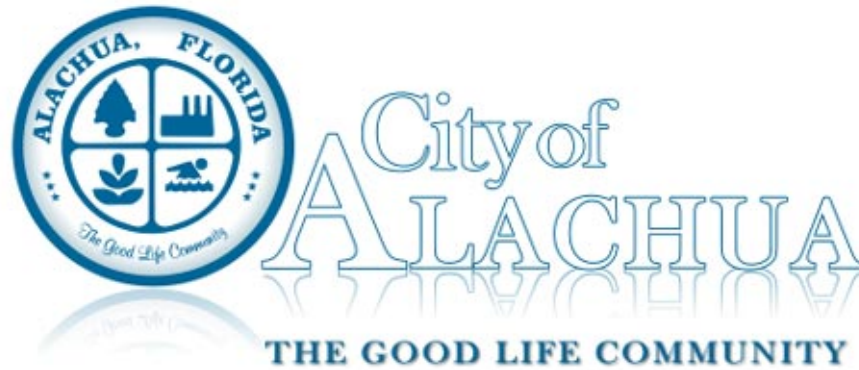




Planning and Zoning Board Agenda February 11, 2020

Chair Gary Thomas
Vice Chair Anthony Wright
Member Sandy Burgess
Member James Sajczuk
Member Virginia Johns
School Board Member Tina Certain

City Manager Adam Boukari

Planning and Zoning Board At 6:00 PM

Meeting Date: February 11, 2020

Meeting Location: James A. Lewis Commission, City Hall

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

PLANNING AND ZONING BOARD MEETING AGENDA
--

CALL TO ORDER

INVOCATION

PLEDGE TO THE FLAG

APPROVAL OF THE AGENDA

I. OLD BUSINESS

II. NEW BUSINESS

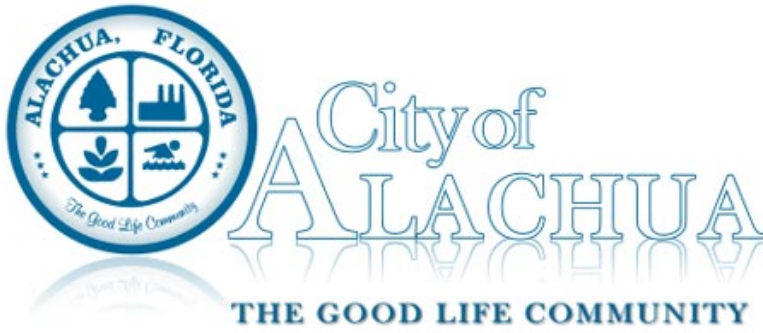
- A. Approval of the Minutes of the January 14, 2020 PZB Meeting
- B. Tara Forest East Preliminary Plat: A request by Christopher Gmuer, P.E., of Gmuer Engineering,

Inc., applicant and agent for Tara Forest LLC and Alachua Development Co, LLC, property owners, for consideration of the Preliminary Plat for the Tara Forest East Subdivision, which proposes the subdivision of a ±148.76 acre subject property into a total of 340 lots, with associated common areas and right-of-way. Tax Parcel Numbers 03067-005-000, 03067-005-001, 03067-000-000, and 03067-000-000 (Quasi-Judicial Hearing).

III. BOARD COMMENTS/DISCUSSION

IV. CITIZENS COMMENTS

ADJOURN



Board/Committee Agenda Item

MEETING DATE: 2/11/2020

SUBJECT: Approval of the Minutes of the January 14, 2020 PZB Meeting

PREPARED BY: Kenyata Curtis, Planning Assistant

RECOMMENDED ACTION:

Approve the Minutes of the January 14, 2020 PZB Meeting

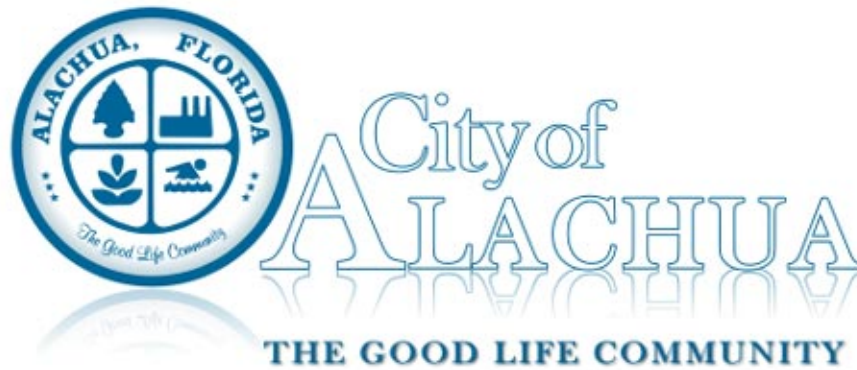
Summary

Approval of the Minutes of the January 14, 2020 PZB Meeting

ATTACHMENTS:

Description

- ▢ PZB Minutes for January 14, 2020 Meeting



Planning and Zoning Board Minutes January 14, 2020

Chair Gary Thomas

City Manager Adam Boukari

Vice Chair Anthony Wright

Member Sandy Burgess

Member James Sajczuk

Member Virginia Johns

School Board Member Tina Certain

**Planning and Zoning Board
At 6:00 PM**
to address the item(s) below.

Meeting Date: January 14, 2020

Meeting Location: James A. Lewis Commission, City Hall

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

PLANNING AND ZONING BOARD MEETING MINUTES

CALL TO ORDER

Chair Gary Thomas called the meeting to order. Vice Chair Anthony Wright and School Board Member Tina Certain were absent.

INVOCATION

Member Virginia Johns led the invocation.

PLEDGE TO THE FLAG

Led by the Board.

APPROVAL OF THE AGENDA

Member Johns moved to approve the agenda; seconded by Member Sandy Burgess.

Passed by unanimous consent.

I. OLD BUSINESS

None.

II. NEW BUSINESS

- A. Approval of the Minutes of the 12/10/19 PZB Meeting

Member Johns moved to approve the minutes; seconded by Member Burgess.

Passed by unanimous consent.

- B. Site-Specific Amendment to the Official Zoning Atlas: A request by Clay Sweger, AICP, LEED AP, of EDA Engineers - Surveyors - Planners, Inc., applicant and agent for Andrews Paving, Inc., B & C Crane Service, Inc., Innovative Property, Inc., KD Lyons – 6201, LLC, KD Lyons – 6201, LLC, KSG Hague Properties, LLC, McGinley & McGinley Trustees, Quinn Adams #4, LLC, Richard McGinley, and U.S. Spars, Inc., property owners, for consideration of a Site-Specific Amendment to the Official Zoning Atlas (Rezoning) to amend the Official Zoning Atlas from Planned Unit Development (PUD) (Alachua County) to Industrial General (IG) (City of Alachua) on a ±34.63 acre subject property; consisting of Tax Parcel Numbers 05893-000-000, 05893-001-000, 05893-010-001, 05893-010-004, 05893-010-005, 05893-010-006, 05893-010-007, 05893-010-009, 05893-010-010; 05893-020-001, 05893-020-002, 05893-020-005, 05893-020-006, 05893-020-007, 05893-020-008, and 05893-020-009. FLUM: Industrial; Existing Zoning: Planned Unit Development (PUD) (County). (Quasi-Judicial Hearing).

Department Director Kathy Winburn introduced the item.

Planning Assistant Kenyata Curtis swore in all parties entering in the hearing.

Principal Planner Justin Tabor, AICP, presented the Staff Report.

Clay Sweger, AICP, LEED AP, of EDA Engineers-Planners-Surveyors, Inc., provided additional information and availed himself for questions.

Member James Sajczuk moved that based upon the competent substantial evidence presented at this hearing, the presentation before this Board, and Staff's recommendation this Board finds the application for a Site-Specific Amendment to the Zoning Atlas to be consistent with the City of Alachua Comprehensive Plan and in compliance with the the Land Development Regulations and transmits the application to the City Commission with a recommendation to approve; seconded by Member Johns.

Motion Passed 4-0 in a roll call vote.

- C. Site Plan - Sheth Parking Lot: A request by Craig Hedgecock, P.E., applicant and agent for Subhas and Elaine Sheth, property owners, for consideration of a Site Plan to construct a parking lot with associated paving, grading, drainage, and landscaping improvements, on a ± 0.46 acre subject property, located at 15303 NW 140th Street; Tax Parcel Number 03342-000-000 (Quasi-Judicial Hearing).

Department Director Winburn introduced the item.

Planning Assistant Curtis swore in all parties entering in the hearing.

Planner Adam Hall, AICP, presented the Staff Report.

Craig Hedgecock, P.E., P.S.M, provided additional information, accepted Staff's recommended conditions, and availed himself for questions.

Member Burgess moved that based upon the competent substantial evidence presented at this hearing, the presentation before this Board, and Staff's recommendation this Board finds the application to be consistent with the City of Alachua Comprehensive Plan and in compliance with the the Land Development Regulations and approves the Site Plan, subject to the four (4) conditions provided in Exhibit "A" and on page 21 of the January 14, 2020 Staff Report to the Planning & Zoning Board; seconded by Member Sajczuk.

Motion Passed 4-0 in a roll call vote.

- D. Site Plan – Dreyer's DKI: A request by Craig Hedgecock, P.E., P.S.M., applicant and agent for Dreyer's Cleaning & Restoration, Inc., for a consideration of a Site Plan to construct a ±7,500 square foot building addition with parking, stormwater, landscaping, and site improvements on a ±1.96 acre subject property, located at 14619 NW US Highway 441; Consisting of Tax Parcel Number 03211-003-000; FLUM: Commercial; Zoning: Commercial Intensive (CI) (Quasi-Judicial Hearing).

Department Director Winburn introduced the item.

Planning Assistant Curtis swore in all parties entering in the hearing.

Principal Planner Tabor, AICP, presented the Staff Report.

Member Johns inquired about the arterial screening requirements.

Principal Planner Tabor, AICP, responded.

Clay Sweger, AICP, LEED AP, of EDA Engineers-Planners-Surveyors, Inc., provided additional information, accepted Staff's recommended conditions, and availed himself for questions.

Member Johns moved that based upon the competent substantial evidence presented at this hearing, the presentation before this Board, and Staff's recommendation this Board finds the application to be consistent with the City of Alachua Comprehensive Plan and in compliance with the the Land Development Regulations and approves the Site Plan for Dreyer's DKI, subject to the five (5) conditions provided in Exhibit "A" and on page 18 of the January 14, 2020 Staff Report to the Planning & Zoning Board, seconded by Member Sajczuk.

Motion Passed 4-0 in a roll call vote.

- E. Evaluation and Appraisal Based Amendments to Update the City of Alachua Comprehensive Plan for the Period 2019-2035 (Legislative)

Department Director Winburn introduced the item.

Principal Planner Tabor, AICP, presented the Staff Report.

Member Johns asked for clarification on the proposed changes to Policies 1.2.a and 4.1.b of the CFNGAR Element.

Principal Planner Tabor, AICP, responded.

Chair Thomas and Member Burgess commented on the extensive review of the Comprehensive Plan that Staff has completed.

Department Director Winburn noted that these updates respond to changes in Florida Statutes since 2012 and also clarify many existing Goals, Objectives, and Policies to make the Comprehensive Plan better and easier to understand.

Member Sajczuk moved that based upon the presentation to this Board and Staff's recommendation, this Board finds the proposed Comprehensive Plan Text Amendments to be consistent with the City of Alachua Comprehensive Plan and transmits such finding to the City Commission with a recommendation to approve; seconded by Member Burgess.

Motion Passed 4-0 in a roll call vote.

III. BOARD COMMENTS/DISCUSSION

Department Director stated the next Planning and Zoning Board meeting will be February 11, 2020 at 6:00 p.m.

IV. CITIZENS COMMENTS

None.

ADJOURN

Member Sajczuk moved to adjourn; seconded by Member Burgess.

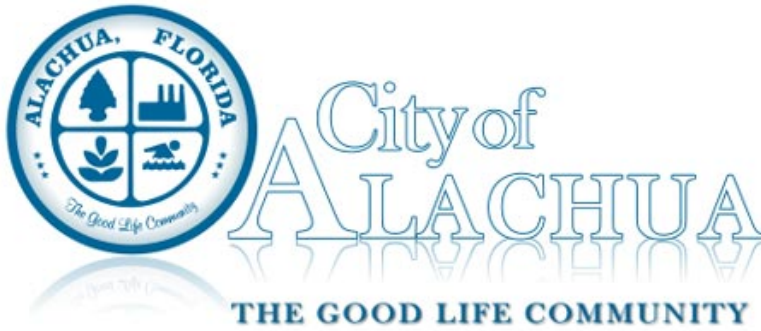
Pass by unanimous consent.

ATTEST:

PLANNING AND ZONING BOARD OF THE
CITY OF ALACHUA, FLORIDA

Presiding Officer

Staff Liaison



Board/Committee Agenda Item

MEETING DATE: 2/11/2020

SUBJECT: Tara Forest East Preliminary Plat: A request by Christopher Gmuer, P.E., of Gmuer Engineering, Inc., applicant and agent for Tara Forest LLC and Alachua Development Co, LLC, property owners, for consideration of the Preliminary Plat for the Tara Forest East Subdivision, which proposes the subdivision of a ±148.76 acre subject property into a total of 340 lots, with associated common areas and right-of-way. Tax Parcel Numbers 03067-005-000, 03067-005-001, 03067-000-000, and 03067-000-000 (Quasi-Judicial Hearing).

PREPARED BY: Adam Hall, AICP

RECOMMENDED ACTION:

Staff recommends that the Planning & Zoning Board transmit the preliminary plat of Tara Forest East to the City Commission with a recommendation to approve subject to the four (4) conditions provided in Exhibit “A” and located on page 19 of the Staff Report.

Based upon the competent substantial evidence presented at this hearing, the presentation before this Board, and Staff's recommendation, this Board finds the application to be consistent with the City of Alachua Comprehensive Plan and in compliance with the Land Development Regulations and transmits the Preliminary Plat of Tara Forest East to the City Commission, with a recommendation to approve, subject to the four (4) conditions provided in Exhibit “A” and located on page 19 of the Staff Report.

Summary

This application is a request by Christopher Gmuer, P.E., of Gmuer Engineering, LLC., applicant and agent for Tara Forest LLC and Alachua Development Co, LLC., property owners, for consideration of the preliminary plat of Tara Forest East, which proposes the subdivision of the ±148.76 acre subject property into a total of 340 lots, with associated right-of-way and common areas. The preliminary plat indicates the development will be constructed in 10 (ten) phases, with the first phase consisting of 32 lots. The first phase would connect to an extension of NW 161st Ave, west of the intersection of NW 147th Drive. As a part of Phase 2, an additional connection would be made to CR 241, approximately ½ mile north of Mebane Middle School.

The subject property consists of Parcel Numbers 03067-005-000, 03067-005-001, 03067-000-000, and 03067900-000, and is located north of Lowe's and the Baywood subdivision, south of the Dogwood Acres subdivision and west of Main Street/ NW 141st Street.

The proposed Tara Forest East subdivision would consist of lots approximately 10,000 square feet (0.23 acre) in size, with a majority being 80' wide by 125' deep. The preliminary plat proposes a series of common areas along the northern and eastern property boundaries, as well as several A 50' wide common area will be located between any lots and the northern property line, including an approximately 15' wide area outside of the stormwater drainage system.

Development within the proposed subdivision would connect to potable water and wastewater facilities. Stormwater for the proposed development would be conveyed to and treated by seven stormwater retention areas. Stormwater will be conveyed to the retention areas using a combination of traditional underground pipes and “transitional swales”- long, shallow swales along the front of the lots that help to percolate and treat stormwater before reaching a retention basin. An analysis of the

along the front of the lots that help to percolate and treat stormwater before reaching a retention basin. An analysis of the development's impact on other public facilities, including transportation, potable water, sanitary sewer, solid waste, and public schools, is provided within this report.

While no Level of Service standard will be degraded as a result of this application, there are potential offsite impacts associated with traffic that have been specifically analyzed and reviewed as a part of this preliminary plat application. Based on the potential impacts, conditions related to traffic and transportation are proposed to mitigate any negative impacts that may occur in the future. These include future traffic studies to analyze the intersection of CR241 and SR235 and the intersection of SR235 and US 441 as the development builds out. Additionally, the applicant will be required to coordinate with the Florida Department of Transportation to "optimize" the traffic signal at the intersection NW 147th Drive and US 441.

Section 2.4.10(G)(2) of the City's Land Development Regulations (LDRs) establishes the requirements for a preliminary plat. An analysis of the application's compliance with the applicable standards of this section has been provided within this report.

ATTACHMENTS:

Description

- ☐ Tara Forest East Preliminary Plat- Part 1
- ☐ Tara Forest East Preliminary Plat- Part 2
- ☐ Tara Forest East Preliminary Plat- Part 3
- ☐ Staff Report and Staff Supporting Materials
- ☐ Application and Supporting Materials- Part 1
- ☐ Application and Supporting Materials- Part 2
- ☐ Application and Supporting Materials- Part 3
- ☐ Neighborhood Workshop Materials
- ☐ Public Notice Materials for the 02/11/2020 PZB Hearing

FILE: 18-0046-C-000 COVER.DWG | LAST SAVED: 2020-01-23 12:23:48 PM | PLOT SCALE: 1"=111' | PLOTTED: 2020-01-23 12:23:58 PM | USER: cgmuer



TARA FOREST EAST

CITY OF ALACHUA SINGLE-FAMILY RESIDENTIAL SUBDIVISION PRELIMINARY PLAT

PROJECT INFORMATION

PROJECT NAME	TARA FOREST EAST SINGLE-FAMILY RESIDENTIAL SUBDIVISION
LOCATION	TP# 03067-005-000, 03067-005-001, 03067-000-000, 03067-006-000 17002 NW CR241 ALACHUA, FL 32615 ±148.75 ACRES
PROPERTY OWNER	TP# 03067-005-000, 03067-005-001, 03067-000-000 TARA FOREST, LLC SAYED MOUKHTARA (352) 278-5317 sayed@smoukhtara.com 7717 NW 20th LN GAINESVILLE, FL 32605
CIVIL ENGINEER	TP# 03067-006-000 ALACHUA DEVELOPMENT CO, LLC 16469 BRIDLEWOOD CIRCLE DELRAY BEACH, FL 33445
SURVEYOR	CHRISTOPHER A. G穆ER, PE G穆ER ENGINEERING, LLC (352) 281-4928 - chrisg@gmuering.com 2603 NW 13th ST BOX 314 GAINESVILLE, FL 32609
LANDSCAPE ARCH / IRRIGATION DESIGN	LEIGH ANN FLOWERS, PSM FLOWERS SURVEYING AND MAPPING, INC. (386) 462-0130 flowersurveying@gmail.com 16407 NW 174th DR STE D ALACHUA, FL 32615
ZONING	TP# 03067-005-000, 03067-005-001, 03067-000-000 RSF-3
LAND USE	MODERATE DENSITY RESIDENTIAL
PROPOSED USE	DETACHED SINGLE-FAMILY RESIDENTIAL
AREA OF PROJECT	±148.45 ACRES
MAX UNITS	340 UNITS
LOT AREA	MIN 10,000 SF
LOT WIDTH	MIN 50'
FRONT SETBACK	15'
SIDE SETBACK	7.5'
REAR SETBACK	15'
MAX HEIGHT	65'
LOT COVERAGE	MAX 40%
GROSS DENSITY	MAX 3 DWELLING UNITS / ACRE
OPEN SPACE	MIN 10% OF GROSS SITE AREA
ZONING	TP# 03067-006-000 RSF-6
LAND USE	MEDIUM DENSITY RESIDENTIAL
PROPOSED USE	FUTURE DEVELOPMENT
AREA OF PROJECT	±36.37 ACRES
MAX UNITS	211 UNITS (NONE PROPOSED WITH THIS APPLICATION)

UTILITY INFORMATION

POTABLE WATER	CITY OF ALACHUA IS THE PROVIDER AND CONNECTIONS WILL BE MADE TO THE EXISTING DISTRIBUTION SYSTEM LOCATED ADJACENT TO THE SITE IN THREE LOCATIONS: NW 163rd PL, NW 161st AVE, AND CR 241
WASTEWATER	CITY OF ALACHUA IS THE PROVIDER AND THE SUBDIVISION WILL GRAVITY FEED TO SOUTHWEST ALONG THE WESTERN EDGE OF LOWES TO THE CITY LIFT STATION
ELECTRIC	AS PART OF THIS PROJECT, ELECTRIC SYSTEM WILL BE DESIGNED BY A PROFESSIONAL ENGINEER. COORDINATE WITH UTILITY PROVIDER
STORMWATER	THE MAJORITY OF RUNOFF FROM THE PUBLIC ROADS AND RESIDENTIAL LOTS WILL BE COLLECTED BY TRANSITIONAL SWALES ALONG THE LOT FRONTS. THESE TRANSITIONAL SWALES WILL BE MAINTAINED BY THE HOA. ALL RUNOFF WILL BE CONVEYED FROM THE TRANSITIONAL SWALES, OPEN SPACE, MISC ROW, ETC. TO THE STORMWATER MANAGEMENT FACILITIES BY PIPE AND STORM STRUCTURES. THE PIPE AND STRUCTURES LOCATED WITHIN THE ROW WILL BE MAINTAINED BY THE CITY OF ALACHUA. THE PIPE AND STRUCTURES LOCATED WITHIN LOTS AND OPEN AREAS WILL BE MAINTAINED BY THE HOA. THE OPEN AREAS AND STORMWATER MANAGEMENT FACILITIES WILL BE OWNED AND MAINTAINED BY THE HOA.
CABLE	COX WILL BE THE PROVIDER
TELEPHONE	WINDSTREAM WILL BE THE PROVIDER

LEGAL DESCRIPTION:

TP# 03067-005-000, 03067-005-001, 03067-000-000
(O.R. 1868, PAGE 1061)
A TRACT OF LAND SITUATED IN SECTION 10, TOWNSHIP 8 SOUTH, RANGE 18 EAST, CITY OF ALACHUA, ALACHUA COUNTY, FLORIDA, SAID TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:
COMMENCE AT A CONCRETE MONUMENT AT THE NORTHWEST CORNER OF THE N. E. 1/4 OF THE AFOREMENTIONED SECTION 10, TOWNSHIP 8 SOUTH, RANGE 18 EAST FOR THE POINT OF BEGINNING AND RUN N 88°15'52" E, ALONG THE NORTH LINE OF SAID SECTION 10, A DISTANCE OF 1324.84 FEET TO A STEEL ROD & CAP (L8#2903) AT THE NORTHWEST CORNER OF THE N. E. 1/4 OF THE N. E. 1/4 OF SAID SECTION 10; THENCE RUN S 00°04'23" W, ALONG THE WEST LINE OF SAID N. E. 1/4 OF THEN, E. 1/4, A DISTANCE OF 677.41 FEET TO A CONCRETE MONUMENT AT THE NORTHWEST CORNER OF THE S. 1/2 OF SAID N. E. 1/4 OF THE N. E. 1/4; THENCE RUN N 88°19'11" W, ALONG THE NORTH LINE OF SAID S. 1/2 OF THEN, E. 1/4 OF THE N. E. 1/4, A DISTANCE OF 1273.16 FEET TO THE WEST RIGHT OF WAY LINE OF COUNTY ROAD NO. 241 (100 FOOT RIGHT OF WAY); THENCE RUN S 00°11'02" W, ALONG SAID WEST RIGHT OF WAY LINE, A DISTANCE OF 678.06 FEET TO THE SOUTH LINE OF SAID N. E. 1/4 OF THE N. E. 1/4; THENCE RUN S 88°19'11" W, ALONG SAID SOUTH LINE OF THE N. E. 1/4 OF THE N. E. 1/4, A DISTANCE OF 1271.89 FEET TO A CONCRETE MONUMENT AT THE SOUTHWEST CORNER OF SAID N. E. 1/4 OF THEN, E. 1/4; THENCE RUN S 00°02'40" E, ALONG THE WEST LINE OF THE S. E. 1/4 OF SAID N. E. 1/4, A DISTANCE OF 669.07 FEET TO AN IRON PIPE AT THE NORTHWEST CORNER OF ALACHUA REALTY COMPANY ADDITION AS PER PLAT THEREOF RECORDED IN PLAT BOOK "A", PAGE 100 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA; THENCE RUN S 00°04'11" W, ALONG THE WEST LINE OF SAID ALACHUA REALTY COMPANY ADDITION, A DISTANCE OF 679.26 FEET TO A CONCRETE MONUMENT (L8#3456); THENCE RUN S 88°15'52" W, A DISTANCE OF 1326.11 FEET TO A CONCRETE MONUMENT (L8#3456) ON THE WEST LINE OF THE E. 1/2 OF SAID SECTION 10; THENCE RUN N 00°04'23" E, ALONG SAID WEST LINE, A DISTANCE OF 2703.44 FEET TO THE POINT OF BEGINNING, CONTAINING 102.000 ACRES MORE OR LESS.

AND

(O.R. 2094, PAGE 1551)
A TRACT OF LAND SITUATED IN SECTION 10, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA, SAID TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:
COMMENCE AT THE NORTHWEST CORNER OF THE NORTHEAST 1/4 OF THE AFOREMENTIONED SECTION 10, TOWNSHIP 8 SOUTH, RANGE 18 EAST FOR THE POINT OF REFERENCE AND RUN S 00°04'23" W, ALONG THE WEST LINE OF THE EAST 1/2 OF SAID SECTION 10, A DISTANCE OF 2703.44 FEET TO A CONCRETE MONUMENT AND THE TRUE POINT OF BEGINNING, THENCE CONTINUE S 00°04'23" W, ALONG SAID WEST LINE OF THE EAST 1/2 OF SECTION 10, A DISTANCE OF 353.78 FEET TO A CONCRETE MONUMENT; SAID CONCRETE MONUMENT BEING LOCATED 2360.55 FEET NORTH OF THE SOUTHWEST CORNER OF THE SOUTHEAST 1/4 OF SAID SECTION 10, SAID CONCRETE MONUMENT BEING DESIGNATED AS POINT "A" TO BE REFERRED TO LATER; THENCE RETURN TO THE TRUE POINT OF BEGINNING AND RUN N 88°15'52" E, A DISTANCE OF 1326.11 FEET TO A CONCRETE MONUMENT ON THE WEST LINE OF THE SOUTHEAST 1/4 OF SAID SECTION 10; THENCE RUN S 00°04'13" W, ALONG SAID WEST LINE OF THE SOUTHEAST 1/4, A DISTANCE OF 407.10 FEET TO A CONCRETE MONUMENT; SAID CONCRETE MONUMENT LOCATED 2113.49 FEET NORTH OF THE NORTHWEST CORNER OF LOT 10 OF HITCHCOCK'S ADDITION TO THE CITY OF ALACHUA AS PER PLAT THEREOF RECORDED IN PLAT BOOK "F", PAGE 18 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA; THENCE RUN N 89°25'53" W, A DISTANCE OF 1325.52 FEET TO THE AFOREMENTIONED POINT "A" AND TO CLOSE, CONTAINING 11.57 ACRES MORE OR LESS.

TP# 03067-006-000

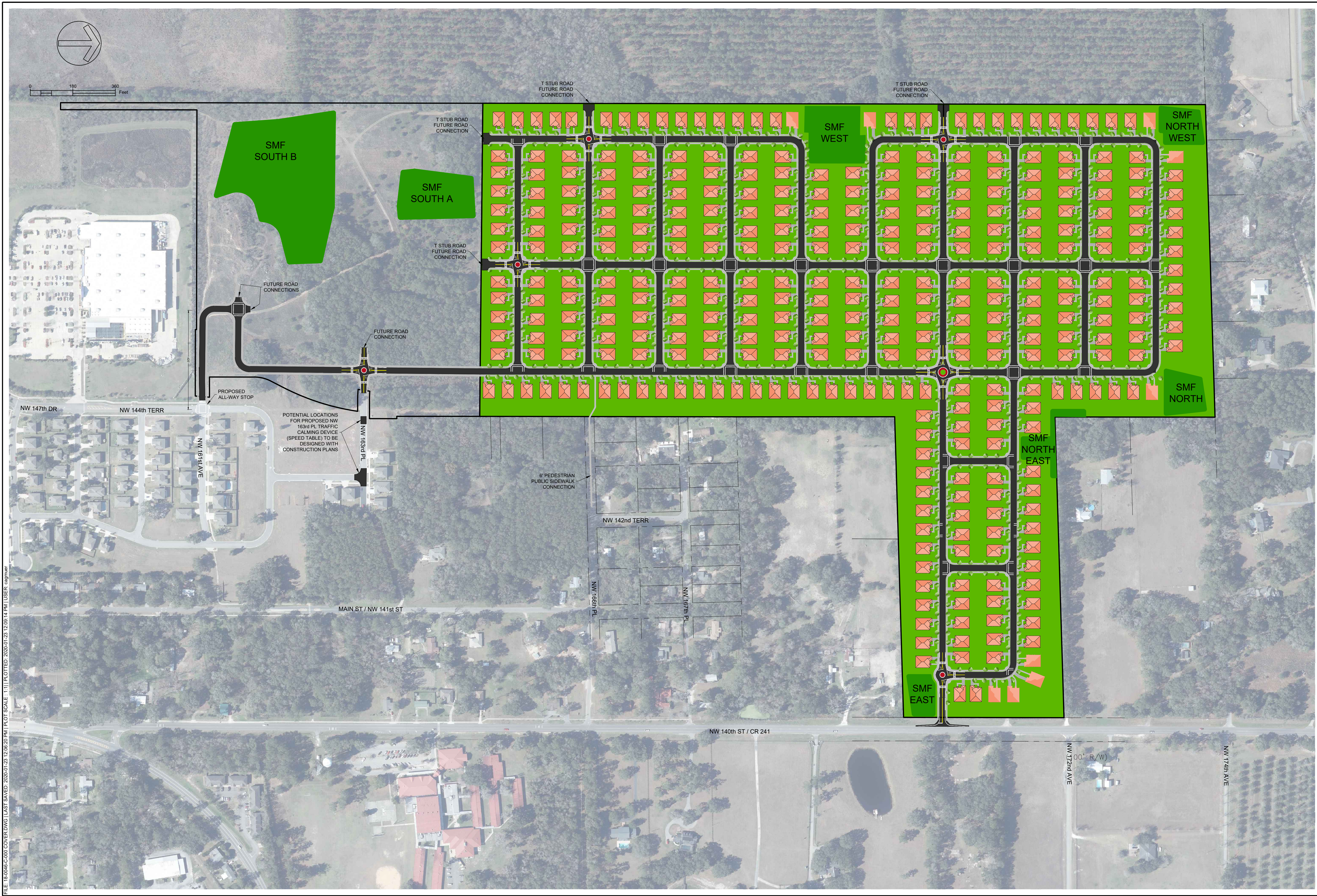
A PORTION OF THE S.E. 1/4 OF SECTION 10, TOWNSHIP 8 SOUTH, RANGE 18 EAST, IN THE CITY OF ALACHUA, ALACHUA COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE S.W. CORNER OF BAYWOOD PHASE 1C, AS PER PLAT THEREOF RECORDED IN PLAT BOOK 29, PAGES 17 AND 18 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA; THENCE N 89°56'50" E, ALONG THE SOUTH BOUNDARY OF SAID BAYWOOD PHASE 1C, A DISTANCE OF 85.50 FEET; THENCE DEPARTING SAID SOUTH BOUNDARY, S 04°52'19" W, A DISTANCE OF 60.27 FEET TO A POINT ON THE NORTHERLY BOUNDARY OF LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 3823, PAGE 513 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA; THENCE ALONG THE NORTHERLY BOUNDARY OF SAID LANDS THE FOLLOWING FIVE (5) CALLS: N 89°54'58" W, A DISTANCE OF 280.91 FEET; THENCE N 01°44'51" W, A DISTANCE OF 4.97 FEET; THENCE N 89°58'41" W, A DISTANCE OF 421.90 FEET TO A POINT ON A CURVE, CONCAVE NORTHERLY, HAVING A RADIUS OF 115.00 FEET, A CENTRAL ANGLE OF 03°47'08" AND A CHORD BEARING AND DISTANCE OF N 88°15'28" W, 7.60 FEET; THENCE WESTERLY, ALONG THE ARC OF SAID CURVE AND NORTHERLY BOUNDARY, A DISTANCE OF 7.60 FEET TO THE END OF SAID CURVE; THENCE N 89°54'28" W, A DISTANCE OF 498.80 FEET TO A POINT ON THE EAST BOUNDARY OF A 30 FOOT NON-EXCLUSIVE ELECTRIC EASEMENT AS RECORDED IN OFFICIAL RECORDS BOOK 3819, PAGE 825 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA; THENCE DEPARTING THE NORTHERLY BOUNDARY OF LANDS DESCRIBED IN SAID OFFICIAL RECORDS BOOK 3823, PAGE 513, ALONG THE EAST BOUNDARY OF SAID 30 FOOT EASEMENT AND THE SOUTHERLY PROJECTION THEREOF, S 00°04'34" W, A DISTANCE OF 576.90 FEET TO A POINT ON THE NORTH BOUNDARY OF BAYWOOD CENTRE AS PER PLAT THEREOF, RECORDED IN PLAT BOOK 28, PAGE 91 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA; THENCE DEPARTING THE SOUTHERLY PROJECTION OF THE EAST BOUNDARY OF SAID 30 FOOT EASEMENT, ALONG THE NORTH BOUNDARY OF SAID BAYWOOD CENTRE, S 89°57'21" W, A DISTANCE OF 29.75 FEET TO A POINT ON THE WEST BOUNDARY OF THE S.E. 1/4 OF SAID SECTION 10; THENCE DEPARTING THE NORTH BOUNDARY OF SAID BAYWOOD CENTRE, ALONG SAID WEST BOUNDARY, N 00°04'30" E, A DISTANCE OF 1788.13 FEET TO THE N.W. CORNER OF LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 2082, PAGE 2132 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA; THENCE DEPARTING THE WEST BOUNDARY OF THE S.E. 1/4 OF SAID SECTION 10, ALONG THE NORTH BOUNDARY OF SAID LANDS, S 89°26'48" E, A DISTANCE OF 1324.74 FEET TO THE N.E. CORNER OF SAID LANDS AND A POINT ON THE EAST BOUNDARY OF THE S.E. 1/4 OF SAID SECTION 10; THENCE ALONG SAID EAST BOUNDARY, S 00°01'22" W, A DISTANCE OF 351.01 FEET TO THE N.W. CORNER OF LOT 2, BLOCK 15, OF ALACHUA REALTY CO.'S ADDITION TO THE CITY OF ALACHUA, AS PER PLAT THEREOF, RECORDED IN PLAT BOOK "A", PAGE 100 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA; THENCE DEPARTING SAID EAST BOUNDARY, ALONG THE NORTHERLY BOUNDARY OF SAID BLOCK 15 OF SAID ALACHUA REALTY CO.'S ADDITION TO THE CITY OF ALACHUA, N 88°22'19" E, A DISTANCE OF 9.89 FEET TO THE N.W. CORNER OF AFOREMENTIONED BAYWOOD PHASE 1C; THENCE ALONG THE WESTERLY BOUNDARY OF SAID BAYWOOD PHASE 1C, THE FOLLOWING TEN (10) COURSES: S 00°01'22" W, A DISTANCE OF 115.81 FEET; THENCE N 89°55'23" W, A DISTANCE OF 87.57 FEET TO THE BEGINNING OF A CURVE, CONCAVE NORTHERLY, HAVING A RADIUS OF 275.50 FEET, A CENTRAL ANGLE OF 05°55'28" AND A CHORD BEARING AND DISTANCE OF N 87°00'29" W, 28.42 FEET; THENCE WESTERLY, ALONG THE ARC OF SAID CURVE AND WESTERLY BOUNDARY, A DISTANCE OF 28.44 FEET TO THE END OF SAID CURVE; THENCE S 08°59'51" W, A DISTANCE OF 50.15 FEET TO THE BEGINNING OF A CURVE, CONCAVE NORTHERLY, HAVING A RADIUS OF 325.00 FEET, A CENTRAL ANGLE OF 06°19'13" AND A CHORD BEARING AND DISTANCE OF S 88°50'30" E, 35.74 FEET; THENCE EASTERLY, ALONG THE ARC OF SAID CURVE AND WESTERLY BOUNDARY, A DISTANCE OF 35.76 FEET TO THE END OF SAID CURVE; THENCE S 89°55'23" E, A DISTANCE OF 57.15 FEET TO THE BEGINNING OF A CURVE CONCAVE WESTERLY, HAVING A RADIUS OF 1012.50 FEET, A CENTRAL ANGLE OF 18°41'51" AND A CHORD BEARING AND DISTANCE OF S 17°43'23" W, 328.95 FEET; THENCE SOUTHERLY, ALONG THE ARC OF SAID CURVE AND WESTERLY BOUNDARY, A DISTANCE OF 330.41 FEET TO THE END OF SAID CURVE; THENCE S 27°12'30" W, A DISTANCE OF 60.70 FEET TO THE BEGINNING OF A CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 154.50 FEET, A CENTRAL ANGLE OF 27°04'06" AND A CHORD BEARING AND DISTANCE OF S 13°38'50" W, 72.31 FEET; THENCE SOUTHERLY, ALONG THE ARC OF SAID CURVE AND WESTERLY BOUNDARY, A DISTANCE OF 72.99 FEET TO THE END OF SAID CURVE; THENCE S 00°04'10" W, A DISTANCE OF 189.27 FEET TO THE POINT OF BEGINNING, SAID LANDS CONTAINING 35.26 ACRES, MORE OR LESS.

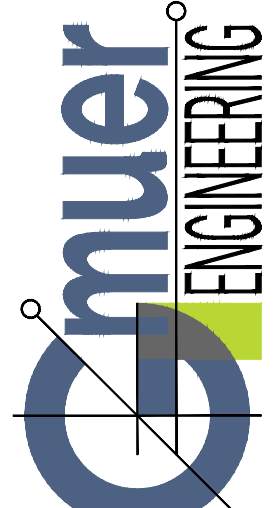
SHEET INDEX

C-000	COVER & SHEET INDEX
C-001	MASTER DEVELOPMENT PLAN & AERIAL
C-005	VICINITY MAP
C-021	PRE-DEVELOPMENT DRAINAGE MAP
C-022	POST-DEVELOPMENT DRAINAGE MAP
C-031	TYPICAL LOTS & SETBACKS
C-032	TYPICAL ROUNDABOUTS,
C-033	TYPICAL RIGHT-OF-WAY & ROAD SECTIONS
C-070	MASTER PRELIMINARY PLAT & PHASING
C-071 to C-076	DETAILED PRELIMINARY PLAT & PHASING
C-250 to C-253	STORMWATER MANAGEMENT FACILITY PLANS
C-300 to C-302	MASTER UTILITY PLAN
C-501	CR241 EROSION CONTROL & DEMOLITION PLAN
C-502	CR241 HORIZONTAL CONTROL & PAVING PLAN
C-503	CR241 GRADING & DRAINAGE PLAN & PROFILE
C-504	CR241 SIGNAGE & STRIPING PLAN
1 - 11 of 11	BOUNDARY, TOPOGRAPHIC & TREE SURVEY
1-3 of 3	BOUNDARY, TOPOGRAPHIC & TREE SURVEY

PRELIMINARY BUDGETING	PERMITTING / DESIGN REVISIONS :	ENGINEER OF RECORD : CHRISTOPHER A. G穆ER FL # E 71598 2020-01-23
PRICING : CONSTRUCTION :	2019-05-01 ACPW ROAD CONNECTION SUBMITTAL 2019-05-24 SRWMD SUBMITTAL 2019-06-03 CITY OF ALACHUA PRELIM PLAT SUBMITTAL 2019-07-03 CITY OF ALACHUA PRELIM PLAT 2ND RESUBMITTAL 2019-12-12 CITY OF ALACHUA PRELIM PLAT 3RD RESUBMITTAL 2020-01-23 MINOR CITY OF ALACHUA RESUBMITTAL	NOT FOR FINAL RECORDING
CLIENT :	TARA FOREST, INC. C.A. G穆ER, PE C.A. G穆ER, PE	gmuering.com (352) 281-4928 2603 NW 13th St, Box 314 Gainesville, FL 32609
DESIGN : QUALITY CONTROL :	CITY OF ALACHUA PRELIM PLAT # SRWMD APP # ALACHUA COUNTY DRIVEWAY # ENG PROJECT #	18-0046
TARA FOREST EAST	SINGLE-FAMILY SUBDIVISION	COVER & SHEET INDEX
C-000		

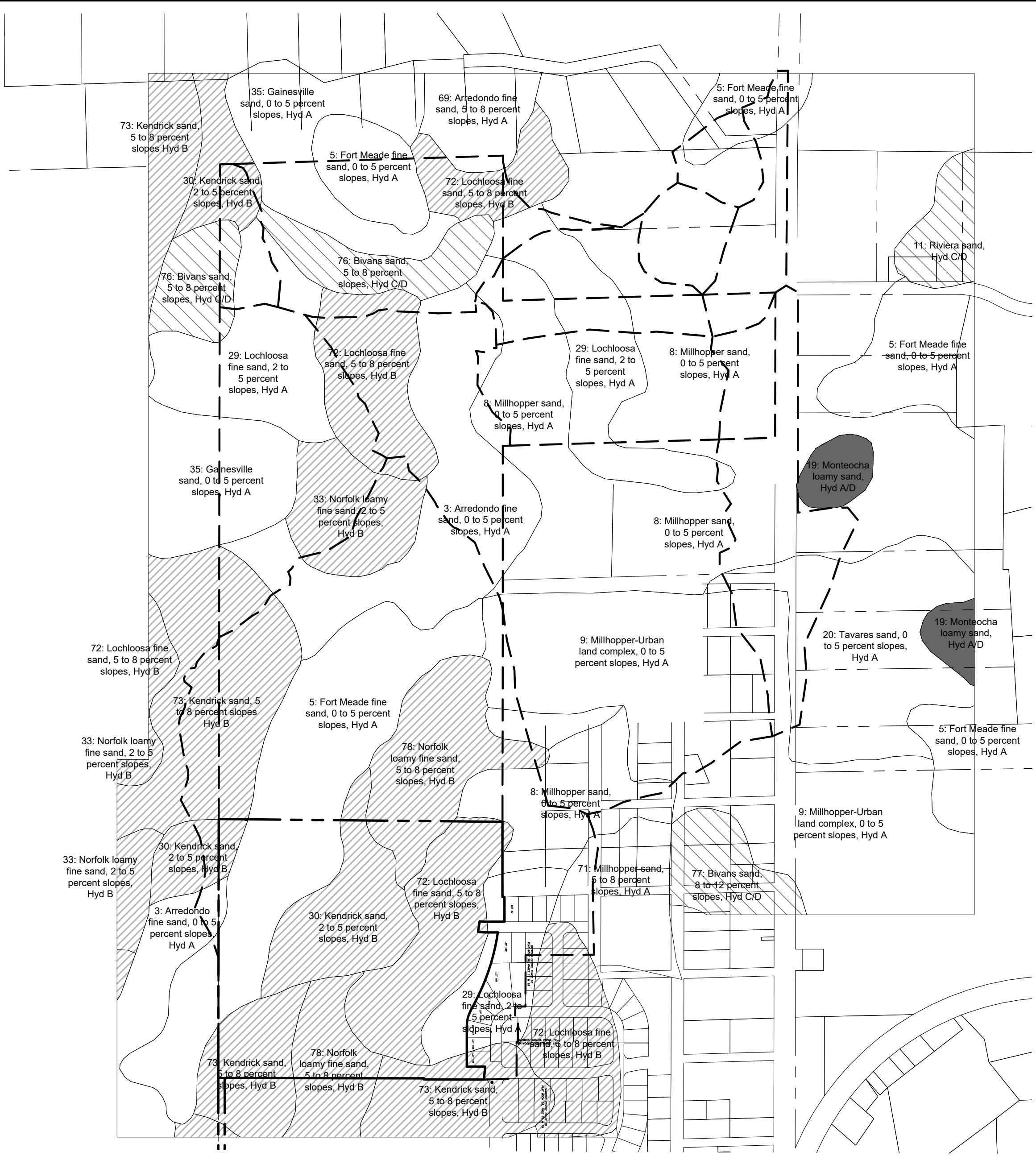
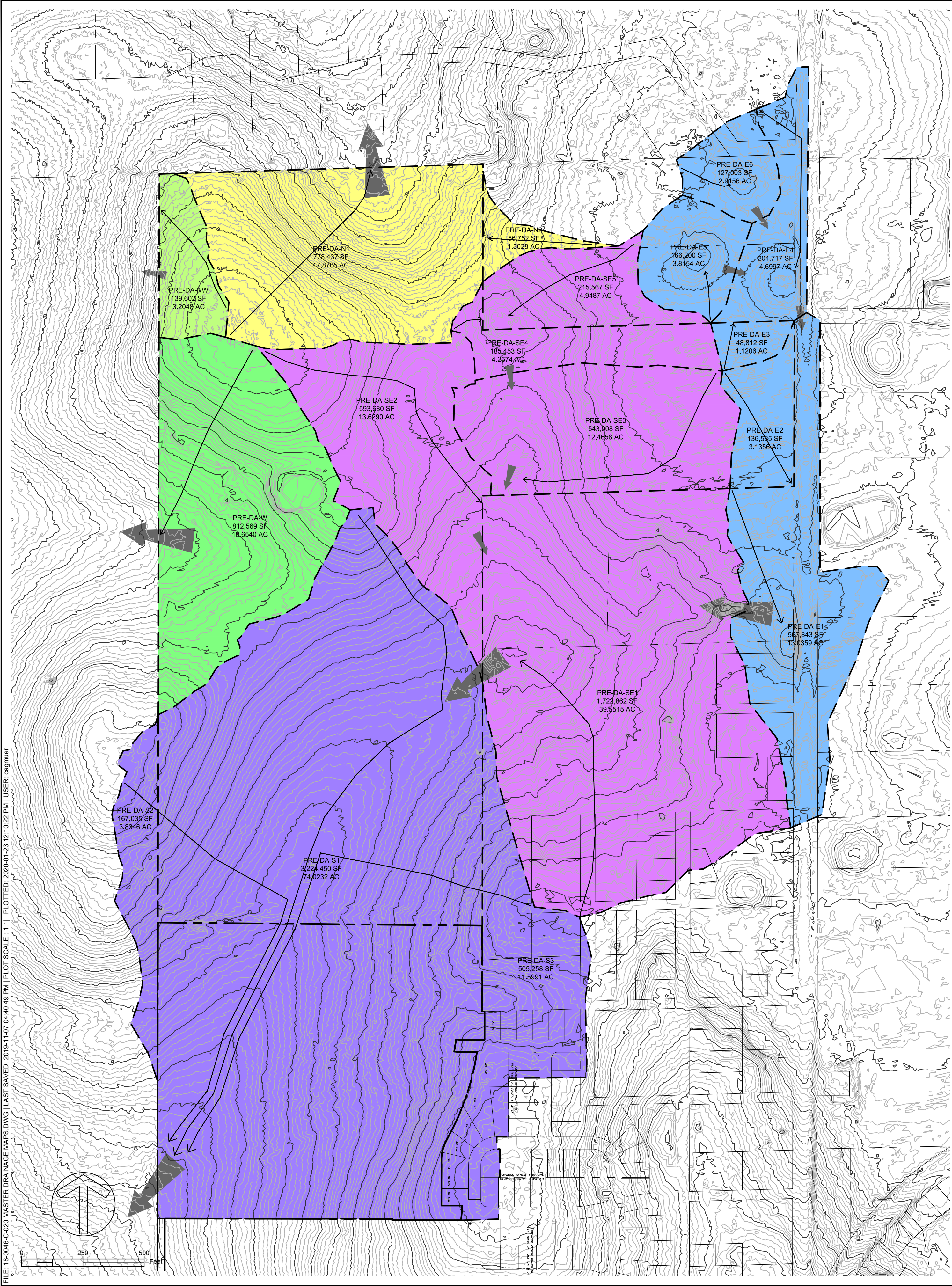


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PRICING: CONSTRUCTION:	
PERMITTING / DESIGN REVISIONS: 2019-05-01 ACPW ROAD CONNECTION SUBMITTAL 2019-05-24 SRWMD SUBMITTAL 2019-06-03 CITY OF ALACHUA PRELIM PLAT SUBMITTAL 2019-07-03 CITY OF ALACHUA PRELIM PLAT 2ND RESUBMITTAL 2019-12-12 CITY OF ALACHUA PRELIM PLAT SUBMITTAL 2020-01-06 CITY OF ALACHUA RESUBMITTAL 2020-01-23 MINOR CITY OF ALACHUA RESUBMITTAL	
ENGINEER OF RECORD: CHRISTOPHER A. GMUER FL PE # 71599 2020-01-23	
NOT FOR FINAL RECORDING	
 FL CA # 21533 gmuereng.com (352) 281-4928 2803 NW 13th St, Box 314 Gainesville, FL 32609	
CLIENT: TARA FOREST, INC.	DESIGN: C.A. GMUER PE
QUALITY CONTROL: C.A. GMUER PE	THE CITY OF ALACHUA PRELIM PLAT # SRWMD APP # ALACHUA COUNTY DRIVEWAY # ENG PROJECT #
TARA FOREST EAST	
SINGLE-FAMILY SUBDIVISION	
MASTER DEVELOPMENT PLAN & AERIAL	
C-001	

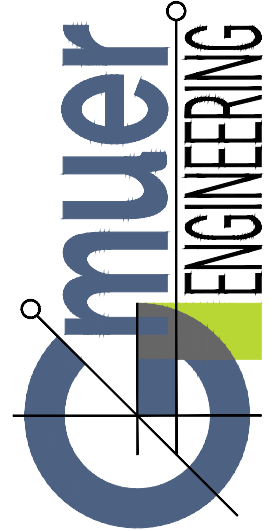
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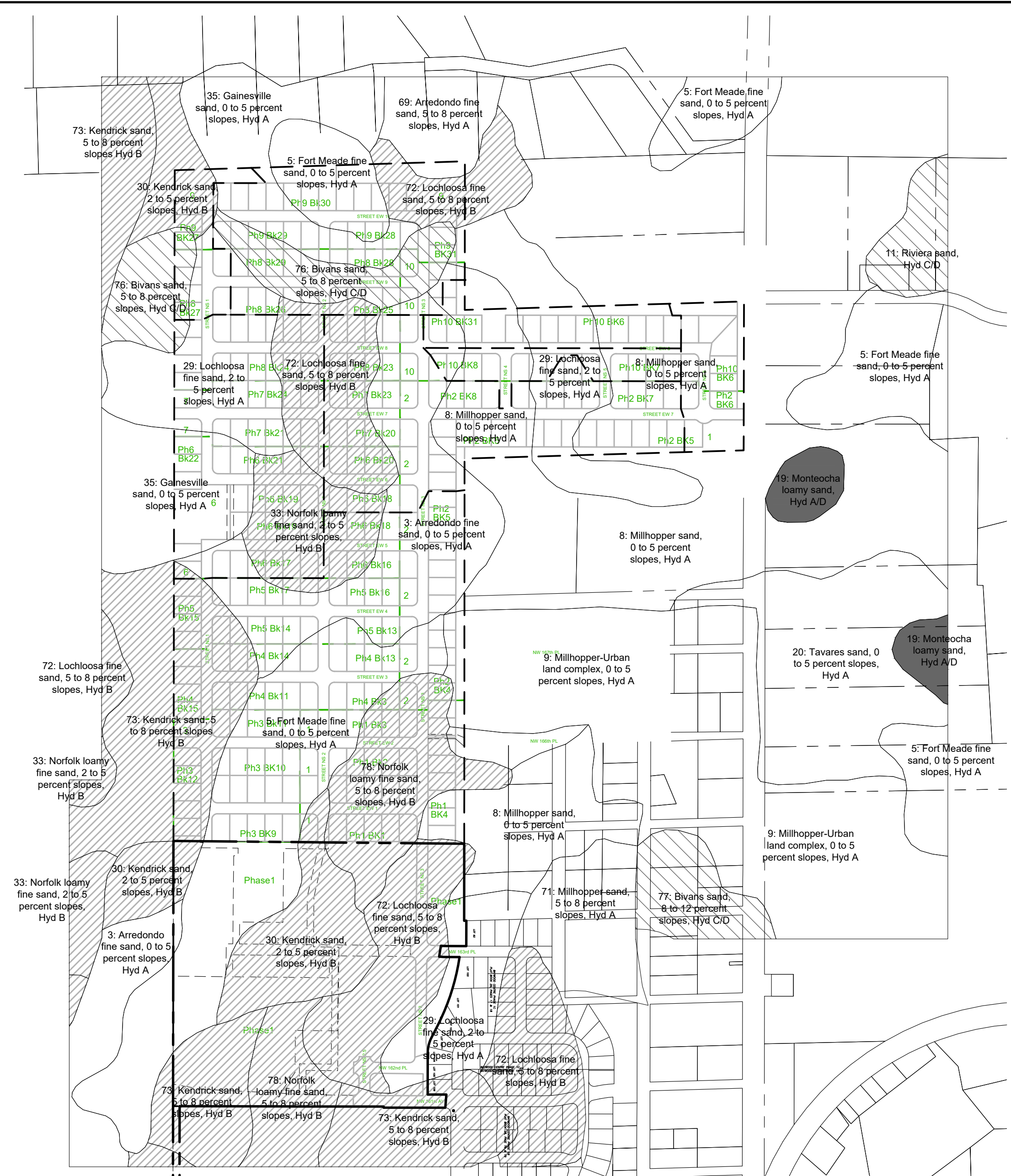
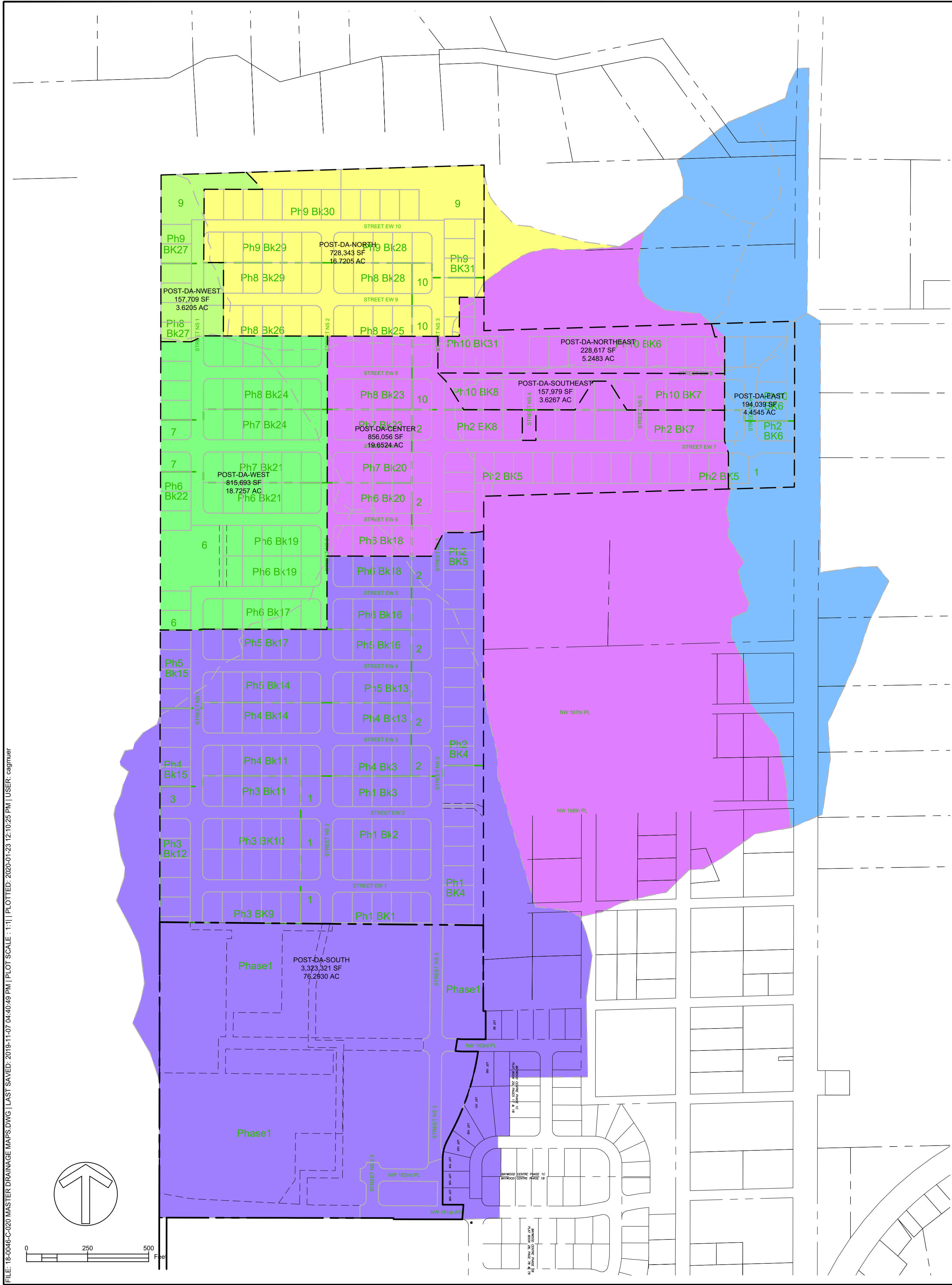


NRCS SOIL MAP AND PRE-DEV DRAINAGE AREAS

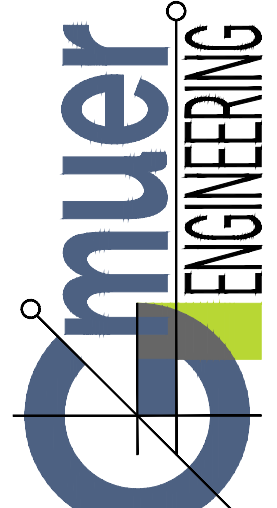
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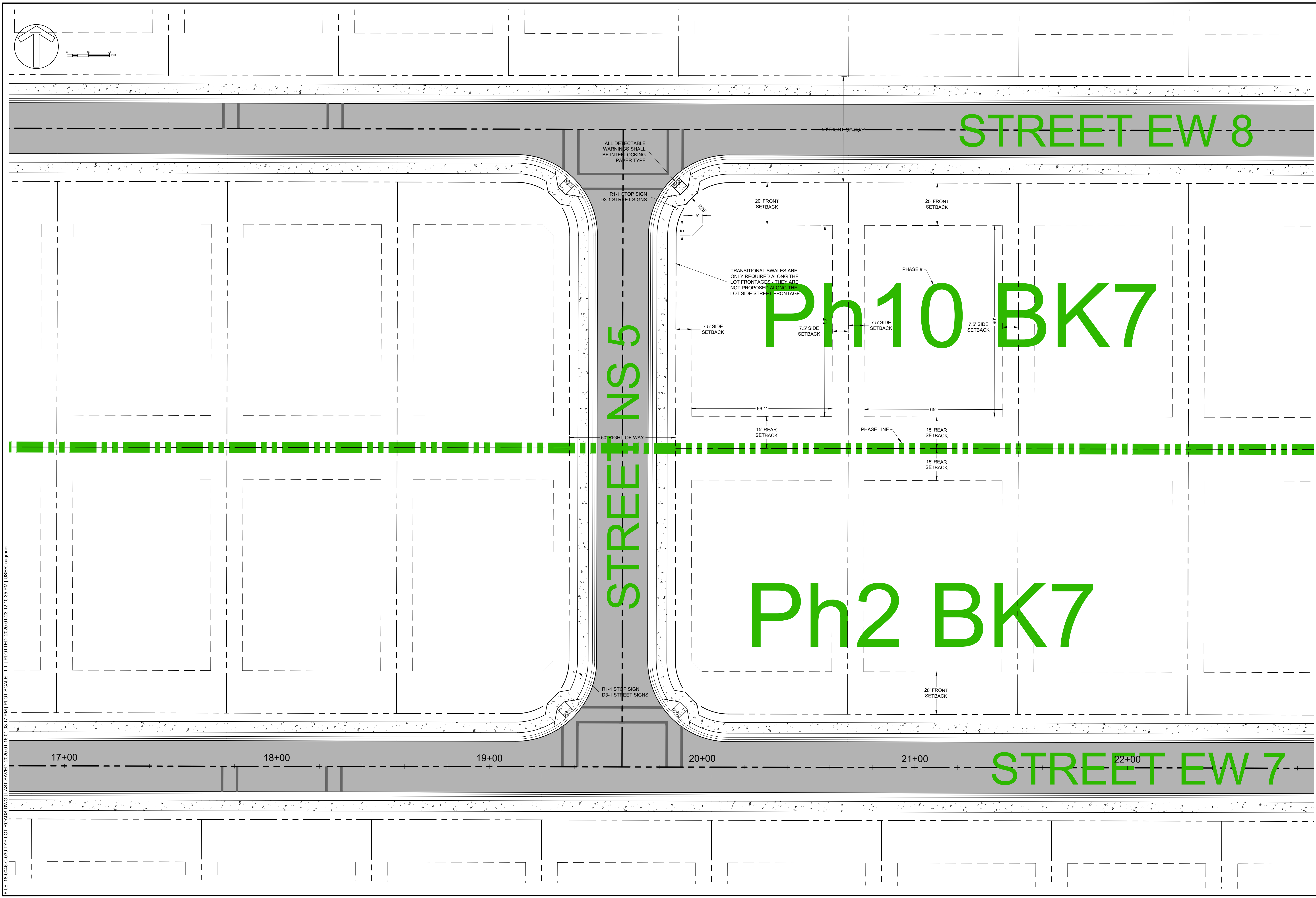
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PRICING: CONSTRUCTION:	
PERMITTING / DESIGN REVISIONS: 2019-05-01 ACPW ROAD CONNECTION SUBMITTAL 2019-05-24 SRWMD SUBMITTAL 2019-06-03 CITY OF ALACHUA PRELIM PLAT SUBMITTAL 2019-07-03 CITY OF ALACHUA PRELIM PLAT 2ND RESUBMITTAL 2019-12-12 CITY OF ALACHUA PRELIM PLAT 3RD RESUBMITTAL 2020-01-06 CITY OF ALACHUA RESUBMITTAL 2020-01-23 MINOR CITY OF ALACHUA RESUBMITTAL	
ENGINEER OF RECORD: CHRISTOPHER A. GMUER FL PE # 71599 2020-01-23	
NOT FOR FINAL RECORDING	
 FL CA # 21533 gmuereng.com (352) 281-4928 2803 NW 13th St, Box 314 Gainesville, FL 32609	
CLIENT: DESIGN: QUALITY CONTROL:	TARA FOREST, INC. C.A. GMUER PE C.A. GMUER PE
CITY OF ALACHUA PRELIM PLAT # SRWMD APP # ALACHUA COUNTY DRIVEWAY # Eng PROJECT #	
TARA FOREST EAST SINGLE-FAMILY SUBDIVISION	
PRE-DEVELOPMENT DRAINAGE MAP C-021	

FILE: 18-0046-C-020 MASTER DRAINAGE MAPS.DWG | LAST SAVED: 2019-11-07 04:40:40 PM | PLOT SCALE: 1"=1' | PLOTTED: 2020-01-23 12:10:25 PM | USER: cagnier



NRCS SOIL MAP AND PRE-DEV DRAINAGE AREAS

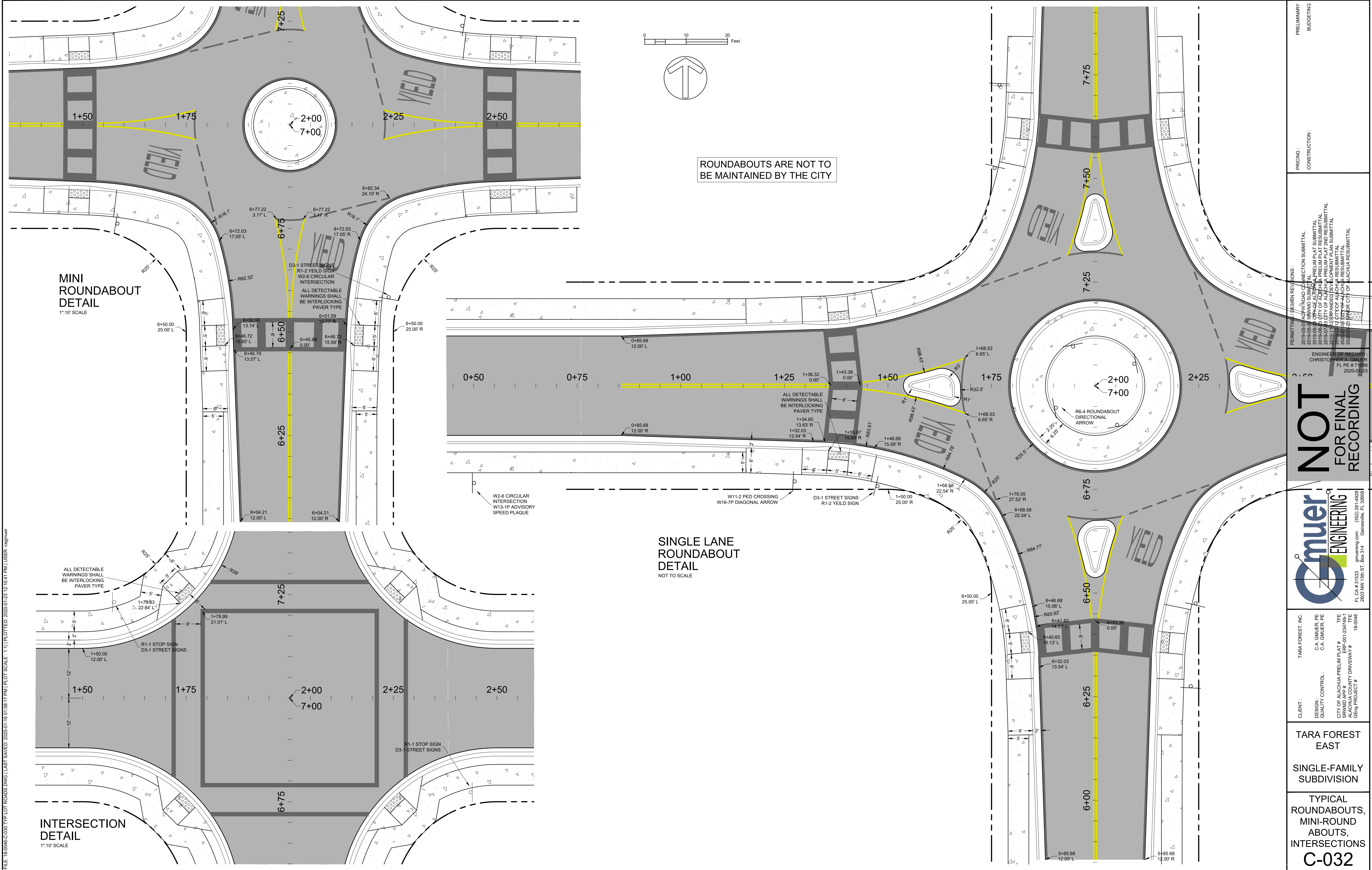
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CONSTRUCTION :	
PERMITTING / DESIGN REVISIONS :	
2019-05-01 ACPW ROAD CONNECTION SUBMITTAL 2019-05-24 SRWMD SUBMITTAL 2019-06-03 CITY OF ALACHUA PRELIM PLAT SUBMITTAL 2019-07-03 CITY OF ALACHUA PRELIM PLAT 2ND RESUBMITTAL 2019-12-12 CITY OF ALACHUA RESUBMITTAL 2020-01-06 CITY OF ALACHUA RESUBMITTAL 2020-01-23 MINOR CITY OF ALACHUA RESUBMITTAL	
ENGINEER OF RECORD : CHRISTOPHER A. GMUER FL PE # 71599 2020-01-23	
NOT FOR FINAL RECORDING	
 FL CA # 31533 gmuereng.com (352) 281-4928 2803 NW 13th St, Box 314 Gainesville, FL 32609	
CLIENT :	TARA FOREST, INC.
DESIGN :	C.A. GMUER, P.E.
QUALITY CONTROL :	C.A. GMUER, P.E.
CITY OF ALACHUA PRELIM PLAT # :	SRWMD APP # :
ALACHUA COUNTY DRIVEWAY # :	Eng PROJECT # :
TARA FOREST EAST	
SINGLE-FAMILY SUBDIVISION	
POSTE-DEVELOPMENT DRAINAGE MAP	
C-022	



FILE: 18-0046-C-030 TYP LOT ROADS DWG 1 LAST SAVED: 2020-01-16 01:08:17 PM PLOT SCALE: 1"=11' PLOTTED: 2020-01-23 12:10:35 PM USER: cagmur

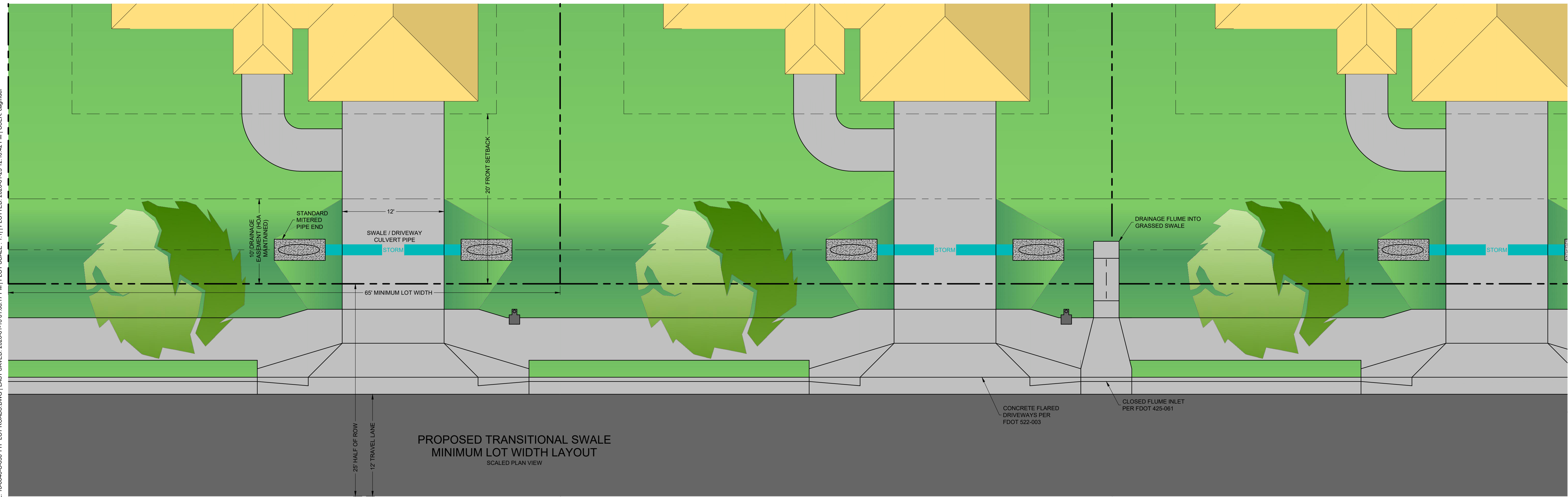
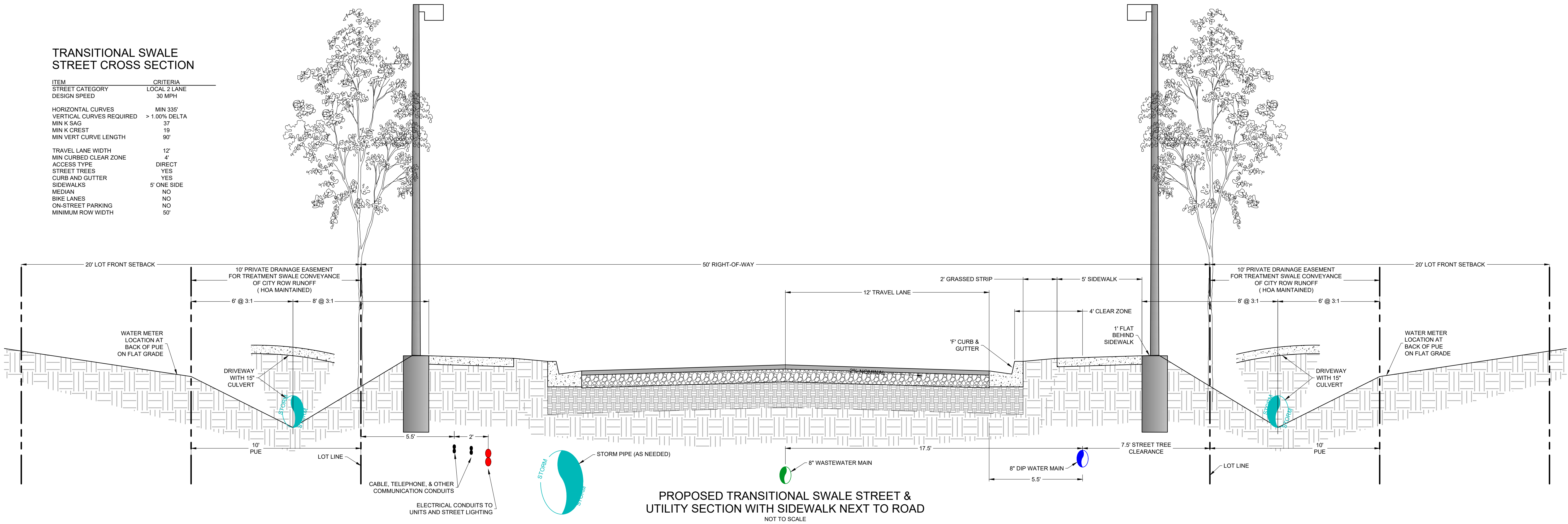
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PRICING: CONSTRUCTION:	
PERMITTING / DESIGN REVISIONS: 2019-05-01 ACPW ROAD CONNECTION SUBMITTAL 2019-05-24 SRWMD SUBMITTAL 2019-06-03 CITY OF ALACHUA PRELIM PLAT SUBMITTAL 2019-07-03 CITY OF ALACHUA PRELIM PLAT 2ND RESUBMITTAL 2019-12-12 CITY OF ALACHUA PRELIM PLAT 3RD RESUBMITTAL 2020-01-06 CITY OF ALACHUA RESUBMITTAL 2020-01-23 MINOR CITY OF ALACHUA RESUBMITTAL	
ENGINEER OF RECORD: CHRISTOPHER A. GMUER FL PE # 71599 2020-01-23	
NOT FOR FINAL RECORDING	
 Gmuer ENGINEERING FL CA # 31533 gmuereng.com (352) 281-4928 2803 NW 13th St, Box 314 Gainesville, FL 32609	
CLIENT: TARA FOREST, INC. DESIGN: C.A. GMUER, PE QUALITY CONTROL: C.A. GMUER, PE	TARA FOREST EAST SINGLE-FAMILY SUBDIVISION
CITY OF ALACHUA PRELIM PLAT # 18-0046 SRWMD APP # 001-247183 ALACHUA COUNTY DRIVEWAY # 18-0046 GEN PROJECT #	
TYPICAL LOTS & SETBACKS C-031	

FILE: 18-0046-C-030 TYP LOT ROADS DWG | LAST SAVED: 2020-01-16 01:08:17 PM | PLOT SCALE: 1"=10' | PLOTTED: 2020-01-23 12:10:41 PM | USER: cagnmur



TRANSITIONAL SWALE
STREET CROSS SECTION

ITEM	CRITERIA
STREET CATEGORY	LOCAL 2 LANE
DESIGN SPEED	30 MPH
HORIZONTAL CURVES	MIN 335'
VERTICAL CURVES REQUIRED	> 1.00% DELTA
MIN K SAG	37
MIN K CREST	19
MIN VERT CURVE LENGTH	90'
TRAVEL LANE WIDTH	12'
MIN CURBED CLEAR ZONE	4'
ACCESS TYPE	DIRECT
STREET TREES	YES
CURB AND GUTTER	YES
SIDEWALKS	5' ONE SIDE
MEDIAN	NO
BIKE LANES	NO
ON-STREET PARKING	NO
MINIMUM ROW WIDTH	50'



PRELIMINARY
BUDGETING

PRICING :
CONSTRUCTION :

PERMITTING / DESIGN REVISIONS :
2019-05-01 ACPW ROAD CONNECTION SUBMITTAL
2019-05-24 SRWMD SUBMITTAL
2019-06-03 CITY OF ALACHUA PRELIM PLAT SUBMITTAL
2019-07-03 CITY OF ALACHUA PRELIM PLAT 2ND RESUBMITTAL
2019-12-12 CITY OF ALACHUA PRELIM PLAT SUBMITTAL
2020-01-06 CITY OF ALACHUA RESUBMITTAL
2020-01-23 MINOR CITY OF ALACHUA RESUBMITTAL

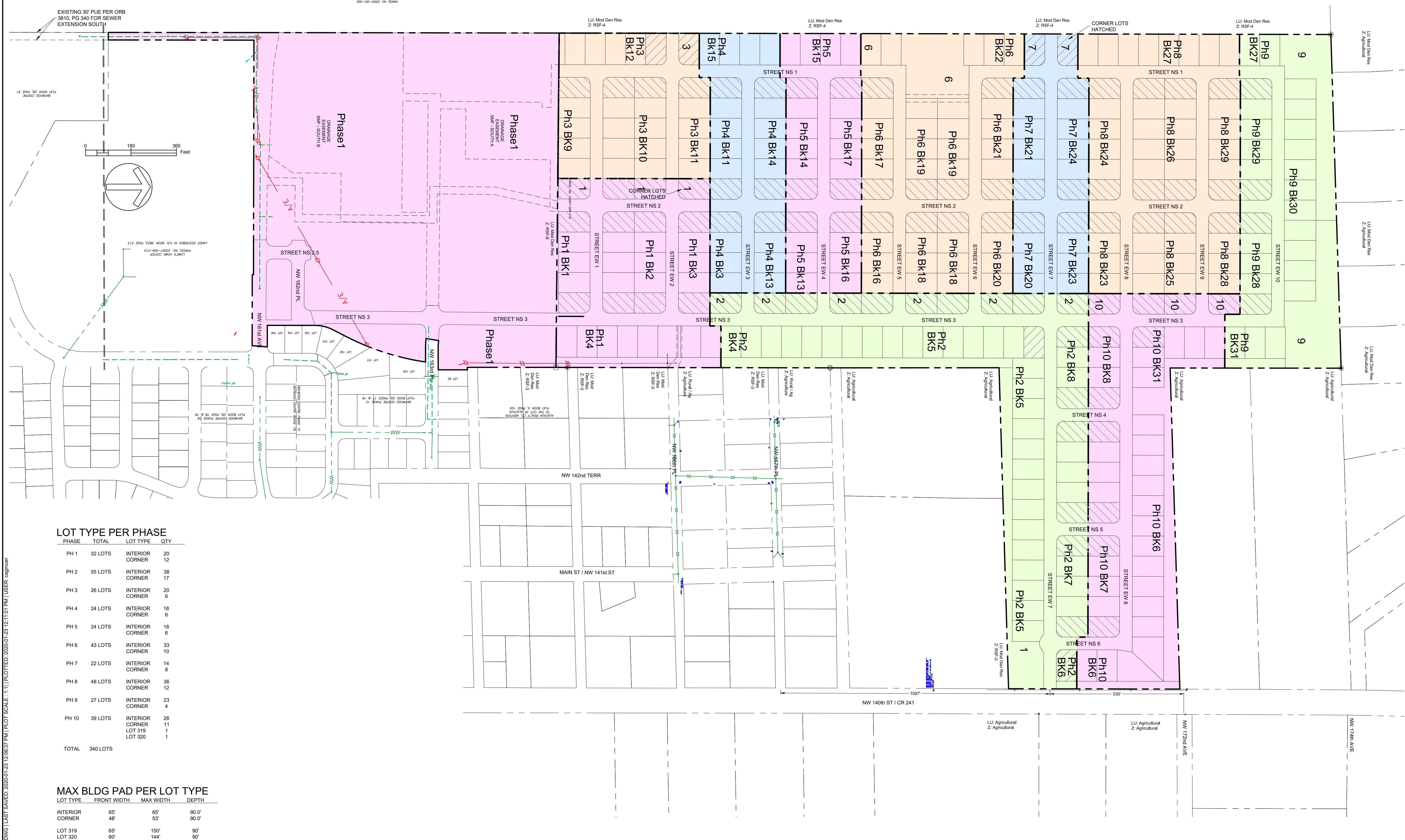
ENGINEER OF RECORD :
CHRISTOPHER A. G穆ER
FL PE # 71599
2020-01-23

NOT
FOR FINAL
RECORDING

ENGINEERING
FL CA # 21533 (352) 281-4928
2803 NW 13th St, Box 314 Gainesville, FL 32609

CLIENT :
TARA FOREST, INC.
DESIGN : C.A. G穆ER, PE
QUALITY CONTROL : C.A. G穆ER, PE
CITY OF ALACHUA PRELIM PLAT # :
SRWMD APP # :
ALACHUA COUNTY DRIVEWAY # :
G穆ER PROJECT # :
TARA FOREST EAST
SINGLE-FAMILY SUBDIVISION
TYPICAL
RIGHT-OF-WAY
& ROAD
SECTIONS
C-033

FILE: 18-0046-C-100 SITE DWG | LAST SAVED: 2020-01-23 12:06:37 PM | PLOT SCALE: 1"=11' | PLOTTED: 2020-01-23 12:11:01 PM | USER: cagmuer



PHASE	TOTAL	LOT TYPE	QTY
PH 1	32 LOTS	INTERIOR CORNER	20
PH 2	55 LOTS	INTERIOR CORNER	38
PH 3	26 LOTS	INTERIOR CORNER	20
PH 4	24 LOTS	INTERIOR CORNER	18
PH 5	24 LOTS	INTERIOR CORNER	18
PH 6	43 LOTS	INTERIOR CORNER	33
PH 7	22 LOTS	INTERIOR CORNER	14
PH 8	48 LOTS	INTERIOR CORNER	36
PH 9	27 LOTS	INTERIOR CORNER	23
PH 10	39 LOTS	INTERIOR CORNER	26
		LOT 319	1
		LOT 320	1
TOTAL	340 LOTS		

LOT TYPE	FRONT WIDTH	MAX WIDTH	DEPTH
INTERIOR CORNER	65'	65'	90.0'
LOT 319	48'	53'	90.0'
LOT 320	65'	150'	90'
	60'	144'	90'

PRELIMINARY BUDGETING

CONSTRUCTION :

PERMITTING / DESIGN REVISIONS :

ENGINEER OF RECORD : CHRISTOPHER A. G穆ER
FL PE # 71599
2020-01-23

NOT FOR FINAL RECORDING

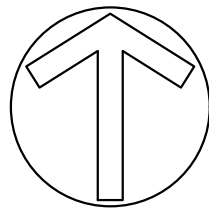
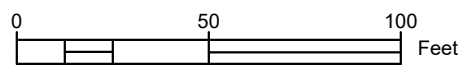
FL CA # 31533 - gmuering.com (352) 281-4928
2803 NW 13th St, Box 314 Gainesville, FL 32609

TARA FOREST, INC.
C.A. G穆ER PE
C.A. G穆ER PE
CITY OF ALACHUA PRELIM PLAT #
SRWMD APP #
ALACHUA COUNTY DRIVEWAY #
ENGPROJECT #

CLIENT :
DESIGN :
QUALITY CONTROL :

TARA FOREST EAST
SINGLE-FAMILY SUBDIVISION

MASTER PRELIMINARY PLAT & PHASING
C-070



LU: Mod Den Res
Z: Agricultural

LU: Mod Den Res
Z: Agricultural

LU: Mod Den Res
Z: Agricultural

LU: Agricultur
Z: Agricultural

LU: Mod Den Res
Z: RSF-4

TREE REMOVAL AND
REPLACEMENT WILL BE
ADDRESSED AS PART OF
THE CONSTRUCTION PLANS,
PER SECTION 6.2.1(G)

Ph9 Bk30

Ph9
BK27

Ph9 Bk29

Ph9 Bk28

Ph9
BK31

Ph8 Bk29

Ph8 Bk28

Ph8
BK27

Ph8 Bk26

Ph8 Bk25

Ph10 BK31

STREET NS 2

STREET EW 9

STREET EW 10

STREET NS 1

STREET NS 3

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PRELIMINARY
BUDGETING

PRICING:
CONSTRUCTION :

PERMITTING / DESIGN REVISIONS :
2019-05-01 ACPW ROAD CONNECTION SUBMITTAL
2019-05-24 SRWMD SUBMITTAL
2019-06-03 CITY OF ALACHUA PRELIM PLAT SUBMITTAL
2019-07-03 CITY OF ALACHUA PRELIM PLAT 2ND RESUBMITTAL
2019-12-12 CITY OF ALACHUA PRELIM PLAT 3RD RESUBMITTAL
2020-01-06 CITY OF ALACHUA RESUBMITTAL
2020-01-23 MINOR CITY OF ALACHUA RESUBMITTAL

ENGINEER OF RECORD :
CHRISTOPHER A. GMUER
FL PE # 71599
2020-01-23

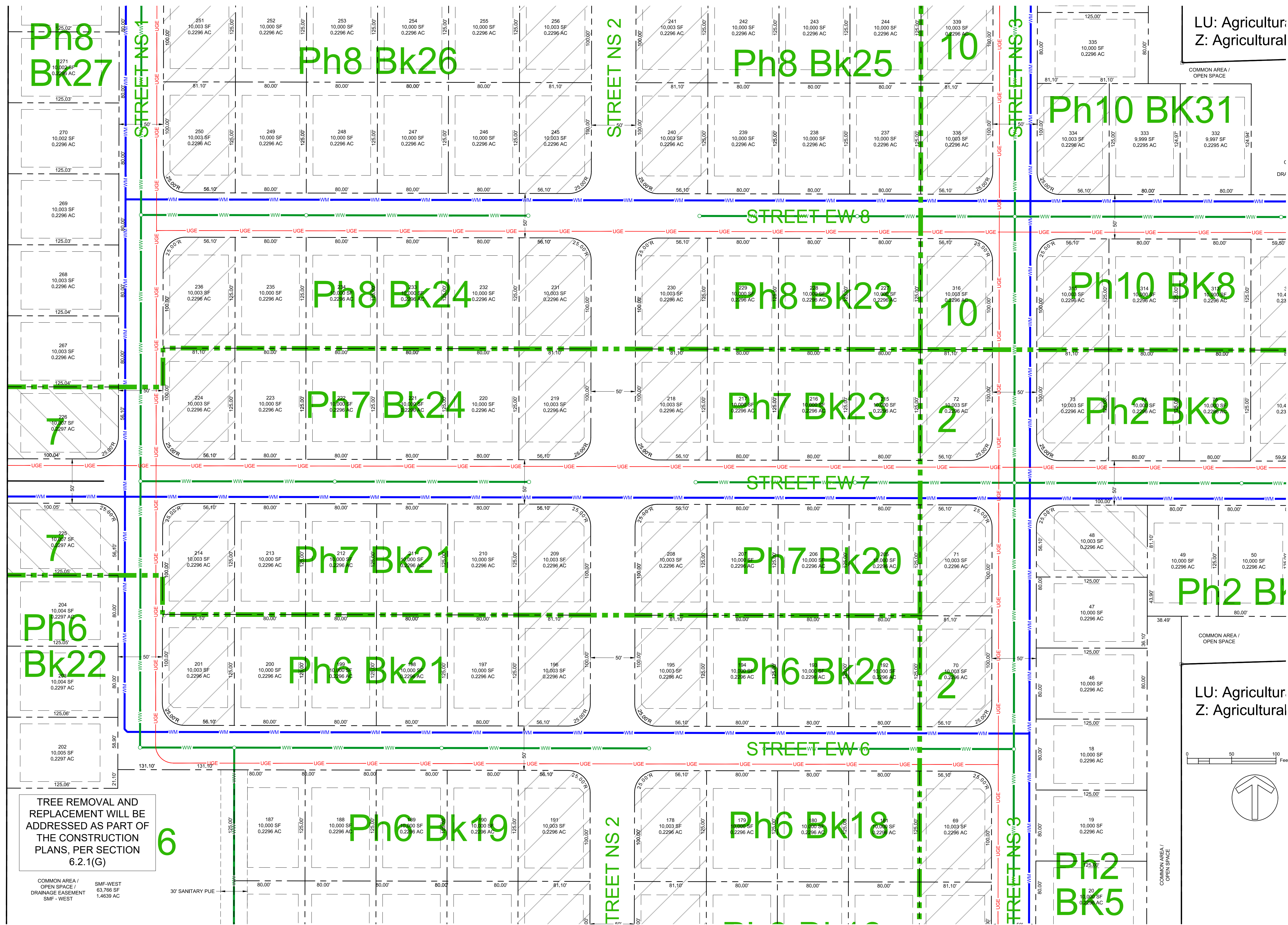
NOT
FOR FINAL
RECORDING



CLIENT :
TARA FOREST, INC.
DESIGN :
C.A. GMUER PE
QUALITY CONTROL :
C.A. GMUER PE
CITY OF ALACHUA PRELIM PLAT #
SRWMD APP #
ALACHUA COUNTY DRIVEWAY #
ENG PROJECT #

TARA FOREST
EAST
SINGLE-FAMILY
SUBDIVISION

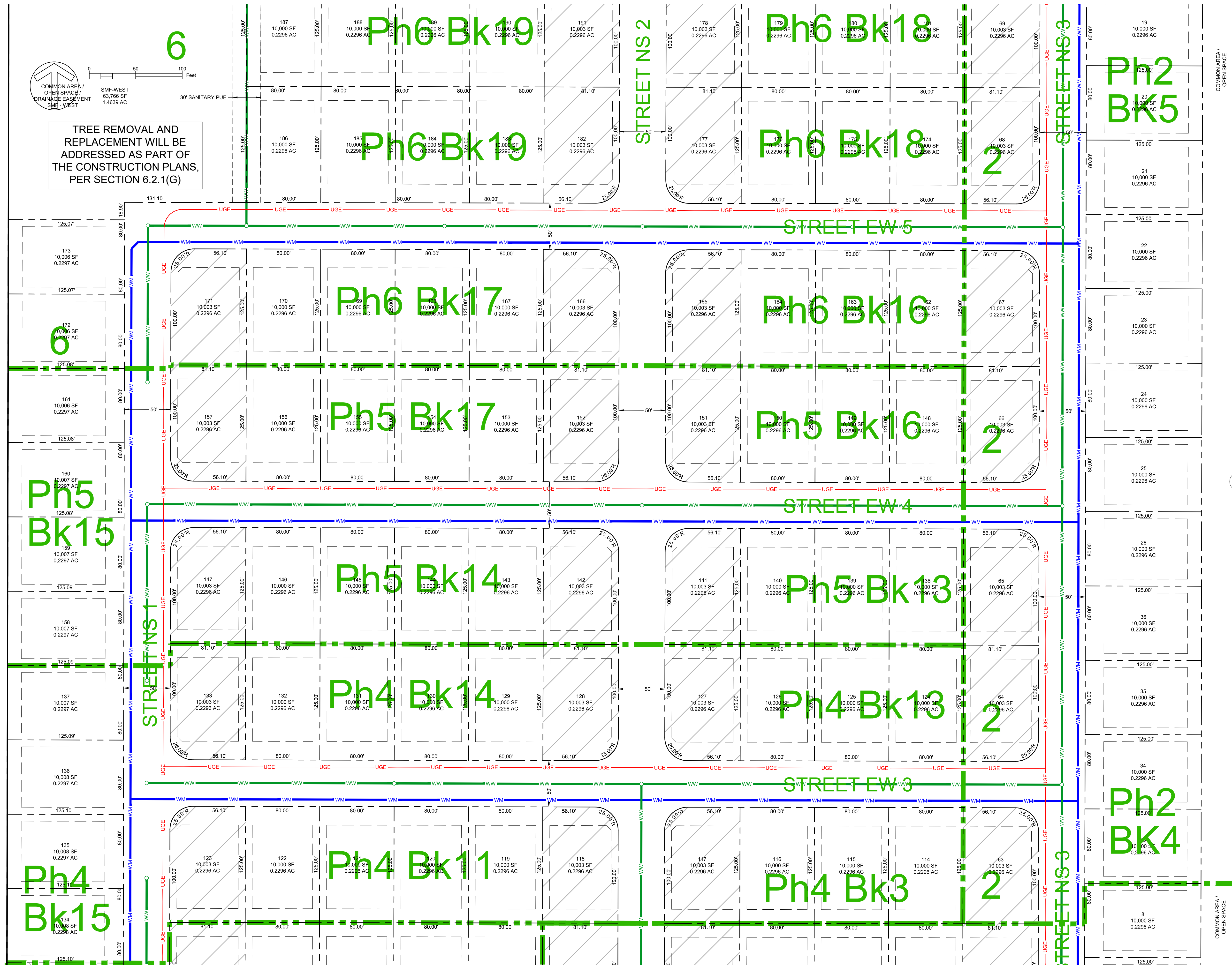
DETAILED
PRELIMINARY
PLAT &
PHASING
C-071



2.	TARA FOREST, INC. DESIGN : C.A. GUMIER, PE QUALITY CONTROL : C.A. GUMIER, PE CITY OF ALACHUA PRELIM PLAT # 18-0046 ALACHUA COUNTY DRIVEWAY # 2503 NW 13th St., Box 314 Gainesville, FL 32609 GEEng PROJECT #	 FL CA # 41533 gmuereng.com (352) 281-4528	NOT FOR FINAL RECORDING ENGINEER OF RECORD : CHRISTOPHER A. GUMIER FL PE # 71559 2020-01-23	PERMITTING / DESIGN REVISIONS : 2019-05-01 ACPIV ROAD CONNECTION SUBMITTAL 2019-05-28 CITY OF ALACHUA PRELIM PLAT SUBMITTAL 2019-05-28 CITY OF ALACHUA PRELIM PLAT SUBMITTAL 2019-06-03 CITY OF ALACHUA PRELIM PLAT SUBMITTAL 2019-06-03 CITY OF ALACHUA PRELIM PLAT SUBMITTAL 2019-11-12 EXPANDED DEVELOPMENT PLAN SUBMITTAL 2019-12-12 CITY OF ALACHUA RESUBMITTAL 2020-01-23 CITY OF ALACHUA RESUBMITTAL 2020-01-23 MINOR CITY OF ALACHUA RESUBMITTAL	PRICING : CONSTRUCTION : PRELIMINARY : BUDGETING :
C-072	DETAILED PRELIMINARY PLAT & PHASING	SINGLE-FAMILY SUBDIVISION	TARA FOREST EAST		

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LU: Mod Den Res
Z: RSF-4



LU: Agricultur
Z: Agricultura

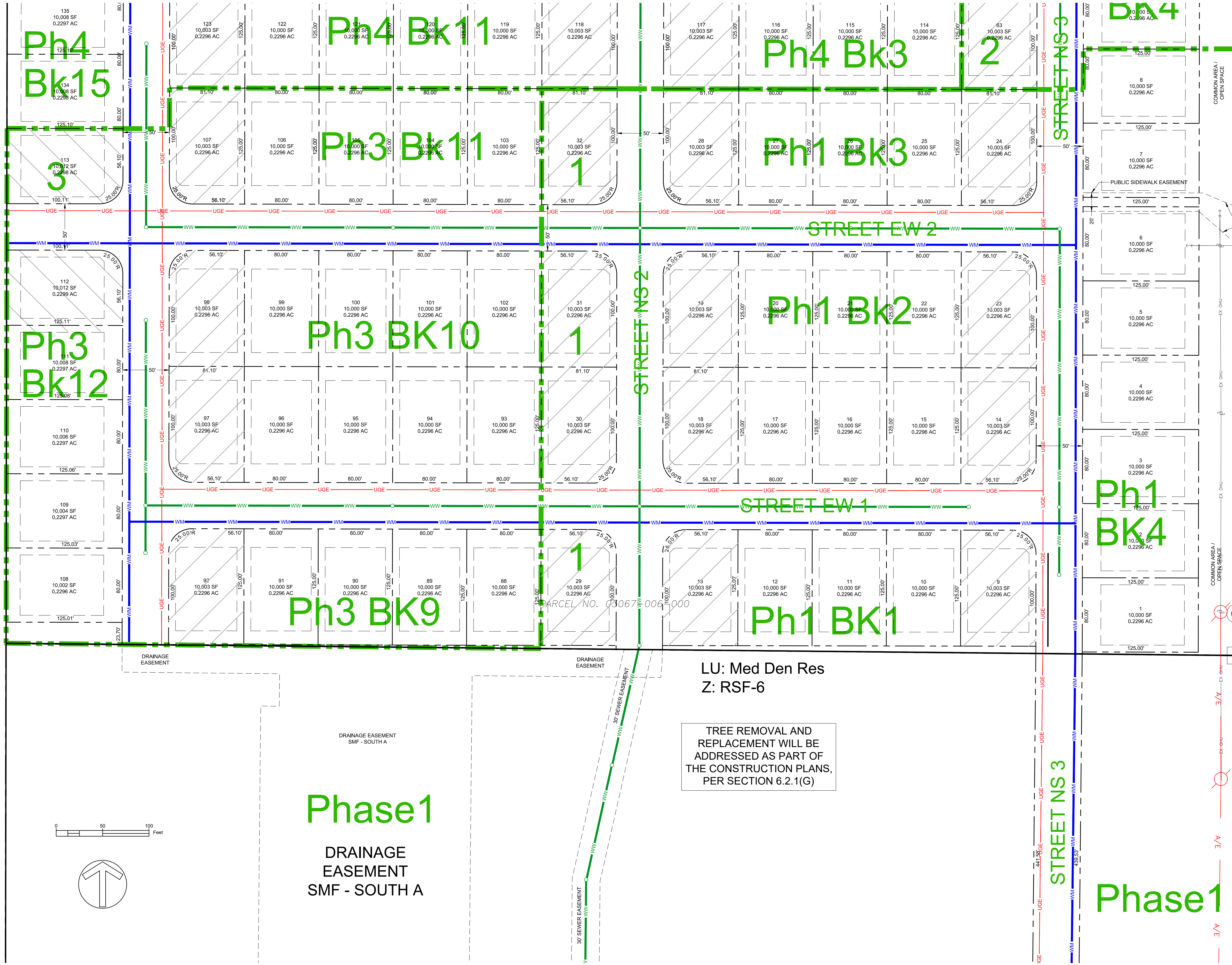
LU: Rural / Ag
Z: Agriculture

LU: Mod
Den Res
Z: RSF-3

PRELIMINARY BUDGETING	PERMITTING / DESIGN REVISIONS: 2019-05-01 ACPW ROAD CONNECTION SUBMITTAL 2019-05-24 SRWMD SUBMITTAL 2019-06-03 CITY OF ALACHUA PRELIM PLAT SUBMITTAL 2019-07-03 CITY OF ALACHUA PRELIM PLAT 2ND RESUBMITTAL 2019-12-12 CITY OF ALACHUA PRELIM PLAT 3RD RESUBMITTAL 2020-01-06 CITY OF ALACHUA RESUBMITTAL 2020-01-23 MINOR CITY OF ALACHUA RESUBMITTAL
PRICING: CONSTRUCTION:	ENGINEER OF RECORD: CHRISTOPHER A. GMUER FL PE # 71599 2020-01-23
NOT FOR FINAL RECORDING	
gmuer ENGINEERING FL CA # 31533 gmuereng.com (352) 281-4928 2803 NW 13th St, Box 314 Gainesville, FL 32609	
CLIENT: DESIGN: QUALITY CONTROL:	TARA FOREST, INC. C.A. GMUER, PE C.A. GMUER, PE CITY OF ALACHUA PRELIM PLAT # SRWMD APP # ALACHUA COUNTY DRIVEWAY # GEng PROJECT #
TARA FOREST EAST SINGLE-FAMILY SUBDIVISION	
DETAILED PRELIMINARY PLAT & PHASING C-073	

FILE: 18-0046-C-100 SITE DWG | LAST SAVED: 2020-01-23 12:06:37 PM | PLOT SCALE: 1"=11' | PLOTTED: 2020-01-23 12:11:33 PM | USER: cgmuer

LU: Mod Den Res
Z: RSF-4



LU: Rural / Ag
Z: Agriculture

LU: Mod
Den Res
Z: RSF-3

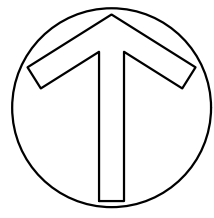
LU: Mod
Den Res
Z: RSF-3

LU: Mod
Den Res
Z: RSF-3

PRELIMINARY BUDGETING	
CONSTRUCTION :	
PERMITTING / DESIGN REVISIONS : 2019-05-01 ACPW ROAD CONNECTION SUBMITTAL 2019-05-24 SRWMD SUBMITTAL 2019-06-03 CITY OF ALACHUA PRELIM PLAT SUBMITTAL 2019-07-03 CITY OF ALACHUA PRELIM PLAT 2ND RESUBMITTAL 2019-12-12 CITY OF ALACHUA PRELIM PLAT 3RD RESUBMITTAL 2020-01-06 CITY OF ALACHUA RESUBMITTAL 2020-01-23 MINOR CITY OF ALACHUA RESUBMITTAL	
ENGINEER OF RECORD : CHRISTOPHER A. GMUER FL PE # 71599 2020-01-23	
NOT FOR FINAL RECORDING	
Gmuer ENGINEERING FL CA # 21533 gmuereng.com (352) 281-4828 2803 NW 13th St, Box 314 Gainesville, FL 32609	
CLIENT : TARA FOREST, INC. DESIGN : C.A. GMUER, PE QUALITY CONTROL : C.A. GMUER, PE CITY OF ALACHUA PRELIM PLAT # SRWMD APP # ALACHUA COUNTY DRIVEWAY # ENG PROJECT #	18-0046
TARA FOREST EAST SINGLE-FAMILY SUBDIVISION	
DETAILED PRELIMINARY PLAT & PHASING C-074	

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0 50 100 Feet



DRAINAGE
EASEMENT
SMF - SOUTH A

Phase1

DRAINAGE
EASEMENT
SMF - SOUTH B

TREE REMOVAL AND
REPLACEMENT WILL BE
ADDRESSED AS PART OF
THE CONSTRUCTION PLANS,
PER SECTION 6.2.1(G)

DRAINAGE EASEMENT
SMF - SOUTH B

PUBLIC UTILITY
EASEMENT

EXISTING 30" PUE PER ORB
3810, PG 340 FOR SEWER
EXTENSION SOUTH

DRAINAGE
EASEMENT

DRAINAGE
EASEMENT

STREET NS 2.5

STREET NS 3

STRE

Phase1

NW 163rd PL

NW 162nd PL

NW 161st AVE

LOT 92

LOT 100

LOT 101

LOT 102

LOT 103

LOT 104

LOT 105

LOT 106

BAYWOC
BAYWOC

PRELIMINARY
BUDGETING

PRICING:
CONSTRUCTION :

PERMITTING / DESIGN REVISIONS :
2019-05-01 ACPW ROAD CONNECTION SUBMITTAL
2019-05-24 SRWMD SUBMITTAL
2019-06-03 CITY OF ALACHUA PRELIM PLAT SUBMITTAL
2019-07-03 CITY OF ALACHUA PRELIM PLAT 2ND RESUBMITTAL
2019-12-12 CITY OF ALACHUA PRELIM PLAT 3RD RESUBMITTAL
2019-12-12 CITY OF ALACHUA PRELIM PLAT 4TH RESUBMITTAL
2020-01-06 CITY OF ALACHUA RESUBMITTAL
2020-01-23 MINOR CITY OF ALACHUA RESUBMITTAL

ENGINEER OF RECORD :
CHRISTOPHER A. G穆ER
FL PE # 71599
2020-01-23

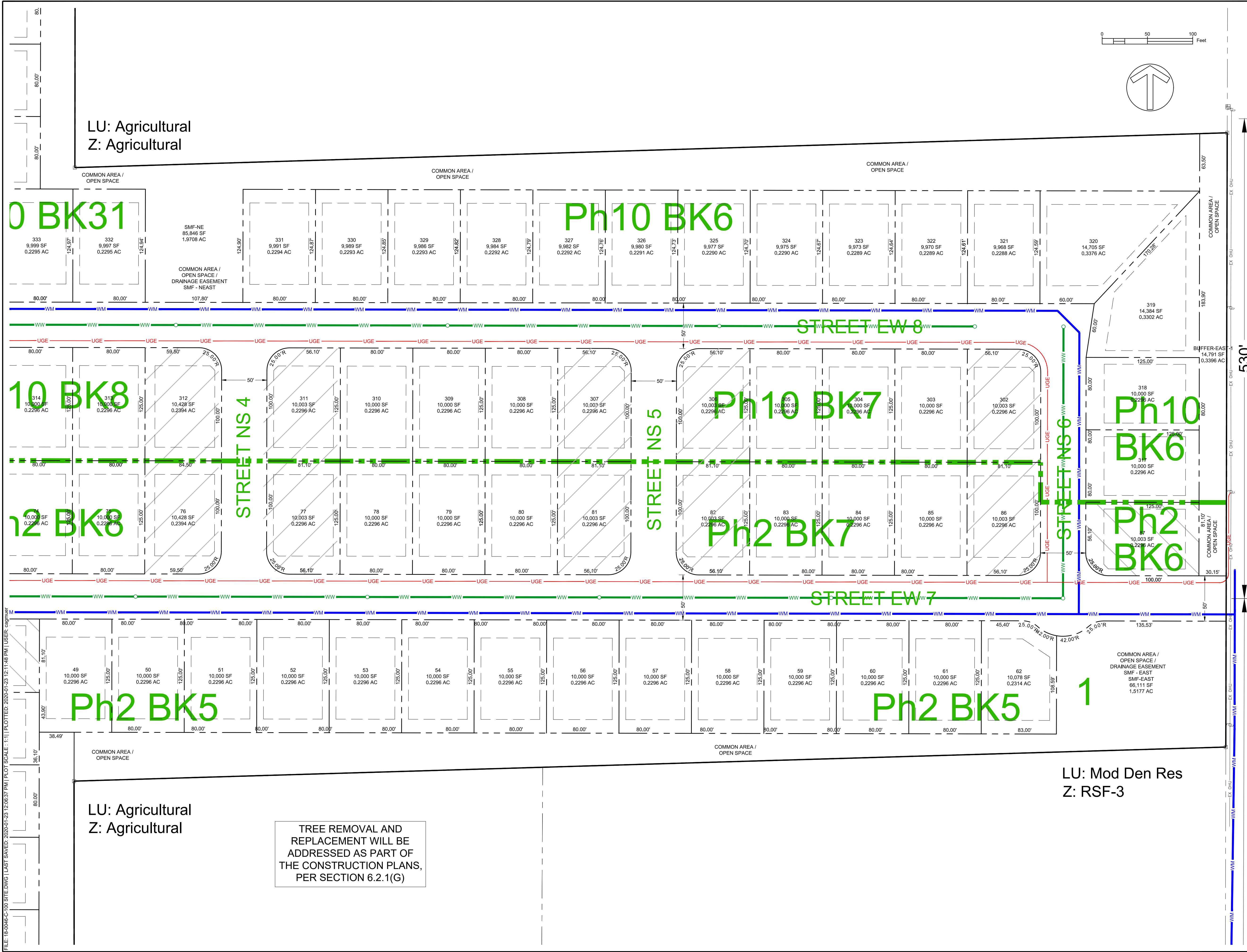
NOT
FOR FINAL
RECORDING

G穆uer
ENGINEERING
FL CA # 31533 gmuering.com (352) 281-4928
2803 NW 13th St, Box 514 Gainesville, FL 32609

TARA FOREST, INC.
C.A. G穆ER PE
C.A. G穆ER PE
DESIGN :
QUALITY CONTROL :
CLIENT :
CITY OF ALACHUA PRELIM PLAT #
SRWMD APP #
ALACHUA COUNTY DRIVEWAY #
G穆ER PROJECT #

TARA FOREST
EAST
SINGLE-FAMILY
SUBDIVISION

DETAILED
PRELIMINARY
PLAT &
PHASING
C-075



LU: Agricultural
Z: Agricultural

LU: Agricultural
Z: Agricultural

LU: Agricultural
Z: Agricultural

LU: Mod Den Res
Z: RSF-3

PRELIMINARY
BUDGETING

PRICING:
CONSTRUCTION :

PERMITTING / DESIGN REVISIONS :
2019-05-01 ACPW ROAD CONNECTION SUBMITTAL
2019-05-24 SRWMD SUBMITTAL
2019-06-03 CITY OF ALACHUA PRELIM PLAT SUBMITTAL
2019-07-03 CITY OF ALACHUA PRELIM PLAT 2ND RESUBMITTAL
2019-12-12 CITY OF ALACHUA PRELIM PLAT SUBMITTAL
2020-01-06 CITY OF ALACHUA RESUBMITTAL
2020-01-23 MINOR CITY OF ALACHUA RESUBMITTAL

ENGINEER OF RECORD :
CHRISTOPHER A. G穆ER
FL # E 71599
2020-01-23

NOT
FOR FINAL
RECORDING

ENGINEERING

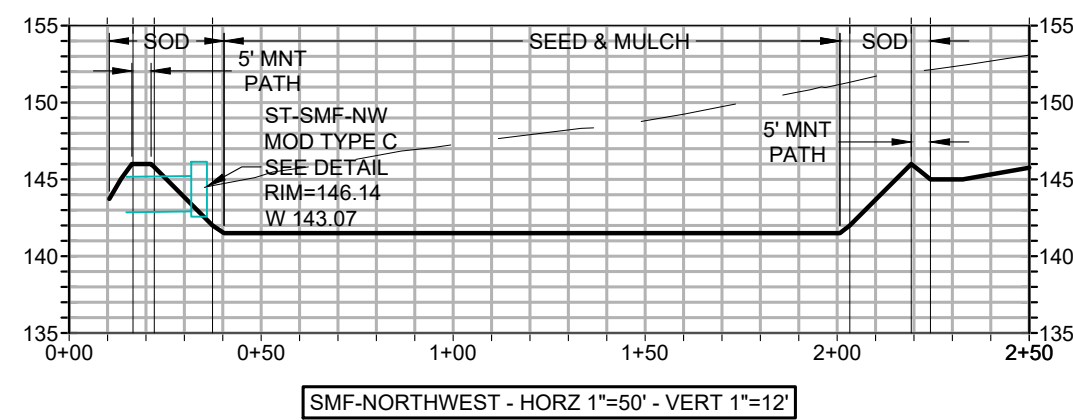
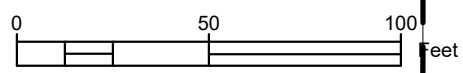
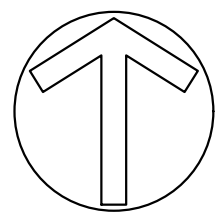
FL CA # 31533
2803 NW 13th St, Box 314
Gainesville, FL 32609

CIENT :
TARA FOREST, INC.
C.A. G穆ER, PE
C.A. G穆ER, PE
DESIGN :
QUALITY CONTROL :
CITY OF ALACHUA PRELIM PLAT #
SRWMD APP #
ALACHUA COUNTY DRIVEWAY #
ENG PROJECT #

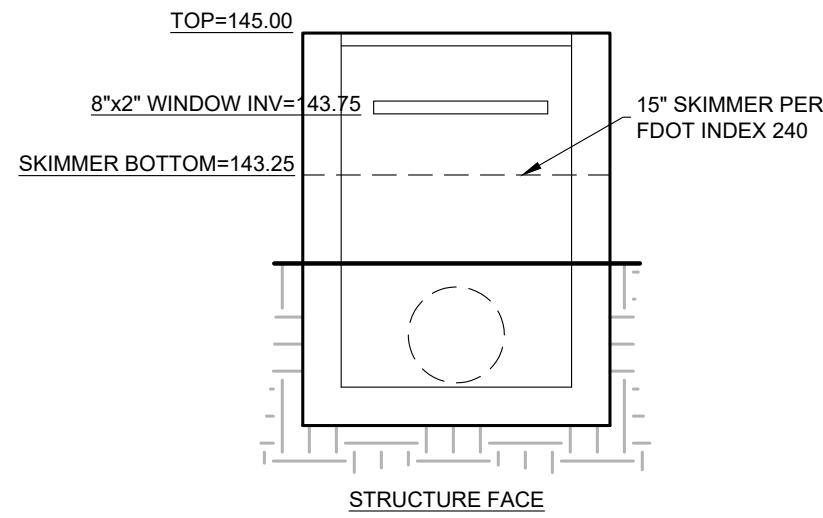
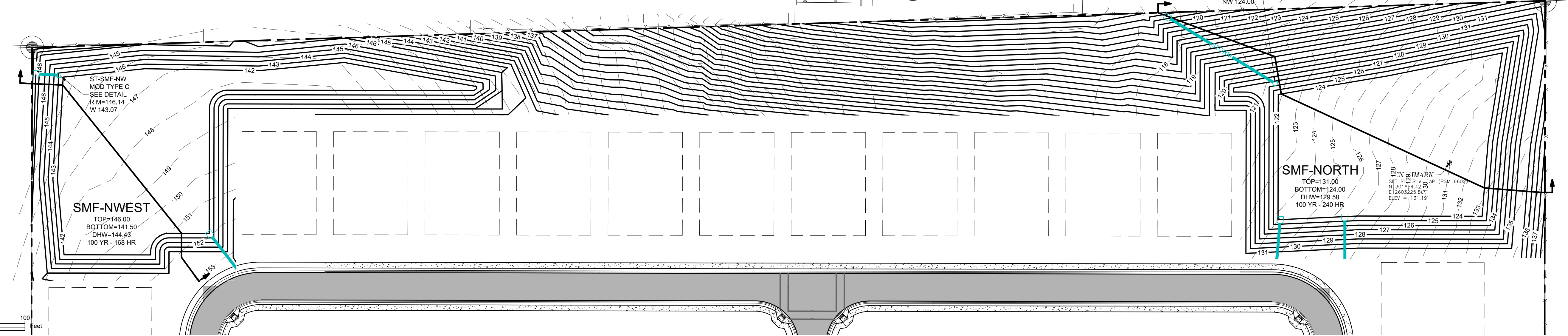
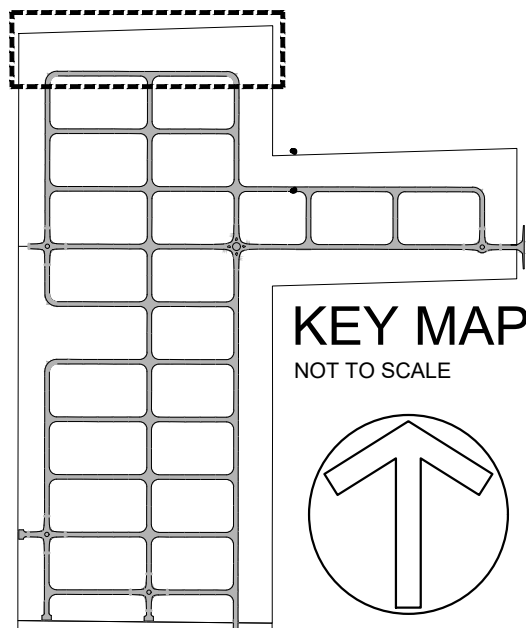
TARA FOREST
EAST
SINGLE-FAMILY
SUBDIVISION

DETAILED
PRELIMINARY
PLAT &
PHASING
C-076

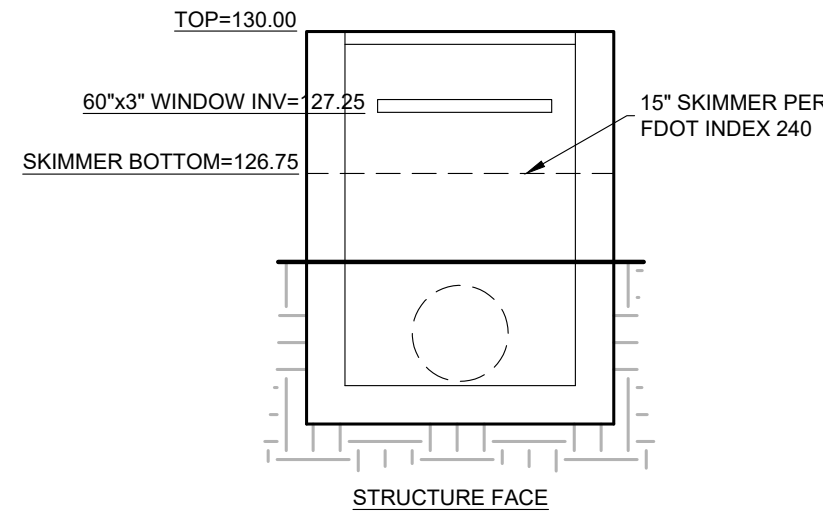
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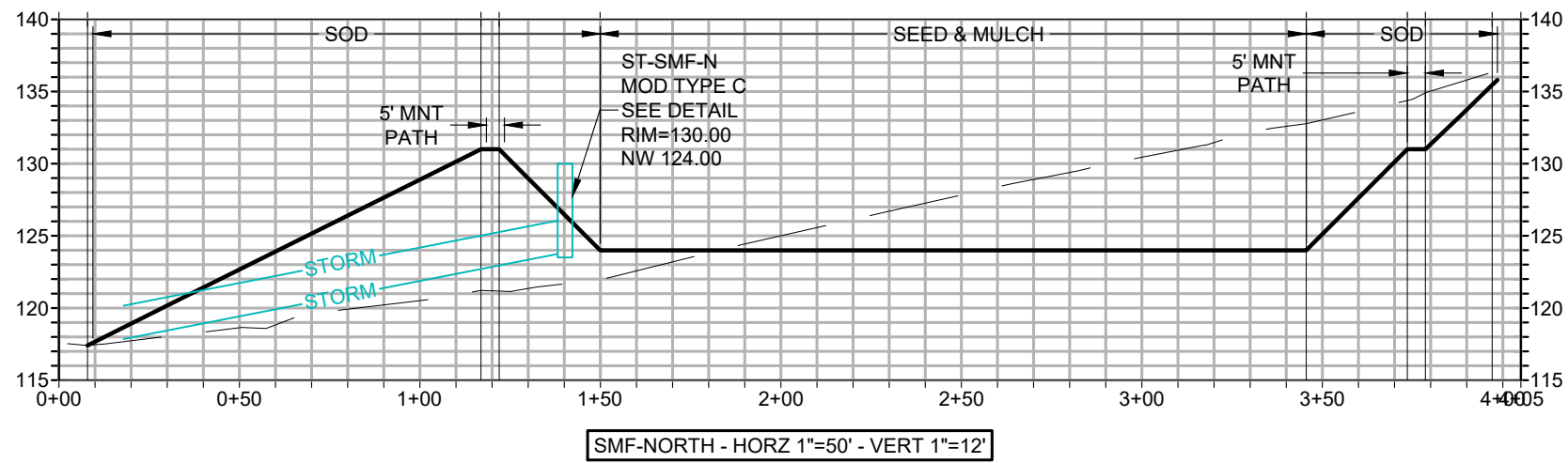
SMF-NORTHWEST - HORZ 1"=50' - VERT 1"=12'



ST-SMF-NW MODIFIED
DISCHARGE STRUCTURE DETAIL
NOT TO SCALE



ST-SMF-N MODIFIED
DISCHARGE STRUCTURE DETAIL
NOT TO SCALE



SMF-NORTH - HORZ 1"=50' - VERT 1"=12'

CLIENT: TARA FOREST, INC.
DESIGN: C.A. G穆ER, P.E.
QUALITY CONTROL: C.A. G穆ER, P.E.
CITY OF ALACHUA PRELIM PLAT #
SRWD APP #
ALACHUA COUNTY DRIVEWAY #
ENG PROJECT #

TARA FOREST
EAST
SINGLE-FAMILY
SUBDIVISION

SMF PLAN
SMF-NORTHWEST
& SMF-NORTH

C-250



NOT
FOR FINAL
RECORDING

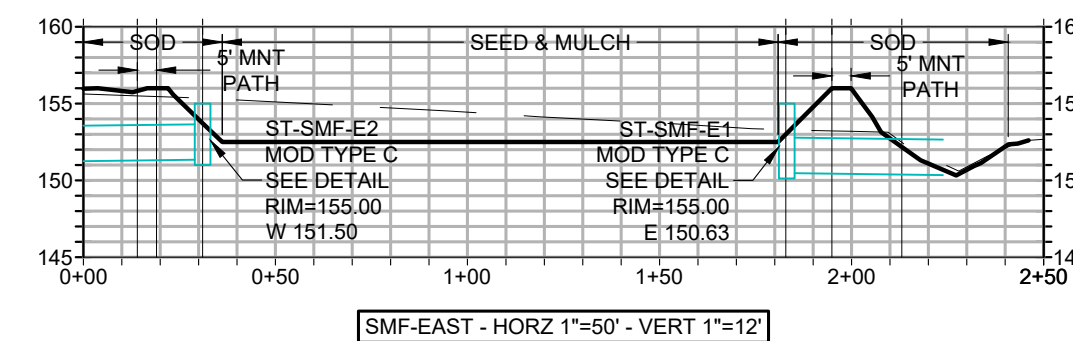
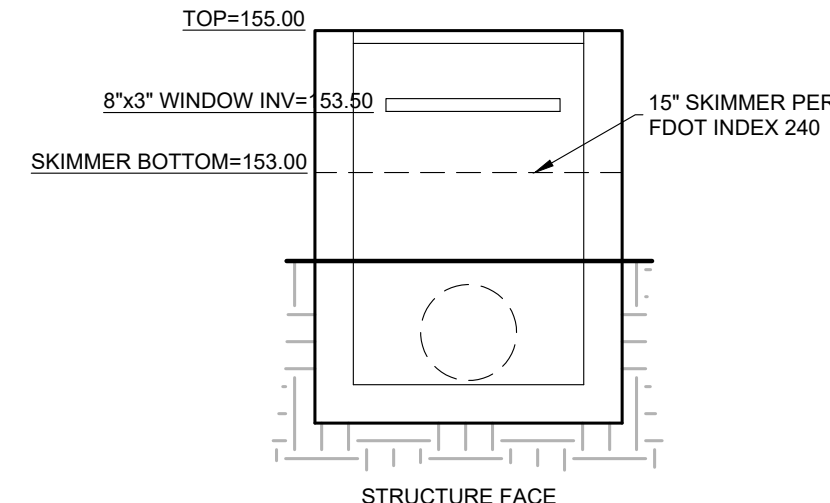
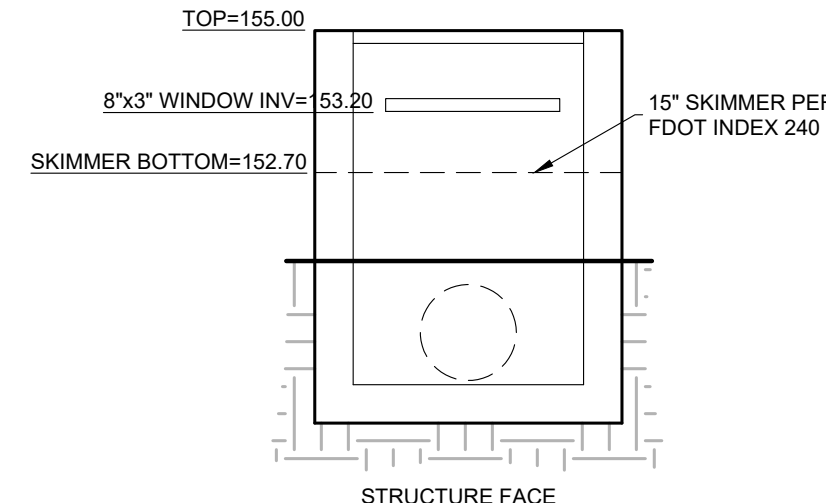
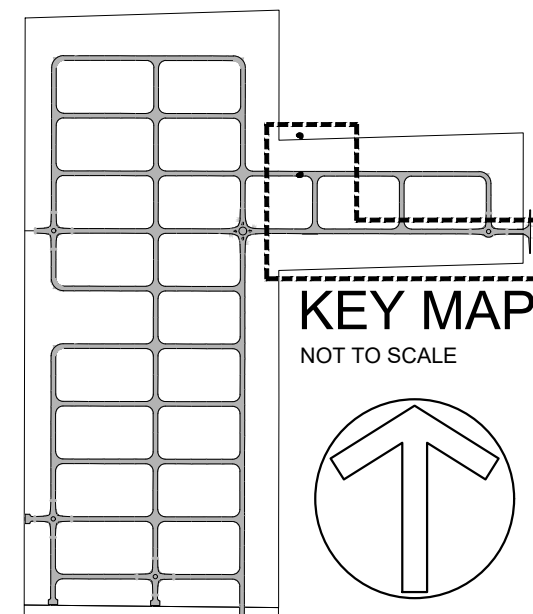
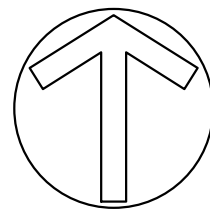
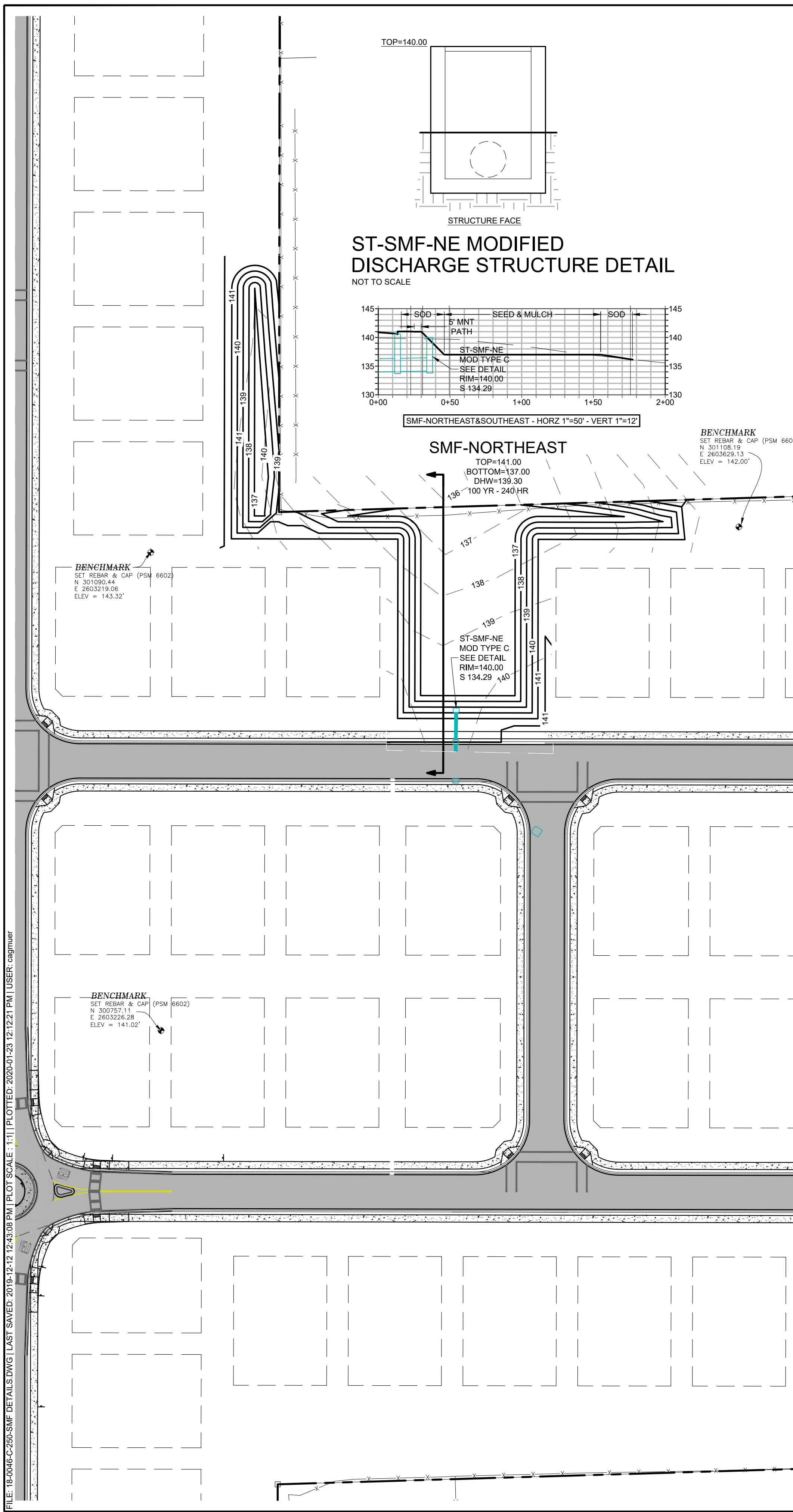
ENGINEER OF RECORD:
CHRISTOPHER A. G穆ER
FL PE # 71599
2020-01-23

PERMITTING / DESIGN REVISIONS:
2019-05-01 ACPW ROAD CONNECTION SUBMITTAL
2019-05-24 SRWD SUBMITTAL
2019-06-03 CITY OF ALACHUA PRELIM PLAT SUBMITTAL
2019-07-03 CITY OF ALACHUA PRELIM PLAT 2ND RESUBMITTAL
2019-12-12 CITY OF ALACHUA PRELIM PLAT 3RD RESUBMITTAL
2020-01-06 CITY OF ALACHUA RESUBMITTAL
2020-01-23 MINOR CITY OF ALACHUA RESUBMITTAL

PRICING:
CONSTRUCTION:

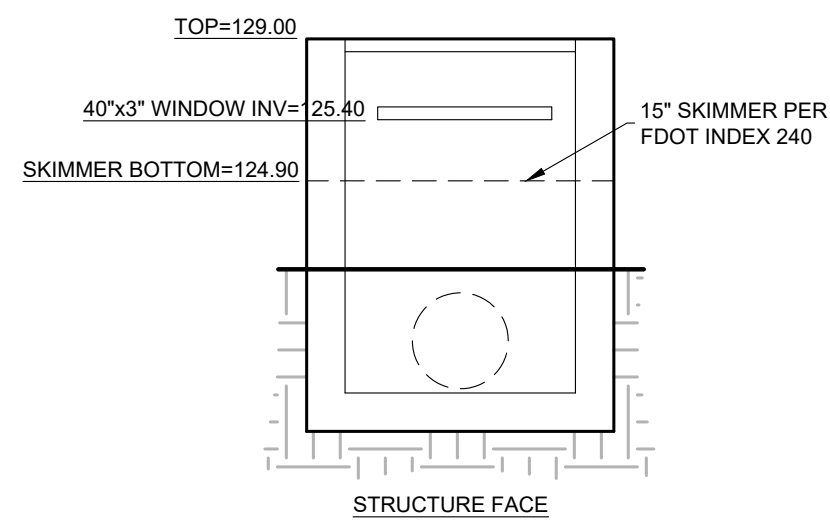
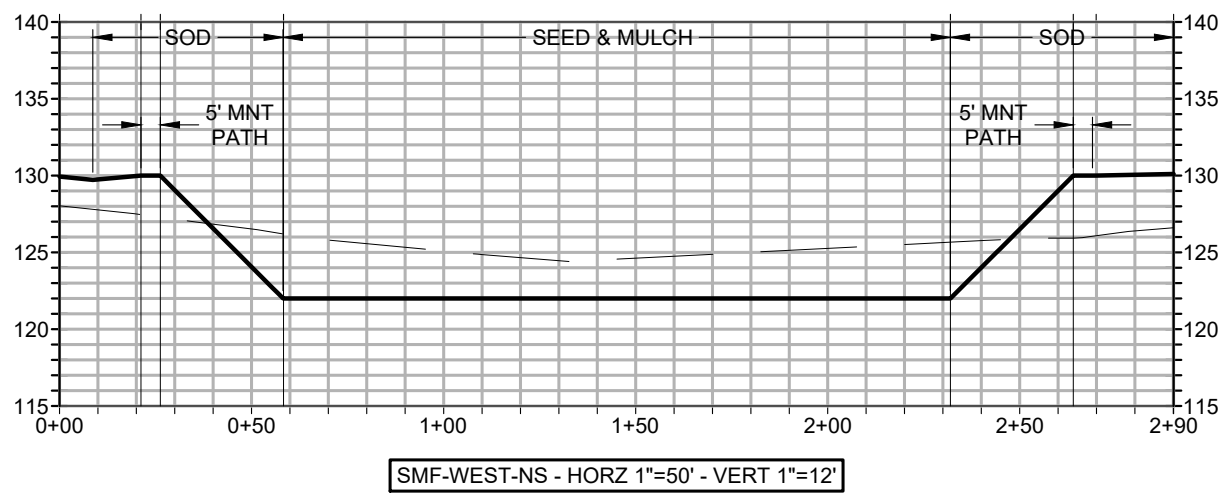
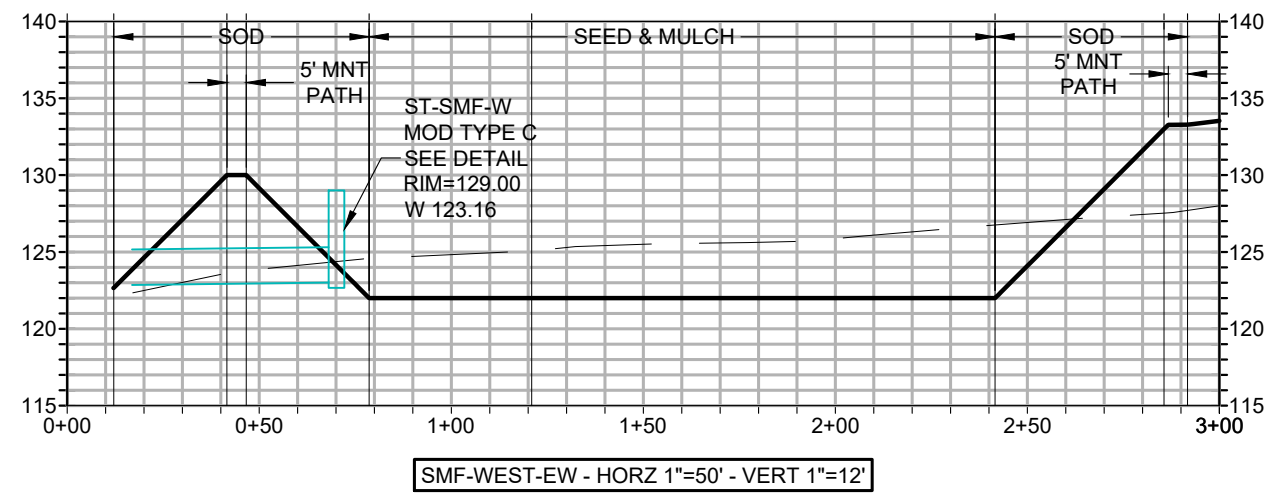
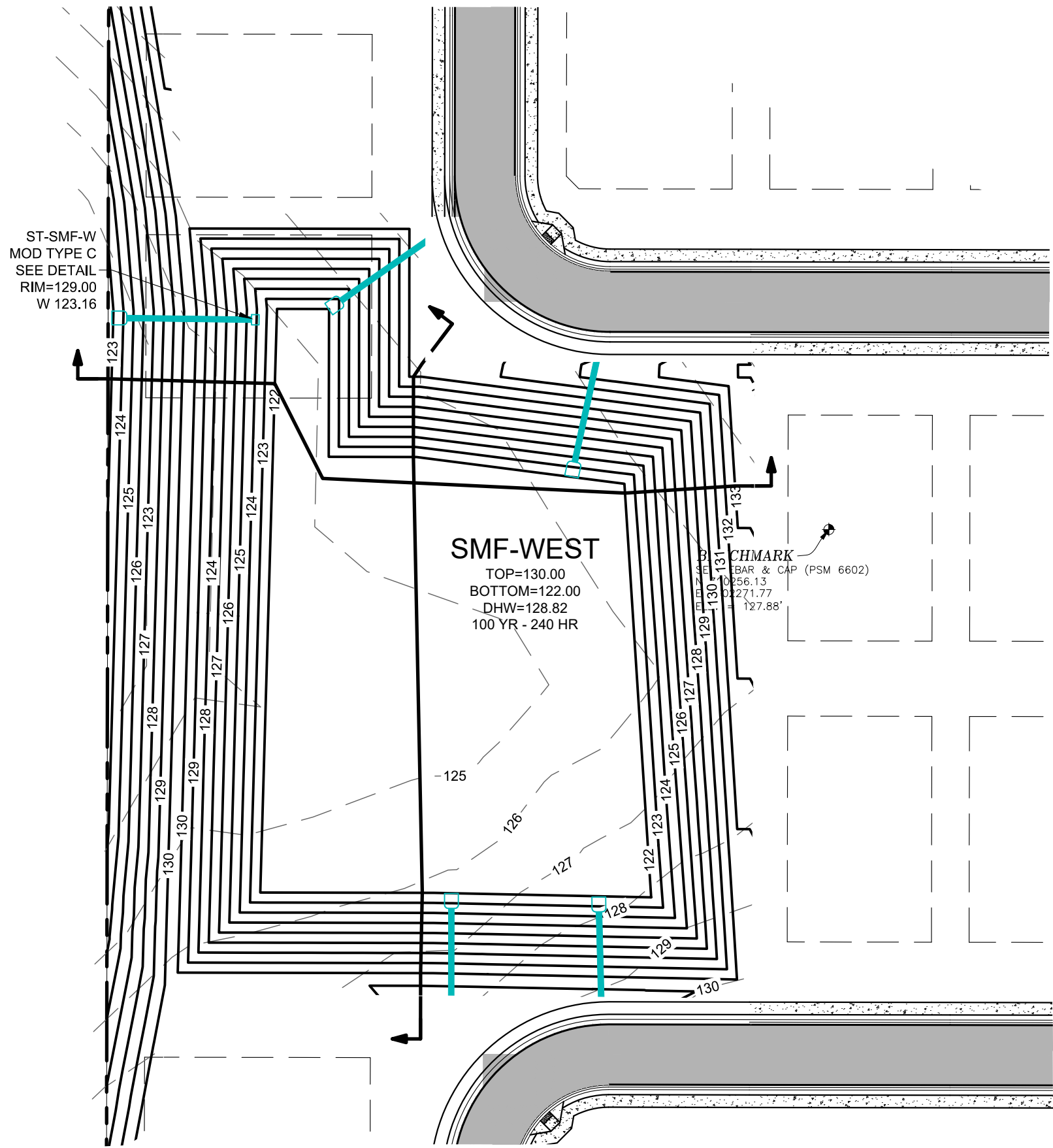
PRELIMINARY
BUDGETING

FILE: 18-0046-C-250-SMF DETAILS.DWG LAST SAVED: 2018-12-12 12:43:08 PM PLOT SCALE: 1"=1' PLOTTED: 2020-01-23 12:12:21 PM USER: cagnmur

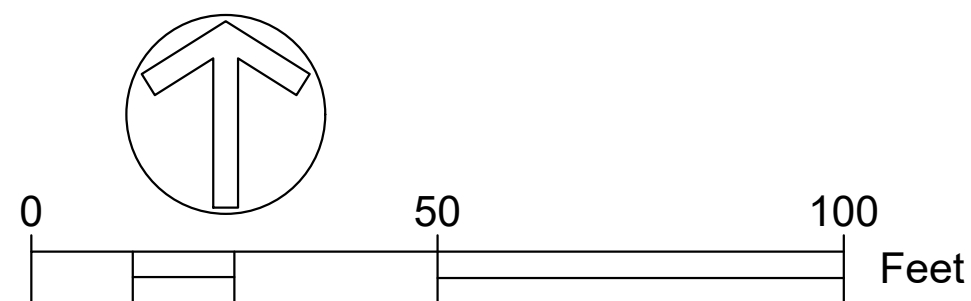
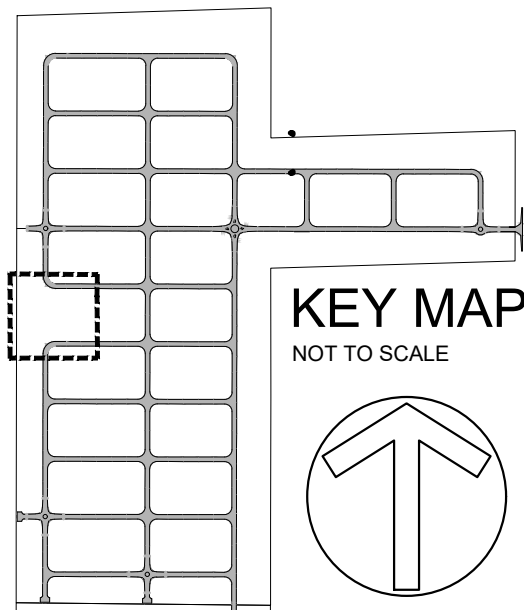


PRELIMINARY BUDGETING	PERMITTING / DESIGN REVISIONS: 2019-05-01 ACPW ROAD CONNECTION SUBMITTAL 2019-05-24 SRWMD SUBMITTAL 2019-06-03 CITY OF ALACHUA PRELIM PLAT SUBMITTAL 2019-07-03 CITY OF ALACHUA PRELIM PLAT 2ND RESUBMITTAL 2019-12-12 CITY OF ALACHUA RESUBMITTAL 2020-01-06 CITY OF ALACHUA RESUBMITTAL 2020-01-23 MINOR CITY OF ALACHUA RESUBMITTAL
PRECING: CONSTRUCTION :	ENGINEER OF RECORD: CHRISTOPHER A. GMUER FL PE # 71599 2020-01-23
NOT FOR FINAL RECORDING	
Gmuer ENGINEERING FL CA # 21533 2803 NW 13th St, Box 314 Gainesville, FL 32609 (352) 281-4828 gmuereng.com	
CLIENT:	TARA FOREST, INC. C.A. GMUER PE C.A. GMUER PE
DESIGN: QUALITY CONTROL:	CITY OF ALACHUA PRELIM PLAT # SRWMD APP # ALACHUA COUNTY DRIVEWAY # GEN PROJECT #
TARA FOREST EAST	
SINGLE-FAMILY SUBDIVISION	
SMF PLAN SMF-EAST, NORTHEAST, & SOUTHEAST	
C-251	

FILE: 18-0046-C-250-SMF DETAILS.DWG | LAST SAVED: 2018-12-12 12:43:08 PM | PLOT SCALE: 1"=12' | PLOTTED: 2020-01-23 12:12:29 PM | USER: cagmuier

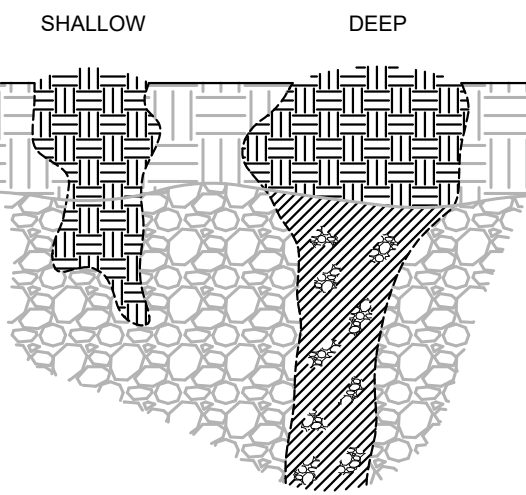


ST-SMF-W MODIFIED
DISCHARGE STRUCTURE DETAIL
NOT TO SCALE



NOTES: THE FOLLOWING SHALL BE PERFORMED IN THE EVENT ANY KARST FEATURES FORM DURING CONSTRUCTION - E.G. SOLUTION CAVITIES, CHIMNEYS, SINKHOLES

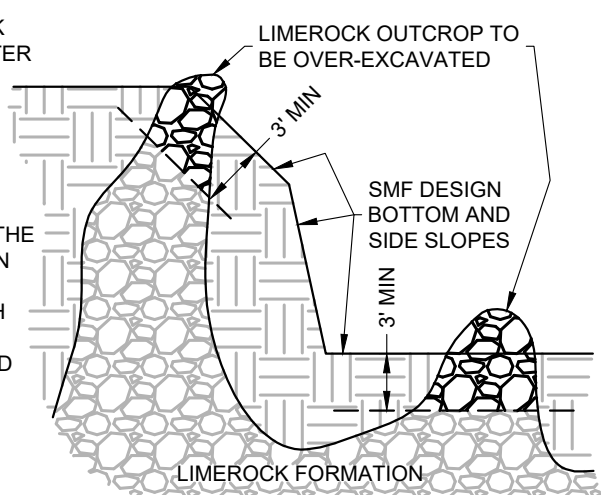
1. NOTIFY THE WATER MANAGEMENT DISTRICT AND THE APPLICABLE MUNICIPAL OR COUNTY PUBLIC WORKS IMMEDIATELY WHEN THE FEATURES ARE ENCOUNTERED - THE METHOD OF REPAIR SHALL BE SUBMITTED FOR REVIEW, COMMENT, AND APPROVAL PRIOR TO ATTEMPTING ANY REPAIR
2. SHALLOW KARST FEATURES ARE TYPICALLY LESS THAN 5' DEEP AND ONLY HAVE SMALL VOIDS IN THE LIMESTONE - THE FEATURE CAN BE REPAIRED BY BACKFILLING WITH A LOWER PERMEABILITY MATERIAL SUCH AS CLAYEY-SAND OR CLAY - COMPACT THE BACKFILL AND CREATE A SMALL MOUND SLIGHTLY ABOVE GRADE TO ACCOUNT FOR SETTLING
3. DEEP KARST FEATURES SHALL BE REPAIRED MORE PERMANENTLY - EXCAVATE THE FEATURE TO THE LIMESTONE BEDROCK - PLUG VOIDS IN THE BEDROCK WITH CLEAN GROUT - BACKFILL OVER THE PLUG WITH A LOWER-PERMEABILITY MATERIAL SUCH AS CLAYEY-SAND OR CLAY - COMPACT THE BACKFILL TO GRADE



KARST FEATURE REPAIR DETAIL
NOT TO SCALE

NOTES: THE FOLLOWING SHALL BE PERFORMED IN THE EVENT ANY LIMEROCK OUTCROP FEATURE IS ENCOUNTERED WITHIN THE LIMITS OF THE STORMWATER MANAGEMENT FACILITY (SMF) DURING ITS CONSTRUCTION / EXCAVATION

1. NOTIFY THE WATER MANAGEMENT DISTRICT AND THE APPLICABLE MUNICIPAL OR COUNTY PUBLIC WORKS WHEN THE FEATURES ARE ENCOUNTERED AND PRIOR TO COMMENCING EXCAVATION AND BACKFILL OPERATIONS
2. OVER-EXCAVATE THE OUTCROP A MINIMUM OF THREE (3) FEET BEYOND THE SMF DESIGN BOTTOM AND / OR SIDE SLOPES - INDIVIDUAL BOULDERS CAN BE REMOVED ENTIRELY AT THE OPTION OF THE CONTRACTOR
3. BACKFILL THE THE EXCAVATED VOLUME TO THE SMF DESIGN LIMITS WITH CLAYEY-SAND/SANDY-CLAY (AASHTO SOIL GROUP A-2) SOILS
4. THE BACKFILL MATERIAL SHALL BE PLACED IN SIX INCH LIFTS AND ROLLED WITH HEAVY LOADED RUBBER TIRED EQUIPMENT
5. SEE THE KARST FEATURE REPAIR DETAIL IF ANY KARST FEATURES ARE ENCOUNTERED - E.G. SOLUTION CAVITIES, CHIMNEYS, SINKHOLES



STORMWATER MANAGEMENT FACILITY LIMEROCK
OUTCROP OVER-EXCAVATION AND BACKFILL DETAIL
NOT TO SCALE

CLIENT: TARA FOREST, INC.
DESIGN: C.A. GMUER, P.E.
QUALITY CONTROL: C.A. GMUER, P.E.
CITY OF ALACHUA PRELIM PLAT # 18-0046
SRWMD APP # THE
ALACHUA COUNTY DRIVEWAY # 18-0046
GEO PROJECT #

TARA FOREST
EAST
SINGLE-FAMILY
SUBDIVISION

SMF PLAN
SMF-WEST

C-252

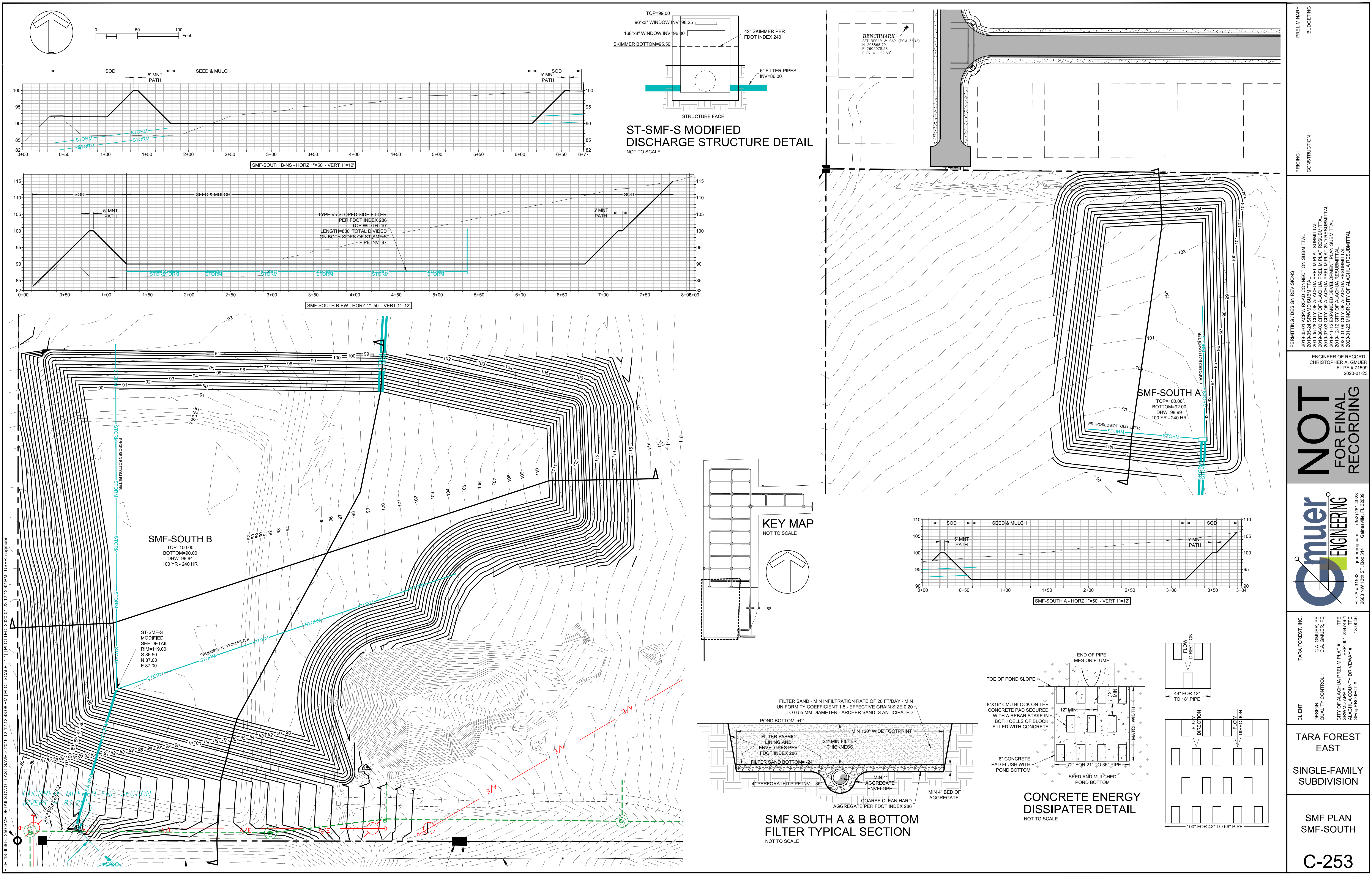
PERMITTING / DESIGN REVISIONS:
2019-05-01 ACPW ROAD CONNECTION SUBMITTAL
2019-05-24 SRWMD SUBMITTAL
2019-06-03 CITY OF ALACHUA PRELIM PLAT SUBMITTAL
2019-07-03 CITY OF ALACHUA PRELIM PLAT 2ND RESUBMITTAL
2019-12-12 CITY OF ALACHUA PRELIM PLAT 3RD RESUBMITTAL
2020-01-06 CITY OF ALACHUA RESUBMITTAL
2020-01-23 MINOR CITY OF ALACHUA RESUBMITTAL

ENGINEER OF RECORD:
CHRISTOPHER A. GMUER
FL PE # 71599
2020-01-23

NOT
FOR FINAL
RECORDING

gmuer
ENGINEERING
FL CA # 21533 gmuereng.com (352) 281-4928
2803 NW 13th St, Box 314 Gainesville, FL 32609

PRELIMINARY
BUDGETING
PRICING:
CONSTRUCTION:



PRELIMINARY
BUDGETING

CONSTRUCTION :

PERMITTING / DESIGN REVISIONS :

2019-05-01 ACPW ROAD CONNECTION SUBMITTAL
2019-05-24 SRWMD SUBMITTAL
2019-06-03 CITY OF ALACHUA PRELIM PLAT SUBMITTAL
2019-07-03 CITY OF ALACHUA PRELIM PLAT 2ND SUBMITTAL
2019-12-12 CITY OF ALACHUA RESUBMITTAL
2020-01-06 CITY OF ALACHUA RESUBMITTAL
2020-01-23 MINOR CITY OF ALACHUA RESUBMITTAL

ENGINEER OF RECORD :

CHRISTOPHER A. GMUER
FL PE # 71599
2020-01-23

NOT FOR FINAL RECORDING

ENGINEERING

FL CA # 31533 gmuereng.com (352) 281-4928
2803 NW 13th St, Box 514 Gainesville, FL 32609

TARA FOREST, INC.

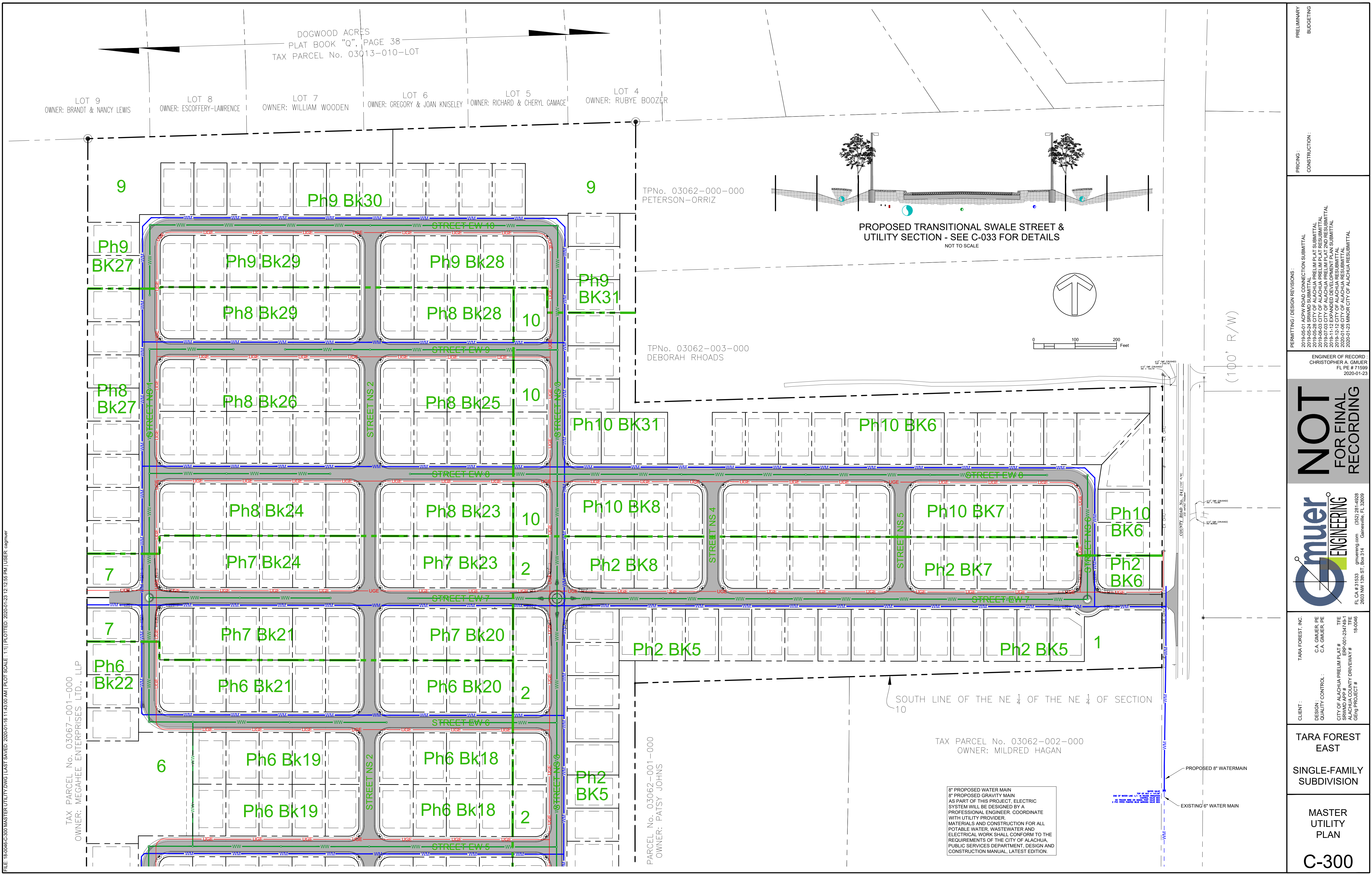
DESIGN : C.A. GMUER PE
QUALITY CONTROL : C.A. GMUER PE

TARA FOREST EAST

SINGLE-FAMILY SUBDIVISION

SMF PLAN
SMF-SOUTH

C-253



PRELIMINARY
BUDGETING

PRICING:
CONSTRUCTION :

PERMITTING / DESIGN REVISIONS :

2019-05-01 ACPW ROAD CONNECTION SUBMITTAL
2019-05-24 SRWMD SUBMITTAL
2019-06-03 CITY OF ALACHUA PRELIM PLAT SUBMITTAL
2019-07-03 CITY OF ALACHUA PRELIM PLAT 2ND RESUBMITTAL
2019-12-12 CITY OF ALACHUA PRELIM PLAT 3RD RESUBMITTAL
2020-01-06 CITY OF ALACHUA RESUBMITTAL
2020-01-23 MINOR CITY OF ALACHUA RESUBMITTAL

ENGINEER OF RECORD :

CHRISTOPHER A. G穆ER
FL PE # 71599
2020-01-23

NOT
FOR FINAL
RECORDING

ENGINEERING

FL CA # 31533 gmuering.com (352) 281-4928
2803 NW 13th St, Box 514 Gainesville, FL 32609

TARA FOREST, INC.

CLIENT :

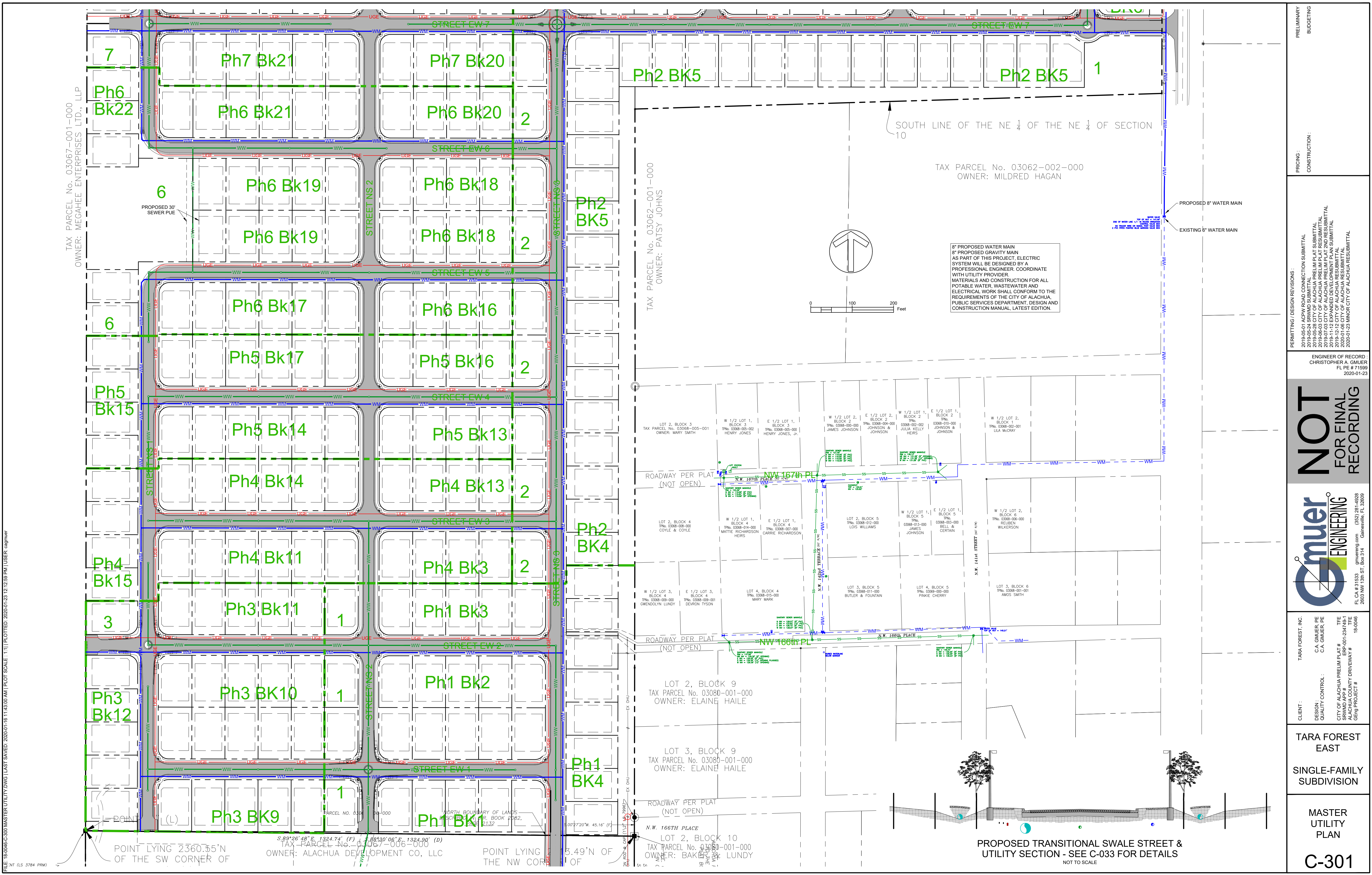
DESIGN : C.A. G穆ER PE
QUALITY CONTROL : C.A. G穆ER PE
CITY OF ALACHUA PRELIM PLAT # 18-0048
SRWMD APP # THE
ALACHUA COUNTY DRIVEWAY # 18-0048
ENG PROJECT #

TARA FOREST
EAST

SINGLE-FAMILY
SUBDIVISION

MASTER
UTILITY
PLAN

C-300



FILE: 18-0046-C-300 MASTER UTILITY DWG [LAST SAVED: 2020-01-16 11:43:00 AM] PLOT SCALE: 1"=11' PLOTTED: 2020-01-23 12:12:59 PM [USER: cagnaut
WT (LS 3784 PRM)

PRELIMINARY
BUDGETING

PRICING:
CONSTRUCTION:

PERMITTING / DESIGN REVISIONS:

2019-05-01 ACPW ROAD CONNECTION SUBMITTAL
2019-05-24 SRWMD SUBMITTAL
2019-06-03 CITY OF ALACHUA PRELIM PLAT SUBMITTAL
2019-07-03 CITY OF ALACHUA PRELIM PLAT 2ND RESUBMITTAL
2019-12-12 CITY OF ALACHUA PRELIM PLAT 3RD RESUBMITTAL
2020-01-06 CITY OF ALACHUA RESUBMITTAL
2020-01-23 MINOR CITY OF ALACHUA RESUBMITTAL

ENGINEER OF RECORD:

CHRISTOPHER A. G穆ER
FL # E 71599
2020-01-23

NOT
FOR FINAL
RECORDING

gmuerm
ENGINEERING

FL CA # 31533 gmuering.com (352) 281-4928
2803 NW 13th St, Box 514 Gainesville, FL 32609

CLIENT:

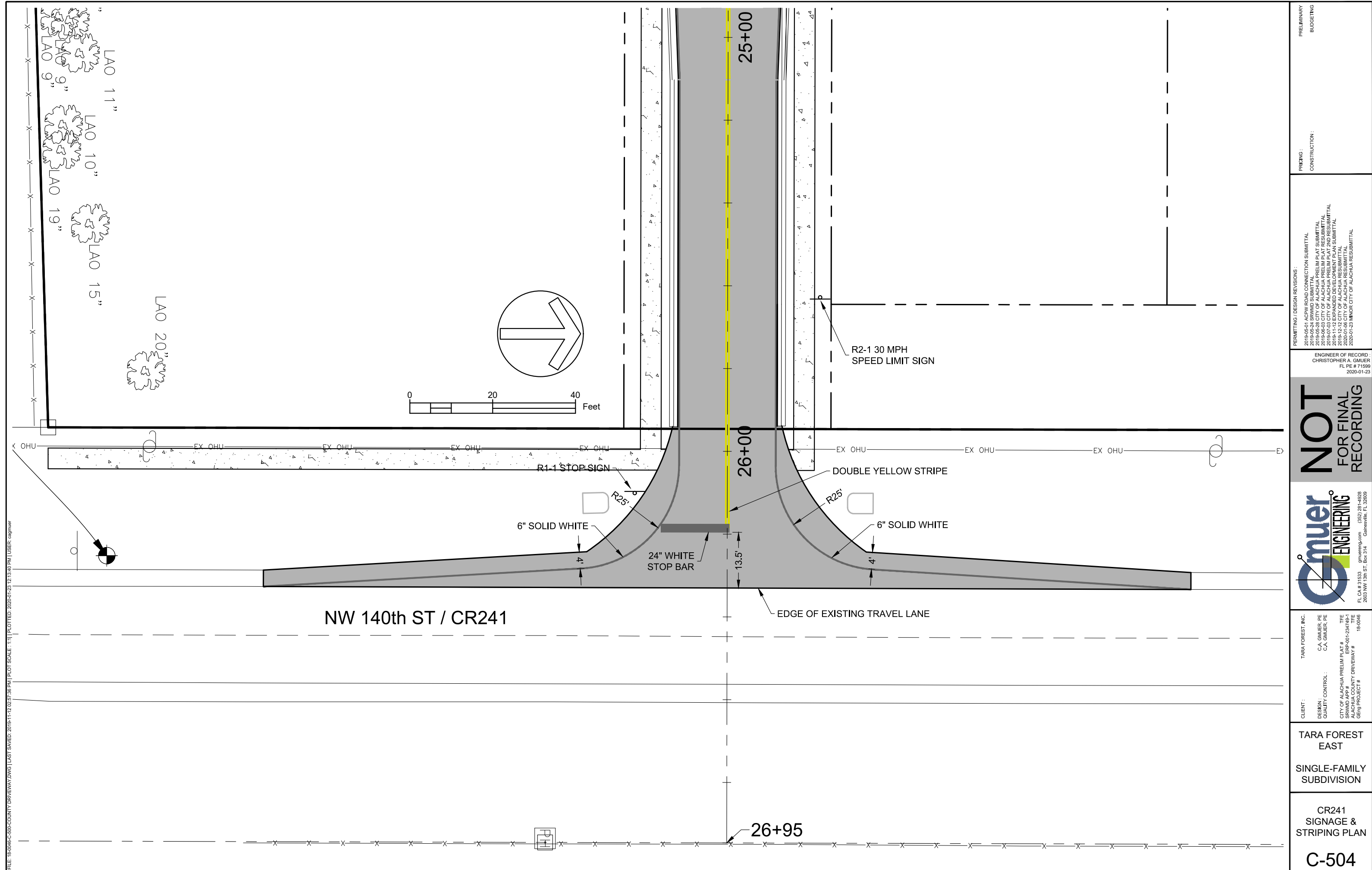
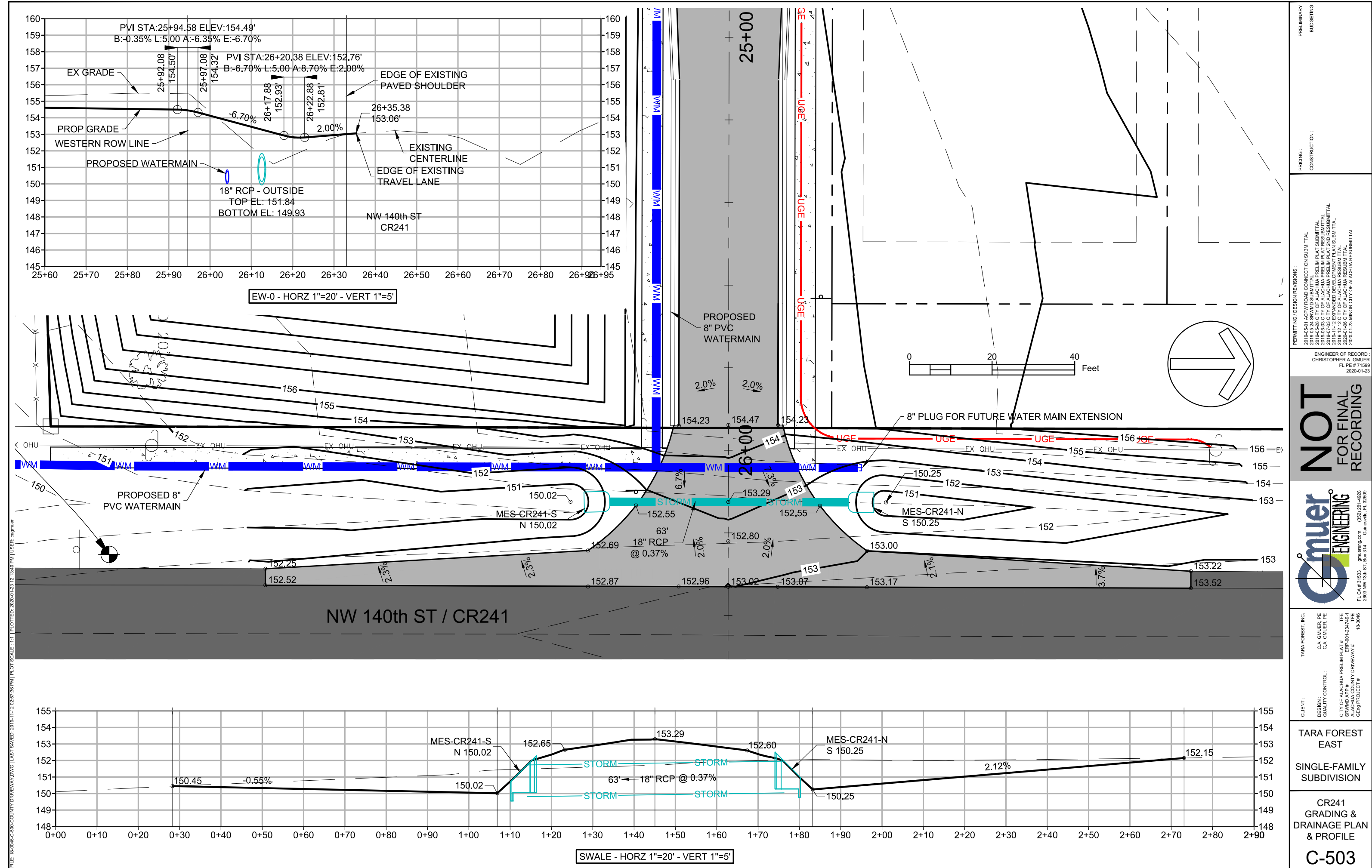
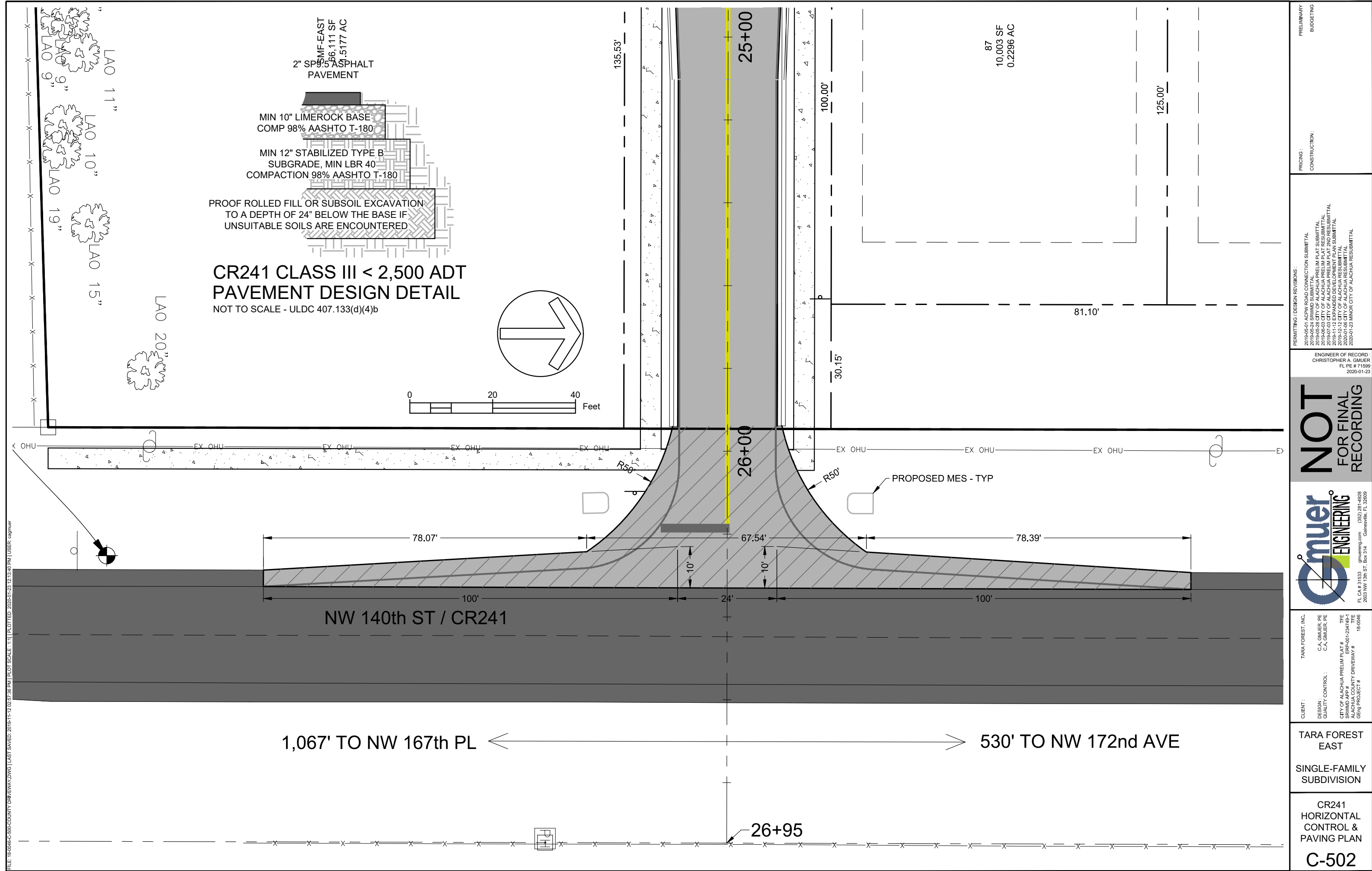
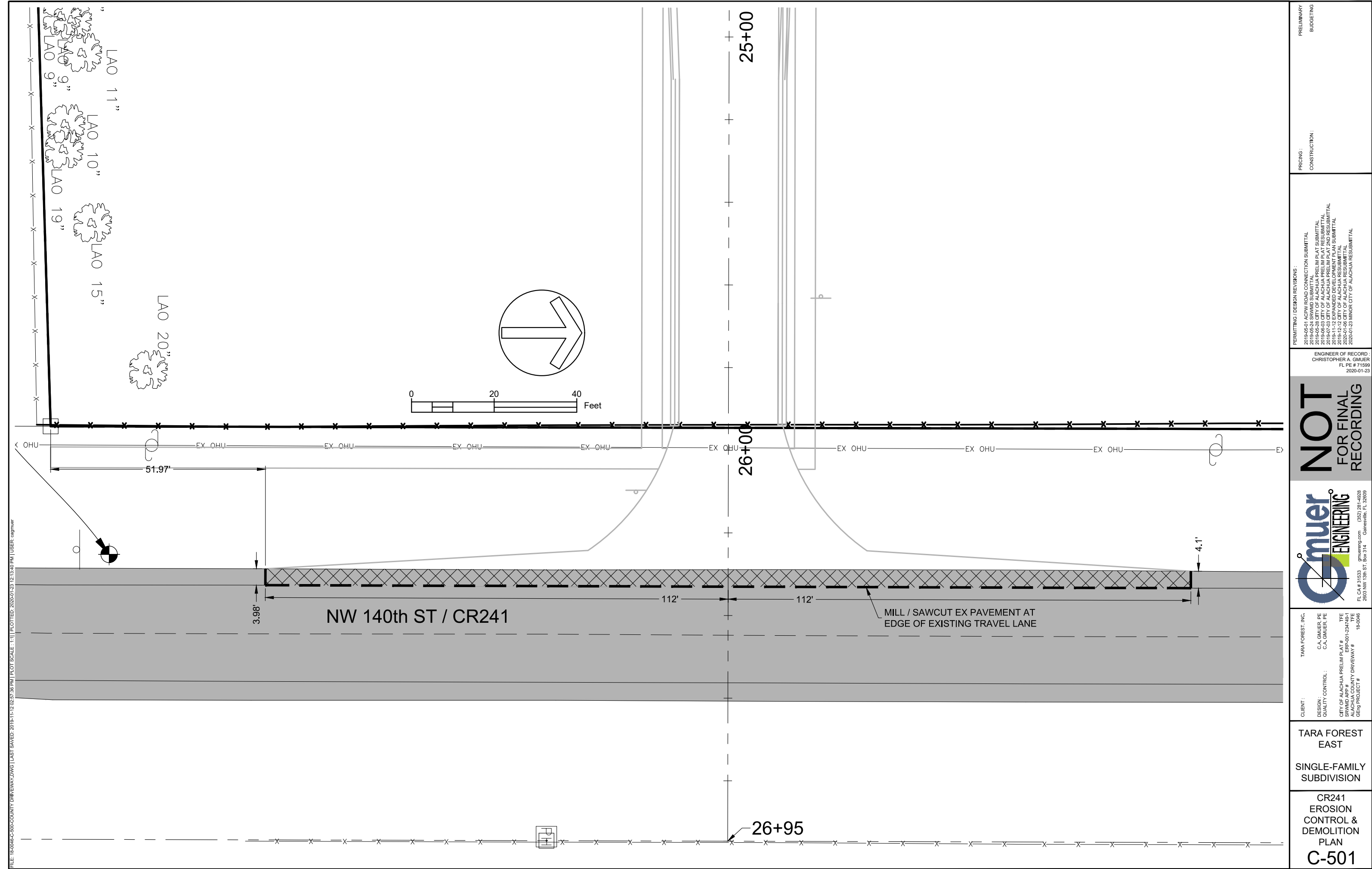
TARA FOREST, INC.
DESIGN: C.A. G穆ER, P.E.
QUALITY CONTROL: C.A. G穆ER, P.E.
CITY OF ALACHUA PRELIM PLAT # 18-0046
SRWMD APP # 18-0046
ALACHUA COUNTY DRIVEWAY # 18-0046
G穆ER PROJECT # 18-0046

TARA FOREST
EAST

SINGLE-FAMILY
SUBDIVISION

MASTER
UTILITY
PLAN

C-301

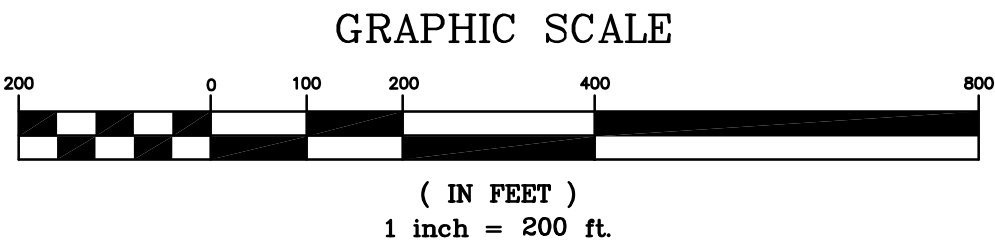


LYING IN SECTION 10, TOWNSHIP 8 SOUTH, RANGE 18 EAST,
ALACHUA COUNTY, FLORIDA

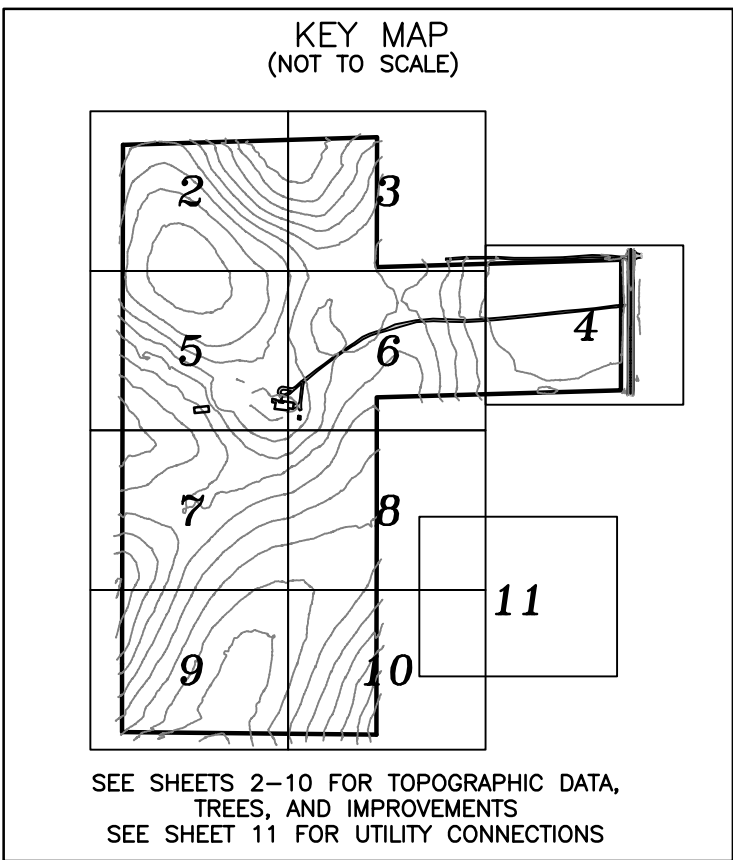
(O.R. 2094, PAGE 1551)
A TRACT OF LAND SITUATED IN SECTION 10, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA, SAID TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:
COMMENCE AT THE NORTHWEST CORNER OF THE NORTHEAST 1/4 OF THE AFORESAID SECTION 10, TOWNSHIP 8 SOUTH, RANGE 18 EAST FOR THE POINT OF REFERENCE AND RUN S.00°04'23"W, ALONG THE WEST LINE OF THE EAST 1/2 OF SECTION 10, A DISTANCE OF 1326.11 FEET TO THE POINT OF BEGINNING; FROM THE BEGINNING, THENCE CONTINUE S.00°04'23"W, ALONG SAID WEST LINE OF THE EAST 1/2 OF SECTION 10, A DISTANCE OF 353.78 FEET TO A CONCRETE MONUMENT, SAID CONCRETE MONUMENT BEING LOCATED 2360.55 FEET NORTH OF THE SOUTHWEST CORNER OF THE SOUTHEAST 1/4 OF SAID SECTION 10, SAID CONCRETE MONUMENT BEING DESIGNATED AS POINT "A" TO BE THE POINT OF BEGINNING OF THE TRACT OF LAND HEREIN DESCRIBED; FROM SAID POINT "A", THENCE RUN N.73°26'11"W 1326.11 FEET TO A CONCRETE MONUMENT ON THE WEST LINE OF THE SOUTHEAST 1/4 OF SAID SECTION 10; THENCE RUN S.00°04'13"W, ALONG SAID WEST LINE OF THE SOUTHEAST 1/4, A DISTANCE OF 407.10 FEET TO A CONCRETE MONUMENT, SAID CONCRETE MONUMENT LOCATED 2113.49 FEET NORTH OF THE NORTHWEST CORNER OF LOT 10 OF HITCHCOCK'S "A" TRACT, ALACHUA COUNTY, FLORIDA, AS SHOWN ON RECORD MAP NO. 10,000, AS RECORDED IN THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA; THENCE RUN N.89°25'53"W, A DISTANCE OF 1325.52 FEET TO THE AFORESAID POINT "A" AND TO CLOSE, CONTAINING 11.57 ACRES MORE OR LESS.

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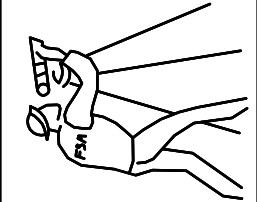
1. THE BEARINGS SHOWN HEREON ARE STATE PLANE COORDINATES, FLORIDA NORTH (NORTH AMERICAN DATUM OF 1983) BASED ON GPS MEASUREMENTS ON THE GEODETIC REFERENCE SYSTEM 1980 (GEOID 12A) FROM THE FLORIDA PERMANENT REFERENCE NETWORK (FPRN).
2. ELEVATIONS SHOWN HEREON ARE BASED ON GPS MEASUREMENTS ON THE GEODETIC REFERENCE SYSTEM 1980 (GEOID 12A) FROM THE FLORIDA PERMANENT REFERENCE NETWORK (FPRN). ALL ELEVATIONS SHOWN HEREON ARE NORTH AMERICAN VERTICAL DATUM OF 1988. ALL SITE BENCHMARKS SHOULD BE CHECKED AND VERIFIED BEFORE USE.
3. THE SURVEYOR HAS NO KNOWLEDGE OF UNDERGROUND FOUNDATIONS WHICH MAY ENCROACH.
4. NO UNDERGROUND INSTALLATION OF UTILITIES OR IMPROVEMENTS HAVE BEEN LOCATED EXCEPT AS SHOWN.
5. RECORDED EASEMENT AND/OR DEEDS NOT FURNISHED TO THE SURVEYOR ARE NOT SHOWN.
6. ALL TREES 8" AND LARGER, AS MEASURED AT CHEST HEIGHT, ON THE SUBJECT PARCEL ARE SHOWN HEREON.
7. THIS SURVEY CONTAINS 11 SHEETS AND IS NOT VALID WITHOUT ALL SHEETS.
8. INTERIOR FENCES NOT LOCATED OR SHOWN.



THE SUBJECT PROPERTY LIES WITHIN FLOOD ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBERS 12001C0110D, 12001C0120D, 12001C0130D, AND 12001C0140D FOR ALACHUA COUNTY, FLORIDA INCORPORATED AREAS, EFFECTIVE DATE JUNE 16, 2006, FOR CITY OF ALACHUA, COMMUNITY NUMBER 120664 PANEL NUMBERS 0110, 0120, 0130, AND 0140 SUFFIX D.



FLOWERS SURVEYING AND MAPPING INC.
207 SE CONDOR GLEN
HIGH SPRINGS, FLORIDA 32643
PHONE: (386) 462-0130
EMAIL: FLOWERSSURVEYING@GMAIL.COM



LEIGH ANN FLOWERS

PROFESSIONAL SURVEYOR & MAPPER
FLA. LICENSE NO. 6602

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL PASTED SEAL OF A FLORIDA LICENSED SURVEYOR. ANY VIOLATIONS OR DEVIATIONS TO THIS MAP BY ANYONE OTHER THAN THIS SURVEYOR IS PROHIBITED.

