



**AGENDA
TECHNICAL REVIEW COMMITTEE
REGULAR MEETING
APRIL 9, 2026
10:00 AM
CITY HALL COMMISSION CHAMBERS
204 ASH STREET
FERNANDINA BEACH, FL 32034**

- 1. CALL TO ORDER**
- 2. ROLL CALL**
- 3. PLEDGE OF ALLEGIANCE**
- 4. APPROVAL OF MINUTES**
 - 4.1 Approval of Minutes for the Regular Meeting of March 26, 2026.
- 5. FIRST STEP REVIEW (PRE-APPLICATION ITEMS)**
 - 5.1 **NORMAN STEIN, 728 9TH STREET & 8TH STREET - MUSTANG LOT**
Site plan review for commercial building with 2 residential units.
 - 5.2 **AMELIA ISLAND LIFESTYLE MEDICINE, 1890 S 14TH STREET**
Change of Use review from a former sleep clinic to an ambulatory Lifestyle and Medicine office.
- 6. OLD BUSINESS**
 - 6.1 **TRC-2025-0008 - GILLETTE & ASSOCIATES INC., AGENT FOR BUTTERFLY PROJEKT LLC, 2959 BUTTERFLY TRAIL**
Site plan review for new 7 single-family residence subdivision. County property with a request to be annexed with a Zoning District of R-1 and Land Use of LDR.
- 7. NEW BUSINESS**
- 8. DEVELOPMENT INQUIRIES FROM APPLICANTS NOT ON THE AGENDA - DISCUSSION ONLY, NO ACTION TO BE TAKEN.**
- 9. COMMITTEE BUSINESS**
- 10. ADJOURNMENT**

NEXT REGULAR TRC MEETING IS SCHEDULED FOR APRIL 23, 2026

Persons with disabilities requiring accommodations in order to participate in this program or activity should contact 310-3115, TTY 711, or through the Florida Relay Services at 1-800-955-8771 (TTY number for all City offices) at least 24 hours in advance to request such accommodations.



**MINUTES
TECHNICAL REVIEW COMMITTEE
REGULAR MEETING
MARCH 26, 2026
10:00 AM
CITY HALL COMMISSION CHAMBERS
204 ASH STREET
FERNANDINA BEACH, FL 32034**

1. CALL TO ORDER: 10:00 AM

2. ROLL CALL

Jacob Platt, Project Coordinator
Jimmy Parr, Building
Jason Higginbotham, Fire
Cathy Sabattini, Public Works Operation
Marco Aguilera, Code Enforcement

Mia Sadler, Planning & Conservation
David Neville, Arborist/Urban Forester
Victoria Guadagnino, Stormwater/Utilities
Michelle Forstrom, Code Enforcement

3. PLEDGE OF ALLEGIANCE

4. APPROVAL OF MINUTES

4.1 Approval of Minutes for the Regular Meeting of February 26, 2026.

Member Guadagnino provided a small amendment to item 5.3.

ACTION TAKEN: A motion was made by Member Forstrom, seconded by Member Guadagnino, to approve the Minutes for the Regular Meeting of February 12, 2026, with the suggested amendment.

Motion taken by voice vote, being all ayes, carried.

4.2 Approval of Minutes for the Regular Meeting of March 12, 2026.

ACTION TAKEN: A motion was made by Member Forstrom, seconded by Member Sabattini, to approve the Minutes for the Regular Meeting of February 12, 2026, as presented.

Motion taken by voice vote, being all ayes, carried.

5. FIRST STEP REVIEW (PRE-APPLICATION ITEMS)

5.1 CITY OF FERNANDINA BEACH, MARINA REDEVELOPMENT - 1 SOUTH FRONT STREET

Site Review of the resiliency wall portion of the Amelia River Waterfront Stabilization Project

Glenn Akromoff, Deputy City Manager, gave a presentation on the Marina Development project. He noted that the project will start at the North end and end at the South end and that all utilities will be run through the seawall. He added that the wall will alleviate flooding and that further testing will take place to assess where the sewer will be

DRAFT

located.

Member Neville began the conversation by speaking of the removing of 3 Plam Trees and mitigation with native trees. Mr. Akramoff noted that Phase II also includes landscaping.

Member Guadagnino noted that there will be a planned smoke test to assess the location of sewer lines. She also mentioned that FPU addresses electrical infrastructure needs. Mr. Akramoff commented that water meter testing is planned as part of the construction to make sure the flow is maintained and that this phase also includes relocating of power lines since additional structures are planned in the future.

Member Sadler spoke of the recent HDC approval with conditions. She also emphasized incorporating green elements into the seawall such as habitat and saltmarsh restorations, living shorelines, oyster reef regeneration, textures seawall to stimulate plant growth. Mr. Akramoff noted that it would be most likely possible at the south end aea.

Member Sabattini, inquired about disposal of the waste and where the roll-offs would be located for the Marina. It was suggested that a barge could be used. Mr. Akramoff said the most effective, price-wise, would be to not impact the streets. He added that Parking Lot A would be used for construction staging and there is a plan for opening during the Shrimp Fest or at least providing some access.

Member Forstrom, asked about the enclosures for the dumpsters. Mr. Akramoff spoke of planned dumpsters to be screened on the south end adjacent to the park. He also mentioned that there have been discussions about the use of concrete forms to enhance the intersection at Alachua as much as possible.

Member Higginbotham said he's already been working with the City on the fueling components of the project and asked to be updated if there are changes to the plans during construction.

There was discussion here about gas lines, their types, capacity, and DEP permits.

Member Parr inquired about any removal of transformers. Mr. Akramoff said they have made multiple site visits to make sure it is running smoothly during the construction

Member Platt mentioned the HDC comments and noted that they are in the process of being addressed, especially the geometry aspect. He said that the plans are ready to be submitted out for bid.

Member Parr said the building permitting is going to be minimal as most will be pulled through DEP or USACOE. Member Higginbotham asked that as this progresses, that revised plans be submitted if any changes occur.

