#### CITY OF TARPON SPRINGS BOARD OF COMMISSIONERS [September 14, 2021]

#### STAFF REPORT ADDENDUM

Sept 13, 2021

Application No. / Project Title: #21-82 / North Lake Estates Final Planned Development

Staff: Patricia McNeese, Principal Planner

Applicant / Owner: GGR Holdings I

Property Size: 43.54 acres

Current Zoning: Residential Planned Development (RPD)

Current Land Use: Residential Very Low (RVL)

Location / Parcel ID: North side of Keystone Road approximately 0.75 miles from the

intersection of Keystone Road and North Highland Avenue and west of East Lake Drive / 09-27-16-00000-220-0100 and 08-27-16-89406-

000-0010

Since this agenda back up was posted the Developer's engineer (WRA) submitted revised site construction plans which have been reviewed and found compliant by the City's Engineer of Record. The previous staff report has been amended to remove the last condition of approval to the resolution and the Sept. 13, 2021, and signed and sealed construction plans have replaced the previous plans included in the agenda back up.

# NORTH LAKE ESTATES FINAL PLANNED DEVELOPMENT APP #21-82

Board of Commissioners – September 14, 2021



# **LOCATION & CONTEXT**



# **SUMMARY OF REQUEST**

#21-82 – Final Planned Development on 43.54 acres

Land Use: RL (Residential Very Low)

Zoning: RPD (Residential Planned Development)

**Applicant:** GGR Holdings I

## **Previous Approvals:**

- Ordinance 2019-23 for annexation
- Ordinance 2019-24 for Preliminary Planned Development and rezoning
- Ordinances 2019-25 for amendment to the Future Land Use Map
- Resolutions 2019-38 and 2020-20 for Development Agreement and DA Amendment



# CITY OF TARPON SPRINGS PLANNING & ZONING DEPARTMENT

# **44-UNIT SINGLE FAMILY RESIDENTIAL SUBDIVISION**



# EXISTING CONDITIONS / TREES





# **LANDSCAPE PLAN**

PLANT SCHEDULE

CODE

AR

MS

TA

22

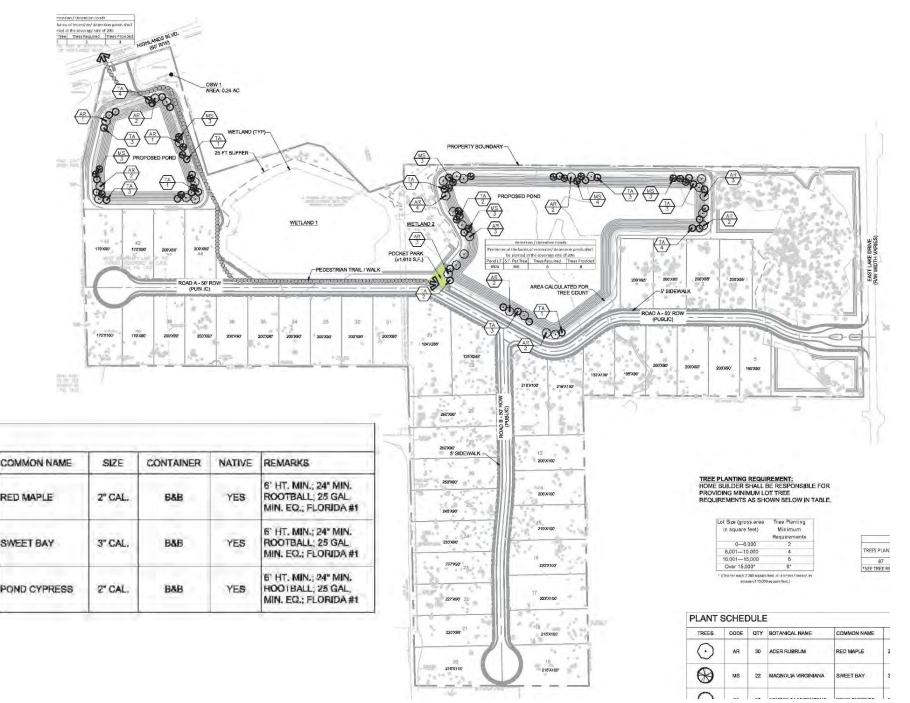
QTY BOTANICAL NAME

ACER RUBRUM

MAGNOLIA VIRGINIANA

TAXODIUM ASCENDENS

TREES









5' o.c.

1 gal



Sand cordgrass

Spartina bakeri

# **REVIEW CRITERIA – FINAL DEVELOPMENT PLAN**

- 1) Meets the requirements of the land development code, as conditioned.
- 2) Is consistent with the City's Comprehensive Plan.
- Is consistent with the Preliminary Development Plan approved under Ordinance 2019-24.
- 4) Demonstrates that facilities and services will be available at the prescribed level of service standards concurrent with the impact of development – a Certificate of Concurrency may be approved.



# STAFF RECOMMENDATION

### #21-82 - *Approval* of the following:

- Resolution 2021-50, Final Development Plan for North Lake Estates with dimensional standards and with conditions as follows:
- 1. The existing Preservation (P) Future Land Use Map (FLUM) category shall be revised to match the final existing wetlands plus created wetland mitigation area on site. The applicant shall supply electronic boundary coverage of this area to the City for mapping of the revised Preservation boundary.
- 2. For roadways dedicated to the public, the plat shall include sufficient assurances providing for the property maintenance of the stormwater system components in the right-of-way in coordination with privately-maintained components of the system. Such assurances shall be on the plat and/or in agreements prepared by the applicant to the satisfaction of the City.
- 3. The plat shall include appropriate dedications/easements to the satisfaction of Pinellas County for the access and maintenance of County utilities (water and sewer).
- 4. A recorded restrictive covenant shall be included on the final plat stating that accessory dwelling units are restricted to use by the owner/occupant of the primary dwelling on the same lot and shall not be separately addressed, shall not be rented, shall not include separate garages, and/or, shall not include separate meters for utilities of any kind. This language shall also be added to the final Homeowners' Association Declarations to ensure that property owners are aware of it.



# STAFF RECOMMENDATION

#21-82 — Resolution 2021-50 recommended conditions (continued):

- 5. All permits and approvals including, but not limited to, those authorizing wetland and gopher tortoise impacts shall be required to be submitted with the building permit application.
- 6. Tree mitigation may be further refined based on arborist's report to preserve additional trees if possible and to accommodate the removal of invasive exotics.
- 7. Participation in the City's Public Art Program if the total site construction costs exceed \$1,000,000.
- 8. Prior to any on-site construction an archaeological resource survey shall be conducted. A plan for appropriate mitigation for identified resources shall be submitted with the building permit application.
- All Brazilian pepper (Schinus terebinthifolius) plants on site shall be eradicated and the entire
  development site shall be kept free of Brazilian pepper in perpetuity.
- 10. Individual home plans shall adhere to the dimensional standards approved with the Preliminary Planned Development for setbacks and driveways widths, as set forth in Resolution 2021-50, and shall otherwise conform to the regulations for Single Family Detached Dwellings in accordance with Section 78.01 of the Land Development Code.
- 11. All terms of the Development Agreement remain in affect and are applicable until such time as the agreement expires.
- 12. All remaining Engineer of Record (Burgess and Niple) review comments shall be addressed prior to approval of site construction permits by the City. Revised site construction permits shall be reviewed by Burgess and Niple and the developer shall re-imburse the City for all additional costs of review prior to site construction permits being released.



#### CITY OF TARPON SPRINGS BOARD OF COMMISSIONERS [September 14, 2021]

#### STAFF REPORT – September 7, 2021

Application No. / Project Title: #21-82 / North Lake Estates Final Planned Development

**Staff:** Patricia McNeese, Principal Planner

Applicant / Owner: GGR Holdings I

Property Size: 43.54 acres

Current Zoning: Residential Planned Development (RPD)

Current Land Use: Residential Very Low (RVL)

Location / Parcel ID: North side of Keystone Road approximately 0.75 miles from the

intersection of Keystone Road and North Highland Avenue and west of East Lake Drive / 09-27-16-00000-220-0100 and 08-27-16-89406-

000-0010

#### **BACKGROUND SUMMARY:**

The North Lake Estates Residential Planned Development is a 44-lot single family detached subdivision with access provided from East Lake Drive. The project has received the following approvals to date:

- Annexation, Ordinance 2019-23, adopted on December 10, 2019.
- Future Land Use Map (FLUM) amendment to Residential Very Low (RVL), Ordinance 2019-25, adopted on June 9, 2020.
- Zoning Map amendment to Residential Planned Development (RPD), Ordinance 2019-24, adopted on June 9, 2020.
  - Includes approval of the Preliminary Development Plan, subject to conditions identified in the associated staff report
- Development Agreement, Resolution 2019-38, adopted on December 3, 2019, and amended by Resolution 2020-20 on June 9, 2020.
  - The applicant revised the concept plan to remove impacts to previously designated
     Preservation areas (revisions included with the approved Preliminary Development Plan)

The applicant is now seeking Final Planned Development approval as provided for under Section 82.00 of the Land Development Code (LDC). The project is a single family detached residential subdivision of 44 lots with access point at East Lake Drive. The applicant plans to install the subdivision improvements prior to seeking approval and recording of the final plat.

Revised site construction plans have been received and found in compliance.

As of the date of staff report submittal, there are still outstanding comments on the site construction plans (Attachment 2) that have not been resolved. The applicant is seeking to move forward with a condition of approval that will require these outstanding details to be addressed in full prior to approval of any site construction permits. Staff is supportive of this request with a

further recommendation that the applicant be required to reimburse the City for costs of additional review by the City's Engineer of Record (Burgess & Niple).

The Board of Commissioners may proceed with review under these conditions or may elect to defer the application to a date in November to allow the applicant to address remaining issues identified by Burgess & Niple.

#### FINAL PLANNED DEVELOPMENT SUBMITTAL FEATURES

The project includes:

- 44 lots ranging from approximately one-third acre to one-half acre in size, each to accommodate
  at least one single family detached dwelling and up to one accessory dwelling for mother-in-law
  apartments.
- Access is from East Lake Drive.
- On-site wetland mitigation and enhancement to compensate for wetland impacts.
- Tree removal from subdivision construction areas only. Each lot owner must comply with the
  City's tree ordinance with the submittal of a building permit application. Preliminary estimates of
  tree removal mitigation costs associated with the construction of roads and infrastructure are
  approximately \$530,000.
- Custom-built homes proposed with no set architectural design. The Homeowners' Association documents include an Architectural Control Committee.
- The following dimensional standards were approved as part of the Preliminary Planned Development and are included in the Final Planned Development Resolution #2021-50:

Front yard setback 25 feet
Front yard oriented to long axis of lot 20 feet
Side yard setback 10 feet
Side street setback 15 feet
Rear yard setback 20 feet

Driveway width (waiver)
 1/3 of lot width, maximum 36 feet

- 5-foot sidewalks on both sides of the streets and connecting to both East Lake Drive and North Highlands Avenue
- If the total site construction permit costs exceed \$1,000,000 the developer will be required to participate in the City's Public Art program, either through direct payment to the Public Art Fund or through development of a qualified public art project (see LDC Article XVII Public Art Program).

#### PRELIMINARY STAFF RECOMMENDATION:

Staff finds the application for a Final Planned Development is consistent with the applicable review criteria and recommends **APPROVAL** of **Resolution 2021-50**, subject to the following:

- The existing Preservation (P) Future Land Use Map (FLUM) category shall be revised to match
  the final existing wetlands plus created wetland mitigation area on site. The applicant shall
  supply electronic boundary coverage of this area to the City for mapping of the revised
  Preservation boundary.
- 2. For roadways dedicated to the public, the plat shall include sufficient assurances providing for the property maintenance of the stormwater system components in the right-of-way in coordination with privately-maintained components of the system. Such assurances shall be on the plat and/or in agreements prepared by the applicant to the satisfaction of the City.
- 3. The plat shall include appropriate dedications/easements to the satisfaction of Pinellas County

for the access and maintenance of County utilities (water and sewer).

- 4. A recorded restrictive covenant shall be included on the final plat stating that accessory dwelling units are restricted to use by the owner/occupant of the primary dwelling on the same lot and shall not be separately addressed, shall not be rented, shall not include separate garages, and/or, shall not include separate meters for utilities of any kind. This language shall also be added to the final Homeowners' Association Declarations to ensure that property owners are aware of it.
- 5. All permits and approvals including, but not limited to, those authorizing wetland and gopher tortoise impacts shall be required to be submitted with the building permit application.
- 6. Tree mitigation may be further refined based on arborist's report to preserve additional trees if possible and to accommodate the removal of invasive exotics.
- 7. Participation in the City's Public Art Program if the total site construction costs exceed \$1,000,000.
- 8. Prior to any on-site construction an archaeological resource survey shall be conducted. A plan for appropriate mitigation for identified resources shall be submitted with the building permit application.
- 9. All Brazilian pepper (*Schinus terebinthifolius*) plants on site shall be eradicated and the entire development site shall be kept free of Brazilian pepper in perpetuity.
- 10. Individual home plans shall adhere to the dimensional standards approved with the Preliminary Planned Development for setbacks and driveways widths, as set forth in Resolution 2021-50, and shall otherwise conform to the regulations for Single Family Detached Dwellings in accordance with Section 78.01 of the Land Development Code.
- 11. All terms of the Development Agreement remain in affect and are applicable until such time as the agreement expires.
- 12. All remaining Engineer of Record (Burgess and Niple) review comments shall be addressed prior to approval of site construction permits by the City. Revised site construction permits shall be reviewed by Burgess and Niple and the developer shall re-imburse the City for all additional costs of review prior to site construction permits being released.

#### PRELIMINARY PLANNED DEVELOPMENT CONDITIONS:

The Preliminary Planned Development was approved in June 2020 with conditions, listed below along with the status of each condition:

- 1. Approval of the RPD, including the Future Land Use Map amendment and the rezoning, is subject to approval of property annexation (Application 18-50) and Development Agreement (Application 19-32).
  - <u>Analysis</u>: Both the annexation and the Development Agreement were approved in December, 2019.
- 2. Acceptance of any infrastructure by the City is subject to further review at the Final Development Plan stage.
  - <u>Analysis</u>: The water service and sewer service will be supplied by Pinellas County. Appropriate dedications / easement language to the benefit of Pinellas County is a condition of Final Plan Development approval. The stormwater handling system will be privately maintained by the Homeowners' Association. The road rights-of-way are currently proposed to be dedicated to the public. The roadways include stormwater infrastructure that will convey runoff to (are part of) the private stormwater management system. If the Board of Commissioners accepts the

- roadway dedication as proposed, staff recommends that condition number 1 above be fulfilled at the time of final plat to clearly delineate the coordination of and responsibility for maintenance of specific stormwater infrastructure components.
- 3. The Final Development Plan shall demonstrate a minimum open space area of 25% in accordance with the standards set forth in Section 78.01(D)(7) of the Land Development Code. <u>Analysis</u>: The open space standard in Section 78.01(D)(7) has been met and is demonstrated on the plans.
- 4. All permits and approvals including, but not limited to, those authorizing wetland and gopher tortoise impacts shall be required.
  - <u>Analysis</u>: The applicant has acknowledged the above and will present the applicable permits with the submittal of a building permit application. This is recommended as a condition of approval of the final planned development.
- A construction management plan to avoid potential listed species impacts as outlined in Environmental Considerations Report dated February 13, 2018 shall be required. <u>Analysis</u>: The applicant has included the construction management plan on the plan set.
- 6. Management and future maintenance plans for the wetlands and for the control of invasive species shall be required for Final Planned Development and Subdivision approval.

  Analysis: The applicant has provided the management/maintenance mechanism
- The developer is responsible for obtaining applicable permits from all other agencies and meeting the minimum requirements of the Comprehensive Zoning and Land Development Code.
  - <u>Analysis</u>: The applicant will obtain all final agency permits and submit those with the building permit.
- 8. The applicant shall complete the process for a Final Development Plan pursuant to Section 82.00 of the Land Development Code and Subdivision process pursuant to Article X of the Land Development Code, with all attendant easements and covenants.
  Analysis: The applicant has submitted the application for a Final Planned Development with nearly full construction plans, Homeowners' documents and all other final design documents required under Section 82.00.
- 9. The Final Development Plan shall be submitted within one year of the date of Preliminary Planned Development approval.
  - <u>Analysis</u>: The applicant submitted the application for a Final Planned Development on June 7, 2021. The applicant also filed a notice of extension of the application deadline pursuant to Section 252.363(1), Florida Statutes, providing for tolling of expiration dates based on the Governor's Declaration of State of Emergency due to the Coronavirus-2019.

#### PLANNED DEVELOPMENT REVIEW PROCEDURES & STANDARDS:

The Technical Review Committee (TRC) last reviewed this project at their regular meeting of July 1, 2021 and determined that the application was complete and ready for processing, subject to satisfying Engineer of Record review comments of the site construction plans. All other TRC comments were addressed with the most recent submittal.

Review criteria for Planned Developments are found in Section 79.00 of the LDC and are analyzed below:

#### **CONSISTENCY WITH THE COMPREHENSIVE PLAN:**

**Analysis**: The Preliminary Planned Development, as conditioned, was found to be consistent with the City's Comprehensive Plan. The applicant has submitted a Final Planned Development that substantially conforms to the approved preliminary plan and meets all conditions of the approval. The plan also meets all of the terms of the approved Development Agreement.

#### PHYSICAL CHARACTER OF THE SITE:

The Preliminary Planned Development was approved as being "suitable in location, area, and character for the uses and structures proposed." The Preliminary Planned Development was approved for a relatively large-lot subdivision situated in a relatively low-density area of the City. The Final Planned Development submitted by the applicant matches the approved plan and incorporates all of the features approved under the Preliminary Planned Development.

#### **ADEQUACY OF PUBLIC FACILITIES:**

The Final Planned Development is consistent with the approved facility impacts as outlined in the Preliminary Planned Development and provided in the table below.

Facility	Proposed Impacts	Facility	Proposed Impacts					
Potable	13,200 gallons per	Solid Waste:	1.3 tons per person					
Water:	day		per year					
Wastewater:	13,200 gallons per	Transportation:	44 peak hour trips					
wastewater.	day							

#### **RELATION TO MAJOR TRANSPORTATION FACILITIES:**

The project is not located near the "thoroughfare streets or mass transit facilities" referenced in this standard. This is a relative low-density (1 dwelling unit/acre) subdivision with a low peak hour trip generation rate. The traffic level is appropriate for the adjoining roadways.

#### **ENVIRONMENTAL DESIGN:**

The Final Planned Development carries out the approved environmental design of the approved Preliminary Planned Development including mitigation of wetland impacts on site, enhancement of existing wetlands on site, maintenance of site topography, and minimization of tree removal.

#### **ATTACHMENTS:**

- 1. Slide Show Presentation
- 2. Burgess & Niple review letter of Sept 10, 2021
- 3. Resolution 2021-50 with Final Development Plan attachment

#### Memorandum

#### **BURGESS & NIPLE**

10006 N. Dale Mabry Highway | Suite 201 | Tampa, FL 33618 | 813.962.8689

Date: September 10, 2021

To: Kim Yothers/Tony Mannello

City of Tarpon Springs

From: Charles T. Curtis

Subject: North Lakes Estates – Site Drainage Review

B&N Job Number: 59434

#### 1.0 Purpose:

The purpose of this memorandum is to review the plans, calculations, and documentation for the North Lake Estates project.

#### 2.0 Information reviewed:

The following items were reviewed in preparing this Technical Memorandum.

- Site Construction Plans, prepared by WRA Engineering, not dated, and provided by the City on September 10, 2021.
- Drainage Calculations, prepared by WRA Engineering, not dated, and provided by the City on September 10, 2021.
- Responses to Site Drainage Review, prepared by WRA Engineering, dated September 10, 2021, and provided by the City on September 10, 2021.
- Storm Tabulation Calculations, prepared by WRA Engineering, dated August 25, 2021, and provided by the City on September 8.
- Storm sewer basin map, prepared by WRA Engineering, not dated, and provided by the City on September 10.

This memorandum has been prepared to document findings and concurrence with applicable design standards as well as generally accepted engineering practices.

#### 3.0 Drainage Calculations Comments:

No comments.

#### 4.0 Construction Plan Comments:

No comments.

#### 5.0 General Comments:

5.1 Please note that any future changes to the storm sewer system will require a resubmittal of the storm tabs for review.

All previous drainage concerns have been addressed and we have no further comments. If you have any questions or need additional clarification, please feel free to contact me.

If you have any questions or need additional clarification, please feel free to contact me at **314-805-3972** or at <a href="mailto:charles.curtis@burgessniple.com">charles.curtis@burgessniple.com</a>.



September 9, 202 Kim Yothers/Tony Mannello Reference: North Lakes Estates

Page 2

Respectfully,

Charles Curtis
Drainage Reviewer



#### RESOLUTION NO. 2021-50

A RESOLUTION OF THE BOARD OF COMMISSIONERS OF THE CITY OF TARPON SPRINGS, FLORIDA, APPROVING APPLICATION 21-82 REQUESTING FINAL DEVELOPMENT APPROVAL **FOR PLAN** NORTH LAKE **ESTATES** RESIDENTIAL PLANNED DEVELOPMENT LOCATED ON THE NORTH SIDE OF KEYSTONE ROAD APPROXIMATELY 0.75 MILES FROM THE INTERSECTION OF KEYSTONE ROAD AND NORTH HIGHLAND AVENUE AND WEST OF EAST LAKE DRIVE, LYING IN SECTIONS 8 AND 9, TOWNSHIP 27 SOUTH, RANGE 16 EAST; PROVIDING FOR A CERTIFICATE OF CONCURRENCY; PROVIDING FOR CONDITIONS; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, GGR Holdings I, LLP (Applicant) has filed an application for Final Development Plan approval for the development of a 44-lot single family residential planned development and subdivision on 43.54 acres, M.O.L., of land located north of Keystone Road approximately 0.75 miles from the intersection of Keystone Road and North Highland Avenue and west of East Lake Drive in the Residential Planned Development zoning district; and,

**WHEREAS**, Annexation of the subject property was approved by the Board of Commissioners on December 10, 2019 with adoption of Ordinance 2019-23, and became effective on June 9, 2020; and,

**WHEREAS**, a Preliminary Planned Development including Future Land Use Amendment and Rezoning Amendment for the subject property was approved by the Board of Commissioners on June 9, 2020 with the adoption of Ordinance 2019-24 and Ordinance 2019-25.

# NOW, THEREFORE BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE CITY OF TARPON SPRINGS, FLORIDA:

#### **Section 1.** FINDINGS

- A. That the final plan, as conditioned, meets the requirements of applicable sections of the Land Development Code.
- B. That the final plan, as conditioned, is consistent with the Tarpon Springs Comprehensive Plan.
- C. That the final plan, as conditioned is consistent with the Preliminary Development Plan approved under Ordinance 2020-10 and Ordinance 2020-09.

D. That the final plan, as conditioned, has demonstrated that required facilities and services will be available at the prescribed level of service standards concurrent with the impact of the development and may during the term of this site plan approval receive a Certificate of Concurrency pursuant to Section 122.00, et. seq.

#### **Section 2.** FINAL DEVELOPMENT PLAN APPROVAL

The final plan for North Lake Estates on property described in Exhibit A and prepared by Joseph P. Cimino, P.E., sealed on Sept 13, 2021 (Exhibit B) is hereby approved subject to the dimensional standards, waivers and conditions of Section 3 of this Resolution.

#### **Section 3.** DIMENSIONAL STANDARDS, WAIVERS AND CONDITIONS

#### Dimensional Standards:

1.	Front yard setback	25 feet
2.	Front yard oriented to long axis of lo	t 20 feet
3.	Side yard setback	10 feet
4.	Side street setback	15 feet
5.	Rear yard setback	20 feet
6.	Driveway width (waiver)	1/3 of lot width, maximum 36 feet

#### Conditions:

- 1. The existing Preservation (P) Future Land Use Map (FLUM) category shall be revised to match the final existing wetlands plus created wetland mitigation area on site. The applicant shall supply electronic boundary coverage of this area to the City for mapping of the revised Preservation boundary.
- 2. For roadways dedicated to the public, the plat shall include sufficient assurances providing for the property maintenance of the stormwater system components in the right-of-way in coordination with privately-maintained components of the system. Such assurances shall be on the plat and/or in agreements prepared by the applicant to the satisfaction of the City.
- 3. The plat shall include appropriate dedications/easements to the satisfaction of Pinellas County for the access and maintenance of County utilities (water and sewer).
- 4. A recorded restrictive covenant shall be included on the final plat stating that accessory dwelling units are restricted to use by the owner/occupant of the primary dwelling on the same lot and shall not be separately addressed, shall not be rented, shall not include separate garages, and/or, shall not include separate meters for utilities of any kind. This language shall also be added to the final Homeowners' Association Declarations to ensure that property owners are aware of it.
- 5. All permits and approvals including, but not limited to, those authorizing wetland and gopher tortoise impacts shall be required to be submitted with the building

- permit application.
- 6. Tree mitigation may be further refined based on arborist's report to preserve additional trees if possible and to accommodate the removal of invasive exotics.
- 7. Participation in the City's Public Art Program if the total site construction costs exceed \$1,000,000.
- 8. Prior to any on-site construction an archaeological resource survey shall be conducted. A plan for appropriate mitigation for identified resources shall be submitted with the building permit application.
- 9. All Brazilian pepper (*Schinus terebinthifolius*) plants on site shall be eradicated and the entire development site shall be kept free of Brazilian pepper in perpetuity.
- 10. Individual home plans shall adhere to the dimensional standards approved with the Preliminary Planned Development for setbacks and driveways widths, as set forth in Resolution 2021-50, and shall otherwise conform to the regulations for Single Family Detached Dwellings in accordance with Section 78.01 of the Land Development Code.
- 11. All terms of the Development Agreement remain in affect and are applicable until such time as the agreement expires.
- 12. All remaining Engineer of Record (Burgess and Niple) review comments shall be addressed prior to approval of site construction permits by the City. Revised site construction permits shall be reviewed by Burgess and Niple and the developer shall re-imburse the City for all additional costs of review prior to site construction permits being released.

#### **Section 4.** EFFECTIVE DATE

This Resolution shall become effective upon adoption.

#### Resolution 2021-50. Exhibit A.

#### PROPOSED NORTH LAKE ESTATES

A PORTION OF THE SOUTHEAST % OF SECTION 5 AND A PORTION OF THE NORTHWEST % OF SECTION 9, TOWNSHIP 27 SOUTH, RANGE 16 EAST PINELLAS COUNTY FLORIDA; AND ALSO A PORTION OF TRACTS 1, 2, 3 AND THE VACATED 15 FOOT RIGHTS-OF-WAY LYING IN THE NORTHEAST % OF SECTION 8, TOWNSHIP 27 SOUTH, RANGE 16 EAST OF THE TAMPA AND TARPON SPRINGS LAND COMPANY SUBDIVISION AS SHOWN ON THE PLAT RECORDED IN PLAT BOOK 1, PAGE 116 OF THE PUBLIC RECORDS OF HILLSBROUGH COUNTY FLORIDA, OF WHICH PINELLAS COUNTY WAS FORMERLY A PART BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT A FOUND 4"X4" CONCRETE MONUMENT MARKED P.C.E.D. AT THE NORTHWEST CORNER OF SAID SECTION 9 FOR A POINT OF BEGINNING, SAID POINT ALSO BEING THE NORTHWEST CORNER OF THE PARCEL DESCRIBED IN OFFICIAL RECORDS BOOK 170020, PAGE 2653 OF SAID PUBLIC RECORDS; THENCE ALONG THE NORTH BOUNDARY LINE OF SAID PARCEL SOUTH 89°36'27" EAST, A DISTANCE OF 1,309,30 FEET TO A SET 5/8" IRON ROD AND CAP MARKED PRECISION SURVEYING LB 6734 AT THE NORTHEAST CORNER OF SAID PARCEL, SAID POINT ALSO BEING ON THE WEST RIGHT-OF-WAY LINE OF EAST LAKE ROAD: THENCE ALONG SAID WEST RIGHT-OF-WAY LINE SOUTH 01°05'11" EAST, A DISTANCE OF 659.07 FEET TO A FOUND 4"X4" CONCRETE MONUMENT WITH NO IDENTIFICATION; THENCE ALONG THE SOUTH BOUNDARY LINE OF SAID PARCEL NORTH 89°36'59" WEST, A DISTANCE OF 806.13 TO A FOUND 4"X4" CONCRETE MONUMENT WITH NO IDENTIFICATION; THENCE ALONG THE EAST BOUNDARY LINE OF SAID PARCEL THE FOLLOWING THREE (3) COURSES AND DISTANCES: (1) SOUTH 01°10'59" EAST, A DISTANCE OF 669.90 FEET TO A FOUND 5/8" IRON ROD AND CAP MARKED EBI LB 7652; (2) SOUTH 19°56°03" WEST, A DISTANCE OF 0.70 FOOT TO A FOUND 5/8" IRON ROD; (3) SOUTH 01°18'23" EAST, A DISTANCE OF 164.98 FEET TO A FOUND 3/2" IRON ROD AT THE SOUTHEAST CORNER OF SAID PARCEL; THENCE ALONG THE SOUTH BOUNDARY LINE OF SAID PARCEL NORTH 89°49'30" WEST, A DISTANCE OF 500.33 FEET TO A FOUND NAIL & DISK MARKED PSM 4123 AT THE SOUTHWEST CORNER OF SAID PARCEL, SAID POINT BEING ON THE WEST BOUNDARY LINE OF THE NORTHWEST 1/4 OF SAID SECTION 9, THE SAME BEING THE WEST BOUNDARY LINE OF SAID PARCEL; THENCE ALONG SAID WEST BOUNDARY LINE NORTH 01°15'04" WEST, A DISTANCE OF 916.52 FEET TO A SET 5/8" IRON ROD AND CAP MARKED PRECISION SURVEYING LB 6734 AT THE SOUTHEAST CORNER OF THE PARCEL DESCRIBED IN OFFICIAL RECORDS BOOK 20004, PAGE 0966 OF SAID PUBLIC RECORDS; THENCE ALONG THE SOUTH BOUNDARY LINE OF SAID PARCEL NORTH 89°52'10" WEST, A DISTANCE 921.61 FEET TO A FOUND 5/8" IRON ROD AT THE SOUTHWEST CORNER OF SAID PARCEL; THENCE ALONG THE WEST BOUNDARY LINE OF SAID PARCEL THE FOLLOWING TWO (2) COURSES AND DISTANCES: (1) NORTH 01°20'50" WEST, A DISTANCE OF 581.27 FEET TO A FOUND 3/4" OPEN PIPE; (2) NORTH 13°03'40" EAST, A DISTANCE OF 280.89 FEET TO A FOUND 1/2" IRON ROD AND CAP MARKED RLS 2512 AT THE NORTHWEST CORNER OF SAID PARCEL, THE SAME BEING ON THE SOUTH RIGHT-OF-WAY LINE OF HIGHLANDS BOULEVARD; THENCE ALONG SAID SOUTH RIGHT-OF-WAY LINE NORTH 72°03'01" EAST, A DISTANCE OF 197.03 FEET TO A SET 5/8" IRON ROD AND CAP MARKED PRECISION SURVEYING LB 6734; THENCE ALONG THE EASTERLY BOUNDARY LINE OF SAID PARCEL SOUTH 16°25'18"EAST, A DISTANCE OF 383.10 FEET TO A SET 5/8" IRON ROD AND CAP MARKED PRECISION SURVEYING LB 6734; THENCE ALONG THE NORTHERLY BOUNDARY LINE OF SAID PARCEL THE FOLLOWING FOUR (4) COURSES AND DISTANCES: (1) NORTH 72°23'14" EAST, A DISTANCE OF 302.63 FEFT TO A SET 5/8" IRON ROD AND CAP MARKED PRECISION SURVEYING LB 6734; (2) SOUTH 76°37'09" EAST, A DISTANCE OF 44.27 FEET TO A SET 5/8" IRON ROD AND CAP MARKED PRECISION SURVEYING LB 6734; (3) SOUTH 45°31'23" EAST, A DISTANCE OF 186.90 FEET TO A SET 5/8" IRON ROD AND CAP MARKED PRECISION SURVEYING LB 6734; (4) NORTH 71°27'27" EAST, A DISTANCE OF 104.97 TO A SET 5/8" IRON ROD AND CAP MARKED PRECISION SURVEYING LB 6734 AT THE NORTHEAST CORNER OF SAID PARCEL, SAID POINT BEING ON THE WEST BOUNDARY LINE OF THE NORTHWEST 1/2 OF SAID SECTION 9; THENCE

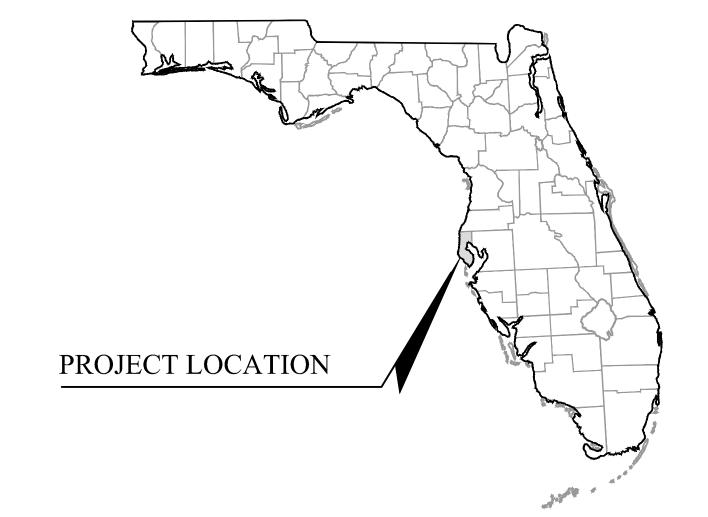
#### Resolution 2021-50. Exhibit A (continued)

ALONG SAID WEST BOUNDARY LINE, NORTH 01°15'04" WEST, A DISTANCE OF 46.22 FEET TO THE POINT OF BEGINNING.