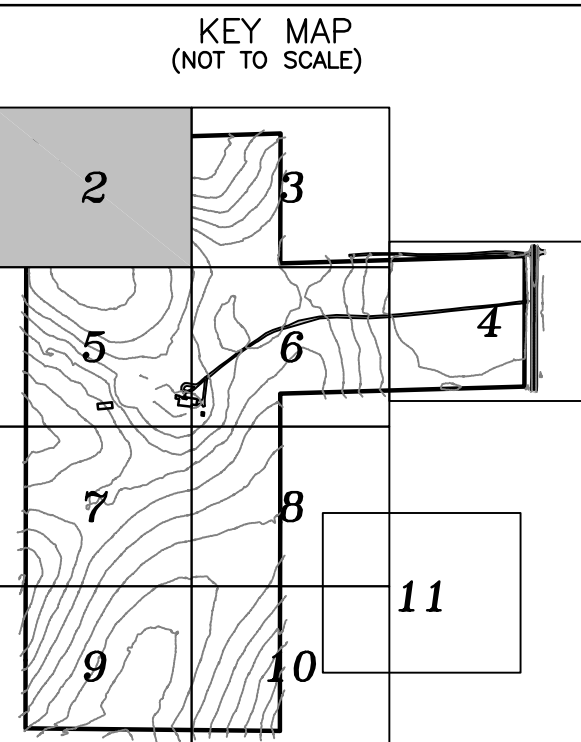
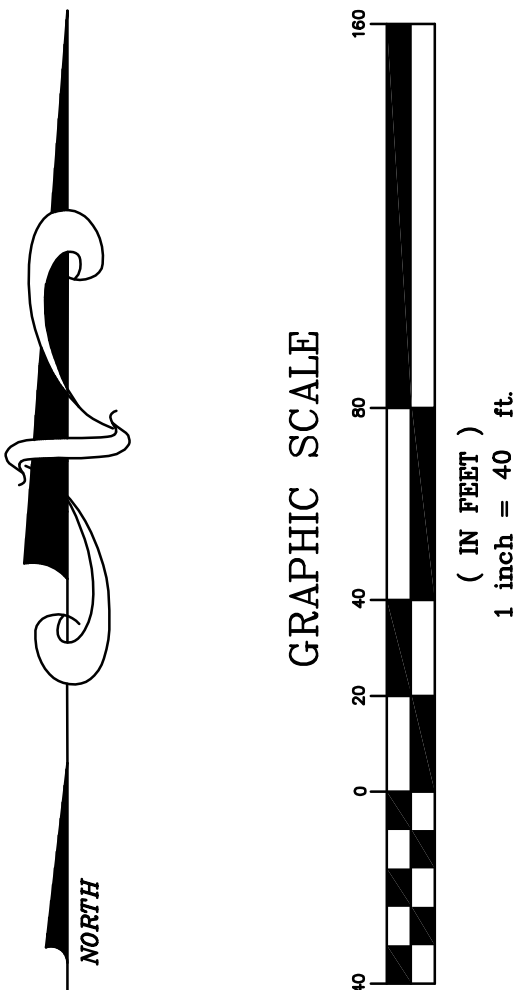
I HEREBY CERTIFY THAT THE SURVEY DATA SHOWN HEREON, IS A TRUE AND CORRECT REPRESENTATION OF A SURVEY PERFORMED UNDER MY SUPERVISION OF THE HERON DESCRIBED PROPERTY, AND IT MEETS THE MINIMUM TECHNICAL STANDARDS AS SET FORTH BY THE FLORIDA BOARD OF LAND SURVEYORS, PURSUANT TO SECTION 47.0207, FLORIDA STATUTES, AND CHAPTER 30, FLORIDA ADMINISTRATIVE CODE.

BOUNDARY and
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SEE SHEETS 2-10 FOR TOPOGRAPHIC DATA,
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EMAIL: FLOWERSSURVEYING@GMAIL.COM

FIELD BOOK - SEE FOLDER

DRAFTED: LAF

CHECKED: LAF

SURVEY DATE: 8/13/18

JOB NUMBER: 18-119

SHEET

2 OF 11

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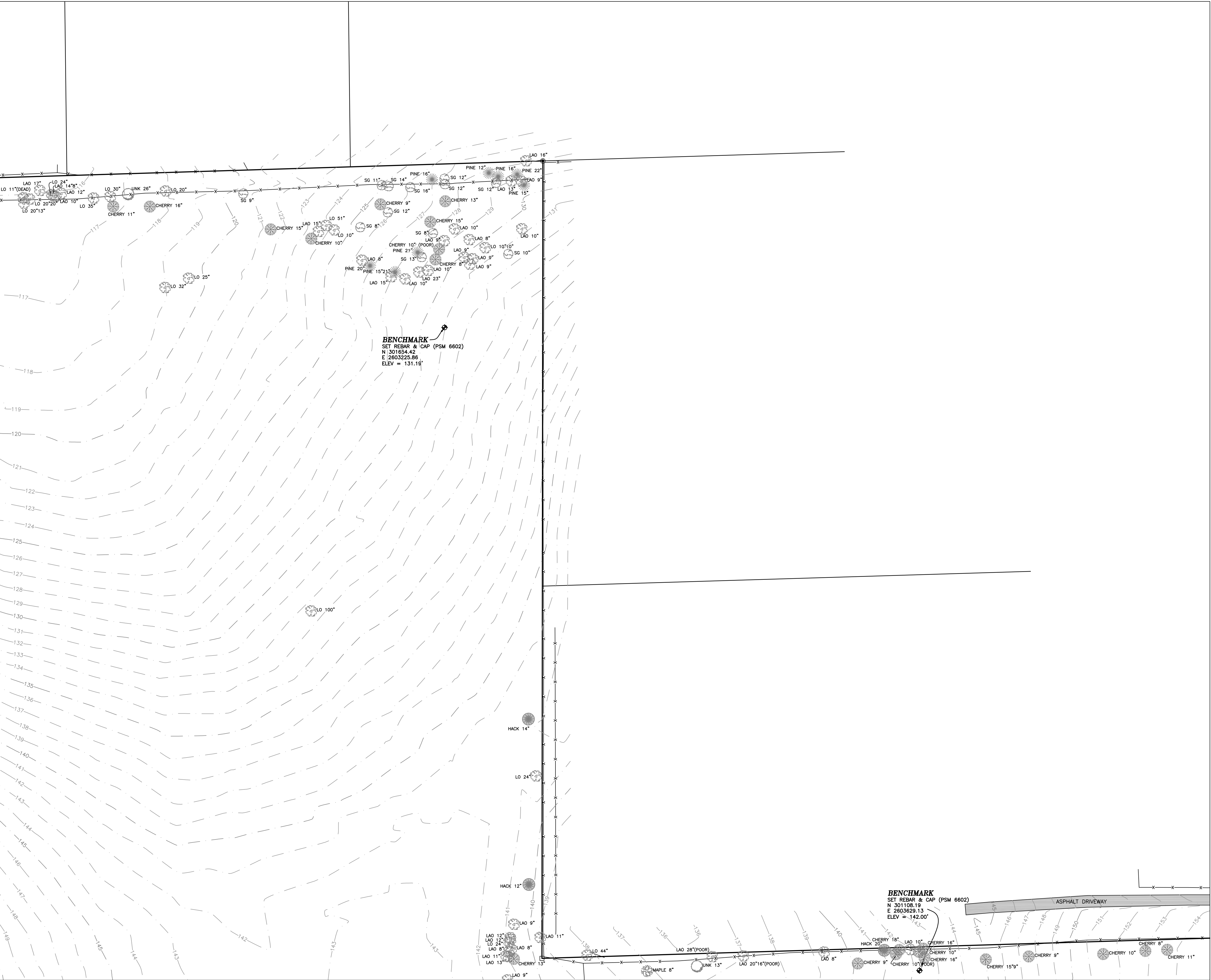
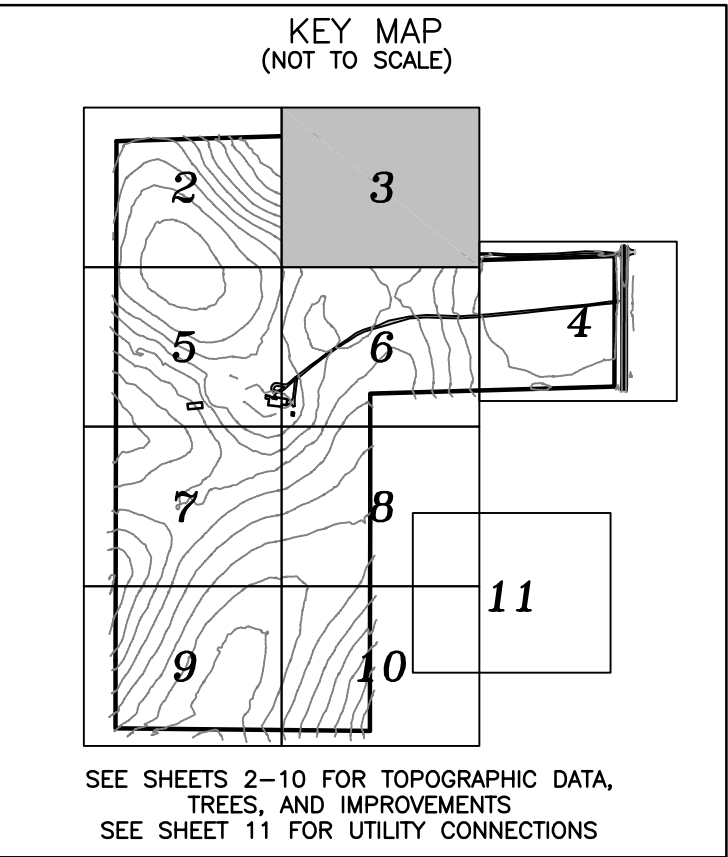
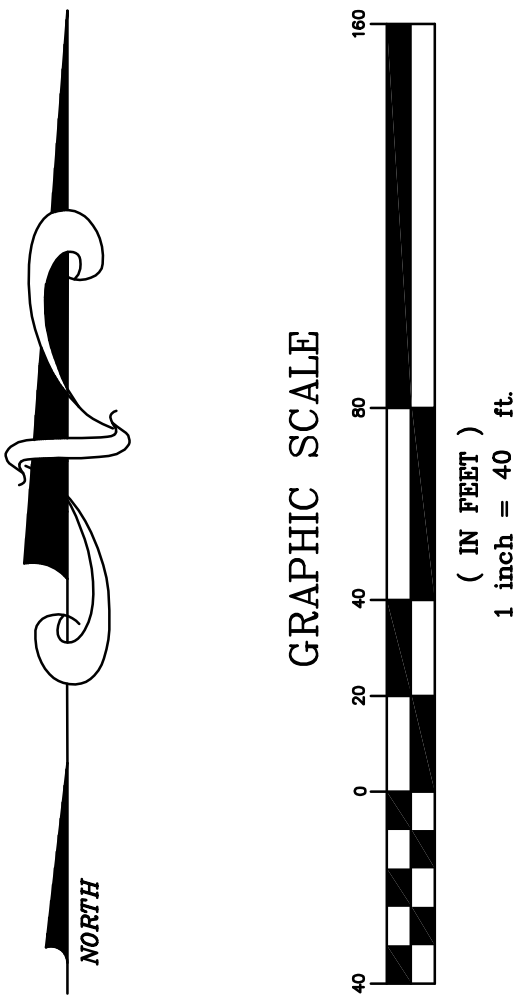
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- AT&T = AT&T PEDESTAL
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SEE SHEET 1 FOR NOTES, LEGEND, AND CERTIFICATION

LEIGH ANN FLOWERS

SEE SHEET 1

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FLA LICENSE NO. 4602

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207 SE CONDOR GLEN

HIGH SPRINGS, FLORIDA 32643

PHONE: (386) 462-0130

EMAIL: FLOWERSSURVEYING@GMAIL.COM

FIELD BOOK - SEE FOLDER

DRAFTED: LAF

CHECKED: LAF

SURVEY DATE: 8/13/18

CERTIFIED TO:

TARA FOREST, LLC

ALACHUA TITLE SERVICES, LLC

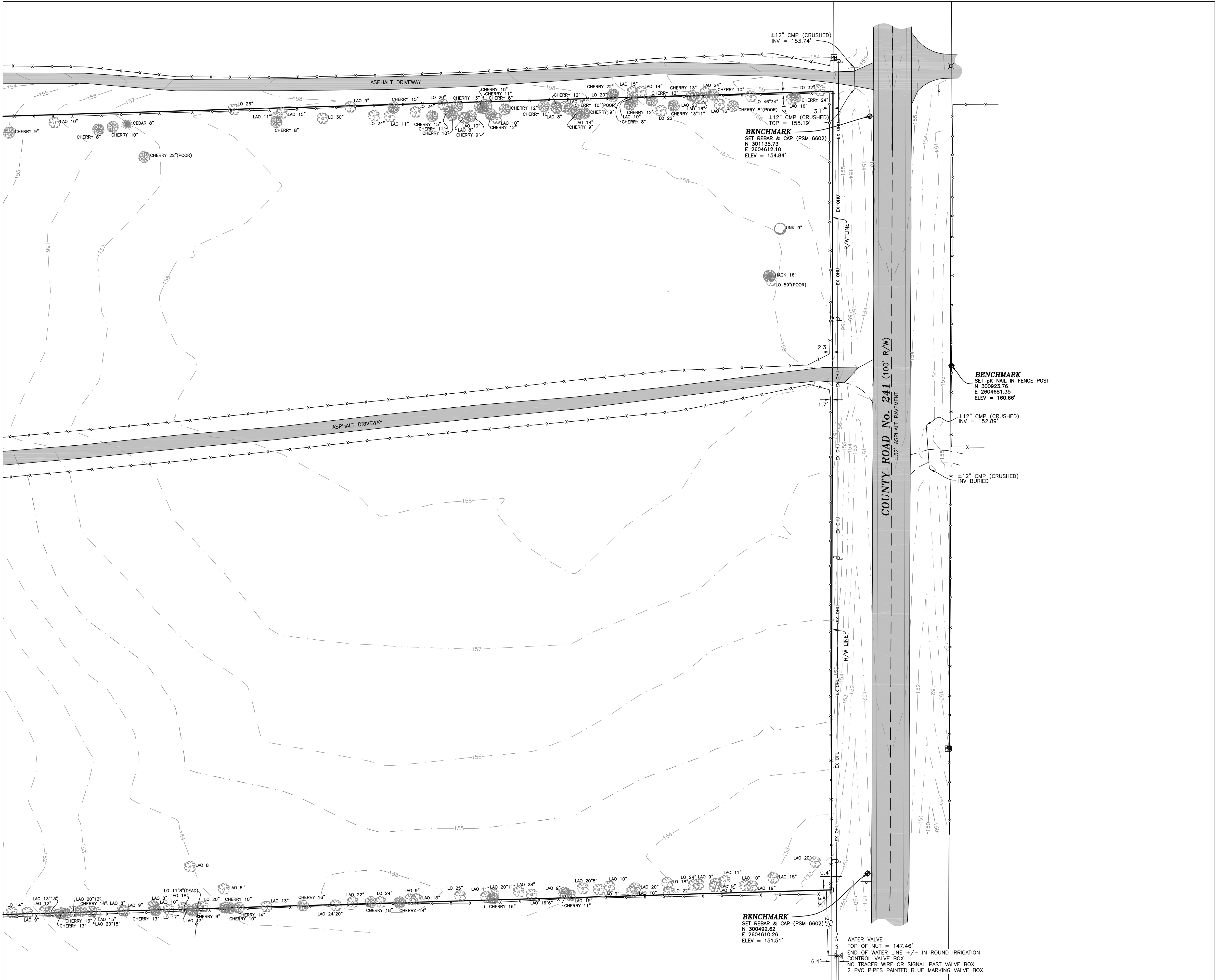
FIDELITY NATIONAL TITLE INSURANCE COMPANY

JOB NUMBER: 18-119

SHEET

3 OF 11

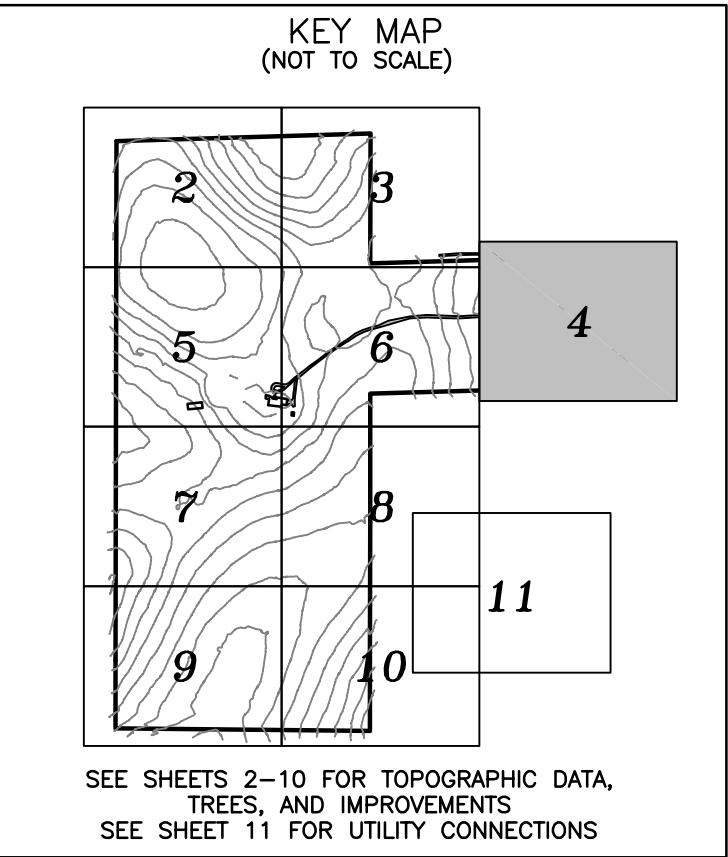
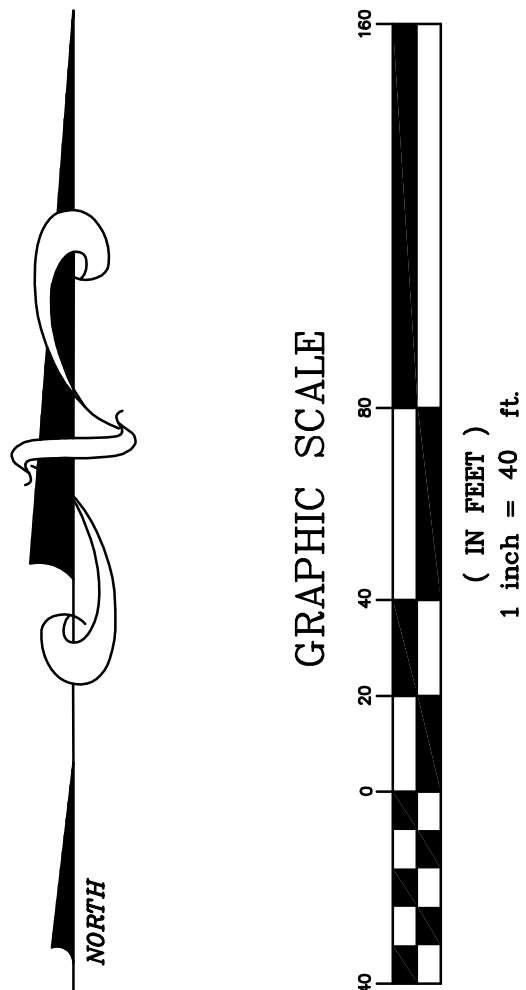
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ALACHUA TITLE SERVICES, LLC

FIDELITY NATIONAL TITLE INSURANCE COMPANY

JOB NUMBER: 18-119

DRAFTED: LAF

CHECKED: LAF

SURVEY DATE: 8/13/18

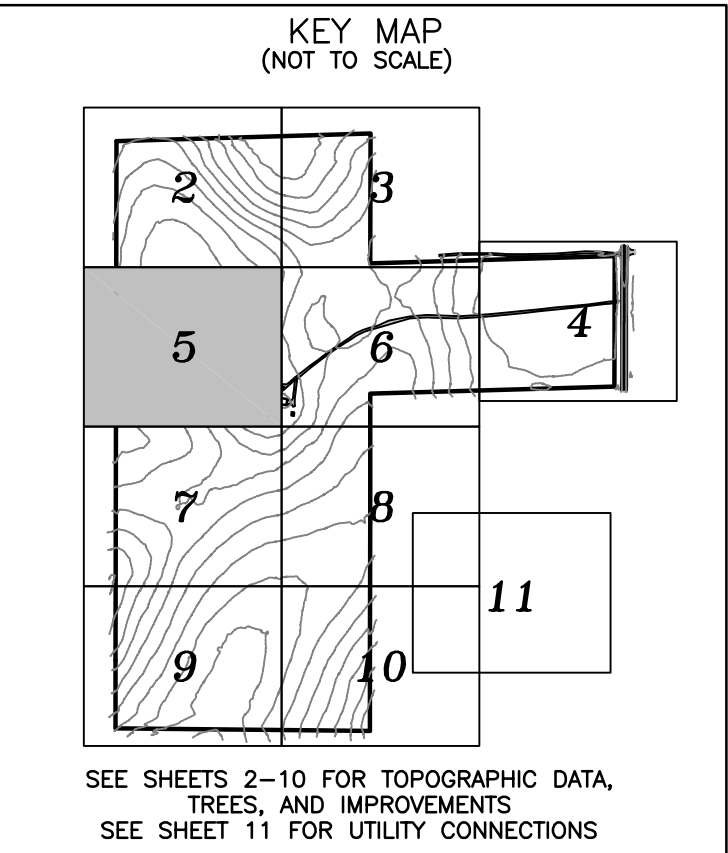
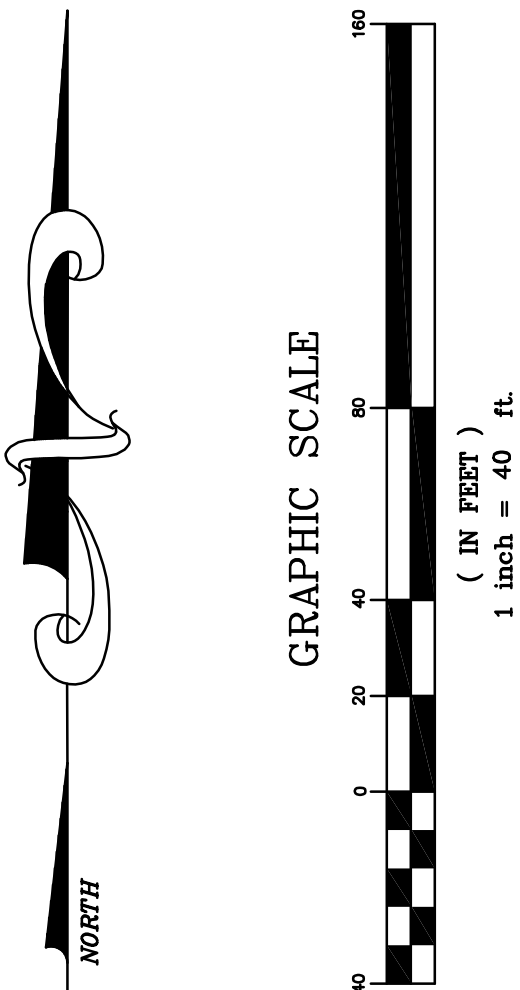
SHEET
4 OF 11

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SEE SHEET 1

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ALACHUA TILE SERVICES, LLC

FIDELITY NATIONAL TILE INSURANCE COMPANY

FIELD BOOK - SEE FOLDER

DRAFTED: LAF

CHECKED: LAF

SURVEY DATE: 8/13/18

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SHEET

5 OF 11

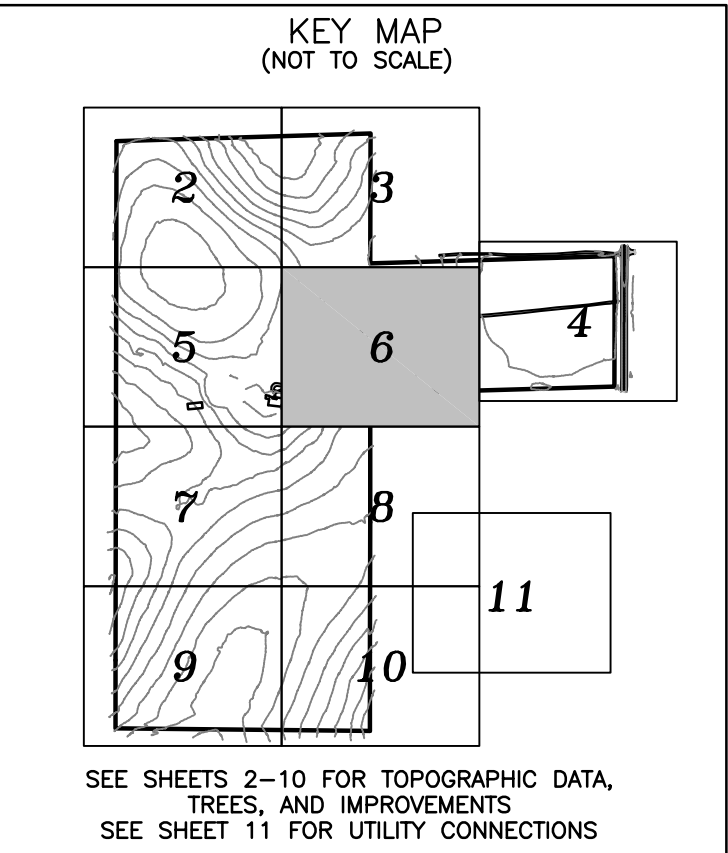
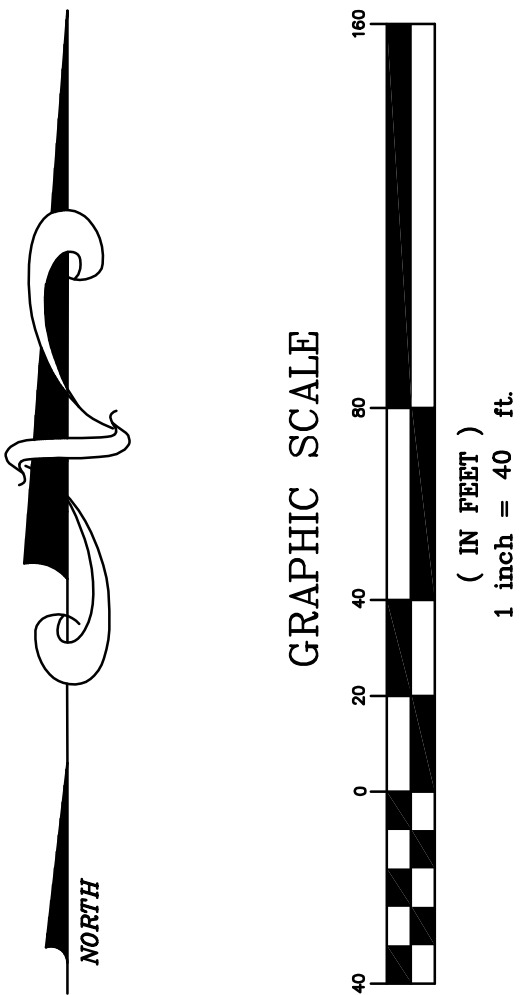
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FIELD BOOK - SEE FOLDER

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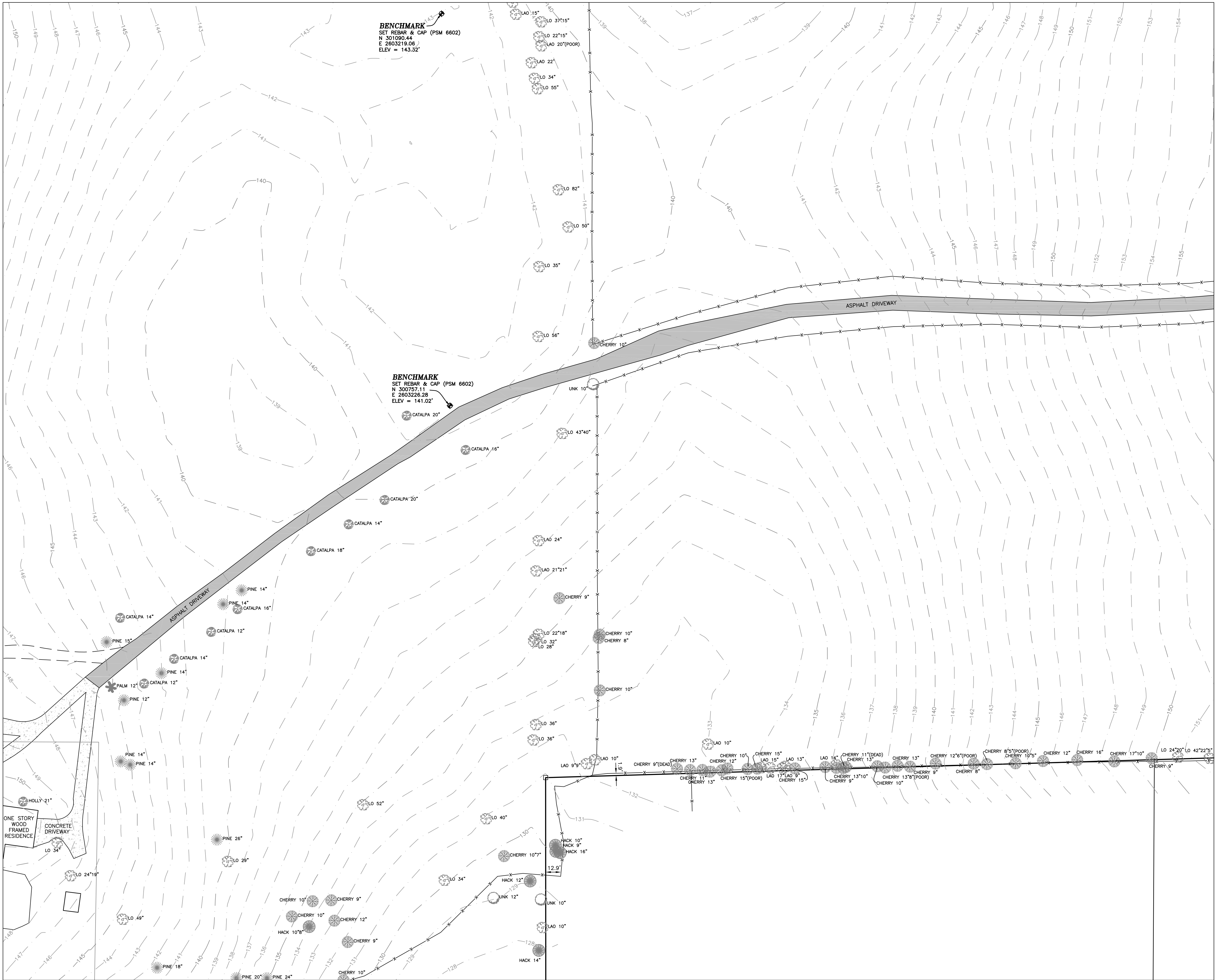
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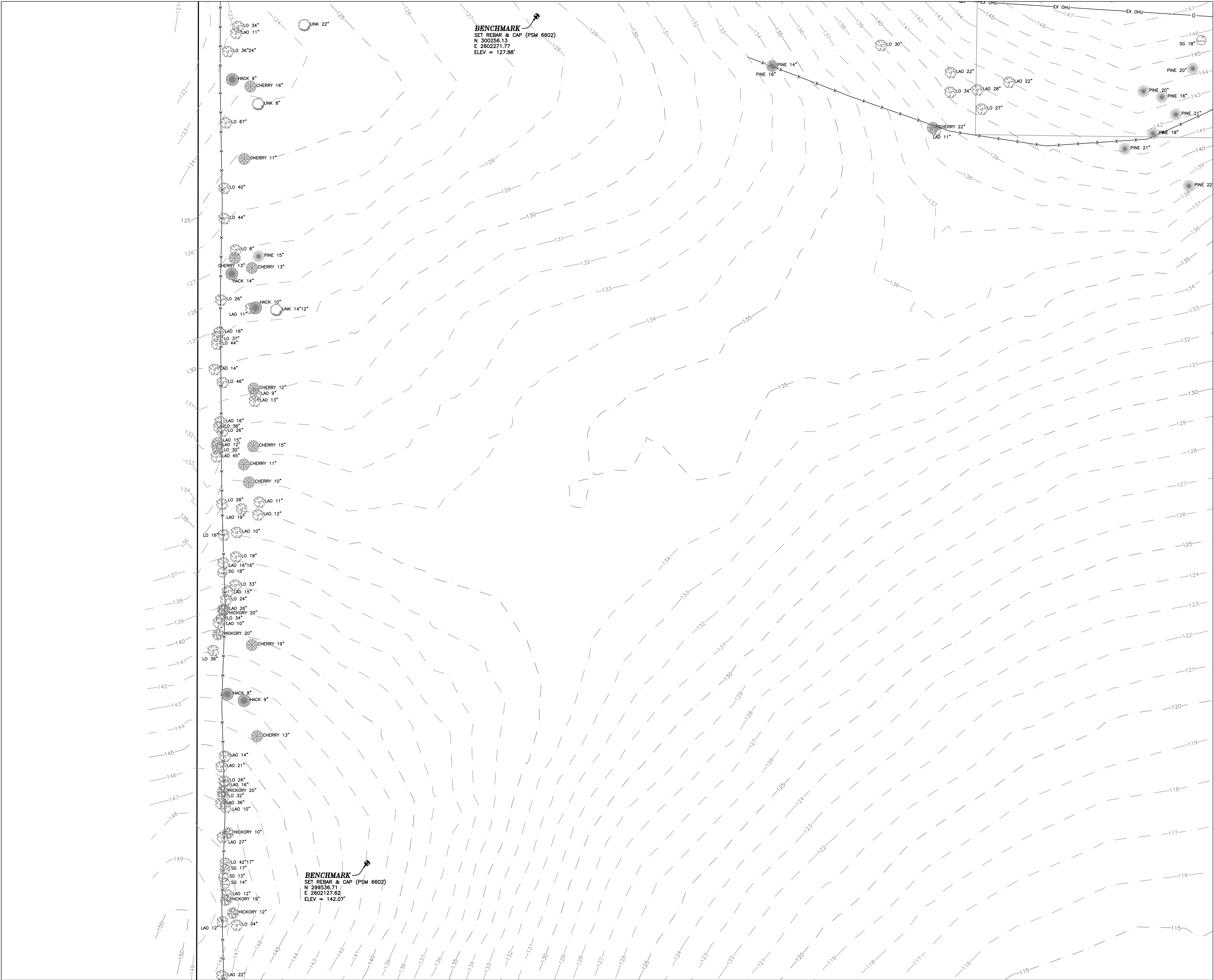
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SHEET

6 OF 11

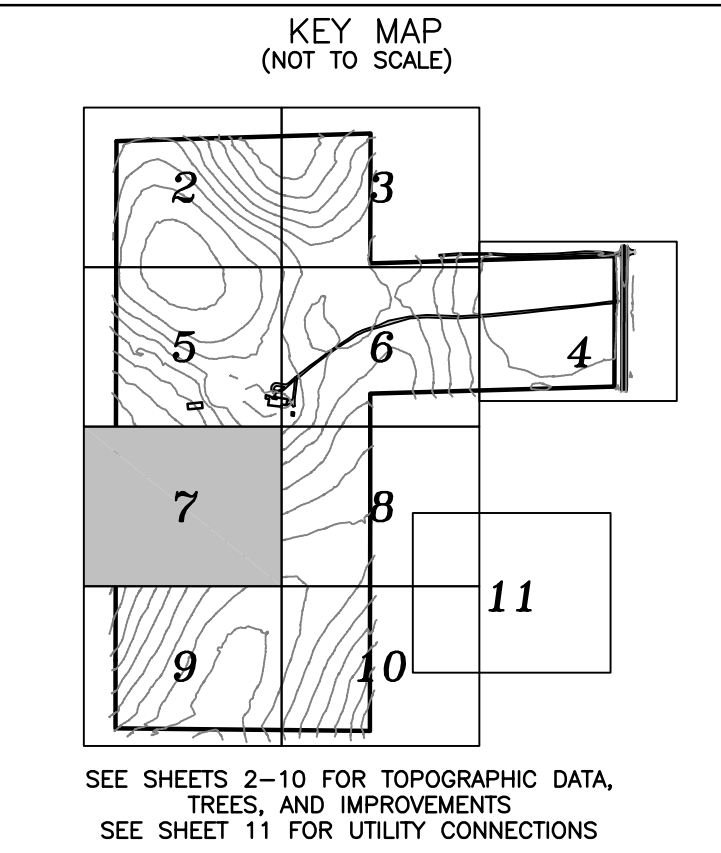
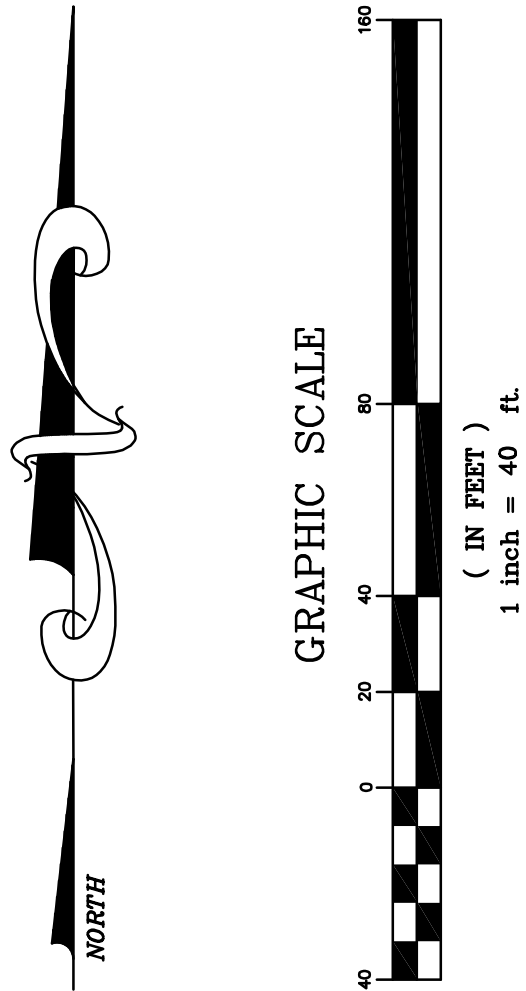




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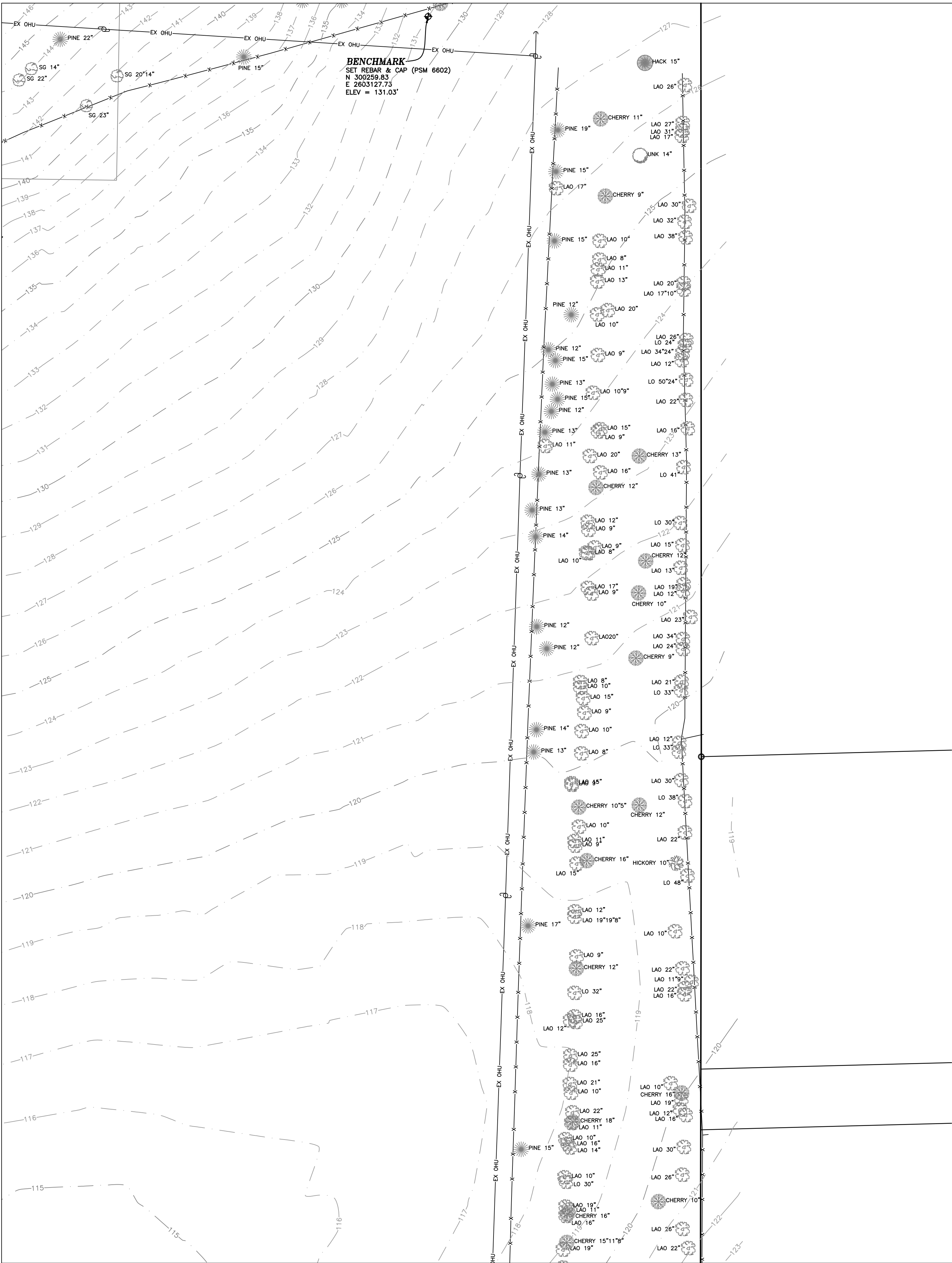
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7 OF 11

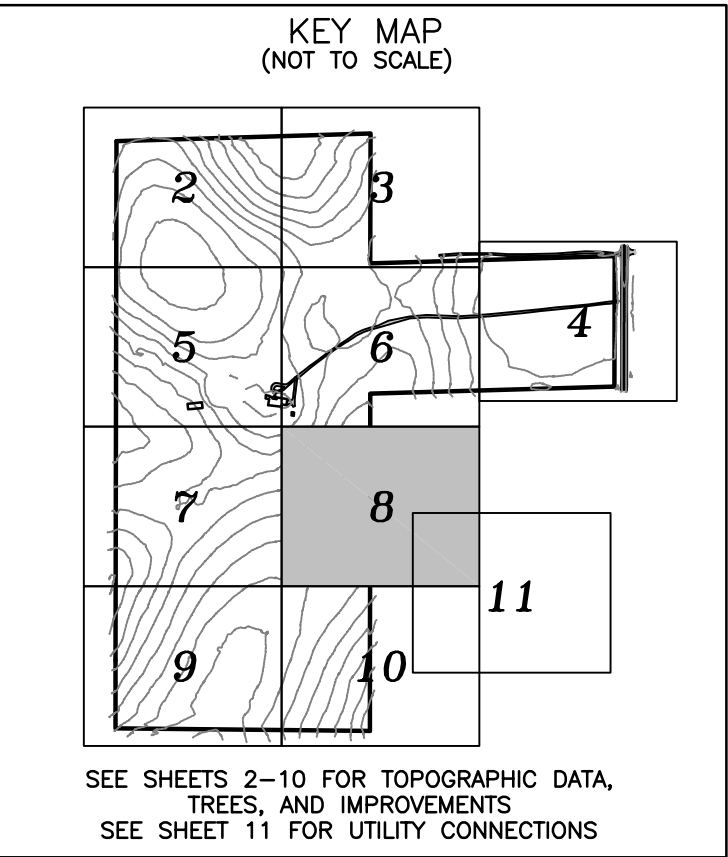
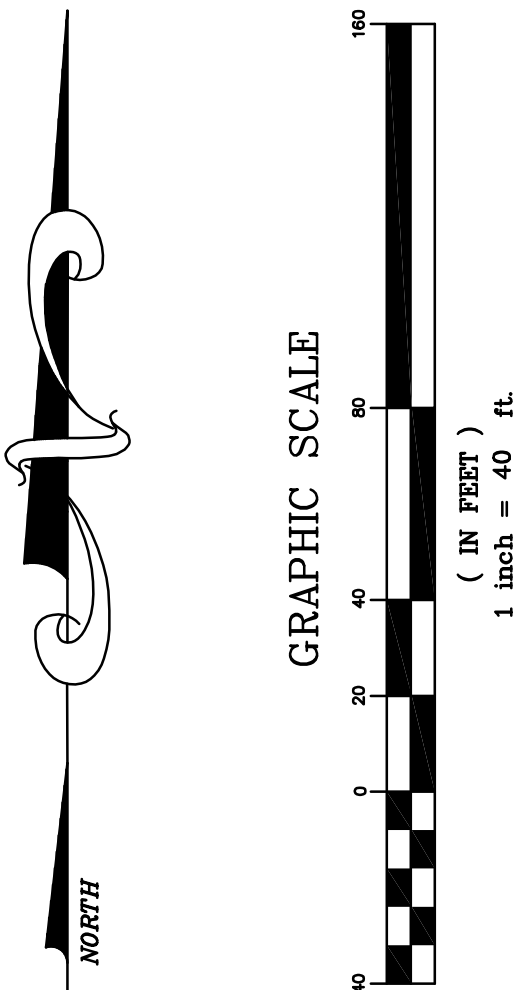
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I HEREBY CERTIFY THAT THE SURVEY DATA SHOWN HEREON, IS A
TRUE AND CORRECT REPRESENTATION OF A SURVEY PERFORMED UNDER
THE MINIMUM TECHNICAL STANDARDS AS SET FORTH BY THE FLORIDA
BOARD OF LAND SURVEYORS. PURSUANT TO SECTION 472.02, FLORIDA
STATUTES, AND CHAPTER 24-17, FLORIDA ADMINISTRATIVE CODE.



BOUNDARY and TOPOGRAPHIC SURVEY

LYING IN SECTION 10, TOWNSHIP 8 SOUTH,
RANGE 18 EAST,
ALACHUA COUNTY, FLORIDA

- LEGEND:
- = SET 5/8" REBAR (PSM 6602)
 - = FOUND 4"x4" CONCRETE MONUMENT(AS NOTED)
 - ⊙ = FOUND 5/8" REBAR & CAP (AS NOTED)
 - ⊕ = BENCHMARK
 - (L) = PER LEGAL DESCRIPTION OF RECORD
 - (M) = MEASURED
 - O.R. = OFFICIAL RECORDS BOOK
 - R/W = RIGHT OF WAY
 - INV = INVERT
 - PVC = POLYVINYL CHLORIDE PIPE
 - EX OHU = OVERHEAD UTILITY LINE
 - 100--- = CONTOUR LINE
 - = METAL SIGN
 - ⊕ = ELECTRIC HAND HOLE
 - ⊕ = GUY ANCHOR
 - ⊕ = CONCRETE POWER POLE
 - ⊕ = WOOD LIGHT POLE
 - ⊕ = SANITARY SEWER MANHOLE
 - ⊕ = AT&T PEDESTAL
 - ⊕ = TELEPHONE MANHOLE
 - ⊕ = WATER VALVE
 - ⊕ = FIRE HYDRANT
 - ⊕ = FIRE HYDRANT
 - PINE 26" = TREE TYPE & DIAMETER
 - HICK = HICKORY
 - LAO = LAUREL OAK
 - LO = LIVE OAK
 - *100.00 = SPOT ELEVATION
 - = ASPHALT PAVEMENT
 - = CONCRETE SURFACE



SEE SHEET 1 FOR NOTES, LEGEND, AND CERTIFICATION

LEIGH ANN FLOWERS

SEE SHEET 1

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL BASED SEAL OF
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BOARD OF LAND SURVEYORS. PURSUANT TO SECTION 472.005,
STATUTES, AND CHAPTER 24-17, FLORIDA ADMINISTRATIVE CODE.

FLOWERS SURVEYING AND MAPPING INC
207 SE CONDOR GLEN
HIGH SPRINGS, FLORIDA 32643
PHONE: (386) 462-0130
EMAIL: FLOWERSSURVEYING@GMAIL.COM

CERTIFIED TO:

TARA FOREST, LLC
ALACHUA TITLE SERVICES, LLC
FIDELITY NATIONAL TITLE INSURANCE COMPANY

FIELD BOOK - SEE FOLDER

DRAFTED: LAF

CHECKED: LAF

SURVEY DATE: 8/13/18

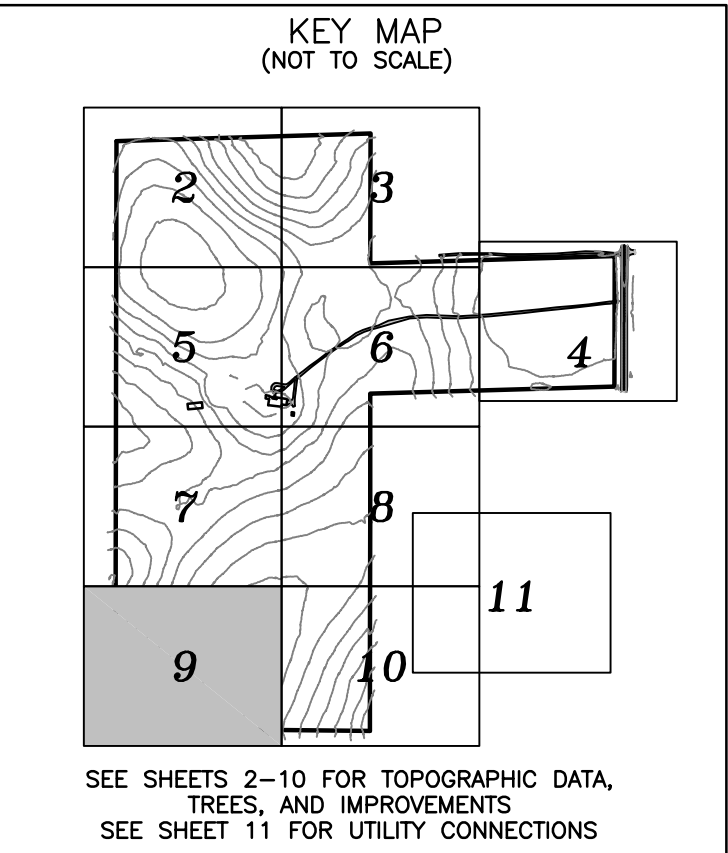
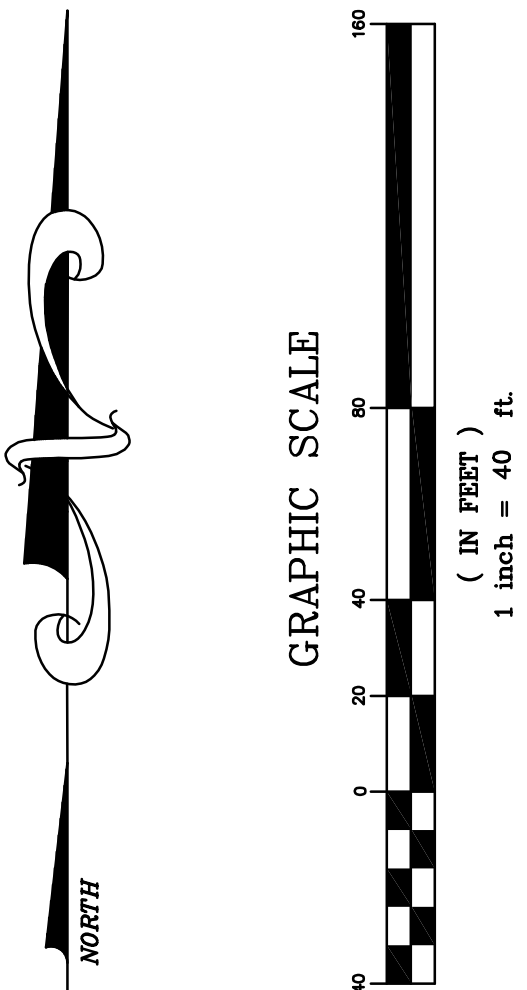
JOB NUMBER: 18-119

SHEET
8 OF 11

BOUNDARY and
TOPOGRAPHIC
SURVEY

LYING IN SECTION 10, TOWNSHIP 8 SOUTH,
RANGE 18 EAST,
ALACHUA COUNTY, FLORIDA

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 - = ASPHALT PAVEMENT
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LEIGH ANN FLOWERS

SEE SHEET 1

PROFESSIONAL SURVEYOR & MAPPER
FLA. LICENSE NO. 6602

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DRAFTED: LAF

CHECKED: LAF

SURVEY DATE: 8/13/18

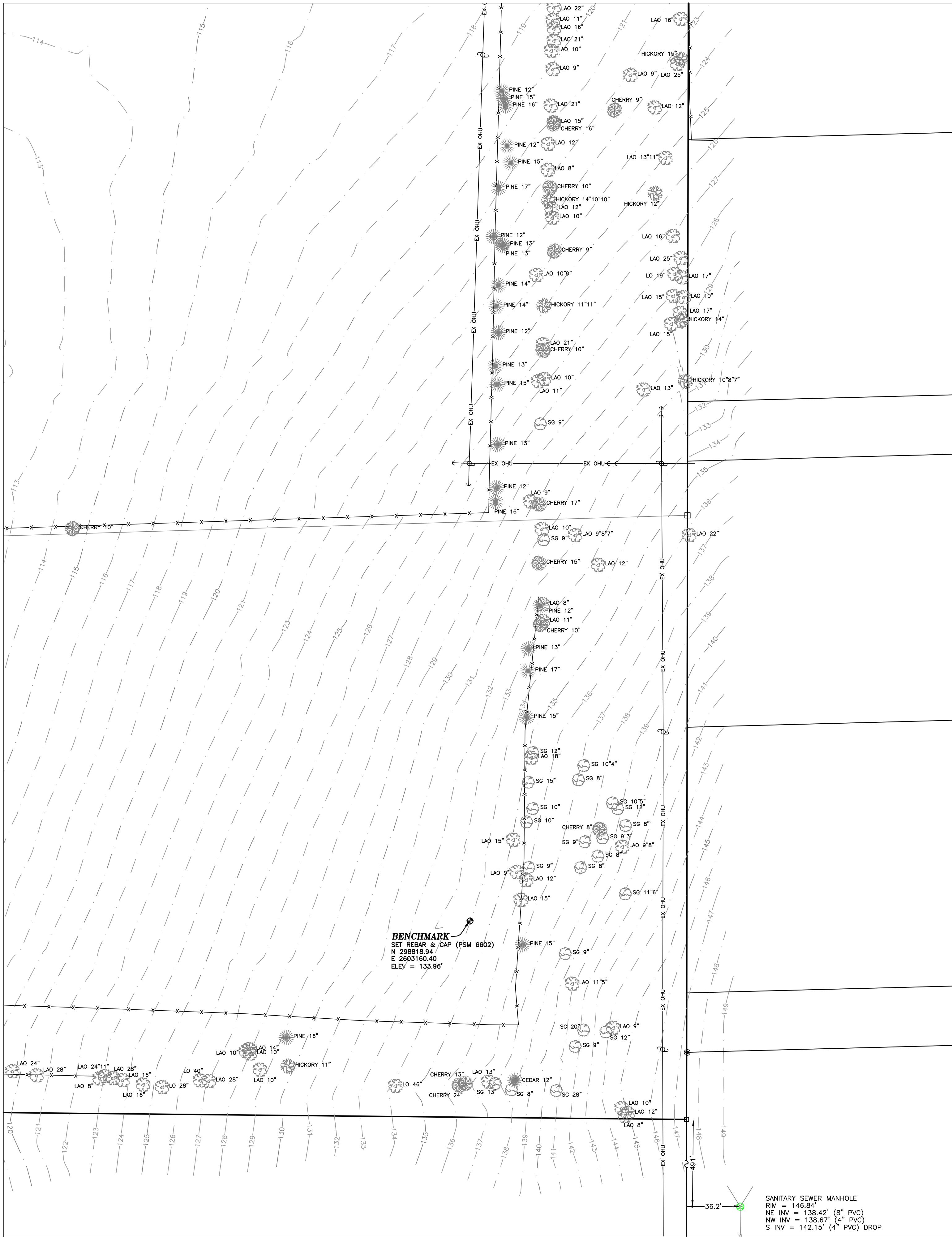
JOB NUMBER: 18-119

SHEET

9 OF 11

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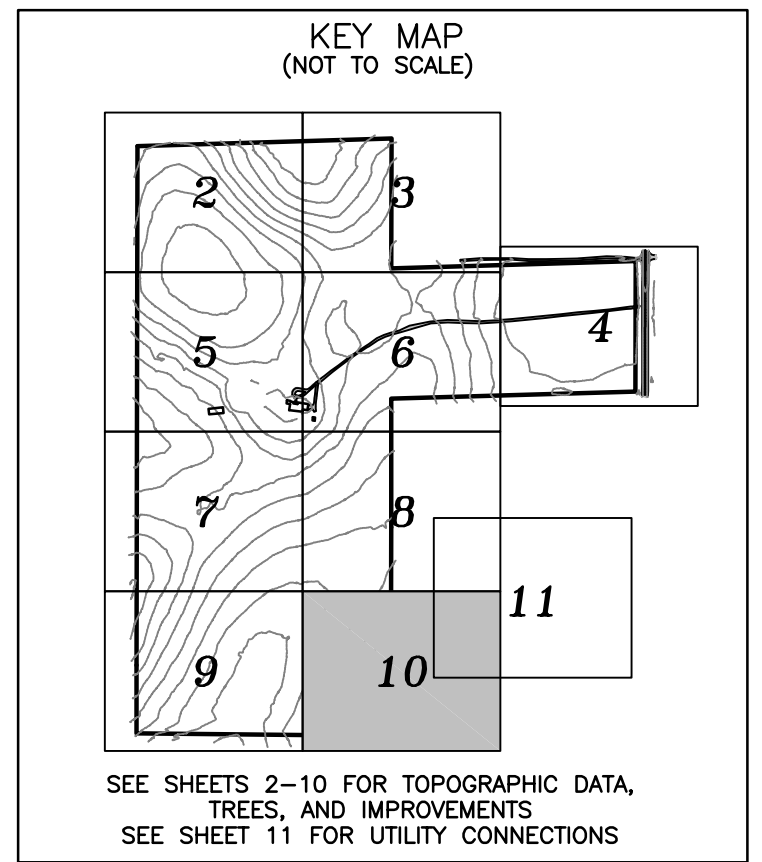
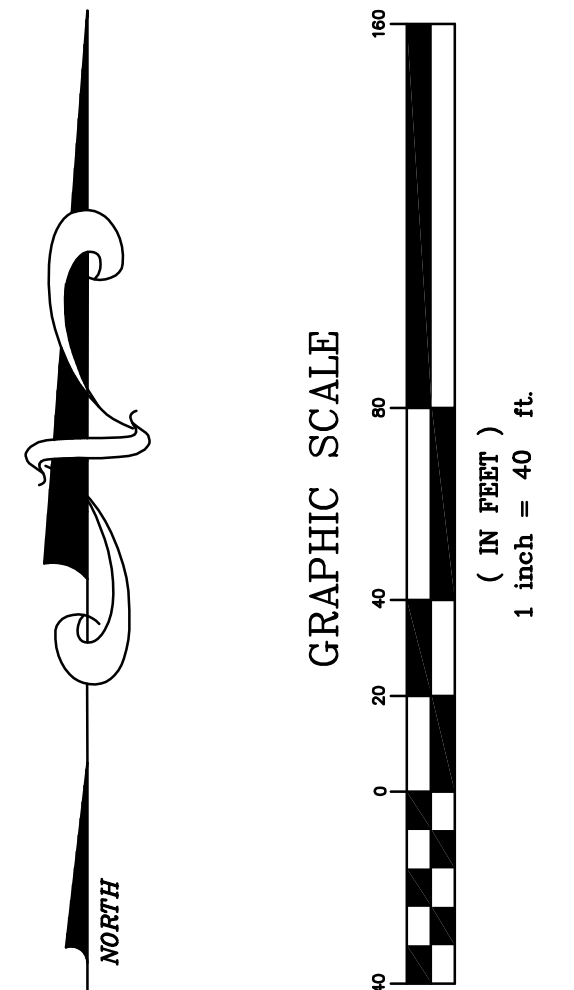


SANITARY SEWER MANHOLE
RIM = 146.84'
NE INV = 138.42' (8" PVC)
NW INV = 138.67' (4" PVC)
S INV = 142.15' (4" PVC) DROP

BOUNDARY and TOPOGRAPHIC SURVEY

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FLA. LICENSE NO. 8602

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HIGH SPRINGS, FLORIDA 32643

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EMAIL: FLOWERSSURVEYING@GMAIL.COM

FIELD BOOK - SEE FOLDER

DRAFTED: LAF

CHECKED: LAF

SURVEY DATE: 8/13/18

JOB NUMBER: 18-119

SHEET

10 OF 11

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL BASED SEAL OF
THIS MAP BY ANYONE OTHER THAN THE SURVEYOR IS PROHIBITED.

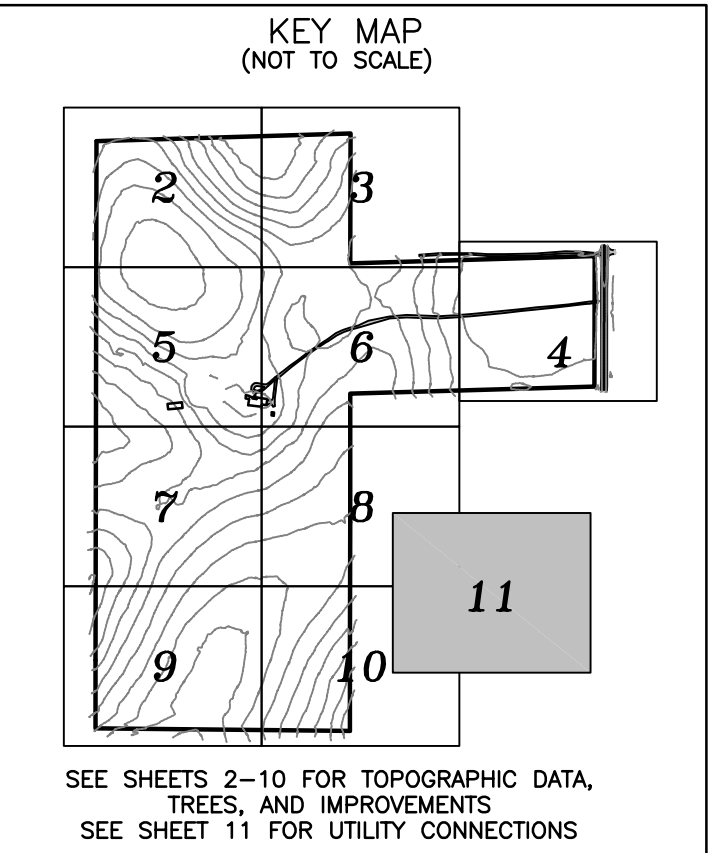
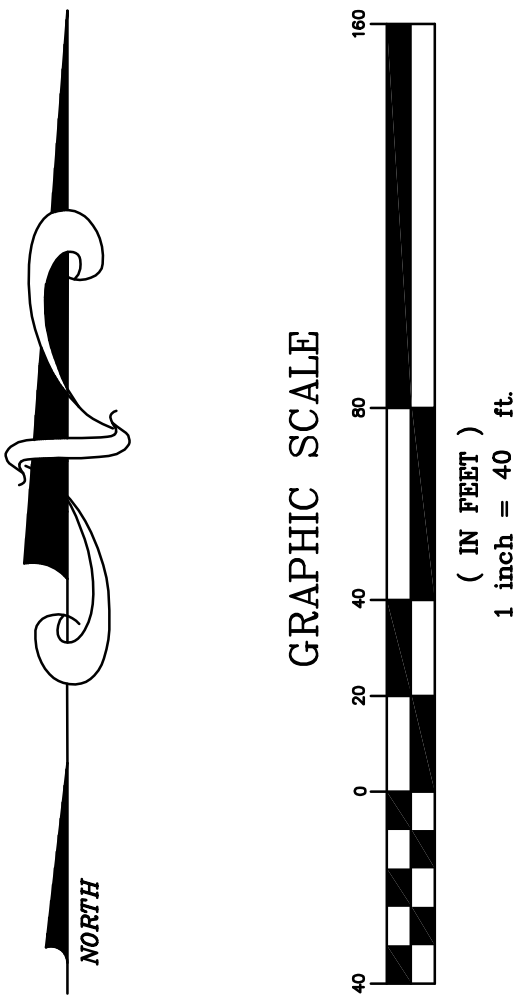
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BOUNDARY and
TOPOGRAPHIC
SURVEY

LYING IN SECTION 10, TOWNSHIP 8 SOUTH,
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ALACHUA COUNTY, FLORIDA

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SEE SHEET 1

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FIELD BOOK - SEE FOLDER

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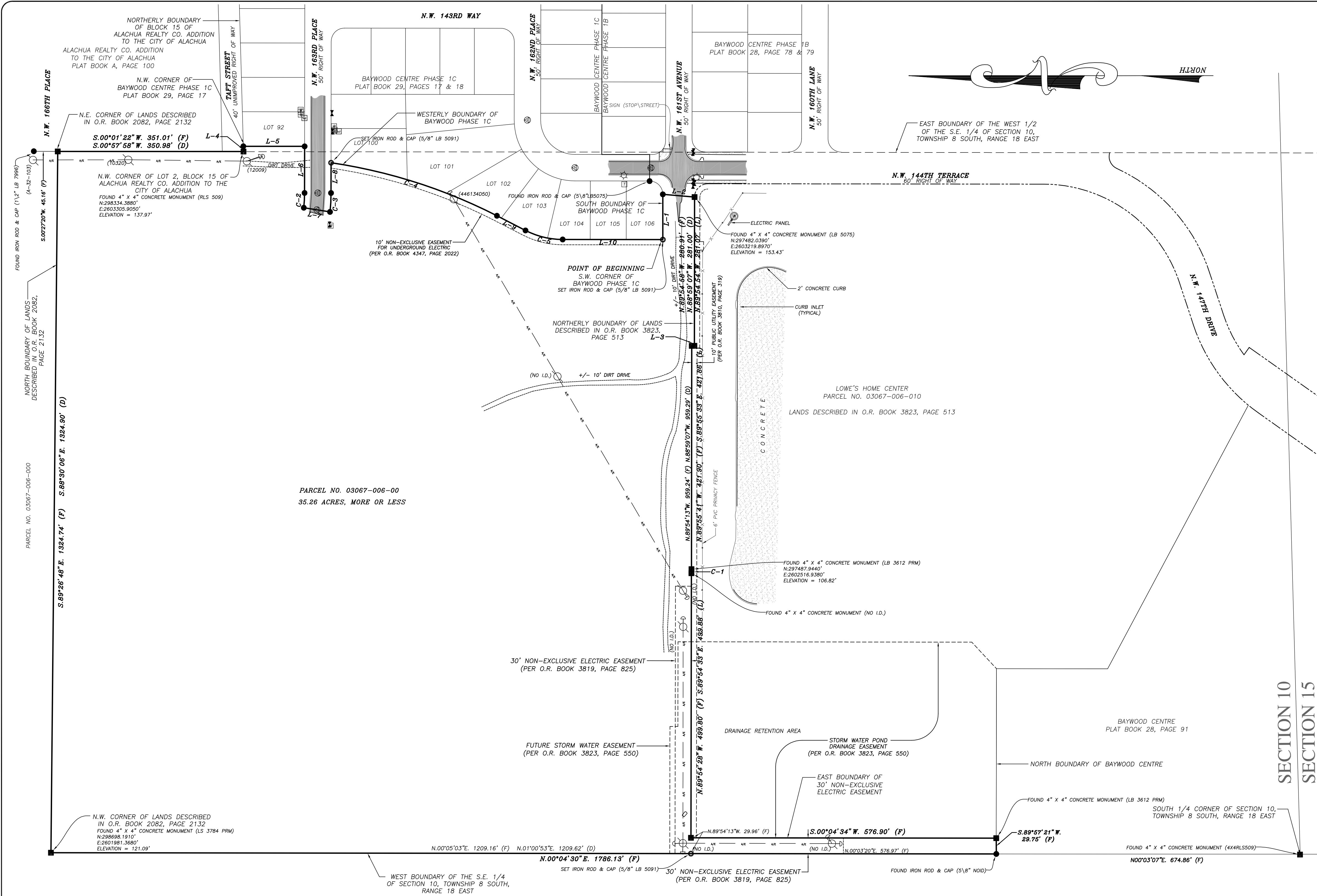
SURVEY DATE: 8/13/18

JOB NUMBER: 18-119

SHEET

11 OF 11





SECTION 10, TOWNSHIP 8 SOUTH, RANGE 18 EAST ALACHUA COUNTY, FLORIDA

DESCRIPTION: (AS FURNISHED)

PER TITLE COMMITMENT FILE NO. 2037-4078799 ISSUED BY FIRST AMERICAN TITLE INSURANCE COMPANY FOR AKERMAN LLP, BEARING A COMMITMENT DATE OF JULY 23, 2018.

A PORTION OF LAND SITUATED IN SECTION 10, TOWNSHIP 8 SOUTH, RANGE 18 EAST, IN THE CITY OF ALACHUA, ALACHUA COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGIN AT THE SOUTHWEST CORNER OF BAYWOOD PHASE 1C, AS PER PLAT THEREOF RECORDED IN PLAT BOOK 29, PAGES 17 AND 18 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA; THENCE SOUTH 88°59'07" EAST, ALONG THE SOUTH LINE OF SAID BAYWOOD PHASE 1C, A DISTANCE OF 85.50 FEET, THENCE DEPARTING SAID SOUTH LINE, SOUTH 05°46'42" WEST, A DISTANCE OF 60.21 FEET TO A POINT ON THE NORTHERLY LINE OF LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 3823, PAGE 513 OF SAID PUBLIC RECORDS; THENCE NORTH 88°59'07" WEST, ALONG SAID NORTH LINE, A DISTANCE OF 281.00 FEET; THENCE NORTH 01°00'53" EAST, ALONG SAID NORTH LINE, A DISTANCE OF 5.00 FEET; THENCE NORTH 88°59'07" WEST, ALONG SAID NORTH LINE AND IT'S WESTERLY PROJECTION THEREOF, A DISTANCE OF 959.29 FEET TO THE WEST LINE OF THE SOUTHEAST 1/4 OF SAID SECTION 10; THENCE NORTH 01°00'53" EAST, ALONG SAID WEST LINE, A DISTANCE OF 1209.62 FEET TO THE NORTHWEST CORNER OF LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 2082, PAGE 2132 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA; THENCE SOUTH 88°30'06" EAST, ALONG THE NORTH LINE OF SAID LANDS, A DISTANCE OF 1324.90 FEET TO THE NORTHEAST CORNER OF SAID LANDS, SAID CORNER BEING ON THE EAST LINE OF THE WEST 1/2 OF THE SOUTHEAST 1/4 OF SAID SECTION 10; THENCE SOUTH 00°57'58" WEST, ALONG SAID EAST LINE, A DISTANCE OF 350.98 FEET TO THE NORTHWEST CORNER OF LOT 2, BLOCK 15, OF ALACHUA REALTY CO.'S ADDITION TO THE CITY OF ALACHUA, AS PER PLAT THEREOF RECORDED IN PLAT BOOK 'A', PAGE 100 OF SAID PUBLIC RECORDS; THENCE DEPARTING SAID EAST LINE, NORTH 89°15'26" EAST, ALONG THE NORTHERLY LINE OF BLOCK 15 OF SAID ALACHUA REALTY CO.'S ADDITION TO THE CITY OF ALACHUA, A DISTANCE OF 10.00 FEET TO THE NORTHWEST CORNER OF AFOREMENTIONED BAYWOOD PHASE 1C; THENCE THE FOLLOWING TEN (10) COURSES ALONG THE WESTERLY BOUNDARY OF SAID BAYWOOD PHASE 1C; (1) THENCE SOUTH 01°00'53" WEST, A DISTANCE OF 115.79 FEET; (2) THENCE NORTH 88°59'07" WEST, A DISTANCE OF 88.14 FEET TO THE BEGINNING OF A CURVE CONCAVE NORTHERLY, HAVING A RADIUS OF 275.00 FEET, AND BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 86°04'29" WEST, 27.93 FEET; (3) THENCE WESTERLY ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 05°49'15", AN ARC DISTANCE OF 27.94 FEET TO THE END OF SAID CURVE; (4) THENCE SOUTH 09°56'14" WEST, A DISTANCE OF 50.06 FEET TO THE BEGINNING OF A CURVE CONCAVE NORTHERLY, HAVING A RADIUS OF 325.00 FEET AND BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 85°50'10" EAST, 35.71 FEET; (5) THENCE EASTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 06°17'55", AN ARC DISTANCE OF 35.73 FEET TO THE END OF SAID CURVE; (6) THENCE SOUTH 88°59'07" EAST, A DISTANCE OF 57.15 FEET TO THE BEGINNING OF A CURVE CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 1012.50 FEET, AND BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 18°41'44" WEST, 328.91 FEET; (7) THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 18°41'43", AN ARC DISTANCE OF 330.37 FEET TO THE END OF SAID CURVE; (8) THENCE SOUTH 28°02'36" WEST, A DISTANCE OF 60.73 FEET TO THE BEGINNING OF A CURVE CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 154.50 FEET, AND BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 31°44" WEST, 72.31 FEET; (9) THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 27°01'43", AN ARC DISTANCE OF 72.88 FEET TO THE END OF SAID CURVE; (10) THENCE SOUTH 01°00'53" WEST, A DISTANCE OF 189.27 FEET TO THE POINT OF BEGINNING.

DESCRIPTION: (AS SURVEYED)

A PORTION OF THE S.E. 1/4 OF SECTION 10, TOWNSHIP 8 SOUTH, RANGE 18 EAST, IN THE CITY OF ALACHUA, ALACHUA COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE S.W. CORNER OF BAYWOOD PHASE 1C, AS PER PLAT THEREOF RECORDED IN PLAT BOOK 29, PAGES 17 AND 18 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA; THENCE N.89°56'50"E., ALONG THE SOUTH BOUNDARY OF SAID BAYWOOD PHASE 1C, A DISTANCE OF 85.50 FEET; THENCE DEPARTING SAID SOUTH BOUNDARY, S.04°52'19"W., A DISTANCE OF 60.27 FEET TO A POINT ON THE NORTHERLY BOUNDARY OF LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 3823, PAGE 513 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA; THENCE ALONG THE NORTHERLY BOUNDARY OF SAID LANDS THE FOLLOWING FIVE (5) CALLS: N.89°54'58"W., A DISTANCE OF 280.91 FEET; THENCE N.01°44'31"W., A DISTANCE OF 4.97 FEET; THENCE N.89°55'41"W., A DISTANCE OF 421.90 FEET TO A POINT ON A CURVE, CONCAVE NORTHERLY, HAVING A RADIUS OF 115.00 FEET, A CENTRAL ANGLE OF 03°47'06" AND A CHORD BEARING AND DISTANCE OF N.88°15'26"W., 7.60 FEET; THENCE WESTERLY, ALONG THE ARC OF SAID CURVE AND NORTHERLY BOUNDARY, A DISTANCE OF 7.60 FEET TO THE END OF SAID CURVE; THENCE N.89°54'28"W., A DISTANCE OF 499.80 FEET TO A POINT ON THE EAST BOUNDARY OF A 30 FOOT NON-EXCLUSIVE ELECTRIC EASEMENT AS RECORDED IN OFFICIAL RECORDS BOOK 3819, PAGE 825 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA; THENCE DEPARTING THE NORTHERLY BOUNDARY OF LANDS DESCRIBED IN SAID OFFICIAL RECORDS BOOK 3823, PAGE 513, ALONG THE EAST BOUNDARY OF SAID 30 FOOT EASEMENT AND THE SOUTHERLY PROJECTION THEREOF, S.00°04'34"W., A DISTANCE OF 576.90 FEET TO A POINT ON THE NORTH BOUNDARY OF BAYWOOD CENTRE AS PER PLAT THEREOF, RECORDED IN PLAT BOOK 28, PAGE 91 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA; THENCE DEPARTING THE SOUTHERLY PROJECTION OF THE EAST BOUNDARY OF SAID 30 FOOT EASEMENT, ALONG THE NORTH BOUNDARY OF SAID BAYWOOD CENTRE, S.89°57'21"W., A DISTANCE OF 29.75 FEET TO A POINT ON THE WEST BOUNDARY OF THE S.E. 1/4 OF SAID SECTION 10; THENCE DEPARTING THE NORTH BOUNDARY OF SAID BAYWOOD CENTRE, ALONG SAID WEST BOUNDARY, N.00°04'30"E., A DISTANCE OF 1786.13 FEET TO THE N.W. CORNER OF LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 2082, PAGE 2132 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA; THENCE DEPARTING THE WEST BOUNDARY OF THE S.E. 1/4 OF SAID SECTION 10, ALONG THE NORTH BOUNDARY OF SAID LANDS, S.89°26'48"E., A DISTANCE OF 1324.74 FEET TO THE N.E. CORNER OF SAID LANDS AND A POINT ON THE EAST BOUNDARY OF THE WEST 1/2 OF THE S.E. 1/4 OF SAID SECTION 10; THENCE ALONG SAID EAST BOUNDARY, S.00°01'22"W., A DISTANCE OF 351.01 FEET TO THE N.W. CORNER OF LOT 2, BLOCK 15 OF ALACHUA REALTY CO.'S ADDITION TO THE CITY OF ALACHUA, AS PER PLAT THEREOF, RECORDED IN PLAT BOOK 'A', PAGE 100 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA; THENCE DEPARTING SAID EAST BOUNDARY, ALONG THE NORTHERLY BOUNDARY OF SAID BLOCK 15 OF SAID ALACHUA REALTY CO.'S ADDITION TO THE CITY OF ALACHUA, N.88°22'19"E., A DISTANCE OF 9.89 FEET TO THE N.W. CORNER OF AFOREMENTIONED BAYWOOD PHASE 1C; THENCE ALONG THE WESTERLY BOUNDARY OF SAID BAYWOOD PHASE 1C, THE FOLLOWING TEN (10) COURSES: S.00°03'52"W., A DISTANCE OF 115.81 FEET; THENCE N.89°55'23"W., A DISTANCE OF 87.57 FEET TO THE BEGINNING OF A CURVE, CONCAVE NORTHERLY, HAVING A RADIUS OF 275.00 FEET, A CENTRAL ANGLE OF 05°55'28" AND A CHORD BEARING AND DISTANCE OF N.87°00'29"W., 28.42 FEET; THENCE WESTERLY, ALONG THE ARC OF SAID CURVE AND WESTERLY BOUNDARY, A DISTANCE OF 28.44 FEET TO THE END OF SAID CURVE; THENCE S.08°59'15"W., A DISTANCE OF 50.15 FEET TO THE BEGINNING OF A CURVE, CONCAVE NORTHERLY, HAVING A RADIUS OF 275.00 FEET, A CENTRAL ANGLE OF 06°18'13" AND A CHORD BEARING AND DISTANCE OF S.86°50'30"E., 35.74 FEET; THENCE EASTERLY, ALONG THE ARC OF SAID CURVE AND WESTERLY BOUNDARY, A DISTANCE OF 35.76 FEET TO THE END OF SAID CURVE; THENCE S.89°55'23"E., A DISTANCE OF 57.15 FEET TO THE BEGINNING OF A CURVE CONCAVE WESTERLY, HAVING A RADIUS OF 1012.50 FEET, A CENTRAL ANGLE OF 18°41'51" AND A CHORD BEARING AND DISTANCE OF S.17°43'23"W., 328.95 FEET; THENCE SOUTHWESTERLY, ALONG THE ARC OF SAID CURVE AND WESTERLY BOUNDARY, A DISTANCE OF 330.41 FEET TO THE END OF SAID CURVE; THENCE S.27°12'36"W., 60.70 FEET TO THE END OF SAID CURVE; THENCE S.00°04'10"W., 189.27 FEET TO THE BEGINNING OF A CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 154.50 FEET, A CENTRAL ANGLE OF 27°04'06" AND A CHORD BEARING AND DISTANCE OF S.13°38'50"W., 72.31 FEET; THENCE SOUTHERLY, ALONG THE ARC OF SAID CURVE AND WESTERLY BOUNDARY, A DISTANCE OF 72.99 FEET TO THE END OF SAID CURVE; THENCE S.00°04'10"W., A DISTANCE OF 189.27 FEET TO THE POINT OF BEGINNING. SAID LANDS CONTAINING 35.26 ACRES, MORE OR LESS.

SURVEYOR'S CERTIFICATION:

I HEREBY CERTIFY THAT THE SURVEY REPRESENTED HEREON MEETS THE STANDARDS OF PRACTICE AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 54-17.050-052, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027, FLORIDA STATUTES.

SIGNATURE DATE

TRAVIS@RMBARRINEAU.COM

TRAVIS P. BARRINEAU, P.S.M. - LS 6897

OF R.M. BARRINEAU & ASSOCIATES, INC.

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER

LEGEND UNLESS OTHERWISE NOTED

- ☉ = CENTERLINE OF RIGHT OF WAY
- C.B. = CHORD BEARING
- O.R. = OFFICIAL RECORDS OF ALACHUA COUNTY
- = FOUND 5/8" IRON ROD & CAP - LB 5075
- = SET 5/8" IRON ROD & CAP - LB 5091
- = FOUND 4" x 4" CONCRETE MONUMENT (BROKEN; NO IDENTIFICATION)
- = SET 4" x 4" CONCRETE MONUMENT - LB 5091
- = FOUND NAIL & DISC - LB 5075
- (P) = FIELD MEASUREMENT
- (P) = PLAT DIMENSION
- (L) = PER FURNISHED DESCRIPTION
- (D) = PER LOWE'S HOME CENTER DEED RECORDED IN O.R. BOOK 3823, PAGE 513
- (C) = CALCULATED DIMENSION
- ☉ = DRAINAGE MANHOLE
- ☉ = STORM DRAINAGE GRATE
- ☉ = CURB INLET GRATE
- ☉ = MAILBOX
- ☉ = SIGN
- ☉ = WOOD POWER POLE
- ☉ = METAL LIGHT POLE
- ☉ = CONCRETE POWER POLE
- ☉ = ELECTRIC TRANSFORMER
- ☉ = ELECTRIC BOX
- ☉ = GUY ANCHOR

- ☉ = SANITARY MANHOLE
- ☉ = SANITARY CLEANOUT
- ☉ = SEWER VALVE
- ☉ = TELEPHONE BOX
- ☉ = TELEPHONE CABLE MARKER
- ☉ = CABLE BOX
- ☉ = FIRE HYDRANT
- ☉ = WATER VALVE
- ☉ = WATER METER
- ☉ = BACKFLOW PREVENTOR
- ☉ = 5" WELL
- ☉ = GAS METER
- ☉ = GAS VALVE
- ☉ = GAS LINE MARKER
- P.V.C. = POLYVINYL CHLORIDE
- R.C.P. = REINFORCED CONCRETE PIPE
- C.M.P. = CORRUGATED METAL PIPE
- H.D.P.E. = HIGH DENSITY POLYETHYLENE
- A/E— = AERIAL ELECTRIC
- T— = UNDERGROUND TELEPHONE LINE
- W— = UNDERGROUND WATER LINE
- G— = UNDERGROUND GAS LINE
- E— = UNDERGROUND ELECTRIC
- ☉ = DENOTES CONCRETE
- ☉ = DENOTES ASPHALT

CURVE TABLE					
NO.	DELTA	RADIUS	LENGTH	CHORD	C.B.
C-1 (F)	03°47'06"	115.00'	7.60'	7.60'	N.88°15'26"W.
C-1 (L)	03°47'20"	115.00'	7.60'	7.60'	S.88°01'11"E.
C-2 (F)	05°55'28"	275.00'	28.44'	28.42'	N.87°00'29"W.
C-2 (D)(P)	05°49'15"	275.00'	27.94'	27.93'	N.86°04'29"W.
C-3 (F)	06°18'13"	325.00'	35.76'	35.74'	S.86°50'30"E.
C-3 (D)(P)	06°17'55"	325.00'	35.73'	35.71'	S.85°50'10"E.
C-4 (F)	18°41'51"	1012.50'	330.41'	328.95'	S.17°43'23"W.
C-4 (D)(P)	18°41'43"	1012.50'	330.37'	328.91'	S.18°41'44"W.
C-5 (F)	27°04'06"	154.50'	72.99'	72.31'	S.13°38'50"W.
C-5 (D)(P)	27°01'43"	154.50'	72.88'	72.21'	S.14°31'44"W.

GRAPHIC SCALE



(IN FEET)
1 inch = 100 ft.

SHEET 1 OF 3 ONE IS NOT COMPLETE WITHOUT THE OTHERS

SEE SHEET 2 OF 3 FOR TOPOGRAPHIC INFORMATION

SEE SHEET 3 OF 3 FOR TREE SURVEY

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LINE TABLE		LINE TABLE	
LINE	BEARING & DISTANCE	LINE	BEARING & DISTANCE
L-1	N.89°56'50"E. 85.50' (F)	L-6	N.89°55'23"W. 87.57' (F)
	N.88°59'07"E. 85.50' (D)&(P)		N.88°59'07"W. 88.14' (D)&(P)
L-2	S.04°52'19"W. 60.27' (F)	L-7	S.08°59'15"W. 50.15' (F)
	S.05°46'42"W. 60.21' (D)&(P)		S.09°56'14"W. 50.06' (D)&(P)
L-3	N.01°44'31"W. 4.97' (F)	L-8	S.89°55'23"E. 57.15' (F)
	N.01°00'53"E. 5.00' (D)		S.88°59'07"E. 57.15' (D)&(P)
	N.00°44'35"W. 5.09' (L)	L-9	S.27°12'36"W. 60.70' (F)
L-4	N.88°22'19"E. 9.89' (F)		S.28°02'36"W. 60.73' (D)&(P)
	N.89°19'56"E. 10.00' (D)	L-10	S.00°04'10"W. 189.27' (F)
L-5	S.00°03'52"W. 115.81' (F)		S.01°00'53"W. 189.27' (D)&(P)
	S.01°00'53"W. 115.79' (D)&(P)		

NOTES:

- DATE OF FIELD SURVEY: APRIL 3, 2019
- SUBJECT TO RIGHTS OF WAY, RESTRICTIONS, EASEMENTS AND RESERVATIONS OF RECORD.
- UNLESS OTHERWISE SHOWN, UNDERGROUND IMPROVEMENTS NOT LOCATED.
- PUBLIC RECORDS NOT SEARCHED BY R.M. BARRINEAU & ASSOCIATES, INC.
- BEARINGS AND STATE PLANE COORDINATES DEPICTED HEREON ARE GRID, NORTH FLORIDA ZONE, NAD-83 (CORS96) EPOCH:2002.0000, BASED ON TRIMBLE VIRTUAL REFERENCE STATION NETWORK AND REFERENCED TO THE WEST BOUNDARY OF THE S.E. 1/4 OF SECTION 10, TOWNSHIP 8 SOUTH, RANGE 18 EAST, AS BEING N.00°08'03"E.
- VERTICAL DATUM BASED ON NATIONAL GEODETIC SURVEY CONTROL POINT 175 D1 WITH AN ELEVATION OF 102.24', NAVD-88.
- ORIENTATION FOR THE IMPROVEMENTS SHOWN HEREON SHOULD NOT BE USED TO RECONSTRUCT BOUNDARY LINES.
- ADDITIONS OR DELETIONS TO SURVEY MAPS BY OTHER THAN THE SIGNING PARTY OR PARTIES IS PROHIBITED WITHOUT WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES.
- THIS SURVEY DEPICTS THE PROPERTY AS IT EXISTED ON THE SURVEY DATE, NOT NECESSARILY THE SIGNATURE DATE.
- THIS SURVEY HAS BEEN PREPARED FOR THE EXCLUSIVE BENEFIT OF THE PARTY(IES) NAMED HEREON, AND SHALL NOT BE DUPLICATED OR RELIED UPON BY ANY OTHER INDIVIDUAL OR ENTITY WITHOUT AUTHORIZATION FROM R.M. BARRINEAU & ASSOCIATES, INC.

R.M. BARRINEAU & ASSOCIATES
PROFESSIONAL SURVEYORS & MAPPERS
CORPORATE OFFICE: 1000 W. PALM BLVD., SUITE 100, PALM BEACH, FLORIDA 33481
PHONE (561) 852-1133 • FAX (561) 852-3883 • WWW.RMBARRINEAU.COM
TRAVIS P. BARRINEAU, P.S.M. - LS 6897 • CERTIFICATE OF AUTHORIZATION NO. 18909

BOUNDARY & TOPOGRAPHIC SURVEY FOR: SAYED MOUKHTARA

REFERENCES:
F.B. 624, PGS. 20-26

J.O.# 19013

DWG.# 19013 R2

SHT 1 OF 3

NO.	REVISIONS	BY	DATE
2	ADD "AS SURVEYED" DESC. INCL 30' STRIP	KLJ	9/4/19

DRAWN: K.L.J.	REVISED: T.P.B.
REVISED: T.P.B.	APPROVED: T.P.B.
SCALE: 1" = 100'	

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100 ft.

[illegible]

SEE SHEET 3 OF 3 FOR TREE SURVEY

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DRAWN:	K.L.J.
REVISED:	
REVISED:	
CHECKED:	T.P.B.
APPROVED:	T.P.B.
SCALE: 1" = 100'	

R.M. BARRINEAU
— AND ASSOCIATES —
PROFESSIONAL SURVEYORS & MAPPERS
 Colabour Professional Park • 3309 S.E. 22nd Loop-Suite 103-Office, FLORIDA 33471
PHONE (562) 622-3131 • **FAX** (562) 386-5771 • **www.rmbarrineau.com**
 REGINALD M. BARRINEAU, P.S.M., FOUNDER • CERTIFICATE OF AUTHORIZATION NO. 52091
 TRAVIS P. BARRINEAU, P.S.M., 1-5 6897

**BOUNDARY & TOPOGRAPHIC
SURVEY FOR:
SAYED MOUKHTARA**

REFERENCES:
F.B. 624, PGS. 20-26

J.O.# 19013

DWG.# 19013R2

SHT 2 OF 3

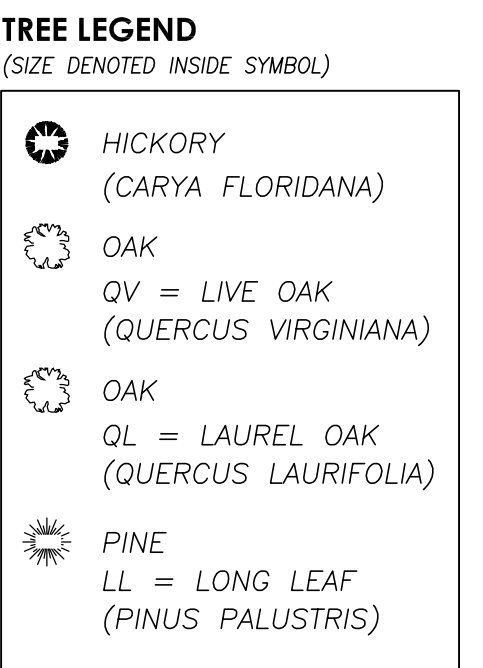
01-0-01.7711

HLMSON

GRAPHIC SCALE

A horizontal scale bar with alternating black and white segments. The segments are labeled with numbers: 100, 0, 50, 100, 200, and 400. The first 100-foot segment is divided into four 25-foot sub-segments.

(IN FEET)
1 inch = 100 ft.



BOUNDARY & TOPOGRAPHIC SURVEY FOR: SAYED MOUKHTARA

<u>REFERENCES:</u> F.B. 624, PGS. 20-26	FILE: 10-8-18
J.O.# 19013	
DWG.# 19013R2	
SHT 3 OF 3	

DRAWN:	K.L.J.		
REVISED:			
CHECKED:			
APPROVED:	T.P.B.		
SCALE:	1" = 100'		
		NO.	REVISIONS
		2	ADD "AS SURVEYED" DESC. INCL 30' STRIP
			KLJ
			DATE
			9/4/19

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City of Alachua

Planning & Community Development Department Staff Report

Planning & Zoning Board Hearing Date: Quasi-Judicial Hearing

February 11, 2020

SUBJECT:	A request for consideration of the preliminary plat of Tara Forest East, which proposes the subdivision of a ±148.76 acre subject property into a total of 340 lots, with associated rights-of-way and common areas
APPLICANT/AGENT:	Chistopher Gmuer, P.E., of Gmuer Engineering, LLC
PROPERTY OWNERS:	Tara Forest LLC, and Alachua Development Co, LLC
PARCEL ID NUMBER:	03067-005-000, 03067-005-001, 03067-000-000, and 03067-000-000
FLUM DESIGNATION:	Moderate Density Residential/ Medium Density Residential
ZONING:	Residential Single Family -3 (RSF-3)/ Residential Single Family – 6 (RSF-6)
OVERLAY:	N/A
ACREAGE:	±148.76
PROJECT PLANNER:	Adam Hall, AICP
RECOMMENDATION:	Staff recommends that the Planning & Zoning Board transmit the preliminary plat of Tara Forest East to the City Commission with a recommendation to approve subject to the four (4) conditions provided in Exhibit “A” and located on page 19 of the Staff Report.
RECOMMENDED MOTION:	<i>Based upon the competent substantial evidence presented at this hearing, the presentation before this Board, and Staff’s recommendation, this Board finds the application to be consistent with the City of Alachua Comprehensive Plan and in compliance with the Land Development Regulations and transmits the Preliminary Plat of Tara Forest East to the City Commission, with a recommendation to approve, subject to the four (4) conditions provided in Exhibit “A” and located on page 19 of the Staff Report.</i>

SUMMARY & BACKGROUND

This application is a request by Christopher Gmuer, P.E., of Gmuer Engineering, LLC., applicant and agent for Tara Forest LLC and Alachua Development Co, LLC., property owners, for consideration of the preliminary plat of Tara Forest East, which proposes the subdivision of the ±148.76 acre subject property into a total of 340 lots, with associated right-of-way and common areas. The preliminary plat indicates the development will be constructed in 10 (ten) phases, with the first phase consisting of 32 lots. The first phase would connect to an extension of NW 161st Ave, west of the intersection of NW 147th Drive. As a part of Phase 2, an additional connection would be made to CR 241, approximately ½ mile north of Mebane Middle School.

The subject property consists of Parcel Numbers 03067-005-000, 03067-005-001, 03067-000-000, and 03067900-000, and is located north of Lowe's and the Baywood subdivision, south of the Dogwood Acres subdivision and west of Main Street/ NW 141st Street.

The proposed Tara Forest East subdivision would consist of lots approximately 10,000 square feet (0.23 acre) in size, with a majority being 80' wide by 125' deep. The preliminary plat proposes a series of common areas along the northern and eastern property boundaries, as well as several. A 50' wide common area will be located between any lots and the northern property line, including an approximately 15' wide area outside of the stormwater drainage system.

Development within the proposed subdivision would connect to potable water and wastewater facilities. Stormwater for the proposed development would be conveyed to and treated by seven stormwater retention areas. Stormwater will be conveyed to the retention areas using a combination of traditional underground pipes and "transitional swales"- long, shallow swales along the front of the lots that help to percolate and treat stormwater before reaching a retention basin. An analysis of the development's impact on other public facilities, including transportation, potable water, sanitary sewer, solid waste, and public schools, is provided within this report.

While no Level of Service standard will be degraded as a result of this application, there are potential offsite impacts associated with traffic that have been specifically analyzed and reviewed as a part of this preliminary plat application. Based on the potential impacts, conditions related to traffic and transportation are proposed to mitigate any negative impacts that may occur in the future. These include future traffic studies to analyze the intersection of CR241 and SR235 and the intersection of SR235 and US 441 as the development builds out. Additionally, the applicant will be required to coordinate with the Florida Department of Transportation to "optimize" the traffic signal at the intersection NW 147th Drive and US 441.

Section 2.4.10(G)(2) of the City's Land Development Regulations (LDRs) establishes the requirements for a preliminary plat. An analysis of the application's compliance with the applicable standards of this section has been provided within this report.

SURROUNDING USES

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

Table 1. Surrounding Land Uses

Direction	Existing Use(s)	FLUM Designation(s)	Zoning District(s)
North	Dogwood Acres Subdivision	Agriculture	Agricultural ("A")
South	Vacant Residential Land/ Lowe's Home Improvement	Medium Density Residential/ Commercial	Residential Single Family - 6 ("RSF-6")/ Commercial Intensive ("CI")
West	Vacant Residential Lands	Moderate Density Residential	Residential Single Family- 4 ("RSF-4")
East	County Road 241/ Alachua Realty Co Addition to Alachua	Moderate Density Residential	Residential Single Family - 3 ("RSF-3")

Map 1. Vicinity Map

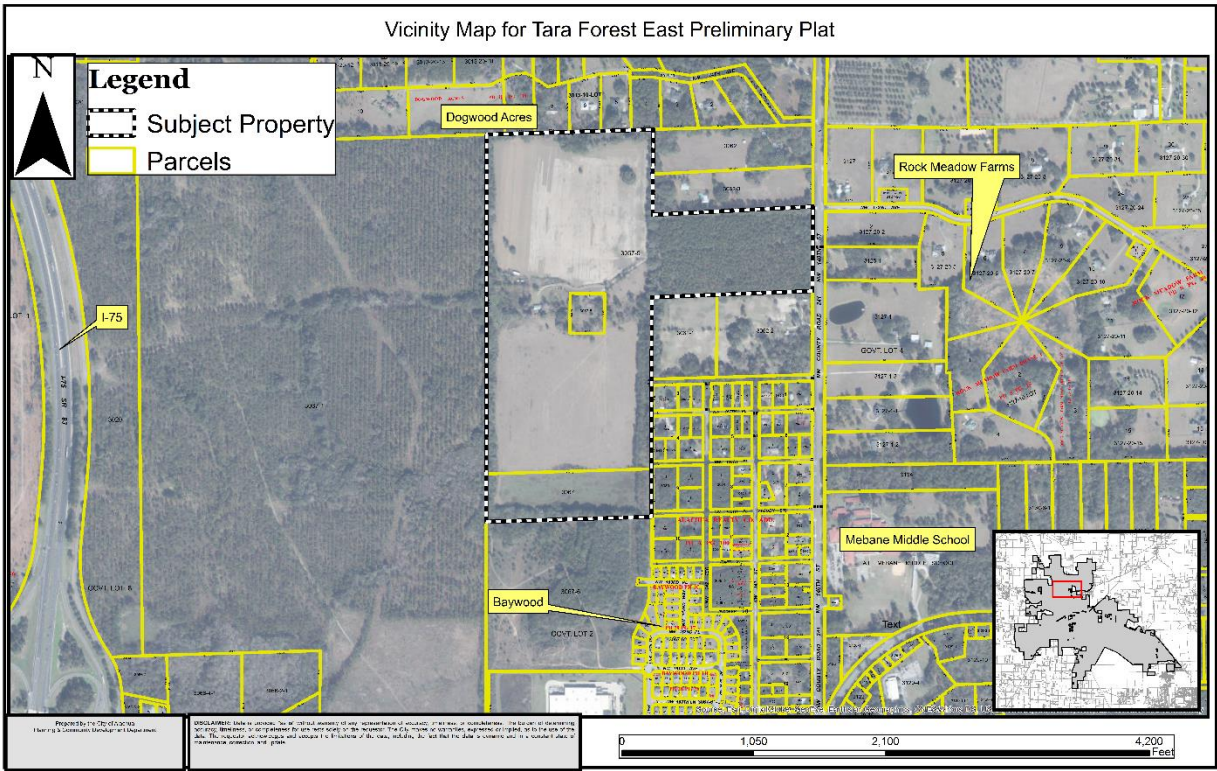


Illustration 1. Overall Site Plan for Tara Forest East Preliminary Plat



NEIGHBORHOOD MEETING

The purpose of a Neighborhood Meeting is to educate the owners of nearby land and any other interested members of the public about the project and to receive comments regarding the project.

A Neighborhood Meeting was held on Friday, September 20, 2019, at the intersection of NW 161st Ave and NW 147th Drive (approximate location of proposed entrance to Tara Forest East), to educate the owners of nearby land and any other interested members of the public about the application. As required by Section 2.2.4 of the LDRs, all property owners within 400 feet of the subject property and any organizations or persons who have registered to receive notification of applications for development were notified of the meeting. In addition, a notice of the meeting was published in a newspaper of general circulation. The applicant's agent was present and available to answer questions. As evidenced by materials submitted by the applicant, the meeting was attended by eight (8) members of the public. A summary of the discussion which occurred at the Neighborhood Meeting has been provided by the applicant and is included within the application materials.

A previous Neighborhood Meeting was held on Saturday, December 1st, 2018 at the Alachua Branch Library. This meeting was attended by three (3) members of the public.

CONSISTENCY WITH THE COMPREHENSIVE PLAN

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

Future Land Use Element

GOAL 1: Future Land Use Map 2025:

The City of Alachua shall maintain a Future Land Use Map in order to effectively guide development in a sustainable manner and to ensure economic prosperity and stability while maintaining a high quality of life for all of its present and future citizens.

Objective 1.2: Residential

The City of Alachua shall establish three Residential land use categories to ensure an orderly urban growth pattern that makes the best use of available lands for residential development.

Policy 1.2.a: Moderate density residential (0 to 4 dwelling units per acre): The moderate density residential land use category allows residential development at a maximum density of 4 dwelling units per acre. The following uses are allowed in the moderate density residential land use category:

1. Single family, conventional dwelling units;
2. Accessory dwelling units;
3. Manufactured or modular homes meeting certain design criteria
4. Mobile homes only within mobile home parks;
5. Duplexes and quadplexes;
6. Townhomes;
7. Residential Planned Developments;
8. Supporting community services, such as schools, houses of worship, parks, and community centers

Analysis of Consistency with Goal 1, Objective 1.2, and Policy 1.2.a: The proposed rezoning would comply with this Policy as the maximum number of dwelling units per acre would not be exceeded, and the uses proposed are consistent with the uses allowed under this policy.

Objective 5.1: Natural features: The City shall coordinate Future Land Use designations with appropriate topography, soils, areas of seasonal flooding, wetlands and habitat during review of proposed amendments to the Future Land Use Map and the development

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

- Policy 5.1.a: Topography: The City shall protect the natural topography of the City, including steep and seepage slopes, by requiring new development to include techniques to minimize negative impacts on the natural terrain. An emphasis will be placed on retaining the natural function of seepage slopes during development. Additionally, retention of existing native vegetation will be encouraged as one method of protecting slopes.
- Policy 5.1.b: Soils: The City shall ensure soil protection and intervention measures are included in the development review process.
- Policy 5.1.c: Flood prone areas: The City shall require as part of the development review process the identification of FEMA flood zone areas. Where necessary, base flood elevations and minimum finished floor elevations shall be established. The City shall also require finished floor elevations on subdivision plats, site plans and building permit plans when necessary to determine compliance with flood prone area regulations. The City shall establish standards for a limitation on filling in flood prone areas.
- Policy 5.1.d: Wetlands: The City shall utilize statewide wetland delineation methodology in accordance with Florida Administrative Code (FAC) and regulations adopted by the FDEP and the Suwannee River Water Management District.
- Policy 5.1.e: Habitat: The City shall require as part of the development review process, an inventory of listed species for all new developments in areas identified as known habitat for listed species if listed species are known to exist in close proximity to the development. The survey shall include detailed information regarding type, quantity, location, and habitat requirements for any listed species identified. A de minimus threshold for properties required to complete the inventory shall be established in the City's Land Development Regulations.

Analysis of Consistency with Objective 5.1 and Policies 5.1.a – e: Based on the assessment provided by the applicant, there are no significant environmental resources that would limit or impact development. As a condition of approval, the applicant will be required to provide a 100% gopher tortoise with submission of a final plat.

Objective 5.2: Availability of facilities and services: All new development shall be planned and constructed concurrently with the availability of facilities and services necessary for the development.

Analysis of Consistency with Objective 5.2: The subject property is located within the City's potable water and wastewater service areas, as defined in Policies 1.2.a and 4.2.a of the Community Facilities and Natural Groundwater Aquifer Recharge Element of the Comprehensive Plan, and will be required to connect to the City of Alachua's potable water and wastewater system.

GOAL 9: Water and Wastewater Service:

The City will ensure that new development within the corporate limits, where potable water and wastewater service are available, as defined in Policy 1.2.a and Policy 4.2.a of the Community Facilities and Natural Groundwater Aquifer Recharge Element of the Comprehensive Plan, shall connect to the City of Alachua's potable water and wastewater system.

Policy 9.2: Any new residential subdivision within the corporate limits, where potable water service is available, as defined in Policy 4.2.a of the Community Facilities and Natural Groundwater Aquifer Recharge Element of the City of Alachua Comprehensive Plan, regardless of size, that is within either a Residential or Agriculture Future Land Use Map Designation shall connect to the City of Alachua's potable water system. Any new residential subdivision within the corporate limits, where wastewater service is available, as defined in Policy 1.2.a of the Community Facilities and Natural Groundwater Aquifer Recharge Element of the City of Alachua Comprehensive Plan, regardless of size, that is within a Residential Future Land Use Map Designation shall connect to the City of Alachua's wastewater system.

Analysis of Consistency with Goal 9 and Policy 9.2: The subject property is within the potable water and wastewater service area. Any development of the subject property will be required to connect to the potable water and wastewater systems at the time of development.

Housing Element

Policy 1.1.a: The City shall encourage development of a variety of housing types including conventional single family homes, accessory dwelling units, multi-family units, group homes, assisted living facilities, foster care facilities, mobile homes and manufactured housing, and shall ensure that appropriate land use designations and zoning districts exist to accommodate each type.

Analysis of Consistency with Policy 1.1.a: This project would support additional housing within the City, thereby furthering Policy 1.1.a.

Recreation Element

Policy 1.2.b: The City shall adhere to a minimum level of service of five (5.0) acres of community, neighborhood or pocket park, per 1,000 persons, with a minimum of 20 percent of this in improved, passive parks.

Analysis of Consistency with Policy 1.2.b: An analysis of the impacts to recreation facilities has been provided within this report. The proposed development would not result in a failure of the City's adopted level of service for recreation and park area.

Transportation Element

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

Analysis of Consistency with Objective 1.1: An analysis of the impacts to transportation facilities has been provided within this report. The proposed development would not result in a decrease in the level of service for transportation facilities monitored for concurrency.

Community Facilities & Natural Groundwater Aquifer Recharge Element

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

1. A gravity wastewater system, wastewater pumping station, or force main exists within $\frac{1}{4}$ mile of the property line of any residential subdivision with more than 5 units, or any multi-family residential development, or any commercial development, or any industrial development and the gravity wastewater system, wastewater pumping station, or force main can be accessed through public utility easements or right of ways. The distance shall be measured as required for construction of the infrastructure along public utility easements and right of ways.

Analysis of Consistency with Policy 1.2.a: The subject property is located within the wastewater service area, and any future development on the subject property will be required to connect to the wastewater system.

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

<u>FACILITY TYPE</u>	<u>LEVEL OF SERVICE STANDARD</u>
Solid Waste Landfill	.73 tons per capita per year

Analysis of Consistency with Objective 2.1.a: An analysis of the impacts to solid waste facilities has been provided within this report. The proposed amendment would not result in a decrease in the level of service for solid waste disposal facilities.

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

1. A water main exists within $\frac{1}{4}$ mile of any residential subdivision with more than 5 units, or any multi-family residential development, or any commercial development, or any industrial development and water service can be accessed through public

utility easements or right of ways. The distance shall be measured as required for construction of the infrastructure along public utility easements and right of ways.

Analysis of Consistency with Policy 4.1.b: The subject property is located within the potable water service area, and any future development on the subject property will be required to connect to the potable water system.

Conservation and Open Space Element

OBJECTIVE 1.3: Listed Species

The City shall protect species listed by State and Federal agencies as endangered, threatened or of special concern, and their habitats.

Policy 1.3.a: The City shall ensure that its ordinances, regulations and policies protect listed species and their habitats.

Policy 1.3.b: The City shall utilize the development review process, land acquisition programs, environmental regulatory partnerships, stewardship programs and public education to protect listed species and their habitat, and prevent extinction of or reduction in populations of listed species.

Policy 1.3.c: The City shall obtain data from the Florida Fish and Wildlife Conservation Commission, Alachua County Environmental Protection Department, Florida Department of Environmental Protection, to maintain a periodically updated inventory of listed species and habitats located within City limits or immediately adjacent to City limits. The City will use the Florida Natural Areas Inventory as a base inventory.

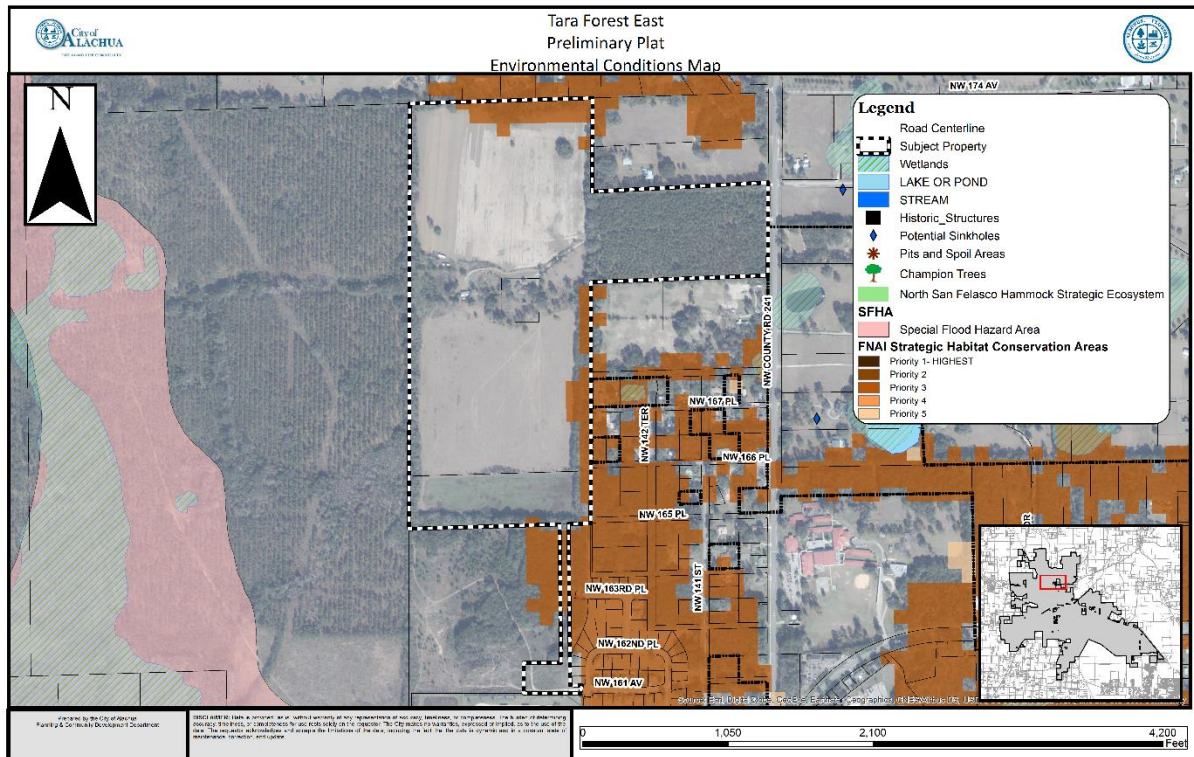
Policy 1.3.d: The City shall require prior to development approval, an inventory of listed species for all new developments in areas identified as known habitat for listed species. The inventory shall include detailed information regarding type, quantity, and location and habitat requirements for any listed species identified. De minimus threshold for properties required to complete the inventory shall be established in the City's Land Development Regulations.

Policy 1.3.e: The City's land use designations shall provide for the protection of threatened and endangered species.

Analysis of Consistency with Objective 1.3 and Policies 1.3.a - e: Based on the assessment provided by the applicant, there are no significant environmental resources that would limit or impact development. As a condition of approval, the applicant will be required to provide a 100% gopher tortoise with submission of a final plat.

ENVIRONMENTAL CONDITIONS & SITE SUITABILITY ANALYSIS

Map 2. Environmental Features



Wetlands

According to National Wetlands Inventory, no potential wetlands are located on the subject property. Any wetlands identified must be delineated and protected in accordance with the applicable protection standards.

Evaluation: No wetlands have been identified on subject property. If wetlands are identified on subject property at a later time, the applicable standards in the City's Comprehensive Plan, Land Development Regulations, and Suwannee River Water Management District (SRWMD) regulations would apply to those areas identified as wetlands; therefore, there are no issues related to wetland protection.

Strategic Ecosystems

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

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

Regulated Plant & Animal Species

Based on the environmental assessment provided by the applicant, there are no significant environmental resources that would limit or impact development.

Evaluation: Based on the assessment provided by the applicant, there are no significant environmental resources that would limit or impact development. As a condition of approval, the applicant will be required to provide a 100% gopher tortoise with submission of a final plat.

Soil Survey

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

Soil Type	Hydrologic Group	Drainage Class	Dwellings without basements	% of Subject Property (may not total to 100% due to rounding)
Arredondo fine sand, 0 to 5% slopes	A	Well drained	Not limited	14.6%
Fort Meade fine sand, 0 to 5 percent slopes	A	Well drained	Not limited	11.7%
Millhopper sand, 0 to 5 percent slopes	A	Moderately well drained	Not Limited	14.7%
Kendrick Sand, 2 to 5 percent slopes	B	Well drained	Not Limited	1.3%
Norfolk loamy fine sand, 2 to 5 percent slopes	B	Well drained	Not limited	5.9%
Lochloosa fine sand, 2 to 5 percent slopes	A	Somewhat poorly drained	Not limited	12.3%
Millhopper-Urban land complex, 0 to 5 percent slopes	A	Moderately well drained	Not limited	0.5%
Gainesville sand, 0 to 5 percent slopes	A	Well drained	Not limited	7.9%
Millhopper sand, 5 to 8 percent slopes	A	Moderately well drained	Not limited	0.1%
Lochloosa fine sand, 5 to 8 percent slopes	B	Somewhat poorly drained	Not limited	11.0%
Kendrick sand, 5 to 8 percent slopes	B	Well drained	Not limited	8.4%
Bivans sand, 5 to 8 percent slopes	C/D	Poorly drained	Very limited	6.2%
Norfolk loamy fine sand, 5 to 8 percent slopes	B	Well drained	Not limited	5.3%

Evaluation: The soil types located within a majority of the subject property (93.8%) do not pose any significant limitations for residential dwellings. Therefore, there are no issues related to soil suitability. Any future development would require that any soil limitations be addressed at the time of development.

Flood Potential

Panels 110D, 120D, 130D, 140D of the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Series, dated June 16, 2006, indicates that the subject property contains areas with Flood Zone "X" designations (areas determined to be outside of the 500-year floodplain).

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

Karst-Sensitive Features

Karst sensitive areas include geologic features, such as fissures, sinkholes, underground streams, and caverns, and are generally the result of irregular limestone formations. The subject property is located within an area where sinkholes may potentially allow hydrologic access to the Floridan Aquifer System, however, best available data indicates that no sinkholes or known indicators of sinkhole activity are located on the subject property.

Evaluation: There are no geologic features located on the subject property which indicate an increased potential for karst sensitivity.

Wellfield Protection Zone

Policy 7.2.1 of the Future Land Use Element of the Comprehensive Plan establishes a 500 foot radial buffer around city-owned potable water well.

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

Historic Structures and Markers

The subject property does not contain any historic structures or markers as determined by the State of Florida and the Alachua County Historic Resources Inventory.

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

FINDINGS OF FACT: COMPLIANCE WITH LAND DEVELOPMENT REGULATIONS

SECTION 2.4.10(G) (2) (e), PRELIMINARY PLAT STANDARDS

Section 2.4.10(G) (2) (e) of the City’s Land Development Regulations (LDRs) establishes the standards with which all major subdivision preliminary plats must be found to be compliant. The application has been reviewed for compliance with the standards of Section 2.4.10(G) (2) (e.) An evaluation and findings of the application’s compliance with the applicable standards of Section 2.4.10(G)(2)(e) is provided below.

2.4.10(G) (2) (e) Subdivision preliminary plat standards. A subdivision preliminary plat shall be approved upon a finding the application complies with the standards in Article 7, Subdivision Standards, all other relevant provisions of these LDRs, and all other relevant City ordinances and regulations.

Evaluation & Findings: The application has been reviewed for and is found to be in compliance with the applicable standards of Article 7, Subdivision Standards, including standards related to block length, lot arrangement, dimensions and design, and street arrangement.

PUBLIC FACILITIES IMPACT

The analysis of each public facility provided below represents an analysis of the impacts which would be generated by the proposed development, which consists of 340 single-family residential units.

At present, the impacts which would be generated by the proposed development are acceptable and are not anticipated to degrade the Level of Service (LOS) of any public facility. Facility capacity will be re-evaluated at the time of the review of the final plat, which serves as the final development order. Facility capacity must be available to support the proposed development prior to the issuance of a final development order.

Table 3. Affected Comprehensive Plan Roadway Segments¹

Segment Number ^{2, 3}	Segment Description	Lanes	Functional Classification	Area Type	LOS
5 (107/4107)	US Hwy 441 (from SR235 to NCL)	4D	Principle Arterial	Urban Trans	D
9 (109/4109)	SR 235 (from US 441 to NCL)	2U	Major Collector	Comm	D

1 Source: City of Alachua Comprehensive Plan, Traffic Circulation Element.
2 For developments generating 1,000 trips or greater, affected roadway segments are identified as all those wholly or partially located within ½ mile of the development's ingress/egress, or to the nearest intersecting major street, whichever is greater, and all roadway segments for which the proposed development's impacts are 5% or greater on the Maximum Service Volume (MSV) of the roadway [Section 2.4.14(H)(2)(b) of the LDRs].
3 FDOT roadway segment number shown in parenthesis. For the purposes of concurrency management, COA Comprehensive Plan segments that make up a portion of a larger FDOT roadway segment will be evaluated together when determining post development roadway capacity.

Table 4. Potential Trip Generation¹

	Land Use	AADT (Enter/Exit)	AM Peak Hour (Enter/Exit)	PM Peak Hour (Enter/Exit)
Single Family Detached Dwelling units (340)	Single- Family, Detached ² (ITE Code 230)	3,206 (1,603/1,603)	246 (42/204)	329 (220/109)

¹ Source: ITE Trip Generation, 10th Edition.
² Formulas: AADT – 9.44 trips per dwelling unit x 340 dwelling units (50% entering/50% exiting); AM Peak Hour – 0.74 trips per dwelling unit x 340 dwelling units (17% entering/83% exiting); PM Peak Hour – .99 trips per dwelling unit x 340 dwelling units (67% entering/33% exiting).

Table 5. Potential Impact on Affected Comprehensive Plan Roadway Segments

Traffic System Category	SR 235 (from US 441 to NCL) ¹	US Hwy 441 (from SR235 to NCL) ¹
Maximum Service Volume ²	14,400	39,000
Existing Traffic ³	7,537	25,926
Reserved Trips ⁴	32	3,637
Available Capacity ⁴	6,831	9,437
Potential Impact Generated by Proposed Preliminary Plat ⁵	1,257	1,924
Residual Capacity after Proposed Preliminary Plat⁶	5,574	7,513
PM Peak Hour Traffic Analysis	SR 235 (from US 441 to NCL) ¹	US Hwy 441 (from SR235 to NCL) ¹
Maximum Service Volume ²	1,290	3,510
Existing Traffic ³	716	2,463
Reserved Trips ⁴	2	383
Available Capacity ⁴	572	664
Potential Impact Generated by Proposed Preliminary Plat ⁵	129	197
Residual Capacity after Proposed Preliminary Plat⁶	443	467

¹ FDOT roadway segment number shown in parenthesis. For the purposes of concurrency management, COA Comprehensive Plan segments that make up a portion of a larger FDOT roadway segment will be evaluated together when determining post development roadway capacity.
² Source: FDOT 2018 Quality/Level of Service Handbook, Generalized Annual Average Daily Volumes and Generalized Peak Hour Two-Way Volumes for Areas Transitioning to Urbanized Areas or Areas of 5,000 Not in Urbanized Areas.
³ Florida State Highway System Level of Service Report 2016, Florida Department of Transportation, District Two (published August 2017).
⁴ Source: City of Alachua January 2020 Development Monitoring Report.
⁵ Trip Assignment: US 441 (from SR 235 to NCL): 60%; SR 235 (from US 441 to NCL): 39.2%; CR 241 to NCL: 0.8%.
⁶ The application is for a Preliminary Development Order. Facility capacity and concurrency will **not** be reserved.

Evaluation: It is anticipated that the proposed amendment will not adversely affect the Level of Service (“LOS”) for the affected roadway segments, and the potential impact of 340 single-family residential dwellings is therefore acceptable. This analysis is based on the maximum development potential of 340 single-family residential dwellings. Concurrency and impacts to the City’s transportation network will be reevaluated at construction plan and Final Plat stage.

While no Level of Service standard will be degraded as a result of this application, there are potential offsite impacts associated with traffic that have been specifically analyzed and reviewed as a part of this preliminary plat application. Based on the potential impacts, conditions related to traffic and transportation are proposed to mitigate any negative impacts that may occur in the future. These include future traffic studies to analyze the intersection of CR241 and SR235 and the intersection of SR235 and US 441 as the development builds out. Additionally, the applicant

will be required to coordinate with the Florida Department of Transportation to “optimize” the traffic signal at the intersection NW 147th Drive and US 441.

Potable Water Impacts

Table 6. Potable Water Impacts

System Category	Gallons Per Day
Current Permitted Capacity*	2,300,000
Less Actual Potable Water Flows*	1,295,603
Reserved Capacity*	135,767
Potential Potable Water Demand from Proposed Application **	93,500
Residual Capacity	775,130
Percentage of Permitted Design Capacity Utilized	66.30%
<i>Sources:</i> <i>* City of Alachua January 2020 Development Monitoring Report</i> <i>**City of Alachua Comprehensive Plan Potable Water Level of Service of 275 gallons/du/ day</i>	

Evaluation: The proposed amendment would increase the maximum potential demand from the development of the subject property to 93,500 gallons per day. This analysis is based on the maximum development potential of 340 single-family residential dwellings that would be permitted by the proposed preliminary plat. Concurrency and impacts to the City’s utility systems will be reevaluated at construction plan and Final Plat stage. It is anticipated that the proposed amendment will not adversely affect the Level of Service (“LOS”) for potable water facilities, and the impacts are therefore acceptable.

Sanitary Sewer Impacts

Table 7. Sanitary Sewer Impacts

System Category	Gallons Per Day
Treatment Plant Current Permitted Capacity*	1,500,000
Less Actual Treatment Plant Flows*	729,000
Reserved Capacity*	127,878
Projected Potential Wastewater Demand from Proposed Application **	85,000
Residual Capacity	558,122
Percentage of Permitted Design Capacity Utilized	62.79%
<i>Sources:</i> <i>* City of Alachua January 2020 Development Monitoring Report</i> <i>**City of Alachua Comprehensive Plan Potable Water Level of Service of 250 gallons/du/ day</i>	

Evaluation: The proposed amendment would increase the maximum potential demand from the development of the subject property to 85,000 gallons per day. This analysis is based on the maximum development potential of 340 single-family residential dwellings that would be permitted by the proposed preliminary plat. Concurrency and impacts to the City’s utility systems will be reevaluated at the construction plan and final plat review stage. It is anticipated that the proposed amendment will not adversely affect the Level of Service (“LOS”) for sanitary sewer facilities, and the impacts are therefore acceptable.

Recreational Impacts

Table 8a. Recreational Impacts

System Category	Acreage
Existing City of Alachua Recreation Acreage ¹	135.48
Acreage Required to Serve Existing Population ²	50.78
Reserved Capacity ¹	2.22
Potential Demand Generated by Development ³	3.98
Residual Recreational Capacity After Impacts	78.50
Sources: ¹ City of Alachua January 2020 Development Monitoring Report. ² University of Florida, Bureau of Economic & Business Research, Estimates of Population by County and City in Florida, April 1, 2018; Policy 1.2.b, Recreation Element (Formula: 10,155 persons / [5 acres/1,000 persons]) ³ US Census Bureau; Policy 1.2.b, Recreation Element (Formula: 2.34 persons per dwelling x 340 dwellings / [5 acres/1,000 persons])	

Table 8b. Improved Passive Park Space Analysis

Minimum Improved Passive Park Space Required to Serve Existing Population & Reserved Capacity ¹	10.60 acres
Acreage Required to Serve Demand Generated by Development ²	0.80 acres
Total Area Required to Serve Existing Population, Reserved Capacity, & Demand Generated by Development	11.40 acres
Existing Improved Passive Park Space ¹	34.82 acres
Improved, Passive Park Space Utilized by Existing Population, Reserved Capacity, & Demand Generated by Development³	32.74%
¹ Source: City of Alachua January 2020 Development Monitoring Report. ² Formula: Recreation Demand Generated by Development (3.98 acres) x 20%. ³ Formula: Total Improved Passive Park Space / (Acreage Required to Serve Existing Population + Reserved Capacity + Acreage Required to Serve Demand Generated by Development.)	

Evaluation: The proposed amendment would increase the maximum potential demand from the development of the subject property acres by 3.98 acres, and for passive park space by 0.80 acres. Concurrency and impacts to the City's recreation system will be reevaluated at the construction plan and final plat stage. It is anticipated that the proposed amendment will not adversely affect the Level of Service ("LOS") of recreational facilities; therefore, the impacts are acceptable.

Solid Waste Impacts

Table 9. Solid Waste Impacts

System Category	Lbs Per Day	Tons Per Year
Existing Demand ¹	40,620.00	7,413.15
Reserved Capacity ²	9,324.03	1,701.64
Projected Solid Waste Demand from Application ³	3,182.40	580.79
New River Solid Waste Facility Capacity⁴	50 years	
Sources: ¹ University of Florida, Bureau of Economic & Business Research, Estimates of Population by County and City in Florida, April 1, 2018; Policy 2.1.a, CFNGAR Element (Formula: 10,155 persons x 0.73 tons per year) ² City of Alachua January 2020 Development Monitoring Report ³ Policy 2.1.a, CFNGAR Element (Formula: 2.34 persons per dwelling x 340 dwellings x 0.73 tons per year) ⁴ New River Solid Waste Facility, April 2019		

Evaluation: The proposed amendment would increase the maximum potential demand from the development of the subject property by approximately 581 tons per year. Concurrency and impacts to the solid waste system will be reevaluated at the construction plan and final plat review stage. It is anticipated that the proposed amendment will not adversely affect the Level of Service (“LOS”) of solid waste facilities; therefore, the impacts are acceptable.

Public School Impact

A School Capacity Review was submitted to The School Board of Alachua County (SBAC) in accordance with the City’s Comprehensive Plan, specifically Policies 1.1.b, 1.1.c, 1.1.e, and 1.1.f of the Public School Facilities Element. According to the School Capacity Review report submitted to the City by the School Board of Alachua County on August 22, 2019, the students generated by the proposed development can be reasonably accommodated for the five, ten, and twenty year planning periods at the elementary, middle, and high school levels.

Upon submittal of a final subdivision plat, the development will be subject to a concurrency review and determination of the availability of school capacity at the time of such review.

EXHIBIT “A”
TO
TARA FOREST EAST
PRELIMINARY PLAT
STAFF REPORT

CONDITIONS:

1. Transportation and Traffic:
 - a. The following improvements shall be made, at the developer’s expense, and designed in a manner acceptable by the City:
 - i. A sidewalk shall be extended from the development within the right of way of NW 166th Place to the termination of existing pavement for pedestrian connectivity. The sidewalk shall be shown on the Construction Plans for the first phase of the project.
 - b. The developer shall coordinate with the Florida Department of Transportation to complete the synchronization(also referred to as optimization) of the signal at NW 147th Drive and US HWY441 with existing traffic signals along 441. A letter from the Florida Department of Transportation certifying completion of the synchronization (optimization) shall be provided prior to the completion of Phase 1, as described in the Preliminary Plat approved by the City Commission on _____(date of approval).
 - c. A revised traffic impact analysis, for the purpose of reviewing safety and operational impacts, shall be completed before the completion of Phase 4, as described in the Preliminary Plat approved by the City Commission on _____(date of approval). The study shall be coordinated with the Florida Department of Transportation , Alachua County Public Works, and the City of Alachua and shall specifically analyze:
 - i. The intersection of SR 235 and CR 241
 - ii. The intersection of US Highway 441 and SR 235
 - iii. The intersection of NW 147th Drive and US Highway 441
 - d. The developer shall make any improvements required, at Developer’s expense, associated with the proportionate share of any deficiencies identified in the revised traffic impact analysis. These improvements shall be completed before the completion of Phase 6, as described in the Preliminary Plat approved by the City Commission on _____(date of approval).
 - e. Traffic calming measures shall be provided approximately every 500 feet and at connections to existing subdivisions. Traffic calming measures include, but are not limited to traffic islands, speed humps, speed bumps, speed tables, or 4 way controlled intersections.
2. A 100% gopher tortoise survey shall be completed for any area subject to development in any final plat submitted. The survey shall be valid for a period of three years from date of report and must include a list of all local, state, and federal permits required for relocation of any gopher tortoises encountered on site.
3. Modifications to these conditions shall only be done in accordance with the preliminary plat approval process.
4. The applicant agrees that Conditions 1, including all subparts, 2 and 3 as stated above do not inordinately burden the land and shall be binding upon the property owner, including any subsequent property owners, successors, or assigns, and that the development shall comply with Conditions 1 through 3 as stated herein.

EXHIBIT “B”

TO

**TARA FOREST EAST
PRELIMINARY PLAT
STAFF REPORT**

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



City of Alachua

ADAM BOUKARI
CITY MANAGER

PLANNING & COMMUNITY DEVELOPMENT
DIRECTOR KATHY WINBURN, AICP

January 23, 2020

Also sent by electronic mail to chrisg@gmuereng.com

Christopher Gmuer, PE
Gmuer Engineering, Inc.
2603 NW 13th Street
Box 314
Gainesville, FL 32609

RE: Notice of Hearing to be Scheduled for Tara Forest East Preliminary Plat

Dear Mr Gmuer:

On January 23, 2020 the City of Alachua received your updated applications for the above referenced project.

Based on review of the materials submitted, the City has determined that the application can now be scheduled for a hearing before the Planning and Zoning Board.

You must provide two (2) *double-sided, three-hole punched, color sets* of each **complete** application package, seven (7) full size sets of site plans, and a digital copy of all materials in PDF format on a CD *no later than 10 business days prior to the PZB Meeting at which your application is scheduled to be heard*. The application has been scheduled for the **February 11, 2020** Planning and Zoning Board meeting; therefore, the above referenced materials must be submitted to the City no later than 12 PM on **Tuesday, January 28, 2020**. Materials may be submitted earlier than this date.

Should you have any questions, please feel free to contact me at (386) 418-6100, ext. 108 or via email at ahall@cityofalachua.com.

Sincerely,

Adam Hall, AICP
Planner

c: Kathy Winburn, AICP, Planning Director
Justin Tabor, AICP, Principal Planner
File



City of Alachua

ADAM BOUKARI
CITY MANAGER

PLANNING & COMMUNITY DEVELOPMENT
DIRECTOR KATHY WINBURN, AICP

January 23, 2020

Also sent by electronic mail to chrisg@gmuereng.com

Christopher Gmuer, PE
Gmuer Engineering, Inc.
2603 NW 13th Street
Box 314
Gainesville, FL 32609

**RE: Development Review Team (DRT) Letter No. 5 for
Tara Forest East (Preliminary Plat)**

Dear Mr Gmuer:

On January 6, 2020 the City of Alachua received your revised application for the approval of a preliminary plat which proposes to subdivide a ±113.49 acre subject property into a total of ~~320~~ 340 lots (consisting of Tax Parcel Numbers 03067-000-000, 03067-005-000, and 03067-005-001), with associated common areas, open space, stormwater management facilities, and right-of-way.

The revised application has been reviewed for compliance with the applicable review standards, including the City's Comprehensive Plan and Land Development Regulations (LDRs). Based upon Staff's review, revisions must be made to the application before it may be scheduled for a public hearing before the City's Planning & Zoning Board (PZB). A meeting was held on June 20, 2019 to discuss the needed revisions to the submitted application. Please address all insufficiencies outlined below in writing and provide an indication as to how they have been addressed by 3:00 PM on Wednesday, February 5, 2020. A total of four (4) copies of the complete application package (i.e., all application materials and attachments) and a CD containing a PDF of all application materials must be provided by this date. Upon receipt of your revised application, Staff will notify you of any remaining insufficiencies which must be resolved, if any, before the item may be scheduled for a public hearing before the PZB. Please note that if Staff determines that the revised submission requires outside technical review by the City, your application may be delayed in order to allow for adequate review time.

Please address the following insufficiencies (begins on next page):

Deficiencies to be Addressed

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

E. New Comments based on November 12, 2019 Submittal

f. Traffic Impact Analysis Comments

- iii. The proposed connection to NW 163rd Place as presented is not acceptable. The connection shown with Tara Forest East must be to NW 147th Drive. A conceptual intersection design must be provided. Design of this intersection may have significant impacts to proposed Tara Baywood Subdivision as well.

New Comment (12/19/19): While complete (100%) intersection design is not required at this time, Staff's concerns about conceptual design still remain. As currently shown it does not appear that the intersection will be adequately designed to accommodate build out traffic of Tara Forest East and Tara Baywood. New primary road entrance into Tara Baywood and Tara Forest should be between 300 and 600' from existing roadway in Baywood subdivision. Additionally, sufficient right-of-way should be provided to accommodate any foreseeable improvements that may be required to that intersection, including provision of turn lanes, landscape islands, etc.

New Comment (01/16/2020):. Additional traffic calming is required east of roundabout located at intersection of the NW 163rd Place extension.

If you have any questions regarding the information above, please contact me at 386-418-6100 x 108 or via e-mail at ahall@cityofalachua.com. We look forward to receiving your revised application.

Sincerely,



Adam Hall, AICP
Planner

/attachments

cc: Kathy Winburn, AICP, Planning & Community Development Director
Justin Tabor, AICP, Principal Planner
Project File



City of Alachua

ADAM BOUKARI
CITY MANAGER

PLANNING & COMMUNITY DEVELOPMENT
DIRECTOR KATHY WINBURN, AICP

December 19, 2019

Also sent by electronic mail to chrisg@gmuereng.com

Christopher Gmuer, PE
Gmuer Engineering, Inc.
2603 NW 13th Street
Box 314
Gainesville, FL 32609

**RE: Development Review Team (DRT) Letter No. 4 for
Tara Forest East (Preliminary Plat)**

Dear Mr Gmuer:

On December 12, 2019 the City of Alachua received your revised application for the approval of a preliminary plat which proposes to subdivide a ±113.49 acre subject property into a total of ~~320~~ 340 lots (consisting of Tax Parcel Numbers 03067-000-000, 03067-005-000, and 03067-005-001), with associated common areas, open space, stormwater management facilities, and right-of-way.

The revised application has been reviewed for compliance with the applicable review standards, including the City's Comprehensive Plan and Land Development Regulations (LDRs). Based upon Staff's review, revisions must be made to the application before it may be scheduled for a public hearing before the City's Planning & Zoning Board (PZB). A meeting was held on June 20, 2019 to discuss the needed revisions to the submitted application. Please address all insufficiencies outlined below in writing and provide an indication as to how they have been addressed by 3:00 PM on Monday, January 6, 2020. A total of four (4) copies of the complete application package (i.e., all application materials and attachments) and a CD containing a PDF of all application materials must be provided by this date. Upon receipt of your revised application, Staff will notify you of any remaining insufficiencies which must be resolved, if any, before the item may be scheduled for a public hearing before the PZB. Please note that if Staff determines that the revised submission requires outside technical review by the City, your application may be delayed in order to allow for adequate review time.

Please address the following insufficiencies (begins on next page):

Deficiencies to be Addressed

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

A. Compliance with Land Development Regulations (LDRs)

2. Article 7, Subdivision Standards

- ii. Per Section 7.2.5 (D)(2)(a), a notation will be required on final plat indicating that the land used for the temporary T or L shaped cul-de-sac shall be converted to a traffic circle, speed table, or other traffic calming device.

COMMENT: Section 7.2.5 (D)(2)(a) states that the land used for the cul-de-sac shall be converted to a traffic circle, speed table, or other traffic calming device. This area cannot be a platted lot. Once adjacent property is developed, it may be possible, through a subdivision process to plat those individual lots, but it is the responsibility of the developer and not the City that the covenants and restrictions provide for this to potentially occur. Any proposed future subdivision will be subject to all laws and ordinances in effect at the time of development application.

The connections to the west still do not appear to be T or L shaped. The connections to the south must also be T or L shaped. Staff has received an application to develop this property. However, the design of the current development application cannot be solely based on proposed development on adjacent property. Staff is proposing that a condition be added that would permit the applicant to modify the southern connections, through a modification of construction plans for Tara Forest East, when and if the Tara Baywood subdivision Final Plat is approved by the City Commission.

New Comment (12/19/19): Section 7.2.5 (D)(2) requires connections to adjacent properties and requires that these future connections be T or L shaped. Applicant has previously expressed concern regarding design of such T or L shaped street stub; to clarify, the T or L does not need to extend beyond the right-of-way width of 50'. Likewise, for the southern connections, the T or L should be on subject property.

E. Public Services/ Fire Marshall/ Outside Review

- a. Applicant must address any comments provided by Public Service Department, Fire Marshall or Outside Reviewer (attached).

NEW COMMENT: Please address all comments in the memo from the City of Alachua Public Services Department dated December 18, 2019, and the comments in the letter from Brian Kanely, P.E., of Volkert, Inc. in a letter dated December 18, 2019.

F. New Comments based on November 12, 2019 Submittal

f. Traffic Impact Analysis Comments

New Comment (12/19/19): Revised traffic study received 12/17/19. Review has been completed. See attached comments from Volkert. A condition will be included with the preliminary plat requiring a revised traffic impact analysis before 170th Certificate of Occupancy.

- i. A 25' easement to connect with NW 167th Place or NW 166th Place will be required. A sidewalk connecting to the pavement at the terminus of the pavement on NW 167th Place or NW 166th Place a minimum of 6' will be required. The remainder of the easement and any existing right of way should

be stabilized to allow for secondary fire truck access. Final design must be supplied with Construction Plans.

New Comment (12/19/19): The goal of the 25' easement is not only for pedestrian access, but also for emergency vehicle access. The proposed 10' wide easement is not sufficient as property owners may build to block easement to prevent emergency vehicle access. The two provided points of ingress/egress are not distantly located and share a common point of access from 441. Per Alachua County Fire Rescue, the stabilized width may be reduced to 20'. The proposed additional 10 feet may be provided as an easement over lots to prevent fencing/landscaping being placed to prevent emergency vehicle access.

- iii. The proposed connection to NW 163rd Place as presented is not acceptable. The connection shown with Tara Forest East must be to NW 147th Drive. A conceptual intersection design must be provided. Design of this intersection may have significant impacts to proposed Tara Baywood Subdivision as well.

New Comment (12/19/19): While complete (100%) intersection design is not required at this time, Staff's concerns about conceptual design still remain. As currently shown it does not appear that the intersection will be adequately designed to accommodate build out traffic of Tara Forest East and Tara Baywood. New primary road entrance into Tara Baywood and Tara Forest should be between 300 and 600' from existing roadway in Baywood subdivision. Additionally, sufficient right-of-way should be provided to accommodate any foreseeable improvements that may be required to that intersection, including provision of turn lanes, landscape islands, etc.

If you have any questions regarding the information above, please contact me at 386-418-6100 x 108 or via e-mail at ahall@cityofalachua.com. We look forward to receiving your revised application.

Sincerely,



Adam Hall, AICP
Planner

/attachments

cc: Kathy Winburn, AICP, Planning & Community Development Director
Justin Tabor, AICP, Principal Planner
Project File



City of Alachua

ADAM BOUKARI
CITY MANAGER

RODOLFO VALLADARES, P.E.
PUBLIC SERVICES DIRECTOR

INTER-OFFICE COMMUNICATION

DATE: Dec 19, 2019

TO: Kathy Winburn, AICP
Planning & Community Development Director

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

TR 12/19/2019

RE: Tara Forest East - Preliminary Plat – Public Service Comments

Public Services has reviewed the Tara Forest East Preliminary Plat (Dec 12 Submittal) and offer the following comment. Review was specific to the Public Services Utilities.

NO.	COMMENTS
1.	July 3 Submittal Comment The CoA "Requirements for Design and Construction" Manual (Par. 1.4) encourages the Engineer to attend a Pre-Design meeting with the CoA Public Services Department for CoA related projects. The purpose of the meeting is to firmly establish the project design criteria and to discuss the overall purpose of the project. As soon as possible, please schedule this meeting with the CoA Public Services Department, in particular, to discuss alternate routing of the proposed wastewater collection system. Nov 12 Submittal Comment The proposed conceptual routing of the wastewater gravity main is acceptable.
2.	Nov 12 Submittal Comment, Sheet C-033 Stormwater Drainage: The typical right-of-way section shows both (1) F Curb and Gutter and (2) swales to be used for stormwater drainage. This is unusual. For each case, please explain how stormwater will be drained to the stormwater basins. In a previously submitted document titled "Transitional Swale Street Cross Section", a flume appears to route curb stormwater flow under the sidewalk road to a swale. Please confirm this understanding. Such flumes are not shown on this preliminary plat submittal. Submit flume details. Please verify that these flumes will be shown on the Construction

NO.	COMMENTS
	Documents. Dec 12 Submittal Comment, Sheet C-033 Comment addressed.
3.	Nov 12 Submittal Comment, Sheet C-033 A 2.5-foot PUE is very narrow. Please increase to 10-feet , which is as shown on the previously submitted document titled "Transitional Swale Street Cross Section". Dec 12 Submittal Comment, Sheet C-033 Comment addressed.
4.	Nov 12 Submittal Comment, Sheet C-033 Presumably the design intent is to install the water meter where the PUE is now shown. Note that there is a slope within the PUE due to the swale. This is not an acceptable location in which to install each water meter. Please explain how and where each water meter will be installed so that it is at grade with zero slope. Dec 12 Submittal Comment, Sheet C-033 Comment addressed.
5.	Nov 12 Submittal Comment, Sheet C-250 Lower right: Call out the missing text in the call-out for the ST-SMF-N Modified Discharge Structure Detail. Dec 12 Submittal Comment, Sheet C-250 Comment addressed.
6.	Nov 12 Submittal Comment, Sheet C-253 SMF South A & B Bottom Filter Typical Section: The reviewer could not find the filters on the plan views of SMF-South A & SMF South B. Please show in the next submittal. Also filter width is shown as 120-inch min on the typical section. What will a typical length be? How and where will the drainage be routed from the perforated pipe? Dec 12 Submittal Comment, Sheet C-253 Comments above addressed.
7.	Nov 12 Submittal Comment, Sheets C-300 & C-301 (Note that C-301 is the sheet number used on two sheets). Please confirm that 8-inch water main shown will be ductile iron as per sheet C-033. Dec 12 Submittal Comment, Sheets C-300 & C-033 Comment addressed. Construction drawings will be reviewed to confirm that piping conforms to CoA standards.

NO.	COMMENTS
8.	Nov 12 Submittal Comment, Sheets C-300 & C-301 (Note that C-301 is the sheet number used on two sheets). Note says that "ELECTRIC SYSTEM BEING DESIGNED BY THE UTILITY PROVIDER". The utility provider; namely, City of Alachua will NOT design the electric system. Please include the electric design drawings with the Construction Drawings. Electric design drawings shall be prepared by a Florida Professional Engineer, who will eventually sign and seal them. The City of Alachua will coordinate with the electric design engineer for connection points of the electric supply. Dec 12 Submittal Comment, Sheets C-300-C-302 Suggest that the revised note being further revised as follows: "AS PART OF THIS PROJECT, ELECTRIC SYSTEM WILL BE DESIGNED BY A PROFESSIONAL ENGINEER. COORDINATE WITH UTILITY PROVIDER".
9.	Nov 12 Submittal Comment, General Add the following note on the appropriate sheet: "Materials and construction for all potable water, wastewater and electrical work shall conform to the requirements of the City of Alachua, Public Services Department, Design and Construction Manual, latest edition." Dec 12 Submittal Comment, Sheets 300-302 Comment addressed.
10.	Nov 12 Submittal Comment, C-302, Typical This drawing shows detectable warning devices installed at roadway crossings. All detectable warning devices shall be the interlocking paver type. Please submit a detail of this. Dec 12 Submittal Comment, Sheets 300-302 Comment addressed.
11.	Nov 12 Submittal Comment, C-032, Typical General Note: Roundabouts are NOT to be maintained by the City; annotate on drawing. Dec 12 Submittal Comment, Sheets C-300-C-302 Comment addressed.
12.	Nov 12 Submittal Comment General Note: Submit detail for through-sidewalk drainage. Dec 12 Submittal Comment, Sheet C-032, Typical

NO.	COMMENTS
	Engineer has stated details will be provided as part of the construction plans. This will allow for a more thorough review. Comment addressed.
13	Nov 12 Submittal Comment General Note: Annotate on the drawing City right for drainage. Coordinate with City drainage easements for stormwater. Dec 12 Submittal Comment, C-033 Comment addressed.
14	Dec 12 Submittal Comment, Sheets C-300, C-301 As shown on these drawings, under roadways, water mains are distributed by means of tees and crosses. Tees and crosses are common points of failure. If a failure occurs, CoA will need dig up and then repair street. Street traffic will not be possible during the repair. Please rearrange water main piping so tees and crosses are not installed underneath roadways.
15	Dec 12 Submittal Comment, Sheets C-300, C-302 The drawings assume that wastewater will be conveyed to a CoA Lift Station; namely, Lift Station 25. Note that the gravity main between Tara Forest East and Lift Station 25 is not complete. This issue must be resolved.
END OF COMMENTS	

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



Volkert, Inc.

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December 18, 2019

Mr. Adam Hall, AICP
Planner, Office of Planning and Community Development
City of Alachua
15100 NW 142nd Terrace
P.O. Box 6
Alachua, FL 32616

Subject: Independent Review of the Tara Forest East Subdivision Traffic Study – Comments on the Revised Traffic Study and the Corresponding Letter from Gmuer Engineering

Dear Mr. Hall:

Below are Volkert's comments on the following:

- The revised Traffic Study for the Tara Forest East Subdivision that was submitted by Buckholz Traffic in December 2019.
- The comments from Gmuer Engineering with respect to Volkert's comments contained in the Independent Review of the Tara Forest East Subdivision project.

Volkert's comments are as follows:

1. The revised Traffic Study addresses Volkert's comments contained in the Independent Review and provides the appropriate data on the current and 2028 build out conditions at the signalized intersection of US 441/CR 235.
2. The three major areas that the City of Alachua needs to address for this development as the approval and permitting process moves forward are:
 - a. Follow-up traffic study. The need for a follow-up traffic study is to verify the trip distributions from the project onto the adjacent roadways. Volkert recommends the follow-up traffic study be performed when the Certificates of Occupancy issued for the project have reached 50%. The City should also contact the FDOT and Alachua County Public Works with respect to when the follow-up traffic study is conducted since the project impacts state and county roads.
 - b. Design of the gateway intersection at NW 147th Drive/NW 161st Avenue. The intersection of NW 147th Drive/NW 161st Avenue will serve as the gateway to the project from the south. This intersection will have to accommodate approximately 3,000 vehicles per day and the roadway geometry will need to guarantee that the design vehicle can adequately make all maneuvers without tracking outside the travel lane. In addition, there will be project signage, landscaping, street lighting, etc. at this intersection. All these factors need to be designed in a manner that will not create any sight vision issues while still providing a functional and attractive gateway entrance.

Office Locations:

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Collinsville, Illinois • Baton Rouge, Slidell, Louisiana • Biloxi, Mississippi • Jefferson City, Missouri • Raleigh, North Carolina
Chattanooga, Tennessee • Alexandria, Virginia • Washington, D.C.



- c. Traffic calming in the Tara Forest Subdivision. The Tara Forest subdivision is a large project. Several of the interior roads will function as minor/residential collector streets. All the roads in the project will contain driveways with direct access to residential lots. To control the traffic speeds in the project, and in particular on the more heavily traveled streets, traffic calming should be designed into the project at the approval/platting stage. Traffic calming for the project could consist of mini-traffic circles, raised intersections that act as large speed tables and an alternating pattern of all-way stops. These three traffic calming techniques have been used in many cities and counties with great success in all parts of the country.
3. Other Volkert comments are as follows:
- a. How the Tara Forest project connects to the south with NW 161st Avenue and NW 163rd Place needs to be resolved in a manner that is consistent with the City's LDC while recognizing that the intersection of NW 147th Drive/NW 161st Avenue will serve as the gateway intersection to the project.
 - b. Given the significant distances from US 441 and CR 235 to the project, the issue of providing adequate access to the project for emergency services needs to be factored into phasing of the construction of the roads in the project.
 - c. The City needs to work with the FDOT with respect to updating the timing of the traffic signals on US 441 at CR 235, NW 141st Street and NW 147th Drive.
 - d. The Traffic Study documents that the intersection of US 441/CR 235 will operate at a LOS F in the project build out year of 2028. However, the LOS F is substantially due to the pass through traffic on US 441. This is an important point to note at any public hearings on the project.

Thank you for the opportunity to provide transportation engineering services for the City of Alachua, FL. If you have any questions or comments or require additional information, please contact me at 352-240-7459 (direct line) or 352-262-3580 (cell phone).

Sincerely,

Volkert, Inc.


Brian Kanely, P.E.
Senior Traffic Engineer

CC: Gene Quinn



City of Alachua

ADAM BOUKARI
CITY MANAGER

PLANNING & COMMUNITY DEVELOPMENT
DIRECTOR KATHY WINBURN, AICP

December 5, 2019

Also sent by electronic mail to chrisg@gmuereng.com

Christopher Gmuer, PE
Gmuer Engineering, Inc.
2603 NW 13th Street
Box 314
Gainesville, FL 32609

**RE: Development Review Team (DRT) Letter No. 3 for
Tara Forest East (Preliminary Plat)**

Dear Mr Gmuer:

On November 12, 2019 the City of Alachua received your revised application for the approval of a preliminary plat which proposes to subdivide a ±113.49 acre subject property into a total of ~~320~~ 340 lots (consisting of Tax Parcel Numbers 03067-000-000, 03067-005-000, and 03067-005-001), with associated common areas, open space, stormwater management facilities, and right-of-way. The November 12, 2019 submittal included significant changes from previously submitted applications, which required additional review time. The changes included modification to primary connection locations and an increase in the total number of units being proposed.

The revised application has been reviewed for compliance with the applicable review standards, including the City's Comprehensive Plan and Land Development Regulations (LDRs). Based upon Staff's review, revisions must be made to the application before it may be scheduled for a public hearing before the City's Planning & Zoning Board (PZB). A meeting was held on June 20, 2019 to discuss the needed revisions to the submitted application. Please address all insufficiencies outlined below in writing and provide an indication as to how they have been addressed by 3:00 PM on Thursday, December 12, 2019. A total of four (4) copies of the complete application package (i.e., all application materials and attachments) and a CD containing a PDF of all application materials must be provided by this date. Upon receipt of your revised application, Staff will notify you of any remaining insufficiencies which must be resolved, if any, before the item may be scheduled for a public hearing before the PZB. Please note that if Staff determines that the revised submission requires outside technical review by the City, your application may be delayed in order to allow for adequate review time.

Please address the following insufficiencies (begins on next page):

Deficiencies to be Addressed

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

A. Compliance with Land Development Regulations (LDRs)

2. Article 7, Subdivision Standards

- ii. Per Section 7.2.5 (D)(2)(a), a notation will be required on final plat indicating that the land used for the temporary T or L shaped cul-de-sac shall be converted to a traffic circle, speed table, or other traffic calming device.

COMMENT: Section 7.2.5 (D)(2)(a) states that the land used for the cul-de-sac shall be converted to a traffic circle, speed table, or other traffic calming device. This area cannot be a platted lot. Once adjacent property is developed, it may be possible, through a subdivision process to plat those individual lots, but it is the responsibility of the developer and not the City that the covenants and restrictions provide for this to potentially occur. Any proposed future subdivision will be subject to all laws and ordinances in effect at the time of development application.

The connections to the west still do not appear to be T or L shaped. The connections to the south must also be T or L shaped. Staff has received an application to develop this property. However, the design of the current development application cannot be solely based on proposed development on adjacent property. Staff is proposing that a condition be added that would permit the applicant to modify the southern connections, through a modification of construction plans for Tara Forest East, when and if the Tara Baywood subdivision Final Plat is approved by the City Commission.

E. Public Services/ Fire Marshall/ Outside Review

- a. Applicant must address any comments provided by Public Service Department, Fire Marshall or Outside Reviewer (attached).

NEW COMMENT: Please address all comments in the attached memo from the City of Alachua Public Services Department dated November 20, 2019, the revised comments from outside review (Daniel Young, P.E., CHW, Inc.) in a memo dated November 20, 2019, and the comments in the letter from Brian Kanely, P.E., of Volkert, Inc. in a letter dated December 5, 2019.

F. New Comments based on November 12, 2019 Submittal

- a. Concurrency Analysis
 - i. Cover sheet states the number of proposed units is 340, however, the traffic study states the number of single family residential units is 338. Please verify total number of units proposed and ensure consistency throughout application.
 - ii. US Hwy 441 must be included in the concurrency evaluation. Please refer to letter from Brian Kanely, P.E., of Volkert regarding trip distribution to each segment and ensure concurrency evaluation reflects the revised distribution.
 - iii. Submitted Public School Student Generation form states proposed development is 320 single family units. Please revise.
- b. Comprehensive Plan Analysis
 - i. Page 3 of Comprehensive Plan Consistency Analysis respond to Policy 1.2.a, of the Future Land Use Element. Gross density calculation appears to use previously proposed number of units. Please revise.
- c. Covenants and Restrictions

- i. Section 7.7.2 (C) requires a statement in the covenants and restrictions disclosing that the City of Alachua does not insure common areas or recreational facilities associated with the proposed development. Please provide language
- d. Neighborhood Meeting Materials
 - i. Provide mailing list or copy of mailing labels of property owners notified.
 - ii. Provide greater detail on concerns of the surrounding property owners.
 - iii. Provide neighborhood workshop materials from original submittal as well.
- e. General Comments
 - i. Permit with Alachua County Public Works will need to be updated for connection to CR 241.
 - ii. Phasing plan provided on Sheet C-070 do not appear to correctly identify lots in each Phase.
 - iii. Identify proposed use of Parcel 03067-006-000: open space/ common area? Clarification needs to be supplied regarding ownership and maintenance of these stormwater ponds located on this parcel. They appear to be servicing both Tara Forest East and the recently submitted Tara Baywood.
 - iv. Lots 319 and 320 appear to have setback lines that do not match property lines.
 - v. Block 8 appears to be longer than 600' permitted by the Section 7.2.3 (B).
 - vi. Lot 26 appears to be mislabeled as a DRA.
- f. Traffic Impact Analysis Comments
 - i. A 25' easement to connect with NW 167th Place or NW 166th Place will be required. A sidewalk connecting to the pavement at the terminus of the pavement on NW 167th Place or NW 166th Place a minimum of 6' will be required. The remainder of the easement and any existing right of way should be stabilized to allow for secondary fire truck access. Final design must be supplied with Construction Plans.
 - ii. Traffic calming will be required on long streets. Calming can include provision of mini roundabouts, speed tables, or controlled intersections.
 - iii. The proposed connection to NW 163rd Place as presented is not acceptable. The connection shown with Tara Forest East must be to NW 147th Drive. A conceptual intersection design must be provided. Design of this intersection may have significant impacts to proposed Tara Baywood Subdivision as well.

If you have any questions regarding the information above, please contact me at 386-418-6100 x 108 or via e-mail at ahall@cityofalachua.com. We look forward to receiving your revised application.

Sincerely,



Adam Hall, AICP
Planner

/attachments

cc: Kathy Winburn, AICP, Planning & Community Development Director
Justin Tabor, AICP, Principal Planner
Project File



City of Alachua

ADAM BOUKARI
CITY MANAGER

RODOLFO VALLADARES, P.E.
PUBLIC SERVICES DIRECTOR

INTER-OFFICE COMMUNICATION

DATE: Nov 20, 2019

TO: Kathy Winburn, AICP
Planning & Community Development Director

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

RE: Tara Forest East - Preliminary Plat – Public Service Comments

Public Services has reviewed the Tara Forest East Preliminary Plat (Nov 12 Submittal) and offer the following comment. Review was specific to the Public Services Utilities.

NO.	COMMENTS
1.	July 3 Submittal Comment The CoA “Requirements for Design and Construction” Manual (Par. 1.4) encourages the Engineer to attend a Pre-Design meeting with the CoA Public Services Department for CoA related projects. The purpose of the meeting is to firmly establish the project design criteria and to discuss the overall purpose of the project. As soon as possible, please schedule this meeting with the CoA Public Services Department, in particular, to discuss alternate routing of the proposed wastewater collection system. Nov 12 Submittal Comment The proposed conceptual routing of the wastewater gravity main is acceptable.
2.	Nov 12 Submittal Comment, Sheet C-033 Stormwater Drainage: The typical right-of-way section shows both (1) F Curb and Gutter and (2) swales to be used for stormwater drainage. This is unusual. For each case, please explain how stormwater will be drained to the stormwater basins. In a previously submitted document titled “Transitional Swale Street Cross Section”, a flume appears to route curb stormwater flow under the sidewalk road to a swale. Please confirm this understanding. Such flumes are not shown on this preliminary plat submittal. Submit flume details. Please verify that these flumes will be shown on the Construction

NO.	COMMENTS
	Documents.
3.	Nov 12 Submittal Comment, Sheet C-033 A 2.5-foot PUE is very narrow. Please increase to 10-feet , which is as shown on the previously submitted document titled “Transitional Swale Street Cross Section”.
4.	Nov 12 Submittal Comment, Sheet C-033 Presumably the design intent is to install the water meter where the PUE is now shown. Note that there is a slope within the PUE due to the swale. This is not an acceptable location in which to install each water meter. Please explain how and where each water meter will be installed so that it is at grade with zero slope.
5.	Nov 12 Submittal Comment, Sheet C-250 Lower right: Call out the missing text in the call-out for the ST-SMF-N Modified Discharge Structure Detail.
6.	Nov 12 Submittal Comment, Sheet C-253 SMF South A & B Bottom Filter Typical Section: The reviewer could not find the filters on the plan views of SMF-South A & SMF South B. Please show in the next submittal. Also filter width is shown as 120-inch min on the typical section. What will a typical length be? How and where will the drainage be routed from the perforated pipe?
7.	Nov 12 Submittal Comment, Sheets C-300 & C-301 (Note that C-301 is the sheet number used on two sheets). Please confirm that 8-inch water main shown will be ductile iron as per sheet C-033.
8.	Nov 12 Submittal Comment, Sheets C-300 & C-301 (Note that C-301 is the sheet number used on two sheets). Note says that “ELECTRIC SYSTEM BEING DESIGNED BY THE UTILITY PROVIDER”. The utility provider; namely, City of Alachua will NOT design the electric system. Please include the electric design drawings with the Construction Drawings. Electric design drawings shall be prepared by a Florida Professional Engineer, who will eventually sign and seal them. The City of Alachua will coordinate with the electric design engineer for connection points of the electric supply.
9.	Nov 12 Submittal Comment, General Add the following note on the appropriate sheet: “Materials and construction for all potable water, wastewater and electrical work shall conform to the requirements of the City of Alachua, Public Services Department, Design and Construction Manual, latest edition.”
10.	Nov 12 Submittal Comment, C-302, Typical This drawing shows detectable warning devices installed at roadway crossings. All detectable warning devices shall be the interlocking paver type. Please submit a detail of this.

NO.	COMMENTS
11.	General Note: Roundabouts are NOT to be maintained by the City; annotate on drawing.
12.	General Note: Submit detail for through-sidewalk drainage.
13	General Note: Annotate on the drawing City right for drainage. Coordinate with City drainage easements for stormwater.
END OF COMMENTS	

Please advise if you have any questions or require additional information.

cc: Justin Tabor – AICP Principal Planner

Adam Hall – AICP Planner

Harry Dillard – Lead Engineering Technician

MEMORANDUM

City of Alachua

19-0256



To: Mr. Adam Hall, AICP
From: Daniel Young, PE
Date: November 20, 2019
RE: Tara Forest East Preliminary Plat Review

Below are comments from CHW's review regarding the above mention project dated November 12, 2019.

Previous Comments:

- 14. CHW defers to City staff. Comment addressed.
- 16. CHW defers to City Legal Counsel on the need for drainage rights for the transitional swales. It is CHW's position that the City is required to have legal drainage rights to discharge to private property from the right of way. It is agreed maintenance should be provided by the HOA of the transitional swales, but the City should also have an easement to maintain the system in the event the HOA does not.
- 17. Comment addressed.
- 30. Comment addressed.
- 35. Easement has been added but building side setback has not been adjusted for the easement on Lots 186 and 187. Please revise accordingly (Sheet C-072, C-073, C-300 and C-301).
- 36. Comment addressed.
- 37. No response received but it acknowledged that it will be deferred to construction plans.
- 38. Comment addressed.
- 39. CHW defers to Public Services Department. Comment addressed.

New Comments:

- 1. Add R.M. Barrineau and Associate's information to surveyor's information on C-000.
- 2. On Sheet C-031, curb ramps (north of Street EW 8 and south of Street EW 7 on Street NS 4) will be required with construction plans. This comment applies to all crosswalks throughout the subdivision.
- 3. Remove dimension in error on lot 6 (Sheet C-074).
- 4. Off-site (south of subdivision) utilities must be within an easement or right of way. Please show easements. Sewer on C-074 and C-301. Water, sewer and electric on C-075 and C-031.

Should the City, Applicant, and/or the EOR have any questions regarding the above comments, please feel free to contact me at 352-331-1976.



Volkert, Inc.

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December 5, 2019

Mr. Adam Hall, AICP
Planner, Office of Planning and Community Development
City of Alachua
15100 NW 142nd Terrace
P.O. Box 6
Alachua, FL 32616

Subject: Independent Review of the Tara Forest East Subdivision Traffic Study

Dear Mr. Hall:

Attached is Volkert's Independent Review of the Tara Forest East Subdivision Traffic Study that was prepared by Buckholz Traffic. Volkert's comments on the Traffic Study and additional recommendations with respect to the traffic impacts related to the project are included in the Independent Review. When the Traffic Study has been updated to reflect Volkert's recommendations and/or comments, please forward the updated Traffic Study to me and I can perform another review of the updated Traffic Study.

Thank you for the opportunity to provide transportation engineering services for the City of Alachua, FL. If you have any questions or comments or require additional information, please contact me at 352-240-7459 (direct line) or 352-262-3580 (cell phone).

Sincerely,

Volkert, Inc.

Brian Kanely, P.E.
Senior Traffic Engineer

CC: Gene Quinn

Attachment: Independent Review of the Tara Forest East Subdivision Traffic Study

Office Locations:

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Collinsville, Illinois • Baton Rouge, Slidell, Louisiana • Biloxi, Mississippi • Jefferson City, Missouri • Raleigh, North Carolina
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**Independent Review of the Traffic Study for the Tara Forest East Subdivision
Located in the City of Alachua, Florida
Prepared by Volkert, Inc., December, 2019**

Introduction

At the request of the City of Alachua, FL, Planning and Community Development Department, Volkert, Inc., conducted an independent review of the Traffic Study for the Tara Forest East Subdivision located west of CR 241 and north of NW 147th Drive (just north of the Lowe's Home Improvement Store). The Traffic Study was prepared by Buckholz Traffic in September, 2019.

The Tara Forest East Subdivision (Project) will contain 338 single family homes and 213 townhomes (total of 551 residential units). The Project is expected to generate 4,758 daily trips. These are new trips, no pass-by capture trips or internal capture trips. The Project is planned to have access to the east onto CR 241 and access to the south onto NW 147th Drive. The anticipated phasing for the project is:

- 100 units completed by the end of 2020.
- 200 units completed by the end of 2022.
- 280 units completed by the end of 2024.
- 551 units (full build out) completed by 2028.
- 2028 is the design year for the Traffic Study

The independent review of the Traffic Study will include the following:

- Review of existing traffic volumes.
- Review of trip generation data.
- Review of site trip distribution and traffic assignment.
- Review of 2028 build traffic volumes.
- Review of turn lane analysis on CR 241.
- Review of non-signalized intersection capacity analysis.
- Review of signalized intersection capacity analysis.
- Review/discuss the Project's access management/roadway connections to the south onto NW 147th Drive and impact to the residential area immediately east of Lowe's.
- Review/discuss project phasing/road construction for emergency vehicle access and trip distribution.
- Discuss potential traffic calming issues within the Tara Forest East Subdivision.
- Discuss issues related to the Florida Department of Transportation.
- Discuss traffic signal issues along US 441 between CR 235 and NW 147th Drive.

Review of the Traffic Study

Existing Traffic Volumes

This section of the Traffic Study describes and documents the existing traffic volumes. This information is correct.

Figures 2 and 3 visually show the existing traffic counts on CR 241 at NW 172nd Avenue and at NW 174th Avenue. Figures 4 and 5 show the existing traffic counts on US 441 at NW 147th Drive. However, the description of the data in the small boxes could be labeled differently to assist non-engineers/planners understand what data is being shown.

Recommendation:

1. Recommend that the small boxes on Figure 2 be labeled “AM Peak Hour, 7:00 – 8:00 AM” and “PM Peak Hour, 4:45 – 5:45 PM”.
2. Recommend that the small boxes on Figure 3 be labeled “AM Period, 6:30 – 8:30 AM” and “PM Period, 3:45 – 5:45 PM”.
3. The small boxes in Figure 4 are correctly labeled.
4. Recommend that the small boxes on Figure 5 be labeled “AM Period, 6:45 – 8:45 AM” and “PM Period, 3:45 – 6:00 PM”.

Trip Generation Data

This section of the Traffic Study describes and documents the trip generation for the Project. The total daily trips, AM peak hour trips and PM peak hour trips are correctly calculated per the ITE *Trip Generation Manual, 10th Edition*. It is noted that all the trips are new trips (no pass-by capture trips or internal capture trips).

Site Trip Distribution and Traffic Assignment

This section of the Traffic Study distributes and assigns site traffic onto the streets adjacent to the Project. Based on the existing traffic counts, a traffic distribution of 40% to the east (CR 241) and 60% to the south (NW 147th Drive) was calculated and used in the Traffic Study.

The trip distribution/assignment can also be estimated based on the layout of the Project’s street system and location of the dwelling units along the street system. Volkert used two different assumptions to independently determine the trip distribution/assignment:

1. The first assumption was that all (100%) of the townhomes (located at the south end of the project) would use NW 147th Drive to enter/exit the Project and the single family homes would be assigned 50% to the south (NW 147th Drive) and 50% to the east (CR 241) to enter/exit the project. This assumption produced a trip distribution of 33% to the east (CR 241) and 67% to the south (NW 147th Drive).
2. The second assumption was to draw an east/west line at the West SMF and assume that all traffic from the residences north of the line would go to the east and south of the line would go to the south. This assumption produced a trip distribution of 39% to the east (CR 241) and 61% to the south (NW 147th Drive). It should be noted that this assumption

arrived at virtually the same distribution percentage that the Traffic Study developed (40% to the east, CR 241, and 60% to the south, NW 147th Drive).

It is important to note that determining the percentages for the traffic distribution from any large project with access to multiple existing streets at the initial planning/study stages is at best an estimation process. Both the distribution percentages developed by Buckholz Traffic and Volkert are reasonable and very similar. With a large project like the Tara Forest East subdivision, an accepted practice would be to conduct a follow-up traffic study at some point in the future when enough of the project has been constructed that the actual traffic to/from the project can be counted, which would provide an accurate estimate of the trip distribution percentages. This is an important issue because how the trips are assigned to the existing street system is critical to determining traffic impacts onto adjacent roadways and traffic signals.

Volkert recommends a two phase approach to determining the traffic distribution from Tara Forest East to CR 241 and US 441 as follows:

1. At the current initial planning/approval stage of the project, use the 40%/60% traffic distribution recommended in the Traffic Study.
2. When 50% of the number of residential units have been constructed in both the single family area and townhouse areas of the project and there is roadway access to both CR 241 and US 441, a follow-up traffic study be conducted to establish the traffic distribution and the impacts on the adjacent roads and traffic signals.

2028 Build Traffic Volumes

This section of the Traffic Study computes the 2028 Build Traffic volumes for the AM and PM peak hours based on the 2028 No Build traffic projections and the site traffic trip distribution and assignments at the following locations:

- CR 241 and the site driveway and at NW 172nd and 174th Avenues.
- US 441 and NW 147th Drive.

The calculation of the 2028 Build Traffic volumes as shown on Figures 7 – 10 were checked and are correct.

Turn Lane Analysis on CR 241

This section of the Traffic Study describes and documents how the determination for left and/or right turn lanes on CR 241 at the Project site driveway were determined. The documentation and methodology for making the determination for the warrants for right and left turn lanes adequately support the conclusions of the Traffic Study (no right turn and/or left turn lane on CR 241 at the site driveway is warranted). Since CR 241 is an Alachua County road and a County Connection Permit will be required, the Traffic Study should be forwarded to Alachua County Public Works for review.

Volkert recommends the Traffic Study be forward to Alachua County Public Works for review as part of the review and approval process.

Non-Signalized Intersection Capacity Analysis

This section of the Traffic Study describes and documents how the capacity calculations were performed for the non-signalized intersections on CR 241 at the site driveway, NW 172nd Avenue and NW 174th Avenue for the weekday AM and PM peak hours. The calculations are correct and demonstrate that the level of service (LOS) will be B or better at all three intersections. There is a typo on both Tables 3 and 4; the Build Out year is stated as 2026 when it should be 2028.

Signalized Intersection Capacity Analysis

This section of the Traffic Study describes and documents how the capacity calculations were performed for the existing signalized intersection at US 441 & NW 147th Drive for the AM and PM peak hour. The traffic volume inputs for the Highway Capacity Software were checked and are accurate. This section accurately documents the capacity calculations for this intersection for the existing 2019 conditions and the 2028 Build conditions. It should be pointed out that when the traffic signal timings (phase splits) are optimized for the 2028 Build conditions, the intersection LOS will improve over using the existing timings. This is a typical result with the HCS calculations. Even with the optimized signal timings for 2028, the heavy westbound through movement on US 441 in the PM peak period (non-Project traffic) still results in an intersection LOS of E. There are two typos on Table 5, the Build Out year is stated as 2026 when it is actually 2028.

Volkert has one comment/question with respect to the signalized intersection capacity analysis section of the Traffic Study. The Traffic Study has a trip distribution of 40% of the project trips east to CR 241 and then south via CR 235 to US 441. Virtually all the project trips east to/from CR 241 use the signalized intersection of US 441/CR 235. Why was this signalized intersection not included in the Traffic Study?

Given the additional traffic from Tara Forest East that will be passing through the US 441 & CR 235 signalized intersection, Volkert recommends that this intersection be analyzed to determine potential impacts.

Review/discuss the Project's access management/roadway connections to the south onto NW 147th Drive and impact to the residential area immediately east of Lowe's.

The site plan for Tara Forest East shows two connections to the existing public roadway system at the south end of the project. One connection is at NW 161st Avenue and the second connection is at NW 163rd Place. South of NW 161st Avenue, NW 147th Drive does not have any residential driveways that directly connect to NW 147th Drive. North of NW 161st Avenue, there are residential single family homes with driveways that connect directly to NW 147th Drive (eight existing homes with additional sites available for construction). Due to the added traffic volumes from Tara Forest East to NW 147th Drive, NW 147th Drive south of NW 161st Avenue will function as a collector street. Since NW 147th Drive south of NW 161st Avenue does not have any direct access to residential driveways, this section of NW 147th Drive has access management characteristics that are compatible with a collector street. The section of NW 147th Drive north of NW 161st Avenue allows direct access to residential driveways, which is not compatible with a Collector Street, from either a traffic speed and/or traffic volume perspective.

To eliminate potentially negative impacts to the residential lots with direct access to NW 147th Drive north of NW 161st Avenue, Volkert recommends that the connection from Tara Forest East onto NW 163rd Place be eliminated. If the City determines that an access to Tara Forest East is needed via NW 163rd Place, traffic calming measures should be installed on NW 147th Drive and NW 163rd Place to calm traffic where residential units have direct access to these two streets.

The intersection of NW 147th Drive/NW 161st Avenue warrants additional review with respect to the intersection design and right of way assignment. The trip distribution of 60% to the south results in a traffic volume of 2,855 trips per day from Tara Forest East through this intersection. Adding the traffic from the existing residential area just east of NW 147th Drive will result in a daily traffic volume through the intersection of approximately 3,000 vehicles per day. Given this traffic volume, the design of the intersection should be reviewed to determine the appropriate geometrics for an intersection with approximately 3,000 vehicles per day. The primary movements through the intersection will be the east to south right turn and north to west left turn. The street corner radii and lane width should accommodate the City's design vehicle without the design vehicle running over the curb on the corner radii and/or tracking outside the travel lanes. The Auto-Turn program should be utilized to guarantee that the design vehicle can negotiate the intersection (not run over the curb on the corner radii and not track outside the travel lane). The issue of right of way assignment also needs to be reviewed. Since the high volume movements through the intersection are right and left turns, an all-way stop or even a roundabout would be appropriate for this intersection. This intersection will also be the gateway entrance to Tara Forest East from the south and will most likely contain an entrance sign and appropriate landscaping. The placement of any entrance feature(s) needs careful review to guarantee that sight vision is not obscured. In addition, this area needs adequate street lighting. The City of Gainesville recently constructed several roundabouts with a minimal diameter (inscribed circle) on SW 6th Street at SW 2nd Avenue and at SW 4th Avenue that function extremely well and are attractively landscaped. A minimal diameter roundabout would function very well at the intersection of NW 147th Drive/NW 161st Avenue and could be attractively landscaped. Other design issues that need to be included when examining the intersection of NW 147th Drive/NW 161st Avenue are the provision of turn lanes, highway lighting and landscaping.

Given the traffic volumes, substantial traffic turning movements and potential entrance feature(s) sight vision obstruction issues, the intersection of NW 147th Drive/NW 161st Avenue needs careful review/design to guarantee it can efficiently and safely accommodate the approximately 3,000 vehicles per day that will be travelling through the intersection.

A second issue to consider with the design of the NW 147th Drive/NW 161st Avenue intersection is its close proximity to the intersection immediately to the west (approximately 150 feet). This intersection will also experience a high volume of right and left turns. An alternate approach to the design of the connection between Tara Forest East and NW 147th Drive is to locate the north/south street along the east side of the project more to the west as it approaches NW 161st Avenue. Such a redesign would separate the two intersections with the heavy right/left turns and

would reduce traffic congestion at the south entrance. This would also allow for more room to provide turn lanes, install landscaping and entrance features, etc.

Volkert recommends the City consider a redesign of the south entrance of Tara Forest East by moving the intersection immediately to the west of the NW 147th Drive/NW 161st Avenue intersection westward several hundred feet to provide additional separation between the two intersections.

Review/discuss project phasing/road construction for emergency vehicle access and trip distribution.

The Tara Forest East subdivision contains 551 residential units. There are two access points (entry/exit) to the project, one off CR 241, the other off NW 147th Drive just north of Lowe's. Tara Forest East is a large project with a potential build out trip generation of 4,758 trips per day. With only two access points to the public highway system, the project needs to be carefully phased with respect to roadway construction for access for emergency vehicles, trucks and school buses. The site plan that accompanied the Traffic Study shows the townhouse portion of the project is located at the south most portion of the property. From this south most portion of the property, it is approximately **0.4 miles** via NW 147th Drive south to US 441. From the north most portion of the townhouse portion of the project, it is approximately **0.6 miles** to CR 241. These are substantial distances for travel to the Project from US 441 and CR 241 and would present a challenge for emergency vehicles to respond if there was only one access and it was blocked for some reason. The same reasoning applies to the south most portion of the single family portion of the Project. If the only access for the single family portion was via CR 241, the distance from the most distant house to CR 241 is **0.75 miles**. Which internal roads and access points are constructed in conjunction with the number and location of residential units needs to be carefully reviewed by the City's Public Works Department and emergency services to require the adequate delivery of public services. The Traffic Study stated the project was going to be built in phases. Typically, a project's roadways and access are provide in a manner that is consistent with the amount of development that is permitted. However, given the substantial distances from Tara Forest East to the access to the public road system (US 441 and CR 241), the issue of the phasing of where and when the residential units are constructed in relation to the project's internal roadway system deserves careful attention and planning by all parties involved.

Volkert recommends that the City carefully review the phasing of the construction of the internal roadways, access points to the public highway system and construction of the residential units to guarantee that emergency access can be provided in a manner that is consistent with the City's requirements and expectations.

Discuss potential traffic calming issues within the Tara Forest East Subdivision.

The site plan for the Tara Forest East subdivision shows that the internal street system is a series of east/west and north/south streets that intersect at right angles (commonly referred to as a gridded street system). Per the site plan, the north/south street along the east side of the project has a length of approximately 3,900 feet (0.74 miles) with two roundabouts/mini-traffic circles. Given the length of this street and that there are a number of lots with driveways with direct

access to this street, the issue of traffic calming along this street should be reviewed by the City in conjunction with the review and approval of the project. The use of roundabouts/mini-traffic circles, raised intersections, speed tables and several all way stop intersections should be examined to control vehicle speeds on this north/south street. It is easier to review potential traffic calming techniques at the approval/platting stage of a large project versus having to attempt to retrofit traffic calming into a project that has already been constructed. Even if the project roadways were private roads, an effective traffic calming plan would be a major asset to the development. There are several accepted traffic calming techniques for roads with traffic volumes that would fall into the residential/minor collector category (greater than 1,500 vehicles/day) that have been successfully installed in the City of Gainesville that could be used in Tara Forest East. Examples of these are:

- Speed tables:
 - NW 10th Avenue between NW 6th Street and NW 18th Terrace.
 - NW 36th Street between West University Avenue and NW 8th Avenue.
- Mini-traffic circles:
 - On NW 14th Avenue at NW 16th Terrace and at NW 17th Street.
 - On NW 62nd Avenue at NW 26th Terrace and at NW 28th Terrace (Northwood Pines).
- Raised intersections:
 - NW 22nd Street & NW 5th Avenue (the entire intersection is raised and acts as a large speed table).

A very minimal traffic calming technique that can be used with a gridded pattern of streets is to install an all-way stop at every second or third intersection. This is a very low cost traffic calming solution that can be used with a high degree of effectiveness.

To deal with the issues of vehicle volumes and/or speeds within the Tara Forest East subdivision, Volkert recommends (1) the City work with the developer and City emergency services to establish a traffic calming plan for the project and (2) the approved traffic calming plan be constructed in conjunction with the project's internal roadway system.

Discuss issues related to the Florida Department of Transportation.

US 441 is a Florida Department of Transportation (FDOT) highway (State Road). Since the intersections of US 441/NW 147th Drive and US 441/CR 235 are on the state highway system and are signalized, the FDOT should review the traffic study. The FDOT owns the traffic signals and the signals are maintained and timed by the City of Alachua (the City of Alachua contracts the maintenance and timing of traffic signals on state roads to the City of Gainesville Public Works Department).

Volkert recommends that the City forward the Traffic Study to the FDOT for review as a component of the review and approval process.

Discuss traffic signal issues along US 441 between CR 241 and NW 147th Drive.

As was discussed in the previous section, the traffic signals along US 441 are owned by the FDOT and the signals are maintained and timed by the City of Gainesville via a maintenance agreement

between the City of Alachua and the City of Gainesville. The Tara Forest East subdivision will have direct impacts on the traffic signals on US 441 at CR 235, Main Street/NW 141st Street and NW 147th Drive. These three traffic signals are coordinated and included in the City of Gainesville/Alachua County Traffic Management Center (TMC). The TMC was contacted and replied that although the three traffic signals are included in the TMC, they have not been retimed recently. All traffic signals that are in a coordinated system (includes the three signals on US 441 impacted by the project) should be retimed every three to five years or if impacted by a project that generates a substantial number of new trips. For traffic signals in a coordinated system on a state road, the retiming of signals is performed by a consultant hired by the FDOT.

Volkert recommends that the City work with the FDOT to establish a program for retiming the three traffic signals on US 441 that will be impacted by the Tara Forest East subdivision.

Summary of Volkert's Recommendations/Comments on the Traffic Study

The summary of Volkert's recommendations/comments on the Tara Forest East Subdivision Traffic Study are as follows:

1. Except for the several typos and minor wording changes, Volkert concurs with the Traffic Study's recommendations and conclusions.
2. The calculations of the Project's trip generation, 2028 traffic volumes and 2028 Build traffic are correct.
3. Volkert recommends that the initial traffic distribution for the project utilize the Traffic Study's 40%/60% traffic distribution. A second traffic study should be conducted when the project is approximately 50% built out with roadway connections to both CR 241 and US 441. This will allow a more accurate assessment of the project's impacts to the adjacent roads and traffic signals.
4. Volkert concurs with the Traffic Study's conclusions with respect to the turn lane analysis at the site driveway on CR 241 and the Level of Service analysis for the non-signalized intersections on CR 241 and the signalized intersection of US 441/NW 147th Drive. Since an Alachua County Connection Permit will be required at CR 241, the Traffic Study should be forwarded to the Alachua County Public Works Department for review.
5. Since 40% of the Project trips are headed east onto CR 241 and then south through the intersection of US 441/CR 235, the intersection of US 441/CR 235 should be analyzed for traffic impacts.

Additional Volkert Recommendations/Comments on the Tara Forest East Subdivision

The summary of Volkert's additional recommendations/comments on the Tara Forest East Subdivision are as follows:

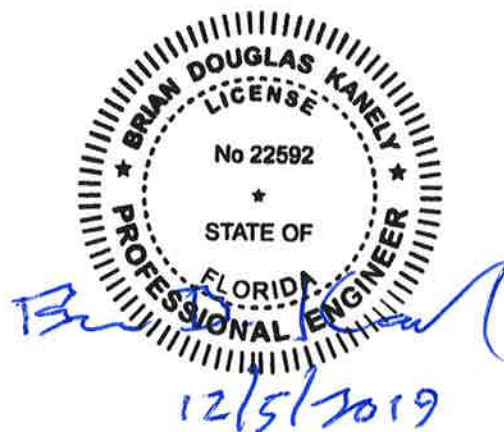
1. To eliminate potentially negative impacts to the residential lots with direct access to NW 147th Drive north of NW 161st Avenue, the connection from Tara Forest East to NW 163rd Place should be eliminated. If the City determines that access from Tara Forest East to NW 163rd Place is required, traffic calming should be installed on these two streets.
2. Due to the traffic volumes, substantial traffic turning movements and potential entrance feature(s) sight vision obstruction issues, the intersection of NW 147th Drive/NW 161st

Avenue needs careful review to guarantee it can efficiently and safely accommodate the approximately 3,000 vehicle per day that will be traveling through the intersection.

3. The City consider a redesign of the south entrance of Tara Forest East by moving the intersection immediately to the west of the NW 147th Drive/NW 161st Avenue intersection westward several hundred feet to provide additional separation between the two intersections.
4. Since the two entrances to the subdivision are located some distance from the connections to the public highway system, the City needs to carefully review the phasing of the construction of the internal roadways, access points to the public highway system and construction of the residential units to guarantee that emergency access can be provided in a manner that is consistent with the City's requirements and expectations.
5. To deal with issues of vehicle volumes and speeds, it is recommended that (1) the City work with the developer and City emergency services to establish a traffic calming plan for the Project and (2) the approved traffic calming plan be constructed in conjunction with the Project's internal roadway system.
6. Since the Tara Forest East project directly impacts two traffic signals on the state highway system (US 441/CR 235 and US 441/NW 147th Drive) the Traffic Study should be forwarded to the FDOT for review as a component of the review and approval process.
7. The City should work with the FDOT to establish a program for retiming the three traffic signals on US 441 that will be impacted by the Tara Forest East subdivision.

Volkert, Inc. appreciates the opportunity to assist the City of Alachua with this independent review of the Traffic Study for the Tara Forest East subdivision. Please contact me if you have any additional questions or need additional information.

Prepared by:
Brian D. Kanely, P.E.
Senior Traffic Engineer
Volkert, Inc.
December 5, 2019





City of Alachua

ADAM BOUKARI
CITY MANAGER

PLANNING & COMMUNITY DEVELOPMENT
DIRECTOR KATHY WINBURN, AICP

July 25, 2019

Also sent by electronic mail to chrisg@gmuereng.com

Christopher Gmuer, PE
Gmuer Engineering, Inc.
2603 NW 13th Street
Box 314
Gainesville, FL 32609

**RE: Development Review Team (DRT) Letter No. 2 for
Tara Forest East (Preliminary Plat)**

Dear Mr Gmuer:

On July 3, 2019 the City of Alachua received your revised application for the approval of a preliminary plat which proposes to subdivide a ±113.49 acre subject property into a total of 320 lots (consisting of Tax Parcel Numbers 03067-000-000, 03067-005-000, and 03067-005-001), with associated common areas, open space, stormwater management facilities, and right-of-way.

The revised application has been reviewed for compliance with the applicable review standards, including the City's Comprehensive Plan and Land Development Regulations (LDRs). Based upon Staff's review, revisions must be made to the application before it may be scheduled for a public hearing before the City's Planning & Zoning Board (PZB). A meeting was held on June 20, 2019 to discuss the needed revisions to the submitted application. Please address all insufficiencies outlined below in writing and provide an indication as to how they have been addressed by 4:00 PM on Monday, August 5, 2019. A total of four (4) copies of the complete application package (i.e., all application materials and attachments) and a CD containing a PDF of all application materials must be provided by this date. Upon receipt of your revised application, Staff will notify you of any remaining insufficiencies which must be resolved, if any, before the item may be scheduled for a public hearing before the PZB. Please note that if Staff determines that the revised submission requires outside technical review by the City, your application may be delayed in order to allow for adequate review time.

Please address the following insufficiencies (begins on next page):

Deficiencies to be Addressed

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

A. Compliance with Land Development Regulations (LDRs)

1. Article 5, Density, Intensity, and Dimensional Standards

- i.*** Section 5.2.1 (A) (5), states that the width between side lot lines shall not be less than 80% of required lot width (80% of 75 feet = 60 feet). Please review lot numbers 55, 56, 114, 115, 116, and 221.

NEW COMMENT: Ordinance 19-25 states that the minimum lot width for subdivisions utilizing transitional swales is 75'.

2. Article 7, Subdivision Standards

- ii.*** Per Section 7.2.5 (D)(2)(a), a notation will be required on final plat indicating that the land used for the temporary T or L shaped cul-de-sac shall be converted to a traffic circle, speed table, or other traffic calming device.

NEW COMMENT: Section 7.2.5 (D)(2)(a) states that the land used for the cul-de-sac shall be converted to a traffic circle, speed table, or other traffic calming device. This area cannot be a platted lot. Once adjacent property is developed, it may be possible, through a subdivision process to plat those individual lots, but it is the responsibility of the developer and not the City that the covenants and restrictions provide for this to potentially occur. Any proposed future subdivision will be subject to all laws and ordinances in effect at the time of development application.