Both Mr. Akramoff and Member Platt affirmed that this can be done and would be glad to update staff once a month to keep everyone updated. He added that all departments will be invited to the pre-construction meeting and will be able to have access to the meeting minutes which would reflect any changes affecting each department.

Member Platt spoke of the 1938 seawall, and that they have no idea what could be found in that area once construction starts. Keeping a line of communication is always the intent and they welcome communication.

Member Platt asked if TRC will see another presentation for each phase. Mr. Akramoff said the next presentation will cover bid design. The bid is set to go out April 6th. The Marina General Manager is included on all meetings as he plans to operate a functional marina.

6. OLD BUSINESS

7. NEW BUSINESS

8. DEVELOPMENT INQUIRIES FROM APPLICANTS NOT ON THE AGENDA - DISCUSSION ONLY,

NO ACTION TO BE TAKEN.

Kelly Powers, discussed 1008 Beech Street, and inquired about commercial properties neighboring MU-8 and the possibilities of having multiple units instead of a single-family home. She inquired about dividing the parcel into 2 lots and discussed an option for putting townhomes.

There was discussion about LDC Section 1.03.05 and the possibility of dividing the parcel into 2 parallel lots facing S 10th Street. There was also discussion about the demolition of a structure and having to be re-constructed as a single-family.

Margaret Pearson commented about keeping the character of the neighborhood which has multiple single-family homes as you go back further into the neighborhood. She explained that a variance could be applied for through the Board of Adjustment to vary from rebuild as a single-family. Chair Platt noted that this is MU-8, Mixed Use, to the west and could potentially be commercial.

Member Guadagnino spoke of stormwater retention for new development and said that there would be calculations made based on the impervious area.

Member Neville provided extensive information about tree mitigation for single-family versus multi-family projects.

9. COMMITTEE BUSINESS

Members discussed previous request for needed information for easier review from members.

Member Guadagnino emphasized that the more details provided about a project the easier it is for reviewers to provide comprehensive comments back to the applicant. She asked if plats could also be presented one last time before approval in case there are any last changes impacting their approvals.

Member Sadler brought up the need for clarification regarding criteria to issue Land Development Orders, mainly defining if an LDO is needed or not. Ms. Pearson agreed that this should be clarified and more details about criteria should be provided, and suggested that a list could be created with examples and establish some written policies

Chair Platt agreed that policies could be written, then discussed before getting adopted. Other Members concurred.

Member Sadler provided LDC Section 11.00.02 for members to review and provide feedback. This could be discussed again at the next meeting.

10. ADJOURNMENT: 10:45

Mackennah Tarmey, Recording Secretary

Jacob Platt, Chair



DEPARTMENT OF PLANNING & CONSERVATION

204 Ash Street | Fernandina Beach, Florida 32034
| 904 310-3480 | www.fbfl.us/planning

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<---- Docaccess Script ---->

Receive an email copy of this form.

Email address

This field is not part of the form submission.

Submit

Submit and Print

* indicates a required field

Project Name

Project Type*

Please choose your preferred method of conducting your First Step Review*

Project Description*

Commercial Building with Residence x 2

Describe your project in detail

Proposed Access Road*

Rd Maintenance Jurisdiction *

Certification*

- By signing below, I certify that the information contained in this application is true and correct to the best of my knowledge at the time of the application.
- I acknowledge that I understand and have complied with all of the submittal requirements and procedures.

Applicant First Name*

Applicant Last Name*

Today's Date*

Upload Supporting Documentation

 No file chosen

Upload 2

Upload 3

Upload 4

Upload 5

Application Requirements

The First Step application and all required documents must be submitted no later than seven (7) days before the schedule meeting. All required documents are as follow:

- A complete application.
- Site plans or scaled drawings;
- Any other files that illustrate the proposed project; and
- A signed an notarized Agent Authorization form (if applicable).

PROPERTY INFORMATION

Property information can be found at the [Nassau County Property Appraiser's Website](#) → [Map Search](#)

Site Address*

728 9th st and 8th st Mustang Lot

City*

Fernandina Beach

State*

Florida

Zip*

32034

Parcel ID #(s)*

Lot

Block

Subdivision

Zoning District*

MU-8

Future Land Use Designation*

8th Street Mixed

Overlay District

Downtown Histo

Size of Property (acres)*

Present Property Use*

Wetlands*

No

Flood Zone*

X, 0.2 % c

Coastal Construction Control Line (CCCL)*

No

CONTACT INFORMATION

Applicant or interested party who will be present at the meeting.

First Name*

Norman

Last Name*

Stein

Company (if applicable)

True Course Yacht Management Inc

Telephone Number*

912-257-6888

E-mail Address*

bud@tcyminc.com

PROJECT INFORMATION

IMPORTANT NOTES

A change of use occurs when an existing use is replaced by a different use, as listed in table 2.03.02. A proposed change of use will require a First Step Review as set forth in 11.01.02. A change of use shall not require a local development order when all the conditions of 11.00.05 are met. The determination that a proposed use or development constitutes a change of use is an administrative decision subject to appeal. When a local development order is required due to a proposed change of use, all standards and procedures of the Comprehensive Plan and LDC shall apply to the proposed new use.

2026 TRC MEETINGS + DEADLINES

Nov 20 2025	Dec 04 2025	Dec 18 2025	Jan 02 2026	Jan 22 2026	Feb 05 2026	Feb 19 2026	Mar 05 2026	Mar 19 2026	Apr 02 2026	Apr 23 2026	May 07 2026	May 21 2026	June 04 2026
Dec 11 2025	Dec 18 2025	Jan 08 2026	Jan 22 2026	Feb 12 2026	Feb 26 2026	Mar 12 2026	Mar 26 2026	Apr 09 2026	Apr 23 2026	May 14 2026	May 28 2026	June 11 2026	June 25 2026
May 18 2026	July 02 2026	July 23 2026	Aug 06 2026	Aug 20 2026	Sept 03 2026	Sept 17 2026	Oct 01 2026	Oct 22 2026	Nov 05 2026	Nov 19 2026	Dec 03 2026	Dec 28 2026	Jan 07 2027
July 09 2026	July 23 2026	Aug 13 2026	Aug 27 2026	Sept 10 2026	Sept 24 2026	Oct 08 2026	Oct 22 2026	Nov 12 2026	Nov 19 2026	Dec 10 2026	Dec 17 2026	Jan 14 2027	Jan 28 2027

In observance of the Thanksgiving and Christmas Holidays scheduled office closures, the November 26, 2026 and December 24, 2026 Regular TRC meetings have been re-scheduled November 19 and December 17, 2026 respectively.