THE ABOVE DESCRIBED PARCEL CONTAINS 43.54 ACRES MORE OR LESS.

(CLOSES 0.004' J.M.M.)

# CONSTRUCTION PLANS FOR NORTH LAKES ESTATES



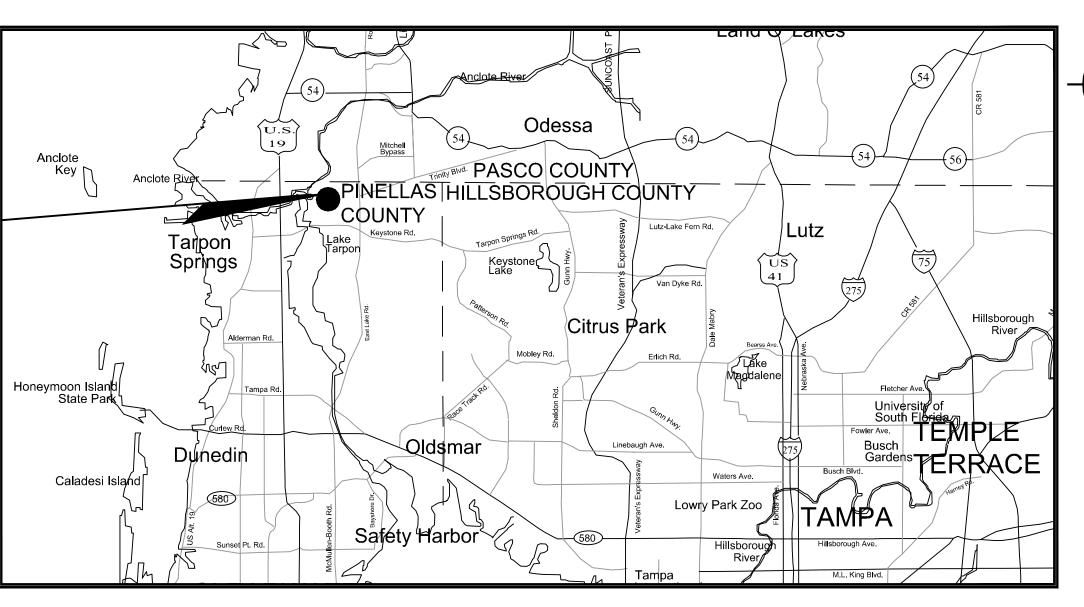
**PROJECT** 

LOCATION

PINELLAS COUNTY, FLORIDA PARCEL ID: 09-27-16-00000-220-0100

# PREPARED FOR

G G R HOLDINGS I LLP 46 W LEMON ST TARPON SPRINGS FL 34689



et Number	Sheet Title
001	COVER SHEET
002	GENERAL CONSTRUCTION NOTES
100	EXISTING CONDITIONS SHEET
101	TREE REMOVAL TABLE & CALCULATIONS
102	EROSION CONTROL PLAN
103	EROSION CONTROL DETAILS
150	PRELIMINARY PLAT
200	OVERALL SITE PLAN
201	SITE LAYOUT, SIGNAGE & MARKING PLAN
202	SITE LAYOUT, SIGNAGE & MARKING PLAN
203	SITE LAYOUT, SIGNAGE & MARKING PLAN
204	SITE LAYOUT, SIGNAGE & MARKING PLAN
205	TYPICAL ROADWAY SECTIONS
206	SITE DETAILS
300	OVERALL GRADING AND DRAINAGE PLAN
301	GRADING AND DRAINAGE PLAN
302	GRADING AND DRAINAGE PLAN
303	GRADING AND DRAINAGE PLAN
304	GRADING AND DRAINAGE PLAN
305	SECTIONS
306	DRAINAGE DETAILS
307	WETLAND MITIGATION PLAN
400	OVERALL UTILITY PLAN
401	UTILITY PLAN
402	UTILITY PLAN
403	UTILITY PLAN
404	UTILITY PLAN
405	PLAN AND PROFILE
406	PLAN AND PROFILE
407	PLAN AND PROFILE
408	UTLITY DETAILS
409	UTILITY DETAILS
410	LIFT STATION DETAILS
L-101	LANDSCAPE PLAN
L-102	LANDSCAPE DETAILS

VICINITY MAP

# PREPARED BY



Engineering ~ Environmental Water Resource ~ Survey

4260 W. Linebaugh Ave. 7978 Cooper Creek Blvd. University Park, Florida 34201

www.wraengineering.com CA 00007652 LB 8274 Phone: 813.265.3130 941.275.9721 **ENGINEER'S CERTIFICATION** 

I HEREBY CERTIFY THAT THE DESIGN OF THIS PROJECT, AS PREPARED UNDER MY PERSONAL DIRECTION AND CONTROL, COMPLIES WITH ALL APPLICABLE STANDARDS, INCLUDING THE "MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS" AS ADOPTED BY THE FLORIDA DEPARTMENT OF TRANSPORTATION PURSUANT TO 334.044(10)(a) AND 336.045, FLORIDA STATUTE.

SUNSHINE STATE ONE CALL OF FLORIDA, INC.

CALL 48 HOURS BEFORE YOU DIG

IT'S THE LAW!

Datum: NAVD 88

001

A. TARPON SPRINGS LAND DEVELOPMENT CODE (JAN 31, 2012).

B. CURRENT WATER AND WASTEWATER STANDARDS OF TARPON SPRINGS. THE WATER AND WASTEWATER SYSTEMS SHALL BE DEDICATED TO TARPON SPRINGS FOR OWNERSHIP AND MAINTENANCE. C. THE STORMWATER DRAINAGE COLLECTION SYSTEM AND PROPOSED ROADWAY SHALL MEET TARPON SPRINGS CURRENT SPECIFICATION FOR DESIGN. WHERE INDICATED ON THE PLANS, THE RIGHT-OF-WAY SHALL BE DEDICATED TO THE COUNTY FOR OWNERSHIP AND MAINTENANCE. ACCORDINGLY, THE ABOVE DOCUMENTS SHALL BE THE TECHNICAL SPECIFICATIONS FOR THE CONSTRUCTION OF THIS THE CONTRACTOR SHALL OBTAIN AND FULLY FAMILIARIZE HIMSELF WITH THE CONTENTS OF SPECIFICATIONS. IN THE EVENT THAT A DISCREPANCY OCCURS BETWEEN THESE PLANS AND AFOREMENTIONED SPECIFICATIONS, THE SPECIFICATIONS SHALL TAKE PRECEDENCE. UNLESS OTHERWISE DIRECTED BY THE ENGINEER IN WRITING. THE CONTRACTOR SHALL HAVE A SET OF THESE PLANS MARKED "APPROVED FOR CONSTRUCTION" ALONG WITH A COPY OF ALL THE DOCUMENTS NOTED ABOVE ON THE PROJECT SITE AT ALL

2. ALL SUBSURFACE CONSTRUCTION SHALL COMPLY WITH THE "TRENCH SAFETY ACT". IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO INSURE THAT ALL CONSTRUCTION IS IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS.

PRIOR TO CONSTRUCTION COMMENCEMENT. THE CONTRACTOR SHALL OBTAIN FROM THE ENGINEER AND/OR THE DEVELOPER COPIES OF ALL PERTINENT PERMITS AND APPROVALS RELATED TO THIS PROJECT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROPERLY POST ALL PERMITS. ON-SITE AND TO ASSURE ALL CONSTRUCTION ACTIVITIES ARE IN COMPLIANCE WITH THE CONDITIONS OF ALL PERMITS AND APPROVALS. I. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UTILITIES WHETHER OR NOT THEY ARE INDICATED ON THESE PLANS AND SHALL NOTIFY ALL UTILITY OWNERS A MINIMUM OF 48 HOURS IN ADVANCE OF CONSTRUCTION COMMENCEMENT. THE CONTRACTOR SHALL NOTIFY AND COORDINATE WITH ALL UTILITY COMPANIES AND GOVERNING AGENCY NECESSARY FOR CONSTRUCTION OF THE PROJECT, INCLUDING BUT NOT LIMITED TO TARPON SPRINGS UTILITIES, DUKE ENERGY, BRIGHTHOUSE NETWORKS. CALL SUNSHINE ONE (1-800-432-4770) PRIOR TO ANY EXCAVATION

5. THE CONTRACTOR SHALL ASSURE AND BE RESPONSIBLE FOR THE PROPER PLACEMENT AND MAINTENANCE OF ALL TRAFFIC CONTROL DEVICES REQUIRED FOR THE CONSTRUCTION OF THIS PROJECT. . THE CONTRACTOR SHALL ASSURE AND BE RESPONSIBLE FOR THE PROPER PLACEMENT OF TREI

BARRICADES PRIOR TO COMMENCING CONSTRUCTION AND SHALL MAINTAIN THE TREE BARRICADES THROUGH-OUT THE DURATION OF CONSTRUCTION. TREE BARRICADES SHALL BE PLACED IN ACCORDANCE WITH TARPON SPRINGS REQUIREMENTS AND THE SITE SPECIFIC PERMIT ISSUED BY THE COUNTY DURING LAND ALTERATION AND CONSTRUCTION ACTIVITIES, IT SHALL BE UNLAWFUL TO REMOVE VEGETATION BY GRUBBING OR TO PLACE SOIL DEPOSITS, DEBRIS, SOLVENTS, CONSTRUCTION MATERIAL, MACHINERY OR OTHER EQUIPMENT OF ANY KIND WITHIN THE DRIPLINE OF TREES TO REMAIN ON THE SITE

UNLESS OTHERWISE APPROVED BY TARPON SPRINGS.  ${f s}$  . AREAS DISTURBED BY THE CONTRACTOR OUTSIDE OF THE CONSTRUCTION SITE SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN THE PRE-CONSTRUCTION CONDITION: THIS INCLUDES LANDS

OWNED BY THE DEVELOPER ). THE CONTRACTOR SHALL TAKE ALL REASONABLE MEASURES TO GUARD AGAINST FUGITIVE DUST DURING

10. ALL PRACTICAL AND NECESSARY EFFORTS SHALL BE TAKEN DURING CONSTRUCTION TO CONTROL AND PREVENT EROSION AND TRANSPORT OF SEDIMENT TO SURFACE DRAINS, SURFACE WATERS OR ONTO ADJACENT PROPERTIES. THESE EFFORTS SHALL INCLUDE THE PLACEMENT AND MAINTENANCE OF SILT SCREENS AS INDICATED ON THESE PLANS AND/OR AS REQUIRED BY CONSTRUCTION PERMITS AND APPROVALS. RE-VEGETATION AND STABILIZATION OF DISTURBED GROUND SURFACES SHALL BE ACCOMPLISHED AS RAPIDLY AS POSSIBLE TO PREVENT EROSION FROM OCCURRING AND TO REDUCE SEDIMENTATION IN RUN-OFF

1. THE CONTRACTOR SHALL NOT UNDERTAKE ANY WORK HE FEELS WILL CONSTITUTE A CHANGE ORDER WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER AND THE DEVELOPER 12. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER, FOR HIS REVIEW, ALL SHOP DRAWINGS A MINIMUM OF

SEVEN (7) WORKING DAYS IN ADVANCE OF THE CONTRACTOR'S NEED FOR SAME. 13. ALL EXISTING WELLS TO BE ABANDONED SHALL BE PROPERLY ABANDONED BY A LICENSED WATER WELL CONTRACTOR IN ACCORDANCE WITH SWFWMD RULES 40D-3 AND 17-21.10(4) F.A.C.

14. PRIOR TO BIDDING, CONTRACTOR SHALL VERIFY THE TOPOGRAPHICAL INFORMATION AS SHOWN ON THE CONSTRUCTION DRAWINGS AND ACCEPT THE SITE (ACCURATE TO 0.5 FEET OF THE CONTOUR INTERVAL AND 0.2 FEET OVERALL) AS REPRESENTED. COMMENCEMENT OF SITE IMPROVEMENTS SHALL BE INTERPRETED AS ACCEPTANCE BY CONTRACTOR OF ALL REPRESENTATIONS IN CONTRACT DOCUMENTS. 15. CONTRACTOR SHALL PERFORM ALL CLEARING AND GRUBBING OPERATIONS IN ACCORDANCE WITH STANDARD CONSTRUCTION PROCEDURES AS REQUIRED TO CONSTRUCT ALL FACILITIES SHOWN ON THE

CONSTRUCTION DRAWINGS 16. ALL UNSUITABLE MATERIAL SHALL BE REMOVED BY CONTRACTOR FROM STRUCTURAL AREAS AND PLACED ON SITE IN NON STRUCTURAL AREAS OR AS SPECIFIED BY THE DEVELOPER. ALL EXCESS FILL MATERIAL EXCAVATED FROM THE SITE SHALL BE STOCKPILED ON SITE AS DIRECTED BY THE DEVELOPER AND SHALL RFMAIN THE PROPERTY OF THE DEVELOPER.

17. THE DEVELOPER SHALL PROVIDE 2 BENCH MARKS AND A COORDINATE CONTROL SHEET FROM THE ENGINEER FOR THE CONTRACTOR'S USE. ALL FIELD SURVEY LAYOUT FOR THE FACILITIES SHOWN ON THE CONSTRUCTION DRAWINGS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL MAINTAIN A SET OF FIELD "AS BUILTS" FOR ALL IMPROVEMENTS NOTING ANY FIELD ADJUSTMENTS THE "AS BUILT" SHALL ALSO INCLUDE LOT, POND AND MITIGATION AREA GRADING. PRIOR TO FINAL PAYMENT, THE CONTRACTOR SHALL BE RESPONSIBLE TO SUBMIT A CERTIFIED SET OF "AS BUILTS" TO THE ENGINEER. EACH SHEET OF THE PLANS SHALL BE SIGNED, SEALED AND DATED BY A PROFESSIONAL LAND SURVEYOR LICENSED TO PERFORM LAND SURVEYING SERVICES IN THE STATE OF FLORIDA. THE ENGINEER SHALL REVIEW THE "AS BUILTS" AND CONVERT THEM INTO RECORD DRAWINGS

8. CONTRACTOR TO CONSTRUCT ALL BUILDING PADS IN A LINEAR GRADING FASHION AS SHOWN ON THE CONSTRUCTION DRAWINGS. ALL BUILDINGS SHALL BE COMPACTED TO 95% OF THE MODIFIED PROCTOR VALUE (ASTM D-1557). AS PART OF THE AS BUILTS REQUIREMENTS UNDER #18 (ABOVE), THE CONTRACTOR SHALL ALSO AS BUILT THE BUILDING PADS AS SHOWN ON THE CONSTRUCTION DRAWINGS.

IF ALLOWED, CONTRACTOR TO OBTAIN ALL REQUIRED PERMITS FOR BURNING ON SITE. 20. DEVELOPER SHALL PROVIDE SOILS AND MATERIALS TESTING SERVICES FROM A LICENSED GEOTECHNICAL ENGINEER AT HIS OWN EXPENSE. CONTRACTOR SHALL COOPERATE WITH THE OWNER'S GEOTECHNICAL ENGINEER AND SHALL NOTIFY THE GEOTECHNICAL ENGINEER AT LEAST 24 HOURS PRIOR TO ANY TESTING REQUIRED BY THE DEVELOPER, GOVERNMENTAL AGENCY OR AS RECOMMENDED BY GEOTECHNICAL ENGINEER. IF A FAILURE IN ANY OF THE CONTRACTOR'S ACTIVITIES RELATED TO SOILS OR MATERIALS ESTING OCCURS, THE CONTRACTOR SHALL IMMEDIATELY REMEDY THE FAILURE AT HIS EXPENSE AND RE-SCHEDULE THE RE-TESTING AS NECESSARY. ALL RE-TESTING FEES FROM THE GEOTECHNICAL ENGINEER RESULTING FROM THE AFORESAID FAILURES SHALL BE AT THE CONTRACTOR'S EXPENSE.

21. WORK PERFORMED BY THE CONTRACTOR SHALL INTERFACE SMOOTHLY WITH OTHER WORK BEING PERFORMED ON SITE OR ADJACENT TO THE SITE BY OTHER CONTRACTORS AND UTILITY COMPANIES. IT WILL BE NECESSARY FOR THE CONTRACTOR TO COORDINATE AND SCHEDULE HIS ACTIVITIES, WHERE NECESSARY, WITH OTHER CONTRACTORS AND UTILITY COMPANIES, INCLUDING BUT NOT LIMITED TO TECO, WREC & VERIZON

22. OVERALL CLEAN-UP SHALL BE ACCOMPLISHED BY THE CONTRACTOR IN ACCORDANCE WITH PASCO COUNTY STANDARDS OR AS DIRECTED BY THE ENGINEER AND OWNER

23. THE CONTRACTOR SHALL PROTECT AND MAINTAIN ACCESS TO PRIVATE PROPERTY. ANY DAMAGE CAUSED BY THE CONTRACTOR IN THE PERFORMANCE OF HIS WORK SHALL BE CORRECTED TO THE SATISFACTION OF THE ENGINEER AND THE OWNER AT THE CONTRACTOR'S EXPENSE. 24. ANY DAMAGE TO STATE, COUNTY, OR LOCAL ROADS CAUSED BY THE CONTRACTOR'S HAULING OR EXCAVATION EQUIPMENT SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE

ENGINEER, THE OWNER, AND THE APPLICABLE GOVERNMENTAL AGENCY 25. ANY U.S.C. & G.S. MONUMENT WITHIN LIMITS OF CONSTRUCTION IS TO BE PROTECTED BY THE

26. GATED ENTRIES REQUIRE SIREN OPENING SYSTEM, (SOS), OR 3M OPTICOM SYSTEM FOR EMERGENCY 27. PRIOR TO THE START OF THE CLEARING AND GRUBBING, OR ANY SOIL DISTURBANCE CONTACT PC STORMWATER MGMT. AT (727) 834-3611 FOR A SOIL EROSION AND SEDIMENT CONTROL, PRE-INSPECTION

CONSTRUCTION SEQUENCE & MAINTENANCE SCHEDULE OF EROSION CONTROL SEE BMP PLAN FOR SILT SCREEN BARRIER DETAILS & NOTES.

ALL EROSION CONTROL DEVICES AS INDICATED ON THESE PLANS SHALL BE INSTALLED PRIOR TO THE

START OF ANY CONSTRUCTION. DAILY INSPECTION OF THE EROSION CONTROL WILL BE REQUIRED BY THE CONTRACTOR. ANY DISTURBANCE OF THESE DEVICES SHALL BE REPAIRED IMMEDIATELY

SILTATION ACCUMULATIONS GREATER THAN THE LESSER OF 12 INCHES OR ONE HALF THE DEPTH OF THE SILTATION CONTROL BARRIER SHALL BE IMMEDIATELY REMOVED AND PLACED IN UPLAND AREAS. JURISDICTIONAL LINES SHALL BE MARKED IN THE FIELD FOR IDENTIFICATION AND LIMITS OF

CONSTRUCTION MAINTENANCE OF ALL EROSION CONTROL DEVICES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR

FOR THE LIFE OF THE PROJECT OR UNTIL APPROVED FOR REMOVAL BY THE ENGINEER. SEE NOTE 9 &10 OF THE GENERAL NOTES THIS DWG.

THE CONTRACTOR IS RESPONSIBLE FOR SITE CONDITIONS FROM THE DATE OF NOTICE TO PROCEED, UNTIL THE PROJECT IS ACCEPTED BY THE OWNER, ENGINEER AND TARPON SPRINGS. ACCORDINGLY, THE CONTRACTOR SHALL TAKE ALL NECESSARY STEPS TO CONTROL FUGITIVE DUST AND EROSION. PROTECTION FROM EROSION INTO EXISTING WETLANDS, DRAINAGE WAYS, CONSERVATION AREAS, NATURAL AREAS AND OFFSITE AREAS, AS WELL AS NEWLY CONSTRUCTED ROADWAYS, STORMWATER FACILITIES AND MITIGATION AREAS, IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL MANAGE HIS WORK SO AS TO PREVENT EROSION. THIS MAY REQUIRE ADDITIONAL MEASURES FROM THOSE SHOWN ON THE CONSTRUCTION PLANS, SUCH AS WINDROWS, DIVERSION SWALES, SEED & MULCH, STAKED HAY BALES, OR OTHER EROSION CONTROL MEASURES NECESSARY TO REACT TO VARYING SITE CONDITIONS OR INCLEMENT WEATHER. IF EROSION OCCURS, THE CONTRACTOR SHALL IMMEDIATELY REMEDY THE DAMAGE CAUSED BY SUCH EROSION BY CONTROLLED REMOVAL OF SEDIMENTS, REPLANTING IF NECESSARY AND RE-ESTABLISHMENT OF EROSION PROTECTION DEVICES, AT THE CONTRACTOR'S SOLE EXPENSE.

HISTORICAL PRESERVATION NOTE

IF DURING CONSTRUCTION ACTIVITIES, ANY EVIDENCE OF HISTORIC RESOURCES, INCLUDING BUT NOT LIMITED TO ABORIGINAL OR HISTORIC POTTERY, PREHISTORIC STONE TOOLS, BONE OR SHELL TOOLS, HISTORIC TRASH PITS, OR HISTORIC POTTERY, FOUNDATION, ARE DISCOVERED, WORK SHALL COME TO AN IMMEDIATE STOP AND THE FLORIDA DEPARTMENT OF HISTORIC RESOURCES (STATE HISTORIC PRESERVATION OFFICER) AND TARPON SPRINGS SHALL BE NOTIFIED WITHIN TWO WORKING DAYS OF THE RESOURCES FOUND ON THE SITE.

IF DURING CONSTRUCTION ACTIVITIES, ANY EVIDENCE OF THE PRESENCE OF STATE AND/OR FEDERALLY PROTECTED PLANT AND/OR ANIMAL SPECIES IS DISCOVERED, TARPON SPRINGS AND APPLICABLE AGENCIES SHALL BE NOTIFIED WITHIN TWO WORKING DAYS OF THE PLANT AND/OR ANIMAL SPECIES FOUND ON THE SITE. ALL WORK IN THE EFFECTED AREA SHALL COME TO AN IMMEDIATE STOP UNTIL ALL PERTINENT PERMITS HAVE BEEN OBTAINED, AGENCY WRITTEN AUTHORIZATION TO COMMENCE ACTIVITIES HAS BEEN GIVEN, OR UNLESS COMPLIANCE WITH STATE AND FEDERAL GUIDELINES CAN BE DEMONSTRATED.

#### **OPERATION/MAINTENANCE SCHEDULE**

THE DEVELOPER OR HIS ASSIGNS SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE DETENTION AREA AND SUBSURFACE DRAINAGE SYSTEM. THIS WILL REQUIRE INSPECTION, ON AT LEAST AN ANNUAL BASES, OF THE ON-SITE DRAINAGE SYSTEM. INCLUDING BUT NOT LIMITED TO, INLETS, STORM MANHOLES, DETENTION AREAS, AND CONTROL STRUCTURES, MAKING SURE THAT THE SYSTEM IS FREE FROM EXCESS SILT, DEBRIS AND SEDIMENTATION BUILD-UP. THIS MAY REQUIRE PERIODIC FLUSHING OF THE SUBSURFACE DRAINAGE SYSTEM, CUTTING AND REMOVAL OF VEGETATION FROM AND AROUND STRUCTURES, AND REMOVAL OF ACCUMULATED SEDIMENTS FROM THE BOTTOM OF THE DETENTION AREAS AND STRUCTURES AS NEEDED TO MAINTAIN THE VIABILITY OF THE ORIGINAL DESIGN INTENT. THE DESIGNATED LITTORAL ZONE SHALL BE MAINTAINED AS A FUNCTIONAL BIOLOGICAL FILTRATION AREA (I.E. VEGETATED ZONE) AND SHALL NOT BE LESS

#### **GENERAL MAINTENANCE**

1. ALL STORM WATER PIPES, INLETS, CATCH BASINS, MANHOLES, FLUMES, POND INFLOW AND OUTFALL STRUCTURES (INCLUDING OIL SKIMMERS), AND DISCHARGE PIPES SHOULD BE INSPECTED ON A REGULAR BASIS (MONTHLY OR QUARTERLY) AND AFTER MAJOR RAINFALLS. THEY SHOULD BE MAINTAINED BY REMOVING BUILT-UP DEBRIS AND VEGETATION AND REPAIRING DETERIORATING STRUCTURES.

CHEMICALS, OILS, GREASES, OR SIMILAR WASTES ARE NOT TO BE DISPOSED OF DIRECTLY TO THE STORMWATER FACILITY OR THROUGH STORM SEWERS. TREATMENT PONDS ARE DESIGNED TO TREAT NORMAL ROAD, PARKING LOT, ROOF AND YARD RUNOFF ONLY. SOME CHEMICALS MAY INTERFERE WITH A TREATMENT POND'S FUNCTIONS OR KILL VEGETATION AND WILDLIFE. DISPOSE OF THESE POTENTIALLY DANGEROUS MATERIALS PROPERLY BY TAKING THEM TO RECYCLING FACILITIES OR TO LOCAL "AMNESTY DAYS" SPONSORED BY MANY LOCAL GOVERNMENTS. ALSO, DO NOT DISPOSE OF GRASS CLIPPINGS IN SWMS. GRASS CLIPPINGS POSE PROBLEMS BY SMOTHERING DESIRABLE VEGETATION, CLOGGING OUTFALL STRUCTURES, AND WHEN THEY DECOMPOSE, MAY CAUSE UNSIGHTLY ALGAE BLOOMS THAT CAN

. ACCUMULATED POND SEDIMENTS MAY CONTAIN HEAVY METALS SUCH AS LEAD, CADMIUM AND MERCURY, AS WELL AS OTHER POTENTIALLY HAZARDOUS MATERIALS. THEREFORE, SEDIMENTS REMOVED FROM STORM SEWERS, INLETS, PIPES AND PONDS SHOULD BE DISPOSED OF AT AN APPROVED FACILITY (CHECK WITH THE COUNTY SOLID WASTE DEPARTMENT OR THE FLORIDA DEPARTMENT OF ENVIRONMENTAL

PROTECTION FOR DISPOSAL FACILITIES APPROVED TO ACCEPT TREATMENT POND SEDIMENT). 4. DURING ANY REPAIR OR MAINTENANCE ACTIVITY USE CARE TO AVOID CAUSING EROSION OR SILTATION TO

5. REMEMBER, ALTERATIONS (FILLING, ENLARGING, ETC.) OF ANY PART OF THE STORMWATER FACILITY IS NOT PERMITTED WITHOUT PRIOR APPROVAL FROM ALL APPLICABLE GOVERNING AGENCIES. 6. THE APPROVED OPERATION AND MAINTENANCE PERMIT AND AS-BUILT DRAWINGS ARE AVAILABLE AT YOUR

LOCAL DISTRICT SERVICE OFFICE. REFER TO THOSE PLANS AND PERMITS FOR ADDITIONAL RESTRICTIONS, INSTRUCTIONS AND CONDITIONS. 7. IT IS USUALLY MORE COST EFFECTIVE TO MONITOR AND PERFORM ROUTINE MAINTENANCE ON A SWMS, RATHER THAN LET IT FAIL AND HAVE TO RECONSTRUCT THE ENTIRE SYSTEM.

MOSQUITO GROWTH CAN BE MINIMIZED IN A SWMS BY THE FOLLOWING MEASURES A. DO NOT DUMP GRASS CLIPPINGS OR OTHER ORGANIC DEBRIS INTO SWMS - DECAYING GRASS CLIPPINGS AND OTHER DECOMPOSING VEGETATION CREATE IDEAL CONDITIONS FOR BREEDING MOSQUITOS. B. CLEAN OUT ANY OBSTRUCTIONS WHICH GET INTO THE SYSTEM. DEBRIS CAN OBSTRUCT FLOW AND

HARBOR MOSQUITO EGGS AND LARVAE. C. REMOVE WATER LETTUCE AND WATER HYACINTH, WHICH NOURISH AND SHELTER MOSQUITO LARVAE. D. STOCK PONDS WITH PREDATORY "MOSQUITOFISH"- GAMBUSIA MINNOWS

#### WET DETENTION POND MAINTENANCE

ADJACENT OR OFF-SITE AREAS.

