRED OPEN SPACE (25% OF 62.4 AC)		15.60
	176.06		PREVIOUS/ORIGINAL TOTAL PUD BOUNDARY (FROM PHASE ONE-A PLAT)		
	192.96		REVISED TOTAL PUD BOUNDARY (176.06 AC + 16.90 AC = 192.96 AC)		
			TOTAL REQUIRED OPEN SPACE (25% OF 192.96 AC)		48.24
	176.06		TOTAL PLATTED PUD BOUNDARY PHASE ONE-A		
	30.86		TOTAL PLATTED PUD BOUNDARY PHASE ONE-B		
			PROVIDED COMMON OPEN SPACE (PHASE ONE-C)		14.41
			TOTAL PROVIDED OPEN SPACE		48.24



KEY MAP
N.T.S.



LOCATION MAP
N.T.S.

DESCRIPTION OF ADAMSON CREEK PHASE ONE-C

TRACT 3, ADAMSON CREEK PHASE ONE-A, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 57, PAGE 49, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, TOGETHER WITH THAT CERTAIN PARCEL OF LAND DESCRIBED AS PARCEL 4 IN OFFICIAL RECORDS BOOK 8071, PAGE 1946, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, TOGETHER ALSO WITH THAT PART OF THE WEST 1/2 OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 22, TOWNSHIP 24 SOUTH, RANGE 35 EAST, LYING WEST OF THE WEST RIGHT-OF-WAY LINE OF INTERSTATE 95, ALL BEING IN SECTION 22, TOWNSHIP 24 SOUTH, RANGE 35 EAST, BREVARD COUNTY, FLORIDA BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGIN AT THE NORTHWEST CORNER OF SAID TRACT 3 AND RUN N89°54'29"E ALONG THE NORTH LINE OF SAID TRACT 3 AND THE NORTH LINE OF SAID PARCEL 4, A DISTANCE OF 646.75 FEET TO THE NORTHEAST CORNER OF SAID PARCEL 4 AND A NON-TANGENT INTERSECTION WITH THE CURVED WEST BOUNDARY OF TRACT S OF SAID ADAMSON CREEK PHASE ONE-A, (SAID POINT ALSO BEING THE NORTHWEST CORNER OF SAID TRACT S); THENCE ALONG THE WEST LINE OF SAID TRACT S THE FOLLOWING NINETEEN (19) COURSES AND DISTANCES: (1) THENCE ALONG THE ARC OF SAID CURVE, (SAID CURVE BEING CURVED CONCAVE TO THE NORTHEAST AND HAVING A RADIUS OF 5929.58 FEET, A CENTRAL ANGLE OF 2°24'50", A CHORD BEARING OF S24°45'17"E AND A CHORD LENGTH OF 249.79 FEET); A DISTANCE OF 249.81 FEET TO AN INTERSECTION WITH A NON-TANGENT LINE TO THE WEST; (2) THENCE S89°54'29"W, ALONG SAID NON-TANGENT LINE, A DISTANCE OF 81.82 FEET; (3) THENCE S00°16'59"W, A DISTANCE OF 143.93 FEET; (4) THENCE S07°22'26"E, A DISTANCE OF 42.82 FEET; (5) THENCE S24°41'05"E, A DISTANCE OF 42.91 FEET; (6) THENCE S41°49'05"E, A DISTANCE OF 44.27 FEET; (7) THENCE S45°59'00"E, A DISTANCE OF 310.00 FEET; (8) THENCE S46°35'43"E, A DISTANCE OF 51.50 FEET; (9) THENCE S42°35'28"E, A DISTANCE OF 58.27 FEET; (10) THENCE S37°36'39"E, A DISTANCE OF 58.27 FEET; (11) THENCE S32°37'51"E, A DISTANCE OF 58.27 FEET; (12) THENCE S27°39'03"E, A DISTANCE OF 58.27 FEET; (13) THENCE S22°40'15"E, A DISTANCE OF 58.27 FEET; (14) THENCE S17°41'27"E, A DISTANCE OF 58.27 FEET; (15) THENCE S12°42'39"E, A DISTANCE OF 58.27 FEET; (16) THENCE S07°43'51"E, A DISTANCE OF 58.27 FEET; (17) THENCE S02°45'02"E, A DISTANCE OF 58.27 FEET; (18) THENCE S00°59'32"W, A DISTANCE OF 50.97 FEET; (19) THENCE S00°19'09"W, A DISTANCE OF 64.50 FEET TO THE SOUTHWEST CORNER OF SAID TRACT S; THENCE S89°40'51"E ALONG THE SOUTH LINE OF SAID TRACT S, A DISTANCE OF 140.00 FEET TO THE NORTHWEST CORNER OF THE WEST 1/2 OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 OF SAID SECTION 22; THENCE S89°54'29"W, ALONG THE NORTH LINE OF SAID WEST 1/2 OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 22, A DISTANCE OF 113.22 FEET TO A POINT ON THE WEST RIGHT-OF-WAY LINE OF SAID INTERSTATE 95; THENCE S30°19'39"E, ALONG SAID WEST RIGHT-OF-WAY LINE, A DISTANCE OF 1081.98 FEET TO A POINT ON THE EAST LINE OF SAID WEST 1/2 OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 22; THENCE S00°19'09"W ALONG SAID EAST LINE, A DISTANCE OF 390.07 FEET TO SOUTHEAST CORNER OF SAID WEST 1/2 OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 22; THENCE S89°52'00"W ALONG THE SOUTH LINE OF SAID WEST 1/2 OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 22, A DISTANCE OF 664.77 FEET TO THE SOUTHWEST CORNER OF SAID WEST 1/2 OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 22 AND A POINT ON THE BOUNDARY LINE OF SAID TRACT 3; THENCE ALONG THE BOUNDARY LINE OF SAID TRACT 3 THE FOLLOWING SEVENTY (70) COURSES AND DISTANCES: (1) THENCE S00°19'09"W, A DISTANCE OF 1334.27 FEET TO THE SOUTHEAST CORNER OF SAID TRACT 3; (2) THENCE N89°58'23"W, A DISTANCE OF 16.92 FEET; (3) THENCE N08°53'29"W, A DISTANCE OF 73.91 FEET; (4) THENCE N07°14'12"E, A DISTANCE OF 99.37 FEET; (5) THENCE N64°31'19"W, A DISTANCE OF 77.11 FEET; (6) THENCE S57°14'18"W, A DISTANCE OF 145.00 FEET; (7) THENCE S62°29'02"W, A DISTANCE OF 49.23 FEET; (8) THENCE S78°10'44"W, A DISTANCE OF 10.88 FEET; (9) THENCE N00°54'03"E, A DISTANCE OF 21.33 FEET; (10) THENCE N34°36'56"E, A DISTANCE OF 63.29 FEET; (11) THENCE N44°38'20"E, A DISTANCE OF 148.87 FEET; (12) THENCE N03°54'50"E, A DISTANCE OF 216.82 FEET; (13) THENCE N05°18'23"E, A DISTANCE OF 243.14 FEET; (14) THENCE N13°52'57"W, A DISTANCE OF 109.98 FEET; (15) THENCE N23°00'03"W, A DISTANCE OF 323.75 FEET; (16) THENCE N10°39'59"E, A DISTANCE OF 47.82 FEET; (17) THENCE N21°20'41"E, A DISTANCE OF 58.17 FEET; (18) THENCE N46°31'35"E, A DISTANCE OF 68.69 FEET; (19) THENCE N34°46'00"E, A DISTANCE OF 77.57 FEET; (20) THENCE N37°07'27"W, A DISTANCE OF 56.20 FEET; (21) THENCE N66°26'23"W, A DISTANCE OF 39.14 FEET; (22) THENCE N55°56'01"W, A DISTANCE OF 34.89 FEET; (23) THENCE N18°22'07"W, A DISTANCE OF 64.70 FEET; (24) THENCE N19°23'46"W, A DISTANCE OF 64.50 FEET; (25) THENCE N29°05'29"W, A DISTANCE OF 13.86 FEET; (26) THENCE N21°27'53"E, A DISTANCE OF 42.16 FEET; (27) THENCE N40°24'06"W, A DISTANCE OF 68.00 FEET; (28) THENCE N10°43'08"W, A DISTANCE OF 85.75 FEET; (29) THENCE N17°03'09"W, A DISTANCE OF 43.86 FEET; (30) THENCE N22°25'29"E, A DISTANCE OF 46.95 FEET; (31) THENCE N43°56'57"W, A DISTANCE OF 64.25 FEET; (32) THENCE N04°08'44"W, A DISTANCE OF 76.26 FEET; (33) THENCE N26°51'50"E, A DISTANCE OF 40.59 FEET; (34) THENCE N05°22'29"E, A DISTANCE OF 68.44 FEET TO THE SOUTHEAST CORNER OF TRACT M OF SAID ADAMSON CREEK PHASE ONE-A; (35) THENCE CONTINUE N05°22'29"E, A DISTANCE OF 78.28 FEET; (36) THENCE N30°19'31"W, A DISTANCE OF 176.87 FEET; (37) THENCE N16°17'17"W, A DISTANCE OF 74.28 FEET; (38) THENCE N05°08'44"W, A DISTANCE OF 70.34 FEET; (39) THENCE N01°33'15"E, A DISTANCE OF 54.19 FEET; (40) THENCE N00°19'09"E, A DISTANCE OF 308.03 FEET; (41) THENCE N32°30'25"W, A DISTANCE OF 34.60 FEET; (42) THENCE S57°29'37"W, A DISTANCE OF 21.75 FEET; (43) THENCE S62°13'24"W, A DISTANCE OF 55.19 FEET; (44) THENCE S64°10'33"W, A DISTANCE OF 55.38 FEET; (45) THENCE S60°13'10"W, A DISTANCE OF 51.18 FEET; (46) THENCE S55°43'48"W, A DISTANCE OF 47.85 FEET; (47) THENCE S50°48'57"W, A DISTANCE OF 47.85 FEET; (48) THENCE S45°54'05"W, A DISTANCE OF 47.85 FEET; (49) THENCE S40°59'13"W, A DISTANCE OF 47.85 FEET; (50) THENCE S36°04'22"W, A DISTANCE OF 47.85 FEET; (51) THENCE S33°22'16"W, A DISTANCE OF 49.85 FEET; (52) THENCE S33°21'57"W, A DISTANCE OF 50.00 FEET; (53) THENCE N56°43'06"W, A DISTANCE OF 120.00 FEET; (54) THENCE S33°21'57"W, A DISTANCE OF 29.95 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT; (55) THENCE ALONG THE ARC OF SAID CURVE, (SAID CURVE BEING CURVED CONCAVE TO THE NORTHWEST, AND HAVING A RADIUS OF 100.00 FEET, A CENTRAL ANGLE OF 1°51'47", A CHORD BEARING OF S34°17'51"W, AND A CHORD LENGTH OF 3.25 FEET, A DISTANCE OF 3.25 FEET TO AN INTERSECTION WITH A NON-TANGENT LINE TO THE SOUTHEAST; (56) THENCE S52°35'53"E, ALONG SAID NON-TANGENT LINE, A DISTANCE OF 124.06 FEET; (57) THENCE S42°54'01"E, A DISTANCE OF 30.00 FEET; (58) THENCE S47°05'59"W, A DISTANCE OF 30.00 FEET; (59) THENCE N42°54'01"W, A DISTANCE OF 30.00 FEET; (60) THENCE S47°05'59"W, A DISTANCE OF 55.48 FEET; (61) THENCE S70°33'47"W, A DISTANCE OF 104.48 FEET; (62) THENCE S00°16'59"W, A DISTANCE OF 400.00 FEET; (63) THENCE S00°48'10"E, A DISTANCE OF 50.01 FEET; (64) THENCE S03°13'34"W, A DISTANCE OF 61.69 FEET; (65) THENCE S11°24'05"W, A DISTANCE OF 63.60 FEET; (66) THENCE N74°30'39"W, A DISTANCE OF 171.13 FEET TO A NON-TANGENT INTERSECTION WITH A CURVE TO THE LEFT; (67) THENCE ALONG THE ARC OF SAID CURVE, (SAID CURVE BEING CURVED CONCAVE TO THE NORTHWEST, AND HAVING A RADIUS OF 275.00 FEET, A CENTRAL ANGLE OF 15°12'21", A CHORD BEARING OF N07°53'10"E, AND A CHORD LENGTH OF 72.77 FEET); A DISTANCE OF 72.98 FEET TO THE END OF SAID CURVE; (68) THENCE N00°16'59"E, A DISTANCE OF 1.00 FEET; (69) THENCE N89°43'01"W, A DISTANCE OF 140.00 FEET; (70) N00°16'59"E, A DISTANCE OF 2065.77 FEET TO THE POINT OF BEGINNING. CONTAINING 62.4 ACRES, MORE OR LESS.

PLAT BOOK _____, PAGE _____

SHEET 1 OF 5

SECTION 22, TOWNSHIP 24 SOUTH, RANGE 35 EAST

DEDICATION

KNOW ALL MEN BY THESE PRESENTS, the Corporation named below, being the owner in fee simple of the lands described in

ADAMSON CREEK PHASE ONE-C

Hereby dedicates said lands and plat for the uses and purposes therein expressed and dedicates all public drainage and utility easements as further described in the notes or as shown hereon. The owners hereby dedicate to the public and the City of Cocoa, Florida, all easements shown hereon as public easements and a perpetual public easement over and across the private rights-of-way of Talbot Boulevard and Morely Drive for ingress and egress for law enforcement and emergency vehicles, emergency access and emergency maintenance. An easement is hereby dedicated to the City of Cocoa, Florida over and across Talbot Boulevard and Morely Drive, (noted and shown hereon as private rights-of-way), for for the installation and maintenance of public utilities. The roadway easement, drainage facilities and private drainage within the subdivision are not dedicated to, or the responsibility of the City of Cocoa, Florida.

By: _____
Daniel J. Liparini, Assistant Secretary

Attest: _____
Printed Name:

Attest: _____
Printed Name:

D.R. HORTON, INC., A DELAWARE CORPORATION
1430 CULVER DRIVE
PALM BAY, FLORIDA 32934

STATE OF FLORIDA COUNTY OF BREVARD

The foregoing instrument was acknowledged before me by means of _____ physical presence _____ or online notarization, this _____ by Daniel J. Liparini, Assistant Secretary of the above named corporation incorporated under the laws of State of Florida, on behalf of the company, who is personally known to me _____ or has produced _____ as identification.

IN WITNESS WHEREOF, I have hereunto set my hand and seal on the above date.

NOTARY PUBLIC _____
My Comm. Expires _____

CERTIFICATE OF SURVEYOR

KNOW ALL MEN BY THESE PRESENTS, That the undersigned, being a licensed professional surveyor and mapper, does hereby certify on 02/28/2020 he completed a boundary survey of the lands shown on the foregoing plat; and that said plat was prepared under his direction and supervision and that said plat complies with all of the survey requirements of Chapter 177, part 1, Florida Statutes, and that said lands are located in the City of Cocoa, Brevard County, Florida.

Registration Number 5611
LESLIE E. HOWARD
B.S.E. Consultants, Inc.
312 South Harbor City Boulevard, Suite #4
Melbourne, Fla. 32901
Certificate of Authorization Number: LB-0004905

CERTIFICATE OF REVIEWING SURVEYOR

I HEREBY CERTIFY, That I have reviewed the foregoing plat and find that it is in conformity with Chapter 177, part 1, Florida Statutes.

J. Barry. Cabannis
Reg. Florida Surveyor & Mapper #4524
Reviewing Surveyor for the City of Cocoa

CERTIFICATE OF APPROVAL OF MUNICIPALITY

THIS IS TO CERTIFY, That on _____, the foregoing plat was approved by the City Council of the City of Cocoa, Florida.

Jake Williams, Jr., MAYOR

ATTEST: _____
Carie Shealy, CITY CLERK

CERTIFICATE OF CLERK

I HEREBY CERTIFY, That I have examined the foregoing plat and find that it complies in form with all the requirements of Chapter 177, Part 1, Florida Statutes, and was filed for record on _____ at _____.

File No. _____
ATTEST: _____
Clerk of the Circuit Court in and for Brevard County, Fla.