****Please note that First Step items are reviewed as Discussion Items at the beginning of each TRC meeting followed by Formal Review items.****

Please see the Land Development Code (LDC) for detailed information:

- Local Development Orders for a Change of Use – see LDC Section 11.00.05
- Pre-Application Conference – see LDC section 11.01.02

The LDC is available for review at

www.fbf.us/LDC

SEARCH

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Technical Review Committee (TRC): First Step Review Request

Save Progress

Technical Review Committee (TRC) First Step Review

USE THIS FORM TO Submit a project for input and guidance from the Technical Review Committee, the City group responsible for reviewing site plans and commercial projects. First Step reviews are a free service provided by the City of Fernandina Beach to help guide a project through the development review and permitting process. The First Step review is a meeting between an applicant and representatives of City departments responsible for reviewing applications for the purpose of exchanging information on the potential development of a site. This may include providing information on permissible uses of the site; required improvements; infrastructure requirements; any applicable design standards; any potential regional, state or federal standards; requirements for supporting plans, documents and studies; and any applicable design standards.

Fees
None

Select Language

Google Translate

LEGAL DESCRIPTION AND CERTIFICATION

ALL OF THOSE CERTAIN. LOTS, PIECES OR PARCELS OF LAND SITUATE, LYING AND BEING IN THE CITY OF FERNANDINA BEACH (FORMERLY CITY OF FERN AND IN A), COUNTY OF NASSAU AND STATE OF FLORIDA AND MORE PARTICULARLY DESCRIBED ACCORDING TO THE OFFICIAL PLAT OF SAID CITY (AS LITHOGRAPHED AND ISSUED BY THE FLORIDA RAILROAD COMPANY IN 1857, AND ENLARGED, REVISED AND REISSUED BY THE FLORIDA TOWN IMPROVEMENT COMPANY IN 1887 AND 1901) AS:

LOTS NUMBERED TWELVE (12), THIRTEEN (13) AND FOURTEEN (14), BLOCK ONE HUNDRED FIFTY-FIVE (155).

Community Number: 120172 Panel: 0237 Suffix: G F.I.R.M. Date: Flood Zone: X Field Work: 2/18/2026

Certified To:
MICHAEL HAM; BLUE OCEAN TITLE

Property Address:
728 SOUTH 9TH STREET
FERNANDINA BEACH, FL 32034















Survey Number: 734778

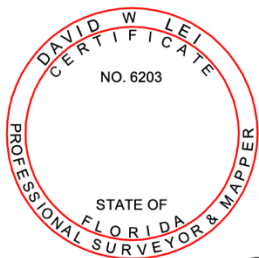
Client File Number: NBOT-26-27

ABBREVIATION DESCRIPTION:

A.E.	ANCHOR EASEMENT	F.F. EL.	FINISH FLOOR ELEVATION	O.R.B.	OFFICIAL RECORDS BOOK
A/C	AIR CONDITIONER	F.I.P.	FOUND IRON PIPE	(P)	PLAT
B.M.	BENCH MARK	F.I.R.	FOUND IRON ROD	P.B.	PLAT BOOK
B.R.	BEARING REFERENCE	F.P.K.	FOUND PARKER-KALON NAIL	P.C.	POINT OF CURVATURE
(C)	CALCULATED	(L)	LENGTH	P.C.C.	POINT OF COMPOUND CURVE
?	CENTRAL / DELTA ANGLE	L.A.E.	LIMITED ACCESS EASEMENT	P.O.B.	POINT OF BEGINNING
CH	CHORD	L.M.E.	LAKE MAINTENANCE EASEMENT	P.O.C.	POINT OF COMMENCEMENT
(D)	DEED / DESCRIPTION	(M)	MEASURED / FIELD VERIFIED	P.R.C.	POINT OF REVERSE CURVE
D.E.	DRAINAGE EASEMENT	M.H.	MANHOLE	P.T.	POINT OF TANGENCY
D.H.	DRILL HOLE	N&D	NAIL & DISK	R/W	RIGHT-OF-WAY
D.W.	DRIVEWAY	N.R.	NOT RADIAL	(R)	RADIAL / RADIUS
E.O.W.	EDGE OF WATER	N.T.S.	NOT TO SCALE	S.I.R.	SET IRON ROD
F.C.M.	FOUND CONCRETE MONUMENT	O.H.L.	OVERHEAD UTILITY LINES	T.O.B.	TOP OF BANK
				U.E.	UTILITY EASEMENT

SYMBOL DESCRIPTIONS:

	= CATCH BASIN		= MISC. FENCE
	= CENTERLINE ROAD		= PROPERTY CORNER
	= COVERED AREA		= UTILITY BOX
	= EXISTING ELEVATION		= UTILITY POLE
	= HYDRANT		= WATER METER
	= MANHOLE		= WELL
	= METAL FENCE		= WOOD FENCE



SURVEYORS CERTIFICATE
I HEREBY CERTIFY THAT THIS BOUNDARY SURVEY IS A TRUE AND CORRECT REPRESENTATION OF A SURVEY PREPARED UNDER MY DIRECTION. NOT VALID WITHOUT AN AUTHENTICATED ELECTRONIC SIGNATURE AND AUTHENTICATED ELECTRONIC SEAL, OR A RAISED EMBOSSED SEAL AND SIGNATURE.