ALL SODDED SIDE SLOPES AND BERMS SHOULD BE MAINTAINED BY THE PROCEDURE OUTLINED FOR DITCHES AND SWALES. INFLOW STRUCTURES SHOULD BE MAINTAINED BY THE PROCEDURES OUTLINED UNDER "GENERAL MAINTENANCE" MAINTAIN, RATHER THAN REMOVE, WETLAND VEGETATION THAT BECOMES ESTABLISHED IN THE LITTORAL

ZONE. DO NOT CUT, MOW, USE HERBICIDE OR GRASS CARP TO REMOVE ANY OF THE VEGETATION IN THE LITTORAL ZONE WITHOUT PRIOR APPROVAL FROM THE DISTRICT. REFER TO THE CONDITIONS OF THE PERMIT AND CONSTRUCTION NOTES OF ANY FURTHER INSTRUCTIONS.

3. WHEN WET DETENTION POND LITTORAL ZONES ARE INTENTIONALLY PLANTED FOR AESTHETIC PURPOSES OR TO OFFSET WETLANDS IMPACTS, REMOVAL OF WEEDY OR EXOTIC VEGETATION MAY BE REQUIRED AND ACCOMPANIED BY REPLANTING OF DESIRABLE VEGETATION. CHECK WITH THE LOCAL DISTRICT SERVICE OFFICE TO DETERMINE SPECIFIC REQUIREMENTS 4. ON A MONTHLY OR QUARTERLY BASIS AND AFTER SEVERE RAINFALL EVENTS, CHECK THE AREA IN FRONT

OF THE OUTFALL CONTROL STRUCTURE FOR BUILT-UP SEDIMENTS AND VEGETATION THAT IMPAIR THE

OPERATION OF THE STRUCTURE. REMOVE SEDIMENT AND VEGETATION TO AN APPROVED DISPOSAL SITE. WHEN LITTORAL ZONE VEGETATION AND SEDIMENT ACCUMULATE TO SUCH AN EXTENT THAT WATER DEPTH DECREASES, THE LITTORAL ZONE MAY NEED TO BE REGRADED AND REVEGETATED. WHEN IT APPEARS THAT A POND HAS REACHED THIS STATE, IT IS BEST TO CONTACT A DISTRICT REPRESENTATIVE PRIOR TO LARGE SCALE MAINTENANCE.

SOME MSSW AND ERP PERMITS REQUIRE THAT THE VEGETATION IN SOME DITCHES BE PROTECTED TO OFFSET WETLAND IMPACTS PERMITTED DURING CONSTRUCTION OR FOR WATER QUALITY TREATMENT. THE PERMIT OR APPROVED CONSTRUCTION SHOULD CLEARLY IDENTIFY WHICH DITCH VEGETATION MUST BE PRESERVED. IF YOU'RE UNSURE, CONTACT THE LOCAL DISTRICT SERVICE OFFICE. IF VEGETATION IS NOT REQUIRED TO BE PROTECTED, DITCHES AND SWALES SHOULD BE PERIODICALLY MOWED AND CLEANED OF ACCUMULATED REFUSE. DURING THE MOWING OPERATIONS. DITCHES AND SWALES SHOULD BE INSPECTED FOR BARE SPOTS DAMAGE OR EROSION. BARE AREAS SHOULD BE SODDED OR SEEDED TO REPLACE THE GRASS COVER. IN THE CASE OF EROSION, REPLACE THE MISSING SOILS AND BRING THE AREA BACK TO GRADE. SOME DITCHES ARE DESIGNED TO STORE RUNOFF FOR SHORT PERIODS OF TIME UTILIZING DITCH BLOCKS OR RAISED INLETS. THESE DITCH BLOCKS OR INLETS SHOULD NOT BE REMOVED OR ALTERED. IF YOU ARE UNABLE TO IDENTIFY WHAT TYPE OF TREATMENT METHOD SERVES YOUR DEVELOPMENT, CONTACT THE DISTRICT SERVICE OFFICE.

HOW TO OPERATE AND MAINTAIN THE STORMWATER MANAGEMENT SYSTEI

YOUR STORMWATER MANAGEMENT SYSTEM (SWMS) IS DESIGNED AND CONSTRUCTED TO COMPLY WITH CERTAIN ENVIRONMENTAL PROTECTION CRITERIA. STORMWATER PONDS AND THEIR ASSOCIATED SURFACE WATER MANAGEMENT FACILITIES ARE DESIGNED TO CAPTURE AND REMOVE POLLUTANTS FROM SPECIFIC VOLUMES OF STORMWATER RUNOFF THROUGH PROCESSES SUCH AS PERCOLATION. FILTERING AND/OR DETENTION. AS LONG AS THEY ARE CONSTRUCTED PROPERLY AND MAINTAINED IN AN EFFECTIVE STATE, WATER QUALITY STANDARDS ARE PRESUMED TO BE MET. STORMWATER MANAGEMENT SYSTEMS SHOULD BE INSPECTED ON A ROUTINE BASIS TO ENSURE THAT THEY ARE FUNCTIONING PROPERLY. INSPECTIONS SHOULD BE SCHEDULED ON A MONTHLY OR QUARTERLY BASIS AND FOLLOWING ANY MAJOR RAIN EVENT MORE FREQUENT INSPECTIONS MAY BE NECESSARY DURING THE RAINY SEASON. KEEPING DETAILED NOTES ON MAINTENANCE ACTIVITIES WILL HELP WHEN PROVIDING A REPORT TO THE DISTRICT AT THE TIME OF YOUR 18 OR 24 MONTH INSPECTION. YOUR MANAGEMENT AND STORAGE OF SURFACE WATERS (MSSW) PERMIT OR ENVIRONMENTAL RESOURCES PERMIT (ERP) INCLUDES A CONDITION THAT SPECIFIES HOW OFTEN THE INSPECTION REPORTS ARE DUE. IT WOULD BE WISE TO DESIGNATE ONE INDIVIDUAL AS THE PERSON RESPONSIBLE FOR OVERSEEING OPERATION AND MAINTENANCE ACTIVITIES. MONITORING AND REPORTING. THIS WILL ALLOW THAT INDIVIDUAL TO BECOME WELL-ACQUAINTED WITH THE SWMS. A COPY OF THE PERMIT AND DISTRICT-APPROVED CONSTRUCTION DRAWINGS SHOULD BE MADE AVAILABLE TO THE RESPONSIBLE PERSON IF QUESTIONS OR ISSUES DEVELOP.

 STANDARD INDICES REFER TO THE LATEST EDITION OF TARPON SPRINGS & FDOT SPECIFICATIONS. 2. ALL STORM SEWER PIPE SHALL BE REINFORCED CONCRETE CLASS III (ASTM 6-76-72A) UNLESS OTHERWISE NOTED ON PLANS. ALL DRAINAGE STRUCTURES SHALL BE IN ACCORDANCE WITH TARPON SPRINGS AND

FDOT DESIGN STANDARDS UNLESS OTHERWISE NOTED ON PLANS. 3. PIPE LENGTHS SHOWN ARE APPROXIMATE AND TO CENTER OF DRAINAGE STRUCTURE WITH THE EXCEPTION OF MITERED AND FLARED END SECTIONS, WHICH ARE NOT INCLUDED IN LENGTHS.

4. ALL DRAINAGE STRUCTURE TOPS AND COVERS SHALL BE TRAFFIC RATED FOR H-20 LOADINGS. 5. ALL STORM DRAINAGE PIPING SHALL BE SUBJECT TO A VISUAL INSPECTION BY THE OWNER'S ENGINEER

TO SCHEDULE INSPECTION 6. THE CONTRACTOR SHALL MAINTAIN AND PROTECT FROM MUD, DIRT, DEBRIS, ETC. THE STORM DRAINAGE SYSTEM UNTIL FINAL ACCEPTANCE OF THE PROJECT. THE CONTRACTOR MAY BE REQUIRED TO CLEAN PIPES AND INLETS PRIOR TO FINAL ACCEPTANCE.

PRIOR TO THE PLACEMENT OF BACKFILL. CONTRACTOR TO NOTIFY THE ENGINEER 48 HOURS IN ADVANCE

#### National Pollution Discharge Elimination System (NPDES) Requirements

THE ENGINEER WILL COMPLETE APPROPRIATE SECTIONS OF THE NOTICE OF INTENT (NOI) AND NOTICE OF TERMINATION (NOT) APPLICATIONS AVAILABLE FROM FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP). THE ENGINEER WILL SUBMIT THE NOI AND THE NOT TO THE OWNER OR THE CONTRACTOR FOR COMPLETION, SIGNATURE AND TRANSMITTAL TO THE FDEP. THE ENGINEER WILL ALSO PREPARE A SUGGESTED DRAFT STORMWATER POLLUTION PREVENTION PLAN (SWPPP) FOR THE SITE. THE ENGINEER WILL SUBMIT THE SUGGESTED DRAFT SWPPP TO THE OWNER OR THE CONTRACTOR FOR USE ONLY AS A GUIDE IN PREPARING THE FINAL SWPPP. THE FINAL SWPPP, AS PREPARED BY THE OWNER OR THE CONTRACTOR, WILL BE LOCATED ON SITE AND MONITORED AS DESCRIBED IN THE NOI.

THE OWNER OR THE CONTRACTOR WILL ALSO BE RESPONSIBLE FOR THE FOLLOWING: 1. SIGNING THE NOI, NOT, AND THE FINAL SWPPP AS THE "OPERATOR AND/OR RESPONSIBLE AUTHORITY" FOR THE PROJECT

2. IMPLEMENTING THE "BEST MANAGEMENT PRACTICES" AS SHOWN IN THE FINAL SWPPP PREPARED BY 3. MAINTAINING THE "BEST MANAGEMENT PRACTICES" AS SHOWN IN THE SWPPP PREPARED BY OTHERS AS

REQUIRED TO ACCOMMODATE CONDITIONS IN THE FIELD. 4. MONITORING THE SITE CONDITIONS AND PREPARING ALL REPORTS AS REQUIRED BY THE CONDITIONS OF THE GENERAL NPDES PERMIT.

#### WATER, WASTEWATER & REUSE WATER SYSTEM NOTES

1. HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS SHALL BE AS FOLLOWS:

A. NEW OR RELOCATED UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER

REGULATED UNDER PART III OF CHAPTER 62-610, B. NEW OR RELOCATED UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER

. NEW OR RELOCATED UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE AT LEAST SIX FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO THREE FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER.

D. NEW OR RELOCATED UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2),

F.S., AND RULE 64E-6,002, F.A.C. 2. VERTICAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS

WASTEWATER OR STORMWATER FORCE MAINS, AND RECLAIMED WATER PIPELINES SHALL BE AS FOLLOWS: A. NEW OR RELOCATED UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSE 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

B. NEW OR RELOCATED UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.

C. AT THE UTILITY CROSSINGS DESCRIBED IN PARAGRAPHS (A) AND (B) ABOVE, ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT SUCH CROSSINGS, THE PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS STORM SEWERS STORMWATER FORCE MAINS OR PIPELINES. CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY-OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. SEPARATION BETWEEN WATER MAINS AND SANITARY OR STORM SEWER MANHOLES.

A. NO WATER MAIN SHALL PASS THROUGH, OR COME INTO CONTACT WITH, ANY PART OF A SANITARY SEWER MANHOLE, STORM SEWER MANHOLE OR INLET STRUCTURE.

4. ALL UTILITY SYSTEM-DESIGN MATERIALS AND WORKMANSHIP SHALL COMPLY WITH STANDARDS FOR DESIGN AND CONSTRUCTION OF WATER, WASTEWATER AND RECLAIMED WATER FACILITIES, LATEST 5. ALL PVC WATER MAINS 4 - 12 INCHES SHALL BE IN ACCORDANCE WITH AWWA C-900. PIPE SHALL BE CLASS

200 AND MEET THE REQUIREMENTS OF DR-14. 6. ALL PVC WATER MAIN SMALLER THAN 4 INCHES SHALL BE CLASS 200 AND MEET THE REQUIREMENTS OF SDR 21 IN ACCORDANCE WITH ASTM D-2241

7. ALL PVC SANITARY SEWER PIPE SHALL MEET THE REQUIREMENTS OF ASTM D-3034 WITH THICKNESS AS FOLLOWS: AT INVERTS FROM 0' - 12' SHALL BE SDR-35, INVERT DEPTHS FROM 12' - 18' SHALL BE SDR 26. FOR INVERTS DEEPER THAN18', DUCTILE IRON PIPE SHALL BE USED.

8. ALL DUCTILE IRON UTILITY WATER MAIN, SANITARY SEWER PIPE AND REUSE WATER MAINS SHALL BE CLASS 50 IN ACCORDANCE WITH ANSI A 21.52. RECLAIMED WATER MAINS 4 - 12 INCHES SHALL BE IN ACCORDANCE WITH AWWA C-900. DR18. RECLAIMED

CLASS 150. 10. ALL PVC REUSE WATER MAINS SMALLER THAN 4" SHALL BE CLASS 200 AND MEET THE REQUIREMENTS OF SDR 21 IN ACCORDANCE WITH ASTM D-2241.

WATER MAINS 14 - 24 INCHES SHALL BE IN ACCORDANCE WITH AWWA C-905, DR25. ALL PIPE SHALL BE

11. ALL WATER MAINS, SANITARY SEWER MAINS AND RECLAIMED WATER MAINS SHALL HAVE A MINIMUM OF 36 INCHES OF COVER, EXCEPT AS NOTED. 12. PRIOR TO COMMENCING NEW WORK WHICH REQUIRES CONNECTING TO EXISTING LINES OR APPURTENANCES, THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE UTILITY AND SHALL VERIFY THE LOCATION AND ELEVATION OF THE EXISTING CONNECTION POINT AND NOTIFY THE DEVELOPER'S ENGINEER

OF ANY CONFLICTS OR DISCREPANCIES. 13. CONNECTIONS INTO AN EXISTING COUNTY-OWNED SYSTEM SHALL BE VIA WET TAP. WET TAPS SHALL BE PERFORMED EXCLUSIVELY BY THE UTILITIES SERVICES BRANCH AT THE DEVELOPER'S EXPENSE. EXCAVATION, BACKFILL, AND SURFACE RESTORATION SHALL BE THE CONTRACTOR'S RESPONSIBILITY. MATERIAL FOR WET TAPS LARGER THAN TWO INCHES SHALL BE PROVIDED AND INSTALLED BY THE

PROJECT CONTRACTOR. 14. LOCATION OF THE SANITARY SEWER SERVICE LATERALS, IF INDICATED ON THE PLANS ARE A DISTANCE FROM THE DOWNSTREAM MANHOLE.

15. LOCATION OF THE WATER SERVICE SLEEVE, IF INDICATED ON THE PLANS, ARE PER THE CENTERLINE ROAD 16. CONFLICTS BETWEEN REUSE WATER AND STORM, SANITARY SEWER OR WATER MAIN TO BE RESOLVED BY ADJUSTING THE REUSE WATER LINES AS NECESSARY.

17. JOINT RESTRAINTS SHALL BE PROVIDED AT ALL FITTINGS, JOINTS AND BENDS AS SHOWN ON DETAILS. 18. ALL PIPE AND FITTINGS SHALL BE CLEARLY MARKED WITH THE NAME OR TRADEMARK OF THE MANUFACTURER, THE BATCH NUMBER, THE LOCATION OF THE PLANT AND STRENGTH DESIGNATION, AS APPLICABLE . ALL PIPE SHALL BE LAID WITH A TWO INCH METALLIC TAPE APPROPRIATELY COLOR CODED AND IMPRINTED WITH THE TYPE OF SERVICE 12 INCHES TO 18 INCHES BELOW FINAL GRADE, DIRECTLY ABOVE THE UTILITY FOR IDENTIFICATION AND EASE OF LOCATION. THE APPROPRIATE TAPE COLOR CODES ARE AS FOLLOWS: GREEN SANITARY FORCE MAIN

BLUE POTABLE WATER PURPLE TREATED EFFLUENT FOR REUSE

19. THE CONTRACTOR SHALL TEST ALL GRAVITY SEWERS IN ACCORDANCE WITH TARPON SPRINGS REGULATIONS. IF ACCEPTABLE, SAID TESTS WILL BE CERTIFIED BY THE ENGINEER OF RECORD AS

20. PIPE DEFLECTION SHALL BE IN ACCORDANCE WITH AWWA STANDARD C-600, LATEST EDITION. 21. THRUST BLOCKS ARE NOT ALLOWED! RESTRAINED JOINTS SHALL BE USED ON ALL PRESSURIZED PIPING. 22. FIRE HYDRANTS WILL REQUIRE FLOW TESTING AND COLOR-CODING BASED ON TEST RESULTS.

#### PAVING AND GRADING

I. ALL DELETERIOUS SUBSURFACE MATERIAL (I.E. MUCK, PEAT, BURIED DEBRIS) IS TO BE EXCAVATED IN ACCORDANCE WITH THESE PLANS OR AS DIRECTED BY THE OWNER THE OWNER'S ENGINEER OR OWNER'S SOIL TESTING COMPANY. DELETERIOUS MATERIAL IS TO BE STOCKPILED OR REMOVED FROM THE SITE AS DIRECTED BY THE OWNER. EXCAVATED AREAS TO BE BACK FILLED WITH APPROVED MATERIALS AND COMPACTED AS SHOWN ON THESE PLANS. CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ANY PERMITS THAT

ARE NECESSARY FOR REMOVING DELETERIOUS MATERIAL FROM THE SITE. 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXCAVATIONS AGAINST COLLAPSE AND WILL PROVIDE BRACING, SHEETING OR SHORING AS NECESSARY. DEWATERING METHODS SHALL BE USED AS REQUIRED TO KEEP TRENCHES DRY WHILE PIPE AND APPURTENANCES ARE BEING PLACED. 3. ALL NECESSARY FILL AND EMBANKMENT THAT IS PLACED DURING CONSTRUCTION SHALL CONSIST OF MATERIAL SPECIFIED BY THE OWNER'S SOIL TESTING COMPANY OR ENGINEER AND BE PLACED AND COMPACTED ACCORDING TO THESE PLANS OR THE REFERENCED SOILS REPORT.

4. PROPOSED SPOT ELEVATIONS REPRESENT TOP OF FINISHED PAVEMENT OR GROUND SURFACE GRADE UNLESS OTHERWISE NOTED ON DRAWINGS. 5. CONTRACTOR SHALL TRIM, TACK AND MATCH EXISTING PAVEMENT AT LOCATIONS WHERE NEW PAVEMENT

MEETS EXISTING PAVEMENT. 6. CONCRETE CURBING WILL BE PLACED AS SHOWN ON THE PLANS. 7. THE CONTRACTOR WILL STABILIZE BY SEED AND MULCH, SOD OR OTHER APPROVED MATERIALS ANY DISTURBED AREAS WITHIN ONE WEEK FOLLOWING CONSTRUCTION OF THE PAVEMENT AREAS. CONTRACTOR

SHALL MAINTAIN SUCH AREAS UNTIL FINAL ACCEPTANCE BY OWNER 8. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING APPLICABLE TESTING WITH THE SOILS ENGINEER. TESTS WILL BE REQUIRED PURSUANT TO TARPON SPRINGS. UPON COMPLETION OF PROPOSED CONSTRUCTION, SOILS ENGINEER WILL SUBMIT CERTIFICATIONS TO THE OWNER'S ENGINEER STATING THAT ALL REQUIREMENTS HAVE BEEN MET.

9. ALL UNDERGROUND UTILITIES, INCLUDING UTILITY SLEEVES, AND CONDUITS SHALL BE INSTALLED PRIOR TO BASE & PAVEMENT CONSTRUCTION.

PRIOR TO ANY SITE CLEARING, ALL TREES SHOWN TO REMAIN AS INDICATED ON THE CONSTRUCTION PLANS SHALL BE PROTECTED IN ACCORDANCE WITH LOCAL TREE ORDINANCES AND DETAILS CONTAINED IN THESE PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THESE TREES IN GOOD CONDITION. NO TREE SHOWN TO REMAIN SHALL BE REMOVED WITHOUT WRITTEN APPROVAL FROM TARPON SPRINGS AND THE 2. THE CONTRACTOR SHALL CLEAR AND GRUB THE SITE NECESSARY FOR CONSTRUCTION. DISTURBED

AREAS, NOT OTHERWISE STABILIZED, WILL BE SEEDED, MULCHED, SODDED OR PLANTED WITH OTHER APPROVED LANDSCAPE MATERIAL IMMEDIATELY FOLLOWING CONSTRUCTION. 3. REMAINING MATERIAL THAT RESULTS FROM CLEARING AND GRUBBING OR SITE EXCAVATION IS TO BE UTILIZED ON-SITE IF REQUIRED, PROVIDED THAT THE MATERIAL IS DEEMED SUITABLE FOR CONSTRUCTION BY THE OWNER'S SOILS TESTING COMPANY. EXCESS MATERIAL IS TO BE EITHER STOCKPILED ON THE SITE AS DIRECTED BY THE OWNER OR OWNER'S ENGINEER, OR REMOVED FROM THE SITE. THE CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ANY PERMITS THAT ARE NECESSARY FOR REMOVING EXCESS EARTHWORK 4. ALL CONSTRUCTION DEBRIS AND OTHER WASTE MATERIALS SHALL BE DISPOSED OF OFF-SITE BY THE

CONTRACTOR IN ACCORDANCE WITH APPLICABLE REGULATORY AGENCY REQUIREMENTS.

2. LABOR SAFETY REGULATIONS SHALL CONFORM TO THE PROVISIONS SET FORTH BY OSHA IN THE FEDERAL REGISTER OF THE DEPARTMENT OF TRANSPORTATION. CONTRACTOR SHALL PROVIDE AND MAINTAIN ITS OWN SAFETY EQUIPMENT IN ACCORDANCE WITH ITS HEALTH & SAFETY PROGRAM AND ALL OTHER APPLICABLE LEGAL AND HEALTH AND SAFETY REQUIREMENTS. THE CONTRACTOR IS ALSO RESPONSIBLE FOR PROVIDING ITS EMPLOYEES AND SUBCONTRACTORS WITH ADEQUATE INFORMATION AND TRAINING TO ENSURE THAT ALL EMPLOYEES AND SUBCONTRACTORS AND SUBCONTRACTORS' EMPLOYEES COMPLY WITH ALL APPLICABLE REQUIREMENTS. CONTRACTOR SHALL REMAIN IN COMPLIANCE WITH ALL OCCUPATION SAFETY AND

OF THE TRAVELING PUBLIC AND THE SAFETY OF HIS PERSONNEL.

. DURING THE CONSTRUCTION AND MAINTENANCE OF THIS PROJECT, ALL SAFETY REGULATIONS ARE TO

BE ENFORCED. THE CONTRACTOR SHALL BE TOTALLY RESPONSIBLE FOR THE CONTROL AND SAFETY

HEALTH REGULATIONS AS WELL AS THE ENVIRONMENTAL PROTECTION LAWS. THE FOLLOWING IS NOT TO BE PERCEIVED AS THE ENTIRE SAFETY PROGRAM BUT JUST BASIC REQUIREMENTS. ALL EXCAVATIONS BY THE CONTRACTOR SHALL CONFORM TO THE REQUIREMENTS OF THE DEPARTMENT OF LABOR'S OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION RULES AND REGULATIONS. PARTICULAR ATTENTION MUST BE PAID TO THE CONSTRUCTION STANDARDS FOR EXCAVATIONS, 29 CFR PART 1926, SUBPART P.

THE MINIMUM STANDARDS AS SET FORTH IN THE CURRENT EDITION OF "THE STATE OF FLORIDA, MANUAL ON TRAFFIC CONTROL AND SAFE PRACTICES FOR STREET AND HIGHWAY CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS" 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

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.

THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN AREAS OF BURIED UTILITIES AND SHALL PROVIDE AT LEAST 48 HOURS NOTICE TO THE UTILITY COMPANIES PRIOR TO CONSTRUCTION TO OBTAIN FIELD LOCATIONS OF EXISTING UNDERGROUND UTILITIES. CALL SUNSHINE ONE (1-800-432-4770) TO ARRANGE FIELD LOCATIONS.

#### TARPON SPRINGS FIRE PROTECTION NOTES

1. ALL PROJECTS MUST COMPLY WITH TARPON SPRINGS FIRE HYDRANT ORDINANCE NO. 46-51 2. FIRE HYDRANTS SHALL BE INSTALLED AND IN SERVICE PRIOR TO THE ACCUMULATION OF

3. PER THE NATIONAL FIRE PROTECTION ASSOCIATION, NFPA-1 16.4.3.1.3. WHERE UNDERGROUND WATER MAINS AND HYDRANTS ARE TO BE PROVIDED, THEY SHALL BE INSTALLED, COMPLETED, AND IN SERVICE PRIOR TO CONSTRUCTION WORK.

4. PER NFPA-1 18.3.4.1; CLEARANCES OF 7.5 FT IN FRONT AND TO THE SIDES OF THE FIRE HYDRANT WITH A 4-FOOT CLEARANCE TO THE REAR MUST BE MAINTAINED AT ALL TIMES.

5. GATED ENTRIES REQUIRE A SIREN OPERATING SYSTEM OR 3M OPTICOM SYSTEM FOR EMERGENCY

6. FIRE HYDRANTS SHALL BE FLOW TESTED AND COLOR CODED BASED ON FLOW RESULTS

4. ALL SODDED SLOPES OVER 4 TO 1, SHALL BE INSTALLED WITH SOD PEGS. (LDC 902.2)

THE SOIL EROSION AND SEDIMENT CONTROL DEVISES SHALL BE INSTALLED PRIOR TO CONSTRUCTION, MAINTAINED THROUGHOUT CONSTRUCTION AND UNTIL THE SITE IS PERMANENTLY STABILIZED. (LDC 902.2) 2. PRIOR TO CONSTRUCTION, A BUILDING PERMIT SHALL BE OBTAINED FOR ALL STRUCTURES THAT HAVE

FOOTER, REGARDLESS OF SIZE, THROUGH TARPON SPRINGS CENTRAL PERMITTING. (IE. INCLUDING BUT NOT INCLUSIVE BUILDINGS, ACCESSORIES, AND RETAINING WALLS) 3. IT IS THE OWNER'S RESPONSIBILITY OR (CURRENT PARCEL OWNER: PASCO RANCH, INC., TO INSPECT AND MAINTAIN THE WATER RETENTION SYSTEM ON A REGULAR BASIS. (LDC 902.2.M)

5. ALL FIRST FLOOR ELEVATIONS (FF) SHALL BE A MINIMUM OF 1' ABOVE THE BASE FLOOD ELEVATION OR AS REQUIRED BY THE LDC1104) 16" ABOVE THE HIGHEST CROWN LINE OF THE STREET LYING BETWEEN THE PROJECTION OF THE SIDE BUILDING LINES(LDC902.2.K).

ANY OFF SITE DISTURBANCE SHALL BE RESTORED TO THE PRE OR BETTER CONDITION. (LDC 902.2) 7. AS APPLICABLE, THE OWNER/DEVELOPER WILL PROVIDE COPIES OF THE REQUIRED PERMITS FROM THE

RESPECTIVE GOVERNING AGENCIES, PRIOR TO ISSUANCE OF THE SDP. (LDC 902.2.C) 8. ALL WORK WITHIN THE ROW WILL REQUIRE A ROW USE PERMIT. (LDC 406.5)/ DRIVEWAY CONNECTION

9. THE SITE SHALL BE GRADED TO WITHIN FOUR INCHES (4") OF THE FINAL BUILDING PAD GRADE, AND TWELVE INCHES (12") FOR SURROUNDING OUTPARCEL PAD ELEVATIONS. WHERE FILL IS PROPOSED IT SHALL BE PLACED IN COMPLIANCE WITH THE GEOTECHNICAL/GEOLOGICAL ENGINEERING REPORT RECOMMENDATIONS (INCLUDING ANY LIFT DEPTHS RECOMMENDED) AND COMPACTED TO A MINIMUM DENSITY OF 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY. DENSITY TESTS TO CONFIRM COMPACTION SHALL BE REQUIRED WITHIN THE BUILDING PAD AREA, BEFORE THE NEXT LIFT IS PLACED. UPON COMPLETION OF THE LAND DEVELOPMENT CONSTRUCTION, A PROFESSIONAL ENGINEER SHALL PROVIDE A CERTIFICATION TO TARPON SPRINGS THAT THE PROJECT, INCLUDING EACH PAD AREA,

COMPLIES WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL/GEOLOGICAL ENGINEERING REPORT

TARPON SPRINGS STANDARD SITE PLAN NOTES

PERFORMED BY BTL ENGINEERING SERVICES, INC. DATED NOVEMBER 13, 2017.

1. ALL UTILITY CONSTRUCTION SHALL COMPLY WITH THE TARPON SPRINGS STANDARDS FOR DESIGN AND CONSTRUCTION OF WATER AND WASTEWATER FACILITIES SPECIFICATIONS, LATEST EDITION.

2. ALL ON-SITE WATER AND SEWER FACILITIES SHALL BE OWNED AND MAINTAINED BY THE OWNER-DEVELOPER. 3. INSTALLATION OF FUEL STORAGE TANKS REQUIRES REVIEW AND APPROVAL BY THE FIRE MARSHAL AND

THE ISSUANCE OF A SEPARATE BUILDING PERMIT. APPROVAL OF THE SITE PLAN DOES NOT CONSTITUTE APPROVAL OF THE LOCATION OF THE FUEL TANKS 4. ALL PROPOSED SIGNS MUST BE APPLIED FOR, APPROVED, AND PERMITTED ON AN INDIVIDUAL BASIS APART FROM ANY ULTIMATELY APPROVED SITE PLAN. APPROVAL OF THIS SITE PLAN DOES NOT CONSTITUTE

APPROVAL OF ANY SIGNAGE. 5. HANDICAP PARKING SPACES WILL BE PROPERLY SIGNED AND STRIPED IN ACCORDANCE WITH FLORIDA STATUTE 316, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, OR OTHER APPLICABLE STANDARDS.

6. THE ARCHITECT/ENGINEER CERTIFIES THAT THE SITE HAS BEEN DESIGNED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT. 7. ALL ON-SITE PARKING SPACES WILL BE STRIPED AND SIGNED IN ACCORDANCE WITH THE MANUAL ON

UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION. PARKING SPACES, DIRECTIONAL ARROWS, AND STOP BARS SHALL BE STRIPED IN WHITE. IT SHALL BE THE OWNER/DEVELOPER'S RESPONSIBILITY TO PROPERLY SIGN AND STRIPE IN ACCORDANCE WITH APPLICABLE STANDARDS. 8. THE OWNER/DEVELOPER ACKNOWLEDGES THAT THIS APPROVAL DOES NOT INCLUDE ANY WORK IN THE

COUNTY RIGHT-OF-WAY. ALL RIGHT-OF-WAY WORK SHALL BE A FUNCTION OF AN APPROVED PASCO 9. ALL CLEAR-SITE AREAS SHALL BE KEPT FREE OF ANY SIGNAGE PLANTINGS, TREES, ETC. IN EXCESS OF THREE-AND-A-HALF (3-1/2) FEET IN HEIGHT.