B.S.E. CONSULTANTS, INC.
CONSULTING - ENGINEERING - LAND SURVEYING
312 SOUTH HARBOR CITY BOULEVARD, SUITE #4 MELBOURNE, FL 32901
PHONE: (321) 725-3674 FAX: (321) 725-1159
CERTIFICATE OF BUSINESS AUTHORIZATION: 0000000000
CERTIFICATE OF LAND SURVEYING BUSINESS AUTHORIZATION: LB0004905

DATE: 08/20/2020
DESIGN/DRAWN: SMG/RMB
DRAWING#1145302_300_001
PROJECT# 11453.02

- THIS PLAT PREPARED BY -

PLAT BOOK _____, PAGE _____
SHEET 2 OF 5
SECTION 22, TOWNSHIP 24 SOUTH, RANGE 35 EAST



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ADAMSON CREEK PHASE ONE-C

A REPLAT OF (TRACT 3, ADAMSON CREEK PHASE ONE-A, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 57, PAGE 49, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, TOGETHER WITH THAT CERTAIN PARCEL OF LAND DESCRIBED AS PARCEL 4 IN OFFICIAL RECORDS BOOK 8071, PAGE 1946, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, TOGETHER ALSO WITH THAT PART OF THE WEST 1/2 OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 22, TOWNSHIP 24 SOUTH, RANGE 35 EAST), CITY OF COCOA, BREVARD COUNTY, FLORIDA

PRELIMINARY PLAT

PLAT BOOK _____, PAGE _____
SHEET 3 OF 5
SECTION 22, TOWNSHIP 24 SOUTH, RANGE 35 EAST

ABBREVIATIONS

- MINUTES/FEET
- SECONDS/INCHES
- DEGREES
- (NR) NOT RADIAL
- AC ACRES
- AL ARC LENGTH
- BOC BEGINNING OF CURVE
- CB CHORD BEARING
- CDD CENTRAL DRAINAGE DISTRICT
- CH CHORD LENGTH
- CM CONCRETE MONUMENT
- DEL CENTRAL DELTA ANGLE
- DE PRIVATE DRAINAGE EASEMENT
- E EAST
- EOC END OF CURVE
- ESMT EASEMENT
- FD FOUND
- FDOT FLORIDA DEPARTMENT OF TRANSPORTATION
- FT FOOT/FEET
- LB LICENSED BUSINESS
- N NORTH
- NTI NON-TANGENT INTERSECTION
- NTS NOT TO SCALE
- OR/ORB OFFICIAL RECORDS BOOK
- PB PLAT BOOK
- PCC POINT OF COMPOUND CURVATURE
- PCP PERMANENT CONTROL POINT
- PKD PARKER-KALEN NAIL AND DISK
- POB POINT OF BEGINNING
- POC POINT OF COMMENCEMENT
- PRC POINT OF REVERSE CURVATURE
- PG(S) PAGE(S)
- R RADIUS
- R/W RIGHT-OF-WAY
- SEC SECTION
- S SOUTH
- W WEST

SURVEY SYMBOL LEGEND

SECTION CORNER, MARKED AS NOTED

1/4 SECTION CORNER, MARKED AS NOTED

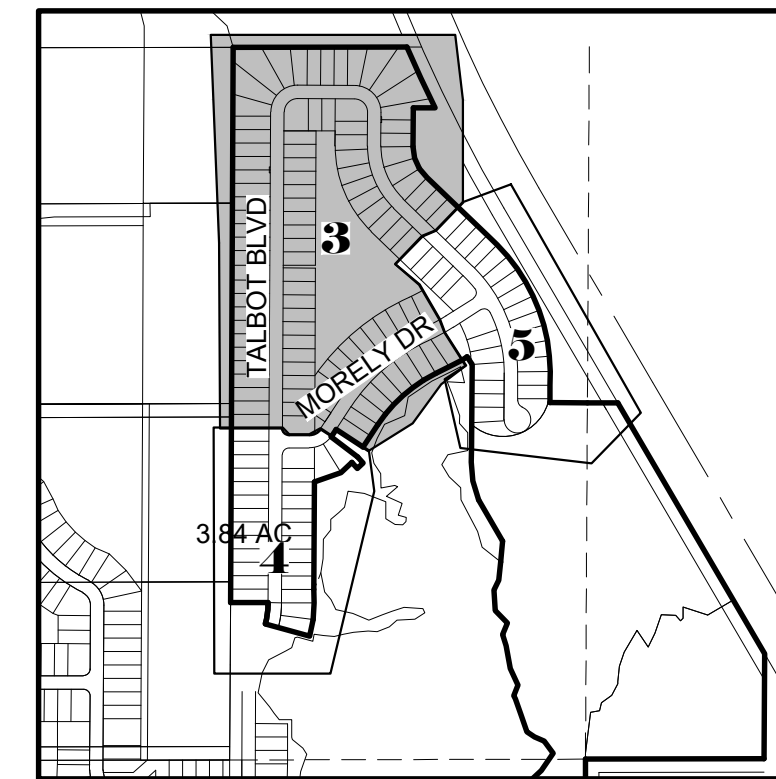
FOUND (FD) 4"x4" CONCRETE MONUMENT (CM); STAMPED "PRM LB3608", UNLESS OTHERWISE NOTED

FOUND (FD) 1/2" IRON ROD AND CAP (IRC); STAMPED "LB3608", UNLESS OTHERWISE NOTED

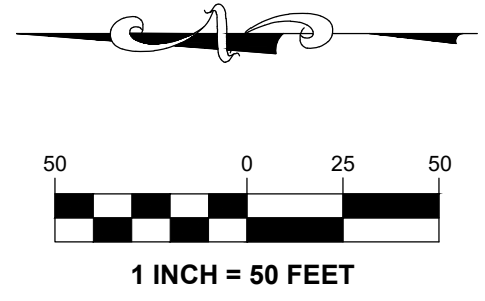
SET PRM 5/8" IRON ROD AND CAP (IRC); STAMPED "PRM LB4905", UNLESS OTHERWISE NOTED

PERMANENT CONTROL POINT (PCP); SET MAG NAIL AND DISK STAMPED "PCP LB4905", UNLESS OTHERWISE NOTED

DE (SEE DETAIL 'A' ON SHEET 4)



KEY MAP
N.T.S.



1 INCH = 50 FEET

FOR CONTINUATION SEE SHEET 4

FOR CONTINUATION SEE SHEET 4

FOR CONTINUATION SEE SHEET 4

FOR CONTINUATION SEE SHEET 4

FOR CONTINUATION SEE SHEET 4

FOR CONTINUATION SEE SHEET 4

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FOR CONTINUATION SEE SHEET 4

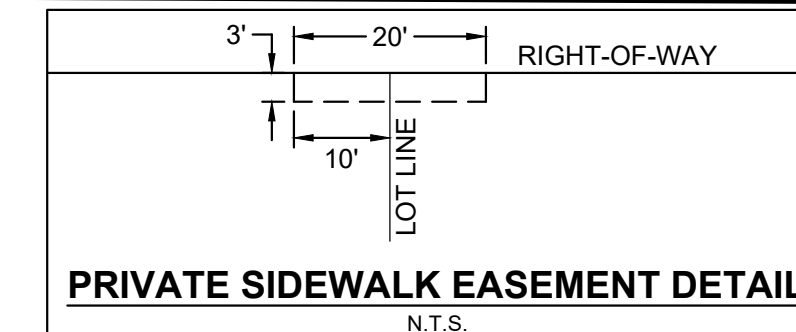
CURVE TABLE					
CURVE #	ARC LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C1	49.67'	50.00'	56°55'02"	N61°49'28"E	47.65
C2	28.86'	50.00'	33°04'27"	N49°54'11"E	28.46
C3	157.08'	100.00'	90°00'00"	S45°16'59"W	141.42

UNPLATTED
ORB 5289, PG 76

CURVE TABLE					
CURVE #	ARC LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C4	157.08'	100.00'	90°00'00"	N44°43'01"W	141.42
C5	218.03'	270.00'	46°15'59"	S22°51'00"E	212.15
C6	258.40'	320.00'	46°15'59"	S22°51'00"E	251.44

N00°16'59"E 2065.77'
(BASIS OF BEARINGS)

UNPLATTED
ORB 3585, PG 3522



PRIVATE SIDEWALK EASEMENT DETAIL
N.T.S.



B.S.E. CONSULTANTS, INC.
CONSULTING - ENGINEERING - LAND SURVEYING
312 SOUTH HARRISON CITY BOULEVARD, SUITE 100, MELBOURNE, FL 32901
PHONE: (321) 725-3024 FAX: (321) 725-1159
CERTIFICATE OF BUSINESS AUTHORIZATION: 4605

DATE: 08/20/2020
DESIGN/DRAWN: SMG/RMB
DRAWING#1145302_300_002-005
PROJECT# 11453.02

H:\Projects\Folder1145302_300_002-005.dwg August 21, 2020 12:24:05 PM RB

PLAT BOOK _____, PAGE _____
SHEET 4 OF 5
SECTION 22, TOWNSHIP 24 SOUTH, RANGE 35 EAST

KEY MAP
N.T.S.

[illegible]

'	MINUTES/FEET
"	SECONDS/INCHES
°	DEGREES
(NR)	NOT RADIAL
AC	ACRES
AL	ARC LENGTH
BOC	BEGINNING OF CURVE
CB	CHORD BEARING
CDD	CENTRAL DRAINAGE DISTRICT
CH	CHORD LENGTH
CM	CONCRETE MONUMENT
DEL	CENTRAL/DELTA ANGLE
DE	PRIVATE DRAINAGE EASEMENT
E	EAST
EOC	END OF CURVE
ESMT	EASEMENT
FD	FOUND
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION
FT	FOOT/FEET
LB	LICENSED BUSINESS
N	NORTH
NTI	NON-TANGENT INTERSECTION
NTS	NOT TO SCALE
OR/ORB	OFFICIAL RECORDS BOOK
PB	PLAT BOOK
PCC	POINT OF COMPOUND CURVATURE
PCP	PERMANENT CONTROL POINT
PKD	PARKER-KALEN NAIL AND DISK
POB	POINT OF BEGINNING
POC	POINT OF COMMENCEMENT
PRC	POINT OF REVERSE CURVATURE
PG(S)	PAGE(S)
R	RADIUS
R/W	RIGHT-OF-WAY
SEC	SECTION
S	SOUTH
W	WEST

CURVE TABLE					
CURVE #	ARC LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C1	49.67'	50.00'	56°55'02"	N61°49'28"E	47.65
C7	99.34'	100.00'	56°55'02"	N61°49'28"E	95.30

TRACT H

S30°14'00"E 126.23'

36.07'

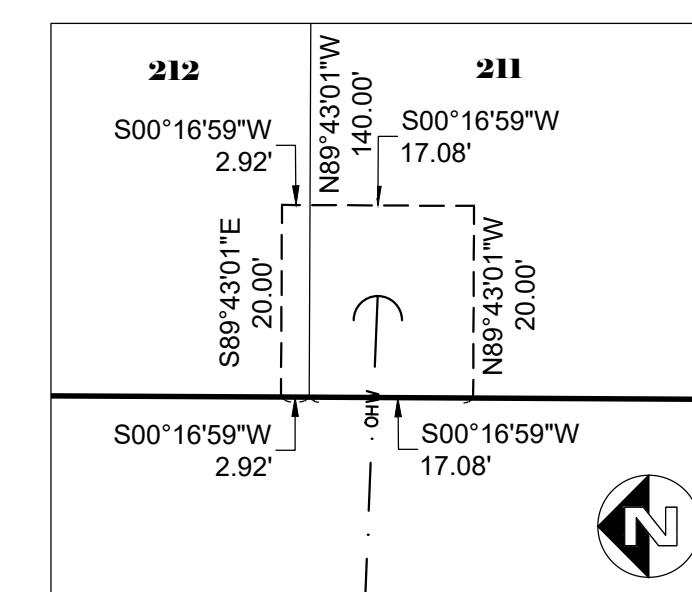
S46°49'42"E 30.00'

**LOT
346**

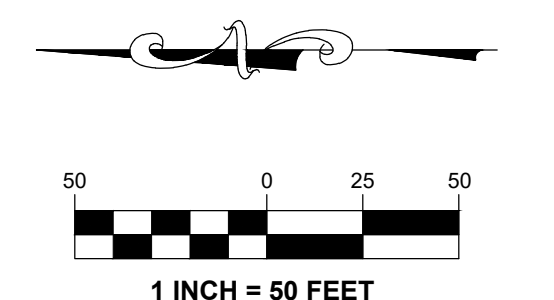
S74°04'16"E 11.99'

A15-17-15'
A15-17-15'
R15-17-15'
D15-17-15'
C15-17-15'
CH-17-15'

DRAINAGE EASEMENT DETAIL 'A'
SCALE 1" = 20'



TOWER GUY ANCHOR EASEMENT
DETAIL 'B'



- THIS PLAT PREPARED BY -



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CONSULTING - ENGINEERING - LAND SURVEYING
312 SOUTH HARBOR CITY BOULEVARD, SUITE 4 MELBOURNE, FL 32901
PHONE: (321) 725-3674 FAX: (321) 723-1159
CERTIFICATE OF BUSINESS AUTHORIZATION: 4905
CERTIFICATE OF LAND SURVEYING BUSINESS AUTHORIZATION: L18004905

DATE: 08/20/2020
DESIGN/DRAWN: SMG/RMB
DRAWING#1145302_300_002-005
PROJECT# 11453 02

PLAT BOOK _____, PAGE _____
SHEET 5 OF 5
SECTION 22, TOWNSHIP 24 SOUTH, RANGE 35 EAST

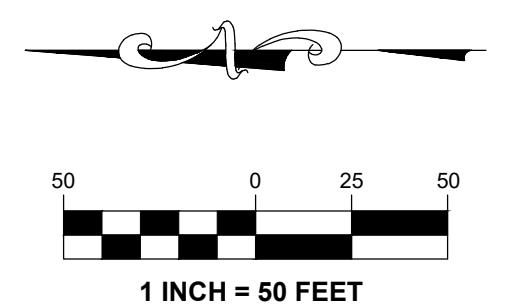
A key map showing the location of the subject property (shaded) relative to Talbot Blvd and Morely Dr. The map includes a north arrow and a scale bar labeled "KEY MAP" and "N.T.S.".

	SECTION CORNER; MARKED AS NOTED
	1/4 SECTION CORNER; MARKED AS NOTED
	FOUND (FD) 4"x4" CONCRETE MONUMENT (CM); STAMPED "PRM LB3608", UNLESS OTHERWISE NOTED
	FOUND (FD) 1/2" IRON ROD AND CAP (IRC); STAMPED "LB3608", UNLESS OTHERWISE NOTED
	SET PRM 5/8" IRON ROD AND CAP (IRC); STAMPED "PRM LB4905", UNLESS OTHERWISE NOTED
	PERMANENT CONTROL POINT (PCP); SET MAG NAIL AND DISK STAMPED "PCP LB4905", UNLESS OTHERWISE NOTED

'	MINUTES/FEET
"	SECONDS/INCHES
°	DEGREES
(NR)	NOT RADIAL
AC	ACRES
AL	ARC LENGTH
BOC	BEGINNING OF CURVE
CB	CHORD BEARING
CDD	CENTRAL DRAINAGE DISTRICT
CH	CHORD LENGTH
CM	CONCRETE MONUMENT
DEL	CENTRAL/DELTA ANGLE
DE	PRIVATE DRAINAGE EASEMENT
E	EAST
EOC	END OF CURVE
ESMT	EASEMENT
FD	FOUND
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION
FT	FOOT/FEET
LB	LICENSED BUSINESS
N	NORTH
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PRC	POINT OF REVERSE CURVATURE
PG(S)	PAGE(S)
R	RADIUS
R/W	RIGHT-OF-WAY
SEC	SECTION
S	SOUTH
W	WEST

CURVE TABLE					
CURVE #	ARC LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C8	41.91'	25.00'	96°02'32"	N09°27'16"E	37.17
C9	130.15'	380.00'	19°37'25"	N18°56'23"W	129.51
C10	30.77'	25.00'	70°31'44"	N34°56'43"W	28.87
C11	218.63'	50.00'	250°31'44"	N55°03'17"E	81.65

- THIS PLAT PREPARED BY -

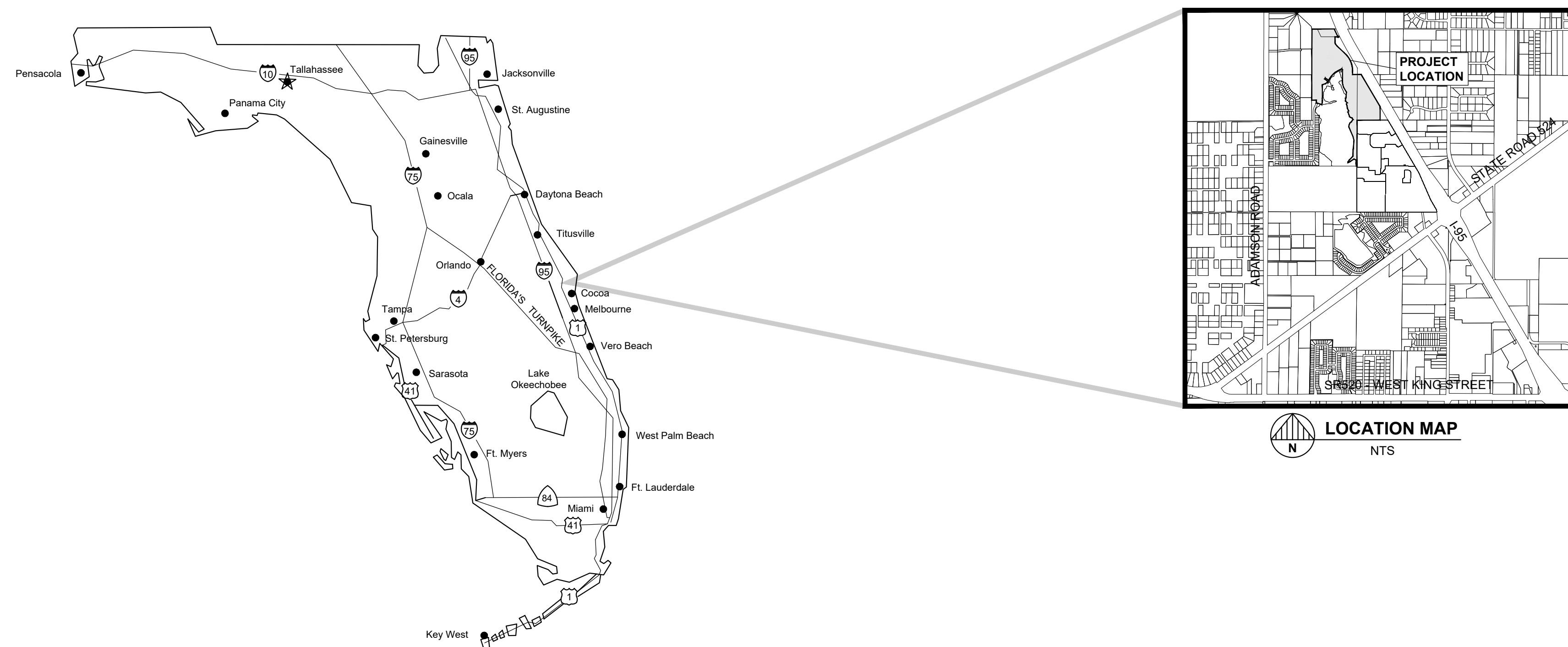



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 CERTIFICATE OF BUSINESS AUTHORIZATION: 180004906

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ADAMSON CREEK
PHASE ONE-C
LANDSCAPE PLAN
SECTION 22, TOWNSHIP 24 SOUTH, RANGE 35 EAST
CITY OF COCOA, BREVARD COUNTY, FLORIDA

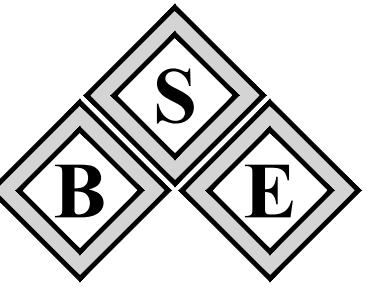
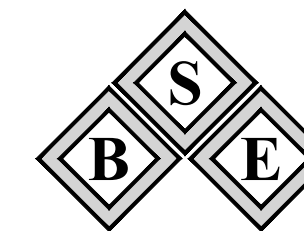
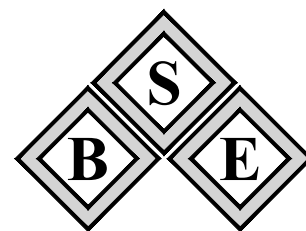
SHEET INDEX		
SHEET #	DRAWING #	SHEET TITLE
1	1145302_401_001	COVER SHEET
2	1145302_401_002	GENERAL LANDSCAPE PLAN AND NOTES
3	1145302_401_003	GENERAL LANDSCAPE PLAN
4	1145302_401_004	GENERAL LANDSCAPE PLAN AND DETAILS



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SCOTT M. GLAUBITZ, P.E. & P.L.S.
STATE OF FLORIDA, No. 33659 No. 4151

HASSAN A. KAMAL, P.E.
STATE OF FLORIDA, No. 41951

PROJECT TITLE

**ADAMSON CREEK
PHASE ONE-C**

SHEET TITLE

COVER SHEET

PROJECT NO.