(SIGNED) 
DAVID W LEI
PROFESSIONAL SURVEYOR AND MAPPER #6203

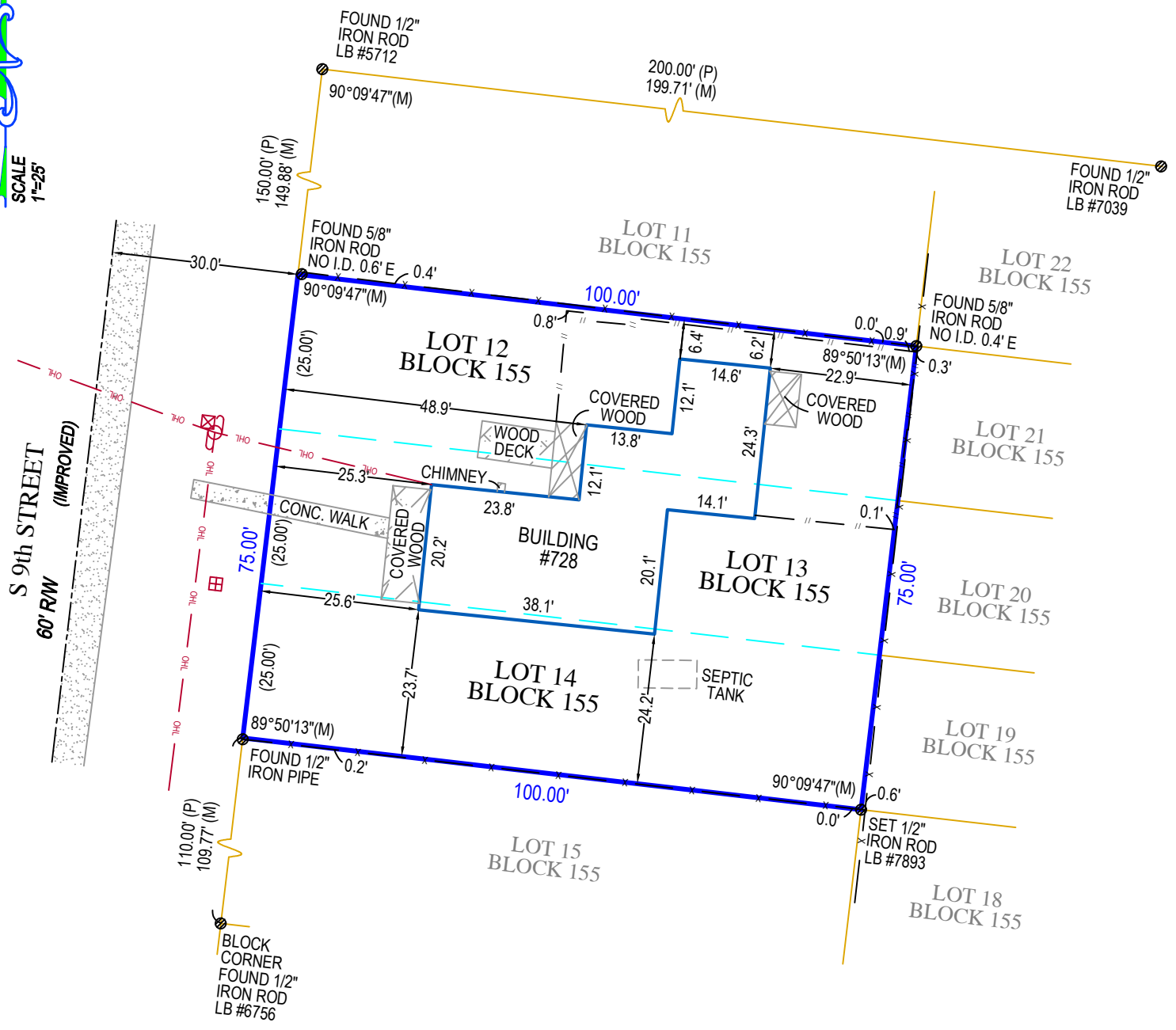
PRINTING INSTRUCTIONS:
WHEN PRINTING BE SURE TO SELECT "ACTUAL SIZE" TO ENSURE PROPER SCALING. DO NOT USE "FIT"

PAGE 1 OF 2 PAGES
(NOT COMPLETE WITHOUT PAGE 2)

6250 N. MILITARY TRAIL, SUITE 102
WEST PALM BEACH, FL 33407
PHONE (561) 640-4800
STATEWIDE PHONE (800) 226-4807
STATEWIDE FACSIMILE (800) 741-0576
WEBSITE: <http://targetsurveying.net>

BOUNDARY SURVEY

SCALE
1"=25'



SURVEY NOTES
 CONCRETE WALK CROSSING INTO R/W ALONG WESTERLY LOT LINE.
 THERE ARE FENCES NEAR THE BOUNDARY OF THE PROPERTY.

PAGE 2 OF 2 PAGES
(NOT COMPLETE WITHOUT PAGE 1)
 SURVEY NUMBER:
 734778

GENERAL NOTES:

- 1) LEGAL DESCRIPTION PROVIDED BY OTHERS
- 2) THE LANDS SHOWN HEREON WERE NOT ABSTRACTED FOR EASEMENTS OR OTHER RECORDED ENCUMBRANCES NOT SHOWN ON THE PLAT.
- 3) UNDERGROUND PORTIONS OF FOOTINGS, FOUNDATIONS OR OTHER IMPROVEMENTS WERE NOT LOCATED.
- 4) WALL TIES ARE TO THE FACE OF THE WALL AND ARE NOT TO BE USED TO RECONSTRUCT BOUNDARY LINES.
- 5) ONLY VISIBLE ENCROACHMENTS LOCATED.
- 6) DIMENSIONS SHOWN ARE PLAT AND MEASURED UNLESS OTHERWISE SHOWN.
- 7) FENCE OWNERSHIP NOT DETERMINED.
- 8) ELEVATIONS INDICATED HEREON ARE IN FEET AND DECIMALS REFERENCED TO N.A.V.D. 1988
- 9) THIS SURVEY HAS BEEN COMPLETED FOR A MORTGAGE TRANSACTION, ITS SCOPE IS LIMITED TO THE DETERMINATION OF TITLE DEFICIENCIES. NO DESIGN OR CONSTRUCTION SHALL BE BASED UPON THIS SURVEY WITHOUT APPROVAL FROM TARGET SURVEYING PRIOR TO SUCH USE. TARGET SURVEYING ASSUMES NO RESPONSIBILITIES FOR ERRORS RESULTING FROM FAILURE TO ADHERE TO THIS CLAUSE.
- 10) IN SOME INSTANCES, GRAPHIC REPRESENTATIONS HAVE BEEN EXAGGERATED TO MORE CLEARLY ILLUSTRATE RELATIONSHIPS BETWEEN PHYSICAL IMPROVEMENTS AND/OR LOT LINES. IN ALL CASES, DIMENSIONS SHALL CONTROL THE LOCATION OF THE IMPROVEMENTS OVER SCALED POSITIONS.