- vi.*** Section 7.3.12 requires adequate offsite improvements to serve the proposed development. The proposed development proposes to connect to NW 141st Street and CR 241 via NW 167th Place and NW 166th Place. Improvements will be needed to both of these roadways in order to accommodate traffic generated by proposed subdivision. Please coordinate with the City of Alachua Public Services Department for required improvements.

NEW COMMENT: It is necessary that the applicant be aware of the general parameters for the required improvements to NW 166th Place and NW 167th Place. As a condition of approval of the preliminary plat, general design parameters will be established. These proposed improvements will be required to be designed and reviewed as part of the Construction Plan review process. The required improvements have been included as an attachment to this letter.

E. Public Services/ Fire Marshall/ Outside Review

- a.*** Applicant must address any comments provided by Public Service Department, Fire Marshall or Outside Reviewer (attached).

NEW COMMENT: Please see attached memo from the City of Alachua Public Services Department and revised comments from outside review (Daniel Young, P.E., CHW, Inc.)

If you have any questions regarding the information above, please contact me at 386-418-6100 x 108 or via e-mail at ahall@cityofalachua.com. We look forward to receiving your revised application.

Sincerely,



Adam Hall, AICP
Planner

/attachments

cc: Kathy Winburn, AICP, Planning & Community Development Director
Justin Tabor, AICP, Principal Planner
Project File

Conditions of Approval for Tara Forest East Preliminary Plat

- Because of the proposed and potential impacts to existing City facilities, the following improvements shall be made, at the developer's expense, and designed in a manner acceptable by the City:
 - NW 167th Place from the subject property line to NW 140th Street/CR 241 shall be widened, paved, and otherwise improved to the maximum extent feasible to meet minimum City standards. In no event shall the improvements be less than the following:

	Required Improvements	
	Existing Paved Street Area – NW 167 th Place (1,076')	New Paved Street Area (250')
Wearing Surface Width (Min/Avg)	20' / 22'	24' / 24'
Wearing Surface Detail	1.5" SP-9.5 Asphaltic *	1.5" SP-9.5 Asphaltic
Base	6" limerock *	6" limerock
Subgrade	12" stabilized type B*	12" stabilized type B
Sidewalks Required	No	Yes
Curb Required	No	Yes
SRWMD Permitting	Yes	Yes
Tree Removal Permit and Mitigation Required	Yes. May be incorporated into Application for Construction Plans	Yes. May be incorporated into Application for Construction Plans
Deadline for Completion	Prior to Scheduling Final Inspection for CO for 1 st Building Permit	Prior to City Acceptance of Infrastructure for Phase 1

* Alternative construction materials/ thicknesses may be utilized for the wearing surface, base, and subgrade if equal or greater strength requirements are met and are approved by the City of Alachua Department of Public Services.

- NW 166th Place from the subject property line to NW 140th Street/ CR 241 shall be widened, paved, and otherwise improved to the maximum extent feasible to meet minimum City Standards. In no event shall the improvements be less than the following:

	Required Improvements	
	Existing Paved Street Area – NW 166 th Place (880')	New Paved Street Area (400')
Wearing Surface Width (Min/Avg)	20' / 22'	24' / 24'
Wearing Surface Detail	1.5" SP-9.5 Asphaltic *	1.5" SP-9.5 Asphaltic
Base	6" limerock *	6" limerock
Subgrade	12" stabilized type B *	12" stabilized type B
Sidewalks Required	No	Yes
Curb Required	No	Yes
SRWMD Permitting	Yes	Yes
Tree Removal Permit and Mitigation Required	Yes. May be incorporated into Application for Construction Plans	Yes. May be incorporated into Application for Construction Plans
Deadline for Completion	Prior to Scheduling Final Inspection for CO for 91 st Building Permit	Prior to City Acceptance of Infrastructure for Phase 3

* Alternative construction materials/ thicknesses may be utilized for the wearing surface, base, and subgrade if equal or greater strength requirements are met and are approved by the City of Alachua Department of Public Services.

- Any submitted construction plans or application for final plat shall conform to the standards and timing requirements as set forth above.
2. Other improvements, as may be deemed necessary to ensure the life, safety, and welfare of the residents or visitors of the City, may be required at time of Construction Plans or Final Plat submittal.
 3. The applicant agrees that Conditions 1 and 2 as stated above do not inordinately burden the land and shall be binding upon the property owner, including any subsequent property owners, successors, or assigns, and that the development shall comply with Conditions 1 and 2 as stated herein.



City of Alachua

ADAM BOUKARI
CITY MANAGER

RODOLFO VALLADARES, P.E.
PUBLIC SERVICES DIRECTOR

INTER-OFFICE COMMUNICATION

DATE: July 15, 2019

TO: Kathy Winburn, AICP
Planning & Community Development Director

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

TR
E

RE: Tara Forest East - Preliminary Plat – Public Service Comments

Public Services has reviewed the Tara Forest East Preliminary Plat (July 3rd Submittal) and offer the following comment. Review was specific to the Public Services Utilities.

NO.	COMMENTS
1.	The CoA "Requirements for Design and Construction" Manual (Par. 1.4) encourages the Engineer to attend a Pre-Design meeting with the CoA Public Services Department for CoA related projects. The purpose of the meeting is to firmly establish the project design criteria and to discuss the overall purpose of the project. As soon as possible, please schedule this meeting with the CoA Public Services Department, in particular, to discuss alternate routing of the proposed wastewater collection system.
2.	
3.	
4.	
END OF COMMENTS	

Please advise if you have any questions or require additional information.

cc: Justin Tabor – AICP Principal Planner

Adam Hall – AICP Planner

Harry Dillard – Lead Engineering Technician

MEMORANDUM

City of Alachua

19-0256



To: Adam Hall
From: Daniel Young, PE
Date: July 18, 2019
RE: Tara Forrest East Subdivision Comments

All previous comments except for the below have been addressed and/or acknowledged. Should any revisions occur to the stormwater system and/or lots during the construction plan design/review that affect the approved preliminary plat layout the project will be required to revise the preliminary plat prior to construction plan approval.

Repeat Comments

14. Per Section 7.2.3(B)(2), Block lengths appear to exceed 600 ft and are less than 300 ft. Revise accordingly.

Gmuer Engineering Response: City Staff clarified the interpretation of the code language and determined that the requirements of the section haven satisfied.

Comment: Comment has not been addressed. Phase 1 Block 7 and Phase 2 Block 7 are both over 600' in length. Revise accordingly.

16. Since roadways are being dedicated to the City, stormwater conveyance shall provide easements or be within ROW

Gmuer Engineering Response: Stormwater conveyance, including transitional swales, is being provided per newly revised LDC changes regarding "transitional swales." Traditional swales will be maintained and managed by the associated HOA.

Comment: Comment has not been addressed. City will need drainage rights/easements to discharge stormwater and maintain the transitional swales in the event the HOA does not.

17. Provide street signage per Section 7.3.3.

Gmuer Engineering Reponse: Typical Signage has been provided on C-031 and C0-032 and C-501 through C504.

Comment: Sheet C-501 through C-504 are not included in the set.

30. On Sheet C-031 and throughout subdivision, on the side streets will the swale encroach into the building area? Setbacks should be adjusted to account for swales.

Gmuer Engineering Response: Per revised LDC language regarding "transitional swales" provided swales can be within lots, are owned and maintained by HOA, and do not affect building setback.

Comment: Confirm that lots with side streets will not have transitional swales (e.g. Lot 253 and 254). Add note to plans if that is the case.

New Comments

Comment 35. Provide public utility easement on Lot 199 and 202 for wastewater main. Side setback must be adjusted for these lots.

Comment 36. Provide Public utility easement or expand right of way for water and wastewater mains on SW 167th Place.

Comment 37. Analysis must be completed to determine if the proposed water main distribution system will meet the required potable and fire flow demands with tying into existing system. Note if this is deferred to Construction Plan review any revisions may require revisions to the Preliminary Plat.

Comment 38. The sheet after C-301 appears to not have title block. Revise accordingly.

Informational Comment 39. Engineer of Record to confirm with Public Services if any lift station upgrades are required by the Developer. No response needed.

N:\2019\19-0256\Engineer Review Materials\190709\MEMO Tara Forrest East Eng Comments 190718.docx



City of Alachua

ADAM BOUKARI
CITY MANAGER

PLANNING & COMMUNITY DEVELOPMENT
DIRECTOR KATHY WINBURN, AICP

June 20, 2019

Also sent by electronic mail to chrisg@gmuereng.com

Christopher Gmuer, PE
Gmuer Engineering, Inc.
2603 NW 13th Street
Box 314
Gainesville, FL 32609

RE: Development Review Team (DRT) Summary for:
Tara Forest East (Preliminary Plat)

Dear Mr Gmuer:

On May 28, 2019 the City of Alachua received your application for the approval of a preliminary plat which proposes to subdivide a ±113.49 acre subject property into a total of 320 lots (consisting of Tax Parcel Numbers 03067-000-000, 03067-005-000, and 03067-005-001), with associated common areas, open space, stormwater management facilities, and right-of-way.

The application has been reviewed for compliance with the applicable review standards, including the City's Comprehensive Plan and Land Development Regulations (LDRs). Based upon Staff's review, revisions must be made to the application before it may be scheduled for a public hearing before the City's Planning & Zoning Board (PZB). A meeting was held on June 20, 2019 to discuss the needed revisions to the submitted application. Please address all insufficiencies outlined below in writing and provide an indication as to how they have been addressed by 2:00 PM on Wednesday, July 3rd, 2019. A total of four (4) copies of the complete application package (i.e., all application materials and attachments) and a CD containing a PDF of all application materials must be provided by this date. Submission of an incomplete package may delay your tentative hearing at the Planning and Zoning Board. Upon receipt of your revised application, Staff will notify you of any remaining insufficiencies which must be resolved, if any, before the item may be scheduled for a public hearing before the PZB. Please note that if Staff determines that the revised submission requires outside technical review by the City, your application may be delayed in order to allow for adequate review time.

Please address the following insufficiencies (begins on next page):

Deficiencies to be Addressed

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

A. Compliance with Land Development Regulations (LDRs)

1. Article 5, Density, Intensity, and Dimensional Standards

- i. Section 5.2.1 (A) (5), states that the width between side lot lines shall not be less than 80% of required lot width (80% of 75 feet = 60 feet). Please review lot numbers 55, 56, 114, 115, 116, and 221.

2. Article 6, Development Standards

- i. Section 6.2.1(D) (4), tree mitigation may be required. At time of Construction Plans submittal, a complete Landscape Plan and Tree Mitigation plan will be required demonstrating compliance with the City's Tree Mitigation requirements.

3. Article 7, Subdivision Standards

- i. Section 7.2.5 (D) (1) requires temporary T or L turn at future connections to adjacent properties.
- ii. Per Section 7.2.5 (D)(2)(a), a notation will be required on final plat indicating that the land used for the temporary T or L shaped cul-de-sac shall be converted to a traffic circle, speed table, or other traffic calming device.
- iii. NW 167th Place extension appears to be within 125' of a proposed new street. Per Section 7.2.5 (I) (2), there must be at least 125' centerline off set between streets at intersections.
- iv. Section 7.3.1 (B) (2)(iii), requires F-type or similar style curbing. Submittal indicates "drop curb or "F" curb". Please clarify.
- v. Section 7.3.2 (A) requires sidewalks to be constructed along arterial streets. A sidewalk must be included from project entrance on CR 241 to south property boundary.
- vi. Section 7.3.12 requires adequate offsite improvements to serve the proposed development. The proposed development proposes to connect to NW 141st Street and CR 241 via NW 167th Place and NW 166th Place. Improvements will be needed to both of these roadways in order to accommodate traffic generated by proposed subdivision. Please coordinate with the City of Alachua Public Services Department for required improvements.

B. Comprehensive Plan Consistency Analysis

1. Page 3 of Comprehensive Plan analysis refers to site plan and landscape plan. Please update to refer to preliminary plat and landscape plan to be submitted with construction plans.
2. Policy 1.12.d, Conservation and Open Space Element, required buffers from surface water bodies. Please identify potential water body located on subject property (near existing home site).

C. Concurrency Impact Analysis

1. Appropriate roadway segment to evaluate for concurrency is SR235 (FDOT Segment 109/4109, Comp Plan Segment 9) from US 441 to north City limit of Alachua. Additional affected roadway segments may also need to be evaluated if the project's impacts will be more than 5% of maximum service volume for any roadway within the City (Section 2.4.14 (H)(2)(b)).

D. Miscellaneous/General Issues

1. Please review side setbacks for all corner lots. If transitional swale is present setbacks will need to be at least the width of the proposed swale easement (10').
2. If future development is anticipated on parcels or property to the west of the subject property, the absence of a collector or arterial road may inhibit or reduce number of units that could potentially place trips onto the proposed local roads associated with Tara Forest East.
3. Outfall structures for SMF South and SMF Outfall structure located on sheet C-250 appear to be close to property lines.
4. Please complete Countywide Wetland Protection Code Self-Certification Form and submit to Alachua County Environmental Protection Department (please contact Alachua County EPD directly should you have any questions regarding this form). A hard copy has been attached, but can be completed at <http://alachuacounty.us/Depts/epd/Pages/WetlandsProtection.aspx>.

E. Public Services/ Fire Marshall/ Outside Review

1. Applicant must address any comments provided by Public Service Department, Fire Marshall or Outside Reviewer (attached).

If you have any questions regarding the information above, please contact me at 386-418-6100 x 108 or via e-mail at ahall@cityofalachua.com. We look forward to receiving your revised application.

Sincerely,



Adam Hall, AICP
Planner

cc: Kathy Winburn, AICP, Planning & Community Development Director
Justin Tabor, AICP, Principal Planner
Project File

MEMORANDUM

City of Alachua

19-0256



To: Adam Hall
From: Daniel Young, PE
Date: June 20, 2019
RE: Tara Forrest East Subdivision Comments

CHW has completed our peer review of the subject project. Our review is based on the Stormwater Management Report for Tara Forrest East Subdivision dated May 20, 2019. This memorandum summarizes our findings and comments.

1. Stormwater report Page 4 of 5 indicates that SMF-Northeast sends water to SMF-Southeast. The node diagram does not appear to show this connection. Additionally, no percolation link is shown for SMF-Southeast. If a percolation link is added, please ensure the perimeter rings are properly measured as it relates to the adjacent SMFs.
2. Stage storage for SMF-South on page 7 of 9 appears to call for a bottom of 107. Plans and ICPR input appear to show a bottom of elevation 109. Please revise WQTV calculations accordingly.
3. In addition to the standard percolation link, the ICPR input for SMF-South appears to call for a filter connecting SMF-South to the Groundwater. I do not see any discussion of this in the body of the stormwater report. Please explain the purpose of this filter. Please explain how this filter meets the WQT standards of SRWMD, Alachua County and City of Alachua.
4. Please ensure that offsite runoff is being collected and conveyed to proposed SMFs. In most cases, it looks like this water would have to pass through lots to make it into the roadway network.
5. Please ensure that stormwater discharge from all SMFs to offsite areas have adequate erosion control.
6. Please ensure that discharges to offsite properties will mimic pre-development flow patterns as much as possible.
7. WQT calculation shows 80' for swale length. Please ensure the driveway is included in this calculation as the entire lot width is only 80'.
8. Please clarify the purpose of the green numbering on the drainage map.
9. SMF-East appears to have no borings. Please ensure borings are located in the area of proposed SMFs at a rate of at least 1 per acre.
10. Please add boring locations to the SMF sheets so calculations can be verified more accurately.
11. Please verify grading for SMF-East. Contours as shown appear to overlap proposed traffic circle.
12. SMF-Center does not have the required 12" of freeboard. Please ensure that adjacent finished floors are adequately above the top of bank to accommodate this lack of freeboard.
13. Several SMFs are proposed to be constructed with substantial berms. Please provide reasonable assurance that proper slope stability will be maintained.
14. Per section 7.2.3 (B)(2), Block lengths appear to exceed 600 ft and are less than 300 ft. Revise accordingly.
15. Per Section 7.2.5 (D), Dead end streets shall provide temporary turnarounds. Additional ROW or easements maybe needed.
16. Since roadways are being dedicated to the City, stormwater conveyance shall provide easements or be within ROW.
17. Provide street signage per Section 7.3.3.
18. Per Section 6.2.1 (G)(2), what considerations are being made for tree preservation?
19. Survey acreage in legal, plan view, and cover sheet are all different. Please revise accordingly.
20. List Utility providers on plans.
21. Provide note on how water, sewer, drainage, and electrical will be provided (notes)
22. Provide statement "NOT FOR FINAL RECORDING" on every sheet.
23. List property owner south of subdivision (Sheet C-301)
24. Label open space on plans.
25. Recommend providing initial road names for each of the projects roadways (Road A, Road B, etc.)

26. Please ensure the zoning is correct. Zoning atlas has eastern property as CC.
27. Provide lot numbers on all sheets.
28. On sheets C-021 and C-022, explain the insert in the upper right corner of sheet (assuming a soils map). If soils map, please clarify and provide a legend of the hatch patterns. Make sure to include soil number, soil name and Hydrological group.
29. On sheet C-031, Revise the sidewalk crosswalks stopping at the center line.
30. On Sheet C-031 and throughout subdivision, On the side streets will the swales encroach into the buildable area? Setbacks should be adjusted to account for swales.
31. On Sheet C-033, Cross section does not provide adequate separation of utilities (storm vs. electric). Also must provide 2' flat from sidewalk prior to swale. Conflicting information in table vs. cross section plan (Clear zone, Slopes, etc.). Evaluate if a larger ROW or PUE is necessary for utilities. Extremely difficult to maintain water main without disturbing roadway (i.e. 1' off back of curb).
32. Sheets C-071-C075 show and label all easements, common space, stormwater ponds, street signs, project boundary and ROW width. Adjust/add all lot dimensions (i.e. Lot 267, 263, etc.). Show existing contours.
33. Sheets C-300-C301, Label all existing utilities (Size), point of connection, existing lift station, proposed utility (size). Show and label electric.
34. Water crossing at NW 166th Place should be perpendicular.

Additional comments will be generated based on revisions and responses.

N:\2019\19-0256\Engineer Review Materials\MEMO Tara Forrest East Eng Comments 190620.docx



City of Alachua

ADAM BOUKARI
CITY MANAGER

PLANNING & COMMUNITY DEVELOPMENT
DIRECTOR KATHY WINBURN, AICP

May 30, 2019

Also sent by electronic mail to chrisg@gmuereng.com

Christopher Gmuer, P.E.
Gmuer Engineering, LLC
2603 NW 13th Street
Box 314
Gainesville, FL 32609

RE: Completeness Review of Tara Forest East Preliminary Plat

Dear Mr. Gmuer:

On May 28, 2019, the City of Alachua received your application for the Preliminary Plat of Tara Forest East, which proposes to subdivide a ±113.49 acre subject property into a total of 320 lots (consisting of Tax Parcel Numbers 03067-000-000, 03067-005-000, and 03067-005-001), with associated common areas, open space, stormwater management facilities, and right-of-way.

According to Section 2.2.6 of the Land Development Regulations (LDRs), upon receipt of an application, a completeness review shall be conducted to determine that the application contains all the necessary information and materials, is in proper form and of sufficient detail, and is accompanied by the appropriate fee. The Planning Department has reviewed the aforementioned application for completeness and finds that the application is complete, conditional upon submission of certain information found below. Please provide materials addressing the comments below by **5:00 PM on Thursday, June 6, 2019.**

The comments below are based solely on a preliminary review of your application for completeness. An in-depth review of the content of the application will be performed, and the findings of the in-depth review will be discussed at a Development Review Team (DRT) Meeting, which will be scheduled after the application is determined to be complete.

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

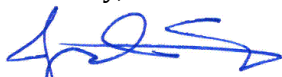
1. Subdivision Application, Preliminary Plat Attachment #1 – Plans:

- a. **Attachment #1.h.: Names of owners of adjoining land with their approximate acreage or, if developed, names of abutting subdivisions.** The required information is provided on the utility plan sheets (C-300 – C-301), but not on other sheets where such information should be provided, such as the Master and Detailed Preliminary Plat and Phasing Sheets (C-070 – C-075).
- b. **Attachment #1.k.: Zoning district boundaries on adjacent properties.** The zoning of adjacent properties is not provided on plan sheets where such information should be provided, such as the Master and Detailed Preliminary Plat and Phasing Sheets (C-070 – C-075).

- c. **Attachment 1.l.: proposed method of water supply, sewage disposal, drainage, and electric service.** Plans do provide any detail of electric service on the Master and Detailed Preliminary Plat and Phasing Sheets (C-070 – C-075).
 - d. **Attachment #1.p.: Inscription stating “NOT FOR FINAL RECORDING”.** Plans do not provide such inscription on plan sheets.
 - e. **Attachment 1.q.: Tree location survey in conformance with LDR Article 6.2.1(G).** Plans do not indicate trees to be removed or the proposed replacement plan for those trees to be removed.
2. **Subdivision Application, Preliminary Plat Attachment #5. – Mailing Labels:**
- a. The mailing labels for those persons/organizations registered with the City to receive notices are not correctly aligned. Resubmit two (2) sets of mailing labels for those persons/organizations registered with the City.
 - b. GIS analysis indicates the following parcels are within 400 feet of the subject property, however, mailing labels for the following parcels have not been provided. Submit two (2) sets of mailing labels for the following parcels: 03067-062-091; 03067-062-092; 03081-001-000; 03081-002-000; and 03081-003-000.

If you have any questions regarding the information above, please contact me at 386-418-6100 x 107 or via e-mail at jtabor@cityofalachua.com.

Sincerely,



Justin Tabor, AICP
Principal Planner

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



City of
ALACHUA

THE GOOD LIFE COMMUNITY

FOR PLANNING USE ONLY

Case #: _____
Application Fee: \$ _____
Filing Date: _____
Acceptance Date: _____
Review Type: P&Z; CC; Admin

Subdivision Application

Reference City of Alachua Land Development Regulations Article 2.4.10

- ☒ **Major Subdivision** – complete application and provide copy of original application with each type of submission.
☐ **Minor Subdivision** – refer only to Final Plat section of this application.

A. PROJECT

1. Project Name: Tara Forest East
2. Address of Subject Property: 17002 NW COUNTY RD 241 ALACHUA, FL 32615
3. Parcel ID Number(s): 03067-005-001, 03067-000-000, 03067-005-000, and 03067-006-000
4. Existing Use of Property: Single Family Residential/Agriculture
5. Future Land Use Map Designation: Moderate Density Residential / Medium Density Residential
6. Zoning Designation: RSF-3 and RSF-6
7. Acreage: ±148.76

B. APPLICANT

1. Applicant's Status ☐ Owner (title holder) ☒ Agent
2. Name of Applicant(s) or Contact Person(s): Christopher Gmuer Title: President
Company (if applicable): Gmuer Engineering, LLC
Mailing address: 2603 NW 13th St Box 314
City: Gainesville State: FL ZIP: 32609
Telephone: () 352-593-3134 FAX: () _____ e-mail: chrisg@gmuereng.com
3. If the applicant is agent for the property owner*:
Name of Owner (title holder): Tara Forest LLC
Mailing Address: 7717 NW 20th LN
City: Gainesville State: FL ZIP: 32605

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

C. ADDITIONAL INFORMATION

1. Is there any additional contact for sale of, or options to purchase, the subject property? ☒ Yes ☐ No
If yes, list names of all parties involved: Alachua Development Co., LLC, Marvin Smollar
If yes, is the contract/option contingent or absolute? ☐ Contingent ☒ Absolute

D. ATTACHMENTS

Preliminary Plat Attachments:

1. Plans, to include but not limited to:
 - a. Scale: at least 1inch = 200 ft;
 - b. Proposed name of subdivision.
 - c. Name, address, and telephone number of the subdivider and agent of subdivider.
 - d. Name, address, telephone number and registration number of surveyor or engineer.
 - e. Date of boundary survey, north arrow, graphic scale, date of plat drawing, and space for revision dates.
 - f. Vicinity map - indicating general location of the site and all abutting streets and properties, section lines and quarter section lines, etc., total acreage of the subdivision and total number of lots. The vicinity map shall be drawn to show clearly the information required, but not less than one (1) inch to 2,000 feet. USGS Maps may be used as a reference guide for the vicinity map.
 - g. Legal description of the property to be subdivided.

City of Alachua ♦ Planning and Community Development Department
PO Box 9 ♦ Alachua, FL 32616 ♦ (386) 418-6121

- h. Names of owners of adjoining land with their approximate acreage or, if developed, names of abutting subdivisions.
- i. Preliminary layout including streets and easements with dimensions, lot lines with approximate dimensions, land to be reserved or dedicated for public or common uses, and any land to be used for purposes other than single-family dwellings.
- j. Block letters and lot numbers, lot lines, and scaled dimensions.
- k. Zoning district boundaries on abutting properties.
- l. Proposed method of water supply, sewage disposal, and drainage, and electric service.
- m. Minimum building setback lines as required by the Land Development Regulations.
- n. Natural features, including lakes, marshes or swamps, water courses, wooded areas, and land subject to the 100-year flood as defined by FEMA official flood maps.
- o. Surface drainage and direction of flow and method of disposition and retention indicated.
- p. Inscription stating "NOT FOR FINAL RECORDING".
- q. Tree location survey in conformance with LDR Article 6.2.1(G).
- r. Any other information that may be considered necessary by either the subdivider, the Planning and Zoning Board or the City Commission for full and proper consideration of the proposed subdivision.

Sheet Size: 24" X 36" with 3" left margin and ½" top, bottom, and right margins

- 2. Concurrency Impact Analysis showing the impact on public facilities, including potable water, sanitary sewer, transportation, solid waste, recreation, stormwater, and public schools in accordance with Article 2.4.14 of the Land Development Regulations.
- 3. Analysis of Consistency with the City of Alachua Comprehensive Plan (analysis must identify specific Goals, Objectives, and Policies and describe in detail how the application complies with the noted Goal, Objective, or Policy.)
- 4. Existing and/or proposed covenants and restrictions.
- 5. Two (2) sets of labels for all property owners within 400 feet of the subject property boundaries – even if property within 400 feet falls outside of City limits. (Obtain from the Alachua County Property Appraiser).
- 6. Neighborhood Meeting Materials, including:
 - i. Copy of the required published notice (advertisement) – must be published a newspaper of general circulation, as defined in Article 10 of the City's Land Development Regulations
 - ii. Copy of written notice (letter) sent to all property owners within 400 feet, and mailing labels or list of those who received written notice
 - iii. Written summary of meeting – must include (1) those in attendance; (2) a summary of the issues related to the development proposal discussed; (3) comments by those in attendance about the development proposal; and, (4) any other information deemed appropriate.
- 7. City of Alachua Public School Student Generation Form
- 8. Legal description with tax parcel number.
- 9. Proof of ownership.
- 10. Proof of payment of taxes.
- 11. Environmental Resource Permit (or Letter of Exemption) from the Suwannee River Water Management District.
- 12. If access is from a County Road, access management permit from Alachua County Public Works (or documentation providing evidence that a permit application has been submitted).
- 13. If access is from a State Road, access management permit from Florida Department of Transportation (or documentation providing evidence that a permit application has been submitted).
- 14. **Fee.** Please see fee schedule for fee determination. No application shall be accepted for processing until the required application fee is paid in full by the applicant. Any necessary technical review or additional reviews of the application beyond will be billed to the applicant at the rate of the reviewing entity. The invoice shall be paid in full prior to any legislative and/or quasi-judicial action of any kind on the petition, appeal, or development application.

All 14 attachments are required for a complete application. A completeness review of the application will be conducted within five (5) business days of receipt. If the application is determined to be incomplete, the application will be returned to the applicant.

Within twelve (12) months of the approval of the Subdivision Preliminary Plat, Construction Plans must be reviewed and approved in accordance with LDR Article 2.4.10(G)(3).

Construction Plans Attachments:

1. A copy of this original application must accompany the submission.
2. Plans, to include but not limited to:
 - a. Scale: 1 inch=200 ft.
 - b. A topographic map of the subdivision with maximum contour intervals of one foot where overall slopes are zero percent to two percent, two feet where slopes are over two percent, based on U.S. Coastal and Geographic Datum. This topographic map must be prepared by a land surveyor.
 - c. A contour drainage map of the stormwater basins. The outlines and sizes, measured in acres, of all existing and proposed drainage areas shall be shown and related to corresponding points of flow concentration. Each drainage area shall be clearly delineated. Flow paths must be indicated throughout. Any existing and proposed structures affecting the drainage must be shown.
 - d. Plans showing proposed design features and typical sections of canals, swales and all other open channels, storm sewers, all drainage structures and other proposed subdivision improvements.
 - e. Plans and profiles for all proposed streets and curbs. Where proposed streets intersect existing streets, elevations and other pertinent details shall be shown for existing streets for a distance of 300 feet from point of intersection.
 - f. Plans of any proposed water distribution system and sanitary sewer collection system showing pipe sizes and location of valves, pumping stations and fire hydrants, where installation of such facilities are required by these LDRs.
 - g. Plans for all road and street signs and street names signs showing the location of such signage and any other traffic safety control devices that is required or proposed. In addition, the specifications for such signage shall be provided as part of this plan, which shall detail in diagram form as necessary the size, material, color, and specifications for installation of such signage.
 - h. Other information on the construction plans as may be required by the Land Development Regulations Administrator and Public Services Director.

Sheet Size: 24" X 36" with 3" left margin and ½" top, bottom, and right margins

3. Concurrency Impact Analysis showing the impact on public facilities, including potable water, sanitary sewer, transportation, solid waste, recreation, stormwater, and public schools in accordance with Article 2.4.14 of the Land Development Regulations.
4. Analysis of Consistency with the City of Alachua Comprehensive Plan (analysis must identify specific Goals, Objectives, and Policies and describe in detail how the application complies with the noted Goal, Objective, or Policy.)
5. Legal description with tax parcel number.
6. Proof of ownership.
7. Proof of payment of taxes.
8. Environmental Resource Permit (or Letter of Exemption) from the Suwannee River Water Management District.
9. If access is from a County Road, access management permit from Alachua County Public Works (or documentation providing evidence that a permit application has been submitted).
10. If access is from a State Road, access management permit from Florida Department of Transportation (or documentation providing evidence that a permit application has been submitted).

All 10 attachments are required for a complete application. A completeness review of the application will be conducted within 5 business days of receipt. If the application is determined to be incomplete, the application will be returned to the applicant.

Within six (6) months of the approval of Construction Plans, the applicant must submit an application for Final Plat for review. Concurrently with the review of the Final Plat, a Subdivider Agreement shall be prepared. The applicant must also provide a surety device for the public improvements in accordance with LDR Article 7.4, Improvement Guarantees for Public Improvements.

Final Plat Attachments:

1. A copy of this original application must accompany the submission.
2. Plans, to include but not limited to:
 - a. Scale: at least 1 inch = 200 ft.
 - b. Name of subdivision shall be shown in bold legible letters, as stated in Chapter 177, Florida Statutes. The name of the subdivision shall be shown on each sheet included and shall have legible lettering of the same size and type including the words "section," "unit," "replat," "amended," etc.
 - c. Name and address of subdivider.
 - d. North arrow, graphic scale, and date of plat drawing.
 - e. Vicinity map showing location with respect to existing streets, landmarks, etc., and total acreage of the subdivision and total number of lots. The vicinity map shall be drawn to show clearly the information required, but not less than one (1) inch to 2,000 feet. USGS Maps may be used as a reference guide for the vicinity map.
 - f. Exact boundary line of the tract, determined by a field survey, giving distances to the nearest one-hundredth foot and angles to the nearest minute, shall be balanced and closed with an apparent error of closure not to exceed one in 5,000.
 - g. Legal description of the property to be subdivided.
 - h. Names of owners of adjoining lands with their approximate acreage or, if developed, names of abutting subdivisions.
 - i. Location of streams, lakes and swamps, and land subject to the 100-year flood as defined by the Federal Emergency Management Agency, official flood maps.
 - j. Bearing and distance to permanent points on the nearest existing street lines of bench marks or other permanent monuments (not less than three (3)) shall be accurately described on the plat.
 - k. Municipal lines shall be accurately tied to the lines of the subdivision by distance and angles when such lines traverse or are reasonably close to the subdivision.
 - l. The closest land lot corner shall be accurately tied to the lines of the subdivision by distance and angles.
 - m. Location, dimensions, and purposes of any land reserved or dedicated for public use.
 - n. Exact locations, width, and names of all streets within and immediately adjoining the proposed subdivision.
 - o. Street right-of-way lines must show deflection angles of intersection, radii, and lines of tangents.
 - p. Lot lines, dimensions, and bearings must be shown to the nearest one hundredth (1/100) foot.
 - q. Lots must be numbered in numerical order and blocks lettered alphabetically.
 - r. Accurate location and description of monuments and markers.
 - s. Minimum building front yard setback lines as required by the Land Development Regulations as determined by the property's zoning.
 - t. Reference to recorded subdivision plats of adjoining platted land shall be shown by recorded names, plat book, and page number.
 - u. Covenants and restrictions notice in accordance with Chapter 177.091(28), Florida Statutes.
 - v. Dedication to the public by the owners of the land involved of all streets, drainage easements, and other rights-of-way however designated and shown on the plat for perpetual use for public purposes, including vehicular access rights where required. If the property is encumbered by a mortgage, the owner of the mortgage shall join in the dedication or in some other manner subordinate the mortgagee's interest to the dedication of public right-of-way.
 - w. Certification that all payable taxes have been paid and all tax sales against the land redeemed.
 - x. Title certification as required by Chapter 177, Florida Statutes.

Sheet Size: 24" X 36" with 3" left margin and ½" top, bottom, and right margins

3. Concurrency Impact Analysis showing the impact on public facilities, including potable water, sanitary sewer, transportation, solid waste, recreation, stormwater, and public schools in accordance with Article 2.4.14 of the Land Development Regulations.
4. Analysis of Consistency with the City of Alachua Comprehensive Plan (analysis must identify specific Goals, Objectives, and Policies and describe in detail how the application complies with the noted Goal, Objective, or Policy.)
5. Legal description with tax parcel number.
6. City of Alachua Public School Student Generation Form.
7. One (1) set (two [2] sets for Minor Subdivisions) of labels for all property owners within 400 feet of the subject property boundaries – even if property within 400 feet falls outside of City limits. (Obtain from the Alachua County Property Appraiser).

8. Proof of ownership.
9. Proof of payment of taxes.
10. Environmental Resource Permit (or Letter of Exemption) from the Suwannee River Water Management District.
11. If access is from a County Road, access management permit from Alachua County Public Works (or documentation providing evidence that a permit application has been submitted).
12. If access is from a State Road, access management permit from Florida Department of Transportation (or documentation providing evidence that a permit application has been submitted).
13. **For Minor Subdivisions: Fee.** Please see fee schedule for fee determination. No application shall be accepted for processing until the required application fee is paid in full by the applicant. Any necessary technical review will be billed to the applicant at the rate of the reviewing entity. The invoice shall be paid in full prior to any legislative and/or quasi-judicial action of any kind on the petition, appeal, or development application.

All 12/13 attachments are required for a complete application. A completeness review of the application will be conducted within five (5) business days of receipt. If the application is determined to be incomplete, the application will be returned to the applicant.

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


Signature of Applicant

Signature of Co-applicant

Christopher Gmuere, P.E. President Gmuere Engineering

Typed or printed name and title of applicant

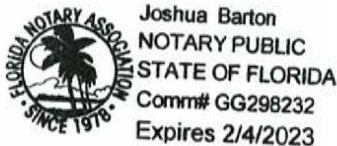
Typed or printed name of co-applicant

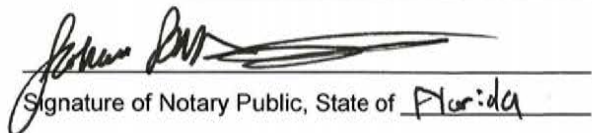
State of Florida County of Alachua

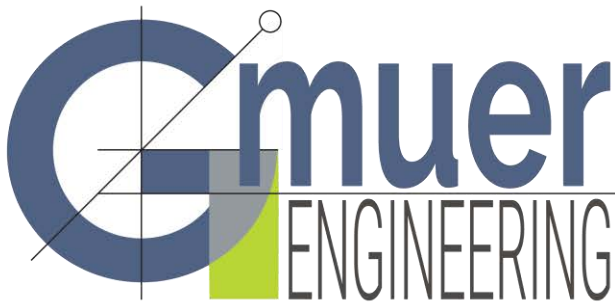
The foregoing application is acknowledged before me this 12th day of November, 2019, by Christopher Gmuere

_____, who is/are personally known to me, or who has/have produced Fl. Drivers License
as identification.

NOTARY SEAL




Signature of Notary Public, State of Florida



2603 NW 13th St, Box 314
Gainesville, FL 32609
Ph. (352) 281-4928

gmuereng.com

January 23, 2020

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

Re: Tara Forest East – Preliminary Plat – Response to Staff Comments dated 1/23/2020

Dear Planning and Zoning Staff,

This memorandum is submitted in response to DRT Letter No 5 dated January 23, 2020 regarding the Tara Forest East Preliminary Plat. Please see the associated response to comments (this document) and attachments below.

Attachments (2 Copies of Application Package and 7 Sets of Plans with CD containing PDFs of all items listed below) :

- Cover Letter with Response to Comments
- Major Subdivision Application (Signed and Dated)
- Ownership Affidavit from Tara Forrest, LLC
- Ownership Affidavit from Alachua Development Co. LLC
- Geotechnical Report TFE (Signed and Sealed)
- Supplemental Geotechnical Report TFE (Signed and Sealed)
- Geotechnical Report TBW (Signed and Sealed)
- Stormwater Report
- Traffic Study (Signed and Sealed)
- Preliminary Plat (24x36 – Not for Final Recording)
- Concurrency Impact Analysis
- Analysis of Consistency with City of Alachua Comprehensive Plan
- Existing and Proposed Covenants and Restrictions
- 1 Copy of Mailing Labels (Labels have been provided previously)
- Neighborhood Workshop Meeting Materials
- City of Alachua Public School Student Generator Form
- Legal Description with Tax Parcel Number
- Proof of Ownership
- Proof of Payment of Taxes
- Proof of Submittal to the SRWMD
- Proof of Submittal to Alachua County Public Works for Access Management Permit
- Original Neighborhood Workshop Meeting Materials and Labels

Please let us know if you need any additional information for your review.

Sincerely,

Gmuer Engineering, LLC



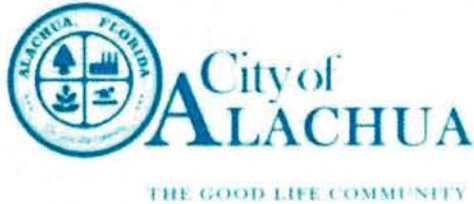
Christopher A Gmuer, PE
President

Planning and Zoning

New Comment (01/16/2020):. Additional traffic calming is required east of roundabout located at intersection of the NW 163rd Place extension.

See the note added to C-001 along with two conceptual locations on that same sheet. The final design of the traffic calming device will be completed with the Construction Plans since drainage and sight distances will need to be taken into consideration with the ultimate design that gets constructed.

This is the end of the comment responses.



Authorized Agent Affidavit

A. PROPERTY INFORMATION

Address of Subject Property: 17002 County Rd 241 Alachua, FL 32615
Parcel ID Number(s): 03067-005-000, 03067-005-001, and 03067-000-000
Acreage: ±113.5 Acres

B. PERSON PROVIDING AGENT AUTHORIZATION

Name: Sayed Moukhtara Title: President
Company (if applicable): Tara Forest LLC
Mailing Address: 7717 NW 20th LN
City: Gainesville State: FL ZIP: 32605
Telephone: 352-278-5317 FAX: _____ e-mail: sayed@moukhtara.com

C. AUTHORIZED AGENT

Name: Christopher Gmuer Title: President
Company (if applicable): Gmuer Engineering, LLC
Mailing address: 2603 NW 13th ST Box 314
City: Gainesville State: FL ZIP: 32609
Telephone: (352) 281-4928 FAX: N/A e-mail: chrisg@gmuereng.com

D. REQUESTED ACTION:

Preliminary Plat review for a Major Subdivision with 320 units and associated stormwater, utilites, roadway connections/access.

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

[Signature]
Signature of Applicant

Sayed Moukhtara
Typed or printed name and title of applicant

Signature of Co-applicant

Typed or printed name of co-applicant

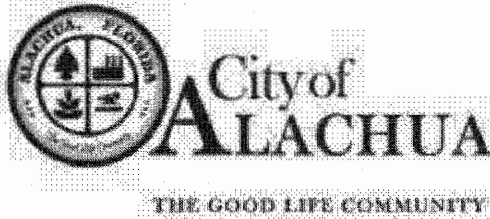
State of FLORIDA County of ALACHUA

The foregoing application is acknowledged before me this 10th day of May, 2012, by Sayed

Moukhtara, who is/are personally known to me, or who has/have produced _____
as identification.



[Signature]
Signature of Notary Public, State of FL



Authorized Agent Affidavit

A. PROPERTY INFORMATION

Address of Subject Property: None existing. The property is generally NW of NW 147th Dr. and NW 161st Ave.

Parcel ID Number(s): 03067-006-000

Acreage: ±36.37 Acres

B. PERSON PROVIDING AGENT AUTHORIZATION

Name: Marvin Smollar

Title: Manager

Company (if applicable): Alachua Development Co, LLC

Mailing Address: 16469 Bridlewood Cir.

City: Delray Beach

State: FL

ZIP: 33445

Telephone: 561-499-0411

FAX: _____

e-mail: marvsmollar@gmail.com

C. AUTHORIZED AGENT

Name: Christopher Gmuer

Title: President

Company (if applicable): Gmuer Engineering, LLC

Mailing address: 2603 NW 13th ST Box 314

City: Gainesville

State: FL

ZIP: 32609

Telephone: (352) 281-4928

FAX: N/A

e-mail: chrisg@gmuereng.com

D. REQUESTED ACTION:

Plat review and site plan permitting for a Major Subdivision with roughly 211 units and associated stormwater, utilities, roadway connections/access.

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

Signature of Applicant

Signature of Co-applicant

Alachua Development Co., LLC, by Marvin Smollar, manager

Typed or printed name and title of applicant

Typed or printed name of co-applicant

State of Florida County of Palm Beach

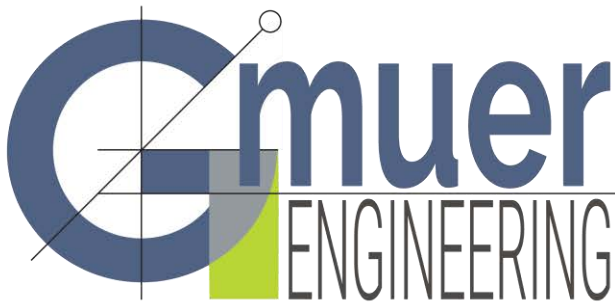
The foregoing application is acknowledged before me this 12th day of August, 2019 by Marvin Smollar

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



Signature of Notary Public, State of _____

City of Alachua ♦ Planning and Community Development Department
PO Box 9 ♦ Alachua, FL 32616 ♦ (386) 418-6121
Revised 9/30/2014



2603 NW 13th St, Box 314
Gainesville, FL 32609
Ph. (352) 281-4928

gmuereng.com

December 12, 2019

City of Alachua Planning & Zoning
15100 NW 142nd Terr
Alachua, FL 32615

Re: Tara Forest East – Consistency with the City of Alachua Comprehensive Plan

The proposed Tara Forest East subdivision is located at 17002 NW CR 241 (TP#03067-000-000, 03067-005-000, 03067-005-001, and 03067-006-000) and proposes a 340-unit single-family detached neighborhood development with associated stormwater, open space/common area, roadway network, and utilities. The underlying land use for the property is Moderate Density Residential and the zoning designation is RSF-3 (Residential Single-Family – 3 dwelling units per acre). The stormwater facility and portions of public infrastructure is proposed on TP# 03067-006-000 which has an underlying land use of Medium Density Residential and the zoning is RSF-6 (Residential Single-Family – 3 dwelling units per acre) but no units are currently proposed with this application. The eastern portion of parcel 03067-005-000 was zoned CC (Community Commercial) prior to being rezoned to RSF-3 on November 19, 2018. The following is a Comprehensive Plan Consistency Analysis for this development and is submitted in accordance with the City of Alachua Preliminary Plat requirements.

The Comprehensive Plan language is provided and followed with the **consistency statement in bold**.

Vision 2020

Goal 1: Economic Development

The City of Alachua has a unique business climate. The City is home to corporations, technology incubators, local businesses, and start-up companies. The City will maintain its focus on a welcoming business environment and encourage business development in the downtown area and along the U.S. 441 corridor. Alachua desires to continue to be a home to innovative businesses and an employment center where jobs are provided at every level. The City will continue to encourage the growth and development of established industries, such as biotechnology, and encourage the diversification and expansion of commercial businesses which provide integral services to the City's residents.

The proposed development will attract 340 households with an estimated 795 new residents significantly adding to the population and labor pool of Alachua. The neighborhood will provide additional tax revenue as well as disposable incomes to grow and support local economic growth. Immediate jobs will be created with the construction and development of the neighborhood in addition to the long-term support of existing jobs required to provide services to the neighborhood (i.e. lawn maintenance, trades contractors, delivery services, etc.). This will offer economic growth consistent with the City of Alachua's goal to encourage and support commercial businesses which provide integral services to the City's residents.

Goal 4: Housing

The City of Alachua has a variety of housing options, from historic downtown neighborhoods to large lot agrarian developments. The City supports the provision of safe, affordable housing for all income levels. The City will encourage mixed-use development with affordable housing, workforce housing, senior housing, housing for the disabled and enhancements that strengthen and upgrade neighborhoods, thereby maintaining a livable community for all age groups.

The development will provide safe, affordable housing at a mid-range pricing point. Modest sized homes on roughly quarter acre lots will ensure affordable price ranges and accessibility to a wide range of income levels. This in turn will make the neighborhood attractive as an option for workforce, senior, or starter home housing. The developer has also worked closely with City of Alachua staff to develop new land development regulations that would intentionally provide design options that allow for a character between "historic downtown neighborhood" and "large lot agrarian developments." These regulation changes are also specifically geared towards allowing for the provision of lower-cost, but equally effective, stormwater facilities. This savings in up-front development costs and long-term maintenance can be passed down to the homebuyer through reduced home prices and lower Home Owner's Association maintenance fees. The proposed development provides housing consistent with the City of Alachua's goal of encouraging, strengthening, and maintaining a livable community for all age groups.

Future Land Use Element

GOAL 1:

Future Land Use Map 2025: The City of Alachua shall maintain a Future Land Use Map in order to effectively guide development in a sustainable manner and to ensure economic prosperity and stability while maintaining a high quality of life for all of its present and future citizens.

Objective 1.25: Residential:

The City of Alachua shall establish three Residential land use categories to ensure an orderly urban growth pattern that makes the best use of available lands for residential development.

The proposed development complies with the requirements of the land use and zoning designations to ensure an orderly urban growth pattern.

Policy 1.2.a: Residential: Moderate density residential (0 to 4 dwelling units per acre): The moderate density residential land use category allows residential development at a maximum density of 4 dwelling units per acre. The following uses are allowed in the moderate density residential land use category:

1. Single family, conventional dwelling units;
2. *(cont.)*...

The proposed development provides single family, conventional dwelling units at a density of 2.996 du/acre, below the 4 du/acre set out by the land use and below the 3 du/ac limit set out by the zoning designation (RSF-3).

GOAL 2:

Innovative Design Standards: The City shall utilize innovative design standards to discourage urban sprawl, provide aesthetic standards, promote open space and preserve rural character.

Objective 2.4: Landscaping and Tree Protection Standards:

The City shall adopt landscaping and tree protection standards in order to achieve the aesthetic design values of the community and preserve tree canopies, as well as specimen protected, heritage and champion trees.

A landscape plan is included as part of the site plan set and shows the development will be landscaped according to adopted standards and will include individual lots, common areas, and stormwater facilities. In addition, street trees will be provided along roadways to provide a pleasing aesthetic design and to provide future canopy coverage.

Policy 2.4.2: Landscaping: Buffering - A buffer consists of horizontal space (land) and vertical elements (plants, berms, fences, walls) that physically separate and visually screen adjacent land uses that may not be fully compatible. The City shall establish buffer yard requirements that are based on the nature of the adjacent uses and the desired result of the buffer.

A landscape plan will be included as part of the construction plan submittal phase meeting all of the code requirements including the applicable buffers. The single-family development is bordered by agricultural/timber lands and existing large-lot single family homes. Where new development is proposed adjacent to existing homes, additional horizontal buffering beyond required setbacks has been provided.

Objective 2.5: Open Space Standards:

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

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

Approximately 12% or more of the site will be pervious area / open space. This exceeds the 10% open space requirement.

Policy 2.5.b: Open space shall not be limited to unusable portions of project sites. A portion of open space shall be usable and functional.

Useable and functional open space has been provided and designed in accordance with Section 6.7 Open Space Standards of the City of Alachua LDRs. Where possible, a portion of the open space set-aside provides focal points for the development in accordance with Section 6.7.4(A) and (B).

GOAL 5: Development Standards:

The City shall include provisions through its comprehensive plan amendment process, development review process and in its land development regulations for development standards that address natural features and availability of facilities and services. These development standards will strive to protect natural resources and public facility resources while allowing for innovative and flexible development patterns.

Objective 5.1: Natural features:

The City shall coordinate Future Land Use designations with appropriate topography, soils, areas of seasonal flooding, wetlands and habitat during review of proposed amendments to the Future Land Use Map and the development review process. Natural features may be included as amenities within a development project.

Policy 5.1.a: Topography: The City shall protect the natural topography of the City, including steep and seepage slopes, by requiring new development to include techniques to minimize negative impacts on the natural terrain. An emphasis will be placed on retaining the natural function of seepage slopes during development. Additionally, retention of existing native vegetation will be encouraged as one method of protecting slopes.

The project site has historically been used as agricultural/timber lands with an associated single-family house as such, there are relatively few trees or vegetation across the property. The highest portions of the site are a dome to the northwest of the property and another dome to the east of the property along CR 241. The site generally slopes towards the center of the property and then south where elevations are significantly lower. Stormwater design will intentionally utilize topography to capture, shuttle, and treat runoff through the use of transitional swales and treatment ponds.

Policy 5.1.b: Soils: The City shall ensure soil protection and intervention measures are included in the development review process.

The site plans show the erosion control measures per State of Florida requirements.

Policy 5.1.c: Flood prone areas: The City shall require as part of the development review process the identification of FEMA flood zone areas. Where necessary, minimum flood elevations shall be surveyed and established. The City shall also require finished floor elevations on subdivision plats, site plans and building permit plans. The City shall establish standards for a limitation on filling in flood prone areas.

The proposed project site does not include any FEMA 100 year floodplain.

Policy 5.1.d: Wetlands: The City shall utilize statewide wetland delineation methodology in accordance with Florida Administrative Code (FAC) and regulations adopted by the FDEP and the Suwannee River Water Management District.

The proposed project site does not include any delineated wetlands.

Objective 5.2: Availability of facilities and services:

All new development shall be planned and constructed concurrently with the availability of facilities and services necessary for the development.

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

A separate Concurrency Analysis is included as part of this site plan application package to address these concerns.

GOAL 9: Water and Wastewater Service:

The City will ensure that new development within the corporate limits, where potable water and wastewater service are available, as defined in Policy 1.2.a and Policy 4.2.a of the Community Facilities and Natural Groundwater Aquifer Recharge Element of the Comprehensive Plan shall connect to the City of Alachua's potable water and wastewater system.

The development will connect and extend existing utility services. Water and wastewater will be connected from CR 241 and the existing stubouts from the Baywood Subdivision.

Transportation Element

GOAL 1:

Provide for a traffic circulation system, which serves existing and future land uses.

Objective 1.1: Level of Service

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

A separate Concurrency Analysis is included as part of this site plan application package to address these concerns.

Policy 1.2.b: The City shall establish the access point requirements for City streets

The development proposes 3 primary/initial access points from CR 241 and two road connections to the Baywood subdivision. Also proposed are 2 or 3 additional connections to the west in anticipation of future development.

Objective 1.4: Bicycle and Pedestrian Standards:

The City shall work to develop a network of bicycle and pedestrian facilities which connect all areas of the City.

Policy 1.4.a: The City shall require any development which must obtain site plan or subdivision approval to provide additional right-of-way width for bicycle and pedestrian ways along all proposed collector and arterial streets.

No collector or arterial streets are proposed.

Policy 1.4.c: The City shall require pedestrian paths within subdivisions and within new developments to be connected to paths outside the development.

Sidewalks have been provided within the development and will connect with sidewalks within the Baywood subdivision and sidewalk "stub-outs" have been included for future connections in the CR241 right-of-way.

Community Facilities and Natural Groundwater Aquifer Recharge Element

GOAL 1: Wastewater

Plan for and provide adequate, high quality and economical wastewater service while protecting the environment, especially groundwater resources.

Objective 1.1:

The City of Alachua shall examine capital improvements priorities as funded in the Five-Year Capital Improvements Program in order to prevent, or correct, deficiencies in the Community Sanitary Sewer System to meet projected demands within established service areas at adopted levels of service.

Policy 1.1.d: The City hereby establishes the following level of service standards for sanitary sewer facilities:

Levels of Service:

- A. Quality: Compliance with all applicable standards of the U.S. Environmental Protection Agency (EPA) and the Florida Department of Environmental Protection (FDEP).

The proposed development will comply with all applicable sanitary sewer quality standards of the EPA and FDEP.

- B. Quantity: System-wide wastewater collection and treatment will be sufficient to provide a minimum of 250 gallons per day per equivalent residential unit (ERU) on an average annual basis. Plant expansion shall be planned in accordance with F.A.C. 62-600.405, or subsequent provision. This level of service standard shall be re-evaluated one year from the adoption date for the amended Plan.

A separate Concurrency Analysis is included as part of this site plan application package to address these concerns.

- C. System capacity: If the volume of existing use in addition to the volume of the committed use of the City's wastewater facility reaches 85% of the permitted capacity design, no further development orders for projects without reserved capacity will be issued until additional capacity becomes available or funds to increase facility capacity are committed in accordance with a development agreement.

A separate Concurrency Analysis is included as part of this site plan application package to address these concerns.

Objective 1.2:

Wastewater service will be made available to new development in a manner to promote compact urban growth, promoting development where wastewater service is available, and discouraging urban sprawl. For purposes of this objective, new development does not include remodeling of existing developments or additions of less than 33% to existing developments.

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

The proposed development appears to meet the criteria to have wastewater services extended or otherwise made available by the City of Alachua.

GOAL 2: Solid Waste:

The City of Alachua will provide for solid waste disposal service in a sanitary, economic, and environmentally safe manner.

Objective 2.1:

Continue to ensure satisfactory and economical solid waste service for all City residents, with an emphasis on reuse and recycling.

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

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

A separate Concurrency Analysis is included as part of this site plan application package to address these concerns.

GOAL 3: Stormwater

Develop and maintain a stormwater management system that minimizes flooding, protects, preserves and enhances desirable water quality conditions, and, where possible, preserves and utilizes existing natural features.

Objective 3.1:

Ensure provision of drainage and stormwater retention through level of service standards and design requirements to minimize flooding and to protect and improve water quality.

Policy 3.1.a: The City hereby establishes the following water quantity and quality level of service standards for drainage facilities:

LEVEL OF SERVICE STANDARD

For all projects which fall totally within a stream, or open Lake Watershed, detention systems must be installed such that the peak rate of post-development runoff will not exceed the peak-rate of predevelopment runoff for storm events up through and including either:

1. A design storm with a 10-year, 24-hour rainfall depth with Soil Conservation Service type II distribution falling on average antecedent moisture conditions for projects serving exclusively agricultural, forest, conservation, or recreational uses; or
2. A design storm with 100-year critical duration rainfall depth for projects serving any land use other than agricultural, silvicultural, conservation, or recreational uses.
3. The LOS standard for water quality treatment shall be treatment for the "first one inch" of runoff, and compliance with the design and performance standards established in Chapter 40C-42.025, FAC, and 42.035, FAC to ensure that the receiving water quality standards of Chapter 62.302.500, FAC are met and to ensure their water quality is not degraded below the minimum conditions necessary to maintain their classifications as established in Chapter 62-302, FAC. These standards shall apply to all new development and redevelopment and any exemptions, exceptions or -thresholds in these citations are not applicable. Infill residential development within improved residential areas or subdivisions existing prior to the adoption of this comprehensive plan must ensure that its post-development stormwater runoff will not contribute pollutants which will cause the runoff from the entire improved area or subdivision to degrade receiving water bodies and their water quality as stated above.

A Grading and Drainage Plan and Stormwater Management Report is included as part of the development plan application. The site will convey runoff via overland flow to the proposed stormwater management facilities. The treated storm water will discharge at a rate below predevelopment flows to the West, Northwest, North, East, and Southwestern property lines. The design is consistent with LOS standards

provided in the City's Comprehensive Plan Community Facilities and Natural Groundwater Aquifer Recharge Element Policy 3.1.a, and the Suwannee River Water Management District.

Policy 3.1.b: The City shall require the construction of roads within new plats or replats to be arranged so that the grades of the streets shall conform as closely as possible to the original topography to prevent the interruption of natural drainage flows, including sheet flow and flow to isolated wetland systems.

The Grading and Drainage Plan and the Stormwater Management Report show that the grades of the streets conform as closely as possible to existing topography and natural drainage patterns are combined with proposed roadways to efficiently capture and treat stormwater.

Objective 3.3:

The City shall implement design guidelines for stormwater management facilities to promote dual use, protect natural features, and provide aesthetically pleasing facilities.

Policy 3.3.a: Stormwater facility design shall incorporate the following features, where practicable:

1. Joint use of retention and detention basins for passive recreation, habitat and open space.
Proposed basins are designed to be jointly used for recreation, habitat, and open space in accordance with Section 6.9.3 generally and Section 6.9.3(D)(7) specifically.
2. Use of vegetation, such as cypress and river birch, in retention and detention basin to enhance stormwater management objectives.
Vegetation such as cypress and river birch will be proposed in basins to enhance stormwater management objectives.
3. On-site retention and detention facilities shall be integrated with other elements of the proposed development through aesthetically sensitive design and the use of landscaping.
Retention and detention facilities are designed to be integrated functionally and aesthetically. Additionally, transitional swales are proposed as a method to incorporate Low Impact Development techniques that utilize natural elements in the landscape and landscaping to facilitate stormwater capture and treatment.
4. Maintain and enhance the existing hydrological and ecological function of stream or drainage corridors or wetland areas which serve stormwater facilities.
There are no stream corridors or wetlands in the project area.
5. Where retention and detention basins are located along County roads or State roads, the basin design shall comply with the Gainesville Urbanized Area Metropolitan Transportation Planning Organization's drainage retention basin landscaping standards.
The retention basin adjacent to CR 241 will be designed to comply with the MTPO landscaping standards.

GOAL 4: Potable Water

Provide an adequate supply of high quality potable water to customers throughout the water service area.

Objective 4.1:

Achieve and maintain acceptable levels of service for potable water quantity and quality.

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

The proposed development appears to meet the criteria to have potable water services extended or otherwise made available by the City of Alachua.

Objective 4.2:

Prioritize and execute needed system improvements in a manner which protects existing investments, promotes orderly growth, and is consistent with the Capital Improvements Element and Capital Improvements Program of this Plan.

Policy 4.2.a: New urban development will only occur within areas where potable water services are available concurrent with development. For purposes of this policy, new development does not include remodeling of existing developments or additions of less than 33% to existing developments.

A separate Concurrency Analysis is included as part of this site plan application package to address these concerns.

Conservation and Open Space Element

GOAL 1:

To conserve, protect, manage and restore the natural and environmental resources of the City by emphasizing stewardship and understanding that environmental issues transcend political and geographical boundaries.

Objective 1.2: Native Communities and Ecosystems

The City shall preserve and protect native communities and ecosystems, particularly those considered endangered or threatened.

There are no known endangered or threatened species within the project area.

Objective 1.3: Listed Species

The City shall protect species listed by State and Federal agencies as endangered, threatened or of special concern, and their habitats.

There are no known species of special concern or their habitats within the project area.

Objective 1.5: Soils

The City shall protect soil resources through erosion and sedimentation control, by requiring proper design criteria on specific soils.

A separate Geotechnical Report and Stormwater Report have been provided that detail proper design criteria and methods for the protection of soil resources.

Objective 1.10: Wetlands

The City shall protect and preserve wetland values and functions from adverse, human caused, physical and hydrologic disturbances.

There are no identified wetlands on the proposed project site.

Economic Element

GOAL 1:

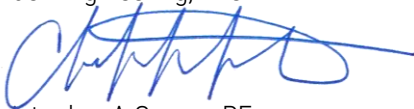
To emphasize economic principles consistent with the City's Vision that support the prosperity of the community and enhance its quality of life.

The proposed development will provide and support economic growth consistent with the City of Alachua's goals.

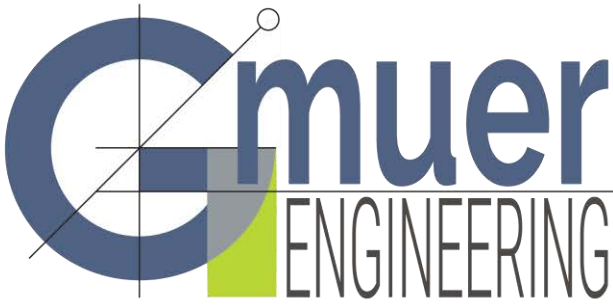
Please let us know if you need any additional information for your review.

Sincerely,

Gmuer Engineering, LLC

A handwritten signature in blue ink, appearing to read 'Christopher A Gmuer', with a stylized flourish extending to the right.

Christopher A Gmuer, PE
President



2603 NW 13th St, Box 314
Gainesville, FL 32609
Ph. (352) 281-4928

gmuereng.com

December 12, 2019

City of Alachua Planning & Zoning
15100 NW 142nd Terr
Alachua, FL 32615

Re: Tara Forest East – Concurrency Impact Analysis

Tara Forest East is a proposed 340-unit single-family neighborhood development located at 17002 NW CR 241 / TP#03067-000-000, 03067-005-000, 03067-005-001, and 03067-006-000. The following is a Concurrency Impact Analysis for this development and is submitted in accordance with the City of Alachua Preliminary Plat requirements. The analysis includes impacts to roads, recreation facilities, potable water facilities, sanitary sewer facilities, and solid waste facilities.

A Grading and Drainage Plan and Stormwater Management Report is included as part of the development plan application. The site will convey runoff via a combination of curbs, gutters, and swales to the proposed stormwater management facilities. The treated storm water will discharge at a rate below predevelopment flows and will roughly mimic existing drainage patterns. The design is consistent with LOS standards provided in the City's Comprehensive Plan Community Facilities and Natural Groundwater Aquifer Recharge Element Policy 3.1.a, and the Suwannee River Water Management District.

Park and Recreation Facilities

Policy 1.2.b of the Recreation Element of the Comprehensive Plan establishes a LOS Standard for recreational facilities of five (5) acres of community, neighborhood, or pocket park area per 1,000 persons, with a minimum of 20 percent of the required acreage consisting of improved, passive parks. Using 2.34 for the [Average Household Size in Alachua County](#)¹ 340 lots gives an estimated population of 795. At 5 acres/1000 persons, the required acreage of improved passive park is 3.98 acres, well below the 66.26 Available Recreation Acreage (see Table 4.5 below). Further, the proposed development includes roughly 13 acres of common area or open space and is within one mile of Mebane High School and Maude Lewis Park and their combined 8.5 acres of public recreational facilities.

¹ University of Florida College of Liberal Arts and Sciences Bureau of Economic and Business Research; Household Size in Florida: April 1, 2016; *Florida Population Studies*, Volume 50, Bulletin 176, December 2016

Table 4.5 Recreational Public Facilities Impacts	
System Category	Acreage
Existing City of Alachua Recreation Acreage ¹	117.65
Acreage Required to Serve Existing Population ²	50.78
Reserved Capacity ¹	0.62
Available Recreation Acreage	66.26
<i>1. City of Alachua May 2019 Development Monitoring Report</i> <i>2. Bureau of Economic & Business Research, University of Florida, Estimates of Population by County and City in Florida (2019); Policy 1.2.b, Recreation Element.</i> <i>Formula: 10,155 persons / (5 acres / 1,000 persons)</i>	

Conclusion: The required 3.98 acres of improved passive park is well below the available capacity of 66.26 as identified in the 2019 Annual Concurrency Status Report and the proposed development will not cause adopted LOS standards to be exceeded.

Transportation

Trip Generation Calculations per ITE Trip Generation 10th Edition

Land Use (ITE)	Units	AADT	AM Peak	PM Peak
Single-Family Detached (210)	340	3206	246	329

Public facility capacities are based on the City of Alachua's 2019 Annual Concurrency Status Report. Below are the roadway segments within a half mile of the development.

Affected Roadway Segments

Roadway Segment (FDOT Segment #, CoA Comp Plan #)		Comp Plan MSV	Existing Traffic	Reserved Trips	Available Capacity
<i>County Facilities</i>		Min LOS Std: D			
U.S. Hwy 441 (107/4107, 5)	AADT	39,000	25,926	3,637	9,437
	Peak Hour	3,510	2,463	383	664
SR 235 (137 & 138, 9)	AADT	14,400	7,537	32	6,831
	PM	1,290	716	2	572

Peak hour site trips were directionally distributed based on the percentages shown in Figure 3 of the attached Traffic Study. The resulting weekday peak hour traffic assignments for the development are provided in Figure 4 of the Traffic Study. The values contained in this figure were obtained by multiplying the trip generation results found in Table 1 of the Traffic Study by the trip distribution percentages provided in Figure 3.

Conclusion: The traffic generation of the development is below available capacities in the identified road segments and will not exceed the adopted LOS standards.

Potable Water

Table 4.2 Potable Water Public Facilities Impacts	
System Category	Gallons Per Day
Current Permitted Capacity ¹	2,300,000
Less Actual Potable Water Flows ¹	1,295,603
Reserved Capacity ²	79,775
Residual Capacity	924,622
Percentage of Permitted Design Capacity Utilized	59.80%
<i>Sources:</i> 1. City of Alachua Public Services Department, April 2019 2. City of Alachua May 2019 Development Monitoring Report	

Policy 4.1.c of the Community Facilities and Natural Groundwater Aquifer Recharge (CFNGAR) Element of the Comprehensive Plan establishes the potable water LOS Standard for residential uses at 275 gallons per day per equivalent residential dwelling unit on an average annual basis. As such:

Proposed Demand **93,500 GPD (340 units x 275 gpd)**
 Residual Capacity after Proposed 831,122 GPD

Conclusion: The demand of the development will not exceed the adopted LOS standards.

Sanitary Sewer

Table 4.3 Wastewater Public Facilities Impacts	
System Category	Gallons Per Day
Treatment Plant Current Permitted Capacity ¹	1,500,000
Less Actual Treatment Plant Flows ²	729,000
Reserved Capacity ²	76,737
Residual Capacity	694,263
Percentage of Permitted Design Capacity Utilized	53.72%
<i>Sources:</i> 1. City of Alachua Public Services Department, April 2019 2. City of Alachua May 2019 Development Monitoring Report	

Policy 1.1.d of the CFNGAR Element of the Comprehensive Plan establishes the sanitary sewer LOS Standard at 250 gallons per day per equivalent residential dwelling unit on an average annual basis. As such:

Proposed Demand **85,000 GPD (340 units x 250 gpd)**
 Residual Capacity after Proposed 609,263 GPD

Conclusion: The demand of the development will not exceed the adopted LOS standards.

Solid Waste

Table 4.7 Solid Waste Public Facilities Impacts		
System Category	Pounds Per Day	Tons Per Year
Existing Demand ¹	40,620.00	7,413.15
Reserved Capacity ²	6,882.99	1,256.15
New River Solid Waste Facility Capacity ³	50 years	
<i>1. Bureau of Economic & Business Research, University of Florida, Estimates of Population by County and City in Florida (2018); Policy 2.1.a, CFNGAR Element Formula: 10,155 persons x 0.73 tons per year</i>		
<i>2. City of Alachua May 2019 Development Monitoring Report</i>		
<i>3. New River Solid Waste Association, April 2019</i>		

Policy 2.1.a of the CFNGAR Element of the Comprehensive Plan establishes a LOS Standard for solid waste facilities of 0.73 tons per capita per year for residential development. As such:

Proposed Demand 3182.4 lbs/day 580.79 tons per year (749 persons x 0.73)

Conclusion: The demand of the development will not exceed the adopted LOS standards.

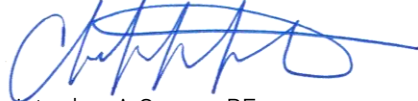
Stormwater

A separate stormwater report has been provided along with the site grading plan.

Please let us know if you need any additional information for your review.

Sincerely,

Gmuer Engineering, LLC



Christopher A Gmuer, PE

President

**ARTICLES OF INCORPORATION
OF
TARA FOREST HOMEOWNERS' ASSOCIATION, INC.**

(A corporation not for profit)

In compliance with the requirements of Chapter 617 of the Florida Statutes, the undersigned, all of whom are residents of Florida, and all of whom are of full age, have this day voluntarily associated themselves together for the purpose of forming a corporation not for profit, and so hereby certify the following:

**ARTICLE I
NAME**

1.01. The name of this corporation shall be **Tara Forest Homeowners' Association, Inc.** The business of the corporation shall be conducted as Tara Forest Homeowners' Association, Inc.

**ARTICLE II
LOCATION**

2.01. The principal office of the Association is located at 7717 NW 20th Lane, Gainesville, FL 32605.

**ARTICLE III
REGISTERED AGENT**

3.01. Justin M. Mowitz, Esq., whose address is 5341 SW 91st Terrace, Suite A, Gainesville, FL 32608, is hereby appointed the initial registered agent of this Association.

**ARTICLE IV
PURPOSES AND POWERS OF THE ASSOCIATION**

2.01 Purpose. This Association does not contemplate pecuniary gain or profit to the members hereof, and the specific purposes for which it is formed are to provide for the maintenance, preservation and architectural control of the residential lots and Common Areas, and to promote the common interests of the residents within Tara Forest, including any additions thereto, as may be hereafter brought within the jurisdiction of this Association.

2.02 Powers. In furtherance of their purposes, the Association shall have the power to:

- (a) exercise all of the powers and privileges and to perform all of the duties and obligations of the Association as set for the in the Declaration of Covenants, Easements and Restrictions (hereinafter called the "Declaration"), and all plats applicable to Tara Forest, which plats and Declaration are to be recorded in the Official Records of Alachua County, Florida, and as the same may be amended form time to time. Capitalized terms herein shall the meanings set for the in the Declaration;
- (b) fix, levy, collect and enforce payment by any lawful means, all charges or assessments pursuant to the terms of the Declaration; to pay all expenses in connection therewith and all office and

other expenses incident to the conduct of business of the Association, including all license, taxes or governmental charges levied or imposed against the property of the Association.

- (c) acquire (by gift, purchase or otherwise), own, hold, improve, build upon, operate, maintain, convey, sell, lease, transfer, dedicate for public use or otherwise dispose of real or personal property in connection with the affairs of the Association;
- (d) borrow money, mortgage, pledge, deed in trust, or hypothecate any or all of its real or personal property as security for money borrowed or debts incurred;
- (e) dedicate, sell or transfer all or any part of the Common Area to any public agency, authority or utility for such purposes and subject to such conditions as may be agreed to by the members;
- (f) participate in mergers and consolidations with other not for profit corporations organized for the same purpose or annex additional residential property and Common Area(s);
- (g) have and to exercise any and all powers, rights, and privileges which a corporation organized under the Non-Profit Corporation Law of the State of Florida by law may now, or hereafter have or exercise;
- (h) the Association shall operate, maintain and manage the Surface Water or Storm Water Management System(s) in a manner consistent with Suwannee River Water Management District ("District") permit No. ____ and applicable District rules, and shall assist in the enforcement of the Declaration of Covenants and Restrictions which related to the Surface Water or Storm Water Management System(s);
- (i) the Association shall levy and collect adequate assessments against the member of the Association for the costs of maintenance and operation of the Surface Water or Storm Water Management System(s), including, but not limited to, work within retention areas, drainage structures and drainage easements, and for maintenance and repair of the private roads, landscaping and walls within common areas.
- (j) manage and maintain the Common Area(s)/Open Space in accordance with such Common Area/Open Space Management Plans as may be adopted by the Board of Directors;
- (k) manage and protect from wildfire, such Common Area(s)/Open Space(s) in accordance with such Common Area/Open Space Management Plans as may be adopted by the Board of Directors;
- (l) protect and preserve populations of Gopher Tortoise occupying the Property in accordance with the Gopher Tortoise Protection and Management Plan, and the Conservation Plan, to be included herewith as Exhibit "C"

ARTICLE III MEMBERSHIP

3.01. Every person or entity who is a record owner of a fee or undivided fee interest in any Lot which is subject to the Declaration and the jurisdiction of the Association, shall automatically be a Member of the Association.

The foregoing is not intended to include persons or entities that hold an interest merely as security for the performance of an obligation. Membership shall be appurtenant to, and may not be separated from ownership of, any Lot which is subject to the jurisdiction of the Association.

3.02 Non-Voting Affiliates. The board of directors may approve classes of non-voting affiliates with rights, privileges, and obligations established by the board. Affiliates may be individuals, businesses, and other organizations that seek to support the mission of the corporation. The board, a designated committee of the board, or any duly elected officer in accordance with board policy, shall have authority to admit any individual or organization as an affiliate, to recognize representatives of affiliates, and to make determinations as to affiliates' rights, privileges, and obligations. At no time shall affiliate information be shared with or sold to other organizations or groups without the affiliate's consent. At the discretion of the board of directors, affiliates may be given endorsement, recognition and media coverage at fundraising activities, clinics, other events or at the corporation website. Affiliates have no voting rights, and are not members of the corporation.

3.03 Dues. Any dues for affiliates shall be determined by the board of directors.

ARTICLE IV VOTING RIGHTS

4.01. The Association shall have two classes of voting membership, as outlined below, which shall have the voting rights specified below:

Class A: Class A members shall consist of all of the Owners of Lots within any phase of Tara Forest, with the exception of Tara Forest, Inc. (the "Declarant"). Each Class A member shall be entitled to one (1) vote for each Lot owned. In the event any Owner has purchased two (2) adjacent Lots and has utilized both Lots for the situs of one single-family residence, such Owner shall be entitled to only one (1) vote. Following the Conversion Date, both Class A members and Class B members shall be entitled to vote in the affairs of the Association on the basis of one vote for each Lot owned, and Class A members, excluding any builder, contractor, or other who has purchased a Lot for the purpose of constructing improvements thereon for resale, shall be entitled to elect a majority of the Board of Directors. When more than one person holds an interest in any Lot, all such persons shall be Members. The vote for such Lot shall be exercised as the fractional owners of such Lot agree in writing, but in no event shall more than one vote be cast with respect to any Lot, nor shall any fractional vote be cast. Decisions of the Members shall be rendered in accordance with the provision of the Bylaws of the Association.

Class B: Class B shall consist of Declarant and any person or entity to which Declarant assigns its rights hereunder. Until the Conversion Date, the Class B member shall be entitled to cast two (2) votes for each vote that the Class A members are entitled to cast. Upon the occurrence of the Conversion Date, Class B members shall be entitled to cast one (1) vote for each Lot owned, but any member who is a builder, contractor, or other who has purchased a Lot for the purpose of constructing improvements thereon for sale shall not be allowed to vote for a majority of the Board of Directors. After the Conversion Date, the Association shall succeed to all of the rights, obligations and powers of Declarant. The Conversion Date shall be defined as the earlier of the following to transpire:

- (a) the date the Declarant voluntarily relinquishes control of the Association to the Class A members;

- (b) within three (3) months after Declarant conveys ninety (90%) of all Lots in all phases (including proposed phases) of the Tara Forest subdivision, that will ultimately be governed by the Association; or,
- (c) Ten (10) years after the date of the original recording of the Declaration in the public records of Alachua County, Florida.

ARTICLE V BOARD OF DIRECTORS

5.01 Number of Directors. The affairs of the Tara Forest Homeowners' Association shall be managed by a Board of Directors composed of three (3) directors. Directors need not be members of the Association. The number of directors may be changed by amendment of the Bylaws of the Association. The names and addresses of the person who are to act in the capacity of directors until the selection of their successors are:

<u>Name</u>	<u>Address</u>
Silvia H Moukhtara Nemer	7717 NW 20 th Lane, Gainesville, FL 32605
Phillip Moukhtara	7717 NW 20 th Lane, Gainesville, FL 32605
Berit Lassen	7717 NW 20 th Lane, Gainesville, FL 32605

All directors shall be appointed by Declarant until the Conversion Date. After the conversion Date, all other directors shall be elected by a majority of the Class A Members, except that any builder, contractor, or other who has purchased a Lot for the purpose of constructing improvements thereon for sale shall not be allowed to vote for a majority of the directors. At the first annual meeting after the Conversion Date, the members shall elect one (1) director for a term of one (1) year, and one (1) director for a term of two (2) years, and one (1) director for a term of three (30) years.

ARTICLE V DISSOLUTION

5.01. The Association may be dissolved only with the assent given in writing and signed by not less than three-fourths (3/4) of the members. Upon dissolution of the Association, other than incident to merger or consolidation, the assets of the Association shall be dedicated to an appropriate public agency to be used for purposes similar to those for which this Association was created. In the event that such dedication is refused acceptance, such assets shall be granted, conveyed and assigned to any non-profit corporation, association, trust or other organization to be devoted for such similar purposes.

In the event of termination, dissolution or final liquidation of the Association, the responsibility for the operation and maintenance of the surface water or storm water management systems must be transferred to and accepted by an entity which would comply with Section 40C-42.027, F.A.C., and be approved by the Suwannee River Water Management District prior to such termination, dissolution or liquidation.

**ARTICLE VI
DURATION**

6.01. The corporation shall exist perpetually unless otherwise described as provided above.

**ARTICLE VII
AMENDMENTS**

7.01. Except where otherwise provided herein, amendment of these Articles may be made provided such amendment does not conflict with the Declaration and shall require the Assent of two-thirds (2/3) of the total votes entitled to be cast.

**ARTICLE VIII
MISCELLANEOUS**

8.01. Should a conflict exist or arise between any of the provisions of the Articles of Incorporation and the provisions of the Bylaws, the provisions of the Articles of Incorporation shall control.

CERTIFICATE OF ADOPTION OF BYLAWS

IN WITNESS WHEREOF, for the purposes of forming this corporation under the laws of the State of Florida, we, the undersigned, constituting the incorporator of this Association, have executed these Articles of Incorporation this ____ day of _____, 2019.

Justin M. Mowitz
Incorporator

NON-PROFIT CORPORATE BYLAWS

TARA FOREST HOMEOWNERS' ASSOCIATION, INC.

ARTICLE I DEFINITIONS

1.01 Definitions. All defined terms contained herein which are defined in the Declaration of Covenants, Easements and Restrictions for Tara Forest Homeowner's Association ("Declaration") to be recorded in the public record of Alachua County, Florida, and in the Articles of Incorporation of the Association, shall have the same meaning as such terms are defined in the Declaration and Articles of Incorporation.

ARTICLE II LOCATION OF PRINCIPAL OFFICE

2.01 Location of Principal Office. The office of Tara Forest Homeowners' Association, Inc., ("Association") shall be initially located at 7717 NW 20th Lane, Gainesville, FL 32605, or at such other place as may be established by resolution of the Board of Directors of the Association from time to time.

ARTICLE III VOTING RIGHTS AND ASSESSMENTS

3.01. Every person who is a record fee simple owner of a Lot or any other portion of the Property, and the Developer as long as it owns any Property subject to the Declaration, shall be a member of the Association (the "Members") as provided in the Articles of Incorporation of the Association, and shall have the voting rights as set forth in the Articles of Incorporation, provided that any such person or entity who holds such interests only as a security for the performance of an obligation shall not be a member. Membership shall be appurtenant to, and may not be separated from, ownership of any parcel within the Property.

3.02. Assessments and installments thereon not paid when due shall bear interest from the date when due until paid at the highest lawful rate, and shall result in the suspension of voting privileges during any period of such non-payment.

ARTICLE IV BOARD OF DIRECTORS

4.01. A majority of the Board of Directors of the Association (the "Board") shall constitute a quorum to transact business at any meeting of the Board, and the action of the majority present at a meeting at which a quorum is present shall constitute the action of the Board.

4.02. Any vacancy occurring on the Board because of death, resignation, or other termination of services of any Director, shall be filled by the Board, except that the Developer, to the exclusion of other Members and/or the Board itself, shall fill any vacancy created by the death, resignation, removal or other termination of services of any Director appointed by the Developer. A Director elected or appointed to fill the vacancy shall be elected or appointed for the unexpired term of his predecessor in office and thereafter until his successor shall have been elected or appointed, and qualified.

ARTICLE V ELECTION OF DIRECTORS

5.01. Nominations for the election of Board members (other than Board members appointed by the Developer) shall be made by the Nominating committee described in Article IX hereof, or upon petition in accordance with Section 5.3 of this Article. The Nominating Committee shall make as many nominations as it shall in its discretion, determine appropriate.

5.02. The Developer shall, within fourteen (14) days of the date set for the annual meeting of the Association, notify the Secretary of the names of the Directors that Developer is Appointing to the Board.

5.03. Petitions for nominees shall also be accepted if signed by Members representing one-third (1/3) of the total votes held by the Class A Members, and if received by the Secretary of the Association not less than thirty (30) days prior to the date fixed for the annual meeting of the Members. Nominations and notifications of vacancies being filled by the Developer shall be placed on written ballot referenced in Section 5.4 of this Article V.

5.04. All elections to the Board shall be made on written ballots to be voted at the annual meeting, or in the discretion of the Board, by mail, provided such ballots are mailed to the Members not less than fifteen (15) days prior to the date fixed for the annual meeting. The ballots shall (i) describe the vacancies to be filled by the Class A members, (ii) set forth the names of those nominated for each such vacancy, and (iii) set forth the names of those appointed to the Board by the Developer. Each Member may cast the number of votes to which such Member is entitled as set for the in the Articles of incorporation.

5.05. In order for an election of members of the Board to be valid and binding, the election must occur at a meeting of the Members at which a quorum is present; or if the election is conducted by mail, the Association must receive as of the date established by the Board for receipt of ballots, a number of ballots representing not less than a quorum of the Members.

5.06. The members of the Board elected or appointed in accordance with the procedures set forth in this Article V shall be deemed elected or appointed as of the date of the annual meeting of the Members.

ARTICLE VI POWERS AND DUTIES OF THE BOARD OF DIRECTORS

6.01.

A. The Board of Directors shall have the power:

1. To call meetings of the Members.
2. To appoint and remove at its pleasure all officers, agents, and employees of the Association; and to prescribe their duties, fix their compensation, and require of them such security or fidelity bonds as it may deem expedient and/or necessary. Nothing contained in these Bylaws shall be construed to prohibit the employment of any Member, Officer, or Director of the Association in any capacity whatsoever.
3. To establish, levy and assess, and collect the annual and special assessments necessary to operate the Association, and carry on its activities, and to create such reserves as may be deemed appropriate by the Board.

4. To collect assessments on behalf of any property owners association entitled to establish, levy and collect assessments from the Members of the Association.
5. To appoint committees, adopt and publish rules and regulations governing the use of Common Areas of any portion thereof, and the personal conduct of Members and their guest thereon, including reasonable admission charges if deemed appropriate.
6. To authorize and cause the Association to enter into contracts for the day-to-day-operation of the Association and the discharge of its responsibilities and obligations.
7. To cause the financial records of the Association to be compiled, reviewed, or audited by an independent certified public accountant at such periodic intervals as the Board may determine in its sole discretion.
8. To exercise for the Association all powers, duties, and authority vested in or delegated to the Association, except those reserved to Members in the Declaration or the Articles of Incorporation of the Association.

B. It shall be the duty of the Board of Directors of the Association:

1. To cause to be kept a complete record of all of its acts and corporate affairs.
2. To supervise all officers, agents, and employees of this Association to ensure that their duties are properly performed.
3. With reference to assessments of the Association:
 - a. To fix the amount of annual assessments against each Class A Member for each annual assessment period at least thirty (30) days in advance of such date or period;
 - b. To prepare and maintain a roster of the Members and assessments applicable thereto which shall be kept in the office of the Association and shall be open to inspection by any Member; and,
 - c. To send written notice of each assessment to every Member subject thereto.

ARTICLE VII DIRECTORS' MEETINGS

7.01. Regular meetings of the Board shall be held on such a date and at such a time as the Board may establish. Notice of such meetings is hereby waived.

7.02. Special meetings of the Board shall be held when called by the President or Vice President of the Association, or by any two (2) Directors, after not less than three (3) day's notice to each Director.

7.03. Meetings of the Board of Directors shall be open to all Members and notices of meetings shall be posted in a conspicuous places within the Property at least forty-eight (48) hours in advance, except in an emergency. Notice of any meeting of the Board of Directors during which assessments are to be established, shall specifically contain a statement that the assessments shall be considered and a statement of the nature of such assessments.

7.04. The transaction of any business at any meeting of the Board, however called and noticed, or wherever held, shall be valid as though made as a meeting duly held after regular call and notice, if a quorum is present, and, if either before or after the meeting, each of the Directors present signs a waiver of notice, or a consent to the holding of such meeting, or an approval of the minutes thereof. All such waivers, consents, and approvals shall be filed with the corporate records of the Association and made part of the minutes of the meeting.

ARTICLE VIII OFFICERS

8.01. The Officers of the Association shall be a President, a Vice President, a Secretary, and a Treasurer, and such other officers as may be determined from time to time by the Board, in accordance with the Articles of Incorporation of the Association. The President shall be a member of the Board, but the other Officers need not be.

8.02. The Officers of the Association shall be elected by the Board at the annual meeting of the Board, which shall be held immediately following the annual meeting of the Association. New offices may be created and filled at any meeting of the Board. Each Officer shall hold office until his successor shall have been duly elected.

8.03. A vacancy in any office because of death, resignation, or other termination of service, may be filled by the Board for the unexpired portion of the term.

8.04. All Officers shall hold office for terms of one (1) year.

8.05. The President shall preside at all meetings of the Board, shall see that orders and resolutions are carried out, and shall sign all notes, checks, leases, mortgages, deeds and all other written instruments.

8.06. The Vice President, or the Vice President so designated by the Board if there is more than one Vice President, shall perform all the duties of the President in his absence. The Vice President(s) shall perform such other acts and duties as may be assigned by the Board.

8.07. The Secretary Shall be ex officio the secretary of the Board, and shall record the votes and keep the minutes of all meetings of the Members and of the Board of Directors in a book to be kept for that purpose. The Secretary shall keep all records of the Association and shall record in the book kept for that purpose all the names of the Members of the Association together with their addresses as registered by such Members.

8.08. The Treasurer shall receive and deposit in appropriate bank accounts, all monies of the Association, and shall disburse such funds as directed by resolution of the Board, provided however, that a resolution of the Board shall not be necessary for disbursements made in the ordinary course of business of the

Association, conducted within the limits of a budget adopted by the Board. The Treasurer may, but need not, be a signatory on checks and notes of the Association.

8.09. The Treasurer, or his appointed agent, shall keep proper books of account and cause to be prepared at the completion of each fiscal year, an annual budget and an annual balance sheet statement, and the budget and balance sheet statement shall be open for inspection upon reasonable request by any Member.

8.10. Upon approval of the Board of Directors, any or all of the Officers of the Association may delegate their respective duties and functions to a licensed and qualified property manager, provided however, such property manager shall at all times be subject to supervision and control of the Board of Directors.

ARTICLE IX COMMITTEES

9.01. The standing committees of the Association shall be the Nominating Committee and the Architectural Review Board. The Nominating Committee and the Architectural Review Board shall the duties, authority and functions described in the Declaration and as elsewhere described in these Bylaws.

9.02. The Board shall have the power and authority to appoint such other committees as it deems advisable, including such committees as may be created on an ad hoc basis. Any committee appointed by the Board shall consist of a Chairman and two (2) or more other Members, and shall include a member of the Board. Committee members shall serve at the pleasure of the Board, and shall perform such duties and functions as the Board may direct. Terms of members of Ad hoc committees shall cease at such time as the ad hoc committee's function has been fulfilled.

ARTICLE X BOOKS AND RECORDS

10.01. The books, records and papers of the Association shall at all times, during reasonable business hours, be subject to inspection by any Member or any representative of the Suwannee River Water Management District, and Alachua County.

ARTICLE XI MEETINGS OF MEMBERS

11.01. The annual meeting of the Members shall be held prior to April 30th of each year, at such time as the Board may designate, or at such time and date as may be selected by the Board.

11.02. Special meetings of the Members for any purpose may be called at any time by the President, the Vice President, the Secretary, or the Treasurer, by any two or more members of the Board, or upon written request of Members holding a majority of all votes allocated to the entire Membership.

11.03. Notice of all meetings of the Members shall be given to the Members by the Secretary. Notice may be given to the Member either personally or by sending a copy of the notice through the mail, postage fully prepaid, to his address appearing on the books of the Association. Each Member shall be responsible for registering his address and telephone number with the Secretary and notice of the meetings shall be mailed to him at such address. Notice of the annual meeting of the Members shall be delivered at least fourteen (14) days in advance. Notice of the meeting shall set forth in general the nature of the business to be transacted; provided, however, that if business of any meeting shall involve any action as governed

by the Articles of Incorporation or the Declaration in which other notice provisions are provided for, notice shall be given or sent as therein provided.

11.04. The presence, in person or by proxy, of the Members holding not less than thirty percent (30%) of the total votes in the Association, as established by the Articles of Incorporation, shall constitute a quorum of the Membership for any action governed by the Declaration, the Articles of Incorporation, or these Bylaws.

11.05. At any meeting of the Members or Directors, whether an annual meeting or other special called meeting, at which a Motion is made concerning the Surface Water or Storm Water Management System(s), such Motion may only be voted upon at such meeting if the Suwannee River Water Management District and Alachua County have been given at least ten (10) days written notice, and to which the Suwannee River Water Management District and Alachua County have been invited to attend by their respective representatives.

ARTICLE XII PROXIES

12.01. At all meetings of the Members, each Member may vote in person or by limited or general proxy.

12.02. All proxies shall be in writing and shall state the date of the proxy and the date, time and place of the meeting for which the proxy is given, and must be signed by the authorized Member giving the proxy. A proxy shall be effective only for the specified meeting for which it is given, as such meeting may be lawfully adjourned and reconvened from time to time. No proxy shall extend beyond a period of ninety (90) days from the date of the meeting for which it was originally given, and every proxy shall automatically cease upon the sale by the Member of his interest in the Property. All proxies be revocable at any time at the pleasure of the Member who executes the same, and may include powers of substitution.

12.03. For elections of the Board of Directors, the Members shall vote in person or by proxy at a meeting of the Members, or by written ballot that each Member personally casts.

ARTICLE XIII SEAL

13.01. The Association shall have a seal, in circular form having within its circumference the words: Tara Forest Homeowners' Association, Inc., not for profit, 2018.

ARTICLE XIV AMENDMENTS

14.01. These Bylaws may be altered, amended or rescinded by majority vote of the Board of Directors at a duly constituted meeting of the Board. Amendments shall be effective on the date of passage by the Board, and no amendment need be recorded in the public records of Alachua County, Florida. Amendments to the Bylaws which directly or indirectly impact operation and maintenance of the Surface Water Management System, including, but without limitation, all lakes, ditches, canals, retention or detention areas, drainage, other Surface Water Management works, and preservation or conservation areas, wetlands and wetland mitigation areas which are owned by the Association or the owners in common, may be made only after approval by the Suwannee River Water Management District. Such approval shall be in the form of a modification to any and all permits issued by the Suwannee River Water

Management District under the lawfully-adopted rules of the Suwannee River Water Management District in effect at the time of application for such modification. Amendments to the Bylaws which do not impact operation of maintenance of the system may be made without authorization of the Suwannee River Water Management District; however, copies of any and all such amendments shall be forwarded to the District within thirty (30) days of approval.

ARTICLE XV INCONSISTENCIES

15.01. Should a conflict exist or arise between any of the provisions of the Articles of Incorporation and the provisions of the Bylaws, the provisions of the Articles of Incorporation shall control.

DRAFT

**DECLARATION OF COVENANTS, CONDITIONS, EASEMENTS,
AND RESTRICTIONS
FOR
TARA FOREST
(Alachua County, Florida)**

This document prepared by
and after recording return to:

Justin M. Mowitz, Esq.
5341 SW 91st Terrace, Suite A
Gainesville, FL 32608

**DECLARATION OF COVENANTS, CONDITIONS, EASEMENTS,
AND RESTRICTIONS FOR TARA FOREST**

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**DECLARATION OF COVENANTS, CONDITIONS, EASEMENTS,
AND RESTRICTIONS FOR TARA FOREST**

THIS DECLARATION OF COVENANTS, CONDITIONS, EASEMENTS, AND RESTRICTIONS FOR TARA FOREST is made as of and on the Effective Date, by and **TARA FOREST, LLC**, a Florida corporation, ("Declarant"), whose post office address is 7717 NW 20th Lane, Gainesville, Florida 32605.

RECITALS:

A. Declarant owns the real property described in the plat for **TARA FOREST**, as Recorded in Plat Book _____, Pages _____ through _____, inclusive, of the Public Records (the "Plat") and as more particularly described on **Exhibit "A"** attached hereto and made a part hereof.

B. The Property is a proposed residential community known as "**TARA FOREST**" (the "Development").

C. Declarant is the developer of the "community" (as that term is defined in the Association Act) pursuant to the Association Act.

D. Declarant desires to preserve and enhance the values and quality of life on the Initial Property and the health, safety, and welfare of the residents thereof, and to provide for the maintenance of certain areas and improvements for the benefit of the Property.

E. Declarant has incorporated the Association, which Association will be conveyed title to certain property, and which Association will be delegated the powers of and responsibility for maintaining and administering certain property and improvements, administering and enforcing this Declaration and the other Governing Documents, and collecting and disbursing the monies derived from the Assessments hereafter levied.

DECLARATIONS:

NOW, THEREFORE, Declarant declares that the Property is and shall be owned, improved, held, controlled, transferred and occupied subject to this Declaration.

The recitals above are incorporated herein as if fully set forth herein.

This Declaration is not intended to, nor does it create or establish a condominium under Chapter 718 of the Florida Statutes, a cooperative under Chapter 719 of the Florida Statutes, or a timeshare under Chapter 721 of the Florida Statutes. No condominium under Chapter 718 of the Florida Statutes, cooperative under Chapter 719 of the Florida Statutes, or timeshare under Chapter 721 of the Florida Statutes, may be created or established at any time upon the Property.

ARTICLE I

DEFINITIONS

Section 1.01. Definitions. Some of the definitions set forth in the Governing Documents may contain terms, conditions, and provisions that are necessary for: (i) the proper interpretation of the Governing Documents; and (ii) to fully understand the Members' rights, privileges, responsibilities, duties, liabilities, and obligations under the Governing Documents and under the Association Act. Capitalized

terms used above or herein that are not defined in this Article I shall have the meanings given to such terms elsewhere in this Declaration. When used above or herein in this Declaration, the following terms shall have the following meanings:

(a) “Additional Property” shall mean and refer to those lands, together with any improvements thereon, if any, which are made subject to this Declaration by annexation pursuant to Article II hereof.

(b) “Annual Assessments” shall mean and refer to the assessments levied annually by the Association pursuant to the “Association Act” and the “Budget” (as that term is defined in Section 6.03(a) of this Declaration).

(c) “Architectural Control Provisions” shall collectively mean and refer to the terms, covenants, conditions, provisions, and limitations set forth in Article VII and Article IX of this Declaration.

(d) “Area(s) of Common Responsibility” shall mean and refer to any land or improvement located in or near the Property which is not intended to be owned by the Association, but which is intended to be improved, maintained, or operated by the Association in the manner and to the extent determined from time to time by the Board. Areas of Common Responsibility may be designated by this Declaration, any Supplemental Declaration, a contract entered into by the Association, or by a decision of the Board. The following are hereby designated as Areas of Common Responsibility:

(i) Rights of Way and Entrance Area. Subject to limitations imposed by any Governmental Authority, the Association shall maintain, repair and replace to the extent determined by the Board, the signs; lighting fixtures; electrical equipment; drainage improvements in accordance with the Permit; irrigation lines and equipment; landscape materials and features; and other improvements from time to time located within the unpaved rights-of-way and unpaved medians in any rights-of-way as shown on any Recorded Plat;

(ii) Street Lighting. The Association may arrange for and assess the Owners for the fixture rental, electrical usage and other costs of Street lighting for the Property and any Areas of Common Responsibility; and

(iii) Easements. The Association shall maintain, repair and replace any walls, signs, lighting fixtures, electrical equipment, drainage improvements (in accordance with the Permit), irrigation lines and equipment, landscape materials and features, and other improvements from time to time located within all wall and landscape easements created in favor of the Association as shown on any Recorded Plat. Notwithstanding the foregoing, the Owner of each Lot encumbered by a wall easement shall maintain all landscaping lying between the wall and that Owner's Dwelling, and said Owner shall maintain the paint or other surface finish, if any, on the vertical surface of the wall which faces the Owner's Dwelling, failing which the Association shall perform the required maintenance and may levy an Individual Assessment to cover the costs thereof.

The foregoing duties and prerogatives of the Association are subject to the terms of Article IV, hereof, regarding potential implementation of one or more MSTU/MSBU or similar mechanisms to assume responsibility for and collect the funds necessary to pay the costs of any of the foregoing or any other services that would otherwise be the responsibility of the Association under this Declaration or otherwise.

(e) “Articles” shall mean and refer to the Articles of Incorporation of the Association. A copy of the initial Articles is attached as **Exhibit “A”** to this Declaration and made a part hereof. The Articles may be amended as provided therein, and it shall not be necessary to amend this Declaration in order to amend the Articles.

(f) “Assessments” shall mean and include: (i) Annual Assessments or charges; (ii) “Special Assessments” (as that term is defined in Section 6.04(a) of this Declaration); (iii) “Individual Assessments” (as that term is defined in Section 6.04(b) of this Declaration); (iv) if required to be paid pursuant to the terms hereof or hereafter required by the Board from time to time, a one-time only start-up assessment (“Start-Up Assessment”); (v) assessments or amenity fees permitted pursuant to the Association Act; and (vi) any interest and late charges that may be imposed by the Board at its discretion, and the cost of collection of any of the foregoing, including, without limitation, court costs and expenses/fees and reasonable attorneys' and paralegals' fees before trial, at trial, and on appeal.

(g) “Association” shall mean and refer to the TARA FOREST HOMEOWNERS' ASSOCIATION, INC., a Florida not for profit corporation, and its successors and/or assigns.

(h) “Association Act” shall mean and refer to the laws of the State of Florida applicable to the operations of the Association on the Effective Date (as opposed to as amended, restated, or re-codified from time to time), including, but not necessarily limited to, those laws set forth in Chapters 617 and 720 of the Florida Statutes. Chapter 720 of the Florida Statutes, being the Florida legislation specifically enacted to govern the Association and the “Community” (as that term is defined in the Chapter 720 of the Florida Statutes), shall in all instances trump the more general legislation set forth in Chapter 617 of the Florida Statutes. In the event of any ambiguity or conflict between Chapter 617 and 720 of the Florida Statutes, Chapter 720 shall govern as necessary to resolve any such ambiguity or conflict.

(i) “Board”, “Board of Directors” or “Directors” shall mean and refer to the Board of Directors of the Association.

(j) “Builder” or “Homebuilder” shall mean and refer to any person or legal entity that has acquired or that acquires title to any Lot expressly in furtherance of: (1) the business of developing the Lot for eventual construction of Dwellings thereon in the ordinary course of such person's or entity's business; or (2) the business of constructing Dwellings thereon, in the ordinary course of such person's or entity's business, for later sale to bona fide Third-Party Purchasers that are not Builders or affiliates of a Builder. After the Turnover occurs, Declarant shall be considered and deemed a Builder with regard to or concerning any Lot(s) that Declarant then owns or thereafter acquires title to, and with Declarant, as a Builder, automatically being deemed to and having all rights, powers, benefits, easements, and reservations afforded to a Builder under the Governing Documents or that may be delegated to a Builder by Declarant under the Governing Documents.

(k) “Bylaws” shall mean and refer to the Bylaws of the Association. A copy of the initial Bylaws are attached as **Exhibit “B”** to this Declaration and made a part hereof. The Bylaws may be amended as provided therein, and it shall not be necessary to amend this Declaration in order to amend the Bylaws.

(l) “City” shall mean and refer to the City of Alachua, Florida, a political subdivision of the State of Florida, specifically including each and all of its departments, divisions, and agencies.

(m) “Common Area(s)” or “Common Property” shall mean and refer to the real and personal property from time to time owned or intended to be owned by the Association and devoted to the use and enjoyment of all Members of the Association, all at Common Expense. Without limiting the generality of the foregoing, the Common Area Tracts shall be Common Area. Common Area shall include, but not be limited to, easement areas which are held by the Association as grantee, including, but not limited to, any private access and drainage easements and private drainage easements. Additional Property may contain Common Area, but no commitment is made that any Additional Property will in fact contain Common Area. The definition of “Common Area” and “Common Property” shall also include the definition of “common area” defined in the Association Act.

(n) “Common Area Tract(s)” shall initially mean and refer only to the platted tracts set forth on the Initial Plat and identified on Exhibit “C” attached hereto and made a part hereof as to be owned (in fee simple no later than Turnover) by the Association, which exhibit also depicts, subject to the terms of this Declaration, the party or entity responsible for maintaining said Common Area Tracts.

(o) “Common Expense” shall mean and refer to the actual and estimated expense of operating the Association and meeting the costs to be incurred by the Association in performing its duties and in exercising its prerogatives, including, without limitation, costs incurred for operation, management, administration, maintenance, repairs, replacement, insurance and improvement of the Common Area and Areas of Common Responsibility, and for any reserves from time to time established to be set aside by the Board. Except as may be expressly set forth herein, all undertakings or activities of the Association concerning the Property, the Community, the Common Area, the Areas of Common Responsibility, and enforcing the provisions of the Governing Documents, shall be done at Common Expense.

(p) “Community Development District”: As defined in Chapter 190 of the Florida Statutes.

(q) “Conservation Easement”: As defined in Article IV, Section 4.09 hereof.

(r) “Conservation Easement Area(s)” shall mean and refer to any areas or portions of the Property from time to time included within, or subjected to, a Conservation Easement pursuant to the provisions of Article IV, Section 4.09 hereof.

(s) “County” shall mean and refer to Alachua County, Florida, a political subdivision of the State of Florida, specifically including each and all of its departments, divisions, and agencies.

(t) “Declarant” shall mean and refer to **Tara Forest, LLC, a Florida corporation**, its successors and/or assigns. No successor or assignee of Declarant shall have any rights, privileges, liabilities or obligations of Declarant under this Declaration or any other Constituent Document unless such rights and obligations are specifically set forth in a Recorded instrument of succession and/or assignment, or unless such rights expressly pass by operation of Law from Declarant to such successors and/or assigns.

(u) “Declaration” shall mean and refer to this Declaration of Covenants, Conditions, Easements, and Restrictions for Tara Forest, as amended, modified, restated or supplemented.

(v) “Deficit Fund” or “Deficit Funding” shall mean and refer to Declarant's subsidizing of the Common Expenses of the Association pursuant to Section 6.08 hereof.

(w) “Division” shall mean and refer to the Division of Florida Condominiums, Timeshares, and Mobile Homes, or any successor governmental agency, division, or department of the State of Florida.

(x) “District” shall mean and refer to the Suwanee River Water Management District, an agency created pursuant to Chapter 373, Florida Statutes.

(y) “Dwelling” or “Residence” shall mean and refer to any single family residence or dwelling unit located on a Lot.

(z) “Effective Date” shall mean and refer to the date that this Declaration is Recorded in the Public Records.

(aa) “Electronic Transmission” shall mean and refer to any form of communication, not directly involving the physical transmission or transfer of paper, which creates a record that may be retained, retrieved, and reviewed by a recipient and which may be directly reproduced in a comprehensible and legible paper form by such recipient through an automated process. Examples of Electronic Transmission include, but shall not be limited to, telegrams, facsimile transmissions, Short Message Service (SMS), Multimedia Messaging Service (MMS), and email. Notices may be given via Electronic Transmission for and regarding any meetings of the Board, any committee meetings requiring notice under the Association Act, including, but not limited to, ARC meetings, and any annual and special meetings of the Members; provided, however, that a Member must consent in writing to receiving notice by Electronic Transmission. Consent by a Member to receive notice by Electronic Transmission shall be revocable by the Member only by written notice to the Board.

(bb) “Fiscal Year”. The first fiscal year shall begin on the date of incorporation and end on December 31 of that year (“Fiscal Year”). Thereafter, the Fiscal Year of the Association shall begin on the first day of January and end on the 31st day of December of every year.

(cc) “Governmental Authority(ies)” shall mean and refer to any federal, state or local authority, court, department, division, legislature or instrumentality having authority, control or jurisdiction over or concerning the Development, the Property, the Community, the Areas of Common Responsibility, the Association, the Members and/or the Owners, including, but not limited to, the Local Government.

(dd) “Governing Document(s)” shall collectively mean the “governing documents” (as that term is defined in the Association Act) and the Rules and Regulations.

(ee) “Homeowners' Association”: As defined in the Association Act.

(ff) “Law” or “law” shall mean and refer to all laws, statutes (including, but not limited to, the Association Act), codes, ordinances, rules, requirements, regulations, orders, decrees and judgments of any Governmental Authority having jurisdiction over the Association, the Property, the Community, the Declarant or the Owners or Members.

(gg) “Limited Common Area” means any and all real and personal property, easements, improvements, facilities and other interest, if any, as more particularly described in Article IV, Section 4.03 hereof, which are reserved for the use of Owner(s) of certain Lots to the exclusion of other Owner(s) and/or other Lots.

(hh) “Limited Common Expense(s)” shall mean and refer to Common Expenses with respect to any Limited Common Area.

(ii) “Lot” shall mean and refer to each residential building site created by any Recorded Plat of the Property, including any Dwelling located thereon once constructed.

(jj) “Local Government” shall mean and refer to, as applicable, the County and/or the City.

(kk) “Member” shall mean and refer to each Member of the Association as provided in Article III, Section 3.02 hereof.

(ll) “Monetary Obligation” shall mean and refer to any monetary obligations, including, but not limited to, Assessments, due to the Association by any Member pursuant to the Governing Documents, the Rules and Regulations, or under the Association Act.

(mm) “Mortgage” shall mean and refer to any first-lien or first-position mortgage encumbering a Lot or Dwelling that was granted or made in good faith and for value.

(nn) “Mortgagee” shall mean and refer to the owner and holder of a Mortgage, which owner and holder of said Mortgage may be a bank, savings bank, mortgage company, life insurance company, federal or state savings and loan association, an agency of the United States government, private or public pension fund, the United States Department of Veterans Affairs (the “VA”), the Federal National Mortgage Association, the Federal Home Loan Mortgage Corporation, a credit union, real estate or mortgage investment trust or any other lender generally recognized as an institutional lender in the County.

(oo) “Officer(s)” shall have the meaning given to such term in the Articles or the Bylaws.

(pp) “Owner” shall mean and refer to the record holder, whether one or more persons or entities, of fee-simple title to any Lot in the Property, but, notwithstanding any applicable theory of the law of mortgages, the term “Owner” shall not mean or refer to any Mortgagee unless and until such Mortgagee has acquired title to a Lot pursuant to an unappealable, final, lawful foreclosure proceeding or a proper and lawful conveyance by deed in lieu of foreclosure. All owners of a single Lot shall be treated for all purposes as a single Owner, irrespective of whether such ownership is joint, in common, or by tenancy by the entirety.

(qq) “Permit” shall mean and refer to General Environmental Resource Permit No. ERP-001-231875-1, as issued by the District.

(rr) “Property” shall initially mean and refer to the real property legally described in the Initial Plat (the “Initial Property”), together with any Additional Property hereafter annexed to this Declaration pursuant to Article II hereof.

(ss) “Public Records” shall mean and refer to the official or public records of the County, or such other place designated from time to time as the official County location for Recording documents affecting and encumbering title to real property and any improvements located thereon.

(tt) “Record,” “Recordation,” “Recording,” or “Recorded”: To record, the recording of, of appearing of record, of an instrument in the Public Records.

(uu) “Recorded Plat(s)” shall mean and refer to any and all subdivision plats of the Property, including the Plat, Recorded in the Public Records.

(vv) “Rules and Regulations” shall mean and refer to the Rules and the Planning Criteria, as any of the foregoing may be amended, modified or supplemented from time to time.

(ww) “Street(s)” shall mean and refer to the rights-of-way of all streets, roads, alleys, drives, courts, ways and cul-de-sacs within the Property as the same are described in and depicted on any Recorded Plat, and all paving, curbs and other improvements, facilities and appurtenances constituting part of the roadway system within the Property, conveyed or dedicated to the Local Government or other appropriate Governmental Authority or quasi-governmental entity.

(xx) “Supplemental Declaration” shall mean and refer to any instrument which extends the effect of this Declaration to any Additional Property pursuant to Article II hereof.

(yy) “Stormwater Management System” or “Surface Water Management System” shall mean and refer to a system which is designed and constructed or implemented to control discharges which are necessitated by rainfall events, incorporating methods to collect, convey, store, absorb, inhibit, treat, use or reuse water to prevent or reduce flooding, overdrainage, environmental degradation, and water pollution or otherwise affect the quantity and quality of discharges from the system, as permitted pursuant to Chapter 62-330, F.A.C.

(zz) “Tenant” or “tenant” shall mean and refer to any tenant, lessee, subtenant, or sublessee, beneficiary under any land trust pursuant to Section 689.071 of the Florida Statutes, or any other occupant or possessor that is not the Owner thereof of any Lot or improvement thereon, whether or not such relationship is documented by a lease, a sublease, a trust agreement, or any other document or writing (collectively, “Lease” or “lease”).

(aaa) “Turnover” shall mean and refer to the transition of control of the Association by Declarant pursuant to Section 720.307 of the Association Act.

(bbb) “Turnover Meeting” shall mean and refer to the meeting at which Members other than Declarant elect a majority of the Directors pursuant to Section 720.307 of the Association Act.

Section 1.02. Interpretation. The provisions of the Governing Documents shall be liberally construed so as to effectuate the purposes herein expressed with respect to the efficient operation of the Association and the Property, the preservation of the value of the Lots, and the protection of Declarant's rights, benefits and privileges herein contemplated and to the fullest extent permitted by the Association Act. Notwithstanding that some or all of the Governing Documents may have been prepared, initially, at the direction of Declarant, and notwithstanding any rule of construction to the contrary, the Governing Documents shall not be more strictly construed or interpreted against Declarant or any of Declarant's affiliates than against any other person or entity.

ARTICLE II

PROPERTY SUBJECT TO THIS DECLARATION

Section 2.01. Initial Property. The Initial Property is and shall be owned, improved, held, controlled, transferred and occupied subject to this Declaration.

Section 2.02. Additional Property. Declarant shall have the right, but not the obligation, to bring within the scope of this Declaration, as Additional Property, lands lying adjacent to or in the vicinity of the Initial Property, at any time and from time to time within twenty (20) years after the Effective Date (the "Potential Additional Property"). Unless and until annexed, this Declaration shall not encumber or bind in any way any of the Potential Additional Property. Except as provided in Article XIII hereof, annexation of any or all of the Potential Additional Property as Additional Property may be accomplished by Declarant without the consent of the Association, the Owners, the Members, any Mortgagee or other lien holder, or anyone else.

Section 2.03. Method of Annexation. Additions authorized under this Article II shall be made, if at all, by Recording a Supplemental Declaration extending this Declaration to the Additional Property. The Supplemental Declaration shall describe that portion of the Potential Additional Property annexed as Additional Property and shall state that it is being made pursuant to the terms of this Declaration for the purpose of annexing that portion of the Potential Additional Property to this Declaration and extending the jurisdiction of the Association to such Additional Property. The Supplemental Declaration may contain additional terms not inconsistent with this Declaration to reflect the different character, if any, of the Additional Property then being annexed or of the housing or development approaches being implemented with respect to such Additional Property. Upon the Recordation of any Supplemental Declaration in the Public Records, the Owners shall also have a right and non-exclusive easement of use and enjoyment in and to the Common Area, if any, located on the Additional Property, and the obligation, as a Common Expense, to contribute to the cost of operating, management, maintaining, repairing, operating, administering, replacing, insuring and improving: (a) the additional Common Area located within the Additional Property; and (b) any additional Areas of Common Responsibility located within the vicinity of the Additional Property. Any Supplemental Declaration Recorded in the Public Records in accordance with the terms hereof shall be conclusive in favor of all persons who rely on such Supplemental Declaration in good faith. From and after Recordation of any Supplemental Declaration in the Public Records, the Additional Property described therein shall be subject to the provisions of this Declaration and to the jurisdiction of the Association.

Section 2.04. Withdrawal. Declarant reserves the right to amend this Declaration unilaterally at any time and for any reason for the purpose of removing any portion of the Property (including, without limitation, Lots and Common Area) without notice and without the consent of any person or entity whatsoever, other than the owner of the portion of the Property to be withdrawn or the District, if consent by the District is required; provided, however, that no such withdrawal may impair vehicular or other access to any Lot as established by the applicable Recorded Plat.

ARTICLE III

THE ASSOCIATION

Section 3.01. The Association; Directors; Officers; Meetings; Official Records.

(a) Association. The Association is and shall remain a Florida nonprofit corporation. The Association shall have the power to do all lawful things which may be authorized, assigned, required or permitted to be done by the Association by virtue and authority of the Governing Documents and applicable Law, and to do and perform any and all acts which may be necessary or proper for, or incidental to, the exercise of any of the duties or powers of the Association for the benefit of the Owners and for the operation, maintenance, administration, repairing, replacing, insuring and improvement of the Property, the Community, the Common Area and all Areas of Common Responsibility. Neither the Articles, the Bylaws or any of the other Governing Documents shall be amended or interpreted so as to be or become inconsistent with this Declaration. In the event of any such inconsistency, the provisions of this

Declaration shall prevail. The Board, and such Officers as the Board may appoint from time to time, shall conduct the affairs of the Association.

(b) Directors.

(i) Number. At all times, the Board shall consist of at least (3) Directors and shall always be an odd number. Prior to Turnover, (y) the Board shall consist of three (3) Directors unless Declarant, by notice to the Association, increases the Board; and (z) the number of Directors may not be increased or decreased without Declarant's prior written consent, which consent may be granted or denied by Declarant in its sole and absolute discretion. The term of office of the initial Directors appointed herein by Declarant shall expire at the time of Turnover, unless otherwise required by Florida law. After Turnover, Directors shall be elected to the Board by a vote of the Members. Notwithstanding anything in the foregoing to the contrary, Declarant shall, without regard to the number of votes allocated to Declarant, be entitled to appoint one (1) Director for as long as Declarant is the Owner of at least five percent (5%) of the total number of Lots within the Property. Nothing contained in the foregoing, however, is intended, nor shall be deemed, to create any obligation upon Declarant to exercise such right to appoint such one (1) Director.

(ii) Appointment; Election. Prior to Turnover, Declarant, as the Class B Member, shall have the sole and absolute right to appoint, remove, and recall all of the Directors; provided, however, that if at any time Declarant is not permitted under Florida law to appoint, remove, or recall such Directors, then the Class B Member shall have the sole and absolute right to elect, remove, and recall all such Directors, which election, removal or recall, to the fullest extent permitted under the Association Act, may be conducted via written consent of the Class B Member, in lieu of a meeting of the Class B Member. Notwithstanding the foregoing, Members other than Declarant are entitled to elect at least one (1) Director if fifty percent (50%) of the Lots in all phases of the Community which will ultimately be operated by the Association have been conveyed to Members other than Declarant. Any Directors appointed by Declarant or elected by the Class B Member prior to Turnover, or appointed or elected by Declarant pursuant to this Section 3.01(b)(ii) need not be Members and need not be residents of the State of Florida. All other Directors shall be Class A Members or designated representatives of the Class B Member, and residents of the State of Florida. After Turnover, no Member or Owner may serve as a Director if: (i) such Member or Owner is more than ninety (90) days delinquent or deficit with regard to payment of any Monetary Obligation owed to the Association, or (ii) such Member or Owner has been convicted of any felony in the State of Florida or in a United States District or Territorial Court, or has been convicted of any offense in another jurisdiction would be considered a felony in the State of Florida, unless such individual's civil rights have been restored for at least five (5) years as of the date such individual seeks election to the Board. Any Director charged by information or indictment with a felony theft or embezzlement offense involving the Association's funds or property shall immediately be deemed removed from office. The Board shall fill the vacancy according to the provision of this Declaration until the end of the period of the suspension or the end of the Director's term of office, whichever occurs first. However, if the charges are resolved without a finding of guilt or without acceptance of a plea of guilty or nolo contendere, the Director shall be reinstated for any remainder of his or her term of office. A Member who has such criminal charges pending may not be appointed or elected to a position as a Director.

(iii) Educational Requirements. Within ninety (90) days after being elected or appointed to the Board, each Director shall certify in writing to the Secretary that he or she has read the Governing Documents, the Rules and Regulations, and any other written rules and policies of the Association; that he or she will work to uphold such documents and policies to the

best of his or her ability; and that he or she will faithfully discharge his or her fiduciary responsibility to the Members. Within ninety (90) days after being elected or appointed to the Board, in lieu of such written certification, the newly elected or appointed Director may submit a certificate of having satisfactorily completed the educational curriculum administered by a Division-approved education provider within one (1) year before or ninety (90) days after the date of election or appointment. The written certification or educational certificate is valid for the uninterrupted tenure of the Director. A Director who does not timely file the written certification or educational certificate shall be suspended from the Board until he or she complies with the requirement. The Board may temporarily fill the vacancy during the period of suspension. The Association shall retain each Director's written certification or educational certificate for inspection by the Members for five (5) years after the Director's appointment or election. However, the Association's failure to have the written certification or educational certificate on file does not affect the validity of any Board action.

(iv) Meetings. A meeting of the Board occurs whenever a quorum of the Board gathers to conduct Association business. All meetings of the Board shall be open to the Members, except for meetings between the Board and its attorney with respect to proposed or pending litigation where the contents of the discussion would otherwise be governed by the attorney-client privilege. Members have the right to attend all meetings of the Board. The right to attend such meetings includes the right to speak at such meetings with reference to all designated items. The Association may adopt written reasonable Rules and Regulations expanding the right of Members to speak and governing the frequency, duration, and other manner of Member statements, which Rules and Regulations may include a sign-up sheet for Members wishing to speak. Notwithstanding any other law, meetings between the Board or a committee and the Association's attorneys to discuss proposed or pending litigation or meetings of the Board held for the purpose of discussing personnel matters are not required to be open to the Members other than Directors.

(c) Officers.

(i) General. The officers of the Association (the "Officers") shall be a President, who shall be selected from the Board, a Vice President, a Treasurer, and a Secretary. Prior to Turnover, all Officers shall be appointed/elected by the Declarant and may only be removed and replaced by Declarant pursuant to the terms hereof. After Turnover, all Officers shall be elected annually by the Board of Directors and each Officer may be removed by vote of the Directors at any meeting with or without cause. After Turnover, no Member or Owner may serve as an Officer if such Member or Owner is delinquent or deficit more than ninety (90) days with regard to payment of Assessments or any other any Monetary Obligation. Any person may hold two or more offices except that the President shall not also be the Vice President or the Secretary. The Board shall from time to time elect such other Officers and designate their powers and duties as the Board shall find necessary or convenient to manage properly the affairs of the Association. Officers shall serve without compensation or fees; provided, however, nothing herein shall be deemed to prevent reimbursement of out-of-pocket expenses approved by the Board and incurred on behalf of the Association.

(ii) President. The "President" shall be the chief executive officer of the Association. He shall have all of the powers and duties which are usually vested in the office of a president of a Florida not for profit corporation and a Homeowners' Association. He shall serve as chairman of all Board and Members' meetings.

(iii) Vice President. The "Vice President" shall, in the absence or disability of the President, exercise the powers and perform the duties of the President. He shall

also generally assist the President and exercise such other powers and perform such other duties as shall be prescribed from time to time by the Board or the President.

(iv) Secretary. The “Secretary” shall keep the minutes of all proceedings of the Directors and the Members. He shall attend to the giving and serving of all notices to the Members and Directors and other notices required by law. He shall keep the official records of the Association, except those of or to be maintained or kept by the Treasurer, and shall perform all other duties incident to the office of a secretary of a Florida not for profit corporation, to the office of a secretary of a Homeowners' Association, and as may be required by the Directors or the President. From time to time, the duties of the Secretary may be fulfilled by a manager or management company employed by the Association.

(v) Treasurer. The “Treasurer” shall have custody of all funds, securities, and evidences of indebtedness regarding or concerning the Association. He shall keep the books of the Association in accordance with good accounting practices, and shall perform all other duties incident to the office of a treasurer of a Florida not for profit corporation and a Homeowners' Association. From time to time, the duties of the Treasurer may be fulfilled by a manager or management company employed by the Association.

(vi) Removal. Any Officer charged by information or indictment with a felony theft or embezzlement offense involving the Association's funds or property shall immediately be deemed removed from office. As applicable, the Board shall fill the vacancy according to the provision of this Declaration until the end of the period of the suspension or the end of the Officer's term of office, whichever occurs first. However, if the charges are resolved without a finding of guilt or without acceptance of a plea of guilty or nolo contendere, the Officer shall be reinstated for any remainder of his or her term of office. A Member who has such criminal charges pending may not be appointed or elected to a position as an Officer.

(d) Member Meetings.

(i) Annual Meetings. The annual meeting of the Members of the Association shall be held at such place, at such time and on such date each year as is from time to time designated by the Board. Failure to hold an annual meeting timely shall in no way affect the terms of Officers or Directors or the validity of actions of the Directors, the Officers, or the Association.

(ii) Special Meetings. Special meetings of the Members may be called by any one of the following persons or groups:

- (A) The President;
- (B) A majority of the Board of Directors;
- (C) Prior to Turnover, Members representing at least fifty percent (50%) of total voting interests of the Association;
- (D) After Turnover, Members representing at least ten percent (10%) of total voting interests of the Association; or
- (E) The Declarant, so long as Declarant has the right to elect a Director pursuant to Section 720.307 of the Association Act.

(e) Official Records.

(i) Section 720.303(4) of the Association Act defines the “official records” of the Association. The official records shall be made available to an Owner for inspection within ten (10) business days after receipt by the Board or its designee of a written request. This subsection may be complied with by having a copy of the official records available for inspection or copying in the Community or, at the option of the Association, by making the records available to an Owner electronically via the Internet or by allowing the records to be viewed in electronic format on a computer screen and printed upon request. If the Association has a photocopy machine available where the records are maintained, it must provide Owners with copies on request during the inspection if the entire request is limited to no more than 25 pages. An Association shall allow a Member or his or her authorized representative to use a portable device, including a smartphone, tablet, portable scanner, or any other technology capable of scanning or taking photographs, to make an electronic copy of the official records in lieu of the Association's providing the Member or his or her authorized representative with a copy of such records. The Association may not charge a fee to a Member or his or her authorized representative for the use of a portable device. From time to time, the Association may adopt reasonable Rules and Regulations governing the frequency, time, location, notice, official records to be inspected, and manner of inspections by the Owners, but may not require an Owner to demonstrate any proper purpose for the inspection, state any reason for the inspection, or limit an Owner's right to inspect records to less than one 8-hour business day per month. From time to time, the Association may impose fees to cover the costs of providing copies of the official records, including the costs of copying and the costs required for personnel to retrieve and copy the records if the time spent retrieving and copying the records exceeds one-half hour and if the personnel costs do not exceed \$20 per hour. Personnel costs may not be charged for records requests that result in the copying of 25 or fewer pages. The Association may charge up to 25 cents per page for copies made on the Association's photocopier. If the Association does not have a photocopy machine available where the records are kept, or if the records requested to be copied exceed 25 pages in length, the Association may have copies made by an outside duplicating service and may charge the actual cost of copying, as supported by the vendor invoice. The Association shall maintain an adequate number of copies of the recorded Governing Documents, to ensure their availability to Members and prospective Members. Notwithstanding the foregoing, the following official records are not accessible to Members or Owners:

(A) Any record protected by the lawyer-client privilege as described in Section 90.502 of the Florida Statutes and any record protected by the work-product privilege, including, but not limited to, a record prepared by an Association attorney or prepared at the attorney's express direction which reflects a mental impression, conclusion, litigation strategy, or legal theory of the attorney or the Association and which was prepared exclusively for civil or criminal litigation or for adversarial administrative proceedings or which was prepared in anticipation of such litigation or proceedings until the conclusion of the litigation or proceedings.

(B) Information obtained by an Association in connection with the approval of the lease, sale, or other transfer of a Lot or parcel within the Community.

(C) Personnel records of Association or management company employees, including, but not limited to, disciplinary, payroll, health, and insurance records. For purposes of this subparagraph, the term “personnel records”

does not include written employment agreements with an Association or management company employee or budgetary or financial records that indicate the compensation paid to an Association or management company employee.

(D) Medical records of Owners or Community residents.

(E) Social security numbers, driver license numbers, credit card numbers, electronic mailing addresses, telephone numbers, facsimile numbers, emergency contact information, any addresses for an Owner other than as provided for Association notice requirements, and other personal identifying information of any person, excluding the person's name, Lot or parcel designation, mailing address, and property address of the Lot or parcel. Notwithstanding the restrictions in this subparagraph, the Association may print and distribute to the Owners a directory containing the name, parcel address, and telephone number of each Owner. However, an Owner may exclude his or her telephone number from the directory by so requesting in writing to the Association. An Owner may consent in writing to the disclosure of other contact information described in this subparagraph. The Association is not liable for the disclosure of information that is protected under this subparagraph if the information is included in an official record of the Association and is voluntarily provided by an Owner and not requested by the Association.

(F) Any electronic security measure that is used by the Association to safeguard or protect data, including passwords.

(G) The software and operating system used by the Association which allows the manipulation of data, even if the Owner owns a copy of the same software used by the Association. The data is part of the official records of the Association.

(ii) The Association or its authorized agent is not required to provide any prospective purchaser, lienholder, Member, or, with information about the residential subdivision, Community, or the Association other than information or documents required by Chapter 720 of the Florida Statutes to be made available or disclosed. The Association or its authorized agent may charge a reasonable fee to the prospective purchaser, lienholder, Member, or Owner, or the current Owner or Member for providing good faith responses to requests for information by or on behalf of a prospective purchaser, lienholder, Member, or Owner, other than that required by law, if the fee does not exceed \$150 plus the reasonable cost of photocopying and any attorney fees incurred by the Association in connection with the response.

Section 3.02. Membership. Each Owner (including Declarant) shall be a Member of the Association. The Association membership of each Owner (other than Declarant) shall be appurtenant to and inseparable from the Lot giving rise to such membership, and any transfer of title to a Lot shall automatically transfer to the new Owner the membership in the Association appurtenant to that Lot, without any further action required whatsoever of the Board, the Association, the old Owner or the new Owner.

Section 3.03. Voting Rights and Turnover of Association.

(a) Voting Rights. The Association shall have two (2) classes of voting membership as follows:

(i) Class "A". "Class 'A' Members" or "Class A Members" shall be all Owners, with the exception of Declarant for so long as Declarant retains Class "B" voting rights. Each Class "A" Member shall have one (1) vote for each Lot owned by that Member.

(ii) Class "B". The sole "Class 'B' Member" or "Class B Member" shall be Declarant, or its specifically designated (in writing) successor(s) or assign(s). The Class "B" Member shall be allocated the number of votes equal to the total number of Class "A" Member votes, plus one (1). Class "B" Membership shall cease and become converted to Class "A" membership upon Turnover.

(b) Termination of Class "B" Membership. The Class "B" membership, in its entirety, shall terminate and become converted to Class "A" membership upon the earlier of the following events:

(i) When Declarant, in its sole and absolute discretion, elects to convert the last of its Class "B" membership interests, to Class "A" membership interests;
or

(ii) At the Turnover Meeting.

(c) Turnover of Association. Any other provision of this Article III to the contrary notwithstanding, Members Other Than Declarant (as that term is defined below), shall be entitled to elect at least a majority of the members of the Board of Directors not later than Turnover, which shall be: (i) three (3) months after ninety percent (90%) of the Lots in all phases of the Development that will or may ultimately be operated by the Association have been conveyed to Class "A" Members, which Turnover shall occur at the Turnover Meeting; (ii) upon Declarant abandoning or deserting its responsibility to maintain and complete the amenities or infrastructure as disclosed in the Governing Documents, with there being a rebuttable presumption that Declarant has abandoned and deserted the Property if Declarant has unpaid Assessments or guaranteed amounts under FL. STAT. §720.308 for a period of more than 2 years; (iii) upon Declarant filing a petition seeking protection under Chapter 7 of the U.S. Federal Bankruptcy Code; (iv) upon Declarant losing title to the Property through a foreclosure action or the transfer of a deed in lieu of foreclosure, unless the successor owner has accepted an assignment of Declarant's rights and responsibilities hereunder first arising after the date of such assignment; or (v) upon a receiver for the Declarant being appointed by a circuit court and not being discharged within 30 day after such appointment, unless the court determines within 30 days after such appointment that transfer of control would be detrimental to the Association or the Members. For purposes of this Declaration, the term "Member(s) Other Than Declarant" shall not include Builders, contractors or other parties who purchases or holds the title to a Lot for the purpose of constructing a Dwelling thereon for resale.

(d) Turnover of Documents. No later than the Turnover Meeting, Declarant, at Declarant's expense, shall deliver to the Board the documents that Declarant is required to deliver pursuant Subsection 720.307(4) of the Association Act.

(e) Turnover of Board. Prior to the Turnover Meeting, (y) the Board shall consist of three (3) Directors; and (z) the number of Directors may not be increased or decreased without the Declarant's prior written consent, which consent may be granted or denied by the Declarant in its sole and absolute discretion. The term of office of the initial Directors appointed herein by Declarant shall expire at the Turnover Meeting, unless otherwise required by Florida law. As of and after the Turnover Meeting, Directors shall be elected to the Board by a vote of the Members. Notwithstanding anything in the foregoing to the contrary, the Declarant shall, without regard to the number of votes allocated to Declarant, be entitled

to appoint one (1) member of the Board for as long as the Declarant is the Owner of at least five percent (5%) of the total number of the combined Lots within the Property. Nothing contained in the foregoing, however, is intended, nor shall be deemed, to create any obligation upon the Declarant to exercise such right to elect such one (1) Director. Prior to the Turnover Meeting, Directors appointed or elected by Declarant may only be removed and replaced by Declarant, the Class "B" Member, pursuant to this Declaration, the Articles, and the Bylaws. Notwithstanding the foregoing, Members other than the Declarant are entitled to elect at least one (1) member of the Board if fifty percent (50%) of the Lots in all phases of the Community which will ultimately be operated by the Association have been conveyed to Members other than the Declarant. Any Directors appointed by the Declarant prior to the Turnover Meeting, or appointed or elected by the Declarant pursuant to this subsection, need not be Members of the Association and need not be residents of the State of Florida. All other Directors shall be Class A Members of the Association or designated representatives of the Class B Members of the Association, and residents of the State of Florida. No Member or Owner (other than Declarant or any Director appointed or elected by Declarant pursuant to the terms hereof) may serve as a Director if: (i) such Member or Owner is more than ninety (90) days delinquent or deficit with regard to payment of any monetary obligation owed to the Association, or (ii) such Member or Owner has been convicted of a felony in the State of Florida or in a United States District or Territorial Court, or has been convicted of any offense in another jurisdiction would be considered a felony in the State of Florida, unless such individual's civil rights have been restored for at least five (5) years as of the date such individual seeks election to the Board. Any Director charged by information or indictment with a felony theft or embezzlement offense involving the Association's funds or property shall immediately be deemed removed from the Board. The Board shall fill the vacancy according to the applicable provision of this Declaration until the end of the period of the suspension or the end of the Director's term of office, whichever occurs first. However, if the charges are resolved without a finding of guilt or without acceptance of a plea of guilty or nolo contendere, the Director shall be reinstated for any remainder of his or her term of office. A Member who has such criminal charges pending may not be appointed or elected to a position as a Director.

(f) Officers. Any Officer charged by information or indictment with a felony theft or embezzlement offense involving the Association's funds or property shall immediately be deemed removed from office. The Board shall fill the vacancy according to the applicable provision of the Governing Documents until the end of the period of the suspension or the end of the Officer's term of office, whichever occurs first. However, if the charges are resolved without a finding of guilt or without acceptance of a plea of guilty or nolo contendere, the Officer shall be reinstated for any remainder of his or her term of office. A Member who has such criminal charges pending may not be appointed or elected to a position as an Officer.

Section 3.04. Multiple Owners. When any Lot entitling an Owner to membership in the Association is owned of record in the name of more than one person, party, or entity, whether such persons or entities own said Lot as fiduciaries, joint tenants, tenants in common, tenants in partnership, partners, or in any other manner of joint or common ownership, or if two or more persons or entities aforesaid or otherwise shall have the same fiduciary relationship or rights respecting the same Lot, then unless the instrument, document, or order appointing them or creating the subject tenancy or relationship otherwise directs and it or a copy thereof is filed with the Secretary of the Association or has been recorded in the Public Records, such Owner shall: (i) select one official representative to represent such Lot ("Representative"), which Representative shall be the only person, or party, or entity with the right to exercise any rights of membership in the Association with respect to such Lot, including, but not limited to, voting with respect to such Lot; and (ii) shall notify the Secretary of the Association in writing of the Representative's name and of any change in same as it occurs. The vote of each Representative shall be considered to represent the will of all the Owners of the subject Lot. In the circumstance of such common or joint ownership or rights, if the Owners fail to properly designate a Representative, then the Association may accept the person, party, or entity asserting the right to vote on behalf of the subject Lot as the voting

Owner, until notified to the contrary by the other person(s), party(ies), or entity(ies) that also make up the Owner. Upon such notification no Owner of said Lot may vote until the Owner appoints its Representative pursuant to this paragraph.

ARTICLE IV

PROPERTY RIGHTS IN THE COMMON AREAS

Section 4.01. Easements. The Association and each Owner (including Declarant) shall have a non-exclusive right and easement of use and enjoyment in and to the Common Area. Said right and easement shall be appurtenant to and pass with the title to each Lot, and shall include, without limitation, the following:

(a) Right-of-way for ingress and egress by vehicles and on foot through and across any Streets or walks in the Common Area for all lawful purposes; and

(b) Rights to connect to, maintain and make use of utility lines, wires, pipes, conduits, cable television lines, telephone lines and equipment, sewers and drainage lines, which may from time to time be in or within the vicinity of the Common Area, but only in accordance with all Laws and the requirements of the applicable Governmental Authorities or entities which regulate said utilities; and

(c) Rights and easements to use and enjoy the Common Area for any purpose not inconsistent with this Declaration, the Articles, the Bylaws, any Recorded Plats, the Rules and Regulations, and applicable Laws.

Section 4.02. Title to Common Area. In accordance with the requirements set forth in Section 3.03(d) hereof, Declarant shall convey to the Association or, if required by the Local Government incidental to the establishment of an MSTU/MSBU as described in Article IV, Section 4.08 hereof, dedicate to the Local Government for the uses and purposes set forth in this Declaration or in any Recorded Plats, fee-simple title in and to the Common Area, free and clear of all encumbrances except current real estate taxes and assessments not yet due and payable, any Recorded Plats, this Declaration and any easements or matters Recorded in the Public Records prior to such conveyances to the Association. Once conveyed to the Association, the Common Area may not be mortgaged, liened or further conveyed without the consent of at least two-thirds (2/3) of the Members (excluding Declarant).

Section 4.03. Limited Common Area. Certain portions of the Community may be designated by Declarant in its sole and absolute discretion as Limited Common Area and reserved for the exclusive use or primary benefit of the Owners, occupants and invitees of certain Lots. By way of illustration and not limitation, Limited Common Areas may include entry features, recreational facilities, landscaped medians and cul-de-sacs, and lakes. Except as otherwise provided herein, all costs associated with the maintenance, repair, replacement, and insurance of Limited Common Areas shall be Limited Common Expenses to be assessed against and paid by the Owners of those Lots to which the Limited Common Area is assigned.

As of the Effective Date, there shall be no initial Limited Common Areas.

Declarant reserves the right in its sole discretion to designate any initial or additional Limited Common Areas and assign the exclusive use thereof in Supplemental Declaration(s), the deed conveying the Common Area to the Association, or on the Plat relating to such Common Area; provided, any such assignment shall not preclude the Declarant from later assigning use of the same Limited Common Area to additional Lots, so long as the Turnover Meeting has not occurred. Any matter arising under this Declaration and pertaining to the Limited Common Area and requiring a vote of Members, shall be decided by a vote of only those

Members that have been identified by Declarant as being authorized and entitled to utilize and realize the benefits of the Limited Common Area. The Association may adopt Rules and Regulations which govern, among other things, the use of the Limited Common Area. Prior to the Turnover Meeting, the Declarant, shall have the right in its sole discretion to convey additional real estate, improved or unimproved and/or personal property as additional Limited Common Area which conveyance or dedication to the Association shall be accepted by the Association and thereafter shall (except as may otherwise be set forth herein) be maintained by the Association as Limited Common Expenses.

Section 4.04. Extent of Easements. The rights and easements created in this Article IV shall be governed by the following:

(a) Subject to any rights of Declarant and the Owners set forth in this Declaration, except as to any part of the Common Area that is required to be conveyed to Local Government, the Association shall be responsible for the exclusive operation, management, administration, control, maintenance, repairing, replacing and insuring of the Common Area;

(b) Declarant, until conveyance of fee-simple title to the Association, and the Association thereafter, may reserve unto itself or grant or dedicate (subject to the terms of Article XIII hereof) to Declarant, any Owner, any Governmental Authority and/or to any utility companies, easements and rights-of-way, over, under, in or through the Common Area for installation, use, maintenance, repair, replacement, and inspection of utility lines and appurtenances for public or private utilities, surface water drainage improvements and areas, or for completion of the development of the Property. No improvements or materials may be placed upon any such easements which may damage or interfere with the installation, maintenance, repairing or replacement of such utilities or the easement area or that may alter or impede the direction or flow of drainage, or that may interfere with completion of development of the Property;

(c) Declarant's rights reserved in this Declaration;

(d) Matters shown in the Public Records or on any Recorded Plats; and

(e) Applicable Laws.

Section 4.05. Additional Easements over Common Area.

(a) Declarant hereby creates, reserves and declares to exist, the following licenses, rights, privileges and easements over, under, in and through the Common Area, subject at all times to the terms and conditions of the Permit and subject to receiving prior written approval of the District as to any activities that may affect or may occur on or within the Stormwater Management System and the Conservation Easement Area, including, but not limited to, any upland buffers: (i) rights-of-way and easements to install, maintain and use electric, lighting, telecommunications, cable television, telephone, gas, water, sewer, drainage and utility poles, wires, cables, conduits, fixtures, pipes, meters, equipment, facilities, ponds, swales, berms or ditches, and such other equipment and improvements necessary, convenient, or desirable for the completion, marketing, use and enjoyment of the Property; (ii) the right to cut trees, bushes or shrubbery, make any gradings of the soil, and take any similar action reasonably necessary to provide economical and safe utility and drainage installation or to maintain reasonable standards of health, convenience, safety and appearance; (iii) the right to locate thereon wells, pumping stations, lift stations and irrigation systems and lines; (iv) easements of ingress, egress and access for purposes of development, construction and marketing of the Property; and (v) such other rights as may be reasonably necessary, convenient or desirable to complete in an orderly and economic manner the development and sale of the Property including, without limitation, the maintenance of temporary signage and trailers used in such development and sales efforts; provided, however, that said reservation and right

shall not be considered an obligation of Declarant to provide or maintain any such easements, utilities, equipment, improvements or services. Declarant also reserves the right to connect with and make use of the utility lines and drainage improvements which may from time to time be in or along the Streets or within the Common Area or any easements as shown on any Recorded Plats or as otherwise properly established. The easements and rights-of-way herein reserved: (y) shall continue in existence in favor of Declarant after conveyance of the Common Area to the Association or dedication to the Local Government or appropriate Governmental Authority until such time as Declarant has sold all Lots in the Property; and (z) shall continue in favor of Declarant until such time as any lands separately developed by Declarant and located adjacent to the Property have been conveyed to unrelated third-parties; provided, however, that such unrelated third-party is not a Builder, contractor or other party who purchases or hold the title to property for the purpose of constructing a Dwelling thereon for resale.

(b) Declarant also reserves a perpetual right and easement, at its sole election and from time to time, to irrigate the Common Area with treated effluent from a wastewater treatment facility, if any. The benefit of this reservation shall inure to Declarant and its specifically designated successors and/or assigns, but not in favor of any other Owner, and shall remain in effect whether or not Declarant owns any Lots in or lands adjacent to the Property.

Section 4.06. Delegation. Any Owner (including Declarant) may grant the benefit of any easement, right or privilege to tenants and guests for the duration of their tenancies or visits, but the same shall not be construed to create any rights in the general public or any other party.

Section 4.07. Reservation for Corrections. The conveyance of the Common Area to the Association or other entity(ies) shall be subject to the right of Declarant from time to time to correct errors in the legal description or other errors contained in the instrument of conveyance to any Owner, which right is reserved to Declarant. In the event that any such error is discovered after the conveyance of the subject Common Area, then the Association shall upon request of Declarant or any Owner so affected execute a quitclaim deed to the Lot held by said Owner, which quitclaim deed shall contain a correct legal description. If required to vest marketable title (without regard to the fact that the Common Area is held by a homeowners association) in the Association, said Owner will execute a quitclaim deed to any portion of the Common Area which may have been erroneously included within the legal description in the instrument of conveyance of such Owner's Lot. In addition to any other remedy available to the parties or any Owner, the provisions of this Section 4.07 shall be enforceable by specific performance or other equitable remedy.

Section 4.08. MSTU/MSBU. Declarant or the Local Government may establish a municipal service taxing unit, municipal service benefit unit, or similar mechanism (referred to in this Declaration as "MSTU/MSBU"), which MSTUs/MSBUs will have responsibilities established in their enabling resolutions. By way of example, and not limitation, an MSTU/MSBU may established to provide for any one or more of the following: (a) operation, management, administration, maintenance, repair, and replacement by the Local Government of any of the Common Area, and any recreational, drainage or other improvements whatsoever at any time located thereon, for the uses and purposes set forth in this Declaration or in any applicable Recorded Plat, which may or may not include a requirement that ownership of the affected lands and improvements be transferred to the Local Government; (b) construction, maintenance, repair, replacement, or improvement of recreation, drainage, sidewalk, wall, landscaping, open space, conservation, or other areas, improvements or facilities, in, on, under or within the Common Area or any easement areas for the use and benefit of the Property and the occupants thereof; and (c) construction, operation, maintenance, repair and replacement of Street lighting or any other service or benefit to or for the Property authorized under the terms of this Declaration, the MSTU/MSBU, or by the applicable Governmental Authority. Notwithstanding the foregoing, the Association may elect, from time to time, to aesthetically maintain any property otherwise maintained or to be maintained by the MSTU/MSBU and if Association does so, no Owner or Member, as a result thereof, shall thereby receive or be entitled to a

discount for any ad valorem taxes or Assessments assessed by or in connection with the MSTU/MSBU. If established, each Owner and Member acknowledges and agrees that the costs incurred by the MSTU/MSBU may be billed directly to the Owners or to the Association for subsequent Assessment to the Owners and Lots.

Section 4.09. Conservation Easement Area(s).

Pursuant to and as and to the extent required by the Permit, the District, or any Governmental Authority, from time to time, Declarant will record in the Public Records, one or more conservation easements (collectively, "Conservation Easement"), in favor of the District or any applicable Governmental Authority over, across, and upon certain portions of the Property. The precise metes and bounds legal description of the portions of the Property encumbered by a Conservation Easement shall be as specifically set forth in the subject Conservation Easement (all such portions of the Property that are or become encumbered by a Conservation Easement shall hereinafter be referred to as "Conservation Areas"). Upon establishment of any Conservation Easement, the Conservation Areas shall be subjected to the restrictions set forth in the subject Conservation Easement. The Conservation Areas, or the Association's interest therein, shall be Common Area and the Conservation Areas shall be the perpetual responsibility of the Association, and may in no way be altered from their natural state, except as specifically provided in the subject Conservation Easement. Furthermore, the use and development of the Conservation Areas shall be restricted as set forth in the subject Conservation Easement.

ARTICLE V

INSURANCE

Section 5.01. Basic Insurance. The Board may obtain fidelity bond coverage insuring the Association in its discretion. In addition, as the City of Alachua provides no liability insurance for any common areas or recreational facilities the, Board shall obtain insurance for insurable improvements on (a) the Common Areas, on (b) any Area of Common Responsibility, on (c) any easement area benefiting the Owners or the Association, and on (d) any recreational facilities; public liability policies covering the Common Area, the Association, and Members for damage or injury caused by the negligence of the Association or any of its Members, guests or agents, which public liability shall have at least One Million Dollar (\$1,000,000.00) combined single limits for bodily injury, personal injury, and property damage from a single occurrence, and, if reasonably available, a Five Million Dollar (\$5,000,000.00) umbrella liability policy; directors' and officers' liability insurance; and, any other types of insurance coverage as the Board may deem appropriate, necessary or desirable from time to time, with such insureds, deductibles, provisions, and coverage types and amounts as shall be determined by the Board. Such insurance shall include "special form" casualty insurance for all improvements on the Common Area, if such insurance is reasonably available. If "special form" coverage is not reasonably available, then at a minimum an insurance policy providing fire and extended coverage shall be obtained. Said insurance shall be in an amount sufficient to cover one hundred percent (100%) of the replacement cost of any repair or reconstruction in the event of damage or destruction from any insured hazard.

Section 5.02. Additional Insurance. In addition to any other insurance required by Article V, the Board may obtain, as a Common Expense: (A) worker's compensation insurance, if and to the extent required by law; (B) directors' and officers' liability coverage, if reasonably available; (C) flood insurance, if required; and (D) insurance or a fidelity bond for all persons who control or disburse funds of the Association. As used in this paragraph, the term "persons who control or disburse funds of the Association" includes, but is not limited to, persons authorized to sign checks on behalf of the Association, and the President, Secretary, and Treasurer of the Association. The insurance policy or fidelity bond must cover the maximum funds that will be in the custody of the Association or its management agent at any one time, as

determined by the Board's best business judgment, with such amounts, regardless, never being less than three (3) months' Assessments, plus all reserves on hand. If available, any such insurance policy or fidelity bonds shall contain a waiver of all defenses based upon the exclusion of persons serving without compensation and shall require at least thirty (30) days' prior written notice to the Association of any cancellation, substantial modification, or non-renewal. If annually approved by a majority of the voting interests present at a properly called meeting of the Association, the Association may waive the requirement of obtaining an insurance policy or fidelity bond for all persons who control or disburse funds of the Association.

Section 5.03. Individual Insurance. By virtue of taking title to a Lot, each Owner (other than Declarant) covenants and agrees with all other Owners, and with the Association, that each Owner shall carry, at a minimum full replacement cost dwelling protection with building structure replacement cost method extended limits. Each Owner further covenants and agrees that in the event of a partial loss or damage resulting in less than total destruction of structures comprising its Lot, the Owner shall proceed promptly to repair or to reconstruct the damaged structure in a manner consistent with the original construction or such other plans and specifications as are approved in accordance with this Declaration. Said Owner shall pay any costs of repair or reconstruction which is not covered by insurance proceeds. In the event that the structure is totally destroyed, said Owner may decide not to rebuild or to reconstruct, in which case the Owner shall clear the Lot of all debris and return it to substantially the natural state in which it existed prior to the beginning of construction and thereafter the Owner shall continue to maintain the Lot in a neat and attractive condition consistent with the terms hereof, any Rules and Regulations, and all applicable Law. Assessments shall still apply to and be levied against any Lot cleared and thereafter maintained pursuant to the provisions of this section. Any such cleared Lot shall still, at all times, continue to be responsible for payment of full Assessments, regardless of the fact that the Lot and Owner may not benefit from maintenance and other services otherwise provided by the Association to occupied or improved Lots.

Section 5.04. Insurance Premiums. Premiums for all insurance obtained by the Association pursuant to this Article V shall be a Common Expense. Under no circumstances shall the City of Alachua provide insurance for any common areas, recreational facilities, or any other community facilities. Such insurance, and the associated premiums, will be the sole responsibility of the Homeowners' Association.

ARTICLE VI

COVENANT FOR MAINTENANCE ASSESSMENTS

Section 6.01. Lien and Personal Obligation Nonpayment.

(a) Declarant, for each Lot owned by it on the Property, and each Owner other than Declarant, by acceptance of fee-simple title to any Lot, whether or not it shall be so expressed in any deed or other conveyance of title to such Lot, covenants and agrees to pay to the Association the Assessments, which Assessments shall be fixed, established, assessed, and enforced as herein provided and as permitted by the Association Act. Assessments shall be a charge and a continuing lien upon the Lot against which such Assessment is made, and upon any Dwelling located on said Lot, from and after the date on which such Assessment is due. Each Assessment shall also be the personal obligation of each person or entity who was an Owner of the Lot at the time the Assessment fell due. Declarant will never be obligated to pay any Individual Assessment or Start-Up Assessment.

(b) If any Assessment or installment thereon is not paid when due, then such Assessment shall be delinquent and the delinquent Assessment shall be secured by a continuing lien on the Lot as to which the Assessment accrued, and upon any Dwelling located thereon. The Association may

Record a lien against any Lot to secure payment of Assessments that remain unpaid for a period of thirty (30) days or longer after becoming due (the "Assessment Lien"). Any Assessment Lien shall be prior to all other liens created except (i) ad valorem real estate taxes and assessments levied by any Governmental Authority, (ii) the lien of any Mortgage (expressly subject to the Mortgagee's compliance with FL. STAT. §720.3085(2)(c) and said Mortgagee's payment of all unpaid Assessments resulting from said Mortgagee's compliance with, or failure to comply with, said statute), and (iii) other liens which by Law would be superior. To the fullest extent permitted by Law, any Assessment Lien shall be prior to and superior in dignity to the Owner's homestead status. Any Assessment Lien shall bind the Lot and any Dwelling located thereon in the hands of the then Owner and of each subsequent Owner. The personal obligation of the Owner to pay such delinquent Assessment shall remain that Owner's personal obligation for the statutory limitations period and personal liability shall not pass to successors in title of the Lot unless expressly assumed by them.

(c) If the delinquent Assessment or installment thereon is not paid within thirty (30) days after the due date, the same shall bear interest from the date due at the highest lawful rate in Florida, or at such lesser rate as may be determined by the Board and uniformly applied, and the Association may bring an action for collection against the Owner personally obligated to pay the same and to foreclose the lien against the Lot and any Dwelling located thereon by judicial foreclosure in the same manner as foreclosure of a mortgage, and there shall be added to the amount of such delinquent Assessment the aforesaid interest, late charges, collection costs, expenses and attorneys' and paralegals' fees, and all of the foregoing shall be recoverable whether or not suit be brought. The Owner shall also be required to pay to the Association any Assessments against the Lot which become due during any period of foreclosure by the Association. The Association, acting on behalf of the Owners, shall have the right and power to bid for any Lot at any foreclosure sale and to acquire the same via foreclosure or a deed in lieu thereof and thereafter hold, lease, mortgage, and convey the same. During the period in which a Lot is owned by the Association following foreclosure or a deed in lieu thereof: (x) no right to vote shall be exercised on said Lot; (y) no Assessment shall be assessed or levied on said Lot; and (z) each other Lot shall be charged, in addition to its Assessments, its pro rata share of the Assessment that would have been charged the subject Lot had it not been acquired by the Association as a result of foreclosure or a deed in lieu thereof. Suit to recover a money judgment against an Owner or Lot for unpaid Common Expenses, Assessments, and all costs, expenses, and fees incurred by the Association in connection with such action, including, but not limited to, interest as provided herein, along with reasonable attorneys' and other legal fees to be fixed by the court, together with all other costs, expenses, and fees of the action, shall be maintainable by the Association without foreclosing or waiving the lien securing the same.

(d) In addition to any other rights and remedies of the Association hereunder or under Florida law in connection with an Owner's or Member's failure to timely pay Assessments or any installments thereof, the Association may also charge an administrative late fee ("Late Fee") not to exceed the greater of Twenty-Five and no/100 Dollars (\$25.00) or five percent (5%) percent of the amount of each installment that is paid past the due date. If in the future, Section 720.3085(3)(a) is amended to permit the Association to charge a higher Late Fee, then the immediately preceding sentence shall be deemed automatically amended to permit the Association to charge such higher Late Fee.

(e) The following property shall be exempt from the Assessments, charges and liens created herein: (1) Common Area; (2) lands owned by Declarant which have not been annexed to the Property by this Declaration or any Supplemental Declaration; (3) lands conveyed or dedicated to the Local Government or other Governmental Authority, any public or quasi-public utility company, or the public; and (4) to the fullest extent permitted by the Association Act, Lots owned by Declarant during the period of time that Declarant subsidizes the Common Expenses of the Association pursuant to Section 6.08 hereof. No other land or improvements in the Property shall be exempt from the Assessments, charges or

liens stated above. No Owner may avoid Assessment obligations by virtue of non-use or abandonment of the Common Area or any Area of Common Responsibility, as applicable.

(f) If any Lot is occupied by a Tenant and the Owner of the Lot is delinquent in paying any Monetary Obligations, the Association may demand in writing that the Tenant pay to the Association the subsequent rental payments related to the Lot ("Tenant Demand"). Any Tenant Demand is continuing in nature, and upon such Tenant Demand, the Tenant of the subject Lot (the "Notified Tenant") must continue to pay the subsequent rental payments until all the Monetary Obligations of the Lot Owner related to the Lot have been paid in full to the Association and the Association releases the Tenant or until the Tenant discontinues tenancy in the Lot. A Notified Tenant is immune from any claim by the Lot Owner related to the rent timely paid to the Association after the Association has made a Tenant Demand.

If the Notified Tenant paid rent to the Owner of the Lot for a given rental period before receiving the Tenant Demand and provides written evidence to the Association of having paid the rent within fourteen (14) days after receiving the Tenant Demand, such Notified Tenant shall begin making rental payments to the Association for the following rental period and shall continue making rental payments to the Association to be credited against the Monetary Obligations of the Lot Owner until the Association releases the Tenant or the Tenant discontinues tenancy in the Lot. The Association shall, upon request, provide the Tenant with written receipts for payments made. The Association shall mail written notice to the Lot Owner of the Association's demand that the Tenant pay Monetary Obligations to the Association.

The liability of the Notified Tenant may not exceed the amount due from the Notified Tenant to the Lot Owner. The Notified Tenant shall be given a credit against rents due to the Lot Owner in the amount of Assessments paid to the Association.

After serving a Tenant Demand, if the Notified Tenant fails to pay any Monetary Obligation, the Association may issue notices under Section 83.56 of the Florida Statutes, and may sue for eviction under Sections 83.59-83.625 of the Florida Statutes, as if the Association were a landlord under Part II of Chapter 83 of the Florida Statutes. However, the Association is not otherwise considered a landlord under Chapter 83 of the Florida Statutes and specifically has no duties under Section 83.51 of the Florida Statutes.

A Tenant does not, by virtue of payment of Monetary Obligations, have any of the rights of the Owner of the Lot to vote in any election or to examine the books and records of the Association.

Section 6.02. Purpose; Powers. The Assessments levied by the Association shall be used to promote the recreation, health, safety and welfare of the Owners, to perform the Association's duties and obligations hereunder and under the Association Act, to exercise the powers conferred on the Association hereunder and under the Association Act, to manage, improve, operate, administrate, insure, maintain, repair and replace the Common Area and the Areas of Common Responsibility (as may be determined by the Board), and to pursue any other purpose deemed desirable, necessary, convenient or appropriate by the Board, including, without limitation, any one or more of the following, or as otherwise stated herein or as permitted by the Association Act: (a) payment of Common Expenses; (b) lighting, irrigation, maintenance, improvement and beautification of the Streets and all easement areas benefiting the Association or the Property as shown on any Recorded Plat, or otherwise properly established; (c) acquisition, maintenance, repair and replacement of community identification signs and traffic control devices, and control and regulation of traffic in the Property; (d) payment, contest or compromise of real and personal property taxes and assessments separately levied upon or assessed against the Association or the Common Area; (e) operation, management, insurance, replacement, maintenance, repair, beautification and improvement of

the Common Area, Areas of Common Responsibility (as may be determined by the Board), and all easement areas benefiting the Association or the Property as shown on any Recorded Plat, or otherwise properly established; (f) repayment of any deficits previously incurred by the Association; (g) funding of reserves for future Common Expenses; (h) procurement and maintenance of all insurance; (i) employment of accountants, attorneys and other professionals, administration, and experts to represent or advise the Association; (j) operation, maintenance and replacement of the Stormwater Management System for the Property in accordance with the terms of this Declaration and the requirements of the District including, but not limited to, work within retention areas, drainage structures and drainage easements; (k) monitoring and maintenance of protected wetlands and associated reporting as may be required by the District; and (l) doing anything necessary, desirable, or convenient in the judgment of the Board to keep the Property neat and attractive, to preserve or enhance the value thereof, to eliminate fire, health or safety hazards, or otherwise to benefit the Owners. At all times, the Association, acting by and through the Board, shall, in addition to those general and specific powers elsewhere referenced in the Governing Documents or imposed upon it by law, have the following specific powers:

(a) Except as may be limited by the terms of the Governing Documents, to acquire, own, hold, control, administer, manage, operate, regulate, care for, maintain, repair, replace, restore, preserve, protect, insure, buy, sell, lease, transfer, convey, encumber or otherwise deal in or with real or personal property (or any interest therein, including easements) (i) which is, or upon its acquisition by the Association shall thereupon become, Common Area as defined in this Declaration, including the power to enter into any leases or other arrangements with appropriate governmental agencies necessary for the use of sovereignty lands associated with any of the Common Area, or (ii) the responsibility for which is delegated to the Association pursuant to the terms and provisions of this Declaration, and further including the power to direct, conduct, maintain or support activities within or upon the Property in order to limit or control access to said Common Area.

(b) To establish, make, levy, impose, enforce and collect all Assessments and impose, foreclose and otherwise enforce all liens for Assessments for which provision is made in this Declaration in accordance with the terms and provisions of the Governing Documents.

(c) To establish, make, levy, impose, enforce and collect fines and temporarily suspend rights of use of Common Area against any Owner and Lot for any violation of the covenants, conditions and restrictions set forth in the Governing Documents or in the Rules and Regulations, all in accordance with the terms hereof and of the Association Act.

(d) To create, establish, maintain, and administer such capital expenditure reserves and other reserve funds or accounts as shall, in the discretion of the Board, be reasonably necessary to provide and assure the availability of funds necessary for the care, maintenance, repair, replacement, restoration, preservation, and protection of all Common Area, including all easements and facilities, and for such other purposes as the Board, in its reasonable discretion, shall deem necessary or appropriate.

(e) To sue and be sued and to defend any suits brought against it.

(f) Subject to any limitations set forth in the Governing Documents or imposed by the Association Act, to borrow such money as may reasonably be required to discharge and perform the duties, responsibilities and obligations imposed upon the Association pursuant to the Governing Documents or the Association Act.

(g) As per Section 3, No. 6, Ordinance 15-05, all Category I and II exotic plant species shall be removed from the site and properly disposed of at the time of construction (prior to dedication of, and acceptance by the City of, and public infrastructure). The Association shall perform

regular site monitoring to ensure no Category I or II exotic plant species establish/re-establish on site, and shall have the power to appoint such professionals to monitor and/or remediate the same as necessary.

(h) To employ such persons or to contract with such independent contractors or managing agents as shall be reasonably required in order for the Association to carry out, perform and discharge all or any part of its duties, obligations and responsibilities pursuant to the Governing Documents and the Association Act; provided, however, that any such employment contract or contract with any independent contractor or managing agent for a term of more than one (1) year shall, by its express terms, be terminable: (i) for cause at any time upon not more than thirty (30) days written notice by the Association; and (ii) without cause at any time after one (1) year upon not more than sixty (60) days written notice by either party; and, provided further, that any such contract shall otherwise be subject to the provisions of this Section 6.02.

(i) To provide equipment, facilities and personnel or to contract with an independent contractor or independent contractors, for such public or quasi-public services as may be deemed by the Association to be reasonably necessary or desirable for the common health, safety and general welfare of the residents, including, without limitation, internal security and protection services, garbage and trash pickup and disposal services, cable television/Internet services and street lighting services.

(j) To take such steps as may be necessary to enforce the provisions of the Governing Documents and the Rules and Regulations, including, without limitation, the employment of counsel and the institution and prosecution of litigation to enforce said provisions including, without limitation, such litigation as may be necessary to collect Assessments and foreclose liens for which provisions are made in the Governing Documents.

(k) To encourage, cause, facilitate, assist and cooperate in the formation, establishment and operation of a Community Development District and/or MSBUs/MSTUs.

(l) To establish, undertake, and promote, from time to time, social activities or programs; educational programs; cultural, artistic and environmental programs; charter clubs and other similar services, activities or programs designed, intended, or implemented to further a sense of community among Owners and residents thereof. Nothing in this subsection shall ever be construed as a representation or promise by Declarant or the Association as to which, if any, of the foregoing may be established, undertaken, promoted, or (as applicable) continued by the Association from time to time.

Section 6.03. Determination of Annual Assessments.

(a) Budgets and Reserve Fund Contribution. The Board shall annually prepare a budget that sets out the Association's annual operating expenses ("Budget"), which Budget must: (i) reflect the estimated revenues and expenses for that year and the estimated surplus or deficit as of the end of the current year; (ii) set out separately all fees or charges paid for by the Association for recreational amenities, whether owned by the Association, the Declarant, or another person or entity; (iii) include reserve accounts for capital expenditures and deferred maintenance for which the Association is responsible, including, but not limited to, the Common Area; (iv) any and all local taxes (if applicable); and, (v) comply with FL. STAT. §720.303(6)(a) and (b), taking into account the number and nature of replaceable assets, the expected life of each asset, and the expected repair or replacement cost to be incurred by the Association, and shall establish a reserve fund for such anticipated expenditures. The Board shall set the required reserve fund, if any, in an amount sufficient to permit meeting the projected capital needs of the Association, as shown on the Budget, with respect both to amount and timing of Annual Assessments over the period of the Budget. The reserve funds required, if any, shall be fixed by the Board and included

within and distributed with the Budget and any applicable notice of Annual Assessment. Any reserve funds established by the Board shall be held in an interest-bearing account or investments. The first Budget promulgated or adopted by the Declarant on behalf of the Association must designate therein the components for which reserve accounts and funds may be used.

(b) Adoption of Operating Budget. The Association shall mail to each Member a copy of the Budget and projected Annual Assessments approved by the Board to be levied for the next Fiscal Year at least thirty (30) days prior to the end of the Association's current Fiscal Year. The Budget and Annual Assessments set forth therein shall become effective unless disapproved at a special meeting of the Members held not later than sixty (60) days after the proposed Budget and Annual Assessments are mailed to the Members. To be effective, the disapproval of the proposed Budget and Annual Assessments must be by a vote of two-thirds (2/3) of the membership of the Association, without regard to membership class. If the membership so disapproves the Budget for the succeeding year, or if the Board fails to propose a Budget or the Annual Assessments, then the Budget and Annual Assessments for the preceding year shall continue in effect until a new Budget with Annual Assessments is determined or adopted.

(c) Allocation of Annual Assessments Among Lots. The Budget and Annual Assessments of the Association shall be assessed against all Owners and Lots within the Property in an equal amount per Lot. At the discretion of the Board, the Annual Assessments for any year may be paid by Owners in monthly installments, due and payable on the first (1st) day of each month; in bi-annual installments, due and payable by the first (1st) day of January and July of each year; or in quarterly installments, due and payable by the first (1st) day of January, the first (1st) day of April, the first (1st) day of July, and the first (1st) day of October of each year. In the event of such deferred payments, the Board may, but shall not be required to, charge a uniform, lawful rate of interest on the unpaid balance. The Board may accelerate the balance of any Annual Assessment upon default in the payment of any installment thereon or any other Assessment due hereunder. Absent any such determination by the Board permitting payment in monthly, bi-annual, or quarterly installments, the Annual Assessment for any year shall be due and payable by January 1 of such year. Any Annual Assessment not paid by January 15, if payable in one lump sum, not paid by the fifteenth (15th) day of January and July, if allowed to be paid bi-annually, or paid by the fifteenth (15th) day of January, April, July, and October, if allowed to be paid quarterly, or on the fifth (5th) day of any month, if allowed to be paid monthly, shall be considered delinquent.

Section 6.04. Special Assessments.

(a) Special Assessments. In addition to Annual Assessments, the Board may levy at any time a special assessment for the purpose of defraying the cost of any construction, maintenance, repair, replacement or insurance of any improvement on the Common Area, any Areas of Common Responsibility, or on any easement benefiting the Association or the Property as shown on any Recorded Plat, or otherwise properly established, for the purpose of covering any budget deficits of the Association, or for any other purpose deemed necessary, desirable or appropriate by the Board (collectively, "Special Assessment(s)").

(b) Individual Assessment. The Board may levy an individual assessment against any Owner and that Owner's Lot and, if applicable, any Dwelling located thereon in order to cover any costs, expenses and fees whatsoever incurred by the Association due to (i) that Owner's failure to maintain its Lot or Dwelling pursuant to the standards set forth in this Declaration or as otherwise established by the Board or the ARC, or (ii) to reimburse the Association for loss or damage to the Association or to any Common Area, Area of Common Responsibility or easement area benefiting the Association or the Property caused by that Owner or that Owner's lessee, sublessee, licensee, agent, contractor, subcontractor, invitee, domestic help or guest, and not covered by insurance maintained by the

Association, or (iii) for any other purpose expressly permitted by this Declaration or permitted under applicable Law (each assessment levied pursuant to (i), (ii), or (iii), above, an “Individual Assessment”).

Section 6.05. Start-Up Assessment; Initial Annual Assessment; Due Dates.

(a) Annual Assessments on each Lot(s) in the Initial Property shall commence upon the closing of each Lot in the Initial Property to a bona fide third party purchaser (a “Third Party Purchaser”), or upon the occupancy of each Lot by a Third Party Purchaser, whichever is earlier. The Annual Assessment for the Initial Property for the calendar year 2019 shall be four hundred eighty and No/100 dollars (\$480.00) per Lot. Prior to Turnover, the Board shall not, without approval of the voting interests of the Class “A” Members, increase the Annual Assessments in any Fiscal Year by more than fifteen percent (15%) above what the Annual Assessments were in the prior Fiscal Year; provided, however, that any increase in the Annual Assessments in any Fiscal Year pursuant to the terms hereof must be accompanied by an equal percentage increase in the Deficit Funding obligations

(b) At the closing of the sale of each Lot in the Property to a Third Party Purchaser, said purchaser shall pay to the Association: (i) the entire Annual Assessment for the calendar year of closing, prorated on a per diem basis from the date of closing on the sale of, or the date of occupancy of the Lot, whichever is earlier, through the end of that calendar year. Thereafter, Annual Assessments shall be due, in advance, on or before the commencement of the Association Fiscal Year for which they are imposed; but the Board, as provided above, may elect to collect Annual Assessments in monthly, quarterly or semi-annual installments. Annual Assessments which commence to accrue as to any Lot other than on the first day of the year shall be prorated for the balance of that year. Notwithstanding the foregoing, the Start-Up Assessment shall be due from the first Third Party Purchaser that is not a Builder. After the one time Start-Up Assessment has been paid as to a Lot in the Property, subsequent purchasers of the same Lot shall not be required to pay said Start-Up Assessment. The funds derived from the Start-Up Assessments are income to the Association and shall be used at the discretion of Board for any purpose, including without limitation, the reduction of the Declarant's Deficit Funding, future and existing capital improvements, operating expenses, Common Expenses, support costs and start-up costs.

(c) The Annual Assessment for each Lot on any Additional Property shall commence upon the closing of the first sale by Declarant of any Lot in the Additional Property to a Third Party Purchaser, or upon the occupancy of the first Lot in the Additional Property by a Third Party Purchaser, whichever is earlier. The initial Annual Assessment for the Lots on any Additional Property shall be the same as the then current Annual Assessment for the remainder of the Property, or as otherwise set forth in the relevant Supplemental Declaration.

(d) Notwithstanding anything contained in this Declaration to the contrary, in the event of a sale of a Lot to a Builder (“Builder Lot”), no Assessment provided for in this Declaration shall arise or commence regarding said Builder Lot until such time that the Lot is conveyed to a Third Party Purchaser that is not a Builder, or a Third Party Purchaser that is not a Builder takes occupancy of the Lot (with or without a Dwelling located thereon), whichever is earlier. In furtherance of the foregoing, provided said Lot has been acquired from Declarant, in no event shall a Builder be obligated to pay any Assessment whatsoever concerning its Lots, other than any Individual Assessments. Prior to Turnover, Declarant shall Deficit Fund as necessary regarding any Builder Lots. After Turnover, to the extent Assessments (other than Individual Assessments) shall become due regarding any Builder Lots under this Declaration or under Florida law, Declarant shall be and remain obligated to pay same. Notwithstanding anything contained in this Declaration to the contrary, in the event of a sale of a Lot by Declarant to a third party builder, no Annual Assessments provided for in this Declaration shall arise or commence regarding said Lot until such time that the Lot is conveyed to a Third Party Purchaser, or a Third Party Purchaser takes occupancy of the Lot (with or without a Dwelling located thereon), whichever is earlier.

Section 6.06. Certificate. Upon request, the Association, pursuant to FL. STAT. §720.30851, shall furnish to any Owner a certificate setting forth whether all required Assessments have been paid. Such certificate, subject to the limitations and terms of FL. STAT. §720.30851, shall be conclusive evidence in favor of bona-fide third parties relying thereon of the payment of any Assessment therein stated to have been paid. The Association may charge a fee for the preparation of such certificate, and the amount of such fee must be stated on the certificate. Unless sold or conveyed by or to Declarant, no Lot or parcel may be sold or conveyed unless an estoppel certificate pursuant to FL. STAT. §720.30851 is obtained and all amounts set forth therein are paid prior to the sale or conveyance.

Section 6.07. Subordination. Expressly subject to the Mortgagee's compliance with FL. STAT. §720.3085(2)(c) and said Mortgagee's payment of all unpaid Assessments resulting from said Mortgagee's compliance with, or failure to comply with, said statute, all Assessment Liens shall be subordinate to the lien of any Mortgage. Any Mortgagee which obtains title to a Lot by lawful foreclosure of a Mortgage or by lawful and proper voluntary conveyance by deed in lieu of such foreclosure, shall not be liable for the uncollected Assessments or interest, late charges or collection costs pertaining to such Lot or chargeable to the former Owner thereof which became due prior to the acquisition of title of the Lot by said Mortgagee. Such unpaid Assessment amounts shall be deemed a Common Expense collectible from all Owners, including the acquiring Mortgagee, on a pro-rata basis. Any such transfer to a Mortgagee under this Section 6.07 or otherwise shall not relieve the transferor of personal responsibility for any prior Assessments nor the Lot from the lien for Assessments thereafter falling due.

Section 6.08. Funding by Declarant.

anything contained in this Declaration to the contrary or otherwise, to the fullest extent permitted by the Association Act, Declarant shall not be obligated to pay any Assessment as to any Lot owned by it during any period of time that Declarant pays the Common Expense actually incurred over and above the income derived from the Assessments collectible from the Class "A" Members ("Deficit Fund"). For purposes of this subsidy arrangement, unless expressly required by applicable law, Declarant need not subsidize or pay any Assessment amounts levied for replacement reserves or capital expenditures. If Declarant elects to Deficit Fund as permitted herein and under the Association Act, then for purpose of complying with FL. STAT. §720.308(3), the amount of the Annual Assessments set forth in Section 6.05 hereof, as such Annual Assessments may be increased per Fiscal Year as permitted in Section 6.05 hereof, shall be the maximum obligation of the Class "A" Members. If Declarant elects to Deficit Fund, then for purpose of complying with FL. STAT. §720.308(3), the amount above the Annual Assessments set forth in Section 6.05 Section 6.05 hereof, as such Annual Assessments may be increased per Fiscal Year as permitted in Section 6.05 hereof, that is necessary to keep the Association operational shall be the amount of Declarant's guarantee of Common Expenses. It is the express intent of Declarant that this Section 6.08 be an establishment of a guarantee pursuant to FL. STAT. §720.308(2). Unless Declarant otherwise notifies the Board in writing at least thirty (30) days before the beginning of a Fiscal Year, Declarant shall continue paying on the same basis as during the previous Fiscal Year. Declarant, at its option, may elect by written notice delivered to the Association at any time to abandon the subsidy approach and commence payment of the Assessments thereafter falling due for the Lots then owned by Declarant, prorated as of the date that such notice is delivered to the Association. Notwithstanding the foregoing, Declarant shall never be obligated to pay any Individual Assessment or Start-Up Assessment.

ARTICLE VII

ARCHITECTURAL CONTROL

Section 7.01. Architectural Control; ARC.

(a) All Lots and Dwellings in the Property are subject to architectural review in accordance with this Article VII and any planning, construction, development, or other architectural criteria, guidelines, procedures, rules or regulations (collectively, "Planning Criteria") as may be adopted and revised from time to time by the Architectural Review Committee (the "ARC"), which may also be referred to at times as the Architectural Review Board (the "ARB"). The Planning Criteria shall be written and made available to all Builders and to all Owners or prospective Owners. The Planning Criteria may include any matters considered appropriate by the ARC not inconsistent with this Declaration, the other Governing Documents or the Association Act. The Planning Criteria shall be, at the discretion of the Board, subject to the prior approval of the Board.

(b) No site work/development, landscaping, utility extension, drainage improvement, paving, driveway, swimming pool, pool enclosure, building, fence, wall, sidewalk, or any other physical or structural improvement, or change or alteration to the exterior of any existing structure or improvement, or to any existing landscaping (collectively, "Improvement(s)"), shall be commenced, constructed, erected, modified, changed, altered or maintained until the plans showing such details as the size, design, shape, finished grade elevation, height, materials and color of the same, together with a landscape plan and a plot plan showing the location relative to boundaries and adjacent improvements of such proposed improvements or changes (collectively, the "Plans"), have been approved in writing by the ARC. The Plans shall certify that same are in compliance with any applicable regulations and ordinances of the Local Government. All such improvements must further conform to the Planning Criteria and no Plans shall be approved by the ARC if they are not in conformity with same. All improvements, construction, changes, modifications and alterations shall also comply with all Laws. Until such time as any improvements, construction, changes, modifications and/or alterations have been submitted to and approved by the ARC, no Owner (and/or designee thereof) shall make application for a building permit from the applicable Governmental Authority. Nothing herein shall limit the right of an Owner to finish or alter the interior of that Owner's Dwelling as that Owner desires.

Section 7.02. Membership of ARC. Prior to Turnover, Declarant shall be entitled to appoint all members of the ARC. Thereafter, the membership of the ARC shall be determined by the Board. The ARC shall consist of no less than three (3) members, none of whom shall be required, prior to Turnover, to be Owners or occupants of the Property. The ARC shall always consist of an odd number of members. No member of the ARC shall be entitled to compensation for services performed, but the ARC may employ professional advisors and pay reasonable compensation to such advisors at Common Expense. Members of the ARC (other than those appointed or designated by Declarant) may be removed by the Board of Directors at any time without cause. Members of the ARC appointed or designated by Declarant may only be removed by Declarant, which removal may be at any time without cause.

Section 7.03. Approvals. Decisions of the ARC shall be by majority action. Unless waived by the ARC, all Plans shall be prepared by an architect or engineer, said person to be employed by and at the expense of the Owner. If for any reason, including purely aesthetic reasons, the ARC should determine that a proposed improvement, construction, modification or alteration is not consistent with the Planning Criteria or Declarant's development plan, or in the best interest of the Association and its Members, such improvement, construction, modification or alteration shall not be approved or made. Approval of Plans may be withheld not only because of noncompliance with any of the specific conditions, covenants and restrictions contained in this Declaration, but also by virtue of the dissatisfaction of the ARC with the location of the structure on the Lot, the elevation, color scheme, finish, design, proportions, architecture, drainage plan, shape, height, style and appropriateness of the proposed structures or altered structures, the materials used therein, the planting, landscaping, size, height or location of vegetation on the Lot, or because of its reasonable dissatisfaction with any other matter or thing which, in the judgment of the ARC, will render the proposed improvement or alteration inharmonious with Declarant's general development plan or the Planning Criteria. Two (2) sets of Plans and specifications shall be submitted to the ARC by the Owner

prior to applying for a building permit from the applicable Governmental Authority. Submittals and re-submittals of Plans shall be approved or disapproved within thirty (30) days after receipt by the ARC. The ARC approval or disapproval shall be written and shall be accompanied by one (1) copy of the Plans to be returned to the Owner. Whenever the ARC disapproves Plans, the ARC shall specify the reason or reasons for such disapproval. The Planning Criteria are not the exclusive basis for decisions of the ARC and compliance with the Planning Criteria does not guarantee approval of any application.

Section 7.04. Violations. The work approved by the ARC must be performed strictly in accordance with the Plans as approved by the ARC. If after Plans have been approved, the improvements are altered, constructed, modified, erected, or maintained upon the Lot other than as approved, the same shall be deemed to have been undertaken without ARC approval. After one (1) year from completion of any improvement, addition, modification or alteration, said improvement shall, in favor of purchasers in good faith and for value and Mortgagees, be deemed to comply with the provisions hereof unless a notice of such noncompliance executed by any member of the ARC shall appear in the Public Records or legal proceedings shall have been instituted to enjoin the noncompliance or to enforce compliance with this Article VII.

Section 7.05. Variances. The ARC may grant variances from compliance with the architectural provisions of this Declaration or the Planning Criteria, including, without limitation, restrictions upon height, size or placement of structures, or similar restrictions, when circumstances such as topography, natural obstructions, hardship, aesthetic or environmental considerations may reasonably require. The granting of any variance shall not operate to waive any of the terms and provisions of this Declaration or the Planning Criteria for any purpose except as to the particular Lot and the particular provision covered by the variance, nor shall it affect the Owner's obligation to comply with all applicable Laws. Such variances may only be granted when unique circumstances dictate and no variance shall (i) be effective unless in writing, (ii) be contrary to the restrictions set forth in this Declaration, or (iii) estop the ARC from denying a variance in other similar or dissimilar circumstances.

Section 7.06. Waiver of Liability. None of Declarant, the ARC, the Directors or the Association, or any agent, employee or officer thereof, shall be liable to anyone submitting Plans for approval or to any Owner, occupant, tenant, subtenant, invitee, licensee or guest of the Property by reason of or in connection with approval or disapproval of any Plans, or for any defect in any Plans submitted, reviewed, revised or approved in accordance with the requirements of the ARC, or for any structural or other defect in any work done according to or contrary to such Plans. Approval of Plans, or any other approvals, variances or consents by the ARC, are given solely to protect the aesthetics of the Property in the judgment of the ARC and shall not be deemed a warranty, representation or covenant that any action taken in reliance thereon complies with all applicable Laws, nor shall ARC approval be deemed approval of any Plan or design from the standpoint of structural safety or conformity with building or other codes. Every person who submits Plans for approval agrees, by submission of such Plans, and every Owner or occupant, tenant and subtenant of any Lot agrees, by acquiring title thereto or an interest therein, that it will not bring any action, proceeding or suit to recover any such damages and shall be deemed to have automatically agreed to hold harmless and indemnify the Board, the ARC, the Declarant and the Association, and all of the foregoing's directors, officers, members, agents and employees from and for any loss, claim, liability, expenses, causes of action or damages connected with the aforesaid aspects of the Plans, improvements or alterations.

Section 7.07. Enforcement. Declarant and the Association shall have standing and authority on behalf of the Association to enforce in courts of competent jurisdiction the Planning Criteria and the decisions of the ARC. Should Declarant or the Association be required to enforce the provisions hereof by legal action, the reasonable attorneys' and paralegals' fees and costs and expenses incurred, whether or not judicial proceedings are involved, including the attorneys' and paralegals' fees and costs, and expenses

incurred on appeal from judicial proceedings, shall be collectible from the violating Owner. Should any Owner fail to comply with the requirements hereof after thirty (30) days' written notice, Declarant and the Association shall have the right, but not the obligation, to enter upon the Owner's Lot, make such corrections, alterations or modifications as are necessary, or remove anything in violation of the provisions hereof, the Rules and Regulations, or the Planning Criteria, and charge the costs and expenses thereof to the Owner as an Individual Assessment. Declarant, the Association the Board and the ARC and all of the foregoing's directors, officers, members, agents and employees, shall not be liable to the Owner or to any occupant or invitee of any Lot for any trespass or damages or injury to property or person for any action taken hereunder unless caused by gross negligence, intentional misconduct or intentional wrongdoing.

Section 7.08. Exemption. Declarant, before and after Turnover, shall be exempt from any Planning Criteria and the architectural control provisions of this Article VII. Declarant, before and after Turnover, shall be entitled to construct or install any new improvement, and to alter or change or modify any existing improvement, without submitting Plans to or obtaining the approval of the ARC.

Section 7.09. No Waiver of Future Approvals. The approval of the ARC of any proposals or Plans and specifications or drawings for any work done or proposed, or in connection with any other matter requiring the approval and consent of the ARC, shall not be deemed to constitute a waiver of any right to withhold approval or consent as to any similar proposals, Plans, specifications, drawings or matters subsequently or additionally submitted for approval or consent.

ARTICLE VIII

EXTERIOR MAINTENANCE

Section 8.01. Owner's Responsibility.

(a) Each Owner shall keep and maintain that Owner's Lot, Dwelling and all buildings and other improvements and structures and landscaping located on that Owner's Lot in good repair and in a neat, orderly and attractive condition. The minimum (but not exclusive) standard for maintenance of improvements and structures shall be consistency with the approved Plans thereof and with the general appearance of the other Dwellings and improvements in the Property as a whole when initially constructed and improved (taking into account, however, normal weathering and fading of exterior finishes, but not to the point of unsightliness).

(b) The maintenance obligation of each Owner as to Dwelling, building, structure and improvements on the Owner's Lot shall include, without limitation, maintenance of all exterior surfaces and roofs, fascias and soffits, awnings, trellises, decorative facades, screens, windows and doors. Owner's shall have their Dwellings (including the roof) and all external improvements such as driveways, sidewalks, decks, patios, and lanai floors, walls and screen professionally power washed as necessary, but no less than once every three (3) years.

(c) Owners shall clean, repaint or re-stain, as appropriate, the exterior portions of the Dwelling, building, structure and improvements on the Owner's Lot (with the same colors as initially approved or with another color or colors approved by the ARC), including exterior surfaces of garage doors, as often as is necessary to comply with the foregoing standards.

(d) Each Owner shall also keep, maintain and irrigate the trees, shrubbery, grass and other landscape materials located on that Owner's Lot in good repair and in a neat and attractive condition. The minimum (but not exclusive) standard for maintenance of landscaping on the Owner's Lot shall be consistency with the approved Plans thereof and with the general appearance of the other occupied

Lots in the Property as a whole when initially landscaped (taking into account, however, the natural and orderly growth and maturation of applicable landscaping, as properly trimmed and maintained).

(e) Landscape maintenance shall include, without limitation, irrigation, fertilization, weeding, mowing, trimming, spraying for insects and disease, and periodic replacement of dead, damaged or diseased plantings.

(f) Each Owner shall grass over, mow and keep free of trash and debris, on a routine basis, the unpaved portion of any platted Street depicted on any Recorded Plat abutting the Owner's Lot.

(g) A Xeriscape or Florida-friendly landscape landscaping plan designed and constructed in accordance with the definition of such terms in Section 737.185 of the Florida Statutes, shall be permitted. Any Xeriscape or Florida-friendly landscape landscaping plan shall be subject to review and approval by the ARC, consistent with the terms of this Declaration and any Rules and Regulations of the ARC, including, but not necessarily limited to, any Rules and Regulations of the ARC governing the implementation of Xeriscape or Florida-friendly landscape landscaping plans within the Property.

(h) If an irrigation system capable of using reclaimed water for irrigation purposes is installed adjacent to or on a Lot, and reclaimed water shall be or become available, then in such events, the Association shall: (i) require the Owner of each such Lot to use the reclaimed water for irrigation purposes; and (ii) if applicable, charge the Owner of each Lot served by the reclaimed water system a fee for the use of such reclaimed water based on either, as determined by the Association, (A) a uniform rate applicable to all Owners evenly, or (B) the volume of reclaimed water used at each Lot.

(i) The Association shall have the right but not the obligation to provide exterior repair and maintenance on any Lot or any Dwelling, building or structure or improvement located thereon in the event of default by any Owner in the duties hereby imposed under this Article VIII. Prior to performing such repair or maintenance, the Board must determine that there is need of repair or maintenance and whether such need detracts from the overall appearance of the Property. Except in emergency situations, prior to commencement of any such repairs or maintenance, the Board must furnish written notice to the Owner to the effect that, unless specified repairs or maintenance are commenced within fifteen (15) days after the mailing of the notice, and thereafter diligently pursued to completion, the Association may procure said repairs or maintenance. Upon the Owner's failure to commence timely and to diligently pursue the requested repairs or maintenance, the Association and its designated agents, employees, contractors and subcontractors shall have the right to enter in or upon the Lot and the exterior of any Dwelling, building or structure or improvement thereon to perform the repairs or maintenance specified in the notice. In this regard, the Association shall have the right to do such things as, but not limited to, paint; power wash; repair, replace and care for pools, pool enclosures, roofs, gutters, down spouts and exterior building surfaces; clean or resurface paved access ways and parking areas; trim and care for trees, shrubs, grass, walks, swales, berms and other landscaping and drainage improvements; and to provide general cleanup, shoreline maintenance, and removal of debris which in the opinion of the Board detracts from the overall beauty and setting of the Property. Declarant, the Board, the Association, and the foregoing's respective directors, officers, members, agents, employees, contractors and subcontractors shall have no liability to the Owner or any occupant, tenant, subtenant or guest or invitee for trespass, or damage, or injury to property or person as the result of actions taken pursuant this paragraph, unless caused by gross negligence, intentional misconduct, or intentional wrongdoing.

Section 8.02. Assessment of Cost. The cost of any work performed by or at the request of the Association pursuant to Section 8.01 hereof shall be assessed as an Individual Assessment against the Owner of the Lot upon which such work is done.

Section 8.03. Access. In order to perform the repairs or maintenance authorized by this Article VIII, the designated agents, employees, contractors and subcontractors of the Association may enter upon any Lot and the exterior of any improvement located thereon during reasonable hours on any day except Sundays and legal holidays, except that in an emergency situation, as determined by the Board, entry may be made at any time and on any day.

Section 8.04. Association's Responsibility. The Association shall maintain and keep in good repair the Common Areas, recreational facilities, and all other community facilities, and as the Board deems appropriate, the Areas of Common Responsibility, and the wall, landscaping, lighting, irrigation, signage, drainage and other improvements from time to time located on either of the foregoing.

ARTICLE IX

RESTRICTIVE COVENANTS

Unless otherwise inconsistent with or in direct conflict with the approvals, requirements, or laws of any applicable Governmental Authority, in which case said approvals, requirements, and laws shall govern and control only to the extent necessary to resolve any such inconsistencies or conflicts, the Property shall at all times and forever be subject to and encumbered by the following covenants and restrictions, which covenants and restrictions shall bind each and every Member, Owner and Lot, and shall bind and run with the land:

Section 9.01. Wells. No individual well water supply system shall be permitted on any Lot without the prior written approval of the ARC.