11453.02

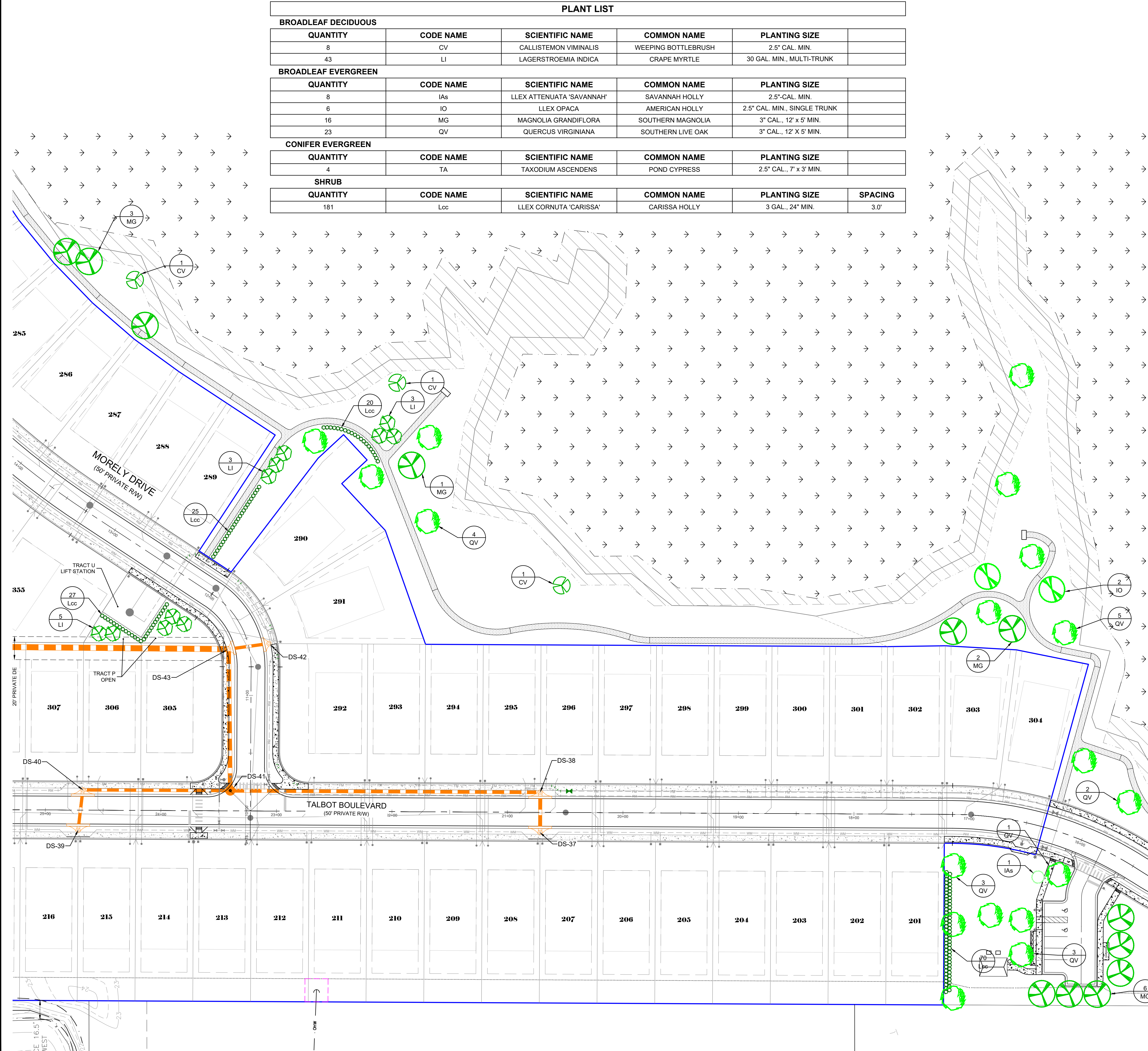
DRAWING NO.

1145302 401 001

SHEET

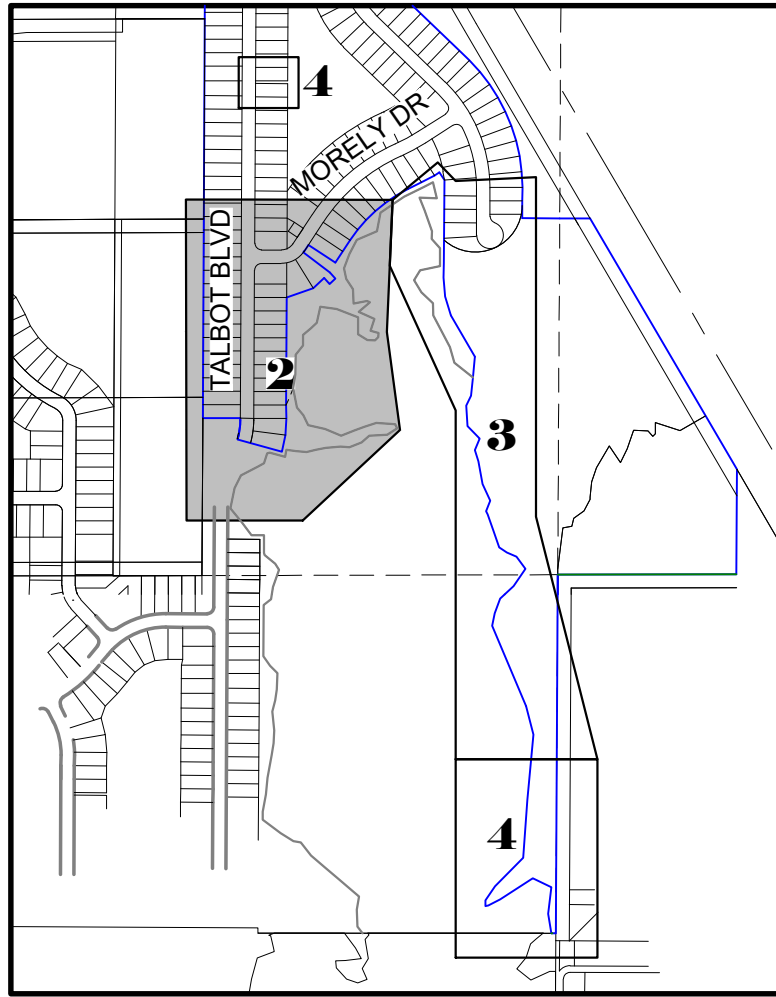
1 of 4

VERTICAL DATUM: NGVD29
CONVERSION FROM NGVD29 TO NAVD88: SUBTRACT 1.38' FROM NGVD29



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PLANT LIST					
BROADLEAF DECIDUOUS					
QUANTITY	CODE NAME	SCIENTIFIC NAME	COMMON NAME	PLANTING SIZE	
8	CV	CALLISTEMON VIMINALIS	WEeping BOTTLEBRUSH	2.5" CAL. MIN.	
43	LI	LAGERSTROEMIA INDICA	CRAPE MYRTLE	30 GAL. MIN., MULTI-TRUNK	
BROADLEAF EVERGREEN					
QUANTITY	CODE NAME	SCIENTIFIC NAME	COMMON NAME	PLANTING SIZE	
8	IAs	LLEX ATTENUATA 'SAVANNAH'	SAVANNAH HOLLY	2.5"-CAL. MIN.	
6	JO	LLEX OPACA	AMERICAN HOLLY	2.5" CAL. MIN., SINGLE TRUNK	
16	MG	MAGNOLIA GRANDIFLORA	SOUTHERN MAGNOLIA	3" CAL., 12' x 5' MIN.	
23	QV	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	3" CAL., 12' x 5' MIN.	
CONIFER EVERGREEN					
QUANTITY	CODE NAME	SCIENTIFIC NAME	COMMON NAME	PLANTING SIZE	
4	TA	TAXODIUM ASCENDENS	POND CYPRESS	2.5" CAL., 7' x 3' MIN.	
SHRUB					
QUANTITY	CODE NAME	SCIENTIFIC NAME	COMMON NAME	PLANTING SIZE	SPACING
181	Lcc	LLEX CORNUTA 'CARISSA'	CARISSA HOLLY	3 GAL., 24" MIN.	3.0'



- LANDSCAPE INSTALLATION NOTES:**
- PONDS #5 AND #6 HAVE BEEN CONSTRUCTED DURING PHASE ONE-A.
 - NO CLEARING OR CONSTRUCTION IS ALLOWED WITHIN THE WETLAND CONSERVATION AREA.
 - THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND BASE INFORMATION PRIOR TO INITIATION PLANTING INSTALLATION. ALL EXISTING PLANTING SHALL REMAIN INTACT AND UNDISTURBED UNLESS OTHERWISE NOTED ON THE PLANS.
 - CONTRACTOR SHALL NOTIFY ALL NECESSARY UTILITY COMPANIES 72 HOURS MINIMUM PRIOR TO DIGGING FOR VERIFICATION OF ALL UNDERGROUND UTILITIES, IRRIGATION AND ALL OTHER OBSTACLES AND COORDINATE WITH OWNERS REPRESENTATIVE PRIOR TO INITIATING OPERATIONS. DRAWINGS ARE PREPARED ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARING THESE DOCUMENTS.
 - CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH EXISTING SITE CONDITIONS PRIOR TO INITIATING PLANTING. ALL EXISTING SITE FAYING, LANDSCAPE AND OTHER ELEMENTS TO REMAIN SHALL BE PRESERVED AND PROTECTED FROM DAMAGE UNLESS OTHERWISE NOTED.
 - UNLESS OTHERWISE NOTED, THE LIMITS OF CONSTRUCTION ARE THE CLEARING LIMITS NOTED ON THE DRAWINGS. (REFERENCE CIVIL DRAWINGS)
 - REPORT ANY DISCREPANCIES BETWEEN THE CONSTRUCTION DRAWINGS AND FIELD CONDITIONS TO THE OWNERS REPRESENTATIVE IMMEDIATELY.
 - LANDSCAPE CONTRACTOR SHALL COORDINATE ALL WORK WITH RELATED CONTRACTORS AND THE GENERAL CONSTRUCTION OF THE PROJECT IN ORDER NOT TO IMPEDE THE PROGRESS OF THE WORK OF OTHERS OR THE CONTRACTORS OWN WORK.
 - CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE ALL PORTIONS OF EXISTING LAWN DAMAGED WHILE COMPLETING PLANTING INSTALLATION WITH SAME GRASS SPECIES TO THE SATISFACTION OF THE OWNER & REPRESENTATIVE.
 - ALL PLANT MATERIAL SHALL BE FLORIDA NO. 1 OR BETTER AS OUTLINED UNDER GRADES AND STANDARDS FOR NURSERY PLANTS, PART 1, 1996, STATE OF FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES, TALLAHASSEE, FLORIDA, AND ANY AMENDMENTS THERETO.
 - ALL TREES AND PLANT MATERIAL SHALL BE PLANTED IN ACCORDANCE WITH THE SPECIFICATIONS DESCRIBED IN THE STATE DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES, DIVISION OF FORESTRY, TREE PROTECTION MANUAL FOR BUILDING AND DEVELOPMENT 1980, AND ANY AMENDMENTS THERETO. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MATERIALS AND ALL MATERIALS AS CALLED FOR ON THE LANDSCAPE PLANS, THE LIST OF PLANT QUANTITIES ACCOMPANYING. THE PLANS SHALL BE USED AS A GUIDE ONLY. IF A VARIATION OCCURS BETWEEN THE PLANS AND THE PLANT LIST, IMMEDIATELY CONTACT THE LANDSCAPE ARCHITECT.
 - THE LANDSCAPE CONTRACTOR SHALL ENSURE ADEQUATE VERTICAL DRAINAGE IN ALL PLANTING BEDS AND PLANTERS. VERTICAL DRILLING THROUGH ANY COMPACTED FILL TO NATIVE SOIL SHALL BE ACCOMPLISHED TO AID DRAINAGE.
 - ALL PLANT BEDS AND TREE WELLS SHALL BE FREE OF DE MATERIALS, TRASH, DEBRIS, ROAD BASE MATERIALS AND THE LIKE. BEDS TO BE TOP DRESSED WITH ACCEPTABLE MULCH TO A DEPTH OF 3" (THREE INCHES).
 - NO TREES SHALL BE PLANTED CLOSER THAN 3 FEET (3' FROM THE EDGE OF PAVEMENT TO ALLOW ADEQUATE TREE TRUNK PROTECTION).
 - LANDSCAPE CONTRACTOR SHALL BE WHOLLY RESPONSIBLE FOR STABILITY AND PLUM CONDITION OF ALL TREES AND SHALL BE LEGALLY LIABLE FOR ANY DAMAGE CAUSED BY THE INSTALLATION OF ANY PLANT MATERIAL.
 - SOD SHALL BE FREE OF WEEDS AND PESTS. IT SHALL BE LAID EVENLY AND ROLLED, WITH TIGHT FITTING JOINTS. SOD SHALL CONTAIN MOIST SOIL WHICH DOES NOT FALL APART OR TEAR WHEN LIFTED. ALL AREAS NOT PAVED OR OTHERWISE LANDSCAPED SHALL BE SODDED. SOD SPECIES SHALL BE MATCHED TO EXISTING SPECIES ON SITE. SEEDED AREAS ADJACENT TO TEMPORARY PARKING LOT SHALL BE BAHIA, FREE OF NOXIOUS WEEDS, MULCHED SUFFICIENTLY TO PROTECT AND ENHANCE GERMINATION. ANY DISCREPANCIES ARE TO BE DISCUSSED WITH THE LANDSCAPE ARCHITECT.
 - ALL TREES SHALL HAVE ALL SIX FEET (6') CLEAR TRUNK UNLESS OTHERWISE SPECIFIED.
 - SIZES NOTED ON PLANT LIST ARE MINIMUM. INCREASE SIZE IF NECESSARY, TO CONFORM TO PLANT SIZE AND SPECIFICATIONS.
 - ANY TREE WITH A 'V' SHAPE FORMED TRUNK (PRIMARY LIMB STRUCTURE) WILL BE REJECTED.
 - LANDSCAPE CONTRACTOR SHALL FIELD STAKE THE LOCATION OF ALL PLANT MATERIAL PRIOR TO INITIATING INSTALLATION FOR THE REVIEW AND APPROVAL OF THE OWNERS REPRESENTATIVE AND/OR LANDSCAPE ARCHITECT.
 - LANDSCAPE CONTRACTOR SHALL FIELD ADJUST LOCATION OF PLANT MATERIAL AS NECESSARY TO AVOID DAMAGE TO ALL EXISTING UNDERGROUND UTILITIES AND OR EXISTING ABOVE GROUND ELEMENTS. ALL CHANGES REQUIRED SHALL BE COORDINATED WITH THE OWNERS REPRESENTATIVE OR THE LANDSCAPE ARCHITECT.
 - ANY SUBSTITUTIONS IN SIZE AND OR PLANT MATERIAL MUST BE APPROVED BY THE LANDSCAPE ARCHITECT. ALL PLANTING WILL BE SUBJECT TO APPROVAL BY LANDSCAPE ARCHITECT AND/OR OWNER'S REPRESENTATIVE BEFORE THE PLANTING CAN BEGIN.
 - CONTRACTOR SHALL REFER TO THE LANDSCAPE PLANTING DETAILS, PLANT LIST, AND THE GENERAL NOTES FOR LANDSCAPE PLANTING INSTRUCTIONS.
 - LANDSCAPE CONTRACTOR SHALL COORDINATE ALL PLANTING WORK WITH IRRIGATION WORK LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL HAND WATERING AS REQUIRED BY PLANT NEEDS OR REQUESTS OF OWNERS REPRESENTATIVE TO SUPPLEMENT REGULAR IRRIGATION OR RAINFALL, REGARDLESS OF STATUS OF EXISTING OR PROPOSED IRRIGATION.
 - LANDSCAPE CONTRACTOR SHALL CLEAN THE WORK AREAS AT THE END OF EACH WORKING DAY. RUBBISH AND DEBRIS SHALL BE COLLECTED AND DEPOSITED OFF-SITE DAILY. ALL MATERIALS, PRODUCTS AND EQUIPMENT SHALL BE STORED IN AN ORGANIZED FASHION AS DIRECTED BY THE OWNERS REPRESENTATIVE.
 - LANDSCAPE CONTRACTOR SHALL REGRADE ALL AREAS DISTURBED BY PLANT REMOVAL, RELOCATION, OR INSTALLATION WORK. LANDSCAPE CONTRACTOR SHALL REPLACE (BY EQUAL SIZE AND QUALITY) ANY AND ALL EXISTING PLANT MATERIAL DISTURBED OR DAMAGED BY PLANT REMOVAL, RELOCATION AND OR INSTALLATION WORK.