TARGET SURVEYING, LLC

LB #7893

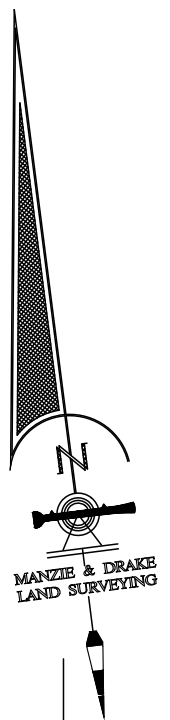
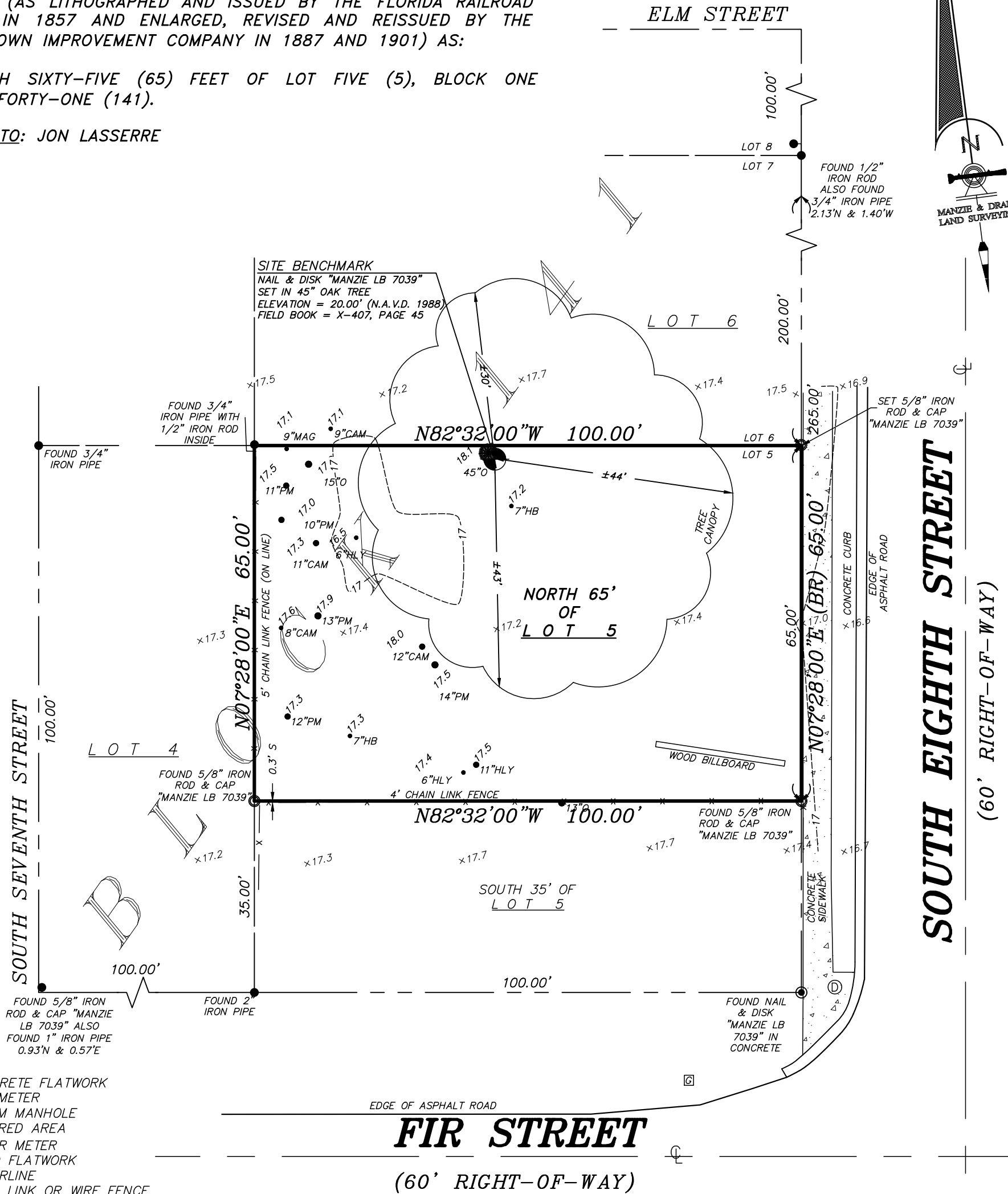
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 PHONE (561) 640-4800
 STATEWIDE PHONE (800) 226-4807
 STATEWIDE FACSIMILE (800) 741-0576
 WEBSITE: <http://targetsurveying.net>

MAP OF BOUNDARY & TOPOGRAPHIC SURVEY

ALL THAT CERTAIN LOT, PIECE OR PARCEL OF LAND SITUATE, LYING AND BEING IN THE CITY OF FERNANDINA BEACH, (FORMERLY NAMED FERNANDINA), COUNTY OF NASSAU AND STATE OF FLORIDA AND BEING FURTHER DESCRIBED ACCORDING TO THE OFFICIAL MAP OR PLAT OF SAID CITY (AS LITHOGRAPHED AND ISSUED BY THE FLORIDA RAILROAD COMPANY IN 1857 AND ENLARGED, REVISED AND REISSUED BY THE FLORIDA TOWN IMPROVEMENT COMPANY IN 1887 AND 1901) AS:

THE NORTH SIXTY-FIVE (65) FEET OF LOT FIVE (5), BLOCK ONE HUNDRED FORTY-ONE (141).