Section 9.02. Obnoxious or Offensive Activity. No activity or use shall be allowed upon any Lot or the Property which is a source of annoyance, embarrassment, harassment or discomfort to Owners or their tenants, subtenants, guests or invitees, or which interferes with the peaceful possession and proper use and enjoyment of the Property, nor shall any improper, unsightly, offensive or unlawful use be made of any Lot, Dwelling, the Common Area or the Areas of Common Responsibility. The use of any Lot and the Property shall comply with all applicable Laws. Each Lot and the Property shall be used, enjoyed, held and occupied in such manner as not to cause or produce any of the following effects discernible outside any Dwelling: noise or sound that is objectionable because of its volume, duration, beat, frequency or shrillness; smoke; noxious, toxic or corrosive fumes or gases; obnoxious odors; dust, dirt or fly ash; unusual fire or explosive hazards; vibration; or interference with normal television, radio or other telecommunication reception by other Owners.

Section 9.03. Rules and Regulations. Reasonable rules, regulations, policies, procedures and standards may be promulgated by the Board, as to the use and enjoyment of the Property (the "Rules") and such Rules shall be observed by the Owners, Members, tenants, subtenants, licenses, invitees, guests and occupants of all Lots. Such Rules may involve such matters as air conditioning units, signs, mailboxes, temporary structures, noisy mufflers, loud music, loud vehicles or other nuisances; garbage and trash disposal; parking; traffic; state of repair of vehicles; tree removal; animals; game and play structures and devices; swimming pools; television and telecommunications devices and antennae; driveways; walkways; sight distances at intersections; garages; and fences. These matters are set out by way of illustration only and shall not be construed to limit the authority of the Board to promulgate and enforce Rules. Such Rules may augment or clarify the terms of this Declaration or any term, covenant or restriction herein contained.

Section 9.04. Animals. No animals of any kind, character, nature, or description shall be kept, raised, bred, or maintained on or upon any Lot; provided, however, that household, domesticated "Pets" (as that term is defined below), as allowed by the Local Government, may be kept on each Lot so long as they

are not kept, raised, bred, or maintained thereon for any business or commercial purposes whatsoever. As used herein, the term “Pet(s)” shall mean and refer to birds, fish, dogs, cats, reptiles, insects, and all other non-human, non-plant living organisms, that: (i) have not been prohibited by the Board from time to time; and (ii) that are generally and commonly recognized as household and domestic pets in the County, and shall expressly exclude livestock of domesticated or undomesticated animals, fowl, and poultry, e.g., horses, cows, pigs, donkeys, squirrels, etc. Exotic animals such as, but in no way limited to, snakes and big cats (e.g., tigers, cougars, etc.) are not considered Pets and are expressly prohibited, as are breeds of any kind of Pet deemed aggressive from time to time by the Board. “Dangerous dogs”, as that term is Chapter 767 of the Florida Statutes, or as determined from time to time by the Local Government, are prohibited on the Property. Only a reasonable number of Pets, as determined in the Board's discretion, may be kept on a Lot at any one time. Pets shall be sheltered inside buildings/improvements. No separate or exterior building/improvement for Pets shall be permitted on the Property. All Pets must be kept in a fully fenced area or leashed when outside of a building/improvement and shall not be permitted to run loose. Invisible dog fences or barriers, if allowed at all within the Community, must first be approved by the ARC. No Pet shall be permitted to remain on the Property if it or they disturb the tranquility of the Property, the Community, the Association, or the other Owners or residents (e.g., excessive dog barking), if it or they are unlawful, dangerous, annoying, or a nuisance to or destructive of wildlife, or if it or they are expressly excluded from the Property by the Board after notice and hearing. All owners of Pets are responsible for timely cleanup of Pet waste and the Board may elect to promulgate Rules and Regulations to enforce the same and other matters concerning Pets. Each Owner who determines to keep a Pet hereby agrees to indemnify the Association and Declarant and hold each of the Association and Declarant harmless against any loss or liability of any kind or character whatsoever arising from or growing out of such Owner having any animal on the Property.

Section 9.05. Garbage and Trash; Recycling.

(a) No garbage, trash, junk, refuse, rubbish, or waste materials shall be placed, kept, maintained, or stored on any Lot, except in covered containers and sealed sanitary containers of a type, size, color, and style which are required by the Local Municipality or pre-approved by the ARC. All such containers shall be kept inside Dwellings and screened from view from outside of the Lot, except when they are being transported and made available for collection. Containers transported and made available for collection shall not be placed at any Lot curb or outside any Dwelling earlier than 6:00 p.m. on the evening prior to the scheduled pickup, and must be retrieved and returned to storage inside the Dwelling by no later than 9:00 a.m. on the date after the pickup occurs. Garbage, trash, junk, refuse, rubbish, or waste materials, regardless of the type or cause, must be removed from the Lot by the Lot Owner and may not be permitted to stay or accumulate on any Lot. Outdoor incinerators may not be kept or maintained on any Lot. Notwithstanding anything to the contrary set forth above in this Section 9.05 if required by the Local Government in connection with the development of the Community, Declarant shall establish, on Common Area or otherwise, a centralized garbage collection and recycling facility (collectively, “Garbage Facility”) at or near the main entrance of the Community, all in accordance with the Local Government requirements regarding establishment of the Garbage Facility. After Declarant establishes and constructs the same, the administration, regulation, care, maintenance, repair, restoration, replacement, insuring, preservation and protection of the Garbage Facility, regardless of whether or not the same is located on Common Area, shall be done by the Association at Common Expense, all in accordance with the Local Government's requirements regarding same. Rules and Regulations may be promulgated from time to time regarding the use of the Garbage Facility.

(b) The Board may establish a recycling program and recycling center within the Community and in such event, all occupants of Dwellings shall support such program by recycling, to the extent reasonably practical, all materials which the Association's recycling program or center is set up to accommodate. The Association may, but shall have no obligation to purchase recyclable materials in

order to encourage participation and any income received by the Association as a result of such recycling efforts shall be used to reduce Common Expenses.

Section 9.06. Storage Receptacles. No fuel tanks or similar storage receptacles may be exposed to view, and the same may be installed only within an approved accessory building or structure, within a screened area, and they shall otherwise comply with Rules and Regulations established from time to time and applicable Law.

Section 9.07. Vehicles.

(a) Unless express prior written approval is given by the Board, in the Board's sole and absolute discretion, no commercial vehicle (including, but not limited to, any vehicle operated for the transportation of persons or property in the furtherance of any business, commercial, manufacturing, or industrial enterprise, for-hire, not-for-hire, or otherwise), recreational vehicle (including, but not limited to, personal water craft, all-terrain vehicles, and two-wheeled dirt bike motorcycles), camper, mobile home, motor home, boat, house trailer, boat trailer, or trailer of any other kind or description (collectively, "Prohibited Vehicle(s)"), shall be permitted to be parked or to be stored at any place on the Property, unless Declarant designates specifically certain spaces for some or all of the above, in which case Declarant or the Association may change for the use of such spaces. The Board may, but is not required to, allow boats or other recreational vehicles or Prohibited Vehicles to be parked on a Lot behind an ARC-approved fence or wall which totally screens said boat or other recreational vehicle or Prohibited Vehicle from the view of all Streets and adjacent Dwellings. Provision for temporary visitation of Prohibited Vehicles may be established by the Board. The foregoing prohibition of parking shall not apply to temporary parking of commercial Prohibited Vehicles, such as for pick-up and delivery and other bona fide temporary commercial services being delivered or provided to a Lot or Dwelling, nor to Prohibited Vehicles which are stored within a Dwelling's closed garage, nor to any Prohibited Vehicles of Declarant or its affiliates or any Builder or building contractor designated by Declarant in writing from time to time. Marked or unmarked police cars and other municipal vehicles are specifically excluded from the definition of Prohibited Vehicles.

(b) No vehicle, regardless of whether it would otherwise be permitted to be parked on any Lot or other part of the Property, shall be permitted to be parked on any Lot (unless permanently in a garage) or other part of the Property if such vehicle is not fully functioning and operational, currently registered by the State of Florida or another U.S. state, and currently tagged (with a license plate affixed in the proper place(s) on said vehicle) by the State of Florida or such other U.S. state in which the vehicle is registered.

(c) All vehicles must be parked on surfaces designed for vehicle parking (e.g. parking areas or lots and driveways) and shall not in any event be parked on individual lawns or the grass of any Common Areas. Vehicles shall not be parked in a manner which would block fire hydrants, dumpsters, sidewalks or pedestrian or bicycle paths.

(d) No Owner or other occupant of the Community shall repair or restore any vehicle of any kind upon or within the Community, except for (i) emergency repairs and then only to the extent necessary to enable the movement thereof to a proper repair facility; or (ii) repairs completed within the garage (in which case no garage doors shall be left open overnight or at any other time when the subject vehicle is not actually being worked on or repaired).

(e) Inoperable vehicles (e.g. missing major components such as engines and/or transmissions, one or more flat tires, etc.), or derelict vehicles (e.g. broken glass, severely damaged

body panels, unpainted body panels, etc.) must be fully enclosed within a closed garage at all times, and in any case may not be parked in plain view.

(f) As long as the provisions of Section 715.07 of the Florida Statutes are complied with, any vehicles parked in violation of the aforementioned or other restrictions contained herein, or in violation of any Rules and Regulations, may be towed by the Association at the sole cost and expense of the owner of such vehicle, if such vehicle remains in violation for a period of twenty-four (24) hours from the time a notice of violation is placed on the vehicle or the owner thereof is otherwise notified. The Association shall not be liable to the owner of such vehicle for trespass, conversion, or otherwise, nor guilty of any criminal or civil act, by reason of such towing and once the notice is posted, neither its removal, nor failure of the owner thereof to receive it for any other reasons, shall be grounds for relief of any kind. An affidavit of the person posting such notice on any vehicle stating that it was properly posted shall be conclusive evidence of proper posting.

Section 9.08. Visibility of Intersections. No obstruction to visibility at Street intersections shall be permitted; provided that the Association shall not be liable in any manner to any person or entity, including Owners, their guests, tenants, subtenants, licensees and invitees, for any damages, injuries or deaths arising from any violation of this Section 9.08.

Section 9.09. Temporary Structures. No building or structure of a temporary or portable character such as trailers, tents or shacks shall be permitted in the Property, except as approved by the ARC, and except for temporary improvements used solely in connection with the construction of ARC approved permanent improvements and removed immediately upon completion of such ARC approved permanent improvement. Neither Declarant nor any Builders doing business in the Property shall be prohibited from erecting or maintaining temporary dwellings, model homes and other structures for development and marketing purposes, provided the same are in compliance with all applicable Laws, and further provided that any such Builder first obtains Declarant's written approval of such temporary dwelling, home or structure prior to installing or constructing same, such approval to be granted, conditioned or denied by Declarant in Declarant's sole and absolute discretion.

Section 9.10. Signs. No signs, advertisements, billboards, solicitation or advertising structures or materials of any kind shall be displayed or placed upon any Lot (including within any window) without the prior written approval of the ARC. Notwithstanding the foregoing, the following shall be permitted without prior approval of the ARC: (i) street number and name signs; and (ii) one (1) professionally made, non-digital, non-electric (or otherwise illuminated) sign constructed of metal or wood, installed on one wooden 4" by 4" post, and of not more than eight (8) square feet of surface area per side (2 sides maximum), containing no handwriting whatsoever, and used solely in connection with the marketing of the affected Lot for sale or lease. Wire-stake signs, commonly known as "H-Frame" or "U-Frame" signs, are expressly prohibited. The ARC shall have the right to establish guidelines so as to require a uniform standard for signs in the subdivision. Additionally, an Owner may display a sign of reasonable size provided by a contractor for security services provided that said sign is located no more than ten (10) feet from any entrance to a Dwelling. Declarant or the Association may enter upon any Lot and remove and destroy any sign which violates this Section 9.10. This Section 9.10 shall not apply to Declarant or to any Builder doing business in the Property provided that any such Builder first obtains Declarant's written approval of any such signs structures or materials prior to installing same, such approval to be granted, conditioned or denied by Declarant in Declarant's sole and absolute discretion.

Section 9.11. Air Conditioning Equipment. No air conditioning equipment other than compressor units may be visible on the exterior of any Dwelling unless previously approved by the ARC, which approval may be based on the aesthetics or adequacy of screening of such equipment. Window and wall air conditioning units are prohibited on the Property.

Section 9.12. Exterior Electronic or Electric Devices; Solar Panels.

(a) No exterior antennas and no citizen band or short wave antennas or satellite dishes in excess of one meter in diameter shall be permitted on any Lot or improvement thereon, except that Declarant and its affiliates shall have the right to install and maintain community antenna, microwave antenna, dishes, satellite antenna and radio, television and security lines. The location of any approved satellite dish must be approved by the ARC, which may require appropriate screening; provided, however, that the satellite dish shall be allowed in the least obtrusive location where the satellite signal may be received.

(b) No solar heating equipment, panels, collectors, or devices ("Solar Equipment") is permitted on or outside of any enclosed structure on any Lot, except such Solar Equipment whose installation and use is protected by U.S. federal or Florida law including, but not limited, by Section 163.04 of the Florida Statutes. Notwithstanding such protection, for aesthetic purposes, and to the maximum extent permitted by Section 163.04 of the Florida Statutes, the location, type, and design of all Solar Equipment must be approved by the ARC prior to installation and use of same, which approval, if granted, may require landscape or other screening, in the ARC's determination and reasonable discretion. An application for use and installation of such Solar Equipment must be submitted for approval to the ARC prior to installation and approval and will be granted only if: (i) such Solar Equipment is designed for minimal visual intrusion when installed (*i.e.*, is located in a manner which minimizes visibility from all Streets and adjacent Lots); and (ii) the Solar Equipment complies to the maximum extent feasible with the ARC's requirements and the Planning Criteria. Without limiting, and in addition to the foregoing, Declarant or the ARC may determine the specific location where solar collectors may be installed on the roof of any Dwelling or building within an orientation to the south or within forty five (45) degrees east or west of due south if such determination does not impair the effective operation of the solar collectors.

Section 9.13. Subdivision. No part of the Property shall be further subdivided without the prior written consent of Declarant for so long as Declarant owns any Lot, and thereafter, by the Board.

Section 9.14. Completion. Upon commencement of construction of improvements on any Lot, the Owner shall diligently prosecute the work to the end so that the improvements shall be completed as expeditiously as is reasonable. The Owner of the Lot on which improvements are being built shall keep the Streets and areas adjacent to the Lot free from dirt, mud, garbage, trash or other debris occasioned by construction.

Section 9.15. Excavation. No clearing or excavation shall be made except incident to construction, maintenance or repair of an ARC approved improvement (or by Declarant, by a Builder, or in connection with development of the Property) and must be in accordance with the Permit; and upon completion thereof exposed openings shall be back-filled, and disturbed ground shall be leveled, graded and covered with sod or seeded in accordance with the approved Plans and the Permit.

Section 9.16. Sidewalks. If required by the Local Government, the Owner of each Lot shall construct, prior to occupancy of the Dwelling on that Lot, a sidewalk along each boundary line of the Lot which abuts a platted Street shown on any Recorded Plats.

Section 9.17. Fences and Walls. Except for fences and walls constructed by Declarant or a Builder, there shall be no fence or wall permitted on any Lot unless it has been approved by the ARC as to size, material, color, location, etc. Landscape buffers may be required by the ARC on the outside of any fences and walls. All fences must be of a material approved by the ARC and must be installed with the posts and supports on the inside. If the Owner of a Lot fails to timely remove any unauthorized or unapproved fence or portion thereof, the Declarant may remove such fence or portion thereof, in its

discretion, without any liability whatsoever to said Owner, whereupon the fence or portion thereof may be disposed of. Notwithstanding anything herein to the contrary, so long as Declarant or any Builders designated by Declarant maintain any model homes within the Property, they shall have the right to fence all or any part of any Lots being used for parking for the term of such permitted use.

Section 9.18. Yard Accessories and Play Structures.

(a) Except as otherwise required by Law, all yard accessories and play structures, including basketball hoops or backboards and any other fixed games, shall be located at the side or rear of the Dwelling, except that, in the case of Dwelling(s) on corner Lots, such accessories and structures shall be restricted to the side yard furthest from the side Street and to that portion of the rear yard which is no closer to the side Street than a fence would be permitted to be located by the Local Government. The location of any play structure or permanent basketball structure shall be approved by the ARC prior to location of the structure on a Lot. Basketball structures, either permanently mounted to a Dwelling above the garage or mounted to a permanent pole, will be allowed only under the following conditions:

- (i) basketball hoops and structures must be well-maintained;
- (ii) backboards must be transparent or white, NBA approved, with a limit of two colors of trim;
- (iii) nets are limited to white nylon;
- (iv) the location of the basketball hoop and structure must first be approved by the ARC;
- (v) If pole-mounted, the pole must be metal, either black or galvanized and permanently mounted into the ground with a concrete base; and
- (vi) No permanent basketball structures may be placed in any side yard.

Temporary basketball structures are allowed provided that they meet the requirements of items (i) through (iii) above. Temporary basketball structures shall be placed in the garage or laid down behind a fence when not in use so as not to be seen from the Streets or neighboring Lots. The time of play of basketball may be limited by the Board or the ARC to reasonable daylight hours.

- (b) Tree houses are prohibited within the Community.
- (c) The ARC may regulate the size and number (which could be zero) of permitted decorative statues or figures, birdbaths, bird houses, lawn ornaments and other yard art.

Section 9.19. Use; Rentals; Timesharing.

(a) Lots shall be used for single family residential purposes only. No trade, business, profession, occupation or other commercial activity or use shall be conducted on any Lot or within any Dwelling, provided, however, that an Owner or lawful Tenant of a completed Dwelling may use a single room within the Dwelling as an office for conducting business as long as the business: (I) does not involve or require regular visitation of the Lot or dwelling by clients, customers, suppliers, service providers, or other business invitees, or door-to-door solicitation within the Community; (II) does not include the manufacture or distribution of any products or goods in the Dwelling or on or from the

Community; (iii) is not apparent or detectable by sight, sound, or smell from outside the Dwelling; (iv) complies with applicable land use and zoning requirements; (v) is consistent with the residential character of the Community and does not constitute a nuisance, or a hazardous or offensive use, or threaten the security or safety of others within the Community, as determined from time to time in the Board's sole discretion; and (v) is not a daycare facility, child care facility, or assisted living/hospice facility. No signs shall be placed on any Dwelling or Lot which identifies the Dwelling or Lot as a place of business. For purposes of this section, "(B)usiness" shall have its ordinary, customary, generally accepted meaning and shall include, without limitation, any occupation, work, trade, or activity undertaken from time to time or on an ongoing basis which involves providing goods or services to persons other than the family of the producer and for which the producer receives a fee, compensation, or other form of monetary or non-monetary consideration, regardless of whether: (A) such activity is engaged in full or part-time; (B) such activity is intended to or does generate a profit; or (C) a license is required. This section shall not apply to restrict Declarant's or Declarant's affiliates' activities or those a Builder, nor shall it restrict the activities of persons or entities Declarant approves with respect to the development and marketing/sale of property within the Community. This section also shall not apply to Association activities related to the provision of services or to operating and maintaining the Community, including the Community's recreational and other amenities. Leasing a Dwelling is not a "business" within the meaning of this section. Temporary uses of Lots by Declarant and its affiliates or assigns (including Builders as may be designated by Declarant from time to time) for model homes, sales displays, parking lots, sales offices, and other offices or uses, or any one or combination of the foregoing, shall be permitted until permanent cessation of such uses takes place. No changes may be made in buildings or structures erected by Declarant or its affiliates (except if such changes are made by Declarant) without the consent of Declarant and the ARC as provided herein.

(b) Owners shall be permitted to lease their Dwelling, provided that such lease shall require the tenant thereunder to comply with the Governing Documents and the terms and conditions of the Rules and Regulations. "Short-Term Rentals" (as that term is defined below) of Dwellings are prohibited. For purposes of this Declaration, the term "Short-Term Rentals" shall mean and refer to the leasing or rental of any Dwelling or Lot to a person or entity for a period of less than seven (7) consecutive months. Should an Owner enter into a lease or rental agreement, and said lease or rental agreement shall terminate or expire earlier than stated therein, then Owner may only enter into one more lease or rental agreement in the calendar year in which the previous lease or rental agreement terminated or expired. The subleasing or sub-renting of a Dwelling is subject to the same requirements and limitations as are applicable to the leasing or renting thereof. If an Owner intending to lease or rent a Dwelling is delinquent in the payment of Assessments, the Association shall be entitled, but not required, to prohibit the Owner from renting or leasing the Dwelling until such delinquency is made current. From time to time, the Association may reserve the right to approve of any form of Lease that an Owner wishes to use, or otherwise require inclusion in a Lease of certain provisions that the Association may deem necessary or appropriate to assure the Tenant's compliance with all the terms and provisions of the Governing Documents and the Rules and Regulations. The Association may charge a reasonable administrative fee not to exceed One Hundred and No/100 Dollars (\$100.00) for the required review of any lease or rental agreement, or other such amount as permitted by law from time to time. Dwellings shall be leased in their entirety, and no individual rooms may be leased.

(c) No time sharing plan (as defined in Chapter 721, Florida Statutes, as may be amended from time to time), or any similar plan of fragmented or interval ownership of Dwellings shall be permitted. De facto timesharing of a Dwelling shall not be permitted. By way of example but not limitation, de facto timesharing shall include use of a Dwelling by multiple persons, such as siblings or business associates, who intend that they and their families would split occupancy of the Dwelling into different periods for use during the year.

Section 9.20. Pools. Swimming pools may not be located in the front or side yard of any Lot, nor nearer than the Dwelling to any side Street lot line. Swimming pools, spas, hot tubs, decks, screens, screen enclosures, lanais, etc. (collectively, “Pool Improvements”), shall be designed to be compatible and “tie in” with the architecture and material of the subject Dwelling. Screen enclosures and lanais shall be a maximum of one (1) story in height (unless building architecture, as determined by the ARC, requires two (2) stories in height). Tree protection barricades shall remain throughout construction of all Pool Improvements. All swimming pools shall be constructed and built at existing grade unless otherwise expressly approved by the ARC. All Pool Improvements construction shall, at all times, be in accordance with all applicable laws. In no event shall any above-ground swimming pool be permitted within the Community. All swimming pool materials, equipment, and play toys stored on any Lot shall be screened from view from outside the Lot. Swimming pool security fencing and screen enclosures shall be installed subject to applicable hurricane standards within the Florida Building Code or other applicable jurisdictional codes. No Pool Improvements may be constructed, erected, or maintained upon any Residential Property without the prior written approval of the ARC.

Section 9.21. Dwellings.

(a) No Dwelling shall contain less than the minimum living area required by the local Governmental Authority, exclusive of screened area, open porches, terraces, patios and the garage.

(b) Each Dwelling shall have an attached fully enclosed garage capable of housing not less than two (2) standard sized automobiles, which shall not be enclosed for use as a living area.

(c) Setbacks for Dwellings shall be as permitted by the Local Government.

(d) No Dwelling shall exceed two (2) stories in height.

(e) Except as permitted pursuant to Section 9.12 hereof or by the ARC, no projections of any type other than chimneys, skylights and vent stacks shall be placed or permitted to remain above any roof of any Dwelling.

(f) No Dwelling shall have exposed structural block on its front elevation.

(g) All driveways shall be constructed of solid concrete or decorative pavers approved by the ARC.

(h) Except as may otherwise be provided herein (if at all) with regard to central air conditioning compressor units, all oil tanks, soft water tanks, wood piles, water softeners, well pumps, sprinkler pumps, pool and spa equipment and heaters, and other or similar mechanical fixtures and equipment, shall be screened or located so as not to be visible from a Street or other Lot.

(i) Unless installed by Declarant or the Association, the following fence materials are expressly prohibited: (a) metal, other than decorative aluminum; (b) plastic, other than PVC which is tan in color; (c) fabric of any type; (d) wood of any type; (e) bamboo; or (f) chain link.

Section 9.22. Tree Removal and Landscaping. Except if done by Declarant, trees measuring six inches (6”) or more in diameter at three feet (3') or more above ground level shall not be cut or removed without the prior written consent of the ARC; provided, however, if approved by the ARC, trees located within six feet (6') of the location of the Dwelling may be removed, regardless of size, without prior approval of the ARC. More restrictive arbor ordinances or environmental Laws shall control in the event

of conflict herewith. There shall be no removal of trees or Lot clearing, other than clearing of underbrush, until the ARC has approved in writing a general, conceptual landscape plan that designates those existing trees to be retained and preserved on the Lot. All Lots shall have fully sodded front and side lawns using St. Augustine Grass (i.e., *Stenotaphrum Secundatum* “Floritam” or a similar variety) except in approved landscape or retained natural areas, or as otherwise installed by Declarant or permitted by the ARC. All areas of each Lot not covered by building improvements or included within approved gardens and natural areas within the Lot shall be sodded prior to occupancy of the Dwelling on that Lot. Unless prohibited by Law, natural areas shall be finished by removal of underbrush and addition of mulch. Notwithstanding anything contained herein to the contrary and unless done so by Declarant, prior to Turnover no tree, regardless of size, shall be removed without prior written consent of the ARC.

Section 9.23. Debris. Except for normal construction debris on any Lot during the course of construction of the Dwelling, no weeds, garbage, refuse or debris of any kind shall be placed or permitted to accumulate upon any portion any Lot.

Section 9.24. Pumping or Draining; Drilling or Mining. The Owner of any Lot which includes or is adjacent to any pond, creek, bay head, or other body of water shall not reduce the depth or size of said body of water by pumping or draining therefrom, or by placing fill dirt or any other material or debris in said body of water. No Owner of any Lot may drill or mine for, or otherwise extract or attempt to extract, minerals, oil, gas, or any other natural resources or geological materials from the subsurface of said Owner's Lot or from any other portion of the Property.

Section 9.25. Ramps. No skateboard or bicycle ramp or similar structure shall be permanently installed or maintained overnight on any portion of any Lot located forward of the rear wall of the Dwelling or adjacent to any side Street.

Section 9.26. Firearms. The discharge of firearms within the Property is prohibited. The term “firearms” includes “B-B” guns, pellet guns and other firearms of all types and sizes. Each Owner who determines to keep a firearm on or about the Property hereby agrees to indemnify the Association and Declarant and hold each of the Association and Declarant harmless against any loss or liability of any kind or character whatsoever arising from or growing out of such Owner having a firearm on the Property.

Section 9.27. Declarant Reservation. Any provision of this Declaration to the contrary notwithstanding, until Declarant and its successor and assigns has completed all of the contemplated improvements and closed the sales of all of the Lots, neither the Owners nor the Association shall interfere with, or allow the interference with, the completion of Declarant's planned improvements and the sale of the Lots. Declarant and Builders may make such lawful use of the unsold Lots and the Common Area, without charge, as may facilitate such completion and sale, including, but not limited to, maintenance of sales and construction trailers and offices, the showing of the Lots and the display of signs and the use of Lots for vehicular parking. Without limiting the generality of the foregoing, except only when the express provisions of this Declaration prohibit Declarant from taking a particular action, nothing in this Declaration shall be understood or construed to prevent or prohibit Declarant from any of the following:

(a) Doing on any property or Lot owned or controlled by it, whatever it determines to be necessary, convenient or advisable in connection with the completion of the development of the Property, including without limitation, the alteration of its construction plans and designs as Declarant deems advisable in the course of development (all models or sketches showing plans for future development of the Property, as same may be expanded, may be modified by Declarant at any time and from time to time, without notice); or

(b) Erecting, constructing and maintaining on any property or Lot owned or controlled by Declarant, such structures as may be reasonably necessary for the conduct of its business of completing said development and establishing the Property as a community and disposing of the same by sale, lease or otherwise; or

(c) Conducting on any property or Lot owned or controlled by Declarant, its business of developing, subdividing, grading and constructing improvements in the Property and of disposing of Lots therein by sale, lease or otherwise; or

(d) Determining in its sole discretion the nature of any type of improvements to be initially constructed as part of the Development or the Property; or

(e) Maintaining such sign or signs on any property or Lot owned or controlled by Declarant as may be necessary or desired in connection with the operation of any Lots owned by Declarant or the sale, lease, marketing or operation of the Lots; or

(f) Recording Supplemental Declarations which modify or amend this Declaration, which add or withdraw Additional Property, or that otherwise allow or permit Declarant to effect any action which may be required of Declarant by the Local Government or any other Governmental Authority or quasi-governmental agency in connection with the development and continuing operation of the Property; or

(g) Modifying, changing, re-configuring, removing or otherwise altering any improvements located on the Common Area or utilizing all or portions of the Common Area for construction access or staging (provided that same does not impair existing platted access (as shown on any Recorded Plats) or utility services to the Lots); or

(h) Causing utilities to be available to all portions of the Property, including, but not limited to, the reserving or granting of easements and rights of way as may be necessary to locate, install and maintain facilities and connections.

Section 9.28. Conservation Tracts. If any conservation tract is specifically designated as such on any Recorded Plat of the Property, then, except for those alterations made by Declarant and those additional alterations which may be permitted by applicable Governmental Authorities and the ARC, there shall be no further clearing, construction, grading or alteration of such tracts. Any portion of the Property which is designated on any Recorded Plat as “open space” shall not be developed in the future with any Dwellings or improvements and shall remain open space in perpetuity.

Section 9.29. Mailboxes.

(a) Community mailboxes may be provided by the United States Postal Service (“USPS”) and individual mailboxes on each Lot shall be prohibited while community mailboxes are utilized by the U.S. Post Office. If community mailboxes are not provided, each Owner shall install a U.S. Postal Service-approved mailbox, the color, style and design of which shall be subject to approval by the ARC. All individual mailboxes shall be mounted on a 4” X 4” vertical post with a supporting bracket installed at a 45 degree angle to the post. Except for identifying numbers and letters, the mailbox shall be painted solid black and the post and support shall be painted solid white.

(b) Notwithstanding the foregoing, in connection with the development of the Community, should: (a) the USPS require the use of cluster box units approved by the USPS (“CBUs”) for the purpose of centralized mail delivery by the USPS (“Centralized Mail Delivery”) to the Community or

any part, section, or phase thereof; (b) any other Governmental Authority requires the use of CBUs for Centralized Mail Delivery to the Community or any part, section, or phase thereof; or (c) Declarant, in its sole discretion, desires to develop the Community or any part, section, or phase thereof with CBUs for Centralized Mail Delivery, then the Community or the applicable part, section, or phase thereof shall be developed with concrete slabs on, as applicable, Common Area or Limited Common Area to accommodate the subject CBUs. Unless otherwise undertaken by the USPS from time to time, the Association, as determined necessary by the Board, and, as applicable, at Common Expense or Limited Common Area Expense, shall be responsible for the routine maintenance, repair, and replacement of the aforementioned concrete slabs and all CBUs, all in accordance with any applicable requirements, rules, policies, and guidelines of the USPS. Notwithstanding the foregoing, neither Declarant nor the Association shall ever be responsible for the safety or security of any CBUs or any mailboxes or parcel compartments contained therein. Each Owner and Member acknowledges and agrees that if at any time their Lot is or becomes serviced by CBUs, all mail delivery to said Lot by the USPS will be done via the mailboxes or parcel compartments contained within the CBUs, as opposed to individual, curbside mailboxes for said Lot.

Section 9.30. Windows. No security bar system may be installed or placed on any window or door of any Dwelling in the Property. Window treatments within any Dwelling constructed on a Lot shall consist of drapery, blinds, decorative panels, or other window covering, and no newspaper, aluminum foil, sheets or other temporary window treatments are permitted, except for periods not exceeding twenty-one (21) days after an Owner or tenant first moves into a Dwelling or while permanent window treatments are being installed, cleaned, or repaired. All window coverings shall be professionally made, uniform in appearance, and generally keeping with the exterior scheme of the Unit. No awnings, canopies or shutters shall be affixed to the exterior of a Dwelling on a Lot without the prior written approval of the ARC. No reflective tinting or mirror finishes on windows on any Dwelling on a Lot shall be permitted unless approved by the ARC. Window treatments on any Dwelling facing the street shall be of a neutral color, such as white, off-white or wood tones.

Section 9.31. Outdoor Drying. No clothing, laundry or wash shall be aired or dried outside of any building structure on any Lot, unless such clothing, laundry, wash and drying apparatus are fully screened from view from adjacent property and streets by fencing or landscaping. Such clothing, laundry, or wash shall not be placed outside before sunrise and shall be removed from the exterior of the Lot by sunset each day.

Section 9.32. Use of Name "TARA FOREST". No Owner shall use the name(s) "Tara Forest" or any logo associated with such name(s) and used by Declarant in connection with the Property, or any derivative of such name or logo, in any printed or promotional material or in any activity, without Declarant's prior written consent. Declarant may, however, use such names and logos with respect to any property or other development activities of Declarant, without the consent of any party, including any Owner.

Section 9.33. Garages. Garages are intended primarily for parking and vehicle storage. No garages may ever be converted to or otherwise used as: living space/quarters such as, but not limited to, family rooms, bedrooms, bonus rooms, recreational (rec) rooms, or secondary/mother-in-law suites; office space; or a workshop. Only the number of cars exceeding occupied garage spaces shall be parked on the driveway. Vehicles parked in the driveway shall be parked such that they are not blocking the sidewalk.

Section 9.34. Flags. Display of flags is permitted on Lots only as and to the extent expressly permitted pursuant to this Section 9.34. Each Lot Owner may display one portable, removable United States flag or official flag of the State of Florida in a respectful manner, and one portable, removable official flag, in a respectful manner, not larger than 4.5 feet by 6 feet, which flag represents the United States Army, Navy, Air Force, Marine Corps, or Coast Guard, or a POW-MIA flag. Each Lot Owner may erect a single

freestanding flagpole no more than 20 feet high on any portion of the said Owner's Lot ("Flagpole"), provided the Flagpole does not obstruct sightlines at intersections and is not erected within or upon any easement area established, granted, or reserved pursuant to this Declaration or otherwise. Each Lot Owner may further display in a respectful manner from the Flagpole, one official United States flag, not larger than 4.5 feet by 6 feet, and may additionally display one official flag of the State of Florida or the United States Army, Navy, Air Force, Marines, or Coast Guard, or a POW-MIA flag. Such additional flag of the State of Florida or the United States Army, Navy, Air Force, Marines, or Coast Guard, or a POW-MIA flag, must be equal in size to or smaller than the United States flag. In addition to the foregoing, each Lot Owner may display either one (1) 2-sided decorative house flag or banner, or one (1) 2-sided decorative garden flag or banner, not larger than 29" wide x 44" long. Any such decorative flag or banner may only be displayed via a standard decorative neutral color flag pole or stand; must be professionally made of nylon, denier polyester, or similar material; must be in good condition, good taste, and not unsightly; unless installed by Declarant or approved in advance by Declarant, may not be used in connection with, as applicable, the advertising, advocating, promotion, marketing, sale, or leasing of the Property, the Community, any Lot, Dwelling, Member, Owner, Builder, product, good, service, business, real or personal property, or political party, candidate, or cause; and may not directly or indirectly, in anyway whatsoever, defame or cast negative light on or upon the Declarant, the Association, any Builder, the Community, the Property, any Lot, Dwelling, Member, Owner, product, good, service, business, real or personal property, or political party, candidate, or cause. Any holiday (e.g., Thanksgiving, Christmas, etc.) or seasonal (e.g., Spring) decorative flags and banners shall be subject to any Rules and Regulations regarding the time periods during which such flags and banners may be displayed. The Flagpole and aforementioned displays are subject at all times to all building codes, zoning setbacks, and other applicable governmental regulations, including, but not limited to, noise and lighting ordinances of the County, and to all setback and locational criteria set forth in the Governing Documents.

Section 9.35. Holiday Decorations. The Board may, from time to time, as necessary, adopt reasonable size, location, time, place, manner, and other Rules and Regulations with respect to holiday symbols and decorations inside Dwellings or on Lots generally, which Rules and Regulations may include, but shall not be limited to, establishing schedules and time periods during which such displays are allowed. For example, a Rule and Regulation may provide that Christmas displays may not be erected or permitted on any Lot, or to be visible outside any Dwelling, prior to Thanksgiving in the year that the subject Christmas occurs, and must be removed no later than the end of the second week of January of the next calendar year.

Section 9.36. Approved Builders. All development, construction, and reconstruction of any Dwelling or other improvements on or about a Lot shall be performed by a Builder approved by Declarant, or by another licensed residential building contractor approved by Declarant or the ARC (after Turnover).

Section 9.37. Solicitation. No soliciting shall be allowed at any time within the Property. Owners should notify the Association if a solicitor appears, and appropriate action may be taken by the Board.

Section 9.38. Yard Sales. The Board, in its sole and absolute discretion, may designate up to two (2) dates or weekends during each calendar year to hold and promote community-wide yard and/or garage sales. No other yard or garage sales shall ever be permitted to be held at any time within the Community by Owners or residents thereof.

Section 9.39. Exterior Lighting. Except as may be installed initially by Declarant, no spotlights, seasonal and special effect lighting, floodlights or similar high intensity lighting shall be placed or utilized upon any Lot which in any way will allow light to be reflected on any other Lot or the improvements thereon or upon any Common Area, or any part thereof without the prior written approval of the ARC and in

accordance with the Planning Criteria and the Rules and Regulations. Low intensity lighting which does not disturb the Owners or other occupants shall be permitted.

Section 9.40. Traffic Hazards. Nothing shall be erected, constructed, planted or otherwise placed in the Community subsequent to the initial construction of Improvements in the Community by Declarant which creates a traffic hazard or blocks the vision of motorists upon any of the Streets or intersections of the Community.

Section 9.41. Hurricane Shutters. Any hurricane shutters or other protective devices visible from the outside of a Dwelling (collectively, "Hurricane Shutters") shall be of a type approved in writing by the ARC. Unless applicable law otherwise expressly permits the permanent affixing of same, Hurricane Shutters may only be used on a temporary basis, and shall not be stored on the exterior of any Residence. Any approval by the ARC shall not be deemed as an endorsement of the effectiveness of any Hurricane Shutters. Hurricane Shutters may not be left closed for any extended period beyond the time needed to protect the Dwelling from damage caused by a hurricane, tropical storm, or other high winds event (collectively, "Storm Event"). Any approved Hurricane Shutters may be installed or closed up five (5) days prior to the expected arrival of a Storm Event, and must be removed or opened within five (5) days after the end or passing of the Storm Event or as the Board may determine otherwise. Except as the Board may otherwise decide, Hurricane Shutters may not be closed at any time other than a Storm Event. A Lot Owner or occupant who plans to be absent during all or any portion of a hurricane season, i.e., June 1st through November 30th ("Hurricane Season") must prepare their Dwelling prior to their departure by designating a responsible firm or individual to care for their Dwelling should a Storm Event threaten or damage the Dwelling. Said Lot Owner or occupant must furnish the Association with the names of such firm or individual prior to any Storm Event.

Variances. Declarant and the Board shall have the right and power to grant variances from the provisions of this Article IX and from the Rules and Regulations for good cause shown, as determined in the reasonable discretion of the Board. No variance granted as aforesaid shall alter, waive or impair the operation or effect of the provisions of this Article IX in any instance in which such variance is not granted.

ARTICLE X

STORMWATER MANAGEMENT

Section 10.01. Association.

(a) Pursuant to Fl. Stat. §617.0302(11), the Association, as a corporation not for profit organized under Chapter 617 of the Florida statutes, has the power to sell, convey, mortgage, pledge, lease, exchange, transfer, or otherwise dispose of all or any part of its property and assets.

(b) Pursuant to Fl. Stat. §617.0302(2), the Association, as a corporation not for profit organized under Chapter 617 of the Florida statutes, has the power to sue and be sued and appear and defend in all actions and proceedings in its corporate name to the same extent as a natural person.

(c) At Common Expense, the Association shall have the authority at all times to contract for services to provide for operation and maintenance services concerning the Common Areas, the Stormwater or Surface Water Management System, any Association property, and the Association generally.

(d) The Association shall operate, maintain, and manage the Stormwater Management System(s) in a manner consistent with the requirements of the Permit and applicable District rules, and shall assist in the enforcement of the restrictions and covenants contained herein.

(e) The Association shall levy and collect adequate Assessments (e.g., Annual Assessments and Special Assessments) against Members of the Association for the cost of maintenance, operation, and replacement of the Stormwater Management System. The Assessments shall be used for the maintenance and repair of the Stormwater Management Systems and mitigation or preservation areas, including but not limited to work within retention areas, drainage structures and drainage easements.

(f) In the event of termination, dissolution or final liquidation of the Association, the responsibility for the operation and maintenance of the Stormwater Management System must be transferred to and accepted by an entity which complies with Rule 62-330.310, F.A.C., and Applicant's Handbook Volume I, Section 12.3, and be approved by the District prior to such termination, dissolution or liquidation.

(g) Existence of the Association shall commence with the filing the Articles with the Secretary of State, Tallahassee, Florida, and the Association shall thereafter exist in perpetuity. However, if the Association is dissolved, the Stormwater Management System, any property containing the Stormwater Management System, and all water management portions of Common Areas, shall be conveyed to an entity meeting the requirements of subsection (c) directly above.

(h) As provided elsewhere herein, this Declaration shall run with and bind and benefit the Property for a term of thirty (30) years from the Effective Date, after which time this Declaration and each Supplemental Declaration shall be automatically extended for successive periods of ten (10) years, unless prior to the commencement of any 10-year extension period an instrument properly executed and signed by the Owners of eighty percent (80%) of the Lots and agreeing to terminate this Declaration is Recorded in the Public Records.

(i) A "Recorded Notice of Environmental Resource Permit," Form No. 62-330.090(1), shall be Recorded in the Public Records. If Rules are promulgated a copy of the Permit shall be attached to said Rules as an exhibit. The Registered Agent for the Association will maintain a copy of the Permit and copies of all further permitting actions for the benefit of the Association.

Section 10.02. Ownership/Control, Maintenance, and General Use of Stormwater Management System.

(a) The Association owns the Stormwater Management System. The Stormwater Management System is located on land that is designated as Common Area, is located on land that is owned by the Association, or is located on land that is subject to a perpetual easement in favor of the Association and its successors such that the Association has the perpetual right to operate and maintain the Stormwater Management System.

(b) The Association shall be responsible for the maintenance, operation and repair of the Stormwater Management System. It is the responsibility of the Association to operate and maintain the Stormwater Management System. Maintenance of the Stormwater Management System(s) shall mean the exercise of practices which allow the systems to provide drainage, water storage, conveyance or other stormwater management capabilities as permitted by the District. The Association shall be responsible for such maintenance and operation. Any repair or reconstruction of the Stormwater Management System shall be as permitted, or if modified as approved by the District. If monitoring and/or maintenance of wetland mitigation areas are required by the Permit, the Association, at Common Expense,

shall be perpetually responsible for carrying out said monitoring and/or maintenance to complete any necessary or required tasks successfully, including meeting all conditions associated with said wetland mitigation, maintenance, and monitoring.

(c) To the extent not included in the areas required to be maintained by the Association pursuant to Section 10.02(b) above, each Owner shall, at that Owner's expense, grass over, provide routine landscape maintenance, mow and keep free of trash and debris, on a routine basis, those portions of the Stormwater Management System located on or within that Owner's Lot (whether or not included in a platted drainage easement depicted on any Recorded Plat), failing which the Association shall perform the required maintenance and may levy an Individual Assessment to cover the costs thereof. Each Owner shall be responsible for the "Maintenance, Operation and Repair" (as that term is defined below) of the swales, if any, on the Owner's Lot, failing which the Association shall perform the required maintenance and may levy an Individual Assessment to cover the costs thereof. The term "Maintenance, Operation and Repair", as used in this Declaration, shall mean the exercise of practices, such as mowing and erosion repair, which allow the swales to provide drainage, water storage, conveyance or other stormwater management capabilities as permitted or required by the Permit or the District. Filling, excavation, or construction of fences, or the existence of anything else that interferes with drainage or otherwise obstructs the surface water flow in the swales is prohibited. No alteration of the swale shall be authorized and any damage to any swale, whether caused by natural or human-induced phenomena, shall be repaired and the swale returned to its former and proper condition as soon as possible by the Owner(s) of the Lot(s) upon which the swale is located, failing which the Association shall perform the required repair and may levy an Individual Assessment to cover the costs thereof.

(d) Unless first approved by the ARC and the District, no Owner, including Declarant, may obstruct, alter or in any way modify the method and/or structures of drainage utilized or installed by Declarant or the Association from, on, or across any Lot, Common Area or any easement area; nor shall any structure or material be erected, placed or maintained which shall in any way obstruct such drainage devices or facilities or impede their efficient operation. No elevation changes shall be permitted on any Lot which materially adversely affects the drainage of or to neighboring Lots or the Common Area.

(e) It shall be the responsibility of each Owner, at the time of construction of the Dwelling or any other structure or building on that Owner's Lot, to comply with the approved construction plans for the Stormwater Management System on file with the District.

(f) Fences may only be permitted within drainage easements on an Owner's Lot so long as the fence does not block or impede the flow of water through the drainage easement area. With regard to any fences permitted within drainage easements pursuant to the terms hereof, the Owner of the subject Lot shall be responsible for removal/replacement of the fence or any portion thereof if removal of same is required in connection with any maintenance, repair, construction, or installations concerning the drainage easement area or the Stormwater Management System. Notwithstanding the foregoing, if the Owner of the subject Lot fails to timely remove any such fence or portion thereof, the Declarant, the Association, and any Governmental Authority (including, but not limited to, the District) may remove such fence or portion thereof, in its discretion, without any liability whatsoever to said Owner, whereupon the fence or portion thereof may be disposed of, and without the party removing the fence or any portion thereof being required to thereafter reinstall or replace said fence or portion thereof.

(g) ALL OWNERS ARE HEREBY ADVISED THAT A PERMIT FROM THE DISTRICT WILL BE REQUIRED IF ANY OF THE FOLLOWING ITEMS ARE PROPOSED: (I) ANY ALTERATION TO THE STORMWATER MANAGEMENT SYSTEM; OR (II) ENCROACHMENT INTO THE WETLANDS, WETLAND BUFFERS, OR ADJACENT OFF-SITE PROPERTY LINE BUFFERS.

Section 10.03. Easements for Access and Drainage.

(a) The Association shall have a perpetual non-exclusive easement over all areas of the Stormwater Management System for access thereto and to operate, maintain or repair the system. By virtue of said easement, the Association shall have the right to enter upon any portion of any Lot which is a part of the Stormwater Management System, at a reasonable time and in a reasonable manner, to operate, maintain or repair the Stormwater Management System as required by the Permit, subject to any maintenance responsibilities assumed by any Governmental Authorities. Additionally, the Association shall have a perpetual non-exclusive easement for drainage over the entire Stormwater Management System. No person shall alter the drainage flow of the Stormwater Management System, including buffer areas or swales, without the prior written approval of the Association and the District.

(b) Each Owner (including Declarant) shall have a non-exclusive right and easement of use and enjoyment to drain across the Stormwater Management System in accordance with the Permit, District rules, and the Rules and Regulations.

Section 10.04. Amendment to Declaration. Any Amendment to this Declaration which alters the Stormwater Management System, beyond maintenance in its original condition, including mitigation or preservation areas and the water management portions of the Common Areas, must have the prior approval of the District. Any proposed Amendment to this Declaration affecting the Stormwater Management System (including environmental conservation areas and the water management portions of the Common Areas) shall be submitted to the District for a determination of whether the Amendment necessitates a modification of the Permit. If a modification is necessary, the District will so advise the Permit's permittee. The Amendment affecting the Stormwater Management System may not be finalized until any necessary Permit modification is approved by the District or the Association is advised that a modification is not necessary.

Section 10.05. Enforcement. The District shall have the right to enforce, by a proceeding at law or in equity, the provisions contained in this Declaration which relate to the maintenance, operation, and repair of the Stormwater Management System. The District has the right to take enforcement action, including a civil action for an injunction and penalties, against the Association to compel it to correct any outstanding problems with the Stormwater Management System facilities or in mitigation or conservation areas under the responsibility or control of the Association.

ARTICLE XI

ADDITIONAL COVENANTS AND RESTRICTIONS

No Owner may impose any additional covenants, conditions or restrictions on any part of the Property without the prior written approval of Declarant, for so long as Declarant owns any Lots, and thereafter, without the prior written approval of the Board.

ARTICLE XII

AMENDMENT

Section 12.01. Amendment by Members

(a) Amendment by Written Instrument. This Declaration may be amended (an "Amendment") at any time by the holders of a simple majority of the votes in the Association (without regard to membership class). Upon approval of an Amendment in accordance with the preceding sentence,

the Board shall direct the appropriate Officer, agent or employee of the Association to have a written instrument prepared in recordable form which instrument shall set forth the text of the approved Amendment, and which Amendment shall also comply with all requirements of the Association Act. Upon execution of the Amendment by the holders of at least a simple majority of the votes in the Association (without regard to membership class), the Board shall direct the appropriate Officer, agent or employee of the Association to Record the Amendment in the Public Records. The Amendment will be deemed effective upon Recording.

(b) Amendment by Vote at a Duly-Authorized Meeting. An Amendment may be proposed by Declarant (before or after Turnover), the Association, or after Turnover, through a petition signed by ten percent (10%) of the Owners. If a proposed Amendment is to be adopted by a vote, a written copy of the proposed Amendment shall be furnished to each Owner at least thirty (30) days, but not more than ninety (90) days, prior to a duly-authorized meeting called to discuss the proposed Amendment. To pass, the proposed Amendment shall be approved upon the affirmative vote of at least a simple majority of the membership casting votes (either in person or by proxy) (as governed by Section 12.01(a) herein) at a meeting duly called to consider the proposed Amendment. Upon the approval of an Amendment pursuant to this Section 12.01(b), the President and Secretary shall execute a written instrument in recordable form which shall set forth the text of the Amendment, the effective date of the Amendment, the date of the meeting of the Association at which such Amendment was adopted, the date that notice of such meeting was given, the total number of votes cast at the meeting (either in person or by proxy), the total number of votes necessary to adopt the Amendment, the total number of votes cast for the Amendment, and the total number of votes cast against the Amendment. The written Amendment executed by the President and Secretary shall be Recorded in the Public Records. The Amendment will be deemed effective upon Recording.

(c) Amendment by Declarant. Until such time as Turnover occurs, Declarant specifically reserves the absolute and unconditional right to alter, modify, change, revoke, rescind, amend, restate, or cancel all or any portion of this Declaration (or any of the other Governing Documents) or the restrictive covenants contained in this Declaration (or in any of the other Governing Documents); provided, however, that to be valid and enforceable, any such amendment by Declarant may not be arbitrary, capricious, or in bad faith; destroy the general plan of development of the community; prejudice the rights of existing Non-Declarant Members to use and enjoy the benefits of Common Area; or materially shift economic burdens from the Declarant to the existing Non-Declarant Members. Following Declarant's relinquishment of control of the Association, this Declaration may only be amended pursuant to the provisions of such Section 12.01(a) and Section 12.01(b) hereof.

Section 12.02. Restrictions on Amendments Notwithstanding anything to the contrary contained in Section 12.01 hereof, no Amendment to this Declaration may: (i) remove, revoke, or modify any right or privilege of Declarant without the prior express written consent of Declarant or the assignee of any such right or privilege which consent may be granted, conditioned or denied in such party's absolute and sole discretion; (ii) impair the validity or priority of the lien of any Mortgage or impair the rights granted to Mortgagees herein without the prior written consent of such Mortgagees; (iii) to the extent that any provision of the Declaration has been included to satisfy a condition of approval of a planned development, preliminary subdivision plan, development order or a subdivision plat of the property, such provision shall not be changed, amended, modified or otherwise deleted or eliminated without the prior written consent of the applicable Governmental Authority; (iv) result in or facilitate a termination of the Association's obligation to maintain the Common Area; or (v) change, amend, modify, eliminate or delete the restrictions contained in this Section 12.02. Additionally, any proposed Amendment which would have the effect of materially altering the general plan of development for the Development or which would materially prejudice the Owners' rights to use and enjoy the benefits of the Common Area, shall require the unanimous written consent of all Owners. No Amendment shall be permitted that would violate the Association Act.

ARTICLE XIII

HUD/FHA/VA AND DISTRICT APPROVAL RIGHTS

Notwithstanding anything in this Declaration to the contrary, as long as there exists a Class "B" membership, if any one or more of the U.S. Department of Housing and Urban Development (HUD), the Federal Housing Administration (FHA) or the U.S. Department of Veterans Affairs (VA), or any successor department or agency of any of the foregoing, requires approval or consent by it or them to annexation of Additional Property, any merger or consolidation involving the Association, the placing of any mortgage lien on the Common Area, dedication to the public of any Common Area, any Amendment, or dissolution of the Association, by any one or more of said agencies as a condition of making, insuring or purchasing loans on Dwellings in the Property, and any such loan has been approved, insured, guaranteed, or purchased by the applicable agency at the time of the proposed annexation, merger, consolidation, mortgaging, dedication, Amendment or dissolution, then the required consent or approval shall be obtained.

ARTICLE XIV

DURATION AND TERMINATION

This Declaration shall run with and bind and benefit the Property, and shall inure to the benefit of and be enforceable by Declarant, the Association and any Owner, and their respective legal representatives, heirs, successors and assigns, for a term of thirty (30) years from the Effective Date, after which time this Declaration and each Supplemental Declaration shall be automatically extended for successive periods of ten (10) years unless prior to the commencement of any 10-year extension period an instrument properly executed and signed by the Owners of eighty percent (80%) of the Lots and agreeing to terminate this Declaration is Recorded in the Public Records.

ARTICLE XV

ENFORCEMENT

Section 15.01. Compliance by Owners. Every Owner and all guests, tenants, subtenants, occupants, licensees, and guests and invitees of any Member, shall comply with the restrictions and covenants set forth in this Declaration and any and all Rules and Regulations which from time to time may be adopted.

Section 15.02. Enforcement. Failure of an Owner or that Owner's tenants, subtenants, occupants, licensees, invitees and guests to comply with the restrictions and covenants set forth in this Declaration or the Rules and Regulations applicable to the Owner, the Lot, the Dwelling or the Property, shall be grounds for immediate action which may include, without limitation, an action to recover sums due for damages, injunctive relief, or any combination thereof. The offending Owner shall be responsible for all costs and expenses of enforcement, including, but not limited to, attorneys' and paralegals' fees actually incurred and court costs, fees and expenses. If any person shall violate or attempt or threaten to violate the provisions of this Declaration, it shall be lawful for Declarant, any Owner, or the Association: (a) to prosecute proceedings for the recovery of damages against those so violating or attempting to violate the provisions of this Declaration; (b) to maintain a proceeding in any court of competent jurisdiction against those so violating or attempting or threatening to violate the provisions of this Declaration, for the purpose of preventing or enjoining all or any such violations or attempted or threatened violations; or (c) to maintain a proceeding for any other equitable or legal recourse or remedy available at law or in equity to address or prevent the violation or attempted or threatened violation of this Declaration. In addition, whenever there shall have been built or there shall exist on any Lot any structure, building, thing or condition which violates

the provisions of this Declaration, Declarant or the Association (but not any Owner) shall have the right, but not the obligation, to enter upon the Lot where such violation exists and summarily abate and remove the same, all at the expense of the Owner of such Lot, which expense shall constitute an Individual Assessment, and such entry and abatement or removal shall not be deemed a trespass or make Declarant, the Board, or Association, or the directors, officers, members, agents, employees, contractors or subcontractors of any of the foregoing, liable for any damages on account thereof. The remedies contained in this Section 15.02 shall be cumulative of all other remedies now or hereafter provided by law, in equity, or by virtue of this Declaration. The failure of Declarant, the Board, the Association, or an Owner to enforce any covenant, restriction, obligation, right, power, privilege or reservation contained in this Declaration, however long continued, shall in no event be deemed a waiver of the right to enforce the same thereafter as to the same breach or violation, or as to any other breach or violation occurring prior or subsequent thereto.

Section 15.03. Fines; Suspension. In addition to all other remedies, and to the maximum extent lawful, in the sole discretion of the Board of Directors, (A) a fine or fines may be imposed upon an Owner for failure of an Owner or that Owner's tenants, subtenants, occupants, licensees, invitees and guests to comply with any condition, covenant or restriction contained in this Declaration or any Rule or Regulation, and (B) the Association shall have the right to suspend for a reasonable period of time the rights of use of the Common Area and the facilities located thereon (except for vehicular and pedestrian ingress to and egress from the Lot, including, but not limited to, the right to park of defaulting Owners) provided that before imposing any fine or suspension, the following procedures are adhered to:

(a) Notice. The Association shall notify the Owner of the alleged infraction or infractions. Included in the notice shall be the date and time of a hearing of a committee of at least three (3) Members who are appointed by the Board of Directors (the "Committee"), at which time the Owner may present reasons why a fine(s) or suspension should not be imposed. The members of the Committee shall not be Officers, Directors, or employees of the Association, or the spouse, parent, child, brother or sister of an Officer, Director, or employee of the Association. At least fourteen (14) days' notice of such meeting shall be given.

(b) Hearing. The alleged non-compliance shall be presented to the Committee after which the Committee shall hear reasons why a fine(s) or suspension should not be imposed. A written decision of the Committee shall be submitted to the Owner by not later than twenty-one (21) days after the Committee's hearing. The Owner shall have a right to be represented by counsel and to cross examine witnesses. If the Committee does not approve a proposed fine or suspension by majority vote, it may not be imposed.

(c) Amounts. The Board of Directors (if the Committee's findings are made against the Owner) may impose a suspension or a fine in the form of Special Assessments against the Lot owned by the Owner as follows:

(i) For each separate violation, a fine not exceeding One Hundred Dollars (\$100.00). Each day that there exists on any Lot any structure, thing or condition which violates this Declaration shall be considered a separate violation.

(ii) Because Declarant intends that the Property be developed and occupied as a high-end residential development, it is important that the Association have the authority and leeway to enforce the covenants, conditions, and restriction set forth in the Governing Documents and the Rules and Regulations by meaningful fines. Therefore, fines may exceed One Thousand and No/100 Dollars (\$1,000.00) in the aggregate and there shall be no limit on the aggregate amount of fines that may be levied for continuing

violations of the covenants, conditions, and restriction set forth in the Governing Documents or in the Rules and Regulations.

(d) Payment and Collection of Fines. Any Owner against whose Lot fines have been levied shall remit such fines to the Association within thirty (30) days of receiving notice of such fines from the Association. The Association may pursue legal and equitable remedies to recover such fines. Fines shall be treated as an Individual Assessment subject to the provisions for the collection of Individual Assessments, and the lien securing same, as set forth herein.

(e) Application of Proceeds. All moneys received from fines shall be allocated as directed by the Board of Directors.

(f) Non-exclusive Remedy. These fines and suspensions shall not be construed to be exclusive, and shall exist in addition to all other rights and remedies to which the Association may be otherwise legally entitled; provided, however, any fines paid by the offending Owner shall be deducted from or offset against any damages which the Association may otherwise be entitled to recover by Law from such Owner.

(g) CPI. Unless limited by Law, specific dollar amounts stated in this Section 15.03 shall increase from time to time by application of a nationally recognized consumer price index chosen by the Board of Directors, using the year of the Effective Date as the base year. In the event no such consumer price index is available, the Board shall choose a reasonable alternative to compute such increases.

(h) Suspension of Voting Rights. In accordance with Florida law, the Association may suspend the voting rights of a Member for the nonpayment of regular Annual Assessments that are delinquent in excess of ninety (90) days.

ARTICLE XVI

DAMAGE OR DESTRUCTION TO COMMON AREA

Damage to or destruction of all or any portion of the Common Area shall be addressed in the following manner, notwithstanding any provision in this Declaration to the contrary:

Section 16.01. Sufficient Insurance Proceeds. In the event of damage to or destruction of the Common Area, if the insurance proceeds are sufficient to effect total restoration, then the Association shall cause such portions of the Common Area to be repaired and reconstructed substantially as previously existed prior to such damage or destruction.

Section 16.02. Insufficient Insurance Proceeds. If the insurance proceeds are not sufficient to effect total restoration of the Common Area, then the Association shall cause such portions of the Common Area to be repaired and reconstructed substantially as they previously existed and the difference between the insurance proceeds and the actual cost shall be levied as a Special Assessment against each of the Owners in accordance with the provisions of Article VI of this Declaration.

Section 16.03. Negligence or Willful Misconduct. Each Owner shall be liable to the Association for the cost to repair any damage to the Common Area not fully covered by collected insurance which may be sustained by reason of the negligence, willful misconduct or wrongdoing of any Owner or that Owner's tenants, subtenants, occupants, licensees, guests or invitees. In addition, the Association shall have the right to charge any Owner for the increase, if any, in any insurance premiums attributable to damage caused by

such Owner or that Owner's tenants, subtenants, occupants, licensees, guests or invitees. The sums due from an Owner hereunder shall be an Individual Assessment against the Owner and that Owner's Lot and may be collected as provided elsewhere in this Declaration for the collection of Individual Assessments.

ARTICLE XVII

MORTGAGEE PROTECTION

Section 17.01. Records and Notices. The Association shall make available to all Owners and to all Mortgagees and guarantors of any Mortgages, for inspection, upon request, during normal business hours or as set forth in the Rules, current copies of the Governing Documents and the books and records of the Association (including the Budget). All Mortgagees and guarantors of any Mortgages shall be entitled, upon prior written request, which request shall state the name and address of such holder, insurer, or guarantor, and to identify with particularity the encumbered Lot: (i) to receive a copy of the Association's financial statement for the immediately preceding Fiscal Year; (ii) to receive notice from the Association of an alleged default by any Owner in the performance of such Owner's obligations under the Governing Documents, which default is not cured within thirty (30) days after the Association learns of such default and to the extent that the Mortgagee, insurer and/or guarantor has an interest, by virtue of the Mortgage, in the Lot owned by the defaulting Owner; and (iii) to receive notice of any substantial condemnation loss or any casualty loss which affects a material portion of the Property or which affects the Lot(s) on which there is a Mortgage held, insured, or guaranteed by such Mortgagee.

Section 17.02. Adverse Events.

(a) Any Mortgagee, insurer or guarantor of a Mortgage shall have, if first requested in writing, which request shall state the name and address of such holder, insurer, or guarantor, and to identify with particularity the encumbered Lot, to timely written notice of (i) any condemnation or casualty loss affecting a material portion of the Common Area, (ii) a sixty (60) day delinquency in the payment of the Assessments on a mortgaged Lot in which said holder, insurer or guarantor has an interest, and (iii) the occurrence of a lapse, cancellation or material modification of any insurance policy or fidelity bond maintained by the Association.

(b) Any failure by the Association to furnish any notice under this Section 17.02 hereof shall not result in liability of the Association because such notice is given as a courtesy to a requesting Mortgagee and guarantors of any Mortgages, and the furnishing of such notice is not an obligation of the Association to any Mortgagee or guarantors of any Mortgages.

Section 17.03. Failure of Mortgagee to Respond. Any Mortgagee or guarantors of any Mortgage who receives a written request from the Board to respond to or consent to any action shall be deemed to have approved such action if the Association does not receive a written response from the Mortgagee within sixty (60) days of the date of the Association's request, provided such request is delivered to the Mortgagee by certified or registered mail, return receipt requested.

ARTICLE XVIII

GENERAL PROVISIONS

Section 18.01. Notice. Any notice required to be sent to any Member or Owner under the provisions of this Declaration shall be deemed to have been properly sent when personally delivered or mailed, postpaid, to the last known address of the person who appears as Member or Owner on the records of the Association at the time of such mailing.

Section 18.02. Enforcement. Without limiting the generality of Article XV, enforcement of the covenants and restrictions of the Declaration and the other Governing Documents may be accomplished by any proceeding at law or in equity against any person or persons violating or attempting or threatening to violate any condition, covenant or restriction of the Declaration or the other Governing Documents, either to restrain violation or to recover damages, and against the Lots to enforce any lien created by the conditions, covenants and restrictions of this Declaration; and failure to enforce any condition, covenant or restriction of the Declaration or the other Governing Documents shall in no event be deemed a waiver of the right to do so thereafter.

Section 18.03. Interpretation. The article and section headings have been inserted for convenience only, and shall not be considered or referred to in resolving questions and interpretation or construction of this Declaration. Unless the context requires a contrary construction, the singular shall include the plural and the plural the singular, and the masculine, feminine and neuter genders shall each include the others.

Section 18.04. Severability. If any clause or provision of any Constituent Document is deemed by a court of law illegal, invalid, or unenforceable under any present or future Law, the remainder of such Constituent Document shall not be affected thereby. It is the intention of Declarant that if any such provision of any Constituent Document is held to be illegal, invalid, or unenforceable, there shall be added in lieu thereof a provision as similar in terms to such provision as is possible and still be legal, valid and enforceable.

Section 18.05. Effective Date. This Declaration shall become effective on the Effective Date.

Section 18.06. Conflict. As more specifically addressed below, this Declaration shall take precedence over conflicting provisions in the Articles and Bylaws and the Rules and Regulations, said Articles shall take precedence over conflicting provisions in the Bylaws and the Rules and Regulations, said Bylaws shall take precedence over conflicting provisions in the Rules and Regulations, and the Rules shall take precedence over conflicting provisions in the Planning Criteria.

Section 18.07. Cooperation. Each Owner, by acceptance of a deed conveying a Lot to the Owner or other conveyance thereof, whether or not it shall be so expressed in such deed or other conveyance, shall be deemed to covenant and agree with Declarant, to cooperate in, and support, any and all zoning, administrative, governmental and/or quasi-governmental filings, applications, requests, submissions and other actions deemed necessary, convenient or desirable by Declarant for development and/or improvement of the Property, including, without limitation, signing any required applications, subdivisions plats, etc., as the owner of any portion of the Property owned or controlled thereby when necessary or requested to do so by Declarant.

Section 18.08. Easements. Should the intended creation of any easement provided for in this Declaration fail by reason of the fact that at the time of creation there may be no grantee in being having the capacity to take and hold such easement, then any such grant of easement deemed not to have been so created shall nevertheless be considered as having been granted directly to the Association as agent for such intended grantees for the purpose of allowing the original party or parties to whom the easements were originally intended to have been granted the benefit of such easement and the Owners hereby designate Declarant and the Association (or either of them) as their lawful attorney-in-fact to execute any instrument on such Owners' behalf as may hereafter be required or deemed necessary or convenient for the purpose of later creating such easement as it was intended to have been created herein. All parties using easements granted in this Declaration shall use reasonable efforts to minimize interference with all other permitted uses of the easements and the property subject thereto and shall restore any damage to such property caused in the exercise of any rights granted in any such easement.

Section 18.09. No Public Right or Dedication. Nothing contained in this Declaration shall be deemed to be a gift or dedication of all or any part of the Common Area to the public, or for any public use.

Section 18.10. Constructive Notice and Acceptance. Every person who owns, occupies or acquires any right, title, estate or interest whatsoever in or to any Lot, shall be conclusively deemed to have consented and agreed to every limitation, restriction, easement, reservation, condition, lien and covenant contained in this Declaration, whether or not any reference hereto is contained in the instrument by which such person acquired such interest in such Lot.

Section 18.11. Execution of Documents Required by the Local Government. Declarant's plan for the development of the Development may require from time to time the execution of certain documents required by the Local Government. To the extent that said documents require the joinder of any or all Owners each of said Owners, by virtue of said Owner's acceptance of a deed to the Owner's Lot or other conveyance thereof, does irrevocably give and grant to Declarant, or any of its officers individually, full power of attorney to execute said documents as the Owner's agent and in the Owner's place and stead.

Section 18.12. Construction. This Declaration may be amended without amending any of the other Governing Documents. The provisions of the Governing Documents shall be liberally construed so as to effectuate the purposes herein expressed with respect to the efficient operation of the Association and the community; to effectuate the purpose of creating a uniform plan for the operation of the Property; for the preservation of the value of the Property; and the protection of Declarant's rights, benefits, and privileges contemplated herein, in the other Governing Documents, and under the Association Act, to the fullest extent permitted by Florida law. If there is or should there ever be any conflicts between Florida law and the terms and provisions of the Governing Documents, or between the terms and provisions of more than one Governing Document, then the following order of priority and governance shall prevail, but only as necessary to resolve such specific conflict(s): (A) Florida law; (B) this Declaration; (C) any Supplemental Declaration (in the event that there are multiple Supplemental Declaration, then the order of priority and governance of such Supplemental Declarations shall be based upon Recording order); (D) the Articles; (E) the Bylaws; (F) the Planning Criteria; and (G) the Rules and Regulations. If a Governing Document of a higher priority and governance, as established above, is amended in such a way that the terms and provisions of such Governing Document conflict with the terms and provisions of any lower priority Governing Documents, as established above, then the lower priority Governing Documents shall be deemed automatically and simultaneously amended with the amendment of the higher priority Governing Document, so that such lower priority Governing Documents may be read and interpreted to be consistent with the higher priority Governing Document. In no event shall any lower priority Governing Documents be amended if such amendment would conflict with the terms and provisions of any higher priority Governing Document, and any such purported amendment shall be automatically ineffective and void. Notwithstanding that some or all of the Governing Documents may have been prepared, initially, at the direction of Declarant, and notwithstanding any rule of construction to the contrary, the Governing Documents shall not be more strictly construed or interpreted against Declarant or any of Declarant's affiliates than against any other person or entity.

Section 18.13. Assignment of Rights and Duties. Declarant hereby expressly reserves and shall hereafter have the right to assign all or any part of the rights, powers, benefits, and reservations under the Governing Documents and under the Association Act to any corporation, company, partnership, firm, or any other legal entity of any kind, character or nature, whatsoever, that has or acquires fee simple interest in any part of the Property, and that accepts and assumes in writing the duties and liabilities of Declarant pertaining to the particular rights, powers, benefits, and reservations so assigned ("Assignee"). Upon the Recording of such instrument of assignment and assumption in the Public Records ("Assignment and Assumption"), Assignee shall, to the extent expressly set forth in such Assignment and Assumption, have the same rights, powers, benefits, and reservations of Declarant, and be subject to the same obligations,

duties, and liabilities of Declarant as are herein or under the Association Act given to, accepted, and assumed by Assignee, as the case may be. Declarant hereby expressly reserves and shall hereafter have the right to appoint or designate one or more Co-Declarants, subject to the terms and conditions of the specific Assignment and Assumption appointing such Co-Declarant(s). Notwithstanding anything to the contrary contained herein, in any Assignment and Assumption, or otherwise, to the extent that any rights and liabilities of Declarant under this Declaration and under the Association Act are not expressly assigned and assumed pursuant to an Assignment and Assumption, such rights and liabilities shall remain Declarant's rights and liabilities.

Section 18.14. Breach Shall Not Permit Termination. No breach of this Declaration shall entitle any Member or Owner to cancel, rescind, or otherwise terminate this Declaration, but such limitation shall not affect in any manner any other rights or remedies which such Member or Owner may have hereunder by reason of any breach of this Declaration. Any breach of any of said covenants or restrictions, however, shall not defeat or render invalid the lien of any Mortgage, but such covenants or restrictions shall be binding upon and effective against such Owner of any of said Property or any portion thereof whose title thereto is acquired by foreclosure, deed in lieu, trustee sale or otherwise.

Section 18.15. Negation of Partnership. None of the terms, conditions, or provisions of this Declaration shall be deemed to create a partnership between or among the Owners, Members, Association or Declarant, nor shall it cause them to be considered joint venturers or members of any joint enterprise. Each such entity shall be considered a separate entity and no such entity shall have the right to act as an agent for another unless expressly authorized to do so herein or by separate instrument signed by the party(ies) to be charged.

Section 18.16. Attorney Fees. In the event of the institution of any legal proceedings for any violation or attempted or threatened violation of any of the terms, covenants, restrictions and conditions contained herein, or concerning the interpretation or application of any of the foregoing to any person or property, or for the collection of any sums due and payable hereunder, or for the foreclosures of any liens provided for herein, the prevailing party(ies) shall be entitled to recover all expenses incurred in connection therewith, including, but not limited to, reasonable attorneys' fees, legal fees, and other costs and expenses of litigation connected therewith, which fees, costs, and expenses shall include those caused by reason of any appellate proceeding, re-hearing, appeal, post-judgment action, or otherwise, from the non-prevailing party(ies).

Section 18.17. No Vested Rights. Each Owner by acceptance of a deed to a Dwelling irrevocably waives any claim that such Owner has any vested rights pursuant to case law or statute with respect to this Declaration or any of the other Governing Documents. It is expressly intended that Declarant and the Association shall have the broad right to amend this Declaration and the other Governing Documents, except as limited by applicable law as it exists on the Effective Date or except as expressly set forth herein.

Section 18.18. Community Signage. THIRD PARTY BUILDER may, but is not obligated, in its sole discretion, to construct or otherwise install signage at any entrance(s) of the Community which identifies the Community and includes a notation indicating that the Community was developed by "THIRD PARTY BUILDER" or is a THIRD PARTY BUILDER community (or some similar reference to Declarant or an entity affiliated with Declarant), including the use of any particular logos and/or trademarks utilized by Declarant, and convey any such signage to the Association along with a non-exclusive license to use the logos and/or trademarks depicted on the signage (but only for purposes of maintaining such logos/trademarks in the manner depicted on the signage at the time of conveyance and for no other purpose, such license being revocable by Declarant at any time). If any such signage is constructed/installed and conveyed to the Association, the Association shall thereafter perpetually maintain such signage, at Common Expense, including perpetually maintaining the notation that the Community was developed by "THIRD

PARTY BUILDER” or is a THIRD PARTY BUILDER community (or some similar reference to Declarant or an entity affiliated with Declarant) in the same presentation as was utilized when such signage was conveyed to the Association, until such time as the Declarant may determine, in its sole and absolute discretion, that it no longer wishes to be referenced on the signage (upon which the Association shall, at Common Expense, remove such references). In addition to the foregoing, Declarant may elect at any time (prior to or after Turnover) to itself remove any such references on the signage, and Declarant hereby reserves any such rights and easements that are necessary to allow Declarant to do so. Declarant, via a Recorded instrument, may assign its rights under this Section 18.18 to any entity related to or affiliated with Declarant, or to one or more Builders.

ARTICLE XIX

DISCLAIMERS

Section 19.01. Disclaimer of Representations or Warranties. EXCEPT AS EXPRESSLY PROVIDED IN THIS DECLARATION, NO REPRESENTATION OR WARRANTY OF ANY KIND OR NATURE WHATSOEVER, WHETHER EXPRESS OR IMPLIED, HAS BEEN GIVEN OR MADE BY DECLARANT OR ITS DIRECTORS, OFFICERS, MEMBERS, SHAREHOLDERS, AGENTS OR EMPLOYEES (OR THE SUCCESSORS OR ASSIGNS OF ANY OF THE FOREGOING) IN CONNECTION WITH THE PROPERTY (INCLUDING ANY LOT, DWELLING, COMMON AREA OR AREAS OF COMMON RESPONSIBILITY), ITS PHYSICAL CONDITION, ZONING, COMPLIANCE WITH APPLICABLE LAWS, MERCHANTABILITY, HABITABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR IN CONNECTION WITH THE SUBDIVISION, SALE, OPERATION, MAINTENANCE, COST OF MAINTENANCE, TAXES, REGULATION THEREOF OR OTHERWISE. IF ANY SUCH REPRESENTATION OR WARRANTY CANNOT LAWFULLY BE DISCLAIMED, AND AS TO ANY CLAIMS WHICH CAN BE MADE AS TO THE AFORESAID MATTERS, ALL INCIDENTAL, CONSEQUENTIAL, EXEMPLARY, PUNITIVE, PRESUMPTIVE AND SPECIAL DAMAGES ARISING THEREFROM ARE HEREBY FULLY, FOREVER AND IRREVOCABLY WAIVED AND DISCLAIMED.

Section 19.02. Retaining Walls. Each Owner (by virtue of the Owner's acceptance of title to the Owner's Lot) acknowledges and agrees that elevation changes within the Property may have necessitated or required, or in the future may necessitate or require, the construction or installation of one or more retaining walls on or about the Property (collectively, “Retaining Wall(s)”). In connection with any such Retaining Walls, each Owner, occupant, tenant, subtenant, invitee, licensee or guest of any Lot or of the Property generally agrees to and shall: (a) exercise caution and care when around or near any Retaining Walls; and (b) not utilize any Retaining Wall or part thereof in any way, including, by way of example but not limitation, by climbing, scaling, or walking on a Retaining Wall; by affixing lights or hanging baskets or decorations on or to a Retaining Wall; by striking, piercing or damaging a Retaining Wall; or by otherwise directly or indirectly interfering with the intended purpose of any Retaining Wall. Without express prior written approval of the ARC, digging is prohibited within all easement areas adjacent to any Retaining Walls, as shown on the Plat, or as established by any written instrument Recorded by Declarant or the Association.

Section 19.03. Safety. Neither the Declarant nor the Association, nor any of their respective partners, members, officers, directors, employees, or agents shall, in any manner or way, whatsoever, be considered as or deemed or construed to be insurers or guarantors of the personal safety or security of any persons, including, without limitation, any Owner or Member or any tenant, guest, invitee, employee, agent, or family member of such Owner or Member, or of any property, whether real, personal, or otherwise, from time to time located within or upon the Property or any portion thereof. Accordingly, neither the Declarant nor the Association, nor any of their respective partners, members, officers, directors, employees, or agents

shall be responsible or held liable or accountable for the injury or death of any person or for the loss of or damage to any property by reason or on account of the failure of the Declarant or the Association to limit or control access to the Property or any Retaining Walls, or by reason or on account of the ineffectiveness of any activities directed, conducted, maintained, or supported by the Declarant or Association from time to time for such purposes. In this regard, each Owner and Member, for itself and on behalf of any tenants, employees, agents, guests, invitees, or family members of such Owner, shall, by virtue of the acceptance of a deed or other conveyance of a Lot or any other portion of the Property, be deemed to have acknowledged, understood, and agreed to the foregoing and further: (i) that notwithstanding any efforts or activities on the part of the Declarant or Association from time to time to limit or control access to the Property in general and any Retaining Wall in particular, each Owner and Member, for itself and on behalf of any tenants, employees, agents, guests, invitees, and family members of such Owner or Member: (y) shall take title to its Lots or any other part of the Property subject to, and hereby assumes, all risk of personal injury or death and damage to or loss of property, of whatever nature, while present or situate within or upon the Property; and (z) waives, and forever and irrevocably releases Declarant and Association from, any and all claims, losses, damages, causes of action or liabilities of any kind, character, or nature whatsoever with respect to any personal injury or death or damage to or loss of property while present or situate within or upon the Property; and (ii) that neither Declarant nor the Association, nor any of their respective partners, members, officers, directors, employees, or agents have made, nor has any Owner or Member, or any of Owner's or Member's tenants, employees, agents, guests, invitees, or family members relied upon, any representation or warranty, whether express or implied, pertaining to: (A) the safety of the Property; or (B) the effectiveness of any activities directed, conducted, maintained or supported by the Declarant or Association from time to time in order to limit or control access to the Property in general and any Retaining Walls in particular.

Section 19.04. Wet and Dry Retention Areas. Neither the Declarant nor the Association make any representation concerning the current or future water levels in any of the wet or dry retention areas within the Community; provided, further, neither the Declarant nor the Association bear any responsibility to attempt to adjust or modify the water levels since such levels are subject to seasonal groundwater and rainfall fluctuations that are beyond the control of the Declarant and the Association. By acceptance of a deed to a Dwelling or Lot, each Owner acknowledges that the water levels of all wet or dry retention areas may vary. There is no guarantee by Declarant or the Association that water levels will be constant or aesthetically pleasing at any particular time; at times, water levels may be nonexistent. Declarant and the Association shall not be obligated to erect fences, gates, or walls around or adjacent to any wet or dry retention areas within the Community.

Section 19.05. General.

(a) Notwithstanding anything to the contrary or otherwise contained in the Governing Documents, neither the Association, the Board, nor Declarant shall be liable or responsible for, or in any manner considered or deemed a guarantor or insurer of, the health, safety or welfare of any Owner, occupant or user of any portion of the Property including, without limitation, residents and their families, agents, employees, contractors, subcontractors, licensees, tenants, subtenants, occupants, guests or invitees, or for any property of any such persons. Without limiting the generality of the foregoing:

(i) it is the express intent of the Governing Documents that the various provisions thereof which are enforceable by the Association or Declarant or which govern the uses of the Property, have been written, and are to be interpreted and enforced, for the sole purpose of enhancing and maintaining the enjoyment of the Property and the value thereof;

(ii) the Association is not empowered, nor has it been created, to act as an entity which enforces or ensures compliance with the Laws, or prevents tortious activities, actions or omissions; and

(iii) any provisions of the Governing Documents setting forth the uses of Assessments which relate to health, safety and/or welfare shall be interpreted and applied only as limitations on the uses of Assessment funds and not as creating a duty of the Association to protect or further the health, safety or welfare of any person(s), even if Assessment funds are chosen to be used for such reason.

(b) Each Owner (by virtue of the Owner's acceptance of title to the Owner's Lot) and each other person having an interest in or lien upon, or making any use of, said Lot or any portion of the Property (by virtue of accepting such interest or lien or making such uses) shall be bound by this Article XIX and shall be deemed to have automatically and irrevocably waived any and all rights, claims, demands and causes of action against the Board, the ARC, Association or Declarant and arising from or connected with any matter for which the liability of the Board, the ARC, Association or Declarant has been disclaimed in this Article XIX or in this Declaration generally.

(c) UNLESS OTHERWISE EXPRESSLY SET FORTH HEREIN, EACH OWNER (BY VIRTUE OF OWNER'S ACCEPTANCE OF TITLE TO THE OWNER'S LOT) ACKNOWLEDGES AND AGREES THAT SAID OWNER SHALL HAVE NO RIGHTS, RIPARIAN OR OTHERWISE, IN OR TO ANY BODY OF WATER, IF ANY, LYING WITHIN OR ADJACENT TO THE DEVELOPMENT.

(d) As used in this Article XIX, the words "Association" and "Declarant" shall each include within their meanings all of the respective directors, officers, committees and board members, employees, agents, contractors, subcontractors (including without limitation management companies), and successors and assigns of each.

[THE REST OF THIS PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, Declarant has executed this Declaration as of the Effective Date.

Signed, sealed and delivered in the
presence of:

DECLARANT:

TARA FOREST, LLC,
a Florida corporation _____

Print Name: _____

By: _____

Name: _____

Title: _____

Print Name: _____

(CORPORATE SEAL)

STATE OF FLORIDA

COUNTY OF _____

The foregoing instrument was acknowledged before me this ____ day of _____, 2018, by _____, the _____ of **TARA FOREST, LLC**, a Florida corporation, on behalf of said entity. Said person (check appropriate box) ☐ is personally known to me or ☐ has produced his/her _____ as identification.

(NOTARY STAMP OR SEAL)

Name: _____

Notary Public – State of Florida

My Commission Expires: _____

EXHIBIT “A”

PROPERTY

EXHIBIT “B”

ARTICLES

[See Next Page]

**Electronic Articles of Incorporation
For**

N18000008316
FILED
August 01, 2018
Sec. Of State
ndmccleessam

TARA VILLAGE HOMEOWNERS' ASSOCIATION, INC.

The undersigned incorporator, for the purpose of forming a Florida not-for-profit corporation, hereby adopts the following Articles of Incorporation:

Article I

The name of the corporation is:

TARA VILLAGE HOMEOWNERS' ASSOCIATION, INC.

Article II

The principal place of business address:

7717 NW 20TH LANE
GAINESVILLE, FL. 32605

The mailing address of the corporation is:

7717 NW 20TH LANE
GAINESVILLE, FL. 32605

Article III

The specific purpose for which this corporation is organized is:

TO PROVIDE FOR MAINTENANCE, PRESERVATION AND ARCHITECTURAL
CONTROL OF THE RESIDENTIAL LOTS AND COMMON AREAS, AND TO
PROMOTE THE COMMON INTERESTS OF THE RESIDENTS WITHIN TARA
VILLAGE.

Article IV

The manner in which directors are elected or appointed is:

AS PROVIDED FOR IN THE BYLAWS.

Article V

The name and Florida street address of the registered agent is:

JUSTIN M MOWITZ ESQ.
5341 SW 91ST TERRACE
SUITE A
GAINESVILLE, FL. 32608

I certify that I am familiar with and accept the responsibilities of
registered agent.

Registered Agent Signature: JUSTIN M MOWITZ, ESQ.

N18000008316
FILED
August 01, 2018
Sec. Of State
ndmccleessam

Article VI

The name and address of the incorporator is:

JUSTIN M MOWITZ
5341 SW 91ST TERRACE
SUITE A
GAINESVILLE, FL 32608

Electronic Signature of Incorporator: JUSTIN M MOWITZ

I am the incorporator submitting these Articles of Incorporation and affirm that the facts stated herein are true. I am aware that false information submitted in a document to the Department of State constitutes a third degree felony as provided for in s.817.155, F.S. I understand the requirement to file an annual report between January 1st and May 1st in the calendar year following formation of this corporation and every year thereafter to maintain "active" status.

Article VII

The initial officer(s) and/or director(s) of the corporation is/are:

Title: P
SILVIA H MOUKHTARA NEMER
7717 NW 20TH LANE
GAINESVILLE, FL. 32605

Title: T
BERIT LASSEN
7717 NW 20TH LANE
GAINESVILLE, FL. 32605

Article VIII

The effective date for this corporation shall be:

07/27/2018

EXHIBIT “C”

BYLAWS

[See Next Page]

BYLAWS
OF
TARA FOREST HOMEOWNERS ASSOCIATION, INC.,

ADOPTED BY UNANIMOUS WRITTEN CONSENT OF THE BOARD OF DIRECTORS OF THE CORPORATION EFFECTIVE _____, 2018

ARTICLE I

IDENTITY AND LOCATION

These are the Bylaws of Tara Forest Homeowners Association, Inc., a corporation not for profit organized and existing under Chapter 617, Florida Statutes, (the "Association") for the purpose of administering the Property, as defined in and in accordance with the terms and conditions of that certain Declaration of Covenants, Conditions, Easements and Restrictions for Tara Forest (the "Declaration"). The principal office of the Association shall be located at 7717 NW 20th Lane, Gainesville, Florida 32605.

ARTICLE II

GENERAL

Section 1. **Incorporation of Declaration.** As supplemented herein, the regulation of the business and affairs of the Association shall be governed by certain provisions of the Declaration, as amended from time to time, which are incorporated herein by reference as if set forth verbatim.

Section 2. **Definitions.** All capitalized terms used herein without definition shall have the meaning given such term in the Declaration or the Articles of Incorporation of the Association as filed with the State of Florida Department of State.

ARTICLE III

ASSOCIATION PURPOSES AND POWERS

Section 1. **Association's Purposes.** The Association has been organized for the purposes set forth in the Declaration and Articles, including, without limitation, the following:

- (a) to own, operate, maintain and convey the Common Property and to operate and maintain Areas of Common Responsibility, including but not limited to the Surface Water Management System and any personal property owned by the Association;
- (b) to clean, clear, trim, remove weeds, limbs, and debris from, and to provide general grounds maintenance for both the Common Property and the Areas of Common Responsibility;
- (c) to fix assessments to be levied against the Lots in the Property;
- (d) to enforce any and all covenants and agreements contained in the Declaration; and
- (e) to pay taxes and insurance, if any, on the Common Property.

Section 2. Records of the Association. The Association shall maintain each of the following items, when applicable, which constitute the official records of the Association:

- (a) Copies of any plans, specifications, permits, and warranties related to improvements constructed on the Common Property or Areas of Common Responsibility;
- (b) A copy of these Bylaws and of each amendment thereto;
- (c) A copy of the Articles of Incorporation of the Association and of each amendment thereto;
- (d) A copy of the Declaration and each amendment thereto;
- (e) A copy of the current rules of the Association;
- (f) The minutes of all meetings of the Board of Directors;
- (g) All of the Association's insurance policies or copies thereof;
- (h) A current copy of all contracts to which the Association is a party, including, without limitation, any management agreement, lease, or other contract under which the Association has any obligation or responsibility; and
- (i) The financial and accounting records of the Association, kept according to good accounting practices, which financial and accounting records shall be maintained for a period of at least seven (7) years. The financial and accounting records shall include: (1) accurate, itemized, and detailed records of all receipts and expenditures, (2) a current account and a periodic statement of Assessments or other charges, the due date and amount of each Assessment or other charge, the date and amount of each payment on the account, and the balance due, (3) all tax returns, financial statements, and financial reports of the Association, and (4) any other records that identify, measure, record, or communicate financial information.

Section 3. Inspection of Records. The official records of the Association shall be maintained within the state and must be open to inspection and available for photocopying by Members or their authorized agents at reasonable times and places within ten (10) business days after receipt of written request for access. This Section may be complied with by having a copy of the records available for inspection or copying in the community.

ARTICLE IV

MEETING OF MEMBERS

Section 1. Annual Meetings. The first annual meeting of the Association shall be held within one year from the date of incorporation of the Association and each subsequent regular annual meeting of the Members shall be held on the same day of the same month of each year thereafter. If the day for the annual meeting of the Members is a legal holiday, the meeting will be held at the same hour on the first day following which is not a legal holiday. Business transacted at the annual meeting shall include the election of Directors of the Association.

Section 2. Special Meeting. Special meetings of the Members may be called at any time by the president or by the Board of Directors, and shall be called upon written request of Members entitled to vote one-fourth (1/4) of all votes in the Association.

Section 3. Notice of Meeting. Written notice of each meeting of the Members shall be given by, or at the direction of, the secretary or person authorized to call the meeting, by mailing a copy of such notice, postage prepaid, at least 15 days before such meeting to each Member entitled to vote, addressed to the Member's address last appearing on the books of the Association, or supplied by such Member to the Association for the purpose of notice. Such notice shall specify the place, day and hour of the meeting, and, in the case of a special meeting, the purpose of the meeting. An assessment may not be levied at a board meeting unless the notice of the meeting includes a statement that assessments will be considered and the nature thereof.

Section 4. Quorum. The presence at the meeting of Members entitled to cast, or of proxies entitled to cast, one-tenth (1/10) of the votes shall constitute a quorum for any action except as otherwise provided in the Articles of Incorporation, the Declaration, or these Bylaws. If such quorum is not present or represented at any meeting, the Members entitled to vote shall have the power to adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum is present or represented.

Section 5. Proxies. At all meetings of Members, each Member may vote in person or by proxy. All proxies shall be in writing and filed with the secretary. Every proxy shall be revocable and shall automatically cease upon conveyance by the Member of title to that Member's Lot.

Section 6. Electronic Voting. Notwithstanding anything contained herein to the contrary, pursuant to and consistent with Section 720.317 of the Florida Statutes, electronic voting is permitted as to any matter that requires a vote of the Members.

ARTICLE V

BOARD OF DIRECTORS

Section 1. Board of Directors; Selection; Terms of Office. The affairs of the Association shall be managed by a Board of Directors consisting of no less than three (3) members and must be an odd number. Initially the Board of Directors shall consist of three (3) Directors who shall be selected by the Declarant and, subject to the Declaration, thereafter the members of the Board shall be determined as set forth in Article VI herein.

Section 2. Vacancies in the Board of Directors. Vacancies in the Board of Directors shall be filled by the majority of the remaining Directors, or by a sole remaining Director, and any such appointed Director shall serve for the remaining term of his predecessor.

ARTICLE VI

NOMINATION AND ELECTION OF DIRECTORS

Section 1. Nomination. Nomination for election to the Board of Directors may be made by a nominating committee. Nominations may also be made from the floor at the annual meeting of the Members. Any nominating committee shall consist of a Chairman, who shall be a member of the Board of Directors, and two or more Members of the Association. Any nominating committee shall be appointed by the Board of Directors prior to each annual meeting of the Members, to serve from the close of such annual meeting until the close of the next annual meeting and such appointment shall be announced at each annual meeting. Any nominating committee shall make as many nominations for election to the Board of Directors as it shall in its discretion determine, but not less than the number of vacancies that are to be filled. Such nominations may be made from among the Members.

Section 2. Election. At the election of the Board of Directors, the Members may cast, in respect to each vacancy, as many votes as they are entitled to exercise under the provisions of the Declaration. The persons receiving the largest number of votes shall be elected. Cumulative voting is not permitted and votes must be made in person at a Members' meeting or by ballots the Members personally cast.

ARTICLE VII

POWERS AND DUTIES OF THE BOARD OF DIRECTORS

Section 1. Board of Directors' Powers. Subject to the provisions of the Declaration, the Board of Directors shall have power:

- (a) to call special meetings of the Board;
- (b) to appoint and remove at its pleasure all officers, agents and employees of the Association, prescribe their duties, fix their compensation and require of them such security or fidelity bond as it may deem expedient. Nothing contained in these Bylaws shall be construed to prohibit the employment of any officer or Director of the Association in any capacity whatsoever;

- (c) to establish, levy and assess, and collect assessments or charges in accordance with the Declaration;
- (d) to adopt and publish rules and regulations governing the use of the Common Property and Areas of Common Responsibility;
- (e) to exercise for the Association all powers, duties and authority vested in or delegated to the Association;
- (f) to fill vacancies on the Board of Directors pursuant to Article V above;
- (g) to appoint committees and delegate all or any portion of the powers of the Board of Directors to such committees, subject to the limitations on the authority of such committee imposed by law;
- (h) employ a manager, an independent contractor, or such other employees as they deem necessary, and to prescribe their duties; and
- (i) to take such other action as provided in the Declaration.

Section 2. Board of Directors' Duties. It shall be the duty of the Board of Directors:

- (a) to cause to be kept a complete record of all its acts and corporate affairs and to present a statement thereof to the members at the annual meeting of the Members, or at any special meeting when such statement is requested in writing by at least one-fourth (1/4) of the Members;
- (b) supervise all officers, agents and employees of this Association, and to see that their duties are properly performed;
- (c) as more fully provided in the Declaration, to:
 - 1. fix the amount of the annual assessment against each Lot;
 - 2. send written notice of each assessment to every Owner subject thereto in advance of each annual assessment period; and
 - 3. foreclose the lien against any Lot for which assessments are not paid or to bring an action at law against the Owner personally obligated to pay same.
- (d) issue, or to cause an appropriate officer to issue, upon demand by any person, a certificate setting forth whether or not any assessment has been paid. A reasonable charge may be made by the Board for the issuance of these certificates. If a certificate states an assessment has been paid, such certificate shall be conclusive evidence of such payment as against third parties relying thereon;
- (e) procure and maintain adequate liability, hazard and other insurance on any Common Property;

- (f) cause all officers or employees having fiscal responsibilities to be bonded, if the Board deems appropriate;
- (g) cause the Common Property, Areas of Common Responsibility, and the Surface Water Management System for the Property, to be maintained;
- (h) to prepare the annual budget in accordance with the Declaration;
- (i) to prepare a roster of the Owners and Lots and the assessments applicable thereto, which roster shall be kept in the office of the Association;
- (j) to send written notice of each assessment to each Owner as provided in the Declaration; and
- (k) to take any and all actions pursuant to the Governing Documents as may be necessary for the purposes of the Association.

Section 3. Resignation. A Director of the Association may resign at any time by giving a written notice to the Board of Directors of the Association. The resignation of any Director shall take effect upon delivery of the notice thereof or at such later time as shall be specified in such notice; and, unless otherwise specified therein, the acceptance of such resignation shall not be necessary to make it effective.

Section 4. Removal. Except as otherwise provided in the Declaration, any Director may be removed, with or without cause, by a two-thirds (2/3) vote of the members of the Board.

Section 5. Directors' Fees. There shall be no Directors fees paid to members of the Board of Directors, except that Directors shall be entitled to reimbursement of out-of-pocket costs authorized by the Board of Directors.

ARTICLE VIII

DIRECTORS' MEETINGS

Section 1. Directors' Annual Meeting. The annual meeting of the Board of Directors shall be held immediately following the annual meeting of the members.

Section 2. Regular Meetings. Regular meetings of the Board of Directors shall be held at such time and at such place and hour as may be fixed from time to time by a majority of the Board. Should said meeting fall upon a legal holiday, then that meeting shall be held at the same time on the next day which is not a legal holiday.

Section 3. Special Meetings. Special meetings of the Board of Directors shall be held when called by any officer of the Association or by any two (2) Directors after not less than three (3) days notice to each Director.

Section 4. Waiver of Notice. A Director may waive notice of a meeting of the Directors before or after the date and time stated in the notice. Except as otherwise provided in this Section 4, the waiver must be in writing, signed by the Director entitled to the notice and filed with the minutes or corporate records. Attendance of a Director at any meeting shall constitute waiver of notice of such meeting, except where the Director attends for the express purpose of objecting to the transaction of any

business because the meeting is not lawfully called or convened and does not thereafter vote for or assent to action taken at the meeting. If a meeting otherwise valid of the Board of Directors is held without notice where such is required, any action taken at such meeting shall be deemed ratified by a Director who did not attend, unless after learning of the action taken and of the impropriety of the meeting, he makes prompt objection thereto. Objection by a Director shall be effective only if written objection to the holding of the meeting or to any specific action so taken is filed with the Secretary of the Association.

Section 5. Action Upon Written Consent Without a Meeting. Action of the Board of Directors may be taken without a meeting upon the written consent signed by all members of the Board. Any such action without a meeting shall be effective on the date the last Board member signs the consent or on such date as is specified in the consent. Any such action by written consent shall have the same effect as a vote taken at a meeting of the Board of Directors.

Section 6. Board Quorum and Voting. The majority of the Board of Directors shall constitute a quorum thereof. Every act or decision done or made by a majority of the directors present at a duly held meeting at which a quorum is present shall be regarded as the act of the Board. Directors may not vote by proxy or by secret ballot at board meetings, except that secret ballots may be used in the election of officers.

ARTICLE IX

OFFICERS

Section 1. Association officers. The officers shall be a President, a Vice-President, a Secretary and a Treasurer. The officers may be, but shall not be required to be, members of the Board of Directors. However, each officer must be a Member of the Association.

Section 2. Election of officers. All officers shall hold office at the pleasure of the Board of Directors.

Section 3. Removal of officer. Upon an affirmative vote of a majority of the members of the Board of Directors, any officer may be removed, either with or without cause, and his successor elected at any regular meeting of the Board of Directors, or at any special meeting of the Board called for such purpose.

Section 4. Special Appointment. The Board may elect such other officers as the affairs of the Association may require, each of whom shall hold office for such period, have such authority, and perform such duties as the Board may from time to time determine. When a final decision regarding an expenditure of Association funds is to be made by such special appointment, no vote may be made by proxy or secret ballot.

Section 5. Multiple Offices. The holding of multiple offices shall be permitted.

Section 6. Duties. The duties of the officers are as follows:

(a) President. The president shall be the chief executive officer of the Association. The president shall preside at all meetings of the Members and of the Board of Directors. Except where otherwise provided by law or these Bylaws, the president shall have the general powers and duties of supervision and management of the Association, shall see that orders and resolutions of the Board are carried out, shall sign all leases, mortgages, deeds and other written instruments, shall sign all promissory notes, and shall perform all such other duties as are incidental to his or her office or as are required by the Board.

(b) Vice President. The vice president shall act in the place and stead of the president in the event of his absence, inability or refusal to act, and shall exercise and discharge such other duties as may be required of him by the Board or the president.

(c) Secretary. The secretary shall record the votes and keep the minutes of all meetings and proceedings of the Board and of the Members; keep the corporate seal of the Association and affix it on all papers requiring said seal; serve notice of meetings of the Board and of the Members; keep appropriate current records showing the Members of the Association together with their addresses, and shall perform such other duties as required by the Board.

(d) Treasurer. The treasurer shall receive and deposit in appropriate bank accounts all monies of the Association and shall disburse such funds as directed by resolution of the Board of Directors; shall sign all checks and promissory notes of the Association; cause an annual audit of the Association books to be made by a public accountant at the completion of each fiscal year; keep proper books of account; and shall prepare an annual budget and a statement of income and expenditures to be presented to the membership at its regular annual meeting, and deliver a copy of each to the Members.

ARTICLE X

LIABILITY AND INDEMNIFICATION

Section 1. Liability of Board Member. No Board member or officer of the Association shall be liable to any Owner for any decision, action or omission made or performed by such Board member or officer in the course of his duties unless such Board member or officer acted in bad faith or in reckless disregard of the rights of any person or of the terms of the Declaration or these Bylaws.

Section 2. Indemnification. To the fullest extent allowed by Section 617.0831, Florida Statutes, as same may be amended, and subject to any limitations set forth in the Declaration or Articles, the Association shall indemnify the Directors, officers, employees, agents and other persons specifically designated from time to time by the Board of Directors whom it may indemnify pursuant to law. In this connection, the Association is authorized to take out such insurance as it may deem necessary or desirable consistent with such indemnification.

ARTICLE XI

INSURANCE

The Board of Directors or its duly authorized agent shall obtain insurance as described in the Declaration.

ARTICLE XII

AMENDMENTS

These Bylaws may be changed, amended or modified at any time and from time to time, by the Members, the Board, or the Declarant, in the same manner as the Members, the Board, or Declarant may change, amend or modify the Declaration, as set forth in the Declaration.

ARTICLE XIII

COMMITTEES

The Association shall appoint a Nominating Committee, as provided in these Bylaws. In addition, the Board of Directors shall appoint other committees as deemed appropriate in carrying out its purpose.

ARTICLE XIV

BOOKS AND RECORDS

The books, records and papers of the Association shall at all times, during reasonable business hours, be subject to inspection by any Member. The Declaration, the Articles and the Bylaws of the Association shall be available for inspection by any Member at the principal office of the Association, where copies may be purchased at reasonable cost.

ARTICLE XV

ASSESSMENTS

Pursuant to the Declaration, each Member is obligated to pay to the Association assessments, including, without limitation, annual, special and individual assessments which are secured by a lien upon the property against which the assessment is made.

ARTICLE XVI

CORPORATE SEAL

The Association shall have a seal in circular form having within its circumference the words: Tara Forest Homeowners Association, Inc., a Florida not for profit corporation”, and the year of incorporation in the center of that circle.

ARTICLE XVII

GENERAL

Section 1. Conflicts. It is intended that the provisions of the Declaration which apply to the governance of the Association, as supplemented by the provisions in these Bylaws which are not contained in the Declaration, shall operate as the Bylaws of the Association. In the case of any conflict between such provisions set forth in the Declaration and these Bylaws, the Declaration shall control.

Section 2. Waiver. No provision of these Bylaws or any regulation promulgated by the Board of Directors pursuant hereto shall be deemed to have been abrogated or waived by reason of any failure to enforce the same, regardless of the number of violations or breaches which may have occurred.

Section 3. Severability. The provisions of these Bylaws are severable, and the invalidity of one or more provisions hereof shall not be deemed to impair or affect in any manner the enforceability or effect of the remainder.

Section 4. Captions. Captions are inserted herein only as a matter of convenience and for reference and in no way define, limit, or describe the scope of these Bylaws or the intent of any provision.

Section 5. Gender and Number. All nouns and pronouns used herein shall be deemed to include the masculine, the feminine, and the neuter, and the singular shall include the plural and the plural shall include the singular whenever the context requires or permits.

Section 6. Roberts Rules. All meetings of the membership of the Board of Directors shall be conducted in accordance with Roberts Rules of Orders (latest edition) when not in conflict with the Act, the Governing Documents, or Rules and Regulations.

Section 7. Fiscal Year. The fiscal year of the Association shall be the calendar year or such other period as shall subsequently be determined by the Board of Directors.

EXHIBIT “D”

COMMON AREA TRACT(S)

<u>Tract</u>	<u>Ownership</u>	<u>Maintenance Responsibility</u>
Common Open Area	Association	Association

**DAN RHINE
288 TURKEY CREEK
ALACHUA FL 32615**

**DAVID FOREST
23 TURKEY CREEK
ALACHUA FL 32615**

**PEGGY ARNOLD
410 TURKEY CREEK
ALACHUA FL 32615**

**MICHELE L. LIEBERMAN
ALACHUA COUNTY MANAGER
12 SE 1ST STREET
GAINESVILLE FL 32601**

**LINDA DIXON, AICP
ASSISTANT DIRECTOR PLANNING
PO BOX 115050
GAINESVILLE FL 32611**

**LYNN COULLIAS
7406 NW 126TH AVE
ALACHUA FL 32615**

**TOM GORMAN
9210 NW 59TH STREET
ALACHUA FL 32653**

**ANTOINETTE ENDELICATO
5562 NW 93RD AVENUE
GAINESVILLE FL 32653**

**CRAIG PARENTEAU
FL DEPT OF ENV PROTECTION
4801 CAMP RANCH ROAD
GAINESVILLE FL 32641**

**RICHARD GORMAN
5716 NW 93RD AVENUE
ALACHUA FL 32653**

**LYNDA COON
7216 NW 126 AVENUE
ALACHUA FL 32615**

**PRESIDENT, TCMOA
1000 TURKEY CREEK
ALACHUA FL 32615**

**CITY MANAGER, CITY OF ALACHUA
P.O. BOX 9
ALACHUA FL 32616**

**JEANNETTE HINSDALE
P.O. BOX 1156
ALACHUA FL 32616**

**TAMARA ROBBINS
PO BOX 2317
ALACHUA FL 32616**

**BONNIE FLYNN
16801 NW 166TH DRIVE
ALACHUA, FL 32615**

03076-000-000
SHARMA LATIKA
4870 DEER LAKE DR E STE 2318
JACKSONVILLE, FL 32246-6313

03067-001-000
MEGAHEE ENTERPRISES LTD. LLLP
4110 SW 34TH ST STE 24
GAINESVILLE, FL 32608

03081-000-000
BAKER & LUNDY
242 BAYBERRY DR
LAKE PARK, FL 33403

03081-002-000
KIRKLAND MARY L
1275 NE 136TH TER #1
NORTH MIAMI, FL 33161

03068-015-000
MARK MARY
PO BOX 711
ALACHUA, FL 32616-0711

03068-008-000
COYLE & COYLE
14319 NW 167TH PL
ALACHUA, FL 32615

03067-062-092
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03081-003-000
CALHOUN JOHNNY B & MARIE
PO BOX 434
ALACHUA, FL 32616

03068-009-000
LUNDY GWENDOLYN
14000 NW 154TH AVE APT 21
ALACHUA, FL 32615

03067-000-000
TARA FOREST LLC
7717 NW 20TH LN
GAINESVILLE, FL 32605

03067-062-091
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03068-007-000
RICHARDSON CARRIE
815 SE 19TH ST
GAINESVILLE, FL 32641

03080-000-000
HAILE ELAINE D
802 OAK ST
STARKE, FL 32091-2340

03081-001-000
SMITH H E
18125 NW 42ND PL
OPA LOCKA, FL 33055-3311

03068-009-001
TYSON DEVRON D
PO BOX 23
ALACHUA, FL 32616-0023

03068-014-000
RICHARDSON MATTIE HEIRS
815 SE 19TH ST
GAINESVILLE, FL 32641

03067-005-000
TARA FOREST LLC
7717 NW 20TH LN
GAINESVILLE, FL 32605

03080-001-000
HAILE ELAINE D
802 OAK ST
STARKE, FL 32091-2340

03067-006-000
ALACHUA DEVELOPMENT CO LLC
16469 BRIDLEWOOD CIR
DELRAY BEACH, FL 33445

03013-010-003
BOOZER RUBY D TRUSTEE
PO BOX 1085
ALACHUA, FL 32616-1085

03013-020-016
MURTHA GARY J & MARY E
14528 NW 174TH AVE
ALACHUA, FL 32615-4856

03068-014-000
RICHARDSON MATTIE HEIRS
815 SE 19TH ST
GAINESVILLE, FL 32641

03127-020-002
KARAPHILLIS JOHN M & CYNTHIA A
13811 NW 172ND AVE
ALACHUA, FL 32615-4463

03080-001-000
HAILE ELAINE D
802 OAK ST
STARKE, FL 32091-2340

03013-010-006
KNISELEY GREGORY P & JOAN E
PO BOX 782
ALACHUA, FL 32616

03013-020-020
CORAL FARMS MCS LLC
PO BOX 482
FLORAHOME, FL 32140

03076-000-000
SHARMA LATIKA
4870 DEER LAKE DR E STE 2318
JACKSONVILLE, FL 32246-6313

03068-009-000
LUNDY GWENDOLYN
14000 NW 154TH AVE APT 21
ALACHUA, FL 32615

03013-010-002
KARRH MARGARET MCKNIGHT
14201 NW 174TH AVE
ALACHUA, FL 32615

03125-001-000
CEMETERY
17017 NW COUNTY ROAD 241
ALACHUA, FL 32615

03013-010-005
GAMAGE RICHARD F & CHERYL L
14495 NW 174TH AVE
ALACHUA, FL 32615

03068-008-000
COYLE & COYLE
14319 NW 167TH PL
ALACHUA, FL 32615

03062-001-000
JOHNS PATSY ANNETTE
PO BOX 1722
HIGH SPRINGS, FL 32655-1722

03080-000-000
HAILE ELAINE D
802 OAK ST
STARKE, FL 32091-2340

03067-005-001
TARA FOREST LLC
7717 NW 20TH LN
GAINESVILLE, FL 32605

03013-010-009
LEWIS BRANDT A & NANCY A
14907 NW 174TH AVE
ALACHUA, FL 32615

03068-009-001
TYSON DEVRON D
PO BOX 23
ALACHUA, FL 32616-0023

03067-000-000
TARA FOREST LLC
7717 NW 20TH LN
GAINESVILLE, FL 32605

03013-010-007
BAKER WILLIAM S & PAMELA A
14655 NW 174TH AVE
ALACHUA, FL 32615

03067-005-000
TARA FOREST LLC
7717 NW 20TH LN
GAINESVILLE, FL 32605

03062-000-000
ORTIZ & PETERSON-ORTIZ H/W
17304 NW 140TH ST
ALACHUA, FL 32616

03081-000-000
BAKER & LUNDY
242 BAYBERRY DR
LAKE PARK, FL 33403

03068-005-001
SMITH MARY LOUISE
14314 NW 167TH PL
ALACHUA, FL 32615-8696

03068-007-000
RICHARDSON CARRIE
815 SE 19TH ST
GAINESVILLE, FL 32641

03068-015-000
MARK MARY
PO BOX 711
ALACHUA, FL 32616-0711

03062-002-000
HAGAN MILDRED
16906 NW 140TH ST
ALACHUA, FL 32615-4411

03068-005-000
JONES HENRY JR & PHOEBE
PO BOX 956
ALACHUA, FL 32616-0956

03013-010-004
BOOZER RUBY D TRUSTEE
PO BOX 1085
ALACHUA, FL 32616-1085

03067-006-000
ALACHUA DEVELOPMENT CO LLC
16469 BRIDLEWOOD CIR
DELRAY BEACH, FL 33445

03013-010-008
ESCOFFERY-LAWRENCE & LAWRENCE W/H
14745 NW 174TH AVE
ALACHUA, FL 32615-4856

03013-020-015
INNIS CHRIS & VERONIKA
14596 NW 174TH
ALACHUA, FL 32615-4881

03067-001-000
MEGAHEE ENTERPRISES LTD. LLLP
4110 SW 34TH ST STE 24
GAINESVILLE, FL 32608

03127-000-000
EIB REUBEN J & DEBORAH S
17325 NW COUNTY RD 241
ALACHUA, FL 32615

03068-005-002
JONES HENRY
PO BOX 956
ALACHUA, FL 32616-0956

03062-003-000
RHOADS A K & DEBORAH
332 SE 2ND AVE
MELROSE, FL 32666-5441

03127-001-000
WD PROPERTIES FL LLC
1006 SE 4TH ST
GAINESVILLE, FL 32601

03062-001-000
JOHNS PATSY ANNETTE
PO BOX 1722
HIGH SPRINGS, FL 32655-1722

03067-005-000
TARA FOREST LLC
7717 NW 20TH LN
GAINESVILLE, FL 32605

03067-005-001
TARA FOREST LLC
7717 NW 20TH LN
GAINESVILLE, FL 32605

03067-062-084
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03067-062-090
CRISWELL JOHNATHAN
14324 NW 163RD PL
ALACHUA, FL 32615

03067-001-001
CANVAS CHURCH FL INC
PO BOX 219
ALACHUA, FL 32616

03605-001-013
ALACHUA TOWNE CENTRE ASSOCIAT
13505 NW 88TH PL
ALACHUA, FL 32615

03067-062-099
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03531-011-000
ALBERT L NORA
PO BOX 1241
ALACHUA, FL 32616

03067-061-035
YOUNG MACK H & GEORGIA MAE
14367 NW 160TH LANE
ALACHUA, FL 32615

03067-001-003
STARMAX FDA LLC
961094 GATEWAY BLVD STE 200
AMELIA ISLAND, FL 32034

03080-000-000
HAILE ELAINE D
802 OAK ST
STARKE, FL 32091-2340

03605-001-006
PROGRESSIVE RESTAURANTS INC
602 S MAIN ST
GAINESVILLE, FL 32601

03067-061-053
FABIANO CHRISTOPHER & GAYLE CRUZ LIFE ESTATE
14364 NW 160TH LN
ALACHUA, FL 32615

03076-000-000
SHARMA LATIKA
4870 DEER LAKE DR E STE 2318
JACKSONVILLE, FL 32246-6313

03067-006-010
LOWES HOME CENTERS INC
1000 LOWES BOULEVARD TAX DEPT
MOORESVILLE, NC 28117

03067-062-082
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03067-062-097
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03067-001-004
AUTOZONE STORES LLC
123 SOUTH FRONT ST 3RD FLOOR
MEMPHIS, TN 38103

03548-001-000
WELCOME EVELYN
PO BOX 384
ALACHUA, FL 32616-0384

03531-013-000
ALACHUA COUNTY HOUSING AUTHOR
701 NE 1ST ST
GAINESVILLE, FL 32601

03067-061-063
LISTZWAN LORI JORDAN
14296 NW 161ST AVE
ALACHUA, FL 32615

03531-027-000
KANE D L TRUSTEE
13919 NW 145TH AVE
ALACHUA, FL 32615-6218

03067-062-085
COON-WHITE PRISCA S
5615 SW 215TH TER
NEWBERRY, FL 32669

03531-028-000
JACOB & LEGREE
14325 NW 156TH PL
ALACHUA, FL 32615-8254

03531-048-000
FORD JOYCE M
PO BOX 764
ALACHUA, FL 32616-0764

03067-060-034
TARROBAL JOEL CONRAD W & RIA C
14387 NW 160TH LN
ALACHUA, FL 32615

03067-062-094
AMA GAINESVILLE INVESTMENTS THREE LLC
7475 SW 70TH LN
GAINESVILLE, FL 32608

03531-031-000
JACOBS TERRI ANN
PO BOX 2383
ALACHUA, FL 32616

03549-000-000
ANTIOCH MISSIONARY BAPTIST CHURCH OF ALACHUA INC
PO BOX 814
ALACHUA, FL 32616

03542-000-000
GREENE BEVERLY
110 NW 39TH AVE APT 9
GAINESVILLE, FL 32609

03067-061-051
WOODARD TERRI M
14324 NW 160TH LN
ALACHUA, FL 32615

03067-061-036
WILSON TANGELA M
14347 NW 160TH LN
ALACHUA, FL 32615

03067-062-089
SORRELL ALBERT L & PAMELA E
14304 NW 163RD PL
ALACHUA, FL 32615

03067-062-092
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03869-003-001
ALACHUA TOWNE CENTRE ASSOCIAT
13505 NW 88TH PL
ALACHUA, FL 32615

03067-060-031
KIRBY KEVIN L & STACY L
14342 NW 159TH LN
ALACHUA, FL 32615

03067-061-066
MYLEK DENNIS JAMES & EDITH
14348 NW 161ST AVE
ALACHUA, FL 32615

03067-062-072
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03605-001-003
GATEWAY BANK OF CENTRAL FLORI
1632 E SILVER SPRINGS BLVD
OCALA, FL 34470

03067-002-001
LEWIS F ALLEN & DIANE R
PO BOX 1421
ALACHUA, FL 32616-1421

03080-001-000
HAILE ELAINE D
802 OAK ST
STARKE, FL 32091-2340

03552-001-000
ANTIOCH MISSIONARY BAPTIST CHURCH OF ALA FL INC
PO BOX 814
ALACHUA, FL 32616-0814

03583-000-000
OM NAMAH SHIVAAY LLC
5144 SW 82ND TER
GAINESVILLE, FL 32608

03531-032-000
JACOB REBECCA
14325 NW 156TH PL
ALACHUA, FL 32615-8254

03531-030-000
HERRING TIMOTHY R
4631 SW ATHENA DR
PORT ST LUCIE, FL 34953-5548

03067-062-086
WILLIAMS RAYMOND A & SHARON J
16293 NW 143RD WAY
ALACHUA, FL 32615

03067-061-060
WILLIAMS HUBERT RAY & GANEANE M
14291 NW 161ST AVE
ALACHUA, FL 32615

03067-062-070
AKRIDGE MICHAEL D & SHATEKA
14365 NW 162ND PL
ALACHUA, FL 32615

03553-000-000
BROOKS JOHNNIE MAE HEIRS
4930 SW 87TH PL
LAKE BUTLER, FL 32054-5966

03547-000-000
CALHOUN & CALHOUN
PO BOX 545
ALACHUA, FL 32616-0545

03067-062-091
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03552-000-000
WALKER SHARRICKA HUNT
14327 NW 155TH PL
ALACHUA, FL 32616

03067-062-088
DEJESUS BERMAN
614 SW 70TH TER APT D
GAINESVILLE, FL 32607

03067-061-055
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03067-601-004
ALACHUA DEVELOPMENT CO LLC
16469 BRIDLEWOOD CIR
DELRAY BEACH, FL 33445

03067-060-032
CANNEGIETER LEROY R & TANYA
14362 NW 159TH LN
ALACHUA, FL 32615

03067-061-067
LEVY SETH G & MONIQUE DE SOUZA BARBOSA
14368 NW 161ST AVE
ALACHUA, FL 32615

03869-003-000
HITCHCOCK & SONS INC
29220 NW 122ND ST
ALACHUA, FL 32615

03067-061-054
MATHIS STANLEY P & ANTOINETTE L
14384 NW 160TH AVE
ALACHUA, FL 32615

03531-012-000
LINING KATINA A
14321 NW 157TH PL
ALACHUA, FL 32615-8740

03067-062-073
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03067-062-083
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03067-062-105
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03067-061-058
COBTY MAJIB & MARIE N
14325 NW 161ST AVE
ALACHUA, FL 32615

03531-008-000
ALACHUA COUNTY HOUSING AUTHOR
701 NE 1ST ST
GAINESVILLE, FL 32601

03531-014-000
ALACHUA COUNTY HOUSING AUTHOR
701 NE 1ST ST
GAINESVILLE, FL 32601

03585-001-000
XPANDING INDUSTRIES INC
PO BOX 383
ALACHUA, FL 32616

03067-062-101
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03067-062-104
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03067-004-001
HANCOCK JOSEPH A & CRYSTAL M
14309 NW 159TH PL
ALACHUA, FL 32615

03531-006-000
ALACHUA COUNTY HOUSING AUTHOR
701 NE 1ST ST
GAINESVILLE, FL 32601

03531-015-000
ALACHUA COUNTY HOUSING AUTHOR
701 NE 1ST ST
GAINESVILLE, FL 32601

03081-001-000
SMITH H E
18125 NW 42ND PL
OPA LOCKA, FL 33055-3311

03067-061-064
SANDERS BRYAN & AMANDA
14308 NW 161ST AVE
ALACHUA, FL 32615

03067-000-000
TARA FOREST LLC
7717 NW 20TH LN
GAINESVILLE, FL 32605

03067-006-000
ALACHUA DEVELOPMENT CO LLC
16469 BRIDLEWOOD CIR
DELRAY BEACH, FL 33445

03531-010-000
EDWARDS VELMA D
PO BOX 314
ALACHUA, FL 32616-0314

03067-062-103
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03067-061-049
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03531-035-000
WHITE JOHN R & TRENITA A
PO BOX 1246
ALACHUA, FL 32616-1246

03605-003-000
GATEWAY BANK OF CENTRAL FLORI
1632 EAST SILVER SPRINGS BLVD
OCALA, FL 34470

03067-062-098
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03584-001-000
M & R INVESTMENTS OF NORTH FL
11 SE 2ND AVE
GAINESVILLE, FL 32601

03548-000-000
SESCO DAVID L
PO BOX 372
LACROSSE, FL 32658

03531-049-000
SRI JAGANNATH CHAITANYA SANGH
2441 NW 43RD ST UNIT 24-A
GAINESVILLE, FL 32606

03531-009-000
MCCLAIN ERICA S
14324 NW 157TH PL
ALACHUA, FL 32615

03067-600-000
ALACHUA DEVELOPMENT CO LLC
16469 BRIDLEWOOD CIR
DELRAY BEACH, FL 33445

03067-060-033
COOK DAVID P JR
14392 NW 159TH LN
ALACHUA, FL 32615

03067-062-095
AMA GAINESVILLE INVESTMENTS THREE LLC
7475 SW 70TH LN
GAINESVILLE, FL 32608

03067-061-052
GIRALDO & MARTINEZ H/W
14344 NW 160TH LN
ALACHUA, FL 32615

03067-062-102
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03542-001-000
WISE LULA M
820 WEST 3RD ST
ST AUGUSTINE, FL 32084

03067-061-059
THOMAS CURTIS L & CANDACE M
14305 NW 161ST AVE
ALACHUA, FL 32615

03067-005-000
TARA FOREST LLC
7717 NW 20TH LN
GAINESVILLE, FL 32605

03531-029-000
SOUTH ERNEST WAYNE & JUSTINE
2611 ROCK SPRINGS RD
KINGSPORT, TN 37664-5635

03067-601-000
ALACHUA DEVELOPMENT CO LLC
16469 BRIDLEWOOD CIR
DELRAY BEACH, FL 33445

03067-061-037
TAOPO EDWIN & MIDNITTE
14327 NW 160TH LANE
ALACHUA, FL 32615

03081-003-000
CALHOUN JOHNNY B & MARIE
PO BOX 434
ALACHUA, FL 32616

03067-001-000
MEGAHEE ENTERPRISES LTD. LLLP
4110 SW 34TH ST STE 24
GAINESVILLE, FL 32608

03067-062-071
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03554-000-000
BRIANT WILLIAM L & JHONA L
14329 NW 186TH AVE
ALACHUA, FL 32615

03546-000-000
LEWIS & LEWIS TRUSTEES
26260 US HIGHWAY 129
BRANFORD, FL 32008

03081-000-000
BAKER & LUNDY
242 BAYBERRY DR
LAKE PARK, FL 33403

03067-004-000
CRUSADERS FOR CHRIST CHURCH
PO BOX 1087
ALACHUA, FL 32616-1087

03542-001-001
GREENE BEVERLY
110 NW 39TH AVE APT 9
GAINESVILLE, FL 32609

03531-007-000
ALACHUA COUNTY HOUSING AUTHOR
701 NE 1ST ST
GAINESVILLE, FL 32601

03067-062-106
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03067-004-002
CURTIS NATRON
PO BOX 1087
ALACHUA, FL 32616

03067-061-065
HEWITT THOMAS C
14328 NW 161ST AVE
ALACHUA, FL 32615

03531-034-000
KIMBALL JOHN H
13504 NW 56TH AVE
GAINESVILLE, FL 32653

03551-000-000
HUNT-WALKER SHARRICKA DAWNDREY
PO BOX 545
ALACHUA, FL 32616-0545

03531-033-000
THOMAS LOUISE
PO BOX 1172
ALACHUA, FL 32616-1172

03067-061-056
BROWN WYNDELL A & LATOSHA L
14365 NW 161ST AVE
ALACHUA, FL 32615

03067-062-069
YOUNG RAMONE R
14385 NW 162ND PL
ALACHUA, FL 32615

03550-000-000
SOLOMON JANIE HEIRS
PO BOX 234
MICANOPY, FL 32667

03067-060-002
FOX & ROBERTS
14369 NW 159TH PL
ALACHUA, FL 32615

03067-061-038
MENDOZA & VALDES W/H
14307 NW 160TH LN
ALACHUA, FL 32615

03067-061-057
NGUYEN TONY M & TOMOKO S
14345 NW 161ST AVE
ALACHUA, FL 32615

03531-046-000
DANIELS EVELYN R
PO BOX 584
ALACHUA, FL 32616-0584

03605-001-010
WARRING & WARRING 2 LLC
7106 NW 18TH AVE
GAINESVILLE, FL 32605

03583-001-000
OM NAMAH SHIVAAY LLC
5144 SW 82ND TER
GAINESVILLE, FL 32608

03544-000-000
GARRISON LULA MAE
PO BOX 901
ALACHUA, FL 32616-0901

03531-026-000
LEWIS DIANE R
PO BOX 1421
ALACHUA, FL 32616

03067-062-096
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03067-062-093
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03067-060-003
MCGINNIS-BROWN RUBY D
14349 NW 159TH PL
ALACHUA, FL 32615

03549-001-000
ANTIOCH MISSIONARY BAPTIST CHURCH OF ALACHUA INC
PO BOX 814
ALACHUA, FL 32616

03067-062-100
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

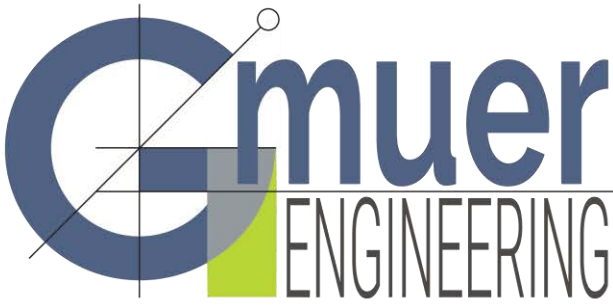
03081-002-000
KIRKLAND MARY L
1275 NE 136TH TER #1
NORTH MIAMI, FL 33161

03067-062-087
ODUM RONNIE & LEEANNE J
14282 NW 163RD PL
ALACHUA, FL 32615

03067-061-068
FLYNN & JANSON
14388 NW 161ST AVE
ALACHUA, FL 32615

03067-061-050
BUONSIGNORE MICHAEL W & MAMI
14304 NW 160TH LN
ALACHUA, FL 32615

03067-060-001
WARD & WARD
14389 NW 159TH PL
ALACHUA, FL 32615



2603 NW 13th St, Box 314
Gainesville, FL 32609
Ph. (352) 281-4928

gmuereng.com

Neighborhood Meeting

A Neighborhood Meeting will be held to discuss a revision to a previously discussed 340-lot single-family subdivision. The site is located on TP#03067-005-000, 03067-005-001, 03067-000-000, and 03067-006-000 at approximately 17002 NW County RD 241, Alachua, FL.

Date: Friday, September 20, 2019

Time: 5:00pm

Place: The northwest corner of NW 161st Ave and NW 147th Drive (behind Lowe's), Alachua, FL 32615

Contact: Forrest Eddleton, (352) 593-3159, Gmuer Engineering, LLC

Gmuer Engineering will be holding a workshop to discuss the site plan revision described above.

Per the City of Alachua Land Development Regulations, the properties are zoned RSF-3 (residential single-family 3). The RSF-3 district is established as a district in which the principal use of land is single-family residential development at a moderate density in areas served by water and sewer systems. The regulations of this district are intended to discourage any use that would substantially interfere with the development of single-family dwellings and that would be detrimental to the quiet residential nature of the district. Complementary uses customarily found in residential zone districts, such as community facilities, religious institutions, parks and playgrounds, and schools, are also allowed. The minimum lot area is 10,000 square feet and the maximum density allowed is three dwelling units an acre.

The purpose of the workshop is to inform neighboring property owners about the nature of the proposal and to seek comments. We look forward to seeing you there.

3067

3067-6

NW 142nd Ter

NW 165th

NW 163rd Pl

NW 143rd Way

ALACRUA REALTY

PG 100

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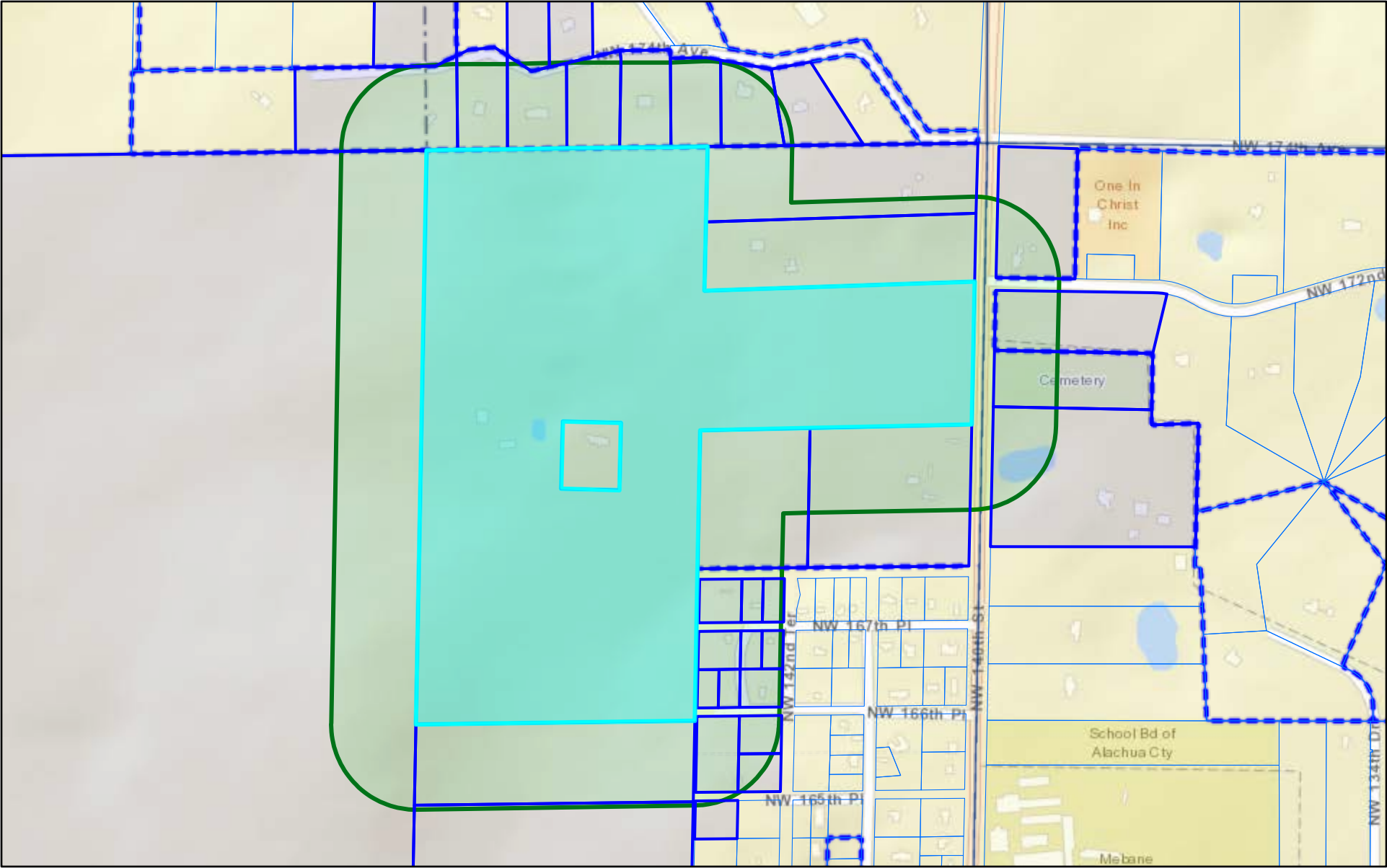
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Parcels

County of Alachua, Esri, HERE, Garmin, INCREMENT P, NOAA, USGS | ACPA |

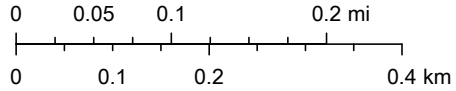
Tara Forest East Revision Public Notice - 400 ft Buffer (Parcel 2)



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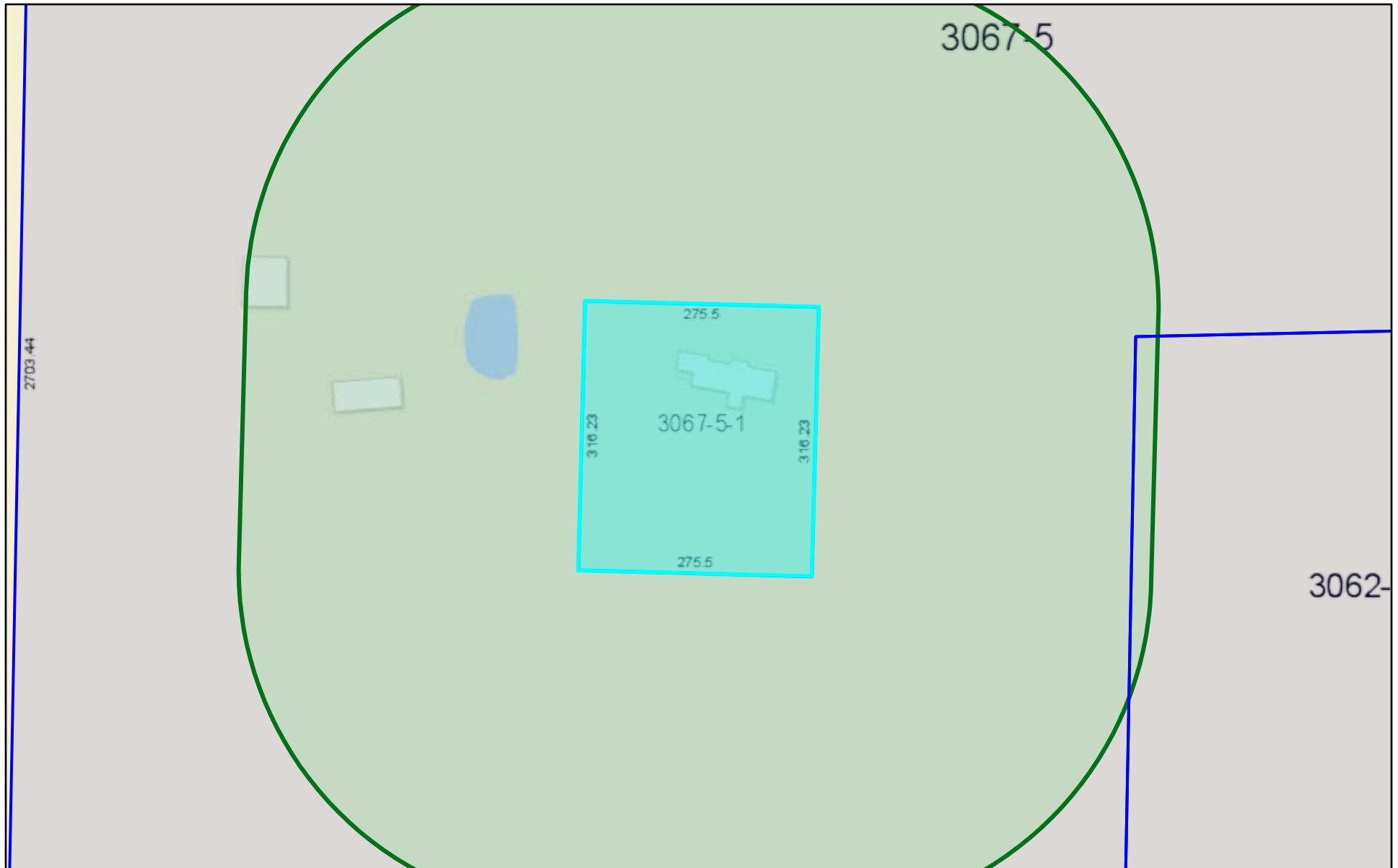
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Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan,

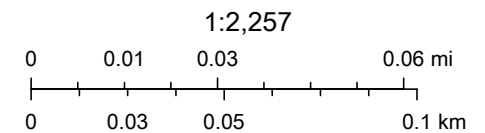
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Tara Forest East Revision Public Notice - 400 ft Buffer (Parcel 3))



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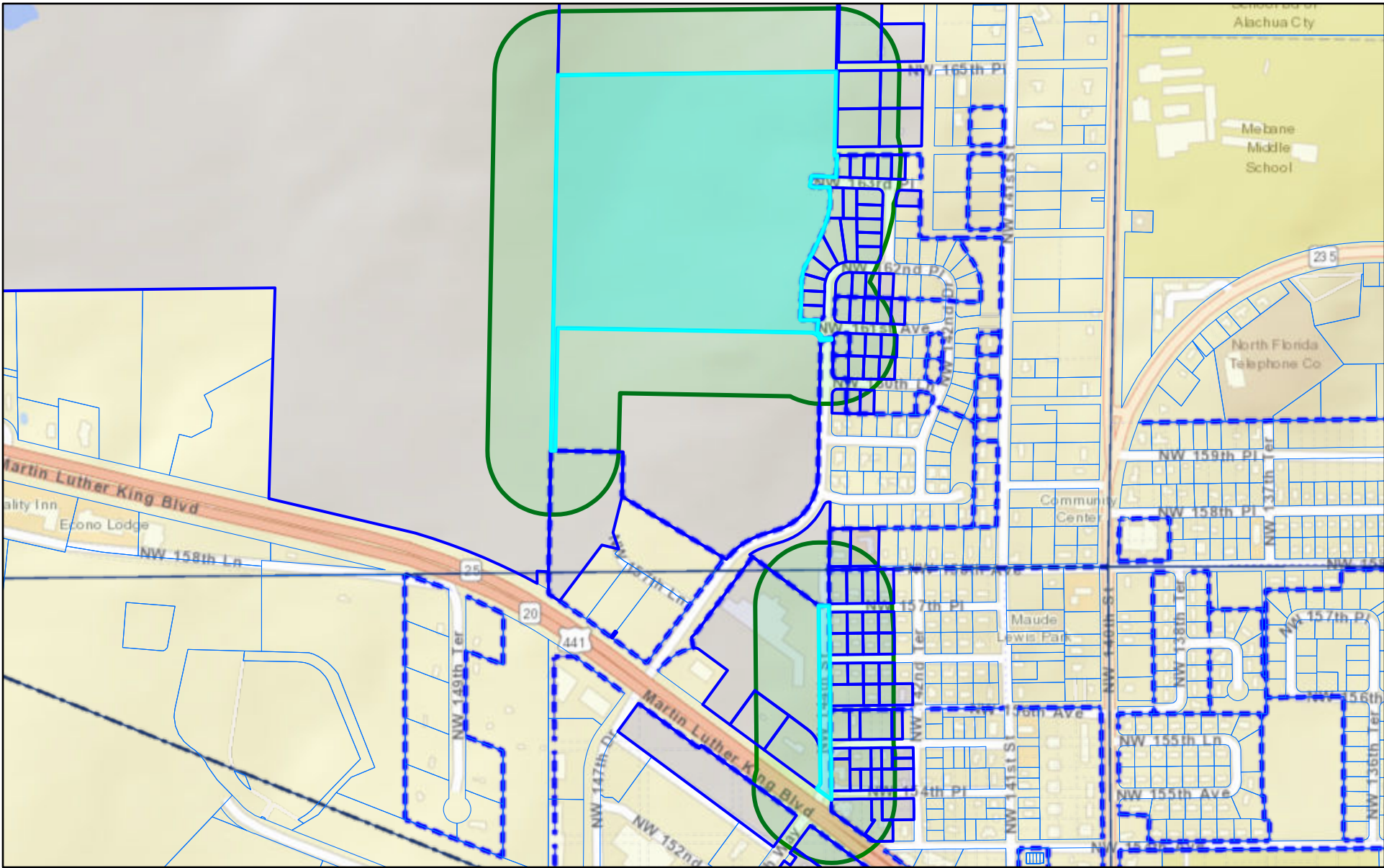
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Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan,

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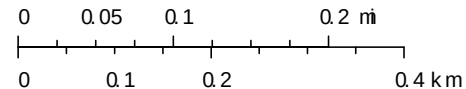
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Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan,

County of Alachua, Esri, HERE, Garmin, INCREMENT P, NOAA, USGS | ACPA |



STATE OF FLORIDA
COUNTY OF ALACHUA

Published Daily and Sunday
Gainesville, Florida

Before the undersigned authority personally appeared Kim Kanemoto who on oath says that she is an Advertising Account Executive of THE GAINESVILLE SUN, a daily newspaper published in Gainesville in Alachua County, Florida (with circulation in Alachua, Bradford, Columbia, Dixie, Gilchrist, Levy, Union, Counties), that the attached copy of advertisement, being a Public Notice relating to the matter of

GF-GH049444

PUBLIC NOTICE

A Neighborhood Meeting will be held to discuss a revision to a previously discussed 340-lot single-family subdivision. The site is located on TP#03067-005-000, 03067-005-001, 03067-000-000 and 03067-006-000 at approximately 17002 NW County RD 241, Alachua, FL.

The meeting will be held Friday, September 20th at 5:00pm at the northwest corner of NW 161st Ave. and NW 147th Drive (behind Lowe's) Alachua, FL 32615.

Contact: Forrest Eddleton

Phone: (352) 593-3159 - Gmuer Engineering, LLC

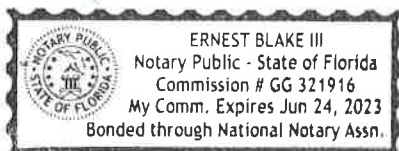
was published in said newspaper in the issues of Saturday, September 07, 2019.

Affiant further says that THE GAINESVILLE SUN is a newspaper published at Gainesville, in said Alachua County, Florida and that the said newspaper has heretofore been continuously published in said Alachua County, each day, and has been entered as second class mail matter at the post office in Gainesville, in said Alachua County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he has neither paid nor promised any person, firm or corporation any discount for publication in said newspaper.

Sworn to and subscribed before me this 9th day of September A.D. 2019.

Notary Public

Witness



US tells pregnant migrant woman to wait in Mexico

By Nomaan Merchant
and Verónica
G. Cárdenas
The Associated Press

MATAMOROS, Mexico — Eight-and-a-half-months pregnant and experiencing contractions, a Salvadoran woman who had crossed the Rio Grande and was apprehended by the Border Patrol was forced to go back to Mexico.

Agents took her to the hospital, where doctors gave her medication to stop the contractions. And then, according to the woman and her lawyer, she was almost immediately sent back to Mexico.

There, she joined the more than 38,000 people forced to wait across the border for immigration court hearings under a rapidly expanding Trump administration policy. And her plight highlights the health risks and perils presented by the "Remain in Mexico" program.

The woman was waiting Thursday with her 3-year-old daughter in a makeshift tent camp in Matamoros, Mexico, next to an international bridge, due to give birth any day, said her attorney, Jodi Goodwin.

"She's concerned about having the baby in the street or having to have the baby in a shelter," Goodwin said.

Pregnant women face special hazards in



In this Aug. 30 photo, migrants, many who were returned to Mexico under the Trump administration's "Remain in Mexico" program, wait in line to get a meal in an encampment near the Gateway International Bridge in Matamoros. (VERONICA G. CARDENAS/THE ASSOCIATED PRESS)

Mexico because places where migrants wait to enter the U.S. often don't have access to regular meals, clean water, and medical care.

Many shelters at the Mexico border are at or above capacity already, and some families have been sleeping in tents or on blankets in the blistering summer heat. Reports have abounded of migrants being attacked or kidnapped in Mexican border cities, especially in Tamaulipas state across from South Texas, where the Salvadoran mother is waiting for a November court date.

The Associated Press is not identifying the woman from El Salvador

because she fears for her safety.

The U.S. government does not automatically exempt pregnant women from the "Remain in Mexico" program. U.S. Customs and Border Protection declined to comment on the woman's case.

The program — officially called the Migrant Protection Protocols — was instituted by the U.S. and Mexico as a way of deterring migrants from crossing the border to seek asylum. Mexico has cooperated with the expansion of the program at the behest of President Donald Trump, who threatened crippling tariffs in June if Mexico did not do more to stop

migrants.

The U.S. Department of Homeland Security has said people in "vulnerable populations" may be exempt from being sent to Mexico. But pregnant women are not necessarily considered "vulnerable" by CBP, a subsidiary of the department.

"In some cases, pregnancy may not be observable or disclosed, and may not in and of itself disqualify an individual from being amenable for the program," CBP said in a statement. "Agents and officers would consider pregnancy, when other associated factors exist, to determine amenability for the program."

Mexico declares success in slowing migrant flow

By Maria Verza
and Christopher
Sherman
The Associated Press

MEXICO CITY — Under threat of crippling U.S. tariffs, Mexico said Friday it had reduced the flow of migrants arriving at its northern border by 56% in three months.

Foreign Secretary Marcelo Ebrard said he believes Mexico's strategy of cracking down on illegal migration with a National Guard deployment, investment in Central America and allowing the U.S. to make more asylum seekers wait in Mexico is enough to avert President Donald Trump's threat to impose tariffs on all Mexican imports.

Ebrard is scheduled to meet with U.S. officials Tuesday at the White House to review the progress.

"We're showing that the strategy that Mexico put forward has been successful," Ebrard said. "I don't expect a tariff threat Tuesday because it wouldn't make sense."

Using U.S. Customs and Border Protection data, Ebrard said the number of migrants apprehended at the U.S.-Mexico border in August was 63,989, down from 144,266 in May. Ebrard's numbers include those who presented themselves at U.S. ports of entry and were deemed inadmissible.

Mexico has reinforced

security on its porous southern border and set up checkpoints on highways leading north, deploying 21,000 police and troops across the nation. Ebrard said there had been seven formal complaints of human rights violations involving the National Guard, a relatively low number which he saw as another sign of success.

The enforcement has been paired with an incipient economic development plan. Mexico has agreed with Honduras and El Salvador to expand a tree-planting program that aims to keep farmers on their land through direct payments and provide them with income-generating fruit and timber trees.

Mexico has committed \$60 million to that program and another to create job opportunities for youth.

Some 4,300 Central American migrants have been working in Mexico's version of that program in the south, Ebrard said.

Mexican President Andres Manuel López Obrador, a leftist who took office Dec. 1 promising better treatment of migrants, instead has embraced the fight against migrant smuggling.

In recent weeks, he has seldom mentioned the U.S. pressure and depicts the crackdown on migrants as a struggle to defend Mexican laws.

Trump challenges California's action on emission standards

By Tom Krisher
and Ellen Knickmeyer
The Associated Press

DETROIT — The Trump administration on Friday launched an all-out assault on California over mileage rules, opening an anti-trust investigation and telling state officials that they appear to be violating federal law in a deal with four automakers setting tougher automotive emission standards.

The outcome of the emissions fight will make or break an effort by President Donald Trump to relax Obama-era mileage standards nationwide. California's congressionally granted authority to set its own, tougher emissions standards under the 1970 Clean Air Act has long prodded automakers to adopt more fuel-efficient passenger vehicles.

Ford and Honda confirmed receiving a letter from the U.S. Justice Department informing them of an antitrust inquiry into a July deal with California, in which the two automakers along with Volkswagen and BMW agreed to stricter emissions standards than preferred by Trump. The Department of Transportation and the Environmental Protection Agency sent a letter to California saying the deal appears to violate the Clean Air Act and other laws.

"Congress has squarely vested the authority to set fuel economy standards for new motor vehicles, and nationwide standards for GHG (greenhouse gas) vehicle emissions, with the federal government, not with California or any other state," the agencies wrote in a letter dated Friday to the California Air Resources Board, which oversees auto emissions in the state.

California has emerged as a leader of state-level efforts to block Trump



In this April 18 file photo, a sign for the Department of Justice hangs in the press briefing room at the Justice Department, in Washington. (PATRICK SEMANSKY/ASSOCIATED PRESS FILE PHOTO)

administration moves weakening environmental protections. As part of those efforts, dozens of lawsuits have been filed challenging administration rollbacks.

Trump long has made clear he wants to end California's clout in setting mileage standards. Gov. Gavin Newsom remained defiant in the face of Friday's administration actions.

"The Trump administration has been attempting and failing to bully car companies for months now," Newsom said in a statement. "We remain undeterred. California stands up to bullies and will keep fighting for stronger clean car protections that protect the health and safety of our children and families."

Ford spokesman T.R. Reid confirmed Friday that the company received the Justice Department letter on the antitrust issue and said the company is cooperating. He would not disclose which

other automakers may have gotten the letter, but Honda confirmed that it also had received it.

The July deal bypassed the Trump administration's plan to freeze emissions and fuel economy standards adopted under the Obama administration at 2021 levels.

The four automakers agreed with the California Air Resources Board to reduce emissions by 3.7% per year starting with the 2022 model year, through 2026. That compares with 4.7% yearly reductions through 2025 under the Obama standards, according to California.

Emissions standards are closely linked with fuel economy requirements because vehicles pollute less if they burn fewer gallons of fuel.

The Justice Department gave no details of why it believed the deal could have violate federal law meant to prohibit anti-competitive behavior by companies. The EPA refused further comment.

Former Zimbabwe leader Robert Mugabe dies

By Farai Mutsaers
and Christopher Torchia
The Associated Press

HARARE, Zimbabwe — Former Zimbabwean leader Robert Mugabe, an ex-guerrilla chief who took power when the African country shook off white minority rule and presided for decades while economic turmoil and human rights violations eroded its early promise, has died in Singapore. He was 95.

Mugabe enjoyed strong support from Zimbabwe's people soon after he became the first post-colonial leader of what had been British-controlled Rhodesia.

Often violent farm seizures from whites who owned huge tracts of land made him a hated figure in the West and a hero in Africa.

His successor, President Emmerson Mnangagwa, tweeted Friday that an "icon of liberation" had died. Mnangagwa, a long-time loyalist until Mugabe dismissed him from his Cabinet, named Mugabe as a national hero, Zimbabwe's highest posthumous honor.

He said the nation would observe an official mourning period for its late leader, "a great teacher and mentor" and "a remarkable statesman of our century." No date or other details were given.

Singapore's Foreign Ministry said it was working with Zimbabwe on arrangements to fly Mugabe's body



In this March 18, 2008, file photo, Zimbabwe President Robert Mugabe addresses party supporters at a rally in Gweru, about 155 miles south of Harare, Zimbabwe. (TSVANGIRAYI MUKWAZHI/ASSOCIATED PRESS FILE PHOTO)

home. In recent years, Mugabe sought medical treatment at Gleneagles Hospital in Singapore.

Presidential spokesman George Charamba told The Associated Press that Mugabe was readmitted to the hospital complaining of chest pains. His personal doctor, Dr. Jonathan Matenga, was flown to Singapore and with Mugabe when he died at 4:45 a.m. Friday, Charamba said.

Mugabe's popularity began to rise again after Mnangagwa failed to deliver on promises of economic recovery and

appeared to take an even harsher and more repressive stance against critics. Many began to publicly say they missed Mugabe.

Forced to resign amid pressure from the military, his party and the public in November 2017, Mugabe was defiant throughout his long life, railing against the West for what he called its neo-colonialist attitude and urging Africans to take control of their resources — a populist message that was often a hit, even as many nations on the continent shed the strongman model and moved toward democracy.

PUBLIC NOTICE

A Neighborhood Meeting will be held to discuss a preliminary plat and a Special Exception for a proposed subdivision resulting in roughly 211 residential single-family lots with townhouse dwellings. The site is located generally NW of NW 147th Drive and NW 161st Ave., Alachua, FL on TP#03067-006-000. The meeting will be held Friday, September 20th at 5:00pm at the northwest corner of NW 161st Ave. and NW 147th Drive (behind Lowe's) Alachua, FL 32615. Contact: Forrest Eddleton Phone: (352) 593-3159 - Gmuier Engineering, LLC

PUBLIC NOTICE

A Neighborhood Meeting will be held to discuss a revision to a previously discussed 340-lot single-family subdivision. The site is located on TP#03067-005-000, 03067-005-001, 03067-000-000 and 03067-006-000 at approximately 17002 NW County RD 241, Alachua, FL. The meeting will be held Friday, September 20th at 5:00pm at the northwest corner of NW 161st Ave. and NW 147th Drive (behind Lowe's) Alachua, FL 32615. Contact: Forrest Eddleton Phone: (352) 593-3159 - Gmuier Engineering, LLC

NOTICE OF RESCHEDULED HEARING

The tentative hearing adopting a millage rate and budget on September 3, 2019 for the Levy County Board of County Commissioners is being rescheduled due to Hurricane Dorian.

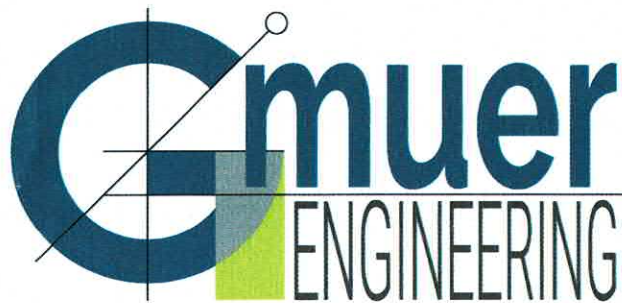
A rescheduled tentative budget hearing will be held on:

September 10, 2019

5:01 P.M. at

Levy County Courthouse,
County Commission Room

355 S Court Street, Bronson, FL 32621



2603 NW 13th St, Box 314
Gainesville, FL 32609
Ph. (352) 281-4928

gmuereng.com

e

Meeting Sign-in Sheet

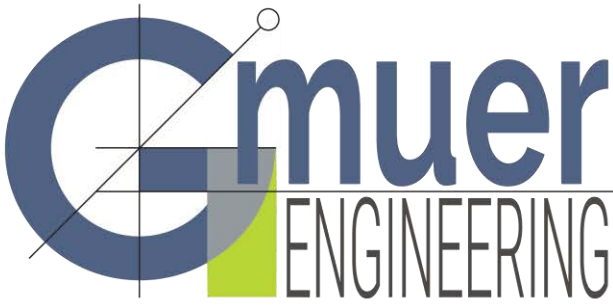
Re: Tara Forest East and Tara Baywood - Neighborhood Workshop

Date: Friday, September 20, 2019

Time: 5:00pm

Place: The northwest corner of NW 161st Ave and NW 147th Drive (behind Lowe's), Alachua, FL 32615

NAME	Email	Phone
Dennis Mylek	DSMYLEK@Pachell.Nor	603-748-0537
SILVIA MONKHARA NANCE	SILVIA@NanceLanESTATE.COM	(352) 870-8772
SAYED MONKHARA	SAYED@MONKHARA.COM	(352) 278-5317
Gayle Fabiano	noe.buddee@yahoo.com	
LaTosha Brown	latoshamiles@yahoo.com	706-536-8299
Paul Flynn	paulflynn82@yahoo.com	404-313-2529
Ryan Ward	ward-Ryan@yahoo.com	352-514-9898
Jean Calderwood	Jean.Calderwood@gmail.com	386-588-4309
Hugh Calderwood	Hugh.Calderwood@gmail.com	
MONIQUE LEVY	MONIQUE.SOUZA.26@GMAIL.COM	857-247-7132



2603 NW 13th St, Box 314
Gainesville, FL 32609
Ph. (352) 281-4928

gmuereng.com

Meeting Agenda and Notes

Re: Tara Forest East and Tara Baywood – Neighborhood Workshop

Date: Friday, September 20, 2019

Time: 5:00pm

Place: The northwest corner of NW 161st Ave and NW 147th Drive (behind Lowe's), Alachua, FL 32615

Agenda

- Explanation of the development proposal and application
- Explanation of the character and nature of the process for review
- Comments and questions and discussion of potential conflicts

Meeting Notes:

Several questions asking about the general layout and location of the stormwater facilities, how they will look like, and the design requirements. The questions were address by:

- Referred to the conceptual plans and indicated all locations of the proposed stormwater facilities
- Described the stormwater facilities as normally dry ponds that would fill during storm events and slowly discharge a portion of the water downstream and infiltrate the remainder of the water into the soils
- Stormwater permitting was described to be completed with the SRWMD and the City of Alachua and that the design would be completed up front for all phases of the development. The Design Storm is the 100Yr-240Hr event which is similar to two large storms back to back such as two tropical storms resulting in 18 inches of rain.

Two participants expressed they were happy to see townhomes becoming an option in the local housing market

General concerns over the increase in residents and associated traffic were expressed

- We reviewed the road connections proposed with Phase 1 of Tara Forest East to CR241 and that a traffic study was completed with this application to be reviewed by the City and the traffic generation numbers were quoted from the report along with the current City of Alachua roadway capacity numbers of the affected segments.
- Participants were also directed to the City's Long Range Transportation Plan and the recent community discussions at Commission meetings

Meeting adjourned at 7:00pm

FOR PLANNING USE ONLY

Case #: _____
Application Fee: \$ _____
Filing Date: _____
Acceptance Date: _____
Review Type: Admin

Public School Student Generation Form for Residential Development in the City of Alachua

A. APPLICANT

1. Applicant's Status (check one):

☐ Owner (title holder) ☒ Agent

2. Name of Applicant(s) or Contact Person(s): Christopher Gmuer, P.E. Title: President

Company (if applicable): Gmuer Engineering

Mailing address: 2603 NW 13th St. Box 314

City: Gainesville State: FL ZIP: 32609

Telephone: 352-593-3134 FAX: _____ e-mail: chrisg@gmuereng.com

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

Name of Owner (title holder): Tara Forest, LLC (Sayed Moukhtara)

Mailing Address: 7717 NW 20th LN

City: Gainesville State: FL ZIP: 32605

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

B. PROJECT

1. Project Name: Tara Forest East

2. Address of Subject Property: 17002 NW CR 241 Alachua, FL 32615

3. Parcel ID Number(s): 03067-005-001, 03067-000-000, and 03067-005-000

4. Section 10 Township 08 Range 18 Grant _____ Acreage: 113.5

5. Existing Use of Property: Single Family Residential/Agriculture

6. Future Land Use Map Designation: Moderate Density Residential

7. Zoning Designation: RSF-3 (Includes parcel 03067-005-000 following rezoning on 11/26/2018)

8. Development Data (check all that apply):

☒ Single Family Residential Number of Units 340

☐ Multi-Family Residential Number of Units _____

☐ Exempt (see exempt developments on page 2)

9. Review Type:

Preliminary Development Order

☐ Comprehensive Plan Amendment

☐ Large Scale

☐ Small Scale

☐ Site Specific Amendment to the Official Zoning Atlas (Rezoning)

☐ Revised

Final Development Order

☒ Preliminary Plat

☐ Final Plat

☐ Site Plan

10. School Concurrency Service Areas (SCSA): Based on the project location, identify the corresponding SCSA for each school type. Maps of the SCSAs can be obtained from the Alachua County Growth Management Department Map Gallery by clicking on the "Public Schools" tab: http://growth-management.alachuacounty.us/gis_services/map_gallery/

Elementary: Irby (Grades K-2) Alachua (Grades 3-5)

Middle: Mebane Middle

High: Santa Fe High

Explanation of Student Generation Calculation: Student Generation is calculated based on the type of residential development and the type of schools. The number of students stations (by school type – Elementary, Middle and High School) used for calculating the school concurrency impacts is equal to the number of dwelling units by housing type multiplied by the student generation multiplier (for housing type & school type) established by the School Board. Calculations are rounded to the nearest whole number. Student Generation for each school type is calculated individually, in order to correctly assess the impact on the School Concurrency Service Area (SCSA) for each school type (Elementary, Middle and High School).

of Elementary School Student Stations = # of housing units x Elementary school student generation multiplier
 # of Middle School Student Stations = # of housing units x Middle school student generation multiplier
 # of High School Student Stations = # of housing units x High school student generation multiplier

Student Generation Calculations: Single Family Residential Development

Elementary School	340	units	x	0.14	Elementary School Multiplier*	48	Student Stations**
Middle School	340	units	x	0.06	Middle School Multiplier*	21	Student Stations**
High School	340	units	x	0.08	High School Multiplier*	28	Student Stations**

Student Generation Calculations: Multi-Family Residential Development

Elementary School	NA	units	x		Elementary School Multiplier*		Student Stations**
Middle School	NA	units	x		Middle School Multiplier*		Student Stations**
High School	NA	units	x		High School Multiplier*		Student Stations**

* Student generation multipliers may be obtained from SBAC at:

http://www.sbac.edu/pages/ACPS/Departments_Programs/DepartmentsAF/D_thru_F/FacilitiesMainConstr/Local_Certification_Packets/City_of_Alachua

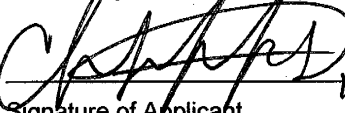
** Round to the nearest whole number

EXEMPT DEVELOPMENTS (check all that apply):

- ☐ Existing legal lots eligible for a building permit.
- ☐ Development that includes residential uses that has received final development plan approval prior to the effective date for public school concurrency, or has received development plan approval prior to June 24, 2008, provided the development approval has not expired.
- ☐ Amendments to final development orders for residential development approved prior to the effective date of public school concurrency, and which do not increase the number of students generated by the development.
- ☐ Age-restricted developments that prohibit permanent occupancy by persons of school age, provided this condition is satisfied in accordance with the standards of the Public Schools Facilities Element or the ILA.
- ☐ Group quarters that do not generate public school students, as described in the ILA.

A completeness review of the application will be conducted within 5 business days of receipt. If the application is determined to be incomplete, the application will be returned to the applicant.

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


 Signature of Applicant

 Signature of Co-applicant

Christopher Gmuier, P.E. President Gmuier Engineering

Typed or printed name and title of applicant

 Typed or printed name of co-applicant

State of Florida County of Alachua

The foregoing application is acknowledged before me this 12 day of December, 2019, by Christopher Gmuier

_____, who is/are personally known to me, or who has/have produced FL. Drivers License as identification.

NOTARY SEAL



Joshua Barton
 NOTARY PUBLIC
 STATE OF FLORIDA
 Comm# GG298232
 Expires 2/4/2023


 Signature of Notary Public, State of FL

City of Alachua ♦ Planning and Community Development Department
 PO Box 9 ♦ Alachua, FL 32616 ♦ (386) 418-6121

Certification

This application for a determination of adequacy of public schools to accommodate the public school students generated by the proposed development has been reviewed for compliance with the school concurrency management program and in accordance with the ILA. The following determinations have been made:

☐ **Approved** based upon the following findings:

Elementary SCSA: _____

- ☐ Capacity Available
- ☐ Capacity Available in 3 years
- ☐ Capacity Available in Adjacent SCSA

Middle SCSA: _____

- ☐ Capacity Available
- ☐ Capacity Available in 3 years
- ☐ Capacity Available in Adjacent SCSA

High SCSA: _____

- ☐ Capacity Available
- ☐ Capacity Available in 3 years
- ☐ Capacity Available in Adjacent SCSA

Capacity Required: _____

Available Capacity: _____

Available Capacity: _____

Available Capacity: _____

Capacity Required: _____

Available Capacity: _____

Available Capacity: _____

Available Capacity: _____

Capacity Required: _____

Available Capacity: _____

Available Capacity: _____

Available Capacity: _____

☐ **Denied** for reasons stated: _____

☐ **Local Government Certification**

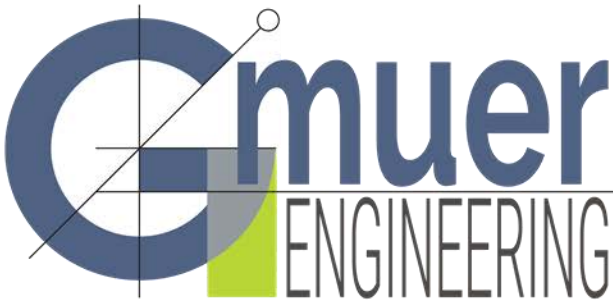
Approved by: _____

Date: _____

☐ **School Board Staff Certification**

Vicki McGrath, Director, Community Planning
School Board of Alachua County
352-955-7400 x 1423

Date: _____



2603 NW 13th St, Box 314
Gainesville, FL 32609
Ph. (352) 281-4928

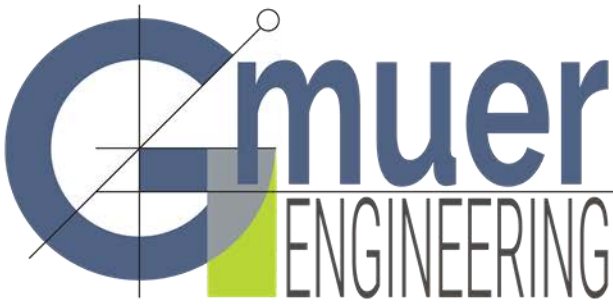
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Tara Forest East Legal Descriptions

Parcel 03067-005-000

A TRACT OF LAND SITUATED IN SECTION 10, TOWNSHIP 8 SOUTH, RANGE 18 EAST, CITY OF ALACHUA, ALACHUA COUNTY, FLORIDA, SAID TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT A CONCRETE MONUMENT AT THE NORTHWEST CORNER OF THE NORTHEAST 1/4 OF THE AFOREMENTIONED SECTION 10, TOWNSHIP 8 SOUTH, RANGE 18 EAST FOR THE POINT OF BEGINNING AND RUN NORTH 88°15'52" EAST, ALONG THE NORTH LINE OF SAID SECTION 10, A DISTANCE OF 1324.84 FEET TO A STEEL ROD AND CAP (LB (12903) AT THE NORTHWEST CORNER OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SAID SECTION 10; THENCE RUN SOUTH 00°04'49" WEST ALONG THE WEST LINE OF SAID NORTHEAST 1/4 OF THE NORTHEAST 114, A DISTANCE OF 677.41 FEET TO A CONCRETE MONUMENT AT THE NORTHWEST CORNER OF THE SOUTH 1/2 OF SAID NORTHEAST 1/4 OF THE NORTHEAST 114; THENCE RUN NORTH 88°18'13" EAST, ALONG THE NORTH LINE OF SAID SOUTH 1/2 OF THE NORTHEAST 1/4 OF THE NORTHEAST 114, A DISTANCE OF 1273.16 FEET TO THE WEST RIGHT OF WAY LINE OF COUNTY ROAD NO. 241 (100 FOOT RIGHT OF WAY); THENCE RUN SOUTH 00°11'02" WEST, ALONG SAID WEST RIGHT OF WAY LINE, A DISTANCE OF 678.06 FEET TO THE SOUTH LINE OF SAID NORTHEAST 1/4 OF THE NORTHEAST 114; THENCE RUN SOUTH 88°19'11" WEST, ALONG SAID SOUTH LINE OF THE NORTHEAST 1/4 OF THE NORTHEAST 114, A DISTANCE OF 1271.89 FEET TO A CONCRETE MONUMENT AT THE SOUTHWEST CORNER OF SAID NORTHEAST 1/4 OF THE NORTHEAST 114; THENCE RUN SOUTH 00°02'40" EAST, ALONG THE WEST LINE OF THE SOUTHEAST 1/4 OF SAID NORTHEAST 1/4, A DISTANCE OF 669.07 FEET TO AN IRON PIPE AT THE NORTHWEST CORNER OF ALACHUA REALTY COMPANY ADDITION AS PER PLAT THEREOF RECORDED IN PLAT BOOK "A", PAGE 100 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA; THENCE RUN SOUTH 00°04'13" WEST, ALONG THE WEST LINE OF SAID ALACHUA REALTY COMPANY ADDITION, A DISTANCE OF 679.26 FEET TO A CONCRETE MONUMENT (LS#3456); THENCE RUN SOUTH 88°15'52" WEST, A DISTANCE OF 1326.11 FEET TO A CONCRETE MONUMENT (LS#3456) ON THE



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WEST LINE OF THE EAST 1/2 OF SAID SECTION 10; THENCE RUN NORTH 00°04'23" EAST, ALONG SAID WEST LINE, A DISTANCE OF 2703.44 FEET TO THE POINT OF BEGINNING.

LESS AND EXCEPT (03067-005-00 I):

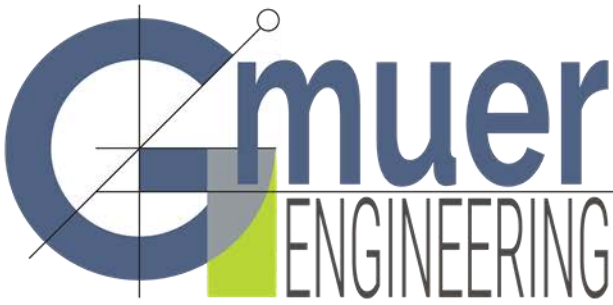
A TRACT OF LAND SITUATED IN SECTION 10, TOWNSHIP 8 SOUTH, RANGE 18 EAST, CITY OF ALACHUA, ALACHUA COUNTY, FLORIDA, SAID TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT A CONCRETE MONUMENT AT THE NORTHWEST CORNER OF THE NE 1/4 OF THE AFOREMENTIONED SECTION 10, TOWNSHIP 8 SOUTH, RANGE 18 EAST, FOR A POINT OF REFERENCE AND RUN NORTH 88° 15'52" EAST, ALONG THE NORTH LINE OF SAID SECTION 10, A DISTANCE OF 629.85 FEET; THENCE RUN SOUTH 01°44'08" EAST, A DISTANCE OF 1269.47 FEET TO A STEEL ROD AND CAP (LB #2903) AND THE TRUE POINT OF BEGINNING; THENCE RUN SOUTH 86°55'51" EAST, A DISTANCE OF 275.50 FEET TO A STEEL ROD AND CAP (LB #2903); THENCE RUN SOUTH

03°04'09" WEST, A DISTANCE OF 316.23 FEET TO A STEEL ROD AND CAP (LB # 2903); THENCE RUN NORTH 86°55'51" WEST, A DISTANCE OF 275.50 FEET TO A STEEL ROD AND CAP (LB #2903); THENCE RUN NORTH 03°04'09" EAST, A DISTANCE OF 316.23 FEET TO THE TRUE POINT OF BEGINNING.

TOGETHER WITH AN EASEMENT FOR INGRESS, AND EGRESS OVER AND ACROSS A 60 FOOT WIDE STRIP OF LAND, SAID STRIP OF LAND BEING 30 FEET ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE:

COMMENCE AT THE AFOREMENTIONED TRUE POINT OF BEGINNING AND RUN SOUTH 86°55'51" EAST, ALONG THE NORTH LINE OF THE BEFORE DESCRIBED TRACT OF LAND, A DISTANCE OF 175.50 FEET TO THE TRUE POINT OF BEGINNING OF SAID EASEMENT CENTERLINE (EASEMENT LINES WILL BE LENGTHENED OR SHORTENED TO BEGIN ON SAID NORTH LINE); THENCE RUN NORTH 59°26'48" EAST, ALONG SAID CENTERLINE, A DISTANCE OF 556.89 FEET TO THE WEST LINE OF THE S 1/2 OF THE NE 1/4 OF THE NE 1/4 OF THE AFOREMENTIONED SECTION 10; THENCE RUN NORTH 88° 18'42" EAST, A DISTANCE OF 1272.53 FEET TO THE WEST RIGHT-OF-WAY LINE OF COUNTY ROAD NO. 241



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(100 FOOT RIGHT-OF-WAY) AND THE TERMINUS OF SAID CENTERLINE (EASEMENT LINES WILL BE LENGTHENED OR SHORTENED TO TERMINATE ON SAID RIGHT-OF WAY LINE).

Parcel 03067-005-001

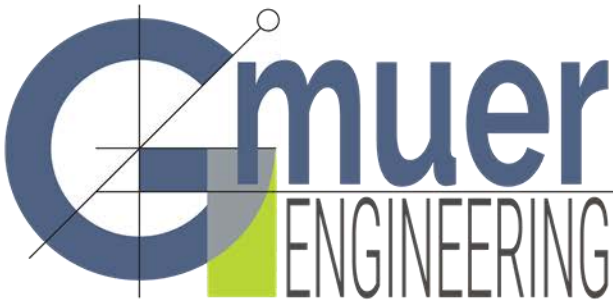
A TRACT OF LAND SITUATED IN SECTION 10, TOWNSHIP 8 SOUTH, RANGE 18 EAST, CITY OF ALACHUA, ALACHUA COUNTY, FLORIDA, SAID TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT A CONCRETE MONUMENT AT THE NORTHWEST CORNER OF THE NE 1/4 OF THE AFOREMENTIONED SECTION 10, TOWNSHIP 8 SOUTH, RANGE 18 EAST, FOR A POINT OF REFERENCE AND RUN NORTH $88^{\circ} 15' 52''$ EAST, ALONG THE NORTH LINE OF SAID SECTION 10, A DISTANCE OF 629.85 FEET; THENCE RUN SOUTH $01^{\circ} 44' 08''$ EAST, A DISTANCE OF 1269.47 FEET TO A STEEL ROD AND CAP (LB #2903) AND THE TRUE POINT OF BEGINNING; THENCE RUN SOUTH $86^{\circ} 55' 51''$ EAST, A DISTANCE OF 275.50 FEET TO A STEEL ROD AND CAP (LB #2903); THENCE RUN SOUTH

$03^{\circ} 04' 09''$ WEST, A DISTANCE OF 316.23 FEET TO A STEEL ROD AND CAP (LB# 2903); THENCE RUN NORTH $86^{\circ} 55' 51''$ WEST, A DISTANCE OF 275.50 FEET TO A STEEL ROD AND CAP (LB #2903); THENCE RUN NORTH $03^{\circ} 04' 09''$ EAST, A DISTANCE OF 316.23 FEET TO THE TRUE POINT OF BEGINNING.

TOGETHER WITH AN EASEMENT FOR INGRESS, AND EGRESS OVER AND ACROSS A 60 FOOT WIDE STRIP OF LAND, SAID STRIP OF LAND BEING 30 FEET ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE:

COMMENCE AT THE AFOREMENTIONED TRUE POINT OF BEGINNING AND RUN SOUTH $86^{\circ} 55' 51''$ EAST, ALONG THE NORTH LINE OF THE BEFORE DESCRIBED TRACT OF LAND, A DISTANCE OF 175.50 FEET TO THE TRUE POINT OF BEGINNING OF SAID EASEMENT CENTERLINE (EASEMENT LINES WILL BE LENGTHENED OR SHORTENED TO BEGIN ON SAID NORTH LINE); THENCE RUN NORTH $59^{\circ} 26' 48''$ EAST, ALONG SAID CENTERLINE, A DISTANCE OF 556.89 FEET TO THE WEST LINE OF THE S li2 OF THE NE 1/4 OF THE NE 1/4 OF THE AFOREMENTIONED SECTION 10; THENCE RUN NORTH $88^{\circ} 18' 42''$ EAST, A DISTANCE OF 1272.53 FEET TO THE WEST RIGHT-OF-WAY LINE OF COUNTY ROAD NO. 241



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(100 FOOT RIGHT-OF-WAY) AND THE TERMINUS OF SAID CENTERLINE (EASEMENT LINES WILL BE LENGTHENED OR SHORTENED TO TERMINATE ON SAID RIGHT-OF WAY LINE).

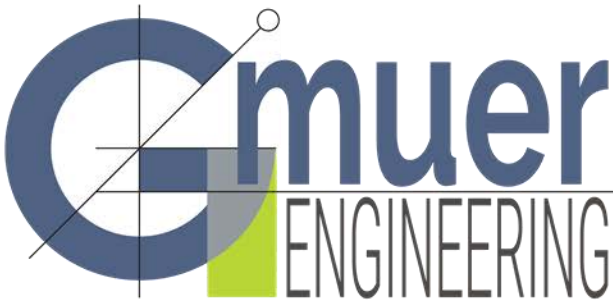
Parcel 03067-000-000

COMMENCE AT THE NORTHWEST CORNER OF THE NORTHEAST 1/4 OF THE AFOREMENTIONED SECTION 10, TOWNSHIP 8 SOUTH, RANGE 18 EAST FOR THE POINT OF REFERENCE AND RUN S.00°04'23"W., ALONG THE WEST LINE OF THE EAST 1/2 OF SAID SECTION 10, A DISTANCE OF 2703.44 FEET TO A CONCRETE MONUMENT AND THE TRUE POINT OF BEGINNING; THENCE CONTINUE S.00°04'23"W., ALONG SAID WEST LINE OF THE EAST 1/2 OF SECTION 10, A DISTANCE OF 353.78 FEET TO A CONCRETE MONUMENT, SAID CONCRETE MONUMENT BEING LOCATED 2360.55 FEET NORTH OF THE SOUTHWEST CORNER OF THE SOUTHEAST 1/4 OF SAID SECTION 10, SAID CONCRETE MONUMENT BEING DESIGNATED AS POINT "A" TO BE REFERRED TO LATER; THENCE RETURN TO THE TRUE POINT OF BEGINNING AND RUN N.88°15'52"E .. A DISTANCE OF 1326.11 FEET TO A CONCRETE MONUMENT ON THE WEST LINE OF THE SOUTHEAST 1/4 OF SAID SECTION 10; THENCE RUN S.00°04'13"W., ALONG SAID WEST LINE OF THE SOUTHEAST 1/4, A DISTANCE OF 407.10 FEET TO A CONCRETE MONUMENT, SAID CONCRETE MONUMENT LOCATED 2113.49 FEET NORTH OF THE NORTHWEST CORNER OF LOT 10 OF HITCHCOCK'S ADDITION TO THE CITY OF ALACHUA AS PER PLAT THEREOF RECORDED IN PLAT BOOK "F", PAGE 18 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA; THENCE RUN N.89°25'53"W., A DISTANCE OF 1325.52 FEET TO THE AFOREMENTIONED POINT "A" AND TO CLOSE.

Parcel 03067-006-000

A PORTION OF THE S.E. 1/4 OF SECTION 10, TOWNSHIP 8 SOUTH, RANGE 18 EAST, IN THE CITY OF ALACHUA, ALACHUA COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE S.W. CORNER OF BAYWOOD PHASE 1C, AS PER PLAT THEREOF RECORDED IN PLAT BOOK 29, PAGES 17 AND 18 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA; THENCE N.89°56'50"E., ALONG THE SOUTH BOUNDARY OF SAID BAYWOOD PHASE 1C, A DISTANCE OF 85.50 FEET;



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THENCE DEPARTING SAID SOUTH BOUNDARY, $S.04^{\circ}52'19''W.$, A DISTANCE OF 60.27 FEET TO A POINT ON THE NORTHERLY BOUNDARY OF LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 3823, PAGE 513 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA; THENCE ALONG THE NORTHERLY BOUNDARY OF SAID LANDS THE FOLLOWING FIVE (5) CALLS: $N.89^{\circ}54'58''W.$ A DISTANCE OF 280.91 FEET; THENCE $N.01^{\circ}44'31''W.$, A DISTANCE OF 4.97 FEET; THENCE $N.89^{\circ}55'41''W.$, A DISTANCE OF 421.90 FEET TO A POINT ON A CURVE, CONCAVE NORTHERLY, HAVING A RADIUS OF 115.00 FEET, A CENTRAL ANGLE OF $03^{\circ}47'06''$ AND A CHORD BEARING AND DISTANCE OF $N.88^{\circ}15'26''W.$, 7.60 FEET; THENCE WESTERLY, ALONG THE ARC OF SAID CURVE AND NORTHERLY BOUNDARY, A DISTANCE OF 7.60 FEET TO THE END OF SAID CURVE; THENCE $N.89^{\circ}54'28''W.$, A DISTANCE OF 499.80 FEET TO A POINT ON THE EAST BOUNDARY OF A 30 FOOT NON-EXCLUSIVE ELECTRIC EASEMENT AS RECORDED IN OFFICIAL RECORDS BOOK 3819, PAGE 825 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA; THENCE DEPARTING THE NORTHERLY BOUNDARY OF LANDS DESCRIBED IN SAID OFFICIAL RECORDS BOOK 3823, PAGE 513, ALONG THE EAST BOUNDARY OF SAID 30 FOOT EASEMENT AND THE SOUTHERLY PROJECTION THEREOF, $S.00^{\circ}04'34''W.$, A DISTANCE OF 576.90 FEET TO A POINT ON THE NORTH BOUNDARY OF BAYWOOD CENTRE AS PER PLAT THEREOF, RECORDED IN PLAT BOOK 28, PAGE 91 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA; THENCE DEPARTING THE SOUTHERLY PROJECTION OF THE EAST BOUNDARY OF SAID 30 FOOT EASEMENT, ALONG THE NORTH BOUNDARY OF SAID BAYWOOD CENTRE, $S.89^{\circ}57'21''W.$, A DISTANCE OF 29.75 FEET TO A POINT ON THE WEST BOUNDARY OF THE S.E. 1/4 OF SAID SECTION 10; THENCE DEPARTING THE NORTH BOUNDARY OF SAID BAYWOOD CENTRE, ALONG SAID WEST BOUNDARY, $N.00^{\circ}04'30''E.$, A DISTANCE OF 1786.13 FEET TO THE N.W. CORNER OF LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 2082, PAGE 2132 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA; THENCE DEPARTING THE WEST BOUNDARY OF THE S.E. 1/4 OF SAID SECTION 10, ALONG THE NORTH BOUNDARY OF SAID LANDS, $S.89^{\circ}26'48''E.$, A DISTANCE OF 1324.74 FEET TO THE N.E. CORNER OF SAID LANDS AND A POINT ON THE EAST BOUNDARY OF THE WEST 1/2 OF THE S.E. 1/4 OF SAID SECTION 10; THENCE ALONG SAID EAST BOUNDARY, $S.00^{\circ}01'22''W.$, A DISTANCE OF 351.01 FEET TO THE N.W. CORNER OF LOT 2, BLOCK 15, OF ALACHUA REALTY CO.'S ADDITION TO THE CITY OF ALACHUA, AS PER PLAT THEREOF, RECORDED IN PLAT BOOK 'A', PAGE 100 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA; THENCE DEPARTING SAID EAST BOUNDARY, ALONG THE NORTHERLY BOUNDARY OF SAID BLOCK

15 OF SAID ALACHUA REALTY CO.S' ADDITION TO THE CITY OF ALACHUA, N.88°22'19"E., A DISTANCE OF 9.89 FEET TO THE N.W. CORNER OF AFOREMENTIONED BAYWOOD PHASE 1C; THENCE ALONG THE WESTERLY BOUNDARY OF SAID BAYWOOD PHASE 1C, THE FOLLOWING TEN (10) COURSES: S.00°03'52"W., A DISTANCE OF 115.81 FEET; THENCE N.89°55'23"W., A DISTANCE OF 87.57 FEET TO THE BEGINNING OF A CURVE, CONCAVE NORTHERLY, HAVING A RADIUS OF 275.00 FEET, A CENTRAL ANGLE OF 05°55'28" AND A CHORD BEARING AND DISTANCE OF N.87°00'29"W., 28.42 FEET; THENCE WESTERLY, ALONG THE ARC OF SAID CURVE AND WESTERLY BOUNDARY, A DISTANCE OF 28.44 FEET TO THE END OF SAID CURVE; THENCE S.08°59'15"W., A DISTANCE OF 50.15 FEET TO THE BEGINNING OF A CURVE, CONCAVE NORTHERLY, HAVING A RADIUS OF 325.00 FEET, A CENTRAL ANGLE OF 06°18'13" AND A CHORD BEARING AND DISTANCE OF S.86°50'30"E., 35.74 FEET; THENCE EASTERLY, ALONG THE ARC OF SAID CURVE AND WESTERLY BOUNDARY, A DISTANCE OF 35.76 FEET TO THE END OF SAID CURVE; THENCE S.89°55'23"E., A DISTANCE OF 57.15 FEET TO THE BEGINNING OF A CURVE CONCAVE WESTERLY, HAVING A RADIUS OF 1012.50 FEET, A CENTRAL ANGLE OF 18°41'51" AND A CHORD BEARING AND DISTANCE OF S.17°43'23"W., 328.95 FEET; THENCE SOUTHERLY, ALONG THE ARC OF SAID CURVE AND WESTERLY BOUNDARY, A DISTANCE OF 330.41 FEET TO THE END OF SAID CURVE; THENCE S.27°12'36"W., A DISTANCE OF 60.70 FEET TO THE BEGINNING OF A CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 154.50 FEET, A CENTRAL ANGLE OF 27°04'06" AND A CHORD BEARING AND DISTANCE OF S.13°38'50"W., 72.31 FEET; THENCE SOUTHERLY, ALONG THE ARC OF SAID CURVE AND WESTERLY BOUNDARY, A DISTANCE OF 72.99 FEET TO THE END OF SAID CURVE; THENCE S.00°04'10"W., A DISTANCE OF 189.27 FEET TO THE POINT OF BEGINNING. SAID LANDS CONTAINING 35.26 ACRES, MORE OR LESS.

Prepared by and return to:

Crystal L. Curran
Alachua Title Services, LLC
16407 Northwest 174th Drive Suite C
Alachua, FL 32615
(386) 418-8183
File No 2018-205
Parcel Identification No 03067-000-000

3/18/2019 11:55 AM
BOOK 4670 PAGE 200
J.K. JESS IRBY, ESQ.
Clerk of the Court, Alachua County, Florida
ERECORDED Receipt# 879727
Doc Stamp-Mort: \$0.00
Doc Stamp-Deed: \$10,283.00
Intang. Tax: \$0.00

[Space Above This Line For Recording Data]

WARRANTY DEED

(STATUTORY FORM - SECTION 689.02, F.S.)

This indenture made the 18th day of March, 2019 between **Wallace R. Cain and Mary H. Cain, husband and wife**, whose post office address is **P.O. Box 100, Alachua, FL 32616**, of the County of Alachua, State of Florida, Grantors, to **Tara Forest, LLC, a Florida Limited Liability Company**, whose post office address is **7717 NW 20th Ln, Gainesville, FL 32605**, of the County of Alachua, State of Florida, Grantee:

Whenever used herein the term "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives and assigns of individuals, and the successors and assigns of corporations.

Witnesseth, that said Grantors, for and in consideration of the sum of TEN DOLLARS (U.S.\$10.00) and other good and valuable considerations to said Grantors in hand paid by said Grantee, the receipt whereof is hereby acknowledged, has granted, bargained, and sold to the said Grantee, and Grantee's heirs and assigns forever, the following described land, situate, lying and being in Alachua, Florida, to-wit:

Property 1:

PARCEL 1 (For Informational Purposes Only Parcel 1 is currently tax parcel 03067-000-000):

A TRACT OF LAND SITUATED IN SECTION 10, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA, SAID TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF THE NORTHEAST 1/4 OF THE AFOREMENTIONED SECTION 10, TOWNSHIP 8 SOUTH, RANGE 18 EAST FOR THE POINT OF REFERENCE AND RUN S.00°04'23"W., ALONG THE WEST LINE OF THE EAST 1/2 OF SAID SECTION 10, A DISTANCE OF 2703.44 FEET TO A CONCRETE MONUMENT AND THE TRUE POINT OF BEGINNING; THENCE CONTINUE S.00°04'23"W., ALONG SAID WEST LINE OF THE EAST 1/2 OF SECTION 10, A DISTANCE OF 353.78 FEET TO A CONCRETE MONUMENT, SAID CONCRETE MONUMENT BEING LOCATED 2360.55 FEET NORTH OF THE SOUTHWEST CORNER OF THE SOUTHEAST 1/4 OF SAID SECTION 10, SAID CONCRETE MONUMENT BEING DESIGNATED AS POINT "A" TO BE REFERRED TO LATER; THENCE RETURN TO THE TRUE POINT OF BEGINNING AND RUN N.88°15'52"E., A DISTANCE OF 1326.11 FEET TO A CONCRETE MONUMENT ON THE WEST LINE OF THE SOUTHEAST 1/4 OF SAID SECTION 10; THENCE RUN S.00°04'13"W., ALONG SAID WEST LINE OF THE SOUTHEAST 1/4, A DISTANCE OF 407.10 FEET TO A CONCRETE MONUMENT, SAID CONCRETE MONUMENT LOCATED 2113.49 FEET NORTH OF THE NORTHWEST CORNER OF LOT 10 OF HITCHCOCK'S ADDITION TO THE CITY OF ALACHUA AS PER PLAT THEREOF RECORDED IN PLAT BOOK "F", PAGE 18 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA; THENCE RUN N.89°25'53"W., A DISTANCE OF 1325.52 FEET TO THE AFOREMENTIONED POINT "A" AND TO CLOSE.