10. NO IRRIGATION SYSTEM OR LANDSCAPING SHALL BE INSTALLED IN ANY COUNTY OR STATE RIGHT-OF-WAY WITHOUT ISSUANCE OF APPROPRIATE RIGHT-OF-WAY USE PERMIT 11. THE OWNER/DEVELOPER ACKNOWLEDGES THAT THE SITE AND ITS SUBSEQUENT BUILDING PERMITS SHALL COMPLY WITH ALL REZONING/MPUD/PUD CONDITIONS.

12. ALL STRUCTURES, INCLUDING BUFFER WALLS, RETAINING WALLS, SIGNAGE, ETC. REQUIRE BUILDING

Datum: NAVD 88

Digitally signed by Joseph Cimino PE 67540 Sta Joseph Cimino PE 67540 State of Florida OJ="", O-Water Resources Associates, CN=Joseph Cimino PE 67540 State of Florida



											Tree Re	emoval										
		es Tree Type	Tree Inches	1 1	Tree Inches		Tree Inches		Tree Inches		Tree Inches	Tree Type	Tree Inches T		Tree Inches		Tree Inches			Tree Type	Tree Inches	, · · ·
	14 17	oak pine	9	oak oak	7	pine camphor	9	oak oak	5	oak oak	6	maple maple	7	oak oak	17 6	oak oak	16 6	maple maple	15 9	oak oak	17 6	oak maple
	22	pine	11	maple	18	oak	26	oak	4	oak	10	oak	6	oak	11	oak	5	maple	9	camphor	5	maple
4	<u>6</u> 5	pine oak	14	oak oak	6	oak oak	7 11	oak camphor	17 10	oak pine	26 12	oak maple	12	oak oak	7 8	oak maple	7	maple maple	16 5	Palm camphor	12 11	camphor camphor
	5	pine	12	oak	19	oak	10	oak	10	oak	11	oak	5	oak	16	oak	13	Palm	7	maple	15	oak
	7 12	pine pine	12	oak maple	13 8	oak oak	10 19	oak oak	8 17	oak oak	8	oak oak	10	oak oak	10	maple maple	14	maple maple	10 14	maple oak	7	oak maple
	9	pine	21	oak	6	oak	8	maple	6	oak	5	oak	7	oak	4	maple	7	oak	8	maple	6	oak
	8 	pine pine	12 18	oak maple	23 10	oak oak	12 8	oak maple	5	oak oak	4	oak oak	7	oak oak	4 4	maple maple	9 14	oak Palm	9 20	oak oak	8 14	camphor Palm
	6	oak	7	oak	9	oak	8	oak	11	oak	4	oak	26	oak	5	maple	19	maple	7	oak	12	maple
WG	5	oak	22	oak	12	oak	15	maple	25	pine	4	oak	21	oak	4	maple	11	oak	5	maple	5	maple
TL.D	14 13	Palm Palm	12 21	oak oak	7	pine oak	12 14	oak oak	<u>8</u> 5	oak oak	5	oak oak	4	oak oak	12 11	oak oak	11 10	oak maple	6 10	maple maple	11 5	maple maple
VERA	5	oak	19	oak	6	oak	4	oak	12	pine	4	oak	6	oak	10	oak	10	maple	7	camphor	9	maple
NG O	8 	oak oak	22	oak oak	5 16	oak pine	13 13	oak oak	7	oak oak	10	oak oak	5	oak oak	14 20	oak oak	10 5	maple oak	16 16	Palm Palm	18 12	maple maple
KISTI	8	oak	6	maple	13	pine	8	oak	8	oak	5	oak	13	oak	21	oak	15	maple	7	oak	14	maple
N E	5 5	oak oak	8	maple maple	17 14	oak pine	8 11	oak oak	7	oak oak	4	oak oak	8	oak oak	6 12	maple maple	11 13	maple oak	16 12	maple maple	15 10	maple maple
N\PL/	12	oak	12	maple	5	oak	8	maple	11	pine	24	oak	10	oak	6	maple	12	maple	10	maple	12	maple
CTIO]	5 9	pine pine	24	pine pine	5 13	oak pine	11 8	maple oak	5	oak oak	7	oak oak	9 7	oak oak	9 8	maple maple	5 11	oak maple	11 5	maple maple	14 8	maple maple
STRU	7	pine	13	oak	7	oak	23	oak	6	oak	5	oak	13	Palm	4	maple	7	oak	5	oak	4	oak
CON	4	pine	19	oak	7	oak	22	oak	5	oak	5	oak	12	Palm	11	maple	7	maple	10	camphor	6	maple
ANS	10 7	pine	16	oak pine	5	oak pine	14 7	oak oak	8	oak oak	10	oak oak	12 16	Palm oak	7	Palm maple	6	maple maple	5	maple oak	8	maple oak
AD\PI	6	pine	13	maple	7	oak	25	oak	5	oak	7	oak	10	oak	7	oak	10	maple	4	maple	12	oak
IAL\C	5 20	oak pine	18 7	oak oak	24	oak oak	10 21	maple pine	6 15	oak pine	5	oak oak	12 12	oak oak	6 9	oak maple	7 15	oak oak	5 22	oak pine	10	oak oak
ENT	7	pine	13	oak	7	oak	21	oak	8	oak	5	oak	6	oak	4	oak	26	oak	8	maple	4	oak
RESII	<u>6</u> 8	pine pine	20	oak oak	10	pine oak	20 16	oak oak	13 7	pine oak	15	oak oak	9	oak oak	10	oak maple	12 28	oak oak	8	oak oak	10	oak oak
ONE]	6	oak	20	pine	7	oak	14	maple	4	oak	5	oak	5	oak	9	oak	11	camphor	15	oak	5	oak
EYST	5 10	oak oak	15 13	maple maple	13	oak oak	21 10	oak maple	14 7	pine oak	8	oak oak	18	oak oak	7	maple oak	9	camphor camphor	5	oak oak	6 14	maple Palm
3R - K	9	oak	15	Palm	12	oak	15	maple	10	oak	14	oak	11	oak	5	oak	20	maple	6	maple	5	maple
ONE	<u>6</u> 5	oak oak	12 16	maple maple	12 16	oak oak	14 16	maple maple	6 10	oak maple	12	oak oak	13	oak oak	5	oak oak	5 13	maple oak	9 7	maple maple	5 10	maple camphor
1 - PI	7	oak	13	maple	4	pine	19	oak	22	oak	15	oak	14	oak	4	oak	6	oak	10	maple	12	camphor
ES\149	6 4	camphor camphor	13 16	oak oak	23 11	oak pine	9 5	maple pine	21 16	oak pine	12	oak oak	20 13	oak oak	10	oak oak	6	oak oak	7	maple maple	7 13	maple camphor
T FIL	6	oak	27	oak	5	oak	7	oak	8	pine	10	oak	6	oak	4	oak	7	oak	10	oak	15	camphor
OJEC	6 6	oak	21	pine	5	oak	6	oak	<u>8</u> 5	maple	10	oak	8 12	oak	6 12	oak	14 24	maple	<u>4</u> 5	oak	19 5	maple
:\~PR	7	oak oak	22	pine pine	5	oak oak	10 8	oak oak	6	oak maple	15	oak oak	5	oak oak	6	oak oak	12	maple maple	10	oak oak	13	camphor camphor
th: S	5	oak	13	maple	8	oak	12	oak	8	maple	10	oak	12	oak	12	maple	24	oak	5	camphor	5	maple
ile Pa	5 13	oak oak	9	maple maple	9	oak oak	12 26	oak oak	8 12	maple pine	9	oak pine	12 14	oak oak	8	maple maple	14 15	maple oak	14 7	pine camphor	12	Palm maple
AD F	4	oak	9	maple	4	oak	8	oak	8	maple	9	oak	8	maple	7	oak	7	maple	5	maple	8	camphor
$\overline{z}$	5 4	oak oak	10 15	maple oak	7	oak oak	10 11	oak	15 21	oak oak	5	oak oak	7	oak oak	18	oak oak	17	oak maple	5	camphor maple	9	maple oak
	9	oak	9	oak	15	Palm	5	oak	6	oak	4	maple	8	maple	6	oak	6	oak	17	pine	10	camphor
	7 4	oak oak	5	oak oak	9 7	oak oak	9 10	oak oak	9 12	oak Palm	6	maple maple	7 19	oak oak	9	maple oak	5	oak oak	5 7	camphor oak	8 11	camphor camphor
	8	oak	10	oak	9	oak	5	oak	6	maple	5	maple	21	oak	13	maple	8	oak	6	oak	10	maple
	<u>6</u> 8	oak oak	<u>4</u>	oak oak	6 4	oak oak	8 17	oak oak	9	oak oak	8	maple maple	5 6	oak oak	13 13	oak oak	5 10	oak oak	7 4	oak oak	10	oak oak
	8	oak	7	oak	15	oak	6	pine	12	oak	8	maple	5	oak	7	oak	10	oak	7	oak	12	camphor
	6 7	oak oak	15 8	oak oak	8	oak oak	5 5	oak oak	6	oak oak	5	oak oak	9 17	maple oak	13 12	oak maple	9	maple maple	<u>8</u> 9	camphor pine	14 6	Palm maple
	5	pine	5	oak	8	oak	7	oak	10	oak	8	maple	19	oak	13	maple	10	maple	6	camphor	6	maple
M	7 5	oak oak	8 10	oak oak	5 19	oak oak	5 8	oak	5 10	oak oak	6	maple maple	12 8	oak oak	8 12	maple oak	10	oak oak	<u>16</u> 5	Palm camphor	8       7	maple maple
5:03 A	12	oak	10	oak	12	oak	10	oak oak	9	oak	7	maple	10	oak	5	oak	8	oak	5	camphor	12	oak
1 10:1	6 5	oak oak	10 5	oak oak	9	maple maple	7 8	oak oak	15 8	oak oak	7 20	oak oak	9 8	oak oak	4 5	maple maple	5	oak oak	5 4	camphor camphor	12 14	oak oak
0/207	13	oak	5	oak	10	oak	10	oak	8	oak	7	oak	6	oak	4	maple	11	oak	4	camphor	9	maple
3: 9/1	6	oak	12	oak	9	maple	10 7	oak	5	oak	15	oak	8 9	maple	13	Palm	7	oak	14	pine	8	maple
ot Date	5 9	oak oak	10 5	oak oak	5	maple maple	7	oak oak	4	oak oak	10	oak oak	7	oak oak	5	maple oak	9	oak oak	12 12	oak pine	6	maple maple
PK	5	oak	6	pine	4	oak	7	oak	6	oak	5	oak	6	oak	8	maple	15	oak	12	pine	5	maple
	<u>5</u> 5	oak oak	4	oak oak	29	maple oak	6 8	oak oak	13 15	maple oak	7	oak maple	6 10	maple maple	6 8	maple maple	9	camphor maple	14 22	pine pine	7 15	maple oak
	8	oak	7	oak	5	oak	5	oak	8	oak	6	maple	5	maple	6	maple	11	camphor	6	oak	17	maple
	8 10	oak oak	12 16	oak oak	5 25	oak oak	14 24	Palm oak	5	oak oak	10	maple pine	14 16	oak oak	6 4	oak oak	7	oak oak	18 5	camphor	19 15	maple maple
	6	oak	11	oak	9	oak	27	oak	7	oak	7	oak	7	maple	14	oak	5	oak	7	oak	8	maple
4	10 4	oak oak	12 8	Palm pine	9	oak oak	11 27	Palm oak	14 6	pine oak	20 12	pine Palm	5	oak oak	10	oak oak	9 11	maple maple	5 6	oak oak	7	maple maple
	6	oak	14	pine	15	Palm	31	oak	7	oak	5	oak	13	oak	16	oak	11	oak	13	pine	12	maple
	4 4	oak oak	21 8	oak oak	16 7	oak oak	20 30	oak oak	9 17	oak oak	5 13	oak oak	5 4	maple maple	5 7	maple oak	23 10	maple maple	12	pine pine	8 12	maple Palm
WRA	5	oak	13	pine	13	oak	31	oak	5	oak	4	maple	6	maple	6	maple	9	maple	10	maple	5	maple
2021	5 7	oak oak	13 7	oak pine	20 8	oak oak	19 17	oak maple	10 10	oak oak	7 15	maple oak	6	maple oak	8 10	maple maple	12 6	maple maple	12 6	pine maple	11 4	maple camphor
	5	oak	16	oak	4	oak	13	oak	4	oak	5	oak	6	maple	4	maple	13	oak	18	pine	9	maple
	5 6	oak oak	23 16	oak oak	12 7	oak maple	17 12	oak oak	4	maple maple	7 13	maple pine	8	maple maple	15 9	maple maple	9 15	maple maple	7 12	camphor Palm	10 5	maple camphor
$\dashv$	4	oak	21	oak	13	maple	19	oak	4	maple	20	pine	6	maple maple	4	oak	8	maple maple	10	camphor	5	campnor
	15	oak	4	pine	18	oak	20	oak	7	maple	8	oak	6	maple	10	maple	16	Palm	5	oak	7	camphor
	4 15	oak oak	<u>8</u> 5	pine camphor	13 5	oak oak	5 4	oak oak	4	maple maple	7	Palm oak	13 7	oak maple	5 10	maple maple	13 7	maple maple	5 7	oak maple	11 14	Palm oak
	11	oak	30	oak	11	oak	7	oak	6	maple	14	pine	5	maple	9	oak	7	maple	6	maple		
$/\!\!1$	20 14	oak oak	10 6	pine pine	9	oak oak	13 5	pine oak	5	maple maple	7	oak pine	6	maple maple	13 9	Palm oak	12 12	maple oak	6 15	maple camphor		
/ J	20	oak	5	pine	10	oak	6	oak	5	maple	5	oak	4	oak	8	maple	17	maple	26	oak		

	Non-Palm Species  Tree Caliper (DBH)	Total inches removed	Percentage of total inches removed	Distribution of replacment inches based on % distribution of tree removals	Net inches to be charged	Fee per inch removed	Replacement fee		
1	4" to less than 8" DBH	2490	25%	42.8	2447.2	\$ 25.00	\$	61,179.48	
2	8" to less than 15" DBH	4506	45%	77.5	4428.5	\$ 50.00	\$	221,425.50	
3	15" to less than 25" DBH	2604	26%	44.8	2559.2	\$ 75.00	\$	191,941.41	
4	25" and greater DBH	518	5%	8.9	509.1	\$ 100.00	\$	50,909.19	
	Total	10118	100%	174	9944		\$	525,455.58	
	Total inches replaced	174							
	Palm Species								
		Total inches	Inches to be	Net inches to be	Fee per inch	Replacement fee			

charged 415

rem oved

Total Replacment Fee

removed required \$ 10.00 \$ 4,150.00

\$ 529,605.58

TREE REMOVAL TABLE & CALCULATIONS

NORTH LAKE ESTATES

NO. 67540 STATE OF

Datum: NAVD 88

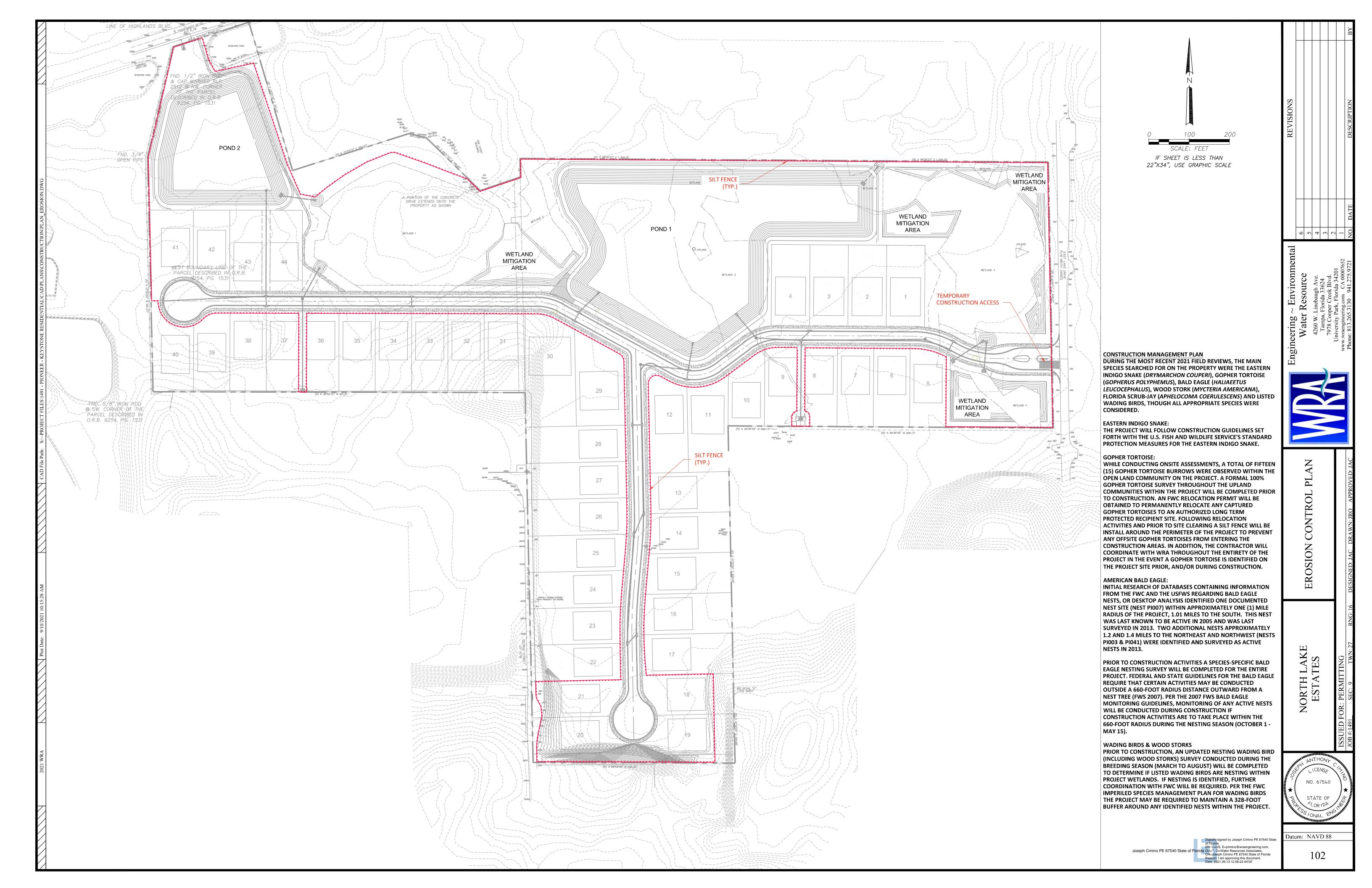
101

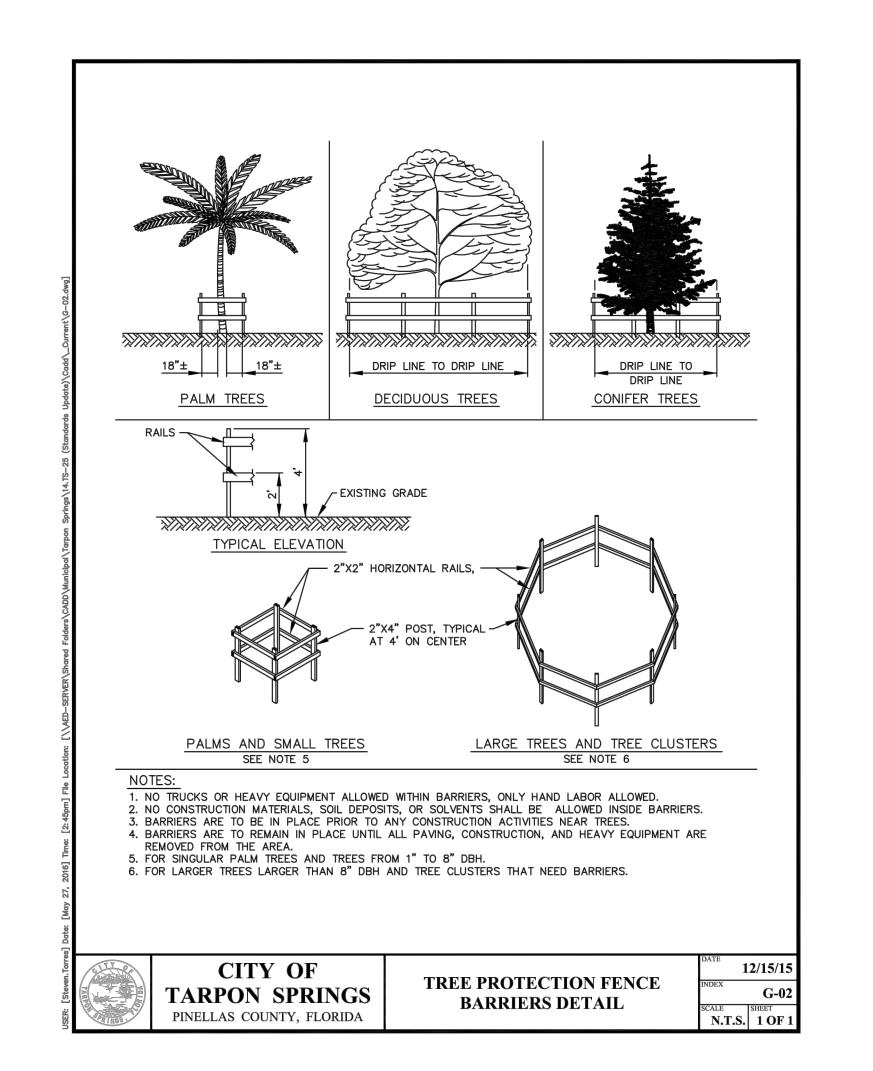
Digitally signed by Joseph Cimino PE 67540 State of Florida

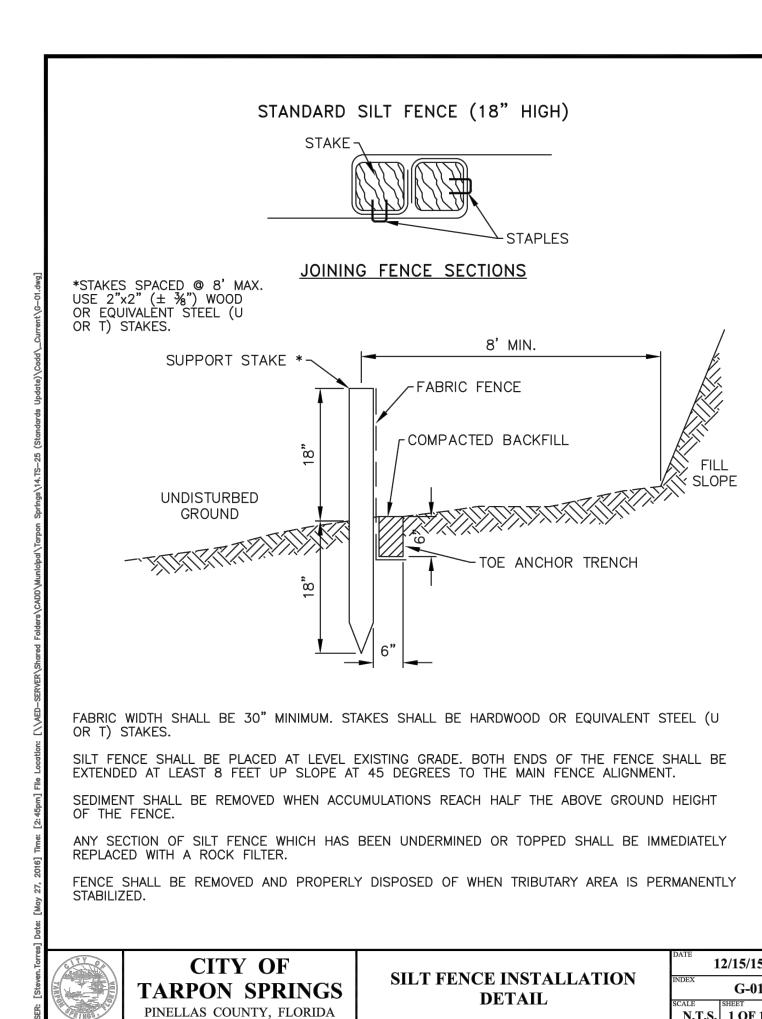
DN: C=US, E=jcimino@wraengineering.com,

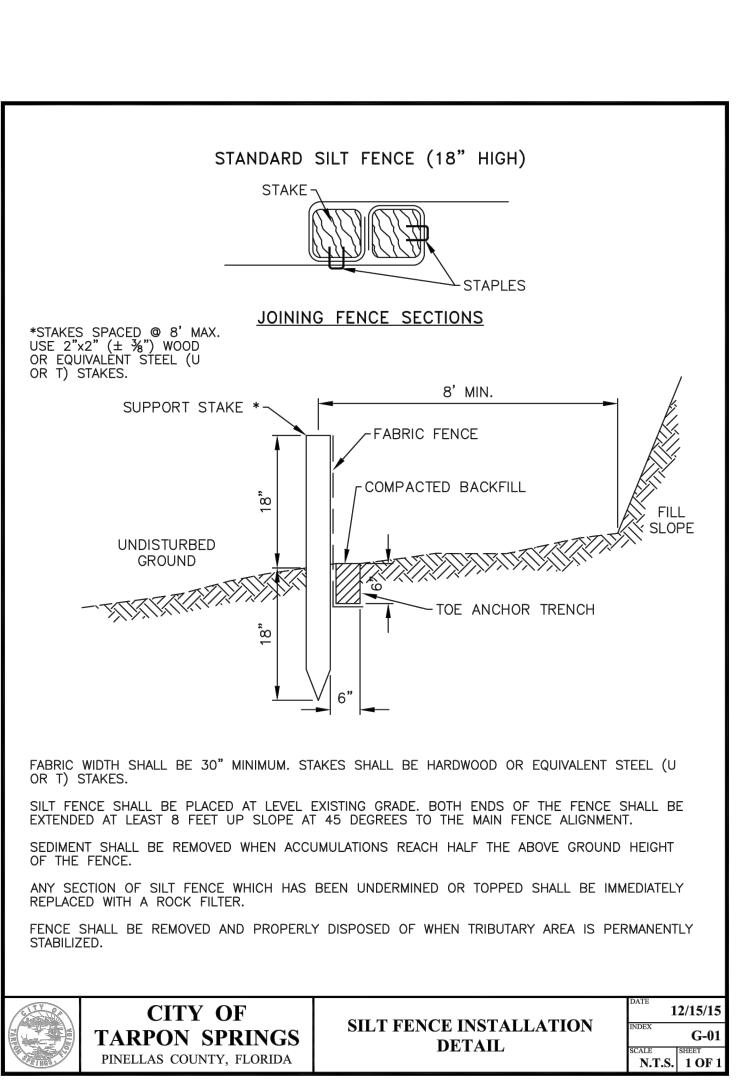
Joseph Cimino PE 67540 State of Florida OU=", O=Water Resources Associates,
CN=Joseph Cimino PE 67540 State of Florida
Reason: I am approving this document.