CERTIFIED TO: JON LASSERRE



- LEGEND**
- = CONCRETE FLATWORK
 - = GAS METER
 - = STORM MANHOLE
 - = COVERED AREA
 - = WATER METER
 - = WOOD FLATWORK
 - = CENTERLINE
 - x-x-x = CHAIN LINK OR WIRE FENCE
- SURVEY NOTES:**
- 1) Unless it bears the original signature and the original raised seal of a Florida licensed Surveyor and Mapper or Validated Digital Signature by a Florida licensed Surveyor and Mapper, this map/report is for informational purposes only and is not valid.
 - 2) The "Legal Description" hereon is in accord with the description provided by the client
 - 3) Underground Improvements were not located or shown.
 - 4) Lands shown hereon were not abstracted by this office for easements, rights-of-way, ownership or other instruments of record.
 - 5) Bearings shown hereon are based on an assumed bearing of N07°28'00"E for the westerly right-of-way line of South Eighth Street. The bearing reference line is indicated as thus (BR).
 - 6) The property shown hereon lies within flood zone X per the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) panel 12089C 0237 G, dated 08/02/2017.
 - 7) The Site Benchmark is as shown hereon.
 - 8) Elevations shown hereon refer to the North American Vertical Datum of 1988 (N.A.V.D. 1988).
 - 9) The Reference Benchmark is a nail & disk found in a wood power pole at the southwest corner of the North 1/2 of Lot 3, Block 141. Elevation = 18.03' (N.A.V.D. 1988)

- TREE LEGEND:**
- O = OAK TREE
 - MAG = MAGNOLIA TREE
 - HLY = HOLLY TREE
 - PM = PALM TREE
 - CAM = CAMPHOR TREE
 - HB = HACKBERRY TREE
- TREE DISCLAIMER:**
- NUMBER OF TREES SHOWN ON SURVEY: 18
- SPECIES OF TREES HAVE BEEN IDENTIFIED TO THE BEST OF OUR KNOWLEDGE AND BELIEF; HOWEVER MANZIE & DRAKE LAND SURVEYING WILL ASSUME NO LIABILITY, EXPRESSED OR IMPLIED, FOR THE CORRECTNESS OF SAID SPECIES IDENTIFICATION.
- TREES HAVE BEEN LOCATED AS ACCURATELY AS POSSIBLE UNDER CURRENT CONDITIONS AND HAVE A POSITIONAL TOLERANCE OF APPROXIMATELY 2 TO 3 FEET. CRITICAL TREES SHOULD BE VERIFIED PRIOR TO CONSTRUCTION.

THE INFORMATION SHOWN HEREON MEETS THE STANDARDS OF PRACTICE SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027, FLORIDA STATUTES.

MANZIE & DRAKE LAND SURVEYING

117 South Ninth Street, Fernandina Beach, FL 32034
 (904) 491-5700 www.ManzieAndDrake.com
 Certificate of Authorization Number "LB 7039"

"OUR SIGHTS ARE ON THE FUTURE, SET YOUR SITES ON US."

SCALE: 1"=20' JOB NO: 22342 DATE: 02/19/26 CADD: LP
 F.B. NO: X-407 PAGE NO: 45 CREW: SS FILE NO: A-6223

Mackennah Tarmey

From: noreply@civicplus.com
Sent: Wednesday, April 1, 2026 1:55 PM
To: TRC Info
Subject: Online Form Submittal: Technical Review Committee (TRC): First Step Review Request

CAUTION: This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender, were expecting this email, and know the content is safe.

Technical Review Committee (TRC): First Step Review Request

Technical Review Committee (TRC) First Step Review

USE THIS FORM TO Submit a project for input and guidance from the Technical Review Committee, the City group responsible for reviewing site plans and commercial projects. First Step reviews are a free service provided by the City of Fernandina Beach to help guide a project through the development review and permitting process. The First Step review is a meeting between an applicant and representatives of City departments responsible for reviewing applications for the purpose of exchanging information on the potential development of a site. This may include providing information on permissible uses of the site; required improvements; infrastructure requirements; any applicable design standards; any potential regional, state or federal standards; requirements for supporting plans, documents and studies; and any applicable design standards.

Fees
None

IMPORTANT NOTES

A change of use occurs when an existing use is replaced by a different use, as listed in table 2.03.02. A proposed change of use will require a First Step Review as set forth in 11.01.02. A change of use shall not require a local development order when all the conditions of 11.00.05 are met. The determination that a proposed use or development constitutes a change of use is an administrative decision subject to appeal. When a local development order is required due to a proposed change of use, all standards and procedures of the Comprehensive Plan and LDC shall apply to the proposed new use.

****Please note that First Step items are reviewed as Discussion Items at the beginning of each TRC meeting followed by Formal Review items.****

Please see the Land Development Code (LDC) for detailed information:	Local Development Orders for a Change of Use – see LDC Section 11.00.05
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The LDC is available for review at	www.fbf.us/LDC
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Application Requirements	A complete application., Site plans or scaled drawings; , Any other files that illustrate the proposed project; and
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PROPERTY INFORMATION	Property information can be found at the Nassau County Property Appraiser's Website → Map Search
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Site Address	1890 S 14th Street
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City	Fernandina Beach
------	------------------

State	FL
-------	----

Zip	32034
-----	-------

Parcel ID #(s)	00-00-31-127A-0009-0010
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Lot	<i>Field not completed.</i>
-----	-----------------------------

Block	<i>Field not completed.</i>
-------	-----------------------------

Subdivision	<i>Field not completed.</i>
-------------	-----------------------------

Zoning District	C-1
-----------------	-----

Future Land Use Designation	8th Street Mixed Use
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Overlay District	None
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Size of Property (acres)	0
--------------------------	---

Present Property Use	vacant; was a sleep study center
----------------------	----------------------------------

Wetlands	No
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Flood Zone	X, area of minimal flood hazard
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Coastal Construction Control Line (CCCL) No

CONTACT INFORMATION

Applicant or interested party who will be present at the meeting.