S

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BUSINESS AUTHORIZATION: LB004005

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STATE OF FLORIDA, No. 33659 No. 4151

HASSAN A. KAMAL, P.E.
STATE OF FLORIDA, No. 41951

400

0

20

40

(IN FEET)

VERTICAL DATUM: NGVD29

CITY COMMENTS

08/19/20

CITY COMMENTS 08/10/2020

08/13/20

CITY COMMENTS 08/10/2020

08/13/20

DATE: 07/31/20

DESIGN/DRAWN: SMG/RMB

PROJECT TITLE

ADAMSON CREEK
PHASE ONE-C

SHEET TITLE

GENERAL
LANDSCAPE PLAN
AND NOTES

PROJECT NO.

11453.02

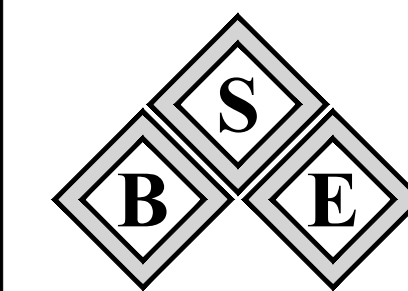
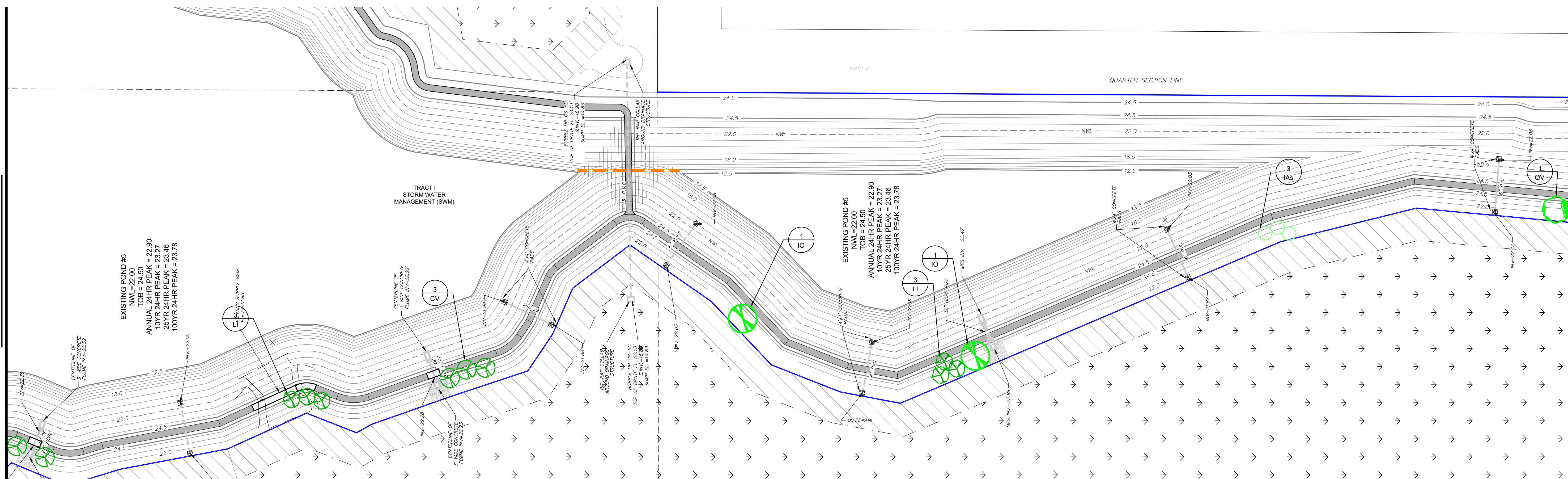
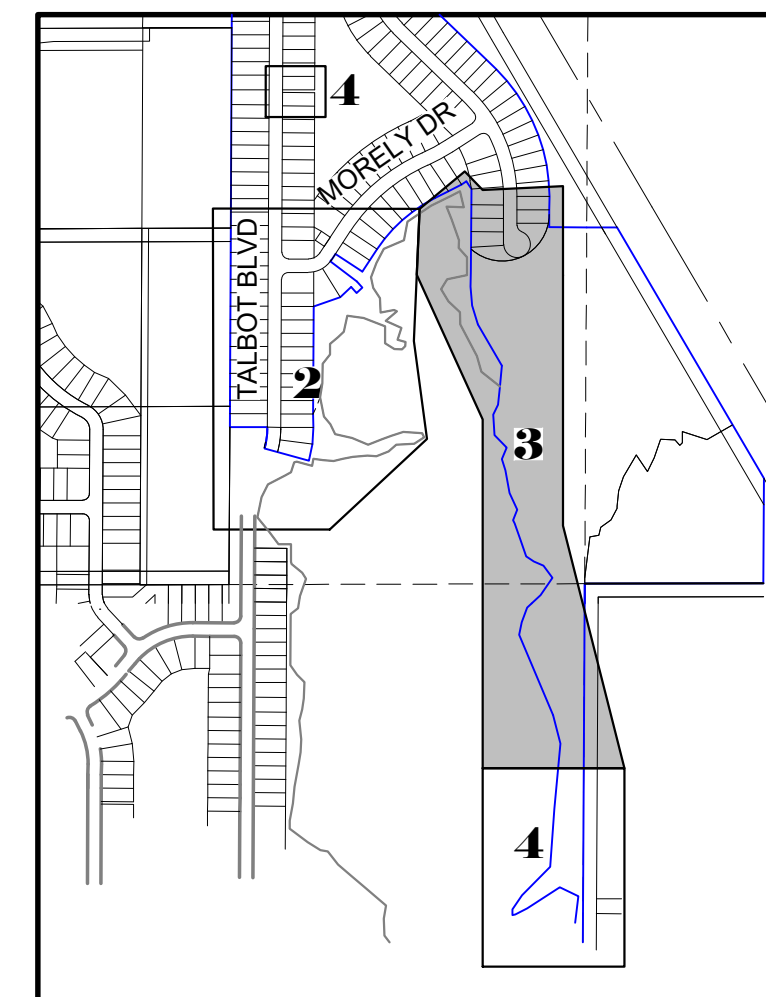
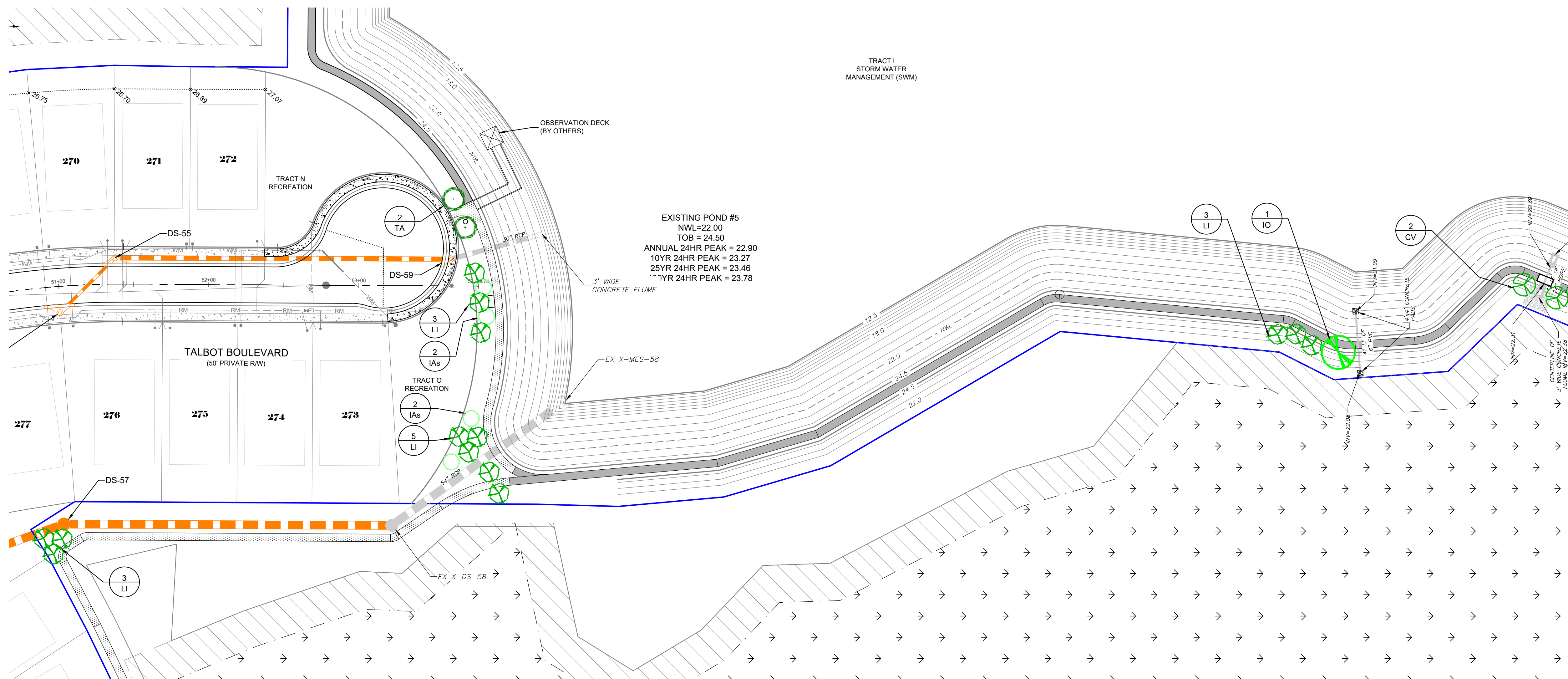
DRAWING NO.

1145302_401_002

SHEET

2 of 4

SYMBOLS SHOWN ARE GRAPHIC IN NATURE; DUE TO SCALE, ALL DESIGN ELEMENTS ARE NOT NECESSARILY SHOWN ON PLAN VIEWS. THE CONTRACTOR SHALL ALSO REFER TO SPECIFICATION AND DETAIL SHEETS AS WELL AS THE COMPLETE PLAN SET.



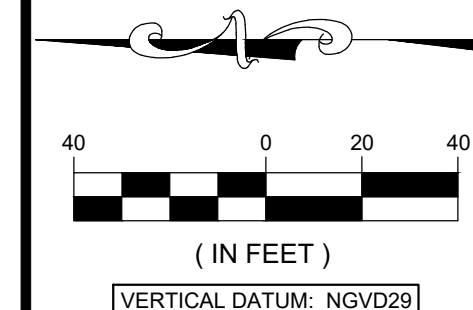
B.S.E. CONSULTANTS, INC
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PROJECT TITLE

**ADAMSON CREEK
PHASE ONE-C**

SHEET TITLE

GENERAL LANDSCAPE PLAN

PROJECT NO. _____

11453.0

DRAWING NO.

1145302_401_003

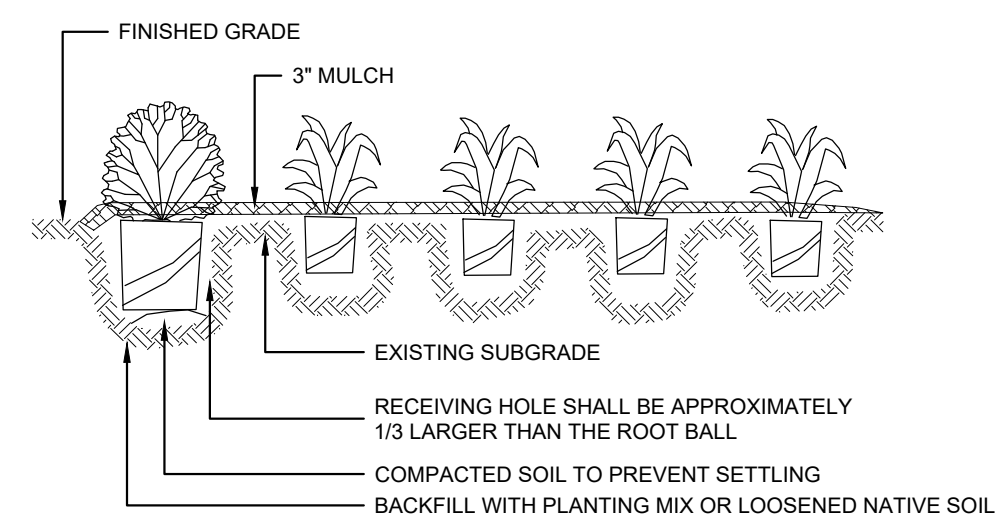
SHEET

3 of 4

SYMBOLS SHOWN ARE GRAPHIC IN NATURE; DUE TO SCALE, ALL DESIGN ELEMENTS ARE NOT NECESSARILY SHOWN ON PLAN VIEWS. THE CONTRACTOR SHALL ALSO REFER TO SPECIFICATION AND DETAIL SHEETS AS WELL AS THE COMPLETE PLAN SET.

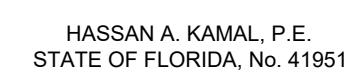


LARGE PLANTING AND STAKING DETAIL
N.T.S.



NOTE: SHRUBS SHALL BE PLANTED A MINIMUM OF 1" AND NO MORE THAN 2" ABOVE FINISH GRADE DEPENDING UPON SITE CONDITIONS.

SHRUB AND GROUND COVER PLANTING DETAIL
N.T.S.

4 of 4

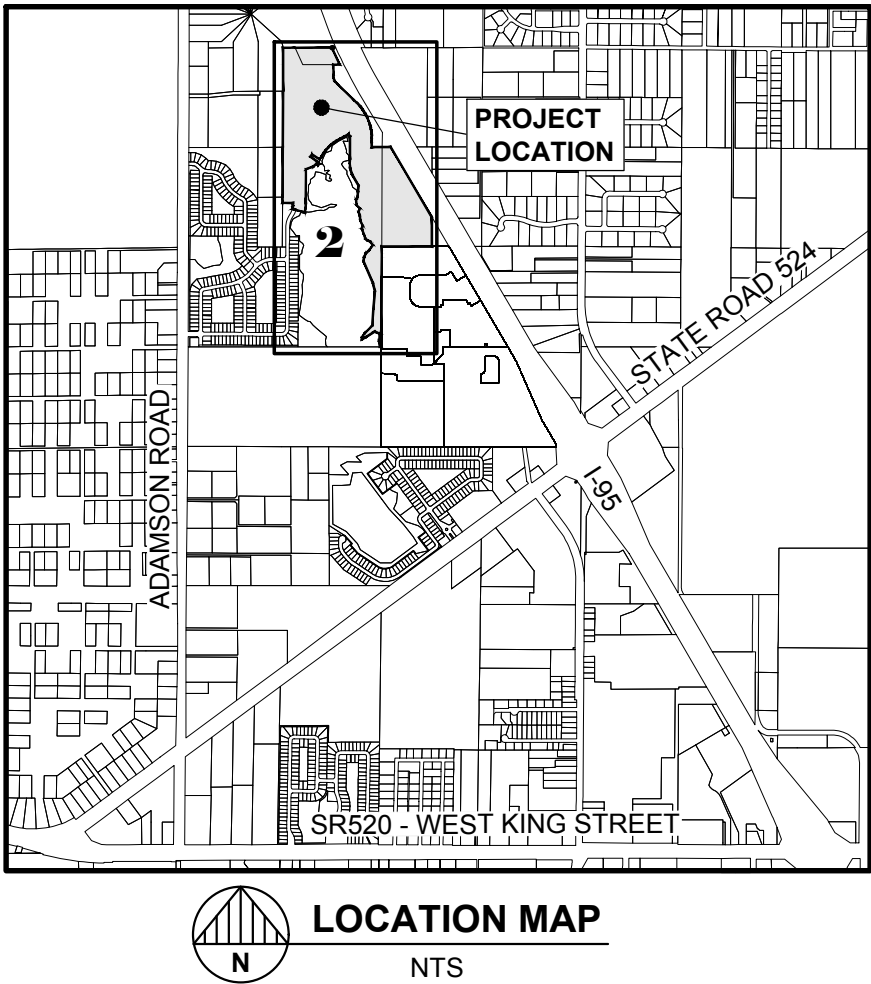
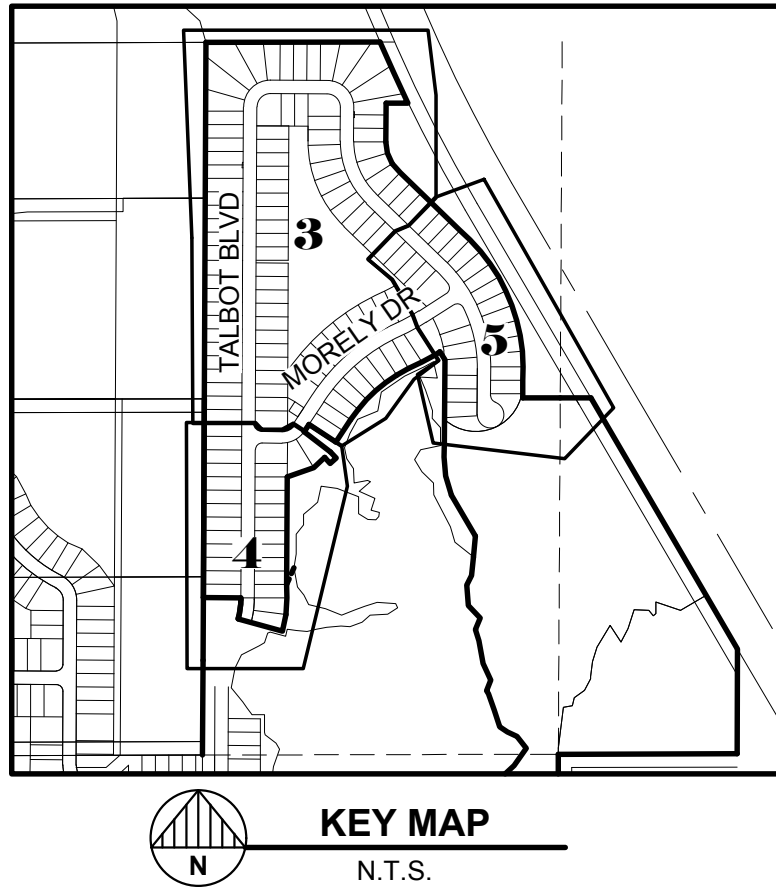
ADAMSON CREEK PHASE ONE-C