Property 2:

PARCEL 2 (For Informational Purposes Only Parcel 2 is currently tax parcel 03067-005-000):

A TRACT OF LAND SITUATED IN SECTION 10, TOWNSHIP 8 SOUTH, RANGE 18 EAST, CITY OF ALACHUA, ALACHUA COUNTY, FLORIDA, SAID TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT A CONCRETE MONUMENT AT THE NORTHWEST CORNER OF THE NORTHEAST 1/4 OF THE AFOREMENTIONED SECTION 10, TOWNSHIP 8 SOUTH, RANGE 18 EAST FOR THE POINT OF BEGINNING AND RUN NORTH 88°15'52" EAST, ALONG THE NORTH LINE OF SAID SECTION 10, A DISTANCE OF 1324.84 FEET TO A STEEL ROD AND CAP (LB (12903) AT THE NORTHWEST CORNER OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SAID SECTION 10; THENCE RUN SOUTH 00°04'49" WEST ALONG THE WEST LINE OF SAID NORTHEAST 1/4 OF THE NORTHEAST 1/4, A DISTANCE OF 677.41 FEET TO A CONCRETE MONUMENT AT THE NORTHWEST CORNER OF THE SOUTH 1/2 OF SAID NORTHEAST 1/4 OF THE NORTHEAST 1/4; THENCE RUN NORTH 88°18'13" EAST, ALONG THE NORTH LINE OF SAID SOUTH 1/2 OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4, A DISTANCE OF 1273.16 FEET TO THE WEST RIGHT OF WAY LINE OF COUNTY ROAD NO. 241 (100 FOOT RIGHT OF WAY); THENCE RUN SOUTH 00°11'02" WEST, ALONG SAID WEST RIGHT OF WAY LINE, A DISTANCE OF 678.06 FEET TO THE SOUTH LINE OF SAID NORTHEAST 1/4 OF THE

Warranty Deed

NORTHEAST 1/4; THENCE RUN SOUTH 88°19'11" WEST, ALONG SAID SOUTH LINE OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4, A DISTANCE OF 1271.89 FEET TO A CONCRETE MONUMENT AT THE SOUTHWEST CORNER OF SAID NORTHEAST 1/4 OF THE NORTHEAST 1/4; THENCE RUN SOUTH 00°02'40" EAST, ALONG THE WEST LINE OF THE SOUTHEAST 1/4 OF SAID NORTHEAST 1/4, A DISTANCE OF 669.07 FEET TO AN IRON PIPE AT THE NORTHWEST CORNER OF ALACHUA REALTY COMPANY ADDITION AS PER PLAT THEREOF RECORDED IN PLAT BOOK "A", PAGE 100 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA; THENCE RUN SOUTH 00°04'13" WEST, ALONG THE WEST LINE OF SAID ALACHUA REALTY COMPANY ADDITION, A DISTANCE OF 679.26 FEET TO A CONCRETE MONUMENT (LS#3456); THENCE RUN SOUTH 88°15'52" WEST, A DISTANCE OF 1326.11 FEET TO A CONCRETE MONUMENT (LS#3456) ON THE WEST LINE OF THE EAST 1/2 OF SAID SECTION 10; THENCE RUN NORTH 00°04'23" EAST, ALONG SAID WEST LINE, A DISTANCE OF 2703.44 FEET TO THE POINT OF BEGINNING.

LESS AND EXCEPT (03067-005-001):

A TRACT OF LAND SITUATED IN SECTION 10, TOWNSHIP 8 SOUTH, RANGE 18 EAST, CITY OF ALACHUA, ALACHUA COUNTY, FLORIDA, SAID TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT A CONCRETE MONUMENT AT THE NORTHWEST CORNER OF THE NE 1/4 OF THE AFOREMENTIONED SECTION 10, TOWNSHIP 8 SOUTH, RANGE 18 EAST, FOR A POINT OF REFERENCE AND RUN NORTH 88°15'52" EAST, ALONG THE NORTH LINE OF SAID SECTION 10, A DISTANCE OF 629.85 FEET; THENCE RUN SOUTH 01°44'08" EAST, A DISTANCE OF 1269.47 FEET TO A STEEL ROD AND CAP (LB #2903) AND THE TRUE POINT OF BEGINNING; THENCE RUN SOUTH 86°55'51" EAST, A DISTANCE OF 275.50 FEET TO A STEEL ROD AND CAP (LB #2903); THENCE RUN SOUTH 03°04'09" WEST, A DISTANCE OF 316.23 FEET TO A STEEL ROD AND CAP (LB # 2903); THENCE RUN NORTH 86°55'51" WEST, A DISTANCE OF 275.50 FEET TO A STEEL ROD AND CAP (LB #2903); THENCE RUN NORTH 03°04'09" EAST, A DISTANCE OF 316.23 FEET TO THE TRUE POINT OF BEGINNING.

TOGETHER WITH AN EASEMENT FOR INGRESS, AND EGRESS OVER AND ACROSS A 60 FOOT WIDE STRIP OF LAND, SAID STRIP OF LAND BEING 30 FEET ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE:

COMMENCE AT THE AFOREMENTIONED TRUE POINT OF BEGINNING AND RUN SOUTH 86°55'51" EAST, ALONG THE NORTH LINE OF THE BEFORE DESCRIBED TRACT OF LAND, A DISTANCE OF 175.50 FEET TO THE TRUE POINT OF BEGINNING OF SAID EASEMENT CENTERLINE (EASEMENT LINES WILL BE LENGTHENED OR SHORTENED TO BEGIN ON SAID NORTH LINE); THENCE RUN NORTH 59°26'48" EAST, ALONG SAID CENTERLINE, A DISTANCE OF 556.89 FEET TO THE WEST LINE OF THE S 1/2 OF THE NE 1/4 OF THE NE 1/4 OF THE AFOREMENTIONED SECTION 10; THENCE RUN NORTH 88°18'42" EAST, A DISTANCE OF 1272.53 FEET TO THE WEST RIGHT-OF-WAY LINE OF COUNTY ROAD NO. 241 (100 FOOT RIGHT-OF-WAY) AND THE TERMINUS OF SAID CENTERLINE (EASEMENT LINES WILL BE LENGTHENED OR SHORTENED TO TERMINATE ON SAID RIGHT-OF WAY LINE).

Property 3:

PARCEL 3 (For Informational Purposes Only Parcel 3 is currently tax parcel 03067-005-001):

A TRACT OF LAND SITUATED IN SECTION 10, TOWNSHIP 8 SOUTH, RANGE 18 EAST, CITY OF ALACHUA, ALACHUA COUNTY, FLORIDA, SAID TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT A CONCRETE MONUMENT AT THE NORTHWEST CORNER OF THE NE 1/4 OF THE AFOREMENTIONED SECTION 10, TOWNSHIP 8 SOUTH, RANGE 18 EAST, FOR A POINT OF REFERENCE AND RUN NORTH 88°15'52" EAST, ALONG THE NORTH LINE OF SAID SECTION 10, A DISTANCE OF 629.85 FEET; THENCE RUN SOUTH 01°44'08" EAST, A DISTANCE OF 1269.47 FEET TO A STEEL ROD AND CAP (LB #2903) AND THE TRUE POINT OF BEGINNING; THENCE RUN SOUTH 86°55'51" EAST, A DISTANCE OF 275.50 FEET TO A STEEL ROD AND CAP (LB #2903); THENCE RUN SOUTH 03°04'09" WEST, A DISTANCE OF 316.23 FEET TO A STEEL ROD AND CAP (LB # 2903); THENCE RUN NORTH 86°55'51" WEST, A DISTANCE OF 275.50 FEET TO A STEEL ROD AND CAP (LB #2903); THENCE RUN NORTH 03°04'09" EAST, A DISTANCE OF 316.23 FEET TO THE TRUE POINT OF BEGINNING.

TOGETHER WITH AN EASEMENT FOR INGRESS, AND EGRESS OVER AND ACROSS A 60 FOOT WIDE STRIP OF LAND, SAID STRIP OF LAND BEING 30 FEET ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE:

COMMENCE AT THE AFOREMENTIONED TRUE POINT OF BEGINNING AND RUN SOUTH 86°55'51" EAST, ALONG THE NORTH LINE OF THE BEFORE DESCRIBED TRACT OF LAND, A DISTANCE OF 175.50 FEET TO THE TRUE POINT OF BEGINNING OF SAID EASEMENT CENTERLINE (EASEMENT LINES WILL BE LENGTHENED OR SHORTENED TO BEGIN ON SAID NORTH LINE); THENCE RUN NORTH 59°26'48" EAST, ALONG SAID CENTERLINE, A DISTANCE OF 556.89 FEET TO THE WEST LINE OF THE S 1/2 OF THE NE 1/4 OF THE NE 1/4 OF THE AFOREMENTIONED SECTION 10; THENCE RUN NORTH 88°18'42" EAST, A DISTANCE OF 1272.53 FEET TO THE WEST RIGHT-OF-WAY LINE OF COUNTY ROAD NO. 241 (100 FOOT RIGHT-OF-WAY) AND THE TERMINUS OF SAID CENTERLINE (EASEMENT LINES WILL BE LENGTHENED OR SHORTENED TO TERMINATE ON SAID RIGHT-OF WAY LINE).

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

Subject to taxes for 2019 and subsequent years, not yet due and payable; covenants, restrictions, easements, reservations and

Warranty Deed

limitations of record, if any.

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

And Grantors hereby covenant with the Grantee that the Grantors are lawfully seized of said land in fee simple, that Grantors have good right and lawful authority to sell and convey said land and that the Grantors hereby fully warrant the title to said land and will defend the same against the lawful claims of all persons whomsoever.

In Witness Whereof, Grantors have hereunto set Grantors' hand and seal the day and year first above written.

Signed, sealed and delivered in our presence:

Crystal L. Curran
WITNESS
Crystal L. Curran
WITNESS

Wallace R. Cain
Wallace R. Cain

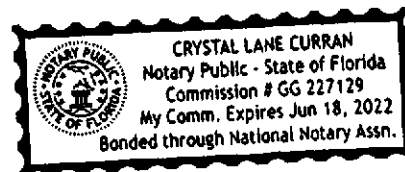
Kyle Polansky
WITNESS
Kyle Polansky
WITNESS

Mary H. Cain
Mary H. Cain

STATE OF FLORIDA
COUNTY OF ALACHUA

The foregoing instrument was acknowledged before me this 18th day of March, 2019, by Wallace R. Cain and Mary H. Cain.

Crystal L. Curran
Signature of Notary Public
Print, Type/Stamp Name of Notary



Personally Known: _____ OR Produced Identification: ☒
Type of Identification: MS
Produced: _____

Warranty Deed

2005 JUL 14 04:36 PM BK 3168 PG 1293

J. K. "BUDDY" IRBY
CLERK OF CIRCUIT COURT
ALACHUA COUNTY, FLORIDA
CLERK10 Receipt#244022
Doc Stamp-Deed: 25,235.00

This Document Prepared By and Return to:
Darryl J. Tompkins, Esquire
Darryl J. Tompkins, P.A.
14420 NW 151st Blvd.
P.O. Box 519
Alachua, FL 32616

Parcel ID Number: 03067-006-000

Warranty Deed

This Indenture, Made this 12th day of July, 2005 A.D., Between
441 Properties of Alachua, Ltd., a Florida limited partnership

of the County of Alachua, State of Florida, grantor, and
Alachua Development Co., LLC, a Florida limited liability company
whose Federal Tax I.D. Number is 51-0543569 and whose Document Number
issued by the State of Florida is L05000047244
whose address is: 16469 Bridlewood Circle, Delray Beach, FL 33445

of the County of Palm Beach, State of Florida, grantee.

Witnesseth that the GRANTOR, for and in consideration of the sum of

-----TEN DOLLARS (\$10)----- DOLLARS,
and other good and valuable consideration to GRANTOR in hand paid by GRANTEE, the receipt whereof is hereby acknowledged, has
granted, bargained and sold to the said GRANTEE and GRANTEE'S heirs, successors and assigns forever, the following described land, situate,
lying and being in the County of Alachua State of Florida to wit:
See Exhibit "A" attached hereto.

SUBJECT TO THE FOLLOWING:

- A. Zoning restrictions, prohibitions and other requirements imposed by governmental authority;
- B. Restrictions and matters appearing on the plat and/or common to the subdivision;
- C. Taxes for the year 2005 and subsequent years.

THE REASON FOR INSERTING THE FEDERAL TAX IDENTIFICATION NUMBER AND THE DOCUMENT NUMBER ISSUED BY THE STATE OF FLORIDA IS TO AVOID CONFUSION BETWEEN THE NAME OF THE GRANTEE NAMED HEREIN WITH ANY OTHER LIMITED LIABILITY COMPANY OF THE SAME OR SIMILAR NAME.

and the grantor does hereby fully warrant the title to said land, and will defend the same against lawful claims of all persons whomsoever.

In Witness Whereof, the grantor has hereunto set its hand and seal the day and year first above written.

Signed, sealed and delivered in our presence:

441 Properties of Alachua, Ltd., a
Florida limited partnership

By: 441 Management, Inc., a Florida
corporation, GENERAL PARTNER

Mariene Pendergast
Printed Name: Mariene Pendergast
Witness

By: James W. Shaw, President (Seal)
P.O. Address: P.O. Box 1990, Alachua, FL 32616

Darryl J. Tompkins
Printed Name: DARRYL J. TOMPKINS
Witness



STATE OF Florida
COUNTY OF Alachua

The foregoing instrument was acknowledged before me this 12th day of July, 2005 by
James W. Shaw, President of 441 Management, Inc., a Florida corporation
and a general partner of 441 Properties of Alachua, Ltd., a Florida
limited partnership, on behalf of the corporation and the partnership
he is personally known to me or he has produced his Florida driver's license as identification.



Mariene Pendergast
My Commission DD248314
Expires September 09 2007

Mariene Pendergast
Printed Name: Mariene Pendergast
Notary Public
My Commission Expires:

EXHIBIT A

PARCEL I:

A TRACT OF LAND SITUATED IN SECTIONS 10 AND 15, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA SAID TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCE AT THE NORTHEAST CORNER OF THE AFOREMENTIONED SECTION 15, TOWNSHIP 8 SOUTH, RANGE 18 EAST FOR THE POINT OF REFERENCE AND RUN S.89°25'30"W., ALONG THE NORTH LINE OF SAID SECTION 15 AND ALONG THE NORTH LINE OF HITCHCOCK'S ADDITION TO THE CITY OF ALACHUA AS RECORDED IN PLAT BOOK "F", PAGE 18 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA, A DISTANCE OF 1320.00 FEET TO THE NORTHWEST CORNER OF LOT 10 OF SAID HITCHCOCK'S ADDITION AND THE TRUE POINT OF BEGINNING; THENCE RUN S.00°36'00"E., ALONG THE WEST LINE OF SAID HITCHCOCK'S ADDITION AND ITS SOUTHERLY EXTENSION, A DISTANCE OF 1080.60 FEET TO THE NORTHEASTERLY RIGHT OF WAY LINE OF U.S. HIGHWAY NO. 441 (A.K.A. STATE ROAD NO. 20 AND 25); THENCE RUN NORTHWESTERLY, ALONG SAID NORTHEASTERLY RIGHT OF WAY LINE, A DISTANCE OF 84.84 FEET MORE OR LESS TO A BOUNDARY CORNER OF THE CERTAIN TOTAL TRACT OF LAND AS DESCRIBED IN THREE PARCELS WITHIN THE WARRANTY DEED RECORDED IN OFFICIAL RECORD BOOK 1735, PAGES 1740 THROUGH 1743 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA, SAID TOTAL TRACT OF LAND BEING HEREINAFTER REFERRED TO AS PARCEL "A"; THENCE RUN NORTHERLY, WESTERLY, AND SOUTHERLY, ALONG THE BOUNDARY LINES OF SAID PARCEL "A" WITH THE FOLLOWING SIX (6) COURSES: N.36°15'17"E., 29.82 FEET; N.00°36'00"W., 837.57 FEET; N.53°44'43"W., 395.00 FEET; S.36°15'17"W., 445.15 FEET; S.43°58'53"W., 32.06 FEET; S.11°15'41"E., 51.00 FEET TO A NORTHWESTERLY CORNER OF THAT CERTAIN PARCEL OF LAND AS DESCRIBED IN THE WARRANTY DEED RECORDED IN OFFICIAL RECORD BOOK 2002, PAGE 111 OF SAID PUBLIC RECORDS, SAID PARCEL OF LAND BEING HEREINAFTER REFERRED TO AS PARCEL "B"; THENCE RUN SOUTHWESTERLY, ALONG THE WESTERLY BOUNDARY LINE OF SAID PARCEL "B" WITH A CURVE CONCAVE SOUTHEASTERLY, SAID CURVE HAVING A RADIUS OF 264.50 FEET, THROUGH AN ARC ANGLE OF 42°29'02", AN ARC DISTANCE OF 196.12 FEET TO THE END OF SAID CURVE; THENCE RUN S.36°15'17"W., ALONG SAID WESTERLY BOUNDARY LINE OF PARCEL "B", A DISTANCE OF 10.00 FEET TO THE AFOREMENTIONED NORTHEASTERLY RIGHT OF WAY LINE OF U.S. HIGHWAY NO. 441; THENCE RUN N.53°47'36"W., ALONG SAID NORTHEASTERLY RIGHT OF WAY LINE A DISTANCE OF 327.25 FEET TO THE BEGINNING OF A CURVE CONCAVE SOUTHERLY, SAID CURVE HAVING A RADIUS OF 2932.77 FEET; THENCE RUN NORTHWESTERLY, ALONG SAID RIGHT OF WAY LINE AND WITH SAID CURVE THROUGH AN ARC ANGLE OF 05°56'26", AN ARC DISTANCE OF 304.08 FEET (CHORD BEARING AND DISTANCE OF N.56°23'07"W., 303.94 FEET RESPECTIVELY) TO THE INTERSECTION OF SAID RIGHT OF WAY LINE WITH THE WEST LINE OF THE NORTHEAST 1/4 OF SAID SECTION 15; THENCE RUN N.01°00'53"E., ALONG SAID WEST LINE, A DISTANCE OF 100.65 FEET TO THE NORTHWEST CORNER OF SAID NORTHEAST 1/4 OF SECTION 15; THENCE RUN N.01°00'53"E., ALONG THE WEST LINE OF THE SOUTHEAST 1/4 OF THE AFOREMENTIONED SECTION 10, TOWNSHIP 8 SOUTH, RANGE 18 EAST, A DISTANCE OF 2360.55 FEET; THENCE RUN S.88°30'19"E., A DISTANCE OF 1324.77 FEET TO THE EAST LINE OF THE WEST 1/2 OF SAID SOUTHEAST 1/4 OF SECTION 10; THENCE RUN S.01°01'05"W., ALONG SAID EAST LINE OF THE WEST 1/2 OF THE SOUTHEAST 1/4, A DISTANCE OF 2311.39 FEET TO THE TRUE POINT OF BEGINNING.

ALSO: PARCEL II

BLOCKS 15, 16, 17, 20, 21, 22, 23 AND ALSO LOTS 1 AND 2 OF BLOCK 26 AND ALSO LOTS 1 AND 2 OF BLOCK 27 ALL OF ALACHUA REALTY COMPANY'S ADDITION TO ALACHUA AS PER PLAT THEREOF RECORDED IN PLAT BOOK "A", PAGE 100 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA.

LESS: ALL OF CENTURY OAKS, ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK "U" PAGE 59, OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA.

ALSO LESS: PARCEL NO. 5 OF "CENTURY OAKS" AS RECORDED IN OFFICIAL RECORDS BOOK 2203, PAGE 503 AND PARCEL NO. 8 OF "CENTURY OAKS" AS RECORDED IN OFFICIAL RECORDS BOOK 2205, PAGE 591, OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA.

INSTRUMENT # 2152178

2 PGS



2018 Roll Details — Real Estate Account At Unassigned Location RE

Print this page

Real Estate Account #03067 000 000



Parcel details



Latest bill



Full bill history

2018

2017

2016

2015

...

2002

PAID

PAID

PAID

PAID

PAID



Get Bills by Email

PAID 2018-11-30 \$90.98
Receipt #18-0042917

Owner: CAIN, WALLACE R
PO BOX 100
ALACHUA, FL 32616-0100
Situs: Unassigned Location RE

Account number: 03067 000 000
Alternate Key: 1011604
Millage code: 1700
Millage rate: 22.5620

Assessed value: 4,200
School assessed value: 4,200
Unimproved land value: 4,200

[View larger map](#)



Location is not guaranteed to be accurate.

Property Appraiser

2018 Annual bill



[View](#)

Ad valorem: \$94.77
Non-ad valorem: \$0.00
Total Discountable: 94.77
No Discount NAVA: 0.00
Total tax: \$94.77

Legal description

N 330 FT M/L OF THE NW1/4 OF THE SE1/4 OR 2094/1551
Location

Book, page, item: 2094-1551-
Geo number: 10-08-18-03067000000
Range: 18
Township: 08
Section: 10
Neighborhood: 233200.00
Use code: 06500
Total acres: 11.570





2018 Roll Details — Real Estate Account At Unassigned Location RE

Print this page

Real Estate Account #03067 005 000



Parcel details



Latest bill



Full bill history

2018

2017

2016

2015

...

2002

PAID

PAID

PAID

PAID

PAID

Apply for the 2019 Installment Payment Plan



Get Bills by Email

PAID 2018-11-30 \$914.68

Receipt #18-0042917

Owner: CAIN, WALLACE R & MARY H

PO BOX 100

ALACHUA, FL 32616-0100

Situs: Unassigned Location RE

Account number: 03067 005 000

Alternate Key: 1011616

Millage code: 1700

Millage rate: 22.5620

Assessed value: 41,500

School assessed value: 41,500

Unimproved land value: 36,600

View larger map



Location is not guaranteed to be accurate.

Property Appraiser

2018 Annual bill



View

Ad valorem: \$936.32

Non-ad valorem: \$16.47

Total Discountable: 952.79

No Discount NAVA: 0.00

Total tax: \$952.79

Legal description

W1/2 OF NE1/4 SEC & S1/2 OF NE1/4 OF NE1/4 (LESS COM NW COR OF NE1/4 E 629.85 FT S 1269.47 FT POB S 86 DEG E 275.50 FT S 3 DEG W 316.23 FT N 86 DEG W 275.50 FT N 3 DEG E 316.23 FT TO POB PER OR 1969/ 1895) (LESS MINERAL RIGHTS) OR 1879/795

Location

Book, page, item: 1879-795-

Geo number: 10-08-18-03067005000

Range: 18

Township: 08

Section: 10

Neighborhood: 233200.00

Use code: 06500

Total acres: 100.000





2018 Roll Details — Real Estate Account At 17002 NW COUNTY RD 241

Print this page

Real Estate Account #03067 005 001



Parcel details



Latest bill



Full bill history

2018

PAID

2017

PAID

2016

PAID

2015

PAID

...

2002

PAID

Apply for the 2019 Installment Payment Plan



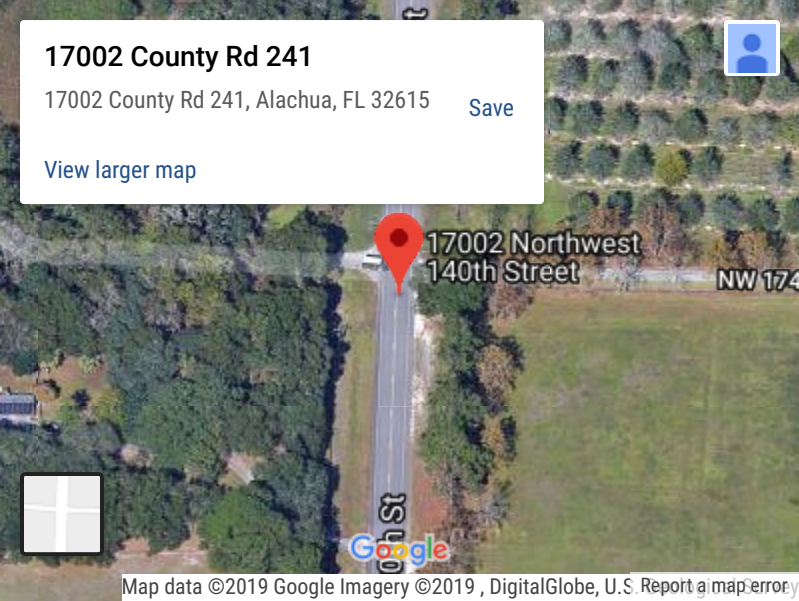
Get Bills by Email

PAID 2018-11-30 \$4,557.73
Receipt #18-0042917

Owner: CAIN, WALLACE R & MARY H
PO BOX 100
ALACHUA, FL 32616-0100
Situs: 17002 NW COUNTY RD 241

Account number: 03067 005 001
Alternate Key: 1011617
Millage code: 1700
Millage rate: 22.5620

Assessed value: 188,760
School assessed value: 202,400
Unimproved land value: 10,000



Property Appraiser



View

2018 Annual bill

Ad valorem: \$4,357.89
Non-ad valorem: \$389.75
Total Discountable: 4747.64
No Discount NAVA: 0.00
Total tax: \$4,747.64

Legal description

COM NW COR OF NE1/4 SEC N 88 DEG E 629.85 FT S 1269.47 FT TO POB S 86 DEG E 275.50 FT S 3 DEG W 316.23 FT N 86 DEG W 275.50 FT N 3 DEG E 316.23 FT POB OR 1969/1895
Location

Book, page, item: 1969-1895-
Geo number: 10-08-18-03067005001
Range: 18
Township: 08
Section: 10
Neighborhood: 233200.00
Use code: 00100
Total acres: 2.000





2018 Roll Details — Real Estate Account At Unassigned Location RE

Print this page

Real Estate Account #03067 006 000

Parcel details

Latest bill

View/Print full bill history

Pay All: \$219.59

2019	2018	2017	2016	...	2002
\$219.59 due	PAID	PAID	PAID		PAID

Apply for the 2020 Installment Payment Plan

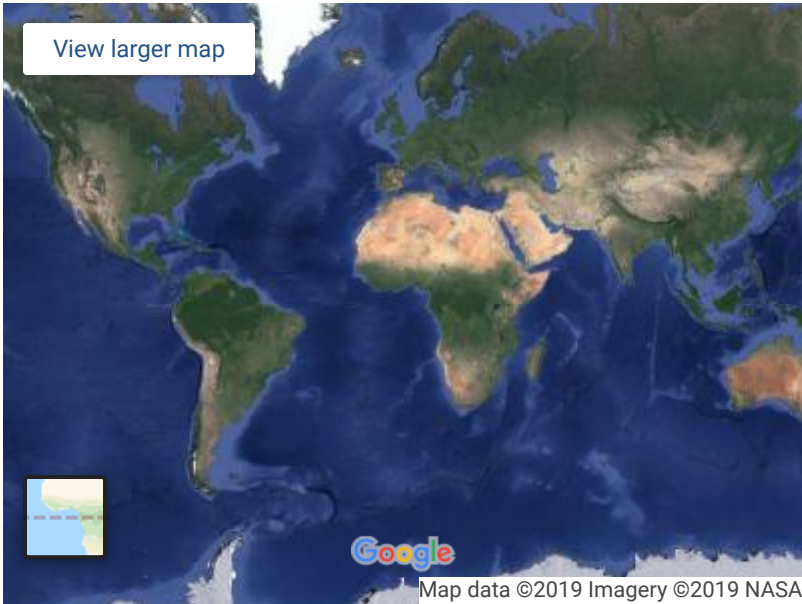
Get Bills by Email

PAID 2018-12-05 \$216.60
Effective 2018-11-30
Receipt #18-0048027

Owner: ALACHUA DEVELOPMENT CO LLC
16469 BRIDLEWOOD CIR
DELRAY BEACH, FL 33445
Situs: Unassigned Location RE

Account number: 03067 006 000
Alternate Key: 1011618
Millage code: 1700
Millage rate: 22.5620

Assessed value: 10,000
School assessed value: 10,000
Unimproved land value: 10,000



Location is not guaranteed to be accurate.

Property Appraiser

2018 Annual bill

View

Ad valorem: \$225.62
Non-ad valorem: \$0.00
Total Discountable: 225.62
No Discount NAVA: 0.00
Total tax: \$225.62

Legal description

COM NE COR SEC 15-8-18 W 1320 FT POB S 1080.60 FT NWLY ALG R/W 84.84 FT M/L N 36 DEG E 29.82 FT N 837.57 FT N 53 DEG W 395 FT S 36 DEG W 445.15 FT S 43 DEG W 32.06 FT S 11 DEG E 51 FT SWLY ALG CURVE 196.12 FT S 36 DEG W 10 FT N 53 DEG W 327.25 FT NWLY ALG CURVE 304.08 FT N 100.65 FT TO THE NW COR OF N NE1/4 SEC 15 N 2360.55 FT E 1324.77 FT S 2311.39 FT POB ALSO BKS 15 16 17 20 21 22 & 23 LOTS 1 & 2 OF BK 26 LOTS 1 & 2 BK 27 ALACHUA REALTY CO ADDN TO ALACHUA PB A-100 (LESS PARCEL K/A CENTURY OAKS UNREC'D S/D LOT 5 PER OR 2203/0503) (LESS PARCEL K/A CENTURY OAKS UNREC'D S/D LOT 8 PER OR 2205/0591) LESS CENTURY OAKS S/D PB U-59)(LESS BAYWOOD PH 1-A PER PB 28 PG 10) (LESS Location

Book, page, item: 3168-1293-
Geo number: 10-08-18-03067006000
Range: 18
Township: 08
Section: 10
Neighborhood: 233200.50
Use code: 05500
Total acres: 32.400



Christopher Gmuer

From: Regulatory-Support@srwmd.org
Sent: Friday, May 24, 2019 6:16 PM
To: sayed@moukhtara.com; Christopher Gmuer; Regulatory-Support@srwmd.org
Cc: SR-Regulatory-Mail@sjrwmd.com; Regulatory-Support@srwmd.org
Subject: SRWMD(EP): Confirmation of On-line ERP application submittal: Submittal Confirmation Number 245819.

Thank you for your online application. Applicant(s): Sayed Moukhtara
Project Name: Tara Forest East Subdivision
Your submittal confirmation number is 245819.
Permit number: 234749-1

You can print an invoice [here](#).

You will receive a receipt confirmation email when your application is accepted for processing.* Until then, please include the project name and confirmation number listed above on any correspondence with the District regarding this application.

Please address all email correspondence to Regulatory-Support@srwmd.org

*** Important Notice:**

In order for the District to consider your electronic application, all documents must be in a format that the District can store and print. If the documents are not in the correct format, then the District cannot consider the application as received. Upon the District's successful receipt of the electronic application, the District will send you a confirmation email with the application number and a summary of the information received by the District.

Please note: As of October 1, 2017, the District will no longer send a copy of an application to the U.S. Army Corps of Engineers. You will need to apply separately to the Corps using the appropriate federal application form for activities under federal jurisdiction. Please see the Corps' Jacksonville District Regulatory Division Sourcebook for more information about federal permitting. Please call your local Corps office if you have questions about federal permitting.

Any documents, calculations, drawings, or plans (hereafter collectively referred to as 'electronic files') submitted electronically, which must be signed, sealed, and dated by an appropriate registered professional as required by Florida Statutes, must be signed and sealed in accordance with applicable rules 61G15-23.003, 61G16-2.005, 61G17-7.0025, or 61G10-11.010, F.A.C.

The electronic files listed below were attached to your application.

We provide two ways for you to sign and seal your electronic documents. You can generate a signature document, which you can sign and send in, or you can digitally sign the files. If you submitted digitally signed files, you do not need to generate the signature document. (For information about digitally signing files, select Digital signatures from the E-Permitting Help menu.)

1. Click Applications Sent - Pending Acceptance on the ERP, or CUP tab.
2. Click Sign & Seal or Add a document in your application's Document Management column to see the files submitted with the application.

3. Click on the Generate Signature File radio button.
4. Enter the professional's name, type of professional registration, and license number.
5. Check the box(es) next to the file(s) to be signed.
6. Click the Submit button.
7. The system will create a form with the professional's information and a list of the files selected (name, SHA number, description).
8. Print, sign and crimp that form, and send it to the District.

If you require assistance, please call the District at 386-362-1001

File Name: 18_0046_C_000_COVER.pdf

Size: 3380582 bytes

Checksum: B6579766E5F38811CE347EB84FBD94E687F5862F

File Name: 18_0046_C_005_VICINITY_MAP.pdf

Size: 181640 bytes

Checksum: 195C51014928DAE46B9612DB6DDD2723954C9850

File Name: 2018_09_01_TFE_Geotechnical_Report_S_S.PDF

Size: 3344463 bytes

Checksum: B4C21768B64AC45B421CC5F570E1DA35852838BF

File Name: 2019_05_03_TFE_SRWMD_4A_Signed.pdf

Size: 616062 bytes

Checksum: AFDF3BB901E5601EA662F0C3F3A7C619A7D007E7

File Name: 2019_05_03_TFE_SRWMD_4B_Signed.pdf

Size: 556355 bytes

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File Name: 2019_05_20_Tara_Forrest_East___Stormwater_Management_Report.pdf

Size: 7218810 bytes

Checksum: A76A39F712AB3E7945AE150E59CBC1AD0CA35024

File Name: 2019_05_24_Tara_Forrest_East___Plans.pdf

Size: 22650842 bytes

Checksum: 3DA407A5665404315E91DE71C86A053C7B0D9297

File Name: Application_pdf

Size: -1 bytes

Checksum: null

Application for Individual and Conceptual Approval Environmental Resource Permit and Authorization to Use State-Owned Submerged Lands

Florida Department of Environmental Protection/
Water Management Districts

Effective June 1, 2018



Instructions for Use of This Form:

This form is designed to assist you in submitting a complete application. All applications must include Section A- General Information for All Activities. Sections B through H list typical information that is needed based on the proposed activities and are only required as applicable. Part 1-C of Section A will guide you to the correct sections needed based on your proposed activities. Applicants are advised to consult Chapter 62-330, F.A.C., and the Environmental Resource Permit Applicant's Handbooks Volumes I and II for information regarding the ERP permitting process and requirements while preparing their application. Internet addresses for Chapter 62-330, F.A.C., and the Applicant's Handbook, Agency contact information, and additional instructions for this form can be found in Attachment 1.

What Sections of the Application Must I Fill Out?

Type of Activity	Section A	Section B	Section C	Section D	Section E	Section F	Section G	Section H
Fill in wetlands or waters for a single family residence?	Y	Y	N	N	N	N	N	N
Docks, shoreline stabilization, seawalls associated with a single family residence?	Y	Y	N	N	N	Y, as needed	N	N
Wetland impacts (other than association with an individual residence)?	Y	N	Y	N	N	N	N	N
Boating facilities, a marina, jetty, reef, or dredging?	Y	N	Y	Y	N	Y, as needed	N	N
Any work on state owned submerged land?	Y	N	Y	N	N	Y	N	N
Construction of a stormwater management system?	Y	N	Y, as needed	N	Y	N	N	N
Constructing a mitigation bank?	Y	N	Y	N	Y, as needed	N	Y	N
Creating a mine?	Y	N	Y, as needed	N	N	N	N	Y

Note- if you are required to provide Section B, then you do not have to provide any other Sections, unless the activities are on state-owned submerged lands. In that case, Section F will also be required.

If you have any questions, or would like assistance completing this form, please contact the staff of the nearest office of either the Florida Department of Environmental Protection (DEP) or a Water Management District (WMD) (see Attachment 2).

Section A: General Information for All Activities

Part 1: Name, Application Type, Location, and Description of Activity

A. Name of project, including phase if applicable: **Tara Forest East Subdivision**

B. This is for (check all that apply):

- ☒ Construction or operation of **new** works, activities and/ or a stormwater management system
- ☐ **Conceptual Approval** of proposed works, activities and/ or a stormwater management system
- ☐ Modification or Alteration of **existing** works activities and / or a stormwater management system. Provide the existing DEP or WMD permit #, if known: _____ Note: Minor modifications do not require completion of this form, and may instead be requested by letter in accordance with section 6.2 of Applicant's Handbook Volume I.
- ☐ **Maintenance or repair** of works, activities and/ or stormwater management system previously permitted by the DEP or WMD. Provide existing permit #, if known: _____
- ☐ Abandonment or removal of works, activities and/ or stormwater management system Provide existing DEP or WMD permit #, if known: _____
- ☐ Operation of an **existing unpermitted** work, activity, and/or stormwater management system.
- ☐ Construction of additional phases of a permitted work, activity, or system.
Provide the existing DEP or WMD permit #, if known: _____

C. **List the type of activities proposed. Check all that apply, and provide the supplemental information requested in each of the referenced application sections.** Please also reference Applicant's Handbooks I and II for the type of information that may be needed.

- ☐ Activities associated with one single-family residence, duplex, triplex, or quadruplex that do not qualify for an exemption or a Noticed General Permit: **Provide the information requested in Section B. Do not complete Section C.**
- ☐ Activities within wetlands or surface waters, or within 25 feet of a wetland or surface water, (not including the activities associated with an individual single-family residence). *Examples include dredging, filling, outfall structures, docks, piers, over-water structures, shoreline stabilization, mitigation, reclamation, restoration/ enhancement.* **Provide the information requested in Section C.**

- ☐ Activities within navigable or flowing surface waters such as a multi-slip dock or marina, dry storage facility, dredging, bridge, breakwaters, reefs, or other offshore structures: **In addition to Section C, also provide the information requested in Section D.**
- ☐ Activities that are (or may be) located within, on or over state-owned submerged lands (See Chapter 18-21, F.A.C. <https://www.flrules.org/gateway/ChapterHome.asp?Chapter=18-21>): **In addition to Section B or C, also provide the information requested in Section F**
- ☒ Construction or alteration of a stormwater management system serving residential, commercial, transportation, industrial, agricultural, or other land uses, or a solid waste facility (excluding mines that are regulated by DEP). **Provide the information requested in Section E.**
- ☐ Creation or modification of Mitigation Bank (refer to Chapter 62-342, F.A.C. <https://www.flrules.org/gateway/ChapterHome.asp?Chapter=62-342>): **Provide the information requested in Section G.**
- ☐ Mines (as defined by in Section 2.0 of Applicant's Handbook Volume I) that are regulated by the DEP: **Provide the information requested in Section H.**
- ☐ Other, describe: _____ Please contact the Agency to determine which additional sections of the application are needed. See Attachment 2 for Agency contacts.
- D. Describe in general terms the proposed project, system, works, or other activities. For permit modifications, please briefly describe the changes requested to the permit: **Development of a 320 unit subdivision in phases**
- E. Project/Activity Street/Road Address or other location (if applicable): **17002 NW CR241**
City: **Alachua** County(ies)**Alachua** Zip: **32615**
- Note: For utility, road, or ditch/canal activities, provide a starting and ending point using street names and nearest house numbers or provide length of project in miles along named streets or highways.
- F. Project location map and Section, Township, and Range information (use additional sheets if needed):
Please attach a location map showing the location and boundaries of the proposed activity in relation to major intersections or other landmarks. The map should also contain a north arrow and a graphic scale; show Section(s), Township(s), and Range(s); and must be of sufficient detail to allow a person unfamiliar with the site to find it.
Land Grant name, if applicable:
- Section(s): 10 Township: 8S Range: 18E
- G. Latitude (DMS) **29.810771** Longitude (DMS) **82.500287** (Taken from central location of the activity). Explain source for obtaining latitude and longitude (i.e. U.S.G.S. Quadrangle Map, GPS, online resource): **Google Maps**

H. Tax Parcel Identification Number(s): **03067-000-000,03067-005-000,03067-005-001**

[Number may be obtained from property tax bill or from the county property appraiser's office; if on multiple parcels, provide multiple Tax Parcel Identification Numbers]

I. Directions to Site (from major roads; include distances and landmarks as applicable): **From City of Alachua go north on CR241 and site will be on your left just before NW 172nd Ave**

J. Project area or phase area: **113.49** acres

K. Name of waterbody(ies) (if known) in which activities will occur or into which the system will discharge:

Receiving Waterbody	Class Type	Outstanding Florida Water	Aquatic Preserve
Mill Creek	III Fresh	no	no

The following questions (L-N) are not applicable to activities related to a single-family residence, including private single-family residential docks, piers, seawalls or boat ramps.

L. Is it part of a larger plan of development or sale? ☐ yes ☒ no

M. Impervious or semi-impervious area excluding wetlands and other surface waters (if applicable):
39 acres or square feet

N. Volume of water the system is capable of impounding (if applicable):

Normal Pool: 0 acre-feet. Depth 0 ft.

Maximum Pool: 55.5 acre-feet. Depth ft.

Part 2: Supplemental Information, and Permit History

A. Is this an application to modify an existing Environmental Resource Permit, or to construct or implement part of a multi-phase project, such as a project with a Conceptual Approval permit? ☐

Yes ☒ No *If you answered "yes", please provide permit numbers below:*

AGENCY	DATE	PERMIT/ APPLICATION NO.	PROJECT NAME

B. Indicate if there have been any **pre-application meeting(s)** with the DEP, WMD, or delegated local government, or other discussions, meetings, or coordination with other stakeholders or agencies about the proposed project, system or activity. If so, please provide the date(s), location(s) of the meeting, and the name(s) of Agency staff that attended the meeting(s):

AGENCY	DATE	LOCATION	MEETING ATTENDEES

- C. **Attach a depiction (plan and section views), which clearly shows the works or other activities proposed to be constructed.** Use multiple sheets, if necessary, a scale sufficient to show the location and type of works, and include a north arrow and a key to any symbols used. **Specific information to be included in the plans is based on the activities proposed and is further described in Sections B-H.** However, supplemental information may be required based on the specific circumstances or location of the proposed works or other activities.
- D. **Processing Fee: Please submit the application processing fee along with this application form and supplemental information.** Processing fees vary based on the size of the activity, the type of permit applied for, and the reviewing Agency. Please reference Appendix D of Applicant's Handbook Volume 1 to determine the appropriate fee.

Part 3: Applicant and Associated Parties Information

Instructions: Please complete the following sections. For corporations, list a person who is a registered agent or officer of the corporation who has the legal authority to bind the corporation.

A. Applicant (Entity Must Have Sufficient Real Property Interest)		
☐ This is a Contact Person for Additional Information		
Name: Last: Moukhtara	First: Sayed	Middle:
Title:	Company: Tara Forest, LLC	
Address: 7717 NW 20th Ln		
City: Gainesville	State: FL	Zip: 32605
Home Telephone:		Work Telephone:
Cell Phone: (352) 278-5317		
E-mail Address: sayed@moukhtara.com		
Correspondence will be sent via email. Check here to receive correspondence via US Mail: ☐		
B. Land Owner(S) (If Different or in Addition to Applicant)		
☐ Check here if land owner is also a co-applicant		
Name: Last: Moukhtara	First: Sayed	Middle:
Title:	Company: Tara Forest, LLC	
Address: 7717 NW 20th Ln		
City: Gainesville	State: FL	Zip: 32605
Home Telephone:		Work Telephone:
Cell Phone: (352) 278-5317		
E-mail Address: sayed@moukhtara.com		
Correspondence will be sent via email. Check here to receive correspondence via US Mail: ☐		

C. Operation and Maintenance Entity (see Applicant's Handbook I, Section 12.3)			
Entity Name:	Contact: Last: Moukhtara	First: Sayed	Middle:
Title:	Company: Tara Forest, LLC		
Address: 7717 NW 20th Ln			
City: Gainesville	State: FL	Zip: 32605	
Home Telephone:		Work Telephone:	
Cell Phone: (352) 278-5317			
E-mail Address: sayed@moukhtara.com			
Correspondence will be sent via email. Check here to receive correspondence via US Mail: ☐			

D. Co-Applicant (If Different or In Addition to Applicant and Owner)		
Name: Last:	First:	Middle:
Title:	Company:	
Address:		
City:	State:	Zip:
Home Telephone:		Work Telephone:
Cell Phone:		
E-mail Address:		
Correspondence will be sent via email. Check here to receive correspondence via US Mail: ☐		

E. Registered Professional Consultant ☒ This is a contact person for additional information		
Name: Last: Gmuer	First: Christopher	Middle: A
Title:	Company: Gmuer Engineering	
Address: 2603 NW 13th ST Box 314		
City: Gainesville	State: FL	Zip: 32609
Home Telephone:		Work Telephone: (352) 281-4928
Cell Phone:		
E-mail Address: chrisg@gmuereng.com		
Correspondence will be sent via email. Check here to receive correspondence via US Mail: ☐		

F. Environmental Consultant ☐ This is a contact person for additional information		
Name: Last:	First:	Middle:
Title:	Company:	
Address:		
City:	State:	Zip:
Home Telephone:		Work Telephone:

Cell Phone:		
E-mail Address:		
Correspondence will be sent via email. Check here to receive correspondence via US Mail: ☐		
G. Agent Authorized to Secure Permit (If Different from Consultant) ☐ This is a contact person for additional information		
Name: Last:	First:	Middle:
Title:	Company:	
Address:		
City:	State:	Zip:
Home Telephone:		Work Telephone:
Cell Phone:		
E-mail Address:		
Correspondence will be sent via email. Check here to receive correspondence via US Mail: ☐		

If necessary, please add additional pages for other contacts and property owners related to this project.

H. Real Property Interest

- a. Permits are only issued to entities having sufficient real property interest as described in Section 4.2.3(d) of Applicant's Handbook Volume I. **Please attach evidence of the applicant's real property interest over the land upon which the activities subject to the application will be conducted, including mitigation areas (if applicable).** Refer to Sections 4.2.3(d)-(e) for sufficient real property interest documentation.
- b. For activities that require a recorded notice in accordance with rule 62-330.090(7), F.A.C., please provide either the complete legal description of the property or a copy of the pages of the document recorded in the public records that contains the complete legal description. If the land upon which the proposed activities are to occur is not owned by the applicant, the applicant must also provide copies of any right-of-way, leases, easements, or other legal agreement which authorizes the applicant to perform the activities on those lands.

Additional Addresses

Applicant	
------------------	--

Land Owner	
-------------------	--

Operation and Maintenance Entity	
---	--

	,
--	---

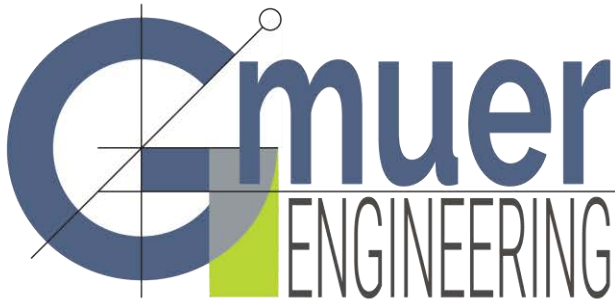
Registered Professional Consultant	,
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Environmental Consultant	,
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Agent	,
--------------	---

Compliance Entity	,
--------------------------	---

Consultant	,
-------------------	---



2603 NW 13th St, Box 314
Gainesville, FL 32609
Ph. (352) 281-4928

gmuereng.com

May 21, 2019

Ron Q. Folmer, C.F.M.
Senior Engineering Technician
Alachua County Public Works
5620 NW 120th Lane
Gainesville, FL 32653

Re: Tara Forest East – Single Family Subdivision – ROW Connection Permit

This package is submitted to apply for a Right-of-Way Connection for the above referenced project located at 17002 NW CR241, Alachua, FL / TP# 03067-005-000, 03067-005-001, 03067-000-000 / 113.49 acres. The 320-unit single-family development proposes a driveway connection to CR241 which is a Class III per ULDC 407.129 and the applicable requirements of ULDC Sec. 407.133 and Sec. 407.134 have been included in the plans and reports listed below.

Attachments (3 sets):

- Right-of-Way Connection Permit Application (Signed)
- Revised Traffic Memo
- Roadway Connection Plans (11x17)

Please let us know if you need any additional information.

Sincerely,
Gmuer Engineering, LLC

A handwritten signature in blue ink, appearing to read 'Christopher A Gmuer'.

Christopher A Gmuer, PE, President

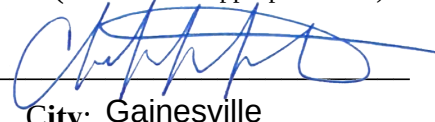


RIGHT-OF-WAY CONNECTION PERMIT

Public Works Permit No.: _____

Segment No. _____
Application Date: May 2, 2019

Type of Connection: ☐ Curb & Gutter Apron, ☐ Driveway & Sidewalk, ☒ Rural Driveway, ☐ Sidewalk,
☐ Drainage, ☐ Easement Road (multiple lots), ☐ Verify existing driveway,
☐ Reconstruct or pave existing driveway, ☐ Common Drive (2 Lots)
☐ Common Drive (via Lot Split, Using Private Easement, Variance - (Please check appropriate box)
☐ Bikepath, ☐ Temporary

(A) **Owner/Permittee:** Gmuer Engineering, LLC **Signature:** 
Mailing Address: 2603 NW 13th ST Box 314 **City:** Gainesville
State: FL **Zip Code:** 32609 **Phone No.:** (352) 593-3134

(B) **Contractor:** N/A **Contractor's Phone No.:** (N/A)

(C) **Property Description:** **Parcel No.:** 03067-5-0, 03067-5-1, 03067-0-0, **Building Permit No.:** N/A
Section: 10, **Township:** 8 S, **Range:** 18 E, **Grant:** _____
Subdivision: Tara Forest East (Proposed Subdivision) **Lot No.:** N/A

Specific Directions (from nearest major road intersection): 3,900 ft North on CR241 from SR235
and CR241

911 Address: TBD

(D) **Type of Building Construction:** ☐ Site Built Home ☐ Mobile Home ☐ Duplex
☒ Subdivision, number of lots: 320 ☐ Multi-Family, number of units: _____

(E) **Estimated Number of Vehicle Trips Per Day:** CR241 2,122 AADT (see report for full AADT)

(F) **Normal Vehicle Usage:** ☒ Auto ☒ Truck ☐ Farm Trailers ☐ Semi-Trucks

(G) **Requested Date for Location Approval:** _____

OFFICE/INSPECTOR USE

(H) **Location Inspected By:** _____ **Date:** _____ ☐ Accepted, ☐ Rejected

(I) **Specified Construction or reason for Permit Rejection:** _____

(J) **Final Approval Date:** _____ **By:** _____

(K) **Building Department Notified (Date):** _____ **By:** _____

(L) ☐ Class I ☐ Class I (with sidewalk) ☐ Class II
☐ Class III ☐ Class IV
☐ Class III with Auxiliary Lanes ☐ Class IV with Auxiliary Lanes

Completion of this permit binds applicant to specific rights and privileges of the permittee as described in the Public Works Department Access Construction Standards and Procedures, available upon request.

Fee Information: Amount Paid: _____ Date: _____ Receipt #: _____ Posted By: _____

ALACHUA COUNTY BOARD OF COUNTY COMMISSIONERS
PUBLIC WORKS DEPARTMENT
CUSTOMER NAME & ADDRESS

Tara Forest

Receipt # PW M086697

Date: 5-21-19

Cash/Check# 010002

VISA MC DISCOVER

Fees and Charges For: Tara Forest East

CODE	DESCRIPTION	AMOUNT
RB	SFH Water Charges Receivable	
DS	SFH Water Deposit	
RF	SFH Reconnection Fee	
RH	WC Cart Exchange	
RI	WC Additional Refuse Fee	
L3	RCC Permit Fees	
W1	Freedom Comm Center Rental Fee	
W04	Soccer Field Lighting Fee	
W09	Soccer Field Lighting Application Fee	
W5	Park Use Commercial Revenue Share	
W4	Freedom Comm Center Concession	
W3	Freedom Comm Center Rental Tax Exempt	
W2	Freedom Comm Center Damage Deposit	
RK	AC Fairgrounds Rental Fee	
RN	AC Fairgrounds Rental Fee Tax Exempt	
RM	AC Fairgrounds Fire Inspection Fee	
RL	AC Fairgrounds Damage Deposit	
W00	Poe Springs Lodge Rental Fee	
W0	Poe Springs Damage Deposit	
W000	Poe Springs Lodge Rental Fee Tax Exempt	

TOTAL AMOUNT RECEIVED: 1,500.00

CODE	DESCRIPTION	AMOUNT
WB	Curb & Culvert Inspections (Driveway)	
W02	Final Site Inspection Fee	1500.00
W02D*	Prepaid Final Site Inspection	
WA	Paving/Draining Inspect Fee (Subdivision)	
W01	Right of Way Utilization Fee	
WX	Record Plat Review Fee	
WV	Plat & Road Vacating	
LT	Franchise Application Fee	
WJ	Copying and Records Research	
FL	Flood Zone Information	
WK	Scrap Metal Sales PW	
WG	Traffic Sign Fees	
WQ	A/R Invoiced: Fleet Charges (Parts, Labor, Commcl)	
ST	FL Sales Tax Collected	
MR*	Misc Revenue	
VZ	A/R Invoiced Traffic Signs	

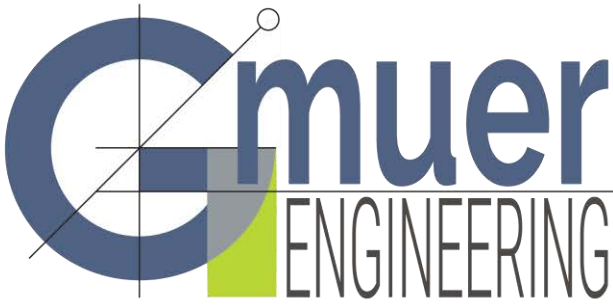
RECEIVED BY: ES

WHITE - Customer

Canary - F&A

PINK - Administration

SCANNED COPY - Division



2603 NW 13th St, Box 314
Gainesville, FL 32609
Ph. (352) 281-4928

gmuereng.com

Neighborhood Meeting

A Neighborhood Meeting will be held to discuss a preliminary plat for a proposed subdivision of land into roughly 340 residential single-family lots. The site is located on TP#03067-005-000 and 03067-005-001 at approximately 17002 NW County RD 241, Alachua, FL.

Date: Saturday, December 1st, 2018

Time: 2:30pm

Place: Alachua Branch Library 14913 NW 140 Street Alachua, FL 32615

Contact: Forrest Eddleton, (352) 593-3159, Gmuer Engineering, LLC

Gmuer Engineering will be holding a workshop to discuss the proposed site plan described above.

Per the City of Alachua Land Development Regulations, the properties are zoned RSF-3 (residential single-family 3) and CC (community commercial district). The CC zoned portion of the property is scheduled to have the zoning change to RSF-3, pending second reading by the Alachua City Commission, on November 19th, 2018. The RSF-3 district is established as a district in which the principal use of land is single-family residential development at a moderate density in areas served by water and sewer systems. The regulations of this district are intended to discourage any use that would substantially interfere with the development of single-family dwellings and that would be detrimental to the quiet residential nature of the district. Complementary uses customarily found in residential zone districts, such as community facilities, religious institutions, parks and playgrounds, and schools, are also allowed. The minimum lot area is 10,000 square feet and the maximum density allowed is three dwelling units an acre.

The purpose of the workshop is to inform neighboring property owners about the nature of the proposal and to seek comments. We look forward to seeing you there.

Pelosi says she has votes to become next speaker

By John Wagner
and Paul Kane
The Washington Post

WASHINGTON — An unbowed House Minority Leader Nancy Pelosi, D-Calif., insisted Thursday that she has the votes to become the chamber's speaker despite opposition from more than a dozen Democrats who want fresh leadership when the party takes control next year.

"I have overwhelming support in my caucus to be speaker of the House," Pelosi told reporters. "I happen to think at this point, I'm the best person for that."

A vote in the Democratic caucus is scheduled for Nov. 28. The full House will vote Jan. 3 to elect a new speaker.

During her remarks, Pelosi touted the size of the Democratic victory in the midterm election, which she called "almost a tsunami." With a few races still to be decided, Democrats are poised to pick up close to 40 seats in the chamber.

She called that "the biggest victory for the Democrats since 1974, when the Watergate babies came in."

At least 17 Democrats oppose Pelosi, setting the stage for an intense battle over who will ascend to one of the most powerful positions in Washington.

After a campaign in which some Democrats prevailed in competitive districts by promising to oppose her, a coalition of incumbents and newly elected members has denied her a smooth path to the speakership.

The defections, if they stand, would leave Pelosi, who has led the Democrats for more than 15 years, several



House Minority Leader Nancy Pelosi, D-Calif., speaks during the Global Climate Action Summit, Sept. 13 in San Francisco. (DAVID PAUL MORRIS/BLOOMBERG)

votes short of the 218 she would need when the full House votes. However, no Democrat has stepped forward to run against her for the job she held from 2007 through 2010.

Rep. Marcia Fudge, D-Ohio, told reporters this week that she's being encouraged to stand for speaker if Pelosi doesn't have the votes.

In an interview with The Washington Post on Thursday, she said she has been taken aback by the support from many of her colleagues for her possible bid.

"Over the last 12 hours, I've been overwhelmed by the amount of support I've received," Fudge said, adding that "probably closer to 30" Democrats have privately signaled that they are willing to oppose Pelosi.

"Things could change rapidly," she said.

Fudge, 66, a former chairman of the Congressional Black Caucus, said she is building a diverse coalition as she considers a run, talking with allies in the CBC, moderate Democrats and newly elected members.

To this point, Pelosi,

78, has received the strong backing of the Congressional Black Caucus.

In a significant boost Thursday, Rep. Karen Bass, D-Calif., whom some have touted as a potential replacement for Pelosi, said in a tweet that she's backing Pelosi for the top leadership post.

Also Thursday, Rep. Bobby Rush, D-Ill., another CBC member, wrote a letter to colleagues praising Pelosi's "insight, fortitude and strategic thinking" and urging support for her speakership bid.

Former Attorney General Eric Holder, an African American who is contemplating a 2020 presidential bid, also voiced support for Pelosi, praising her in a tweet as "an architect of the recent midterm success."

Rep. Seth Moulton, D-Mass., a leader of the resistance to Pelosi, said in an interview with CNN on Thursday that Fudge is "the kind of new leader that we need in this party."

He added: "She's in touch with middle

families are important and that me being here and celebrating that I'm a first is important but that she'll honor it by putting me on critical committees where decisions are made."

There is a scenario in which Pelosi could be elected speaker even if her Democratic support falls short: With the help of Republicans.

President Donald Trump said last week that he thinks Pelosi deserves the job and that he could find some GOP votes for her on the House floor if needed.

Rep. Tom Reed (N.Y.) said that he would be open to supporting Pelosi if she commits in writing to rule changes being sought by the Problem Solvers Caucus, a bipartisan group that he co-chairs.

The rule changes are intended to streamline the process of considering bills with broad bipartisan support on the House floor.

"I'm open to crossing over," Reed said. "However, I think the reality of the day is, they're going to have to do this on their side."

Other Republicans have sounded skeptical about Pelosi drawing Republican votes, given her unpopularity among GOP voters. Asked Wednesday about the prospect of any Republicans supporting Pelosi, Rep. Mark Meadows (N.C.) said: "I doubt it."

In her news conference, Pelosi didn't seem interested in prevailing with the help of Republicans.

"I intend to win the speakership with Democratic votes," she said.

Trump blasts Mueller probe

By John Wagner
The Washington Post

WASHINGTON — President Donald Trump on Thursday lashed out anew at the investigation of special counsel Robert Mueller, calling his team of lawyers "a disgrace to our Nation" and accusing them, without evidence, of threatening witnesses to get answers they want.

Trump's rant, in a pair of morning tweets, came a week after the installation of Matthew Whitaker as acting attorney general, a move many Democrats have said appears designed to curtail Mueller's investigation into possible coordination between Russia and Trump's campaign during the 2016 election.

Trump angrily dismissed a reporter's question about that notion last week and said he had not spoken to Whitaker about the Russia probe before naming him to replace ousted attorney general Jeff Sessions.

Many of Trump's complaints in Thursday's tweets were familiar, but they took on heightened significance with Whitaker now overseeing Mueller's probe, which is also examining whether Trump has obstructed justice.

The tweets also come as Trump spends time with his personal legal team this week to prepare written answers to questions from Mueller's team.

"The inner workings of the Mueller investigation are a total mess," Trump wrote. "They have found no collusion and have gone absolutely nuts. They are screaming and shouting at people, horribly threatening them to come up with the answers they want. They are a disgrace to our Nation and don't care how many lives the ruin."

He continued: "These are Angry People, including the highly conflicted Bob Mueller, who worked for Obama for 8 years. They won't even look at all of the bad acts and crimes on the other side. A TOTAL WITCH HUNT LIKE NO OTHER IN AMERICAN HISTORY!"

In his tweets, Trump misstated Mueller's background. A registered Republican, he was nominated to be FBI director in 2001 by President George W. Bush. In 2011, President Barack Obama gave him his original 10-year term a two-year extension.

Mueller was tapped to be special counsel last year by Deputy Attorney General Rod Rosenstein, who started overseeing the Russia investigation after Sessions recused himself, citing his role in Trump's 2016 presidential campaign.

White House officials have sought in recent days to highlight their continuing cooperation with Mueller's team despite Trump's opinion of the probe.

Speaking to reporters later Thursday, House Speaker Nancy Pelosi, D-Calif., said she considered Trump's tweets to be part of "an all-out campaign to obstruct the Mueller investigation."

During an appearance Thursday morning on CNN, Rep. Jerrold Nadler, D-N.Y., said he is concerned that Trump's description of the "inner workings" of the Mueller investigation could signal that Whitaker is inappropriately sharing details about it with the president.

CHOMP

THE BLOCK

CITY WALL

AT CELEBRATION POINTE

Friday night before each Gators home game, enjoy live music, awesome food and drinks, kids activities, UF celebrities and much more!

Chomp the Block - Friday, November 16

Sponsored by **Palmetto Moon**

6 pm to 10 pm

- Palmetto Moon Grand Opening
- Kid's Activities Hosted by Fun 4 Gator Kids
- Gator Pep Rally

• **Chillula** is a 8 piece band blending the styles of R&B, Funk, Hip-Hop, Soul, Rock, Reggae, & Jazz into a sound that everyone can groove to and is sure to fill the dance floor.

Celebration Pointe is the newest GATOR AIDER BUS LOCATION!

CELEBRATION POINTE

Where Gators Come to Celebrate

CelebrationPointe.com

175, EXIT 384 Archer Road Gainesville, FL

NEWBERRY MAINSTREET FALL FESTIVAL

will be held Saturday, November 17, 2018, 9-4.

There will be a beer/wine garden that will be part of the festival that goes from 12-7p.m.

There will be 7 Food trucks, Tons of fair food and homemade goodies. There will be camel and pony rides, a petting zoo, face painting, balloon animals, and FREE Bounce houses for young and older kids. There will be carnival games, Country musician, Folklore Fiddler, cloggers, dancers, and KISS 105.3 will be there with their Boom box starting at 11:00 a.m. with DJ Brett Douglas will be MC all day and evening long.

This is our biggest festival ever, with over 107 vendors!! Come get your Christmas shopping done. Festival and parking is FREE!!!

PUBLIC NOTICE

A Neighborhood Meeting will be held to discuss a preliminary plat for a proposed subdivision resulting in roughly 340 residential single-family lots. The site is located on TP#03067-005-000 and 03067-005-001 at approximately 17002 NW County RD 241, Alachua, FL.

The meeting will be held
Saturday, December 1, 2018 at 2:30pm at
The Alachua Branch Library
14913 NW 140 Street Alachua, FL 32615

Contact Person: Forrest Eddleton
(352) 593-3159 - Gmuir Engineering, LLC

PUBLIC NOTICE

A neighborhood workshop will be held to discuss a building addition on tax parcel number 05920-001-002 located at 12556 NW US Hwy 441 in Alachua. This is not a public hearing. The purpose of this meeting is to inform neighboring property owners of the proposed development and to seek their comments.



The meeting will be held at 6:00 p.m. on November 29, 2018 in the Meeting Room of the Alachua Branch Library, at 14913 NW 140th Street, Alachua, FL 32615.

Contact: Sergio Reyes, PE
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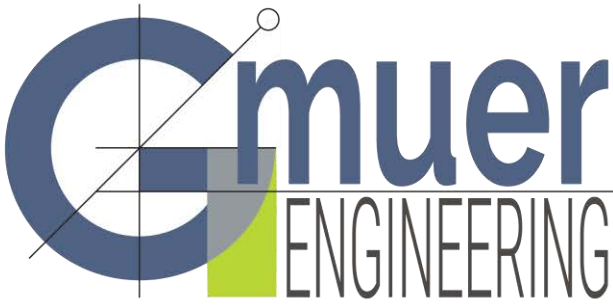
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December 1st, 2018

Tara Forest East Neighborhood Workshop Notes

The Meeting was held on December 1st, 2018 at the Alachua Branch Library at 14913 NW 140 Street Alachua, FL. The meeting began at 2:30pm and was hosted by Forrest Eddleton, Planning Director of Gmuer Engineering, and representatives of the property owner, Sayed and Silvia Moukhtara.

Attendees:

1. Alan Rhoads – 386-365-8017, 386-462-2346
2. Jean Calderwood – 386-588-4309
3. Bud Calderwood – 352-317-1393

Mr. Eddleton described the proposed project including land use and zoning basic dimensional requirements. Site plan was presented as a pre-stormwater concept showing a maximum of 340 units. It was explained that final stormwater design needs will likely alter the final total number of units and lot configuration however, the basic design concept will not change barring alterations made during the development review process.

Attendees asked questions regarding connection points to existing roadways and development. Connection points as shown on the site plan were discussed in greater detail. Attendees also expressed concern regarding traffic on CR 241 and the increased traffic at the intersection CR 235 and US 441 to the south. Mr. Eddleton discussed capacity levels on the associated roadways and discussed recent traffic studies and initiatives by the City of Alachua to address traffic along the US 441 corridor. Overall attendees spoke overwhelmingly positively about the proposed project and expressed excitement that a new residential single family neighborhood was being proposed for the area.

The meeting concluded at 3:30pm and Gmuer Engineering stayed on-site until 4:30pm.

Sign-in Sheet 12/1/2018

ALAN R HOADS	386 365 8017
	386 462 2346
Sayed Moushtara	352 2785217
SILVIA Moushtara	352 876 8772
Jean Calderwood	386 - 588 - 4309
Bud Calderwood	352 - 317 - 1393



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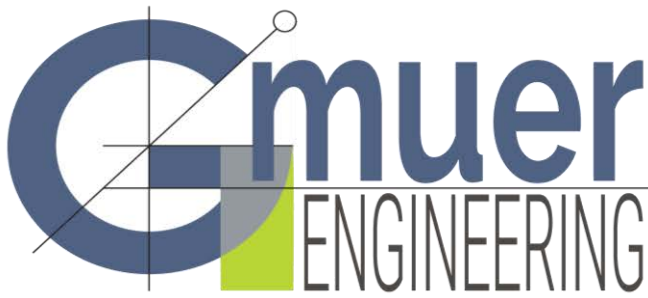
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Preliminary Stormwater Management Report

for

Tara Forest East Subdivision

TP# 03067-005-000, 03067-005-001, 03067-000-000, 03067-006-000
17002 NW CR241 Alachua, FL 32615

Prepared for
Tara Forest, LLC

Date: May 20, 2019
Revised July 3, 2019
Revised November 12, 2019

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Project Description

The project is located on TP# 03067-005-000, 03067-005-001, 03067-000-000, 03067-006-000 at 17002 NW CR241, Alachua, FL 32615 and consists of approximately 148.76 acres. The project proposes the development of an approximately 340 unit single family residential subdivision the the northern majority of the site and a future townhouse subdivision on the southern portion of the site with associated stormwater management facilities and road connections to the available rights-of-way to the east and southeast. The single family portion of the subdivision also incorporates the City of Alachua Transitional Swale roadway cross section that provides nutrient removal treatment in a LID compatible location; directly adjacent to the source of runoff. The subdivision will be developed in ten phases with key infrastructure constructed as required by each phase of construction.

Pre-Development Drainage Narrative

The existing site consists of a mixture of grazing areas with scattered hardwood trees and an area of planted pines. Site runoff generally flows in three major directions; West, North, and South. The runoff to the South begins with runoff to the East and Southeast that ultimately returns back to the site. This South watersheds is discussed in the paragraphs below. All three major runoff directions are located within the Mill Creek Sink, a stream to sink watershed. As such, Pre-vs-Post Runoff Rate and Pre-vs-Post Volume Runoff must be attenuated on-site.

Pre-Dev Western Watershed

The western pre-development watershed is composed of two basins, PRE-DA-W & PRE-DA-NW. The PRE-DA-W basin is located along the western boundary of the site and runoff collects into a valley where it continues as a shallow concentrated path west off-site to Mill Creek. The PRE-DA-NW basin is located at the northwestern corner of the site and runoff sheet flows west off-site to Mill Creek.

Pre-Dev Northern Watershed

The northern pre-development watershed is composed of one basin that is split into an on-site and off-site sub-basin, PRE-DA-N1 & PRE-DA-N2. The PRE-DA-N2 sub-basin is located off-site and along the eastern edge of the on-site sub-basin PRE-DA-N1. The basin is located along the northern boundary of the site and runoff collects into a valley where it continues as a shallow concentrated path north off-site to Bad Dog Branch; a tributary to Mill Creek.

Pre-Dev Southern, Southeastern, & Eastern Watersheds

These three watersheds are a chain of watersheds with multiple on-site and off-site sub-basins and on-site and off-site depressional areas that contribute into each other to ultimately discharge to the southern boundary of the site. The runoff starts with the Eastern Watershed that generally drains along CR241 south to a depressional area adjacent to CR241. This CR241 depressional area then overflows west into the lower sub-basin of the Southeastern Watershed. The Southeastern Watershed generally collects into an on-site valley that drains off-site, in a southeast direction to an off-site depression where it joins with the overflow from the Eastern Watershed. This off-site depression fills and overflows into the Southern Watershed. The Southern Watershed collects on-site runoff from the southern half of the site into an on-site valley that also receives the overflow from the Southeastern and Eastern Watersheds. This runoff continues to the southwestern boundary of the site as a shallow concentrated path through the southern portion of the site. The southern portion of the site also receives runoff from the western portion of the Baywood Phase 1C Subdivision. Runoff ultimately continues via overland flow to Mill Creek. Each sub-watershed is described below.

Pre-Dev Eastern Watershed

The eastern pre-development watershed is composed of four basins with two of them split into an on-site and off-site sub-basin.

Basins PRE-DA-E6, E5, and E4 are similar; they each collect runoff into an isolated depressional area with PRE-DA-E4 having an on-site sub-basin as PRE-DA-E3. Each of these three basins were shown in the ICPR model to be full retention and do not discharge downstream.

The PRE-DA-E1 basin has an on-site sub-basin, PRE-DA-E2, and it consists mainly of runoff from CR241 and drainage areas on both sides of CR241 via a culvert located at the depressional area it drains to. The depressional area is wet and discharges west via a side drain pipe and then continues as a shallow concentrated path west to the lower depressional area of the Southeastern Watershed.

Pre-Dev Southeastern Watershed

The southeastern pre-development watershed is composed of two basins with both of them split into on-site and off-site sub-basins.

The PRE-DA-SE5 basin has an on-site sub-basin, PRE-DA-SE4, and runoff collects into a depressional area that spans across the boundary line of the site. This depressional area stages and the runoff overland flows into a valley where it continues as a shallow concentrated path southeast the depressional area in PRE-DA-S1. Since the depressional area spans the boundary line, pre versus post stage elevations must be attenuated.

The southern half of the Southeastern Watershed is composed of two on-site sub-basins, PRE-DA-SE2 and PRE-DA-SE3, and one off-site sub-basin, PRE-DA-SE1, and this sub-basin also contains the depressional area. All three sub-basins collect runoff into their own valleys and it continues as a shallow concentrated path southeast to the depressional area in PRE-DA-SE1. This depressional area also collects the overland flow from the Eastern Watershed, stages, and the runoff overland flows into a valley where it continues as a shallow concentrated path southwest into the Southern Watershed.

Pre-Dev Southern Watershed

The southern pre-development watershed is composed of the major on-site sub-basin, PRE-DA-S1, and two peripheral off-site sub-basins, PRE-DA-S2 and PRE-DA-S3, located on the western and eastern boundaries of the site. The major on-site sub-basin is located along the southern boundary of the site and collects runoff from the southern half of the site and the overland flow from the Southeastern and the Eastern Watershed. This runoff continues through a valley as a shallow concentrated path southwest across the southern portion of the site and ultimately to Mill Creek via overland flow.

Post-Development Drainage Narrative

The proposed development consists of the development of 148.76 acres as a 340 unit single family residential subdivision the the northern majority of the site and a future townhouse subdivision on the southern portion of the site with associated stormwater management facilities and road connections to the available rights-of-way to the east. Site runoff patterns with be maintained in three major directions; West, North, and South. The runoff to the East and Southeast are discussed in the paragraphs below about how this runoff is a part of the larger watershed that ultimately runs to the South. All three major runoff directions are located within the Mill Creek Sink, a stream to sink watershed. As such, Pre-vs-Post Runoff Rate and Volume Attenuation must be completed on-site.

Post-Dev Western Watershed

The western post-development watershed is composed of two basins, POST-DA-WEST & POST-DA-NWEST. The POST-DA-WEST basin is located along the western boundary of the site and runoff from the subdivision is treated and attenuated in the SMF-West Stormwater Management Facility. Discharge from SMF-West continues west as a shallow concentrated path west off-site to Mill Creek. The POST-DA-NWEST basin is located at the northwestern corner of the site and runoff from the subdivision is treated and attenuated in the SMF-NorthWest Stormwater Management Facility. Discharge from SMF-Northwest continues via a spreader swale as sheet flow west off-site to Mill Creek.

Post-Dev Northern Watershed

The northern post-development watershed is composed of one basin that is split into the on-site basin, POST-DA-NORTH, and off-site sub-basin, PRE-DA-N2, is located off-site and along the northeastern edge of the site. The runoff from the subdivision and the off-site sub-basin is treated and attenuated in the SMF-North Stormwater Management Facility. Discharge from SMF-North continues as a shallow concentrated path north off-site to Bad Dog Branch; a tributary to Mill Creek.

Post-Dev Southern, Southeastern, & Eastern Watersheds

These three watersheds are a chain of watersheds with multiple on-site and off-site sub-basins, on-site stormwater management facilities, and off-site depressional areas that contribute into each other to ultimately discharge to the southern boundary of the site. The runoff starts with the Eastern Watershed with runoff from the subdivision directed to a SMF that combines with runoff from the off-site sub-basins to generally drain along CR241 south to a depressional area adjacent to CR241. This CR241 depressional area then overflows west into the lower sub-basin of the Southeastern Watershed. The on-site portion of the Southeastern Watershed collects runoff from the subdivision and it stages and discharges on-site within a series of SMFs with and ultimately discharges on-site to SMF-South. No discharge is directed to the off-site portion of the Southeastern watershed. The off-site sub-basins of the Southeastern Watershed collect runoff into an off-site valley that drains in a southeast direction to an off-site depression where is joins with the overflow from the Eastern Watershed. This off-site depression fills and overflows back into site near the NW 167th PI road connection and is directed to the Southern Watershed. The Southern Watershed collects on-site runoff from the southern third of the subdivision, the on-site portion of the Southeastern Watershed, and the overflow from the Southeastern and Eastern Watersheds into SMF-South. This stormwater management facility provides treatment and a runoff attenuation. Discharge at southern boundary of the site continues as a shallow concentrated path through the unplatted future phases of the Baywood Subdivision and ultimately to Mill Creek. Details of each watershed is described below.

Post-Dev Eastern Watershed

The off-site basins PRE-DA-E6, E5, and E4 were shown in the ICPR model to be full retention and do not discharge downstream. Additionally, the on-site sub-basin previously draining to PRE-DA-E3 is no longer directed to this depression so runoff was reduced to this basin.

The on-site POST-DA-EAST basin is located along the eastern / CR241 boundary of the site and runoff from the subdivision is treated and attenuated in the SMF-East Stormwater Management Facility. A portion of the discharge from SMF-East continues east to CR241 at pre-development rates and the remainder discharges west into the Southeast Watershed's series of SMFs.

The remainder of the Eastern Watershed consists mainly of runoff from CR241 and drainage areas on both sides of CR241 via a culvert located at the depressional area it drains to. The depressional area is wet and discharges west via a side drain pipe and then continues as a shallow concentrated path west to the lower depressional area of the Southeastern Watershed.

Post-Dev Southeastern Watershed

The southeastern post-development watershed is generally divided into the northern on-site half and the southern off-site half. The drainage patterns have been modified slightly where runoff from the northern half is conveyed to the Southern Watershed directly instead of utilizing off-site overland.

The northern on-site half begins with the sub-basin PRE-DA-SE5 that collects pre-development runoff into a depressional area that spans across the boundary line of the site. The on-site portion of this depressional area was reshaped as SMF-NorthEast to continue to provide the needed stage-areas to attenuate pre versus post stage elevations. In post-development, no subdivision runoff is directed to this depression. The runoff from the subdivision basin POST-DA-Northeast, POST-DA-Southeast, and the discharge from SMF-NorthEast is directed to the SMF-Southeast Stormwater Management Facility where it stages and slowly discharges to SMF-Center. The POST-DA-Center runoff from the subdivision is also directed to the SMF-Center Stormwater Management Facility where it stages and slowly discharges to SMF-South.

The southern off-site half of the Southeastern Watershed consists of PRE-DA-SE1 which collects runoff from the uphill valley as a shallow concentrated path southeast to the depressional area. This depressional area also collects the overland flow from the Eastern Watershed, stages, and the runoff overland flows on-site near the NW 167th Pl road connection and is directed to the Southern Watershed.

Post-Dev Southern Watershed

The southern post-development watershed is composed of the major on-site sub-basin, POST-DA-SOUTH consisting of the subdivision, and the two peripheral off-site sub-basins, PRE-DA-S2 and PRE-DA-S3, located on the western and eastern boundaries of the site. This watershed also accepts the runoff from the northern half of the Southeastern Watershed via pipe conveyance, the southern half of the Southeastern Watershed via overland flow, and the Eastern Watersheds via overland flow through the southern half of the Southeastern Watershed. The runoff from the subdivision and these other sources are treated and attenuated in the SMF-South Stormwater Management Facility. Discharge from SMF-South continues as a shallow concentrated path south off-site across the southern boundary where it continues through the unplatted future phases of the Baywood Subdivision and ultimately to Mill Creek.

The SMF-South stormwater management facility also provides the water quality treatment volume for the post-development subdivision runoff upstream of the facility. The three upstream SMFs (SMF-Northeast, SMF-Southeast, SMF-Center) mainly provide staging opportunities and distributed infiltration to treat the stormwater closer to the point of generation as encouraged by LID practices.

The side filter provided at the toe of the southern berm of SMF-South as allowed per Section 3.4 of the SRWMD handbook as a component of the recovery system. Additionally, the transitional treatment swales are providing the majority of the nutrient removal for all of the proposed impervious area. The filter has been designed to only augment the infiltration of the existing clayey-sands to insure the system can meet the WQTV recovery within 72 hours and the Design Storm Recovery within 30 days. This mixed approach of treatment swales, sequenced stormwater facilities, and infiltration is encouraged by the Alachua County nutrient removal requirements.

Nutrient Removal

The proposed single family lots incorporate Transitional Swale standards per City of Alachua LDC. The swales are located at the front of each single family lot and provide LID treatment for both the road and the lot directly adjacent to the swale by retaining a portion of the runoff. This LID design successfully treats runoff as close as reasonable to the runoff source providing 80% nutrient removal. Nutrient Calculations are provided in the attachments of this report with a swale length of 50' to account for the driveway width and side slopes. For the runoff calculations, the retained volume is easily included by adjusting the CN Value with an increased Initial Abstraction (Ia) value. The 350 CF of retained volume per lot is translated to an equivalent inches of Initial Abstraction (Ia) and inserted into the calculated weighted CN value. Beyond the retained volume, we are also aware that the swale also continuously infiltrates stormwater during a storm event. While this infiltration volume is significant, and we would like to account for it, the complexity added to the computer model is substantial. We left this infiltration unaccounted for and consider it an additional safety factor.

Infinite Slope Analysis

The proposed berm located along the downhill side of the proposed stormwater management facilities are constructed with side slopes of 4:1. An infinite slope stability analysis is included in the following sections of the report and shows a safety factor greater than 1.2 for the proposed design.

Pre-Development Drainage Area Runoff Calculations

	Hyd Soil	CN	Pre-E1	Pre-E2	Pre-E3	Pre-E4	Pre-E5	Pre-E6
Impervious / Road (SF)	N/A	98	66,560	2,950		16,048		
Grass / Pine (SF)	A	32	501,283	133,635	48,812	188,669	166,200	127,003
Grass / Pine (SF)	B	58						
Grass / Pine (SF)	D	79						
Total Area (SF)			567,843	136,585	48,812	204,717	166,200	127,003
(Acres)			13.036	3.136	1.121	4.700	3.815	2.916
CN (weighted)			39.74	33.43	32.00	37.17	32.00	32.00
Sheet Flow Length (FT)			100	100	100	100	100	100
Sheet Flow Slope (FT/FT)			0.025	0.020	0.005	0.005	0.015	0.010
Shallow Flow Length (FT)			480	425	91	103	95	115
Shallow Flow Slope (FT/FT)			0.021	0.014	0.011	0.015	0.047	0.043
Channel Flow Length (FT)						535		
Channel Flow Slope (FT/FT)						0.005		
Hydraulic Radius (FT)						2.00		
Time of Concentration (Minutes)			17.8	19.6	21.7	28.9	13.1	15.5

	Hyd Soil	CN	Pre-N1	Pre-N2	Pre-NW	Pre-W	Pre-S1	Pre-S2
Impervious / Road (SF)	N/A	98				24,560	5,180	
Grass / Pine (SF)	A	32	401,042	43,178	60,086	523,359	1,321,690	20,863
Grass / Pine (SF)	B	58	152,250	13,574	44,701	254,200	1,897,580	146,172
Grass / Pine (SF)	D	79	225,145		34,815	10,450		
Total Area (SF)			778,437	56,752	139,602	812,569	3,224,450	167,035
(Acres)			17.870	1.303	3.205	18.654	74.023	3.835
CN (weighted)			50.68	38.22	52.05	42.73	47.41	54.75
Sheet Flow Length (FT)			100	100	100	100	100	100
Sheet Flow Slope (FT/FT)			0.015	0.025	0.020	0.010	0.030	0.050
Shallow Flow Length (FT)			780	325	380	750	3209	1832
Shallow Flow Slope (FT/FT)			0.059	0.040	0.042	0.053	0.014	0.022
Channel Flow Length (FT)								
Channel Flow Slope (FT/FT)								
Hydraulic Radius (FT)								
Time of Concentration (Minutes)			20.1	14.7	15.1	21.7	57.7	27.1

	Hyd Soil	CN	Pre-S3	Pre-SE1	Pre-SE2	Pre-SE3	Pre-SE4	Pre-SE5
Impervious / Road (SF)	N/A	98		141,832	10,120	14,040		7,000
Grass / Pine (SF)	A	32	424,186	1,573,415	357,260	528,968	185,453	208,567
Grass / Pine (SF)	B	58	81,072	7,615	226,300			
Grass / Pine (SF)	D	79						
Total Area (SF)			505,258	1,722,862	593,680	543,008	185,453	215,567
(Acres)			11.599	39.551	13.629	12.466	4.257	4.949
CN (weighted)			36.17	37.55	43.04	33.71	32.00	34.14
Sheet Flow Length (FT)			100	100	100	100	100	100
Sheet Flow Slope (FT/FT)			0.030	0.020	0.020	0.010	0.035	0.010
Shallow Flow Length (FT)			2127	681	535	411	20	510
Shallow Flow Slope (FT/FT)			0.023	0.037	0.039	0.012	0.063	0.037
Channel Flow Length (FT)				380	552	512		
Channel Flow Slope (FT/FT)				0.032	0.018	0.041		
Hydraulic Radius (FT)				1.60	1.00	1.80		
Time of Concentration (Minutes)			32.7	19.7	18.2	23.5	8.8	21.2

Off-Site Depressional Stage Storage & Pre-Dev Overflow

Depression Pre-E1-Stage	Stage	Area (SF)	(Acres)	Pre-E1-Pipe	24"
	138.00	1,753	0.0402	Up Inv	142
	139.00	4,056	0.0931	Down Inv	141
	140.00	6,607	0.1517	Length	53'
	141.00	9,130	0.2096		
	142.00	14,214	0.3263	Pre-E1-Swale	
	143.00	23,923	0.5492	Bot Width	12'
	144.00	37,645	0.8642	Side Slope	6' Both
	145.00	52,032	1.1945	Length	750'
	146.00	66,508	1.5268	Up Inv	141
	147.00	78,719	1.8071	Down Inv	118
Depression Pre-E4-Stage	Stage	Area (SF)	(Acres)	Pre-E4-Swale	
	149.00	2,200	0.0505	Bot Width	1'
	150.00	11,030	0.2532	Side Slope	4'L - 10'R
	151.00	18,113	0.4158	Length	1260'
	152.00	24,973	0.5733	Up Inv	155
	153.00	32,493	0.7459	Down Inv	146
	154.00	43,083	0.9890		
	155.00	56,820	1.3044		
	156.00	79,669	1.8289		
Depression Pre-E5-Stage	Stage	Area (SF)	(Acres)	Pre-E5-Weir	
	148.00	325	0.0075	Bot Width	40'
	149.00	3,515	0.0807	Side Slope	60' Both
	150.00	8,075	0.1854	Invert	155.5
	151.00	13,547	0.3110		
	152.00	19,192	0.4406		
	153.00	25,800	0.5923		
	154.00	34,145	0.7839		
	155.00	47,338	1.0867		
	156.00	73,186	1.6801		
Depression Pre-E6-Stage	Stage	Area (SF)	(Acres)	Pre-E6-Weir	
	153.00	655	0.0150	Bot Width	35'
	154.00	4,540	0.1042	Side Slope	40' Both
	155.00	8,819	0.2025	Invert	157.5
	156.00	13,277	0.3048		
	157.00	25,001	0.5739		
	158.00	57,316	1.3158		

Depression Pre-SE5-Stage

Stage	Area (SF)	(Acres)
136.00	5,235	0.1202
137.00	12,875	0.2956
138.00	21,430	0.4920
139.00	35,010	0.8037
140.00	51,799	1.1891
141.00	78,327	1.7981

Pre-SE5-Weir

Bot Width	5'
Side Slope	80' Both
Invert	139.87

Pre-SE5-Swale

Bot Width	5'
Side Slope	60' Both
Length	1115'
Up Inv	139
Down Inv	121

Depression Pre-SE1-Stage

Stage	Area (SF)	(Acres)
115.00	2,567	0.0589
116.00	12,390	0.2844
117.00	26,205	0.6016
118.00	42,378	0.9729
119.00	58,480	1.3425
120.00	81,735	1.8764
121.00	111,136	2.5513

Pre-SE1-Swale

Bot Width	50'
Side Slope	35' Both
Length	1350'
Up Inv	120
Down Inv	106

Post-Development Drainage Area Runoff Calculations

	Hyd Soil	CN	Post-W	Post-NW	Post-N
Subdivision 1/4 Ac Lots	A	61	421,020	58,261	303,484
	B	75	323,640	17,438	59,241
	C	83	7,275	33,980	226,499
Miscellaneous Imp	N/A	98	0	0	0
Open Area	A	39	9,034	2,990	71,068
Open Area	B	61	0	3,655	23,344
Stormwater Mgmt. Fac	N/A	100	54,724	41,385	44,707
Total Area (SF)			815,693	157,709	728,343
(Acres)			18.726	3.621	16.720
CN (weighted)			69.12	77.11	69.23
Trans Swale Vol (CF)			19,950	2,800	16,450
Trans Swale Initial Abstraction (in)			0.29	0.21	0.27
CN (weighted + swale)			62.76	71.25	63.29
Sheet Flow Length (FT)			136	136	136
Sheet Flow Slope (FT/FT)			0.030	0.030	0.030
Shallow Flow Length (FT)			500	500	500
Shallow Flow Slope (FT/FT)			0.028	0.028	0.028
Channel Flow Length (FT)			0	0	0
Channel Flow Slope (FT/FT)			0.001	0.001	0.001
Hydraulic Radius (FT)			3.00	3.00	3.00
Time of Concentration (Minutes)			13.3	13.3	13.3

	Hyd Soil	CN	Post-NE	Post-E	Post-SE	Post-C	Post-S1	Post-S3
Subdivision 1/4 Ac Lots	A	61	172,759	122,000	144,079	567,665	984,489	0
	B	75	0	0	0	232,347	755,038	0
	C	83	0	0	0	0	0	0
Townhouses	A	77	0	0	0	0	269,942	0
	B	85	0	0	0	0	767,135	0
Subdivision 1/5 Ac Lots	A	69	0	0	0	0	0	180,429
	B	80	0	0	0	0	0	57,123
Miscellaneous Imp	N/A	98	0	0	0	0	0	0
Open Area	A	39	47,241	39,608	13,900	46,044	97,375	243,758
Open Area	B	61	0	0	0	0	160,473	23,949
Stormwater Mgmt. Fac	N/A	100	8,617	21,733	N/A	N/A	288,870	N/A
Total Area (SF)			228,617	194,039	157,979	846,056	3,323,321	505,259
(Acres)			5.248	4.455	3.627	19.423	76.293	11.599
CN (pre weighted)			57.92	57.51	59.06	63.65	73.77	55.39
Trans Swale Vol (CF)			4,900	3,150	4,200	21,350	46,200	N/A
Trans Swale Initial Abstraction (in)			0.26	0.19	0.32	0.30	0.17	N/A
CN (weighted + swale)			53.91	54.46	53.98	58.05	69.49	N/A
Sheet Flow Length (FT)			136	136	136	136	136	100
Sheet Flow Slope (FT/FT)			0.030	0.030	0.030	0.030	0.030	0.030
Shallow Flow Length (FT)			500	500	500	500	500	2127
Shallow Flow Slope (FT/FT)			0.028	0.028	0.028	0.028	0.028	0.023
Channel Flow Length (FT)			0	0	0	0	0	
Channel Flow Slope (FT/FT)			0.001	0.001	0.001	0.001	0.001	
Hydraulic Radius (FT)			3.00	3.00	3.00	3.00	3.00	
Time of Concentration (Minutes)			13.3	13.3	13.3	13.3	13.3	32.7

WQTV (Water Quality Treatment Volume)

	Post West			Post NorthWest		
	C	Sq Ft	Acres	C	Sq Ft	Acres
Impervious (Parking, etc)	0.95	0	0.000	0.95	0	0.000
Subdivision 1/4 Ac Lots (38% Imp)	0.49	751,935	17.262	0.49	109,679	2.518
Open / Landscape	0.20	63,758	1.464	0.20	48,030	1.103
TOTAL (weighted ave)	0.46	815,693	18.726	0.46	157,709	3.621
On-Line Dry Retention	Inch	Cu Ft	Ac-Ft	Inch	Cu Ft	Ac-Ft
Total WQTV	2.00	62,907	1.444	2.00	12,163	0.279

	Post North			Post NorthEast		
	C	Sq Ft	Acres	C	Sq Ft	Acres
Impervious (Parking, etc)	0.95	0	0.000	0.95	0	0.000
Subdivision 1/4 Ac Lots (38% Imp)	0.49	589,224	13.527	0.49	172,759	3.966
Open / Landscape	0.20	139,119	3.194	0.20	55,858	1.282
TOTAL (weighted ave)	0.43	728,343	16.720	0.43	228,617	5.248
On-Line Dry Retention	Inch	Cu Ft	Ac-Ft	Inch	Cu Ft	Ac-Ft
Total WQTV	2.00	52,266	1.200	2.00	16,406	0.377

	Post East			Post SouthEast		
	C	Sq Ft	Acres	C	Sq Ft	Acres
Impervious (Parking, etc)	0.95	0	0.000	0.95	0	0.000
Subdivision 1/4 Ac Lots (38% Imp)	0.49	122,000	2.801	0.49	144,079	3.308
Open / Landscape	0.20	72,039	1.654	0.20	13,900	0.319
TOTAL (weighted ave)	0.38	194,039	4.455	0.38	157,979	3.627
On-Line Dry Retention	Inch	Cu Ft	Ac-Ft	Inch	Cu Ft	Ac-Ft
Total WQTV	2.00	12,263	0.282	2.00	9,984	0.229

	Post Central			Post South 1 & 3		
	C	Sq Ft	Acres	C	Sq Ft	Acres
Impervious (Parking, etc)	0.95	0	0.000	0.95	0	0.000
Subdivision 1/4 Ac Lots (38% Imp)	0.49	800,012	18.366	0.49	1,739,527	39.934
Townhouses (65% Imp)	0.69	0	0.000	0.69	1,037,077	23.808
Subdivision 1/5 Ac Lots (50% Imp)	0.58	0	0.000	0.58	237,552	5.453
Open / Landscape	0.20	46,044	1.057	0.20	546,717	12.551
TOTAL (weighted ave)	0.47	846,056	19.423	0.47	3,560,873	81.746
On-Line Dry Retention	Inch	Cu Ft	Ac-Ft	Inch	Cu Ft	Ac-Ft
Total WQTV	2.00	66,202	1.520	2.00	278,632	6.397

Combined WQTV of Post Northeast, Southeast, Central, & South 371,224 8.522

Stage-Storage of Stormwater Management Facility

Post SMF West		Stage	Area		Cumulative Volume	
Dry Retention		Feet	Sq Ft	Acre	Cu Ft	Ac-Ft
WQTV	122.00	26,540	0.6093	0	0.0000	
	123.55	31,994	0.7345	62,907	1.4441	
	130.00	54,724	1.2563	325,056	7.4623	
Discharge Controls		Invert	Width	Height		
Rectangular Window		125.40	40"	3"		

Post SMF NorthWest		Stage	Area		Cumulative Volume	
Dry Retention		Feet	Sq Ft	Acre	Cu Ft	Ac-Ft
WQTV	141.50	21,736	0.4990	0	0.0000	
	141.89	23,419	0.5376	12,163	0.2792	
	146.00	41,385	0.9501	142,022	3.2604	
Discharge Controls		Invert	Width	Height		
Rectangular Window		143.75	8"	2"		

Post SMF North		Stage	Area		Cumulative Volume	
Dry Retention		Feet	Sq Ft	Acre	Cu Ft	Ac-Ft
WQTV	124.00	22,847	0.5245	0	0.0000	
	126.05	28,291	0.6495	52,266	1.1999	
	126.00	28,160	0.6465	51,007	1.1710	
	127.00	31,173	0.7156	80,674	1.8520	
	131.00	44,707	1.0263	232,434	5.3359	
Discharge Controls		Invert	Width	Height		
Rectangular Window		127.25	60"	3"		

Post SMF NorthEast		Stage	Area		Cumulative Volume	
Dry Retention		Feet	Sq Ft	Acre	Cu Ft	Ac-Ft
	137.00	8,617	0.1978	0	0.0000	
	138.00	8,298	0.1905	8,458	0.1942	
	139.00	8,155	0.1872	16,684	0.3830	
	140.00	4,149	0.0952	22,836	0.5242	
	141.00	1	0.0000	24,911	0.5719	
Discharge Controls		Invert	Width	Height		
		None	-	-		

Post SMF East Dry Retention	Stage Feet	Area		Cumulative Volume	
		Sq Ft	Acre	Cu Ft	Ac-Ft
	152.50	14,189	0.3257	0	0.0000
WQTV	153.18	15,661	0.3595	12,263	0.2815
	156.00	21,733	0.4989	62,864	1.4431

Discharge Controls	Invert	Width	Height	
Rectangular Window	153.50	8"	3"	To CE241
Rectangular Window	153.20	8"	3"	To SMF-Central

Post SMF South A Dry Retention	Stage Feet	Area		Cumulative Volume	
		Sq Ft	Acre	Cu Ft	Ac-Ft
	92.00	31,628	0.7261	0	0.0000
WQTV	93.47	37,477	0.8604	70,000	1.6070
	100.00	63,386	1.4551	380,056	8.7249

Discharge Controls	Invert	Width	Height	
WQTV / Equalizer Pipe	93.50	See Plans for Pipe Diameter		
Bottom Filter	89.00	10'	N/A	150' x 2 = 300' Total Length

Post SMF South B Dry Retention	Stage Feet	Area		Cumulative Volume	
		Sq Ft	Acre	Cu Ft	Ac-Ft
	90.00	142,742	3.2769	0	0.0000
WQTV	91.64	156,279	3.5877	301,224	6.9152
	100.00	225,484	5.1764	1,841,130	42.2665

Discharge Controls	Invert	Width	Height	
Rectangular	98.25	96"	3"	
Rectangular	96.00	168"	8"	
Bottom Filter	96.00	10'	N/A	400' x 2 = 800' Total Length

Soils Data

		Boring	Depth to Aquifer Feet	Porosity %	Hyd Cond Horz Ft / Day	Unsat V Hyd Cond Ft / Day	Depth to SHGWT Feet
		West Basin	Depth	%	Horz	Vert	SHWT
		P-41	15	20	11	7	15
		P-42	30	25	18	12	30
		P-43	11.5	20	10	6	11
		P-44	15	20	8	5	15
		P-45	5	20	10	6	4.5
		P-46	10	20	8	5	9.5
		P-47	7	20	10	6	6.5
		Ave Relative Elev	13.36	20.71	10.71	6.71	13.07
Ave Exist Grade	124.75	Actual Elev	111.39		5.36	3.36	111.68
		Northwest SMF	Depth	%	Horz	Vert	SHWT
		P-1	10.5	20	10	6	10.5
		P-4	15	20	10	6	15
		Ave Relative Elev	12.75	20	10	6	12.75
Ave Exist Grade	148.00	Actual Elev	135.25		5.00	3.00	135.25
		North SMF	Depth	%	Horz	Vert	SHWT
		P-3	11	25	13	9	10.5
		P-6	30	20	10	6	15
		Ave Relative Elev	20.5	22.5	11.5	7.5	12.75
Ave Exist Grade	127.00	Actual Elev	106.50		5.75	3.75	114.25
		Northeast SMF	Depth	%	Horz	Vert	SHWT
		P-9	3.5	20	4	4	3
		P-10	5	20	14	9	4.5
		P-11	7.5	20	10	6	7
		P-12	5	20	10	6	4.5
		Ave Relative Elev	5.25	20	9.5	6.25	4.75
Ave Exist Grade	137.50	Actual Elev	132.25		4.75	3.13	132.75
		East Basin	Depth	%	Horz	Vert	SHWT
		P-17	5.5	20	4	4	5
		P-18	5	25	15	10	4.5
		P-20	5.5	20	6	6	5
		Ave Relative Elev	5.33	21.67	8.33	6.67	4.83
Ave Exist Grade	154.00	Actual Elev	148.67		4.17	3.33	149.17

Ave Exist Grade	101.00	South A Basin	Depth	%	Horz	Vert	SHWT
			11.50	20.00	2.00	1.50	-
		Actual Elev	89.50		1.00	0.75	89.00
		South B Basin	Depth	%	Horz	Vert	SHWT
			-	20.00	3.00	2.00	-
		Actual Elev	80.00		1.50	1.00	87.00

Stormwater Discharge Pre vs Post

West

Storm Event	Pre-Development		Post-Development					
	CFS	Ac-Ft	West	NorWest			CFS	Ac-Ft
100 Yr - 1 Hr	9.220	0.467	124.36	142.47			0.000	0.000
100 Yr - 2 Hr	8.962	0.965	125.37	142.77			0.000	0.000
100 Yr - 4 Hr	14.956	1.899	126.42	143.18			3.801	0.897
100 Yr - 8 Hr	17.166	3.014	126.77	143.36			4.472	1.914
100 Yr - 24 Hr	8.284	6.225	127.02	143.52			4.905	4.431
100 Yr - 72 Hr	9.685	9.646	127.74	144.18			6.273	8.092
100 Yr - 168 Hr	7.721	12.630	127.69	144.47			6.332	10.381
100 Yr - 240 Hr	9.942	15.448	128.60	144.36			7.409	13.019
Design High Water Elev			128.60	144.47				
Pond Top Elevation			130.00	146.00				
Provided Freeboard (12" min)			16.8"	18.34"				

North

Storm Event	Pre-Development		Post-Development					
	CFS	Ac-Ft	North				CFS	Ac-Ft
100 Yr - 1 Hr	15.017	0.746	126.54				0.000	0.000
100 Yr - 2 Hr	13.824	1.362	127.54				2.415	0.154
100 Yr - 4 Hr	18.455	2.400	128.46				6.256	1.194
100 Yr - 8 Hr	21.650	3.563	128.71				6.939	2.279
100 Yr - 24 Hr	9.501	6.827	128.43				6.180	4.739
100 Yr - 72 Hr	9.556	10.273	128.98				7.629	7.524
100 Yr - 168 Hr	7.350	13.107	128.67				6.847	8.934
100 Yr - 240 Hr	9.516	15.812	129.37				8.503	10.852
Design High Water Elev			129.37					
Pond Top Elevation			131.00					
Provided Freeboard (12" min)			19.56"					

East

Storm Event	Pre-Development		Post-Development					
	CFS	Ac-Ft	East				CFS	Ac-Ft
100 Yr - 1 Hr	0.055	N/A	153.12				0.000	N/A
100 Yr - 2 Hr	0.347	N/A	153.45				0.000	N/A
100 Yr - 4 Hr	1.092	N/A	153.87				0.396	N/A
100 Yr - 8 Hr	1.097	N/A	153.99				0.485	N/A
100 Yr - 24 Hr	0.818	N/A	154.13				0.569	N/A
100 Yr - 72 Hr	1.325	N/A	154.44				0.724	N/A
100 Yr - 168 Hr	1.172	N/A	154.38				0.696	N/A
100 Yr - 240 Hr	1.484	N/A	154.78				0.865	N/A
Design High Water Elev			154.78					
Pond Top Elevation			156.00					
Provided Freeboard (12" min)			14.64"					

Southeast

Storm Event	Pre-Development		Pre-Stage SE5	Post-Development				CFS	Ac-Ft
	CFS	Ac-Ft		NorEast					
100 Yr - 1 Hr	N/A	N/A	136.051	136.05				N/A	N/A
100 Yr - 2 Hr	N/A	N/A	136.427	136.31				N/A	N/A
100 Yr - 4 Hr	N/A	N/A	137.113	136.79				N/A	N/A
100 Yr - 8 Hr	N/A	N/A	137.785	137.06				N/A	N/A
100 Yr - 24 Hr	N/A	N/A	139.165	137.63				N/A	N/A
100 Yr - 72 Hr	N/A	N/A	139.947	138.48				N/A	N/A
100 Yr - 168 Hr	N/A	N/A	140.016	138.95				N/A	N/A
100 Yr - 240 Hr	N/A	N/A	140.032	139.30				N/A	N/A
Design High Water Elev				139.30					
Pond Top Elevation				141.00					
Provided Freeboard (12" min)				20.4"					

South

Storm Event	Pre-Development		Post-Development					
	CFS	Ac-Ft	South A	South B			CFS	Ac-Ft
100 Yr - 1 Hr	22.359	2.467	97.04	92.57			0.000	0.000
100 Yr - 2 Hr	30.955	4.918	96.80	94.02			0.000	0.000
100 Yr - 4 Hr	51.597	9.025	96.62	95.70			0.000	0.000
100 Yr - 8 Hr	51.425	15.949	96.98	96.65			23.477	6.420
100 Yr - 24 Hr	50.868	39.766	97.49	97.44			47.152	37.347
100 Yr - 72 Hr	70.809	65.974	98.39	98.28			63.145	65.652
100 Yr - 168 Hr	60.710	89.571	98.20	98.11			59.868	85.637
100 Yr - 240 Hr	77.586	112.163	98.99	98.84			76.975	104.989
Design High Water Elev			98.99	98.84				
Pond Top Elevation			100.00	100.00				
Provided Freeboard (12" min)			12.12"	13.92"				



INTRODUCTION PAGE

Model requires the use of Excel 2007 or newer

This program is compiled from stormwater management publications and deliberations during a two year review of the stormwater rule in the State of Florida.

Input from the members of the Florida Department of Environmental Protection Stormwater Review Technical Advisory Committee and the staff and consultants from the State Water Management Districts is appreciated.

The State Department of Transportation provided guidance and resources to compile this program. The Stormwater Management Academy is responsible for the content of this program.



GENERAL SITE INFORMATION: V 8.6		GO TO INTRODUCTION PAGE		10/8/2018		Blue Numbers = Red Numbers =		Input data Calculated or Carryover	
Select the appropriate Meteorological Zone, input the appropriate Mean Annual Rainfall amount and select the type of analysis				NAME OF PROJECT		HELP Rainfall			
				Swale Treatment		VIEW ZONE MAP			
Meteorological Zone (Please use zone map):				CLICK ON CELL BELOW TO SELECT Zone 2		VIEW MEAN ANNUAL RAINFALL MAP			
Mean Annual Rainfall (Please use rainfall map):				52.00 Inches					
Type of analysis:				CLICK ON CELL BELOW TO SELECT Specified removal efficiency		GO TO WATERSHED CHARACTERISTICS			
Treatment efficiency (N, P) (ex 80 70 (no decimal points) use only for specified removal efficiency):				80 80 %					
Select the STORMWATER TREATMENT ANALYSIS Button below to begin analyzing the effectiveness of Best Management Practices.				Model documentation and example problems.					
STORMWATER TREATMENT ANALYSIS				There is a user's manual for the BMPTRAINS model. It can be downloaded from .stormwater.ucf.edu. The results from the example problems shown in the manual however may not reflect current model results due to ongoing updates of the model.					
Systems available for analysis: Retention Basin with option for calculating effluent concentration Wet Detention Exfiltration Trench Pervious Pavement Stormwater Harvesting Biofiltration Greenroof Rainwater Harvesting Managed Aquatic Plants Detention Vegetated Natural Buffer Vegetated Filter Strip Swale Rain Garden Tree Well Lined reuse pond User Defined BMP				RESET INPUT FOR STORMWATER TREATMENT ANALYSIS		METHODOLOGY FOR CALCULATING REQUIRED TREATMENT EFFICIENCY			
						METHODOLOGY FOR RETENTION SYSTEMS		METHODOLOGY FOR WET DETENTION SYSTEMS	
						METHODOLOGY FOR GREENROOF SYSTEMS		METHODOLOGY FOR WATER HARVESTING SYSTEMS	

WATERSHED CHARACTERISTICS		V 8.6	GO TO STORMWATER TREATMENT ANALYSIS		Blue Numbers =	Input data	LAND USES/EMC	
SELECT CATCHMENT CONFIGURATION		7/3/2019	CLICK ON CELL BELOW TO SELECT CONFIGURATION		Red Numbers =	Calculated		
			A - Single Catchment		VIEW CATCHMENT CONFIGURATION			
For comingling, the off-site catchment must be upstream. The delay is only for retention BMPs and must be used in hours as measured by the time of concentration at a one inch/hour rain			COMINGLING		GO TO GENERAL SITE INFORMATION PAGE			
Delay hrs	0.00	CATCHMENT NO.1 NAME:	Lot and ROW		OVERWRITE DEFAULT CONCENTRATIONS USING:			
ma_delay = 15 hrs.		CLICK ON CELL BELOW TO SELECT		VIEW AVERAGE ANNUAL RUNOFF C Factor				
Pre-development land use:		CLICK ON CELL BELOW TO SELECT		VIEW EMC FLUCCS				
Post-development land use:		Single-Family: TN=2.070 TP=0.327		GO TO GIS LANDUSE DATA				
Total pre-development catchment area:			AC			USE DEFAULT CONCENTRATIONS		
Total post-development catchment or for BMP analysis:		0.250	AC	Average annual pre runoff volume:			ac-ft/year	
Pre-development Non DCIA CN:				Average annual post runoff volume (note no BMP area):		0.041	ac-ft/year	
Pre-development DCIA percentage:			%	Pre-development Annual Mass Loading - Nitrogen:			kg/year	
Post-development Non DCIA CN:		65.00		Pre-development Annual Mass Loading - Phosphorus:			kg/year	
Post-development DCIA percentage:		0.00	%	Post-development Annual Mass Loading - Nitrogen:		0.104	kg/year	
Estimated BMP Area (No loading from this area)		0.026	AC	Post-development Annual Mass Loading - Phosphorus:		0.016	kg/year	

SWALE

7/3/2019

V 8.6

SWALE SERVING CONTRIBUTING CATCHMENT:

Swale Treatment

Loadings from BMP area are contained by the BMP, thus no BMP area load.

Contributing catchment area:

Required treatment efficiency (**Nitrogen**):

Required treatment efficiency (**Phosphorus**):

Swale top width calculated for flood conditions [W]:

Swale bottom width (0 for triangular section) [B]:

Swale length [L]:

Average impervious length:

Average impervious width (including shoulder):

Average width of the pervious area to include swale width:

Contributing catchment area:

Swale slope (ft drop/ft length) [S]:

Manning's N:

Soil infiltration rate:

Side slope of swale (horizontal ft/vertical ft) [Z]:

Infiltrated storage depth:

Average height of the swale blocks [H]:

Length of the berm upstream of the crest [Lb]:

Number of swale blocks*:

Volume of water in swales upstream of swale blocks:

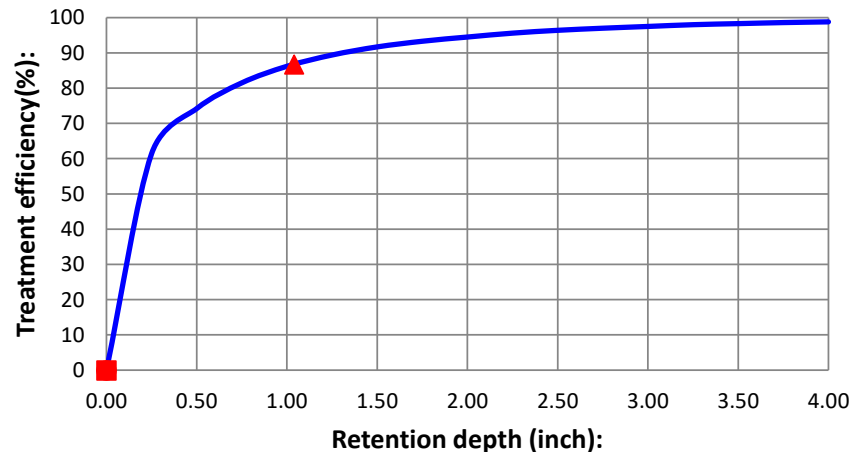
Total volume:

Provided treatment efficiency (**Nitrogen**):

Provided treatment efficiency (**Phosphorus**):

* Assumes that swale blocks are equidistant spacing along length of swale, swale slope is consistent, and swale length is total length of swale

Lot and ROW	Catchment 2	Catchment 3	Catchment 4	
0.224	0.000	0.000	0.000	ac
80.000	80.000	80.000	80.000	%
80.000	80.000	80.000	80.000	%
14.00				ft
0.00				ft
50.00				ft
0.00				ft
0.00				ft
14.00				ft
0.00	0.00	0.00	0.00	ft ²
0.040				
0.030				
3.000				in/hr
3.500				
0.095	0.000	0.000	0.000	in
1.25				ft
1.00				ft
1.00				
0.945	0.000	0.000	0.000	in
1.041	0.000	0.000	0.000	in
86.719	0.000	0.000	0.000	%
86.719	0.000	0.000	0.000	%



- Efficiency Curve:
- ▲ Sys. Eff. (N & P) CAT 1
- Sys. Eff. (N & P) CAT 2
- Sys. Eff. (N & P) CAT 3
- ◆ Sys. Eff. (N & P) CAT 4

NOTE FOR TREATMENT EFFICIENCY GRAPH:

The purpose of this graph is to help illustrate the treatment efficiency of the swale as the function of retention depth. The graph illustrates that there is diminishing effectiveness as the retention depth is increased.

HELP - EXAMPLE PROBLEM 1

Blue Numbers =	Input data	HELP - BACKGROUND
Red Numbers =	Calculated or Carryover	

GO TO STORMWATER TREATMENT ANALYSIS

Concentration reduction (If S = 1% or H = 6 in)	Lot and ROW	Catchment 2	Catchment 3	Catchment 4

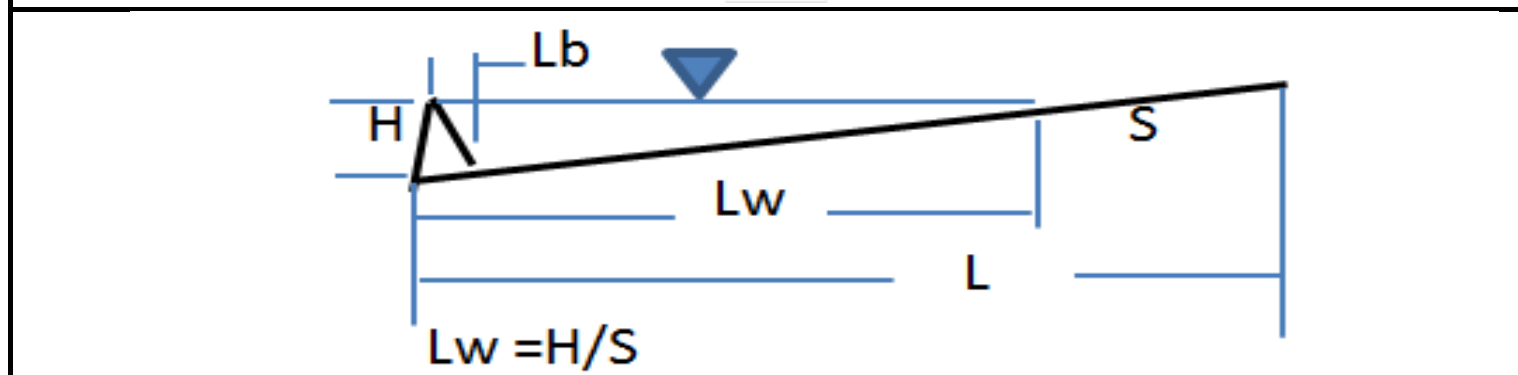
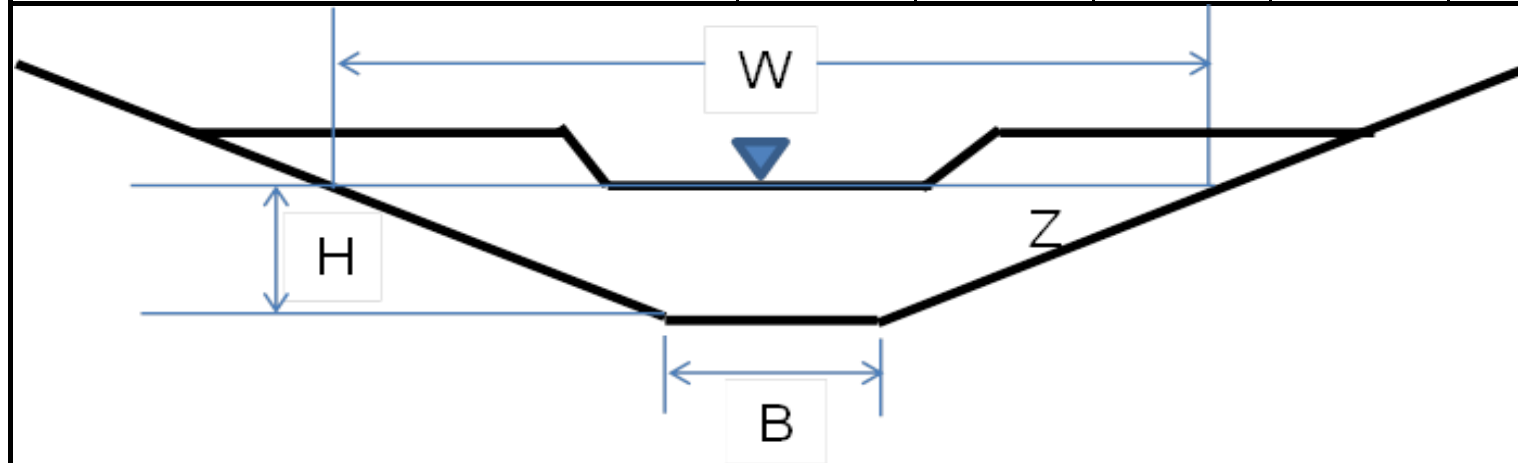
Provided percent mass reductions in surface discharges are:

Nitrogen efficiency	86.719	0.000	0.000	0.000
Phosphorus efficiency	86.719	0.000	0.000	0.000

If you are you interested in the mass of pollutants removed before percolating into the ground ater

Vie Media Mi es

Specify soil media				
Nitrogen mass reduction in groundwater discharge				%
Phosphorus mass reduction in groundwater discharge				%



CATCHMENTS AND TREATMENT SURFACE DISCHARGE SUMMARY

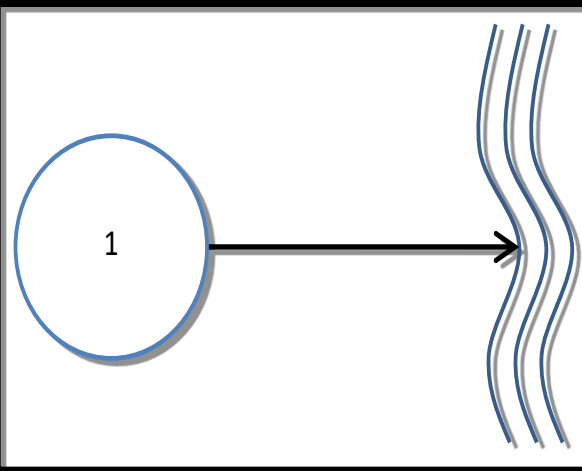
V 8.6

CALCULATION METHODS:

1. The effectiveness of each BMP in a single catchment is converted to an equivalent capture volume.
2. Certain BMP treatment train combinations have not been evaluated and in practice they are at this time not used, an example is a greenroof following a tree cell.
3. Wet detention is last when used in a single catchment with other BMPs, except when followed by filtration

PROJECT TITLE	Single Treatment	Optional Identification			
	Lot and ROW	Catchment 2	Catchment 3	Catchment 4	
BMP Name	Single				
BMP Name					
BMP Name					

Surface Water Discharge Summary Performance of Entire Watershed

Catchment Configuration	A - Single Catchment		7/3/2019	
Nitrogen Pre Load (kg/yr)	0.00	Treatment Objectives or Target for TN MET TP MET	BMPTRAINS MODEL	
Phosphorus Pre Load (kg/yr)	0.00			
Nitrogen Post Load (kg/yr)	0.10			
Phosphorus Post Load (kg/yr)	0.02			
Target Load Reduction (N) %	80			
Target Load Reduction (P) %	80			
Target Discharge Load, N (kg/yr)	0.02			
Target Discharge Load, P (kg/yr)	0.00			
Provided Overall Efficiency, N (%):	87			
Provided Overall Efficiency, P (%):	87			
Discharged Load, N (kg/yr lb/yr):	0.01	0.03		
Discharged Load, P (kg/yr lb/yr):	0.00	0.00		
Load Removed, N (kg/yr lb/yr):	0.09	0.20		
Load Removed, P (kg/yr lb/yr):	0.01	0.03		

Slope Stability Analysis
For Outside Slope of Recharge Trench Berm
Project Name Tara Forest East Subdivision

SLOPE STABILITY ANALYSIS
INFINITE SLOPE THEORY WITH SEEPAGE FORCES

Input Data

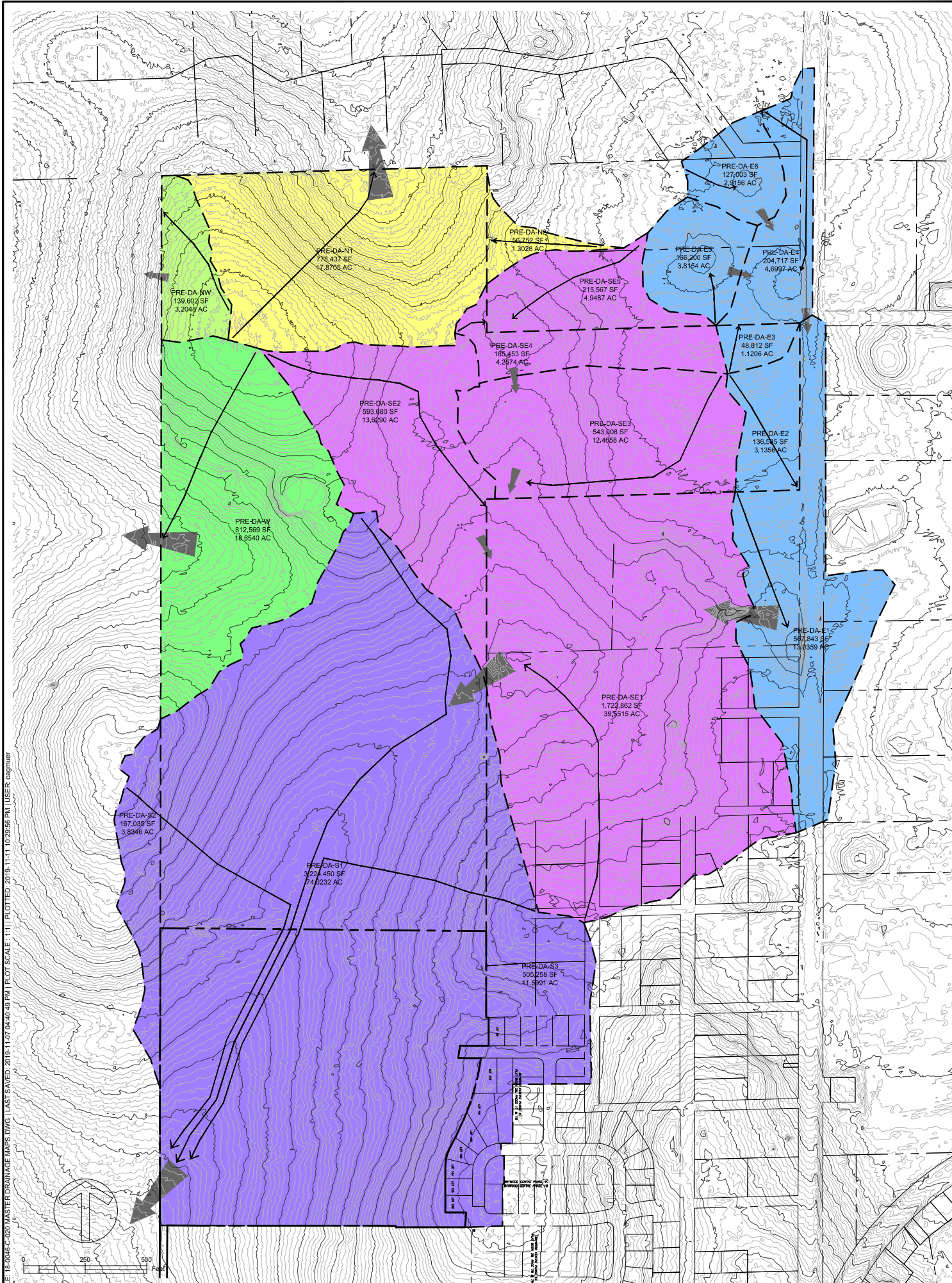
Saturated unit weight	120.0 pcf
Moist unit weight	105.0 pcf
Unit weight of water	62.4 pcf
Slope (Horiz/Vert)	4.0
Inter-particle friction angle	40.0 deg.
% Saturated thickness	100%

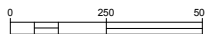
Intermediate Calcs

Effective/Buoyant Unit Weight	57.6 pcf
Slope Angle	14.0 deg.
Hydraulic Gradient	0.25

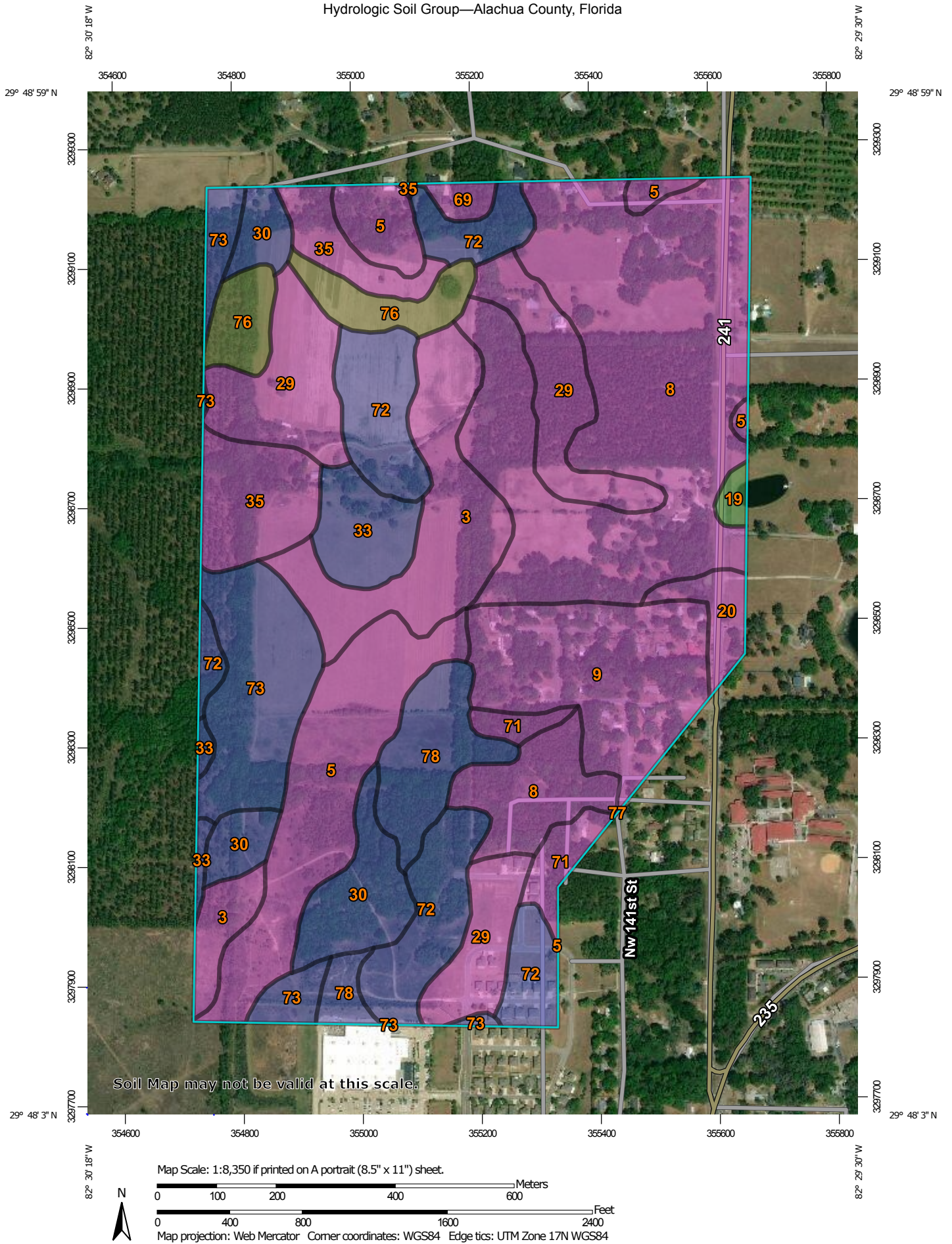
Answer

Computed factor of safety (includes seepage forces)	1.61
Required minimum factor of safety	1.2





Hydrologic Soil Group—Alachua County, Florida



**Natural Resources
Conservation Service**

Web Soil Survey
National Cooperative Soil Survey

10/9/2019
Page 1 of 4

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Lines

 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Points

 A
 A/D
 B
 B/D

 C
 C/D
 D
 Not rated or not available

Water Features

 Streams and Canals

Transportation

 Rails
 Interstate Highways
 US Routes
 Major Roads
 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Alachua County, Florida
 Survey Area Data: Version 20, Sep 16, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 26, 2014—Dec 9, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
3	Arredondo fine sand, 0 to 5 percent slopes	A	22.4	7.8%
5	Fort Meade fine sand, 0 to 5 percent slopes	A	27.8	9.7%
8	Millhopper sand, 0 to 5 percent slopes	A	70.8	24.6%
9	Millhopper-Urban land complex, 0 to 5 percent slopes	A	22.3	7.8%
19	Monteocha loamy sand	A/D	1.1	0.4%
20	Tavares sand, 0 to 5 percent slopes	A	3.6	1.3%
29	Lochloosa fine sand, 2 to 5 percent slopes	A	28.4	9.9%
30	Kendrick sand, 2 to 5 percent slopes	B	13.6	4.7%
33	Norfolk loamy fine sand, 2 to 5 percent slopes	B	8.0	2.8%
35	Gainesville sand, 0 to 5 percent slopes	A	14.3	5.0%
69	Arredondo fine sand, 5 to 8 percent slopes	A	1.5	0.5%
71	Millhopper sand, 5 to 8 percent slopes	A	4.8	1.7%
72	Lochloosa fine sand, 5 to 8 percent slopes	B	27.3	9.5%
73	Kendrick sand, 5 to 8 percent slopes	B	20.7	7.2%
76	Bivans sand, 5 to 8 percent slopes	C/D	9.4	3.3%
77	Bivans sand, 8 to 12 percent slopes	C/D	0.0	0.0%
78	Norfolk loamy fine sand, 5 to 8 percent slopes	B	11.7	4.1%
Totals for Area of Interest			287.7	100.0%

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Pre-Development ICPR Output

Nodes

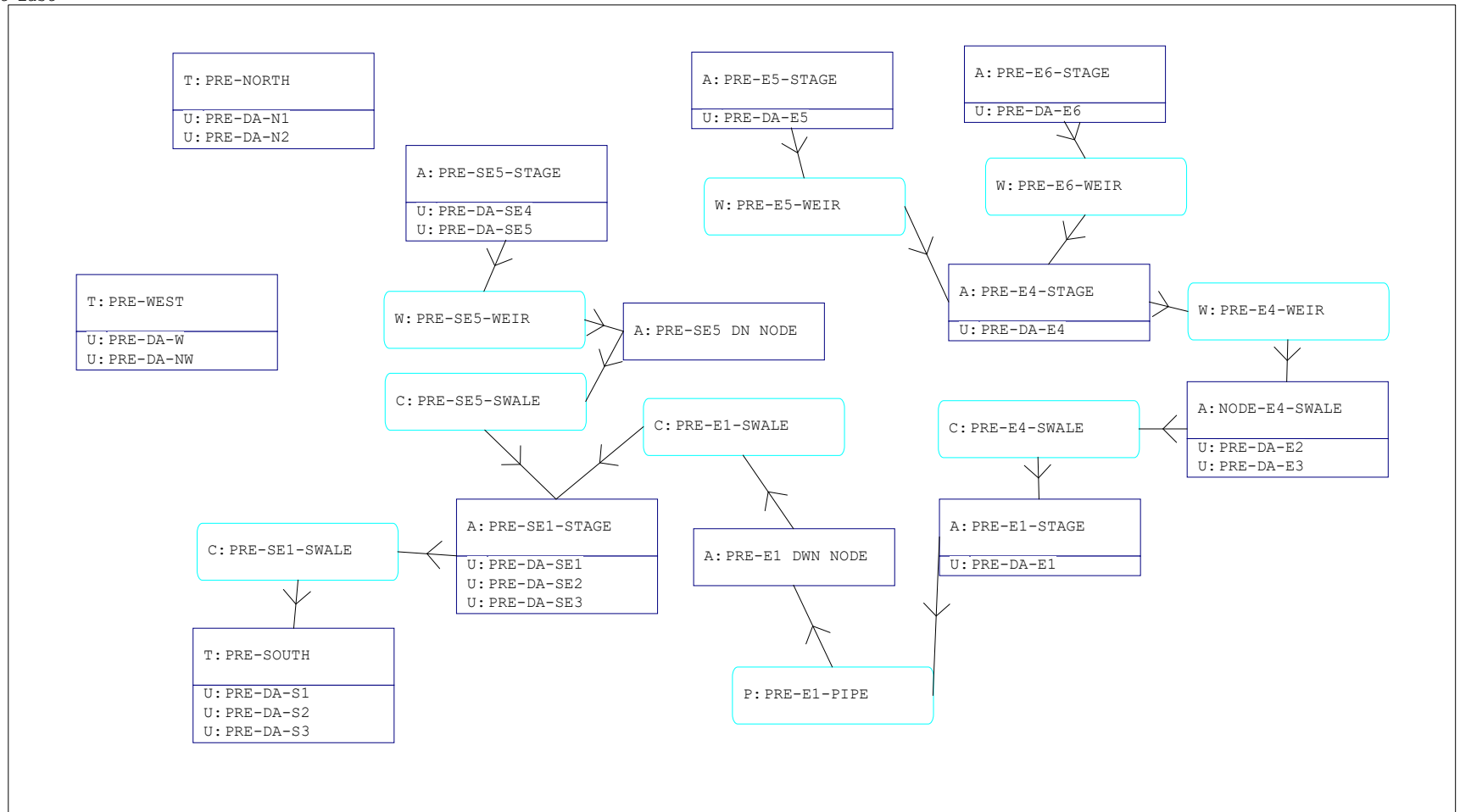
A Stage/Area
V Stage/Volume
T Time/Stage
M Manhole

Basins

O Overland Flow
U SCS Unit CN
S SBUH CN
Y SCS Unit GA
Z SBUH GA

Links

P Pipe
W Weir
C Channel
D Drop Structure
B Bridge
R Rating Curve
H Breach
E Percolation
F Filter
X Exfil Trench



==== Basins =====

Name: PRE-DA-E1 Node: PRE-E1-STAGE Status: Onsite
Group: BASE Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh323 Peaking Factor: 323.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 17.80
Area(ac): 13.036 Time Shift(hrs): 0.00
Curve Number: 39.74 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: PRE-DA-E2 Node: NODE-E4-SWALE Status: Onsite
Group: BASE Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh323 Peaking Factor: 323.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 19.60
Area(ac): 3.136 Time Shift(hrs): 0.00
Curve Number: 33.43 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: PRE-DA-E3 Node: NODE-E4-SWALE Status: Onsite
Group: BASE Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh323 Peaking Factor: 323.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 21.70
Area(ac): 1.121 Time Shift(hrs): 0.00
Curve Number: 32.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: PRE-DA-E4 Node: PRE-E4-STAGE Status: Onsite
Group: BASE Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh323 Peaking Factor: 323.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 28.90
Area(ac): 4.700 Time Shift(hrs): 0.00
Curve Number: 37.17 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: PRE-DA-E5 Node: PRE-E5-STAGE Status: Onsite
Group: BASE Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh323 Peaking Factor: 323.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 13.10
Area(ac): 3.815 Time Shift(hrs): 0.00
Curve Number: 32.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: PRE-DA-E6 Node: PRE-E6-STAGE Status: Onsite
Group: BASE Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh323 Peaking Factor: 323.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 15.50
Area(ac): 2.916 Time Shift(hrs): 0.00
Curve Number: 32.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: PRE-DA-N1 Node: PRE-NORTH Status: Onsite
Group: BASE Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh323 Peaking Factor: 323.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 20.10

Area(ac): 17.870	Time Shift(hrs): 0.00
Curve Number: 50.68	Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00	

Name: PRE-DA-N2	Node: PRE-NORTH	Status: Onsite
Group: BASE	Type: SCS Unit Hydrograph CN	

Unit Hydrograph: Uh323	Peaking Factor: 323.0
Rainfall File:	Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000	Time of Conc(min): 14.70
Area(ac): 1.303	Time Shift(hrs): 0.00
Curve Number: 38.22	Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00	

Name: PRE-DA-NW	Node: PRE-WEST	Status: Onsite
Group: BASE	Type: SCS Unit Hydrograph CN	

Unit Hydrograph: Uh323	Peaking Factor: 323.0
Rainfall File:	Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000	Time of Conc(min): 15.10
Area(ac): 3.205	Time Shift(hrs): 0.00
Curve Number: 52.05	Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00	

Name: PRE-DA-S1	Node: PRE-SOUTH	Status: Onsite
Group: BASE	Type: SCS Unit Hydrograph CN	

Unit Hydrograph: Uh323	Peaking Factor: 323.0
Rainfall File:	Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000	Time of Conc(min): 57.70
Area(ac): 74.023	Time Shift(hrs): 0.00
Curve Number: 47.41	Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00	

Name: PRE-DA-S2	Node: PRE-SOUTH	Status: Onsite
Group: BASE	Type: SCS Unit Hydrograph CN	

Unit Hydrograph: Uh323	Peaking Factor: 323.0
Rainfall File:	Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000	Time of Conc(min): 27.10
Area(ac): 3.835	Time Shift(hrs): 0.00
Curve Number: 54.75	Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00	

Name: PRE-DA-S3	Node: PRE-SOUTH	Status: Onsite
Group: BASE	Type: SCS Unit Hydrograph CN	

Unit Hydrograph: Uh323	Peaking Factor: 323.0
Rainfall File:	Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000	Time of Conc(min): 32.70
Area(ac): 11.599	Time Shift(hrs): 0.00
Curve Number: 36.17	Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00	

Name: PRE-DA-SE1	Node: PRE-SE1-STAGE	Status: Onsite
Group: BASE	Type: SCS Unit Hydrograph CN	

Unit Hydrograph: Uh323	Peaking Factor: 323.0
Rainfall File:	Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000	Time of Conc(min): 19.70
Area(ac): 39.551	Time Shift(hrs): 0.00
Curve Number: 37.55	Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00	

Name: PRE-DA-SE2	Node: PRE-SE1-STAGE	Status: Onsite
Group: BASE	Type: SCS Unit Hydrograph CN	

Unit Hydrograph: Uh323	Peaking Factor: 323.0
------------------------	-----------------------

Rainfall File:	Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000	Time of Conc(min): 18.20
Area(ac): 13.629	Time Shift(hrs): 0.00
Curve Number: 43.04	Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00	

Name: PRE-DA-SE3	Node: PRE-SE1-STAGE	Status: Onsite
Group: BASE	Type: SCS Unit Hydrograph CN	
Unit Hydrograph: Uh323	Peaking Factor: 323.0	
Rainfall File:	Storm Duration(hrs): 0.00	
Rainfall Amount(in): 0.000	Time of Conc(min): 23.50	
Area(ac): 12.466	Time Shift(hrs): 0.00	
Curve Number: 33.71	Max Allowable Q(cfs): 999999.000	
DCIA(%): 0.00		

Name: PRE-DA-SE4	Node: PRE-SE5-STAGE	Status: Onsite
Group: BASE	Type: SCS Unit Hydrograph CN	
Unit Hydrograph: Uh323	Peaking Factor: 323.0	
Rainfall File:	Storm Duration(hrs): 0.00	
Rainfall Amount(in): 0.000	Time of Conc(min): 8.80	
Area(ac): 4.257	Time Shift(hrs): 0.00	
Curve Number: 32.00	Max Allowable Q(cfs): 999999.000	
DCIA(%): 0.00		

Name: PRE-DA-SE5	Node: PRE-SE5-STAGE	Status: Onsite
Group: BASE	Type: SCS Unit Hydrograph CN	
Unit Hydrograph: Uh323	Peaking Factor: 323.0	
Rainfall File:	Storm Duration(hrs): 0.00	
Rainfall Amount(in): 0.000	Time of Conc(min): 21.20	
Area(ac): 4.949	Time Shift(hrs): 0.00	
Curve Number: 34.14	Max Allowable Q(cfs): 999999.000	
DCIA(%): 0.00		

Name: PRE-DA-W	Node: PRE-WEST	Status: Onsite
Group: BASE	Type: SCS Unit Hydrograph CN	
Unit Hydrograph: Uh323	Peaking Factor: 323.0	
Rainfall File:	Storm Duration(hrs): 0.00	
Rainfall Amount(in): 0.000	Time of Conc(min): 21.70	
Area(ac): 18.654	Time Shift(hrs): 0.00	
Curve Number: 42.73	Max Allowable Q(cfs): 999999.000	
DCIA(%): 0.00		

==== Nodes =====

Name: NODE-E4-SWALE	Base Flow(cfs): 0.000	Init Stage(ft): 155.000
Group: BASE		Warn Stage(ft): 160.000
Type: Stage/Area		

Stage(ft)	Area(ac)
155.000	0.0030
160.000	0.0030

Name: PRE-E1 DWN NODE	Base Flow(cfs): 0.000	Init Stage(ft): 141.000
Group: BASE		Warn Stage(ft): 145.000
Type: Stage/Area		

Stage(ft)	Area(ac)
141.000	0.0300
145.000	0.0300

Name: PRE-E1-STAGE	Base Flow(cfs): 0.000	Init Stage(ft): 138.000
--------------------	-----------------------	-------------------------

Group: BASE
Type: Stage/Area

Warn Stage(ft): 147.000

Stage(ft)	Area(ac)
138.000	0.0402
139.000	0.0931
140.000	0.1517
141.000	0.2096
142.000	0.3263
143.000	0.5492
144.000	0.8642
145.000	1.1945
146.000	1.5268
147.000	1.8071

Name: PRE-E4-STAGE Base Flow(cfs): 0.000 Init Stage(ft): 149.000
Group: BASE Warn Stage(ft): 156.000
Type: Stage/Area

Stage(ft)	Area(ac)
149.000	0.0505
150.000	0.2532
151.000	0.4158
152.000	0.5733
153.000	0.7459
154.000	0.9890
155.000	1.3044
156.000	1.8289

Name: PRE-E5-STAGE Base Flow(cfs): 0.000 Init Stage(ft): 148.000
Group: BASE Warn Stage(ft): 156.000
Type: Stage/Area

Stage(ft)	Area(ac)
148.000	0.0075
149.000	0.0807
150.000	0.1854
151.000	0.3110
152.000	0.4406
153.000	0.5923
154.000	0.7839
155.000	1.0867
156.000	1.6801

Name: PRE-E6-STAGE Base Flow(cfs): 0.000 Init Stage(ft): 153.000
Group: BASE Warn Stage(ft): 158.000
Type: Stage/Area

Stage(ft)	Area(ac)
153.000	0.0150
154.000	0.1042
155.000	0.2025
156.000	0.3048
157.000	0.5739
158.000	1.3158

Name: PRE-NORTH Base Flow(cfs): 0.000 Init Stage(ft): 0.000
Group: BASE Warn Stage(ft): 0.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	0.000
999.00	0.000

Name: PRE-SE1-STAGE Base Flow(cfs): 0.000 Init Stage(ft): 115.000
Group: BASE Warn Stage(ft): 121.000
Type: Stage/Area

Stage(ft)	Area(ac)
115.000	0.0589
116.000	0.2844
117.000	0.6016
118.000	0.9729
119.000	1.3425
120.000	1.8764
121.000	2.5513

Name: PRE-SE5 DN NODE Base Flow(cfs): 0.000 Init Stage(ft): 139.000
Group: BASE Warn Stage(ft): 145.000
Type: Stage/Area

Stage(ft)	Area(ac)
139.000	0.0300
145.000	0.0300

Name: PRE-SE5-STAGE Base Flow(cfs): 0.000 Init Stage(ft): 136.000
Group: BASE Warn Stage(ft): 141.000
Type: Stage/Area

Stage(ft)	Area(ac)
136.000	0.1202
137.000	0.2956
138.000	0.4920
139.000	0.8037
140.000	1.1891
141.000	1.7981

Name: PRE-SOUTH Base Flow(cfs): 0.000 Init Stage(ft): 0.000
Group: BASE Warn Stage(ft): 0.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	0.000
999.00	0.000

Name: PRE-WEST Base Flow(cfs): 0.000 Init Stage(ft): 0.000
Group: BASE Warn Stage(ft): 0.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	0.000
999.00	0.000

==== Pipes =====

Name: PRE-E1-PIPE	From Node: PRE-E1-STAGE	Length(ft): 53.00
Group: BASE	To Node: PRE-E1 DWN NODE	Count: 1
	Friction Equation: Automatic	
UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry: Circular	Circular	Flow: Both
Span(in): 24.00	24.00	Entrance Loss Coef: 0.00
Rise(in): 24.00	24.00	Exit Loss Coef: 1.00
Invert(ft): 142.000	141.000	Bend Loss Coef: 0.00
Manning's N: 0.014000	0.014000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in): 0.000	0.000	Inlet Ctrl Spec: Use dc
Bot Clip(in): 0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

```

=====
==== Channels =====
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```

```

Name: PRE-E1-SWALE      From Node: PRE-E1 DWN NODE      Length(ft): 750.00
Group: BASE              To Node: PRE-SE1-STAGE        Count: 1

      UPSTREAM      DOWNSTREAM      Friction Equation: Automatic
Geometry: Trapezoidal Trapezoidal      Solution Algorithm: Automatic
  Invert(ft): 141.000      118.000      Flow: Both
TClpInitZ(ft): 9999.000    9999.000      Contraction Coef: 0.100
Manning's N: 0.014000      0.014000      Expansion Coef: 0.300
Top Clip(ft): 0.000      0.000      Entrance Loss Coef: 0.000
Bot Clip(ft): 0.000      0.000      Exit Loss Coef: 0.000
Main XSec:              Outlet Ctrl Spec: Use dc or tw
AuxElev1(ft):              Inlet Ctrl Spec: Use dc
Aux XSec1:              Stabilizer Option: None
AuxElev2(ft):
Aux XSec2:
Top Width(ft):
Depth(ft):
Bot Width(ft): 12.000      12.000
LtSdSlp(h/v): 6.00      6.00
RtSdSlp(h/v): 6.00      6.00

```

```

-----
Name: PRE-E4-SWALE      From Node: NODE-E4-SWALE      Length(ft): 1260.00
Group: BASE              To Node: PRE-E1-STAGE        Count: 1

      UPSTREAM      DOWNSTREAM      Friction Equation: Automatic
Geometry: Trapezoidal Trapezoidal      Solution Algorithm: Automatic
  Invert(ft): 155.000      146.000      Flow: Both
TClpInitZ(ft): 9999.000    9999.000      Contraction Coef: 0.100
Manning's N: 0.014000      0.014000      Expansion Coef: 0.300
Top Clip(ft): 0.000      0.000      Entrance Loss Coef: 0.000
Bot Clip(ft): 0.000      0.000      Exit Loss Coef: 0.000
Main XSec:              Outlet Ctrl Spec: Use dc or tw
AuxElev1(ft):              Inlet Ctrl Spec: Use dc
Aux XSec1:              Stabilizer Option: None
AuxElev2(ft):
Aux XSec2:
Top Width(ft):
Depth(ft):
Bot Width(ft): 1.000      1.000
LtSdSlp(h/v): 4.00      4.00
RtSdSlp(h/v): 10.00     10.00

```

```

-----
Name: PRE-SE1-SWALE      From Node: PRE-SE1-STAGE      Length(ft): 1350.00
Group: BASE              To Node: PRE-SOUTH        Count: 1

      UPSTREAM      DOWNSTREAM      Friction Equation: Automatic
Geometry: Trapezoidal Trapezoidal      Solution Algorithm: Automatic
  Invert(ft): 120.000      106.000      Flow: Both
TClpInitZ(ft): 9999.000    9999.000      Contraction Coef: 0.100
Manning's N: 0.014000      0.014000      Expansion Coef: 0.300
Top Clip(ft): 0.000      0.000      Entrance Loss Coef: 0.000
Bot Clip(ft): 0.000      0.000      Exit Loss Coef: 0.000
Main XSec:              Outlet Ctrl Spec: Use dc or tw
AuxElev1(ft):              Inlet Ctrl Spec: Use dc
Aux XSec1:              Stabilizer Option: None
AuxElev2(ft):
Aux XSec2:
Top Width(ft):
Depth(ft):
Bot Width(ft): 50.000      50.000
LtSdSlp(h/v): 35.00      35.00
RtSdSlp(h/v): 35.00      35.00

```

```

-----
Name: PRE-SE5-SWALE      From Node: PRE-SE5 DN NODE      Length(ft): 1115.00
Group: BASE              To Node: PRE-SE1-STAGE        Count: 1

      UPSTREAM      DOWNSTREAM      Friction Equation: Automatic
Geometry: Trapezoidal Trapezoidal      Solution Algorithm: Automatic
  Invert(ft): 139.000      121.000      Flow: Both
TClpInitZ(ft): 9999.000    9999.000      Contraction Coef: 0.100
Manning's N: 0.014000      0.014000      Expansion Coef: 0.300
Top Clip(ft): 0.000      0.000      Entrance Loss Coef: 0.000
Bot Clip(ft): 0.000      0.000      Exit Loss Coef: 0.000
Main XSec:              Outlet Ctrl Spec: Use dc or tw
AuxElev1(ft):              Inlet Ctrl Spec: Use dc
Aux XSec1:              Stabilizer Option: None

```

```
AuxElev2(ft):
Aux XSec2:
Top Width(ft):
Depth(ft):
Bot Width(ft): 5.000      5.000
LtSdSlp(h/v): 60.00      60.00
RtSdSlp(h/v): 60.00      60.00
```

=====

==== Weirs =====

=====

```
Name: PRE-E4-WEIR      From Node: PRE-E4-STAGE
Group: BASE            To Node: NODE-E4-SWALE
Flow: Positive         Count: 1
Type: Vertical: Mavis  Geometry: Trapezoidal

Bottom Width(ft): 1.00
Left Side Slope(h/v): 4.00
Right Side Slope(h/v): 10.00
Invert(ft): 155.000
Control Elevation(ft): 155.000
Struct Opening Dim(ft): 9999.00

Bottom Clip(ft): 0.000
Top Clip(ft): 0.000
Weir Discharge Coef: 3.200
Orifice Discharge Coef: 0.600
```

TABLE

```
Name: PRE-E5-WEIR      From Node: PRE-E5-STAGE
Group: BASE            To Node: PRE-E4-STAGE
Flow: Both            Count: 1
Type: Vertical: Mavis  Geometry: Trapezoidal

Bottom Width(ft): 40.00
Left Side Slope(h/v): 60.00
Right Side Slope(h/v): 60.00
Invert(ft): 155.500
Control Elevation(ft): 155.500
Struct Opening Dim(ft): 9999.00

Bottom Clip(ft): 0.000
Top Clip(ft): 0.000
Weir Discharge Coef: 3.200
Orifice Discharge Coef: 0.600
```

TABLE

```
Name: PRE-E6-WEIR      From Node: PRE-E6-STAGE
Group: BASE            To Node: PRE-E4-STAGE
Flow: Both            Count: 1
Type: Vertical: Mavis  Geometry: Trapezoidal

Bottom Width(ft): 35.00
Left Side Slope(h/v): 40.00
Right Side Slope(h/v): 40.00
Invert(ft): 157.500
Control Elevation(ft): 157.500
Struct Opening Dim(ft): 9999.00

Bottom Clip(ft): 0.000
Top Clip(ft): 0.000
Weir Discharge Coef: 3.200
Orifice Discharge Coef: 0.600
```

TABLE

```
Name: PRE-SE5-WEIR      From Node: PRE-SE5-STAGE
Group: BASE            To Node: PRE-SE5 DN NODE
Flow: Both            Count: 1
Type: Vertical: Mavis  Geometry: Trapezoidal

Bottom Width(ft): 5.00
Left Side Slope(h/v): 80.00
Right Side Slope(h/v): 80.00
Invert(ft): 139.870
Control Elevation(ft): 139.870
Struct Opening Dim(ft): 9999.00