Date: 2021.09.13 12:56:07-04'00'









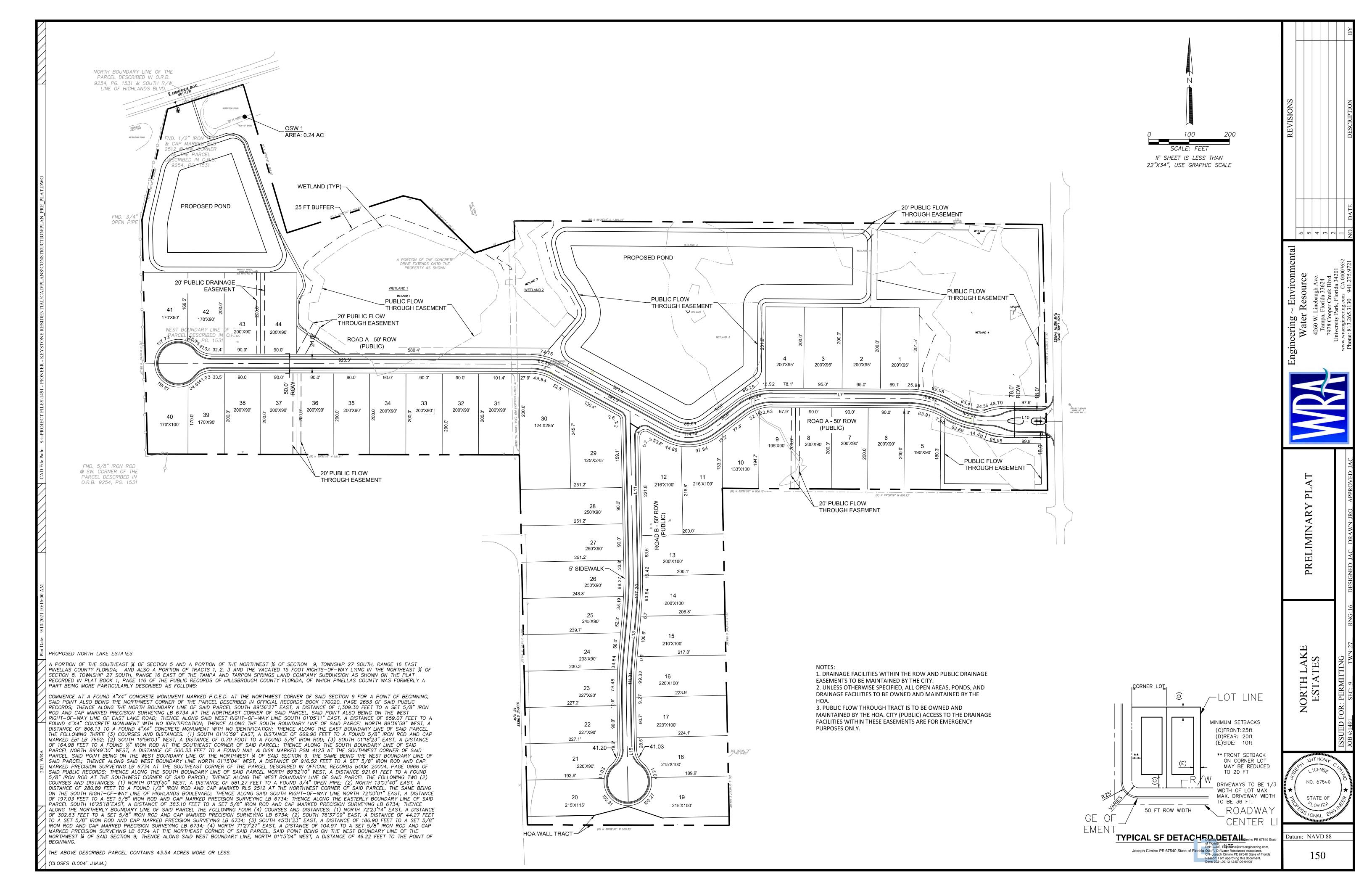
\ \CENSA STATE OF

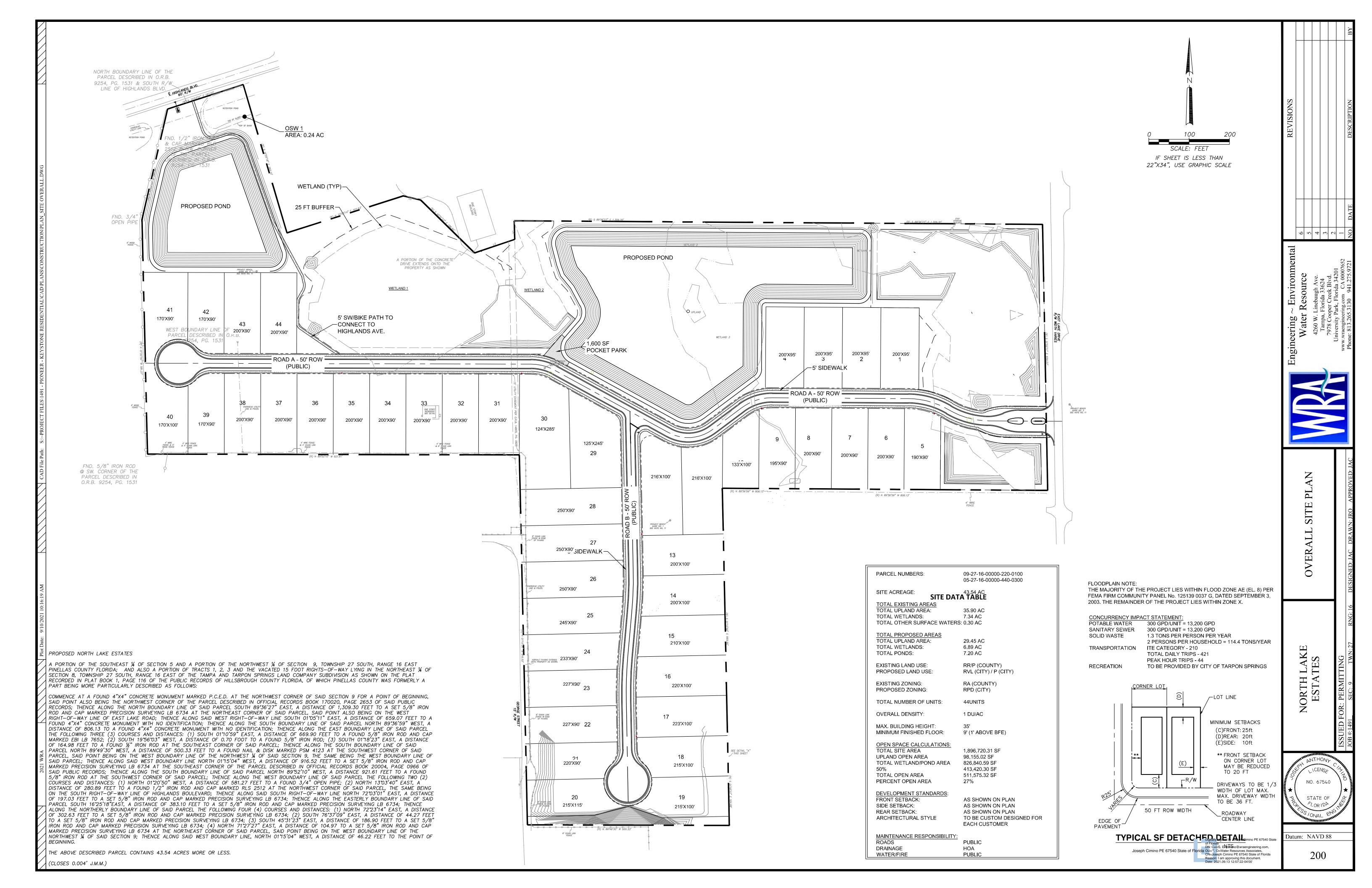
Digitally signed by Joseph Cimino PE 67540 of Florida
DN: C=US, E=jcimino@wraengineering.com
Joseph Cimino PE 67540 State of Florida OU=", O=Water Resources Associates,
CN=Joseph Cimino PE 67540 State of Florid
Reason: I am approving this document.
Date: 2021.09.13 12:56:40-04'00'

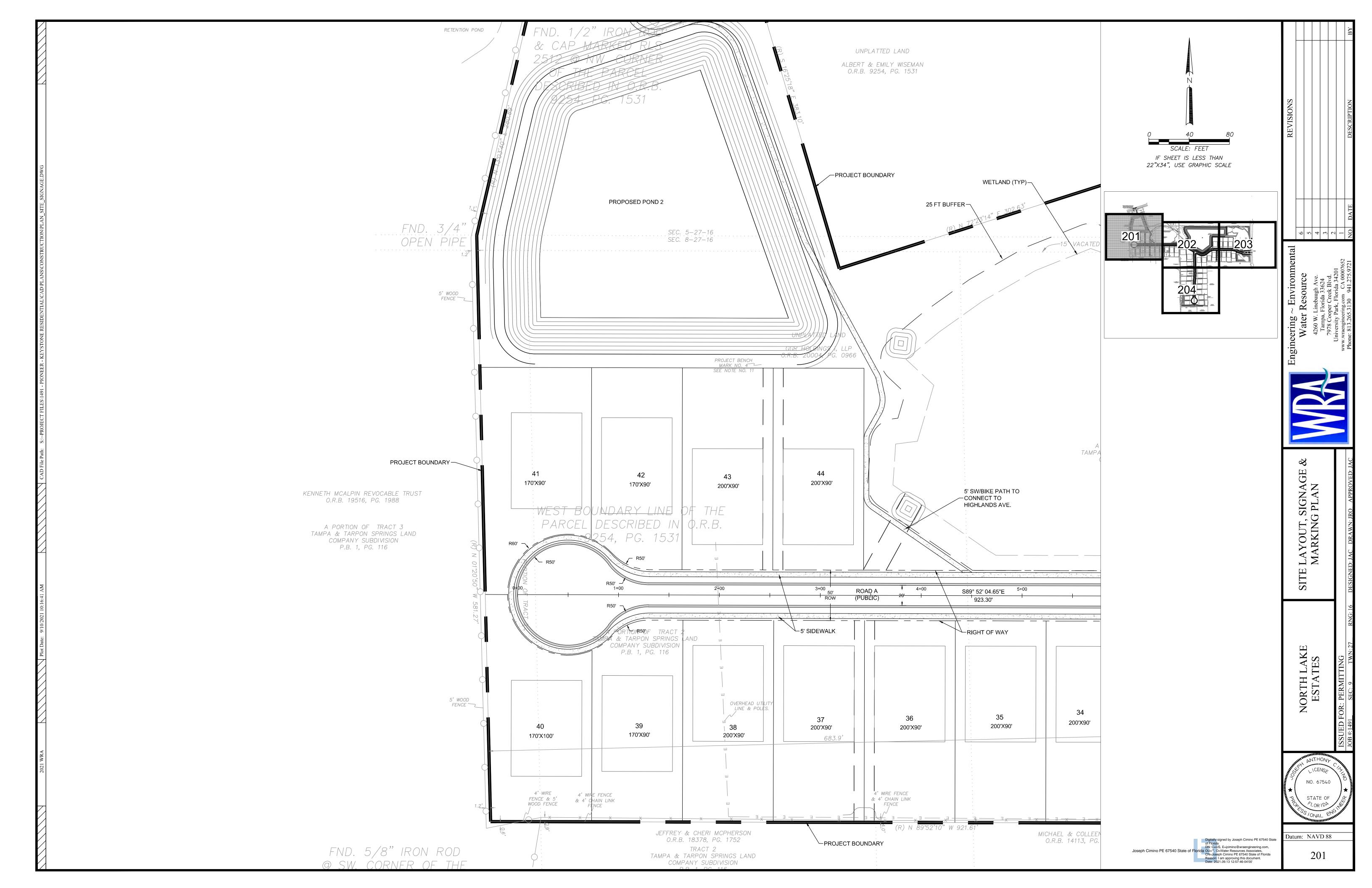
103

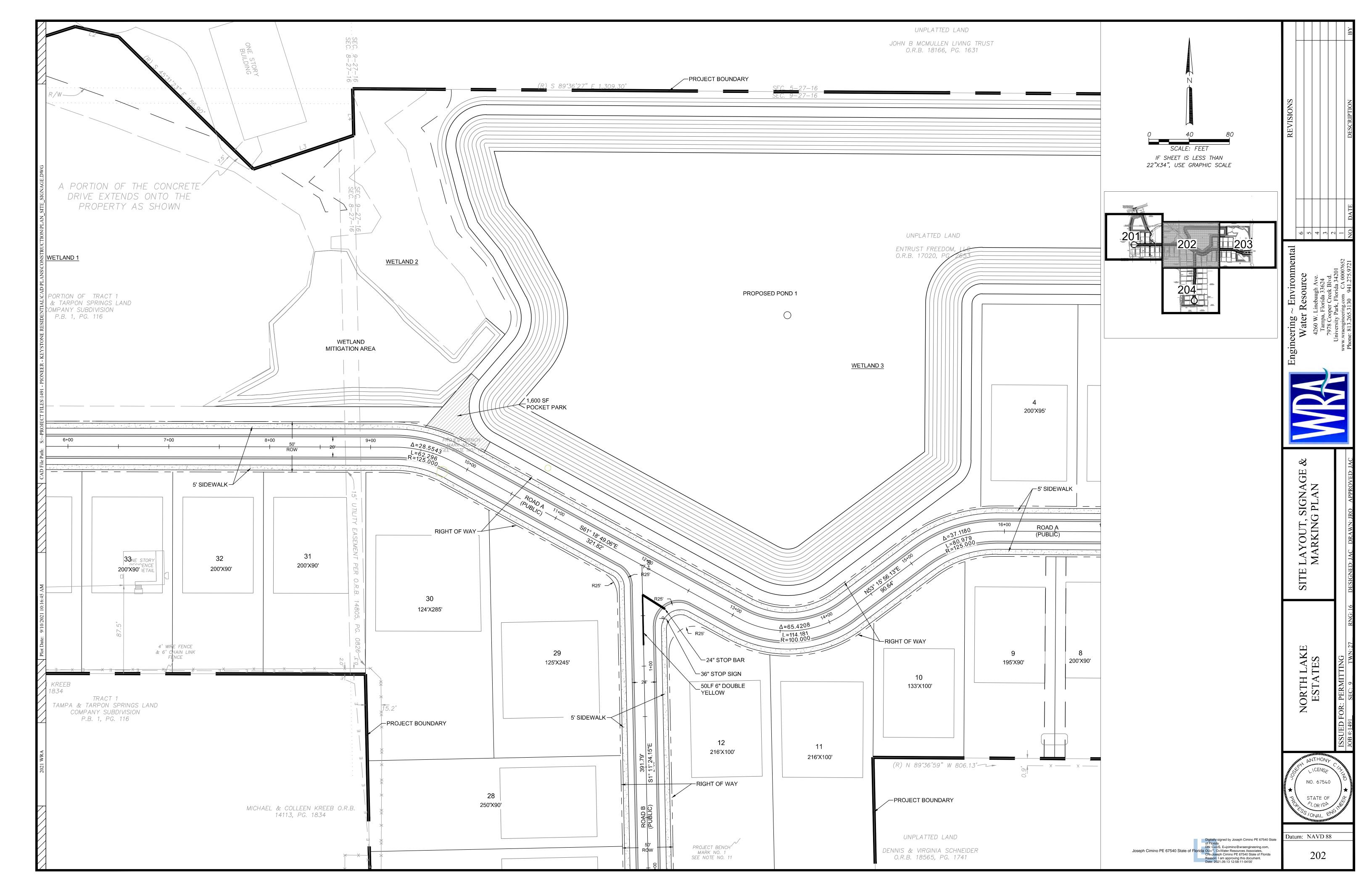
Datum: NAVD 88

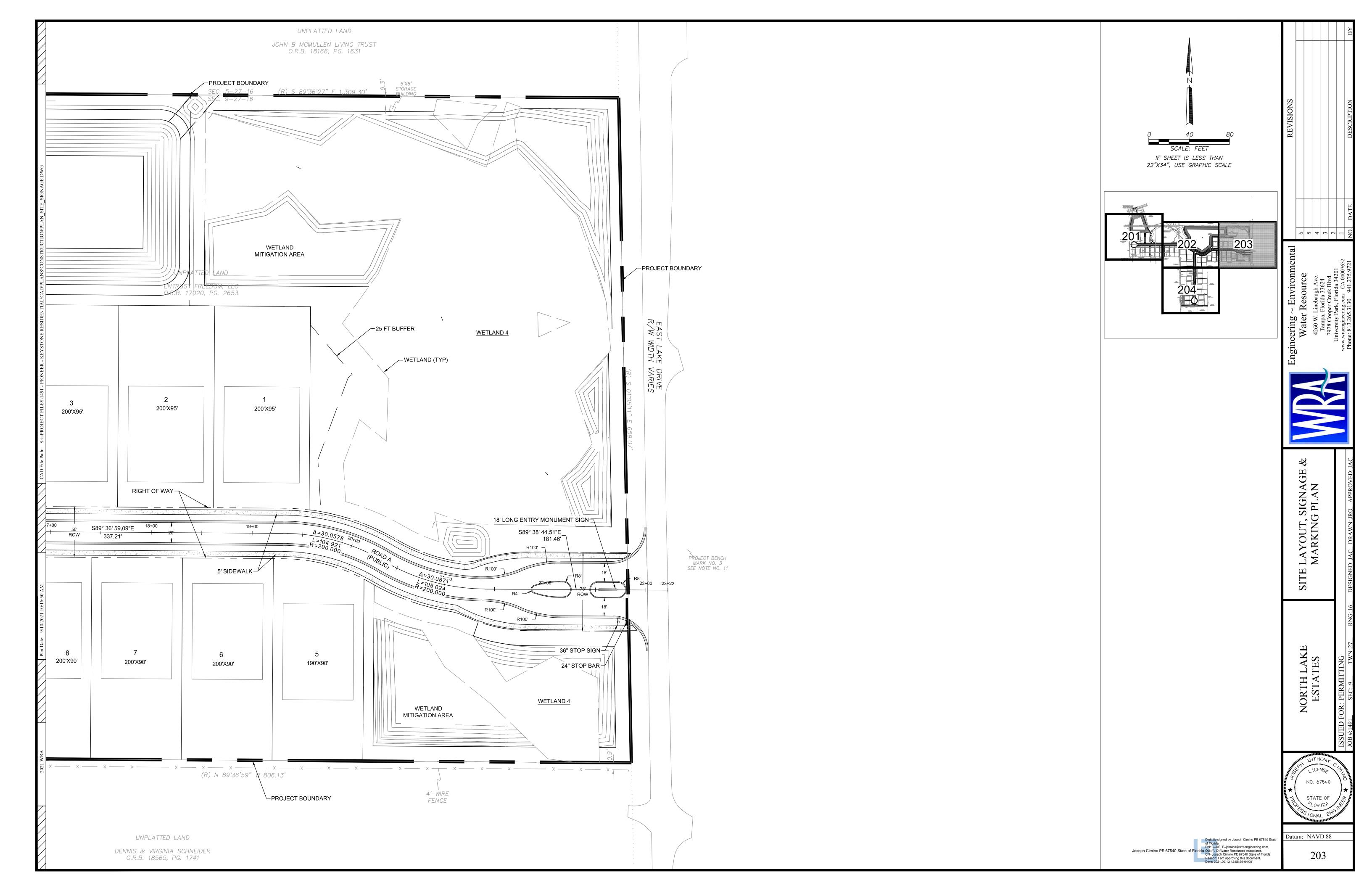
EROSION O

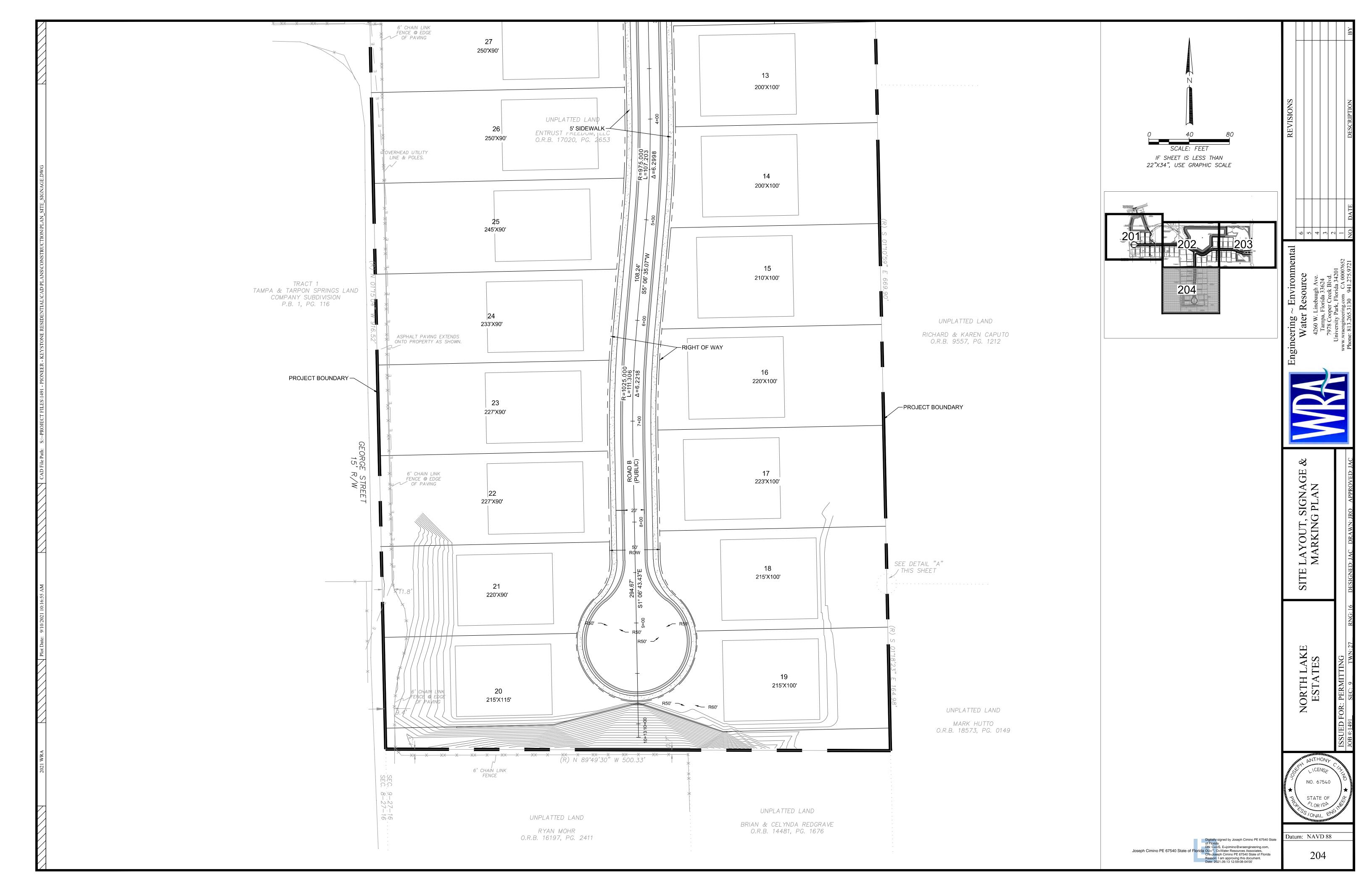


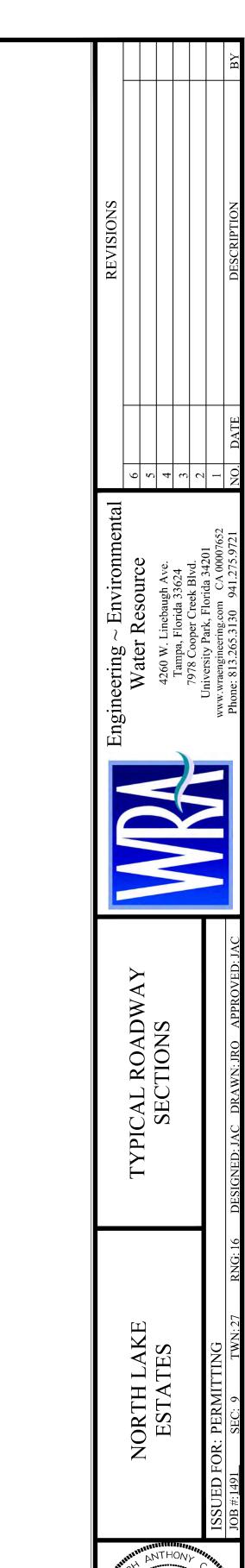


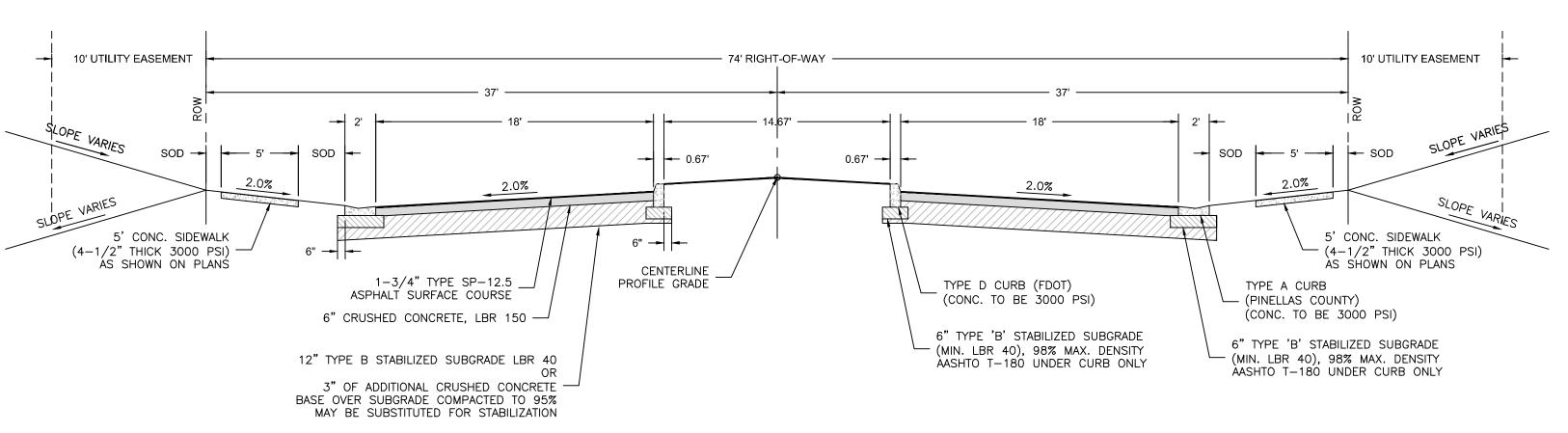




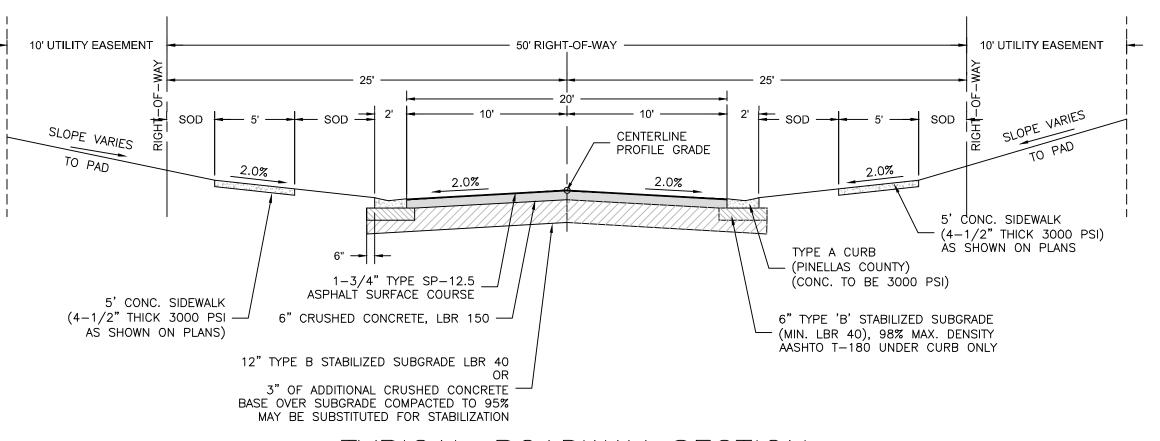








TYPICAL ENTRY SECTION
74' ROW
N.T.S



TYPICAL ROADWAY SECTION
50' ROW
N.T.S

Digitally signed by Joseph Cimino PE 67540 Sof Florida
DN: C=US, E=jcimino@wraengineering.com,
Joseph Cimino PE 67540 State of Florida
OU="", O=Water Resources Associates, CN=Joseph Cimino PE 67540 State of Florida Reason: I am approving this document.
Date: 2021.09.13 12:59:34-04'00'

Datum: NAVD 88

Ingineering.com, Associates, 0 State of Florida document.

NO. 67540



STREET LIGHTING AND SIGN NOTES:

163.10 - STREET SIGNS AND NAMES.

A. TRAFFIC CONTROL SIGNS SHALL BE INSTALLED TO THE SPECIFICATIONS OF THE CITY ENGINEER, OR DESIGNEE.

B. ALL STREETS SHALL BE PROVIDED WITH STREET SIGNS AT EACH INTERSECTION. ONE HUNDRED PERCENT OF THE INITIAL INSTALLATION COST SHALL BE PAID BY THE DEVELOPER. STREET SIGNS SHALL BE IN ACCORDANCE WITH

STANDARD FDOT CONSTRUCTION DETAILS. ACCEPTABLE ABBREVIATIONS FOR THE WORDS THAT WILL APPEAR ON SIGNS SHALL BE AS FOLLOWS:

(1) DRIVE--DR (2) AVENUE--AVE

(3) COURT--CT

(4) PLACE--PL

(5) STREET--ST (6) BOULEVARD--BLVD

(7) PARKWAY--PKWY

(8) CIRCLE--CIR (9) LANE--LN

(10) ROAD--RD

(11) TERRACE--TERR (12) WAY--WAY

C. STREET NAMES SHALL BE APPROVED BY THE CITY. THERE SHALL BE NO DUPLICATION OR SIMILARITY OF STREET NAMES WITH ANY OTHER STREET LOCATED IN THE CITY SERVICE AREA FOR FIRE PROTECTION, POTABLE WATER, AND SANITARY SEWER.

D. THE DESIGN FOR TRAFFIC CONTROL SIGNAGE SHALL BE AS SHOWN IN FIGURE 1

BELOW AND SHALL MEET THE FOLLOWING STANDARDS: (1) SIGN POSTS SHALL BE BLACK OR DARK GREEN IN COLOR.

(2) SIGN POSTS SHALL BE ROUND OR FLUTED IN SHAPE.

(3) SIGN POSTS SHALL BE AT LEAST THREE INCHES IN DIAMETER. (4) SIGN POSTS SHALL HAVE A ROUND OR FLUTED DECORATIVE BASE.

(5) SIGNS SHALL HAVE A BLACK OR DARK GREEN BOARDER OF AT LEAST ONE INCH IN WIDTH. SIGNS IDENTIFYING INDIVIDUAL PARKING SPACES ARE EXEMPT FROM THIS REQUIREMENT.

E. SUBDIVISIONS FOR PREDOMINATELY INDUSTRIAL USES, EXCLUDING THOSE LOCATED WITHIN ANY SAP (SPECIAL AREA PLAN) ZONING DISTRICT, SHALL BE EXEMPT FROM THE DESIGN REQUIREMENTS OF SECTION 163.10(D).

163.11 - STREET LIGHTS.

A. STREET LIGHTING SHALL BE INSTALLED BY THE DEVELOPER AT THE DEVELOPER'S COST IN ALL SUBDIVISIONS.

B. THE DESIGN FOR STREET LIGHTING SHALL BE SUBSTANTIALLY SIMILAR TO THOSEAS SHOWN IN FIGURE 2 BELOW ORAND SHALL MEET THE FOLLOWING STANDARDS:

(1) LIGHT POSTS SHALL BE BLACK OR DARK GREEN IN COLOR.

(2) LIGHT POSTS SHALL BE EITHER ROUND OR FLUTED IN SHAPE.

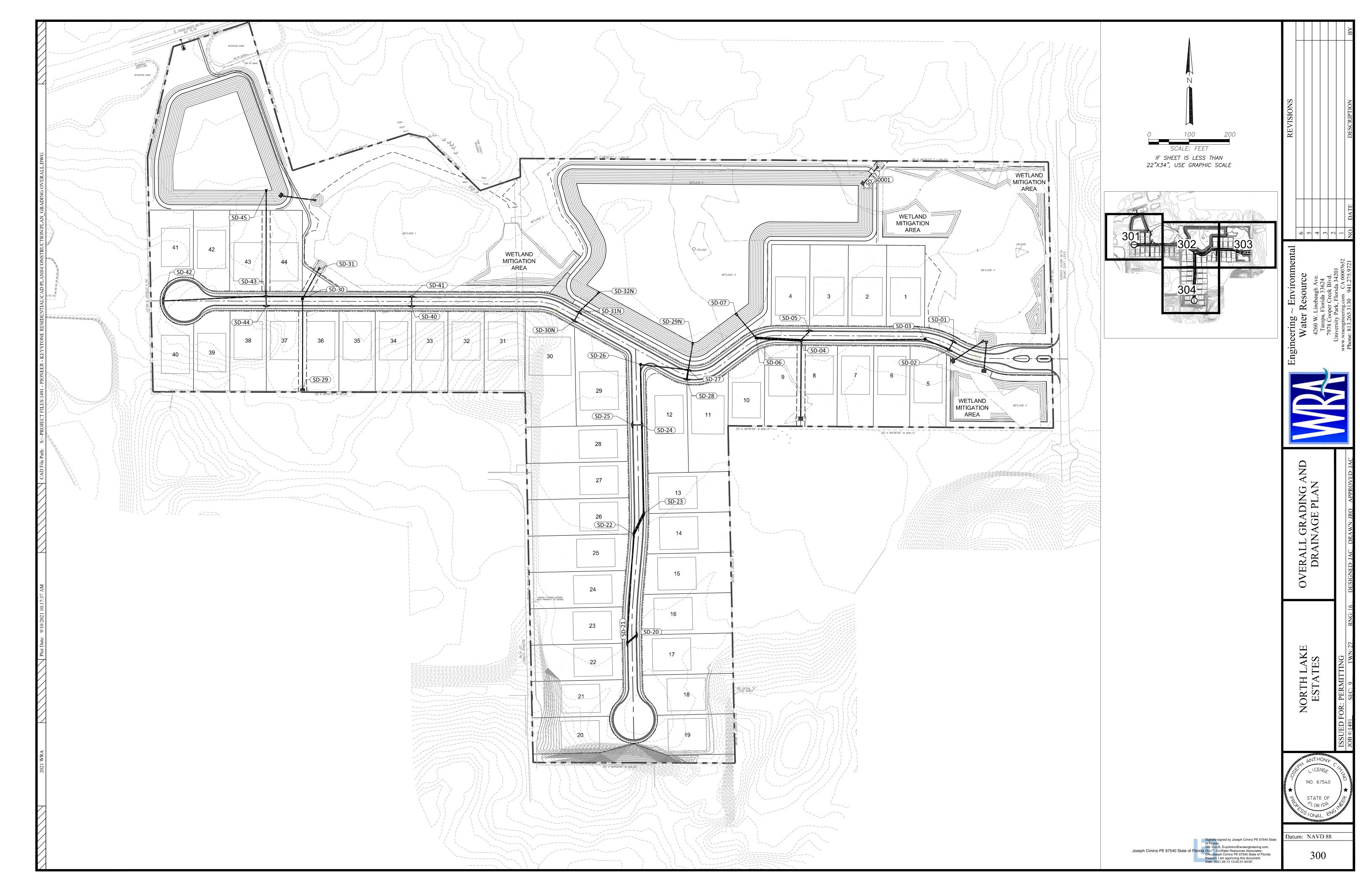
(3) LIGHT POSTS SHALL HAVE A ROUND OR FLUTED DECORATIVE BASE. (4) LIGHT FIXTURES SHALL BE DIRECTED DOWNWARD.