A REPLAT OF (TRACT 3, ADAMSON CREEK PHASE ONE-A, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 57, PAGE 49, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, TOGETHER WITH THAT CERTAIN PARCEL OF LAND DESCRIBED AS PARCEL 4 IN OFFICIAL RECORDS BOOK 8071, PAGE 1946, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, TOGETHER ALSO WITH THAT PART OF THE WEST 1/2 OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 22, TOWNSHIP 24 SOUTH, RANGE 35 EAST), CITY OF COCOA, BREVARD COUNTY, FLORIDA PRELIMINARY PLAT

PLAT NOTES:

- BEARING REFERENCE: ASSUMED BEARING OF N00°16'59"E ON THE WEST LINE OF TRACT 3, ADAMSON CREEK PHASE ONE-A, RECORDED IN PLAT BOOK 57, PAGE 49, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA.
- SURVEY MONUMENTATION WITHIN THE SUBDIVISION SHALL BE SET IN ACCORDANCE WITH FLORIDA STATUTES, CHAPTER 177.091(8) AND 177.091(9).
- LOT LINES ARE RADIAL UNLESS OTHERWISE NOTED.
- ALL PLATTED PUBLIC UTILITY EASEMENTS SHALL ALSO BE EASEMENTS FOR THE CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION OF CABLE TELEVISION SERVICES; PROVIDED, HOWEVER, NO SUCH CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION OF CABLE TELEVISION SERVICES SHALL INTERFERE WITH THE FACILITIES AND SERVICES OF AN ELECTRIC, TELEPHONE, GAS, OR OTHER PUBLIC UTILITY. IN THE EVENT A CABLE TELEVISION COMPANY DAMAGES THE FACILITIES OF A PUBLIC UTILITY, IT SHALL BE SOLELY RESPONSIBLE FOR THE DAMAGES. THIS SECTION SHALL NOT APPLY TO THOSE PRIVATE EASEMENTS GRANTED TO OR OBTAINED BY A PARTICULAR ELECTRIC, TELEPHONE, GAS, OR OTHER PUBLIC UTILITY. SUCH CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION SHALL COMPLY WITH THE NATIONAL ELECTRICAL SAFETY CODE AS ADOPTED BY THE FLORIDA PUBLIC SERVICE COMMISSION.
- THE FOLLOWING EASEMENTS ARE HEREBY GRANTED:
 - A PUBLIC EASEMENT 10 FEET WIDE, ACROSS THE FRONT OF ALL LOTS AND TRACTS CONTIGUOUS WITH AND ADJACENT TO THE PRIVATE ROAD RIGHTS-OF-WAY DEDICATED BY THIS PLAT, IS RESERVED FOR THE INSTALLATION OF FLORIDA POWER AND LIGHT (FPL) FACILITIES, POTABLE WATER, RECLAIMED WATER, PRIVATE DRAINAGE, AND OTHER PUBLIC UTILITIES UNLESS OTHERWISE NOTED.
 - AN EASEMENT TO THE CITY OF COCOA AND BREVARD COUNTY FOR EMERGENCY ACCESS FOR INGRESS/EGRESS OVER ALL PRIVATE ROAD RIGHTS-OF-WAY, PRIVATE DRAINAGE EASEMENTS AND STORM WATER MANAGEMENT TRACTS.
 - AN EASEMENT TO THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT OVER ALL PRIVATE ROAD RIGHTS-OF-WAY, DRAINAGE EASEMENTS AND TRACTS FOR ACCESS TO ADJOINING CONSERVATION TRACTS AND CONSERVATION EASEMENTS.
- ALL LOT DRAINAGE IS PRIVATE AND IS THE RESPONSIBILITY OF THE INDIVIDUAL HOMEOWNER TO MAINTAIN SAID PRIVATE DRAINAGE WITHIN THEIR HOME SITE. THIS DOES NOT INCLUDE DRAINAGE PIPES WITHIN THE PRIVATE DRAINAGE EASEMENTS AS SHOWN HEREON.
- THE PRIVATE DRAINAGE EASEMENTS SHOWN HEREON SHALL BE FOR THE INSTALLATION, OPERATION, MAINTENANCE, AND ACCESS TO THE STORM WATER FACILITIES WITHIN THE PLAT BOUNDARY.
- WHERE PRIVATE SIDEWALKS ARE LOCATED WITHIN LOTS OR TRACTS SHOWN HEREON, SUCH LOTS AND TRACTS SHALL BE SUBJECT TO A PRIVATE SIDEWALK EASEMENT HEREBY DEDICATED TO ADAMSON CREEK HOMEOWNERS ASSOCIATION, INC. TO ACCOMMODATE SUCH SIDEWALK, FOR THE SOLE PURPOSE OF MAINTAINING AND REPAIRING THE PRIVATE SIDEWALKS WITHIN SAID PRIVATE SIDEWALK EASEMENTS. NOTWITHSTANDING THE FOREGOING, ADAMSON CREEK HOMEOWNERS ASSOCIATION, INC. SHALL NOT BE RESPONSIBLE, OBLIGATED OR REQUIRED IN ANY MANNER TO CONSTRUCT SIDEWALKS IN WHOLE OR PART WITHIN THE LANDS PLATTED HEREUNDER. ADAMSON CREEK HOMEOWNERS ASSOCIATION, INC. SHALL NOT BE RESPONSIBLE FOR THE REPAIR OR THE REPLACEMENT OF ANY IRRIGATION FACILITIES OR LANDSCAPING WITHIN THE AREA BETWEEN THE PRIVATE RIGHT-OF-WAY AND THE PRIVATE SIDEWALK EASEMENT THAT MAY BE DAMAGED AS A RESULT OF MAINTENANCE AND REPAIR OF SIDEWALKS WITHIN SAID PRIVATE SIDEWALK EASEMENTS.
- TRACT H AND TRACT I ARE HEREBY DEDICATED TO, CONTROLLED BY, AND MAINTAINED BY THE ADAMSON CREEK HOMEOWNERS ASSOCIATION, INC., ITS SUCCESSORS AND/OR ASSIGNS FOR STORM WATER MANAGEMENT, DRAINAGE, OPEN SPACE, LANDSCAPE AND RECREATION AMENITIES.
- TRACT M-1 IS HEREBY DEDICATED TO, CONTROLLED BY, AND MAINTAINED BY THE ADAMSON CREEK HOMEOWNERS ASSOCIATION, INC., ITS SUCCESSORS AND/OR ASSIGNS FOR DRAINAGE, OPEN SPACE AND RECREATION AMENITIES.
- TRACT N IS HEREBY DEDICATED TO, CONTROLLED BY, AND MAINTAINED BY THE ADAMSON CREEK HOMEOWNERS ASSOCIATION, INC., ITS SUCCESSORS AND/OR ASSIGNS FOR UTILITIES, OPEN SPACE AND RECREATION AMENITIES.
- TRACT O IS HEREBY DEDICATED TO, CONTROLLED BY, AND MAINTAINED BY THE ADAMSON CREEK HOMEOWNERS ASSOCIATION, INC., ITS SUCCESSORS AND/OR ASSIGNS FOR DRAINAGE, UTILITIES, OPEN SPACE AND RECREATION AMENITIES.
- TRACT W IS HEREBY DEDICATED TO, CONTROLLED BY, AND MAINTAINED BY THE ADAMSON CREEK HOMEOWNERS ASSOCIATION, INC., ITS SUCCESSORS AND/OR ASSIGNS FOR OPEN SPACE AND RECREATION AMENITIES.
- TRACT U IS HEREBY DEDICATED TO THE CITY OF COCOA FOR A SANITARY LIFT STATION. THIS TRACT IS INTENDED TO BE CONVEYED TO BREVARD COUNTY BY THE CITY OF COCOA FOR THE OPERATION, MAINTENANCE, AND ACCESS TO THE SANITARY LIFT STATION. UPON TRANSFER OF THIS TRACT TO BREVARD COUNTY, THEY SHALL NO LONGER BE SUBJECT TO THE TERMS AND CONDITIONS OF THIS PLAT. IN THE EVENT THAT OWNERSHIP OF THIS TRACT IS NOT TRANSFERRED TO BREVARD COUNTY, IT SHALL BE OWNED AND MAINTAINED BY THE CITY OF COCOA.
- TRACT V IS HEREBY DEDICATED TO, CONTROLLED BY, AND MAINTAINED BY THE ADAMSON CREEK HOMEOWNERS ASSOCIATION, INC., ITS SUCCESSORS AND/OR ASSIGNS FOR THE CONSERVATION OF PRESERVED WETLANDS AND UPLANDS AND PASSIVE RECREATIONAL USE. NO ALTERATION OR FILLING IS ALLOWED IN TRACT V. TRACT V IS SUBJECT TO A CONSERVATION EASEMENT IN FAVOR OF THE ST JOHNS RIVER WATER MANAGEMENT DISTRICT PURSUANT TO SECTION 704.06, FLORIDA STATUTES.
- THE PRIVATE RIGHTS-OF-WAY FOR TALBOT BOULEVARD AND MORELY DRIVE ARE HEREBY DEDICATED TO THE ADAMSON CREEK HOMEOWNERS ASSOCIATION, INC., ITS SUCCESSORS AND/OR ASSIGNS FOR VEHICULAR AND PEDESTRIAN ACCESS IN CONNECTION WITH THE DEVELOPMENT
- THIS PLAT IS SUBJECT TO THE TERMS AND CONDITIONS OF THAT CERTAIN FLORIDA DEPARTMENT OF TRANSPORTATION DRAINAGE EASEMENT RECORDED IN OFFICIAL RECORDS BOOK 5842, PAGE 3822, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA.

TRACT DATA TABLE / OPEN SPACE CALCULATION					
TRACT ID	AREA (±ACRES)	AREA (±PERCENT)	TRACT USE	OWNERSHIP AND MAINTENANCE	COMMON OPEN SPACE CREDIT
H	3.84	6.15%	STORM WATER MANAGEMENT, DRAINAGE, OPEN SPACE, LANDSCAPE AND RECREATION AMENITIES	ADAMSON CREEK HOMEOWNERS ASSOCIATION, INC.	3.84
I	20.80	33.33%	STORM WATER MANAGEMENT, DRAINAGE, OPEN SPACE, LANDSCAPE AND RECREATION AMENITIES	ADAMSON CREEK HOMEOWNERS ASSOCIATION, INC.	7.89
M-1	0.16	0.26%	DRAINAGE, OPEN SPACE AND RECREATION AMENITIES	ADAMSON CREEK HOMEOWNERS ASSOCIATION, INC.	0.16
N	0.15	0.24%	UTILITIES, OPEN SPACE AND RECREATION AMENITIES	ADAMSON CREEK HOMEOWNERS ASSOCIATION, INC.	0.15
O	0.14	0.22%	DRAINAGE, UTILITIES, OPEN SPACE AND RECREATION AMENITIES	ADAMSON CREEK HOMEOWNERS ASSOCIATION, INC.	0.14
U	0.04	0.06%	SANITARY LIFT STATION	CITY OF COCOA	0.00
V	6.85	10.98%	WETLAND PRESERVATION, UPLAND BUFFER AND OPEN SPACE	ADAMSON CREEK HOMEOWNERS ASSOCIATION, INC.	3.37
W	0.05	0.08%	OPEN SPACE AND RECREATION AMENITIES	ADAMSON CREEK HOMEOWNERS ASSOCIATION, INC.	
N/A	24.90	39.90%	RESIDENTIAL DEVELOPMENT (155 LOTS)		0.00
N/A	5.47	8.78%	PRIVATE RIGHT-OF-WAY	ADAMSON CREEK HOMEOWNERS ASSOCIATION, INC.	0.00
	62.4	100.00%	TOTAL PUD BOUNDARY		
		25.00%	REQUIRED OPEN SPACE (25% OF 62.4 AC)		15.60
			PROVIDED COMMON OPEN SPACE		15.60