Bottom Clip(ft): 0.000
Top Clip(ft): 0.000
Weir Discharge Coef: 3.200
```

TABLE

Orifice Discharge Coef: 0.600

==== Hydrology Simulations =====

Name: 100Y001H
Filename: G:\Engineering\Projects\18-0046 Tara Forest East\2 Stormwater\ICPR\100Y001H.R32

Override Defaults: Yes
Storm Duration(hrs): 1.00
Rainfall File: FDOT-1
Rainfall Amount(in): 4.40

Time(hrs)	Print Inc(min)
2.000	2.50
721.000	5.00

Name: 100Y002H
Filename: G:\Engineering\Projects\18-0046 Tara Forest East\2 Stormwater\ICPR\100Y002H.R32

Override Defaults: Yes
Storm Duration(hrs): 2.00
Rainfall File: FDOT-2
Rainfall Amount(in): 5.40

Time(hrs)	Print Inc(min)
4.000	2.50
722.000	5.00

Name: 100Y004H
Filename: G:\Engineering\Projects\18-0046 Tara Forest East\2 Stormwater\ICPR\100Y004H.R32

Override Defaults: Yes
Storm Duration(hrs): 4.00
Rainfall File: FDOT-4
Rainfall Amount(in): 6.72

Time(hrs)	Print Inc(min)
6.000	2.50
724.000	5.00

Name: 100Y008H
Filename: G:\Engineering\Projects\18-0046 Tara Forest East\2 Stormwater\ICPR\100Y008H.R32

Override Defaults: Yes
Storm Duration(hrs): 8.00
Rainfall File: FDOT-8
Rainfall Amount(in): 8.00

Time(hrs)	Print Inc(min)
12.000	2.50
728.000	5.00

Name: 100Y024H
Filename: G:\Engineering\Projects\18-0046 Tara Forest East\2 Stormwater\ICPR\100Y024H.R32

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: FDOT-24
Rainfall Amount(in): 11.04

Time(hrs)	Print Inc(min)
30.000	5.00
744.000	10.00

Name: 100Y072H
Filename: G:\Engineering\Projects\18-0046 Tara Forest East\2 Stormwater\ICPR\100Y072H.R32

Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: FDOT-72
Rainfall Amount(in): 13.80

Time(hrs)	Print Inc(min)
77.000	5.00

792.000 10.00

Name: 100Y168H
Filename: G:\Engineering\Projects\18-0046 Tara Forest East\2 Stormwater\ICPR\100Y168H.R32

Override Defaults: Yes
Storm Duration(hrs): 168.00
Rainfall File: FDOT-168
Rainfall Amount(in): 16.00

Time(hrs)	Print Inc(min)
-----	-----
173.000	5.00
888.000	10.00

Name: 100Y240H
Filename: G:\Engineering\Projects\18-0046 Tara Forest East\2 Stormwater\ICPR\100Y240H.R32

Override Defaults: Yes
Storm Duration(hrs): 240.00
Rainfall File: Fdot-240
Rainfall Amount(in): 18.00

Time(hrs)	Print Inc(min)
-----	-----
245.000	5.00
960.000	10.00

==== Routing Simulations =====

Name: 100Y001H Hydrology Sim: 100Y001H
Filename: G:\Engineering\Projects\18-0046 Tara Forest East\2 Stormwater\ICPR\100Y001H.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00	Delta Z Factor: 0.00500
Time Step Optimizer: 10.000	
Start Time(hrs): 0.000	End Time(hrs): 721.00
Min Calc Time(sec): 0.2500	Max Calc Time(sec): 60.0000
Boundary Stages:	Boundary Flows:

100 yr / 001 hr

Time(hrs)	Print Inc(min)
-----	-----
999.000	5.000

Group	Run
-----	-----
BASE	Yes

Name: 100Y002H Hydrology Sim: 100Y002H
Filename: G:\Engineering\Projects\18-0046 Tara Forest East\2 Stormwater\ICPR\100Y002H.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00	Delta Z Factor: 0.00500
Time Step Optimizer: 10.000	
Start Time(hrs): 0.000	End Time(hrs): 722.00
Min Calc Time(sec): 0.2500	Max Calc Time(sec): 60.0000
Boundary Stages:	Boundary Flows:

100 yr / 002 hr

Time(hrs)	Print Inc(min)
-----	-----
999.000	5.000

Group	Run
-----	-----
BASE	Yes

Name: 100Y004H Hydrology Sim: 100Y004H
Filename: G:\Engineering\Projects\18-0046 Tara Forest East\2 Stormwater\ICPR\100Y004H.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00	Delta Z Factor: 0.00500
-----------------------	-------------------------

Time Step Optimizer: 10.000	End Time(hrs): 724.00
Start Time(hrs): 0.000	Max Calc Time(sec): 60.0000
Min Calc Time(sec): 0.2500	Boundary Flows:
Boundary Stages:	

100 yr / 004 hr

Time(hrs)	Print Inc(min)
999.000	5.000
Group	Run
BASE	Yes

Name: 100Y008H	Hydrology Sim: 100Y008H
Filename: G:\Engineering\Projects\18-0046 Tara Forest East\2 Stormwater\ICPR\100Y008H.I32	

Execute: Yes	Restart: No	Patch: No
Alternative: No		

Max Delta Z(ft): 1.00	Delta Z Factor: 0.00500
Time Step Optimizer: 10.000	
Start Time(hrs): 0.000	End Time(hrs): 728.00
Min Calc Time(sec): 0.2500	Max Calc Time(sec): 60.0000
Boundary Stages:	Boundary Flows:

100 yr / 008 hr

Time(hrs)	Print Inc(min)
999.000	5.000
Group	Run
BASE	Yes

Name: 100Y024H	Hydrology Sim: 100Y024H
Filename: G:\Engineering\Projects\18-0046 Tara Forest East\2 Stormwater\ICPR\100Y024H.I32	

Execute: Yes	Restart: No	Patch: No
Alternative: No		

Max Delta Z(ft): 1.00	Delta Z Factor: 0.00500
Time Step Optimizer: 10.000	
Start Time(hrs): 0.000	End Time(hrs): 744.00
Min Calc Time(sec): 0.2500	Max Calc Time(sec): 60.0000
Boundary Stages:	Boundary Flows:

100 yr / 024 hr

Time(hrs)	Print Inc(min)
999.000	5.000
Group	Run
BASE	Yes

Name: 100Y072H	Hydrology Sim: 100Y072H
Filename: G:\Engineering\Projects\18-0046 Tara Forest East\2 Stormwater\ICPR\100Y072H.I32	

Execute: Yes	Restart: No	Patch: No
Alternative: No		

Max Delta Z(ft): 1.00	Delta Z Factor: 0.00500
Time Step Optimizer: 10.000	
Start Time(hrs): 0.000	End Time(hrs): 792.00
Min Calc Time(sec): 0.2500	Max Calc Time(sec): 60.0000
Boundary Stages:	Boundary Flows:

100 yr / 072 hr

Time(hrs)	Print Inc(min)
999.000	5.000
Group	Run
BASE	Yes

Name: 100Y168H Hydrology Sim: 100Y168H
Filename: G:\Engineering\Projects\18-0046 Tara Forest East\2 Stormwater\ICPR\100Y168H.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 888.00
Min Calc Time(sec): 0.2500 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

100 yr / 168 hr

Time(hrs)	Print Inc(min)
999.000	5.000
Group	Run
BASE	Yes

Name: 100Y240H Hydrology Sim: 100Y240H
Filename: G:\Engineering\Projects\18-0046 Tara Forest East\2 Stormwater\ICPR\100Y240H.I32

Execute: Yes Restart: No Patch: No
Alternative: No

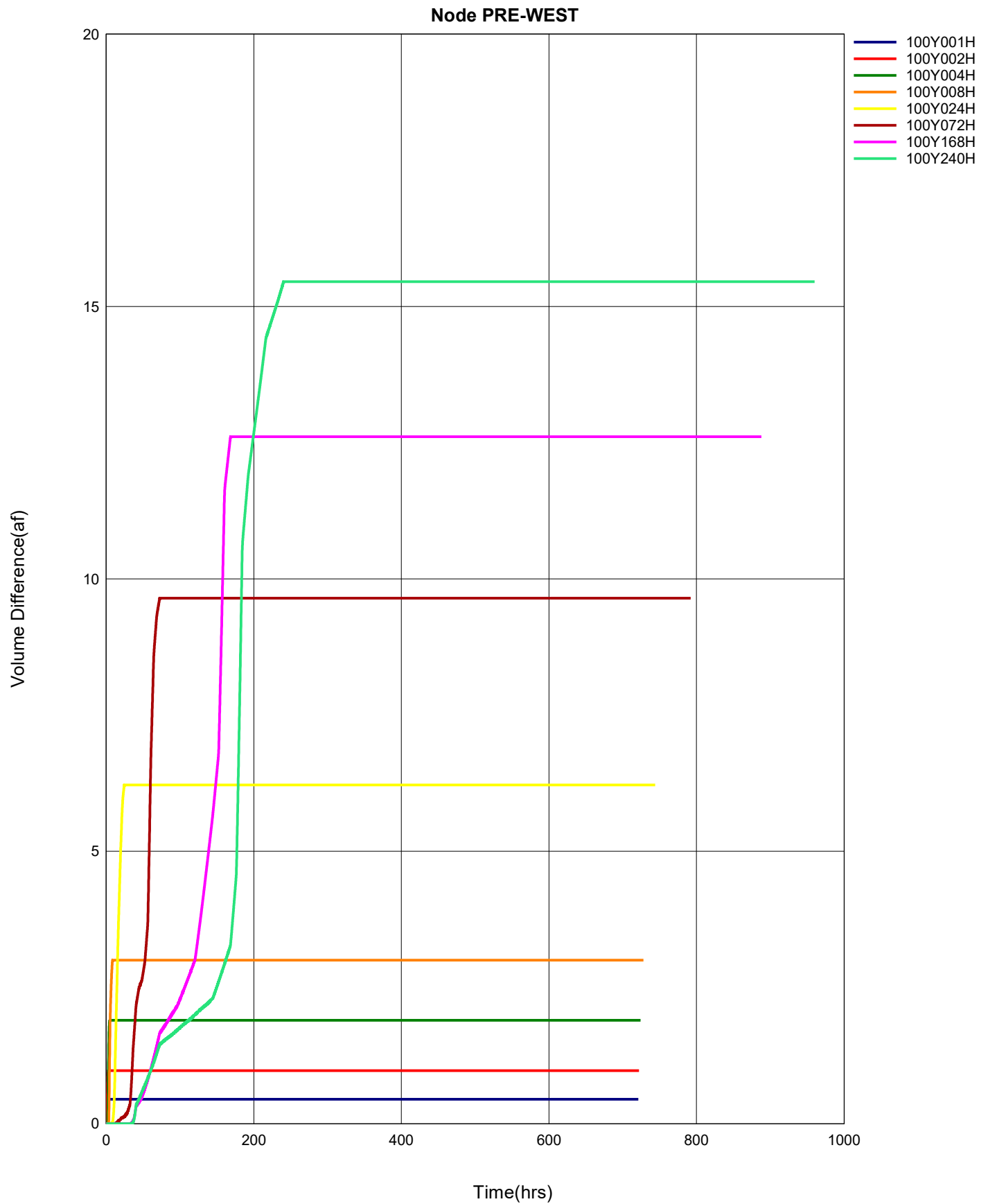
Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 960.00
Min Calc Time(sec): 0.2500 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

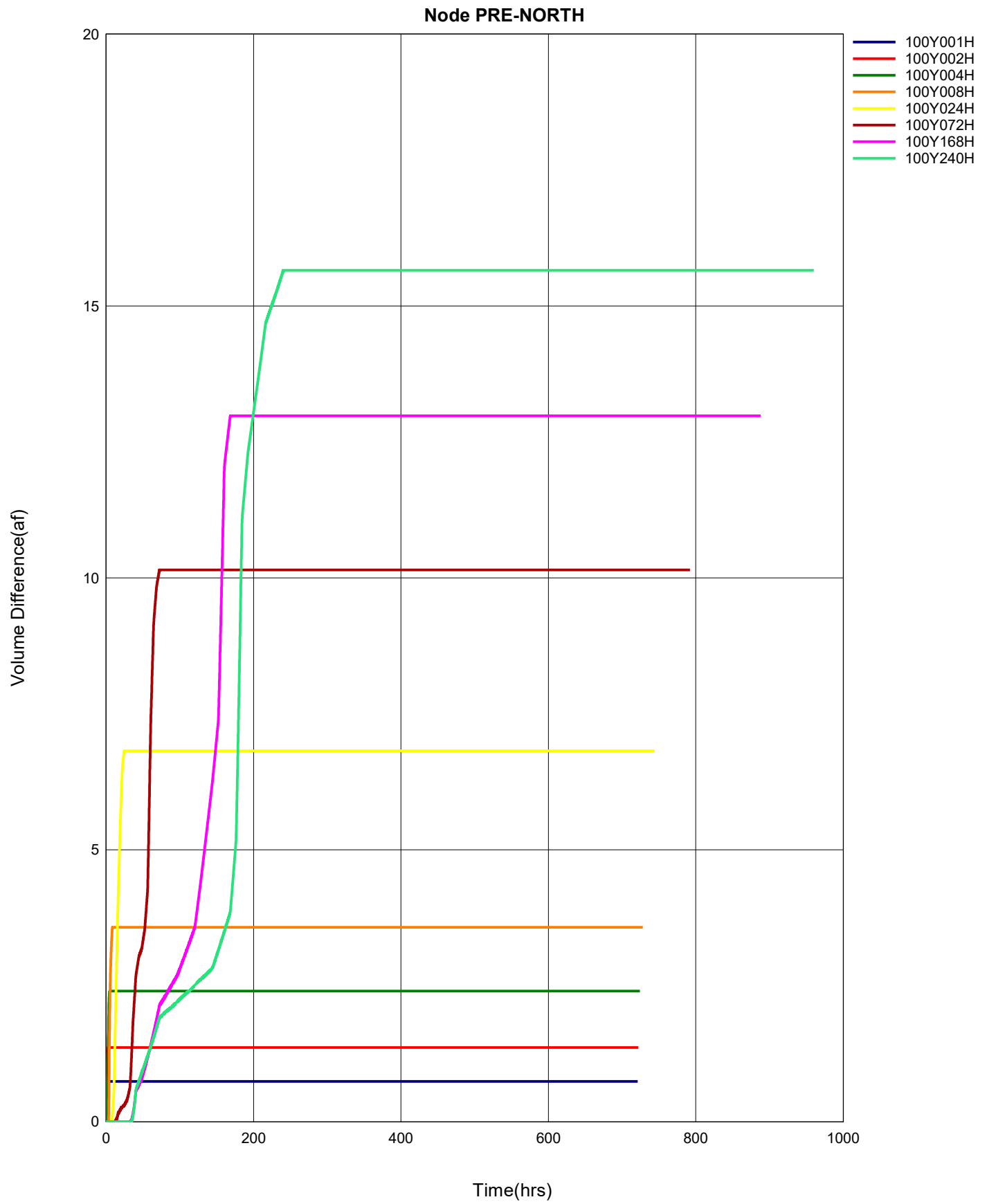
100 yr / 240 hr

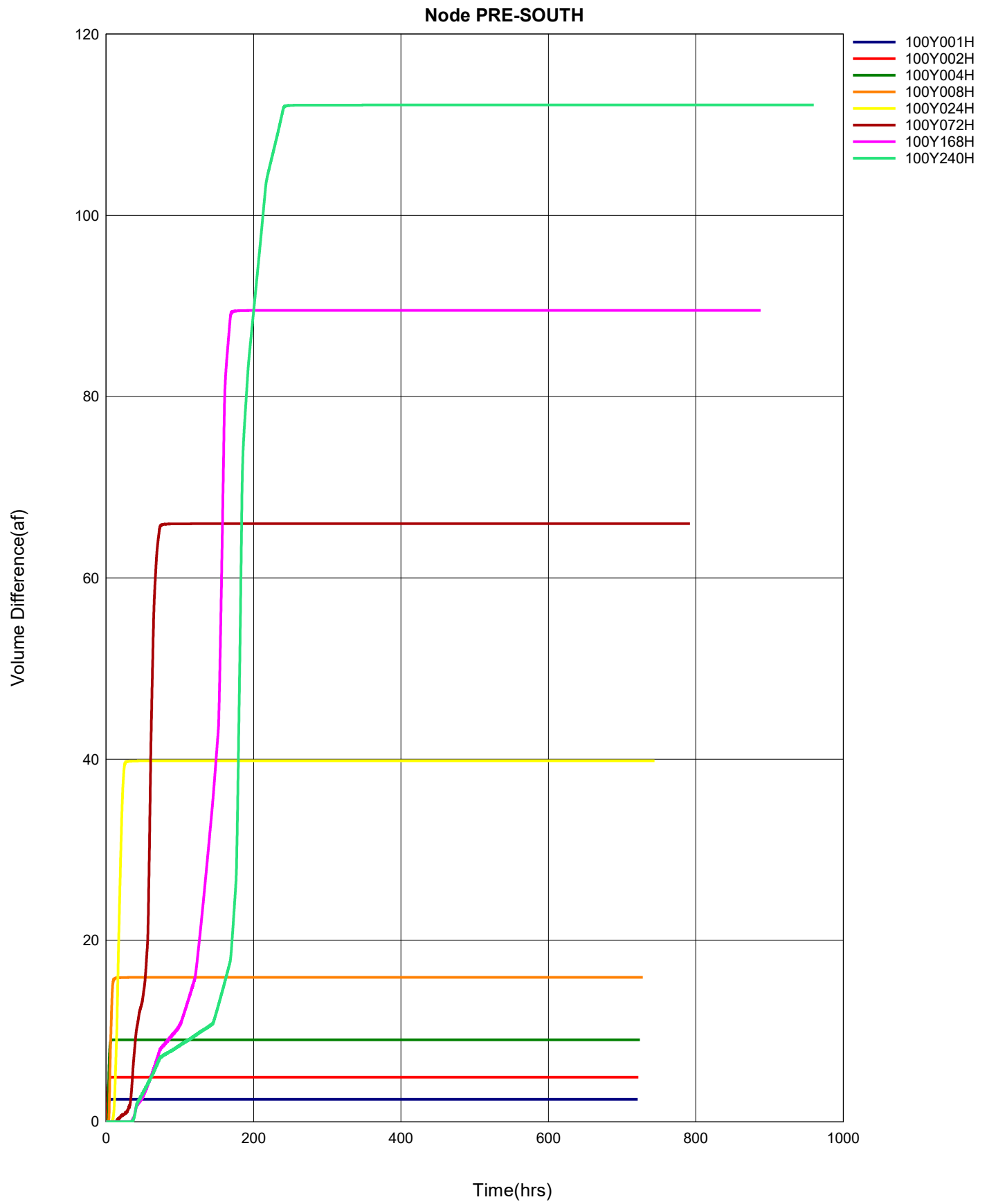
Time(hrs)	Print Inc(min)
999.000	5.000
Group	Run
BASE	Yes

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs
NODE-E4-SWALE	BASE	100Y001H	1.18	155.037	160.000	-0.0003	1072	1.00	0.055	1.18
NODE-E4-SWALE	BASE	100Y002H	1.94	155.117	160.000	-0.0011	1786	1.87	0.347	1.94
NODE-E4-SWALE	BASE	100Y004H	3.15	155.210	160.000	-0.0016	2587	3.08	1.092	3.15
NODE-E4-SWALE	BASE	100Y008H	5.09	155.212	160.000	-0.0022	2603	5.04	1.097	5.09
NODE-E4-SWALE	BASE	100Y024H	15.11	155.183	160.000	-0.0016	2361	15.08	0.818	15.11
NODE-E4-SWALE	BASE	100Y072H	60.02	155.233	160.000	0.0037	2788	59.99	1.325	60.02
NODE-E4-SWALE	BASE	100Y168H	160.00	155.220	160.000	0.0036	2673	159.98	1.172	160.00
NODE-E4-SWALE	BASE	100Y240H	184.01	155.247	160.000	0.0038	2903	184.00	1.484	184.01
PRE-E1 DWN NODE	BASE	100Y001H	0.00	141.000	145.000	0.0000	1534	0.00	0.000	0.00
PRE-E1 DWN NODE	BASE	100Y002H	0.00	141.000	145.000	0.0000	1534	0.00	0.000	0.00
PRE-E1 DWN NODE	BASE	100Y004H	4.81	141.024	145.000	0.0004	5935	4.66	0.259	4.81
PRE-E1 DWN NODE	BASE	100Y008H	7.28	141.103	145.000	-0.0006	6270	7.21	2.309	7.28
PRE-E1 DWN NODE	BASE	100Y024H	16.24	141.145	145.000	-0.0004	6441	16.18	3.886	16.24
PRE-E1 DWN NODE	BASE	100Y072H	60.18	141.194	145.000	0.0008	6640	60.13	6.122	60.18
PRE-E1 DWN NODE	BASE	100Y168H	160.08	141.178	145.000	-0.0008	6575	160.02	5.346	160.08
PRE-E1 DWN NODE	BASE	100Y240H	184.10	141.207	145.000	0.0008	6692	184.05	6.770	184.10
PRE-E1-STAGE	BASE	100Y001H	721.00	139.339	147.000	0.0042	5554	0.92	2.936	0.00
PRE-E1-STAGE	BASE	100Y002H	722.00	140.661	147.000	0.0041	8909	1.54	3.573	0.00
PRE-E1-STAGE	BASE	100Y004H	4.67	142.214	147.000	0.0045	17398	3.04	7.947	4.66
PRE-E1-STAGE	BASE	100Y008H	7.22	142.703	147.000	0.0045	22885	4.13	8.348	7.21
PRE-E1-STAGE	BASE	100Y024H	16.21	142.940	147.000	0.0050	25529	15.05	4.479	16.18
PRE-E1-STAGE	BASE	100Y072H	60.14	143.227	147.000	0.0050	29667	59.99	6.505	60.13
PRE-E1-STAGE	BASE	100Y168H	160.05	143.132	147.000	-0.0050	28266	159.98	5.437	160.02
PRE-E1-STAGE	BASE	100Y240H	184.08	143.305	147.000	0.0050	30852	184.00	6.951	184.05
PRE-E4-STAGE	BASE	100Y001H	3.33	149.283	156.000	0.0010	4696	1.04	0.383	0.00
PRE-E4-STAGE	BASE	100Y002H	4.33	149.695	156.000	0.0014	8337	1.79	0.753	0.00
PRE-E4-STAGE	BASE	100Y004H	6.34	150.233	156.000	0.0016	12682	3.13	1.739	0.00
PRE-E4-STAGE	BASE	100Y008H	10.29	150.749	156.000	0.0025	16337	5.08	1.686	0.00
PRE-E4-STAGE	BASE	100Y024H	26.34	151.919	156.000	0.0027	24418	15.09	1.146	0.00
PRE-E4-STAGE	BASE	100Y072H	74.34	152.887	156.000	0.0029	31639	59.99	1.703	0.00
PRE-E4-STAGE	BASE	100Y168H	170.26	153.578	156.000	0.0028	38614	159.92	1.445	0.00
PRE-E4-STAGE	BASE	100Y240H	960.01	154.174	156.000	0.0030	45467	184.00	1.841	0.00
PRE-E5-STAGE	BASE	100Y001H	2.08	148.037	156.000	0.0002	444	1.00	0.010	0.00
PRE-E5-STAGE	BASE	100Y002H	3.05	148.615	156.000	0.0012	2287	1.83	0.259	0.00
PRE-E5-STAGE	BASE	100Y004H	5.06	149.374	156.000	0.0019	5223	3.04	0.948	0.00
PRE-E5-STAGE	BASE	100Y008H	9.04	150.007	156.000	0.0026	8115	5.04	0.909	0.00
PRE-E5-STAGE	BASE	100Y024H	25.09	151.296	156.000	0.0028	15216	15.00	0.689	0.00
PRE-E5-STAGE	BASE	100Y072H	73.09	152.304	156.000	0.0039	21199	59.99	1.142	0.00
PRE-E5-STAGE	BASE	100Y168H	169.10	153.022	156.000	0.0029	25986	159.98	1.018	0.00
PRE-E5-STAGE	BASE	100Y240H	241.09	153.615	156.000	0.0033	30935	184.00	1.291	0.00
PRE-E6-STAGE	BASE	100Y001H	2.25	153.016	158.000	0.0001	716	1.04	0.007	0.00
PRE-E6-STAGE	BASE	100Y002H	3.25	153.423	158.000	0.0009	2297	1.87	0.191	0.00
PRE-E6-STAGE	BASE	100Y004H	5.26	154.027	158.000	0.0013	4656	3.08	0.689	0.00
PRE-E6-STAGE	BASE	100Y008H	9.26	154.580	158.000	0.0023	7024	5.04	0.686	0.00
PRE-E6-STAGE	BASE	100Y024H	25.26	155.771	158.000	0.0025	12257	15.08	0.523	0.00
PRE-E6-STAGE	BASE	100Y072H	73.26	156.647	158.000	0.0033	20857	59.99	0.870	0.00
PRE-E6-STAGE	BASE	100Y168H	169.26	157.174	158.000	0.0025	30623	159.98	0.777	0.00
PRE-E6-STAGE	BASE	100Y240H	239.96	157.506	158.000	0.0029	41366	184.00	0.984	239.96
PRE-NORTH	BASE	100Y001H	0.00	0.000	0.000	0.0000	0	0.87	15.017	0.00
PRE-NORTH	BASE	100Y002H	0.00	0.000	0.000	0.0000	0	1.08	13.824	0.00
PRE-NORTH	BASE	100Y004H	0.00	0.000	0.000	0.0000	0	2.63	18.455	0.00
PRE-NORTH	BASE	100Y008H	0.00	0.000	0.000	0.0000	0	4.08	21.649	0.00
PRE-NORTH	BASE	100Y024H	0.00	0.000	0.000	0.0000	0	12.08	9.500	0.00
PRE-NORTH	BASE	100Y072H	0.00	0.000	0.000	0.0000	0	59.99	9.556	0.00
PRE-NORTH	BASE	100Y168H	0.00	0.000	0.000	0.0000	0	159.92	7.350	0.00
PRE-NORTH	BASE	100Y240H	0.00	0.000	0.000	0.0000	0	183.92	9.516	0.00
PRE-SE1-STAGE	BASE	100Y001H	2.92	116.561	121.000	0.0050	22197	0.92	10.223	0.00
PRE-SE1-STAGE	BASE	100Y002H	3.88	117.843	121.000	0.0050	41888	1.58	13.177	0.00
PRE-SE1-STAGE	BASE	100Y004H	724.01	119.357	121.000	0.0050	77686	3.04	29.345	0.00
PRE-SE1-STAGE	BASE	100Y008H	7.21	120.113	121.000	0.0050	128938	4.13	30.615	7.21
PRE-SE1-STAGE	BASE	100Y024H	15.30	120.162	121.000	0.0050	132631	15.08	20.235	15.30
PRE-SE1-STAGE	BASE	100Y072H	60.05	120.214	121.000	0.0050	136660	59.99	30.614	60.05
PRE-SE1-STAGE	BASE	100Y168H	160.02	120.205	121.000	0.0049	145838	160.00	28.434	160.02
PRE-SE1-STAGE	BASE	100Y240H	184.02	120.238	121.000	0.0048	149212	184.00	36.176	184.02
PRE-SE5 DN NODE	BASE	100Y001H	0.00	139.000	145.000	0.0000	1446	0.00	0.000	0.00
PRE-SE5 DN NODE	BASE	100Y002H	0.00	139.000	145.000	0.0000	1446	0.00	0.000	0.00
PRE-SE5 DN NODE	BASE	100Y004H	0.00	139.000	145.000	0.0000	1446	0.00	0.000	0.00
PRE-SE5 DN NODE	BASE	100Y008H	0.00	139.000	145.000	0.0000	1446	0.00	0.000	0.00
PRE-SE5 DN NODE	BASE	100Y024H	0.00	139.000	145.000	0.0000	1446	0.00	0.000	0.00
PRE-SE5 DN NODE	BASE	100Y072H	68.11	139.063	145.000	0.0009	8169	68.04	0.669	68.11
PRE-SE5 DN NODE	BASE	100Y168H	160.03	139.126	145.000	0.0023	12143	160.00	2.528	160.03
PRE-SE5 DN NODE	BASE	100Y240H	184.06	139.141	145.000	0.0024	13082	184.02	3.177	184.06
PRE-SE5-STAGE	BASE	100Y001H	2.75	136.051	141.000	0.0002	5629	1.00	0.149	0.00
PRE-SE5-STAGE	BASE	100Y002H	3.72	136.427	141.000	0.0009	8496	1.79	0.808	0.00
PRE-SE5-STAGE	BASE	100Y004H	5.67	137.113	141.000	0.0014	13842	3.04	2.553	0.00
PRE-SE5-STAGE	BASE	100Y008H	9.68	137.785	141.000	0.0028	19593	5.00	2.466	0.00
PRE-SE5-STAGE	BASE	100Y024H	25.76	139.165	141.000	0.0031	37775	15.00	1.797	0.00

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs
PRE-SE5-STAGE	BASE	100Y072H	68.04	139.947	141.000	0.0040	50901	59.99	2.893	68.04
PRE-SE5-STAGE	BASE	100Y168H	160.00	140.016	141.000	0.0029	52209	159.98	2.547	160.00
PRE-SE5-STAGE	BASE	100Y240H	184.02	140.032	141.000	0.0033	52639	184.00	3.231	184.02
PRE-SOUTH	BASE	100Y001H	0.00	0.000	0.000	0.0000	1688	1.25	22.359	0.00
PRE-SOUTH	BASE	100Y002H	0.00	0.000	0.000	0.0000	1688	1.83	30.955	0.00
PRE-SOUTH	BASE	100Y004H	0.00	0.000	0.000	0.0000	1688	3.25	51.597	0.00
PRE-SOUTH	BASE	100Y008H	0.00	0.000	0.000	0.0000	1688	4.58	51.425	0.00
PRE-SOUTH	BASE	100Y024H	0.00	0.000	0.000	0.0000	1688	15.25	50.868	0.00
PRE-SOUTH	BASE	100Y072H	0.00	0.000	0.000	0.0000	1688	60.06	70.809	0.00
PRE-SOUTH	BASE	100Y168H	0.00	0.000	0.000	0.0000	1688	160.00	60.710	0.00
PRE-SOUTH	BASE	100Y240H	0.00	0.000	0.000	0.0000	1688	184.00	77.586	0.00
PRE-WEST	BASE	100Y001H	0.00	0.000	0.000	0.0000	0	0.88	9.220	0.00
PRE-WEST	BASE	100Y002H	0.00	0.000	0.000	0.0000	0	1.17	8.962	0.00
PRE-WEST	BASE	100Y004H	0.00	0.000	0.000	0.0000	0	3.04	14.956	0.00
PRE-WEST	BASE	100Y008H	0.00	0.000	0.000	0.0000	0	4.08	17.166	0.00
PRE-WEST	BASE	100Y024H	0.00	0.000	0.000	0.0000	0	12.08	8.284	0.00
PRE-WEST	BASE	100Y072H	0.00	0.000	0.000	0.0000	0	59.99	9.685	0.00
PRE-WEST	BASE	100Y168H	0.00	0.000	0.000	0.0000	0	159.98	7.721	0.00
PRE-WEST	BASE	100Y240H	0.00	0.000	0.000	0.0000	0	184.00	9.942	0.00

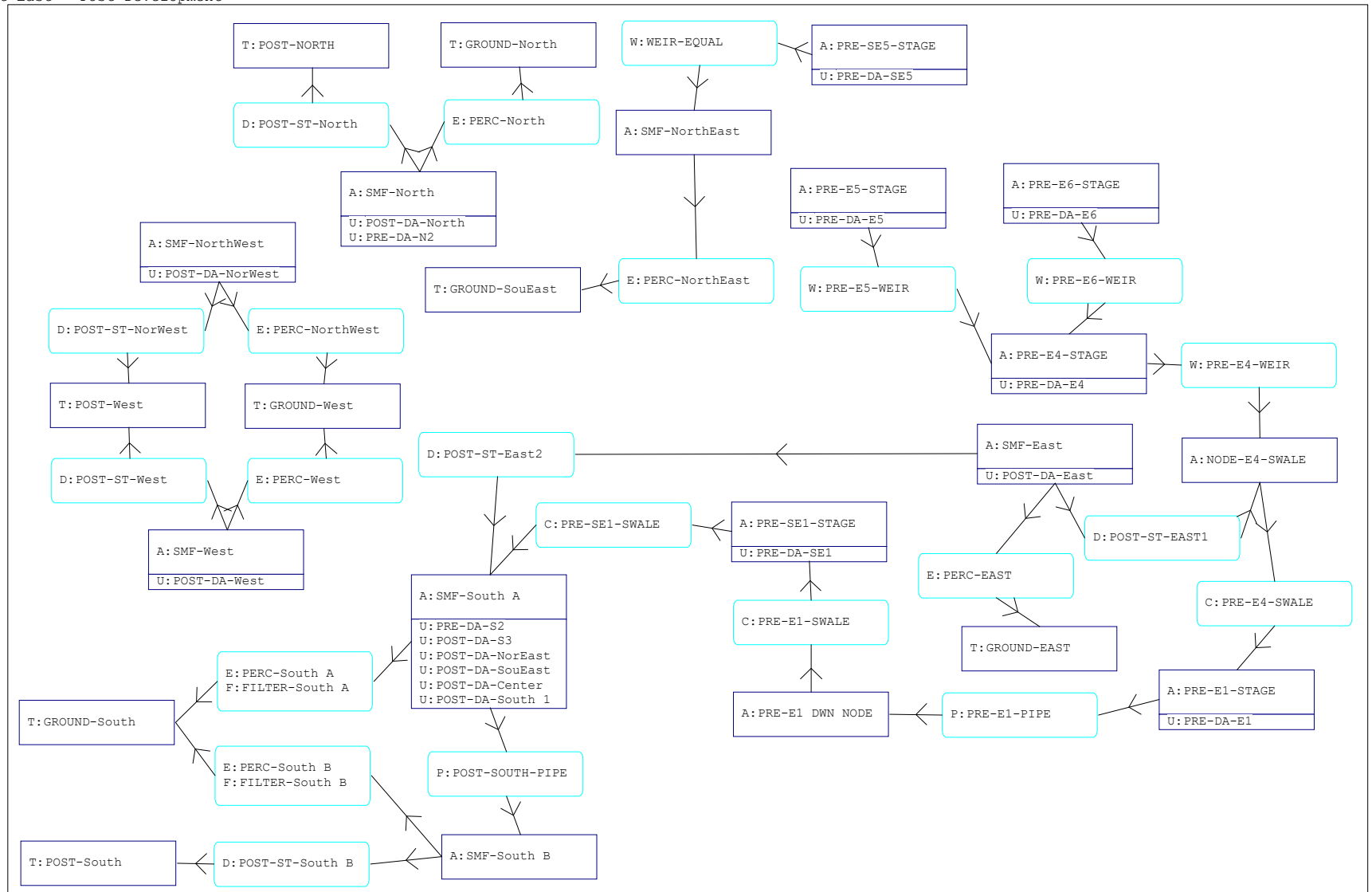






Post-Development ICPR Output

Links
P Pipe
W Weir
C Channel
D Drop Structure
B Bridge
R Rating Curve
H Breach
E Percolation
F Filter
X Exfil Trench



==== Basins =====

Name: POST-DA-Center Node: SMF-South A Status: Onsite
Group: SOUTHEAST Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh484 Peaking Factor: 484.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 13.30
Area(ac): 19.423 Time Shift(hrs): 0.00
Curve Number: 58.05 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: POST-DA-East Node: SMF-EAST Status: Onsite
Group: SOUTHEAST Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh484 Peaking Factor: 484.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 13.30
Area(ac): 4.455 Time Shift(hrs): 0.00
Curve Number: 54.46 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: POST-DA-NorEast Node: SMF-South A Status: Onsite
Group: SOUTHEAST Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh484 Peaking Factor: 484.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 13.30
Area(ac): 5.248 Time Shift(hrs): 0.00
Curve Number: 53.91 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: POST-DA-North Node: SMF-NORTH Status: Onsite
Group: NORTH Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh484 Peaking Factor: 484.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 13.30
Area(ac): 16.720 Time Shift(hrs): 0.00
Curve Number: 63.29 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: POST-DA-NorWest Node: SMF-NorthWest Status: Onsite
Group: WEST Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh484 Peaking Factor: 484.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 13.30
Area(ac): 3.621 Time Shift(hrs): 0.00
Curve Number: 71.25 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: POST-DA-S3 Node: SMF-South A Status: Onsite
Group: SOUTHEAST Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh323 Peaking Factor: 323.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 32.70
Area(ac): 11.599 Time Shift(hrs): 0.00
Curve Number: 55.39 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: POST-DA-SouEast Node: SMF-South A Status: Onsite
Group: SOUTHEAST Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh484 Peaking Factor: 484.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 13.30

Area(ac): 3.627	Time Shift(hrs): 0.00
Curve Number: 53.98	Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00	

Name: POST-DA-South 1	Node: SMF-South A	Status: Onsite
Group: SOUTHEAST	Type: SCS Unit Hydrograph CN	

Unit Hydrograph: Uh484	Peaking Factor: 484.0
Rainfall File:	Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000	Time of Conc(min): 13.30
Area(ac): 76.293	Time Shift(hrs): 0.00
Curve Number: 68.08	Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00	

Name: POST-DA-West	Node: SMF-West	Status: Onsite
Group: WEST	Type: SCS Unit Hydrograph CN	

Unit Hydrograph: Uh484	Peaking Factor: 484.0
Rainfall File:	Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000	Time of Conc(min): 13.30
Area(ac): 18.726	Time Shift(hrs): 0.00
Curve Number: 62.76	Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00	

Name: PRE-DA-E1	Node: PRE-E1-STAGE	Status: Onsite
Group: SOUTHEAST	Type: SCS Unit Hydrograph CN	

Unit Hydrograph: Uh323	Peaking Factor: 323.0
Rainfall File:	Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000	Time of Conc(min): 17.80
Area(ac): 13.036	Time Shift(hrs): 0.00
Curve Number: 39.74	Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00	

Name: PRE-DA-E4	Node: PRE-E4-STAGE	Status: Onsite
Group: SOUTHEAST	Type: SCS Unit Hydrograph CN	

Unit Hydrograph: Uh323	Peaking Factor: 323.0
Rainfall File:	Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000	Time of Conc(min): 28.90
Area(ac): 4.700	Time Shift(hrs): 0.00
Curve Number: 37.17	Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00	

Name: PRE-DA-E5	Node: PRE-E5-STAGE	Status: Onsite
Group: SOUTHEAST	Type: SCS Unit Hydrograph CN	

Unit Hydrograph: Uh323	Peaking Factor: 323.0
Rainfall File:	Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000	Time of Conc(min): 13.10
Area(ac): 3.815	Time Shift(hrs): 0.00
Curve Number: 32.00	Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00	

Name: PRE-DA-E6	Node: PRE-E6-STAGE	Status: Onsite
Group: SOUTHEAST	Type: SCS Unit Hydrograph CN	

Unit Hydrograph: Uh323	Peaking Factor: 323.0
Rainfall File:	Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000	Time of Conc(min): 15.50
Area(ac): 2.916	Time Shift(hrs): 0.00
Curve Number: 32.00	Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00	

Name: PRE-DA-N2	Node: SMF-NORTH	Status: Onsite
Group: NORTH	Type: SCS Unit Hydrograph CN	

Unit Hydrograph: Uh323	Peaking Factor: 323.0
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Rainfall File:	Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000	Time of Conc(min): 14.70
Area(ac): 1.303	Time Shift(hrs): 0.00
Curve Number: 38.22	Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00	

Name: PRE-DA-S2	Node: SMF-South A	Status: Onsite
Group: SOUTHEAST	Type: SCS Unit Hydrograph CN	

Unit Hydrograph: Uh323	Peaking Factor: 323.0
Rainfall File:	Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000	Time of Conc(min): 27.10
Area(ac): 3.835	Time Shift(hrs): 0.00
Curve Number: 54.75	Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00	

Name: PRE-DA-SE1	Node: PRE-SE1-STAGE	Status: Onsite
Group: SOUTHEAST	Type: SCS Unit Hydrograph CN	

Unit Hydrograph: Uh323	Peaking Factor: 323.0
Rainfall File:	Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000	Time of Conc(min): 19.70
Area(ac): 39.551	Time Shift(hrs): 0.00
Curve Number: 37.55	Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00	

Name: PRE-DA-SE5	Node: PRE-SE5-STAGE	Status: Onsite
Group: SOUTHEAST	Type: SCS Unit Hydrograph CN	

Unit Hydrograph: Uh323	Peaking Factor: 323.0
Rainfall File:	Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000	Time of Conc(min): 21.20
Area(ac): 4.949	Time Shift(hrs): 0.00
Curve Number: 34.14	Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00	

==== Nodes =====

Name: GROUND-EAST	Base Flow(cfs): 0.000	Init Stage(ft): 0.000
Group: SOUTHEAST		Warn Stage(ft): 0.000
Type: Time/Stage		

Time(hrs)	Stage(ft)
0.00	0.000
999.00	0.000

Name: GROUND-North	Base Flow(cfs): 0.000	Init Stage(ft): 0.000
Group: NORTH		Warn Stage(ft): 0.000
Type: Time/Stage		

Time(hrs)	Stage(ft)
0.00	0.000
999.00	0.000

Name: GROUND-SouEast	Base Flow(cfs): 0.000	Init Stage(ft): 0.000
Group: SOUTHEAST		Warn Stage(ft): 0.000
Type: Time/Stage		

Time(hrs)	Stage(ft)
0.00	0.000
999.00	0.000

Name: GROUND-South	Base Flow(cfs): 0.000	Init Stage(ft): 0.000
Group: SOUTHEAST		Warn Stage(ft): 0.000

Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	0.000
999.00	0.000

Name: GROUND-West	Base Flow(cfs): 0.000	Init Stage(ft): 0.000
Group: WEST		Warn Stage(ft): 0.000
Type: Time/Stage		

Time(hrs)	Stage(ft)
0.00	0.000
999.00	0.000

Name: NODE-E4-SWALE	Base Flow(cfs): 0.000	Init Stage(ft): 150.000
Group: SOUTHEAST		Warn Stage(ft): 160.000
Type: Stage/Area		

Stage(ft)	Area(ac)
150.000	0.0030
160.000	0.0030

Name: POST-NORTH	Base Flow(cfs): 0.000	Init Stage(ft): 0.000
Group: NORTH		Warn Stage(ft): 0.000
Type: Time/Stage		

Time(hrs)	Stage(ft)
0.00	0.000
999.00	0.000

Name: POST-South	Base Flow(cfs): 0.000	Init Stage(ft): 0.000
Group: SOUTHEAST		Warn Stage(ft): 0.000
Type: Time/Stage		

Time(hrs)	Stage(ft)
0.00	0.000
999.00	0.000

Name: POST-West	Base Flow(cfs): 0.000	Init Stage(ft): 0.000
Group: WEST		Warn Stage(ft): 0.000
Type: Time/Stage		

Time(hrs)	Stage(ft)
0.00	0.000
999.00	0.000

Name: PRE-E1 DWN NODE	Base Flow(cfs): 0.000	Init Stage(ft): 141.000
Group: SOUTHEAST		Warn Stage(ft): 145.000
Type: Stage/Area		

Stage(ft)	Area(ac)
141.000	0.0300
145.000	0.0300

Name: PRE-E1-STAGE	Base Flow(cfs): 0.000	Init Stage(ft): 138.000
Group: SOUTHEAST		Warn Stage(ft): 147.000
Type: Stage/Area		

Stage(ft)	Area(ac)
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138.000	0.0402
139.000	0.0931
140.000	0.1517
141.000	0.2096
142.000	0.3263
143.000	0.5492
144.000	0.8642
145.000	1.1945
146.000	1.5268
147.000	1.8071

Name: PRE-E4-STAGE	Base Flow(cfs): 0.000	Init Stage(ft): 149.000
Group: SOUTHEAST		Warn Stage(ft): 156.000
Type: Stage/Area		

Stage(ft)	Area(ac)
149.000	0.0505
150.000	0.2532
151.000	0.4158
152.000	0.5733
153.000	0.7459
154.000	0.9890
155.000	1.3044
156.000	1.8289

Name: PRE-E5-STAGE	Base Flow(cfs): 0.000	Init Stage(ft): 148.000
Group: SOUTHEAST		Warn Stage(ft): 156.000
Type: Stage/Area		

Stage(ft)	Area(ac)
148.000	0.0075
149.000	0.0807
150.000	0.1854
151.000	0.3110
152.000	0.4406
153.000	0.5923
154.000	0.7839
155.000	1.0867
156.000	1.6801

Name: PRE-E6-STAGE	Base Flow(cfs): 0.000	Init Stage(ft): 153.000
Group: SOUTHEAST		Warn Stage(ft): 158.000
Type: Stage/Area		

Stage(ft)	Area(ac)
153.000	0.0150
154.000	0.1042
155.000	0.2025
156.000	0.3048
157.000	0.5739
158.000	1.3158

Name: PRE-SE1-STAGE	Base Flow(cfs): 0.000	Init Stage(ft): 115.000
Group: SOUTHEAST		Warn Stage(ft): 121.000
Type: Stage/Area		

Stage(ft)	Area(ac)
115.000	0.0589
116.000	0.2844
117.000	0.6016
118.000	0.9729
119.000	1.3425
120.000	1.8764
121.000	2.5513

Name: PRE-SE5-STAGE	Base Flow(cfs): 0.000	Init Stage(ft): 136.000
Group: SOUTHEAST		Warn Stage(ft): 141.000
Type: Stage/Area		

Stage(ft)	Area(ac)
136.000	0.1202
137.000	0.2956
138.000	0.4920
139.000	0.8037
140.000	1.1891
141.000	1.7981

Name: SMF-East	Base Flow(cfs): 0.000	Init Stage(ft): 152.500
Group: SOUTHEAST		Warn Stage(ft): 155.000
Type: Stage/Area		

Stage(ft)	Area(ac)
152.500	0.3257
156.000	0.4989

Name: SMF-North	Base Flow(cfs): 0.000	Init Stage(ft): 124.000
Group: NORTH		Warn Stage(ft): 130.000
Type: Stage/Area		

Stage(ft)	Area(ac)
124.000	0.5245
126.000	0.6465
127.000	0.7156
131.000	1.0263

Name: SMF-NorthEast	Base Flow(cfs): 0.000	Init Stage(ft): 136.000
Group: SOUTHEAST		Warn Stage(ft): 140.000
Type: Stage/Area		

Stage(ft)	Area(ac)
136.000	0.0001
136.999	0.0001
137.000	0.1978
138.000	0.1905
139.000	0.1872
140.000	0.0952
141.000	0.0000

Name: SMF-NorthWest	Base Flow(cfs): 0.000	Init Stage(ft): 141.500
Group: WEST		Warn Stage(ft): 145.000
Type: Stage/Area		

Stage(ft)	Area(ac)
141.500	0.4114
146.000	0.9501

Name: SMF-South A	Base Flow(cfs): 0.000	Init Stage(ft): 92.000
Group: SOUTHEAST		Warn Stage(ft): 99.000
Type: Stage/Area		

Stage(ft)	Area(ac)
92.000	0.7261
100.000	1.4551

Name: SMF-South B	Base Flow(cfs): 0.000	Init Stage(ft): 90.000
Group: SOUTHEAST		Warn Stage(ft): 99.000
Type: Stage/Area		

Stage(ft)	Area(ac)
90.000	3.2769
100.000	5.1764

Name: SMF-West Base Flow(cfs): 0.000 Init Stage(ft): 122.000
 Group: WEST Warn Stage(ft): 129.000
 Type: Stage/Area

Stage(ft)	Area(ac)
122.000	0.6093
130.000	1.2563

==== Pipes =====

Name: POST-SOUTH-PIPE From Node: SMF-South A Length(ft): 450.00
 Group: SOUTHEAST To Node: SMF-South B Count: 4

UPSTREAM	DOWNSTREAM	
Geometry: Circular	Circular	Friction Equation: Automatic
Span(in): 48.00	48.00	Solution Algorithm: Most Restrictive
Rise(in): 48.00	48.00	Flow: Both
Invert(ft): 93.500	90.000	Entrance Loss Coef: 0.00
Manning's N: 0.014000	0.014000	Exit Loss Coef: 1.00
Top Clip(in): 0.000	0.000	Bend Loss Coef: 0.00
Bot Clip(in): 0.000	0.000	Outlet Ctrl Spec: Use dc or tw
		Inlet Ctrl Spec: Use dc
		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
 Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
 Circular Concrete: Square edge w/ headwall

Name: PRE-E1-PIPE From Node: PRE-E1-STAGE Length(ft): 53.00
 Group: SOUTHEAST To Node: PRE-E1 DWN NODE Count: 1

UPSTREAM	DOWNSTREAM	
Geometry: Circular	Circular	Friction Equation: Automatic
Span(in): 24.00	24.00	Solution Algorithm: Most Restrictive
Rise(in): 24.00	24.00	Flow: Both
Invert(ft): 142.000	141.000	Entrance Loss Coef: 0.00
Manning's N: 0.014000	0.014000	Exit Loss Coef: 1.00
Top Clip(in): 0.000	0.000	Bend Loss Coef: 0.00
Bot Clip(in): 0.000	0.000	Outlet Ctrl Spec: Use dc or tw
		Inlet Ctrl Spec: Use dc
		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
 Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
 Circular Concrete: Square edge w/ headwall

==== Channels =====

Name: PRE-E1-SWALE From Node: PRE-E1 DWN NODE Length(ft): 750.00
 Group: SOUTHEAST To Node: PRE-SE1-STAGE Count: 1

UPSTREAM	DOWNSTREAM	
Geometry: Trapezoidal	Trapezoidal	Friction Equation: Automatic
Invert(ft): 141.000	118.000	Solution Algorithm: Automatic
TClpInitZ(ft): 9999.000	9999.000	Flow: Both
Manning's N: 0.014000	0.014000	Contraction Coef: 0.100
Top Clip(ft): 0.000	0.000	Expansion Coef: 0.300
Bot Clip(ft): 0.000	0.000	Entrance Loss Coef: 0.000
		Exit Loss Coef: 0.000
Main XSec:		Outlet Ctrl Spec: Use dc or tw
AuxElev1(ft):		Inlet Ctrl Spec: Use dc
Aux XSec1:		Stabilizer Option: None
AuxElev2(ft):		
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft): 12.000	12.000	
LtSdSlp(h/v): 6.00	6.00	
RtSdSlp(h/v): 6.00	6.00	

Name: PRE-E4-SWALE From Node: NODE-E4-SWALE Length(ft): 1260.00

Group: SOUTHEAST	To Node: PRE-E1-STAGE	Count: 1
UPSTREAM	DOWNSTREAM	Friction Equation: Automatic
Geometry: Trapezoidal	Trapezoidal	Solution Algorithm: Automatic
Invert(ft): 150.000	146.000	Flow: Both
TClpInitZ(ft): 9999.000	9999.000	Contraction Coef: 0.100
Manning's N: 0.014000	0.014000	Expansion Coef: 0.300
Top Clip(ft): 0.000	0.000	Entrance Loss Coef: 0.000
Bot Clip(ft): 0.000	0.000	Exit Loss Coef: 0.000
Main XSec:		Outlet Ctrl Spec: Use dc or tw
AuxElev1(ft):		Inlet Ctrl Spec: Use dc
Aux XSec1:		Stabilizer Option: None
AuxElev2(ft):		
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft): 1.000	1.000	
LtSdSlp(h/v): 4.00	4.00	
RtSdSlp(h/v): 10.00	10.00	

Name: PRE-SE1-SWALE	From Node: PRE-SE1-STAGE	Length(ft): 1350.00
Group: SOUTHEAST	To Node: SMF-South A	Count: 1
UPSTREAM	DOWNSTREAM	Friction Equation: Automatic
Geometry: Trapezoidal	Trapezoidal	Solution Algorithm: Automatic
Invert(ft): 120.000	115.000	Flow: Positive
TClpInitZ(ft): 9999.000	9999.000	Contraction Coef: 0.100
Manning's N: 0.014000	0.014000	Expansion Coef: 0.300
Top Clip(ft): 0.000	0.000	Entrance Loss Coef: 0.000
Bot Clip(ft): 0.000	0.000	Exit Loss Coef: 0.000
Main XSec:		Outlet Ctrl Spec: Use dc or tw
AuxElev1(ft):		Inlet Ctrl Spec: Use dc
Aux XSec1:		Stabilizer Option: Level Pool Option
AuxElev2(ft):		Stabilizer Tol(ft): 0.010
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft): 50.000	50.000	
LtSdSlp(h/v): 35.00	35.00	
RtSdSlp(h/v): 35.00	35.00	

==== Drop Structures =====

Name: POST-ST-EAST1	From Node: SMF-EAST	Length(ft): 50.00
Group: SOUTHEAST	To Node: NODE-E4-SWALE	Count: 1
UPSTREAM	DOWNSTREAM	Friction Equation: Automatic
Geometry: Circular	Circular	Solution Algorithm: Most Restrictive
Span(in): 36.00	36.00	Flow: Positive
Rise(in): 36.00	36.00	Entrance Loss Coef: 0.000
Invert(ft): 150.500	150.000	Exit Loss Coef: 1.000
Manning's N: 0.014000	0.014000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in): 0.000	0.000	Inlet Ctrl Spec: Use dc
Bot Clip(in): 0.000	0.000	Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

*** Weir 1 of 1 for Drop Structure POST-ST-EAST1 ***

Count: 1	Bottom Clip(in): 0.000	TABLE
Type: Vertical: Mavis	Top Clip(in): 0.000	
Flow: Both	Weir Disc Coef: 3.200	
Geometry: Rectangular	Orifice Disc Coef: 0.600	
Span(in): 8.00	Invert(ft): 153.500	
Rise(in): 3.00	Control Elev(ft): 153.500	

Name: POST-ST-East2	From Node: SMF-East	Length(ft): 4000.00
Group: SOUTHEAST	To Node: SMF-South A	Count: 1
UPSTREAM	DOWNSTREAM	Friction Equation: Automatic
Geometry: Circular	Circular	Solution Algorithm: Most Restrictive
Span(in): 36.00	36.00	Flow: Positive
Rise(in): 36.00	36.00	Entrance Loss Coef: 0.000

Invert(ft): 152.000	101.000	Exit Loss Coef: 1.000
Manning's N: 0.014000	0.014000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in): 0.000	0.000	Inlet Ctrl Spec: Use dc
Bot Clip(in): 0.000	0.000	Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

*** Weir 1 of 1 for Drop Structure POST-ST-East2 ***

TABLE

Count: 1	Bottom Clip(in): 0.000
Type: Vertical: Mavis	Top Clip(in): 0.000
Flow: Both	Weir Disc Coef: 3.200
Geometry: Rectangular	Orifice Disc Coef: 0.600
Span(in): 8.00	Invert(ft): 153.200
Rise(in): 3.00	Control Elev(ft): 153.200

Name: POST-ST-North From Node: SMF-North Length(ft): 20.00
Group: NORTH To Node: POST-NORTH Count: 1

UPSTREAM	DOWNSTREAM	Friction Equation: Automatic
Geometry: Circular	Circular	Solution Algorithm: Most Restrictive
Span(in): 36.00	36.00	Flow: Positive
Rise(in): 36.00	36.00	Entrance Loss Coef: 0.000
Invert(ft): 118.000	118.500	Exit Loss Coef: 1.000
Manning's N: 0.014000	0.014000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in): 0.000	0.000	Inlet Ctrl Spec: Use dc
Bot Clip(in): 0.000	0.000	Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

*** Weir 1 of 1 for Drop Structure POST-ST-North ***

TABLE

Count: 1	Bottom Clip(in): 0.000
Type: Vertical: Mavis	Top Clip(in): 0.000
Flow: Both	Weir Disc Coef: 3.200
Geometry: Rectangular	Orifice Disc Coef: 0.600
Span(in): 60.00	Invert(ft): 127.250
Rise(in): 3.00	Control Elev(ft): 127.250

Name: POST-ST-NorWest From Node: SMF-NorthWest Length(ft): 20.00
Group: WEST To Node: POST-WEST Count: 1

UPSTREAM	DOWNSTREAM	Friction Equation: Automatic
Geometry: Circular	Circular	Solution Algorithm: Most Restrictive
Span(in): 36.00	36.00	Flow: Positive
Rise(in): 36.00	36.00	Entrance Loss Coef: 0.000
Invert(ft): 143.500	143.000	Exit Loss Coef: 1.000
Manning's N: 0.014000	0.014000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in): 0.000	0.000	Inlet Ctrl Spec: Use dc
Bot Clip(in): 0.000	0.000	Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

*** Weir 1 of 1 for Drop Structure POST-ST-NorWest ***

TABLE

Count: 1	Bottom Clip(in): 0.000
Type: Vertical: Mavis	Top Clip(in): 0.000
Flow: Both	Weir Disc Coef: 3.200
Geometry: Rectangular	Orifice Disc Coef: 0.600
Span(in): 8.00	Invert(ft): 143.750
Rise(in): 2.00	Control Elev(ft): 143.750

Name: POST-ST-South B	From Node: SMF-South B	Length(ft): 400.00
Group: SOUTHEAST	To Node: POST-South	Count: 3

UPSTREAM	DOWNSTREAM	Friction Equation: Automatic
Geometry: Circular	Circular	Solution Algorithm: Most Restrictive
Span(in): 36.00	36.00	Flow: Positive
Rise(in): 36.00	36.00	Entrance Loss Coef: 0.000
Invert(ft): 83.000	82.000	Exit Loss Coef: 1.000
Manning's N: 0.014000	0.014000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in): 0.000	0.000	Inlet Ctrl Spec: Use dc
Bot Clip(in): 0.000	0.000	Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

*** Weir 1 of 2 for Drop Structure POST-ST-South B ***

Count: 1	Bottom Clip(in): 0.000	TABLE
Type: Vertical: Mavis	Top Clip(in): 0.000	
Flow: Both	Weir Disc Coef: 3.200	
Geometry: Rectangular	Orifice Disc Coef: 0.600	
Span(in): 168.00	Invert(ft): 96.000	
Rise(in): 8.00	Control Elev(ft): 96.000	

*** Weir 2 of 2 for Drop Structure POST-ST-South B ***

Count: 1	Bottom Clip(in): 0.000	TABLE
Type: Horizontal	Top Clip(in): 0.000	
Flow: Both	Weir Disc Coef: 3.200	
Geometry: Circular	Orifice Disc Coef: 0.600	
Span(in): 96.00	Invert(ft): 98.250	
Rise(in): 3.00	Control Elev(ft): 98.250	

Name: POST-ST-West	From Node: SMF-West	Length(ft): 20.00
Group: WEST	To Node: POST-WEST	Count: 1

UPSTREAM	DOWNSTREAM	Friction Equation: Automatic
Geometry: Circular	Circular	Solution Algorithm: Most Restrictive
Span(in): 36.00	36.00	Flow: Positive
Rise(in): 36.00	36.00	Entrance Loss Coef: 0.000
Invert(ft): 123.000	124.000	Exit Loss Coef: 1.000
Manning's N: 0.014000	0.014000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in): 0.000	0.000	Inlet Ctrl Spec: Use dc
Bot Clip(in): 0.000	0.000	Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

*** Weir 1 of 1 for Drop Structure POST-ST-West ***

Count: 1	Bottom Clip(in): 0.000	TABLE
Type: Vertical: Mavis	Top Clip(in): 0.000	
Flow: Both	Weir Disc Coef: 3.200	
Geometry: Rectangular	Orifice Disc Coef: 0.600	
Span(in): 40.00	Invert(ft): 125.400	
Rise(in): 3.00	Control Elev(ft): 125.400	

==== Weirs =====

Name: PRE-E4-WEIR	From Node: PRE-E4-STAGE
Group: SOUTHEAST	To Node: NODE-E4-SWALE
Flow: Positive	Count: 1
Type: Vertical: Mavis	Geometry: Trapezoidal

Bottom Width(ft): 1.00
Left Side Slope(h/v): 4.00
Right Side Slope(h/v): 10.00
Invert(ft): 155.010
Control Elevation(ft): 155.010
Struct Opening Dim(ft): 9999.00

TABLE

Bottom Clip(ft): 0.000
Top Clip(ft): 0.000
Weir Discharge Coef: 3.200
Orifice Discharge Coef: 0.600

Name: PRE-E5-WEIR From Node: PRE-E5-STAGE
Group: SOUTHEAST To Node: PRE-E4-STAGE
Flow: Positive Count: 1
Type: Vertical: Mavis Geometry: Trapezoidal

Bottom Width(ft): 40.00
Left Side Slope(h/v): 60.00
Right Side Slope(h/v): 60.00
Invert(ft): 155.500
Control Elevation(ft): 155.500
Struct Opening Dim(ft): 9999.00

TABLE

Bottom Clip(ft): 0.000
Top Clip(ft): 0.000
Weir Discharge Coef: 3.200
Orifice Discharge Coef: 0.600

Name: PRE-E6-WEIR From Node: PRE-E6-STAGE
Group: SOUTHEAST To Node: PRE-E4-STAGE
Flow: Positive Count: 1
Type: Vertical: Mavis Geometry: Trapezoidal

Bottom Width(ft): 35.00
Left Side Slope(h/v): 40.00
Right Side Slope(h/v): 40.00
Invert(ft): 157.500
Control Elevation(ft): 157.500
Struct Opening Dim(ft): 9999.00

TABLE

Bottom Clip(ft): 0.000
Top Clip(ft): 0.000
Weir Discharge Coef: 3.200
Orifice Discharge Coef: 0.600

Name: WEIR-EQUAL From Node: PRE-SE5-STAGE
Group: SOUTHEAST To Node: SMF-NorthEast
Flow: Positive Count: 1
Type: Vertical: Fread Geometry: Rectangular

Span(in): 120.00
Rise(in): 999.00
Invert(ft): 136.000
Control Elevation(ft): 136.000

TABLE

Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Discharge Coef: 3.200
Orifice Discharge Coef: 0.600

==== Percolation Links =====

Name: PERC-EAST From Node: SMF-East Flow: Positive
Group: SOUTHEAST To Node: GROUND-EAST Count: 1

Surface Area Option: Vary based on Stage/Area Table
Vertical Flow Termination: Horizontal Flow Algorithm

Aquifer Base Elev(ft): 148.670	Perimeter 1(ft): 594.000
Water Table Elev(ft): 149.170	Perimeter 2(ft): 908.000
Ann Recharge Rate(in/year): 0.000	Perimeter 3(ft): 4050.000
Horiz Conductivity(ft/day): 4.170	Distance 1 to 2(ft): 50.000
Vert Conductivity(ft/day): 3.330	Distance 2 to 3(ft): 500.000
Effective Porosity(dec): 0.200	Num Cells 1 to 2: 10
Suction Head(in): 5.000	Num Cells 2 to 3: 50
Layer Thickness(ft): 3.330	

Name: PERC-North From Node: SMF-North Flow: Positive
Group: NORTH To Node: GROUND-North Count: 1

Surface Area Option: Vary based on Stage/Area Table
Vertical Flow Termination: Horizontal Flow Algorithm
Aquifer Base Elev(ft): 106.500 Perimeter 1(ft): 909.000
Water Table Elev(ft): 114.250 Perimeter 2(ft): 1206.000
Ann Recharge Rate(in/year): 0.000 Perimeter 3(ft): 4340.000
Horiz Conductivity(ft/day): 5.750 Distance 1 to 2(ft): 50.000
Vert Conductivity(ft/day): 3.750 Distance 2 to 3(ft): 500.000
Effective Porosity(dec): 0.225 Num Cells 1 to 2: 10
Suction Head(in): 5.000 Num Cells 2 to 3: 50
Layer Thickness(ft): 7.750

Name: PERC-NorthEast From Node: SMF-NorthEast Flow: Positive
Group: SOUTHEAST To Node: GROUND-SouEast Count: 1

Surface Area Option: Vary based on Stage/Area Table
Vertical Flow Termination: Horizontal Flow Algorithm
Aquifer Base Elev(ft): 132.250 Perimeter 1(ft): 813.000
Water Table Elev(ft): 132.750 Perimeter 2(ft): 960.000
Ann Recharge Rate(in/year): 0.000 Perimeter 3(ft): 1915.000
Horiz Conductivity(ft/day): 4.750 Distance 1 to 2(ft): 50.000
Vert Conductivity(ft/day): 3.130 Distance 2 to 3(ft): 500.000
Effective Porosity(dec): 0.200 Num Cells 1 to 2: 10
Suction Head(in): 5.000 Num Cells 2 to 3: 50
Layer Thickness(ft): 4.250

Name: PERC-NorthWest From Node: SMF-NorthWest Flow: Positive
Group: WEST To Node: GROUND-West Count: 1

Surface Area Option: Vary based on Stage/Area Table
Vertical Flow Termination: Horizontal Flow Algorithm
Aquifer Base Elev(ft): 135.250 Perimeter 1(ft): 1160.000
Water Table Elev(ft): 135.260 Perimeter 2(ft): 1440.000
Ann Recharge Rate(in/year): 0.000 Perimeter 3(ft): 4509.000
Horiz Conductivity(ft/day): 5.000 Distance 1 to 2(ft): 50.000
Vert Conductivity(ft/day): 3.000 Distance 2 to 3(ft): 500.000
Effective Porosity(dec): 0.200 Num Cells 1 to 2: 10
Suction Head(in): 5.000 Num Cells 2 to 3: 50
Layer Thickness(ft): 6.250

Name: PERC-South A From Node: SMF-South A Flow: Positive
Group: SOUTHEAST To Node: GROUND-South Count: 1

Surface Area Option: Vary based on Stage/Area Table
Vertical Flow Termination: Horizontal Flow Algorithm
Aquifer Base Elev(ft): 89.500 Perimeter 1(ft): 1007.000
Water Table Elev(ft): 89.510 Perimeter 2(ft): 1322.000
Ann Recharge Rate(in/year): 0.000 Perimeter 3(ft): 2259.000
Horiz Conductivity(ft/day): 1.000 Distance 1 to 2(ft): 50.000
Vert Conductivity(ft/day): 0.750 Distance 2 to 3(ft): 500.000
Effective Porosity(dec): 0.200 Num Cells 1 to 2: 10
Suction Head(in): 5.000 Num Cells 2 to 3: 50
Layer Thickness(ft): 3.000

Name: PERC-South B From Node: SMF-South B Flow: Positive
Group: SOUTHEAST To Node: GROUND-South Count: 1

Surface Area Option: Use 1st Point in Stage/Area Table
Vertical Flow Termination: Horizontal Flow Algorithm
Aquifer Base Elev(ft): 80.000 Perimeter 1(ft): 1816.000
Water Table Elev(ft): 87.000 Perimeter 2(ft): 1817.000
Ann Recharge Rate(in/year): 0.000 Perimeter 3(ft): 1818.000
Horiz Conductivity(ft/day): 1.500 Distance 1 to 2(ft): 50.000
Vert Conductivity(ft/day): 1.000 Distance 2 to 3(ft): 500.000
Effective Porosity(dec): 0.200 Num Cells 1 to 2: 10
Suction Head(in): 5.000 Num Cells 2 to 3: 50
Layer Thickness(ft): 3.000

Name: PERC-West From Node: SMF-West Flow: Positive

Group: WEST To Node: GROUND-West Count: 1

Surface Area Option: Vary based on Stage/Area Table
 Vertical Flow Termination: Horizontal Flow Algorithm
 Aquifer Base Elev(ft): 111.390 Perimeter 1(ft): 1009.000
 Water Table Elev(ft): 111.680 Perimeter 2(ft): 1307.000
 Ann Recharge Rate(in/year): 0.000 Perimeter 3(ft): 4426.000
 Horiz Conductivity(ft/day): 5.360 Distance 1 to 2(ft): 50.000
 Vert Conductivity(ft/day): 3.360 Distance 2 to 3(ft): 500.000
 Effective Porosity(dec): 0.200 Num Cells 1 to 2: 10
 Suction Head(in): 5.000 Num Cells 2 to 3: 50
 Layer Thickness(ft): 10.320

==== Filters =====

Name: FILTER-South A From Node: SMF-South A Flow: Positive
 Group: SOUTHEAST To Node: GROUND-South Count: 2

Sloped: No
 Filter Elev(ft): 92.000 Pipe Inv Elev(ft): 89.000
 Filter Width(ft): 10.000 Pipe Diameter(in): 6.000
 Filter Length(ft): 150.000 X Grav Thkness(in): 6.000
 Filter Permeability(ft/day): 10.000 Y Grav Thkness(in): 6.000

Name: FILTER-South B From Node: SMF-South B Flow: Positive
 Group: SOUTHEAST To Node: GROUND-South Count: 2

Sloped: No
 Filter Elev(ft): 90.000 Pipe Inv Elev(ft): 87.000
 Filter Width(ft): 10.000 Pipe Diameter(in): 6.000
 Filter Length(ft): 400.000 X Grav Thkness(in): 6.000
 Filter Permeability(ft/day): 10.000 Y Grav Thkness(in): 6.000

==== Hydrology Simulations =====

Name: 100Y001H
 Filename: G:\Engineering\Projects\18-0046 Tara Forest East\2 Stormwater\ICPR\100Y001H.R32

Override Defaults: Yes
 Storm Duration(hrs): 1.00
 Rainfall File: FDOT-1
 Rainfall Amount(in): 4.40

Time(hrs)	Print Inc(min)
2.000	2.50
721.000	30.00

Name: 100Y002H
 Filename: G:\Engineering\Projects\18-0046 Tara Forest East\2 Stormwater\ICPR\100Y002H.R32

Override Defaults: Yes
 Storm Duration(hrs): 2.00
 Rainfall File: FDOT-2
 Rainfall Amount(in): 5.40

Time(hrs)	Print Inc(min)
4.000	2.50
722.000	30.00

Name: 100Y004H
 Filename: G:\Engineering\Projects\18-0046 Tara Forest East\2 Stormwater\ICPR\100Y004H.R32

Override Defaults: Yes
 Storm Duration(hrs): 4.00
 Rainfall File: FDOT-4
 Rainfall Amount(in): 6.72

Time(hrs)	Print Inc(min)
6.000	2.50
724.000	30.00

Name: 100Y008H
Filename: G:\Engineering\Projects\18-0046 Tara Forest East\2 Stormwater\ICPR\100Y008H.R32

Override Defaults: Yes
Storm Duration(hrs): 8.00
Rainfall File: FDOT-8
Rainfall Amount(in): 8.00

Time(hrs)	Print Inc(min)
12.000	2.50
728.000	30.00

Name: 100Y024H
Filename: G:\Engineering\Projects\18-0046 Tara Forest East\2 Stormwater\ICPR\100Y024H.R32

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: FDOT-24
Rainfall Amount(in): 11.04

Time(hrs)	Print Inc(min)
30.000	5.00
744.000	30.00

Name: 100Y072H
Filename: G:\Engineering\Projects\18-0046 Tara Forest East\2 Stormwater\ICPR\100Y072H.R32

Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: FDOT-72
Rainfall Amount(in): 13.80

Time(hrs)	Print Inc(min)
77.000	5.00
792.000	30.00

Name: 100Y168H
Filename: G:\Engineering\Projects\18-0046 Tara Forest East\2 Stormwater\ICPR\100Y168H.R32

Override Defaults: Yes
Storm Duration(hrs): 168.00
Rainfall File: FDOT-168
Rainfall Amount(in): 16.00

Time(hrs)	Print Inc(min)
173.000	5.00
888.000	30.00

Name: 100Y240H
Filename: G:\Engineering\Projects\18-0046 Tara Forest East\2 Stormwater\ICPR\100Y240H.R32

Override Defaults: Yes
Storm Duration(hrs): 240.00
Rainfall File: Fdot-240
Rainfall Amount(in): 18.00

Time(hrs)	Print Inc(min)
245.000	5.00
960.000	30.00

Name: SLUG
Filename: G:\Engineering\Projects\18-0046 Tara Forest East\2 Stormwater\ICPR\SLUG.R32

Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: Fdot-72
Rainfall Amount(in): 0.00

Time(hrs)	Print Inc(min)
73.000	5.00

==== Routing Simulations =====

Name: 100Y001H Hydrology Sim: 100Y001H

Filename: G:\Engineering\Projects\18-0046 Tara Forest East\2 Stormwater\ICPR\100Y001H.I32

Execute: Yes	Restart: No	Patch: No
Alternative: No		
Max Delta Z(ft): 1.00	Delta Z Factor: 0.00500	
Time Step Optimizer: 10.000		
Start Time(hrs): 0.000	End Time(hrs): 721.00	
Min Calc Time(sec): 0.5000	Max Calc Time(sec): 60.0000	
Boundary Stages:		Boundary Flows:

100 yr / 001 hr

Time(hrs)	Print Inc(min)
999.000	30.000

Group	Run
NORTH	Yes
SOUTHEAST	Yes
WEST	Yes

Name: 100Y002H Hydrology Sim: 100Y002H
Filename: G:\Engineering\Projects\18-0046 Tara Forest East\2 Stormwater\ICPR\100Y002H.I32

Execute: Yes	Restart: No	Patch: No
Alternative: No		
Max Delta Z(ft): 1.00	Delta Z Factor: 0.00500	
Time Step Optimizer: 10.000		
Start Time(hrs): 0.000	End Time(hrs): 722.00	
Min Calc Time(sec): 0.5000	Max Calc Time(sec): 60.0000	
Boundary Stages:		Boundary Flows:

100 yr / 002 hr

Time(hrs)	Print Inc(min)
999.000	30.000

Group	Run
NORTH	Yes
SOUTHEAST	Yes
WEST	Yes

Name: 100Y004H Hydrology Sim: 100Y004H
Filename: G:\Engineering\Projects\18-0046 Tara Forest East\2 Stormwater\ICPR\100Y004H.I32

Execute: Yes	Restart: No	Patch: No
Alternative: No		
Max Delta Z(ft): 1.00	Delta Z Factor: 0.00500	
Time Step Optimizer: 10.000		
Start Time(hrs): 0.000	End Time(hrs): 724.00	
Min Calc Time(sec): 0.5000	Max Calc Time(sec): 60.0000	
Boundary Stages:		Boundary Flows:

100 yr / 004 hr

Time(hrs)	Print Inc(min)
999.000	30.000

Group	Run
NORTH	Yes
SOUTHEAST	Yes
WEST	Yes

Name: 100Y008H Hydrology Sim: 100Y008H
Filename: G:\Engineering\Projects\18-0046 Tara Forest East\2 Stormwater\ICPR\100Y008H.I32

Execute: Yes	Restart: No	Patch: No
Alternative: No		
Max Delta Z(ft): 1.00	Delta Z Factor: 0.00500	
Time Step Optimizer: 10.000		
Start Time(hrs): 0.000	End Time(hrs): 728.00	
Min Calc Time(sec): 0.5000	Max Calc Time(sec): 60.0000	
Boundary Stages:		Boundary Flows:

100 yr / 008 hr

Time(hrs)	Print Inc(min)
999.000	30.000

Group	Run
NORTH	Yes
SOUTHEAST	Yes
WEST	Yes

Name: 100Y024H Hydrology Sim: 100Y024H
Filename: G:\Engineering\Projects\18-0046 Tara Forest East\2 Stormwater\ICPR\100Y024H.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00	Delta Z Factor: 0.00500
Time Step Optimizer: 10.000	
Start Time(hrs): 0.000	End Time(hrs): 744.00
Min Calc Time(sec): 0.5000	Max Calc Time(sec): 60.0000
Boundary Stages:	Boundary Flows:

100 yr / 024 hr

Time(hrs)	Print Inc(min)
999.000	30.000

Group	Run
NORTH	Yes
SOUTHEAST	Yes
WEST	Yes

Name: 100Y072H Hydrology Sim: 100Y072H
Filename: G:\Engineering\Projects\18-0046 Tara Forest East\2 Stormwater\ICPR\100Y072H.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00	Delta Z Factor: 0.00500
Time Step Optimizer: 10.000	
Start Time(hrs): 0.000	End Time(hrs): 792.00
Min Calc Time(sec): 0.5000	Max Calc Time(sec): 60.0000
Boundary Stages:	Boundary Flows:

100 yr / 072 hr

Time(hrs)	Print Inc(min)
999.000	30.000

Group	Run
NORTH	Yes
SOUTHEAST	Yes
WEST	Yes

Name: 100Y168H Hydrology Sim: 100Y168H
Filename: G:\Engineering\Projects\18-0046 Tara Forest East\2 Stormwater\ICPR\100Y168H.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00	Delta Z Factor: 0.00500
Time Step Optimizer: 10.000	
Start Time(hrs): 0.000	End Time(hrs): 888.00
Min Calc Time(sec): 0.5000	Max Calc Time(sec): 60.0000
Boundary Stages:	Boundary Flows:

100 yr / 168 hr

Time(hrs)	Print Inc(min)
999.000	30.000

Group	Run
NORTH	Yes
SOUTHEAST	Yes
WEST	Yes

Name: 100Y240H Hydrology Sim: 100Y240H
Filename: G:\Engineering\Projects\18-0046 Tara Forest East\2 Stormwater\ICPR\100Y240H.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 960.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

100 yr / 240 hr

Time(hrs)	Print Inc(min)
999.000	30.000

Group	Run
NORTH	Yes
SOUTHEAST	Yes
WEST	Yes

Name: SLUG Hydrology Sim: SLUG
Filename: G:\Engineering\Projects\18-0046 Tara Forest East\2 Stormwater\ICPR\SLUG.I32

Execute: No Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 73.00
Min Calc Time(sec): 0.2500 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

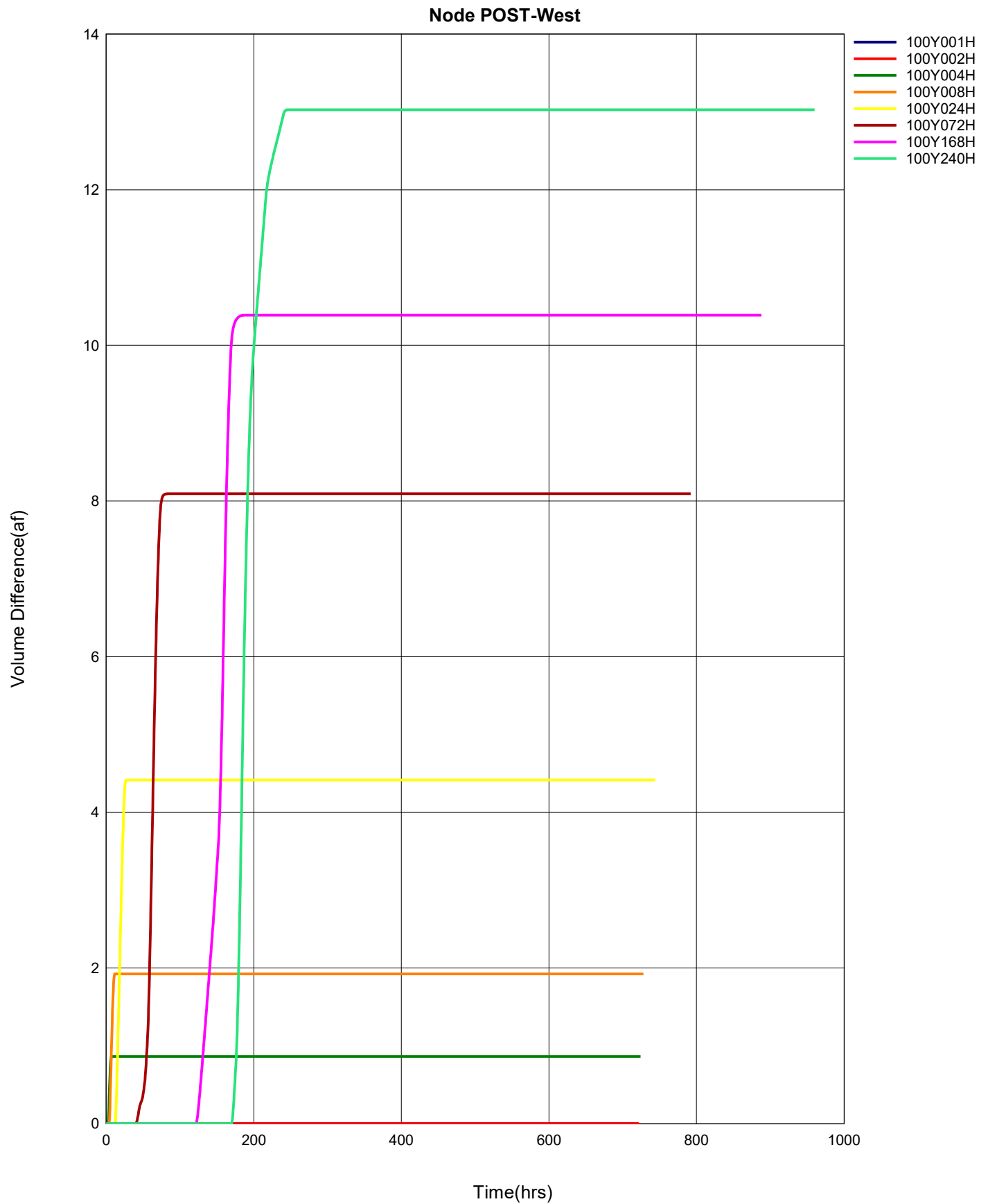
Time(hrs)	Print Inc(min)
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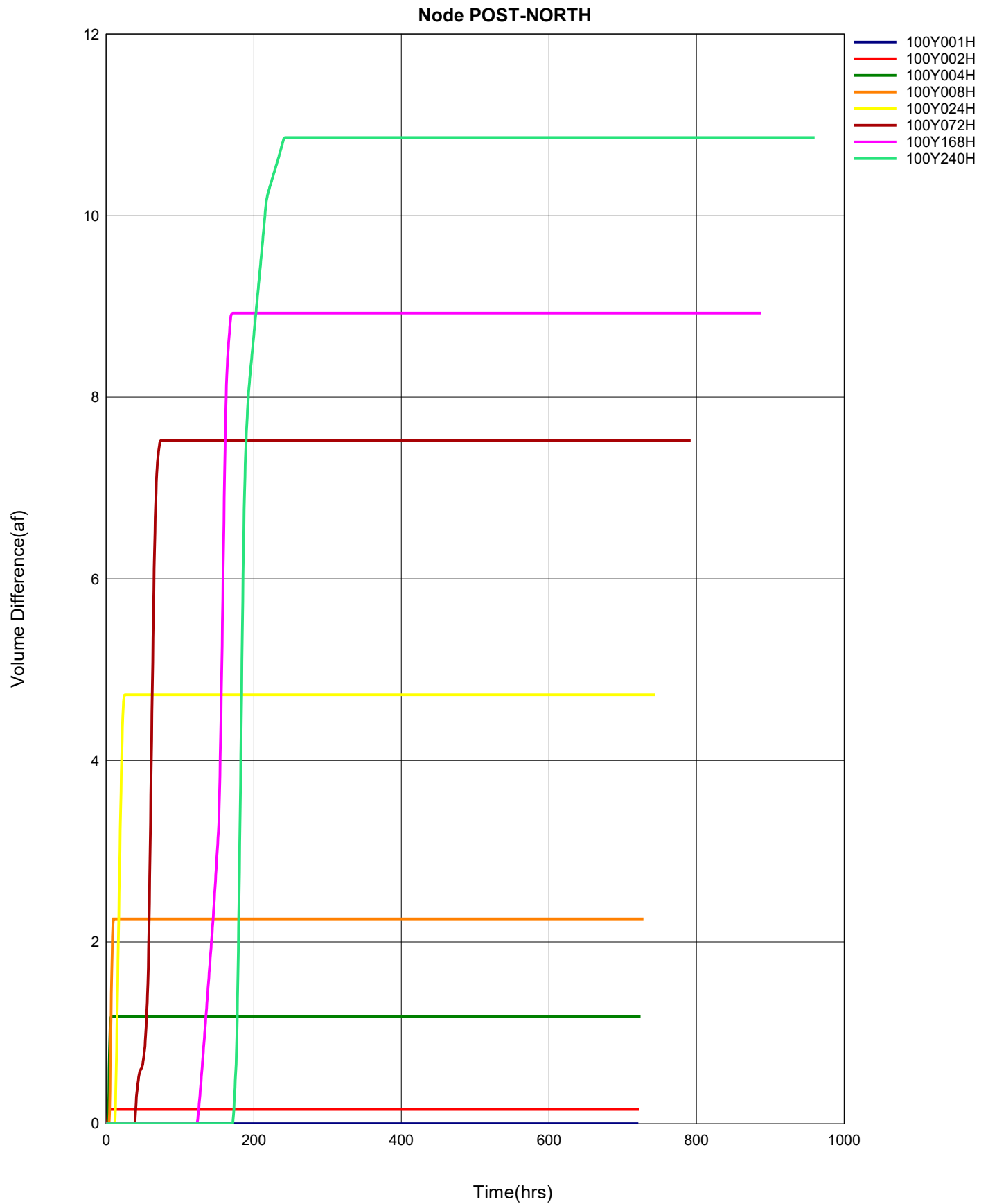
Group	Run
NORTH	Yes
SOUTHEAST	Yes
WEST	Yes

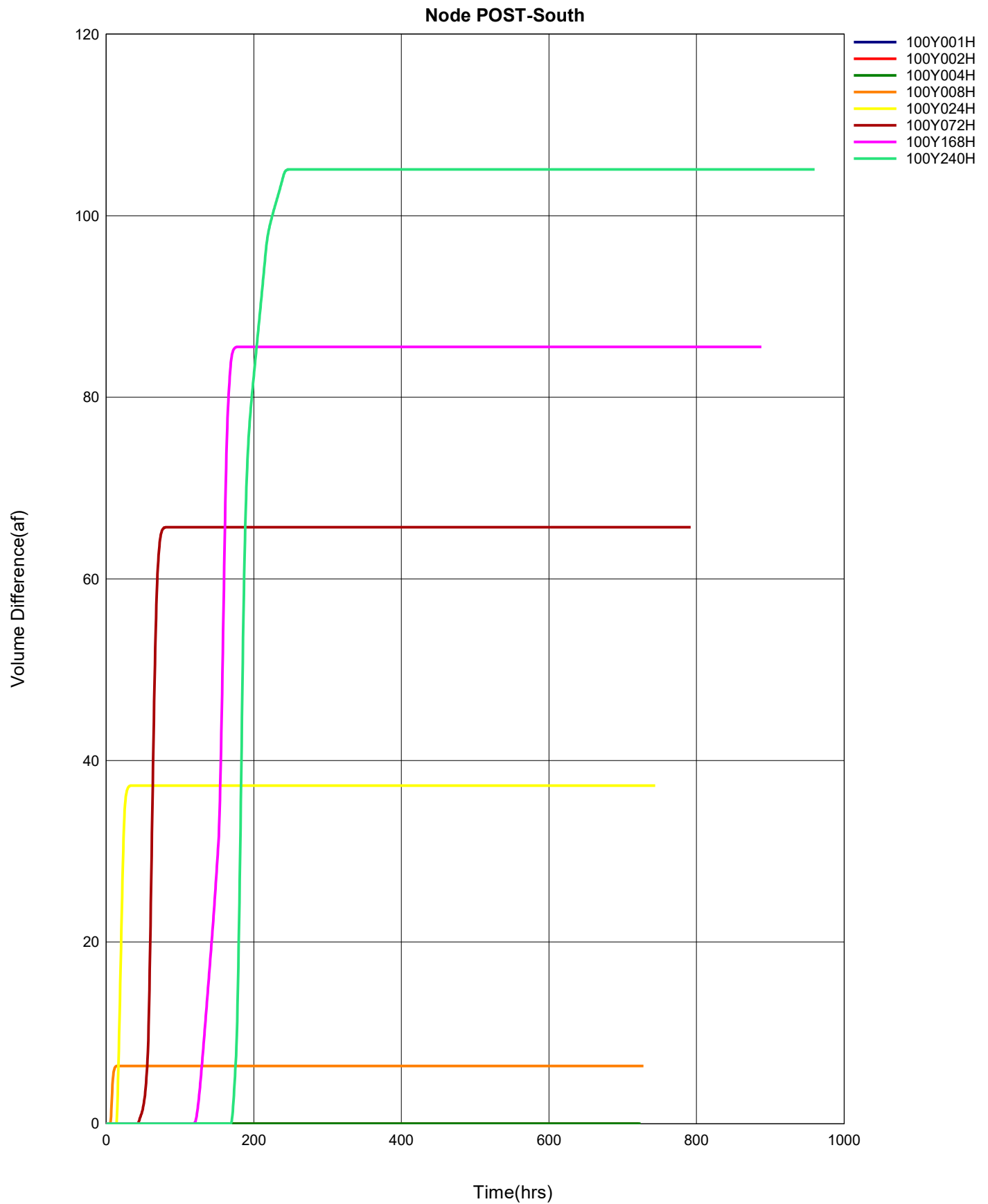
Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs
GROUND-EAST	SOUTHEAST	100Y001H	0.00	0.000	0.000	0.0000	0	1.15	0.598	0.00
GROUND-EAST	SOUTHEAST	100Y002H	0.00	0.000	0.000	0.0000	0	2.11	0.626	0.00
GROUND-EAST	SOUTHEAST	100Y004H	0.00	0.000	0.000	0.0000	0	3.58	0.661	0.00
GROUND-EAST	SOUTHEAST	100Y008H	0.00	0.000	0.000	0.0000	0	5.24	0.671	0.00
GROUND-EAST	SOUTHEAST	100Y024H	0.00	0.000	0.000	0.0000	0	12.74	0.632	0.00
GROUND-EAST	SOUTHEAST	100Y072H	0.00	0.000	0.000	0.0000	0	32.12	0.437	0.00
GROUND-EAST	SOUTHEAST	100Y168H	0.00	0.000	0.000	0.0000	0	39.80	0.522	0.00
GROUND-EAST	SOUTHEAST	100Y240H	0.00	0.000	0.000	0.0000	0	40.07	0.547	0.00
GROUND-North	NORTH	100Y001H	0.00	0.000	0.000	0.0000	0	1.23	1.293	0.00
GROUND-North	NORTH	100Y002H	0.00	0.000	0.000	0.0000	0	2.12	1.432	0.00
GROUND-North	NORTH	100Y004H	0.00	0.000	0.000	0.0000	0	3.58	1.567	0.00
GROUND-North	NORTH	100Y008H	0.00	0.000	0.000	0.0000	0	5.24	1.603	0.00
GROUND-North	NORTH	100Y024H	0.00	0.000	0.000	0.0000	0	16.02	1.563	0.00
GROUND-North	NORTH	100Y072H	0.00	0.000	0.000	0.0000	0	16.16	1.019	0.00
GROUND-North	NORTH	100Y168H	0.00	0.000	0.000	0.0000	0	40.22	1.108	0.00
GROUND-North	NORTH	100Y240H	0.00	0.000	0.000	0.0000	0	40.26	1.136	0.00
GROUND-SouEast	SOUTHEAST	100Y001H	0.00	0.000	0.000	0.0000	0	0.85	0.004	0.00
GROUND-SouEast	SOUTHEAST	100Y002H	0.00	0.000	0.000	0.0000	0	1.04	0.004	0.00
GROUND-SouEast	SOUTHEAST	100Y004H	0.00	0.000	0.000	0.0000	0	2.20	0.004	0.00
GROUND-SouEast	SOUTHEAST	100Y008H	0.00	0.000	0.000	0.0000	0	10.22	0.312	0.00
GROUND-SouEast	SOUTHEAST	100Y024H	0.00	0.000	0.000	0.0000	0	14.25	0.312	0.00
GROUND-SouEast	SOUTHEAST	100Y072H	0.00	0.000	0.000	0.0000	0	43.16	0.312	0.00
GROUND-SouEast	SOUTHEAST	100Y168H	0.00	0.000	0.000	0.0000	0	106.80	0.304	0.00
GROUND-SouEast	SOUTHEAST	100Y240H	0.00	0.000	0.000	0.0000	0	152.80	0.291	0.00
GROUND-South	SOUTHEAST	100Y001H	0.00	0.000	0.000	0.0000	0	0.60	20.484	0.00
GROUND-South	SOUTHEAST	100Y002H	0.00	0.000	0.000	0.0000	0	0.73	18.171	0.00
GROUND-South	SOUTHEAST	100Y004H	0.00	0.000	0.000	0.0000	0	1.69	14.574	0.00
GROUND-South	SOUTHEAST	100Y008H	0.00	0.000	0.000	0.0000	0	3.13	11.825	0.00
GROUND-South	SOUTHEAST	100Y024H	0.00	0.000	0.000	0.0000	0	7.20	7.060	0.00
GROUND-South	SOUTHEAST	100Y072H	0.00	0.000	0.000	0.0000	0	12.55	5.497	0.00
GROUND-South	SOUTHEAST	100Y168H	0.00	0.000	0.000	0.0000	0	33.88	6.010	0.00
GROUND-South	SOUTHEAST	100Y240H	0.00	0.000	0.000	0.0000	0	34.61	6.382	0.00
GROUND-West	WEST	100Y001H	0.00	0.000	0.000	0.0000	0	1.20	2.153	0.00
GROUND-West	WEST	100Y002H	0.00	0.000	0.000	0.0000	0	2.18	2.344	0.00
GROUND-West	WEST	100Y004H	0.00	0.000	0.000	0.0000	0	3.73	2.563	0.00
GROUND-West	WEST	100Y008H	0.00	0.000	0.000	0.0000	0	7.07	2.641	0.00
GROUND-West	WEST	100Y024H	0.00	0.000	0.000	0.0000	0	19.17	2.685	0.00
GROUND-West	WEST	100Y072H	0.00	0.000	0.000	0.0000	0	12.00	1.620	0.00
GROUND-West	WEST	100Y168H	0.00	0.000	0.000	0.0000	0	40.16	1.792	0.00
GROUND-West	WEST	100Y240H	0.00	0.000	0.000	0.0000	0	40.21	1.838	0.00
NODE-E4-SWALE	SOUTHEAST	100Y001H	0.00	150.000	160.000	0.0000	162	0.00	0.000	0.00
NODE-E4-SWALE	SOUTHEAST	100Y002H	0.00	150.000	160.000	0.0000	162	0.00	0.000	0.00
NODE-E4-SWALE	SOUTHEAST	100Y004H	3.68	150.166	160.000	-0.0006	2133	3.58	0.396	3.68
NODE-E4-SWALE	SOUTHEAST	100Y008H	5.39	150.182	160.000	-0.0006	2272	5.24	0.485	5.39
NODE-E4-SWALE	SOUTHEAST	100Y024H	19.18	150.196	160.000	-0.0008	2397	19.12	0.569	19.18
NODE-E4-SWALE	SOUTHEAST	100Y072H	60.34	150.219	160.000	0.0010	2591	60.23	0.724	60.34
NODE-E4-SWALE	SOUTHEAST	100Y168H	160.15	150.215	160.000	0.0013	2557	160.09	0.696	160.15
NODE-E4-SWALE	SOUTHEAST	100Y240H	184.18	150.237	160.000	0.0010	2747	184.10	0.865	184.18
POST-NORTH	NORTH	100Y001H	0.00	0.000	0.000	0.0000	0	0.00	0.000	0.00
POST-NORTH	NORTH	100Y002H	0.00	0.000	0.000	0.0000	0	2.12	2.415	0.00
POST-NORTH	NORTH	100Y004H	0.00	0.000	0.000	0.0000	0	3.58	6.256	0.00
POST-NORTH	NORTH	100Y008H	0.00	0.000	0.000	0.0000	0	5.24	6.939	0.00
POST-NORTH	NORTH	100Y024H	0.00	0.000	0.000	0.0000	0	16.02	6.180	0.00
POST-NORTH	NORTH	100Y072H	0.00	0.000	0.000	0.0000	0	60.16	7.629	0.00
POST-NORTH	NORTH	100Y168H	0.00	0.000	0.000	0.0000	0	160.05	6.847	0.00
POST-NORTH	NORTH	100Y240H	0.00	0.000	0.000	0.0000	0	184.09	8.503	0.00
POST-South	SOUTHEAST	100Y001H	0.00	0.000	0.000	0.0000	0	0.00	0.000	0.00
POST-South	SOUTHEAST	100Y002H	0.00	0.000	0.000	0.0000	0	0.00	0.000	0.00
POST-South	SOUTHEAST	100Y004H	0.00	0.000	0.000	0.0000	0	0.00	0.000	0.00
POST-South	SOUTHEAST	100Y008H	0.00	0.000	0.000	0.0000	0	7.28	23.477	0.00
POST-South	SOUTHEAST	100Y024H	0.00	0.000	0.000	0.0000	0	19.28	47.152	0.00
POST-South	SOUTHEAST	100Y072H	0.00	0.000	0.000	0.0000	0	60.41	63.145	0.00
POST-South	SOUTHEAST	100Y168H	0.00	0.000	0.000	0.0000	0	160.14	59.868	0.00
POST-South	SOUTHEAST	100Y240H	0.00	0.000	0.000	0.0000	0	184.16	76.975	0.00
POST-West	WEST	100Y001H	0.00	0.000	0.000	0.0000	0	0.00	0.000	0.00
POST-West	WEST	100Y002H	0.00	0.000	0.000	0.0000	0	0.00	0.000	0.00
POST-West	WEST	100Y004H	0.00	0.000	0.000	0.0000	0	3.70	3.801	0.00
POST-West	WEST	100Y008H	0.00	0.000	0.000	0.0000	0	6.19	4.472	0.00
POST-West	WEST	100Y024H	0.00	0.000	0.000	0.0000	0	19.10	4.905	0.00
POST-West	WEST	100Y072H	0.00	0.000	0.000	0.0000	0	64.07	6.273	0.00
POST-West	WEST	100Y168H	0.00	0.000	0.000	0.0000	0	160.12	6.332	0.00
POST-West	WEST	100Y240H	0.00	0.000	0.000	0.0000	0	184.14	7.409	0.00
PRE-E1 DWN NODE	SOUTHEAST	100Y001H	0.00	141.000	145.000	0.0000	1534	0.00	0.000	0.00
PRE-E1 DWN NODE	SOUTHEAST	100Y002H	0.00	141.000	145.000	0.0000	1534	0.00	0.000	0.00
PRE-E1 DWN NODE	SOUTHEAST	100Y004H	4.71	141.033	145.000	0.0002	5977	4.60	0.424	4.71
PRE-E1 DWN NODE	SOUTHEAST	100Y008H	7.24	141.102	145.000	0.0004	6267	7.18	2.285	7.24
PRE-E1 DWN NODE	SOUTHEAST	100Y024H	16.28	141.138	145.000	-0.0003	6416	16.21	3.634	16.28

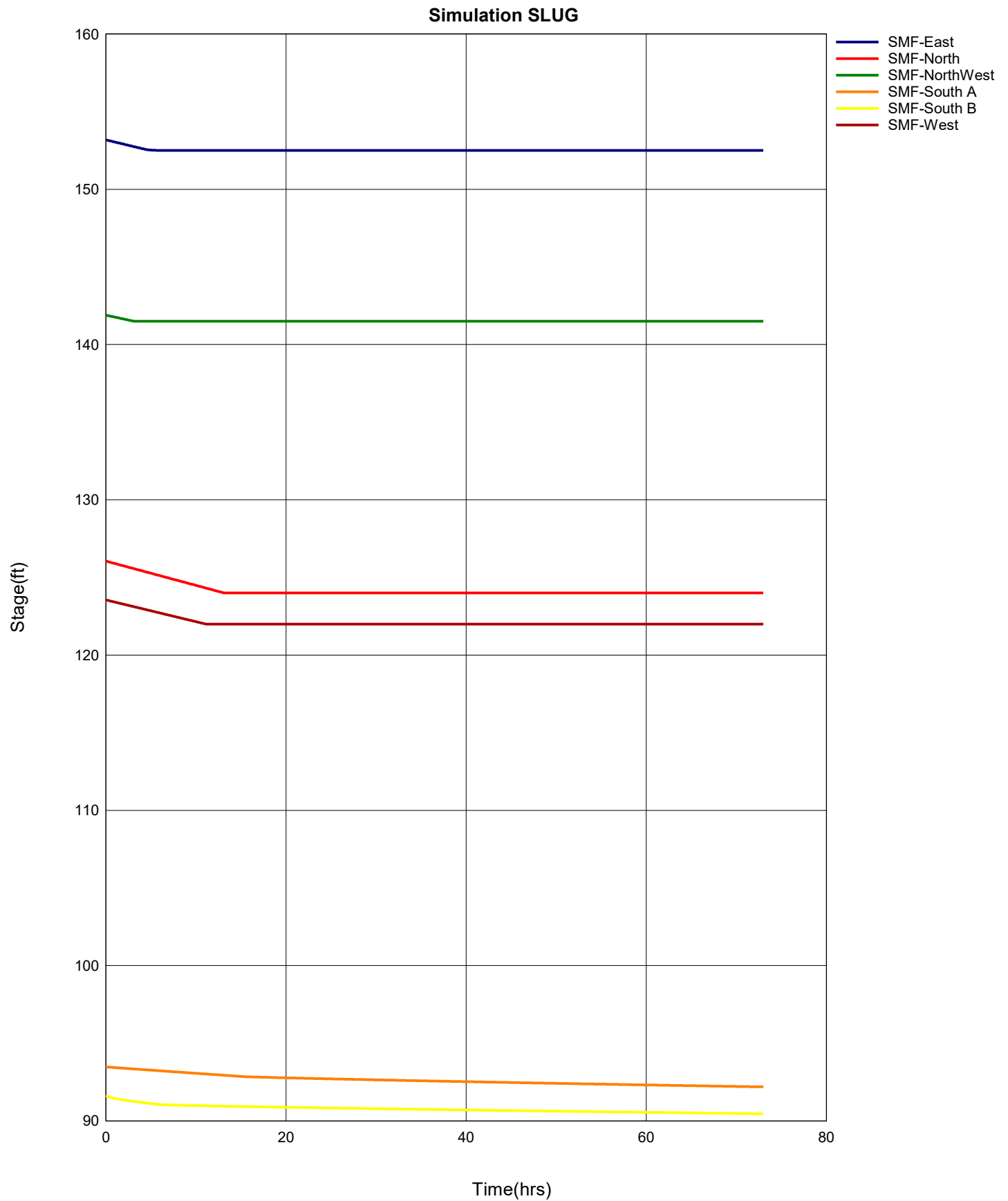
Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs
PRE-E1 DWN NODE	SOUTHEAST	100Y072H	60.18	141.182	145.000	0.0004	6590	60.14	5.525	60.18
PRE-E1 DWN NODE	SOUTHEAST	100Y168H	160.09	141.167	145.000	0.0006	6533	160.04	4.868	160.09
PRE-E1 DWN NODE	SOUTHEAST	100Y240H	184.10	141.195	145.000	0.0004	6644	184.06	6.163	184.10
PRE-E1-STAGE	SOUTHEAST	100Y001H	2.51	139.515	147.000	0.0019	5404	0.92	2.930	0.00
PRE-E1-STAGE	SOUTHEAST	100Y002H	3.42	140.864	147.000	0.0027	8822	1.50	3.343	0.00
PRE-E1-STAGE	SOUTHEAST	100Y004H	4.61	142.280	147.000	0.0029	18401	3.04	7.069	4.60
PRE-E1-STAGE	SOUTHEAST	100Y008H	7.20	142.699	147.000	0.0030	22826	4.08	7.613	7.18
PRE-E1-STAGE	SOUTHEAST	100Y024H	16.23	142.905	147.000	0.0050	25089	15.08	4.138	16.21
PRE-E1-STAGE	SOUTHEAST	100Y072H	60.15	143.154	147.000	0.0034	28336	60.00	5.894	60.14
PRE-E1-STAGE	SOUTHEAST	100Y168H	160.05	143.071	147.000	0.0050	27170	159.99	4.958	160.04
PRE-E1-STAGE	SOUTHEAST	100Y240H	184.08	143.232	147.000	0.0050	29561	184.00	6.329	184.06
PRE-E4-STAGE	SOUTHEAST	100Y001H	3.50	149.284	156.000	0.0003	4706	1.04	0.383	0.00
PRE-E4-STAGE	SOUTHEAST	100Y002H	4.50	149.695	156.000	0.0009	8339	1.79	0.753	0.00
PRE-E4-STAGE	SOUTHEAST	100Y004H	6.50	150.233	156.000	0.0013	12682	3.12	1.740	0.00
PRE-E4-STAGE	SOUTHEAST	100Y008H	10.29	150.749	156.000	0.0013	16336	5.08	1.686	0.00
PRE-E4-STAGE	SOUTHEAST	100Y024H	26.34	151.919	156.000	0.0029	24417	15.09	1.146	0.00
PRE-E4-STAGE	SOUTHEAST	100Y072H	74.35	152.886	156.000	0.0029	31638	60.00	1.703	0.00
PRE-E4-STAGE	SOUTHEAST	100Y168H	170.25	153.578	156.000	0.0026	38613	159.92	1.445	0.00
PRE-E4-STAGE	SOUTHEAST	100Y240H	960.00	154.174	156.000	0.0027	45466	184.00	1.842	0.00
PRE-E5-STAGE	SOUTHEAST	100Y001H	2.51	148.037	156.000	0.0001	444	1.00	0.010	0.00
PRE-E5-STAGE	SOUTHEAST	100Y002H	3.04	148.615	156.000	0.0010	2286	1.83	0.259	0.00
PRE-E5-STAGE	SOUTHEAST	100Y004H	5.04	149.374	156.000	0.0012	5222	3.04	0.948	0.00
PRE-E5-STAGE	SOUTHEAST	100Y008H	9.04	150.007	156.000	0.0014	8114	5.04	0.909	0.00
PRE-E5-STAGE	SOUTHEAST	100Y024H	25.10	151.295	156.000	0.0031	15215	15.00	0.689	0.00
PRE-E5-STAGE	SOUTHEAST	100Y072H	73.10	152.304	156.000	0.0025	21198	60.00	1.142	0.00
PRE-E5-STAGE	SOUTHEAST	100Y168H	169.09	153.022	156.000	0.0027	25985	159.99	1.018	0.00
PRE-E5-STAGE	SOUTHEAST	100Y240H	241.10	153.615	156.000	0.0028	30934	184.00	1.291	0.00
PRE-E6-STAGE	SOUTHEAST	100Y001H	2.51	153.016	158.000	0.0000	717	1.04	0.007	0.00
PRE-E6-STAGE	SOUTHEAST	100Y002H	3.25	153.423	158.000	0.0008	2297	1.87	0.191	0.00
PRE-E6-STAGE	SOUTHEAST	100Y004H	5.25	154.027	158.000	0.0011	4656	3.08	0.689	0.00
PRE-E6-STAGE	SOUTHEAST	100Y008H	9.26	154.580	158.000	0.0012	7024	5.04	0.686	0.00
PRE-E6-STAGE	SOUTHEAST	100Y024H	25.26	155.771	158.000	0.0029	12257	15.08	0.523	0.00
PRE-E6-STAGE	SOUTHEAST	100Y072H	73.26	156.647	158.000	0.0025	20856	60.00	0.871	0.00
PRE-E6-STAGE	SOUTHEAST	100Y168H	169.25	157.174	158.000	0.0020	30621	159.99	0.777	0.00
PRE-E6-STAGE	SOUTHEAST	100Y240H	239.95	157.506	158.000	0.0021	41366	184.00	0.984	239.95
PRE-SE1-STAGE	SOUTHEAST	100Y001H	3.00	115.994	121.000	0.0013	14246	0.92	4.861	0.00
PRE-SE1-STAGE	SOUTHEAST	100Y002H	3.59	117.068	121.000	0.0021	29212	1.67	7.424	0.00
PRE-SE1-STAGE	SOUTHEAST	100Y004H	724.01	118.415	121.000	0.0026	56647	3.04	17.106	0.00
PRE-SE1-STAGE	SOUTHEAST	100Y008H	727.99	119.758	121.000	0.0030	88235	4.12	17.489	0.00
PRE-SE1-STAGE	SOUTHEAST	100Y024H	19.10	120.148	121.000	0.0040	131403	15.09	13.130	19.10
PRE-SE1-STAGE	SOUTHEAST	100Y072H	60.08	120.198	121.000	0.0027	135296	60.00	20.124	60.08
PRE-SE1-STAGE	SOUTHEAST	100Y168H	160.02	120.182	121.000	0.0040	134043	159.99	17.185	160.02
PRE-SE1-STAGE	SOUTHEAST	100Y240H	184.01	120.207	121.000	0.0040	136086	184.00	21.876	184.01
PRE-SE5-STAGE	SOUTHEAST	100Y001H	2.31	136.044	141.000	-0.0001	5570	1.00	0.136	3.12
PRE-SE5-STAGE	SOUTHEAST	100Y002H	3.39	136.305	141.000	0.0006	7564	1.83	0.508	20.49
PRE-SE5-STAGE	SOUTHEAST	100Y004H	5.34	136.784	141.000	0.0010	11229	3.08	1.445	3.69
PRE-SE5-STAGE	SOUTHEAST	100Y008H	8.15	137.065	141.000	0.0010	13429	5.04	1.421	6.26
PRE-SE5-STAGE	SOUTHEAST	100Y024H	24.26	137.633	141.000	0.0014	18288	15.08	1.023	15.08
PRE-SE5-STAGE	SOUTHEAST	100Y072H	72.41	138.480	141.000	0.0020	27948	60.00	1.612	63.31
PRE-SE5-STAGE	SOUTHEAST	100Y168H	168.60	138.951	141.000	0.0023	34344	159.92	1.407	167.72
PRE-SE5-STAGE	SOUTHEAST	100Y240H	240.36	139.299	141.000	0.0021	40031	184.00	1.788	180.30
SMF-East	SOUTHEAST	100Y001H	1.15	153.118	155.000	-0.0018	15520	0.75	7.828	1.15
SMF-East	SOUTHEAST	100Y002H	2.11	153.449	155.000	-0.0013	16233	0.88	7.169	2.11
SMF-East	SOUTHEAST	100Y004H	3.58	153.869	155.000	-0.0013	17138	2.54	6.025	3.58
SMF-East	SOUTHEAST	100Y008H	5.24	153.991	155.000	-0.0015	17402	4.04	7.352	5.24
SMF-East	SOUTHEAST	100Y024H	19.12	154.128	155.000	-0.0022	17696	12.00	2.718	19.10
SMF-East	SOUTHEAST	100Y072H	60.23	154.440	155.000	0.0023	18370	60.00	2.404	60.21
SMF-East	SOUTHEAST	100Y168H	160.09	154.377	155.000	0.0026	18234	159.92	1.801	160.09
SMF-East	SOUTHEAST	100Y240H	184.10	154.789	155.000	0.0025	19122	184.00	2.344	184.10
SMF-North	NORTH	100Y001H	1.23	126.538	130.000	0.0031	29780	0.71	48.465	1.23
SMF-North	NORTH	100Y002H	2.12	127.540	130.000	0.0030	32999	0.87	43.811	2.12
SMF-North	NORTH	100Y004H	3.58	128.457	130.000	-0.0030	36100	2.54	30.228	3.58
SMF-North	NORTH	100Y008H	5.24	128.706	130.000	-0.0049	36943	4.00	36.634	5.24
SMF-North	NORTH	100Y024H	16.02	128.431	130.000	-0.0045	36013	12.00	13.150	16.02
SMF-North	NORTH	100Y072H	60.16	128.984	130.000	-0.0049	37883	60.00	10.481	60.14
SMF-North	NORTH	100Y168H	160.05	128.671	130.000	-0.0050	36825	159.92	7.650	160.04
SMF-North	NORTH	100Y240H	184.09	129.373	130.000	0.0049	39202	184.00	9.997	184.08
SMF-NorthEast	SOUTHEAST	100Y001H	2.36	136.047	140.000	0.0049	113	3.12	0.046	0.85
SMF-NorthEast	SOUTHEAST	100Y002H	3.61	136.309	140.000	0.0050	113	20.49	0.099	1.04
SMF-NorthEast	SOUTHEAST	100Y004H	5.72	136.789	140.000	0.0050	113	3.69	0.150	2.20
SMF-NorthEast	SOUTHEAST	100Y008H	8.15	137.064	140.000	0.0050	8596	6.26	0.550	10.22
SMF-NorthEast	SOUTHEAST	100Y024H	24.26	137.632	140.000	0.0050	8415	15.08	0.586	14.25
SMF-NorthEast	SOUTHEAST	100Y072H	72.40	138.480	140.000	0.0050	8229	63.31	0.806	43.16
SMF-NorthEast	SOUTHEAST	100Y168H	168.62	138.951	140.000	0.0050	8161	167.72	0.397	106.80
SMF-NorthEast	SOUTHEAST	100Y240H	240.38	139.300	140.000	0.0050	6953	180.30	0.503	152.80
SMF-NorthWest	WEST	100Y001H	1.16	142.471	145.000	-0.0021	22984	0.67	14.620	1.16

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs
SMF-NorthWest	WEST	100Y002H	2.13	142.765	145.000	-0.0013	24520	0.87	12.875	2.13
SMF-NorthWest	WEST	100Y004H	3.82	143.175	145.000	0.0009	26653	2.08	7.967	3.82
SMF-NorthWest	WEST	100Y008H	7.18	143.363	145.000	-0.0011	27634	4.00	9.277	7.18
SMF-NorthWest	WEST	100Y024H	22.27	143.524	145.000	0.0013	28474	12.00	3.212	19.42
SMF-NorthWest	WEST	100Y072H	64.33	144.175	145.000	0.0021	31870	59.92	2.300	34.81
SMF-NorthWest	WEST	100Y168H	160.24	144.472	145.000	0.0021	33420	159.90	1.632	40.07
SMF-NorthWest	WEST	100Y240H	184.31	144.357	145.000	0.0025	32816	184.00	2.142	40.12
SMF-South A	SOUTHEAST	100Y001H	0.87	97.036	99.000	0.0050	55935	0.71	336.078	0.87
SMF-South A	SOUTHEAST	100Y002H	1.02	96.804	99.000	0.0050	55331	0.87	302.320	1.02
SMF-South A	SOUTHEAST	100Y004H	2.59	96.621	99.000	0.0050	54792	2.54	208.641	2.59
SMF-South A	SOUTHEAST	100Y008H	4.08	96.982	99.000	0.0050	55804	4.00	251.047	4.08
SMF-South A	SOUTHEAST	100Y024H	19.15	97.491	99.000	0.0050	93238	12.00	91.340	12.05
SMF-South A	SOUTHEAST	100Y072H	60.16	98.391	99.000	0.0050	99033	60.00	92.226	60.01
SMF-South A	SOUTHEAST	100Y168H	160.05	98.201	99.000	0.0050	97575	159.92	69.762	159.99
SMF-South A	SOUTHEAST	100Y240H	184.08	98.996	99.000	0.0050	101906	184.00	90.558	184.00
SMF-South B	SOUTHEAST	100Y001H	2.21	92.572	99.000	0.0032	166007	0.87	242.864	0.60
SMF-South B	SOUTHEAST	100Y002H	2.82	94.016	99.000	0.0031	176752	1.02	219.461	0.73
SMF-South B	SOUTHEAST	100Y004H	4.29	95.703	99.000	0.0031	190956	2.59	201.170	1.69
SMF-South B	SOUTHEAST	100Y008H	7.28	96.650	99.000	0.0035	198632	4.08	237.414	7.26
SMF-South B	SOUTHEAST	100Y024H	19.28	97.436	99.000	0.0050	204459	12.05	89.100	19.27
SMF-South B	SOUTHEAST	100Y072H	60.41	98.282	99.000	-0.0039	211447	60.01	82.419	60.39
SMF-South B	SOUTHEAST	100Y168H	160.14	98.110	99.000	0.0050	210028	159.99	66.667	160.14
SMF-South B	SOUTHEAST	100Y240H	184.16	98.843	99.000	0.0050	216093	184.00	86.160	184.16
SMF-West	WEST	100Y001H	1.23	124.356	129.000	0.0029	34842	0.71	52.826	1.23
SMF-West	WEST	100Y002H	2.22	125.367	129.000	0.0028	38403	0.87	47.827	2.22
SMF-West	WEST	100Y004H	3.70	126.423	129.000	0.0025	42125	2.54	32.799	3.70
SMF-West	WEST	100Y008H	6.19	126.769	129.000	-0.0039	43340	4.00	39.758	6.19
SMF-West	WEST	100Y024H	19.10	127.021	129.000	-0.0049	44231	12.00	14.173	19.10
SMF-West	WEST	100Y072H	64.02	127.738	129.000	0.0045	46755	60.00	11.127	60.23
SMF-West	WEST	100Y168H	160.12	127.694	129.000	0.0049	46601	159.92	8.079	160.10
SMF-West	WEST	100Y240H	184.13	128.602	129.000	0.0050	49799	184.00	10.567	184.12





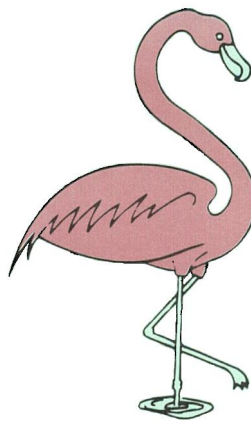




TARA FOREST EAST SUBDIVISION TRAFFIC STUDY

ALACHUA COUNTY, FLORIDA

December 2019



BUCKHOLZ TRAFFIC



BUCKHOLZ TRAFFIC
3585 KORI ROAD
JACKSONVILLE, FLORIDA 32257
(904) 886-2171 jwbuckholz@aol.com

December 13, 2019

Mr. Christopher A. Gmuer, P.E.
Gmuer Engineering
2603 NW 13th Street
Gainesville, Florida 32609

Re: Updated Tara Forest East Traffic Study

Dear Mr. Gmuer:

Attached is the updated traffic study. If there are any questions or comments regarding this study, please contact me.

Sincerely,

Jeffrey W. Buckholz, P.E., PTOE
Principal

This item has been digitally signed and sealed by Jeffrey W. Buckholz, P.E. on 12/13/19. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

INTRODUCTION

The proposed Tara Forest East residential development will contain 340 single family homes and 211 townhomes and will be located on the west side of CR 241 approximately $\frac{3}{4}$ of a mile north of SR 235 in northern Alachua County, Florida. The development will have access to both CR 241 and NW 147th Drive. CR 241 in the vicinity of the site is a two-lane undivided rural major collector with a posted speed limit of 55 mph. NW 147th Drive is a two-lane undivided local road with a posted speed limit of 20 mph. It intersects US 441 approximately $\frac{1}{2}$ mile to the south at an existing signalized intersection.

Figure 1 shows the site location and surrounding road network while Appendix A contains the proposed site plan. The development is expected to be complete by the end of 2028 with 100 units completed by the end of 2020; 200 units completed by the end of 2022; and 280 units completed by the end of 2024. The full build out year of 2028 was chosen as the design year for this study.

EXISTING TRAFFIC VOLUMES

Manual turning movement counts (see Appendix B) were conducted by Buckholz Traffic personnel in 2018 at the intersection of CR 241 with NW 172nd Avenue and NW 174th Avenue. The counts were conducted during weekday peak periods (6:30-8:30 AM and 3:45-5:45 PM). The data was collected at 15-minute intervals and includes a separate tabulation for trucks. Figure 2 provides a visual summary of existing weekday peak hour traffic counts at these two intersections. Figure 3 provides a similar visual summary for weekday peak period traffic flows. Also shown in Figure 3 are the directional percentages for the residential traffic currently using CR 241; a good indicator of the expected trip distribution for site traffic using the CR 241 driveway.

In addition, manual turning movement counts were conducted by Buckholz Traffic personnel in 2019 at the US 441/NW 147th Drive intersection and at the US 441/CR 235 (NW 140th Street) intersection. The counts were conducted during weekday peak periods. The data was collected at 15-minute intervals and includes a separate tabulation for trucks. Figure 4 provides a visual summary of existing weekday peak hour traffic counts at these intersections. Figure 5 provides a similar visual summary for weekday peak period traffic flows at the US 441/NW 147th Drive intersection. Also shown in Figure 5 are directional percentages derived from the traffic counts. These percentages are a good indicator of the expected trip distribution for site traffic using NW 147th Drive.

Appendix C provides daily traffic volumes from the FDOT annual traffic counting program for CR 241 and US 441. The current Average Daily Traffic (ADT) on the portion of CR 241 in the vicinity of the site is about 3000 vehicles per day and the current ADT on US 441 near NW 147th Drive is 24,000 vehicles per day.

BUCKHOLZ TRAFFIC

TRIP GENERATION

Trip generation calculations were carried out using the 10th edition of ITE's Trip Generation Manual and referencing land use codes 210 (Single Family Housing) and 220 (Multi-Family Low Rise). Tables 1 and 2 contain the daily, AM peak hour, and PM peak hour trip generation calculations for the development. During an average weekday the development is expected to generate 4760 trips (2380 entering and 2380 exiting) with 343 trips (83 entering and 260 exiting) occurring during the AM peak hour and 444 trips (279 entering and 165 exiting) occurring during the PM peak hour. All of these trips will be new trips.

SITE TRIP DISTRIBUTION AND TRAFFIC ASSIGNMENT

Peak hour site trips were directionally distributed based on percentages derived from Figures 3 and 5. The resulting weekday peak hour traffic assignments for the development are provided in Figure 6. The values contained in this figure were obtained by multiplying the trip generation results by the trip distribution percentages. Based on the arrangement of dwelling units within the site, it is estimated that 60% of site trips will use NW 147th Drive and 40% will use the CR 241 entrance.

2028 BUILD TRAFFIC VOLUMES

The expected weekday AM peak hour and PM peak hour background (No Build) traffic volumes and total (Build) traffic volumes at the CR 241/NW 172nd Avenue intersection and the CR 241/NW 174th Avenue intersection are graphically depicted in Figures 7 and 8. The 2028 background traffic volumes were obtained by multiplying the existing traffic volumes by the appropriate FDOT seasonal adjustment factor (0.99) and then by a corresponding annual growth factor obtained from nearby FDOT traffic counts on CR 241 (see Appendix C). The FDOT counts suggest that, since 2014, traffic volumes have actually been trending downward along CR 241. Consequently, a 0% annual growth rate was used in the analysis. The 2028 Build traffic volumes were then obtained by adding the traffic generated by the new development to the 2028 background traffic volumes.

The expected weekday AM peak hour and PM peak hour background (No Build) traffic volumes and total (Build) traffic volumes at the US 441/NW 147th Drive intersection and the US 441/CR 235 intersection are graphically depicted in Figures 9 through 12. The 2028 background traffic volumes were obtained by multiplying the existing traffic volumes by the appropriate FDOT seasonal adjustment factor and then by a corresponding annual growth rate (5.0%) obtained from nearby FDOT traffic counts on US 441 (see Appendix C). The 2028 Build traffic volumes were then obtained by adding the traffic generated by the new development to the 2028 background traffic volumes.

BUCKHOLZ TRAFFIC

TURN LANE ANALYSIS

A formal analysis was conducted to determine if an exclusive right turn lane is warranted on CR 241 at the Site Drive. The methodology contained in NCHRP Report #279 was used to conduct the right turn lane analysis. As indicated in Figure 13, right turn volumes into the Site Drive will not be high enough during weekday peak hours to warrant an exclusive right turn lane on CR 241 under 2028 Build conditions. The right turn lane warrants contained in NCHRP Report #420 support this conclusion.

Using the 2028 Build traffic volumes, a formal analysis was also made to determine if an exclusive left turn lane is warranted on CR 241 at the Site Drive. The methodology contained in a paper written by M.D. Harmelink entitled: "Volume Warrants for Left Turn Storage Lanes at Unsignalized Grade Intersections" was used to conduct this evaluation. The results indicate that traffic volumes on CR 241 will not be high enough during the weekday PM peak hour to warrant a left turn lane at the site drive. The supporting analysis is provided in Figure 14.

UNSIGNALIZED INTERSECTION CAPACITY ANALYSIS

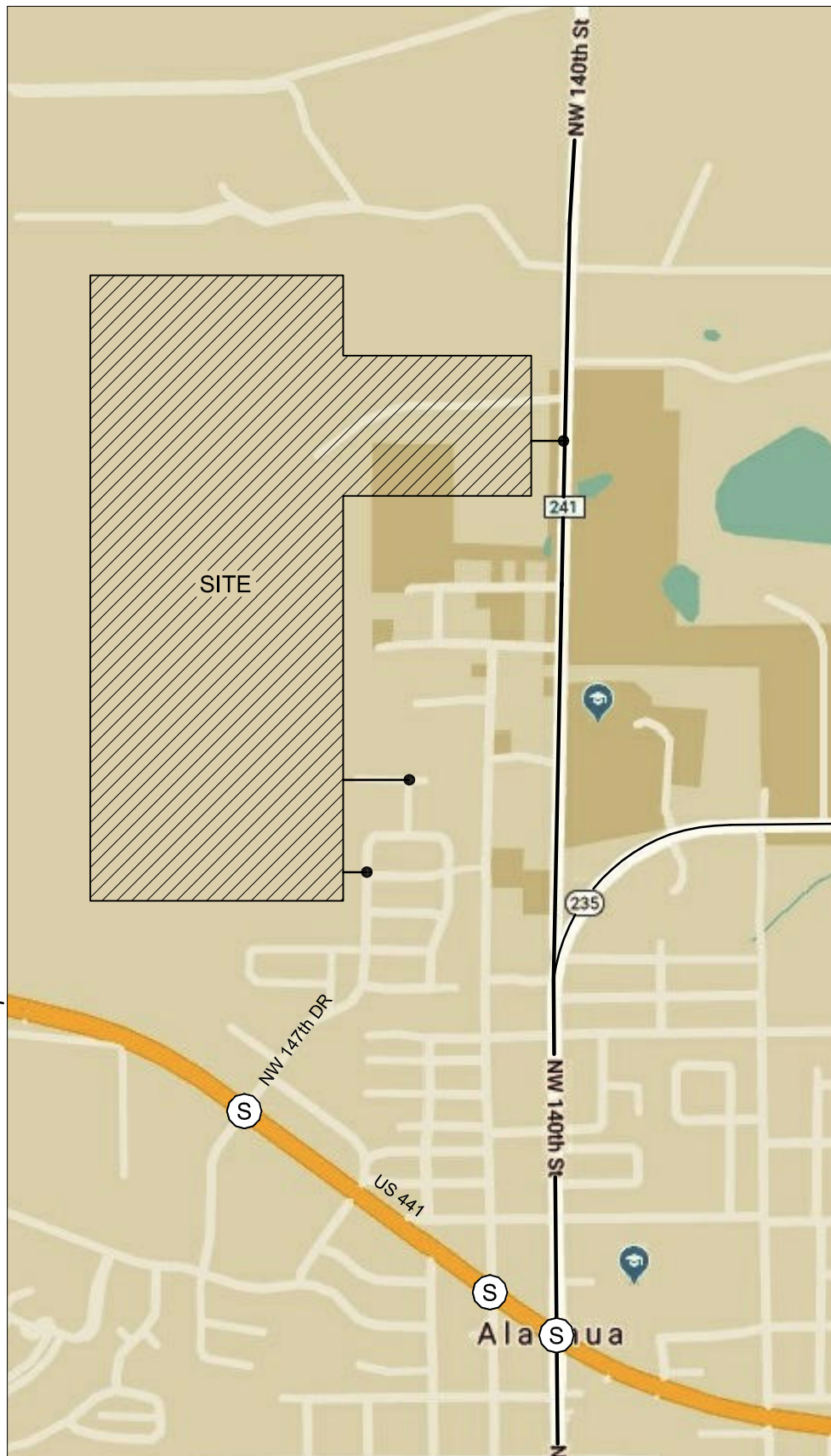
The unsignalized CR 241/Site Drive intersection, the unsignalized CR 241/NW 172nd Avenue intersection, and the unsignalized CR 241/NW 174th Avenue intersection were analyzed using the two-way stop control methodology contained in Chapter 19 of the Sixth Edition of the Highway Capacity Manual. Tables 3 and 4 contain the capacity analysis results with the supporting calculations provided in Appendix D. Under 2028 Build conditions all minor movements and each of these intersections are expected to operate at level of service B or better with minimal queuing and a volume-to-capacity ratio of well less than one.

SIGNALIZED INTERSECTION CAPACITY ANALYSIS

The signalized US 441/NW 147th Drive intersection and the US 441/CR 235 intersection were analyzed using the operational methodology contained in Chapter 19 of the Sixth Edition of the Highway Capacity Manual. Current signal timings were used for the existing (2019) analysis and consultant timings were used for the 2028 BUILD analysis. All timings are provided in Appendix E. Tables 5 and 6 contain the capacity analysis results with the supporting calculations provided in Appendix F. Under 2028 Build conditions with optimized splits, the US 441/NW 147th Drive intersection is expected to operate at LOS C during the weekday AM peak hour and LOS E during the weekday PM peak hour.

The US 441/CR 235 intersection is expected to operate at LOS F during both weekday peak hours with extensive queuing and delay. However, only 9% of expected entering peak hour traffic at this intersection in 2028 is attributable to the new development.

BUCKHOLZ TRAFFIC



(S) = TRAFFIC SIGNAL

Buckholz Traffic

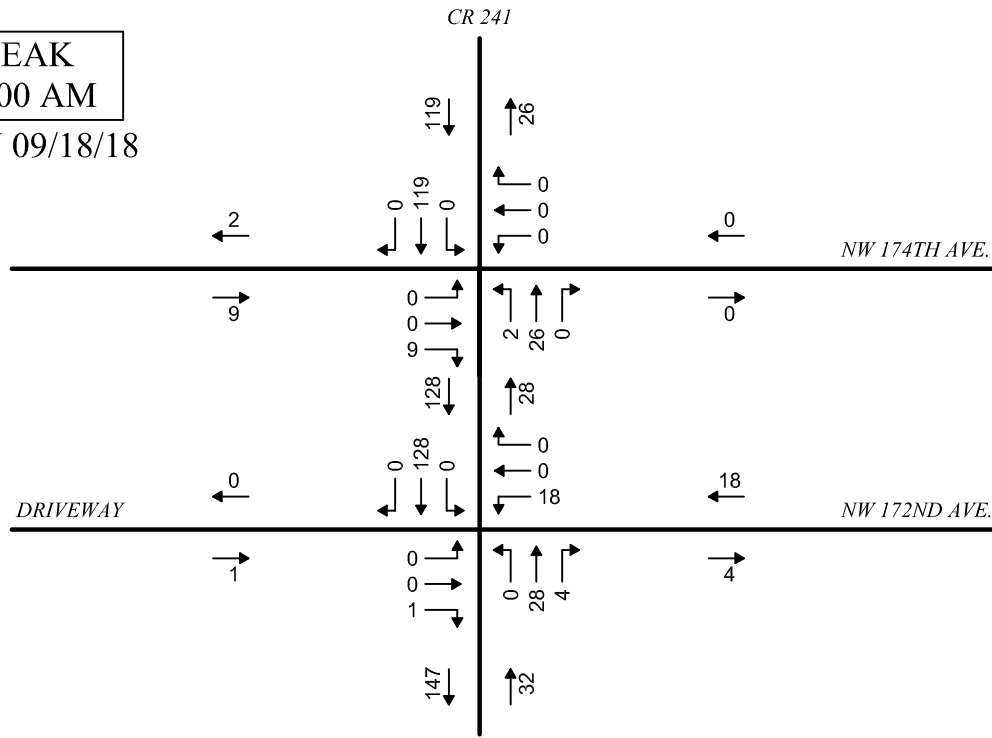
FIGURE 1

SITE LOCATION



M:\18-1534\CAD\FIG_02.dwg Date: 08-26-19 T: 18:48 By: AVDelacruz

AM PEAK
7:00-8:00 AM
TUESDAY 09/18/18



PM PEAK
4:45-5:45 PM
MONDAY 09/17/18

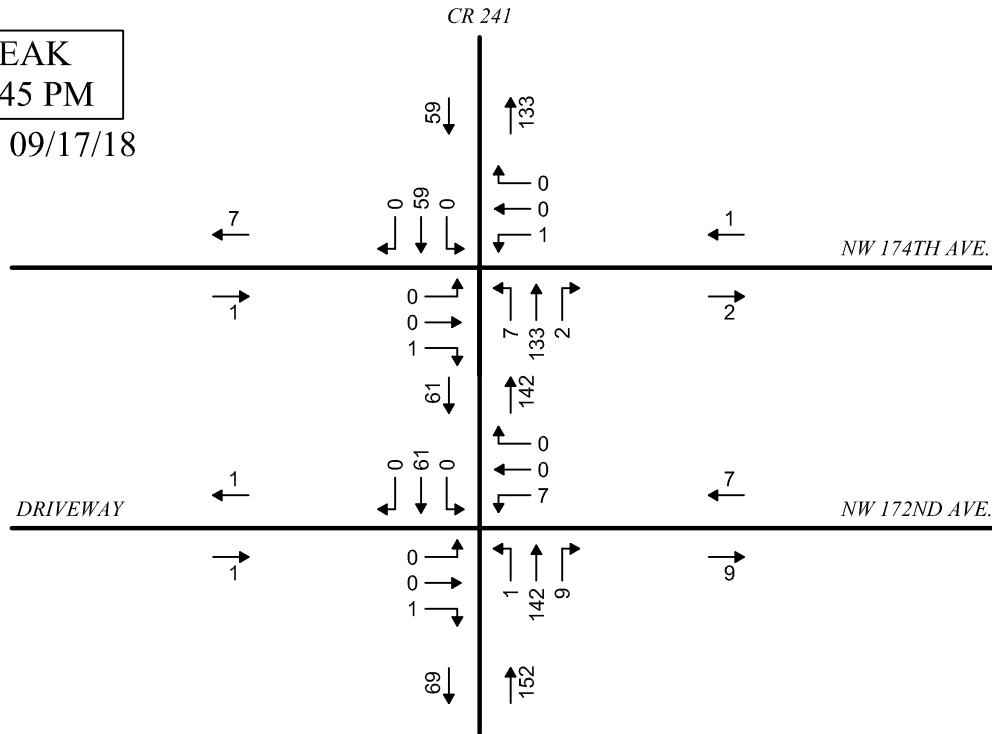


FIGURE 2

CR 241 TRAFFIC COUNTS

WEEKDAY PEAK HOURS



Buckholz Traffic

[illegible]

The diagram illustrates a four-way intersection with the following details:

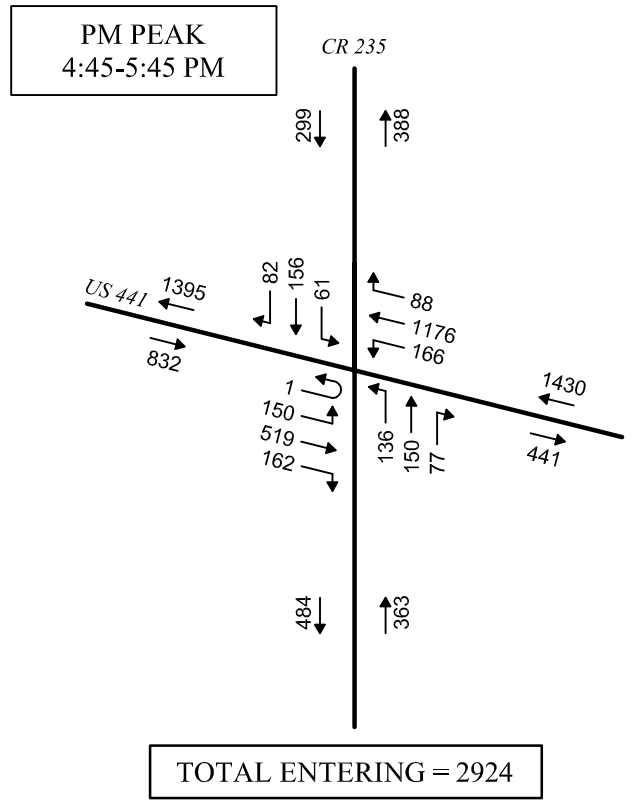
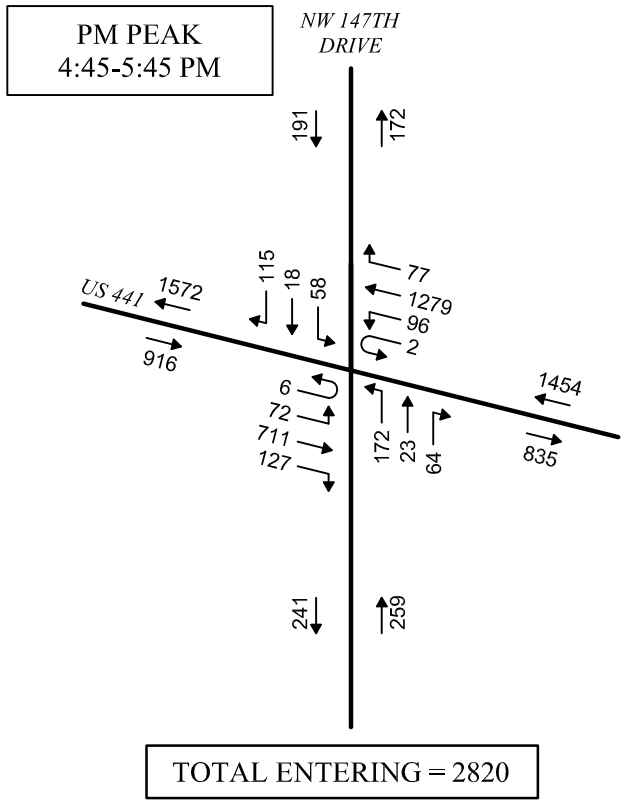
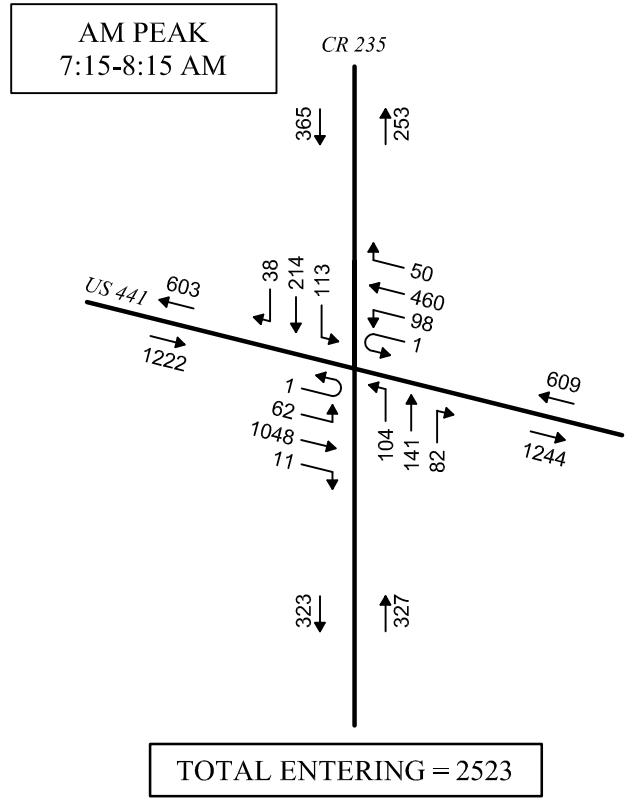
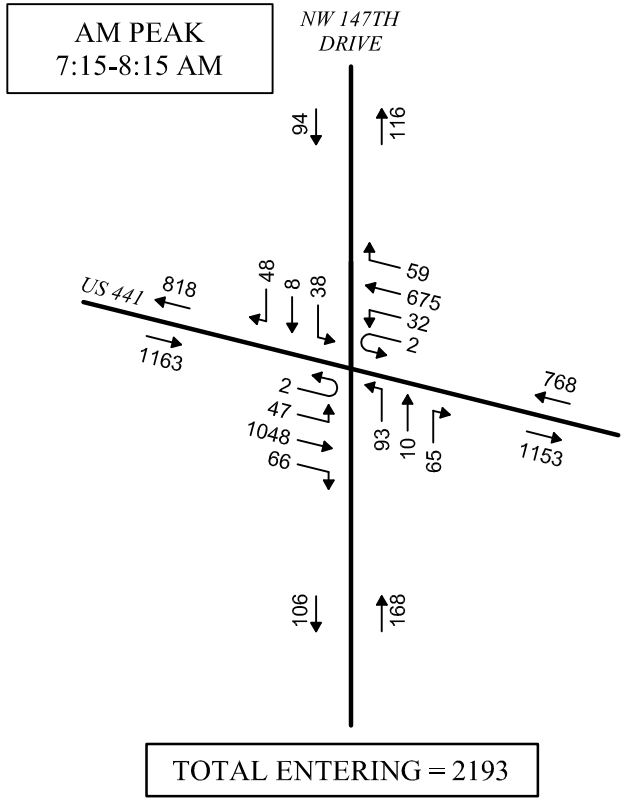
- Streets:** CR 241 (vertical), NW 174TH AVE. (horizontal), and NW 172ND AVE. (horizontal). A DRIVEWAY is located on the left side of NW 172ND AVE.
- Accident Data:**
 - At the intersection of NW 174TH AVE. and NW 172ND AVE.: 3 accidents (5%) and 66 accidents (95%).
- Traffic Flow and Vehicle Counts:**
 - CR 241 (Northbound):** 113 vehicles.
 - CR 241 (Southbound):** 258 vehicles.
 - NW 174TH AVE. (Eastbound):** 4 vehicles.
 - NW 174TH AVE. (Westbound):** 16 vehicles.
 - NW 172ND AVE. (Eastbound):** 20 vehicles.
 - NW 172ND AVE. (Westbound):** 15 vehicles.
 - Driveway (Westbound):** 1 vehicle.
- Vehicle Types and Counts:**
 - Circle Icons (Passenger Vehicles):** 112 on CR 241 Northbound, 121 on CR 241 Southbound, 0 on NW 174TH AVE. Eastbound, 0 on NW 172ND AVE. Eastbound, 0 on NW 172ND AVE. Westbound, 0 on Driveway Westbound.
 - Square Icons (Commercial Vehicles):** 3 on CR 241 Northbound, 15 on CR 241 Southbound, 5 on NW 174TH AVE. Eastbound, 15 on NW 172ND AVE. Eastbound, 1 on NW 172ND AVE. Westbound, 1 on Driveway Westbound.

WEEKDAY PEAK PERIODS



Buckholz Traffic

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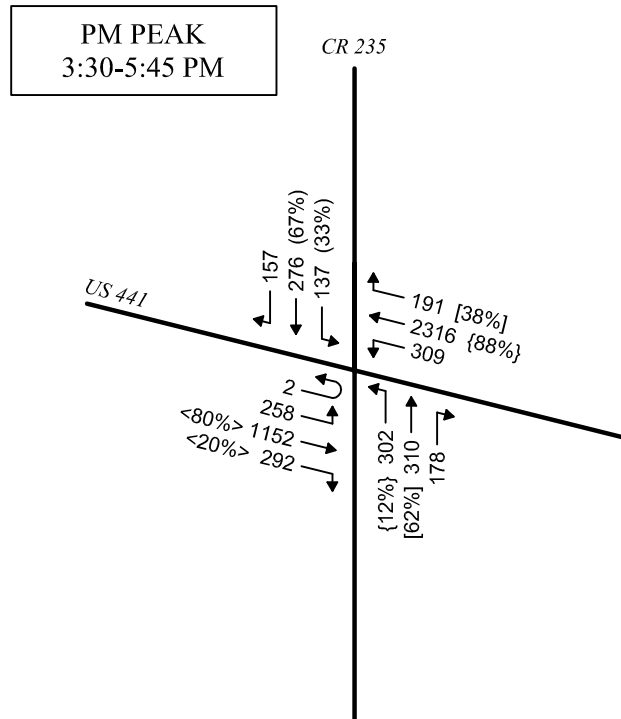
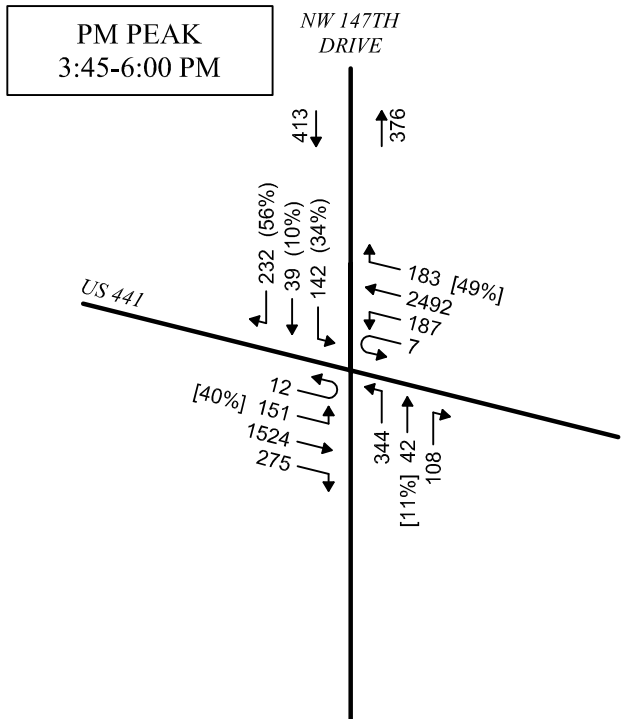
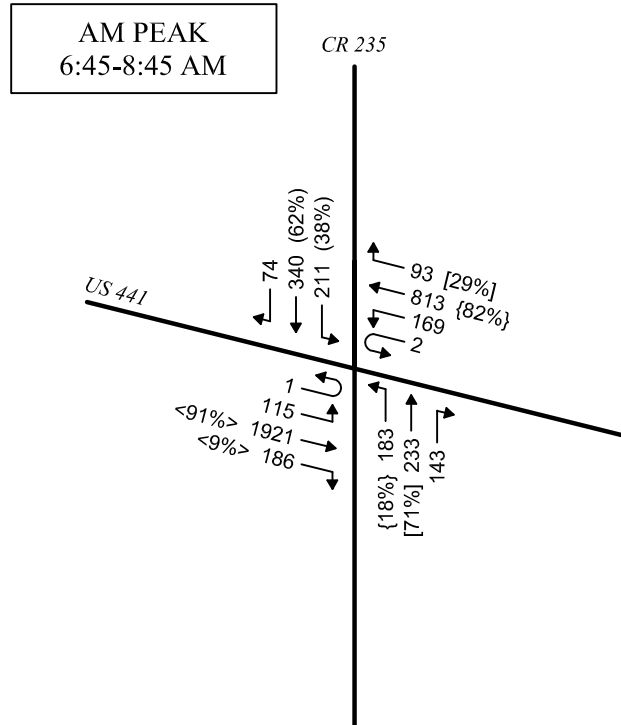
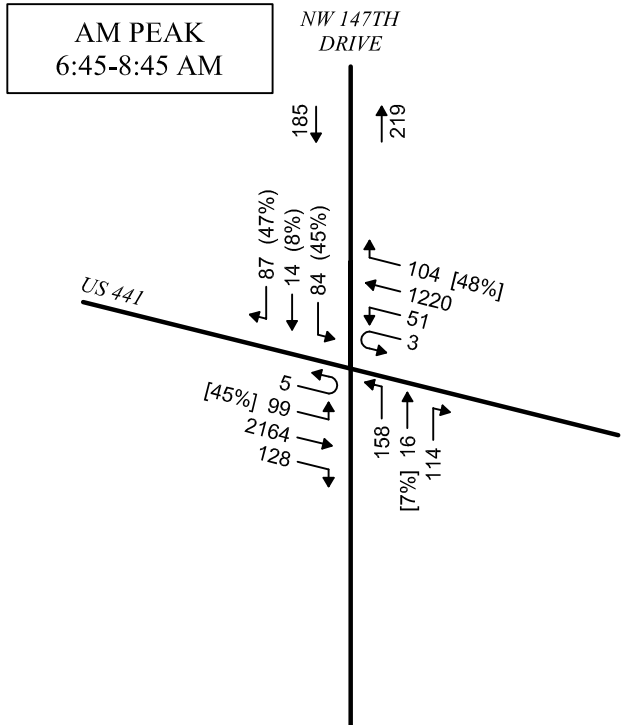


Buckholz Traffic

FIGURE 4
US 441
TRAFFIC COUNTS
WEEKDAY PEAK HOURS



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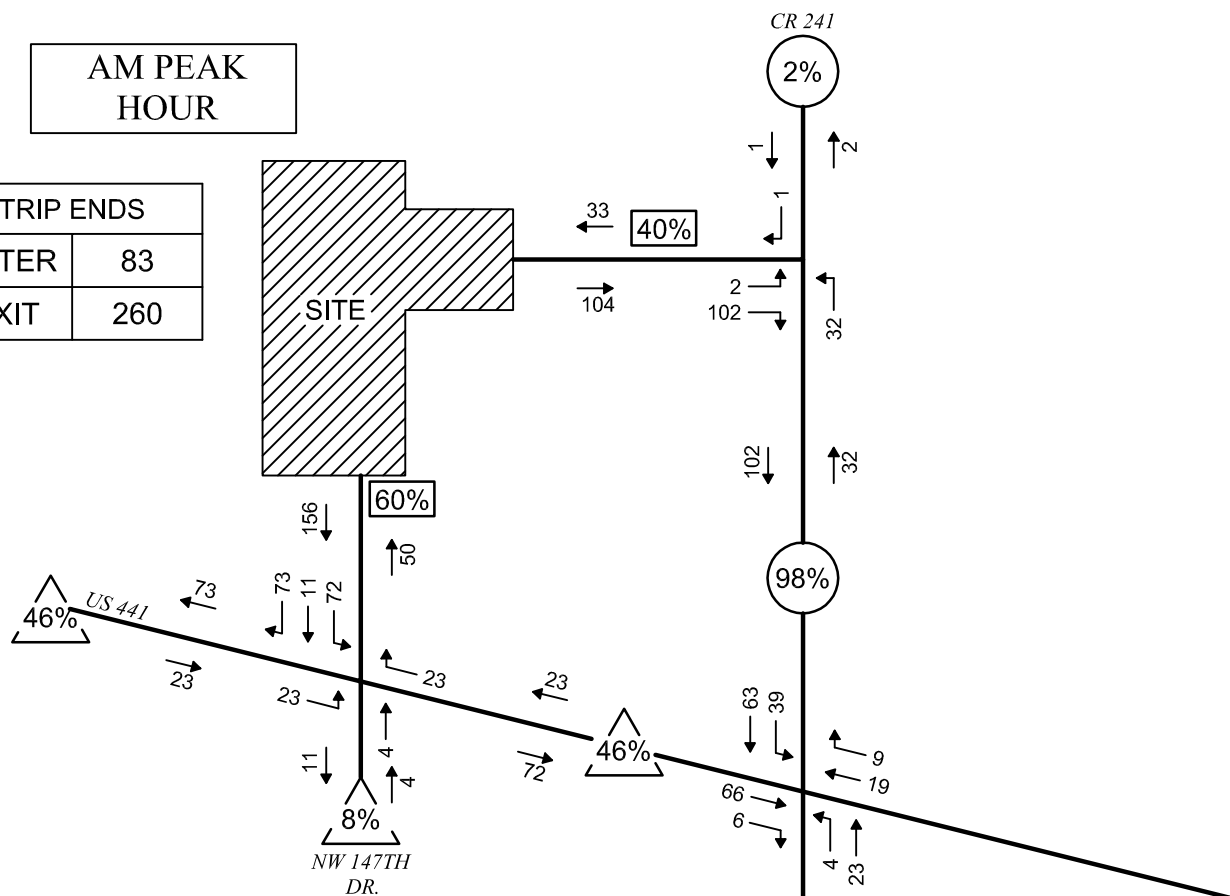
Buckholz Traffic

FIGURE 5
US 441
TRAFFIC COUNTS
WEEKDAY PEAK PERIODS



AM PEAK HOUR

TRIP ENDS	
ENTER	83
EXIT	260



PM PEAK HOUR

TRIP ENDS	
ENTER	279
EXIT	165

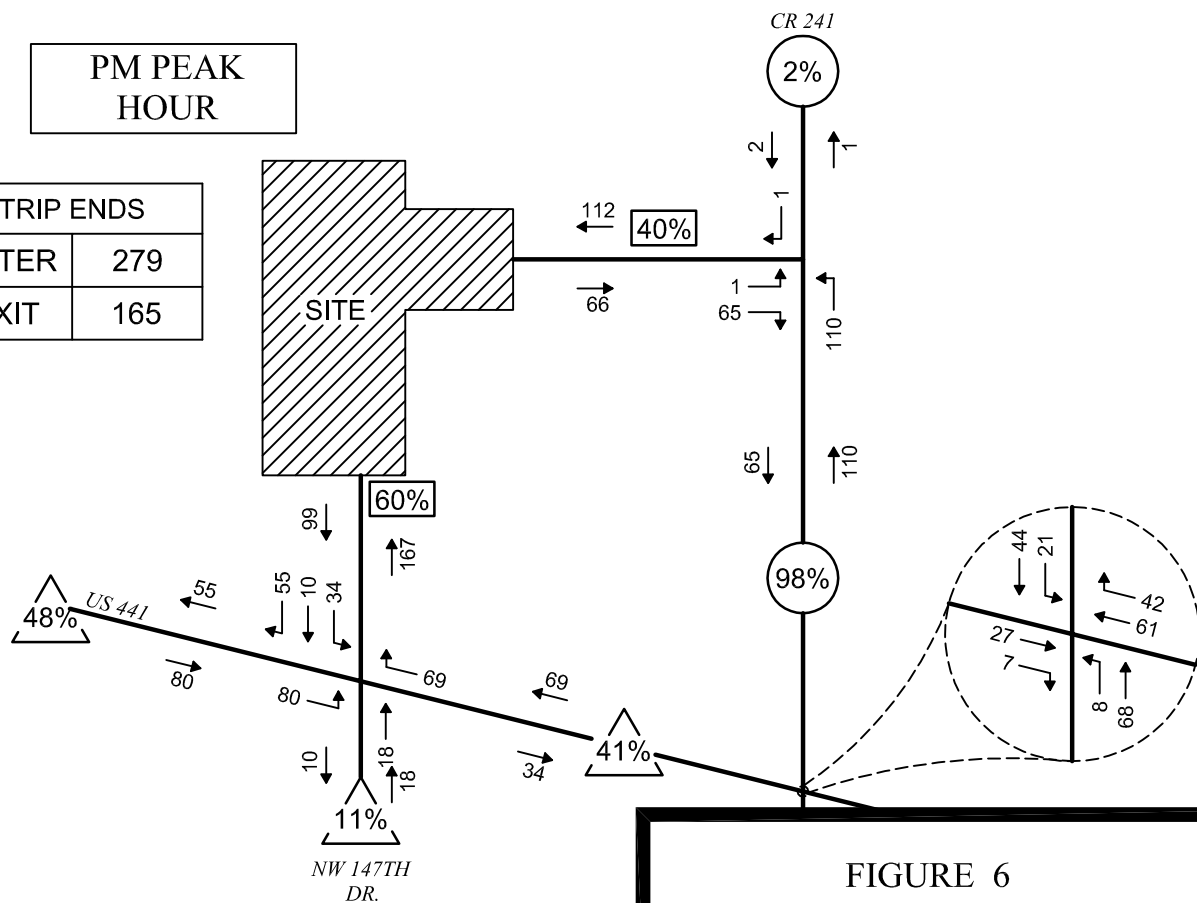
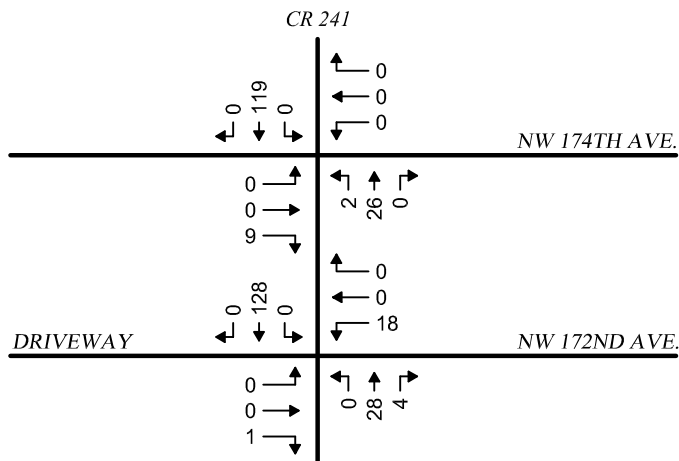


FIGURE 6

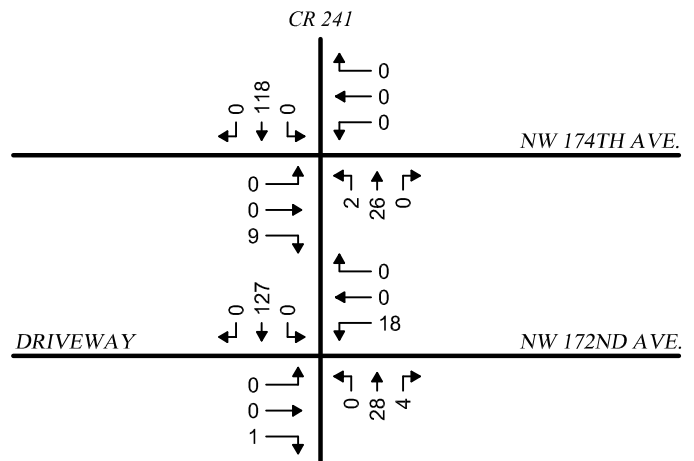
SITE TRAFFIC ASSIGNMENT



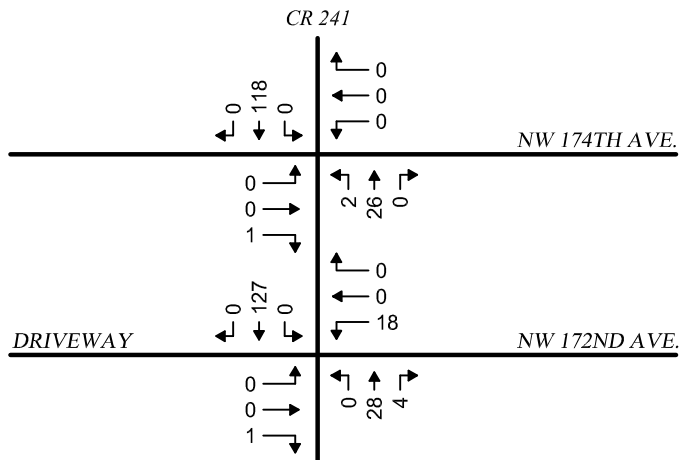
Buckholz Traffic



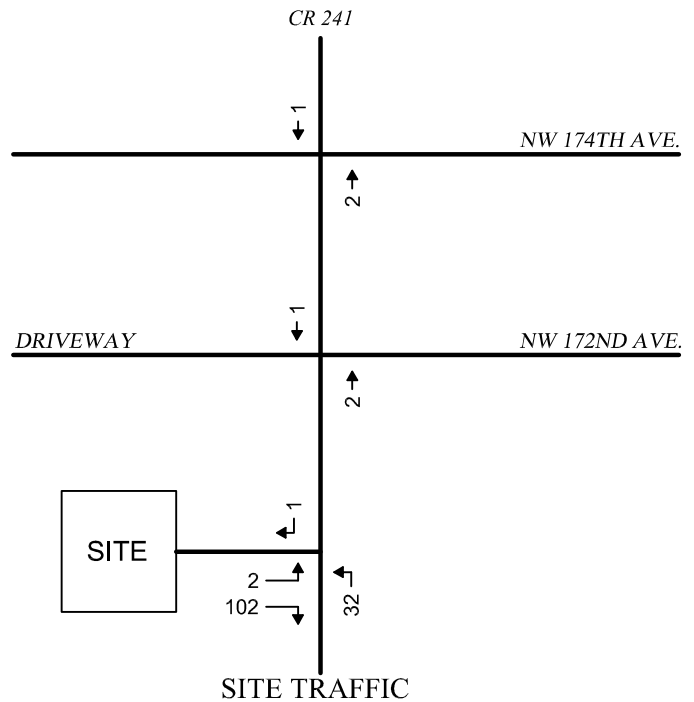
EXISTING TRAFFIC
09/18/18
7:00-8:00 AM



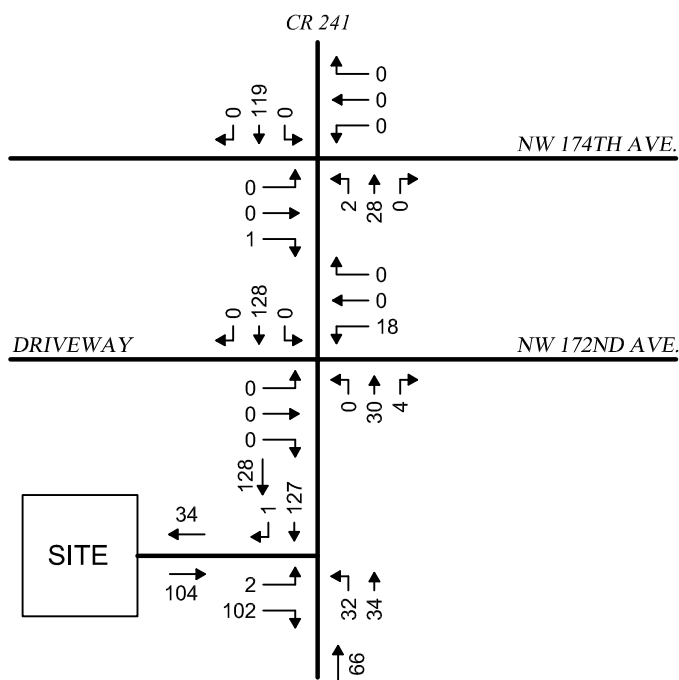
2018 SEASONALLY ADJUSTED TRAFFIC
FDOT SEASONAL CORRECTION FACTOR = 0.99



2028 NO BUILD TRAFFIC
ANNUAL GROWTH RATE = 0%



SITE TRAFFIC



2028 BUILD TRAFFIC

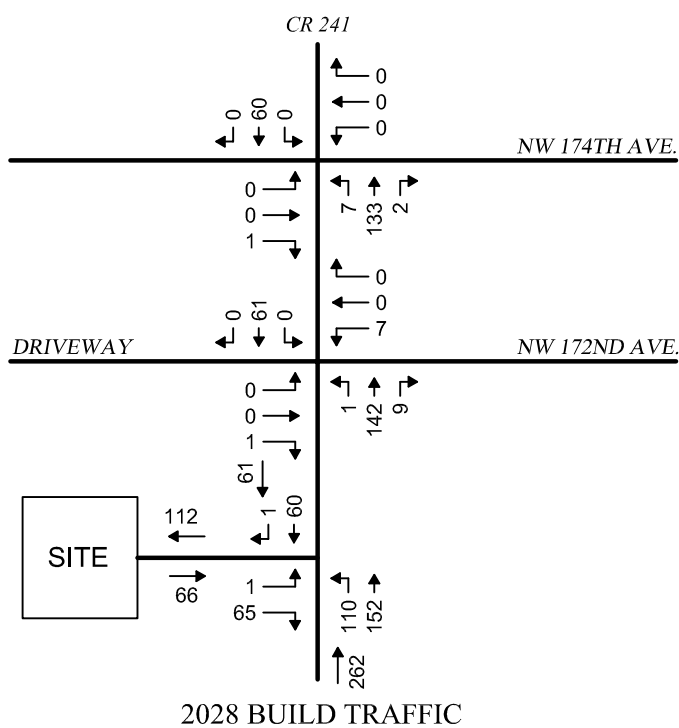
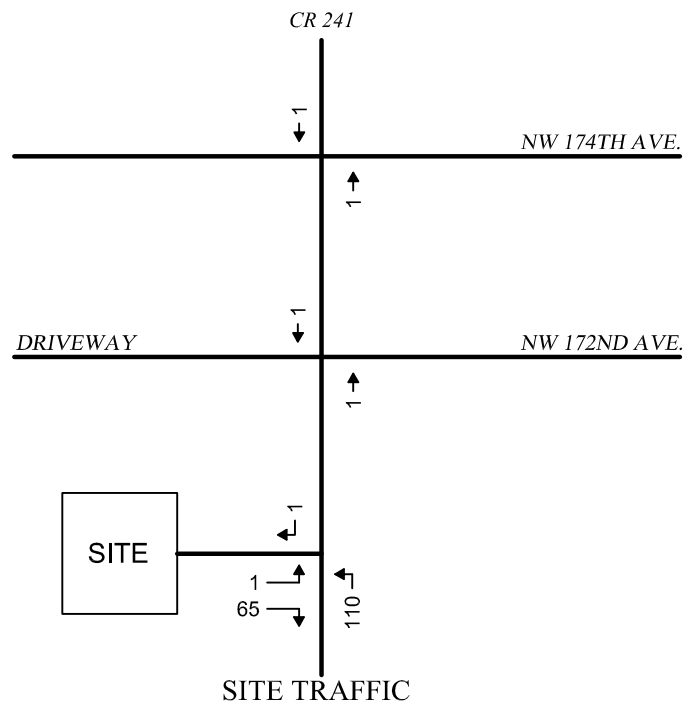
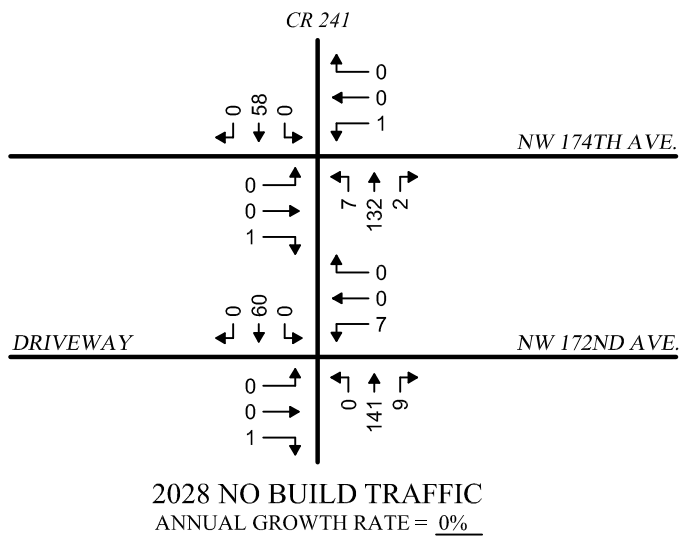
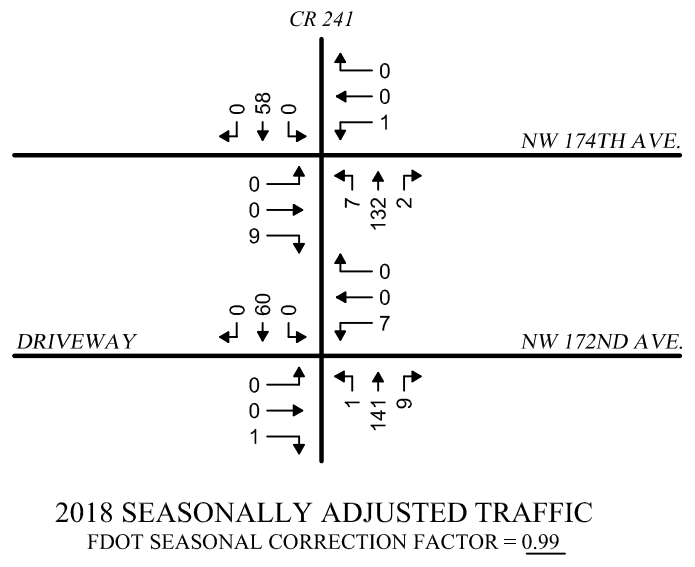
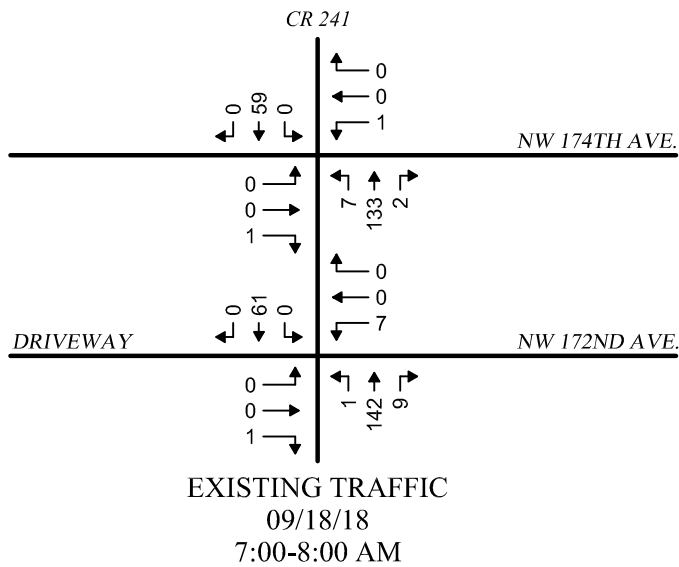
Buckholz Traffic

FIGURE 7

2028 BUILD TRAFFIC
CR 241

AM PEAK HOUR

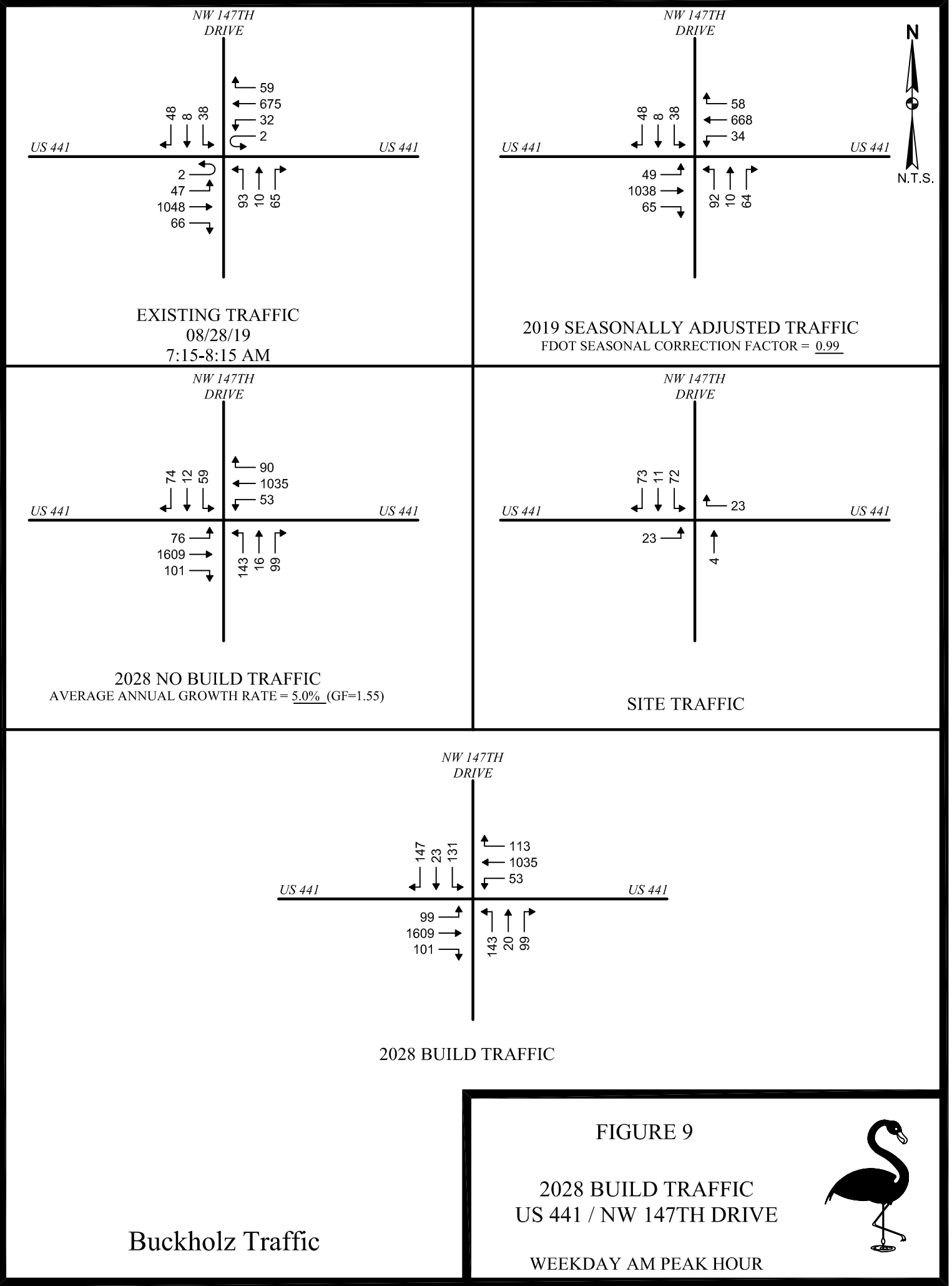




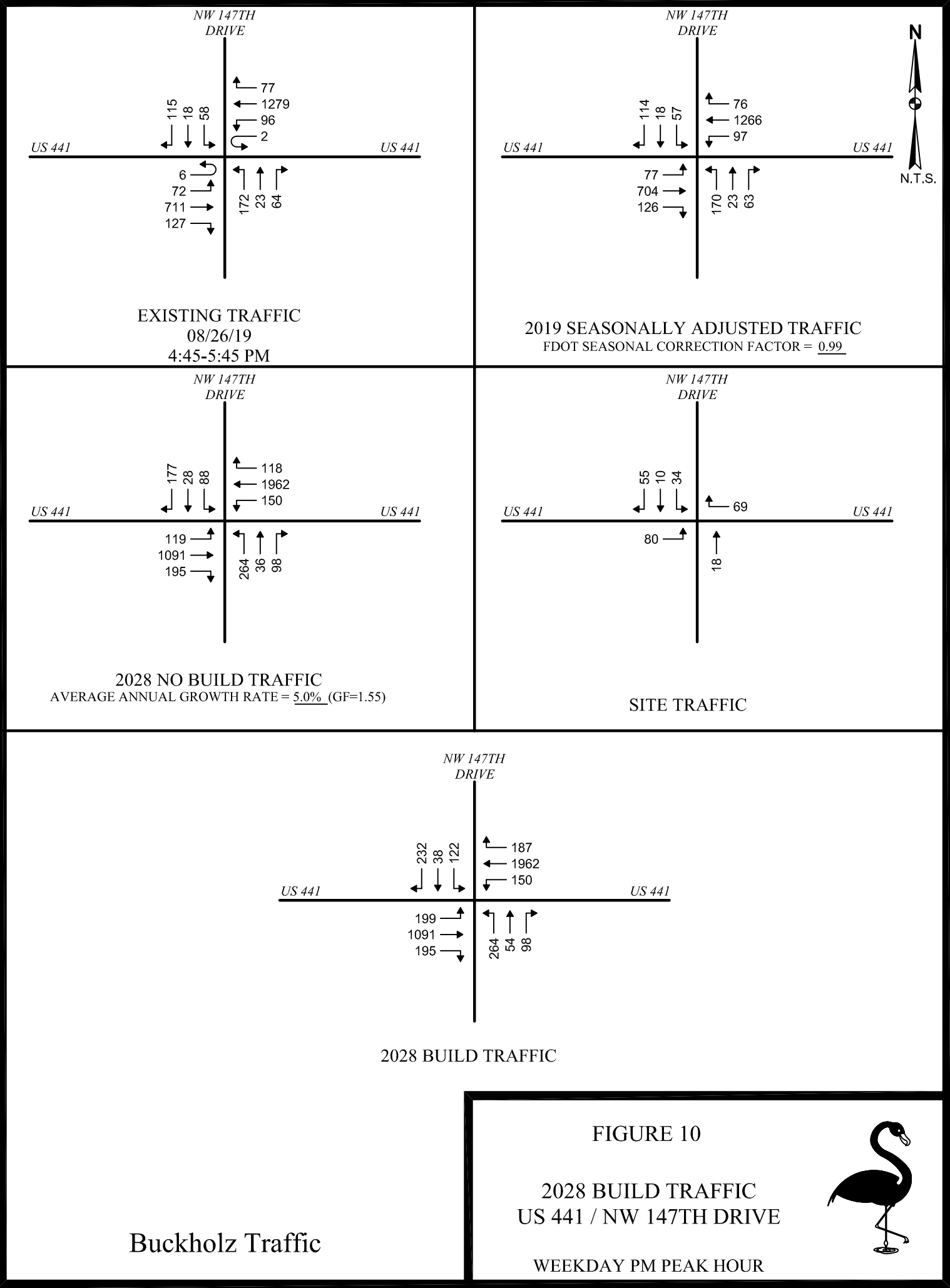
Buckholz Traffic

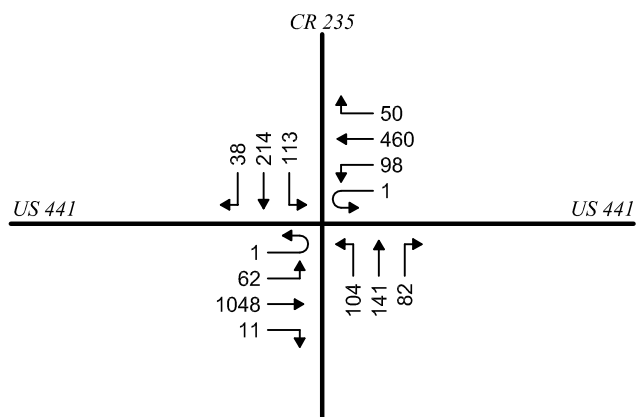
FIGURE 8
2028 BUILD TRAFFIC
CR 241
PM PEAK HOUR



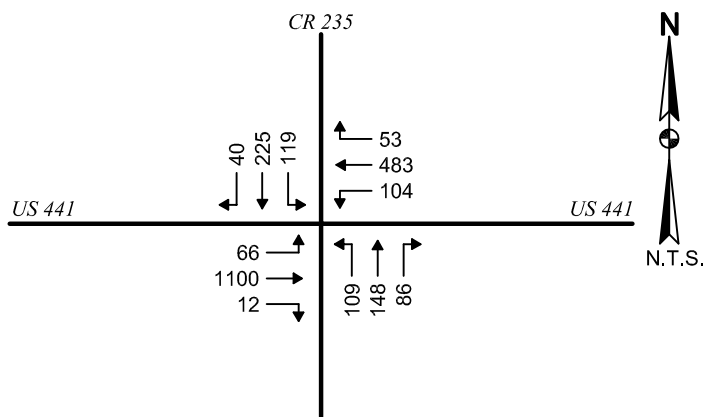


M:\18-1534\CAD\FIG_10.dwg Date:12-10-19 T:17:27 By:AVDelacruz

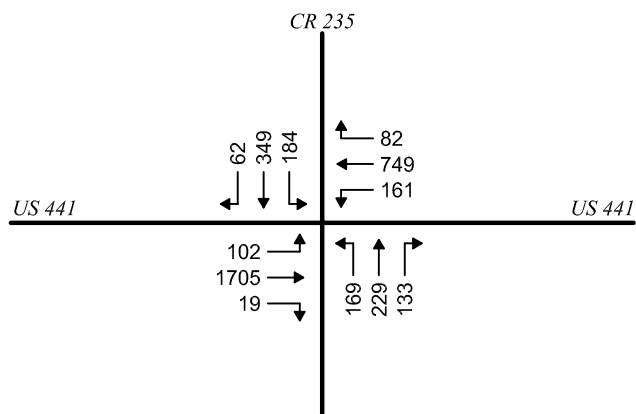




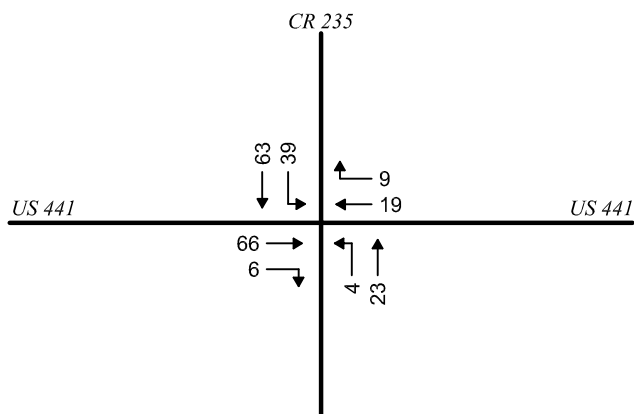
EXISTING TRAFFIC
12/11/19
7:15-8:15 AM



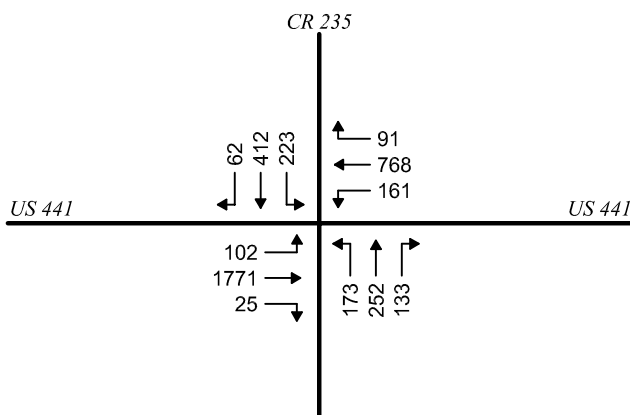
2019 SEASONALLY ADJUSTED TRAFFIC
FDOT SEASONAL CORRECTION FACTOR = 1.05



2028 NO BUILD TRAFFIC
AVERAGE ANNUAL GROWTH RATE = 5.0% (GF=1.55)



SITE TRAFFIC



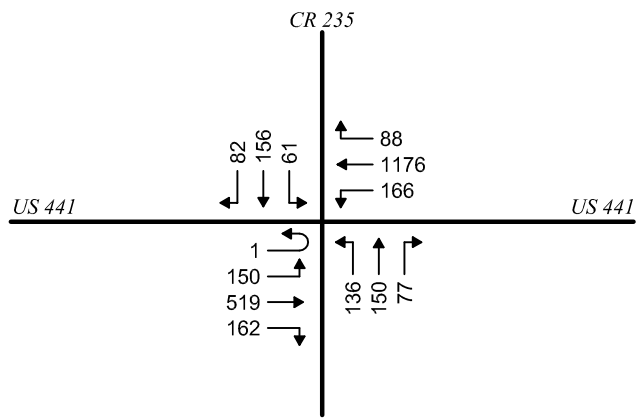
2028 BUILD TRAFFIC

FIGURE 11

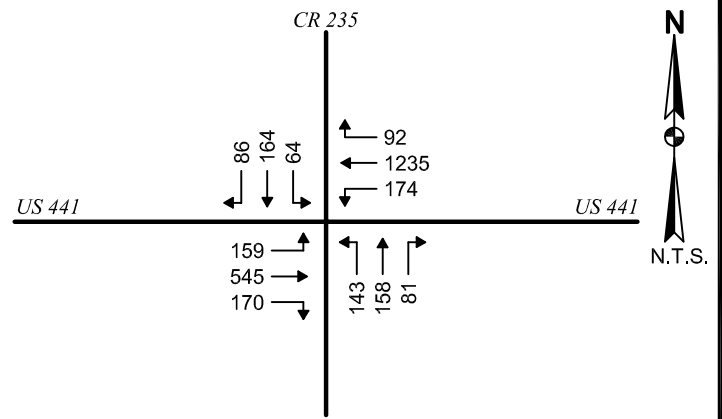
2028 BUILD TRAFFIC
US 441 / CR 235

WEEKDAY AM PEAK HOUR

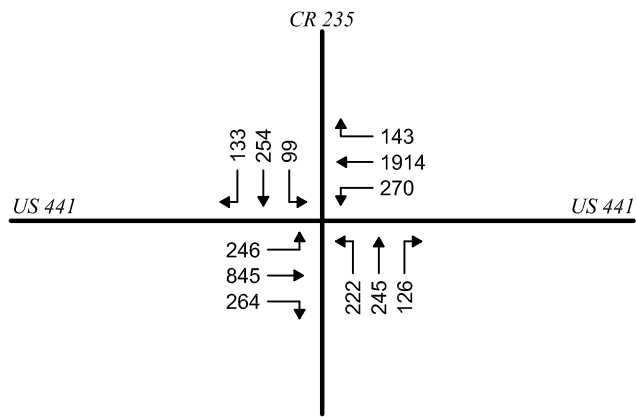




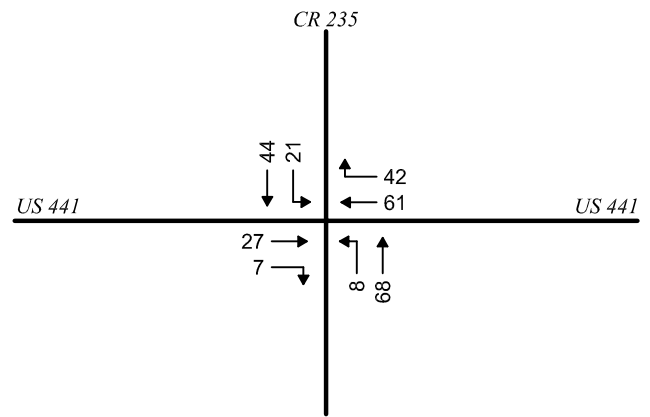
EXISTING TRAFFIC
12/09/19
4:45-5:45 PM



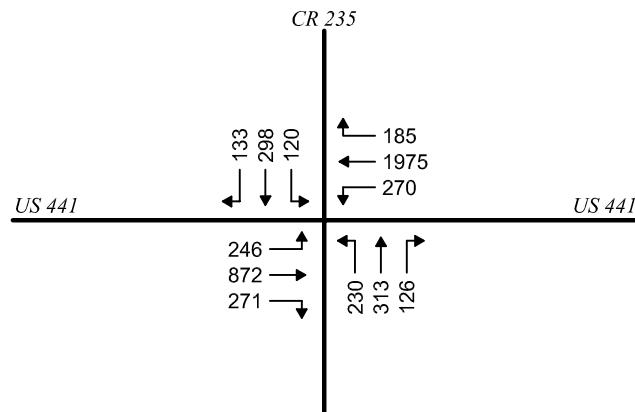
2019 SEASONALLY ADJUSTED TRAFFIC
FDOT SEASONAL CORRECTION FACTOR = 1.05



2028 NO BUILD TRAFFIC
AVERAGE ANNUAL GROWTH RATE = 5.0% (GF=1.55)



SITE TRAFFIC



2028 BUILD TRAFFIC

Buckholz Traffic

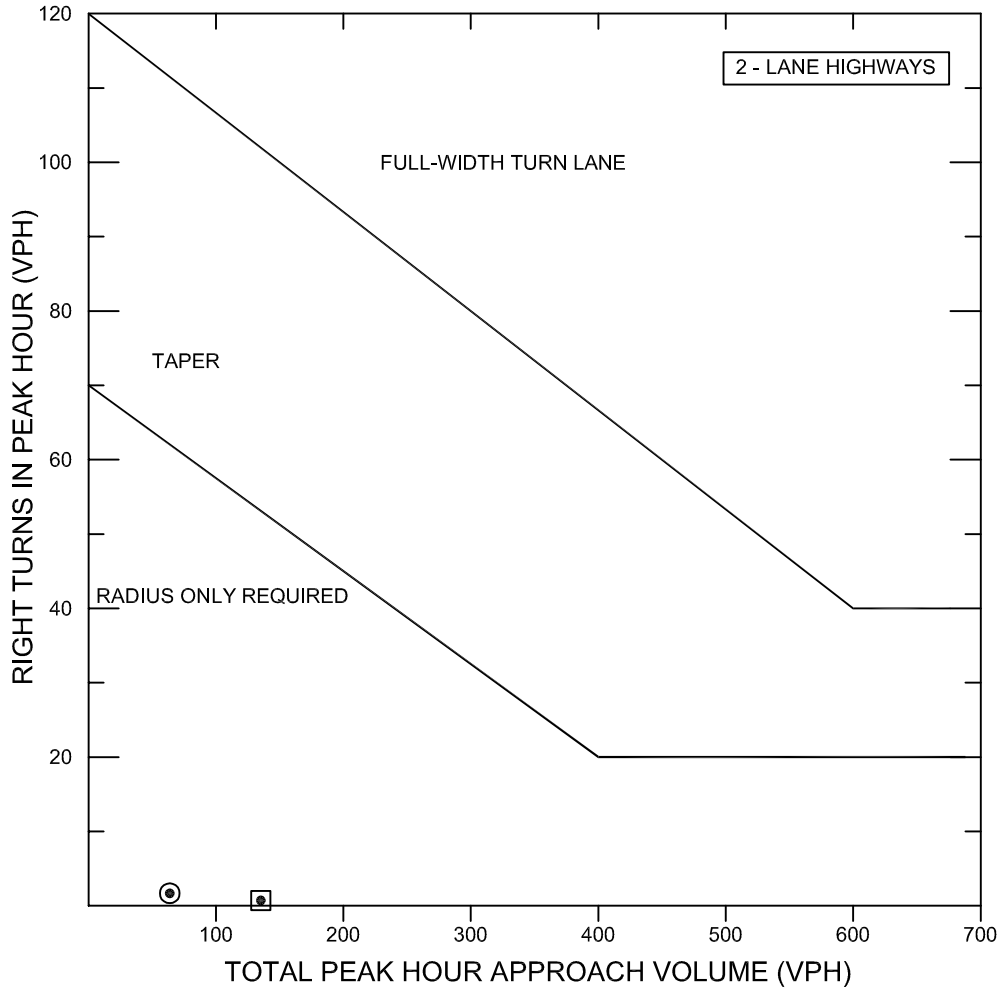
FIGURE 12

2028 BUILD TRAFFIC
US 441 / CR 235

WEEKDAY PM PEAK HOUR



CR 241 @ SITE DRIVE



NOMOGRAPH FOR RIGHT TURN LANES

SOURCE: TRANSPORTATION RESEARCH BOARD NCHRP REPORT #279

AM PEAK HOUR

V_A	128
V_R	1

PM PEAK HOUR

V_A	62
V_R	2

NCHRP 420	
MULTI-LANE	> 45 MPH

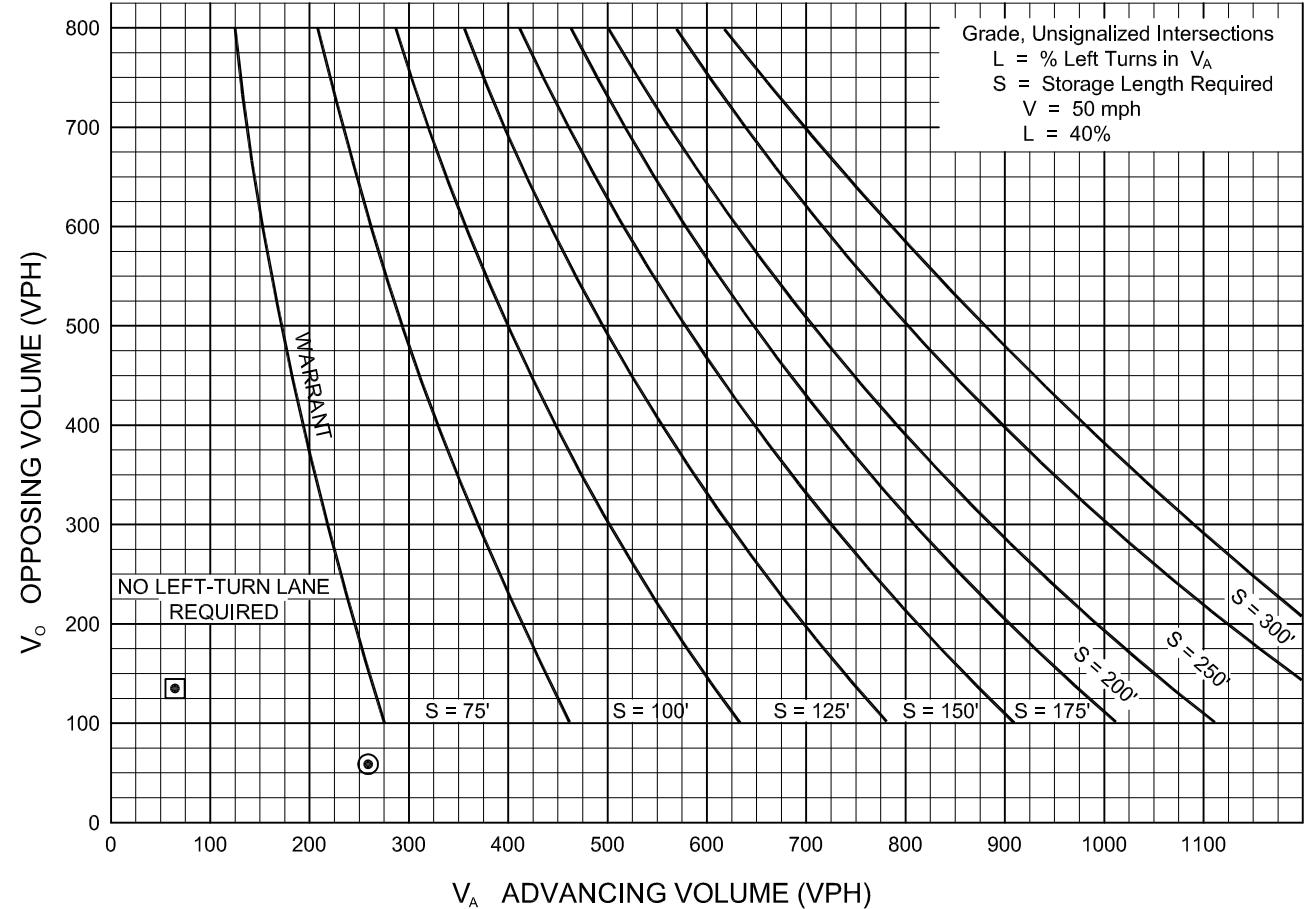
30
REQUIRED > 1 & 2

FIGURE 13

RIGHT TURN
LANE ANALYSIS



CR 241 @ SITE DRIVE



WARRANT FOR LEFT-TURN LANES ON TWO-LANE HIGHWAYS

▣ AM PEAK HOUR

$V_A = 67$
$V_O = 128$
$V_L = 33$
$\%LT = \frac{33}{67} = 49\%$

⊙ PM PEAK HOUR

$V_A = 262$
$V_O = 62$
$V_L = 110$
$\%LT = \frac{110}{262} = 42\%$

FIGURE 14

LEFT TURN
LANE ANALYSIS



SOURCE: HARMELINK

TABLE 1**TRIP GENERATION CALCULATIONS****SINGLE FAMILY DWELLING UNITS**

Land Use Code 210

T = Number of Vehicle Trip Ends

X = Number of Dwelling Units = 340

<u>TIME PERIOD</u>	<u>TRIP GENERATION EQUATION</u>	<u>TOTAL TRIP ENDS</u>	<u>PERCENT ENTERING</u>	<u>PERCENT EXITING</u>	<u>TOTAL TRIP ENDS ENTERING</u>	<u>TOTAL TRIP ENDS EXITING</u>
WEEKDAY						
Daily	$\ln(T)=0.92\ln(X)+2.71$	3206	50%	50%	1603	1603
AM Peak Hour	$T = 0.71 (X) + 4.80$	246	25%	75%	61	185
PM Peak Hour	$\ln(T)=0.96\ln(X)+0.20$	329	63%	37%	207	122

SOURCE: Institute of Transportation Engineers, "Trip Generation", 10th Edition (2017)

BUCKHOLZ TRAFFIC

TABLE 2

TRIP GENERATION CALCULATIONS

MULTIFAMILY HOUSING (LOW-RISE)

Land Use Code 220

T = Number of Vehicle Trip Ends

X = Number of Dwelling Units = 211

<u>TIME PERIOD</u>	<u>TRIP GENERATION EQUATION</u>	<u>TOTAL TRIP ENDS</u>	<u>PERCENT ENTERING</u>	<u>PERCENT EXITING</u>	<u>TOTAL TRIP ENDS ENTERING</u>	<u>TOTAL TRIP ENDS EXITING</u>
WEEKDAY						
Daily	$T = 7.56 (X) - 40.86$	1554	50%	50%	777	777
AM Peak Hour	$\ln(T) = 0.95\ln(X) - 0.51$	97	23%	77%	22	75
PM Peak Hour	$\ln(T) = 0.89\ln(X) - 0.02$	115	63%	37%	72	43

SOURCE: Institute of Transportation Engineers, "Trip Generation", 10th Edition (2017)

BUCKHOLZ TRAFFIC

TABLE 3**UNSIGNALIZED INTERSECTION CAPACITY RESULTS****2026 BUILD CONDITIONS
WEEKDAY AM PEAK HOUR**

	CR 241 / NW 174TH AVENUE			
Movement	LOS	Delay	v/c Ratio	95th % Queue (vehicles)
Northbound Left Turn	A	7.5 sec/veh	0.00	1
Southbound Left Turn	A	7.3 sec/veh	0.00	1
Eastbound Approach	A	8.9 sec/veh	0.00	1
Westbound Approach	A	8.4 sec/veh	0.00	1
	CR 241 / NW 172ND AVENUE			
Movement	LOS	Delay	v/c Ratio	95th % Queue (vehicles)
Northbound Left Turn	A	7.5 sec/veh	0.00	1
Southbound Left Turn	A	7.3 sec/veh	0.00	1
Eastbound Approach	A	8.9 sec/veh	0.00	1
Westbound Approach	A	9.6 sec/veh	0.02	1
	CR 241 / SITE DRIVE			
Movement	LOS	Delay	v/c Ratio	95th % Queue (vehicles)
Northbound Left Turn	A	7.5 sec/veh	0.02	1
Eastbound Left Turn	A	9.9 sec/veh	0.00	1
Eastbound Right Turn	A	9.4 sec/veh	0.11	1

BUCKHOLZ TRAFFIC

TABLE 4**UNSIGNALIZED INTERSECTION CAPACITY RESULTS****2026 BUILD CONDITIONS
WEEKDAY PM PEAK HOUR**

	CR 241 / NW 174TH AVENUE			
Movement	LOS	Delay	v/c Ratio	95th % Queue (vehicles)
Northbound Left Turn	A	7.3 sec/veh	0.00	1
Southbound Left Turn	A	7.5 sec/veh	0.00	1
Eastbound Approach	A	8.6 sec/veh	0.00	1
Westbound Approach	B	9.0 sec/veh	0.00	1
	CR 241 / NW 172ND AVENUE			
Movement	LOS	Delay	v/c Ratio	95th % Queue (vehicles)
Northbound Left Turn	A	7.3 sec/veh	0.00	1
Southbound Left Turn	A	7.5 sec/veh	0.00	1
Eastbound Approach	A	8.6 sec/veh	0.00	1
Westbound Approach	B	10.0 sec/veh	0.01	1
	CR 241 / SITE DRIVE			
Movement	LOS	Delay	v/c Ratio	95th % Queue (vehicles)
Northbound Left Turn	A	7.5 sec/veh	0.08	1
Eastbound Left Turn	B	12.2 sec/veh	0.00	1
Eastbound Right Turn	A	8.9 sec/veh	0.07	1

BUCKHOLZ TRAFFIC

TABLE 5
SUMMARY OF SIGNALIZED INTERSECTION CAPACITY RESULTS
US 441 / NW 147th Drive

2019 EXISTING CONDITIONS	AM PEAK HOUR				
	Highest v/c Ratio	Highest Queue Storage Ratio	Worst Movement Delay & LOS	Intersection Delay & LOS	Cycle Length (Coordinated)
Existing Timings	0.71 SBRT	1.03 NBT/RT	SBRT 83.4 sec/veh LOS F	11.3 sec/veh LOS B	150 sec
2019 EXISTING CONDITIONS	PM PEAK HOUR				
	Highest v/c Ratio	Highest Queue Storage Ratio	Worst Movement Delay & LOS	Intersection Delay & LOS	Cycle Length (Coordinated)
Existing Timings	0.83 SBRT	1.10 NBT/RT	SBRT 84.5 sec/veh LOS F	17.1 sec/veh LOS B	160 sec

2026 BUILD CONDITIONS	AM PEAK HOUR				
	Highest v/c Ratio	Highest Queue Storage Ratio	Worst Movement Delay & LOS	Intersection Delay & LOS	Cycle Length (Coordinated)
With Planned Timings	1.16 SBRT	1.88 NBT/RT	SBRT 187.8 sec/veh LOS F NBT 115.6 sec/veh LOS F	28.3 sec/veh LOS C	130 sec
With Optimized Splits	0.95 EBT	1.37 NBRT	SBRT 66.9 sec/veh LOS E	26.7 sec/veh LOS C	130 sec
2026 BUILD CONDITIONS	PM PEAK HOUR				
	Highest v/c Ratio	Highest Queue Storage Ratio	Worst Movement Delay & LOS	Intersection Delay & LOS	Cycle Length (Coordinated)
With Planned Timings	1.34 WBT	1.67 NBT/RT 1.25 EBLT	WBT 190.1 sec/veh LOS F	104.3 sec/veh LOS F	160 sec
With Optimized Splits	1.21 WBT	1.78 NBT/RT 1.15 EBLT	WBT 127.2 sec/veh LOS F	75.8 sec/veh LOS E	160 sec

BUCKHOLZ TRAFFIC

TABLE 6
SUMMARY OF SIGNALIZED INTERSECTION CAPACITY RESULTS
US 441 / CR 235

2019 EXISTING CONDITIONS	AM PEAK HOUR				
	Highest v/c Ratio	Highest Queue Storage Ratio	Worst Movement Delay & LOS	Intersection Delay & LOS	Cycle Length (Coordinated)
Existing Timings	0.89 SBT	0.93 SBLT	SBT 60.8 sec/veh LOS E	26.1 sec/veh LOS C	120 sec
2019 EXISTING CONDITIONS	PM PEAK HOUR				
	Highest v/c Ratio	Highest Queue Storage Ratio	Worst Movement Delay & LOS	Intersection Delay & LOS	Cycle Length (Coordinated)
Existing Timings	0.87 SBT	1.22 NBLT	SBT 60.3 sec/veh LOS E	28.2 sec/veh LOS C	120 sec

2028 BUILD CONDITIONS	AM PEAK HOUR				
	Highest v/c Ratio	Highest Queue Storage Ratio	Worst Movement Delay & LOS	Intersection Delay & LOS	Cycle Length (Coordinated)
With Planned Timings	1.36 EBT 1.32 SBT 1.18 NBT	2.50 SBLT 2.17 WBLT 1.77 NBLT	SBT 209 sec/veh LOS F EBT 201 sec/veh LOS F NBT 157.5 sec/veh LOS F SBLT 83.5 sec/veh LOS F	140.6 sec/veh LOS F	130 sec
With Optimized Splits	1.55 WBLT 1.20 EBT 1.16 SBT 1.15 SBLT 1.13 NBLT 1.08 NBT	3.43 WBLT 3.11 SBLT 2.64 NBLT	WBLT 317 sec/veh LOS F NBLT 146.0 sec/veh LOS F SBLT 142.8 sec/veh LOS F SBT 141.1 sec/veh LOS F EBT 127.1 sec/veh LOS F NBT 115.6 sec/veh LOS F	113.5 sec/veh LOS F	130 sec

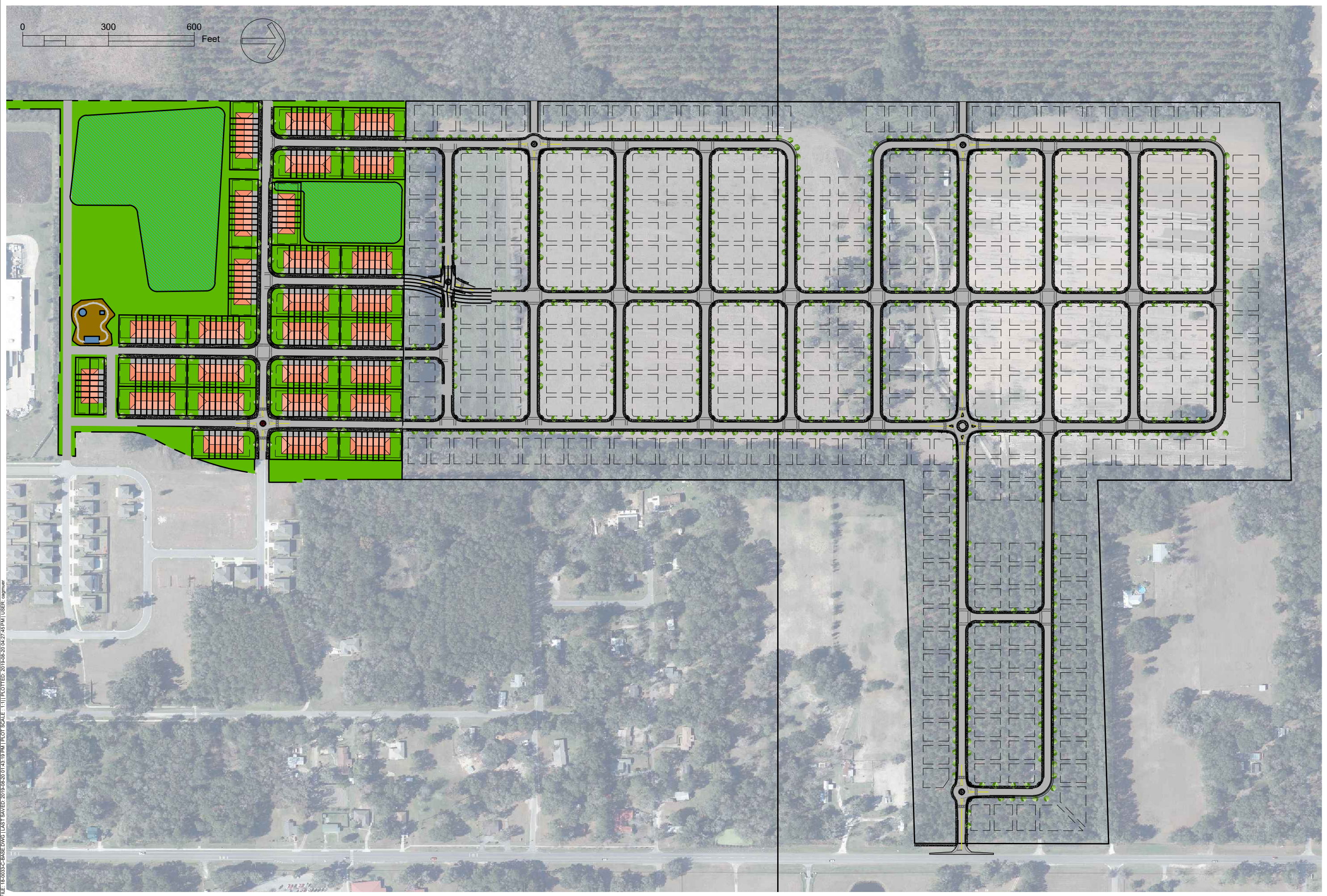
2028 BUILD CONDITIONS	PM PEAK HOUR				
	Highest v/c Ratio	Highest Queue Storage Ratio	Worst Movement Delay & LOS	Intersection Delay & LOS	Cycle Length (Coordinated)
With Planned Timings	1.58 EBLT 1.56 WB 1.16 SB 1.15 NBLT 1.15 WBLT 1.11 NB	4.52 WBLT 4.01 NBLT 4.00 EBLT 1.77 SBLT	EBLT 336 sec/veh LOS F WB 303 sec/veh LOS F SB 157.5 sec/veh LOS F NBLT 156.5 sec/veh LOS F WBLT 149.7 sec/veh LOS F NB 135.2 sec/veh LOS F	196.8 sec/veh LOS F	160 sec
With Optimized Splits	2.36 EBLT 1.37 WB 1.30 SB 1.23 NB	4.49 EBLT 4.01 NBLT 3.07 WBLT 1.76 SBLT	EBLT 680 sec/veh LOS F SB 217 sec/veh LOS F WB 216 sec/veh LOS F NB 187.2 sec/veh LOS F NBLT 155.6 sec/veh LOS F	183.9 sec/veh LOS F	160 sec

BUCKHOLZ TRAFFIC

APPENDIX A

SITE PLAN





FILE: 18-0033-C-BASE.DWG | LAST SAVED: 2019-08-20 01:43:18 PM | PLOT SCALE: 1"=111' | PLOTTED: 2019-08-20 04:27:45 PM | USER: cgmuer

DRAFT LAYOUT	TARA BAYWOOD SUBDIVISION	CLIENT:	C.A. GMUER, PE
		DESIGN:	C.A. GMUER, PE
DRAFT	DRAFT LAYOUT	QUALITY CONTROL:	C.A. GMUER, PE
		SITE PLAN APP #	18-0033
GEOGRAPHIC PROJECT #		2803 NW 13th St, Box 314, Gainesville, FL 32609	
ENGINEER OF RECORD:		gmuereng.com (352) 281-4928	
CHRISTOPHER A. GMUER		FL CA # 31533	
FL PE # 71599		2019-08-20	
PERMITTING / DESIGN REVISIONS:		2019-08-13 DRAFT BLOCK	
2019-08-01 REVISED LAYOUT		2019-08-02 REVISED LAYOUT	
2019-08-07 REVISED LAYOUT		2019-08-07 REVISED LAYOUT	
PRICING:		PRELIMINARY	
CONSTRUCTION:		BUDGETING	

APPENDIX B

TURNING MOVEMENT COUNTS



AM PEAK PERIOD

TABLE B1
NW 140TH STREET (CR 241) / NW 172ND AVENUE INTERSECTION
MANUAL TURNING MOVEMENT COUNT
Weekday AM Peak Period

Tuesday, September 18, 2018

	CR 241 (Main Street)				NW 172nd Avenue				All
	Northbound Left Turn	Northbound Right Turn	Southbound Left Turn	Southbound Right Turn	Eastbound Left Turn	Eastbound Right Turn	Westbound Left Turn	Westbound Right Turn	
6:30-6:45 AM	0	0	0	0	0	0	1	0	1
6:45-7:00 AM	0	0	0	0	0	0	1	0	1
7:00-7:15 AM	0	0	0	0	0	0	5	0	5
7:15-7:30 AM	0	0	0	0	0	1	2	0	3
7:30-7:45 AM	0	3	0	0	0	0	4	0	7
7:45-8:00 AM	0	1	0	0	0	0	7	0	8
8:00-8:15 AM	0	0	0	0	0	0	1	0	1
8:15-8:30 AM	0	0	0	0	0	0	1	0	1
TOTAL:	0	4	0	0	0	1	22	0	27

BUCKHOLZ TRAFFIC

DAY: TUESDAY

MANUAL TURNING MOVEMENT COUNTS

Site Code : 77777777

DATE: 09/18/18

NW 140TH STREET @ NW 174TH AVENUE

Start Date: 09/18/18

WEATHER: CLEAR & DRY

ALACHUA, COUNTY, FLORIDA

File I.D. : 18153402

BEGIN TIME (MILITARY):06:30 Hrs

Page : 1

AUTOMOBILES, COMMERCIAL VEHICLES

NW 140TH STREET					NW 174TH AVE.					NW 140TH STREET					NW 174TH AVE.					
From North					From East					From South					From West					
Left	Thru	Right	Other		Left	Thru	Right	Other		Left	Thru	Right	Other		Left	Thru	Right	Other		
Date 09/18/18																				
06:30	0	26	0	0	0	0	0	0	0	0	4	0	0	0	0	0	3	0	33	
06:45	0	31	0	0	0	0	0	0	0	0	4	0	0	0	1	0	1	0	37	
07:00	0	34	0	0	0	0	0	0	0	0	4	0	0	0	0	0	1	0	39	
07:15	0	33	0	0	0	0	0	0	0	0	5	0	0	0	0	0	1	0	39	
Hr Total	0	124	0	0	0	0	0	0	0	0	17	0	0	0	1	0	6	0	148	
07:30	0	30	0	0	0	0	0	0	0	0	6	0	0	0	0	0	2	0	38	
07:45	0	22	0	0	0	0	0	0	0	2	11	0	0	0	0	0	5	0	40	
08:00	0	21	0	0	0	0	0	0	0	0	12	0	0	0	0	0	1	0	34	
08:15	0	24	0	0	1	0	0	0	0	0	7	0	0	0	0	0	1	0	33	
Hr Total	0	97	0	0	1	0	0	0	0	2	36	0	0	0	0	0	9	0	145	
TOTAL	0	221	0	0	1	0	0	0	0	2	53	0	0	0	1	0	15	0	293	

Peak Hour Analysis By Entire Intersection for the Period: 07:00 to 08:00 on 09/18/18

Peak start	07:00				07:00				07:00				07:00			
Volume	0	119	0	0	0	0	0	0	2	26	0	0	0	0	9	0
Percent	0%	100%	0%	0%	0%	0%	0%	0%	7%	93%	0%	0%	0%	0%	100%	0%
Pk total	119				0				28				9			
Highest	07:00				06:30				07:45				07:45			
Volume	0	34	0	0	0	0	0	0	2	11	0	0	0	0	5	0
Hi total	34				0				13				5			
PHF	.88				.0				.54				.45			

DAY: TUESDAY

MANUAL TURNING MOVEMENT COUNTS

Site Code : 77777777

DATE: 09/18/18

NW 140TH STREET @ NW 174TH AVENUE

Start Date: 09/18/18

WEATHER: CLEAR & DRY

ALACHUA, COUNTY, FLORIDA

File I.D. : 18153402

BEGIN TIME (MILITARY):06:30 Hrs

Page : 1

AUTOMOBILES

NW 140TH STREET				NW 174TH AVE.				NW 140TH STREET				NW 174TH AVE.					
From North				From East				From South				From West					
Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Total	
Date 09/18/18																	
06:30	0	23	0	0	0	0	0	0	3	0	0	0	0	3	0	29	
06:45	0	29	0	0	0	0	0	0	4	0	0	0	0	1	0	34	
07:00	0	31	0	0	0	0	0	0	3	0	0	0	0	1	0	35	
07:15	0	31	0	0	0	0	0	0	5	0	0	0	0	1	0	37	
Hr Total	0	114	0	0	0	0	0	0	15	0	0	0	0	6	0	135	
07:30	0	30	0	0	0	0	0	0	5	0	0	0	0	2	0	37	
07:45	0	20	0	0	0	0	0	0	2	11	0	0	0	5	0	38	
08:00	0	20	0	0	0	0	0	0	11	0	0	0	0	1	0	32	
08:15	0	22	0	0	1	0	0	0	7	0	0	0	0	1	0	31	
Hr Total	0	92	0	0	1	0	0	0	2	34	0	0	0	9	0	138	
TOTAL	0	206	0	0	1	0	0	0	2	49	0	0	0	15	0	273	

Peak Hour Analysis By Entire Intersection for the Period: 07:00 to 08:00 on 09/18/18

Peak start 07:00				07:00				07:00				07:00			
Volume	0	112	0	0	0	0	0	2	24	0	0	0	0	9	0
Percent	0%	100%	0%	0%	0%	0%	0%	8%	92%	0%	0%	0%	0%	100%	0%
Pk total	112			0				26				9			
Highest	07:00			06:30				07:45				07:45			
Volume	0	31	0	0	0	0	0	2	11	0	0	0	0	5	0
Hi total	31			0				13				5			
PHF	.90			.0				.50				.45			

DAY: TUESDAY

MANUAL TURNING MOVEMENT COUNTS

Site Code : 77777777

DATE: 09/18/18

NW 140TH STREET @ NW 174TH AVENUE

Start Date: 09/18/18

WEATHER: CLEAR & DRY

ALACHUA, COUNTY, FLORIDA

File I.D. : 18153402

BEGIN TIME (MILITARY):06:30 Hrs

Page : 1

COMMERCIAL VEHICLES

NW 140TH STREET				NW 174TH AVE.				NW 140TH STREET				NW 174TH AVE.					
From North				From East				From South				From West					
Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Total	
Date 09/18/18 -----																	
06:30	0	3	0	0	0	0	0	0	0	1	0	0	0	0	0	0	4
06:45	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3
07:00	0	3	0	0	0	0	0	0	0	1	0	0	0	0	0	0	4
07:15	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Hr Total	0	10	0	0	0	0	0	0	0	2	0	0	1	0	0	0	13
07:30	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
07:45	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
08:00	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
08:15	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Hr Total	0	5	0	0	0	0	0	0	0	2	0	0	0	0	0	0	7

TOTAL	0	15	0	0	0	0	0	0	0	4	0	0	1	0	0	0	20

Peak Hour Analysis By Entire Intersection for the Period: 07:00 to 08:00 on 09/18/18

Peak start	07:00				07:00				07:00				07:00			
Volume	0	7	0	0	0	0	0	0	0	2	0	0	0	0	0	0
Percent	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%
Pk total	7				0				2				0			
Highest	07:00				06:30				07:00				06:30			
Volume	0	3	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Hi total	3				0				1				0			
PHF	.58				.0				.50				.0			

DAY: TUESDAY

MANUAL TURNING MOVEMENT COUNTS

Site Code : 77777777

DATE: 09/18/18

NW 140TH STREET @ NW 174TH AVENUE

Start Date: 09/18/18

WEATHER: CLEAR & DRY

ALACHUA, COUNTY, FLORIDA

File I.D. : 18153402

BEGIN TIME (MILITARY):06:30 Hrs

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AUTOMOBILES, COMMERCIAL VEHICLES

NW 140TH STREET					NW 174TH AVE.					NW 140TH STREET					NW 174TH AVE.					
From North					From East					From South					From West					
Left	Thru	Right	Other		Left	Thru	Right	Other		Left	Thru	Right	Other		Left	Thru	Right	Other		
Date 09/18/18																				
06:30	0	26	0	0	0	0	0	0	0	0	4	0	0	0	0	0	3	0	33	
06:45	0	31	0	0	0	0	0	0	0	0	4	0	0	0	1	0	1	0	37	
07:00	0	34	0	0	0	0	0	0	0	0	4	0	0	0	0	0	1	0	39	
07:15	0	33	0	0	0	0	0	0	0	0	5	0	0	0	0	0	1	0	39	
Hr Total	0	124	0	0	0	0	0	0	0	0	17	0	0	0	1	0	6	0	148	
07:30	0	30	0	0	0	0	0	0	0	0	6	0	0	0	0	0	2	0	38	
07:45	0	22	0	0	0	0	0	0	0	2	11	0	0	0	0	0	5	0	40	
08:00	0	21	0	0	0	0	0	0	0	0	12	0	0	0	0	0	1	0	34	
08:15	0	24	0	0	1	0	0	0	0	0	7	0	0	0	0	0	1	0	33	
Hr Total	0	97	0	0	1	0	0	0	0	2	36	0	0	0	0	0	9	0	145	
TOTAL	0	221	0	0	1	0	0	0	0	2	53	0	0	0	1	0	15	0	293	

Peak Hour Analysis By Entire Intersection for the Period: 07:00 to 08:00 on 09/18/18

Peak start	07:00				07:00				07:00				07:00			
Volume	0	119	0	0	0	0	0	0	2	26	0	0	0	0	9	0
Percent	0%	100%	0%	0%	0%	0%	0%	0%	7%	93%	0%	0%	0%	0%	100%	0%
Pk total	119				0				28				9			
Highest	07:00				06:30				07:45				07:45			
Volume	0	34	0	0	0	0	0	0	2	11	0	0	0	0	5	0
Hi total	34				0				13				5			
PHF	.88				.0				.54				.45			

DAY: TUESDAY

MANUAL TURNING MOVEMENT COUNTS

Site Code : 77777777

DATE: 09/18/18

NW 140TH STREET @ NW 174TH AVENUE

Start Date: 09/18/18

WEATHER: CLEAR & DRY

ALACHUA, COUNTY, FLORIDA

File I.D. : 18153402

BEGIN TIME (MILITARY):06:30 Hrs

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AUTOMOBILES

NW 140TH STREET				NW 174TH AVE.				NW 140TH STREET				NW 174TH AVE.					
From North				From East				From South				From West					
Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Total	
Date 09/18/18 -----																	
06:30	0	23	0	0	0	0	0	0	3	0	0	0	0	0	3	0	29
06:45	0	29	0	0	0	0	0	0	4	0	0	0	0	0	1	0	34
07:00	0	31	0	0	0	0	0	0	3	0	0	0	0	0	1	0	35
07:15	0	31	0	0	0	0	0	0	5	0	0	0	0	0	1	0	37
Hr Total	0	114	0	0	0	0	0	0	15	0	0	0	0	0	6	0	135
07:30	0	30	0	0	0	0	0	0	5	0	0	0	0	0	2	0	37
07:45	0	20	0	0	0	0	0	0	11	0	0	0	0	0	5	0	38
08:00	0	20	0	0	0	0	0	0	11	0	0	0	0	0	1	0	32
08:15	0	22	0	0	1	0	0	0	7	0	0	0	0	0	1	0	31
Hr Total	0	92	0	0	1	0	0	0	2	34	0	0	0	0	9	0	138

TOTAL	0	206	0	0	1	0	0	0	2	49	0	0	0	0	15	0	273

Peak Hour Analysis By Entire Intersection for the Period: 07:00 to 08:00 on 09/18/18

Peak start	07:00				07:00				07:00				07:00			
Volume	0	112	0	0	0	0	0	0	2	24	0	0	0	0	9	0
Percent	0%	100%	0%	0%	0%	0%	0%	0%	8%	92%	0%	0%	0%	0%	100%	0%
Pk total	112				0				26				9			
Highest	07:00				06:30				07:45				07:45			
Volume	0	31	0	0	0	0	0	0	2	11	0	0	0	0	5	0
Hi total	31				0				13				5			
PHF	.90				.0				.50				.45			

DAY: TUESDAY

MANUAL TURNING MOVEMENT COUNTS

Site Code : 77777777

DATE: 09/18/18

NW 140TH STREET @ NW 174TH AVENUE

Start Date: 09/18/18

WEATHER: CLEAR & DRY

ALACHUA, COUNTY, FLORIDA

File I.D. : 18153402

BEGIN TIME (MILITARY):06:30 Hrs

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COMMERCIAL VEHICLES

NW 140TH STREET				NW 174TH AVE.				NW 140TH STREET				NW 174TH AVE.					
From North				From East				From South				From West					
Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Total	
Date 09/18/18 -----																	
06:30	0	3	0	0	0	0	0	0	0	1	0	0	0	0	0	0	4
06:45	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3
07:00	0	3	0	0	0	0	0	0	0	1	0	0	0	0	0	0	4
07:15	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Hr Total	0	10	0	0	0	0	0	0	0	2	0	0	1	0	0	0	13
07:30	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
07:45	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
08:00	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
08:15	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Hr Total	0	5	0	0	0	0	0	0	0	2	0	0	0	0	0	0	7

TOTAL	0	15	0	0	0	0	0	0	0	4	0	0	1	0	0	0	20

Peak Hour Analysis By Entire Intersection for the Period: 07:00 to 08:00 on 09/18/18

Peak start	07:00				07:00				07:00				07:00			
Volume	0	7	0	0	0	0	0	0	0	2	0	0	0	0	0	0
Percent	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%
Pk total	7				0				2				0			
Highest	07:00				06:30				07:00				06:30			
Volume	0	3	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Hi total	3				0				1				0			
PHF	.58				.0				.50				.0			

DAY: WEDNESDAY

MANUAL TURNING MOVEMENT COUNTS

Site Code : 15082819

DATE: 08/28/19

US 441 @ NW 147TH DRIVE

Start Date: 08/28/19

WEATHER: CLEAR & DRY

ALACHUA COUNTY, FLORIDA

File I.D. : 082819AM

BEGIN TIME (MILITARY): 06:45 Hrs

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AUTOMOBILES, COMMERCIAL VEHICLES

NW 147TH DRIVE					US 441				NW 147TH DRIVE				US 441							
From North					From East				From South				From West							
Left	Thru	Right	Other		Left	Thru	Right	U-TURN		Left	Thru	Right	Other		Left	Thru	Right	U-TURN		Total
Date 08/28/19 -----																				
06:45	6	0	11	0	5	101	8	0	6	1	14	0	10	251	9	0			422	
07:00	12	1	8	0	2	117	8	0	18	0	16	0	13	269	18	0			482	
07:15	11	1	15	0	5	154	12	0	27	3	25	0	7	313	15	1			589	
07:30	7	3	12	0	4	202	14	0	22	3	15	0	12	302	20	1			617	
Hr Total	36	5	46	0	16	574	42	0	73	7	70	0	42	1135	62	2			2110	
07:45	11	0	11	0	5	170	15	0	24	1	12	0	14	209	16	0			488	
08:00	9	4	10	0	18	149	18	2	20	3	13	0	14	224	15	0			499	
08:15	13	3	9	0	7	167	14	1	17	3	11	0	10	287	20	1			563	
08:30	15	2	11	0	5	160	15	0	24	2	8	0	19	309	15	2			587	
Hr Total	48	9	41	0	35	646	62	3	85	9	44	0	57	1029	66	3			2137	

TOTAL	84	14	87	0	51	1220	104	3	158	16	114	0	99	2164	128	5			4247	

Peak Hour Analysis By Entire Intersection for the Period: 07:15 to 08:15 on 08/28/19

Peak start 07:15					07:15				07:15					07:15			
Volume	38	8	48	0	32	675	59	2	93	10	65	0		47	1048	66	2
Percent	40%	9%	51%	0%	4%	88%	8%	0%	55%	6%	39%	0%		4%	90%	6%	0%
Pk total	94				768				168					1163			
Highest	07:15				07:30				07:15					07:15			
Volume	11	1	15	0	4	202	14	0	27	3	25	0		7	313	15	1
Hi total	27				220				55					336			
PHF	.87				.87				.76					.87			

DAY: WEDNESDAY

MANUAL TURNING MOVEMENT COUNTS

Site Code : 15082819

DATE: 08/28/19

US 441 @ NW 147TH DRIVE

Start Date: 08/28/19

WEATHER: CLEAR & DRY

ALACHUA COUNTY, FLORIDA

File I.D. : 082819AM

BEGIN TIME (MILITARY): 06:45 Hrs

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AUTOMOBILES

NW 147TH DRIVE					US 441				NW 147TH DRIVE				US 441							
From North					From East				From South				From West							
Left	Thru	Right	Other		Left	Thru	Right	U-TURN		Left	Thru	Right	Other		Left	Thru	Right	U-TURN		Total
Date 08/28/19 -----																				
06:45	6	0	10	0	5	94	7	0	5	1	13	0	8	245	9	0			403	
07:00	12	1	5	0	1	108	5	0	18	0	15	0	12	254	16	0			447	
07:15	11	1	14	0	5	145	10	0	26	3	24	0	6	304	14	1			564	
07:30	7	2	9	0	4	191	11	0	21	3	15	0	11	288	19	1			582	
Hr Total	36	4	38	0	15	538	33	0	70	7	67	0	37	1091	58	2			1996	
07:45	10	0	9	0	5	152	14	0	23	1	11	0	13	186	13	0			437	
08:00	8	4	10	0	18	140	15	2	20	2	12	0	13	211	15	0			470	
08:15	12	3	8	0	7	157	12	1	16	3	11	0	8	274	18	1			531	
08:30	12	2	7	0	4	138	12	0	24	2	8	0	15	280	15	1			520	
Hr Total	42	9	34	0	34	587	53	3	83	8	42	0	49	951	61	2			1958	

TOTAL	78	13	72	0	49	1125	86	3	153	15	109	0	86	2042	119	4			3954	

Peak Hour Analysis By Entire Intersection for the Period: 07:15 to 08:15 on 08/28/19

Peak start	07:15				07:15				07:15				07:15			
Volume	36	7	42	0	32	628	50	2	90	9	62	0	43	989	61	2
Percent	42%	8%	49%	0%	4%	88%	7%	0%	56%	6%	39%	0%	4%	90%	6%	0%
Pk total	85				712				161				1095			
Highest	07:15				07:30				07:15				07:15			
Volume	11	1	14	0	4	191	11	0	26	3	24	0	6	304	14	1
Hi total	26				206				53				325			
PHF	.82				.86				.76				.84			

DAY: WEDNESDAY

MANUAL TURNING MOVEMENT COUNTS

Site Code : 15082819

DATE: 08/28/19

US 441 @ NW 147TH DRIVE

Start Date: 08/28/19

WEATHER: CLEAR & DRY

ALACHUA COUNTY, FLORIDA

File I.D. : 082819AM

BEGIN TIME (MILITARY): 06:45 Hrs

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COMMERCIAL VEHICLES

NW 147TH DRIVE					US 441					NW 147TH DRIVE					US 441					
From North					From East					From South					From West					
Left	Thru	Right	Other		Left	Thru	Right	U-TURN		Left	Thru	Right	Other		Left	Thru	Right	U-TURN		Total
Date 08/28/19 -----																				
06:45	0	0	1	0	0	7	1	0		1	0	1	0		2	6	0	0		19
07:00	0	0	3	0	1	9	3	0		0	0	1	0		1	15	2	0		35
07:15	0	0	1	0	0	9	2	0		1	0	1	0		1	9	1	0		25
07:30	0	1	3	0	0	11	3	0		1	0	0	0		1	14	1	0		35
Hr Total	0	1	8	0	1	36	9	0		3	0	3	0		5	44	4	0		114
07:45	1	0	2	0	0	18	1	0		1	0	1	0		1	23	3	0		51
08:00	1	0	0	0	0	9	3	0		0	1	1	0		1	13	0	0		29
08:15	1	0	1	0	0	10	2	0		1	0	0	0		2	13	2	0		32
08:30	3	0	4	0	1	22	3	0		0	0	0	0		4	29	0	1		67
Hr Total	6	0	7	0	1	59	9	0		2	1	2	0		8	78	5	1		179

TOTAL	6	1	15	0	2	95	18	0		5	1	5	0		13	122	9	1		293

Peak Hour Analysis By Entire Intersection for the Period: 07:15 to 08:15 on 08/28/19

Peak start	07:15				07:15				07:15				07:15			
Volume	2	1	6	0	0	47	9	0	3	1	3	0	4	59	5	0
Percent	22%	11%	67%	0%	0%	84%	16%	0%	43%	14%	43%	0%	6%	87%	7%	0%
Pk total	9				56				7				68			
Highest	07:30				07:45				07:15				07:45			
Volume	0	1	3	0	0	18	1	0	1	0	1	0	1	23	3	0
Hi total	4				19				2				27			
PHF	.56				.74				.88				.63			

DAY: WEDNESDAY

MANUAL TURNING MOVEMENT COUNTS

Site Code : 15082819

DATE: 08/28/19

US 441 @ NW 147TH DRIVE

Start Date: 08/28/19

WEATHER: CLEAR & DRY

ALACHUA COUNTY, FLORIDA

File I.D. : 082819AM

BEGIN TIME (MILITARY): 06:45 Hrs

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PEDESTRIAN & BICYCLE

NW 147TH DRIVE					US 441					NW 147TH DRIVE					US 441						
From North					From East					From South					From West						
Left	Thru	Right	PEDS		Left	Thru	Right	PEDS		Left	Thru	Right	PEDS		Left	Thru	Right	PEDS		Total	
Date 08/28/19 -----																					
06:45	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0
07:00	0	0	0	0		0	0	0	0		0	0	0	0		0	0	1	0		1
07:15	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0
07:30	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0
Hr Total	0	0	0	0		0	0	0	0		0	0	0	0		0	0	1	0		1
07:45	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0
08:00	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0
08:15	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0
08:30	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0
Hr Total	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0

TOTAL	0	0	0	0		0	0	0	0		0	0	0	0		0	0	1	0		1

Peak Hour Analysis By Entire Intersection for the Period: 07:15 to 08:15 on 08/28/19

Peak start 07:15					07:15					07:15					07:15				
Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Percent	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Pk total	0				0					0					0				
Highest	06:45				06:45					06:45					06:45				
Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hi total	0				0					0					0				
PHF	.0				.0					.0					.0				

DAY: WEDNESDAY

MANUAL TURNING MOVEMENT COUNTS

Site Code : 12111901

DATE: 12/11/19

US 441 AT CR 235

Start Date: 12/11/19

WEATHER: CLEAR & DRY

ALACHUA COUNTY, FLORIDA

File I.D. : 18153404

BEGIN TIME (MILITARY):06:45 Hrs

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AUTOMOBILES, COMMERCIAL VEHICLES

CR 235				US 441				CR 235				US 441					
From North				From East				From South				From West					
Left	Thru	Right	Other	Left	Thru	Right	U-TURN	Left	Thru	Right	Other	Left	Thru	Right	U-TURN	Total	
Date 12/11/19																	
06:45	31	31	4	0	6	65	10	1	17	16	17	0	9	204	10	0	421
07:00	27	41	4	0	29	77	10	0	19	22	13	0	18	243	24	0	527
07:15	26	59	5	0	28	110	13	0	21	35	28	0	18	281	34	0	658
07:30	42	57	11	0	36	128	23	0	28	41	19	0	18	275	23	1	702
Hr Total	126	188	24	0	99	380	56	1	85	114	77	0	63	1003	91	1	2308
07:45	24	47	15	0	21	130	10	1	15	42	21	0	15	259	23	0	623
08:00	21	51	7	0	13	92	4	0	40	23	14	0	11	233	31	0	540
08:15	16	25	14	0	21	105	12	0	19	21	17	0	11	218	26	0	505
08:30	24	29	14	0	15	106	11	0	24	33	14	0	15	208	15	0	508
Hr Total	85	152	50	0	70	433	37	1	98	119	66	0	52	918	95	0	2176
TOTAL	211	340	74	0	169	813	93	2	183	233	143	0	115	1921	186	1	4484

Peak Hour Analysis By Entire Intersection for the Period: 07:15 to 08:15 on 12/11/19

Peak start	07:15				07:15				07:15				07:15			
Volume	113	214	38	0	98	460	50	1	104	141	82	0	62	1048	111	1
Percent	31%	59%	10%	0%	16%	76%	8%	0%	32%	43%	25%	0%	5%	86%	9%	0%
Pk total	365				609				327				1222			
Highest	07:30				07:30				07:30				07:15			
Volume	42	57	11	0	36	128	23	0	28	41	19	0	18	281	34	0
Hi total	110				187				88				333			
PHF	.83				.81				.93				.92			

DAY: WEDNESDAY

MANUAL TURNING MOVEMENT COUNTS

Site Code : 12111901

DATE: 12/11/19

US 441 AT CR 235

Start Date: 12/11/19

WEATHER: CLEAR & DRY

ALACHUA COUNTY, FLORIDA

File I.D. : 18153404

BEGIN TIME (MILITARY):06:45 Hrs

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AUTOMOBILES

CR 235				US 441				CR 235				US 441							
From North				From East				From South				From West							
Left	Thru	Right	Other	Left	Thru	Right	U-TURN	Left	Thru	Right	Other	Left	Thru	Right	U-TURN	Total			
Date 12/11/19																			
06:45	29	25	4	0	5	56	9	1	17	10	15	0	9	194	9	0	383		
07:00	24	35	3	0	22	72	10	0	19	15	9	0	16	236	23	0	484		
07:15	25	50	4	0	24	105	13	0	20	24	27	0	18	267	31	0	608		
07:30	40	51	8	0	31	121	22	0	27	38	17	0	18	266	20	1	660		
Hr Total	118	161	19	0	82	354	54	1	83	87	68	0	61	963	83	1	2135		
07:45	22	39	15	0	16	122	10	1	12	33	17	0	14	246	19	0	566		
08:00	20	41	7	0	10	81	4	0	35	19	12	0	10	227	29	0	495		
08:15	14	15	13	0	16	92	11	0	18	14	14	0	11	207	24	0	449		
08:30	23	23	12	0	12	94	9	0	22	20	9	0	12	193	14	0	443		
Hr Total	79	118	47	0	54	389	34	1	87	86	52	0	47	873	86	0	1953		
TOTAL	197	279	66	0	136	743	88	2	170	173	120	0	108	1836	169	1	4088		

Peak Hour Analysis By Entire Intersection for the Period: 07:15 to 08:15 on 12/11/19

Peak start	07:15				07:15				07:15				07:15			
Volume	107	181	34	0	81	429	49	1	94	114	73	0	60	1006	99	1
Percent	33%	56%	11%	0%	14%	77%	9%	0%	33%	41%	26%	0%	5%	86%	8%	0%
Pk total	322				560				281				1166			
Highest	07:30				07:30				07:30				07:15			
Volume	40	51	8	0	31	121	22	0	27	38	17	0	18	267	31	0
Hi total	99				174				82				316			
PHF	.81				.80				.86				.92			

DAY: WEDNESDAY

MANUAL TURNING MOVEMENT COUNTS

Site Code : 12111901

DATE: 12/11/19

US 441 AT CR 235

Start Date: 12/11/19

WEATHER: CLEAR & DRY

ALACHUA COUNTY, FLORIDA

File I.D. : 18153404

BEGIN TIME (MILITARY):06:45 Hrs

Page : 1

COMMERCIAL VEHICLES

CR 235				US 441				CR 235				US 441					
From North				From East				From South				From West					
Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Total	
Date 12/11/19 -----																	
06:45	2	6	0	0	1	9	1	0	0	6	2	0	0	10	1	0	38
07:00	3	6	1	0	7	5	0	0	0	7	4	0	2	7	1	0	43
07:15	1	9	1	0	4	5	0	0	1	11	1	0	0	14	3	0	50
07:30	2	6	3	0	5	7	1	0	1	3	2	0	0	9	3	0	42
Hr Total	8	27	5	0	17	26	2	0	2	27	9	0	2	40	8	0	173

07:45	2	8	0	0	5	8	0	0	3	9	4	0	1	13	4	0	57
08:00	1	10	0	0	3	11	0	0	5	4	2	0	1	6	2	0	45
08:15	2	10	1	0	5	13	1	0	1	7	3	0	0	11	2	0	56
08:30	1	6	2	0	3	12	2	0	2	13	5	0	3	15	1	0	65
Hr Total	6	34	3	0	16	44	3	0	11	33	14	0	5	45	9	0	223

TOTAL	14	61	8	0	33	70	5	0	13	60	23	0	7	85	17	0	396

Peak Hour Analysis By Entire Intersection for the Period: 07:15 to 08:15 on 12/11/19

Peak start 07:15					07:15				07:15				07:15			
Volume	6	33	4	0	17	31	1	0	10	27	9	0	2	42	12	0
Percent	14%	77%	9%	0%	35%	63%	2%	0%	22%	59%	20%	0%	4%	75%	21%	0%
Pk total	43				49				46				56			
Highest	07:15				08:00				07:45				07:45			
Volume	1	9	1	0	3	11	0	0	3	9	4	0	1	13	4	0
Hi total	11				14				16				18			
PHF	.98				.88				.72				.78			

DAY: WEDNESDAY

MANUAL TURNING MOVEMENT COUNTS

Site Code : 12111901

DATE: 12/11/19

US 441 AT CR 235

Start Date: 12/11/19

WEATHER: CLEAR & DRY

ALACHUA COUNTY, FLORIDA

File I.D. : 18153404

BEGIN TIME (MILITARY):06:45 Hrs

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PEDESTRIAN & BICYCLE

CR 235				US 441				CR 235				US 441							
From North				From East				From South				From West							
Left	Thru	Right	PEDS	Left	Thru	Right	PEDS	Left	Thru	Right	PEDS	Left	Thru	Right	PEDS				
Date 12/11/19																			
06:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hr Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
08:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hr Total	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	2	
TOTAL	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	2	

Peak Hour Analysis By Entire Intersection for the Period: 07:15 to 08:15 on 12/11/19

Peak start	07:15				07:15				07:15				07:15			
Volume	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0
Percent	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Pk total	1				0				1				0			
Highest	07:45				06:45				08:00				06:45			
Volume	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0
Hi total	1				0				1				0			
PHF	.25				.0				.25				.0			

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION - DISTRICT TWO
Signal Retiming - City of Alachua
Design Turning Movement Counts: US 441 from 140th Street to NW 173rd St (CR 235A)

AM PLAN		RAW DATA												
LOCATION	INT #	TIME	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
US 441 AND NW 140TH ST	1	7:00	145	434	46	88	978	114	86	147	77	126	177	25
US 441 AND MAIN ST	2	7:00	10	532	5	13	1151	32	35	6	33	9	17	18
US 441 AND NW 147TH DR	3	7:15	25	666	34	58	1059	60	102	13	47	38	2	50
US 441 AND I-75 NB RAMP	4	7:30	57	646	128	42	898	72	59	29	15	231	37	238
US 441 AND I-75 SB RAMP	5	7:00	29	556	272	0	1660	55	2	0	85	198	13	43
US 441 AND 167TH BLVD	6	7:15	7	556	96	55	1511	0	0	0	0	94	0	10
US 441 AND NW 173RD ST (CR 235A)	7	7:15	79	440	64	30	1365	31	40	24	113	94	19	32
AM PLAN		ADJUSTED BY AGGREGATED FACTOR												
LOCATION	INT #	TIME	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
US 441 AND NW 140TH ST	1	7:00	155	464	49	94	1046	122	92	157	82	135	189	27
US 441 AND MAIN ST	2	7:00	11	569	5	14	1232	34	37	6	35	10	18	19
US 441 AND NW 147TH DR	3	7:15	27	713	36	62	1133	64	109	14	50	41	2	54
US 441 AND I-75 NB RAMP	4	7:30	61	691	137	45	961	77	63	31	16	247	40	255
US 441 AND I-75 SB RAMP	5	7:00	31	595	291	0	1776	59	2	0	91	212	14	46
US 441 AND 167TH BLVD	6	7:15	7	595	103	59	1617	0	0	0	0	101	0	11
US 441 AND NW 173RD ST (CR 235A)	7	7:15	85	471	68	32	1461	33	43	26	121	101	20	34

PM PEAK PERIOD

TABLE B2
NW 140TH STREET (CR 241) / NW 172ND AVENUE INTERSECTION
MANUAL TURNING MOVEMENT COUNT
Weekday PM Peak Period

Monday, September 17, 2018

	CR 241 (Main Street)				NW 172nd Avenue				All
	Northbound Left Turn	Northbound Right Turn	Southbound Left Turn	Southbound Right Turn	Eastbound Left Turn	Eastbound Right Turn	Westbound Left Turn	Westbound Right Turn	
3:45-4:00 PM	0	1	0	0	0	0	2	0	3
4:00-4:15 PM	0	1	0	0	0	0	4	0	5
4:15-4:30 PM	0	3	1	0	0	0	1	0	5
4:30-4:45 PM	0	5	0	0	0	0	1	0	6
4:45-5:00 PM	0	3	0	0	0	0	0	0	3
5:00-5:15 PM	1	1	0	0	0	0	2	0	4
5:15-5:30 PM	0	2	0	0	0	1	3	0	6
5:30-5:45 PM	0	3	0	0	0	0	2	0	5
TOTAL:	1	19	1	0	0	1	15	0	37

BUCKHOLZ TRAFFIC

DAY: MONDAY

MANUAL TURNING MOVEMENT COUNTS

Site Code : 33333333

DATE: 09/17/18

NW 140TH STREET @ NW 174TH AVENUE

Start Date: 09/17/18

WEATHER: CLEAR & DRY

ALACHUA, COUNTY, FLORIDA

File I.D. : 18153401

BEGIN TIME (MILITARY):15:45 Hrs

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AUTOMOBILES, COMMERCIAL VEHICLES

NW 140TH STREET				NW 174TH AVE.				NW 140TH STREET				NW 174TH AVE.							
From North				From East				From South				From West							
Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Total			
Date 09/17/18																			
15:45	0	16	0	0	1	0	0	0	1	31	0	0	0	0	2	0	51		
16:00	0	13	0	0	0	0	0	0	1	32	0	0	0	0	2	0	48		
16:15	0	8	1	0	1	0	0	0	1	31	2	0	0	0	1	0	45		
16:30	0	16	0	0	0	0	1	0	5	30	1	0	0	0	1	0	54		
Hr Total	0	53	1	0	2	0	1	0	8	124	3	0	0	0	6	0	198		
16:45	0	8	0	0	0	0	0	0	3	29	1	0	0	0	0	0	41		
17:00	0	14	0	0	0	0	0	0	2	33	0	0	0	0	1	0	50		
17:15	0	18	0	0	0	0	0	0	2	35	1	0	0	0	0	0	56		
17:30	0	19	0	0	1	0	0	0	0	36	0	0	0	0	0	0	56		
Hr Total	0	59	0	0	1	0	0	0	7	133	2	0	0	0	1	0	203		
TOTAL	0	112	1	0	3	0	1	0	15	257	5	0	0	0	7	0	401		

Peak Hour Analysis By Entire Intersection for the Period: 16:45 to 17:45 on 09/17/18

Peak start 16:45				16:45				16:45				16:45			
Volume	0	59	0	0	1	0	0	0	7	133	2	0	0	0	1
Percent	0%	100%	0%	0%	100%	0%	0%	0%	5%	94%	1%	0%	0%	0%	100%
Pk total	59				1				142				1		
Highest	17:30				17:30				17:15				17:00		
Volume	0	19	0	0	1	0	0	0	2	35	1	0	0	0	1
Hi total	19				1				38				1		
PHF	.78				.25				.93				.25		

DAY: MONDAY

MANUAL TURNING MOVEMENT COUNTS

Site Code : 33333333

DATE: 09/17/18

NW 140TH STREET @ NW 174TH AVENUE

Start Date: 09/17/18

WEATHER: CLEAR & DRY

ALACHUA, COUNTY, FLORIDA

File I.D. : 18153401

BEGIN TIME (MILITARY):15:45 Hrs

Page : 1

AUTOMOBILES

NW 140TH STREET				NW 174TH AVE.				NW 140TH STREET				NW 174TH AVE.					
From North				From East				From South				From West					
Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Total	
Date 09/17/18 -----																	
15:45	0	14	0	0	1	0	0	0	1	30	0	0	0	0	2	0	48
16:00	0	12	0	0	0	0	0	0	1	28	0	0	0	0	2	0	43
16:15	0	8	1	0	1	0	0	0	1	29	1	0	0	0	1	0	42
16:30	0	15	0	0	0	0	1	0	5	28	1	0	0	0	1	0	51
Hr Total	0	49	1	0	2	0	1	0	8	115	2	0	0	0	6	0	184
16:45	0	7	0	0	0	0	0	0	3	29	1	0	0	0	0	0	40
17:00	0	14	0	0	0	0	0	0	2	32	0	0	0	0	1	0	49
17:15	0	18	0	0	0	0	0	0	2	35	1	0	0	0	0	0	56
17:30	0	18	0	0	1	0	0	0	0	36	0	0	0	0	0	0	55
Hr Total	0	57	0	0	1	0	0	0	7	132	2	0	0	0	1	0	200

TOTAL	0	106	1	0	3	0	1	0	15	247	4	0	0	0	7	0	384

Peak Hour Analysis By Entire Intersection for the Period: 16:45 to 17:45 on 09/17/18

Peak start 16:45					16:45					16:45					16:45				
Volume	0	57	0	0	1	0	0	0	7	132	2	0	0	0	1	0			
Percent	0%	100%	0%	0%	100%	0%	0%	0%	5%	94%	1%	0%	0%	0%	100%	0%			
Pk total	57				1				141				1						
Highest	17:15				17:30				17:15				17:00						
Volume	0	18	0	0	1	0	0	0	2	35	1	0	0	0	1	0			
Hi total	18				1				38				1						
PHF	.79				.25				.93				.25						

DAY: MONDAY

MANUAL TURNING MOVEMENT COUNTS

Site Code : 33333333

DATE: 09/17/18

NW 140TH STREET @ NW 174TH AVENUE

Start Date: 09/17/18

WEATHER: CLEAR & DRY

ALACHUA, COUNTY, FLORIDA

File I.D. : 18153401

BEGIN TIME (MILITARY):15:45 Hrs

Page : 1

COMMERCIAL VEHICLES

NW 140TH STREET					NW 174TH AVE.					NW 140TH STREET					NW 174TH AVE.					
From North					From East					From South					From West					
	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Total			
Date 09/17/18 -----																				
15:45	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3		
16:00	0	1	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	5		
16:15	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	3		
16:30	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	3		
Hr Total	0	4	0	0	0	0	0	0	0	9	1	0	0	0	0	0	0	14		

16:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1		
17:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1		
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
17:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1		
Hr Total	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3		

TOTAL	0	6	0	0	0	0	0	0	0	10	1	0	0	0	0	0	0	17		

Peak Hour Analysis By Entire Intersection for the Period: 16:45 to 17:45 on 09/17/18

Peak start 16:45				16:45				16:45				16:45			
Volume	0	2	0	0	0	0	0	0	1	0	0	0	0	0	0
Percent	0%	100%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%
Pk total	2			0				1				0			
Highest	16:45			15:45				17:00				15:45			
Volume	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0
Hi total	1			0				1				0			
PHF	.50			.0				.25				.0			

DAY: MONDAY

MANUAL TURNING MOVEMENT COUNTS

Site Code : 33333333

DATE: 09/17/18

NW 140TH STREET @ NW 174TH AVENUE

Start Date: 09/17/18

WEATHER: CLEAR & DRY

ALACHUA, COUNTY, FLORIDA

File I.D. : 18153401

BEGIN TIME (MILITARY):15:45 Hrs

Page : 1

AUTOMOBILES, COMMERCIAL VEHICLES

NW 140TH STREET From North				NW 174TH AVE. From East				NW 140TH STREET From South				NW 174TH AVE. From West					
Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Total	
Date 09/17/18																	
15:45	0	16	0	0	1	0	0	0	1	31	0	0	0	0	2	0	51
16:00	0	13	0	0	0	0	0	0	1	32	0	0	0	0	2	0	48
16:15	0	8	1	0	1	0	0	0	1	31	2	0	0	0	1	0	45
16:30	0	16	0	0	0	0	1	0	5	30	1	0	0	0	1	0	54
Hr Total	0	53	1	0	2	0	1	0	8	124	3	0	0	0	6	0	198
16:45	0	8	0	0	0	0	0	0	3	29	1	0	0	0	0	0	41
17:00	0	14	0	0	0	0	0	0	2	33	0	0	0	0	1	0	50
17:15	0	18	0	0	0	0	0	0	2	35	1	0	0	0	0	0	56
17:30	0	19	0	0	1	0	0	0	0	36	0	0	0	0	0	0	56
Hr Total	0	59	0	0	1	0	0	0	7	133	2	0	0	0	1	0	203
TOTAL	0	112	1	0	3	0	1	0	15	257	5	0	0	0	7	0	401

Peak Hour Analysis By Entire Intersection for the Period: 16:45 to 17:45 on 09/17/18

Peak start 16:45				16:45				16:45				16:45			
Volume	0	59	0	0	1	0	0	0	7	133	2	0	0	0	1
Percent	0%	100%	0%	0%	100%	0%	0%	0%	5%	94%	1%	0%	0%	0%	100%
Pk total	59				1				142				1		
Highest	17:30				17:30				17:15				17:00		
Volume	0	19	0	0	1	0	0	0	2	35	1	0	0	0	1
Hi total	19				1				38				1		
PHF	.78				.25				.93				.25		

DAY: MONDAY

MANUAL TURNING MOVEMENT COUNTS

Site Code : 33333333

DATE: 09/17/18

NW 140TH STREET @ NW 174TH AVENUE

Start Date: 09/17/18

WEATHER: CLEAR & DRY

ALACHUA, COUNTY, FLORIDA

File I.D. : 18153401

BEGIN TIME (MILITARY):15:45 Hrs

Page : 1

AUTOMOBILES

NW 140TH STREET					NW 174TH AVE.				NW 140TH STREET				NW 174TH AVE.								
From North					From East				From South				From West								
Left	Thru	Right	Other		Left	Thru	Right	Other		Left	Thru	Right	Other		Left	Thru	Right	Other		Total	
Date 09/17/18 -----																					
15:45	0	14	0	0		1	0	0	0		1	30	0	0		0	0	2	0		48
16:00	0	12	0	0		0	0	0	0		1	28	0	0		0	0	2	0		43
16:15	0	8	1	0		1	0	0	0		1	29	1	0		0	0	1	0		42
16:30	0	15	0	0		0	0	1	0		5	28	1	0		0	0	1	0		51
Hr Total	0	49	1	0		2	0	1	0		8	115	2	0		0	0	6	0		184
16:45	0	7	0	0		0	0	0	0		3	29	1	0		0	0	0	0		40
17:00	0	14	0	0		0	0	0	0		2	32	0	0		0	0	1	0		49
17:15	0	18	0	0		0	0	0	0		2	35	1	0		0	0	0	0		56
17:30	0	18	0	0		1	0	0	0		0	36	0	0		0	0	0	0		55
Hr Total	0	57	0	0		1	0	0	0		7	132	2	0		0	0	1	0		200

TOTAL	0	106	1	0		3	0	1	0		15	247	4	0		0	0	7	0		384

Peak Hour Analysis By Entire Intersection for the Period: 16:45 to 17:45 on 09/17/18

Peak start 16:45				16:45				16:45				16:45			
Volume	0	57	0	0	1	0	0	0	7	132	2	0	0	0	1
Percent	0%	100%	0%	0%	100%	0%	0%	0%	5%	94%	1%	0%	0%	0%	100%
Pk total	57				1				141				1		
Highest	17:15				17:30				17:15				17:00		
Volume	0	18	0	0	1	0	0	0	2	35	1	0	0	0	1
Hi total	18				1				38				1		
PHF	.79				.25				.93				.25		

DAY: MONDAY

MANUAL TURNING MOVEMENT COUNTS

Site Code : 33333333

DATE: 09/17/18

NW 140TH STREET @ NW 174TH AVENUE

Start Date: 09/17/18

WEATHER: CLEAR & DRY

ALACHUA, COUNTY, FLORIDA

File I.D. : 18153401

BEGIN TIME (MILITARY):15:45 Hrs

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COMMERCIAL VEHICLES

NW 140TH STREET					NW 174TH AVE.				NW 140TH STREET				NW 174TH AVE.								
From North					From East				From South				From West								
Left	Thru	Right	Other		Left	Thru	Right	Other		Left	Thru	Right	Other		Left	Thru	Right	Other		Total	
Date 09/17/18 -----																					
15:45	0	2	0	0		0	0	0	0		0	1	0	0		0	0	0	0		3
16:00	0	1	0	0		0	0	0	0		0	4	0	0		0	0	0	0		5
16:15	0	0	0	0		0	0	0	0		0	2	1	0		0	0	0	0		3
16:30	0	1	0	0		0	0	0	0		0	2	0	0		0	0	0	0		3
Hr Total	0	4	0	0		0	0	0	0		0	9	1	0		0	0	0	0		14
16:45	0	1	0	0		0	0	0	0		0	0	0	0		0	0	0	0		1
17:00	0	0	0	0		0	0	0	0		0	1	0	0		0	0	0	0		1
17:15	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0
17:30	0	1	0	0		0	0	0	0		0	0	0	0		0	0	0	0		1
Hr Total	0	2	0	0		0	0	0	0		0	1	0	0		0	0	0	0		3

TOTAL	0	6	0	0		0	0	0	0		0	10	1	0		0	0	0	0		17

Peak Hour Analysis By Entire Intersection for the Period: 16:45 to 17:45 on 09/17/18

Peak start	16:45				16:45				16:45				16:45			
Volume	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Percent	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%
Pk total	2				0				1				0			
Highest	16:45				15:45				17:00				15:45			
Volume	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Hi total	1				0				1				0			
PHF	.50				.0				.25				.0			

DAY: MONDAY

MANUAL TURNING MOVEMENT COUNTS

Site Code : 15082619

DATE: 08/26/19

US 441 @ NW 147TH DRIVE

Start Date: 08/26/19

WEATHER: CLEAR & DRY

ALACHUA COUNTY, FLORIDA

File I.D. : 082619PM

BEGIN TIME (MILITARY): 15:45 Hrs

Page : 1

AUTOMOBILES, COMMERCIAL VEHICLES

NW 147TH DRIVE					US 441				NW 147TH DRIVE				US 441							
From North					From East				From South				From West							
Left	Thru	Right	Other		Left	Thru	Right	U-TURN		Left	Thru	Right	Other		Left	Thru	Right	U-TURN		Total
Date 08/26/19																				
15:45	15	5	26	0	15	238	24	0	36	3	13	0	20	165	27	2	589			
16:00	20	4	22	0	14	230	28	1	31	4	7	0	12	164	33	3	573			
16:15	15	2	28	0	24	227	18	1	43	4	8	0	18	148	27	0	563			
16:30	18	6	23	0	15	266	23	2	33	5	8	0	17	156	34	0	606			
Hr Total	68	17	99	0	68	961	93	4	143	16	36	0	67	633	121	5	2331			
16:45	15	6	29	0	14	299	20	0	32	3	15	0	13	186	30	0	662			
17:00	18	3	31	0	26	326	25	2	49	7	14	0	21	169	27	2	720			
17:15	13	4	27	0	26	348	16	0	38	10	17	0	24	200	36	1	760			
17:30	12	5	28	0	30	306	16	0	53	3	18	0	14	156	34	3	678			
Hr Total	58	18	115	0	96	1279	77	2	172	23	64	0	72	711	127	6	2820			
17:45	16	4	18	0	23	252	13	1	29	3	8	0	12	180	27	1	587			
Hr Total	16	4	18	0	23	252	13	1	29	3	8	0	12	180	27	1	587			
TOTAL	142	39	232	0	187	2492	183	7	344	42	108	0	151	1524	275	12	5738			

Peak Hour Analysis By Entire Intersection for the Period: 16:45 to 17:45 on 08/26/19

Peak start 16:45					16:45				16:45					16:45			
Volume	58	18	115	0	96	1279	77	2	172	23	64	0		72	711	127	6
Percent	30%	9%	60%	0%	7%	88%	5%	0%	66%	9%	25%	0%		8%	78%	14%	1%
Pk total	191				1454				259					916			
Highest	17:00				17:15				17:30					17:15			
Volume	18	3	31	0	26	348	16	0	53	3	18	0		24	200	36	1
Hi total	52				390				74					261			
PHF	.92				.93				.88					.88			

DAY: MONDAY

MANUAL TURNING MOVEMENT COUNTS

Site Code : 15082619

DATE: 08/26/19

US 441 @ NW 147TH DRIVE

Start Date: 08/26/19

WEATHER: CLEAR & DRY

ALACHUA COUNTY, FLORIDA

File I.D. : 082619PM

BEGIN TIME (MILITARY): 15:45 Hrs

Page : 1

AUTOMOBILES

NW 147TH DRIVE					US 441				NW 147TH DRIVE				US 441					
From North					From East				From South				From West					
Left	Thru	Right	Other		Left	Thru	Right	U-TURN	Left	Thru	Right	Other	Left	Thru	Right	U-TURN	Total	
Date 08/26/19																		
15:45	14	5	26	0	15	226	23	0	36	3	13	0	20	155	27	2	565	
16:00	18	4	22	0	14	215	26	1	31	4	5	0	11	156	31	2	540	
16:15	14	2	28	0	23	218	17	1	42	4	8	0	18	134	27	0	536	
16:30	17	6	21	0	15	252	22	2	32	5	8	0	16	146	34	0	576	
Hr Total	63	17	97	0	67	911	88	4	141	16	34	0	65	591	119	4	2217	
16:45	14	6	29	0	13	282	20	0	31	3	15	0	13	183	29	0	638	
17:00	18	3	30	0	26	316	24	2	48	7	14	0	21	159	26	2	696	
17:15	13	4	27	0	26	333	15	0	37	10	17	0	24	190	35	1	732	
17:30	12	5	27	0	30	301	16	0	53	3	18	0	13	149	34	3	664	
Hr Total	57	18	113	0	95	1232	75	2	169	23	64	0	71	681	124	6	2730	
17:45	16	4	17	0	23	240	13	1	28	3	7	0	12	176	25	1	566	
Hr Total	16	4	17	0	23	240	13	1	28	3	7	0	12	176	25	1	566	
TOTAL	136	39	227	0	185	2383	176	7	338	42	105	0	148	1448	268	11	5513	

Peak Hour Analysis By Entire Intersection for the Period: 16:45 to 17:45 on 08/26/19

Peak start 16:45					16:45				16:45					16:45			
Volume	57	18	113	0	95	1232	75	2	169	23	64	0	71	681	124	6	
Percent	30%	10%	60%	0%	7%	88%	5%	0%	66%	9%	25%	0%	8%	77%	14%	1%	
Pk total	188				1404				256				882				
Highest	17:00				17:15				17:30				17:15				
Volume	18	3	30	0	26	333	15	0	53	3	18	0	24	190	35	1	
Hi total	51				374				74				250				
PHF	.92				.94				.86				.88				

DAY: MONDAY

DATE: 08/26/19

WEATHER: CLEAR & DRY

BEGIN TIME (MILITARY): 15:45 Hrs

MANUAL TURNING MOVEMENT COUNTS

US 441 @ NW 147TH DRIVE

ALACHUA COUNTY, FLORIDA

Site Code : 15082619

Start Date: 08/26/19

File I.D. : 082619PM

Page : 1

COMMERCIAL VEHICLES

NW 147TH DRIVE					US 441					NW 147TH DRIVE					US 441					
From North					From East					From South					From West					
	Left	Thru	Right	Other	Left	Thru	Right	U-TURN	Left	Thru	Right	Other	Left	Thru	Right	U-TURN	Total			
Date 08/26/19																				
15:45	1	0	0	0	0	12	1	0	0	0	0	0	0	0	10	0	0	24		
16:00	2	0	0	0	0	15	2	0	0	0	2	0	1	8	2	1	33			
16:15	1	0	0	0	1	9	1	0	1	0	0	0	0	14	0	0	27			
16:30	1	0	2	0	0	14	1	0	1	0	0	0	1	10	0	0	30			
Hr Total	5	0	2	0	1	50	5	0	2	0	2	0	2	42	2	1	114			
16:45	1	0	0	0	1	17	0	0	1	0	0	0	0	3	1	0	24			
17:00	0	0	1	0	0	10	1	0	1	0	0	0	0	10	1	0	24			
17:15	0	0	0	0	0	15	1	0	1	0	0	0	0	10	1	0	28			
17:30	0	0	1	0	0	5	0	0	0	0	0	0	1	7	0	0	14			
Hr Total	1	0	2	0	1	47	2	0	3	0	0	0	1	30	3	0	90			
17:45	0	0	1	0	0	12	0	0	1	0	1	0	0	4	2	0	21			
Hr Total	0	0	1	0	0	12	0	0	1	0	1	0	0	4	2	0	21			
TOTAL	6	0	5	0	2	109	7	0	6	0	3	0	3	76	7	1	225			

Peak Hour Analysis By Entire Intersection for the Period: 16:45 to 17:45 on 08/26/19

Peak start 16:45	16:45				16:45	16:45				16:45	16:45			
Volume	1	0	2	0	1	47	2	0	3	0	0	0	1	30
Percent	33%	0%	67%	0%	2%	94%	4%	0%	100%	0%	0%	0%	3%	88%
Pk total	3				50				3				34	
Highest	16:45				16:45				16:45				17:00	
Volume	1	0	0	0	1	17	0	0	1	0	0	0	0	10
Hi total	1				18				1				11	
PHF	.75				.69				.75				.77	

DAY: MONDAY

DATE: 08/26/19

WEATHER: CLEAR & DRY

BEGIN TIME (MILITARY): 15:45 Hrs

MANUAL TURNING MOVEMENT COUNTS

US 441 @ NW 147TH DRIVE

ALACHUA COUNTY, FLORIDA

Site Code : 15082619

Start Date: 08/26/19

File I.D. : 082619PM

Page : 1

PEDESTRIAN & BICYCLE

NW 147TH DRIVE					US 441					NW 147TH DRIVE					US 441					
From North					From East					From South					From West					
Left	Thru	Right	PEDS	Left	Thru	Right	PEDS	Left	Thru	Right	PEDS	Left	Thru	Right	PEDS	Total				
Date 08/26/19 -----																				
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
16:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1				
16:15	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	3				
16:30	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1				
Hr Total	0	0	0	2	0	0	0	0	0	0	0	2	0	0	0	5				
16:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1				
17:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	4				
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Hr Total	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	5				
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Hr Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				

TOTAL	0	0	0	2	0	0	0	0	0	0	0	5	0	0	0	10				

Peak Hour Analysis By Entire Intersection for the Period: 16:45 to 17:45 on 08/26/19

Peak start 16:45					16:45					16:45					16:45				
Volume	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	0
Percent	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	100%	0%	0%
Pk total	0				0					3				2					
Highest	15:45				15:45					17:00				17:00					
Volume	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0
Hi total	0				0					2				2					
PHF	.0				.0					.38				.25					

DAY: MONDAY

MANUAL TURNING MOVEMENT COUNTS

Site Code : 22222222

DATE: 12/09/19

US 441 AT CR 235

Start Date: 12/09/19

WEATHER: CLEAR & DRY

ALACHUA COUNTY, FLORIDA

File I.D. : 18153403

BEGIN TIME (MILITARY):15:30 Hrs

Page : 1

AUTOMOBILES, COMMERCIAL VEHICLES

CR 235				US 441				CR 235				US 441					
From North				From East				From South				From West					
Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	U-TURN	Total	
Date 12/09/19																	
15:30	14	21	15	0	18	227	19	0	34	26	24	0	19	154	29	0	600
15:45	15	19	19	0	35	228	23	0	25	41	29	0	19	116	19	0	588
16:00	11	30	12	0	28	220	19	0	29	30	21	0	23	138	22	0	583
16:15	22	24	20	0	29	204	15	0	35	33	12	0	15	109	19	0	537
Hr Total	62	94	66	0	110	879	76	0	123	130	86	0	76	517	89	0	2308
16:30	14	26	9	0	33	261	27	0	43	30	15	0	32	116	41	1	648
16:45	13	32	18	0	36	259	18	0	36	37	20	0	43	115	37	1	665
17:00	26	39	22	0	41	330	25	0	41	37	20	0	29	150	34	0	794
17:15	9	44	16	0	39	302	18	0	28	44	23	0	51	140	47	0	761
Hr Total	62	141	65	0	149	1152	88	0	148	148	78	0	155	521	159	2	2868
17:30	13	41	26	0	50	285	27	0	31	32	14	0	27	114	44	0	704
Hr Total	13	41	26	0	50	285	27	0	31	32	14	0	27	114	44	0	704
TOTAL	137	276	157	0	309	2316	191	0	302	310	178	0	258	1152	292	2	5880

Peak Hour Analysis By Entire Intersection for the Period: 16:45 to 17:45 on 12/09/19

Peak start 16:45					16:45					16:45					16:45				
Volume	61	156	82	0	166	1176	88	0	136	150	77	0	150	519	162	1			
Percent	20%	52%	27%	0%	12%	82%	6%	0%	37%	41%	21%	0%	18%	62%	19%	0%			
Pk total	299					1430					363					832			
Highest	17:00					17:00					17:00					17:15			
Volume	26	39	22	0	41	330	25	0	41	37	20	0	51	140	47	0			
Hi total	87					396					98					238			
PHF	.86					.90					.93					.87			

DAY: MONDAY

MANUAL TURNING MOVEMENT COUNTS

Site Code : 22222222

DATE: 12/09/19

US 441 AT CR 235

Start Date: 12/09/19

WEATHER: CLEAR & DRY

ALACHUA COUNTY, FLORIDA

File I.D. : 18153403

BEGIN TIME (MILITARY):15:30 Hrs

Page : 1

AUTOMOBILES

CR 235					US 441					CR 235					US 441					
From North					From East					From South					From West					
Left	Thru	Right	Other		Left	Thru	Right	Other		Left	Thru	Right	Other		Left	Thru	Right	U-TURN		
Date 12/09/19																				
15:30	13	17	15	0	17	222	16	0		32	19	22	0		19	145	26	0	563	
15:45	10	10	18	0	34	210	22	0		22	35	28	0		19	103	19	0	530	
16:00	11	20	10	0	26	211	19	0		28	23	18	0		23	122	21	0	532	
16:15	21	21	17	0	27	199	15	0		34	29	12	0		15	103	19	0	512	
Hr Total	55	68	60	0	104	842	72	0		116	106	80	0		76	473	85	0	2137	
16:30	14	24	6	0	32	245	25	0		38	28	13	0		29	113	37	1	605	
16:45	13	24	16	0	35	247	17	0		34	37	12	0		42	113	36	1	627	
17:00	24	36	21	0	37	324	24	0		39	34	18	0		28	146	34	0	765	
17:15	8	39	16	0	38	292	18	0		27	39	22	0		51	133	44	0	727	
Hr Total	59	123	59	0	142	1108	84	0		138	138	65	0		150	505	151	2	2724	
17:30	13	37	26	0	47	281	27	0		30	29	13	0		27	110	42	0	682	
Hr Total	13	37	26	0	47	281	27	0		30	29	13	0		27	110	42	0	682	
TOTAL	127	228	145	0	293	2231	183	0		284	273	158	0		253	1088	278	2	5543	

Peak Hour Analysis By Entire Intersection for the Period: 16:45 to 17:45 on 12/09/19

Peak start 16:45					16:45					16:45					16:45				
Volume	58	136	79	0	157	1144	86	0	130	139	65	0	148	502	156	1			
Percent	21%	50%	29%	0%	11%	82%	6%	0%	39%	42%	19%	0%	18%	62%	19%	0%			
Pk total	273				1387				334				807						
Highest	17:00				17:00				17:00				17:15						
Volume	24	36	21	0	37	324	24	0	39	34	18	0	51	133	44	0			
Hi total	81				385				91				228						
PHF	.84				.90				.92				.88						

DAY: MONDAY

MANUAL TURNING MOVEMENT COUNTS

Site Code : 22222222

DATE: 12/09/19

US 441 AT CR 235

Start Date: 12/09/19

WEATHER: CLEAR & DRY

ALACHUA COUNTY, FLORIDA

File I.D. : 18153403

BEGIN TIME (MILITARY):15:30 Hrs

Page : 1

COMMERCIAL VEHICLES

CR 235					US 441					CR 235					US 441					
From North					From East					From South					From West					
	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other				
Date 12/09/19																				
15:30	1	4	0	0	1	5	3	0	2	7	2	0	0	9	3	0	37			
15:45	5	9	1	0	1	18	1	0	3	6	1	0	0	13	0	0	58			
16:00	0	10	2	0	2	9	0	0	1	7	3	0	0	16	1	0	51			
16:15	1	3	3	0	2	5	0	0	1	4	0	0	0	6	0	0	25			
Hr Total	7	26	6	0	6	37	4	0	7	24	6	0	0	44	4	0	171			
16:30	0	2	3	0	1	16	2	0	5	2	2	0	3	3	4	0	43			
16:45	0	8	2	0	1	12	1	0	2	0	8	0	1	2	1	0	38			
17:00	2	3	1	0	4	6	1	0	2	3	2	0	1	4	0	0	29			
17:15	1	5	0	0	1	10	0	0	1	5	1	0	0	7	3	0	34			
Hr Total	3	18	6	0	7	44	4	0	10	10	13	0	5	16	8	0	144			
17:30	0	4	0	0	3	4	0	0	1	3	1	0	0	4	2	0	22			
Hr Total	0	4	0	0	3	4	0	0	1	3	1	0	0	4	2	0	22			
TOTAL	10	48	12	0	16	85	8	0	18	37	20	0	5	64	14	0	337			

Peak Hour Analysis By Entire Intersection for the Period: 16:45 to 17:45 on 12/09/19

Peak start 16:45					16:45					16:45					16:45				
Volume	3	20	3	0	9	32	2	0	6	11	12	0	2	17	6	0			
Percent	12%	77%	12%	0%	21%	74%	5%	0%	21%	38%	41%	0%	8%	68%	24%	0%			
Pk total	26				43				29				25						
Highest	16:45				16:45				16:45				17:15						
Volume	0	8	2	0	1	12	1	0	2	0	8	0	0	7	3	0			
Hi total	10				14				10				10						
PHF	.65				.77				.72				.62						

DAY: MONDAY

MANUAL TURNING MOVEMENT COUNTS

Site Code : 22222222

DATE: 12/09/19

US 441 AT CR 235

Start Date: 12/09/19

WEATHER: CLEAR & DRY

ALACHUA COUNTY, FLORIDA

File I.D. : 18153403

BEGIN TIME (MILITARY):15:30 Hrs

Page : 1

PEDESTRIAN & BICYCLE

CR 235					US 441					CR 235					US 441					
From North					From East					From South					From West					
Left	Thru	Right	PEDS		Left	Thru	Right	PEDS		Left	Thru	Right	PEDS		Left	Thru	Right	PEDS		
Date 12/09/19																				
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
15:45	0	0	0	0	0	0	0	1	0	1	0	3	0	0	0	0	0	0	5	
16:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	
16:15	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	
Hr Total	0	0	0	0	0	0	0	3	0	1	0	4	0	0	0	0	0	1	9	
16:30	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
17:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
17:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	
Hr Total	0	0	0	1	0	0	0	2	0	0	0	2	0	0	0	0	0	0	5	
17:30	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	
Hr Total	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	
TOTAL	0	0	0	4	0	0	0	5	0	1	0	6	0	0	0	0	0	2	18	

Peak Hour Analysis By Entire Intersection for the Period: 16:45 to 17:45 on 12/09/19

Peak start 16:45					16:45					16:45					16:45				
Volume	0	0	0	4	0	0	0	0	0	0	0	0	2	0	0	0	1	1	1
Percent	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	100%	100%	100%
Pk total	4				0					2				1					
Highest	17:30				15:30					17:15				17:30					
Volume	0	0	0	3	0	0	0	0	0	0	0	0	2	0	0	0	1	1	1
Hi total	3				0					2				1					
PHF	.33				.0					.25				.25					

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION - DISTRICT TWO