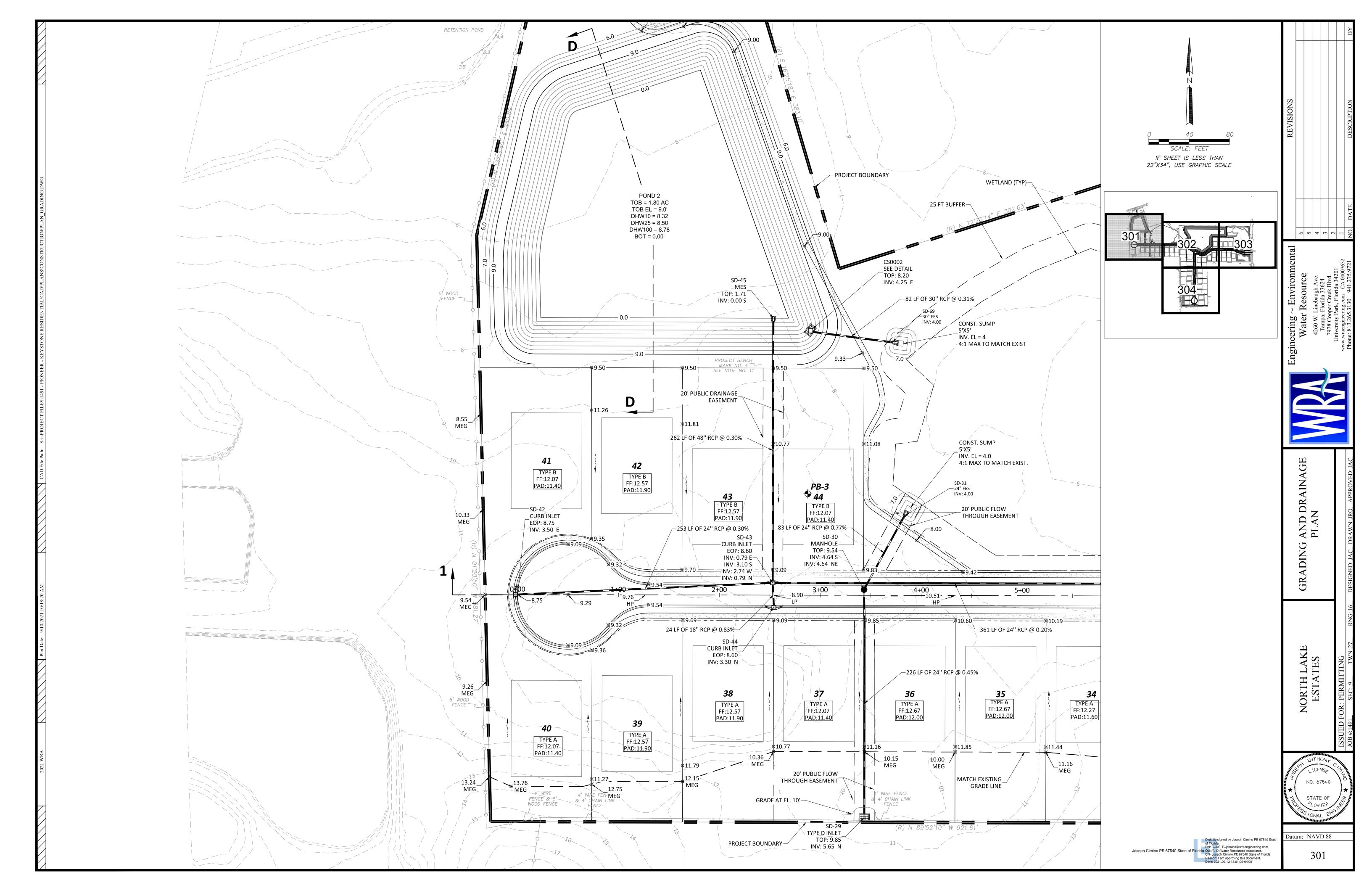
C) STREET LIGHTING SHALL BE INSTALLED TO THE SPECIFICATIONS OF THE CITY ENGINEER, OR DESIGNEE.

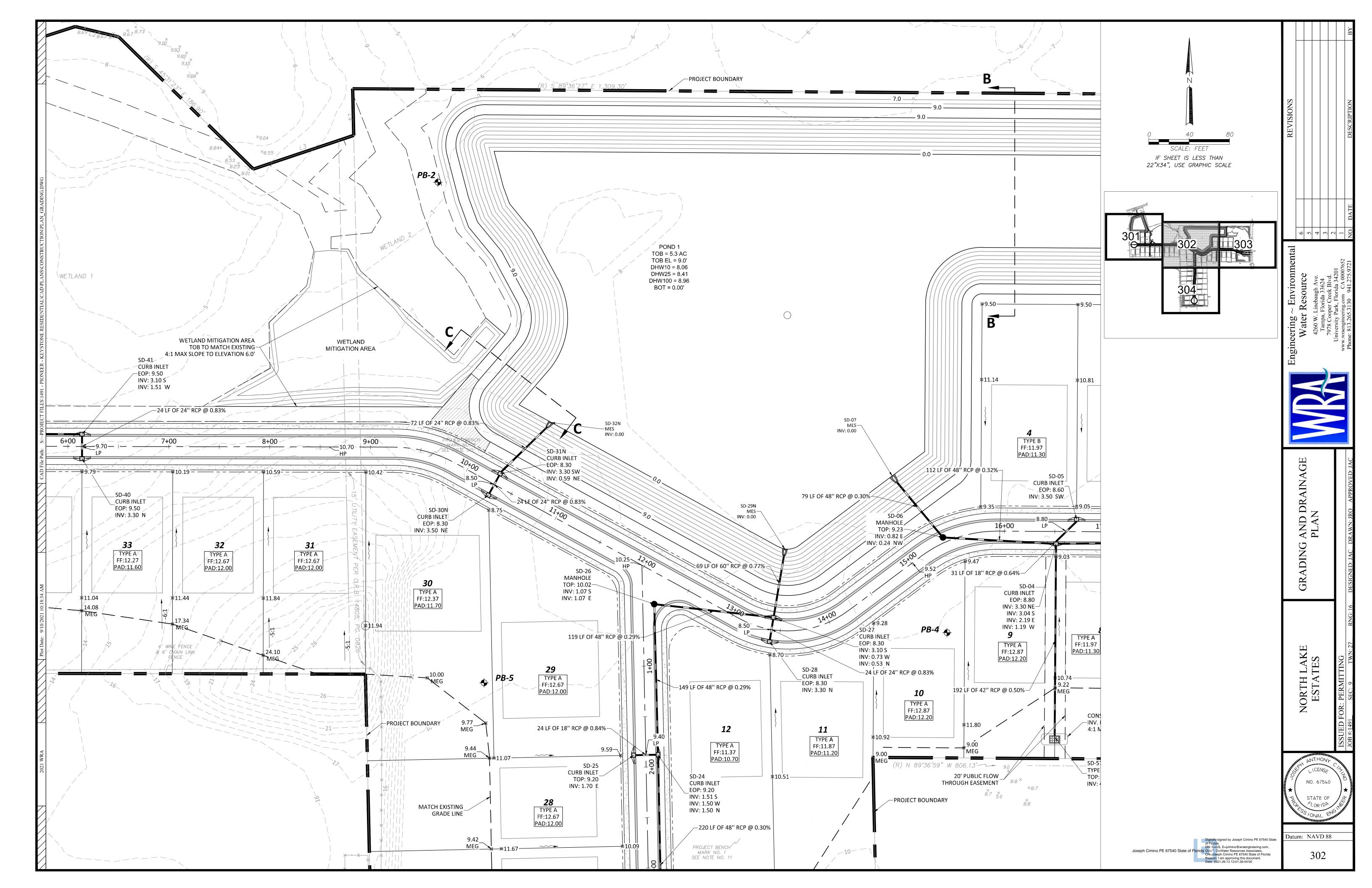
C. STREET LIGHTING SHALL BE INSTALLED TO THE SPECIFICATIONS OF THE CITY ENGINEER, OR DESIGNEE.

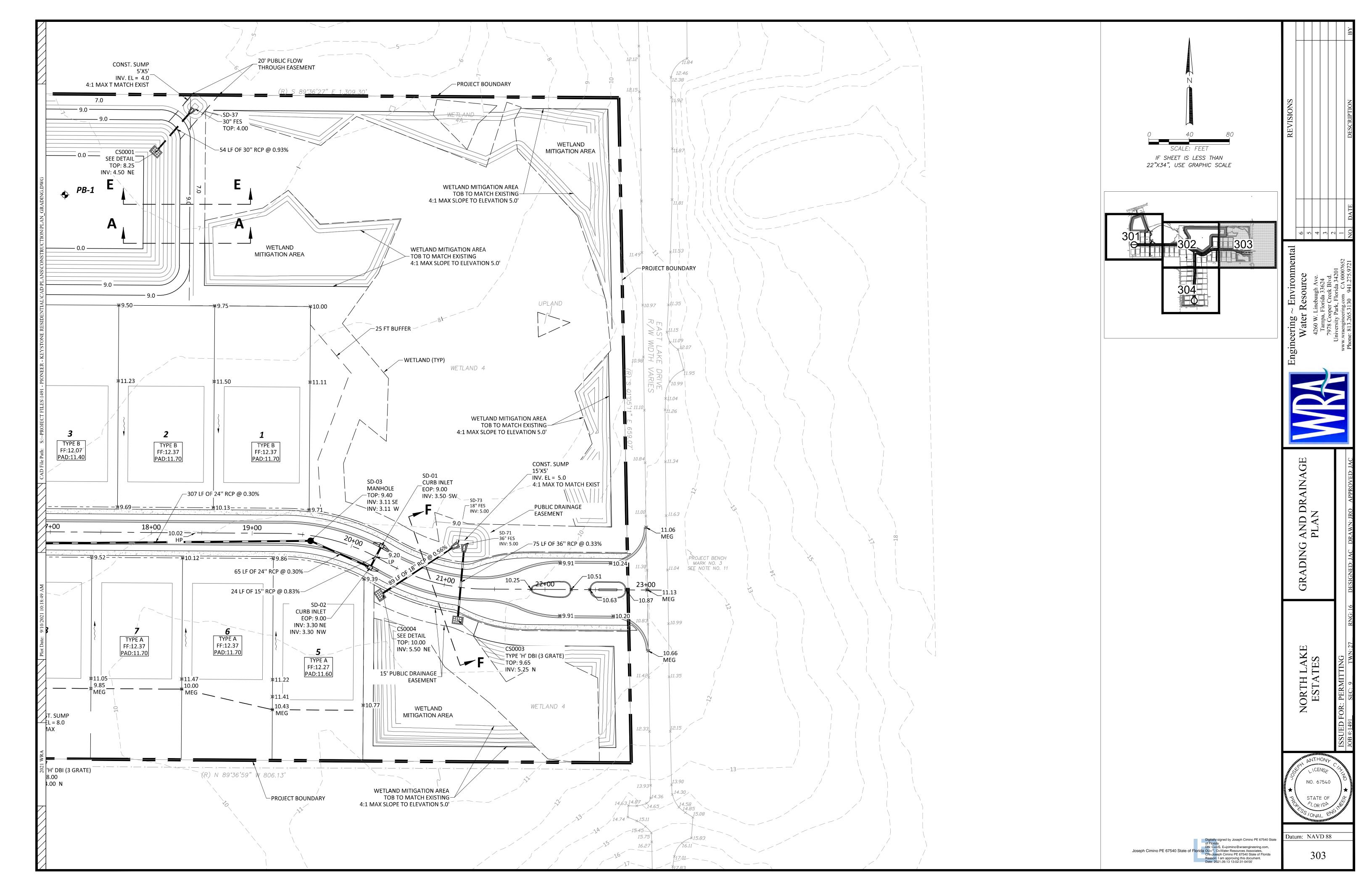
D. SUBDIVISIONS FOR PREDOMINATELY INDUSTRIAL USES, EXCLUDING THOSE

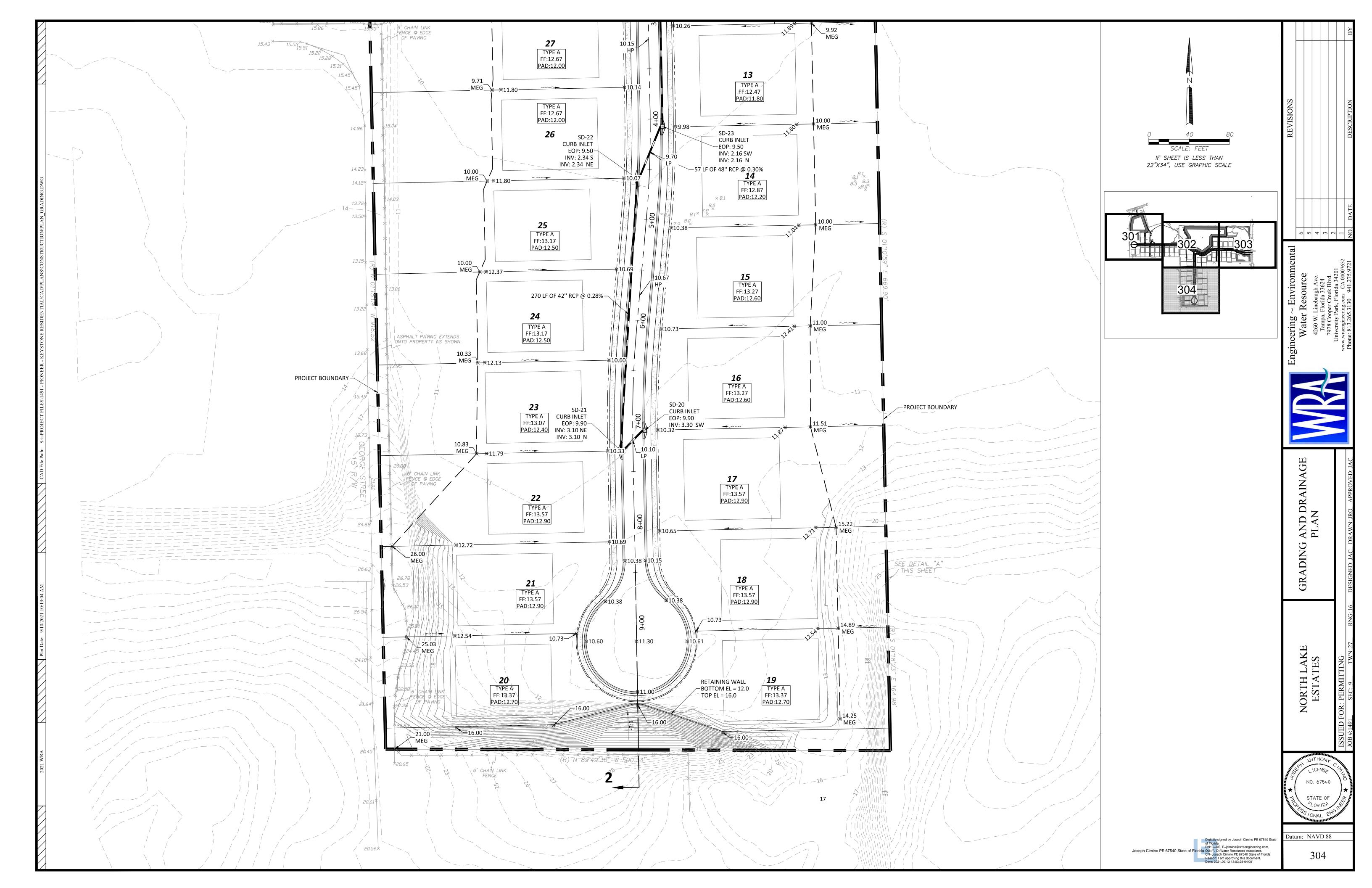


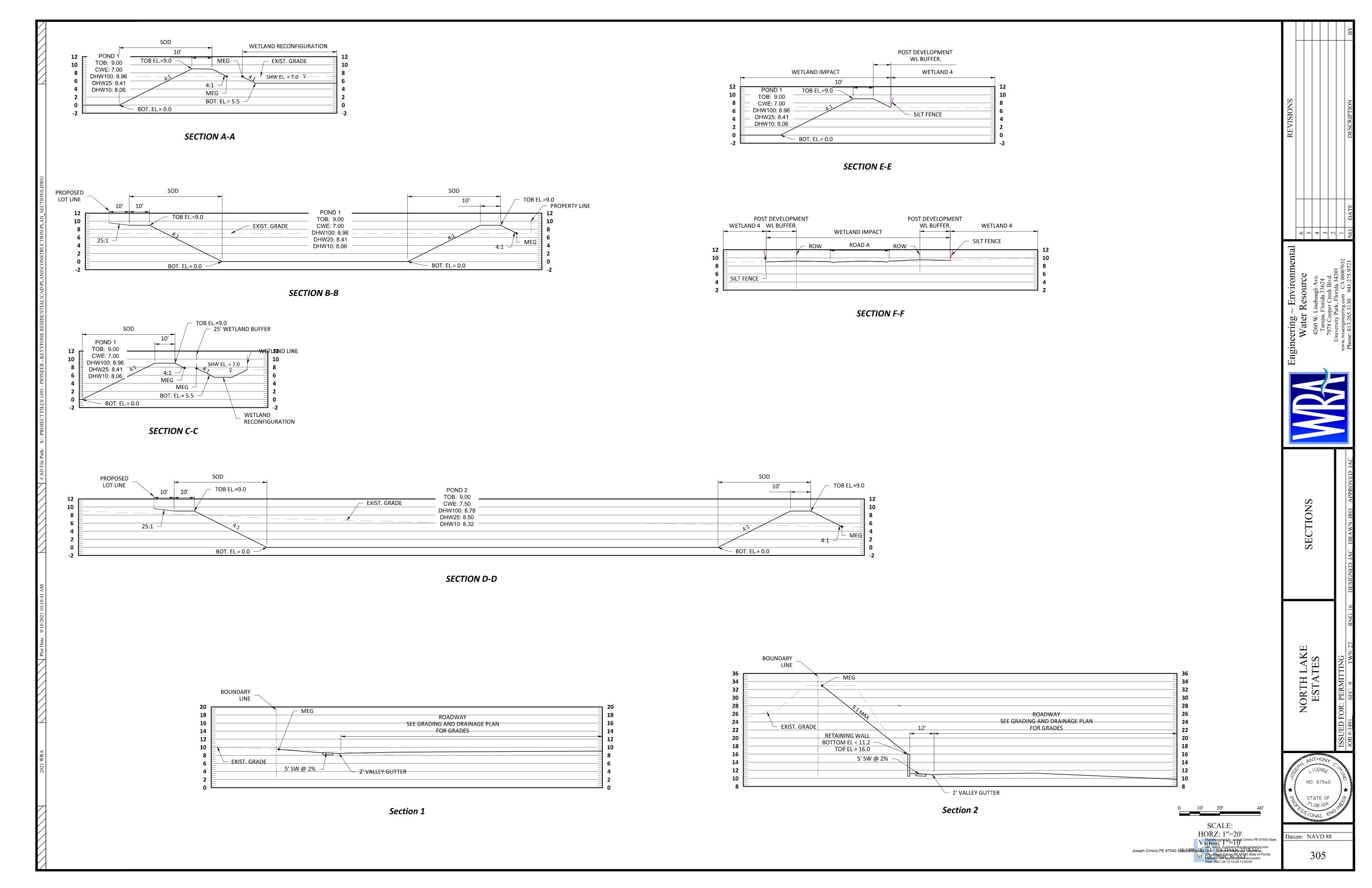


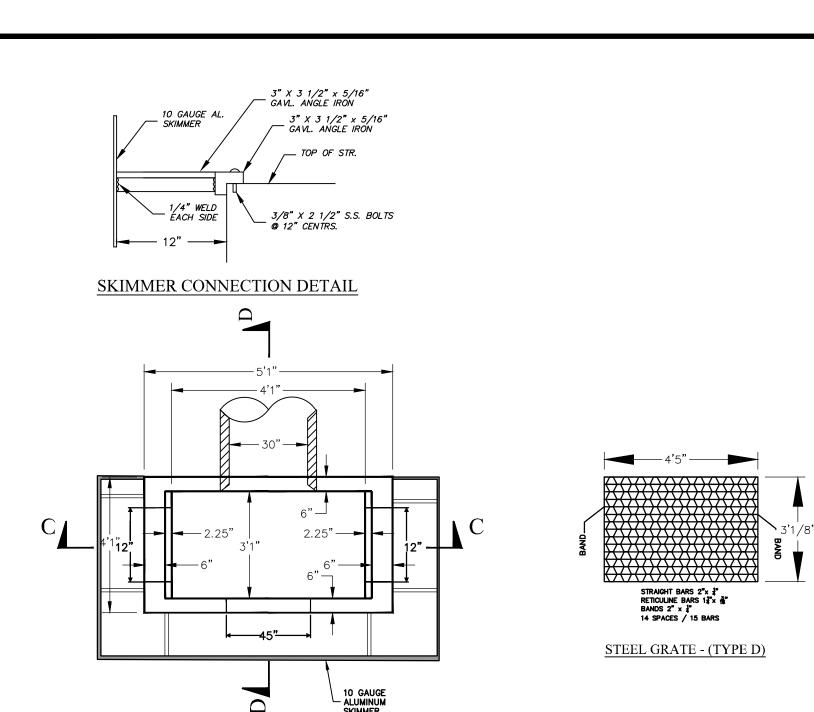




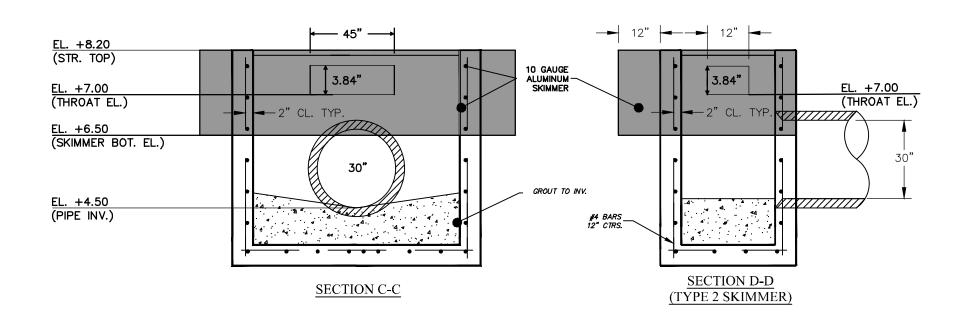








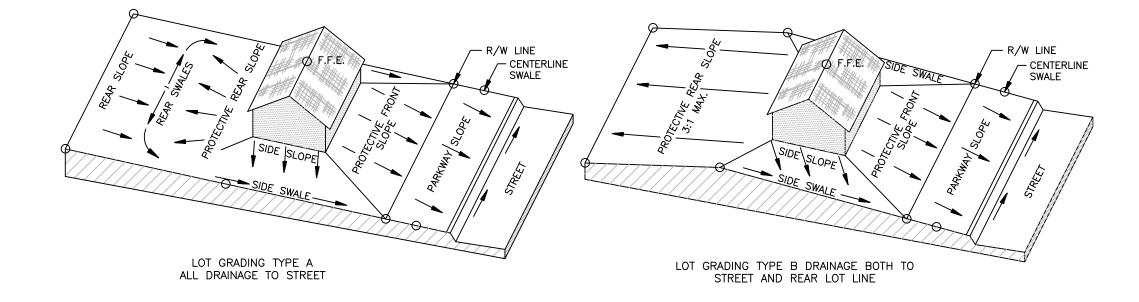




### CS0001 TYPE D CONTROL STRUCTURE DETAIL (TYP.) N.T.S

NOTE:

- (1) TYPICAL DETAIL SHOWS MINIMUM DIMENSIONS FOR FDOT TYPE D INLET. ALL OTHER DIMENSIONAL AND STRUCTURAL REQUIREMENTS SHALL BE PER FDOT INDEX 232.
- (2) SECURE ALUMINUM SKIMMER WITH STAINLESS STEEL CONCRETE ANCHORS AT 12" CENTERS.



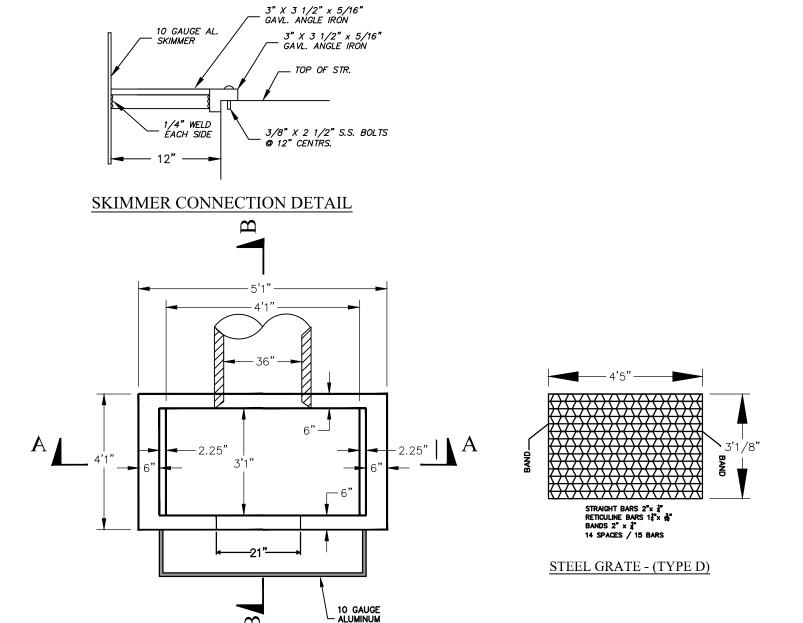
#### 1. FINISH FLOOR ELEVATION TO BE A MIN. 16" ABOVE CENTERLINE OF ROAD GRADE AND BE AT A

- MIN 1 FT ABOVE THE 100 YEAR FLOOD PLAIN.
- 2. FINISH FLOOR ELEVATIONS OF ADJACENT STRUCTURES, IF EXISTING, SHALL BE PROVIDED.
  3. ELEVATION OF SWALE AT CENTERLINE AT EACH PROPERTY LINE PROJECTION AND BOTH CULVERT INVERTS, IF EXISTING, SHALL BE PROVIDED.
- 4. ALL ROOF RUNOFF SHALL BE DIVERTED TOWARDS STREET AND/OR STORMWATER AREAS.

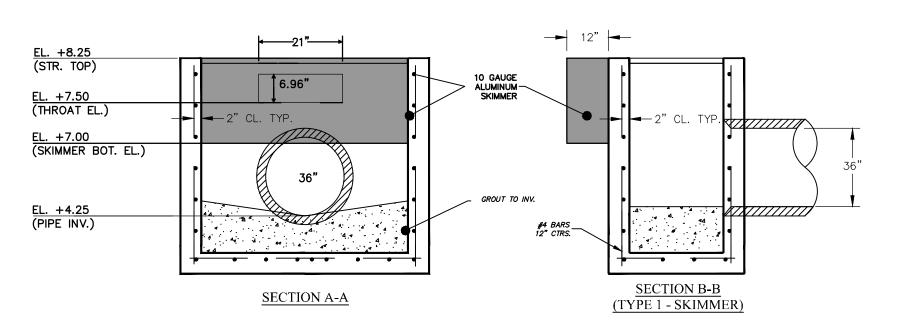
TYPICAL LOT GRADING DETAIL NOT TO SCALE

O ELEVATION REQUIRED

F.F.E. FINISH FLOOR ELEVATION



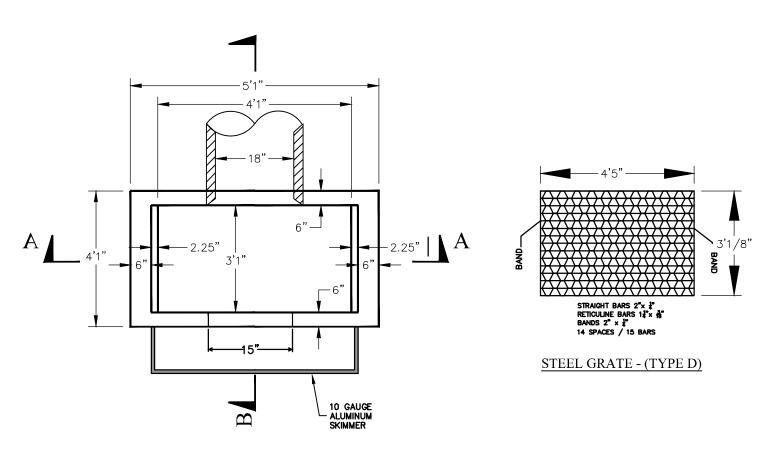
#### SKIMMER DETAIL #1



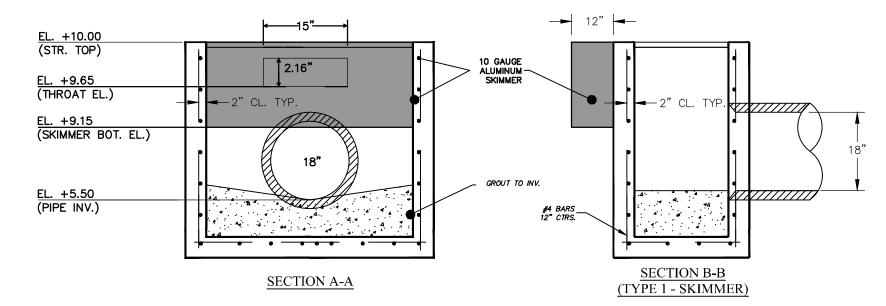
## CS0002 TYPE D CONTROL STRUCTURE DETAIL (TYP.) N.T.S

NOTE:

- (1) TYPICAL DETAIL SHOWS MINIMUM DIMENSIONS FOR FDOT TYPE D INLET. ALL OTHER DIMENSIONAL AND STRUCTURAL REQUIREMENTS SHALL BE PER FDOT INDEX 232.
- (2) SECURE ALUMINUM SKIMMER WITH STAINLESS STEEL CONCRETE ANCHORS AT 12" CENTERS.