DESCRIPTION OF ADAMSON CREEK PHASE ONE-C

TRACT 3, ADAMSON CREEK PHASE ONE-A, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 57, PAGE 49, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, TOGETHER WITH THAT CERTAIN PARCEL OF LAND DESCRIBED AS PARCEL 4 IN OFFICIAL RECORDS BOOK 8071, PAGE 1946, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, TOGETHER ALSO WITH THAT PART OF THE WEST 1/2 OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 22, TOWNSHIP 24 SOUTH, RANGE 35 EAST, LYING WEST OF THE WEST RIGHT-OF-WAY LINE OF INTERSTATE 95, ALL BEING IN SECTION 22, TOWNSHIP 24 SOUTH, RANGE 35 EAST, BREVARD COUNTY, FLORIDA BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGIN AT THE NORTHWEST CORNER OF SAID TRACT 3 AND RUN N89°54'29"E ALONG THE NORTH LINE OF SAID TRACT 3 AND THE NORTH LINE OF SAID PARCEL 4, A DISTANCE OF 646.75 FEET TO THE NORTHEAST CORNER OF SAID PARCEL 4 AND A NON-TANGENT INTERSECTION WITH THE CURVED WEST BOUNDARY OF TRACT S OF SAID ADAMSON CREEK PHASE ONE-A, (SAID POINT ALSO BEING THE NORTHWEST CORNER OF SAID TRACT S); THENCE ALONG THE WEST LINE OF SAID TRACT S THE FOLLOWING NINETEEN (19) COURSES AND DISTANCES: (1) THENCE ALONG THE ARC OF SAID CURVE, (SAID CURVE BEING CURVED CONCAVE TO THE NORTHEAST AND HAVING A RADIUS OF 5929.58 FEET, A CENTRAL ANGLE OF 2°24'50", A CHORD BEARING OF S24°45'17"E AND A CHORD LENGTH OF 249.79 FEET), A DISTANCE OF 249.81 FEET TO AN INTERSECTION WITH A NON-TANGENT LINE TO THE WEST; (2) THENCE S89°54'29"W, ALONG SAID NON-TANGENT LINE, A DISTANCE OF 81.82 FEET; (3) THENCE S00°16'59"W, A DISTANCE OF 143.93 FEET; (4) THENCE S07°22'26"E, A DISTANCE OF 42.82 FEET; (5) THENCE S24°41'05"E, A DISTANCE OF 42.91 FEET; (6) THENCE S41°49'05"E, A DISTANCE OF 44.27 FEET; (7) THENCE S45°59'00"E, A DISTANCE OF 34.00 FEET; (8) THENCE S48°35'43"E, A DISTANCE OF 51.50 FEET; (9) THENCE S42°35'28"E, A DISTANCE OF 58.27 FEET; (10) THENCE S37°36'39"E, A DISTANCE OF 58.27 FEET; (11) THENCE S32°37'51"E, A DISTANCE OF 58.27 FEET; (12) THENCE S27°39'03"E, A DISTANCE OF 58.27 FEET; (13) THENCE S22°40'15"E, A DISTANCE OF 58.27 FEET; (14) THENCE S17°41'27"E, A DISTANCE OF 58.27 FEET; (15) THENCE S12°42'39"E, A DISTANCE OF 58.27 FEET; (16) THENCE S07°43'51"E, A DISTANCE OF 58.27 FEET; (17) THENCE S02°45'02"E, A DISTANCE OF 58.27 FEET; (18) THENCE S00°59'32"W, A DISTANCE OF 50.97 FEET; (19) THENCE S00°19'09"W, A DISTANCE OF 64.50 FEET TO THE SOUTHWEST CORNER OF SAID TRACT S; THENCE S89°40'51"E ALONG THE SOUTH LINE OF SAID TRACT S, A DISTANCE OF 140.00 FEET TO THE NORTHWEST CORNER OF THE WEST 1/2 OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 OF SAID SECTION 22; THENCE N89°53'14"E, ALONG THE NORTH LINE OF SAID WEST 1/2 OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 22, A DISTANCE OF 113.22 FEET TO A POINT ON THE WEST RIGHT-OF-WAY LINE OF SAID INTERSTATE 95; THENCE S30°19'39"E, ALONG SAID WEST RIGHT-OF-WAY LINE, A DISTANCE OF 1081.98 FEET TO A POINT ON THE EAST LINE OF SAID WEST 1/2 OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 22; THENCE S00°19'09"W ALONG SAID EAST LINE, A DISTANCE OF 380.07 FEET TO THE SOUTHWEST CORNER OF SAID WEST 1/2 OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 22; THENCE S89°52'00"W ALONG THE SOUTH LINE OF SAID WEST 1/2 OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 22, A DISTANCE OF 664.77 FEET TO THE SOUTHWEST CORNER OF SAID WEST 1/2 OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 22 AND A POINT ON THE BOUNDARY LINE OF SAID TRACT 3; THENCE ALONG THE BOUNDARY LINE OF SAID TRACT 3 THE FOLLOWING SEVENTY (70) COURSES AND DISTANCES: (1) THENCE S00°19'09"W, A DISTANCE OF 1334.27 FEET TO THE SOUTHEAST CORNER OF SAID TRACT 3; (2) THENCE N89°58'23"W, A DISTANCE OF 16.92 FEET; (3) THENCE N08°53'29"W, A DISTANCE OF 73.91 FEET; (4) THENCE N07°14'12"E, A DISTANCE OF 99.37 FEET; (5) THENCE N64°31'19"W, A DISTANCE OF 77.11 FEET; (6) THENCE S57°14'18"W, A DISTANCE OF 145.00 FEET; (7) THENCE S62°29'02"W, A DISTANCE OF 49.23 FEET; (8) THENCE S78°10'44"W, A DISTANCE OF 10.88 FEET; (9) THENCE N00°54'03"E, A DISTANCE OF 21.33 FEET; (10) THENCE N34°36'56"E, A DISTANCE OF 63.29 FEET; (11) THENCE N44°38'20"E, A DISTANCE OF 148.87 FEET; (12) THENCE N03°54'50"E, A DISTANCE OF 216.82 FEET; (13) THENCE N05°18'23"E, A DISTANCE OF 243.14 FEET; (14) THENCE N13°52'57"W, A DISTANCE OF 109.98 FEET; (15) THENCE N23°00'03"W, A DISTANCE OF 323.75 FEET; (16) THENCE N10°39'59"E, A DISTANCE OF 47.82 FEET; (17) THENCE N21°20'41"E, A DISTANCE OF 58.17 FEET; (18) THENCE N48°31'35"E, A DISTANCE OF 68.69 FEET; (19) THENCE N34°46'00"E, A DISTANCE OF 77.57 FEET; (20) THENCE N37°07'27"W, A DISTANCE OF 56.20 FEET; (21) THENCE N68°26'23"W, A DISTANCE OF 39.14 FEET; (22) THENCE N55°56'01"W, A DISTANCE OF 34.89 FEET; (23) THENCE N18°22'07"W, A DISTANCE OF 64.70 FEET; (24) THENCE N19°23'46"W, A DISTANCE OF 64.50 FEET; (25) THENCE N29°05'29"W, A DISTANCE OF 13.86 FEET; (26) THENCE N21°27'53"E, A DISTANCE OF 42.16 FEET; (27) THENCE N24°24'06"W, A DISTANCE OF 68.00 FEET; (28) THENCE N10°43'08"W, A DISTANCE OF 85.75 FEET; (29) THENCE N17°03'09"W, A DISTANCE OF 43.86 FEET; (30) THENCE N22°25'29"E, A DISTANCE OF 46.95 FEET; (31) THENCE N43°56'57"W, A DISTANCE OF 64.25 FEET; (32) THENCE N04°08'44"W, A DISTANCE OF 76.26 FEET; (33) THENCE N26°51'50"E, A DISTANCE OF 40.59 FEET; (34) THENCE N05°22'29"E, A DISTANCE OF 68.44 FEET TO THE SOUTHEAST CORNER OF TRACT M OF SAID ADAMSON CREEK PHASE ONE-A; (35) THENCE CONTINUE N05°22'29"E, A DISTANCE OF 78.28 FEET; (36) THENCE N30°19'31"W, A DISTANCE OF 176.97 FEET; (37) THENCE N16°17'17"W, A DISTANCE OF 74.28 FEET; (38) THENCE N05°06'44"W, A DISTANCE OF 70.34 FEET; (39) THENCE N01°33'15"E, A DISTANCE OF 54.19 FEET; (40) THENCE N00°19'09"E, A DISTANCE OF 308.03 FEET; (41) THENCE N32°30'23"W, A DISTANCE OF 34.60 FEET; (42) THENCE S57°29'37"W, A DISTANCE OF 21.75 FEET; (43) THENCE S62°13'24"W, A DISTANCE OF 55.19 FEET; (44) THENCE S64°10'33"W, A DISTANCE OF 55.38 FEET; (45) THENCE S60°13'10"W, A DISTANCE OF 51.18 FEET; (46) THENCE S55°43'48"W, A DISTANCE OF 47.85 FEET; (47) THENCE S60°48'57"W, A DISTANCE OF 47.85 FEET; (48) THENCE S45°54'05"W, A DISTANCE OF 47.85 FEET; (49) THENCE S40°59'13"W, A DISTANCE OF 47.85 FEET; (50) THENCE S36°04'22"W, A DISTANCE OF 47.85 FEET; (51) THENCE S33°22'16"W, A DISTANCE OF 49.85 FEET; (52) THENCE S33°21'57"W, A DISTANCE OF 50.00 FEET; (53) THENCE N56°43'06"W, A DISTANCE OF 120.00 FEET; (54) THENCE S33°21'57"W, A DISTANCE OF 29.95 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT; (55) THENCE ALONG THE ARC OF SAID CURVE, (SAID CURVE BEING CURVED CONCAVE TO THE NORTHWEST, AND HAVING A RADIUS OF 100.00 FEET, A CENTRAL ANGLE OF 1°51'47", A CHORD BEARING OF S34°17'51"W, AND A CHORD LENGTH OF 3.25 FEET), A DISTANCE OF 3.25 FEET TO AN INTERSECTION WITH A NON-TANGENT LINE TO THE SOUTHEAST; (56) THENCE S52°35'53"E ALONG SAID NON-TANGENT LINE, A DISTANCE OF 124.06 FEET; (57) THENCE S42°54'01"E, A DISTANCE OF 30.00 FEET; (58) THENCE S47°05'59"W, A DISTANCE OF 30.00 FEET; (59) THENCE N42°54'01"W, A DISTANCE OF 30.00 FEET; (60) THENCE S47°05'59"W, A DISTANCE OF 55.48 FEET; (61) THENCE S70°33'47"W, A DISTANCE OF 104.40 FEET; (62) THENCE S00°16'59"W, A DISTANCE OF 400.00 FEET; (63) THENCE S00°48'10"E, A DISTANCE OF 50.01 FEET; (64) THENCE S03°13'34"W, A DISTANCE OF 61.69 FEET; (65) THENCE S11°24'05"W, A DISTANCE OF 63.60 FEET; (66) THENCE N74°30'39"W, A DISTANCE OF 171.13 FEET TO A NON-TANGENT INTERSECTION WITH A CURVE TO THE LEFT; (67) THENCE ALONG THE ARC OF SAID CURVE, (SAID CURVE BEING CURVED CONCAVE TO THE NORTHWEST, AND HAVING A RADIUS OF 275.00 FEET, A CENTRAL ANGLE OF 15°12'21", A CHORD BEARING OF N07°53'10"E, AND A CHORD LENGTH OF 72.77 FEET), A DISTANCE OF 72.98 FEET TO THE END OF SAID CURVE; (68) THENCE N00°16'59"E, A DISTANCE OF 7.00 FEET; (69) THENCE N89°43'01"W, A DISTANCE OF 140.00 FEET; (70) N00°16'59"E, A DISTANCE OF 2065.77 FEET TO THE POINT OF BEGINNING, CONTAINING 62.4 ACRES, MORE OR LESS.

PLAT BOOK _____, PAGE _____

SHEET 1 OF 5

SECTION 22, TOWNSHIP 24 SOUTH, RANGE 35 EAST

DEDICATION

KNOW ALL MEN BY THESE PRESENTS, the Corporation named below, being the owner in fee simple of the lands described in

ADAMSON CREEK PHASE ONE-C

Hereby dedicates to the City of Cocoa, Florida a perpetual public easement over and across the private rights-of-way of Talbot Boulevard and Morely Drive for ingress and egress for emergency vehicles. No other easements are dedicated or granted to the public, it being the intention of the undersigned that all streets, roads, and other easements and common areas be privately owned and maintained and that the public and City of Cocoa, Florida have no right and/or interest therein.

By: Daniel J. Liparini, Assistant Secretary

SEAL

Attest: Printed Name:

Attest: Printed Name:

D.R. HORTON, INC., A DELAWARE CORPORATION
1430 CULVER DRIVE
PALM BAY, FLORIDA 32934

STATE OF FLORIDA COUNTY OF BREVARD

The foregoing instrument was acknowledged before me by means of _____ physical presence _____ or online notarization, this _____ by Daniel J. Liparini, Assistant Secretary of the above named corporation incorporated under the laws of State of Florida, on behalf of the company, who is personally known to me _____ or has produced _____ as identification.

IN WITNESS WHEREOF, I have hereunto set my hand and seal on the above date.

NOTARY PUBLIC

SEAL

My Comm. Expires _____

CERTIFICATE OF SURVEYOR

KNOW ALL MEN BY THESE PRESENTS, That the undersigned, being a licensed professional surveyor and mapper, does hereby certify that on 02/28/2020 he completed a boundary survey of the lands shown on the foregoing plat; and that said plat was prepared under his direction and supervision and that said plat complies with all of the survey requirements of Chapter 177, part 1, Florida Statutes, and that said lands are located in the City of Cocoa, Brevard County, Florida.

Registration Number 5611

LESLIE E. HOWARD
B.S.E. Consultants, Inc.
312 South Harbor City Boulevard, Suite #4
Melbourne, Fla. 32901
Certificate of Authorization Number: LB-0004905

CERTIFICATE OF COUNTY SURVEYOR

I HEREBY CERTIFY, That I have reviewed the foregoing plat and find that it is in conformity with Chapter 177, part 1, Florida Statutes.

J. Barry. Cabannis
Reg. Florida Surveyor & Mapper #4524
Reviewing Surveyor for the City of Cocoa

CERTIFICATE OF APPROVAL OF MUNICIPALITY

THIS IS TO CERTIFY, That on _____, the foregoing plat was approved by the City Council of the City of Cocoa, Florida.

Jake Williams, Jr., MAYOR

ATTEST: Carrie Shealy, CITY CLERK

CERTIFICATE OF CLERK

I HEREBY CERTIFY, That I have examined the foregoing plat and find that it complies in form with all the requirements of Chapter 177, Part 1, Florida Statutes, and was filed for record on _____ at _____.

File No. _____

ATTEST: Clerk of the Circuit Court in and for Brevard County, Fla.

- THIS PLAT PREPARED BY -



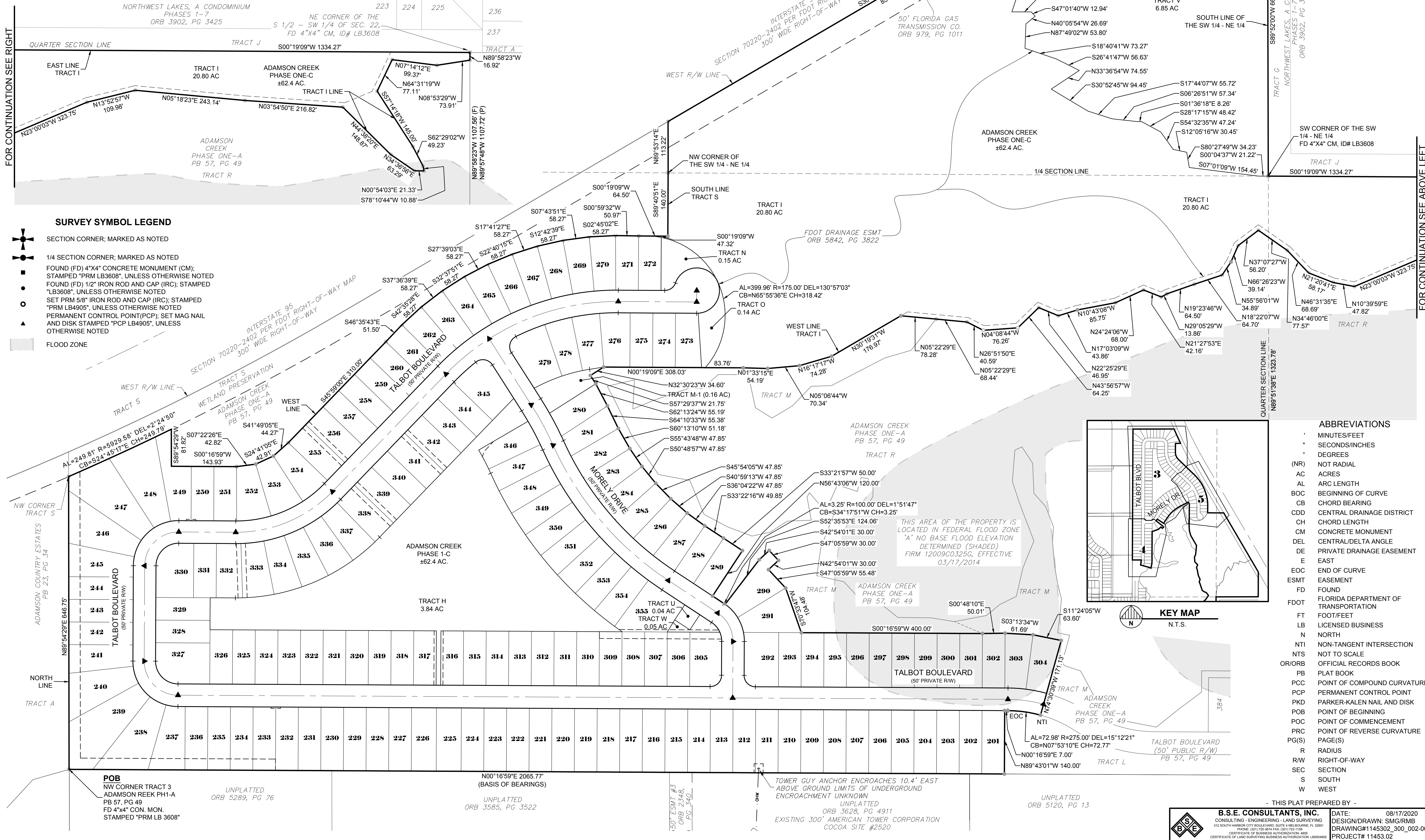
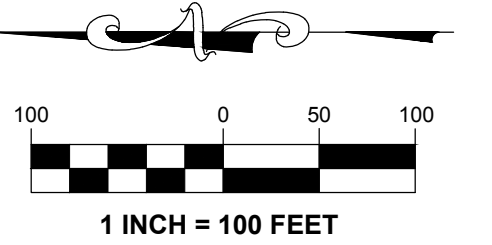
B.S.E. CONSULTANTS, INC.
CONSULTING - ENGINEERING - LAND SURVEYING
312 SOUTH HARBOR CITY BOULEVARD, SUITE 4, MELBOURNE, FL 32901
PHONE: (321) 725-3674 FAX: (321) 725-1158
CERTIFICATE OF LAND SURVEYING BUSINESS AUTHORIZATION: LB0004905

DATE: 08/17/2020
DESIGN/DRAWN: SMG/RMB
DRAWING#1145302_300_001
PROJECT# 11453.02

ADAMSON CREEK PHASE ONE-C

A REPLAT OF (TRACT 3, ADAMSON CREEK PHASE ONE-A, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 57, PAGE 49, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, TOGETHER WITH THAT CERTAIN PARCEL OF LAND DESCRIBED AS PARCEL 4 IN OFFICIAL RECORDS BOOK 8071, PAGE 1946, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, TOGETHER ALSO WITH THAT PART OF THE WEST 1/2 OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 22, TOWNSHIP 24 SOUTH, RANGE 35 EAST), CITY OF COCOA, BREVARD COUNTY, FLORIDA
PRELIMINARY PLAT

PLAT BOOK _____, PAGE _____
SHEET 2 OF 5
SECTION 22, TOWNSHIP 24 SOUTH, RANGE 35 EAST



SURVEY SYMBOL LEGEND

- SECTION CORNER, MARKED AS NOTED
- 1/4 SECTION CORNER, MARKED AS NOTED
- FOUND (FD) 4"x4" CONCRETE MONUMENT (CM); STAMPED "PRM LB3608", UNLESS OTHERWISE NOTED
- FOUND (FD) 1/2" IRON ROD AND CAP (IRC); STAMPED "LB3608", UNLESS OTHERWISE NOTED
- SET PRM 5/8" IRON ROD AND CAP (IRC); STAMPED "PRM LB4905", UNLESS OTHERWISE NOTED
- PERMANENT CONTROL POINT (PCP); SET MAG NAIL AND DISK STAMPED "PCP LB4905", UNLESS OTHERWISE NOTED
- FLOOD ZONE

ABBREVIATIONS

- MINUTES/FEET
- SECONDS/INCHES
- DEGREES
- (NR) NOT RADIAL
- AC ACRES
- AL ARC LENGTH
- BOC BEGINNING OF CURVE
- CB CHORD BEARING
- CDD CENTRAL DRAINAGE DISTRICT
- CH CHORD LENGTH
- CM CONCRETE MONUMENT
- DEL CENTRAL/DELTA ANGLE
- DE PRIVATE DRAINAGE EASEMENT
- E EAST
- EOC END OF CURVE
- ESMT EASEMENT
- FD FOUND
- FDOT FLORIDA DEPARTMENT OF TRANSPORTATION
- FT FOOT/FEET
- LB LICENSED BUSINESS
- N NORTH
- NTI NON-TANGENT INTERSECTION
- NTS NOT TO SCALE
- OR/ORB OFFICIAL RECORDS BOOK
- PB PLAT BOOK
- PCC POINT OF COMPOUND CURVATURE
- PCP PERMANENT CONTROL POINT
- PKD PARKER-KALEN NAIL AND DISK
- POB POINT OF BEGINNING
- POC POINT OF COMMENCEMENT
- PRC POINT OF REVERSE CURVATURE
- PG(S) PAGE(S)
- R RADIUS
- R/W RIGHT-OF-WAY
- SEC SECTION
- S SOUTH
- W WEST

- THIS PLAT PREPARED BY -
B.S.E. CONSULTANTS, INC.
CONSULTING - ENGINEERING - LAND SURVEYING
312 SOUTH HARBOR CITY BOULEVARD, SUITE A, MELBOURNE, FL 32901
PHONE: (321) 725-3044 FAX: (321) 725-1159
CERTIFICATE OF BUSINESS AUTHORIZATION: 4605
DATE: 08/17/2020
DESIGN/DRAWN: SMG/RMB
DRAWING#1145302_300_002-005
PROJECT# 11453.02