Signal Retiming - City of Alachua
Design Turning Movement Counts: US 441 from 140th Street to NW 173rd St (CR 235A)

PM PLAN

RAW DATA

LOCATION	INT #	TIME	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
US 441 AND NW 140TH ST	1	16:45	178	1164	93	118	583	147	141	132	94	68	134	88
US 441 AND MAIN ST	2	16:45	49	1306	11	48	798	68	72	8	44	9	16	47
US 441 AND NW 147TH DR	3	16:45	131	1173	102	92	874	122	174	13	67	65	14	104
US 441 AND I-75 NB RAMP	4	17:00	45	1166	204	57	810	22	41	13	12	260	17	659
US 441 AND I-75 SB RAMP	5	17:00	45	1618	195	0	956	58	26	0	98	173	22	54
US 441 AND 167TH BLVD	6	17:00	3	1360	305	123	787	0	0	0	0	185	0	49
US 441 AND NW 173RD ST (CR 235A)	7	17:00	105	1392	116	35	711	49	83	26	107	93	20	48

PM PLAN

ADJUSTED BY AGGREGATED FACTOR

1.07

LOCATION	INT #	TIME	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
US 441 AND NW 140TH ST	1	16:45	190	1245	100	126	624	157	151	141	101	73	143	94
US 441 AND MAIN ST	2	16:45	52	1397	12	51	854	73	77	9	47	10	17	50
US 441 AND NW 147TH DR	3	16:45	140	1255	109	98	935	131	186	14	72	70	15	111
US 441 AND I-75 NB RAMP	4	17:00	48	1248	218	61	867	24	44	14	13	278	18	705
US 441 AND I-75 SB RAMP	5	17:00	48	1731	209	0	1023	62	28	0	105	185	24	58
US 441 AND 167TH BLVD	6	17:00	3	1455	326	132	842	0	0	0	0	198	0	52
US 441 AND NW 173RD ST (CR 235A)	7	17:00	112	1489	124	37	761	52	89	28	114	100	21	51

APPENDIX C

FDOT TRAFFIC DATA

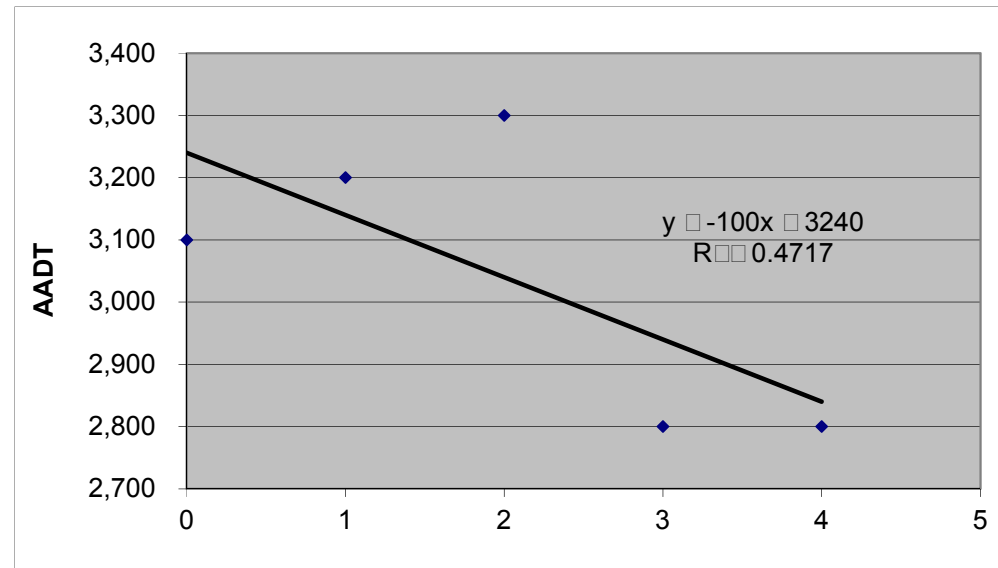


TABLE C1
LINEAR REGRESSION ANALYSIS

CR 241, North of SR 235

<u>Year</u>	<u></u>	<u>Actual</u> <u>AADT (Y)</u>	<u>Predicted</u> <u>AADT</u>
2014	0	3,100	3,240
2015	1	3,200	3,140
2016	2	3,300	3,040
2017	3	2,800	2,940
2018	4	2,800	2,840
2019	5		2,740
2020	6		2,640
2021	7		2,540
2022	8		2,440
2023	9		2,340
2024	10		2,240
2025	11		2,140
2026	12		2,040

i = - 3.8%



BUCKHOLZ TRAFFIC

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2018 HISTORICAL AADT REPORT

COUNTY: 26 - ALACHUA

SITE: 0240 - CR 241.1 MI. N. OF SR 235

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
----	-----		-----		-----	-----	-----	-----
2018	2800 F		0		0	9.50	57.90	2.70
2017	2800 C	N	0		S 0	9.50	53.80	2.60
2016	3300 R		0		0	9.50	53.60	2.80
2015	3200 T		0		0	9.50	57.00	2.60
2014	3100 S					9.50	57.40	2.40
2013	3100 F		0		0	9.50	57.80	2.60
2012	3100 C	N	0		S 0	9.50	58.40	2.50

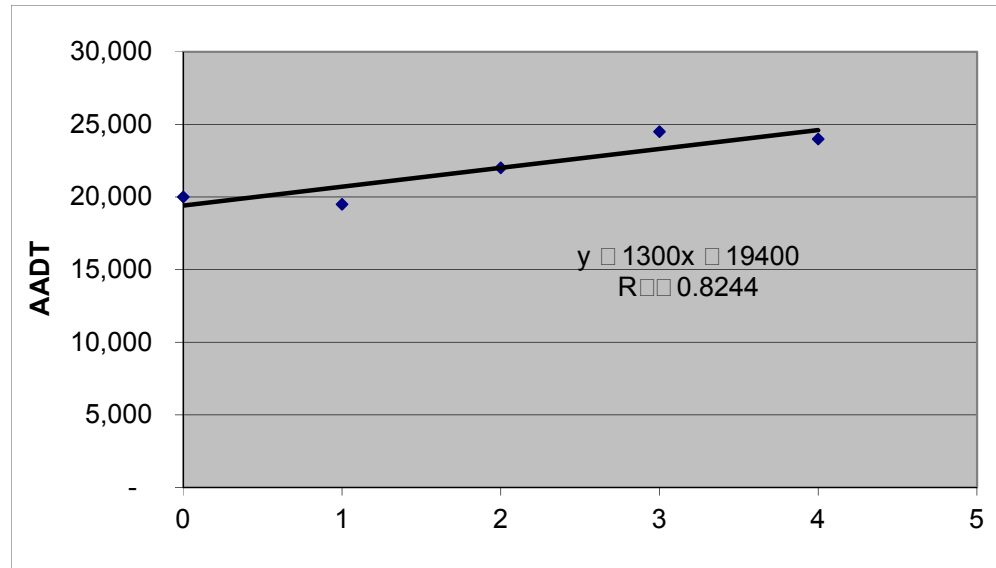
AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

TABLE C2
LINEAR REGRESSION ANALYSIS

US 441, Southeast of NW 147th Drive

<u>Year</u>	<u></u>	<u>Actual</u> <u>AADT (Y)</u>	<u>Predicted</u> <u>AADT</u>
2014	0	20,000	19,400
2015	1	19,500	20,700
2016	2	22,000	22,000
2017	3	24,500	23,300
2018	4	24,000	24,600
2019	5		25,900
2020	6		27,200
2021	7		28,500
2022	8		29,800
2023	9		31,100
2024	10		32,400
2025	11		33,700
2026	12		35,000

i = 5.0%



BUCKHOLZ TRAFFIC

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2018 HISTORICAL AADT REPORT

COUNTY: 26 - ALACHUA

SITE: 5106 - SR 20 .4 MI. NW OF SR 235

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
----	-----		-----		-----	-----	-----	-----
2018	24000	C	N 12000		S 12000	9.50	57.90	4.90
2017	24500	C	N 12500		S 12000	9.50	53.80	4.60
2016	22000	C	N 11000		S 11000	9.50	53.60	4.90
2015	19500	C	N 9700		S 9800	9.50	57.00	5.20
2014	20000	C	N 10000		S 10000	9.50	57.40	5.40
2013	19800	C	N 9800		S 10000	9.50	57.80	5.00
2012	18900	C	N 9600		S 9300	9.50	58.40	4.90
2011	18600	C	N 9200		S 9400	9.50	58.80	5.50
2010	17600	C	N 8700		S 8900	10.13	59.87	5.10
2009	19600	C	N 9600		S 10000	10.04	57.81	6.20
2008	19400	C	N 9800		S 9600	10.17	57.73	7.30
2007	20000	C	N 10000		S 10000	10.22	58.44	5.70
2006	20500	C	N 10000		S 10500	9.98	59.05	6.70
2005	20000	C	N 10000		S 10000	10.10	58.20	19.60
2004	19900	C	N 10000		S 9900	10.20	62.30	9.10
2003	21000	C	N 10500		S 10500	10.20	59.50	12.10

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
 *K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

COUNTY: 26
STATION: 5106
DESCRIPTION: SR 20 .4 MI. NW OF SR 235
START DATE: 04/24/2018
START TIME: 0000

TIME	DIRECTION: N					DIRECTION: S					COMBINED TOTAL	
	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL		
0000	19	17	14	8	58	12	9	10	10	41	99	
0100	11	8	14	11	44	1	20	13	6	40	84	
0200	5	6	10	12	33	5	4	5	11	25	58	
0300	6	9	8	7	30	10	8	21	15	54	84	
0400	14	11	6	30	61	18	22	39	33	112	173	
0500	36	39	46	38	159	59	88	114	106	367	526	
0600	82	97	130	139	448	187	206	252	278	923	1371	
0700	172	195	180	183	730	311	310	346	269	1236	1966	
0800	185	174	123	148	630	230	304	232	159	925	1555	
0900	161	158	148	142	609	206	212	195	169	782	1391	
1000	172	168	179	200	719	163	149	159	156	627	1346	
1100	186	184	208	222	800	191	176	203	180	750	1550	
1200	213	201	187	181	782	232	188	215	220	855	1637	
1300	196	203	181	205	785	228	224	212	201	865	1650	
1400	225	199	208	240	872	209	159	184	184	736	1608	
1500	241	235	252	282	1010	219	217	237	206	879	1889	
1600	261	314	285	300	1160	226	168	267	211	872	2032	
1700	327	337	348	277	1289	241	215	220	174	850	2139	
1800	282	202	177	166	827	174	156	147	123	600	1427	
1900	171	147	119	116	553	130	102	100	92	424	977	
2000	123	124	102	76	425	117	113	95	74	399	824	
2100	66	68	59	48	241	74	75	57	61	267	508	
2200	40	36	26	30	132	43	23	25	25	116	248	
2300	21	17	20	18	76	23	15	10	6	54	130	
24-HOUR TOTALS:					12473						12799	25272

PEAK VOLUME INFORMATION						
DIRECTION: N			DIRECTION: S		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	715	743	645	1245	700	1966
P.M.	1645	1312	1630	934	1645	2199
DAILY	1645	1312	645	1245	1645	2199

COUNTY: 26
STATION: 5106
DESCRIPTION: SR 20 .4 MI. NW OF SR 235
START DATE: 04/25/2018
START TIME: 0000

TIME	DIRECTION: N					DIRECTION: S					COMBINED TOTAL	
	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL		
0000	12	11	9	12	44	20	13	17	13	63	107	
0100	8	7	13	8	36	12	19	7	7	45	81	
0200	8	11	9	6	34	10	14	5	9	38	72	
0300	11	13	12	5	41	7	9	18	11	45	86	
0400	11	21	8	32	72	14	29	17	35	95	167	
0500	38	45	54	48	185	59	96	114	123	392	577	
0600	73	106	102	104	385	160	221	246	269	896	1281	
0700	161	206	182	180	729	331	311	344	261	1247	1976	
0800	185	185	151	119	640	265	258	245	187	955	1595	
0900	137	167	133	169	606	169	171	190	141	671	1277	
1000	151	151	152	178	632	158	141	147	176	622	1254	
1100	150	240	207	247	844	205	193	216	220	834	1678	
1200	220	202	221	246	889	231	215	252	210	908	1797	
1300	197	190	205	186	778	223	194	210	182	809	1587	
1400	203	237	195	226	861	187	189	190	197	763	1624	
1500	225	233	257	290	1005	212	239	207	201	859	1864	
1600	281	296	306	348	1231	204	190	196	213	803	2034	
1700	332	322	282	271	1207	214	214	192	184	804	2011	
1800	259	195	184	181	819	182	165	167	135	649	1468	
1900	159	128	145	128	560	127	130	105	109	471	1031	
2000	134	145	109	103	491	107	96	90	97	390	881	
2100	92	75	63	42	272	73	91	63	61	288	560	
2200	49	38	32	34	153	35	35	34	27	131	284	
2300	20	30	27	15	92	29	21	18	10	78	170	
24-HOUR TOTALS:					12606						12856	25462

PEAK VOLUME INFORMATION						
DIRECTION: N			DIRECTION: S		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	715	753	645	1255	700	1976
P.M.	1630	1308	1200	908	1630	2145
DAILY	1630	1308	645	1255	1630	2145

APPENDIX D

UNSIGNALIZED INTERSECTION CAPACITY CALCULATIONS



AM PEAK HOUR

HCS7 Two-Way Stop-Control Report

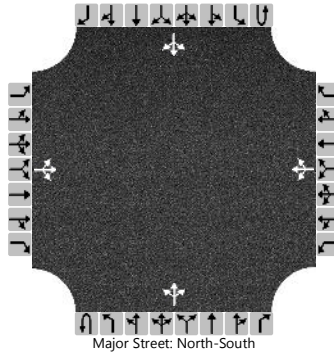
General Information

Analyst	J. Buckholz
Agency/Co.	BUCKHOLZ TRAFFIC
Date Performed	9/7/2019
Analysis Year	2028
Time Analyzed	AM Peak Hour - BUILD
Intersection Orientation	North-South
Project Description	#18-1534

Site Information

Intersection	CR 241/NW 174th Avenue
Jurisdiction	Alachua County
East/West Street	NW 174th Avenue
North/South Street	CR241
Peak Hour Factor	0.98
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	1		0	0	1		2	28	0		0	128	0
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.20		

Delay, Queue Length, and Level of Service

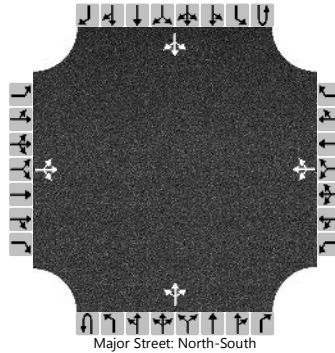
Flow Rate, v (veh/h)			1				1			2				0		
Capacity, c (veh/h)			924				1052			1467				1598		
v/c Ratio			0.00				0.00			0.00				0.00		
95% Queue Length, Q ₉₅ (veh)			0.0				0.0			0.0				0.0		
Control Delay (s/veh)			8.9				8.4			7.5				7.3		
Level of Service (LOS)			A				A			A				A		
Approach Delay (s/veh)	8.9				8.4				0.5				0.0			
Approach LOS	A				A											

HCS7 Two-Way Stop-Control Report

General Information

Analyst	J. Buckholz	Intersection	CR 241/NW 172nd Avenue
Agency/Co.	BUCKHOLZ TRAFFIC	Jurisdiction	Alachua County
Date Performed	9/7/2019	East/West Street	NW 172nd Avenue
Analysis Year	2028	North/South Street	CR241
Time Analyzed	AM Peak Hour - BUILD	Peak Hour Factor	0.98
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	#18-1534		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	1		18	0	0		0	30	4		0	128	0
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			1				18			0				0		
Capacity, c (veh/h)			924				805			1467				1590		
v/c Ratio			0.00				0.02			0.00				0.00		
95% Queue Length, Q ₉₅ (veh)			0.0				0.1			0.0				0.0		
Control Delay (s/veh)			8.9				9.6			7.5				7.3		
Level of Service (LOS)			A				A			A				A		
Approach Delay (s/veh)	8.9				9.6				0.0				0.0			
Approach LOS	A				A											

HCS7 Two-Way Stop-Control Report

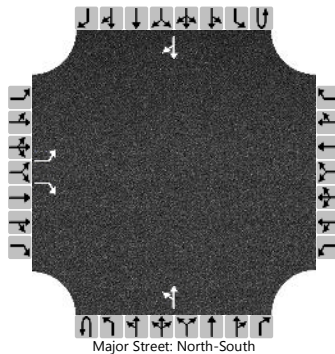
General Information

Analyst	J. Buckholz
Agency/Co.	BUCKHOLZ TRAFFIC
Date Performed	9/7/2019
Analysis Year	2028
Time Analyzed	AM Peak Hour - BUILD
Intersection Orientation	North-South
Project Description	#18-1534

Site Information

Intersection	CR 241/Site Drive
Jurisdiction	Alachua County
East/West Street	Site Drive
North/South Street	CR241
Peak Hour Factor	0.98
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	0	1		0	0	0	0	0	1	0	0	0	1	0
Configuration		L		R						LT						TR
Volume (veh/h)		2		102						33	34				127	1
Percent Heavy Vehicles (%)		2		2						2						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No															
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.42		6.22						4.12						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.52		3.32						2.22						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		2		104						34						
Capacity, c (veh/h)		738		920						1455						
v/c Ratio		0.00		0.11						0.02						
95% Queue Length, Q ₉₅ (veh)		0.0		0.4						0.1						
Control Delay (s/veh)		9.9		9.4						7.5						
Level of Service (LOS)		A		A						A						
Approach Delay (s/veh)	9.4								3.8							
Approach LOS	A															

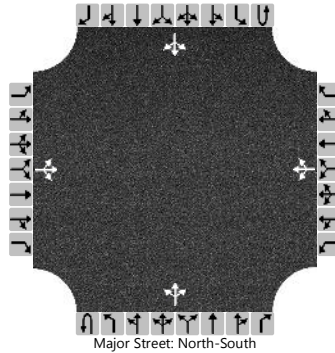
PM PEAK HOUR

HCS7 Two-Way Stop-Control Report

General Information

Analyst	J. Buckholz	Intersection	CR 241/NW 174th Avenue
Agency/Co.	BUCKHOLZ TRAFFIC	Jurisdiction	Alachua County
Date Performed	9/7/2019	East/West Street	NW 174th Avenue
Analysis Year	2028	North/South Street	CR241
Time Analyzed	PM Peak Hour - BUILD	Peak Hour Factor	0.91
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	#18-1534		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	1		0	0	1		7	133	2		0	60	0
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.20		

Delay, Queue Length, and Level of Service

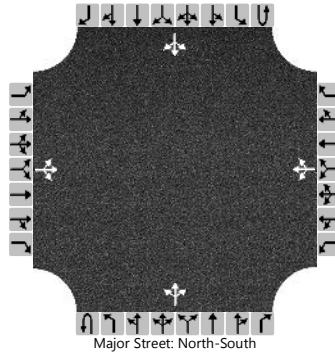
Flow Rate, v (veh/h)			1				1			8				0		
Capacity, c (veh/h)			1004				905			1549				1446		
v/c Ratio			0.00				0.00			0.00				0.00		
95% Queue Length, Q ₉₅ (veh)			0.0				0.0			0.0				0.0		
Control Delay (s/veh)			8.6				9.0			7.3				7.5		
Level of Service (LOS)			A				A			A				A		
Approach Delay (s/veh)	8.6				9.0				0.4				0.0			
Approach LOS	A				A											

HCS7 Two-Way Stop-Control Report

General Information

Analyst	J. Buckholz	Intersection	CR 241/NW 172nd Avenue
Agency/Co.	BUCKHOLZ TRAFFIC	Jurisdiction	Alachua County
Date Performed	9/7/2019	East/West Street	NW 172nd Avenue
Analysis Year	2028	North/South Street	CR241
Time Analyzed	PM Peak Hour - BUILD	Peak Hour Factor	0.91
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	#18-1534		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	1		7	0	0		1	142	9		0	62	0
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			1				8			1				0		
Capacity, c (veh/h)			1001				726			1546				1424		
v/c Ratio			0.00				0.01			0.00				0.00		
95% Queue Length, Q ₉₅ (veh)			0.0				0.0			0.0				0.0		
Control Delay (s/veh)			8.6				10.0			7.3				7.5		
Level of Service (LOS)			A				B			A				A		
Approach Delay (s/veh)	8.6				10.0				0.1				0.0			
Approach LOS	A				B											

HCS7 Two-Way Stop-Control Report

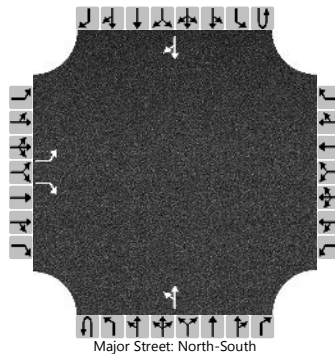
General Information

Analyst	J. Buckholz
Agency/Co.	BUCKHOLZ TRAFFIC
Date Performed	9/7/2019
Analysis Year	2028
Time Analyzed	PM Peak Hour - BUILD
Intersection Orientation	North-South
Project Description	#18-1534

Site Information

Intersection	CR 241/Site Drive
Jurisdiction	Alachua County
East/West Street	Site Drive
North/South Street	CR241
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	0	1		0	0	0	0	0	1	0	0	0	1	0
Configuration		L		R						LT						TR
Volume (veh/h)		1		65						110	152				60	2
Percent Heavy Vehicles (%)		2		2						2						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No															
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.42		6.22						4.12						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.52		3.32						2.22						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		1		71						121						
Capacity, c (veh/h)		500		996						1533						
v/c Ratio		0.00		0.07						0.08						
95% Queue Length, Q ₉₅ (veh)		0.0		0.2						0.3						
Control Delay (s/veh)		12.2		8.9						7.5						
Level of Service (LOS)		B		A						A						
Approach Delay (s/veh)	8.9								3.6							
Approach LOS	A															

APPENDIX E

SIGNAL TIMINGS



EXISTING TIMINGS

Station : 160 - US 441 @ 147th Dr (Alachua) - FYA (Standard File)

Phase [1.1.1]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Walk	0	7	0	7	0	7	0	7	0	0	0	0	0	0	0	0
Ped Clearance	0	28	0	31	0	19	0	31	0	0	0	0	0	0	0	0
Min Green	4	20	4	6	4	20	4	6	0	0	0	0	0	0	0	0
Passage	2	3.5	2	3	2	3.5	2	3	0	0	0	0	0	0	0	0
Max1	15	50	15	30	15	50	15	30	0	0	0	0	0	0	0	0
Max2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yellow	4.8	4.9	3.8	4	4.9	4.9	4	4	0	0	0	0	0	0	0	0
Red	2	2	2.6	3.1	2	2	2.1	3.1	0	0	0	0	0	0	0	0
Red Revert	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Added Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time Before Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Before Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time To Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduce By	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dynamic Max Limit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dynamic Max Step	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto Exit		ON				ON										
Rest In Walk																

Phase Option [1.1.2]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Enable	ON	ON	ON	ON	ON	ON	ON	ON								
Auto Entry				ON				ON								
Non Act1																
Non Act2																
Lock Call		ON				ON										
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry		ON		ON		ON		ON								
Sim Gap Enable		ON				ON										
Guar Passage																
Cond Service																
Add Init Calc																

Alternate Phase Program 1, Calls and Redirection [1.1.6.3]

Entry	Call Phases	From	To	From	To	From	To	From	To	Assigned Ph
1	0 0 0 0 0	0	0	0	0	0	0	0	0	0
2	0 0 0 0 0	0	0	0	0	0	0	0	0	0
3	0 0 0 0 0	0	0	0	0	0	0	0	0	0
4	0 0 0 0 0	0	0	0	0	0	0	0	0	0
5	0 0 0 0 0	0	0	0	0	0	0	0	0	0
6	0 0 0 0 0	0	0	0	0	0	0	0	0	0
7	0 0 0 0 0	0	0	0	0	0	0	0	0	0
8	0 0 0 0 0	0	0	0	0	0	0	0	0	0

Alternate Phase Program 2, Calls and Redirection [1.1.6.3]

Entry	Call Phases	From	To	From	To	From	To	From	To	Assigned Ph
1	0 0 0 0 0	0	0	0	0	0	0	0	0	0
2	0 0 0 0 0	0	0	0	0	0	0	0	0	0
3	0 0 0 0 0	0	0	0	0	0	0	0	0	0
4	0 0 0 0 0	0	0	0	0	0	0	0	0	0
5	0 0 0 0 0	0	0	0	0	0	0	0	0	0
6	0 0 0 0 0	0	0	0	0	0	0	0	0	0
7	0 0 0 0 0	0	0	0	0	0	0	0	0	0
8	0 0 0 0 0	0	0	0	0	0	0	0	0	0

Alternate Phase Program 1, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0

Alternate Phase Program 2, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0

Station : 160 - US 441 @ 147th Dr (Alachua) - FYA (Standard File)

Unit Parameters [1.2.1]

StartUp Flash	Auto Ped Clear	Backup Time	Red Revert	Console Timeout	Tone Disable	Feature Profile	Phase Mode	Diamond Mode	SDLC Retry Time	TS2 Det Faults	Cycle Fault Action	Max Cycle Time	Max Seek Track Time	Max Seek Dwell Time	Enable Run	Local Flash Start	Start Red Time	Disable Init Ped	Yellow 3 Second Disable	Omit Yellow Enable	Free Ring Sequence
	OFF	900	3	10	OFF		STD8	4PH		OFF	ALARM				ON	ON		OFF	OFF	OFF	1

Station ID	Master Station ID	Fallback time	Allow Pencil	Port	System-Up	Sys-Down	PC/Print	Aux 232
160			OFF					

[illegible]

Conflict Lock	Lock Inhibit	Program Card	Use Parent	Canadian Fast Flash
OFF	OFF	OFF	ON	OFF

Overlap	Included Phases					Modifier Phases					Type	Green	Yellow	Red
Overlap 1											NORMAL		3.5	1.5
Overlap 2	1					2					R-T/OTH		5	1.5
Overlap 3											NORMAL		3.5	1.5
Overlap 4	3					4					R-T/OTH		4	1
Overlap 5											NORMAL		3.5	1.5
Overlap 6	5					6					R-T/OTH		5	1.5
Overlap 7											NORMAL		3.5	1.5
Overlap 8	7					8					R-T/OTH		4	1

[illegible][illegible][illegible]

Station : 160 - US 441 @ 147th Dr (Alachua) - FYA (Standard File)

[illegible][illegible]

Channel/SDLC, Parameters [1.3.3]

TOD Dim Enable	Extra Maps Enable	D Connector Enable	Single BIU Map	IO Mode	Preempt or Ext Output
OFF	DEFAULT	TX2_V14	ON	AUTO	EXT

Channel/SDLC, MMU Map [1.3.5]

MMU-to-Controller Channel Map

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Channel/SDLC, Permissive [1.3.4]

Channel	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2
1		1									1	1			
2		1		1							1	1			
3	1								1	1					
4	1		1						1	1					
5				1											
6		1		1											
7			1												
8	1		1												
9															
10															
11															
12															
13			1												
14	1														
15															

Channel/SDLC, Permissive [1.3.7]

SDLC Device	Term/Fac		Detector								MMU								Diag
BIU#	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8			
Present	ON	ON							ON										ON
Peer to Peer																			

Ring Sequence [1.2.4]

Ring	P1	P2	P3	P4	P5	P6	P7	P8
Ring 1	1	2	3	4				
Ring 2	5	6	7	8				
Ring 3								
Ring 4								

City of Gainesville

Timing Sheet

8/26/2019 2:09:58 PM

Station : 160 - US 441 @ 147th Dr (Alachua) - FYA (Standard File)

Alarms, Enable Events [1.6.1]

Event#	Event Enable
1	ON
2	ON
3	ON
4	ON
5	ON
6	ON
7	ON
8	ON
9	
10	ON
11	
12	ON
13	ON
14	ON
15	ON
16	ON
17	ON
18	ON
19	ON
20	ON
21	ON
22	ON
23	ON
24	ON
25	
26	ON

Alarms, Enable Alarms [1.6.4]

Alarm#	Alarm Enable
1	ON
2	ON
3	ON
4	ON
5	ON
6	ON
7	ON
8	ON
9	
10	ON
11	
12	ON
13	ON
14	ON
15	ON
16	ON
17	ON
18	ON
19	ON
20	ON
21	ON
22	ON
23	ON
24	ON
25	
26	ON

Preemption Times[3.1]/Phases[3.2]/Options[3.3]

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Flash						
Override Higher	ON	ON	ON	ON	ON	ON
Flash Dwell						
Link						
Delay						
Min Duration						
Min Green	5	5	5	5	5	5
Min Walk						
Ped Clear	32	32	32	32	32	32
Track Green						
Min Dwell	10	10	10	10	10	10
Max Presence	120	120	120	120	120	120
Track R1						
Track R2						
Track R3						
Track R4						
Dwell P1	4	2	3	4	2	1
Dwell P2	8	6	8	7	5	6
Dwell P3						
Dwell P4						
Dwell P5						
Dwell P6						
Dwell P7						
Dwell P8						

27	ON	27	ON	Dwell P9							
28	ON	28	ON	Dwell P10							
29	ON	29	ON	Dwell P11							
30	ON	30	ON	Dwell P12							
31		31		Dwell Ped1							
32		32		Dwell Ped2							
33		33		Dwell Ped3							
34		34		Dwell Ped4							
35		35		Dwell Ped5							
36		36		Dwell Ped6							
37		37		Dwell Ped7							
38		38		Dwell Ped8							
39		39		Exit R1	4	2	4	4	2	2	
40		40		Exit R2	8	6	8	8	6	6	
41		41		Exit R3							
42		42		Exit R4							
43		43									
44		44									
45		45									
46		46									
47		47									
48		48									
49	ON	49	ON								
50	ON	50	ON								
51	ON	51	ON								
52	ON	52	ON								
53	ON	53	ON								
54	ON	54	ON								
55	ON	55	ON								
56	ON	56	ON								
57	ON	57	ON								
58	ON	58	ON								
59	ON	59									
60		60									
61	ON	61									
62		62									
63		63									
64		64									

Alarms, Parameters [1.4.1] Auto Flash Parameter

Yellow	Red	Mode	Source
4	2	VOT_MON	TEST B

Alarms, Parameters [1.6.7]

Preempt Event Enabled	Pattern Event Enabled
ON	ON

Alarms, Phases/Overlaps [1.4.2]

Auto Flash	1	2	3	4	5	6	7	8	9	10	11	12
Phases	2	6										
Overlaps												

Station : 160 - US 441 @ 147th Dr (Alachua) - FYA (Standard File)

Preemption Times+[3.4]/Overlaps+[3.5]/Options+[3.6]

Preempt	1	2	3	4	5	6
Enable	ON	ON	ON	ON	ON	ON
Type	EMERG	EMERG	EMERG	EMERG	EMERG	EMERG
Skip Track						
Volt Mon Flash						
Coord in Preempt						
Max2						
Return Max/Min	MIN	MIN	MIN	MIN	MIN	MIN
Extend Dwell						
Pattern						
Output Mode	TS2	TS2	TS2	TS2	TS2	TS2
Track Over 1						
Track Over 2						
Track Over 3						
Track Over 4						
Track Over 5						
Track Over 6						
Track Over 7						
Track Over 8						
Track Over 9						
Track Over 10						
Track Over 11						
Track Over 12						
Dwell Over 1			4	8	6	2
Dwell Over 2						
Dwell Over 3						
Dwell Over 4						
Dwell Over 5						
Dwell Over 6						
Dwell Over 7						
Dwell Over 8						
Dwell Over 9						
Dwell Over 10						
Dwell Over 11						

[illegible]

City of Gainesville

Timing Sheet

8/26/2019 2:09:58 PM

Station : 160 - US 441 @ 147th Dr (Alachua) - FYA (Standard File)
TB Coor, Advanced Scheduler [4.3]

[illegible][illegible]

TB Coor, Action Table [4.5]

Action	Pattern	Aux 1	Aux 2	Aux 3	Special 1	Special 2	Special 3	Special 4	Special 5	Special 6	Special 7	Special 8
1	1											
2	2											
3	3											
4	4											
5	5											
6	6											
7	7											
8	8											
9	9											
10	10											
11	11											
12	12											
13	13											
14	14											
15	15											
16	16											
17	17											
18	18											
19	19											
20	20											
21	21											
22	22											
23	23											
24	24											
25	25											
26	26											
27	27											
28	28											
29	29											
30	30											
31	31											
32	32											
33	33											
34	34											
35	35											
36	36											
37	37											
38	38											
39	39											
40	40											
41	41											
42	42											
43	43											
44	44											
45	45											
46	46											
47	47											
48	48											
49												
50												
51												
52												
53												
54												
55												
56												
57												
58												
59												
60												
61												
62												
63												
64												
99												
100	255											



City of Gainesville Traffic Operations

Intersection Timing Sheet

Name **US 441** ☐ **SR 235 (Alachua)** Mod. Date **5/23/2017** Initial Operation Date **____/____/____**
Intersection ID **11** System ID **175** Mod. No. **1**

Part I Actuated Timing Information

Non-coordinated Operation

Phase	1	2	3	4	5	6	7	8	Other(A)	Other(B)
Direction	EBL	WBT	SBL	NBT	WBL	EBT	NBL	SBT		
Initial	4	15	4	6	4	15	4	6		
Passage	2.0	3.5	2.0	4.0	2.0	3.5	2.0	4.0		
Max1	25.0	45.0	20.0	35.0	25.0	45.0	20.0	35.0		
Max2										
Yellow	4.0	4.5	4.0	4.0	4.0	4.5	4.0	4.0		
All Red	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
Walk		7.0		5.0		7.0		7.0		
Ped Clear		26.0		22.0		26.0		22.0		
Recall		MIN				MIN				
Flash Pattern										
Left TurnType										
Detect Type										

Preemption

Fire Station	☐ Active	Emergency Opticom	☐ Active	Preemption Notes
Bridge	☐ Active	Emergency.now	☐ Active	
Rail Road	☐ Active	Other _____	☐ Active	

Part II Coordinated Timing Information

Pattern Tables

PHASE	1	2	3	4	5	6	7	8	Cycle	Offset
Pattern 1	16	49	16	39	17	48	16	39	120	0
Pattern 2	20	45	16	39	20	45	16	39	120	106
Pattern 3	17	50	14	39	17	50	14	39	120	4
Pattern 4	12	46	12	20	12	46	12	20	90	56
Pattern 5										
Pattern 6										
Pattern 7										

Schedule Implementation

Schedule Notes	Day Plan 1 (Mon-Thurs)			Day Plan 2 (Fri)			Day Plan 3 (Sat)		
	Start	End	Pattern	Start	End	Pattern	Start	End	Pattern
	0:00	5:45	FREE	0:00	5:45	FREE	0:00	8:00	FREE
	5:45	6:30	4	5:45	6:30	4	8:00	18:00	1
	6:30	9:00	2	6:30	9:00	2	18:00	21:00	4
	9:00	15:00	1	9:00	15:00	1	21:00	0:00	FREE
	15:00	19:00	3	15:00	19:00	3			
	19:00	20:30	1	19:00	20:30	1			
	20:30	22:00	4	20:30	22:00	4			
	22:00	0:00	FREE	22:00	0:00	FREE			

Schedule Notes	Day Plan 4 (Sun)								
	Start	End	Pattern	Start	End	Pattern	Start	End	Pattern
	0:00	8:00	FREE						
	8:00	18:00	1						
	18:00	21:00	4						
	21:00	0:00	FREE						

Part III Equipment Information

Equipment (N)	Manufacturer	Equipment (C)	Manufacturer	Equipment (V)	Manufacturer
Switch	☐ ITS-Express	Controller	☐ Naztec	CCTV	☐ Bosch
Wireless	☐	CMU/MMU	☐	Video Detection	☐ Iteris
Other _____	☐	Other _____	☐	Other _____	☐

CONSULTANT (FUTURE) TIMINGS

Time of Day Plan

Designed By:	J.M.
Date:	4/19/2019
Checked By:	R. A. A
Date:	4/19/2019

Section:	26020000
Corridor:	US 441
From:	NW 140th St/SR 235
To:	NW 173rd St/CR 235A

TIME OF DAY

Day	Plan	Time		Pattern	Cycle Length
Monday Thru Friday	FREE	0:00	6:00	-	FREE
	AM	6:00	10:00	1	130
	MIDDAY	10:00	16:15	2	130
	PM	16:15	18:15	3	160
	NT	18:15	21:30	4	110
	FREE	21:30	0:00	-	FREE
Saturday	FREE	0:00	7:00	-	FREE
	NT	7:00	9:00	4	110
	WKN OffPk	9:00	12:30	6	130
	WKN	12:30	18:00	5	130
	NT	18:00	21:00	4	110
	FREE	21:00	0:00	-	FREE
Sunday	FREE	0:00	9:00	-	FREE
	NT	9:00	11:00	4	110
	WKN OffPk	11:00	17:30	6	130
	NT	17:30	21:00	4	110
	FREE	21:00	0:00	-	FREE

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION - DISTRICT TWO
US 441 - Signal Retiming
City of Alachua

Designed By:	J.M.		Section	26020000	Mile Post	18.481	Node	3					
Date:	4/19/2019		Sig ID	160	Controller	Naztec 900 TS2	System ID						
Checked By:	R.A.A		Maj. Street	US 441	Orientation	N-S	SOP	10					
Date:	4/19/2019		Min. Street	NW 147th Dr	Orientation	E-W							
Pedestrians													
Movement # Phase Ø)	(Controller	1	2	3	4	5	6	7	8	Notes			
Direction		SBL	NB	WBL	EB	NBL	SB	EBL	WB				
Speed Limit (mph)		45	45	25	30	45	45	30	25				
Vehicle Traversed Width		116	111	109	130	104	109	115	128				
Approach Grades		0.3%	-0.9%	-7.2%	-4.4%	-0.9%	0.3%	-4.4%	-7.2%				
Ped-X (curb to curb)			95		106		64		106				
Crossing Time			28		31		19		31				
Ped-X (button to curb)			6		12		13		13				
Ped-X (button to far curb)			101		118		77		119				
Crossing Time (to far curb)			34		40		26		40				
Controller Timings (seconds)													
Movement # Phase Ø)	(Controller	1	2	3	4	5	6	7	8	Notes			
Direction		SBL	NB	WBL	EB	NBL	SB	EBL	WB				
Turn Type		Prot/Perm		Prot/Perm		Prot/Perm		Prot/Perm					
Min Green		4	20	4	6	4	20	4	6				
Ext		2.0	3.5	2.0	3.0	2.0	3.5	2.0	3.0				
Yellow Change Interval		4.8	4.9	3.8	4.0	4.9	4.8	4.0	3.8				
Red Clearance Interval		2.0	2.0	2.6	2.5	2.0	2.0	2.1	3.1				
Max I		15	50	15	30	15	50	15	30				
Max II													
Walk			7		7		7		7				
Flashing Don't Walk			28		31		19		31				
Min Splits		11.0	42.0	11.0	45.0	11.0	33.0	11.0	45.0				
Detector Memory			ON				ON						
Det. Cross Switch.		ON		ON		ON		ON					
Recall			Min				Min						
CNA													
Coord Phase			YES										
Coordination Timings (seconds)													
Plan	Pattern	C-O-S	Splits							Cycle Length	Offset	Seq	
AM	1		18	75	19	18	18	75	19	18	130	37	1
MIDDAY	2		18	74	18	20	18	74	20	18	130	93	1
PM	3		18	71	19	52	22	67	26	45	160	1	1
PM Alt	7		18	63	18	51	22	59	24	45	150	35	1
NT	4		18	55	19	18	18	55	19	18	110	10	1
WKN	5		18	49	19	44	18	49	18	45	130	99	1
WKN OffPk	6		22	69	19	20	18	73	19	20	130	99	1

Notes

- Offset referenced to end of first through movement 2 & 6
- Program float force-offs
- Program Max Inhibit during coordination

	All Patterns							
Ring-1	1	2	3	4				
Ring-2	5	6	7	8				

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION - DISTRICT TWO
US 441 - Signal Retiming
City of Alachua

Designed By:	J.M.		Section	26020000		Mile Post	17.962		Node	1			
Date:	4/19/2019		Sig ID	175		Controller	Naztec 900 TS2		System ID				
Checked By:	R.A.A		Maj. Street	US 441		Orientation	N-S		SOP	10			
Date:	4/19/2019		Min. Street	NW 140th St/CR 235		Orientation	E-W						
Pedestrians													
Movement # Phase Ø)	(Controller	1	2	3	4	5	6	7	8	Notes			
Direction		SBL	NB	WBL	EB	NBL	SB	EBL	WB				
Speed Limit (mph)		45	45	30	30	45	45	30	30				
Vehicle Traversed Width		96	126	171	161	135	149	173	170				
Approach Grades		-1.0%	0.6%	-7.0%	4.5%	0.6%	-1.0%	4.5%	-7.0%				
Ped-X (curb to curb)			83		116		63		105				
Crossing Time			24		34		18		30				
Ped-X (button to curb)			14		12		16		11				
Ped-X (button to far curb)			97		128		79		116				
Crossing Time (to far curb)			33		43		27		39				
Controller Timings (seconds)													
Movement # Phase Ø)	(Controller	1	2	3	4	5	6	7	8	Notes			
Direction		SBL	NB	WBL	EB	NBL	SB	EBL	WB				
Turn Type		Prot/Perm		Prot/Perm		Prot/Perm		Prot/Perm					
Min Green		4	15	4	6	4	15	4	6				
Ext		2.0	3.5	2.0	9.0	2.0	3.5	2.0	9.0				
Yellow Change Interval		4.9	4.8	4.3	3.7	4.8	4.9	3.7	4.3				
Red Clearance Interval		2.0	2.0	3.4	3.2	2.0	2.0	3.4	3.4				
Max I		25	50	20	35	25	50	20	35				
Max II													
Walk			7		7		7		7				
Flashing Don't Walk			24		34		18		30				
Min Splits		11.0	38.0	12.0	48.0	11.0	32.0	12.0	45.0				
Detector Memory			ON		ON		ON						
Det. Cross Switch.		ON		ON		ON		ON					
Recall			Max				Max		Min				
CNA													
Coord Phase			YES										
Coordination Timings (seconds)													
Plan	Pattern	C-O-S	Splits								Cycle Length	Offset	Seq
AM	1		18	57	20	35	20	55	20	35	130	88	1
MIDDAY	2		18	56	18	38	18	56	19	37	130	19	1
PM	3		18	74	20	48	24	68	23	45	160	150	1
PM Alt	7		18	66	18	48	20	64	21	45	150	147	1
NT	4		18	48	18	26	18	48	21	23	110	73	1
WKN	5		18	57	22	33	18	57	33	22	130	60	1
WKN OffPk	6		19	44	19	48	18	45	22	45	130	60	1

Notes

- Offset referenced to end of first through movement 2 & 6
- Program Max inhibit during coordination
- Program float force-offs

	All Patterns			
Ring-1	1	2	3	4
Ring-2	5	6	7	8

APPENDIX F

SIGNALIZED INTERSECTION CAPACITY CALCULATIONS



AM PEAK HOUR

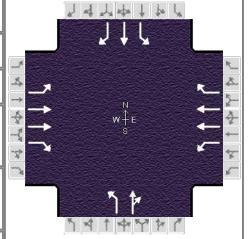
HCS7 Signalized Intersection Results Summary

General Information

Agency	BUCKHOLZ TRAFFIC
Analyst	J. Buckholz
Jurisdiction	Alachua County
Urban Street	US 441
Intersection	US 441/NW 147th Drive
Project Description	2019 AM Peak Hour Traffic

Intersection Information

Duration, h	0.25
Area Type	Other
PHF	0.89
Analysis Period	1> 7:15
File Name	Ex_2019_AM_US441_NW147.xus



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	49	1048	66	34	675	59	93	10	65	38	8	48

Signal Information

Cycle, s	150.0	Reference Phase	2				
Offset, s	0	Reference Point	End				
Uncoordinated	No	Simult. Gap E/W	On				
Force Mode	Fixed	Simult. Gap N/S	Off				
Green	3.2	0.5	101.9	4.6	5.9	7.0	
Yellow	4.8	0.0	4.9	4.0	0.0	4.0	
Red	2.0	0.0	2.0	2.1	0.0	3.1	

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	1.1	4.0	1.1	3.0
Phase Duration, s	10.5	109.3	10.0	108.8	16.6	20.0	10.7	14.1
Change Period, (Y+R c), s	6.9	6.9	6.8	6.9	6.4	7.1	6.1	7.1
Max Allow Headway (MAH), s	2.9	0.0	2.9	0.0	3.0	4.2	3.0	4.2
Queue Clearance Time (g s), s	3.5		3.0		10.3	9.7	5.5	6.9
Green Extension Time (g e), s	0.1	0.0	0.0	0.0	0.1	0.2	0.0	0.1
Phase Call Probability	0.90		0.80		0.99	1.00	0.83	1.00
Max Out Probability	0.00		0.00		0.04	0.00	0.00	0.00

Movement Group Results

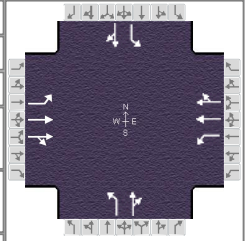
	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (v), veh/h	55	1178	66	38	758	60	104	84		43	9	48
Adjusted Saturation Flow Rate (s), veh/h/ln	1682	1724	1510	1810	1710	1422	1767	1579		1739	1707	1447
Queue Service Time (g s), s	1.5	8.4	2.2	1.0	4.5	2.1	8.3	7.7		3.5	0.8	4.9
Cycle Queue Clearance Time (g c), s	1.5	8.4	2.2	1.0	4.5	2.1	8.3	7.7		3.5	0.8	4.9
Green Ratio (g/C)	0.70	0.68	0.68	0.70	0.68	0.68	0.12	0.09		0.08	0.05	0.05
Capacity (c), veh/h	522	2354	1031	383	2323	966	226	136		128	80	68
Volume-to-Capacity Ratio (X)	0.106	0.500	0.064	0.100	0.326	0.062	0.462	0.619		0.332	0.112	0.712
Back of Queue (Q), ft/ln (95 th percentile)	24.4	95.5	33.6	15.8	61.2	32.3	173.2	154.6		73.7	17.2	103.4
Back of Queue (Q), veh/ln (95 th percentile)	0.9	3.6	1.3	0.6	2.3	1.2	6.8	5.9		2.8	0.6	3.7
Queue Storage Ratio (RQ) (95 th percentile)	0.08	0.00	0.13	0.08	0.00	0.00	0.00	1.03		0.33	0.00	0.26
Uniform Delay (d 1), s/veh	6.9	2.5	7.9	7.2	2.5	8.1	61.1	66.2		65.5	68.5	70.5
Incremental Delay (d 2), s/veh	0.0	0.8	0.1	0.0	0.4	0.1	0.5	4.5		0.6	0.6	12.9
Initial Queue Delay (d 3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Control Delay (d), s/veh	6.9	3.3	8.0	7.3	2.9	8.2	61.6	70.7		66.1	69.1	83.4
Level of Service (LOS)	A	A	A	A	A	A	E	E		E	E	F
Approach Delay, s/veh / LOS	3.7		A	3.4		A	65.7		E	74.7		E
Intersection Delay, s/veh / LOS	11.3						B					

Multimodal Results

	EB	WB	NB	SB
Pedestrian LOS Score / LOS				
Bicycle LOS Score / LOS				

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	BUCKHOLZ TRAFFIC			Duration, h	0.25
Analyst	J. Buckholz	Analysis Date	2/22/2015	Area Type	Other
Jurisdiction	Alachua County	Time Period	Weekday AM Peak Hour	PHF	0.90
Urban Street	US 441	Analysis Year	2019 Existing Traffic	Analysis Period	1> 7:15
Intersection	US 441/CR 235	File Name	Ex_2019_AM_US441_CR235.xus		
Project Description	2019 AM Peak Hour Traffic				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	63	1048	11	99	460	50	104	141	82	113	214	38

Signal Information												
Cycle, s	120.0	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	3.9	2.0	61.9	8.4	0.3	22.9		
				Yellow	4.0	0.0	4.5	4.0	0.0	4.0		
Force Mode	Fixed	Simult. Gap N/S	Off	Red	1.0	0.0	1.0	1.0	0.0	1.0		

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Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	4.0
Phase Duration, s	8.9	67.4	10.9	69.4	13.4	27.9	13.8	28.2
Change Period, (Y+R _c), s	5.0	5.5	5.0	5.5	5.0	5.0	5.0	5.0
Max Allow Headway (MAH), s	2.9	0.0	2.9	0.0	3.0	5.0	3.0	4.9
Queue Clearance Time (g _s), s	4.2		5.9		8.6	20.3	8.9	22.0
Green Extension Time (g _e), s	0.1	0.0	0.1	0.0	0.0	1.1	0.0	1.2
Phase Call Probability	0.90		0.97		0.98	1.00	0.98	1.00
Max Out Probability	0.00		0.00		1.00	0.01	1.00	0.02

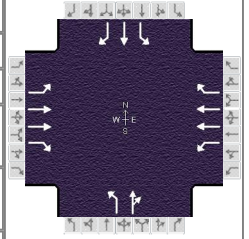
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (v), veh/h	70	589	587	110	287	279	116	248		126	280	
Adjusted Saturation Flow Rate (s), veh/h/ln	1767	1826	1819	1570	1811	1748	1668	1560		1739	1633	
Queue Service Time (g_s), s	2.2	21.2	21.4	3.9	10.6	10.7	6.6	18.3		6.9	20.0	
Cycle Queue Clearance Time (g_c), s	2.2	21.2	21.4	3.9	10.6	10.7	6.6	18.3		6.9	20.0	
Green Ratio (g/C)	0.55	0.52	0.52	0.57	0.53	0.53	0.26	0.19		0.26	0.19	
Capacity (c), veh/h	475	942	939	279	965	931	188	298		229	316	
Volume-to-Capacity Ratio (X)	0.147	0.626	0.626	0.394	0.298	0.300	0.615	0.832		0.548	0.886	
Back of Queue (Q), ft/ln (95 th percentile)	38.8	289.6	298.3	67.1	202.3	212	135.2	351		139	400.8	
Back of Queue (Q), veh/ln (95 th percentile)	1.5	11.1	11.2	2.4	7.7	7.6	5.0	12.4		5.3	14.3	
Queue Storage Ratio (RQ) (95 th percentile)	0.19	0.00	0.00	0.45	0.00	0.00	0.90	0.00		0.93	0.00	
Uniform Delay (d_1), s/veh	13.3	12.4	12.5	14.8	15.6	15.6	37.3	46.7		36.6	47.1	
Incremental Delay (d_2), s/veh	0.1	3.1	3.1	0.3	0.8	0.8	1.7	9.2		0.8	13.7	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Control Delay (d), s/veh	13.3	15.5	15.7	15.1	16.4	16.4	39.0	55.9		37.4	60.8	
Level of Service (LOS)	B	B	B	B	B	B	D	E		D	E	
Approach Delay, s/veh / LOS	15.5	B		16.2	B		50.5	D		53.6	D	
Intersection Delay, s/veh / LOS	26.1						C					

Multimodal Results	EB			WB			NB			SB		
Pedestrian LOS Score / LOS												
Bicycle LOS Score / LOS												

HCS7 Signalized Intersection Results Summary

General Information

Agency	BUCKHOLZ TRAFFIC			Duration, h	0.25
Analyst	J. Buckholz	Analysis Date	2/22/2015	Area Type	Other
Jurisdiction	Alachua County	Time Period	Weekday AM Peak Hour	PHF	0.89
Urban Street	US 441	Analysis Year	2028 BUILD Traffic	Analysis Period	1> 7:15
Intersection	US 441/NW 147th Drive	File Name	2028_B_AM_US441_NW147.xus		
Project Description	2028 AM BUILD Peak Hour Traffic				



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	99	1609	101	53	1035	113	143	20	99	131	23	146

Signal Information

Cycle, s	130.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On								
Force Mode	Fixed	Simult. Gap N/S	Off								
				Green	3.5	1.9	73.8	11.8	0.2	11.4	
				Yellow	4.9	0.0	4.9	3.8	0.0	4.0	
				Red	2.0	0.0	2.0	2.6	0.0	3.1	

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	1.1	4.0	1.1	3.0
Phase Duration, s	12.3	82.6	10.4	80.7	18.5	18.8	18.2	18.5
Change Period, (Y+R _c), s	6.8	6.9	6.9	6.9	5.9	7.1	6.4	7.1
Max Allow Headway (MAH), s	2.9	0.0	2.9	0.0	3.0	4.2	3.0	4.2
Queue Clearance Time (g _s), s	5.6		3.8		12.6	12.9	11.9	13.4
Green Extension Time (g _e), s	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability	0.98		0.88		1.00	1.00	1.00	1.00
Max Out Probability	0.02		0.00		1.00	1.00	1.00	1.00

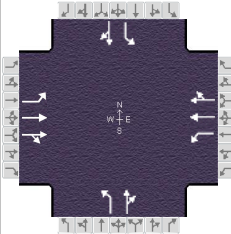
Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (v), veh/h	111	1808	102	60	1163	115	161	134		147	26	147
Adjusted Saturation Flow Rate (s), veh/h/ln	1682	1724	1510	1810	1710	1422	1767	1588		1739	1707	1447
Queue Service Time (g _s), s	3.6	50.7	3.9	1.8	19.7	4.9	10.6	10.9		9.9	1.8	11.4
Cycle Queue Clearance Time (g _c), s	3.6	50.7	3.9	1.8	19.7	4.9	10.6	10.9		9.9	1.8	11.4
Green Ratio (g/C)	0.61	0.58	0.58	0.59	0.57	0.57	0.18	0.09		0.18	0.09	0.09
Capacity (c), veh/h	317	2007	879	151	1940	807	328	143		214	150	127
Volume-to-Capacity Ratio (X)	0.351	0.901	0.116	0.394	0.599	0.142	0.490	0.938		0.689	0.172	1.158
Back of Queue (Q), ft/ln (95 th percentile)	61.3	463.6	63.7	37.8	237.6	79.9	212.2	282.1		214.1	40.3	394.2
Back of Queue (Q), veh/ln (95 th percentile)	2.3	17.7	2.4	1.5	9.0	2.9	8.3	10.8		8.2	1.5	14.3
Queue Storage Ratio (RQ) (95 th percentile)	0.20	0.00	0.25	0.19	0.00	0.00	0.00	1.88		0.95	0.00	0.99
Uniform Delay (d ₁), s/veh	12.6	11.8	12.2	23.9	9.2	13.2	47.6	58.8		48.4	54.9	59.3
Incremental Delay (d ₂), s/veh	0.2	7.0	0.3	0.6	1.4	0.4	0.4	56.8		6.6	0.5	128.5
Initial Queue Delay (d ₃), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Control Delay (d), s/veh	12.8	18.8	12.4	24.5	10.6	13.6	48.0	115.6		55.0	55.5	187.8
Level of Service (LOS)	B	B	B	C	B	B	D	F		D	E	F
Approach Delay, s/veh / LOS	18.1		B	11.5		B	78.7		E	116.0		F
Intersection Delay, s/veh / LOS	28.3						C					

Multimodal Results

	EB	WB	NB	SB
Pedestrian LOS Score / LOS				
Bicycle LOS Score / LOS				

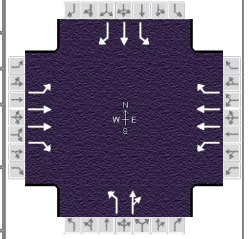
HCS7 Signalized Intersection Results Summary

General Information					Intersection Information														
Agency	BUCKHOLZ TRAFFIC					Duration, h		0.25											
Analyst	J. Buckholz	Analysis Date	2/22/2015		Area Type		Other												
Jurisdiction	Alachua County	Time Period	Weekday AM Peak Hour		PHF		0.90												
Urban Street	US 441	Analysis Year	2028 BUILD Traffic		Analysis Period		1> 7:15												
Intersection	US 441/CR 235	File Name	2028_B_AM_US441_CR235.xus																
Project Description	2028 AM BUILD Peak Hour Traffic																		
																			
Demand Information				EB			WB			NB			SB						
Approach Movement				L	T	R	L	T	R	L	T	R	L	T	R				
Demand (v), veh/h				102	1771	25	161	768	91	173	252	133	223	412	62				
Signal Information																			
Cycle, s	130.0	Reference Phase	2																
Offset, s	0	Reference Point	End																
Uncoordinated	No	Simult. Gap E/W	On	Green	6.8	0.3	52.4	13.3	1.7	30.0									
				Yellow	4.0	4.0	4.5	4.0	0.0	4.0									
Force Mode	Fixed	Simult. Gap N/S	Off	Red	1.0	1.0	1.0	1.0	0.0	1.0									
Timer Results				EBL		EBT		WBL		WBT		NBL		NBT		SBL		SBT	
Assigned Phase				1		6		5		2		7		4		3		8	
Case Number				1.1		4.0		1.1		4.0		1.1		4.0		1.1		4.0	
Phase Duration, s				11.8		57.9		17.1		63.2		18.3		35.0		20.0		36.7	
Change Period, (Y+R c), s				5.0		5.5		5.0		5.5		5.0		5.0		5.0		5.0	
Max Allow Headway (MAH), s				2.9		0.0		2.9		0.0		3.0		5.0		3.0		4.9	
Queue Clearance Time (g s), s				6.8				12.0				13.3		32.0		16.3		33.7	
Green Extension Time (g e), s				0.1		0.0		0.1		0.0		0.1		0.0		0.0		0.0	
Phase Call Probability				0.98				1.00				1.00		1.00		1.00		1.00	
Max Out Probability				0.01				0.84				1.00		1.00		1.00		1.00	
Movement Group Results				EB			WB			NB			SB						
Approach Movement				L	T	R	L	T	R	L	T	R	L	T	R				
Assigned Movement				1	6	16	5	2	12	7	4	14	3	8	18				
Adjusted Flow Rate (v), veh/h				113	998	998	179	486	468	192	428		248	527					
Adjusted Saturation Flow Rate (s), veh/h/ln				1767	1826	1817	1570	1811	1743	1668	1566		1739	1639					
Queue Service Time (g s), s				4.8	52.4	52.4	10.0	26.5	26.5	11.3	30.0		14.3	31.7					
Cycle Queue Clearance Time (g c), s				4.8	52.4	52.4	10.0	26.5	26.5	11.3	30.0		14.3	31.7					
Green Ratio (g/C)				0.46	0.40	0.40	0.51	0.44	0.44	0.33	0.23		0.35	0.24					
Capacity (c), veh/h				279	737	733	201	804	774	226	361		256	399					
Volume-to-Capacity Ratio (X)				0.407	1.354	1.361	0.891	0.605	0.605	0.849	1.184		0.968	1.319					
Back of Queue (Q), ft/ln (95 th percentile)				90.9	2055.6	2125	325.7	454.6	471.6	265.7	934.2		374.9	1284.7					
Back of Queue (Q), veh/ln (95 th percentile)				3.6	79.1	79.9	11.5	17.4	16.8	9.8	33.1		14.4	45.9					
Queue Storage Ratio (RQ) (95 th percentile)				0.45	0.00	0.00	2.17	0.00	0.00	1.77	0.00		2.50	0.00					
Uniform Delay (d 1), s/veh				23.2	30.0	30.3	36.8	27.5	27.5	36.1	50.0		36.6	49.2					
Incremental Delay (d 2), s/veh				0.4	168.3	171.3	26.3	3.4	3.5	20.2	107.5		46.9	160.2					
Initial Queue Delay (d 3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0					
Control Delay (d), s/veh				23.5	198.4	201.6	63.1	30.9	31.0	56.3	157.5		83.5	209.4					
Level of Service (LOS)				C	F	F	E	C	C	E	F		F	F					
Approach Delay, s/veh / LOS				190.5	F		36.0	D		126.1	F		169.1	F					
Intersection Delay, s/veh / LOS				140.6						F									
Multimodal Results				EB			WB			NB			SB						
Pedestrian LOS Score / LOS																			
Bicycle LOS Score / LOS																			

HCS7 Signalized Intersection Results Summary

General Information

Agency	BUCKHOLZ TRAFFIC			Duration, h	0.25
Analyst	J. Buckholz	Analysis Date	2/22/2015	Area Type	Other
Jurisdiction	Alachua County	Time Period	Weekday AM Peak Hour	PHF	0.89
Urban Street	US 441	Analysis Year	2028 BUILD - OptimizedTimings	Analysis Period	1> 7:15
Intersection	US 441/NW 147th Drive	File Name	OPT_2028_B_AM_US441_NW147.xus		
Project Description	2028 AM BUILD Peak Hour Traffic				



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	99	1609	101	53	1035	113	143	20	99	131	23	146

Signal Information

Cycle, s	130.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On								
Force Mode	Fixed	Simult. Gap N/S	Off								
				Green	3.6	2.3	69.4	11.7	0.3	15.6	
				Yellow	4.9	0.0	4.9	3.8	0.0	4.0	
				Red	2.0	0.0	2.0	2.6	0.0	3.1	

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	1.1	4.0	1.1	3.0
Phase Duration, s	12.7	78.5	10.5	76.3	18.3	22.9	18.1	22.7
Change Period, (Y+R c), s	6.8	6.9	6.9	6.9	5.9	7.1	6.4	7.1
Max Allow Headway (MAH), s	2.9	0.0	2.9	0.0	3.0	4.2	3.0	4.2
Queue Clearance Time (g s), s	5.9		3.9		12.2	12.5	11.5	15.0
Green Extension Time (g e), s	0.2	0.0	0.1	0.0	0.3	0.5	0.2	0.6
Phase Call Probability	0.98		0.88		1.00	1.00	1.00	1.00
Max Out Probability	0.00		0.00		0.00	0.00	0.00	0.00

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (v), veh/h	111	1808	102	60	1163	115	161	134		147	26	147
Adjusted Saturation Flow Rate (s), veh/h/ln	1682	1724	1510	1810	1710	1422	1767	1588		1739	1707	1447
Queue Service Time (g s), s	3.9	60.1	4.2	1.9	23.3	5.3	10.2	10.5		9.5	1.8	13.0
Cycle Queue Clearance Time (g c), s	3.9	60.1	4.2	1.9	23.3	5.3	10.2	10.5		9.5	1.8	13.0
Green Ratio (g/C)	0.58	0.55	0.55	0.56	0.53	0.53	0.22	0.12		0.21	0.12	0.12
Capacity (c), veh/h	293	1900	832	124	1825	759	370	194		243	205	173
Volume-to-Capacity Ratio (X)	0.379	0.951	0.123	0.480	0.637	0.151	0.434	0.691		0.606	0.126	0.849
Back of Queue (Q), ft/ln (95 th percentile)	67.8	643.6	69.7	43.8	281.3	87.8	205	205.4		195.7	38.5	248.7
Back of Queue (Q), veh/ln (95 th percentile)	2.5	24.6	2.6	1.8	10.7	3.1	8.0	7.9		7.5	1.4	9.0
Queue Storage Ratio (RQ) (95 th percentile)	0.23	0.00	0.28	0.22	0.00	0.00	0.00	1.37		0.87	0.00	0.62
Uniform Delay (d 1), s/veh	15.1	15.7	14.1	29.9	12.1	15.4	44.0	54.7		45.0	51.1	56.1
Incremental Delay (d 2), s/veh	0.3	12.0	0.3	1.1	1.7	0.4	0.3	4.4		0.9	0.3	10.8
Initial Queue Delay (d 3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Control Delay (d), s/veh	15.4	27.7	14.4	31.0	13.8	15.8	44.3	59.1		45.9	51.4	66.9
Level of Service (LOS)	B	C	B	C	B	B	D	E		D	D	E
Approach Delay, s/veh / LOS	26.3		C	14.8		B	51.0		D	56.0		E
Intersection Delay, s/veh / LOS	26.7						C					

Multimodal Results

	EB	WB	NB	SB
Pedestrian LOS Score / LOS				
Bicycle LOS Score / LOS				

PM PEAK HOUR

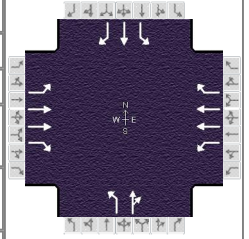
HCS7 Signalized Intersection Results Summary

General Information

Agency	BUCKHOLZ TRAFFIC
Analyst	J. Buckholz
Jurisdiction	Alachua County
Urban Street	US 441
Intersection	US 441/NW 147th Drive
Project Description	2019 PM Peak Hour Traffic

Intersection Information

Duration, h	0.25
Area Type	Other
PHF	0.93
Analysis Period	1> 16:45
File Name	Ex_2019_PM_US441_NW147.xus



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	78	711	127	98	1279	77	172	23	64	58	18	115

Signal Information

Cycle, s	160.0	Reference Phase	2											
Offset, s	0	Reference Point	End	Green	4.6	0.7	101.3	6.7	6.2	13.5				
Uncoordinated	No	Simult. Gap E/W	On	Yellow	4.9	0.0	4.9	4.0	0.0	4.0				
Force Mode	Fixed	Simult. Gap N/S	Off	Red	2.0	0.0	2.0	2.1	0.0	3.1				

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	1.1	4.0	1.1	3.0
Phase Duration, s	11.5	108.2	12.2	108.9	19.0	26.8	12.8	20.6
Change Period, (Y+R c), s	6.9	6.9	6.8	6.9	6.4	7.1	6.1	7.1
Max Allow Headway (MAH), s	2.9	0.0	2.9	0.0	3.0	4.1	3.0	4.2
Queue Clearance Time (g s), s	4.6		5.3		14.6	10.3	7.1	13.0
Green Extension Time (g e), s	0.1	0.0	0.1	0.0	0.0	0.3	0.1	0.4
Phase Call Probability	0.98		0.99		1.00	1.00	0.94	1.00
Max Out Probability	0.00		0.00		1.00	0.00	0.00	0.00

Movement Group Results

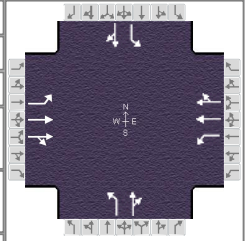
	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (v), veh/h	84	765	123	105	1375	74	185	94		62	19	111
Adjusted Saturation Flow Rate (s), veh/h/ln	1795	1752	1585	1795	1752	1572	1781	1678		1781	1900	1585
Queue Service Time (g s), s	2.6	7.7	4.9	3.3	19.8	2.9	12.6	8.3		5.1	1.5	11.0
Cycle Queue Clearance Time (g c), s	2.6	7.7	4.9	3.3	19.8	2.9	12.6	8.3		5.1	1.5	11.0
Green Ratio (g/C)	0.66	0.63	0.63	0.67	0.64	0.64	0.17	0.12		0.13	0.08	0.08
Capacity (c), veh/h	296	2219	1004	520	2234	1002	289	206		196	160	133
Volume-to-Capacity Ratio (X)	0.283	0.344	0.122	0.203	0.616	0.074	0.639	0.453		0.318	0.121	0.831
Back of Queue (Q), ft/ln (95 th percentile)	46.3	111.6	80.4	57.3	211.5	46.9	57.6	164.9		107	34	218.7
Back of Queue (Q), veh/ln (95 th percentile)	1.8	4.3	3.2	2.3	8.2	1.8	2.3	6.6		4.2	1.4	8.6
Queue Storage Ratio (RQ) (95 th percentile)	0.15	0.00	0.32	0.29	0.00	0.00	0.00	1.10		0.48	0.00	0.55
Uniform Delay (d 1), s/veh	11.3	5.2	11.7	9.6	5.8	11.0	61.5	65.2		63.4	67.8	72.2
Incremental Delay (d 2), s/veh	0.2	0.4	0.2	0.1	1.3	0.1	3.6	1.6		0.3	0.3	12.3
Initial Queue Delay (d 3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Control Delay (d), s/veh	11.5	5.6	11.9	9.7	7.1	11.2	65.2	66.7		63.7	68.1	84.5
Level of Service (LOS)	B	A	B	A	A	B	E	E		E	E	F
Approach Delay, s/veh / LOS	6.9		A	7.5		A	65.7		E	76.1		E
Intersection Delay, s/veh / LOS	17.1						B					

Multimodal Results

	EB	WB	NB	SB
Pedestrian LOS Score / LOS				
Bicycle LOS Score / LOS				

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	BUCKHOLZ TRAFFIC			Duration, h	0.25
Analyst	J. Buckholz	Analysis Date	2/22/2015	Area Type	Other
Jurisdiction	Alachua County	Time Period	Weekday PM Peak Hour	PHF	0.92
Urban Street	US 441	Analysis Year	2019 Existing Traffic	Analysis Period	1> 16:45
Intersection	US 441/CR 235	File Name	Ex_2019_PM_US441_CR235.xus		
Project Description	2019 PM Peak Hour Traffic				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	151	519	162	166	1176	88	136	150	77	61	156	82

Signal Information												
Cycle, s	120.0	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	7.3	0.7	61.8	5.0	4.0	20.7		
				Yellow	4.0	0.0	4.5	4.0	0.0	4.0		
Force Mode	Fixed	Simult. Gap N/S	Off	Red	1.0	0.0	1.0	1.0	0.0	1.0		

																																																																																																																																																																																
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Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	4.0
Phase Duration, s	12.3	67.3	13.0	68.0	14.0	29.7	10.0	25.7
Change Period, (Y+R c), s	5.0	5.5	5.0	5.5	5.0	5.0	5.0	5.0
Max Allow Headway (MAH), s	2.9	0.0	2.9	0.0	3.0	5.0	3.0	5.0
Queue Clearance Time (g s), s	7.1		7.8		10.3	19.0	5.6	19.6
Green Extension Time (g e), s	0.2	0.0	0.2	0.0	0.0	1.2	0.0	1.1
Phase Call Probability	1.00		1.00		0.99	1.00	0.89	1.00
Max Out Probability	0.00		0.00		1.00	0.00	0.50	0.01

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (v), veh/h	164	385	355	180	694	680	148	247		66	259	
Adjusted Saturation Flow Rate (s), veh/h/ln	1795	1856	1704	1739	1856	1810	1731	1629		1813	1722	
Queue Service Time (g_s), s	5.1	10.8	13.2	5.8	34.3	34.6	8.3	17.0		3.6	17.6	
Cycle Queue Clearance Time (g_c), s	5.1	10.8	13.2	5.8	34.3	34.6	8.3	17.0		3.6	17.6	
Green Ratio (g/C)	0.58	0.52	0.52	0.58	0.52	0.52	0.26	0.21		0.21	0.17	
Capacity (c), veh/h	255	956	877	460	967	943	218	335		190	297	
Volume-to-Capacity Ratio (X)	0.643	0.403	0.405	0.392	0.718	0.721	0.678	0.736		0.349	0.872	
Back of Queue (Q), ft/ln (95 th percentile)	89.7	182	221.9	98.6	546.4	589.2	183.2	315.8		76	358.9	
Back of Queue (Q), veh/ln (95 th percentile)	3.6	7.1	8.3	3.8	21.3	21.0	7.1	11.7		2.9	13.3	
Queue Storage Ratio (RQ) (95 th percentile)	0.45	0.00	0.00	0.66	0.00	0.00	1.22	0.00		0.51	0.00	
Uniform Delay (d_1), s/veh	21.0	10.8	14.2	12.7	22.0	22.0	38.0	44.6		39.5	48.4	
Incremental Delay (d_2), s/veh	1.0	1.3	1.4	0.2	4.6	4.8	6.7	4.4		0.4	12.0	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Control Delay (d), s/veh	22.0	12.1	15.6	12.9	26.6	26.8	44.7	49.0		39.9	60.3	
Level of Service (LOS)	C	B	B	B	C	C	D	D		D	E	
Approach Delay, s/veh / LOS	15.3	B		25.1	C		47.4	D		56.2	E	
Intersection Delay, s/veh / LOS	28.2						C					

Multimodal Results	EB			WB			NB			SB		
Pedestrian LOS Score / LOS												
Bicycle LOS Score / LOS												

HCS7 Signalized Intersection Results Summary

General Information

Agency BUCKHOLZ TRAFFIC

Analyst J. Buckholz

Jurisdiction Alachua County

Urban Street US 441

Intersection US 441/NW 147th Drive

Project Description 2028 PM BUILD Peak Hour Traffic

Intersection Information

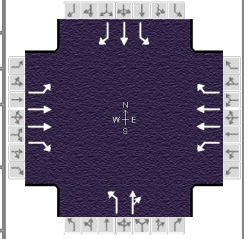
Duration, h 0.25

Area Type Other

PHF 0.93

Analysis Period 1> 16:45

File Name 2028_B_PM_US441_NW147.xus



Demand Information

Approach Movement	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	199	1091	195	150	1962	187	264	54	98	128	39	224

Signal Information

Cycle, s	160.0	Reference Phase	2											
Offset, s	0	Reference Point	End	Green	9.9	0.3	71.8	12.3	1.2	24.3				
Uncoordinated	No	Simult. Gap E/W	On	Yellow	4.8	4.9	4.9	4.0	3.8	4.0				
Force Mode	Fixed	Simult. Gap N/S	Off	Red	2.0	2.0	2.0	2.1	2.6	3.1				

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	1.1	4.0	1.1	3.0
Phase Duration, s	23.9	85.9	16.7	78.7	26.0	39.0	18.4	31.4
Change Period, (Y+R c), s	6.9	6.9	6.8	6.9	6.4	7.1	6.1	7.1
Max Allow Headway (MAH), s	2.9	0.0	2.9	0.0	3.0	4.1	3.0	4.2
Queue Clearance Time (g s), s	16.8		9.7		21.6	15.6	12.3	23.5
Green Extension Time (g e), s	0.2	0.0	0.2	0.0	0.0	0.5	0.0	0.8
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	0.00		0.00		1.00	0.00	1.00	0.00

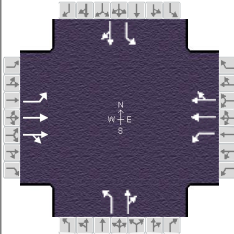
Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (v), veh/h	214	1173	188	161	2110	181	284	163		138	42	217
Adjusted Saturation Flow Rate (s), veh/h/ln	1795	1752	1585	1795	1752	1572	1781	1702		1781	1900	1585
Queue Service Time (g s), s	14.8	33.1	10.9	7.7	71.8	11.4	19.6	13.6		10.3	3.1	21.5
Cycle Queue Clearance Time (g c), s	14.8	33.1	10.9	7.7	71.8	11.4	19.6	13.6		10.3	3.1	21.5
Green Ratio (g/C)	0.57	0.49	0.49	0.51	0.45	0.45	0.29	0.20		0.23	0.15	0.15
Capacity (c), veh/h	236	1730	782	289	1573	706	444	339		307	289	241
Volume-to-Capacity Ratio (X)	0.908	0.678	0.241	0.559	1.341	0.256	0.639	0.482		0.449	0.145	0.902
Back of Queue (Q), ft/ln (95 th percentile)	376.3	442.8	192	148.2	2280.1	202.2	37.9	250.9		209.8	68	382
Back of Queue (Q), veh/ln (95 th percentile)	14.9	17.2	7.6	5.9	88.4	7.9	1.5	10.0		8.3	2.7	15.0
Queue Storage Ratio (RQ) (95 th percentile)	1.25	0.00	0.77	0.74	0.00	0.00	0.00	1.67		0.93	0.00	0.95
Uniform Delay (d 1), s/veh	54.4	19.5	23.3	24.7	32.1	27.5	48.9	56.7		51.8	58.8	66.7
Incremental Delay (d 2), s/veh	19.6	2.2	0.7	0.6	158.0	0.9	2.4	1.1		0.4	0.2	16.9
Initial Queue Delay (d 3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Control Delay (d), s/veh	74.0	21.7	24.0	25.3	190.1	28.3	51.3	57.8		52.2	59.1	83.5
Level of Service (LOS)	E	C	C	C	F	C	D	E		D	E	F
Approach Delay, s/veh / LOS	29.1	C		167.4	F		53.7	D		70.1	E	
Intersection Delay, s/veh / LOS	104.3						F					

Multimodal Results

	EB	WB	NB	SB
Pedestrian LOS Score / LOS				
Bicycle LOS Score / LOS				

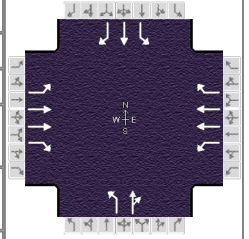
HCS7 Signalized Intersection Results Summary

General Information						Intersection Information													
Agency	BUCKHOLZ TRAFFIC					Duration, h	0.25												
Analyst	J. Buckholz	Analysis Date	2/22/2015			Area Type	Other												
Jurisdiction	Alachua County	Time Period	Weekday PM Peak Hour			PHF	0.92												
Urban Street	US 441	Analysis Year	2028 BUILD Traffic			Analysis Period	1> 16:45												
Intersection	US 441/CR 235	File Name	2028_B_PM_US441_CR235.xus																
Project Description	2028 PM BUILD Peak Hour Traffic																		
																			
Demand Information				EB			WB			NB			SB						
Approach Movement				L	T	R	L	T	R	L	T	R	L	T	R				
Demand (v), veh/h				246	872	271	270	1975	185	230	313	126	120	298	133				
Signal Information																			
Cycle, s	160.0	Reference Phase	2																
Offset, s	0	Reference Point	End																
Uncoordinated	No	Simult. Gap E/W	On	Green	11.1	6.0	61.1	10.7	4.6	37.3									
				Yellow	4.9	0.0	4.9	4.3	0.0	4.3									
Force Mode	Fixed	Simult. Gap N/S	Off	Red	2.0	0.0	2.0	3.4	0.0	3.4									
Timer Results				EBL		EBT		WBL		WBT		NBL		NBT		SBL		SBT	
Assigned Phase				1		6		5		2		7		4		3		8	
Case Number				1.1		4.0		1.1		4.0		1.1		4.0		1.1		4.0	
Phase Duration, s				18.0		68.0		24.0		74.0		23.0		49.6		18.4		45.0	
Change Period, (Y+R c), s				6.9		6.9		6.8		6.9		7.1		7.7		7.7		7.7	
Max Allow Headway (MAH), s				2.9		0.0		2.9		0.0		3.0		10.0		3.0		10.0	
Queue Clearance Time (g s), s				13.1				19.2				17.9		43.9		10.7		39.3	
Green Extension Time (g e), s				0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
Phase Call Probability				1.00				1.00				1.00		1.00		1.00		1.00	
Max Out Probability				1.00				1.00				1.00		1.00		1.00		1.00	
Movement Group Results				EB			WB			NB			SB						
Approach Movement				L	T	R	L	T	R	L	T	R	L	T	R				
Assigned Movement				1	6	16	5	2	12	7	4	14	3	8	18				
Adjusted Flow Rate (v), veh/h				267	646	597	293	1174	1174	250	477		130	468					
Adjusted Saturation Flow Rate (s), veh/h/ln				1795	1856	1704	1739	1856	1800	1731	1643		1813	1732					
Queue Service Time (g s), s				11.1	51.0	52.5	17.2	67.1	67.1	15.9	41.9		8.7	37.3					
Cycle Queue Clearance Time (g c), s				11.1	51.0	52.5	17.2	67.1	67.1	15.9	41.9		8.7	37.3					
Green Ratio (g/C)				0.45	0.38	0.38	0.50	0.42	0.42	0.33	0.26		0.30	0.23					
Capacity (c), veh/h				170	709	651	255	778	755	217	431		166	404					
Volume-to-Capacity Ratio (X)				1.577	0.911	0.917	1.149	1.509	1.555	1.152	1.108		0.786	1.160					
Back of Queue (Q), ft/ln (95 th percentile)				799.1	822.8	859.5	678.5	3112.6	3518.2	600.9	1005.7		265.6	1050.3					
Back of Queue (Q), veh/ln (95 th percentile)				31.7	32.1	32.3	26.1	121.6	125.6	23.3	37.2		10.2	38.9					
Queue Storage Ratio (RQ) (95 th percentile)				4.00	0.00	0.00	4.52	0.00	0.00	4.01	0.00		1.77	0.00					
Uniform Delay (d 1), s/veh				49.7	36.8	41.9	47.1	46.5	46.5	48.3	59.0		46.6	61.4					
Incremental Delay (d 2), s/veh				286.0	18.0	19.9	102.6	235.5	256.3	108.2	76.1		15.8	96.2					
Initial Queue Delay (d 3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0					
Control Delay (d), s/veh				335.7	54.8	61.8	149.7	282.0	302.7	156.5	135.2		62.4	157.5					
Level of Service (LOS)				F	D	E	F	F	F	F	F		E	F					
Approach Delay, s/veh / LOS				107.3		F		276.5		F		142.5		F		136.8		F	
Intersection Delay, s/veh / LOS				196.8						F									
Multimodal Results				EB			WB			NB			SB						
Pedestrian LOS Score / LOS																			
Bicycle LOS Score / LOS																			

HCS7 Signalized Intersection Results Summary

General Information

Agency	BUCKHOLZ TRAFFIC			Duration, h	0.25
Analyst	J. Buckholz	Analysis Date	2/22/2015	Area Type	Other
Jurisdiction	Alachua County	Time Period	Weekday PM Peak Hour	PHF	0.93
Urban Street	US 441	Analysis Year	2028 BUILD - OptimizedTimings	Analysis Period	16:45 - 18:00
Intersection	US 441/NW 147th Drive	File Name	OPT_2028_B_PM_US441_NW147.xus		
Project Description	2028 PM BUILD Peak Hour Traffic				



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	199	1091	195	150	1962	187	264	54	98	128	39	224

Signal Information

Cycle, s	160.0	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	9.2	1.0	79.6	11.6	0.5	23.9		
Force Mode	Fixed	Simult. Gap N/S	Off	Yellow	4.8	4.9	4.9	3.8	0.0	4.0		
				Red	2.0	2.0	2.0	2.6	0.0	3.1		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	1.1	4.0	1.1	3.0
Phase Duration, s	24.0	94.4	16.0	86.5	18.0	31.0	18.5	31.5
Change Period, (Y+R c), s	6.9	6.9	6.8	6.9	6.4	7.1	6.1	7.1
Max Allow Headway (MAH), s	2.9	0.0	2.9	0.0	3.0	4.1	3.0	4.2
Queue Clearance Time (g s), s	16.8		9.0		13.6	16.5	12.4	23.5
Green Extension Time (g e), s	0.3	0.0	0.2	0.0	0.0	0.6	0.1	0.9
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	0.00		0.00		1.00	0.00	0.00	0.00

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (v), veh/h	214	1173	188	161	2110	181	284	163		138	42	217
Adjusted Saturation Flow Rate (s), veh/h/ln	1795	1752	1585	1795	1752	1572	1781	1702		1781	1900	1585
Queue Service Time (g s), s	14.8	26.2	9.8	7.0	79.6	10.4	11.6	14.5		10.4	3.1	21.5
Cycle Queue Clearance Time (g c), s	14.8	26.2	9.8	7.0	79.6	10.4	11.6	14.5		10.4	3.1	21.5
Green Ratio (g/C)	0.62	0.55	0.55	0.56	0.50	0.50	0.22	0.15		0.23	0.15	0.15
Capacity (c), veh/h	237	1917	867	327	1743	782	340	254		256	290	242
Volume-to-Capacity Ratio (X)	0.904	0.612	0.217	0.493	1.210	0.231	0.836	0.643		0.538	0.144	0.897
Back of Queue (Q), ft/ln (95 th percentile)	345.9	329.1	168.1	131.8	1851.9	183.4	294.5	267.1		210.7	67.9	369.8
Back of Queue (Q), veh/ln (95 th percentile)	13.7	12.8	6.6	5.2	71.8	7.2	11.6	10.7		8.3	2.7	14.6
Queue Storage Ratio (RQ) (95 th percentile)	1.15	0.00	0.67	0.66	0.00	0.00	0.00	1.78		0.94	0.00	0.92
Uniform Delay (d 1), s/veh	56.0	13.4	18.6	19.3	27.0	22.8	60.9	64.0		52.5	58.7	66.5
Incremental Delay (d 2), s/veh	5.1	1.5	0.6	0.4	100.3	0.7	15.6	2.7		0.7	0.2	11.2
Initial Queue Delay (d 3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Control Delay (d), s/veh	61.1	14.8	19.2	19.8	127.2	23.5	76.5	66.7		53.2	58.9	77.8
Level of Service (LOS)	E	B	B	B	F	C	E	E		D	E	E
Approach Delay, s/veh / LOS	21.6		C	112.5		F	72.9		E	67.3		E
Intersection Delay, s/veh / LOS	75.8						E					

Multimodal Results

	EB	WB	NB	SB
Pedestrian LOS Score / LOS				
Bicycle LOS Score / LOS				



Engineering & Consulting, Inc.

**SUMMARY REPORT OF A
GEOTECHNICAL SITE EXPLORATION
TARA FOREST SMF'S
ALACHUA, ALACHUA COUNTY, FLORIDA
GSE PROJECT No. 13707**

Prepared For:
GMUER ENGINEERING, LLC
SEPTEMBER 2018

Certificate of Authorization No. 27430



Engineering & Consulting, Inc.

September 20, 2018

Mr. Chris Gmuer
Gmuer Engineering, LLC
2603 NW 13th Street, Box 314
Gainesville, Florida 32609

Subject: Summary Report of a Geotechnical Site Exploration
Tara Forest SMF's
Alachua, Alachua County, Florida
GSE Project No. 13707

Dear Mr. Gmuer:

GSE Engineering & Consulting, Inc. (GSE) is pleased to submit this geotechnical site exploration report for the above referenced project.

Presented herein are the findings and conclusions of our exploration, including the geotechnical parameters and recommendations to assist with stormwater management designs.

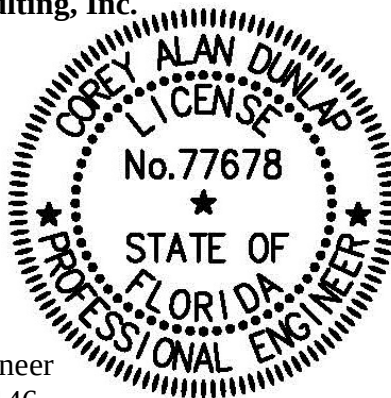
GSE appreciates this opportunity to have assisted you on this project. If you have any questions or comments concerning this report, please contact us.

Sincerely,

GSE Engineering & Consulting, Inc.



Kenneth L. Hill, P.E.
Principal Geotechnical Engineer
Florida Registration No. 40146



This item has been digitally signed and sealed by

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

Corey A. Dunlap, P.E.
Senior Geotechnical Engineer
Florida Registration No. 77678

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Figure

1. Project Site Location Map
2. Site Plan Showing Approximate Locations of Field Tests

1.0 INTRODUCTION

1.1 General

GSE Engineering & Consulting, Inc. (GSE) has completed this geotechnical exploration for the proposed Tara Forest SMF's located in Alachua, Alachua County, Florida. This exploration was performed in accordance with GSE Proposal No. 2018-339 dated June 27, 2018. Mr. Chris Gmuier of Gmuier Engineering, LLC authorized our services on August 1, 2018.

1.2 Project Description

This project will consist of a residential development. You provided information about the project including a site plan illustrating the proposed stormwater management facility locations.

The project will consist of residential lots with streets traversing the neighborhood. Stormwater management facilities (SMFs) will be constructed along the perimeter of the site in areas with lower ground surface elevations. At this time, a total of seven SMFs are planned for the project that will range in size from $\pm 1/2$ acre to ± 3 acres.

We understand geotechnical explorations for pavement and building foundation designs are not required at this time. The project site is located within the City of Alachua; and therefore Alachua County requirements of 8 borings per acre of basin bottom do not need to be met.

Mr. Kevin Fisher visited the site on August 6, 2018 and determined it was necessary to clear lanes through portions of the site to provide access to drilling equipment. In addition to the site plan, a recent aerial photograph was also obtained and reviewed. The site plan and aerial photograph were used in the preparation of this exploration and report.

1.3 Purpose

The purpose of this geotechnical exploration was to determine the general subsurface conditions, evaluate these conditions with respect to the proposed construction, and prepare geotechnical parameters and recommendations to assist with stormwater management designs.

2.0 FIELD AND LABORATORY TESTS

2.1 General Description

The procedures used for field sampling and testing are in general accordance with industry standards of care and established geotechnical engineering practices for this geographic region. This exploration consisted of performing forty-seven (47) auger borings to depths of 15 to 30 feet below land surface (bls) within the proposed stormwater management areas.

The soil borings were performed at the approximate locations as shown on Figure 2. The borings were located at the site using the provided site plan, Global Positioning System (GPS) coordinates, and obvious site features as reference. The boring locations should be considered approximate. The soil borings were performed from August 20 to August 23, 2018.

2.2 Auger Borings

The auger borings were performed in accordance with ASTM D1452. The borings were performed with flight auger equipment that was rotated into the ground in a manner that reduces soil disturbance. After penetrating to the required depth, the auger was retracted and the soils collected on the auger flights were field classified and placed in sealed containers. Representative samples of each stratum were retained from the auger boring. Results from the auger borings are provided in Section 5.1.

2.3 Soil Laboratory Tests

The soil samples recovered from the soil borings were returned to our laboratory, and examined to confirm the field descriptions. Representative samples were then selected for laboratory testing. The laboratory tests consisted of thirty-seven (37) percent soil fines passing the No. 200 sieve determinations, thirty-seven (37) natural moisture content determinations, and twenty-one (21) constant head hydraulic conductivity tests. These tests were performed in order to aid in classifying the soils and to further evaluate their engineering properties. The laboratory tests are provided in Section 5.2.

3.0 FINDINGS

3.1 Surface Conditions

Mr. Kevin Fisher with GSE visited the site on August 6, 2018 to observe the site conditions and mark the boring locations. Mr. Kevin Fisher returned to the site on August 13, 2018 with Mr. Jason Kite of Jason Kite, LLC to clear lanes to allow access to the boring locations for drilling equipment.

The site is mostly open pasture. Small portions of the planned stormwater management facility areas are heavily wooded and required lane clearing for access to boring locations. The site is bordered by NW 140th Street to the east. Residential homes are present north and east of the site while a wooded area is present west and south of the site.

Overall, the topography at the site is gently rolling hills. The provided topographic map indicates the ground surface elevations at the site range from approximately 108 to 162 feet.

3.2 Subsurface Conditions

The locations of the auger borings are provided on Figure 2. Complete logs for the borings are provided in Section 5.1. Descriptions for the soils encountered are accompanied by the Unified Soil Classification System symbol (SM, SP-SM, etc.) and are based on visual examination of the recovered soil samples and the laboratory tests performed. Stratification boundaries between the soil types should be considered approximate, as the actual transition between soil types may be gradual.

The soil borings encountered somewhat consistent subsurface conditions across the property. Overall, the borings initially penetrated a sandy soil layer consisting of sand with silt (SP-SM) to silty sand (SM). The depth of this surficial layer varies widely from 1 to 25+ feet bls. The surficial sandy soils are underlain by clayey soils consisting of clayey sand (SC), very clayey sand (SC/CH), and sandy clay to clay (CH) to the explored depths of up to 30 feet bls.

Groundwater was encountered in some of the auger borings at depths ranging from 6.7 to 21 feet bls. Considering the ground surface elevations at the site are 100+ feet, the groundwater table encountered by some of the borings is likely a perched condition.

3.3 Review of Published Data

The total site is mapped as fourteen soil series by the Soil Conservation Service (SCS) Soil Survey for Alachua County¹. For the purposes of this report, only the seven soil descriptions for the mapped soils in the area of the proposed basins are included below. The following soil descriptions are from the Soil Survey.

Arredondo fine sand, 0 to 5 percent slopes – This nearly level to gently sloping, well drained soil is in both small and large areas of uplands. Slopes are smooth to convex. The areas are irregular in shape and range from about 10 to 160 acres in size.

¹ Soil Survey of Alachua County, Florida. Soil Conservation Service, U.S. Department of Agriculture.

Tara Forest SMF's

Alachua, Alachua County, Florida

GSE Project No. 13707

Typically, the surface layer is dark grayish brown fine sand about 8 inches thick. The subsurface layer is fine sand to a depth of 49 inches. The upper 23 inches is yellowish brown, and the lower 18 inches is brownish yellow. The subsoil extends to a depth of 86 inches or more. The upper 5 inches is yellowish brown loamy sand; the next 10 inches is yellowish brown sandy clay loam, and the lower 22 inches is dark yellowish brown sandy clay and sandy clay loam.

Included with this soil in mapping are small depressional areas of soils that have a very dark gray or black surface layer 8 to 24 inches thick. This layer overlies gray sandy material. These areas are shown by wet spot symbols. Also included are small areas of Fort Meade, Gainesville, Kendrick, and Millhopper soils. A few areas of this soil include Arredondo soils that have 5 to 8 percent slopes. Some areas of this soil in the western part of the county have small spots of strongly acid to medium acid soil material 40 to 70 inches deep to calcareous limestone. Limestone boulders, fragments of limestone, and sinkholes are in some areas of this soil, mainly in the limestone plain sections of the western part of the county. Most of these boulders are siliceous. The sinkholes and the boulders are shown by appropriate map symbols. Total included areas are about 15 percent.

In this Arredondo soil, the available water capacity is low in the sandy surface and subsurface layers and low to medium in the loamy subsoil. Permeability is rapid in the surface and subsurface layers and moderately slow to moderate in the loamy subsoil. Natural fertility is low in the sandy surface and subsurface layers and medium in the finer textured subsoil. Organic matter content is low. The water table in this soil is at a depth of more than 72 inches. Surface runoff is slow.

Fort Meade fine sand, 0 to 5 percent slopes – This nearly level to gently sloping, well drained soil is in both small and large areas on the gently rolling uplands. The areas are mostly irregular in shape and range from about 10 to 400 acres.

Typically, the surface layer is fine sand about 14 inches thick. The upper 10 inches is very dark brown, and the lower 4 inches is very dark grayish brown. The underlying layer is fine sand to a depth of 80 inches or more. In sequence from the top, the upper 20 inches is dark brown; the next 9 inches is dark yellowish brown; the next 28 inches is yellowish brown; and the lower 14 inches is dark brown.

Included with this soil in mapping are small areas of Arredondo, Gainesville, Kendrick, and Millhopper soils. Also included are small areas of soils which are similar to the Fort Meade soil but which have only 6 to 10 inches of a very dark gray or very dark grayish brown surface layer over a fine sand or loamy sand underlying layer. Total included areas are less than 15 percent.

In this Fort Meade soil, the available water capacity is low to medium. The permeability is rapid. The natural fertility is low. Organic matter content of the surface layer is moderately low to high. Surface runoff is slow. The water table is more than 72 inches below the surface.

Millhopper sand, 0 to 5 percent slopes – This nearly level to gently sloping, moderately well drained soil is in small and large irregularly shaped areas on uplands and on slightly rolling knolls in the broad flatwoods. Slopes are mostly nearly smooth or convex. The areas are variable in size. They range from about 10 to 250 acres.

Typically, the surface layer is dark grayish brown sand about 9 inches thick. The subsurface layer is sand or fine sand about 49 inches thick. The upper 17 inches is yellowish brown, the next 22 inches is light yellowish brown, and the lower 10 inches is very pale brown. The subsoil extends to a depth of 89 inches. The upper 6 inches is yellowish brown loamy sand that has grayish and brownish mottles; the next 22 inches is light gray, mottled sandy clay loam; and the lower 3 inches is light gray, mottled sandy loam.

Included with this soil in mapping are small areas of Arredondo, Bonneau, Fort Meade, Gainesville, Kanapaha, Lochloosa, and Sparr soils. Siliceous limestone boulders and small sinks are within some delineations. Small areas of Millhopper soils that have 5 to 8 percent slopes are also included. About 25 acres mapped as this Millhopper soil along the Santa Fe River is occasionally flooded. Total included areas are about 20 percent or less.

This Millhopper soil has a water table that is at a depth of 40 to 60 inches for 1 to 4 months and at a depth of 60 to 72 inches for 2 to 4 months during most years. The available water capacity is low in the surface and subsurface layers and is low to medium in the subsoil. Permeability is rapid in the surface and subsurface layers, moderately rapid in the upper 6 inches of the subsoil, and slow to moderately slow below this depth. Natural fertility is low. Organic matter content is low to moderately low.

Lochloosa fine sand, 2 to 5 percent slopes – This gently sloping, somewhat poorly drained soil is in small and large areas on the rolling uplands. Slopes are slightly convex.

Typically, the surface layer is dark gray fine sand about 7 inches thick. The subsurface layer is yellowish brown loamy sand or sand to a depth of 31 inches. It has light gray and yellowish brown mottles below a depth of 21 inches. The subsoil extends to 76 inches. The upper 4 inches is dark gray, mottled fine sandy loam; the next 19 inches is gray sandy loam; and the lower 22 inches is gray sandy clay loam. Between depths of 76 and 83 inches, the underlying material is mixed light gray and greenish gray sandy clay loam.

This Lochloosa soil has a water table that is about 30 to 40 inches below the surface for 1 to 4 months during most years. The water table rises to a depth of 20 to 30 inches for 1 to 3 weeks. Surface runoff is slow. The available water capacity is low to medium in the sandy surface and subsurface layers and medium in the subsoil. Permeability is rapid in the surface and subsurface layers, moderate in the upper part of the subsoil, and slow in the lower part.

Gainesville sand, 0 to 5 percent slopes – This nearly level to gently sloping, well drained soil has sandy texture to a depth of 80 inches or more. It is in both small and large, irregularly shaped areas on the gently rolling uplands. Most areas range from about 10 to 250 acres.

Typically, the surface layer is dark grayish brown sand about 7 inches thick. The underlying layer extends to a depth of 82 inches or more. The upper 22 inches is yellowish brown sand, and the lower 53 inches is strong brown loamy sand.

Included with this soil in mapping are small areas of Arredondo, Fort Meade, Kendrick, and Lake soils. A few small areas of Gainesville soils that have 5 to 8 percent slopes are included. Total included areas are less than 15 percent.

In this Gainesville soil, the available water capacity is low, and the permeability is rapid. Organic matter content ranges from low to moderately low, and natural fertility is low. Surface runoff is slow. The water table is more than 72 inches below the surface.

Lochloosa fine sand, 5 to 8 percent slopes – This sloping, somewhat poorly drained soil is in relatively small areas on sharp breaking slopes and along long, narrow slopes of the upland. The areas are mostly irregular or elongated in shape and range from about 10 to 50 acres.

Typically, the surface layer is grayish brown fine sand about 5 inches thick. The subsurface layer is light yellowish brown, mottled fine sand to a depth of 25 inches. The subsoil extends to a depth of 67 inches. The upper 5 inches is yellowish brown, mottled sandy loam; the next 5 inches is mottled light yellowish brown and gray sandy clay loam; and the lower 32 inches is gray mottled sandy clay loam. Between depths of 67 to 80 inches, the underlying material is gray, mottled sandy clay and fine pockets of sandy loam and sandy clay loam.

Included with this soil are small areas of Blichton, Kendrick, Micanopy, and Norfolk soils. Also included are small areas of soils that are similar to Lochloosa soils in drainage and texture but have a subsoil less than 20 inches below the surface. Small areas of Lochloosa soils that have 2 to 5 percent slopes are included. Small moderately eroded spots are in some areas. Rock outcrops and sinkholes are in some areas and are shown by appropriate symbols. Total included areas are about 20 percent.

This Lochloosa soil has a water table that is about 30 to 50 inches below the surface for 1 to 3 months during most years. The water table may be at a depth of 20 to 30 inches for 1 to 3 weeks. Wetness is caused by hillside seepage. Surface runoff is medium on this soil. The available water capacity is low in the sandy surface layer and medium in the subsoil. Permeability is rapid in the surface and subsurface layers, moderate in the upper part of the subsoil, and slow in the lower part. Natural fertility is low in the sandy surface and subsurface layers and low to medium in the loamy subsoil. Organic matter content is low in the surface layer.

Norfolk loamy fine sand, 5 to 8 percent slopes – This sloping, well drained soil is in irregularly shaped areas on small, sharp breaking slopes and in irregularly shaped and elongated areas on the long hillsides of the rolling uplands. These areas range from 8 to 35 acres.

Typically, the surface layer is dark grayish brown loamy sand about 6 inches thick. The subsurface layer is light yellowish brown loamy sand about 5 inches thick. The subsoil extends to a depth of 75 inches or more. The upper 35 inches is yellowish brown sandy clay loam; the next 16 inches is yellowish brown, mottled sandy clay loam; and the lower 13 inches is mottled, yellowish brown and gray sandy clay.

Included with this soil in mapping are small areas of Kendrick, Lochloosa, and Bivans soils. Also included are small areas of soils that have a yellowish brown, clayey subsoil at a depth of less than 20 inches and have gray mottles within 30 inches of the surface. In a few small areas, the subsoil extends to a depth of less than 60 inches. Also included are small areas of soils that are similar to Norfolk soils but have more than 5 percent, by volume, nodules and fragments of ironstone. Limestone boulders and sinkholes are included in some areas and are shown by appropriate symbols. Total included areas are about 20 percent.

This Norfolk soil has a water table that is at a depth of 48 to 72 inches for 1 to 2 months during most years. Wetness is caused by hillside seepage. Surface runoff is rapid. The available moisture capacity is low in the sandy surface and subsurface layers and medium to high in the loamy and clayey subsoil. Permeability is rapid in the surface and subsurface layers. It is moderately slow in the upper part of the subsoil and very slow to slow in the lower part. Natural fertility is low in the sandy surface and subsurface layers and medium in the underlying subsoil. Organic matter content is low to moderately low.

3.4 Laboratory Soil Analysis

Selected soil samples recovered from the soil borings were analyzed for the percent soil fines passing the No. 200 sieve, natural moisture content, and hydraulic conductivity. Samples selected for laboratory testing were collected at depths ranging from 2 to 29.5 feet bls. These tests were performed to confirm visual soil classification and evaluate their engineering properties. The complete laboratory report is provided in Section 5.2.

The laboratory tests indicate the tested soils consist of sand with silt, silty sand, clayey sand, and very clayey sand. The tested sand with silt (SP-SM) contains approximately 8.1 to 11 percent soil fines passing the No. 200 sieve with natural moisture contents of about 5.5 to 11 percent. The tested silty sand (SM) contains approximately 13 to 28 percent soil fines passing the No. 200 sieve with natural moisture contents of about 8.2 to 34 percent. The tested clayey sand (SC) contains approximately 15 to 29 percent soil fines passing the No. 200 sieve with natural moisture contents of about 14 to 23 percent. The tested very clayey sand (SC/CH) contains approximately 32 to 42 percent soil fines passing the No. 200 sieve with natural moisture contents of about 20 to 28 percent.

The constant head hydraulic conductivity test results indicate the tested sand with silt (SP-SM) has hydraulic conductivity values of 9.9 to 18 feet per day. The tested silty sand (SM) has hydraulic conductivity values of 5.2 to 15 feet per day. The tested clayey sand (SC) has a hydraulic conductivity value of 6.2 feet per day.

4.0 EVALUATION AND RECOMMENDATIONS

4.1 General

The following recommendations are made based upon our understanding of the proposed construction, a review of the attached soil borings and laboratory test data, and experience with similar projects and subsurface conditions. If plans or the location of proposed construction changes from those discussed previously, GSE requests the opportunity to review and possibly amend our recommendations with respect to those changes.

The performance of site improvements may be sensitive to their post-construction relationship to site groundwater levels, seepage zones, or soil/rock characteristics exposed at final site grades. GSE recommends that use of boring information for final design of all site improvements be predicated on proper horizontal and vertical control of borings.

In this section of the report, we present our geotechnical parameters and recommendations to assist with stormwater management designs.

4.2 Groundwater

Groundwater was encountered in some of the auger borings at depths ranging from 6.7 to 21 feet bls. Considering the ground surface elevations at the site are 100+ feet, the groundwater table encountered by some of the borings is likely a perched condition.

We estimate the seasonal high groundwater table will also be a transient perched condition that will develop on top of the confining soils after periods of intense seasonal rainfall. The estimated perched groundwater depths are presented on the boring logs.

4.3 Stormwater Management

The soil conditions at the SMF's are mostly consistent. Overall, the borings initially penetrated a sandy soil layer consisting of sand with silt (SP-SM) to silty sand (SM). The depth of this surficial layer varies widely from 1 to 25+ feet bls. The surficial sandy soils are underlain by clayey soils consisting of clayey sand (SC), very clayey sand (SC/CH), and sandy clay to clay (CH) to the explored depths of up to 30 feet bls.

The laboratory permeability tests indicate the tested soils have hydraulic conductivity values of 5.2 to 18 feet per day. The underlying very clayey sand (SC/CH) and sandy clay to clay (CH) soils are considered confining, but this material does not appear continuous across the project site.

In areas where clay-rich soils (i.e. clayey soils containing greater than 15 percent soil fines passing the No. 200 sieve) are present at the basin bottom or side slopes, we recommend these soils be undercut a minimum of 2 feet and backfilled with the on-site sands and sands with silt (SP, SP-SM) having a maximum of 10 percent soil fines passing the No. 200 sieve. The intent of this undercutting and replacement is to provide a more uniform sand "blanket" at the basin bottom that allows the migration of water to the deeper deposits of sand. This sand blanket will also reduce the potential for clay-fines leaching out of the soils when water is present in the basin that can result in a thin layer of confining type material on the basin bottom that can reduce the effectiveness of the basin.

Tara Forest SMF's

Alachua, Alachua County, Florida

GSE Project No. 13707

Based upon our findings, test results, and recommended undercutting, our recommended soil parameters for the stormwater management design in the explored areas are presented below. The recommended parameters consider the results of the permeability tests, wash 200 determinations, and our experience with these types of soils. The parameters below do not consider a factor of safety. For your convenience, the parameters have been averaged beneath the table.

Northernmost Basin (P-1 through P-6)

Boring Number	Base of Aquifer Depth (ft)	Porosity (%)	Hydraulic Conductivity (k_h) (ft/ay)	Unsaturated Vertical Infiltration (k_v) (ft/day)	Seasonal High Groundwater Table Depth (ft)
P-1	10.5	20	10	6	10.5
P-2	15	25	14	9	15
P-3	11	25	13	9	10.5
P-4	15	20	10	6	15
P-5	15	20	6	4	15
P-6	30	20	10	6	15
Average	16.1	21.7	10.5	6.7	13.5

Northeast Basin (P-7 through P-25)

Boring Number	Base of Aquifer Depth (ft)	Porosity (%)	Hydraulic Conductivity (k_h) (ft/ay)	Unsaturated Vertical Infiltration (k_v) (ft/day)	Seasonal High Groundwater Table Depth (ft)
P-7	8	20	6	4	7.5
P-8	2	20	10	6	1.5
P-9	3.5	20	4	4	3
P-10	5	20	14	9	4.5
P-11	7.5	20	10	6	7
P-12	5	20	10	6	4.5
P-13	2.5	20	10	6	2
P-14	5.5	20	9	6	5
P-15	2	20	10	6	1.5
P-16	2	20	10	6	1.5
P-17	5.5	20	4	4	5
P-18	5	25	15	10	4.5
P-19	6	25	10	6	5.5
P-20	5.5	20	6	6	5
P-21	15	20	10	6	15
P-22	30	20	15	10	30
P-23	11	20	5	4	10.5
P-24	10.5	20	10	6	10
P-25	13	20	10	6	12.5
Average	7.6	20.5	9.4	6.2	7.2

Southernmost Basin (P-26 through P-40)

Boring Number	Base of Aquifer Depth (ft)	Porosity (%)	Hydraulic Conductivity (k_h) (ft/ay)	Unsaturated Vertical Infiltration (k_v) (ft/day)	Seasonal High Groundwater Table Depth (ft)
P-26	13.5	20	10	6	13
P-27	15	20	10	6	15
P-28	15	20	10	6	15
P-29	15	25	15	10	15
P-30	21	25	15	10	20.5
P-31	15	20	10	6	15
P-32	15	20	10	6	15
P-33	30	20	9	6	30
P-34	15	20	9	6	15
P-35	5	20	10	6	4.5
P-36	15	20	10	6	15
P-37	5	20	10	6	4.5
P-38	15	20	10	6	15
P-39	30	20	8	5	30
P-40	15	20	7	5	15
Average	16.0	20.7	10.2	6.4	15.8

Westernmost Basin (P-41 through P-47)

Boring Number	Base of Aquifer Depth (ft)	Porosity (%)	Hydraulic Conductivity (k_h) (ft/ay)	Unsaturated Vertical Infiltration (k_v) (ft/day)	Seasonal High Groundwater Table Depth (ft)
P-41	15	20	11	7	15
P-42	30	25	18	12	30
P-43	11.5	20	10	6	11
P-44	15	20	8	5	15
P-45	5	20	10	6	4.5
P-46	10	20	8	5	9.5
P-47	7	20	10	6	6.5
Average	13.4	20.7	10.7	6.7	13.1

4.4 Fill Suitability

The soils encountered at this site within the explored depths range from sands (SP) to clays (CL/CH). A discussion of the suitability for reuse as structural fill for each soil classification according to the Unified Soil Classification System (USCS) designation is provided below.

SP, SP/SM – Sands (SP) and sand with silt (SP/SM) have less than 5 percent and 12 percent soil fines passing the No. 200 sieve, respectively, and are typically well draining soils that are suitable for reuse as structural fill. The sands with silt may require moisture conditioning (drying) to make the material more workable. These soils will require stockpiling and drying before they are reused if they are excavated from below the water table.

SM – Silty sands (SM) can have between 12 percent and 50 percent soil fines passing the No. 200 sieve. Silty sands are typically non-plastic or have low plasticity, and can be reused as structural fill with precautions. Silty sands can be moisture sensitive and difficult to work and compact and can rut if the moisture content is near or above the optimum moisture content. We recommend these soils be moisture conditioned (dried) so that the moisture content during use is at or below the optimum moisture content. Aerating and exposure to the sun is typically the most effective methods of drying these soils. It may not be practical to reuse these materials during the wet season, as frequent rain showers may not allow these soils to dry to a workable moisture content. Suitable silty sands are limited to soil having less than 30 percent soil fines passing the No. 200 sieve. Silty sands with more than 30 percent soil fines are especially moisture sensitive, and are not recommended for reuse as structural fill. These soils will behave more as sandy silt, and for this reason, very silty sands having more than 30 percent soil fines passing the No. 200 sieve have been assigned a dual classification of SM/ML. Silty sand soils that are excavated from below the water table are not recommended for reuse as structural fill due to the amount of time that will be required to dry these soils to a workable condition.

SC – Clayey sand (SC) soils can have between 12 percent and 50 percent soil fines passing the No. 200 sieve. Clayey sands can have a high range of plasticity, varying from a PI of 7 or greater and plotting above the A-line to highly plastic. Friable clayey sands are typically suitable for use as structural fill with precautions. Clayey sands will be moisture sensitive and difficult to work and compact and can rut during placement if the moisture content is near or above the natural moisture content. We recommend these soils be moisture conditioned (dried) so that the moisture content during use is at or below the optimum moisture content. Aerating and exposure to the sun is typically the most effective methods of drying these soils. It may not be practical to reuse these materials during the wet season, as frequent rain showers may not allow these soils to dry to a workable moisture content. Suitable clayey sands are limited to soil having less than 30 percent soil fines passing the No. 200 sieve. Clayey sands with more than 30 percent soil fines passing the No. 200 sieve are especially moisture sensitive and are typically highly plastic, and are not recommended for reuse as structural fill. These soils will behave more as sandy clay, and for this reason, very clayey sands having more than 30 percent soil fines passing the No. 200 sieve have been assigned a dual classification of SC/CH or SC/CL. Clayey sand soils that are excavated from below the water table are not recommended for reuse as structural fill due to the amount of time that will be required to dry these soils to a workable condition.

ML, MH, CL, CH – Silts and clays are not suitable materials for reuse as structural fill.

5.0 FIELD DATA

5.1 Auger Boring Logs



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CLIENT Gmuier Engineering, LLC.

PROJECT NAME Tara Forest SMFs

PROJECT NUMBER 13707

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-1**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 10.5 ft

NOTES _____

DATE PERFORMED 8/21/2018 **BORING NUMBER P-2**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH >15 ft

NOTES _____

AB 2 PORTRAIT - GINT STD US.GDT - 9/19/18 15:22 - P:\GENERAL\PROJECTS\13707 TARA FORREST SMF\S\13707 BORINGS\13707 BORINGS.GPJ

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
		AU 1	(SM) Dark brown silty sand			AU 1	(SM/PT) Dark gray organic silty SAND
2.5				2.5			
		AU 2 PS	(SM) Brown silty SAND %PASS-200 = 18 MC = 11 $k_h = 9.8 \text{ ft/day}$			AU 2 PS	(SM) Brown silty SAND %PASS-200 = 18 MC = 17 $k_h = 14 \text{ ft/day}$
5				5			
		AU 3	(SC) Brown, gray, and orange clayey SAND			AU 3	
7.5				7.5			
10			▽	10			
		AU 4	(SC/CH) Pale gray and orange very clayey SAND with lenses of green and orange clay			AU 4	(SM) Dark brown silty SAND %PASS-200 = 21 MC = 34
11.0				11.0			
15				15			
		AU 5	(SC) Pale brown clayey SAND				Bottom of borehole at 15.0 feet.
16.0				16.0			
		AU 6	(SC) Orange and brown clayey SAND				
19.5				19.5			
		AU 7	(CH) Orange and gray CLAY with limestone				
21.5				21.5			
25				25			
		AU 8	(SC/CH) Gray and orange clayey SAND with lenses of gray and orange clay				
27.0				27.0			
30			Bottom of borehole at 30.0 feet.	30.0			

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CLIENT Gmuier Engineering, LLC.

PROJECT NAME Tara Forest SMFs

PROJECT NUMBER 13707

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-3**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 10.5 ft

NOTES _____

DATE PERFORMED 8/21/2018 **BORING NUMBER P-4**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH >15 ft

NOTES _____

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DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
		AU 1	(SM) Dark brown silty SAND			AU 1	(SM) Brown silty SAND
3.0				3.0			
		AU 2 PS	(SP-SM) Brown SAND with silt %PASS-200 = 10 MC = 8 $k_h = 13 \text{ ft/day}$			AU 2	(SM) Brown to orange silty SAND
5				5			
		AU 3				AU 3	
10				10			
			▽				
11.0				11.0			
		AU 4	(CH) Gray and orange sandy CLAY			AU 4	(SM/SC) Gray and orange silty SAND with traces of clay
15				15			
							%PASS-200 = 23 MC = 17
15.0				15.0			
			Bottom of borehole at 15.0 feet.				Bottom of borehole at 15.0 feet.

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CLIENT Gmuer Engineering, LLC.

PROJECT NAME Tara Forest SMFs

PROJECT NUMBER 13707

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-5**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH >15 ft

NOTES _____

DATE PERFORMED 8/21/2018 **BORING NUMBER P-6**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING 15.5 ft CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 15.0 ft

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DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
		AU 1	(SM) Dark brown silty SAND			AU 1	(SM) Dark brown silty SAND
		AU PS	%PASS-200 = 22 MC = 19 $k_h = 5.9 \text{ ft/day}$				
5		AU 2		5			5.0
						AU 2	(SM) Brown silty SAND
10		AU 3	(SM) Pale brown silty SAND	10			
						AU 3	
		AU 4	(SM) Dark gray very silty SAND				
15			Bottom of borehole at 15.0 feet.	15			
						AU 4	
				20			
						AU 5	%PASS-200 = 13 MC = 17
				25			
							27.0
						AU 6	(SC) Gray and orange clayey SAND
				30			30.0
							Bottom of borehole at 30.0 feet.

(Continued Next Page)



PROJECT NAME Tara Forest SMFs

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-8**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▽ AT TIME OF DRILLING 6.7 ft CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 1.5 ft

NOTES

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
		AU 1	(SM) Brown silty SAND			AU 1	(SM) Brown silty SAND
1.5				1.5			
		AU 2 PS	(SC) Brown and orange clayey SAND %PASS-200 = 25 MC = 20 ; $k_h = 6.2$ ft/day			AU 2 PS	(SC/CH) Pale brown, orange, and gray very clayey SAND
3.5				3.5			
5		AU 3	(SC) Gray and orange clayey SAND with sandstone	5			
		AU 4					(CH) Green and gray sandy CLAY
						AU 3	
8.0				8.0			
		AU 5	(CH) Pale green and orange sandy CLAY			AU 4	(CH) Pale gray and orange sandy CLAY with sandstone
10				10			
11.5			(CH) Green and orange CLAY with traces of sand	11.5			
		AU 6					
15.0				15		AU 5	
			Bottom of borehole at 15.0 feet.	15			
							(CH) Pale green sandy CLAY
						AU 6	
				20			
						AU 7	(SC) Pale green to gray clayey SAND
						AU 8	
							Bottom of borehole at 21.0 feet.

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PROJECT NAME Tara Forest SMFs

PROJECT NUMBER 13707

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-9**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 3.0 ft

NOTES _____

DATE PERFORMED 8/21/2018 **BORING NUMBER P-10**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING 14.0 ft CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 4.5 ft

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DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
		AU 1	(SM) Dark brown silty SAND				(SM) Pale brown silty SAND
1.5							
		AU 2	(SC) Pale brown to orange clayey SAND			AU 1 PS	%PASS-200 = 15 MC = 8.8 k _n = 14 ft/day
3.5							
		AU 3	(CH) Orange and gray sandy CLAY				
5				5			
		AU 4	(CH) Orange and green sandy CLAY				(CH) Green and orange sandy CLAY
6.0						AU 2	
		AU 5					
10				10			
						AU 3	
15			Bottom of borehole at 15.0 feet.	15			
						AU 4	(CH) pale green to gray sandy CLAY
				20			
						AU 5	
				25			(SC) Gray clayey SAND
						AU 6	%PASS-200 = 26 MC = 20
				30			Bottom of borehole at 30.0 feet.

(Continued Next Page)



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CLIENT Gmuier Engineering, LLC.

PROJECT NAME Tara Forest SMFs

PROJECT NUMBER 13707

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-11**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 7.0 ft

NOTES _____

DATE PERFORMED 8/21/2018 **BORING NUMBER P-12**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 4.5 ft

NOTES _____

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DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
			(SM) Dark brown silty SAND 1.0				(SM) Brown silty SAND 1.0
			(SM) Brown to orange silty SAND				(SM) Pale brown silty SAND
		AU 1				AU 1	
5				5			▽ 5.0
		AU 2	(SM) Brown silty SAND 5.5				(SC/CH) Gray and orange very clayey SAND
		▽					
			(SC/CH) Gray and orange very clayey SAND 7.5			AU 2	
10		AU 3		10			
			(CH) Green and orange sandy CLAY 11.0			AU 3	
15		AU 4		15			
			Bottom of borehole at 15.0 feet. 15.0				Bottom of borehole at 15.0 feet. 15.0

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PROJECT NAME Tara Forest SMFs

PROJECT NUMBER 13707

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-13**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 2.0 ft

NOTES _____

DATE PERFORMED 8/21/2018 **BORING NUMBER P-14**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 5.0 ft

NOTES _____

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DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
			(SM) Brown SAND 1.0				(SM) Brown silty SAND 1.0
		AU 1	(SM) Brown silty SAND 2.5			AU 1	(SP-SM) Brown SAND with silt 2.0
			(CH) Orange sandy CLAY			AU 2 PS	(SM) Pale brown and orange silty SAND with traces of clay %PASS-200 = 21 MC = 15 k _h = 9.4 ft/day
5		AU 2		5			
			(SC/CH) Gray and orange very clayey SAND 5.5				(CH) Orange and gray sandy CLAY with lenses of clay
		AU 3				AU 3	
10				10			
		AU 4	%PASS-200 = 37 MC = 23			AU 4	(CH) Pale green sandy CLAY with sandstone
15			Bottom of borehole at 15.0 feet.	15			Bottom of borehole at 15.0 feet.

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PROJECT NAME Tara Forest SMFs

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-16**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 1.5 ft

NOTES

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
			(SP-SM) Brown SAND with silt				(SM) Brown silty SAND
1.0				1.0			
			▽ (SM) Pale brown silty SAND				▽
2.0				2.0			
			(SC/CH) Brown very clayey SAND				(CH) Brown, gray, and orange sandy CLAY
5				5			
			%PASS-200 = 32 MC = 20				
5.5				5.5			
			(CH) Orange and green sandy CLAY with lenses of clay				(CH) Green, gray, and orange CLAY with traces of sand
10				10			
12.0				12.0			
			(SC) Gray and pale brown clayey SAND				(SC/CH) Green, gray, and orange CLAY with lenses of clayey sand
15				15			
17.5				17.5			
			(CH) Green and orange CLAY with sandstone				
20				20			
22.0				22.0			
			(SC) Gray and brown clayey SAND				
25				25			
28.5				28.5			
			(SM) Gray and brown silty SAND with trace of clay				
30.0				30.0			
			Bottom of borehole at 30.0 feet.				

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PROJECT NAME Tara Forest SMFs

PROJECT NUMBER 13707

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-17**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 5.0 ft

NOTES _____

DATE PERFORMED 8/21/2018 **BORING NUMBER P-18**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 4.5 ft

NOTES _____

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
			(SP-SM) Brown SAND with silt				(SP-SM) Brown SAND with silt
			1.0				1.5
			(SP-SM) Pale brown SAND with silt				(SP-SM) Pale brown SAND with silt
			2.5				
		AU 1	(SC) Brown clayey SAND with sandstone			AU 1	
							▽
5		AU 2		5			5.0
			5.5				(SC) Gray and orange clayey SAND
			(CH) Orange and green CLAY with traces of sand and sandstone				
		AU 3				AU 2	%PASS-200 = 27 MC = 15
10				10			10.5
			11.0				(CH) Gray, green, and orange sandy CLAY
			(CH) Green and orange sandy CLAY with sandstone			AU 3	
		AU 4					15.0
15			15.0	15			Bottom of borehole at 15.0 feet.
			Bottom of borehole at 15.0 feet.				

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PROJECT NAME Tara Forest SMFs

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-20**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

 AT TIME OF DRILLING 15.5 ft CHECKED BY CAD

 ESTIMATED SEASONAL HIGH 5.0 ft

NOTES

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0			(SP-SM) Pale brown SAND with silt %PASS-200 = 9.5 MC = 7.3 $k_h = 9.9 \text{ ft/day}$	0			(SM) Brown silty SAND 1.0
		AU 1 PS					(SM) Brown to orange silty SAND with trace of clay 1.0
3.5				3.5			%PASS-200 = 23 MC = 14 $k_h = 6.1 \text{ ft/day}$ 5.5
5		AU 2	(SM) Brown silty SAND with traces of clay	5			
6.0				6.0			(CH) Brown, gray, and orange sandy CLAY 12.0
10		AU 3	(CH) Gray sandy CLAY with sandstone	10			
13.0				13.0			(CH) Pale green, gray, and orange sandy CLAY with lenses of clay 15.0
15		AU 4	(CH) Green and orange CLAY	15			
15.0			Bottom of borehole at 15.0 feet.	15			(CH) Green and orange CLAY 22.0
				20			
				25			(SC) Tan to light gray clayey SAND with lenses of SAND %PASS-200 = 15 MC = 23 30.0
				30			Bottom of borehole at 30.0 feet.

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PROJECT NAME Tara Forest SMFs

PROJECT NUMBER 13707

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-21**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH >15 ft

NOTES _____

DATE PERFORMED 8/21/2018 **BORING NUMBER P-22**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH >30 ft

NOTES _____

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DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
		AU 1	(SM) Dark brown silty SAND			AU 1	(SM) Dark brown silty SAND
				2.0			
		AU 2 PS	(SM) Brown silty SAND %PASS-200 = 14 MC = 9.3 $k_h = 10 \text{ ft/day}$			AU 2	(SM) Brown silty SAND
5				5			
		AU 3				AU 3 PS	%PASS-200 = 17 MC = 9.7 $k_h = 15 \text{ ft/day}$
10				10			
		AU 4				AU 4	
15				15			
			Bottom of borehole at 15.0 feet.				
				20		AU 5	
				25		AU 6	
				28.0			(SC-SM) Pale brown and tan SAND with silt
						AU 7	
				30.0			Bottom of borehole at 30.0 feet.

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PROJECT NUMBER 13707

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-23**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 10.5 ft

NOTES _____

DATE PERFORMED 8/21/2018 **BORING NUMBER P-24**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 10.0 ft

NOTES _____

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DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
			(SM) Dark brown silty SAND 1.0				(SM) Dark brown silty SAND 1.0
			(SM) Brown silty SAND				(SM) Brown silty SAND
5		AU 1 PS	%PASS-200 = 18 MC = 8.2 k _h = 5.2 ft/day	5		AU 1	
10		AU 2		10		AU 2	
			▽ 11.0				▽ 10.5
		AU 3	(SC/CH) Brown and orange very clayey SAND 13.5			AU 3	(SC/CH) Gray and orange very clayey SAND 13.5
15		AU 4	(SC) Gray clayey SAND 15.0	15		AU 4	(CH) Gray and orange sandy CLAY 15.0
			Bottom of borehole at 15.0 feet.				Bottom of borehole at 15.0 feet.

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PROJECT NAME Tara Forest SMFs

PROJECT NUMBER 13707

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-25**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 12.5 ft

NOTES _____

DATE PERFORMED 8/21/2018 **BORING NUMBER P-26**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 13.0 ft

NOTES _____

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DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0			(SM) Brown and orange silty SAND	0			(SM) Brown and orange silty SAND
5		AU 1 PS		5		AU 1	
10		AU 2		10		AU 2	
13.0		▽		13.5		▽	
15		AU 3	(SC) Gray and orange clayey SAND %PASS-200 = 29 MC = 17	15		AU 3	(SC/CH) Gray and orange very clayey SAND
18.0		AU 4	(CH) Pale gray and green sandy CLAY	17.0			(CH) Pale brown and orange sandy CLAY
21.0			(SC) Pale brown and gray clayey SAND	21.0			(CH) Orange sandy CLAY
25		AU 5		25		AU 5	
26.0			(CH) Brown, gray, and orange sandy CLAY	28.0		AU 6	(CH) Orange and gray sandy CLAY with traces of sandstone
30.0		AU 6		30.0			
			Bottom of borehole at 30.0 feet.				Bottom of borehole at 30.0 feet.

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PROJECT NAME Tara Forest SMFs

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-28**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH >15 ft

NOTES

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
1.0			(SP-SM) Brown SAND with silt				(SM) Brown silty SAND
			(SP-SM) Orange and brown SAND with silt				
5		AU 1		5		AU 1 PS	
7.0							
		AU 2 PS	(SP-SM) Pale brown SAND with silt %PASS-200 = 9.7 MC = 11 $k_h = 11 \text{ ft/day}$			AU 2	
10				10			
		AU 3	(SC) Gray and orange clayey SAND %PASS-200 = 25 MC = 16			AU 3	(SP-SM) Light brown and orange SAND with silt
12.0				12.0			
		AU 4					
15.0			Bottom of borehole at 15.0 feet.	15			Bottom of borehole at 15.0 feet.



PROJECT NAME Tara Forest SMFs

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-30**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

AT TIME OF DRILLING NE CHECKED BY CAD

 ESTIMATED SEASONAL HIGH 20.5 ft

NOTES

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
			(SP-SM) Brown SAND with silt				(SP-SM) Brown SAND with silt
1.0			(SP-SM) Brown and orange SAND with silt	1.5			(SP-SM) Orange and brown SAND with silt
		AU 1				AU 1	
5				5			
		AU 2				AU 2	
10				10			
		AU 3				AU 3 PS	(SP-SM) Pale brown and orange SAND with silt $%PASS-200 = 8.1$ $MC = 5.5$ $k_h = 18 \text{ ft/day}$
12.0			(SP-SM) Pale brown and orange SAND with silt				
15.0			Bottom of borehole at 15.0 feet.	15			
						AU 4	(SM) Gray and orange silty SAND
				17.0			
				20			
				21.0			
						AU 5	(SC/CH) Gray very clayey sand
				25			
				30			
						AU 6	
				30.0			Bottom of borehole at 30.0 feet.

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PROJECT NAME Tara Forest SMFs

PROJECT NUMBER 13707

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-31**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH >15 ft

NOTES _____

DATE PERFORMED 8/21/2018 **BORING NUMBER P-32**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH >15 ft

NOTES _____

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DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
		AU 1	(SM) Dark gray silty SAND				(SM) Dark gray silty SAND
			1.5				1.0
		AU 2	(SM) Brown silty SAND			AU 1	(SM) Brown silty SAND
5				5			
		AU 3				AU 2 PS	
			7.0				
			(SM) Gray orange silty SAND with traces of clay				
10				10			
		AU 4	(SM) Grayish brown silty SAND			AU 3	(SC) Gray and orange clayey SAND
			10.5				%PASS-200 = 22 MC = 14
15				15			
			15.0				15.0
			Bottom of borehole at 15.0 feet.				Bottom of borehole at 15.0 feet.

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PROJECT NAME Tara Forest SMFs

PROJECT NUMBER 13707

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-33**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING 21.0 ft CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 20.0 ft

NOTES _____

DATE PERFORMED 8/21/2018 **BORING NUMBER P-34**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH >15 ft

NOTES _____

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DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
			(SM) Dark brown silty SAND				(SM) Brown and orange silty SAND
			1.0				
			(SM) Brown silty SAND				
5		AU 1 PS	%PASS-200 = 21 MC = 10 $k_h = 9.6 \text{ ft/day}$	5		AU 1 PS	%PASS-200 = 20 MC = 11 $k_h = 9 \text{ ft/day}$
		AU 2				AU 2	
10				10			
		AU 3				AU 3	
15				15			
		AU 4				AU 4	
			(SP-SC) Brown, gray, and orange SAND with traces of clay				(SC) Gray and orange clayey SAND
			16.5				11.5
20							
			▽				
			▼				
			22.0				
			(SC) Gray clayey SAND				
25							
		AU 5	%PASS-200 = 18 MC = 16				
30							
			30.0				
			Bottom of borehole at 30.0 feet.				Bottom of borehole at 15.0 feet.
							15.0

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PROJECT NAME Tara Forest SMFs

PROJECT NUMBER 13707

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-35**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 4.5 ft

NOTES _____

DATE PERFORMED 8/21/2018 **BORING NUMBER P-36**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH >15 ft

NOTES _____

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DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
		AU 1	(SM) Brown and orange silty SAND				(SM) Brown and orange silty SAND
5			▽	5.0		AU 1	
		AU 2 PS	(SC/CH) Brown very clayey SAND %PASS-200 = 41 MC = 26				
10				10		AU 2	
		AU 3					
15				15		AU 3	
			Bottom of borehole at 15.0 feet.	15.0			Bottom of borehole at 15.0 feet.

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PROJECT NAME Tara Forest SMFs

PROJECT NUMBER 13707

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-37**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 4.5 ft

NOTES _____

DATE PERFORMED 8/21/2018 **BORING NUMBER P-38**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH >15 ft

NOTES _____

AB 2 PORTRAIT - GINT STD US.GDT - 9/19/18 15:22 - P:\GENERAL\PROJECTS\13707 TARA FORREST SMF\S\13707 BORINGS\13707 BORINGS.GPJ

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
			(SM) Brown and orange silty SAND				(SM) Brown and orange silty SAND
5		AU 1	▽	5		AU 1 PS	%PASS-200 = 24 MC = 11 $k_h = 10 \text{ ft/day}$
		AU 2	(SC/CH) Brown, gray, and orange very clayey SAND			AU 2	6.0
10		AU 3	(CH) Pale brown, gray, and orange sandy CLAY with traces of limestone	10		AU 3	
15		AU 4		15			
20		AU 5					15.0
		AU 6	(CH) Pale green, gray, and orange sandy CLAY				Bottom of borehole at 15.0 feet.
25		AU 7	(CH) Pale brown and gray very sandy CLAY				
30			Bottom of borehole at 30.0 feet.				

(Continued Next Page)



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CLIENT Gmuier Engineering, LLC.

PROJECT NAME Tara Forest SMFs

PROJECT NUMBER 13707

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-39**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING 20.0 ft CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 19.0 ft

NOTES _____

DATE PERFORMED 8/21/2018 **BORING NUMBER P-40**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH >15 ft

NOTES _____

AB 2 PORTRAIT - GINT STD US.GDT - 9/19/18 15:22 - P:\GENERAL\PROJECTS\13707 TARA FORREST SMF\S\13707 BORINGS\13707 BORINGS.GPJ

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
		AU 1	(SM) Dark silty SAND			AU 1	(SM) Dark brown silty SAND
1.5				2.0			
		AU 2 PS	(SM) Orange and brown silty SAND			AU 2 PS	(SM) Orange and brown silty SAND with traces of clay %PASS-200 = 28 MC = 14 k _h = 7.1 ft/day
5				6.0			
		AU 3				AU 3	(SM) Orange and brown silty SAND
10				12.0			
		AU 4				AU 4	(SM) Pale brown and orange silty SAND
15				15.0			
		AU 5	(SM) Gray and brown silty SAND				Bottom of borehole at 15.0 feet.
16.0							
		AU 6	(SC) Gray clayey SAND %PASS-200 = 19 MC = 21				
21.0							
		AU 7					
25							
30			Bottom of borehole at 30.0 feet.				
30.0							

(Continued Next Page)



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PROJECT NAME Tara Forest SMFs

PROJECT NUMBER 13707

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-41**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH >15 ft

NOTES _____

DATE PERFORMED 8/21/2018 **BORING NUMBER P-42**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH >30 ft

NOTES _____

AB 2 PORTRAIT - GINT STD US.GDT - 9/19/18 15:22 - P:\GENERAL\PROJECTS\13707 TARA FORREST SMF\S\13707 BORINGS\13707 BORINGS.GPJ

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
		AU 1	(SM) Dark brown silty SAND			AU 1	(SP-SM) Brown and orange SAND with silt
			2.0				
		AU 2 PS	(SM) Brown and orange silty SAND %PASS-200 = 15 MC = 12 $k_h = 11$ ft/day			AU 2 PS	%PASS-200 = 11 MC = 8.8 $k_h = 18$ ft/day
5				5			
		AU 3					
10				10			
		AU 4				AU 3	
15			15.0	15			
			Bottom of borehole at 15.0 feet.				
				20		AU 4	
				25		AU 5	
				30		AU 6	
							27.0
							(SP-SM) Pale brown, tan, and orange SAND with silt
							%PASS-200 = 9.9 MC = 7.4
							30.0
							Bottom of borehole at 30.0 feet.

(Continued Next Page)



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CLIENT Gmuier Engineering, LLC.

PROJECT NAME Tara Forest SMFs

PROJECT NUMBER 13707

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-43**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 11.0 ft

NOTES _____

DATE PERFORMED 8/21/2018 **BORING NUMBER P-44**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH >15 ft

NOTES _____

AB 2 PORTRAIT - GINT STD US.GDT - 9/19/18 15:22 - P:\GENERAL\PROJECTS\13707 TARA FORREST SMF\S13707 BORINGS\13707 BORINGS.GPJ

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
			(SM) Dark brown silty SAND				(SM) Dark brown silty SAND
			1.0				
			(SM) Orange and brown silty SAND				
		AU 1				AU 1	
							2.5
							(SM) Orange silty SAND with traces of clay
5		AU 2		5		AU 2	
		AU 3				AU 3	
10				10			
			▽				
			11.5				
			(SC/CH) Gray and orange very clayey SAND				
							12.0
							(SC) Gray clayey SAND
15				15		AU 4	
			15.0				
			Bottom of borehole at 15.0 feet.				
							15.0
							Bottom of borehole at 15.0 feet.

(Continued Next Page)



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CLIENT Gmuer Engineering, LLC.

PROJECT NAME Tara Forest SMFs

PROJECT NUMBER 13707

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-45**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 4.5 ft

NOTES _____

DATE PERFORMED 8/21/2018 **BORING NUMBER P-46**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 9.5 ft

NOTES _____

AB 2 PORTRAIT - GINT STD US.GDT - 9/19/18 15:22 - P:\GENERAL\PROJECTS\13707 TARA FORREST SMF\S\13707 BORINGS\13707 BORINGS.GPJ

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
			(SM) Brown and orange silty SAND				(SM) Brown silty SAND
		AU 1 PS				AU 1	
5			▽	5.0			
			(CH) Pale greenish gray and orange sandy CLAY				
		AU 2				AU 2	
10				10			(SC) Orange and brown clayey SAND
							▽
		AU 3		11.5		AU 3	
			(SC) Pale brown, gray, and orange clayey SAND				(SC/CH) Pale brown and orange very clayey SAND
15				15.0			%PASS-200 = 42 MC = 28
			Bottom of borehole at 15.0 feet.				Bottom of borehole at 15.0 feet.

(Continued Next Page)



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CLIENT Gmuier Engineering, LLC.

PROJECT NAME Tara Forest SMFs

PROJECT NUMBER 13707

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-47**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 6.5 ft

NOTES _____

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0			
5		AU 1 PS	(SM) Brown and orange silty SAND $\%PASS-200 = 19$ $MC = 8.4$ $k_h = 10 \text{ ft/day}$
7.0			▽
10		AU 2	(CH) Pale gray, green, and orange sandy CLAY
13.0		AU 3	(CH) Pale brownish gray and orange sandy CLAY
15		AU 4	
20.0		AU 5	(CH) Green and brown sandy CLAY
25.0		AU 6	(SM) Green, brown, and tan silty SAND with traces of clay
30.0			Bottom of borehole at 30.0 feet.

AB 2 PORTRAIT - GINT STD US.GDT - 9/19/18 15:22 - P:\GENERAL\PROJECTS\13707 TARA FORREST SMF\S\13707 BORINGS\13707 BORINGS.GPJ

5.2 Laboratory Results



Engineering & Consulting, Inc.

SUMMARY REPORT OF LABORATORY TEST RESULTS

Project Number: 13707

Project Name: Tara Forest SMF's

Boring Number	Depth (ft)	Soil Description	Natural Moisture Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	Percent Passing No. 200 Sieve	Organic Content (%)	Hydraulic Conductivity (ft/day)	Unified Soil Classification
P-1	3-5	Brown silty SAND	11				18		9.8	SM
P-2	5-7	Brown silty SAND	17				18		14	SM
P-3	4-6	Brown SAND with silt	8.0				10		13	SP-SM
P-5	2-5	Dark brown silty SAND	19				22		5.9	SM
P-7	1.5-3.5	Brown and orange clayey SAND	20				25		6.2	SC
P-10	2-4	Pale brown silty SAND	8.8				15		14	SM
P-14	2-4	Pale brown and orange silty SAND with traces of clay	15				21		9.4	SM
P-19	1-3.5	Pale brown SAND with silt	7.3				9.5		9.9	SP-SM
P-20	3-5	Brown to orange silty SAND with traces of clay	14				23		6.1	SM
P-21	3-5	Brown silty SAND	9.3				14		10	SM
P-23	3-5	Brown silty SAND	8.2				18		5.2	SM
P-27	7-9	Pale brown SAND with silt	11				9.7		11	SP-SM



Engineering & Consulting, Inc.

SUMMARY REPORT OF LABORATORY TEST RESULTS

Project Number: 13707

Project Name: Tara Forest SMF's

Boring Number	Depth (ft)	Soil Description	Natural Moisture Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	Percent Passing No. 200 Sieve	Organic Content (%)	Hydraulic Conductivity (ft/day)	Unified Soil Classification
P-22	8-10	Brown silty SAND	9.7				17		15	SM
P-30	10-12	Pale brown and orange SAND with silt	5.5				8.1		18	SP-SM
P-33	3-5	Brown silty SAND	10				21		9.6	SM
P-34	3-5	Brown and orange silty SAND	11				20		9.0	SM
P-38	3-5	Brown and orange silty SAND	11				24		10	SM
P-40	3-5	Orange and brown silty SAND with traces of clay	14				28		7.1	SM
P-41	3-5	Brown and orange silty SAND	12				15		11	SM
P-42	5-7	Brown and orange SAND with silt	8.8				11		18	SP-SM
P-47	3-5	Brown and orange silty SAND	8.4				19		10	SM



Engineering & Consulting, Inc.

SUMMARY REPORT OF LABORATORY TEST RESULTS

Project Number: 13707

Project Name: Tara Forest SMF's

Boring Number	Depth (ft)	Soil Description	Natural Moisture Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	Percent Passing No. 200 Sieve	Organic Content (%)	Hydraulic Conductivity (ft/day)	Unified Soil Classification
P-2	13-13.5	Dark brown silty SAND	34				21			SM
P-4	13-13.5	Gray and orange silty SAND with traces of clay	17				23			SM/SC
P-6	24-24.5	Brown silty SAND	17				13			SM
P-10	29-29.5	Gray clayey SAND	20				26			SC
P-13	12-12.5	Gray and orange very clayey SAND	23				37			SC/CH
P-15	4-4.5	Brown very clayey SAND	20				32			SC/CH
P-18	7.5-8	Gray and orange clayey SAND	15				27			SC
P-20	22-22.5	Tan to light gray clayey SAND with lenses of sand	23				15			SC
P-25	13-13.5	Gray and orange clayey SAND	17				29			SC
P-27	10-10.5	Gray and orange clayey SAND	16				25			SC
P-32	11.5-12	Gray and orange clayey SAND	14				22			SC
P-35	6-6.5	Brown very clayey SAND	26				41			SC/CH



Engineering & Consulting, Inc.

SUMMARY REPORT OF LABORATORY TEST RESULTS

Project Number: 13707

Project Name: Tara Forest SMF's

Boring Number	Depth (ft)	Soil Description	Natural Moisture Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	Percent Passing No. 200 Sieve	Organic Content (%)	Hydraulic Conductivity (ft/day)	Unified Soil Classification
P-33	27-27.5	Gray clayey SAND	16				18			SC
P-39	22-22.5	Gray clayey SAND	21				19			SC
P-42	29-29.5	Pale brown, tan, and orange SAND with silt	7.4				9.9			SP-SM
P-46	11.5-12	Pale brown and orange very clayey SAND	28				42			SC/CH

5.3 Key to Soil Classification

KEY TO SOIL CLASSIFICATION CHART

Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests				SYMBOLS		GROUP NAME	
				GRAPHIC	LETTER		
COARSE-GRAINED SOILS	Gravels	Clean Gravels	$Cu \geq 4$ and $1 \leq Cc \leq 3$		GW	Well graded GRAVEL	
	More than 50% retained on No. 200 sieve	More than 50% of coarse fraction retained on No. 4 sieve	Less than 5% fines	$Cu < 4$ and/or $1 > Cc > 3$		GP	Poorly graded GRAVEL
			Gravels with fines	Fines classify as ML or MH		GM	Silty GRAVEL
			More than 12% fines	Fines classify as CL or CH		GC	Clayey GRAVEL
			Sands	Clean Sands	$Cu \geq 6$ and $1 \leq Cc \leq 3$		SW
	50% or more of coarse fraction passes No. 4 sieve		Less than 5% fines	$Cu < 6$ and/or $1 > Cc > 3$		SP	Poorly graded SAND
			Sand with fines	Fines classify as ML or MH		SP-SM	SAND with silt
			$5\% \leq \text{fines} < 12\%$	Fines classify as CL or CH		SP-SC	SAND with clay
			Sand with fines	Fines classify as ML or MH		SM	Silty SAND
			$12\% \leq \text{fines} < 30\%$	Fines classify as CL or CH		SC	Clayey SAND
			Sand with fines	Fines classify as ML or MH		SM	Very silty SAND
			30% fines or more	Fines classify as CL or CH		SC	Very clayey SAND
	FINE-GRAINED SOILS	Clays	inorganic	$50\% \leq \text{fines} < 70\%$		CL/CH	Sandy CLAY
$70\% \leq \text{fines} < 85\%$					CL/CH	CLAY with sand	
$\text{fines} \geq 85\%$					CL/CH	CLAY	
Silts and Clays		inorganic	PI > 7 and plots on/above "A" line		CL	Lean CLAY	
			PI < 4 or plots below "A" line		ML	SILT	
Liquid Limit less than 50		organic	Liquid Limit - oven dried < 0.75		OL	Organic clay	
			Liquid Limit - not dried		OL	Organic silt	
Silts and Clays		inorganic	PI plots on or above "A" line		CH	Fat CLAY	
			PI plots below "A" line		MH	Elastic SILT	
Liquid Limit 50 or more		organic	Liquid Limit - oven dried < 0.75		OH	Organic clay	
	Liquid Limit - not dried			OH	Organic silt		
HIGHLY ORGANIC SOILS	Primarily organic matter, dark in color, and organic odor				PT	PEAT	

CORRELATION OF PENETRATION RESISTANCE WITH RELATIVE DENSITY AND CONSISTENCY

	No. OF BLOWS, N	RELATIVE DENSITY		No. OF BLOWS, N	CONSISTENCY
SANDS:	0 - 4	Very Loose	SILTS & CLAYS:	0 - 2	Very Soft
	5 - 10	Loose		3 - 4	Soft
	11 - 30	Medium dense		5 - 8	Firm
	31 - 50	Dense		9 - 15	Stiff
	OVER 50	Very Dense		16 - 30	Very Stiff
				31 - 50	Hard
	No. OF BLOWS, N	RELATIVE DENSITY		OVER 50	Very Hard

No. OF BLOWS, N	RELATIVE DENSITY
0 - 8	Very Soft
9 - 18	Soft
LIMESTONE: 19 - 32	Moderately Hard
33 - 50	Hard
OVER 50	Very Hard

SAMPLE GRAPHIC TYPE LEGEND



Location
of SPT
Sample



Location
of Auger
Sample

PARTICLE SIZE IDENTIFICATION

BOULDERS:	Greater than 300 mm
COBBLES:	75 mm to 300 mm
GRAVEL:	Coarse - 19.0 mm to 75 mm
	Fine - 4.75 mm to 19.0 mm
SANDS:	Coarse - 2.00 mm to 4.75 mm
	Medium - 0.425 mm to 2.00 mm
	Fine - 0.075 mm to 0.425 mm
SILTS & CLAYS:	Less than 0.075 mm

LABORATORY TEST LEGEND

LL	=	Liquid Limit, %
PL	=	Plastic Limit, %
PI	=	Plasticity Index, %
% PASS - 200	=	Percent Passing the No. 200 Sieve
MC	=	Moisture Content, %
ORG	=	Organic Content, %
k_h	=	Horizontal Hydraulic Conductivity, ft/day

6.0 LIMITATIONS

6.1 Warranty

This report has been prepared for our client for his exclusive use, in accordance with generally accepted soil and foundation engineering practices, and makes no other warranty either expressed or implied as to the professional advice provided in the report.

6.2 Auger Borings

The determination of soil type and conditions was performed from the ground surface to the maximum depth of the borings, only. Any changes in subsurface conditions that occur between or below the borings would not have been detected or reflected in this report.

Soil classifications that were made in the field are based upon identifiable textural changes, color changes, changes in composition or changes in resistance to penetration in the intervals from which the samples were collected. Abrupt changes in soil type, as reflected in boring logs and/or cross sections may not actually occur, but instead, be transitional.

Depth to the water table is based upon observations made during the performance of the auger borings. This depth is an estimate and does not reflect the annual variations that would be expected in this area due to fluctuations in rainfall and rates of evapotranspiration.

6.3 Site Figures

The measurements used for the preparation of the figures in this report were made using the provided site plan and by estimating distances from existing structures and site features. Figures in this report were not prepared by a licensed land surveyor and should not be interpreted as such.

6.4 Unanticipated Soil Conditions

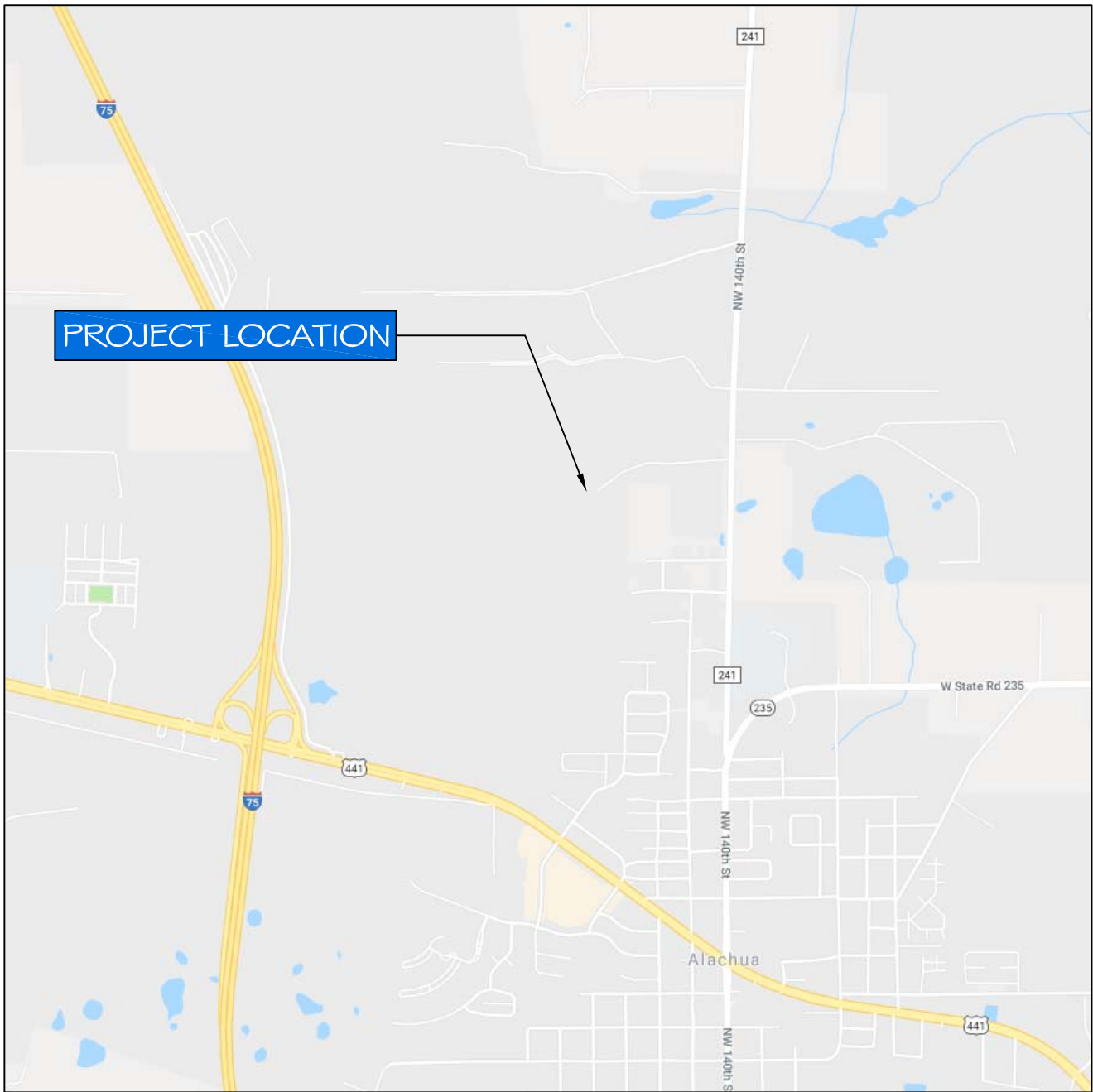
The analysis and recommendations submitted in this report are based upon the data obtained from soil borings performed at the locations indicated on Figure 2. This report does not reflect any variations that may occur between these borings.

The nature and extent of variations between borings may not become known until excavation begins. If variations appear, we may have to re-evaluate our recommendations after performing on-site observations and noting the characteristics of any variations.

6.5 Misinterpretation of Soil Engineering Report

GSE Engineering & Consulting, Inc. is responsible for the conclusions and opinions contained within this report based upon the data relating only to the specific project and location discussed herein. If others make the conclusions or recommendations based upon the data presented, those conclusions or recommendations are not the responsibility of GSE.

FIGURES



TARA FOREST SMFs
ALACHUA, ALACHUA COUNTY, FLORIDA
GSE PROJECT NO. 13707

PROJECT SITE LOCATION MAP

DESIGNED BY: CAD
CHECKED BY: KLH
DRAWN BY: DCJ



FIGURE
1



LEGEND: AUGER BORING 0524' NORTH SCALE: 1" = 524' APPROX.			
TARA FOREST SMFs ALACHUA, ALACHUA COUNTY, FLORIDA GSE PROJECT NO. 13707		SITE PLAN SHOWING APPROXIMATE LOCATIONS OF FIELD TESTS DESIGNED BY: CAD CHECKED BY: KLH DRAWN BY: DCJ Engineering & Consulting, Inc. FIGURE 2	



June 20, 2019

Mr. Chris Gmuer
Gmuer Engineering, LLC
2603 NW 13th Street, Box 314
Gainesville, Florida 32609

Subject: Supplemental Geotechnical Site Exploration
Tara Forest SMF's
Alachua, Alachua County, Florida
GSE Project No. 13707A

Dear Mr. Gmuer:

GSE Engineering and Consulting, Inc. (GSE) is pleased to submit this letter summarizing our supplemental recommendations for stormwater management design soil parameters for the proposed Tara Forest neighborhood in Alachua, Alachua County, Florida.

Background Information

GSE previously performed a geotechnical evaluation to assist with stormwater design as summarized in our *Summary Report of a Geotechnical Site Exploration* dated September 20, 2018 (GSE Project No. 13707). Please refer to that report for further background information on the project.

The basin locations have shifted slightly since the completion of the previous report. An updated site plan with the new basin locations was provided and used in this supplemental exploration. Information from the previously completed borings near the updated basin locations was also taken into account when determining our updated recommendations.

Auger Borings

The auger borings encountered relatively consistent conditions within each basin. Borings AB-1 and AB-2 (SMF East) encountered sand with silt (SP-SM) over silty sand (SM) to the explored depth of 15 feet bls. Boring AB-3 (SMF North) encountered poorly graded sand (SP) and clayey sand (SC) to 6 feet bls overlying 6 feet of very clayey sand (SC) and 3 feet of sandy clay (CL/CH) to 15 feet bls. Borings AB-4 and AB-5 (SMF NW) encountered 2 to 3.5 feet of silty sand (SM) and poorly graded sand (SP). This was followed by 8.5 to 10 feet of very clayey and clayey sand (SC) and 3 feet of sandy clay (CH) to the explored depth of 15 feet bls.

The borings in SMF South each encountered relatively variable conditions. Boring AB-6 encountered approximately 5 feet of sand with trace clay (SP-SC), 3 feet of clayey and very clayey sand (SC), and 7 feet of sandy clay and clay (CH) to the explored depth of 15 feet bls. AB-7 encountered only silty sand (SM) to 15 feet bls, and AB-8 encountered 5.5 feet of silty sand (SM), 3.5 feet of clayey sand (SC), and 6 feet of sandy clay (CH) to the explored depth of 15 feet bls.

Groundwater was not encountered in the boreholes at the time of drilling.

Summary of Laboratory Testing

Selected soil samples recovered from the soil borings were analyzed for the percent soil fines passing the No. 200 sieve, natural moisture content, and hydraulic conductivity. Samples selected for laboratory testing were collected at depths ranging from near ground surface to 9.5 feet bls.

These tests were performed to confirm visual soil classification and evaluate their engineering properties. The laboratory tests indicate the tested soils consist of sand with silt (SP-SM), silty sand (SM), clayey sand (SC), and very clayey sand (SC). The complete laboratory report is provided in the Appendix.

The tested sand with silt (SP-SM) contains approximately 9.9 to 11 percent soil fines passing the No. 200 sieve with natural moisture contents of about 7.3 to 9.7 percent. The tested silty sand (SM) contains approximately 17 to 20 percent soil fines passing the No. 200 sieve with natural moisture contents of about 7.3 to 19 percent. The tested clayey sand (SC) contains approximately 26 to 29 percent soil fines passing the No. 200 sieve with natural moisture contents of about 10 to 17 percent. The tested very clayey sand (SC) contains approximately 31 to 37 percent soil fines passing the No. 200 sieve with natural moisture contents of about 16 to 22 percent.

The constant head hydraulic conductivity tests indicate the sand with silt has hydraulic conductivity values of 6.9 to 19 feet per day. The tested clayey sand has a hydraulic conductivity value of 9.9 feet per day, and the tested silty sand has hydraulic conductivity values of 3.9 to 11 feet per day.

Supplemental Stormwater Management Design Soil Parameters

The soil conditions at the SMF's are mostly consistent. Overall, the borings initially penetrated a sandy soil layer consisting of poorly graded sand (SP) and sand with silt (SP-SM) to silty sand (SM). The depth of this surficial layer varies widely from 2 to 15+ feet bls. The surficial sandy soils are underlain by clayey soils consisting of clayey sand (SC), very clayey sand (SC), and sandy clay to clay (CH) to the explored depth of 15 feet bls.

The laboratory permeability tests indicate the tested soils have hydraulic conductivity values of 3.9 to 19 feet per day. The underlying very clayey sand (SC) and sandy clay (CH) soils are considered confining.