SKIMMER DETAIL #1



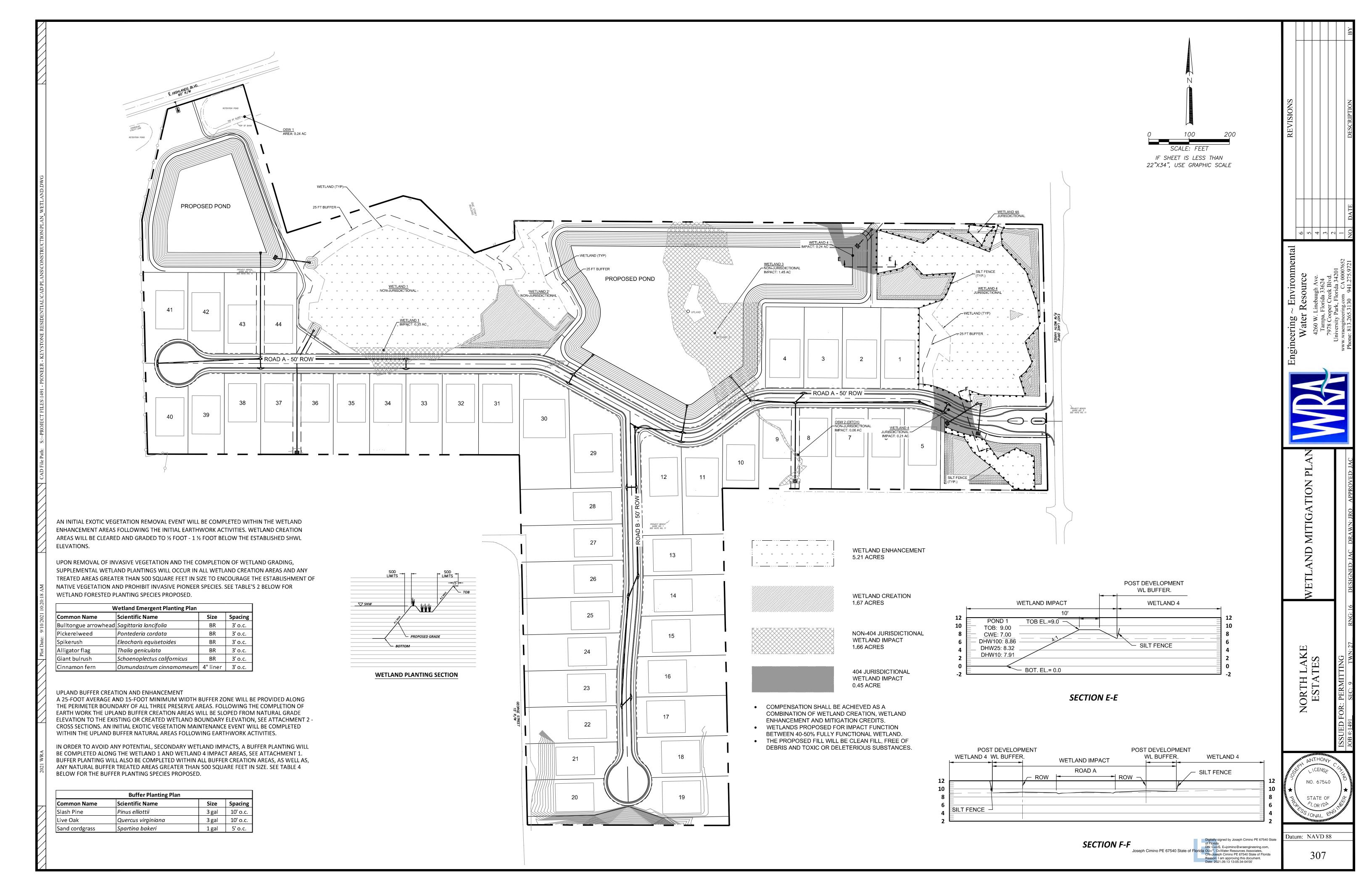
# CS0004 TYPE D CONTROL STRUCTURE DETAIL (TYP.) N.T.S

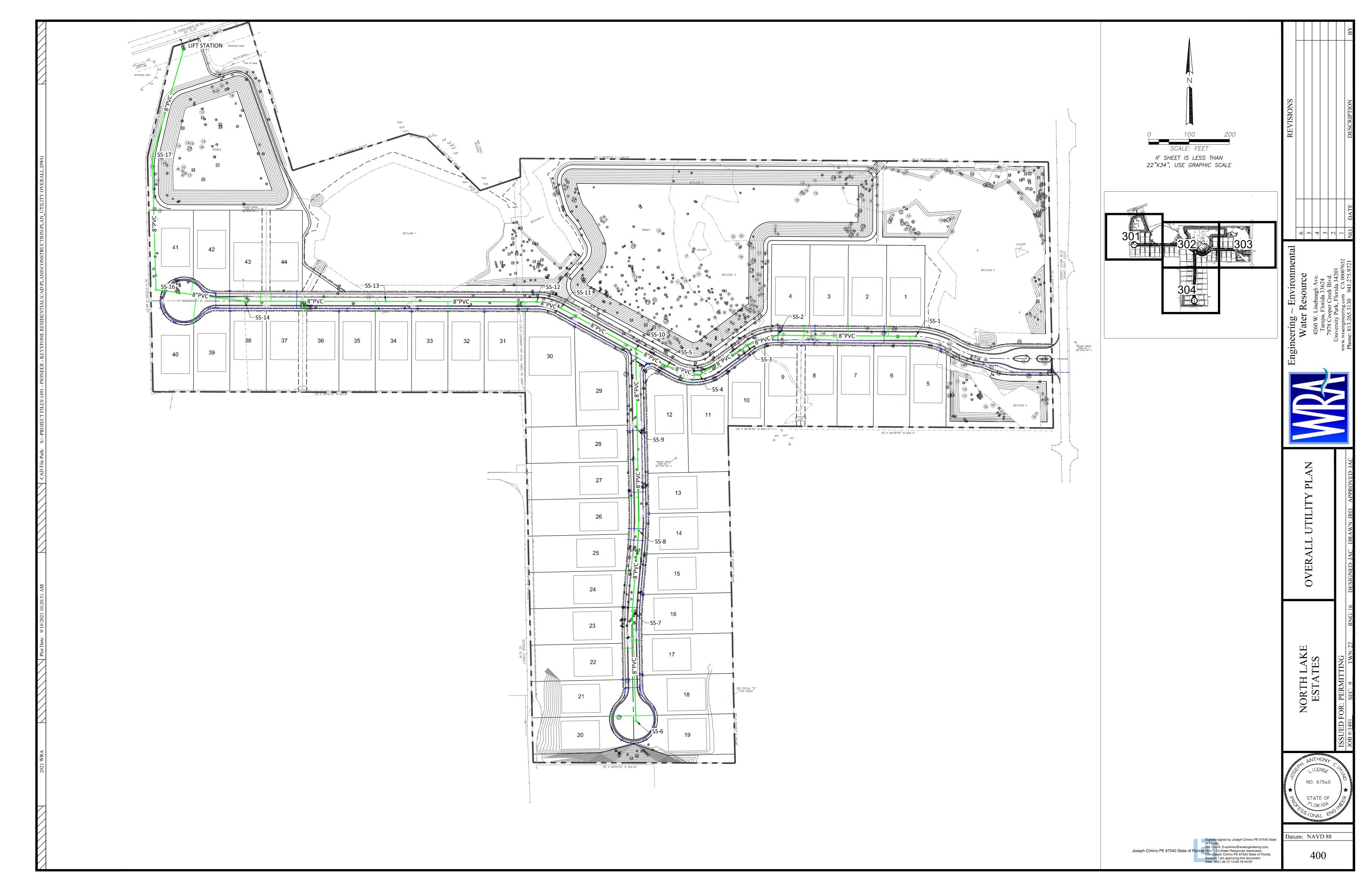
NOTE:

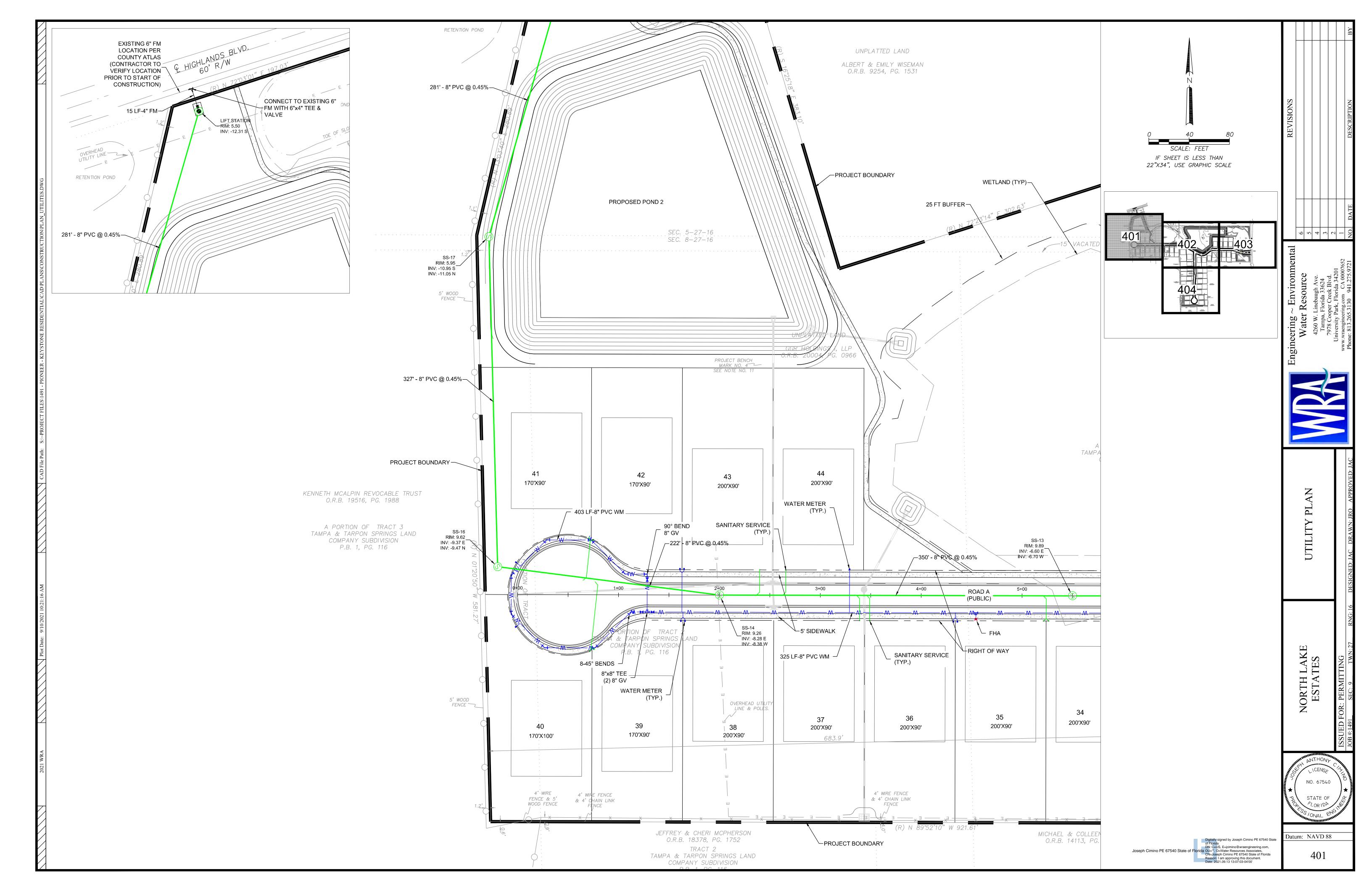
- (1) TYPICAL DETAIL SHOWS MINIMUM DIMENSIONS FOR FDOT TYPE D INLET. ALL OTHER DIMENSIONAL AND STRUCTURAL REQUIREMENTS SHALL BE PER FDOT INDEX 232.
- (2) SECURE ALUMINUM SKIMMER WITH STAINLESS STEEL CONCRETE ANCHORS AT 12" CENTERS.

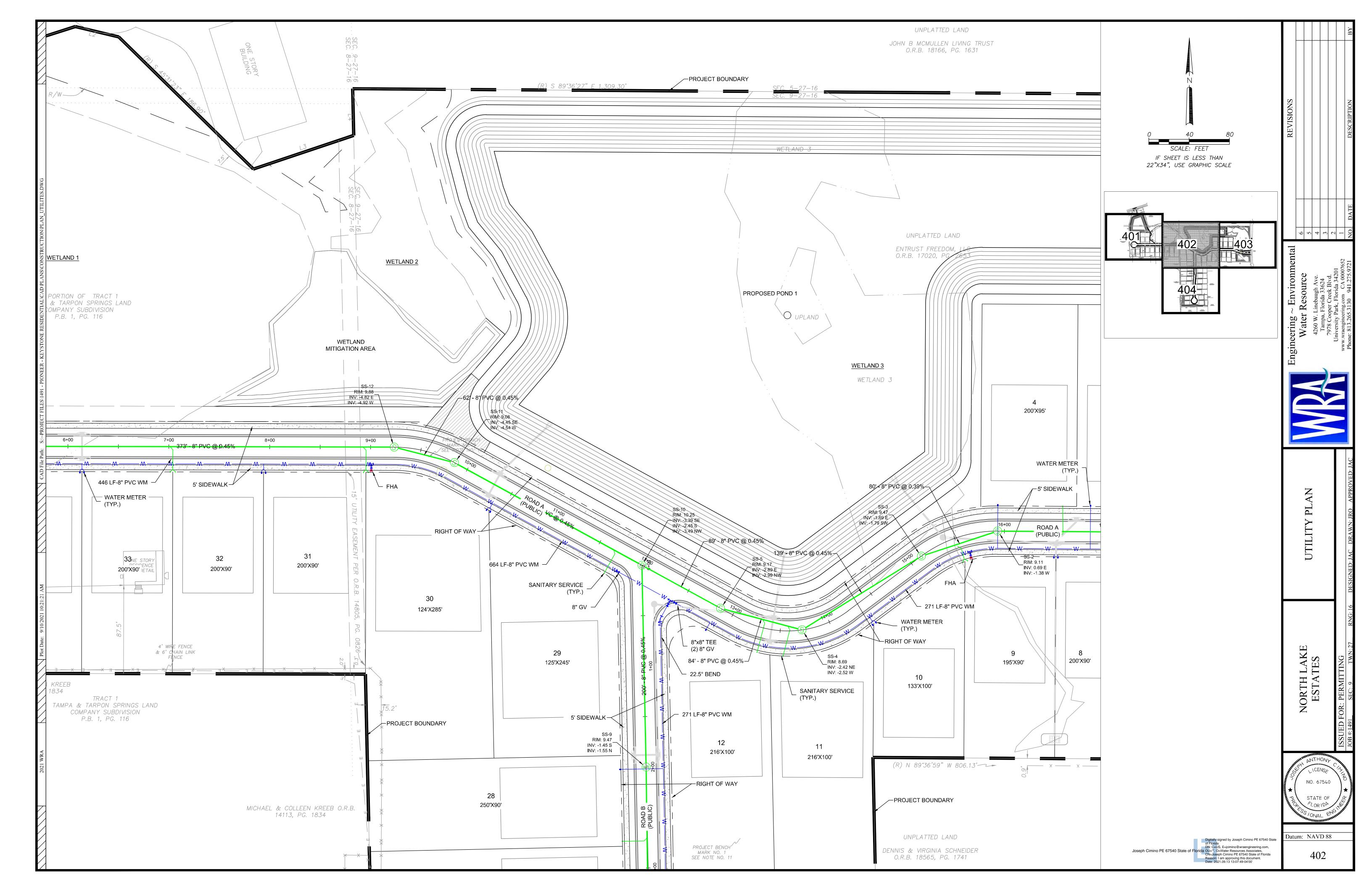
Datum: NAVD 88 306

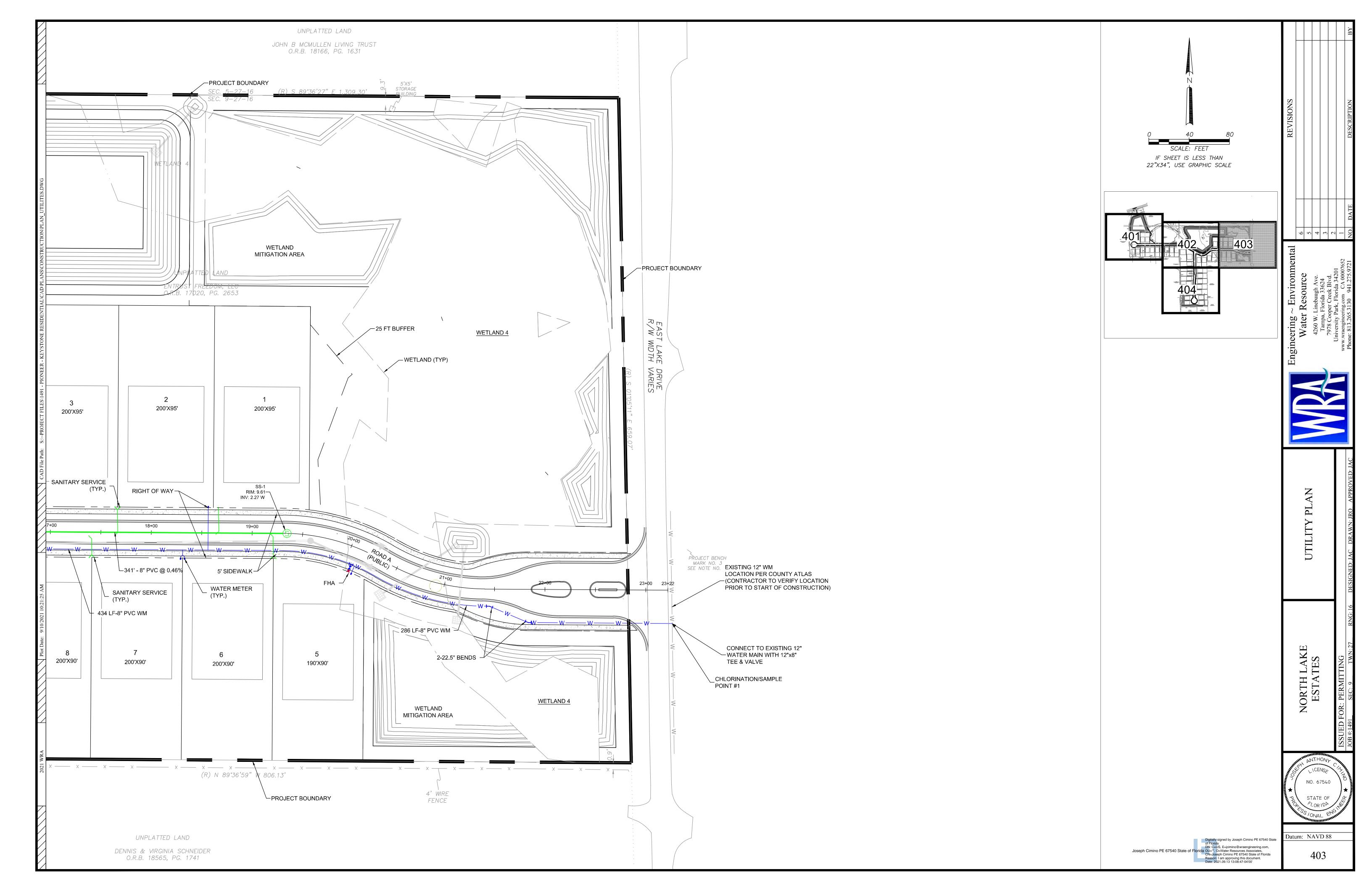
Digitally signed by Joseph Cimino PE 67540 State of Florida Joseph Cimino PE 67540 State of Florida OU=", O=Water Resources Associates, CN=Joseph Cimino PE 67540 State of Florida Reason: I am approving this document. Date: 2021.09.13 13:04:52-04'00'