First Name Diana

Last Name Twiggs

Company (if applicable) Amelia Island Lifestyle Medicine

Telephone Number 904-556-2788

E-mail Address dtwiggs@me.com

PROJECT INFORMATION

Project Name Amelia Island Lifestyle Medicine

Project Type Commercial

Please choose your preferred method of conducting your First Step Review In-person (at City Hall Chambers, 204 Ash St.)

Project Description This will be an ambulatory Lifestyle and Family Medicine office. It is primarily consultative, but phlebotomy will also be offered with specimens then sent to Quest Diagnostics. We will also performed CLIA-waived tests, such as strep tests.

Proposed Access Road South 14th Street

Rd Maintenance Jurisdiction City Maintained

Certification By signing below, I certify that the information contained in this application is true and correct to the best of my knowledge at the time of the application., I acknowledge that I understand and have complied with all of the submittal requirements and procedures.

Applicant First Name Diana

Applicant Last Name Twiggs

Today's Date 4/1/2026

Upload Supporting Documentation *Field not completed.*

Upload 2 *Field not completed.*

Upload 3 *Field not completed.*

Upload 4 *Field not completed.*

Upload 5 *Field not completed.*

DEPARTMENT OF PLANNING & CONSERVATION
204 Ash Street | Fernandina Beach, Florida 32034 | 904 310-3480 |
www.fbfl.us/planning

Email not displaying correctly? [View it in your browser.](#)





Asa Gillette
Gillette & Associates, Inc.
31 South 4th Street
Fernandina Beach, FL 32034

Sent Via Email to Project Agent

Applicant Name: Butterfly Projekt, LLC Agent: Asa Gillette
Project Description: Commercial Park on S 15th Street
Location: 2959 Butterfly Trail
PIN(s):00-00-30-044B-0068-0010;00-00-30-044B-0068-0020;00-00-30-044B-0068-0030;00-00-30-044B-0068-0040;00-00-30-0560-00RW-0010
TRC Case Number: **TRC 2025-0008**

Mr. Gillette,

The City of Fernandina Beach received your request for site plan review on December 11, 2025. All submitted documents provided were routed to the Technical Review Committee (TRC). Concurrently with this TRC review, an application for annexation to the Planning Advisory Board (PAB) was submitted. The PAB application was received on December 11th, 2025. The comments provided as part of this site plan review are valid for six months from the date of issuance.

Please resubmit response documents to address each comment in a narrative form and through an amended site plan within 30 days of the date of this letter. The next available TRC meeting is Thursday, February 12th at 10 am in the City Commission Chambers. Please let us know if you would like to be on the agenda to discuss your comments by this Wednesday, February 4th. All reviewers will be present to discuss any questions you have concerning the comments provided herein.

If you have any questions, please contact us at TRCinfo@fbfl.city or 904-310-3480.

Sincerely,
TRC Committee



TRC Reviewers: After reviewing proposed plans...

- If you have comments that need to be addressed in a resubmittal, please check the first box and enter comments in the bulletized list, **or**
- If you have no comments or the applicant has satisfactorily addressed all of your previous comments, please check the second box. This is your “sign off” for issuance of the Local Development Order (LDO) once all departments have signed off.
- Add name of reviewer and today’s date

1ST ROUND REVIEW COMMENTS:

PLANNING

The Planning Department has reviewed the submittal and noted the following comments:

Street trees along Simmons Rd 1 per 50 feet. Dn 1/7/26

Page 3 contains details related to Nassau County development standards; these details need to be revised to relate to the City of Fernandina Beach.

Submit a wetland delineation survey.

List “*private maintenance*” or “*private*” near the label of the road “Butterfly Trail”.

On UT-1, and other pages where present, please complete the density calculation.

The existing structures must be demolished before annexation into the city for exemption of sections 1.03.04 and 1.03.5 of the LDC.

Keep in mind that until the property is formally annexed into the City, a Local Development Order (LDO) cannot be issued. Plan review fees will be due at that time.

OR

All previous comments have been addressed and the Department of Planning & Conservation approves issuance of a local development order.

Name of Reviewer: Planning Staff

Today’s Date: Wednesday, January 21, 2026

BUILDING

The Building Department has reviewed the submittal and noted the following comments:



OR

All previous comments have been addressed and the Building Department approves issuance of a local development order.

Name of Reviewer: Building Department
Today's Date: Friday, January 23, 2026

UTILITIES & STORMWATER

- The Utilities Department has reviewed the submittal and noted the following comments:
- On the northern part of the sewer lines, it shows a service coming off a different service line in the middle of the road. The line either needs to split at the property line or be separate lines.
 - Change 1" taps to 1 ½" taps.
 - On S-4, there are no east elevations as it flows towards S-8. S-OFF-2 does not have the north elevation as it heads towards S-OFF-1. S-OFF-3 west elevation is in the east column. S-OFF-7 south elevation is in the north column. Please revise.

OR

All previous comments have been addressed and the Public Works Department approves issuance of a local development order.

Name of Reviewer: Victoria Guadagnino
Today's Date: Wednesday, January 21, 2026

STREETS & OPERATIONS

- The Streets & Operations Department has reviewed the submittal and noted the following comments:
- Will Butterfly Trail remain a privately maintained road.
 - Will development pay for the lights, since this parcel is currently outside the City limits.

OR

All previous comments have been addressed and the Public Works Department approves issuance of a local development order.

Name of Reviewer: Cathy Sabattini
Today's Date: Wednesday, January 21, 2026

CODE ENFORCEMENT



The Code Enforcement Department has reviewed the submittal and noted the following comments:

OR

All previous comments have been addressed and the Code Enforcement Department approves issuance of a local development order.

Name of Reviewer: Michelle Forstrom

Today's Date: Friday, January 23, 2026

FIRE

The Fire Department has reviewed the submittal and noted the following comments:

- The dead end turn around should be one of the two approved minimum roadway standards for dead end roadways. Residential Cul-De-Sac or T Turnaround (pages 7 & 8 of the adopted roadway standards). Without the center landscape island.
- What is the proposed length of the residential driveways? Is there a plan for overflow parking of vehicles? The roadway is not wide enough to handle on-street parking and two-way traffic. Is there a proposed plan for the subdivision to prevent blocking the roadway for emergency vehicle access?