In areas where clay-rich soils (i.e. clayey soils containing greater than 15 percent soil fines passing the No. 200 sieve) are present at the basin bottom or side slopes, we recommend these soils be undercut a minimum of 2 feet and backfilled with the on-site sands and sands with silt (SP, SP-SM) having a maximum of 10 percent soil fines passing the No. 200 sieve. The intent of this undercutting and replacement is to provide a more uniform sand "blanket" at the basin bottom that allows the migration of water to the deeper deposits of sand. This sand blanket will also reduce the potential for clay-fines leaching out of the soils when water is present in the basin that can result in a thin layer of confining type material on the basin bottom that can reduce the effectiveness of the basin.

Based upon our findings and test results, our recommended soil parameters for the stormwater management design in the explored areas are presented below. The recommended parameters consider the results of the permeability tests, wash 200 determinations, and our experience with these types of soils. The parameters below do not consider a factor of safety.

SMF East (AB-1 and AB-2)

Boring Number	Base of Aquifer Depth (ft)	Porosity (%)	Hydraulic Conductivity (k_h) (ft/day)	Unsaturated Vertical Infiltration (k_v) (ft/day)	Seasonal High Groundwater Table Depth (ft)
AB-1	15	20	11	7	15
AB-2	15	20	4	3	15
Average	15	20	7.5	5.0	15

SMF North (AB-3, P-3, P-6, P-7)

Boring Number	Base of Aquifer Depth (ft)	Porosity (%)	Hydraulic Conductivity (k_h) (ft/day)	Unsaturated Vertical Infiltration (k_v) (ft/day)	Seasonal High Groundwater Table Depth (ft)
AB-3	6	25	6	4	5.5
P-3	11	25	13	9	10.5
P-6	30	20	10	6	15
P-7	8	20	6	4	7.5
Average	13.8	22.5	8.8	5.8	9.6

SMF Northwest (AB-4 and AB-5)

Boring Number	Base of Aquifer Depth (ft)	Porosity (%)	Hydraulic Conductivity (k_h) (ft/day)	Unsaturated Vertical Infiltration (k_v) (ft/day)	Seasonal High Groundwater Table Depth (ft)
AB-4	2	25	9	6	2
AB-5	6	25	6	4	5.5
Average	4.0	25	7.5	5	3.8

SMF South (AB-6 to AB-8, P-34 to P-36, P-38 to P-40)

Boring Number	Base of Aquifer Depth (ft)	Porosity (%)	Hydraulic Conductivity (k_h) (ft/day)	Unsaturated Vertical Infiltration (k_v) (ft/day)	Seasonal High Groundwater Table Depth (ft)
AB-6	5	25	15	10	4.5
AB-7	15	20	4	4	15
AB-8	9	20	6	4	8.5
P-34	15	20	9	6	15
P-35	5	20	10	6	4.5
P-36	15	20	10	6	15
P-38	15	20	10	6	15
P-39	30	20	8	5	30
P-40	15	20	7	5	15
Average	13.8	20.6	8.8	5.8	13.6

SMF Northeast (P-9 and P-11)

Boring Number	Base of Aquifer Depth (ft)	Porosity (%)	Hydraulic Conductivity (k_h) (ft/day)	Unsaturated Vertical Infiltration (k_v) (ft/day)	Seasonal High Groundwater Table Depth (ft)
P-9	3.5	20	4	4	3
P-11	7.5	20	10	6	7
Average	5.5	20	7	5	5

SMF Southeast (P-12, P-14, P-15, P-17)

Boring Number	Base of Aquifer Depth (ft)	Porosity (%)	Hydraulic Conductivity (k_h) (ft/day)	Unsaturated Vertical Infiltration (k_v) (ft/day)	Seasonal High Groundwater Table Depth (ft)
P-12	5	20	10	6	4.5
P-14	5.5	20	9	6	5
P-15	2	20	10	6	1.5
P-17	5.5	20	4	4	5
Average	4.5	20	8.3	5.5	4.0

SMF Center (P-19 and P-21)

Boring Number	Base of Aquifer Depth (ft)	Porosity (%)	Hydraulic Conductivity (k_h) (ft/day)	Unsaturated Vertical Infiltration (k_v) (ft/day)	Seasonal High Groundwater Table Depth (ft)
P-19	6	25	10	6	5.5
P-21	15	20	10	6	15
Average	10.5	22.5	10	6	10.3

SMF West (P-43 through P-46)

Boring Number	Base of Aquifer Depth (ft)	Porosity (%)	Hydraulic Conductivity (k_h) (ft/day)	Unsaturated Vertical Infiltration (k_v) (ft/day)	Seasonal High Groundwater Table Depth (ft)
P-43	11.5	20	10	6	11
P-44	15	20	8	5	15
P-45	5	20	10	6	4.5
P-46	10	20	8	5	9.5
Average	10.4	20	9.0	5.5	10

Limitations

This report has been prepared for our client for his or her exclusive use, in accordance with generally accepted soil and foundation engineering practices, and makes no other warranty, either expressed or implied, as to the professional advice provided in the report. This report does not reflect any variations that may occur in the subsurface. The extent of variations may not become fully known until excavations begin.

Closing

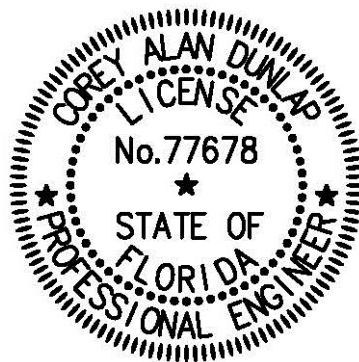
GSE appreciates the opportunity to have assisted you on this project. If you have any questions or comments concerning our report, please contact us.

Sincerely,

GSE Engineering & Consulting, Inc.

Cassandra Lindeman

Cassandra Lindeman, E.I.
Staff Engineer



This item has been digitally signed and sealed by

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

Corey A. Dunlap, P.E.
Senior Engineer
Florida Registration No. 77678

CRL/CAD:bef

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Attachments: Figure 1 – Project Site Location Map
Figure 2 – Site Plan Showing Approximate Locations of Field Tests
Auger Boring Logs
Summary Report of Laboratory Test Results
Key to Soil Classification

Distribution: Addressee (1)
File (1)



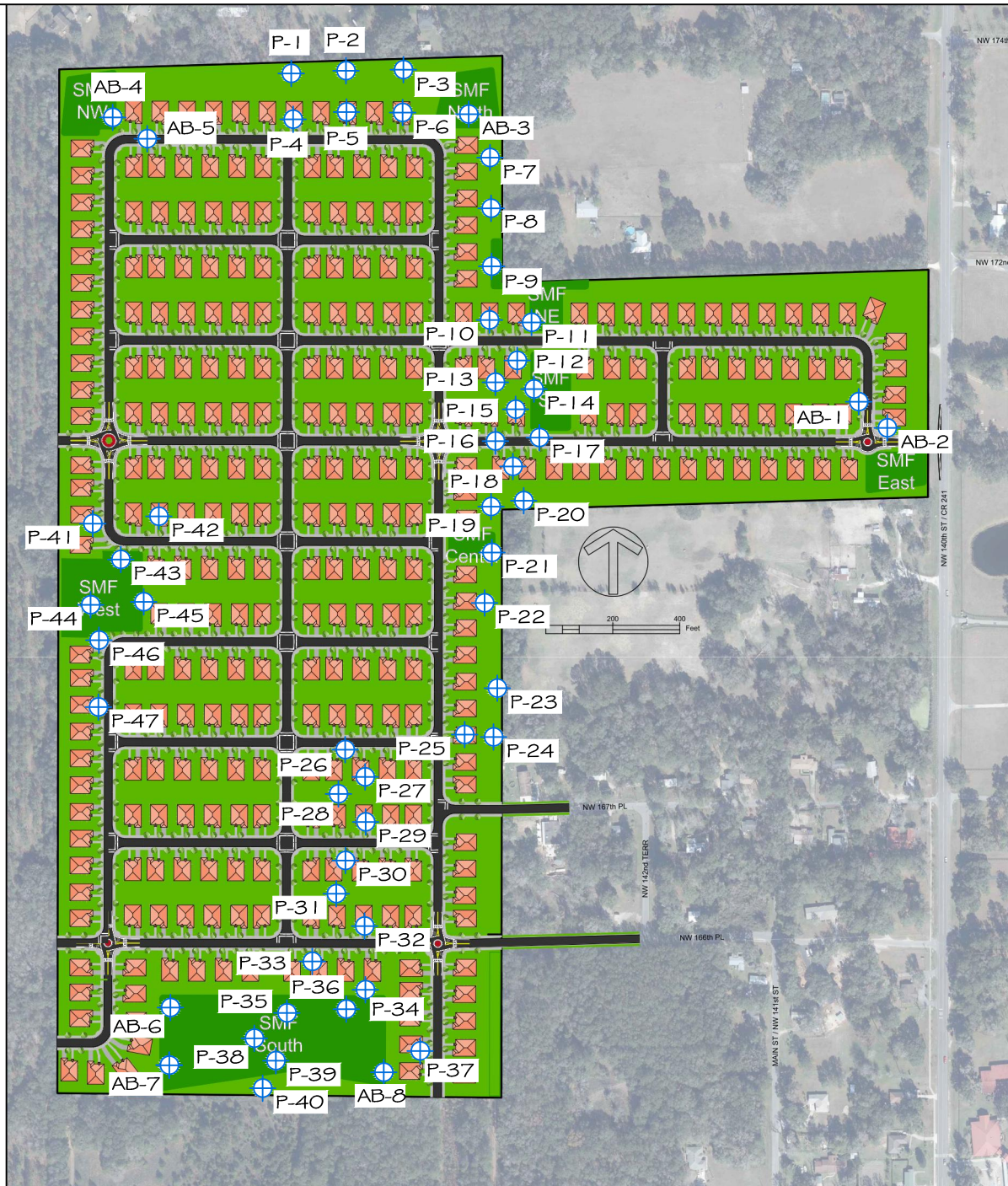
TARA FOREST SMFs
ALACHUA, ALACHUA COUNTY, FLORIDA
GSE PROJECT NO. 13707A

PROJECT SITE LOCATION MAP

DESIGNED BY: CRS
CHECKED BY : KLH
DRAWN BY : MAJ

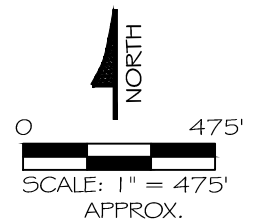


FIGURE
1



LEGEND:

 AUGER BORING



TARA FOREST SMF'S
ALACHUA, ALACHUA COUNTY, FLORIDA
GSE PROJECT NO. 13707A

**SITE PLAN SHOWING APPROXIMATE LOCATIONS OF
FIELD TESTS**

DESIGNED BY: CRS
CHECKED BY: KLH
DRAWN BY: MAJ



FIGURE
2



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CLIENT Gmuier Engineering, LLC.

PROJECT NAME Tara Forest SMFs

PROJECT NUMBER 13707

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-1**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 10.5 ft

NOTES _____

DATE PERFORMED 8/21/2018 **BORING NUMBER P-2**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH >15 ft

NOTES _____

AB 2 PORTRAIT - GINT STD US.GDT - 9/19/18 15:22 - P:\GENERAL\PROJECTS\13707 TARA FORREST SMF\S\13707 BORINGS\13707 BORINGS.GPJ

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
		AU 1	(SM) Dark brown silty sand			AU 1	(SM/PT) Dark gray organic silty SAND
2.5				2.5			
		AU 2 PS	(SM) Brown silty SAND %PASS-200 = 18 MC = 11 $k_h = 9.8 \text{ ft/day}$			AU 2 PS	(SM) Brown silty SAND %PASS-200 = 18 MC = 17 $k_h = 14 \text{ ft/day}$
5				5			
		AU 3	(SC) Brown, gray, and orange clayey SAND			AU 3	
7.5				7.5			
10			▽	10			
		AU 4	(SC/CH) Pale gray and orange very clayey SAND with lenses of green and orange clay			AU 4	(SM) Dark brown silty SAND %PASS-200 = 21 MC = 34
11.0				11.0			
15				15			
		AU 5	(SC) Pale brown clayey SAND				Bottom of borehole at 15.0 feet.
16.0							
		AU 6	(SC) Orange and brown clayey SAND				
19.5							
		AU 7	(CH) Orange and gray CLAY with limestone				
21.5							
		AU 8	(SC/CH) Gray and orange clayey SAND with lenses of gray and orange clay				
27.0							
30.0			Bottom of borehole at 30.0 feet.				

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PROJECT NAME Tara Forest SMFs

PROJECT NUMBER 13707

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-3**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 10.5 ft

NOTES _____

DATE PERFORMED 8/21/2018 **BORING NUMBER P-4**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH >15 ft

NOTES _____

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DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
		AU 1	(SM) Dark brown silty SAND			AU 1	(SM) Brown silty SAND
3.0				3.0			
		AU 2 PS	(SP-SM) Brown SAND with silt %PASS-200 = 10 MC = 8 $k_h = 13 \text{ ft/day}$			AU 2	(SM) Brown to orange silty SAND
5				5			
		AU 3				AU 3	
10				10			
			▽				
11.0				11.0			
		AU 4	(CH) Gray and orange sandy CLAY			AU 4	(SM/SC) Gray and orange silty SAND with traces of clay
15				15			
							%PASS-200 = 23 MC = 17
15.0				15.0			
			Bottom of borehole at 15.0 feet.				Bottom of borehole at 15.0 feet.

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PROJECT NAME Tara Forest SMFs

PROJECT NUMBER 13707

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-5**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH >15 ft

NOTES _____

DATE PERFORMED 8/21/2018 **BORING NUMBER P-6**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING 15.5 ft CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 15.0 ft

NOTES _____

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DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
		AU 1	(SM) Dark brown silty SAND			AU 1	(SM) Dark brown silty SAND
		AU PS	%PASS-200 = 22 MC = 19 $k_h = 5.9 \text{ ft/day}$				
5		AU 2		5			5.0
						AU 2	(SM) Brown silty SAND
10		AU 3	(SM) Pale brown silty SAND	10			
						AU 3	
		AU 4	(SM) Dark gray very silty SAND				
15			Bottom of borehole at 15.0 feet.	15			▽
						AU 4	
				20			
						AU 5	%PASS-200 = 13 MC = 17
				25			
							27.0
							(SC) Gray and orange clayey SAND
				30		AU 6	
							30.0
							Bottom of borehole at 30.0 feet.

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PROJECT NAME Tara Forest SMFs

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-8**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

 AT TIME OF DRILLING 6.7 ft CHECKED BY CAD

 ESTIMATED SEASONAL HIGH 1.5 ft

NOTES

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0			
0		AU 1	(SM) Brown silty SAND
1.5			
1.5		AU 2 PS	(SC) Brown and orange clayey SAND %PASS-200 = 25 $MC = 20 ; k_h = 6.2 \text{ ft/day}$
3.5			
5		AU 3	(SC) Gray and orange clayey SAND with sandstone
5		AU 4	
8.0			
8.0		AU 5	(CH) Pale green and orange sandy CLAY
10			
11.5			
11.5		AU 6	(CH) Green and orange CLAY with traces of sand
15.0			
15.0			Bottom of borehole at 15.0 feet.
15			
15		AU 5	
16.0			
16.0			(CH) Pale green sandy CLAY
20			
20		AU 6	
21.0			
21.0		AU 7	(SC) Pale green to gray clayey SAND
30.0			
30.0		AU 8	
			Bottom of borehole at 21.0 feet.

(Continued Next Page)



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PROJECT NAME Tara Forest SMFs

PROJECT NUMBER 13707

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-9**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 3.0 ft

NOTES _____

DATE PERFORMED 8/21/2018 **BORING NUMBER P-10**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING 14.0 ft CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 4.5 ft

NOTES _____

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DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
		AU 1	(SM) Dark brown silty SAND				(SM) Pale brown silty SAND
1.5							
		AU 2	(SC) Pale brown to orange clayey SAND			AU 1 PS	%PASS-200 = 15 MC = 8.8 k _n = 14 ft/day
3.5							
		AU 3	(CH) Orange and gray sandy CLAY				
5				5			
		AU 4	(CH) Orange and green sandy CLAY				(CH) Green and orange sandy CLAY
6.0						AU 2	
		AU 5					
10				10			
						AU 3	
15			Bottom of borehole at 15.0 feet.	15			
						AU 4	(CH) pale green to gray sandy CLAY
				20			
						AU 5	
				25			(SC) Gray clayey SAND
						AU 6	%PASS-200 = 26 MC = 20
				30			Bottom of borehole at 30.0 feet.

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PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-11**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 7.0 ft

NOTES _____

DATE PERFORMED 8/21/2018 **BORING NUMBER P-12**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 4.5 ft

NOTES _____

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DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
			(SM) Dark brown silty SAND 1.0				(SM) Brown silty SAND 1.0
			(SM) Brown to orange silty SAND				(SM) Pale brown silty SAND
		AU 1				AU 1	
5				5			▽ 5.0
		AU 2	(SM) Brown silty SAND 5.5				(SC/CH) Gray and orange very clayey SAND
			▽ 7.5				
		AU 3	(SC/CH) Gray and orange very clayey SAND			AU 2	
10				10			
		AU 4	(CH) Green and orange sandy CLAY 11.0			AU 3	
15				15			
			Bottom of borehole at 15.0 feet. 15.0				Bottom of borehole at 15.0 feet. 15.0

(Continued Next Page)



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PROJECT NAME Tara Forest SMFs

PROJECT NUMBER 13707

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-13**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 2.0 ft

NOTES _____

DATE PERFORMED 8/21/2018 **BORING NUMBER P-14**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 5.0 ft

NOTES _____

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DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
			(SM) Brown SAND 1.0				(SM) Brown silty SAND 1.0
		AU 1	(SM) Brown silty SAND 2.5			AU 1	(SP-SM) Brown SAND with silt 2.0
			(CH) Orange sandy CLAY			AU 2 PS	(SM) Pale brown and orange silty SAND with traces of clay %PASS-200 = 21 MC = 15 k _h = 9.4 ft/day
5		AU 2		5			
			(SC/CH) Gray and orange very clayey SAND 5.5				(CH) Orange and gray sandy CLAY with lenses of clay
		AU 3				AU 3	
10				10			
		AU 4	%PASS-200 = 37 MC = 23			AU 4	(CH) Pale green sandy CLAY with sandstone
15			Bottom of borehole at 15.0 feet.	15			Bottom of borehole at 15.0 feet.

(Continued Next Page)



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CLIENT Gmuier Engineering, LLC.

PROJECT NAME Tara Forest SMFs

PROJECT NUMBER 13707

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-15**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING 19.0 ft CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 1.5 ft

NOTES _____

DATE PERFORMED 8/21/2018 **BORING NUMBER P-16**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 1.5 ft

NOTES _____

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
			(SP-SM) Brown SAND with silt				(SM) Brown silty SAND
1.0				1.0			
		AU 1	▽ (SM) Pale brown silty SAND			AU 1	▽
2.0				2.0			
			(SC/CH) Brown very clayey SAND			AU 2	(CH) Brown, gray, and orange sandy CLAY
5		AU 2	%PASS-200 = 32 MC = 20	5			
5.5				5.5			
			(CH) Orange and green sandy CLAY with lenses of clay			AU 3	(CH) Green, gray, and orange CLAY with traces of sand
10		AU 3		10			
12.0				12.0			
		AU 4	(SC) Gray and pale brown clayey SAND			AU 4	(SC/CH) Green, gray, and orange CLAY with lenses of clayey sand
15				15			
17.5				17.5			
		AU 5	(CH) Green and orange CLAY with sandstone				
20				20			
22.0				22.0			
		AU 6	(SC) Gray and brown clayey SAND				
25				25			
28.5				28.5			
		AU 7	(SM) Gray and brown silty SAND with trace of clay				
30.0				30.0			
			Bottom of borehole at 30.0 feet.				Bottom of borehole at 15.0 feet.

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CLIENT Gmuer Engineering, LLC.

PROJECT NAME Tara Forest SMFs

PROJECT NUMBER 13707

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-17**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 5.0 ft

NOTES _____

DATE PERFORMED 8/21/2018 **BORING NUMBER P-18**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 4.5 ft

NOTES _____

AB 2 PORTRAIT - GINT STD US.GDT - 9/19/18 15:22 - P:\GENERAL\PROJECTS\13707 TARA FORREST SMF\S\13707 BORINGS\13707 BORINGS.GPJ

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
			(SP-SM) Brown SAND with silt				(SP-SM) Brown SAND with silt
			1.0				1.5
			(SP-SM) Pale brown SAND with silt				(SP-SM) Pale brown SAND with silt
			2.5				
		AU 1	(SC) Brown clayey SAND with sandstone			AU 1	
							▽
5		AU 2		5			5.0
			5.5				(SC) Gray and orange clayey SAND
			(CH) Orange and green CLAY with traces of sand and sandstone				
		AU 3				AU 2	%PASS-200 = 27 MC = 15
10				10			10.5
			11.0				(CH) Gray, green, and orange sandy CLAY
			(CH) Green and orange sandy CLAY with sandstone			AU 3	
		AU 4					15.0
15				15			Bottom of borehole at 15.0 feet.
			Bottom of borehole at 15.0 feet.				

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CLIENT Gmuier Engineering, LLC.

PROJECT NAME Tara Forest SMFs

PROJECT NUMBER 13707

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-19**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 5.5 ft

NOTES _____

DATE PERFORMED 8/21/2018 **BORING NUMBER P-20**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING 15.5 ft CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 5.0 ft

NOTES _____

AB 2 PORTRAIT - GINT STD US.GDT - 9/19/18 15:22 - P:\GENERAL\PROJECTS\13707 TARA FORREST SMF\S\13707 BORINGS\13707 BORINGS.GPJ

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
		AU 1 PS	(SP-SM) Pale brown SAND with silt %PASS-200 = 9.5 MC = 7.3 $k_h = 9.9 \text{ ft/day}$				(SM) Brown silty SAND 1.0
							(SM) Brown to orange silty SAND with trace of clay
3.5					AU 1 PS		%PASS-200 = 23 MC = 14 $k_h = 6.1 \text{ ft/day}$ 5.5
5		AU 2	(SM) Brown silty SAND with traces of clay	5			
							(CH) Brown, gray, and orange sandy CLAY
6.0					AU 2		
		AU 3	(CH) Gray sandy CLAY with sandstone	10			
10							
		AU 4	(CH) Green and orange CLAY	12.0			(CH) Pale green, gray, and orange sandy CLAY with lenses of clay
13.0					AU 3		
15				15.0			15.0
			Bottom of borehole at 15.0 feet.				▼ (CH) Green and orange CLAY
					AU 4		
				20			
					AU 5		(SC) Tan to light gray clayey SAND with lenses of SAND %PASS-200 = 15 MC = 23 22.0
				25			
					AU 6		
				30			
							Bottom of borehole at 30.0 feet.

(Continued Next Page)



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PROJECT NAME Tara Forest SMFs

PROJECT NUMBER 13707

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-21**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH >15 ft

NOTES _____

DATE PERFORMED 8/21/2018 **BORING NUMBER P-22**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH >30 ft

NOTES _____

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DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
		AU 1	(SM) Dark brown silty SAND			AU 1	(SM) Dark brown silty SAND
							2.0
		AU 2 PS	(SM) Brown silty SAND %PASS-200 = 14 MC = 9.3 $k_h = 10 \text{ ft/day}$			AU 2	(SM) Brown silty SAND
5			3.0	5			
		AU 3				AU 3 PS	%PASS-200 = 17 MC = 9.7 $k_h = 15 \text{ ft/day}$
10				10			
		AU 4				AU 4	
15			15.0	15			
			Bottom of borehole at 15.0 feet.			AU 5	
				20			
						AU 6	
				25			
						AU 7	
				30			28.0
							(SC-SM) Pale brown and tan SAND with silt
							30.0
							Bottom of borehole at 30.0 feet.

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PROJECT NAME Tara Forest SMFs

PROJECT NUMBER 13707

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-23**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 10.5 ft

NOTES _____

DATE PERFORMED 8/21/2018 **BORING NUMBER P-24**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

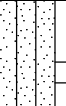
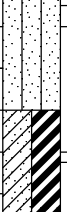
GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 10.0 ft

NOTES _____

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DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
			(SM) Dark brown silty SAND 1.0				(SM) Dark brown silty SAND 1.0
			(SM) Brown silty SAND				(SM) Brown silty SAND
5		AU 1 PS	%PASS-200 = 18 MC = 8.2 $k_h = 5.2 \text{ ft/day}$	5		AU 1	
10		AU 2 AU 3		10		AU 2 AU 3	
11.0			▽ (SC/CH) Brown and orange very clayey SAND	10.5			▽ (SC/CH) Gray and orange very clayey SAND
13.5			(SC) Gray clayey SAND	13.5			(CH) Gray and orange sandy CLAY
15		AU 4		15		AU 4	
			Bottom of borehole at 15.0 feet.				Bottom of borehole at 15.0 feet.

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PROJECT NAME Tara Forest SMFs

PROJECT NUMBER 13707

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-25**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 12.5 ft

NOTES _____

DATE PERFORMED 8/21/2018 **BORING NUMBER P-26**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 13.0 ft

NOTES _____

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0			(SM) Brown and orange silty SAND	0			(SM) Brown and orange silty SAND
5		AU 1 PS		5		AU 1	
10		AU 2		10		AU 2	
13.0		▽		13.0		▽	
15		AU 3	(SC) Gray and orange clayey SAND %PASS-200 = 29 MC = 17	15		AU 3	(SC/CH) Gray and orange very clayey SAND
18.0		AU 4	(CH) Pale gray and green sandy CLAY	17.0			(CH) Pale brown and orange sandy CLAY
21.0			(SC) Pale brown and gray clayey SAND	21.0		AU 5	(CH) Orange sandy CLAY
26.0		AU 5	(CH) Brown, gray, and orange sandy CLAY	28.0		AU 6	(CH) Orange and gray sandy CLAY with traces of sandstone
30.0		AU 6	Bottom of borehole at 30.0 feet.	30.0			Bottom of borehole at 30.0 feet.

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PROJECT NAME Tara Forest SMFs

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-28**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH >15 ft

NOTES

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
1.0			(SP-SM) Brown SAND with silt	1.0			(SM) Brown silty SAND
5.0		AU 1	(SP-SM) Orange and brown SAND with silt	5.0		AU 1 PS	
7.0		AU 2 PS	(SP-SM) Pale brown SAND with silt %PASS-200 = 9.7 MC = 11 $k_h = 11 \text{ ft/day}$	7.0		AU 2	
10.0		AU 3	(SC) Gray and orange clayey SAND %PASS-200 = 25 MC = 16	10.0		AU 3	
12.0		AU 4		12.0			(SP-SM) Light brown and orange SAND with silt
15.0			Bottom of borehole at 15.0 feet.	15.0			Bottom of borehole at 15.0 feet.



PROJECT NAME Tara Forest SMFs

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-30**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

AT TIME OF DRILLING NE CHECKED BY CAD

 ESTIMATED SEASONAL HIGH 20.5 ft

NOTES

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
			(SP-SM) Brown SAND with silt				(SP-SM) Brown SAND with silt
			(SP-SM) Brown and orange SAND with silt				(SP-SM) Orange and brown SAND with silt
		AU 1				AU 1	
5				5			
		AU 2				AU 2	
10				10			
		AU 3	(SP-SM) Pale brown and orange SAND with silt			AU 3 PS	(SP-SM) Pale brown and orange SAND with silt %PASS-200 = 8.1 MC = 5.5 $k_h = 18 \text{ ft/day}$
15			Bottom of borehole at 15.0 feet.	15			
						AU 4	(SM) Gray and orange silty SAND
						AU 5	(SC/CH) Gray very clayey sand
						AU 6	
							Bottom of borehole at 30.0 feet.

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PROJECT NAME Tara Forest SMFs

PROJECT NUMBER 13707

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-31**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH >15 ft

NOTES _____

DATE PERFORMED 8/21/2018 **BORING NUMBER P-32**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH >15 ft

NOTES _____

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DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
		AU 1	(SM) Dark gray silty SAND				(SM) Dark gray silty SAND
			1.5				1.0
		AU 2	(SM) Brown silty SAND			AU 1	(SM) Brown silty SAND
5				5			
		AU 3				AU 2 PS	
			7.0				
			(SM) Gray orange silty SAND with traces of clay				
10				10			
		AU 4	(SM) Grayish brown silty SAND			AU 3	(SC) Gray and orange clayey SAND
			10.5				%PASS-200 = 22 MC = 14
15				15			15.0
			15.0				
			Bottom of borehole at 15.0 feet.				Bottom of borehole at 15.0 feet.

(Continued Next Page)



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CLIENT Gmuier Engineering, LLC.

PROJECT NAME Tara Forest SMFs

PROJECT NUMBER 13707

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-33**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING 21.0 ft CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 20.0 ft

NOTES _____

DATE PERFORMED 8/21/2018 **BORING NUMBER P-34**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH >15 ft

NOTES _____

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
			(SM) Dark brown silty SAND				(SM) Brown and orange silty SAND
			1.0				
			(SM) Brown silty SAND				
5		AU 1 PS	%PASS-200 = 21 MC = 10 $k_h = 9.6 \text{ ft/day}$	5		AU 1 PS	%PASS-200 = 20 MC = 11 $k_h = 9 \text{ ft/day}$
		AU 2				AU 2	
10				10			
		AU 3				AU 3	
15				15			
		AU 4				AU 3	(SC) Gray and orange clayey SAND
16.5				15			
			(SP-SC) Brown, gray, and orange SAND with traces of clay				
			16.5				
20							
			▽				
			▼				
			22.0				
			(SC) Gray clayey SAND				
25							
		AU 5	%PASS-200 = 18 MC = 16				
30							
			30.0				
			Bottom of borehole at 30.0 feet.				Bottom of borehole at 15.0 feet.
							11.5
							15.0

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PROJECT NAME Tara Forest SMFs

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-36**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH >15 ft

NOTES

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
		AU 1	(SM) Brown and orange silty SAND				(SM) Brown and orange silty SAND
5				5		AU 1	
		AU 2 PS	(SC/CH) Brown very clayey SAND %PASS-200 = 41 MC = 26				
10				10		AU 2	
		AU 3					
15				15		AU 3	
			Bottom of borehole at 15.0 feet.				Bottom of borehole at 15.0 feet.



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PROJECT NAME Tara Forest SMFs

PROJECT NUMBER 13707

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-37**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 4.5 ft

NOTES _____

DATE PERFORMED 8/21/2018 **BORING NUMBER P-38**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH >15 ft

NOTES _____

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DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0			(SM) Brown and orange silty SAND	0			(SM) Brown and orange silty SAND
5		AU 1	▽	5		AU 1 PS	%PASS-200 = 24 MC = 11 $k_h = 10 \text{ ft/day}$
5.0		AU 2	(SC/CH) Brown, gray, and orange very clayey SAND	6.0		AU 2	(SM) Orange and brown silty SAND
9.0		AU 3	(CH) Pale brown, gray, and orange sandy CLAY with traces of limestone	10		AU 3	
15		AU 4		15			Bottom of borehole at 15.0 feet.
20		AU 5					
22.0		AU 6	(CH) Pale green, gray, and orange sandy CLAY				
27.5		AU 7	(CH) Pale brown and gray very sandy CLAY				
30.0			Bottom of borehole at 30.0 feet.				

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PROJECT NAME Tara Forest SMFs

PROJECT NUMBER 13707

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-39**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING 20.0 ft CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 19.0 ft

NOTES _____

DATE PERFORMED 8/21/2018 **BORING NUMBER P-40**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH >15 ft

NOTES _____

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DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
		AU 1	(SM) Dark silty SAND			AU 1	(SM) Dark brown silty SAND
1.5				2.0			
		AU 2 PS	(SM) Orange and brown silty SAND			AU 2 PS	(SM) Orange and brown silty SAND with traces of clay %PASS-200 = 28 MC = 14 k _h = 7.1 ft/day
5				6.0			
		AU 3				AU 3	(SM) Orange and brown silty SAND
10				12.0			
		AU 4				AU 4	(SM) Pale brown and orange silty SAND
15				15.0			
		AU 5	(SM) Gray and brown silty SAND				Bottom of borehole at 15.0 feet.
16.0							
		AU 6	(SC) Gray clayey SAND %PASS-200 = 19 MC = 21				
21.0							
		AU 7					
25							
30			Bottom of borehole at 30.0 feet.				
30.0							

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PROJECT NAME Tara Forest SMFs

PROJECT NUMBER 13707

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-41**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH >15 ft

NOTES _____

DATE PERFORMED 8/21/2018 **BORING NUMBER P-42**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH >30 ft

NOTES _____

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DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
		AU 1	(SM) Dark brown silty SAND			AU 1	(SP-SM) Brown and orange SAND with silt
			2.0				
		AU 2 PS	(SM) Brown and orange silty SAND %PASS-200 = 15 MC = 12 $k_h = 11$ ft/day			AU 2 PS	%PASS-200 = 11 MC = 8.8 $k_h = 18$ ft/day
5				5			
		AU 3				AU 3	
10				10			
		AU 4				AU 4	
15			15.0	15			
			Bottom of borehole at 15.0 feet.				
				20		AU 4	
				25		AU 5	
				30		AU 6	
							27.0
							(SP-SM) Pale brown, tan, and orange SAND with silt
							%PASS-200 = 9.9 MC = 7.4
							30.0
							Bottom of borehole at 30.0 feet.

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PROJECT NAME Tara Forest SMFs

PROJECT NUMBER 13707

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-43**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 11.0 ft

NOTES _____

DATE PERFORMED 8/21/2018 **BORING NUMBER P-44**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH >15 ft

NOTES _____

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DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
			(SM) Dark brown silty SAND				(SM) Dark brown silty SAND
			1.0				
			(SM) Orange and brown silty SAND				
		AU 1				AU 1	
							2.5
							(SM) Orange silty SAND with traces of clay
5		AU 2		5		AU 2	
		AU 3				AU 3	
10				10			
			▽				
			11.5				
			(SC/CH) Gray and orange very clayey SAND				12.0
							(SC) Gray clayey SAND
15				15		AU 4	
			15.0				15.0
			Bottom of borehole at 15.0 feet.				Bottom of borehole at 15.0 feet.

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PROJECT NAME Tara Forest SMFs

PROJECT NUMBER 13707

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-45**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 4.5 ft

NOTES _____

DATE PERFORMED 8/21/2018 **BORING NUMBER P-46**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 9.5 ft

NOTES _____

AB 2 PORTRAIT - GINT STD US.GDT - 9/19/18 15:22 - P:\GENERAL\PROJECTS\13707 TARA FORREST SMF\S\13707 BORINGS\13707 BORINGS.GPJ

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0			(SM) Brown and orange silty SAND	0			(SM) Brown silty SAND
5		AU 1 PS	▽	5.0		AU 1	
			(CH) Pale greenish gray and orange sandy CLAY				6.0
		AU 2				AU 2	(SC) Orange and brown clayey SAND
10				10			▽
		AU 3	(SC) Pale brown, gray, and orange clayey SAND			AU 3	(SC/CH) Pale brown and orange very clayey SAND
15				11.5			%PASS-200 = 42 MC = 28
			Bottom of borehole at 15.0 feet.	15.0			15.0
							Bottom of borehole at 15.0 feet.

(Continued Next Page)



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CLIENT Gmuier Engineering, LLC.

PROJECT NAME Tara Forest SMFs

PROJECT NUMBER 13707

PROJECT LOCATION Gainesville, Alachua, Florida

DATE PERFORMED 8/21/2018 **BORING NUMBER P-47**

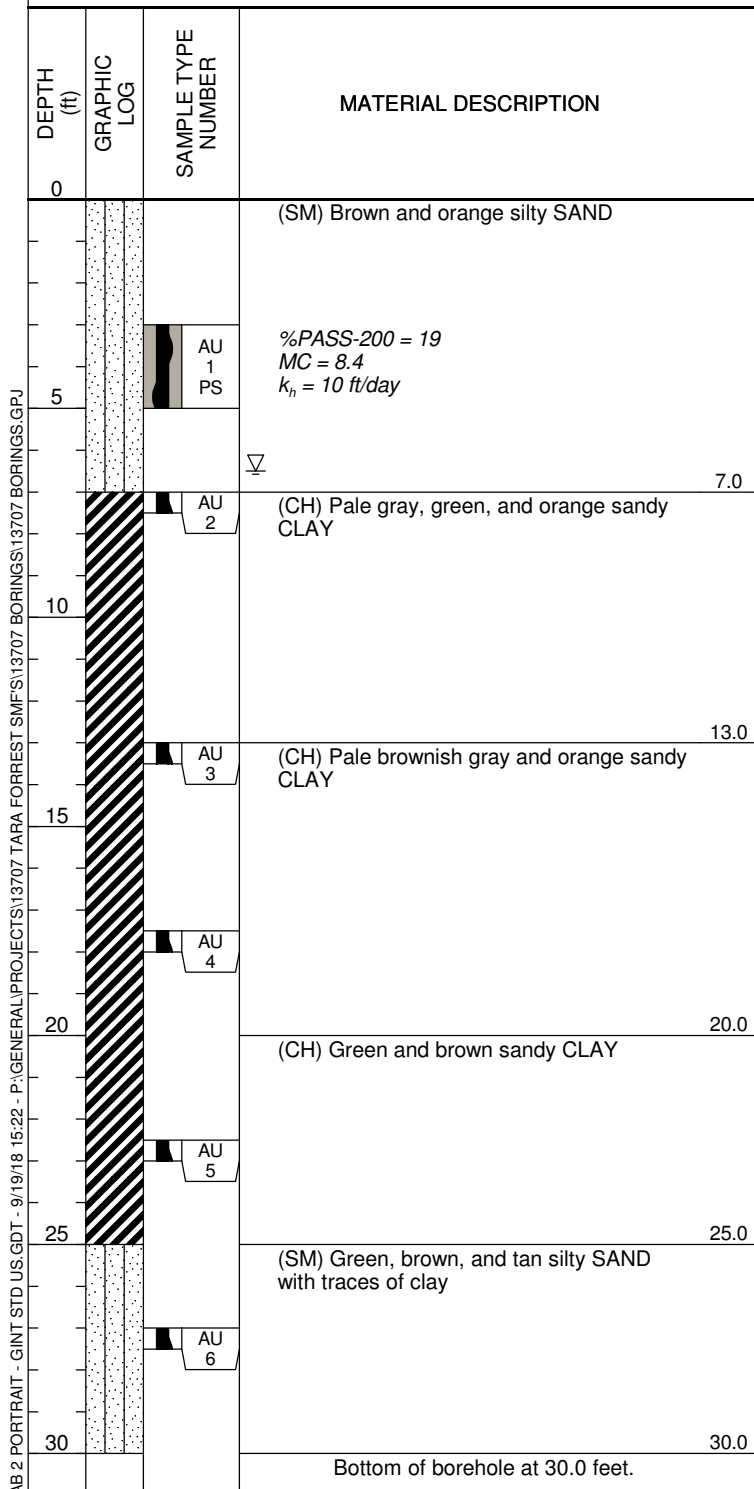
DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH 6.5 ft

NOTES _____





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CLIENT Gmuer Engineering, Inc

PROJECT NAME Tara Forest SMFs

PROJECT NUMBER 13707A

PROJECT LOCATION Alachua, Alachua County, FL

DATE PERFORMED 6/5/2019 **BORING NUMBER AB-1**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NA CHECKED BY CRS

▽ ESTIMATED SEASONAL HIGH >15 ft

NOTES _____

DATE PERFORMED 6/5/2019 **BORING NUMBER AB-2**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NA CHECKED BY CRS

▽ ESTIMATED SEASONAL HIGH >15 ft

NOTES _____

AB 2 PORTRAIT - GINT STD US.GDT - 6/20/19 14:14 - Q:\PROJECTS\13707A TARA FOREST SMFs\13707A BORINGS\13707A BORINGS.GPJ

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0.0			(SP-SM) Brown and orange SAND with silt	0.0			(SP) Brown SAND
2.5			%PASS-200= 9.9 MC = 7.3 K _n = 19 ft/day	2.5			0.8 (SP-SM) Brown and orange SAND with silt
5.0		AU 1 PS		5.0		PS	%PASS-200= 11 MC = 9.7 K _n = 6.9 ft/day
7.5			(SM) Pale gray and orange silty SAND	7.5		AU 2	7.0 (SM) Pale gray and orange silty SAND
10.0		AU 2	%PASS-200= 17 MC = 19	10.0			10.5 (SM) Pale gray and brown silty SAND
12.5			(SM) Pale gray silty SAND	12.5		AU 3	
15.0		AU 3		15.0			15.0 Bottom of borehole at 15.0 feet.
			Bottom of borehole at 15.0 feet.				

(Continued Next Page)



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CLIENT Gmuer Engineering, Inc

PROJECT NAME Tara Forest SMFs

PROJECT NUMBER 13707A

PROJECT LOCATION Alachua, Alachua County, FL

DATE PERFORMED 6/5/2019 **BORING NUMBER AB-3**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NA CHECKED BY CRS

▽ ESTIMATED SEASONAL HIGH 5.5 ft. perched

NOTES _____

DATE PERFORMED 6/5/2019 **BORING NUMBER AB-4**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NA CHECKED BY CRS

▽ ESTIMATED SEASONAL HIGH 2.0 ft. perched

NOTES _____

AB 2 PORTRAIT - GINT STD US.GDT - 6/20/19 14:14 - Q:\PROJECTS\13707A TARA FOREST SMFs\13707A BORINGS.GPJ

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0.0			(SP) Brown orange SAND	0.0			(SM) Brown silty SAND
		AU 1				PS AU 1	%PASS-200= 20 MC = 11 K _h = 9.4
2.5				2.5			▽ (SC) Brown and orange very clayey SAND
						AU 2	%PASS-200= 31 MC = 16
3.5			(SC) Orange and brown clayey SAND	3.5			
			%PASS-200= 29 MC = 17				
5.0		AU 2		5.0			(SC) Brown, orange, and gray clayey SAND with lenses gray sandy clay
			▽				
						AU 3	
6.0			(SC) Gray and orange very clayey SAND with trace limerock	6.0			
7.5		AU 3		7.5			
10.0				10.0			
12.0			(CH) Pale gray and orange sandy CLAY	12.0		AU 4	(CH) Green and orange sandy CLAY
		AU 4		12.5			
12.5							
15.0			Bottom of borehole at 15.0 feet.	15.0			Bottom of borehole at 15.0 feet.

(Continued Next Page)



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CLIENT Gmuier Engineering, Inc

PROJECT NAME Tara Forest SMFs

PROJECT NUMBER 13707A

PROJECT LOCATION Alachua, Alachua County, FL

DATE PERFORMED 6/5/2019 **BORING NUMBER AB-5**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NA CHECKED BY CRS

▽ ESTIMATED SEASONAL HIGH 5.5 ft. perched

NOTES _____

DATE PERFORMED 6/10/2019 **BORING NUMBER AB-6**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NA CHECKED BY CRS

▽ ESTIMATED SEASONAL HIGH 4.5 ft. perched

NOTES _____

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0.0			(SP) Brown and orange SAND	0.0			(SP) Orange and brown SAND with trace clay
2.5		AU 1		2.5		AU 1	
3.5		AU 2		3.5			
5.0		PS	(SC) Orange and brown clayey SAND %PASS-200= 26 MC = 10 K _h = 9.9	5.0			5.0
6.0		▽		6.0		AU 2	(SC) Brown, gray, and orange very clayey SAND with trace limerock %PASS-200= 37; MC = 22
7.5		AU 3	(SC) Gray and orange very clayey SAND with trace limerock	7.5		AU 3	(SC) Brown, gray and orange clayey SAND with lense clay
10.0		AU 4		10.0		AU 4	
12.5		AU 5	(CH) Pale gray and orange sandy CLAY	12.5		AU 5	(CH) Green and orange CLAY
15.0			Bottom of borehole at 15.0 feet.	15.0			Bottom of borehole at 15.0 feet.

AB 2 PORTRAIT - GINT STD US.GDT - 6/20/19 14:14 - Q:\PROJECTS\13707A TARA FOREST SMF\13707A BORINGS.GPJ

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CLIENT Gmuer Engineering, Inc

PROJECT NAME Tara Forest SMFs

PROJECT NUMBER 13707A

PROJECT LOCATION Alachua, Alachua County, FL

DATE PERFORMED 6/10/2019 **BORING NUMBER AB-7**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NA CHECKED BY CRS

▽ ESTIMATED SEASONAL HIGH >15 ft. perched

NOTES _____

DATE PERFORMED 6/10/2019 **BORING NUMBER AB-8**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NA CHECKED BY CRS

▽ ESTIMATED SEASONAL HIGH 8.5 ft. perched

NOTES _____

AB 2 PORTRAIT - GINT STD US.GDT - 6/20/19 14:14 - Q:\PROJECTS\13707A TARA FOREST SMFs\13707A BORINGS\13707A BORINGS.GPJ

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0.0			(SM) Brown and orange silty SAND %PASS-200= 18 MC = 7.3 K _h = 3.9 ft/day	0.0			(SM) Brown and orange silty SAND %PASS-200= 17 MC = 9.6 K _h = 11 ft/day
2.5		AU 1 PS		2.5		AU 1 PS	
5.0				5.0			
7.5				7.5		AU 2	(SC) Pale green and orange clayey SAND with lense clay
10.0		AU 2		10.0		AU 3	(CH) Brown and gray sandy CLAY with trace limerock
12.5				12.5			
15.0		AU 3		15.0			
			Bottom of borehole at 15.0 feet.				Bottom of borehole at 15.0 feet.



Engineering & Consulting, Inc.

SUMMARY REPORT OF LABORATORY TEST RESULTS

Project Number: 13707A

Project Name: Tara Forest SMF's

Boring Number	Depth (ft)	Soil Description	Natural Moisture Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	Percent Passing No. 200 Sieve	Organic Content (%)	Hydraulic Conductivity (ft/day)	Unified Soil Classification
AB-1	3 - 5	Brown and orange SAND with silt	7.3				9.9		19	SP-SM
AB-1	9 - 9.5	Pale gray and orange silty SAND	19				17			SM
AB-2	3 - 5	Brown and orange SAND with silt	9.7				11		6.9	SP-SM
AB-3	5 - 5.5	Orange and brown clayey SAND	17				29			SC
AB-4	0 - 2	Brown silty SAND	11				20		9.4	SM
AB-4	3 - 3.5	Brown and orange very clayey SAND	16				31			SC
AB-5	3 - 5	Orange and brown clayey SAND	10				26		9.9	SC
AB-6	5 - 5.5	Brown, gray, and orange very clayey SAND with trace limerock	22				37			SC
AB-7	0 - 3	Orange and brown silty SAND	7.3				18		3.9	SM
AB-8	1 - 3	Brown and orange silty SAND	9.6				17		11	SM

KEY TO SOIL CLASSIFICATION CHART

Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests				SYMBOLS		GROUP NAME	
				GRAPHIC	LETTER		
COARSE-GRAINED SOILS	Gravels	Clean Gravels	$Cu \geq 4$ and $1 \leq Cc \leq 3$		GW	Well graded GRAVEL	
	More than 50% retained on No. 200 sieve	More than 50% of coarse fraction retained on No. 4 sieve	Less than 5% fines	$Cu < 4$ and/or $1 > Cc > 3$		GP	Poorly graded GRAVEL
			Gravels with fines	Fines classify as ML or MH		GM	Silty GRAVEL
			More than 12% fines	Fines classify as CL or CH		GC	Clayey GRAVEL
			Sands	Clean Sands	$Cu \geq 6$ and $1 \leq Cc \leq 3$		SW
	50% or more of coarse fraction passes No. 4 sieve		Less than 5% fines	$Cu < 6$ and/or $1 > Cc > 3$		SP	Poorly graded SAND
			Sand with fines	Fines classify as ML or MH		SP-SM	SAND with silt
			$5\% \leq \text{fines} < 12\%$	Fines classify as CL or CH		SP-SC	SAND with clay
			Sand with fines	Fines classify as ML or MH		SM	Silty SAND
			$12\% \leq \text{fines} < 30\%$	Fines classify as CL or CH		SC	Clayey SAND
			Sand with fines	Fines classify as ML or MH		SM	Very silty SAND
			30% fines or more	Fines classify as CL or CH		SC	Very clayey SAND
FINE-GRAINED SOILS			Clays	inorganic	$50\% \leq \text{fines} < 70\%$		CL/CH
	$70\% \leq \text{fines} < 85\%$				CL/CH	CLAY with sand	
	$\text{fines} \geq 85\%$				CL/CH	CLAY	
	Silts and Clays	inorganic	PI > 7 and plots on/above "A" line		CL	Lean CLAY	
			PI < 4 or plots below "A" line		ML	SILT	
	Liquid Limit less than 50	organic	Liquid Limit - oven dried < 0.75		OL	Organic clay	
			Liquid Limit - not dried		OL	Organic silt	
	Silts and Clays	inorganic	PI plots on or above "A" line		CH	Fat CLAY	
			PI plots below "A" line		MH	Elastic SILT	
	Liquid Limit 50 or more	organic	Liquid Limit - oven dried < 0.75		OH	Organic clay	
Liquid Limit - not dried				OH	Organic silt		
HIGHLY ORGANIC SOILS	Primarily organic matter, dark in color, and organic odor				PT	PEAT	

CORRELATION OF PENETRATION RESISTANCE WITH RELATIVE DENSITY AND CONSISTENCY

	No. OF BLOWS, N	RELATIVE DENSITY		No. OF BLOWS, N	CONSISTENCY
SANDS:	0 - 4	Very Loose	SILTS & CLAYS:	0 - 2	Very Soft
	5 - 10	Loose		3 - 4	Soft
	11 - 30	Medium dense		5 - 8	Firm
	31 - 50	Dense		9 - 15	Stiff
	OVER 50	Very Dense		16 - 30	Very Stiff
				31 - 50	Hard
	No. OF BLOWS, N	RELATIVE DENSITY		OVER 50	Very Hard

No. OF BLOWS, N	RELATIVE DENSITY
0 - 8	Very Soft
9 - 18	Soft
LIMESTONE: 19 - 32	Moderately Hard
33 - 50	Hard
OVER 50	Very Hard

SAMPLE GRAPHIC TYPE LEGEND



Location
of SPT
Sample



Location
of Auger
Sample

PARTICLE SIZE IDENTIFICATION

BOULDERS:	Greater than 300 mm
COBBLES:	75 mm to 300 mm
GRAVEL:	Coarse - 19.0 mm to 75 mm
	Fine - 4.75 mm to 19.0 mm
SANDS:	Coarse - 2.00 mm to 4.75 mm
	Medium - 0.425 mm to 2.00 mm
	Fine - 0.075 mm to 0.425 mm
SILTS & CLAYS:	Less than 0.075 mm

LABORATORY TEST LEGEND

LL	=	Liquid Limit, %
PL	=	Plastic Limit, %
PI	=	Plasticity Index, %
% PASS - 200	=	Percent Passing the No. 200 Sieve
MC	=	Moisture Content, %
ORG	=	Organic Content, %
k_h	=	Horizontal Hydraulic Conductivity, ft/day



Engineering & Consulting, Inc.

**SUMMARY REPORT OF A
GEOTECHNICAL SITE EXPLORATION**

**TARA BAYWOOD - BASINS
ALACHUA, ALACHUA COUNTY, FLORIDA**

GSE PROJECT No. 14241A

Prepared For:

GMUER ENGINEERING

OCTOBER 2019

Certificate of Authorization No. 27430



Engineering & Consulting, Inc.

October 21, 2019

Christopher Gmuer, P.E., President
Gmuer Engineering
2603 NW 13th Street, Box 314
Gainesville, FL 32609

Subject: Summary Report of a Geotechnical Site Exploration
Tara Baywood - Basins
Alachua, Alachua County, Florida
GSE Project No. 14241A

Dear Mr. Gmuer:

GSE Engineering & Consulting, Inc. (GSE) is pleased to submit this geotechnical site exploration report for the above referenced project.

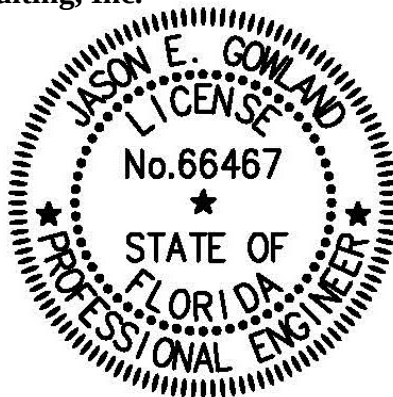
Presented herein are the findings and conclusions of our exploration, including the geotechnical parameters and recommendations to assist with stormwater management designs.

GSE appreciates this opportunity to have assisted you on this project. If you have any questions or comments concerning this report, please contact us.

Sincerely,

GSE Engineering & Consulting, Inc.

Kevin P. Fisher, E.I.
Staff Engineer



This item has been digitally signed and sealed by

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

Jason E. Gowland, P.E.
Senior Geotechnical Engineer
Florida Registration No. 66467

KPF/JEG:maj
Z:\Projects\14241A Tara Baywood - Basins\14241A.doc

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Figure

1. Project Site Location Map
2. Site Plan Showing Approximate Locations of Field Tests

1.0 INTRODUCTION

1.1 General

GSE Engineering & Consulting, Inc. (GSE) has completed this geotechnical exploration for the proposed Tara Baywood stormwater basins located in Alachua, Alachua County, Florida. This exploration was performed in accordance with GSE Proposal No. 2019-553 dated September 13, 2019. Mr. Christopher Gmuer, P.E., President, of Gmuer Engineering authorized our services on September 13, 2019

1.2 Project Description

This project will consist of a 210 unit townhome development. The site is located at the west termination of NW 161st Avenue and north of the Lowes commercial development in Alachua, Florida. The site contains approximately 35 acres. You provided information about the project and site plans illustrating the locations of the proposed improvements.

The site has significant topography changes, with an overall slope down from the east to the west. Site elevations generally range from about 145 feet at the east end to 86 feet at the southwest corner.

You provided a plan indicating the locations of two stormwater basins. We understand soil excavated from the basins will be used as fill in other areas of the site, if suitable.

A recent aerial photograph of the site was obtained. The site plan and aerial photograph were used in preparation of this exploration and report.

1.3 Purpose

The purpose of this geotechnical exploration was to determine the general subsurface conditions, evaluate these conditions with respect to the proposed construction, provide a discussion of the suitability of the various soil materials encountered for use as fill on the project, and prepare geotechnical parameters to assist with the stormwater basin designs.

2.0 FIELD AND LABORATORY TESTS

2.1 General Description

The procedures used for field sampling and testing are in general accordance with industry standards of care and established geotechnical engineering practices for this geographic region. This exploration consisted of performing sixteen (16) auger borings to depths of 15 to 20 feet bls in the area of the proposed stormwater management facilities.

The soil borings were performed at the approximate locations as shown on Figure 2. The borings were located at the site using the provided site plan and obvious site features as reference. The boring locations should be considered approximate. The soil borings were performed from September 23 through 24, 2019.

2.2 Auger Borings

The auger borings were performed in accordance with ASTM D1452. The borings were performed with flight auger equipment that was rotated into the ground in a manner that reduces soil disturbance. After penetrating to the required depth, the auger was retracted and the soils collected on the auger flights were field classified and placed in sealed containers. Representative samples of each stratum were retained from the auger boring. Results from the auger borings are provided in Section 5.1.

2.3 Soil Laboratory Tests

The soil samples recovered from the soil borings were returned to our laboratory, and examined to confirm the field descriptions. Representative samples were then selected for laboratory testing. The laboratory tests consisted of seventeen (17) percent soil fines passing the No. 200 sieve determinations, seventeen (17) natural moisture content determinations, three (3) Atterberg Limits tests, and five (5) constant head hydraulic conductivity tests. These tests were performed in order to aid in classifying the soils and to further evaluate their engineering properties. The laboratory tests are provided in Section 5.2.

3.0 FINDINGS

3.1 Surface Conditions

Mr. Kevin P. Fisher, E.I. with GSE visited the site on September 19, 2019 to observe the site conditions and mark the boring locations. Mr. Jason Kite with Jason Kite, LLC was retained by GSE to clear lanes to allow access to the boring locations for drilling equipment.

The site is partially wooded with large trees and sparse underbrush. The southern and western portions of the site are relatively open with tall weeds. A soil mound is present along the southern property line. Residential homes are present east of the site while a commercial building is located south of the site.

The topography at the site is moderately sloping down toward the west from the east. Regional topography is gently rolling hills. The Alachua County Growth Management website indicates the ground surface elevations at the site are near elevations 86 to 145 feet¹.

3.2 Subsurface Conditions

The locations of the auger borings are provided on Figure 2. Complete logs for the borings are provided in Section 5.1. Descriptions for the soils encountered are accompanied by the Unified Soil Classification System symbol (SM, SP-SM, etc.) and are based on visual examination of the recovered soil samples and the laboratory tests performed. Stratification boundaries between the soil types should be considered approximate, as the actual transition between soil types may be gradual.

The auger borings located in the proposed stormwater management facilities indicate the soils across these areas are relatively consistent. The auger borings initially penetrated 0 to 20 feet of sand with silt, sand with clay, and silty sand (SP-SM, SP-SC, SM). This was underlain by clayey to very clayey sand (SC, SC/CL) with some interbedded strata of sand with clay (SP-SC) to depths of 15 to 20 feet bls. Auger borings P-2, P-6, P-14, and P-16 encountered clay-rich soils consisting of sandy clay and clay with sand (CL/CH) underlying the clayey to very clayey sand (SC) at depths ranging from approximately 7 to 16 feet bls.

The groundwater table was not encountered in the auger borings at the time of our investigation.

3.3 Review of Published Data

The majority of the site is mapped as eight soil series by the Soil Conservation Service (SCS) Soil Survey for Alachua County². The following soil descriptions are from the Soil Survey.

Arredondo fine sand, 0 to 5 percent slopes – This nearly level to gently sloping, well drained soil is in both small and large areas of uplands. Slopes are smooth to convex. The areas are irregular in shape and range from about 10 to 160 acres in size.

¹ Alachua County Growth Management website, <http://mapgenius.alachuacounty.us/>.

² Soil Survey of Alachua County, Florida. Soil Conservation Service, U.S. Department of Agriculture.

Tara Baywood - Basins

Alachua, Alachua County, Florida

GSE Project No. 14241A

Typically, the surface layer is dark grayish brown fine sand about 8 inches thick. The subsurface layer is fine sand to a depth of 49 inches. The upper 23 inches is yellowish brown, and the lower 18 inches is brownish yellow. The subsoil extends to a depth of 86 inches or more. The upper 5 inches is yellowish brown loamy sand; the next 10 inches is yellowish brown sandy clay loam, and the lower 22 inches is dark yellowish brown sandy clay and sandy clay loam.

Included with this soil in mapping are small depressional areas of soils that have a very dark gray or black surface layer 8 to 24 inches thick. This layer overlies gray sandy material. These areas are shown by wet spot symbols. Also included are small areas of Fort Meade, Gainesville, Kendrick, and Millhopper soils. A few areas of this soil include Arredondo soils that have 5 to 8 percent slopes. Some areas of this soil in the western part of the county have small spots of strongly acid to medium acid soil material 40 to 70 inches deep to calcareous limestone. Limestone boulders, fragments of limestone, and sinkholes are in some areas of this soil, mainly in the limestone plain sections of the western part of the county. Most of these boulders are siliceous. The sinkholes and the boulders are shown by appropriate map symbols. Total included areas are about 15 percent.

In this Arredondo soil, the available water capacity is low in the sandy surface and subsurface layers and low to medium in the loamy subsoil. Permeability is rapid in the surface and subsurface layers and moderately slow to moderate in the loamy subsoil. Natural fertility is low in the sandy surface and subsurface layers and medium in the finer textured subsoil. Organic matter content is low. The water table in this soil is at a depth of more than 72 inches. Surface runoff is slow.

Fort Meade fine sand, 0 to 5 percent slopes. This nearly level to gently sloping, well drained soil is in both small and large areas on the gently rolling uplands. The areas are mostly irregular in shape and range from about 10 to 400 acres.

Typically, the surface layer is fine sand about 14 inches thick. The upper 10 inches is very dark brown, and the lower 4 inches is very dark grayish brown. The underlying layer is fine sand to a depth of 80 inches or more. In sequence from the top, the upper 20 inches is dark brown; the next 9 inches is dark yellowish brown; the next 28 inches is yellowish brown; and the lower 14 inches is dark brown.

Included with this soil in mapping are small areas of Arredondo, Gainesville, Kendrick, and Millhopper soils. Also included are small areas of soils which are similar to the Fort Meade soil but which have only 6 to 10 inches of a very dark gray or very dark grayish brown surface layer over a fine sand or loamy sand underlying layer. Total included areas are less than 15 percent.

In this Fort Meade soil, the available water capacity is low to medium. The permeability is rapid. The natural fertility is low. Organic matter content of the surface layer is moderately low to high. Surface runoff is slow. The water table is more than 72 inches below the surface.

Millhopper sand, 0 to 5 percent slopes – This nearly level to gently sloping, moderately well drained soil is in small and large irregularly shaped areas on uplands and on slightly rolling knolls in the broad flatwoods. Slopes are mostly nearly smooth or convex. The areas are variable in size. They range from about 10 to 250 acres.

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Typically, the surface layer is dark grayish brown sand about 9 inches thick. The subsurface layer is sand or fine sand about 49 inches thick. The upper 17 inches is yellowish brown, the next 22 inches is light yellowish brown, and the lower 10 inches is very pale brown. The subsoil extends to a depth of 89 inches. The upper 6 inches is yellowish brown loamy sand that has grayish and brownish mottles; the next 22 inches is light gray, mottled sandy clay loam; and the lower 3 inches is light gray, mottled sandy loam.

Included with this soil in mapping are small areas of Arredondo, Bonneau, Fort Meade, Gainesville, Kanapaha, Lochloosa, and Sparr soils. Siliceous limestone boulders and small sinks are within some delineations. Small areas of Millhopper soils that have 5 to 8 percent slopes are also included. About 25 acres mapped as this Millhopper soil along the Santa Fe River is occasionally flooded. Total included areas are about 20 percent or less.

This Millhopper soil has a water table that is at a depth of 40 to 60 inches for 1 to 4 months and at a depth of 60 to 72 inches for 2 to 4 months during most years. The available water capacity is low in the surface and subsurface layers and is low to medium in the subsoil. Permeability is rapid in the surface and subsurface layers, moderately rapid in the upper 6 inches of the subsoil, and slow to moderately slow below this depth. Natural fertility is low. Organic matter content is low to moderately low.

Lochloosa fine sand, 2 to 5 percent slopes - This gently sloping, somewhat poorly drained soil is in small and large areas on the rolling uplands. Slopes are slightly convex.

Typically, the surface layer is dark gray fine sand about 7 inches thick. The subsurface layer is yellowish brown loamy sand or sand to a depth of 31 inches. It has light gray and yellowish brown mottles below a depth of 21 inches. The subsoil extends to 76 inches. The upper 4 inches is dark gray, mottled fine sandy loam; the next 19 inches is gray sandy loam; and the lower 22 inches is gray sandy clay loam. Between depths of 76 and 83 inches, the underlying material is mixed light gray and greenish gray sandy clay loam.

This Lochloosa soil has a water table that is about 30 to 40 inches below the surface for 1 to 4 months during most years. The water table rises to a depth of 20 to 30 inches for 1 to 3 weeks. Surface runoff is slow. The available water capacity is low to medium in the sandy surface and subsurface layers and medium in the subsoil. Permeability is rapid in the surface and subsurface layers, moderate in the upper part of the subsoil, and slow in the lower part.

Kendrick sand, 2 to 5 percent slopes – This gently sloping, well drained soil is in both small and large areas on the gently rolling uplands. These areas are mostly irregularly shaped or elongated and range from about 20 to 200 acres.

Typically, the surface layer is dark grayish brown sand about 9 inches thick. The subsurface layer is yellowish brown loamy sand to a depth of 26 inches. The subsoil extends to a depth of 90 inches or more. The upper 5 inches is yellowish brown fine sandy loam; the next 20 inches is dark yellowish brown, mottled sandy clay loam; the next 22 inches is dark yellowish brown sandy clay loam; the next 10 inches is yellowish brown, mottled fine sandy loam; and the lower 7 inches is yellowish brown sandy clay loam.

Tara Baywood - Basins

Alachua, Alachua County, Florida

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Included with this soil in mapping are some small areas of soils that have similar characteristics to the Kendrick soils except that they have loamy sand surface and subsurface layers less than 20 inches thick over a sandy clay loam subsoil. Small areas of soils that are similar to the Kendrick soils but have fine sand surface and subsurface layers or have a subsoil that is sandy clay throughout are included. Also included are small areas of Arredondo, Blichton, Bonneau, Lochloosa, and Norfolk soils. A few areas of Kendrick soils have 0 to 2 percent slopes to 5 to 8 percent slopes. Small moderately eroded spots are in a few areas. Sinkholes and limestone boulders are in some areas and are shown by appropriate symbols. Total included areas are about 15 percent.

In this Kendrick soil, the available water capacity is low in the surface and subsurface layers, medium in the upper 5 inches of the subsoil, and medium to high below this depth. Permeability is rapid in the surface and subsurface layers. Permeability is moderate to moderately rapid in the upper 5 inches of the subsoil, moderately slow to moderate in the next 42 inches, slow in the lower 17 inches. Organic matter content is low to moderately low in the surface layer. The water table is more than 72 inches below the surface. Surface runoff is moderately slow.

Norfolk loamy fine sand, 5 to 8 percent slopes – This sloping, well drained soil is in irregularly shaped areas on small, sharp breaking slopes and in irregularly shaped and elongated areas on the long hillsides of the rolling uplands. These areas range from 8 to 35 acres.

Typically, the surface layer is dark grayish brown loamy sand about 6 inches thick. The subsurface layer is light yellowish brown loamy sand about 5 inches thick. The subsoil extends to a depth of 75 inches or more. The upper 35 inches is yellowish brown sandy clay loam; the next 16 inches is yellowish brown, mottled sandy clay loam; and the lower 13 inches is mottled, yellowish brown and gray sandy clay.

Included with this soil in mapping are small areas of Kendrick, Lochloosa, and Bivans soils. Also included are small areas of soils that have a yellowish brown, clayey subsoil at a depth of less than 20 inches and have gray mottles within 30 inches of the surface. In a few small areas, the subsoil extends to a depth of less than 60 inches. Also included are small areas of soils that are similar to Norfolk soils but have more than 5 percent, by volume, nodules and fragments of ironstone. Limestone boulders and sinkholes are included in some areas and are shown by appropriate symbols. Total included areas are about 20 percent.

This Norfolk soil has a water table that is at a depth of 48 to 72 inches for 1 to 2 months during most years. Wetness is caused by hillside seepage. Surface runoff is rapid. The available moisture capacity is low in the sandy surface and subsurface layers and medium to high in the loamy and clayey subsoil. Permeability is rapid in the surface and subsurface layers. It is moderately slow in the upper part of the subsoil and very slow to slow in the lower part. Natural fertility is low in the sandy surface and subsurface layers and medium in the underlying subsoil. Organic matter content is low to moderately low.

Lochloosa fine sand, 5 to 8 percent slopes. - This sloping, somewhat poorly drained soil is in relatively small areas on sharp breaking slopes and along long, narrow slopes of the upland. The areas are mostly irregular or elongated in shape and range from about 10 to 50 acres.

Typically, the surface layer is grayish brown fine sand about 5 inches thick. The subsurface layer is light yellowish brown, mottled fine sand to a depth of 25 inches. The subsoil extends to a depth of 67 inches. The upper 5 inches is yellowish brown, mottled sandy loam; the next 5 inches is mottled light yellowish brown and gray sandy clay loam; and the lower 32 inches is gray mottled sandy clay loam. Between depths of 67 to 80 inches, the underlying material is gray, mottled sandy clay and fine pockets of sandy loam and sandy clay loam.

Included with this soil are small areas of Blichton, Kendrick, Micanopy, and Norfolk soils. Also included are small areas of soils that are similar to Lochloosa soils in drainage and texture but have a subsoil less than 20 inches below the surface. Small areas of Lochloosa soils that have 2 to 5 percent slopes are included. Small moderately eroded spots are in some areas. Rock outcrops and sinkholes are in some areas and are shown by appropriate symbols. Total included areas are about 20 percent.

This Lochloosa soil has a water table that is about 30 to 50 inches below the surface for 1 to 3 months during most years. The water table may be at a depth of 20 to 30 inches for 1 to 3 weeks. Wetness is caused by hillside seepage. Surface runoff is medium on this soil. The available water capacity is low in the sandy surface layer and medium in the subsoil. Permeability is rapid in the surface and subsurface layers, moderate in the upper part of the subsoil, and slow in the lower part. Natural fertility is low in the sandy surface and subsurface layers and low to medium in the loamy subsoil. Organic matter content is low in the surface layer.

3.4 Laboratory Soil Analysis

Selected soil samples recovered from the soil borings were analyzed for the percent soil fines passing the No. 200 sieve, natural moisture content, Atterberg Limits, and hydraulic conductivity. Samples selected for laboratory testing were collected at depths ranging from 2 to 13.5 feet bls. These tests were performed to confirm visual soil classification and evaluate their engineering properties. The complete laboratory report is provided in Section 5.2.

The laboratory tests indicate the tested soils consist of silty sand, clayey sand, very clayey sand, and sandy clay. The tested silty sand (SM) contains approximately 17 to 24 percent soil fines passing the No. 200 sieve with natural moisture contents of about 5.9 to 12 percent. The tested clayey sand (SC) contains approximately 18 to 25 percent soil fines passing the No. 200 sieve with natural moisture contents of about 6.1 to 15 percent. The tested very clayey sand (SC/CL) contains approximately 31 to 46 percent soil fines passing the No. 200 sieve with natural moisture contents of about 16 to 31 percent. The tested sandy clay (CL/CH) contains approximately 52 percent soil fines passing the No. 200 sieve with a natural moisture content of about 30 percent.

Atterberg Limits tests indicate the tested very clayey sand (SC) has Liquid Limit (LL) values of 34 and 35, Plastic Limit (PL) values of 19 and 20, and Plasticity Index (PI) values of 14 and 16. This corresponds to a material with low potential ($LL < 50$ and $PI < 25$) for expansive behavior³. The tested sandy clay (CL/CH) has a LL value of 53, PL value of 22, and PI value of 31. This corresponds to a material with marginal potential ($50 < LL < 60$ and $25 < PI < 35$) for expansive behavior.

³ U.S. Department of the Army USA, 1983, Foundations in Expansive Soils, TM 5-818-7, p. 4-1.

Tara Baywood - Basins

Alachua, Alachua County, Florida

GSE Project No. 14241A

The constant head hydraulic conductivity test results indicate the near-surface silty sand has hydraulic conductivity values of 0.7 to 2.4 feet per day. Tests were not conducted on the deeper clayey sand due to the limitations of the test method on soils having moderate to high fines content, but these soils are expected to have permeability values at least one order of magnitude lower than the sandy soils.

4.0 EVALUATION AND RECOMMENDATIONS

4.1 General

The following recommendations are made based upon our understanding of the proposed construction, a review of the attached soil borings and laboratory test data, and experience with similar projects and subsurface conditions. If plans or the location of proposed construction changes from those discussed previously, GSE requests the opportunity to review and possibly amend our recommendations with respect to those changes.

The performance of site improvements may be sensitive to their post-construction relationship to site groundwater levels, seepage zones, or soil/rock characteristics exposed at final site grades. GSE recommends that use of boring information for final design of all site improvements be predicated on proper horizontal and vertical control of borings.

In this section of the report, we present our geotechnical parameters and recommendations to assist with stormwater management designs as well as a discussion of the suitability of the various soil materials encountered for use as fill on the project.

4.2 Groundwater

The groundwater table was not encountered in the borings at the time of our exploration. However, you should expect water to perch on top of the clayey to very clayey sands after periods of heavy and seasonal rainfall.

4.3 Stormwater Management

The soil conditions at the stormwater management facility are relatively consistent; initially penetrating sand with silt, sand with clay, and silty sand overlying clayey to very clayey sand. Auger borings P-2, P-6, P-14, and P-16 encountered deep clay-rich soils consisting of sandy clay and clay with sand.

The water table was not encountered in the auger borings at the time of our exploration. We anticipate the seasonal high groundwater table to be perched on the clayey to very clayey sands.

The laboratory permeability tests indicate the surficial layer of silty sand has hydraulic conductivity values of 0.7 to 2.4 feet per day. The deeper clayey sand encountered below the surficial sandy material is friable and will have permeability values at least one order of magnitude lower than the sandy soils. The underlying very clayey sand, sandy clay, and clay with sand are expected to be confining soils.

Based upon our findings and test results, our recommended soil parameters for the stormwater management design in the explored areas are presented below. The recommended parameters consider the results of the permeability tests, wash 200 determinations, and our experience with these types of soils. The provided elevations are estimated based upon the site topography you provided. The parameters below do not consider a factor of safety.

Proposed Northern Stormwater Management Facility (P-1 thru P-5)

1. Base elevation of effective or mobilized aquifer (average elevation of confining layer) equal to 11.5 feet bls.
2. Unsaturated vertical infiltration rate of 1.5 feet per day.
3. Horizontal hydraulic conductivity equal to 2 feet per day.
4. Specific yield (fillable porosity) of 20 percent.
5. Average seasonal high groundwater elevation depth equal to 89 feet bls.

Proposed Southern Stormwater Management Facility

1. Base elevation of effective or mobilized aquifer (average elevation of confining layer) equal to 80 feet.
2. Unsaturated vertical infiltration rate of 2 feet per day.
3. Horizontal hydraulic conductivity equal to 3 feet per day.
4. Specific yield (fillable porosity) of 20 percent.
5. Average seasonal high groundwater table elevation equal to 87 feet.

In areas where clay-rich soils are present at the basin bottom, we recommend these soils be undercut a minimum of 2 feet and backfilled with the on-site sand with silt or silty sand (SP-SM, SM) having a maximum of 20 percent soil fines passing the No. 200 sieve. The intent of this undercutting and replacement is to provide a more uniform sand “blanket” at the basin bottom that allows the migration of water to the deeper deposits of sand. This sand blanket will also reduce the potential for clay-fines leaching out of the soils when water is present in the basin that can result in a thin layer of confining type material on the basin bottom that can reduce the effectiveness of the basin.

4.4 Suitability of Excavated Soils for Re-use as Fill

The soils encountered at this site within the explored depths range from sand with silt (SP-SM) to sandy clay (CL/CH). A discussion of the suitability for reuse as structural fill for each soil classification according to the Unified Soil Classification System (USCS) designation is provided below.

SP, SP/SM – Sands (SP) and sand with silt (SP/SM) have less than 5 percent and 12 percent soil fines passing the No. 200 sieve, respectively, and are typically well draining soils that are suitable for reuse as structural fill. The sands with silt may require moisture conditioning (drying) to make the material more workable. These soils will require stockpiling and drying before they are reused if they are excavated from below the water table.

SM – Silty sands (SM) can have between 12 percent and 50 percent soil fines passing the No. 200 sieve. Silty sands are typically non-plastic or have low plasticity, and can be reused as structural fill with precautions. Silty sands can be moisture sensitive and difficult to work and compact and can rut if the moisture content is near or above the optimum moisture content. **We recommend these soils be moisture conditioned (dried) so that the moisture content during use is at or below the optimum moisture content. Aerating and exposure to the sun is typically the most effective methods of drying these soils.** It may not be practical to reuse these materials during the wet season, as frequent rain showers may not allow these soils to dry to a workable moisture content. Suitable silty sands are limited to soil having less than 30 percent soil fines passing the No. 200 sieve. Silty sands with more than 30 percent soil fines are especially moisture sensitive, and are not recommended for reuse as structural fill. These soils will behave more as sandy silt, and for this reason, very silty sands having more than 30 percent soil fines passing the No. 200 sieve have been assigned a dual classification of SM/ML. Silty sand soils that are excavated from below the water table are not recommended for reuse as structural fill due to the amount of time that will be required to dry these soils to a workable condition.

SC – Clayey sand (SC) soils can have between 12 percent and 50 percent soil fines passing the No. 200 sieve. Clayey sands can have a high range of plasticity, varying from a PI of 7 or greater and plotting above the A-line to highly plastic. Friable clayey sands are typically suitable for use as structural fill with precautions. Clayey sands will be moisture sensitive and difficult to work and compact and can rut during placement if the moisture content is near or above the natural moisture content. **We recommend these soils be moisture conditioned (dried) so that the moisture content during use is at or below the optimum moisture content. Aerating and exposure to the sun is typically the most effective methods of drying these soils.** It may not be practical to reuse these materials during the wet season, as frequent rain showers may not allow these soils to dry to a workable moisture content. Suitable clayey sands are limited to soil having less than 30 percent soil fines passing the No. 200 sieve. Clayey sands with more than 30 percent soil fines passing the No. 200 sieve are especially moisture sensitive and are typically highly plastic, and are not recommended for reuse as structural fill. These soils will behave more as sandy clay, and for this reason, very clayey sands having more than 30 percent soil fines passing the No. 200 sieve have been assigned a dual classification of SC/CH or SC/CL. **If very clayey sands need to be used in fill area, they should be mixed with silty sands to reduce their fines content and their plasticity (to less than 15). They should be used at the bottom of the fill areas and not within 3 feet of foundations or roadway base.** Clayey sand soils that are excavated from below the water table are not recommended for reuse as structural fill due to the amount of time that will be required to dry these soils to a workable condition.

ML, MH, CL, CH – Silts and clays are not suitable materials for reuse as structural fill.

5.0 FIELD DATA

5.1 Auger Boring Logs



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CLIENT Gmuier Engineering

PROJECT NAME Tara Baywood - Basins

PROJECT NUMBER 14241A

PROJECT LOCATION Alachua, Alachua County, Florida

DATE PERFORMED 9/24/2019 **BORING NUMBER P-1**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY IDI

▼ AT TIME OF DRILLING NE CHECKED BY KPF

▽ ESTIMATED SEASONAL HIGH > 15 ft

NOTES _____

DATE PERFORMED 9/24/2019 **BORING NUMBER P-2**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY IDI

▼ AT TIME OF DRILLING NE CHECKED BY KPF

▽ ESTIMATED SEASONAL HIGH 10.5 ft, perched

NOTES _____

AB 2 PORTRAIT - GINT STD US.GDT - 10/21/19 10:08 - Q:\PROJECTS\14241A TARA BAYWOOD - BASINS\14241A BORINGS\14241A.GPJ

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0			(SM) Brown and orange silty SAND	0			(SP-SM) Gray SAND with silt
						AU 1	
							1.5
							(SM) Orange and gray silty SAND
						AU 2	
5		AU 1 PS		5			
						AU 3 PS	
			%PASS-200 = 17 MC = 6.5				%PASS-200 = 22 MC = 12 k _h = 0.7 ft/day
10		AU 2 PS		10			
							▽
							11.5
							(SC/CL) Gray and brown very clayey SAND
						AU 4	
			(SP-SC) Brown and orange SAND with clay				%PASS-200 = 31 MC = 16 LL = 35; PL = 19; PI = 16
13.0		AU 3		13.0			
15		AU 4	(SP-SC) Pale brown and orange SAND with clay	15			
							16.0
							(CL/CH) Brown, gray, and orange sandy CLAY
						AU 5	
17.5		AU 5	(SP-SC) Gray and orange SAND with clay	17.5			
20			Bottom of borehole at 20.0 feet.	20			Bottom of borehole at 20.0 feet.

(Continued Next Page)



PROJECT NAME Tara Baywood - Basins

PROJECT LOCATION Alachua, Alachua County, Florida

DATE PERFORMED 9/24/2019 **BORING NUMBER P-4**

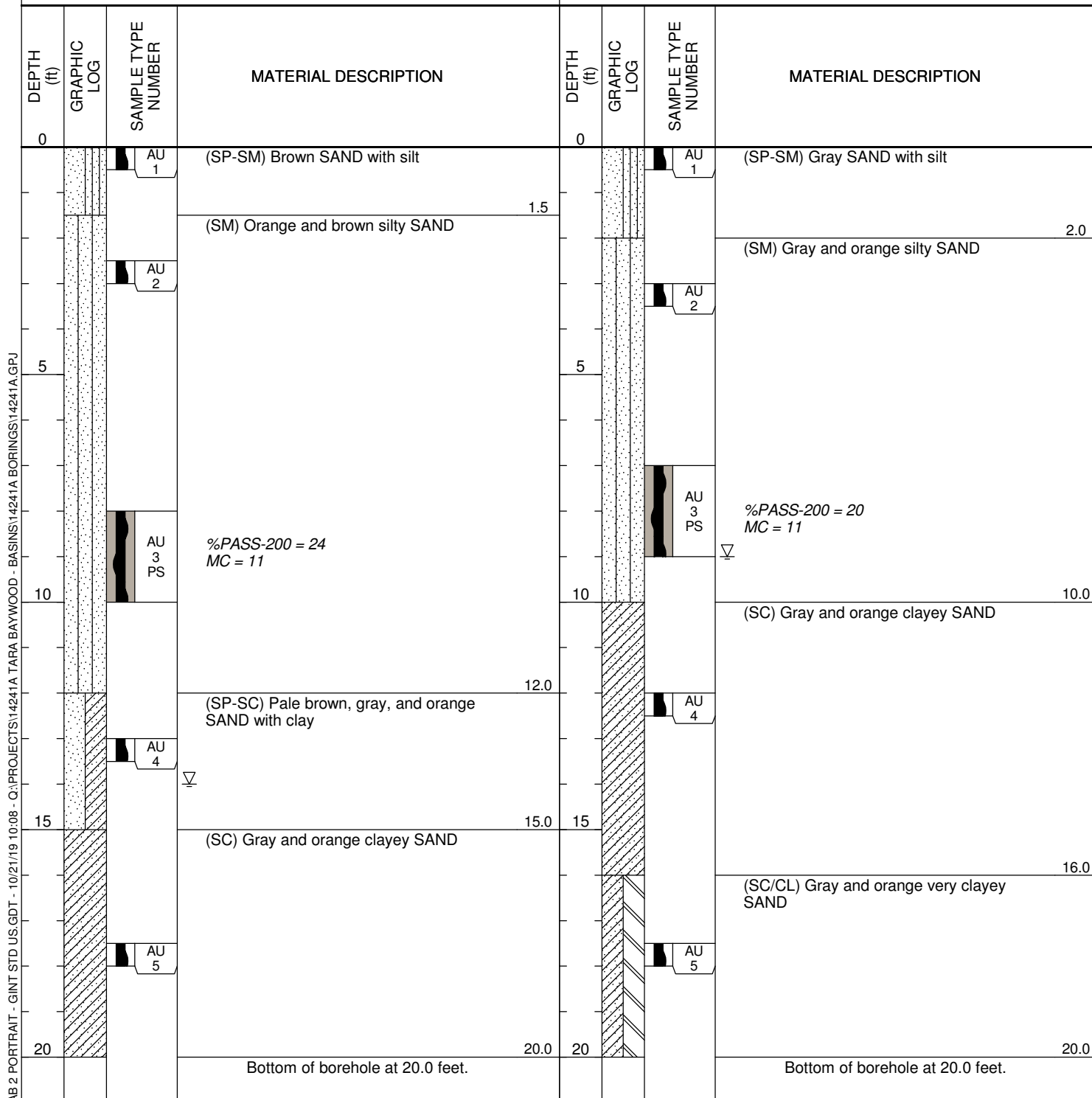
DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY IDI

AT TIME OF DRILLING NE **CHECKED BY** KPF

▽ ESTIMATED SEASONAL HIGH 9.0 ft, perched

NOTES



(Continued Next Page)



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CLIENT Gmuier Engineering

PROJECT NAME Tara Baywood - Basins

PROJECT NUMBER 14241A

PROJECT LOCATION Alachua, Alachua County, Florida

DATE PERFORMED 9/24/2019 **BORING NUMBER P-5**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY IDI

▼ AT TIME OF DRILLING NE CHECKED BY KPF

▽ ESTIMATED SEASONAL HIGH 0.5 ft. perched

NOTES _____

DATE PERFORMED 9/23/2019 **BORING NUMBER P-6**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY IDI

▼ AT TIME OF DRILLING NE CHECKED BY KPF

▽ ESTIMATED SEASONAL HIGH 1.0 ft. perched

NOTES _____

AB 2 PORTRAIT - GINT STD US.GDT - 10/21/19 10:08 - Q:\PROJECTS\14241A TARA BAYWOOD - BASINS\14241A BORINGS\14241A.GPJ

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
		AU 1	(SP-SM) Brown and orange SAND with silt			AU 1	(SP-SC) Gray SAND with clay
1.0			(SC) Brown and orange clayey SAND	1.0			
		AU 2 PS	%PASS-200 = 18 MC = 6.1			AU 2	(SC) Gray and orange clayey SAND
5				5		AU 3	
		AU 3	(SP-SC) Brown, gray, and orange SAND with clay			AU 4	
9.0				9.0			
10				10			
		AU 4	(SC) Brown, gray, and orange clayey SAND			AU 5 PS	(SC) Dark gray and orange clayey SAND
11.0				11.0			%PASS-200 = 25 MC = 14
						AU 6	(CL/CH) Gray and orange sandy CLAY
15				15			
			Bottom of borehole at 15.0 feet.				Bottom of borehole at 15.0 feet.

(Continued Next Page)



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PROJECT NAME Tara Baywood - Basins

PROJECT NUMBER 14241A

PROJECT LOCATION Alachua, Alachua County, Florida

DATE PERFORMED 9/23/2019 **BORING NUMBER P-7**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY IDI

▼ AT TIME OF DRILLING NE CHECKED BY KPF

▽ ESTIMATED SEASONAL HIGH 0.5 ft. perched

NOTES _____

DATE PERFORMED 9/23/2019 **BORING NUMBER P-8**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY IDI

▼ AT TIME OF DRILLING NE CHECKED BY KPF

▽ ESTIMATED SEASONAL HIGH > 15 ft

NOTES _____

AB 2 PORTRAIT - GINT STD US.GDT - 10/21/19 10:08 - Q:\PROJECTS\14241A TARA BAYWOOD - BASINS\14241A BORINGS\14241A.GPJ

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
			▽ (SC) Brown and orange clayey SAND			AU 1	(SP-SM) Gray SAND with silt
							1.0
							(SP-SM) Brown and orange SAND with silt
5		AU 1	%PASS-200 = 18 MC = 8.3	5		AU 2	
		AU 2 PS				AU 3	
10		AU 3	(SP-SC) Gray SAND with clay	10.0		AU 4	(SM) Pale brown and orange silty SAND
		AU 4	(SC/CL) Gray and orange very clayey SAND			AU 5 PS	%PASS-200 = 18 MC = 8.5 k _n = 2.8 ft/day
15			Bottom of borehole at 15.0 feet.	15.0			15.0
							Bottom of borehole at 15.0 feet.

(Continued Next Page)



PROJECT NAME Tara Baywood - Basins

PROJECT LOCATION Alachua, Alachua County, Florida

DATE PERFORMED 9/23/2019 **BORING NUMBER P-10**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY IDI

NE AT TIME OF DRILLING NE CHECKED BY KPF

▽ ESTIMATED SEASONAL HIGH > 15 ft

NOTES

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0			(SP-SC) Brown and orange SAND with silt	0			(SM) Brown and orange silty SAND
						AU 1	
		AU 1 PS				AU 2	
5				5		AU 3	
		AU 2	(SC) Gray and orange clayey SAND %PASS-200 = 25 MC = 15				
		AU 3	(SC) Gray clayey SAND			AU 4 PS	%PASS-200 = 18 MC = 7.0 $k_h = 1.7 \text{ ft/day}$
10				10			
		AU 4				AU 5	
15			Bottom of borehole at 15.0 feet.	15			Bottom of borehole at 15.0 feet.

(Continued Next Page)



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PROJECT NAME Tara Baywood - Basins

PROJECT NUMBER 14241A

PROJECT LOCATION Alachua, Alachua County, Florida

DATE PERFORMED 9/23/2019 **BORING NUMBER P-11**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY IDI

▼ AT TIME OF DRILLING NE CHECKED BY KPF

▽ ESTIMATED SEASONAL HIGH 1.0 ft. perched

NOTES _____

DATE PERFORMED 9/23/2019 **BORING NUMBER P-12**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY IDI

▼ AT TIME OF DRILLING NE CHECKED BY KPF

▽ ESTIMATED SEASONAL HIGH > 15 ft

NOTES _____

AB 2 PORTRAIT - GINT STD US.GDT - 10/21/19 10:08 - Q:\PROJECTS\14241A TARA BAYWOOD - BASINS\14241A BORINGS\14241A.GPJ

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
		AU 1 PS	(SP-SC) Gray and orange SAND with clay ▽			AU 1	(SP-SM) Gray SAND with silt
							1.5
							(SM) Brown and orange silty SAND
2.0			(SC/CL) Brown and orange very clayey SAND				
		AU 2				AU 2	
5				5			
		AU 3	%PASS-200 = 33			AU 3 PS	%PASS-200 = 20 MC = 8.6
10			(SC) Gray and orange clayey SAND	10			
		AU 4				AU 4	
15				15			
			Bottom of borehole at 15.0 feet.				Bottom of borehole at 15.0 feet.

(Continued Next Page)



PROJECT NAME Tara Baywood - Basins

PROJECT LOCATION Alachua, Alachua County, Florida

DATE PERFORMED 9/23/2019 **BORING NUMBER P-14**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY IDI

AT TIME OF DRILLING **NE** **CHECKED BY** **KPF**

▽ ESTIMATED SEASONAL HIGH 4.0 ft, perched

NOTES

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0			(SP-SM) Brown and orange SAND with silt	0			(SM) Brown silty SAND
		AU 1				AU 1	%PASS-200 = 19 MC = 10 $k_h = 2.4 \text{ ft/day}$
5		AU 2		5		AU 2	(SC/CL) Gray and orange very clayey SAND %PASS-200 = 46 MC = 31; LL = 34; PL = 20; PI = 14
		AU 3	(SC) Gray and orange clayey SAND			AU 3	(SC) Gray and orange clayey SAND
10		AU 4		10		AU 4	(CL/CH) Gray, green, and orange CLAY with sand
15			Bottom of borehole at 15.0 feet.	15			Bottom of borehole at 15.0 feet.



GSE Engineering & Consulting, Inc.
 5590 SW 64th Street, Suite B
 Gainesville, Florida 32608
 Telephone: (352) 377-3233
 Fax: (352) 377-0335

CLIENT Gmuier Engineering

PROJECT NAME Tara Baywood - Basins

PROJECT NUMBER 14241A

PROJECT LOCATION Alachua, Alachua County, Florida

DATE PERFORMED 9/23/2019 **BORING NUMBER P-15**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY IDI

▼ AT TIME OF DRILLING NE CHECKED BY KPF

▽ ESTIMATED SEASONAL HIGH 1.0 ft. perched

NOTES _____

DATE PERFORMED 9/23/2019 **BORING NUMBER P-16**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY IDI

▼ AT TIME OF DRILLING NE CHECKED BY KPF

▽ ESTIMATED SEASONAL HIGH 1.0 ft. perched

NOTES _____

AB 2 PORTRAIT - GINT STD US.GDT - 10/21/19 10:08 - Q:\PROJECTS\14241A TARA BAYWOOD - BASINS\14241A BORINGS\14241A.GPJ

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
		AU 1	(SP-SC) Gray SAND with clay			AU 1 PS	(SP-SC) Brown and orange SAND with clay
			▽				▽
			1.5				2.0
		AU 2	(SC) Gray clayey SAND				(SC) Gray and orange clayey SAND
			4.5			AU 2	
5			(SP-SC) Orange and brown SAND with clay	5			
		AU 3 PS					7.5
						AU 3	(CL/CH) Gray and orange sandy CLAY
10				10			%PASS-200 = 52 MC = 30 LL = 53; PL = 22; PI = 31
			12.0			AU 4	11.5
		AU 4	(SC/CL) Gray and orange very clayey SAND				(SC) Gray clayey SAND
15			15.0	15			15.0
			Bottom of borehole at 15.0 feet.				Bottom of borehole at 15.0 feet.

5.2 Laboratory Results



Engineering & Consulting, Inc.

SUMMARY REPORT OF LABORATORY TEST RESULTS

Project Number: 14241A

Project Name: Tara Baywood - Basins

Boring Number	Depth (ft)	Soil Description	Natural Moisture Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	Percent Passing No. 200 Sieve	Organic Content (%)	Hydraulic Conductivity (ft/day)	Unified Soil Classification
P-1	8-10	Brown and orange silty SAND	6.5				17			SM
P-2	13-13.5	Gray and brown very clayey SAND	16	35	19	16	31			SC/CL
P-4	7-9	Gray and orange silty SAND	11				20			SM
P-5	2-4	Brown and orange clayey SAND	6.1				18			SC
P-6	11-13	Dark gray and orange clayey SAND	14				25			SC
P-7	4-4.5	Brown and orange clayey SAND	8.3				18			SC
P-9	6.5-7	Gray and orange clayey SAND	15				25			SC
P-10	8-10	Brown and orange silty SAND	7.0				18		1.7	SM
P-11	7.5-8	Brown and orange very clayey SAND	-				33			SC/CL
P-14	2-4	Brown silty SAND	10				19		2.4	SM
P-14	5.5-6	Gray and orange very clayey SAND	31	34	20	14	46			SC/CL
P-16	8.5-9	Gray and orange sandy CLAY	30	53	22	31	52			CL/CH



Engineering & Consulting, Inc.

SUMMARY REPORT OF LABORATORY TEST RESULTS

Project Number: 14241A

Project Name: Tara Baywood Basins

Boring Number	Depth (ft)	Soil Description	Natural Moisture Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	Percent Passing No. 200 Sieve	Organic Content (%)	Hydraulic Conductivity (ft/day)	Unified Soil Classification
P-2	8-10	Orange and gray silty SAND	12				22		0.7	SM
P-3	8-10	Orange and brown silty SAND	11				24			SM
P-8	12-14	Pale brown and orange silty SAND	8.5				18		2.8	SM
P-12	8-10	Brown and orange silty SAND	8.6				20			SM
P-1	3-5	Brown and orange silty SAND	5.9				18		0.7	SM

5.3 Key to Soil Classification

KEY TO SOIL CLASSIFICATION CHART

Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests				SYMBOLS		GROUP NAME	
				GRAPHIC	LETTER		
COARSE-GRAINED SOILS	Gravels	Clean Gravels	$Cu \geq 4$ and $1 \leq Cc \leq 3$		GW	Well graded GRAVEL	
	More than 50% retained on No. 200 sieve	More than 50% of coarse fraction retained on No. 4 sieve	Less than 5% fines	$Cu < 4$ and/or $1 > Cc > 3$		GP	Poorly graded GRAVEL
			Gravels with fines	Fines classify as ML or MH		GM	Silty GRAVEL
			More than 12% fines	Fines classify as CL or CH		GC	Clayey GRAVEL
			Sands	Clean Sands	$Cu \geq 6$ and $1 \leq Cc \leq 3$		SW
	50% or more of coarse fraction passes No. 4 sieve		Less than 5% fines	$Cu < 6$ and/or $1 > Cc > 3$		SP	Poorly graded SAND
			Sand with fines	Fines classify as ML or MH		SP-SM	SAND with silt
			$5\% \leq \text{fines} < 12\%$	Fines classify as CL or CH		SP-SC	SAND with clay
			Sand with fines	Fines classify as ML or MH		SM	Silty SAND
			$12\% \leq \text{fines} < 30\%$	Fines classify as CL or CH		SC	Clayey SAND
			Sand with fines	Fines classify as ML or MH		SM	Very silty SAND
			30% fines or more	Fines classify as CL or CH		SC	Very clayey SAND
FINE-GRAINED SOILS			Clays	inorganic	$50\% \leq \text{fines} < 70\%$		CL/CH
	$70\% \leq \text{fines} < 85\%$				CL/CH	CLAY with sand	
	$\text{fines} \geq 85\%$				CL/CH	CLAY	
	Silts and Clays	inorganic	PI > 7 and plots on/above "A" line		CL	Lean CLAY	
			PI < 4 or plots below "A" line		ML	SILT	
	Liquid Limit less than 50	organic	Liquid Limit - oven dried < 0.75		OL	Organic clay	
			Liquid Limit - not dried		OL	Organic silt	
	Silts and Clays	inorganic	PI plots on or above "A" line		CH	Fat CLAY	
			PI plots below "A" line		MH	Elastic SILT	
	Liquid Limit 50 or more	organic	Liquid Limit - oven dried < 0.75		OH	Organic clay	
Liquid Limit - not dried				OH	Organic silt		
HIGHLY ORGANIC SOILS	Primarily organic matter, dark in color, and organic odor				PT	PEAT	

CORRELATION OF PENETRATION RESISTANCE WITH RELATIVE DENSITY AND CONSISTENCY

	No. OF BLOWS, N	RELATIVE DENSITY		No. OF BLOWS, N	CONSISTENCY
SANDS:	0 - 4	Very Loose	SILTS & CLAYS:	0 - 2	Very Soft
	5 - 10	Loose		3 - 4	Soft
	11 - 30	Medium dense		5 - 8	Firm
	31 - 50	Dense		9 - 15	Stiff
	OVER 50	Very Dense		16 - 30	Very Stiff
				31 - 50	Hard
	No. OF BLOWS, N	RELATIVE DENSITY		OVER 50	Very Hard

No. OF BLOWS, N	RELATIVE DENSITY
0 - 8	Very Soft
9 - 18	Soft
LIMESTONE: 19 - 32	Moderately Hard
33 - 50	Hard
OVER 50	Very Hard

SAMPLE GRAPHIC TYPE LEGEND



Location
of SPT
Sample



Location
of Auger
Sample

PARTICLE SIZE IDENTIFICATION

BOULDERS:	Greater than 300 mm
COBBLES:	75 mm to 300 mm
GRAVEL:	Coarse - 19.0 mm to 75 mm
	Fine - 4.75 mm to 19.0 mm
SANDS:	Coarse - 2.00 mm to 4.75 mm
	Medium - 0.425 mm to 2.00 mm
	Fine - 0.075 mm to 0.425 mm
SILTS & CLAYS:	Less than 0.075 mm

LABORATORY TEST LEGEND

LL	=	Liquid Limit, %
PL	=	Plastic Limit, %
PI	=	Plasticity Index, %
% PASS - 200	=	Percent Passing the No. 200 Sieve
MC	=	Moisture Content, %
ORG	=	Organic Content, %
k_h	=	Horizontal Hydraulic Conductivity, ft/day

6.0 LIMITATIONS

6.1 Warranty

This report has been prepared for our client for his exclusive use, in accordance with generally accepted soil and foundation engineering practices, and makes no other warranty either expressed or implied as to the professional advice provided in the report.

6.2 Auger Borings

The determination of soil type and conditions was performed from the ground surface to the maximum depth of the borings, only. Any changes in subsurface conditions that occur between or below the borings would not have been detected or reflected in this report.

Soil classifications that were made in the field are based upon identifiable textural changes, color changes, changes in composition or changes in resistance to penetration in the intervals from which the samples were collected. Abrupt changes in soil type, as reflected in boring logs and/or cross sections may not actually occur, but instead, be transitional.

Depth to the water table is based upon observations made during the performance of the auger borings. This depth is an estimate and does not reflect the annual variations that would be expected in this area due to fluctuations in rainfall and rates of evapotranspiration.

6.3 Site Figures

The measurements used for the preparation of the figures in this report were made using the provided site plan and by estimating distances from existing structures and site features. Figures in this report were not prepared by a licensed land surveyor and should not be interpreted as such.

6.4 Unanticipated Soil Conditions

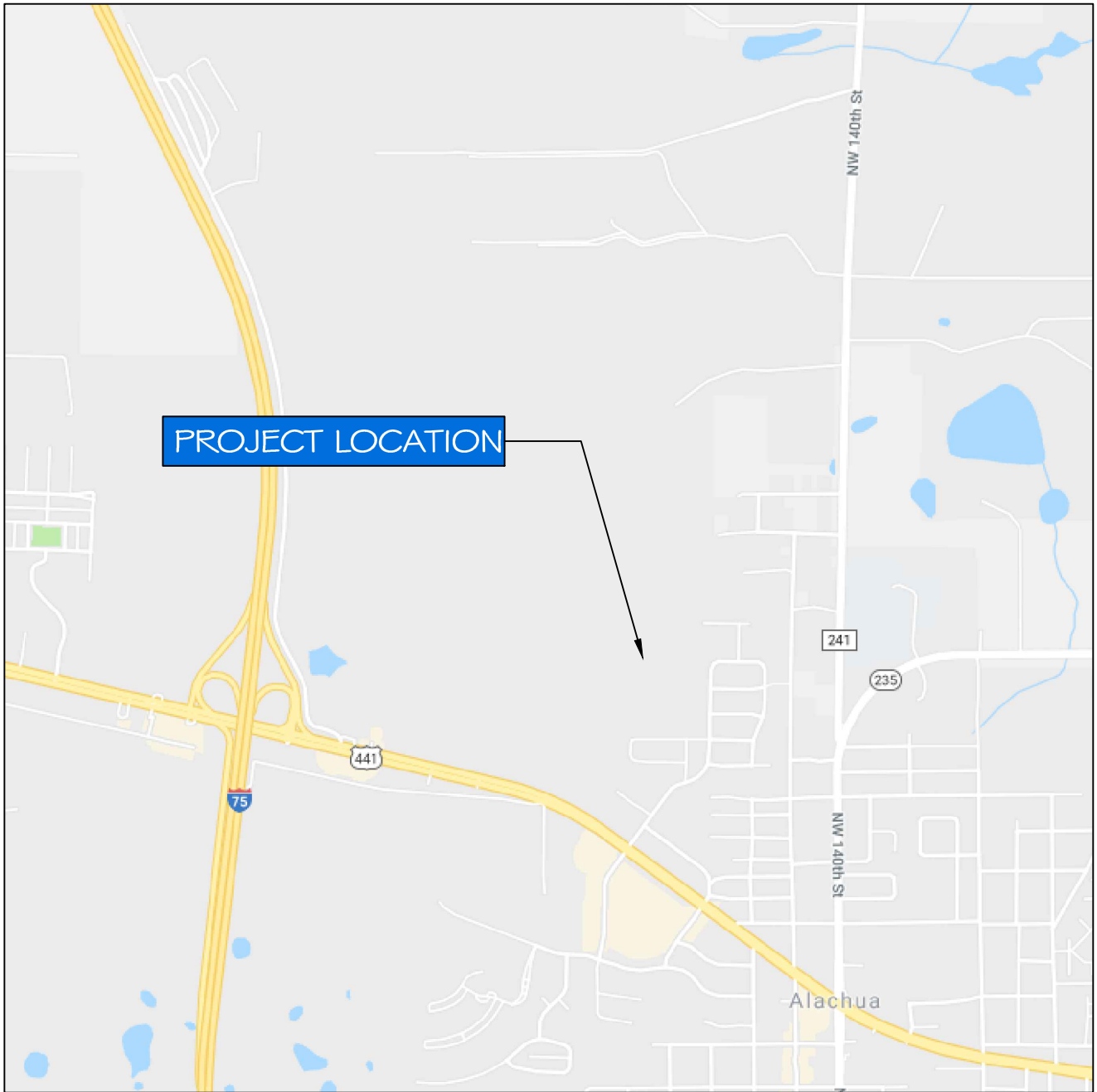
The analysis and recommendations submitted in this report are based upon the data obtained from soil borings performed at the locations indicated on Figure 2. This report does not reflect any variations that may occur between these borings.

The nature and extent of variations between borings may not become known until excavation begins. If variations appear, we may have to re-evaluate our recommendations after performing on-site observations and noting the characteristics of any variations.

6.5 Misinterpretation of Soil Engineering Report

GSE Engineering & Consulting, Inc. is responsible for the conclusions and opinions contained within this report based upon the data relating only to the specific project and location discussed herein. If others make the conclusions or recommendations based upon the data presented, those conclusions or recommendations are not the responsibility of GSE.

FIGURES



TARA BAYWOOD - BASINS
ALACHUA, ALACHUA COUNTY, FLORIDA
GSE PROJECT NO. 14241A

PROJECT SITE LOCATION MAP

DESIGNED BY: KPF
CHECKED BY : KLH
DRAWN BY : EFM

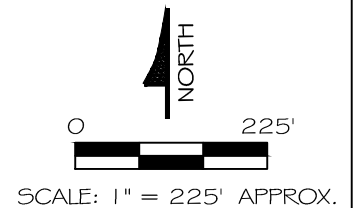


FIGURE
1



LEGEND:

⊕ AUGER BORING



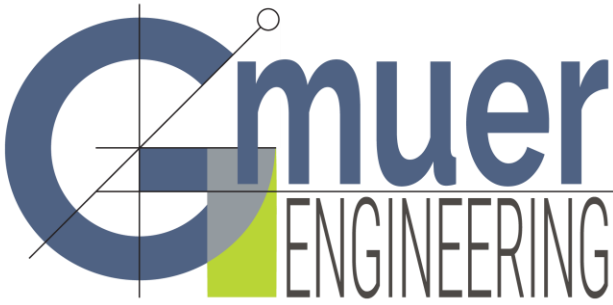
TARA BAYWOOD - BASINS
ALACHUA, ALACHUA COUNTY, FLORIDA
GSE PROJECT NO. 14241A

**SITE PLAN SHOWING APPROXIMATE LOCATIONS OF
FIELD TESTS**

DESIGNED BY: KPF
CHECKED BY : KLH
DRAWN BY : EFM



FIGURE
2



2603 NW 13th St, Box 314
Gainesville, FL 32609
Ph. (352) 281-4928

gmuereng.com

Neighborhood Meeting

A Neighborhood Meeting will be held to discuss a revision to a previously discussed 340-lot single-family subdivision. The site is located on TP#03067-005-000, 03067-005-001, 03067-000-000, and 03067-006-000 at approximately 17002 NW County RD 241, Alachua, FL.

Date: Friday, September 20, 2019

Time: 5:00pm

Place: The northwest corner of NW 161st Ave and NW 147th Drive (behind Lowe's), Alachua, FL 32615

Contact: Forrest Eddleton, (352) 593-3159, Gmuer Engineering, LLC

Gmuer Engineering will be holding a workshop to discuss the site plan revision described above.

Per the City of Alachua Land Development Regulations, the properties are zoned RSF-3 (residential single-family 3). The RSF-3 district is established as a district in which the principal use of land is single-family residential development at a moderate density in areas served by water and sewer systems. The regulations of this district are intended to discourage any use that would substantially interfere with the development of single-family dwellings and that would be detrimental to the quiet residential nature of the district. Complementary uses customarily found in residential zone districts, such as community facilities, religious institutions, parks and playgrounds, and schools, are also allowed. The minimum lot area is 10,000 square feet and the maximum density allowed is three dwelling units an acre.

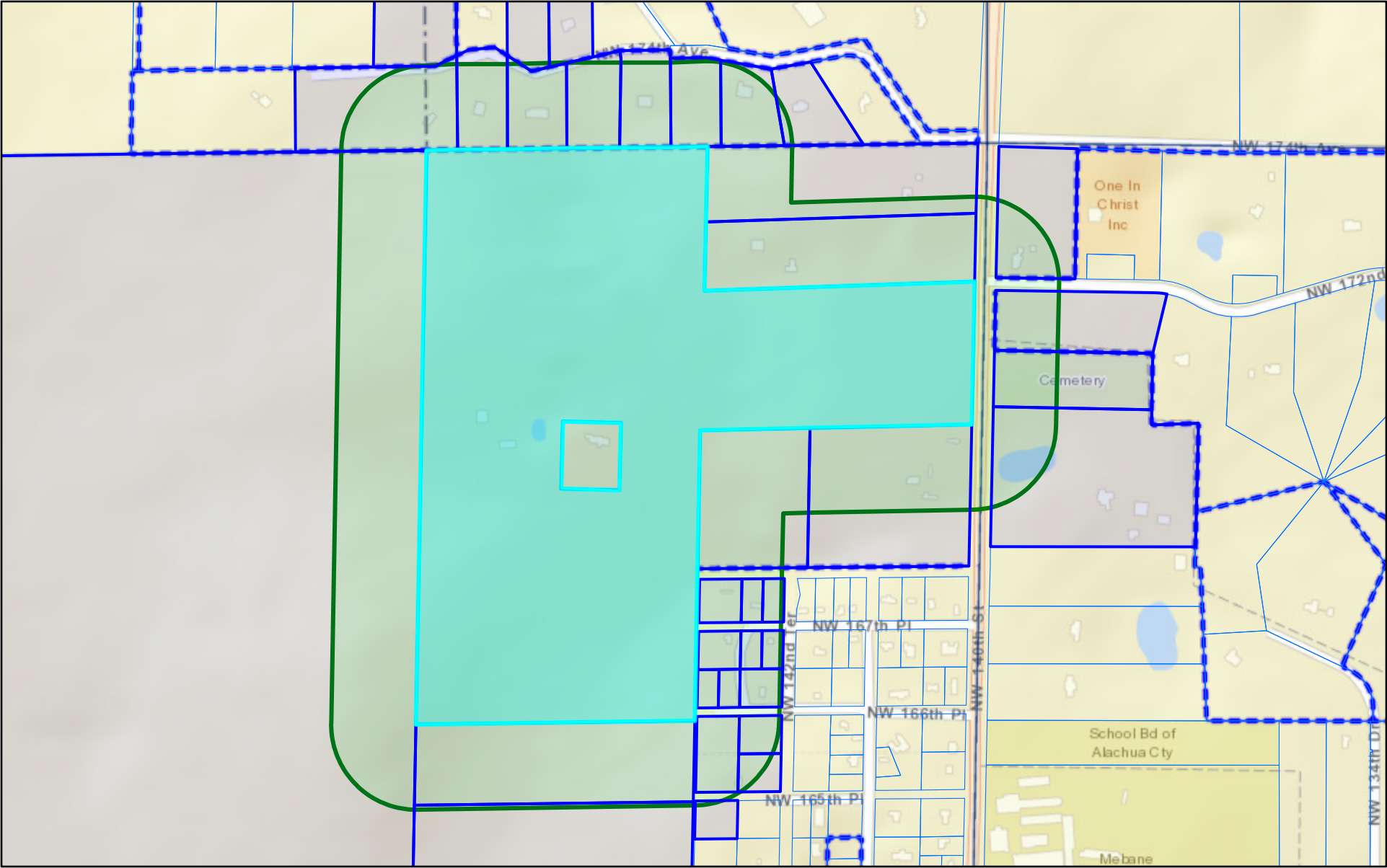
The purpose of the workshop is to inform neighboring property owners about the nature of the proposal and to seek comments. We look forward to seeing you there.

This is a detailed plat map of a portion of the City of Portland, Oregon. The map shows various lots and parcels, with a large, light green parcel outlined in green and a smaller, light blue parcel within it outlined in blue. The map includes street names such as NW 142nd Ter, NW 165th, NW 163rd Pl, and NW 143rd Way. Lot numbers and parcel identifiers are visible throughout the map, including 3067, 3067-6, 3080-1, 3074, 3095, and 3096. A red stamp "ALACRUA REALTY" is visible on the right side of the map.

Parcels

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan,
 Insert Author Name Here
 County of Alachua, Esri, HERE, Garmin, INCREMENT P, NGA, USGS | ACPA |

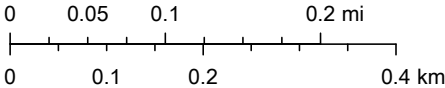
Tara Forest East Revision Public Notice - 400 ft Buffer (Parcel 2)



8/29/2019, 5:08:53 PM

 Parcels

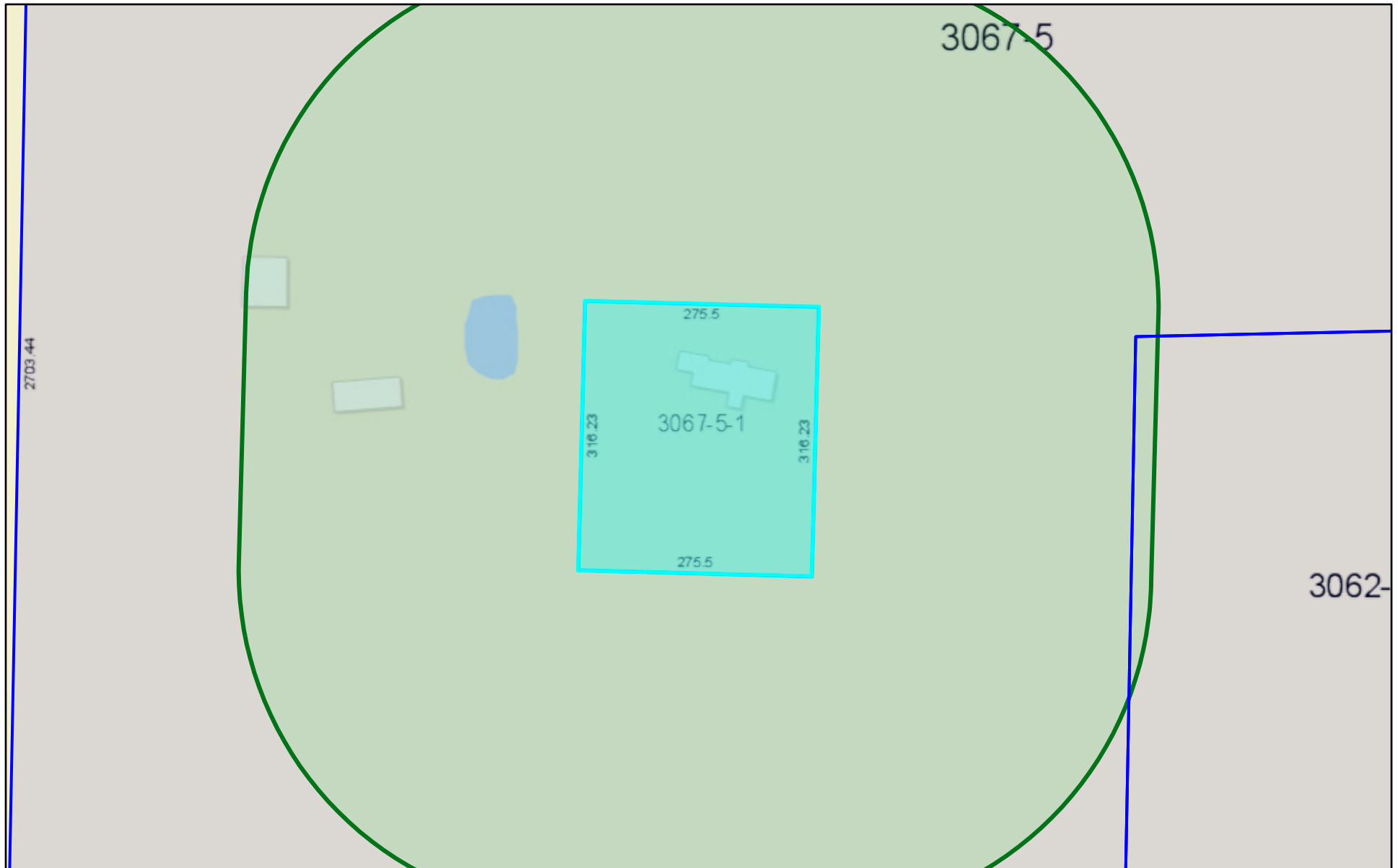
1:9,028



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan,

County of Alachua, Esri, HERE, Garmin, INCREMENT P, NGA, USGS | ACPA |
Insert Author Name Here

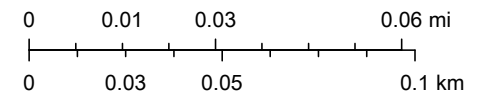
Tara Forest East Revision Public Notice - 400 ft Buffer (Parcel 3))



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 Parcels

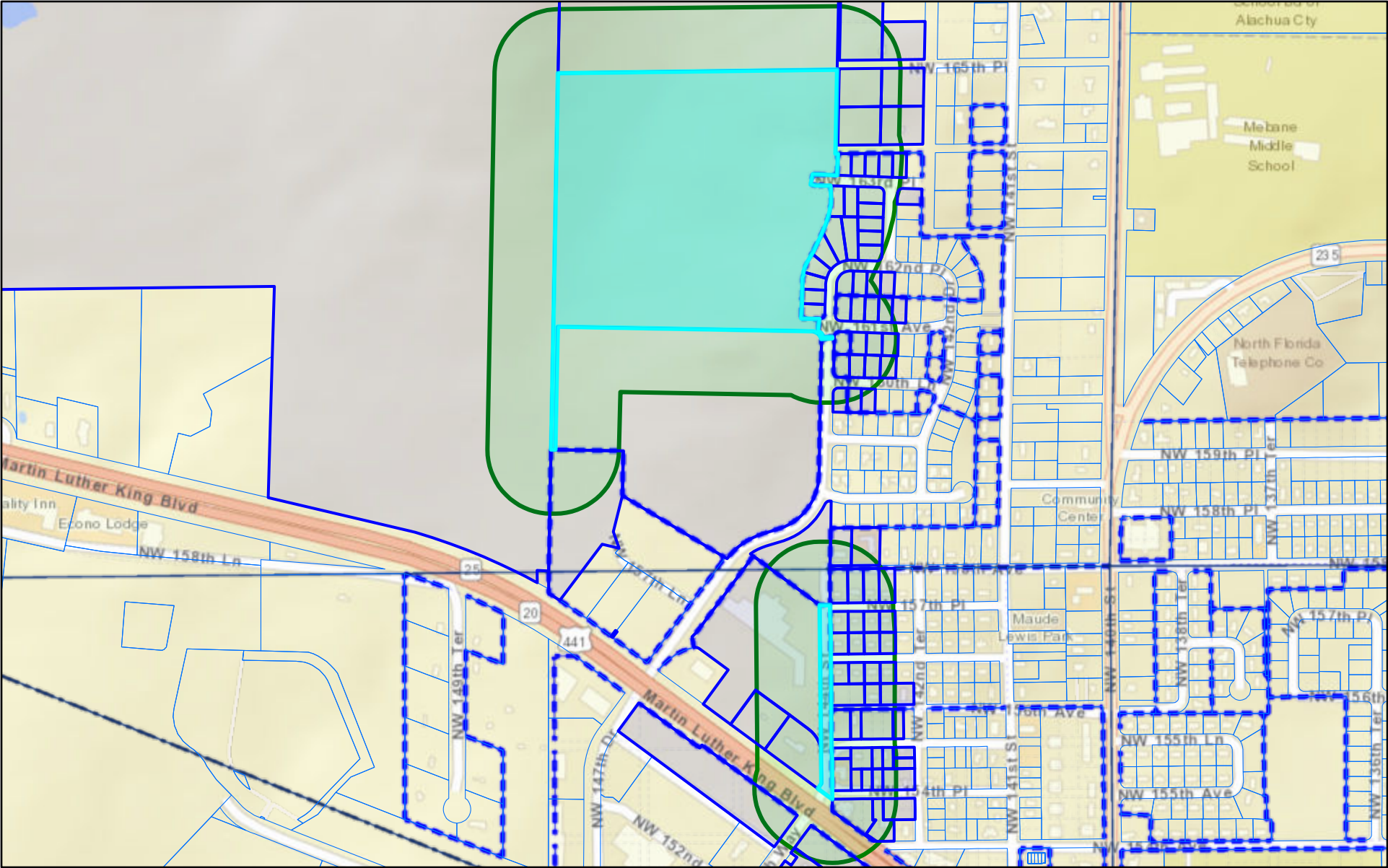
1:2,257



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan,

Insert Author Name Here
County of Alachua, Esri, HERE, Garmin, INCREMENT P, NGA, USGS | ACPA |

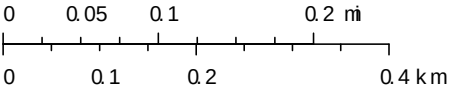
TFE Revision Public Notice - 400ft Buffer Parcel 4



9/3/2019, 4:54:57 PM

Parcels

1:9,028



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan,

County of Alachua, Esri, HERE, Garmin, INCREMENT P, NGA, USGS, ACRA



STATE OF FLORIDA
COUNTY OF ALACHUA

Published Daily and Sunday
Gainesville, Florida

Before the undersigned authority personally appeared Kim Kanemoto who on oath says that she is an Advertising Account Executive of THE GAINESVILLE SUN, a daily newspaper published in Gainesville in Alachua County, Florida (with circulation in Alachua, Bradford, Columbia, Dixie, Gilchrist, Levy, Union, Counties), that the attached copy of advertisement, being a Public Notice relating to the matter of

GF-GH049444

PUBLIC NOTICE

A Neighborhood Meeting will be held to discuss a revision to a previously discussed 340-lot single-family subdivision. The site is located on TP#03067-005-000, 03067-005-001, 03067-000-000 and 03067-006-000 at approximately 17002 NW County RD 241, Alachua, FL.

The meeting will be held Friday, September 20th at 5:00pm at the northwest corner of NW 161st Ave. and NW 147th Drive (behind Lowe's) Alachua, FL 32615.

Contact: Forrest Eddleton

Phone: (352) 593-3159 - Gmuer Engineering, LLC

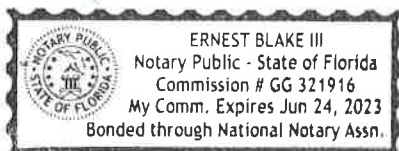
was published in said newspaper in the issues of Saturday, September 07, 2019.

Affiant further says that THE GAINESVILLE SUN is a newspaper published at Gainesville, in said Alachua County, Florida and that the said newspaper has heretofore been continuously published in said Alachua County, each day, and has been entered as second class mail matter at the post office in Gainesville, in said Alachua County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he has neither paid nor promised any person, firm or corporation any discount for publication in said newspaper.

Sworn to and subscribed before me this 9th day of September A.D. 2019.

Notary Public

Witness



US tells pregnant migrant woman to wait in Mexico

By Nomaan Merchant and Verónica G. Cárdenas
The Associated Press

MATAMOROS, Mexico — Eight-and-a-half-months pregnant and experiencing contractions, a Salvadoran woman who had crossed the Rio Grande and was apprehended by the Border Patrol was forced to go back to Mexico.

Agents took her to the hospital, where doctors gave her medication to stop the contractions. And then, according to the woman and her lawyer, she was almost immediately sent back to Mexico.

There, she joined the more than 38,000 people forced to wait across the border for immigration court hearings under a rapidly expanding Trump administration policy. And her plight highlights the health risks and perils presented by the "Remain in Mexico" program.

The woman was waiting Thursday with her 3-year-old daughter in a makeshift tent camp in Matamoros, Mexico, next to an international bridge, due to give birth any day, said her attorney, Jodi Goodwin.

"She's concerned about having the baby in the street or having to have the baby in a shelter," Goodwin said.

Pregnant women face special hazards in



In this Aug. 30 photo, migrants, many who were returned to Mexico under the Trump administration's "Remain in Mexico" program, wait in line to get a meal in an encampment near the Gateway International Bridge in Matamoros. (VERONICA G. CARDENAS/THE ASSOCIATED PRESS)

Mexico because places where migrants wait to enter the U.S. often don't have access to regular meals, clean water, and medical care.

Many shelters at the Mexico border are at or above capacity already, and some families have been sleeping in tents or on blankets in the blistering summer heat. Reports have abounded of migrants being attacked or kidnapped in Mexican border cities, especially in Tamaulipas state across from South Texas, where the Salvadoran mother is waiting for a November court date.

The Associated Press is not identifying the woman from El Salvador

because she fears for her safety.

The U.S. government does not automatically exempt pregnant women from the "Remain in Mexico" program. U.S. Customs and Border Protection declined to comment on the woman's case.

The program — officially called the Migrant Protection Protocols — was instituted by the U.S. and Mexico as a way of deterring migrants from crossing the border to seek asylum. Mexico has cooperated with the expansion of the program at the behest of President Donald Trump, who threatened crippling tariffs in June if Mexico did not do more to stop

migrants.

The U.S. Department of Homeland Security has said people in "vulnerable populations" may be exempt from being sent to Mexico. But pregnant women are not necessarily considered "vulnerable" by CBP, a subsidiary of the department.

"In some cases, pregnancy may not be observable or disclosed, and may not in and of itself disqualify an individual from being amenable for the program," CBP said in a statement. "Agents and officers would consider pregnancy, when other associated factors exist, to determine amenability for the program."

Mexico declares success in slowing migrant flow

By Maria Verza and Christopher Sherman
The Associated Press

MEXICO CITY — Under threat of crippling U.S. tariffs, Mexico said Friday it had reduced the flow of migrants arriving at its northern border by 56% in three months.

Foreign Secretary Marcelo Ebrard said he believes Mexico's strategy of cracking down on illegal migration with a National Guard deployment, investment in Central America and allowing the U.S. to make more asylum seekers wait in Mexico is enough to avert President Donald Trump's threat to impose tariffs on all Mexican imports.

Ebrard is scheduled to meet with U.S. officials Tuesday at the White House to review the progress.

"We're showing that the strategy that Mexico put forward has been successful," Ebrard said. "I don't expect a tariff threat Tuesday because it wouldn't make sense."

Using U.S. Customs and Border Protection data, Ebrard said the number of migrants apprehended at the U.S.-Mexico border in August was 63,989, down from 144,266 in May. Ebrard's numbers include those who presented themselves at U.S. ports of entry and were deemed inadmissible. Mexico has reinforced

security on its porous southern border and set up checkpoints on highways leading north, deploying 21,000 police and troops across the nation. Ebrard said there had been seven formal complaints of human rights violations involving the National Guard, a relatively low number which he saw as another sign of success.

The enforcement has been paired with an incipient economic development plan. Mexico has agreed with Honduras and El Salvador to expand a tree-planting program that aims to keep farmers on their land through direct payments and provide them with income-generating fruit and timber trees.

Mexico has committed \$60 million to that program and another to create job opportunities for youth.

Some 4,300 Central American migrants are working in Mexico's version of that program in the south, Ebrard said.

Mexican President Andres Manuel López Obrador, a leftist who took office Dec. 1 promising better treatment of migrants, instead has embraced the fight against migrant smuggling.

In recent weeks, he has seldom mentioned the U.S. pressure and depicts the crackdown on migrants as a struggle to defend Mexican laws.

Trump challenges California's action on emission standards

By Tom Krisher and Ellen Knickmeyer
The Associated Press

DETROIT — The Trump administration on Friday launched an all-out assault on California over mileage rules, opening an anti-trust investigation and telling state officials that they appear to be violating federal law in a deal with four automakers setting tougher automotive emission standards.

The outcome of the emissions fight will make or break an effort by President Donald Trump to relax Obama-era mileage standards nationwide. California's congressionally granted authority to set its own, tougher emissions standards under the 1970 Clean Air Act has long prodded automakers to adopt more fuel-efficient passenger vehicles.

Ford and Honda confirmed receiving a letter from the U.S. Justice Department informing them of an antitrust inquiry into a July deal with California, in which the two automakers along with Volkswagen and BMW agreed to stricter emissions standards than preferred by Trump. The Department of Transportation and the Environmental Protection Agency sent a letter to California saying the deal appears to violate the Clean Air Act and other laws.

"Congress has squarely vested the authority to set fuel economy standards for new motor vehicles, and nationwide standards for GHG (greenhouse gas) vehicle emissions, with the federal government, not with California or any other state," the agencies wrote in a letter dated Friday to the California Air Resources Board, which oversees auto emissions in the state.

California has emerged as a leader of state-level efforts to block Trump



In this April 18 file photo, a sign for the Department of Justice hangs in the press briefing room at the Justice Department, in Washington. (PATRICK SEMANSKY/ASSOCIATED PRESS FILE PHOTO)

administration moves weakening environmental protections. As part of those efforts, dozens of lawsuits have been filed challenging administration rollbacks.

Trump long has made clear he wants to end California's clout in setting mileage standards. Gov. Gavin Newsom remained defiant in the face of Friday's administration actions.

"The Trump administration has been attempting and failing to bully car companies for months now," Newsom said in a statement. "We remain undeterred. California stands up to bullies and will keep fighting for stronger clean car protections that protect the health and safety of our children and families."

Ford spokesman T.R. Reid confirmed Friday that the company received the Justice Department letter on the antitrust issue and said the company is cooperating. He would not disclose which

other automakers may have gotten the letter, but Honda confirmed that it also had received it.

The July deal bypassed the Trump administration's plan to freeze emissions and fuel economy standards adopted under the Obama administration at 2021 levels.

The four automakers agreed with the California Air Resources Board to reduce emissions by 3.7% per year starting with the 2022 model year, through 2026. That compares with 4.7% yearly reductions through 2025 under the Obama standards, according to California.

Emissions standards are closely linked with fuel economy requirements because vehicles pollute less if they burn fewer gallons of fuel.

The Justice Department gave no details of why it believed the deal could have violate federal law meant to prohibit anti-competitive behavior by companies. The EPA refused further comment.

Former Zimbabwe leader Robert Mugabe dies

By Farai Mutsaka and Christopher Torchia
The Associated Press

HARARE, Zimbabwe — Former Zimbabwean leader Robert Mugabe, an ex-guerrilla chief who took power when the African country shook off white minority rule and presided for decades while economic turmoil and human rights violations eroded its early promise, has died in Singapore. He was 95.

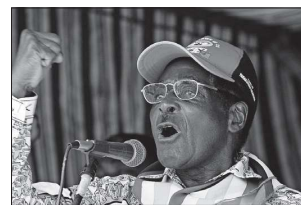
Mugabe enjoyed strong support from Zimbabwe's people soon after he became the first post-colonial leader of what had been British-controlled Rhodesia.

Often violent farm seizures from whites who owned huge tracts of land made him a hated figure in the West and a hero in Africa.

His successor, President Emmerson Mnangagwa, tweeted Friday that an "icon of liberation" had died. Mnangagwa, a long-time loyalist until Mugabe dismissed him from his Cabinet, named Mugabe as a national hero, Zimbabwe's highest posthumous honor.

He said the nation would observe an official mourning period for its late leader, "a great teacher and mentor" and "a remarkable statesman of our century." No date or other details were given.

Singapore's Foreign Ministry said it was working with Zimbabwe on arrangements to fly Mugabe's body



In this March 18, 2008, file photo, Zimbabwe President Robert Mugabe addresses party supporters at a rally in Gweru, about 155 miles south of Harare, Zimbabwe. (TSVANGIRAYI MUKWAZHI/ASSOCIATED PRESS FILE PHOTO)

home. In recent years, Mugabe sought medical treatment at Gleneagles Hospital in Singapore.

Presidential spokesman George Charamba told The Associated Press that Mugabe was readmitted to the hospital complaining of chest pains. His personal doctor, Dr. Jonathan Matenga, was flown to Singapore and with Mugabe when he died at 4:45 a.m. Friday, Charamba said.

Mugabe's popularity began to rise again after Mnangagwa failed to deliver on promises of economic recovery and

appeared to take an even harsher and more repressive stance against critics. Many began to publicly say they missed Mugabe.

Forced to resign amid pressure from the military, his party and the public in November 2017, Mugabe was defiant throughout his long life, railing against the West for what he called its neo-colonialist attitude and urging Africans to take control of their resources — a populist message that was often a hit, even as many nations on the continent shed the strongman model and moved toward democracy.

PUBLIC NOTICE

A Neighborhood Meeting will be held to discuss a revision to a previously discussed 340-lot single-family subdivision. The site is located on TP#03067-005-000, 03067-005-001, 03067-000-000 and 03067-006-000 at approximately 17002 NW County RD 241, Alachua, FL. The meeting will be held Friday, September 20th at 5:00pm at the northwest corner of NW 161st Ave. and NW 147th Drive (behind Lowe's) Alachua, FL 32615. Contact: Forrest Eddleton
Phone: (352) 593-3159 - Gmuier Engineering, LLC

PUBLIC NOTICE

A Neighborhood Meeting will be held to discuss a preliminary plat and a Special Exception for a proposed subdivision resulting in roughly 211 residential single-family lots with townhouse dwellings. The site is located generally NW of NW 147th Drive and NW 161st Ave., Alachua, FL on TP#03067-006-000. The meeting will be held Friday, September 20th at 5:00pm at the northwest corner of NW 161st Ave. and NW 147th Drive (behind Lowe's) Alachua, FL 32615. Contact: Forrest Eddleton
Phone: (352) 593-3159 - Gmuier Engineering, LLC

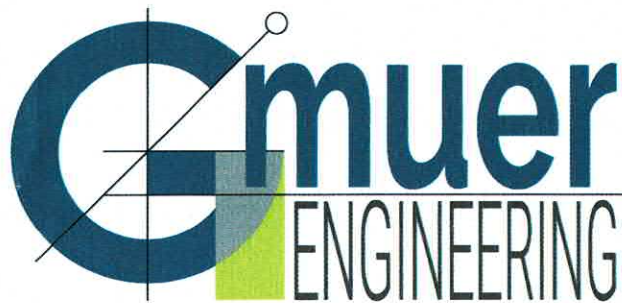
NOTICE OF RESCHEDULED HEARING

The tentative hearing adopting a millage rate and budget on September 3, 2019 for the Levy County Board of County Commissioners is being rescheduled due to Hurricane Dorian.

A rescheduled tentative budget hearing will be held on:

September 10, 2019
5:01 P.M. at

Levy County Courthouse,
County Commission Room
355 S Court Street, Bronson, FL 32621



2603 NW 13th St, Box 314
Gainesville, FL 32609
Ph. (352) 281-4928

gmuereng.com

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Meeting Sign-in Sheet

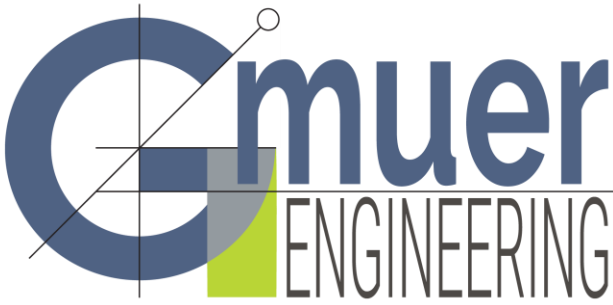
Re: Tara Forest East and Tara Baywood - Neighborhood Workshop

Date: Friday, September 20, 2019

Time: 5:00pm

Place: The northwest corner of NW 161st Ave and NW 147th Drive (behind Lowe's), Alachua, FL 32615

NAME	Email	Phone
Dennis Mylek	DSMYLEK@Pachell.Nor	603-748-0537
SILVIA MONKHARA NANCE	SILVIA@NanceLanESTATE.COM	(352) 870-8772
SAYED MONKHARA	SAYED@MONKHARA.COM	(352) 278-5317
Gayle Fabiano	noe.buddee@yahoo.com	
LaTosha Brown	latoshamiles@yahoo.com	706-536-8299
Paul Flynn	paulflynn82@yahoo.com	404-313-2529
Ryan Ward	ward-Ryan@yahoo.com	352-514-9898
Jean Calderwood	Jean.Calderwood@gmail.com	386-588-4309
Hugh Calderwood	Hugh.Calderwood@gmail.com	
MONIQUE LEVY	MONIQUE.SOUZA.26@GMAIL.COM	857-247-7132



2603 NW 13th St, Box 314
Gainesville, FL 32609
Ph. (352) 281-4928

gmuereng.com

Meeting Agenda and Notes

Re: Tara Forest East and Tara Baywood – Neighborhood Workshop

Date: Friday, September 20, 2019

Time: 5:00pm

Place: The northwest corner of NW 161st Ave and NW 147th Drive (behind Lowe's), Alachua, FL 32615

Agenda

- Explanation of the development proposal and application
- Explanation of the character and nature of the process for review
- Comments and questions and discussion of potential conflicts

Meeting Notes:

Several questions asking about the general layout and location of the stormwater facilities, how they will look like, and the design requirements. The questions were address by:

- Referred to the conceptual plans and indicated all locations of the proposed stormwater facilities
- Described the stormwater facilities as normally dry ponds that would fill during storm events and slowly discharge a portion of the water downstream and infiltrate the remainder of the water into the soils
- Stormwater permitting was described to be completed with the SRWMD and the City of Alachua and that the design would be completed up front for all phases of the development. The Design Storm is the 100Yr-240Hr event which is similar to two large storms back to back such as two tropical storms resulting in 18 inches of rain.

Two participants expressed they were happy to see townhomes becoming an option in the local housing market

General concerns over the increase in residents and associated traffic were expressed

- We reviewed the road connections proposed with Phase 1 of Tara Forest East to CR241 and that a traffic study was completed with this application to be reviewed by the City and the traffic generation numbers were quoted from the report along with the current City of Alachua roadway capacity numbers of the affected segments.
- Participants were also directed to the City's Long Range Transportation Plan and the recent community discussions at Commission meetings

Meeting adjourned at 7:00pm

DRAFT

DRAFT
LAYOUT

TARA
BAYWOOD
SUBDIVISION

CLIENT :
DESIGN :
REVISION :
QUALITY CONTROL :
C.A. GARDNER, P.E.
C.A. GARDNER, P.E.
SITING PLAN APP #
18-00033



FL CA # 13103
2803 NW 13th St, Box 314
Gainesville, FL 32609
(352) 281-4808
www.cagardner.com

REVISIONS
2019-06-13 DRAFT BLOCK
2019-06-07 REVISION LAYOUT
2019-06-27 REVISION LAYOUT
2019-06-28 REVISION LAYOUT

REVISIONS
2019-06-13 DRAFT BLOCK
2019-06-07 REVISION LAYOUT
2019-06-27 REVISION LAYOUT
2019-06-28 REVISION LAYOUT



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800.955.8771
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groups and residents.

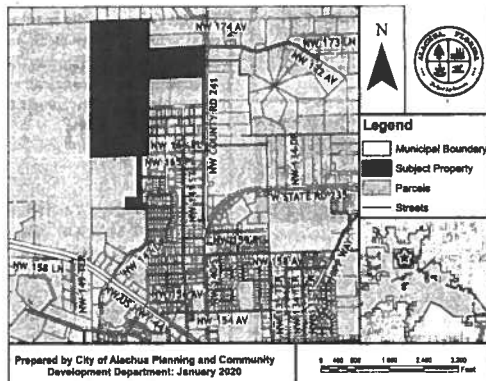
Email cwalker@
alachuatoday.com



City of
ALACHUA

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

Notice is hereby given that the Planning & Zoning Board of the City of Alachua will hold a public hearing on February 11, 2020, at 6:00 p.m. The hearing will be held in the James A. Lewis Commission Chambers in City Hall, located at 15100 NW 142nd Terrace, Alachua, Florida, to consider the following: A request by Christopher Gmuier, P.E. of Gmuier Engineering, LLC, applicant and agent for Tara Forest, LLC and Alachua Development Co., LLC, property owners, for consideration of the preliminary plat of Tara Forest East, which proposes the subdivision of a ±148.76 acre subject property into a maximum total of 340 lots, with associated common areas and right-of-way. The subject property is located north of Lowe's Home Improvement and the Baywood subdivision, south of the Dogwood Acres subdivision, and west of CR 241. Consisting of Tax Parcel Numbers 03067-005-000, 03067-005-001, 03067-000-000, 03067-006-000; Future Land Use Map (FLUM) Designation: Moderate Density Residential and Medium Density Residential; Zoning: Residential Single Family-3 ("RSF-3") and Residential Single Family-6 ("RSF-6").



At the public hearing, all interested parties may appear and be heard with respect to the application. Copies of the application are available for public inspection at the Planning and Community Development Department, 15100 NW 142nd Terrace, Alachua, Florida, on any regular business day between the hours of 7:30 a.m. to 6:00 p.m. Written comments on the application may be sent to the following address: City of Alachua, Planning and Community Development, P.O. Box 9, Alachua, FL 32616. Notice is given pursuant to Section 286.0105, Florida Statutes, that, in order to appeal any decision made at the public hearing, you will need a record of the proceedings, and that, for such purpose, you may need to ensure that a verbatim record of the proceedings is made, which includes the testimony and evidence upon which the appeal is to be based. In accordance with the Americans with Disabilities Act, any persons with a disability requiring reasonable accommodation in order to participate in this meeting should call the City Clerk at (386) 418-6100 x 101 at least 48 hours prior to the public hearing.

(Published: Alachua County Today - January 30, 2020)



City of
ALACHUA

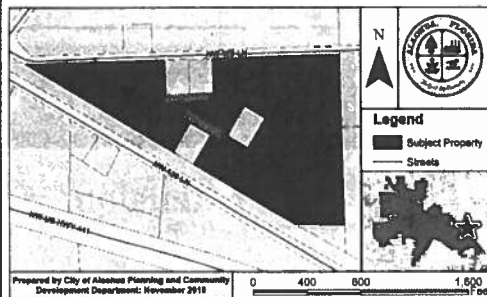
PUBLIC NOTICE OF ENACTMENT OF AN ORDINANCE OF THE CITY OF ALACHUA, FLORIDA

Notice is hereby given that the City Commission of the City of Alachua will hold a public hearing on a proposed ordinance. The hearing will be held on February 10, 2020 at 6:00 p.m., in the James A. Lewis Commission Chambers in City Hall, located at 15100 NW 142nd Terrace, Alachua, Florida.

The ordinance title is as follows:

ORDINANCE 20-04

AN ORDINANCE OF THE CITY OF ALACHUA, FLORIDA, RELATING TO THE AMENDMENT OF THE OFFICIAL ZONING ATLAS; AMENDING THE OFFICIAL ZONING ATLAS FROM PLANNED UNIT DEVELOPMENT (PUD) (ALACHUA COUNTY) TO INDUSTRIAL GENERAL (IG) ON A ±34.63 ACRE PROPERTY; LOCATED WITHIN MCGINLEY INDUSTRIAL PARK, SOUTH OF NW 128TH LANE AND NORTH OF COUNTY ROAD 25A (ALSO KNOWN AS NW 120TH LANE AND THE A.C.L. RAILROAD; CONSISTING OF TAX PARCEL NUMBERS 05893-000-000, 05893-001-000, 05893-010-001, 05893-010-004 THROUGH 05893-010-007, 05893-010-009, 05893-010-010, 05893-020-001, 05893-020-002, AND 05893-020-005 THROUGH 05893-020-009; REPEALING ALL ORDINANCES IN CONFLICT; PROVIDING SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE.



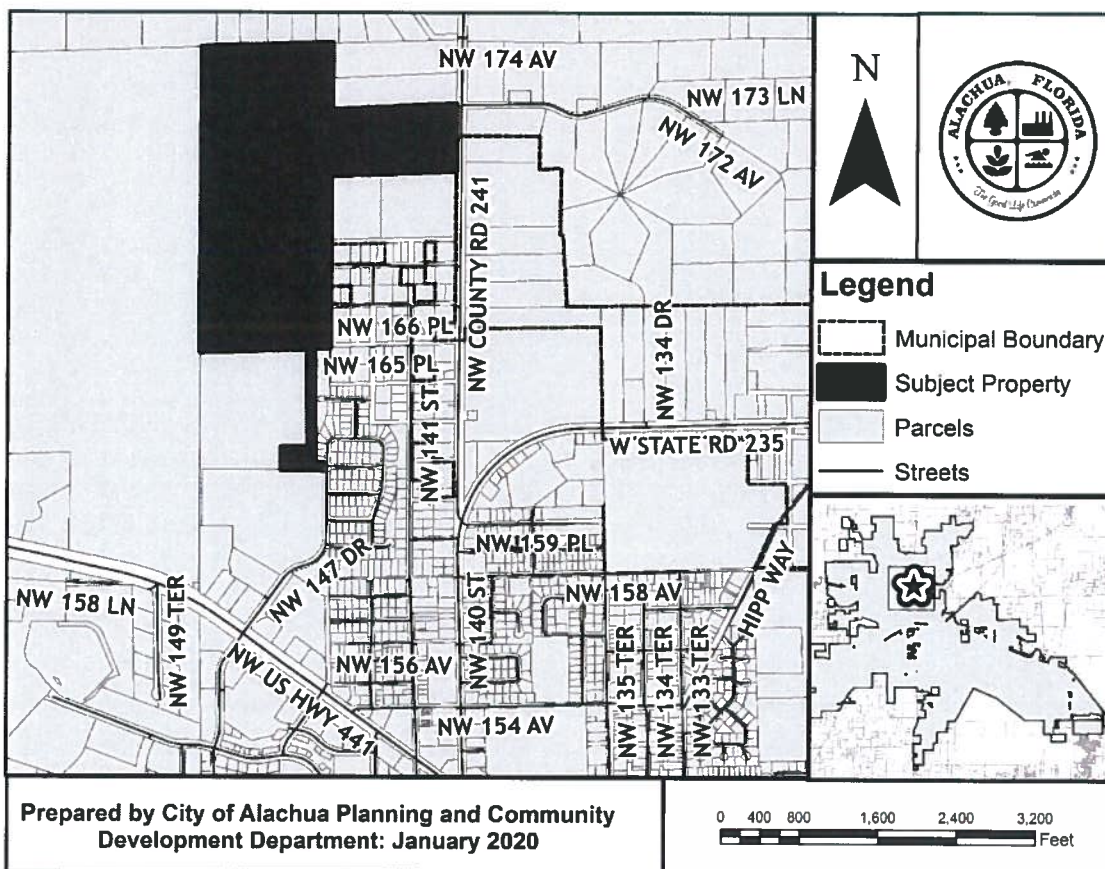
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(Published: Alachua County Today - January 30, 2020)

Mailed 1/27/2020
(K)

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

Notice is hereby given that the Planning & Zoning Board of the City of Alachua will hold a public hearing on February 11, 2020, at 6:00 p.m. The hearing will be held in the James A. Lewis Commission Chambers in City Hall, located at 15100 NW 142nd Terrace, Alachua, Florida, to consider the following: A request by Christopher Gmuer, P.E. of Gmuer Engineering, LLC, applicant and agent for Tara Forest, LLC. and Alachua Development Co., LLC, property owners, for consideration of the preliminary plat of Tara Forest East, which proposes the subdivision of a ± 148.76 acre subject property into a maximum total of 340 lots, with associated common areas and right-of-way. The subject property is located north of Lowe's Home Improvement and the Baywood subdivision, south of the Dogwood Acres subdivision, and west of CR 241. Consisting of Tax Parcel Numbers 03067-005-000, 03067-005-001, 03067-000-000, 03067-006-000; Future Land Use Map (FLUM) Designation: Moderate Density Residential and Medium Density Residential; Zoning: Residential Single Family-3 ("RSF-3") and Residential Single Family-6 ("RSF-6").



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THE GOOD LIFE COMMUNITY

Development, P.O. Box 9, Alachua, FL 32616. Notice is given pursuant to Section 286.0105, Florida Statutes, that, in order to appeal any decision made at the public hearing, you will need a record of the proceedings, and that, for such purpose, you may need to ensure that a verbatim record of the proceedings is made, which includes the testimony and evidence upon which the appeal is to be based. In accordance with the Americans with Disabilities Act, any persons with a disability requiring reasonable accommodation in order to participate in this meeting should call the City Clerk at (386) 418-6100 x 101 at least 48 hours prior to the public hearing.

03067-004-000
CRUSADERS FOR CHRIST CHURCH
PO BOX 1087
ALACHUA, FL 32616-1087

03542-001-001
GREENE BEVERLY
110 NW 39TH AVE APT 9
GAINESVILLE, FL 32609

03531-007-000
ALACHUA COUNTY HOUSING AUTHOR
701 NE 1ST ST
GAINESVILLE, FL 32601

03067-062-106
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03067-004-002
CURTIS NATRON
PO BOX 1087
ALACHUA, FL 32616

03067-061-065
HEWITT THOMAS C
14328 NW 161ST AVE
ALACHUA, FL 32615

03531-034-000
KIMBALL JOHN H
13504 NW 56TH AVE
GAINESVILLE, FL 32653

03551-000-000
HUNT-WALKER SHARRICKA DAWNDREY
PO BOX 545
ALACHUA, FL 32616-0545

03531-033-000
THOMAS LOUISE
PO BOX 1172
ALACHUA, FL 32616-1172

03067-061-056
BROWN WYNDELL A & LATOSHA L
14365 NW 161ST AVE
ALACHUA, FL 32615

03067-062-069
YOUNG RAMONE R
14385 NW 162ND PL
ALACHUA, FL 32615

03550-000-000
SOLOMON JANIE HEIRS
PO BOX 234
MICANOPY, FL 32667

03067-060-002
FOX & ROBERTS
14369 NW 159TH PL
ALACHUA, FL 32615

03067-061-038
MENDOZA & VALDES W/H
14307 NW 160TH LN
ALACHUA, FL 32615

03067-061-057
NGUYEN TONY M & TOMOKO S
14345 NW 161ST AVE
ALACHUA, FL 32615

03531-046-000
DANIELS EVELYN R
PO BOX 584
ALACHUA, FL 32616-0584

03605-001-010
WARRING & WARRING 2 LLC
7106 NW 18TH AVE
GAINESVILLE, FL 32605

03583-001-000
OM NAMAH SHIVAAY LLC
5144 SW 82ND TER
GAINESVILLE, FL 32608

03544-000-000
GARRISON LULA MAE
PO BOX 901
ALACHUA, FL 32616-0901

03531-026-000
LEWIS DIANE R
PO BOX 1421
ALACHUA, FL 32616

03067-062-096
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03067-062-093
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03067-060-003
MCGINNIS-BROWN RUBY D
14349 NW 159TH PL
ALACHUA, FL 32615

03549-001-000
ANTIOCH MISSIONARY BAPTIST CHURCH OF ALACHUA INC
PO BOX 814
ALACHUA, FL 32616

03067-062-100
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03081-002-000
KIRKLAND MARY L
1275 NE 136TH TER #1
NORTH MIAMI, FL 33161

03067-062-087
ODUM RONNIE & LEEANNE J
14282 NW 163RD PL
ALACHUA, FL 32615

03067-061-068
FLYNN & JANSON
14388 NW 161ST AVE
ALACHUA, FL 32615

03067-061-050
BUONSIGNORE MICHAEL W & MAMI
14304 NW 160TH LN
ALACHUA, FL 32615

03067-060-001
WARD & WARD
14389 NW 159TH PL
ALACHUA, FL 32615

03067-061-064
SANDERS BRYAN & AMANDA
14308 NW 161ST AVE
ALACHUA, FL 32615

03067-000-000
TARA FOREST LLC
7717 NW 20TH LN
GAINESVILLE, FL 32605

03067-006-000
ALACHUA DEVELOPMENT CO LLC
16469 BRIDLEWOOD CIR
DELRAY BEACH, FL 33445

03531-010-000
EDWARDS VELMA D
PO BOX 314
ALACHUA, FL 32616-0314

03067-062-103
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03067-061-049
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03531-035-000
WHITE JOHN R & TRENITA A
PO BOX 1246
ALACHUA, FL 32616-1246

03605-003-000
GATEWAY BANK OF CENTRAL FLORI
1632 EAST SILVER SPRINGS BLVD
OCALA, FL 34470

03067-062-098
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03584-001-000
M & R INVESTMENTS OF NORTH FL
11 SE 2ND AVE
GAINESVILLE, FL 32601

03548-000-000
SESCO DAVID L
PO BOX 372
LACROSSE, FL 32658

03531-049-000
SRI JAGANNATH CHAITANYA SANGH
2441 NW 43RD ST UNIT 24-A
GAINESVILLE, FL 32606

03531-009-000
MCCLAIN ERICA S
14324 NW 157TH PL
ALACHUA, FL 32615

03067-600-000
ALACHUA DEVELOPMENT CO LLC
16469 BRIDLEWOOD CIR
DELRAY BEACH, FL 33445

03067-060-033
COOK DAVID P JR
14392 NW 159TH LN
ALACHUA, FL 32615

03067-062-095
AMA GAINESVILLE INVESTMENTS THREE LLC
7475 SW 70TH LN
GAINESVILLE, FL 32608

03067-061-052
GIRALDO & MARTINEZ H/W
14344 NW 160TH LN
ALACHUA, FL 32615

03067-062-102
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03542-001-000
WISE LULA M
820 WEST 3RD ST
ST AUGUSTINE, FL 32084

03067-061-059
THOMAS CURTIS L & CANDACE M
14305 NW 161ST AVE
ALACHUA, FL 32615

03067-005-000
TARA FOREST LLC
7717 NW 20TH LN
GAINESVILLE, FL 32605

03531-029-000
SOUTH ERNEST WAYNE & JUSTINE
2611 ROCK SPRINGS RD
KINGSPORT, TN 37664-5635

03067-601-000
ALACHUA DEVELOPMENT CO LLC
16469 BRIDLEWOOD CIR
DELRAY BEACH, FL 33445

03067-061-037
TAOPO EDWIN & MIDNITTE
14327 NW 160TH LANE
ALACHUA, FL 32615

03081-003-000
CALHOUN JOHNNY B & MARIE
PO BOX 434
ALACHUA, FL 32616

03067-001-000
MEGAHEE ENTERPRISES LTD. LLLP
4110 SW 34TH ST STE 24
GAINESVILLE, FL 32608

03067-062-071
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03554-000-000
BRIANT WILLIAM L & JHONA L
14329 NW 186TH AVE
ALACHUA, FL 32615

03546-000-000
LEWIS & LEWIS TRUSTEES
26260 US HIGHWAY 129
BRANFORD, FL 32008

03081-000-000
BAKER & LUNDY
242 BAYBERRY DR
LAKE PARK, FL 33403

03531-032-000
JACOB REBECCA
14325 NW 156TH PL
ALACHUA, FL 32615-8254

03531-030-000
HERRING TIMOTHY R
4631 SW ATHENA DR
PORT ST LUCIE, FL 34953-5548

03067-062-086
WILLIAMS RAYMOND A & SHARON J
16293 NW 143RD WAY
ALACHUA, FL 32615

03067-061-060
WILLIAMS HUBERT RAY & GANEANE M
14291 NW 161ST AVE
ALACHUA, FL 32615

03067-062-070
AKRIDGE MICHAEL D & SHATEKA
14365 NW 162ND PL
ALACHUA, FL 32615

03553-000-000
BROOKS JOHNNIE MAE HEIRS
4930 SW 87TH PL
LAKE BUTLER, FL 32054-5966

03547-000-000
CALHOUN & CALHOUN
PO BOX 545
ALACHUA, FL 32616-0545

03067-062-091
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03552-000-000
WALKER SHARRICKA HUNT
14327 NW 155TH PL
ALACHUA, FL 32616

03067-062-088
DEJESUS BERMAN
614 SW 70TH TER APT D
GAINESVILLE, FL 32607

03067-061-055
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03067-601-004
ALACHUA DEVELOPMENT CO LLC
16469 BRIDLEWOOD CIR
DELRAY BEACH, FL 33445

03067-060-032
CANNEGIETER LEROY R & TANYA
14362 NW 159TH LN
ALACHUA, FL 32615

03067-061-067
LEVY SETH G & MONIQUE DE SOUZA BARBOSA
14368 NW 161ST AVE
ALACHUA, FL 32615

03869-003-000
HITCHCOCK & SONS INC
29220 NW 122ND ST
ALACHUA, FL 32615

03067-061-054
MATHIS STANLEY P & ANTOINETTE L
14384 NW 160TH AVE
ALACHUA, FL 32615

03531-012-000
LINING KATINA A
14321 NW 157TH PL
ALACHUA, FL 32615-8740

03067-062-073
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03067-062-083
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03067-062-105
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03067-061-058
COBTY MAJIB & MARIE N
14325 NW 161ST AVE
ALACHUA, FL 32615

03531-008-000
ALACHUA COUNTY HOUSING AUTHOR
701 NE 1ST ST
GAINESVILLE, FL 32601

03531-014-000
ALACHUA COUNTY HOUSING AUTHOR
701 NE 1ST ST
GAINESVILLE, FL 32601

03585-001-000
XPANDING INDUSTRIES INC
PO BOX 383
ALACHUA, FL 32616

03067-062-101
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03067-062-104
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03067-004-001
HANCOCK JOSEPH A & CRYSTAL M
14309 NW 159TH PL
ALACHUA, FL 32615

03531-006-000
ALACHUA COUNTY HOUSING AUTHOR
701 NE 1ST ST
GAINESVILLE, FL 32601

03531-015-000
ALACHUA COUNTY HOUSING AUTHOR
701 NE 1ST ST
GAINESVILLE, FL 32601

03081-001-000
SMITH H E
18125 NW 42ND PL
OPA LOCKA, FL 33055-3311

03076-000-000
SHARMA LATIKA
4870 DEER LAKE DR E STE 2318
JACKSONVILLE, FL 32246-6313

03067-006-010
LOWES HOME CENTERS INC
1000 LOWES BOULEVARD TAX DEPT
MOORESVILLE, NC 28117

03067-062-082
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03067-062-097
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03067-001-004
AUTOZONE STORES LLC
123 SOUTH FRONT ST 3RD FLOOR
MEMPHIS, TN 38103

03548-001-000
WELCOME EVELYN
PO BOX 384
ALACHUA, FL 32616-0384

03531-013-000
ALACHUA COUNTY HOUSING AUTHOR
701 NE 1ST ST
GAINESVILLE, FL 32601

03067-061-063
LISTZWAN LORI JORDAN
14296 NW 161ST AVE
ALACHUA, FL 32615

03531-027-000
KANE D L TRUSTEE
13919 NW 145TH AVE
ALACHUA, FL 32615-6218

03067-062-085
COON-WHITE PRISCA S
5615 SW 215TH TER
NEWBERRY, FL 32669

03531-028-000
JACOB & LEGREE
14325 NW 156TH PL
ALACHUA, FL 32615-8254

03531-048-000
FORD JOYCE M
PO BOX 764
ALACHUA, FL 32616-0764

03067-060-034
TARROBAL JOEL CONRAD W & RIA C
14387 NW 160TH LN
ALACHUA, FL 32615

03067-062-094
AMA GAINESVILLE INVESTMENTS THREE LLC
7475 SW 70TH LN
GAINESVILLE, FL 32608

03531-031-000
JACOBS TERRI ANN
PO BOX 2383
ALACHUA, FL 32616

03549-000-000
ANTIOCH MISSIONARY BAPTIST CHURCH OF ALACHUA INC
PO BOX 814
ALACHUA, FL 32616

03542-000-000
GREENE BEVERLY
110 NW 39TH AVE APT 9
GAINESVILLE, FL 32609

03067-061-051
WOODARD TERRI M
14324 NW 160TH LN
ALACHUA, FL 32615

03067-061-036
WILSON TANGELA M
14347 NW 160TH LN
ALACHUA, FL 32615

03067-062-089
SORRELL ALBERT L & PAMELA E
14304 NW 163RD PL
ALACHUA, FL 32615

03067-062-092
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03869-003-001
ALACHUA TOWNE CENTRE ASSOCIAT
13505 NW 88TH PL
ALACHUA, FL 32615

03067-060-031
KIRBY KEVIN L & STACY L
14342 NW 159TH LN
ALACHUA, FL 32615

03067-061-066
MYLEK DENNIS JAMES & EDITH
14348 NW 161ST AVE
ALACHUA, FL 32615

03067-062-072
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03605-001-003
GATEWAY BANK OF CENTRAL FLORI
1632 E SILVER SPRINGS BLVD
OCALA, FL 34470

03067-002-001
LEWIS F ALLEN & DIANE R
PO BOX 1421
ALACHUA, FL 32616-1421

03080-001-000
HAILE ELAINE D
802 OAK ST
STARKE, FL 32091-2340

03552-001-000
ANTIOCH MISSIONARY BAPTIST CHURCH OF ALA FL INC
PO BOX 814
ALACHUA, FL 32616-0814

03583-000-000
OM NAMAH SHIVAAY LLC
5144 SW 82ND TER
GAINESVILLE, FL 32608

03067-062-084
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03067-062-090
CRISWELL JOHNATHAN
14324 NW 163RD PL
ALACHUA, FL 32615

03067-001-001
CANVAS CHURCH FL INC
PO BOX 219
ALACHUA, FL 32616

03605-001-013
ALACHUA TOWNE CENTRE ASSOCIAT
13505 NW 88TH PL
ALACHUA, FL 32615

03067-062-099
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03531-011-000
ALBERT L NORA
PO BOX 1241
ALACHUA, FL 32616

03067-061-035
YOUNG MACK H & GEORGIA MAE
14367 NW 160TH LANE
ALACHUA, FL 32615

03067-001-003
STARMAX FDA LLC
961094 GATEWAY BLVD STE 200
AMELIA ISLAND, FL 32034

03080-000-000
HAILE ELAINE D
802 OAK ST
STARKE, FL 32091-2340

03605-001-006
PROGRESSIVE RESTAURANTS INC
602 S MAIN ST
GAINESVILLE, FL 32601

03067-061-053
FABIANO CHRISTOPHER & GAYLE CRUZ LIFE ESTATE
14364 NW 160TH LN
ALACHUA, FL 32615

03062-001-000
JOHNS PATSY ANNETTE
PO BOX 1722
HIGH SPRINGS, FL 32655-1722

03067-005-000
TARA FOREST LLC
7717 NW 20TH LN
GAINESVILLE, FL 32605

03067-005-001
TARA FOREST LLC
7717 NW 20TH LN
GAINESVILLE, FL 32605

03076-000-000
SHARMA LATIKA
4870 DEER LAKE DR E STE 2318
JACKSONVILLE, FL 32246-6313

03068-009-000
LUNDY GWENDOLYN
14000 NW 154TH AVE APT 21
ALACHUA, FL 32615

03013-010-002
KARRH MARGARET MCKNIGHT
14201 NW 174TH AVE
ALACHUA, FL 32615

03125-001-000
CEMETERY
17017 NW COUNTY ROAD 241
ALACHUA, FL 32615

03013-010-005
GAMAGE RICHARD F & CHERYL L
14495 NW 174TH AVE
ALACHUA, FL 32615

03068-008-000
COYLE & COYLE
14319 NW 167TH PL
ALACHUA, FL 32615

03062-001-000
JOHNS PATSY ANNETTE
PO BOX 1722
HIGH SPRINGS, FL 32655-1722

03080-000-000
HAILE ELAINE D
802 OAK ST
STARKE, FL 32091-2340

03067-005-001
TARA FOREST LLC
7717 NW 20TH LN
GAINESVILLE, FL 32605

03013-010-009
LEWIS BRANDT A & NANCY A
14907 NW 174TH AVE
ALACHUA, FL 32615

03068-009-001
TYSON DEVRON D
PO BOX 23
ALACHUA, FL 32616-0023

03067-000-000
TARA FOREST LLC
7717 NW 20TH LN
GAINESVILLE, FL 32605

03013-010-007
BAKER WILLIAM S & PAMELA A
14655 NW 174TH AVE
ALACHUA, FL 32615

03067-005-000
TARA FOREST LLC
7717 NW 20TH LN
GAINESVILLE, FL 32605

03062-000-000
ORTIZ & PETERSON-ORTIZ H/W
17304 NW 140TH ST
ALACHUA, FL 32616

03081-000-000
BAKER & LUNDY
242 BAYBERRY DR
LAKE PARK, FL 33403

03068-005-001
SMITH MARY LOUISE
14314 NW 167TH PL
ALACHUA, FL 32615-8696

03068-007-000
RICHARDSON CARRIE
815 SE 19TH ST
GAINESVILLE, FL 32641

03068-015-000
MARK MARY
PO BOX 711
ALACHUA, FL 32616-0711

03062-002-000
HAGAN MILDRED
16906 NW 140TH ST
ALACHUA, FL 32615-4411

03068-005-000
JONES HENRY JR & PHOEBE
PO BOX 956
ALACHUA, FL 32616-0956

03013-010-004
BOOZER RUBY D TRUSTEE
PO BOX 1085
ALACHUA, FL 32616-1085

03067-006-000
ALACHUA DEVELOPMENT CO LLC
16469 BRIDLEWOOD CIR
DELRAY BEACH, FL 33445

03013-010-008
ESCOFFERY-LAWRENCE & LAWRENCE W/H
14745 NW 174TH AVE
ALACHUA, FL 32615-4856

03013-020-015
INNIS CHRIS & VERONIKA
14596 NW 174TH
ALACHUA, FL 32615-4881

03067-001-000
MEGAHEE ENTERPRISES LTD. LLLP
4110 SW 34TH ST STE 24
GAINESVILLE, FL 32608

03127-000-000
EIB REUBEN J & DEBORAH S
17325 NW COUNTY RD 241
ALACHUA, FL 32615

03068-005-002
JONES HENRY
PO BOX 956
ALACHUA, FL 32616-0956

03062-003-000
RHOADS A K & DEBORAH
332 SE 2ND AVE
MELROSE, FL 32666-5441

03127-001-000
WD PROPERTIES FL LLC
1006 SE 4TH ST
GAINESVILLE, FL 32601

03013-010-003
BOOZER RUBY D TRUSTEE
PO BOX 1085
ALACHUA, FL 32616-1085

03013-020-016
MURTHA GARY J & MARY E
14528 NW 174TH AVE
ALACHUA, FL 32615-4856

03068-014-000
RICHARDSON MATTIE HEIRS
815 SE 19TH ST
GAINESVILLE, FL 32641

03127-020-002
KARAPHILLIS JOHN M & CYNTHIA A
13811 NW 172ND AVE
ALACHUA, FL 32615-4463

03080-001-000
HAILE ELAINE D
802 OAK ST
STARKE, FL 32091-2340

03013-010-006
KNISELEY GREGORY P & JOAN E
PO BOX 782
ALACHUA, FL 32616

03013-020-020
CORAL FARMS MCS LLC
PO BOX 482
FLORAHOME, FL 32140

03076-000-000
SHARMA LATIKA
4870 DEER LAKE DR E STE 2318
JACKSONVILLE, FL 32246-6313

03067-001-000
MEGAHEE ENTERPRISES LTD. LLLP
4110 SW 34TH ST STE 24
GAINESVILLE, FL 32608

03081-000-000
BAKER & LUNDY
242 BAYBERRY DR
LAKE PARK, FL 33403

03081-002-000
KIRKLAND MARY L
1275 NE 136TH TER #1
NORTH MIAMI, FL 33161

03068-015-000
MARK MARY
PO BOX 711
ALACHUA, FL 32616-0711

03068-008-000
COYLE & COYLE
14319 NW 167TH PL
ALACHUA, FL 32615

03067-062-092
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03081-003-000
CALHOUN JOHNNY B & MARIE
PO BOX 434
ALACHUA, FL 32616

03068-009-000
LUNDY GWENDOLYN
14000 NW 154TH AVE APT 21
ALACHUA, FL 32615

03067-000-000
TARA FOREST LLC
7717 NW 20TH LN
GAINESVILLE, FL 32605

03067-062-091
AMA GAINESVILLE INVESTMENTS
7475 SW 70TH LN
GAINESVILLE, FL 32608

03068-007-000
RICHARDSON CARRIE
815 SE 19TH ST
GAINESVILLE, FL 32641

03080-000-000
HAILE ELAINE D
802 OAK ST
STARKE, FL 32091-2340

03081-001-000
SMITH H E
18125 NW 42ND PL
OPA LOCKA, FL 33055-3311

03068-009-001
TYSON DEVRON D
PO BOX 23
ALACHUA, FL 32616-0023

03068-014-000
RICHARDSON MATTIE HEIRS
815 SE 19TH ST
GAINESVILLE, FL 32641

03067-005-000
TARA FOREST LLC
7717 NW 20TH LN
GAINESVILLE, FL 32605

03080-001-000
HAILE ELAINE D
802 OAK ST
STARKE, FL 32091-2340

03067-006-000
ALACHUA DEVELOPMENT CO LLC
16469 BRIDLEWOOD CIR
DELRAY BEACH, FL 33445

**DAN RHINE
288 TURKEY CREEK
ALACHUA FL 32615**

**DAVID FOREST
23 TURKEY CREEK
ALACHUA FL 32615**

**PEGGY ARNOLD
410 TURKEY CREEK
ALACHUA FL 32615**

**MICHELE L. LIEBERMAN
ALACHUA COUNTY MANAGER
12 SE 1ST STREET
GAINESVILLE FL 32601**

**LINDA DIXON, AICP
ASSISTANT DIRECTOR PLANNING
PO BOX 115050
GAINESVILLE FL 32611**

**LYNN COULLIAS
7406 NW 126TH AVE
ALACHUA FL 32615**

**TOM GORMAN
9210 NW 59TH STREET
ALACHUA FL 32653**

**ANTOINETTE ENDELICATO
5562 NW 93RD AVENUE
GAINESVILLE FL 32653**

**CRAIG PARENTEAU
FL DEPT OF ENV PROTECTION
4801 CAMP RANCH ROAD
GAINESVILLE FL 32641**

**RICHARD GORMAN
5716 NW 93RD AVENUE
ALACHUA FL 32653**

**LYNDA COON
7216 NW 126 AVENUE
ALACHUA FL 32615**

**PRESIDENT, TCMOA
1000 TURKEY CREEK
ALACHUA FL 32615**

**CITY MANAGER, CITY OF ALACHUA
P.O. BOX 9
ALACHUA FL 32616**

**JEANNETTE HINSDALE
P.O. BOX 1156
ALACHUA FL 32616**

**TAMARA ROBBINS
PO BOX 2317
ALACHUA FL 32616**

**BONNIE FLYNN
16801 NW 166TH DRIVE
ALACHUA, FL 32615**

AFFIDAVIT FOR POSTED LAND USE SIGN

I Michael Gmuer, POSTED THE LAND USE
(Name)
SIGN ON 1/27/2020 FOR THE Tara Forest East Preliminary Plat
(Date) (State type of action and project name)
LAND USE ACTION.

AS PER ARTICLE 2.2.9 D OF THE LAND DEVELOPMENT REGULATIONS.

THIS WILL BE INCLUDED IN THE STAFF REPORT.


(Signature)

Four (4)
(Number of signs)