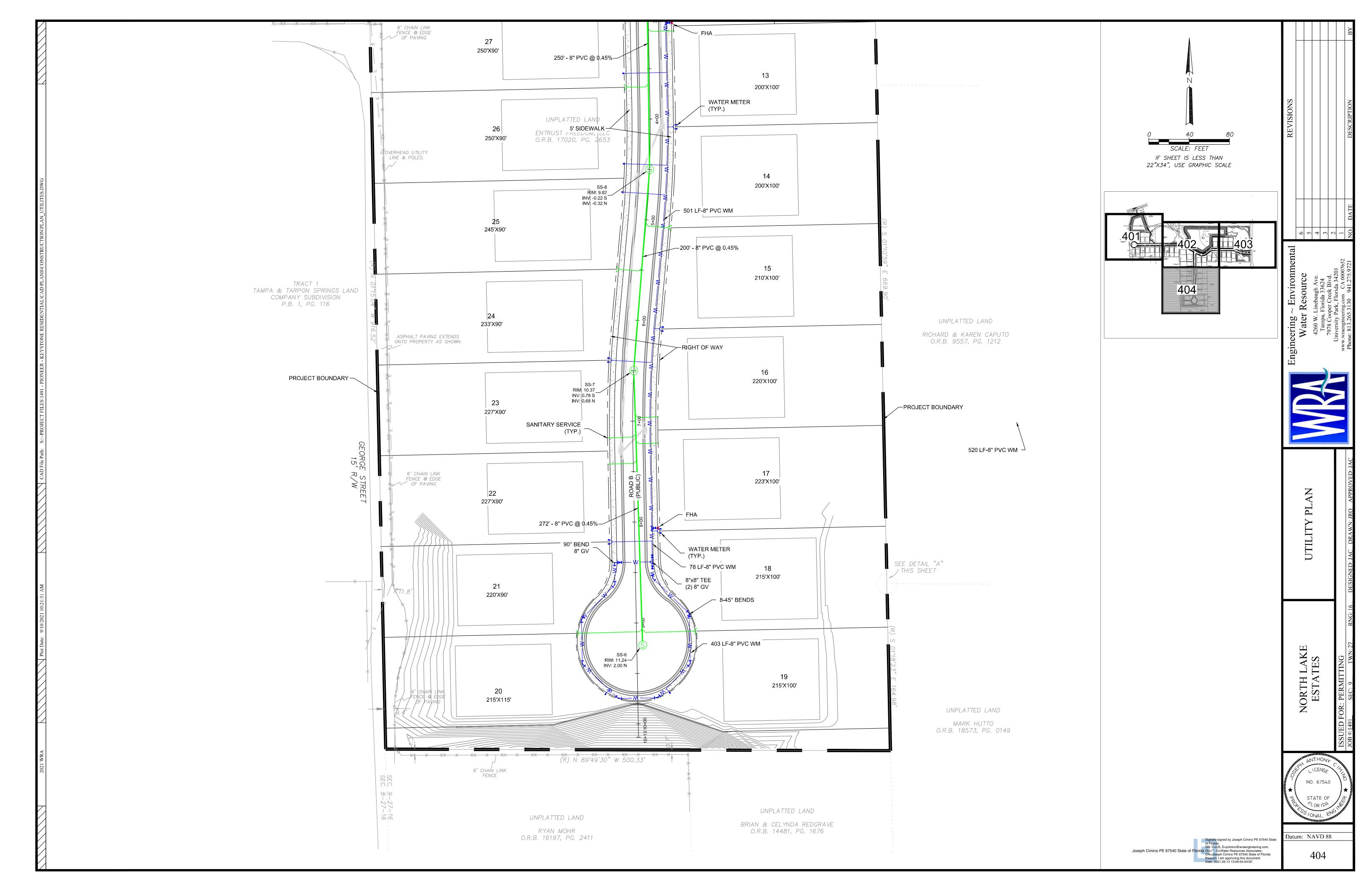




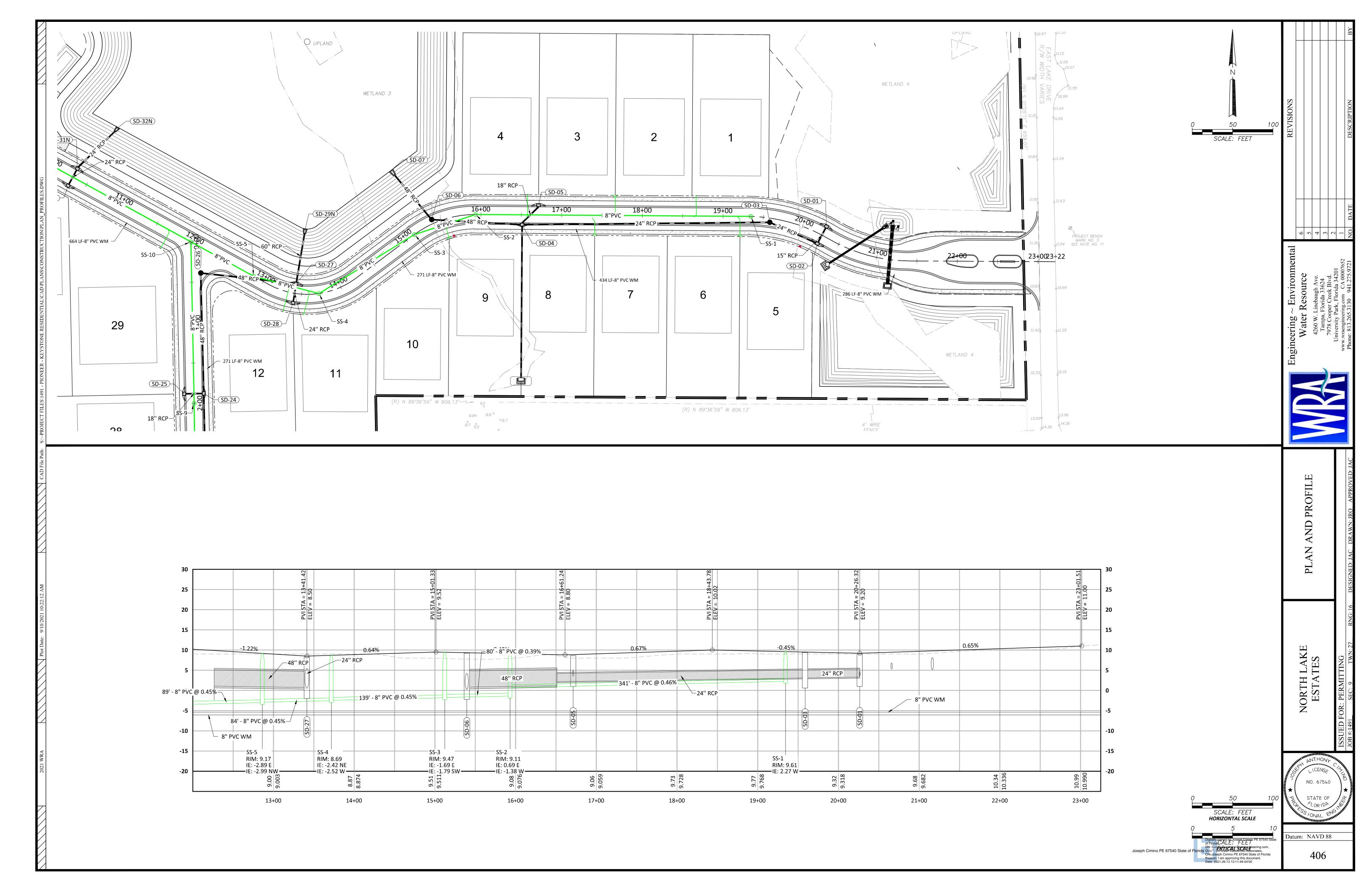


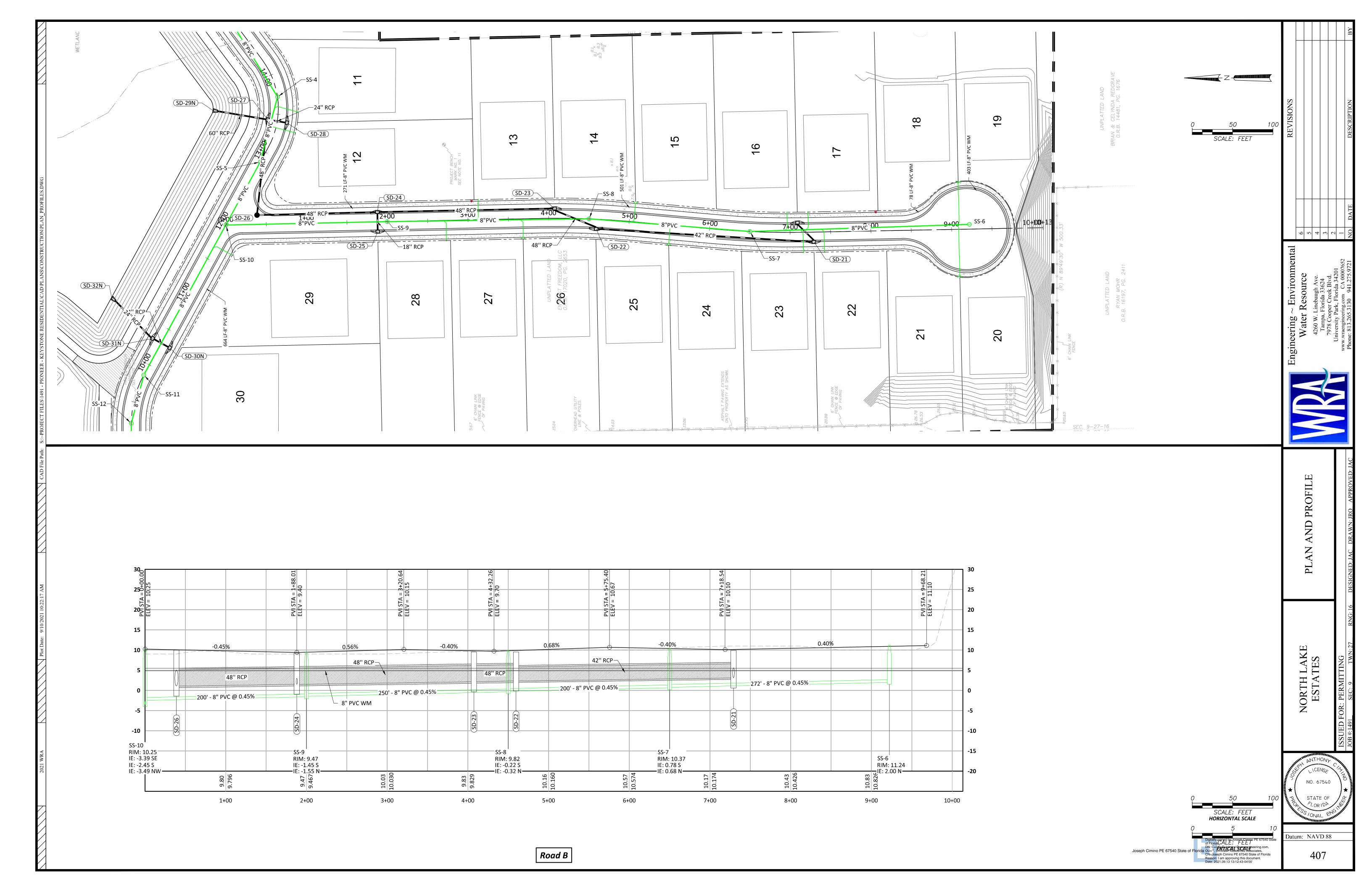


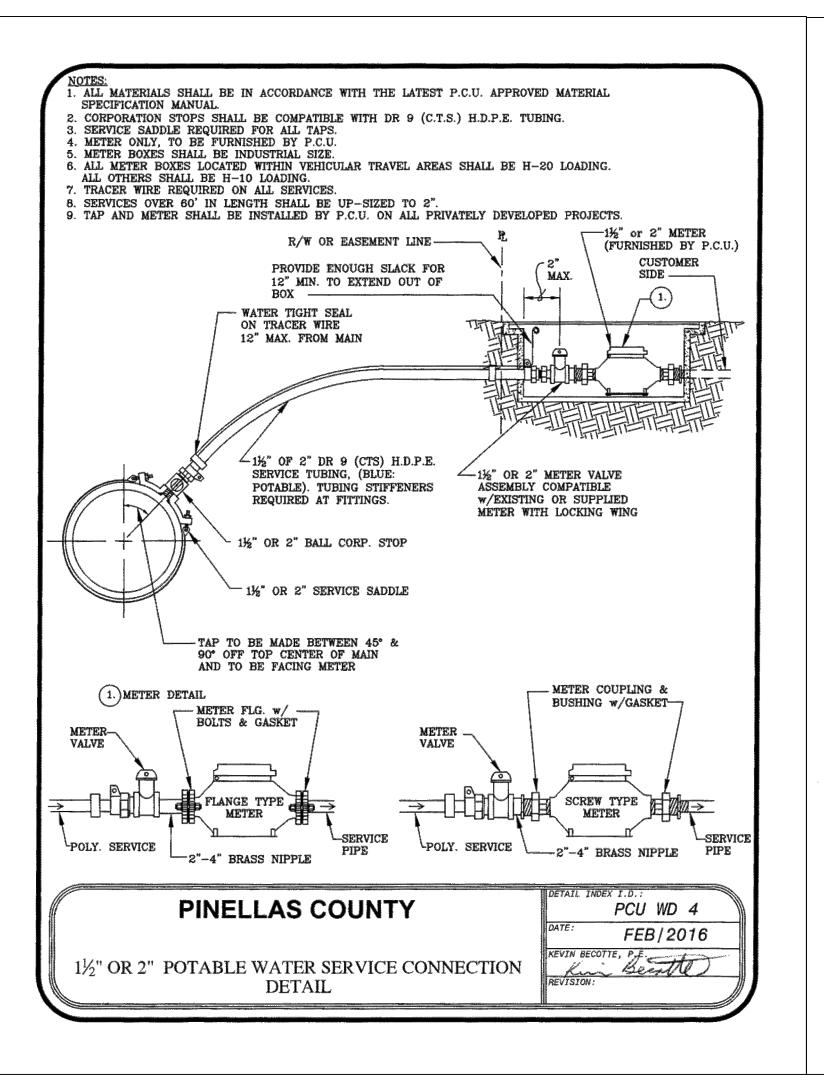


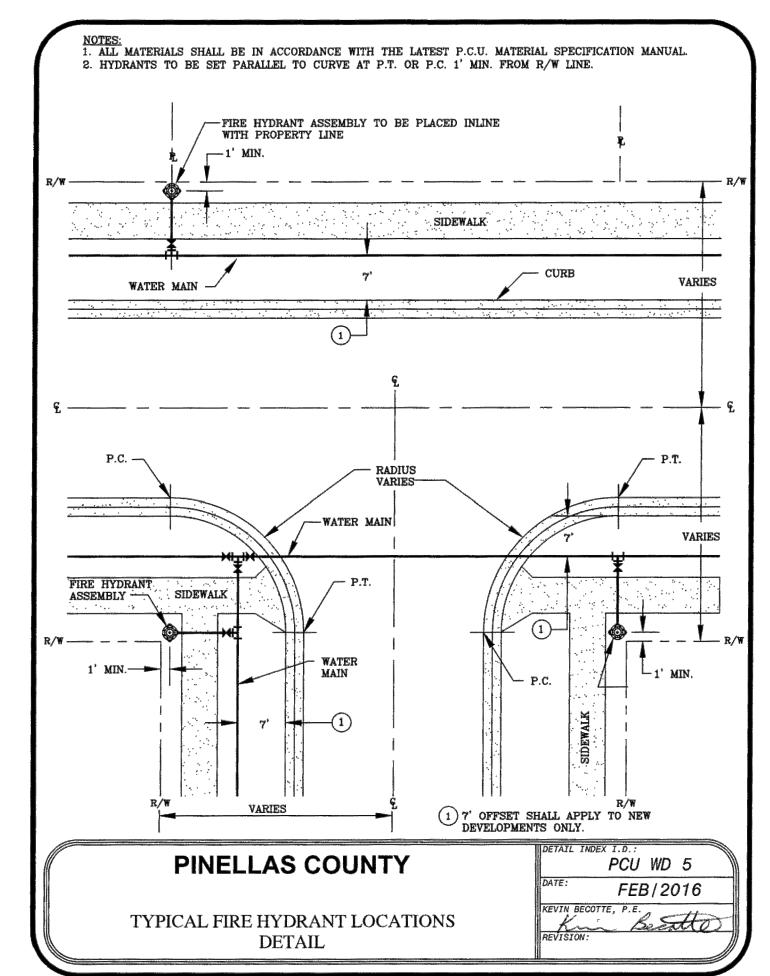


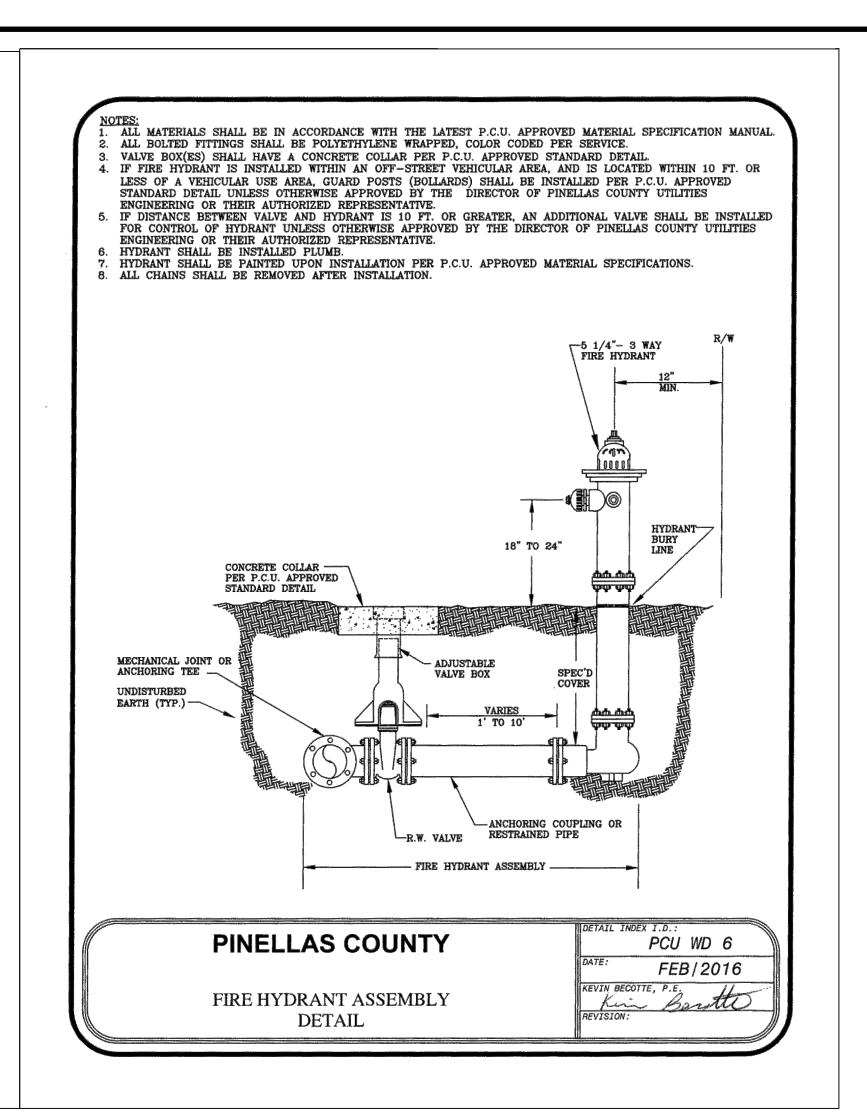












ry Details

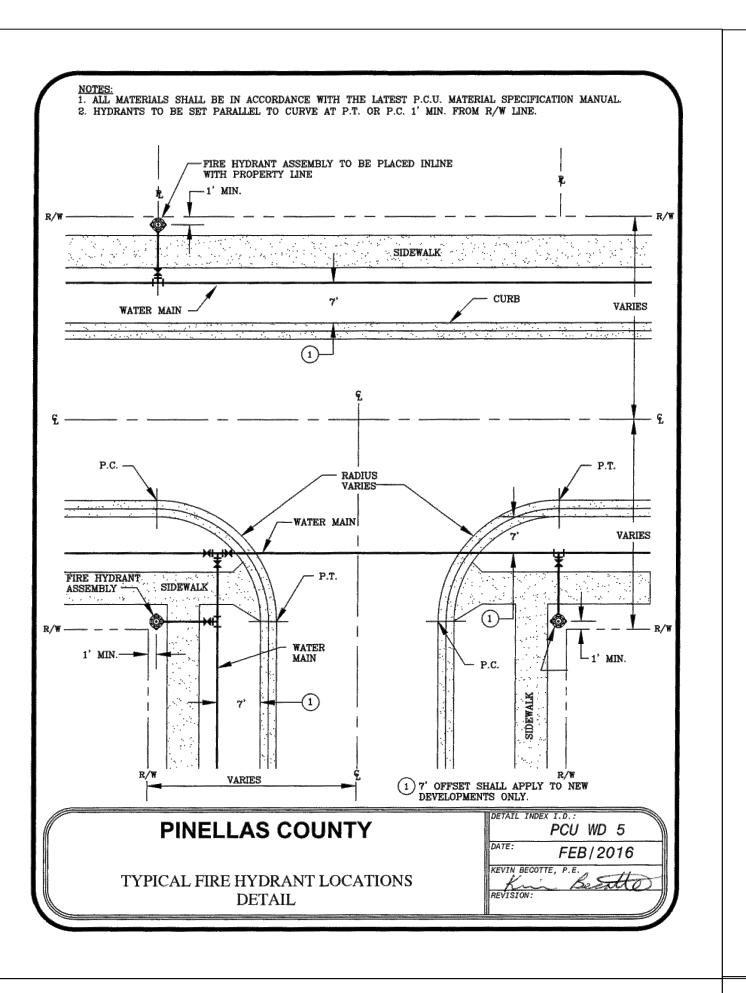
ERMITTING

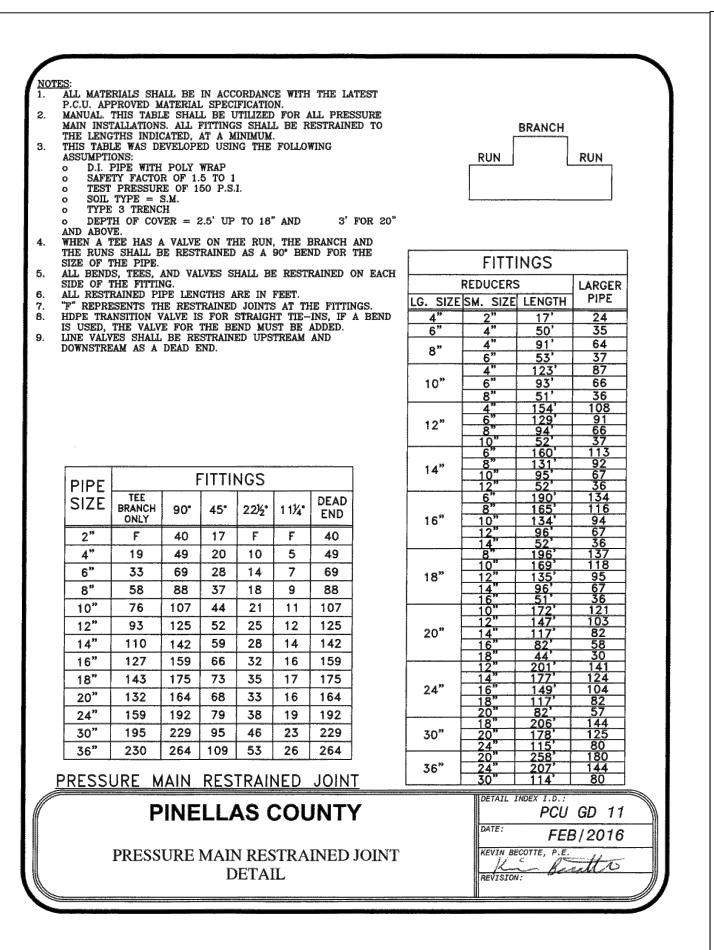
ID FOR: PERMITTING

NO. 67540

STATE OF S

Datum: NAVD 88





. ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST P.C.U. APPROVED MATERIALS SPECIFICATION

3. ALL RISER UNITS SHALL HAVE A MINIMUM HEIGHT OF 12" WITH THE CONCENTRIC CONE SET BETWEEN 21/2" AND

3'-0" MAX.

PRECAST REINFORCED

(KEYED TO ABUTTING

8" MIN. #57 DRAINAGE STONE

PCU SD 1a

FEB/2016

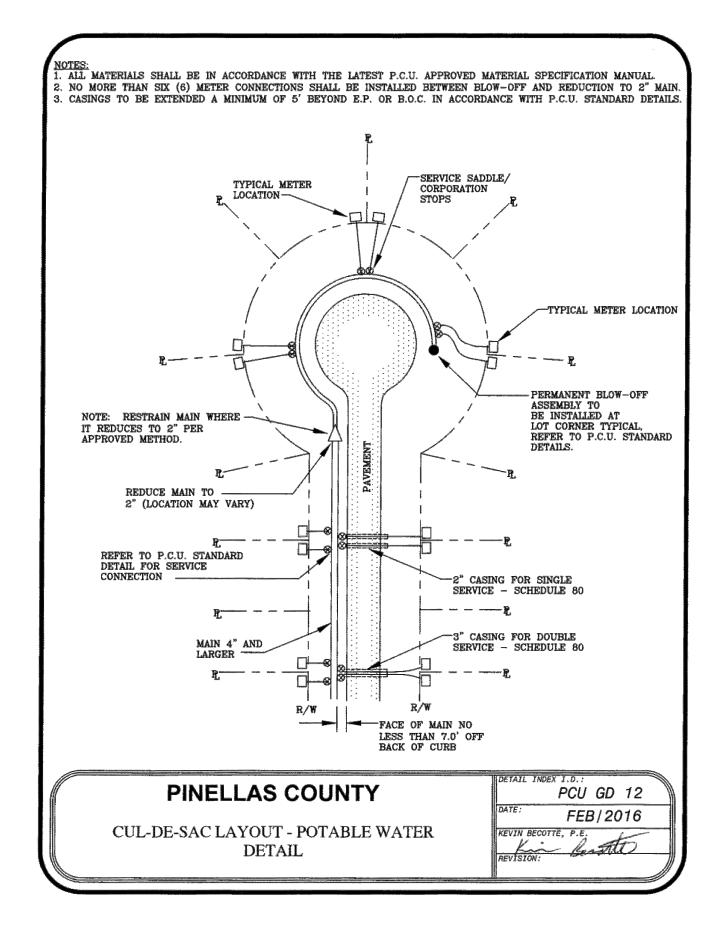
Barotto

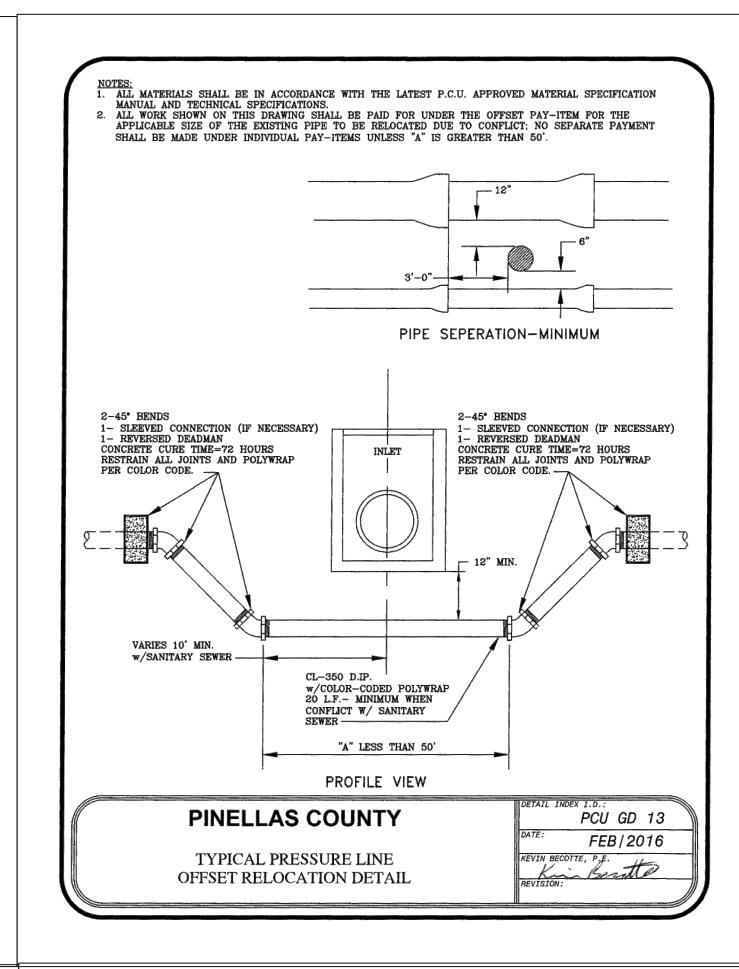
SECTIONS)

2. REFER TO P.C.U. STANDARD DETAIL ON MANHOLE CONSTRUCTION NOTES.

14½" BELOW THE BOTTOM OF MANHOLE COVER AND FRAME.

ASPHALT OR CONCRETE







#### SANITARY SEWER MANHOLE CONSTRUCTION NOTES

MANHOLES
ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST P.C.U. APPROVED MATERIAL

PRECAST MANHOLE SECTIONS SHALL BE MANUFACTURED IN ACCORDANCE WITH THE LATES' EDITIONS OF ASTM C-478 WITH 4000 P.S.I., TYPE II PORTLAND CEMENT. ALL RISER UNITS SHALL HAVE A MINIMUM HEIGHT OF 12" WITH THE CONCENTRIC CONE SET

BETWEEN 2½" AND 14½" BELOW THE BOTTOM OF MANHOLE COVER FRAME. ALL KEYED JOINTS SHALL BE SEALED WITH TWO CONTINUOUS RINGS OF FLEXIBLE JOINT

SEALANT, OR APPROVED EQUAL.
ALL INTERIOR AND EXTERIOR MANHOLE SURFACES SHALL BE PREPARED FOR COATING AND COATED IN ACCORDANCE WITH P.C.U. STANDARD SPECIFICATIONS AND APPROVED MATERIAL SPECIFICATIONS. INSIDE COATING OF MANHOLE MAY BE ELIMINATED IF USING P.C.U. APPROVED

LINING SYSTEM. MANHOLE BASE AND BOTTOM SECTION SHALL BE MONOLITHICALLY CAST. ALL PIPE PENETRATIONS IN MANHOLE SHALL BE PRECAST OR CORE DRILLED.
MANHOLE COVER SHALL BE EQUIPPED WITH AN INFLOW PROTECTOR.

A DROP CONNECTION IS REQUIRED WHERE THE PIPE INVERT IS GREATER THAN 2' ABOVE THE MANHOLE INVERT. FOR DROPS 2' OR LESS A FLUME SHALL BE CONSTRUCTED. 10. ALL MANHOLES 5' IN DIAMETER OR GREATER SHALL REQUIRE THE USE OF A DOUBLE RING

11. ALL MANHOLES WITH A DEPTH OF 14' OR GREATER SHALL BE DESIGNED FOR ANTI-FLOATATION AND SHALL REQUIRE SUBMITTAL OF CALCULATIONS.

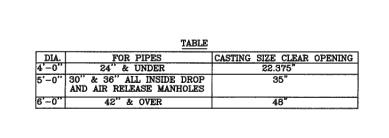
INSIDE DROP MANHOLES

12. THERE SHALL BE NO MORE THAN 2 INSIDE DROPS PER MANHOLE.

13 WHEN USING A 90° BEND ON RISER, IT SHALL BE ROTATED BETWEEN 221/2° AND 45° IN THE DIRECTION OF FLOW AND GROUTED INTO BENCH

14. ALL FORCE MAIN CONNECTIONS REQUIRE THE USE OF A FORCE MAIN HOOD WITH INSIDE 15. ALL INSIDE DROPS SHALL BE CONSTRUCTED USING P.V.C. SDR-35 PIPE.

OUTSIDE DROP MANHOLES
16. OUTSIDE DROP PIPING SHALL BE CONSTRUCTED USING THE SAME MATERIAL AS THE MAIN LINE.

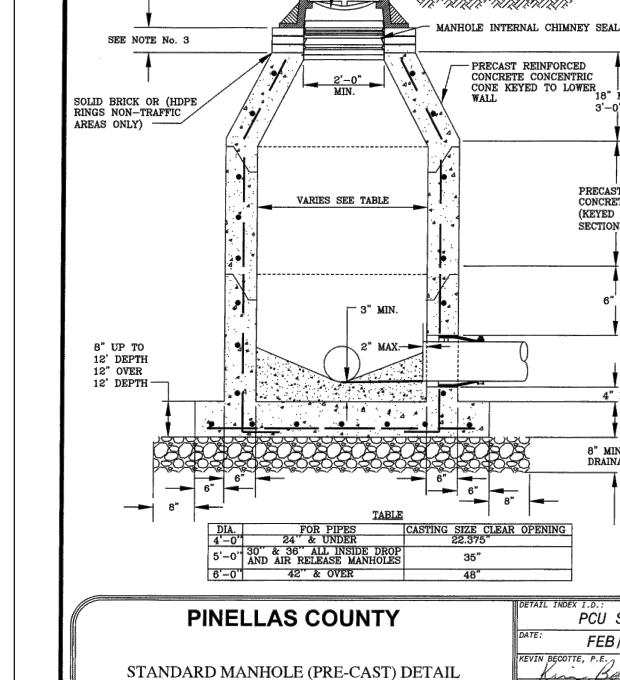


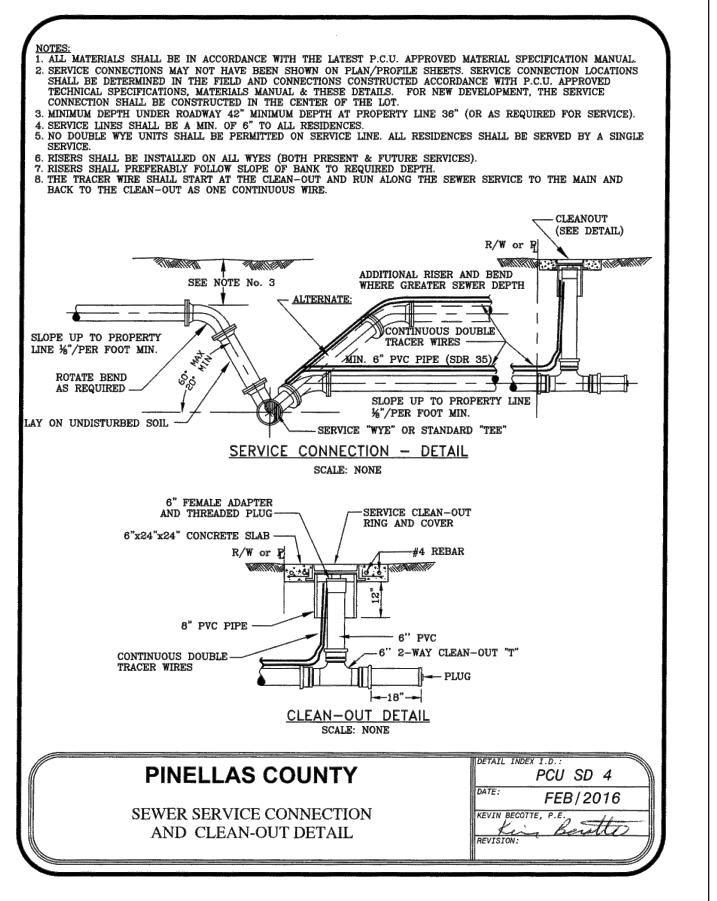
PCU SD 1

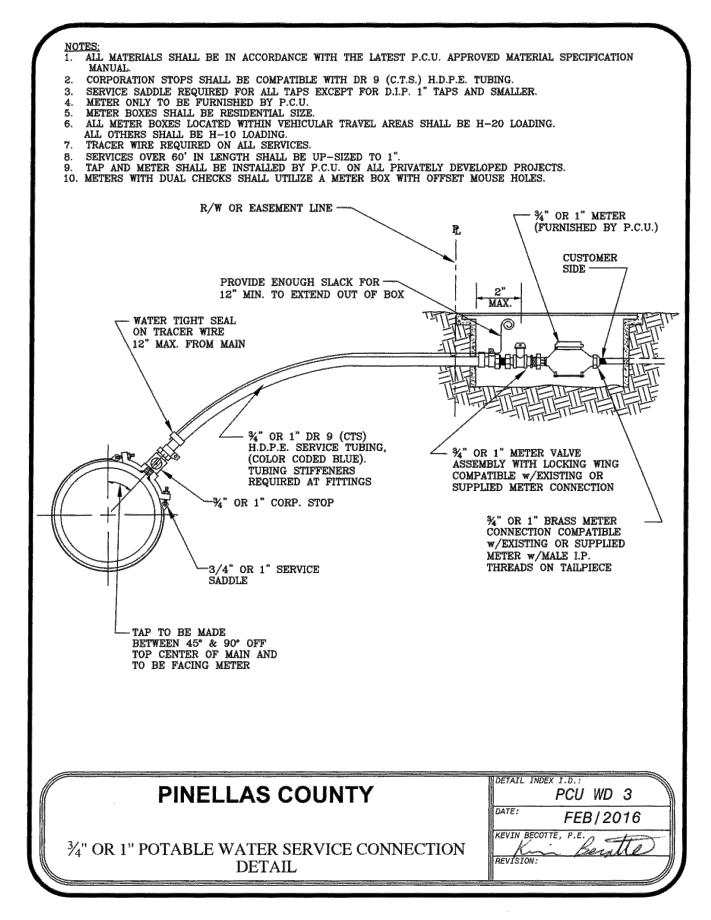
FEB/2016

PINELLAS COUNTY

MANHOLE CONSTRUCTION NOTES







Digitally signed by Joseph Cimino PE 67540 State DN: C=US, E=jcimino@wraengineering.com,
Joseph Cimino PE 67540 State of Florida OU=", O=Water Resources Associates,
CN=Joseph Cimino PE 67540 State of Florida

Reason: I am approving this document.
Date: 2021.09.13 13:14:38-04'00'

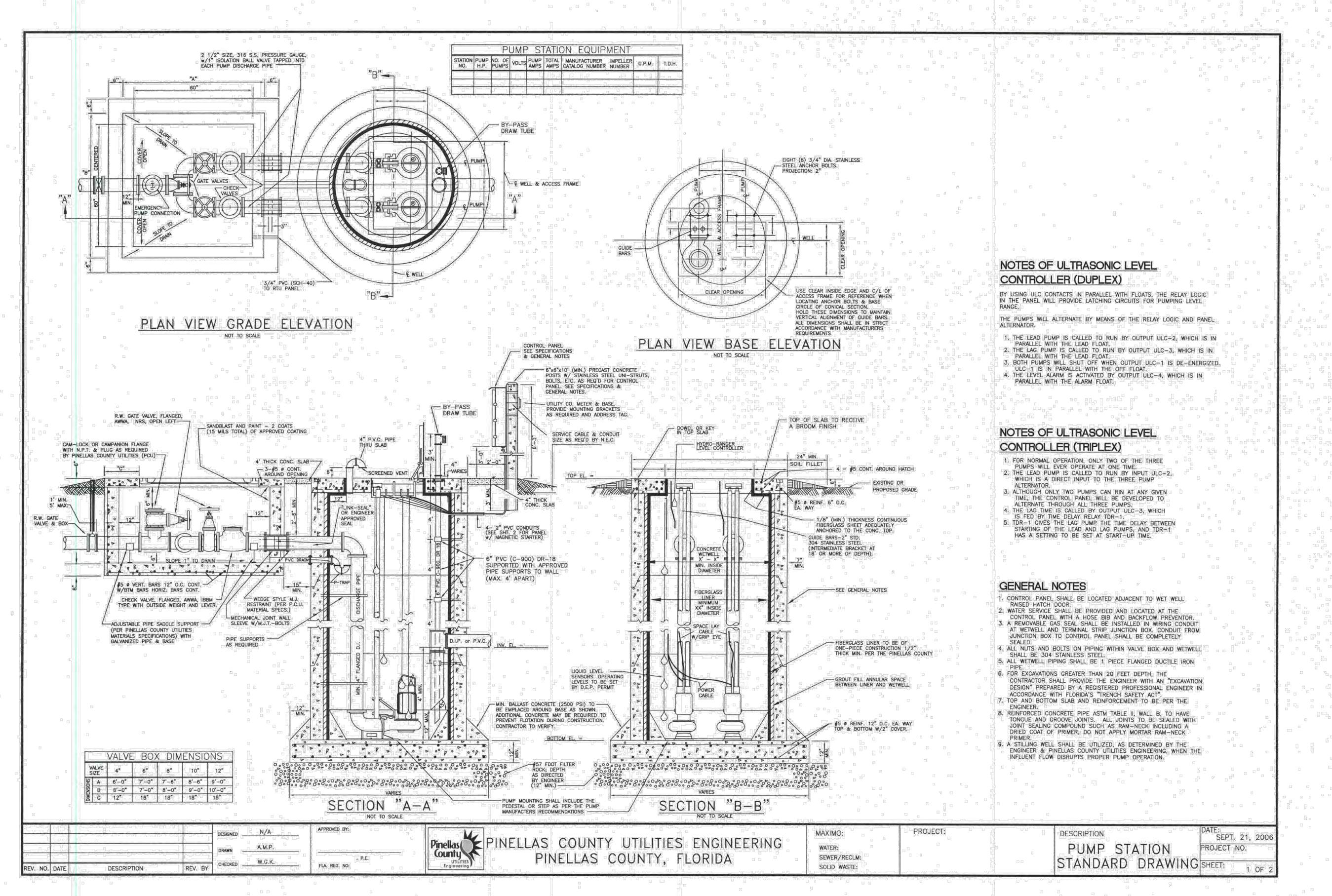
NO. 67540

STATE OF

Datum: NAVD 88

LAK

NORT EST



Digitally signed by Joseph Cimino PE 67540 Stat of Florida

Joseph Cimino PE 67540 State of Florida OU=", O=Water Resources Associates, Subject Cimino PE 67540 State of Florida Reason: I am approving this document.

410

Datum: NAVD 88

Water Resource
4260 W. Linebaugh Ave.
Tampa, Florida 33624
7978 Cooper Creek Blvd.
University Park, Florida 34201

T STATION DETAIL

LAK TES

NORTH ESTA PERMITTING SEC: 9 TWN:27

ISSUED JOB #: 1491