ADAMSON CREEK PHASE ONE-C

A REPLAT OF (TRACT 3, ADAMSON CREEK PHASE ONE-A, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 57, PAGE 49, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, TOGETHER WITH THAT CERTAIN PARCEL OF LAND DESCRIBED AS PARCEL 4 IN OFFICIAL RECORDS BOOK 8071, PAGE 1946, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, TOGETHER ALSO WITH THAT PART OF THE WEST 1/2 OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 22, TOWNSHIP 24 SOUTH, RANGE 35 EAST), CITY OF COCOA, BREVARD COUNTY, FLORIDA

PRELIMINARY PLAT

PLAT BOOK _____, PAGE _____
SHEET 3 OF 5
SECTION 22, TOWNSHIP 24 SOUTH, RANGE 35 EAST

ABBREVIATIONS

- MINUTES/FEET
- SECONDS/INCHES
- DEGREES
- (NR) NOT RADIAL
- AC ACRES
- AL ARC LENGTH
- BOC BEGINNING OF CURVE
- CB CHORD BEARING
- CDD CENTRAL DRAINAGE DISTRICT
- CH CHORD LENGTH
- CM CONCRETE MONUMENT
- DEL CENTRAL/Delta ANGLE
- DE PRIVATE DRAINAGE EASEMENT
- E EAST
- EOC END OF CURVE
- ESMT EASEMENT
- FD FOUND
- FDOT FLORIDA DEPARTMENT OF TRANSPORTATION
- FT FOOT/FEET
- LB LICENSED BUSINESS
- N NORTH
- NTI NON-TANGENT INTERSECTION
- NTS NOT TO SCALE
- OR/ORB OFFICIAL RECORDS BOOK
- PB PLAT BOOK
- PCC POINT OF COMPOUND CURVATURE
- PCP PERMANENT CONTROL POINT
- PKD PARKER-KALEN NAIL AND DISK
- POB POINT OF BEGINNING
- POC POINT OF COMMENCEMENT
- PRC POINT OF REVERSE CURVATURE
- PG(S) PAGE(S)
- R RADIUS
- R/W RIGHT-OF-WAY
- SEC SECTION
- S SOUTH
- W WEST

SURVEY SYMBOL LEGEND

SECTION CORNER, MARKED AS NOTED

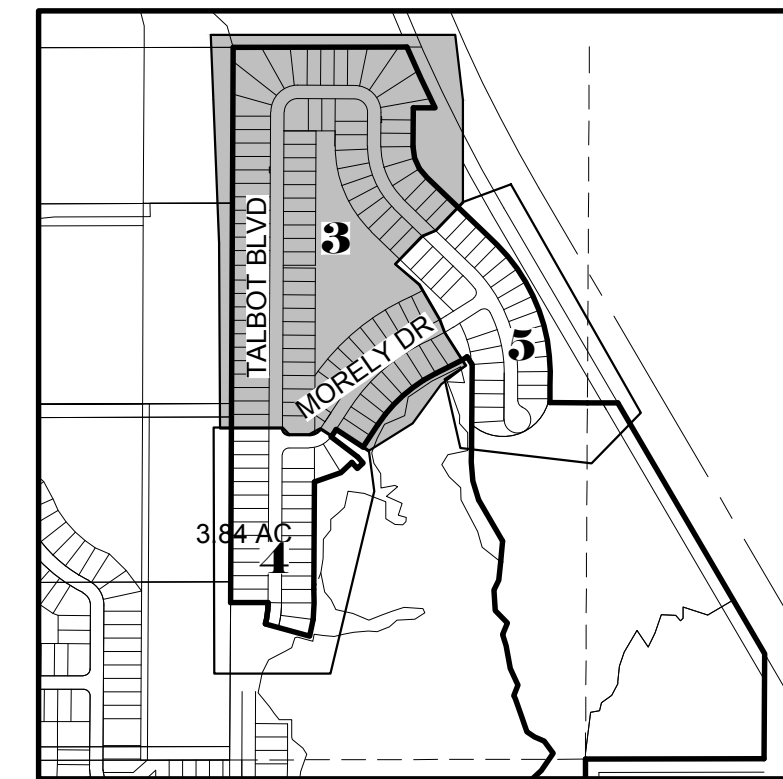
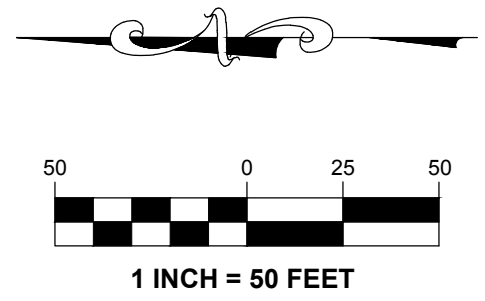
1/4 SECTION CORNER, MARKED AS NOTED

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SET PRM 5/8" IRON ROD AND CAP (IRC); STAMPED "PRM LB4905", UNLESS OTHERWISE NOTED

PERMANENT CONTROL POINT (PCP); SET MAG NAIL AND DISK STAMPED "PCP LB4905", UNLESS OTHERWISE NOTED



KEY MAP
N.T.S.

FOR CONTINUATION SEE SHEET 4

FOR CONTINUATION SEE SHEET 4

FOR CONTINUATION SEE SHEET 4

FOR CONTINUATION SEE SHEET 4

FOR CONTINUATION SEE SHEET 4

FOR CONTINUATION SEE SHEET 4

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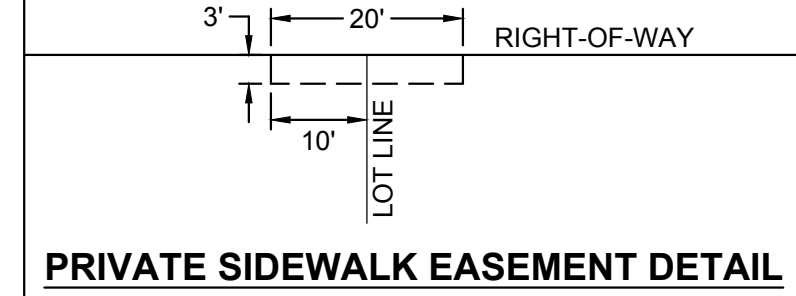
FOR CONTINUATION SEE SHEET 4

FOR CONTINUATION SEE SHEET 4

FOR CONTINUATION SEE SHEET 4

CURVE TABLE				
CURVE #	ARC LENGTH	RADIUS	DELTA	CHORD BEARING
C1	49.67'	50.00'	56°55'02"	N61°49'28"E
C2	28.86'	50.00'	33°04'27"	N49°54'11"E
C3	157.08'	100.00'	90°00'00"	S45°16'59"W

CURVE TABLE				
CURVE #	ARC LENGTH	RADIUS	DELTA	CHORD BEARING
C4	157.08'	100.00'	90°00'00"	N44°43'01"W
C5	218.03'	270.00'	46°15'59"	S22°51'00"E
C6	258.40'	320.00'	46°15'59"	S22°51'00"E



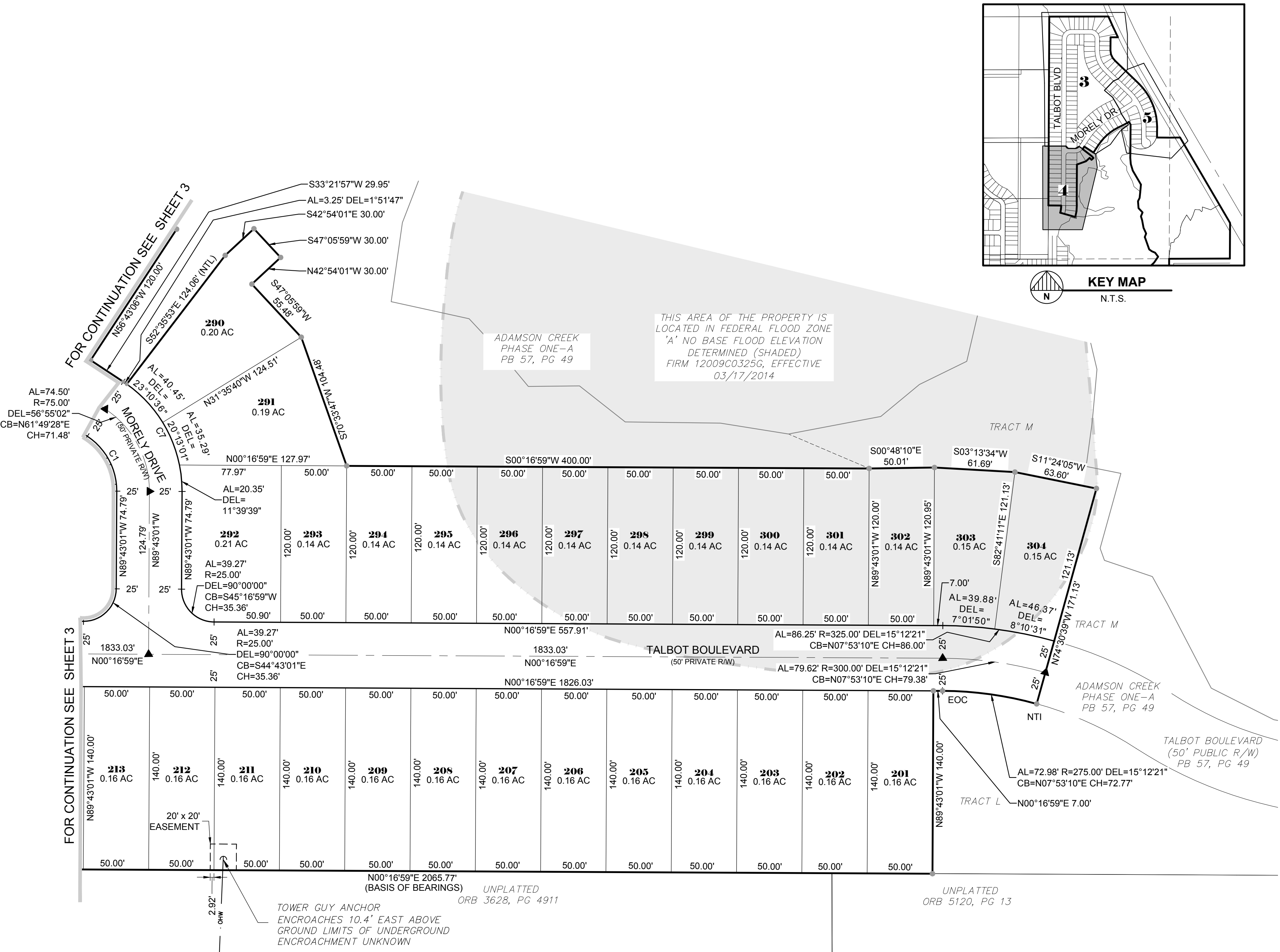
THIS PLAT PREPARED BY -
B.S.E. CONSULTANTS, INC.
CONSULTING - ENGINEERING - LAND SURVEYING
312 SOUTH HARBOR CITY BOULEVARD, SUITE 400, MELBOURNE, FL 32901
PHONE: (321) 725-3624 FAX: (321) 725-1159
CERTIFICATE OF BUSINESS AUTHORIZATION: 4605
DATE: 08/12/2020
DESIGN/DRAWN: SMG/RMB
DRAWING# 1145302_300_002-005
PROJECT# 11453.02

H:\Projects\Folder1\145302_300_002-005.dwg August 12, 2020 7:52:02 AM In

ADAMSON CREEK PHASE ONE-C

PLAT BOOK _____, PAGE _____
SHEET 4 OF 5
SECTION 22, TOWNSHIP 24 SOUTH, RANGE 35 EAST

A REPLAT OF (TRACT 3, ADAMSON CREEK PHASE ONE-A, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 57, PAGE 49, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, TOGETHER WITH THAT CERTAIN PARCEL OF LAND DESCRIBED AS PARCEL 4 IN OFFICIAL RECORDS BOOK 8071, PAGE 1946, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, TOGETHER ALSO WITH THAT PART OF THE WEST 1/2 OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 22, TOWNSHIP 24 SOUTH, RANGE 35 EAST), CITY OF COCOA, BREVARD COUNTY, FLORIDA
PRELIMINARY PLAT

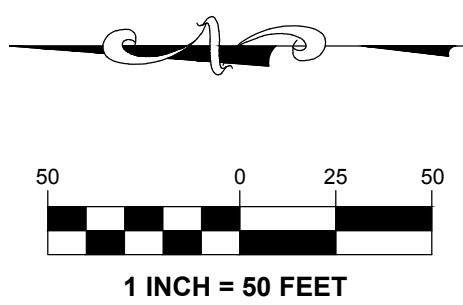
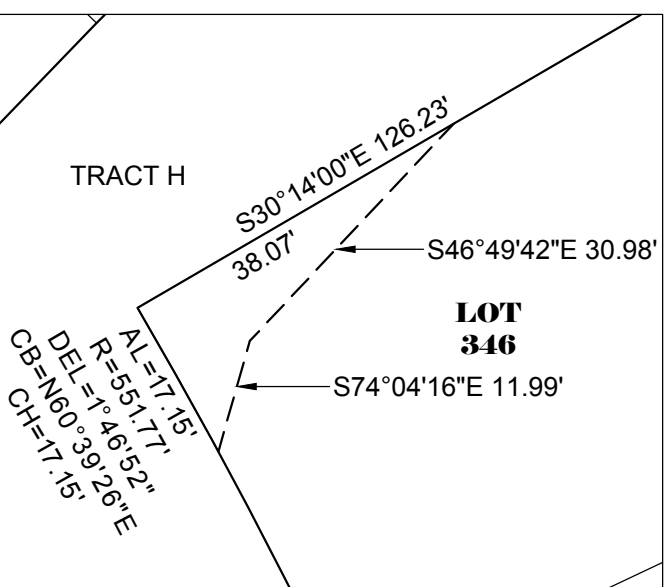


- SURVEY SYMBOL LEGEND**
- SECTION CORNER; MARKED AS NOTED
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 - PERMANENT CONTROL POINT (PCP); SET MAG NAIL AND DISK STAMPED "PCP LB4905", UNLESS OTHERWISE NOTED
 - FLOOD ZONE

ABBREVIATIONS

- ' MINUTES/FEET
- " SECONDS/INCHES
- ° DEGREES
- (NR) NOT RADIAL
- AC ACRES
- AL ARC LENGTH
- BOC BEGINNING OF CURVE
- CB CHORD BEARING
- CDD CENTRAL DRAINAGE DISTRICT
- CH CHORD LENGTH
- CM CONCRETE MONUMENT
- DEL CENTRAL/DELTA ANGLE
- DE PRIVATE DRAINAGE EASEMENT
- E EAST
- EOC END OF CURVE
- ESMT EASEMENT
- FD FOUND
- FOOT FLORIDA DEPARTMENT OF TRANSPORTATION
- FT FOOT/FEET
- LB LICENSED BUSINESS
- N NORTH
- NTI NON-TANGENT INTERSECTION
- NTS NOT TO SCALE
- OR/ORB OFFICIAL RECORDS BOOK
- PB PLAT BOOK
- PCC POINT OF COMPOUND CURVATURE
- PCP PERMANENT CONTROL POINT
- PKD PARKER-KALEN NAIL AND DISK
- POB POINT OF BEGINNING
- POC POINT OF COMMENCEMENT
- PRC POINT OF REVERSE CURVATURE
- PG(S) PAGE(S)
- R RADIUS
- R/W RIGHT-OF-WAY
- SEC SECTION
- S SOUTH
- W WEST

CURVE TABLE					
CURVE #	ARC LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C1	49.67'	50.00'	56°55'02"	N61°49'28"E	47.65
C7	99.34'	100.00'	56°55'02"	N61°49'28"E	95.30

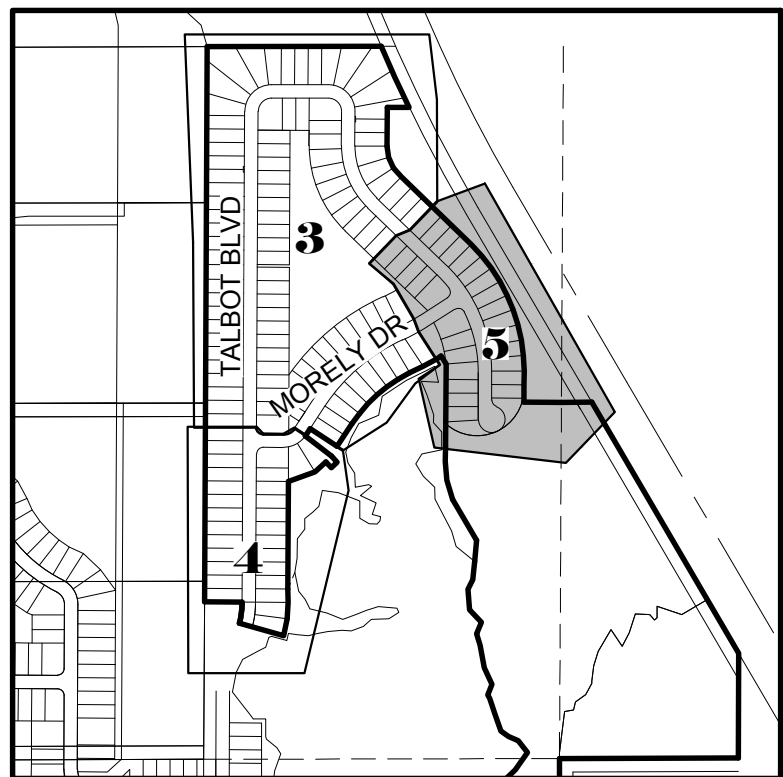


- THIS PLAT PREPARED BY -

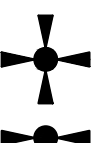
ADAMSON CREEK PHASE ONE-C

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PRELIMINARY PLAT

PLAT BOOK _____, PAGE _____
SHEET 5 OF 5
SECTION 22, TOWNSHIP 24 SOUTH, RANGE 35 EAST



KEY MAP
N.T.S.



SURVEY SYMBOL LEGEND

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AND DISK STAMPED "PCP LB4905", UNLESS
OTHERWISE NOTED

ABBREVIATIONS

' MINUTES/FEET
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° DEGREES
(NR) NOT RADIAL
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AL ARC LENGTH
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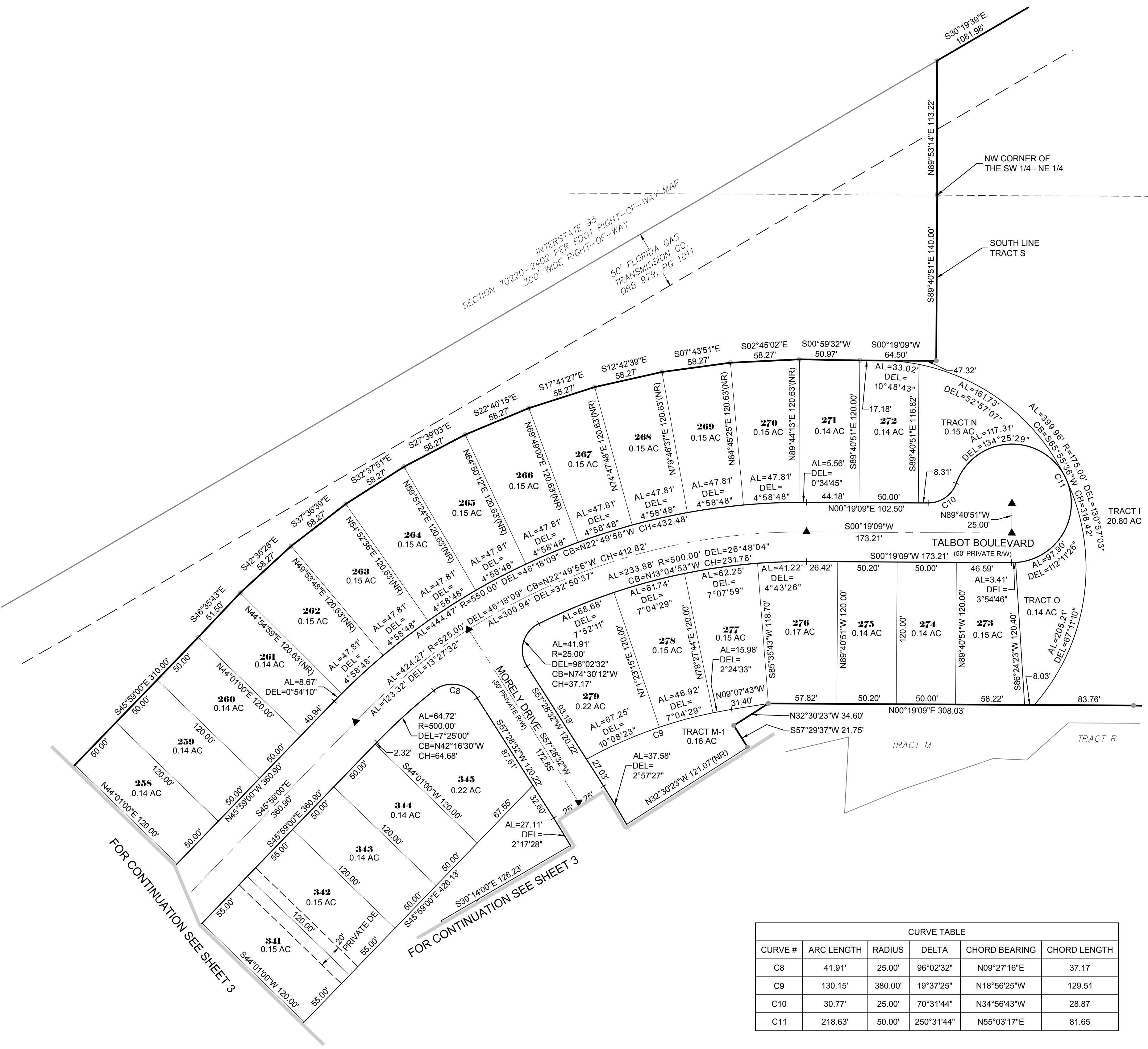
50 0 25 50
1 INCH = 50 FEET

- THIS PLAT PREPARED BY -

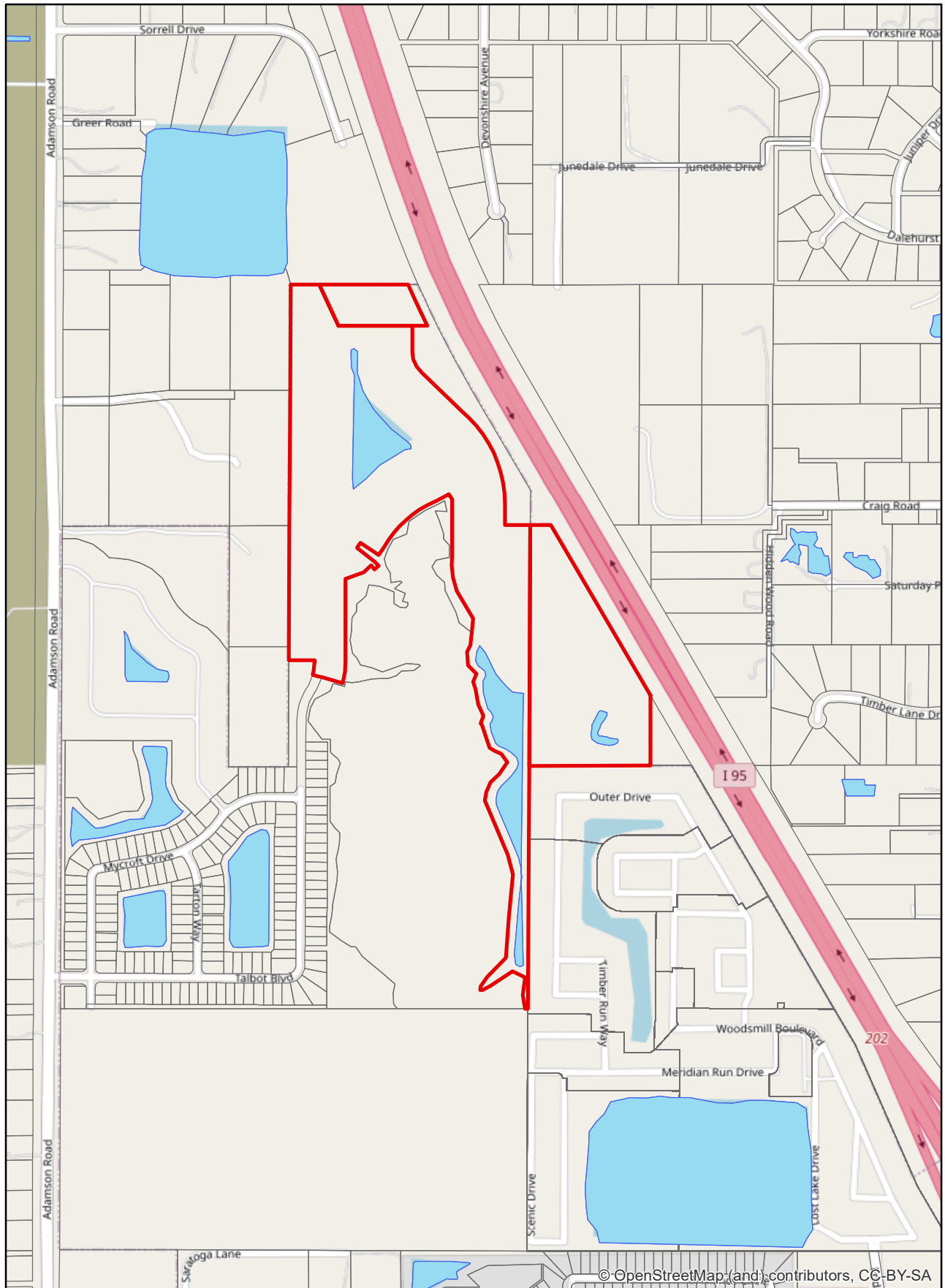


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312 SOUTH HARBOR CITY BOULEVARD, SUITE 4 MELBOURNE, FL 32901
PHONE: (321) 725-3024 FAX: (321) 725-1159
CERTIFICATE OF BUSINESS AUTHORIZATION: 4605
CERTIFICATE OF LAND SURVEYING BUSINESS AUTHORIZATION: LB0004965

DATE: 08/12/2020
DESIGN/DRAWN: SMG/RMB
DRAWING#1145302_300_002-005
PROJECT# 11453.02



CURVE TABLE					
CURVE #	ARC LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C8	41.91'	25.00'	96°02'32"	N09°27'16"E	37.17
C9	130.15'	380.00'	19°37'25"	N18°56'25"W	129.51
C10	30.77'	25.00'	70°31'44"	N34°56'43"W	28.87
C11	218.63'	50.00'	250°31'44"	N55°03'17"E	81.65



**ADAMSON CREEK
PROPOSED AMENITY SCHEDULE
CITY OF COCOA / DR HORTON, INC.
REVISED: AUGUST 21, 2020**

FOURTH MODIFICATION TO BINDING DEVELOPMENT AGREEMENT	TIMEFRAME	STATUS
ITEM		
Tract A & B (PHASE ONE-A)		
Entry Monument & Landscape	Completed	Completed
Tract F (PHASE ONE-A)		
5' concrete sidewalk	Completed	Completed
12' x 12' observation deck		
Fish stocking in lake	To be constructed before the 10 th CO in PHASE ONE-B	
Tract G (PHASE ONE-A)		
5' Sidewalk	Completed	Completed
12' x 12' Observation Deck		
Fish stocking in lake	To be constructed before the 10 th CO in PHASE ONE-B	
Tract E (PHASE ONE-A)		
Fish stocking in lake	To be constructed before the 10th CO in PHASE ONE-B	Completed
12' x 12' observation deck		
Tract M (PHASE ONE-A)		
5' Concrete sidewalk	To Be Constructed before the 154th CO	To be completed in PHASE ONE-C it's labeled as ONE-A but it is in the limits of ONE-C
Bike rack		
Larger than 10' x 10' Tot Lot		
16' x 24' Covered Pavilion		
Picnic Table	To Be Constructed before the 154th CO	
Benches		
Larger Playground		
Multi-use Field		
Grills		
Trash Receptacles		
Tract J (PHASE ONE-A)		
Pool	Completed	Completed
Deck		
Fence (PVS)		
Cabana		
8'8" x 16 Bus Shelter		
Tract D (PHASE ONE-B)		
5' concrete sidewalk	To be constructed before the 10th CO in PHASE ONE-B	Completed
12' x 12' observation deck		
Fish stocking in lake		
Tract K (PHASE ONE-B)		
5' Concrete sidewalk	To be constructed before the 25th CO in PHASE ONE-B	Completed 2 Benches and 2 trash receptacles on contract order to be installed in 3 weeks
Open lot area for play		
Tract L (PHASE ONE-A)		
5' Concrete sidewalk	To be constructed before the 10th CO in PHASE ONE-C	
15' x 24' covered pavilion		
Picnic table		
Grills		
Bike Rack		
Mail Kiosk		
Trash Receptacles		
Tract H (PHASE ONE-C)		
5' Concrete Sidewalk	To be constructed before the 10th CO in PHASE ONE-C	
12' x 12' Observation Deck		
Tract I (PHASE ONE-C)		
10 Station Fitness Course	To be constructed before the 75th CO in PHASE ONE-C	
5' Mulch Path		
Tract O, I, & N (PHASE ONE-C)		
5' Concrete Sidewalk	To be constructed before the 10th CO in PHASE ONE-C	
12' x 12' Observation Deck		
Benches		
Trash Receptacles		



Public Works Department
155 N. Wilson Avenue, Cocoa, FL 32922
Phone: (321) 433-8770 | Fax: (321) 504-0922

Mr. Edward Jones
125 Grace Avenue
Cocoa, FL 32922

RE: 1685 Adamson Rd Property

Dear Mr. Jones,

This correspondence is in response to your concerns regarding flooding impacts to your 1685 Adamson Road property expressed at the Planning and Zoning meeting on June 5, 2019. The Engineer on Record for the Adamson Creek Planned Unit Development has performed an additional analysis at the City's request. Attached please find the signed and sealed copy of the results indicating that your property will not be adversely impacted by stormwater runoff. If you have any questions, feel free to contact this office or the Engineer on Record.

Sincerely,

Ed Wegerif, P.E.
Public Works Director

cc: Dorothy (Dodie) Selig, AICP (with Report)
Matthew Fuhrer, Assistant City Manager

COPY



B.S.E. CONSULTANTS, INC.
Consulting ~ Engineering ~ Land Surveying

Scott M. Glaubitz, P.E., P.L.S.
President

Hassan Kamal, P.E.
Vice President

Memorandum:

DATE: July 9, 2019
TO: Everett J. Wegerif, P.E., Public Works Director, City of Cocoa
FROM: Kenneth Ludwa, P.E.
Re: *Adamson Creek Phase 1B*
Rear Lot Fill Slopes – Drainage Analysis
BSE #11453

This memorandum is provided to address the following condition in the June 2019 Preliminary and Final Subdivision Approval for Adamson Creek Phase 1B:

- (5) Developer will provide a solution that is approved by the City Engineer which can demonstrate that the drainage would not impact the adjoining property (Mr. Ed Jones), prior to recording of the Final Subdivision Plat

The June 2005 PUD approval for Adamson Creek included a similar condition.

Mr. Jones' property (Parcel 263) is bordered on the east, west, and south sides by the Adamson Creek subdivision (lots and a stormwater retention area). Parcel 256, north of Parcel 263, is owned by OPM-USA, Inc. (telecommunications facility and wetlands).

The lots adjacent to Parcel 263 are Type A lots (rear-to-front drainage), meaning that all runoff is contained and handled within the subdivision's drainage system, except for the rear ± 20 feet of each lot, per the construction plans and as-built survey. This "rear lot fill slope" is necessary to transition from existing grade at the property line up to the final (filled) grade at the back of the lots. There will be no impervious area on the fill slopes.

The Public Works Director has directed the applicant to provide an analysis to demonstrate one of the following:

- If rear lot slopes are allowed to flow onto the outparcel, prove that there was flow previously into the outparcel and demonstrate that the natural passage of water has not been altered in a way that could negatively impact the land, or
- Intercept the flow and direct it to an outfall lower in elevation than the outparcel, with easements dedicated to address drainage.

This analysis is intended to address the first option above.

Pre-Development Drainage

Based on available topographic information, ± 1.83 acres of the Adamson Creek property originally drained to Parcel 263, which then drains northward to an existing wetland spanning Parcel 263 and Parcel 256. The wetland then flows westward back through the Adamson Creek property, in turn flowing to a swale, and finally reaching the ditch on Adamson Road. Refer to attached topographic surveys and Pre-Development Basin Map showing elevations on Adamson Creek property surrounding the outparcel (el. $\pm 22.0 - 22.5$) and in the wetland (el. ± 21.0). Also refer to attached Construction Plans for the Telecommunications Facility at 1695 Adamson Road showing elevations in the wetland (el. $\pm 21.0 - 21.5$).

A dirt roadway is situated on the west side of Parcel 263 and Parcel 256. Wetlands are located on both sides of the road. Based on historical aerial photographs, the roadway was constructed in 2005. Although the roadway resulted in fill impacts in the wetland, the SJRWMD website shows no permits were issued. A field investigation on June 28, 2019 identified a 12" culvert under the road near the northwest corner of Parcel 263. An additional 12" culvert is located under the road ± 240 feet north on Parcel 256. This provides at least two flow paths from Parcel 263 through the wetland continuing west under the road.

The pre-development peak flow from the 25-year, 24-hour storm is **5.58 cfs** based on the following parameters:

- Area = 1.83 acres
- Land Use = Brush/Poor
- Soil Type = D
- Curve Number = 83
- Time of Concentration = 36 minutes (refer to attached TR-55 TC calculations).

These parameters are consistent with the original approved drainage report.

Refer to attached ICPR input/output summary pages for flow calculations.

Post-Development Drainage

Under developed conditions, ± 0.78 acres of rear lot fill slopes drain to the outparcel. Runoff will be evenly distributed and unconcentrated. The post-development peak flow from the mean annual storm is **4.65 cfs** based on the following parameters:

- Area = 0.78 acres
- Land Use = Open Space/Grass

- Soil Type = D
- Curve Number = 80
- Time of Concentration = 1.14 minutes. This is the TC calculated by TR-55, based on slope and vegetation; see attached TR-55 TC calculations. For flow calculations, TR-55 uses a minimum TC of 6 minutes. For reference, FDOT specifies a minimum TC of 10 minutes. The attached ICPR4 calculations use the program's allowable minimum TC of 2 minutes.

These parameters are consistent with the original approved drainage report. Note that the curve number is conservative, as onsite soils have dual soil type B/D and would be expected to retain more runoff with improved drainage under post-development conditions.

Construction of the Adamson Creek subdivision will have no impact on the existing drainage path from the outparcel through the wetland to Adamson Road.

Summary

This analysis demonstrates the following:

- The post-development area of lot backslopes draining to the outparcel will be less than the pre-development area originally draining onto the outparcel.
- The post-development flow onto the outparcels will be unconcentrated and less than the pre-development flow.
- The existing drainage path will be maintained downstream of the outparcel, through the wetland flowing through the Adamson Creek subdivision to Adamson Road.

A circular stamp, likely a professional seal, is partially visible. Overlaid on it is a handwritten signature in blue ink, which appears to be 'KAL'. Below the signature, the date '7/15/19' is handwritten in blue ink.