OR

All previous comments have been addressed and the Fire Department approves issuance of a local development order.

Name of Reviewer: Jason Higginbotham

Today's Date: Friday, January 23, 2026



Civil & Environmental Engineering • Mechanical & Structural Engineering • Construction Management

STORMWATER MANAGEMENT EVALUATION

**Butterfly Projekt
Seven Lot Subdivision
Fernandina Beach, Florida**

BY

**Gillette & Associates, Inc.
31 South 4th Street
Fernandina Beach, FL**

Issue Date: October 10, 2025

PROJECT DESCRIPTION

The proposed project consists of seven single family residential lots from five parcels, which combine to form a total of 4.37 acres. Each parcel is approximately 0.45-acres in size. The subdivision will contain a single road with a cul-de-sac at the end, which is served by an onsite stormwater management system. The existing roadway serving the property will be upgraded and its runoff will be treated by the onsite stormwater management system.

EXISTING CONDITIONS

The existing site is 4.37 acres in size and consists of multiple properties. There are two existing residences on the site that will be demolished in their entirety. The predeveloped site ranges in elevation from 8.0' to 5.0', sloping from east to west toward the Amelia River.

DRAINAGE ANALYSIS

The drainage analysis for the site consists of a central, onsite stormwater management system for the onsite and offsite roadways. Impervious area for each lot is treated via a small, on-site dry pond treatment swale located on each lot, near the new structure and driveway. Impervious runoff to be directed to each individual swale. Estimated swale requirements are shown in the lot table on Sheet DR-2

The central pond system (onsite and offsite roadways) was modeled using ICPR software for a 25-year, 24-hour storm event. The central system consists of two ponds hydraulically connected with an average normal water level taken from the geotechnical analysis. The pond will contain a bulkhead from the top of pond to the bottom of pond. The average normal water level resides at elevation 4.50-feet with a top of bank of 6.80-feet and a 25-year, 24-hour storm elevation of 6.54-feet.

Stormwater runoff from the proposed improvements is routed to the ponds through a series of storm water pipes and inlet structures. The proposed outfall for the pond is a weir within the east side of the pond. The weir resides at elevation 5.75-ft, which is required to minimize the discharge to the boundary and meet the pre-vs-post condition for the project. The drawdown orifice was modeled with the weir structure and is located at the normal water level.

A composite curve number of 85.8 was used in the ICPR analysis based on a weighted average of the curve numbers for the impervious area, pervious area, and pond area. This calculation is shown in the pond spreadsheet within this report.

A Time of Concentration of 17 minutes was used in the ICPR model for the post-developed analysis. The factors considered for this calculation are a Minimum Time of Concentration of 10

minutes, an average of 300 feet of overland flow at 1 foot per second, and 200 feet of pipe flow at 2.5 feet per second. The calculation is shown below. ToC formula is calculated as follows:

$$\text{ToC} = \text{Min. ToC} + [(\text{Length of Overland Flow}/1 \text{ fps}) + (\text{Length of Pipe flow}/2.5 \text{ fps})]/60 \text{ s}$$

<u>Summary of Pond Design:</u>	<u>Post-Development</u>
Total Drainage Area	1.32 Acres
Top of Bank Elevation	6.80 ft
25-yr Storm Elevation	6.54 ft
Weir Elevation	5.75 ft
Bottom of Pond Elevation	1.50 ft

Summary of Design - Mean Annual Storm Event

Predevelopment Discharge (Total):	3.418 cfs
Post Development Discharge (Total):	1.713 cfs
Max Stage Elevation Pond:	6.059 ft
Top of Bank Elevation Pond:	6.80 ft

Summary of Design - 5 year Storm Event

Predevelopment Discharge (Total):	4.125 cfs
Post Development Discharge (Total):	2.779 cfs
Max Stage Elevation Pond:	6.194 ft
Top of Bank Elevation Pond:	6.80 ft

Summary of Design - 10 year Storm Event

Predevelopment Discharge (Total):	5.107 cfs
Post Development Discharge (Total):	4.170 cfs
Max Stage Elevation Pond:	6.344 ft
Top of Bank Elevation Pond:	6.80 ft

Summary of Design - 25 year Storm Event

Predevelopment Discharge (Total):	6.591 cfs
Post Development Discharge (Total):	6.197 cfs
Max Stage Elevation Pond:	6.535 ft
Top of Bank Elevation Pond:	6.80 ft

Summary of Design - 100 year Storm Event

Predevelopment Discharge (Total):	9.201 cfs
Post Development Discharge (Total):	9.194 cfs
Max Stage Elevation Pond:	6.788 ft
Top of Bank Elevation Pond:	6.80 ft

WET POND CALCULATIONS

Butterfly Trail Onsite & Offite Road Post Developed Wet Pond

Basin Calculations

Basin 1

Composite Cn	Total Drainage Area =	1.32 Ac.	
	Impervious Area =	0.91 Ac.	69% (not including pond area)
	Pond Area =	0.20 Ac.	89% (including pond area)
	Pervious Area =	0.21 Ac.	
	Impervious Cn =	98.0	
	Pond Cn =	100.0	
	Pervious Cn =	72.0	
	Composite Cn =	85.8	

Time of Concentration, Tc

Minimum Time of Concentration =	10 min.
Length of Overland Flow @ 1ft/sec. =	300 ft.
Length of Pipe Flow @ 2.5 ft/sec. =	200 ft.
Tc =	17 min.

Equivalent Runoff Coefficient, Ct

Soil Storage, S = 1000/Cn -10 =	1.66 in.
Precipitation Depth, Pt =	7.68 (Zone 5)
Ct = 1 - S/Pt * (1.2 - S/(Pt + .8S)) =	0.78

Pond Information

El. (ft.)		Area (Ac.)	Volume (Ac.-ft.)
6.80	T.O.B.	0.18	0.98
5.75	weir	0.18	0.79
4.50	NWL	0.18	0.55
3.50		0.18	0.37
2.50		0.18	0.18
1.50	BOP	0.18	0.00

Treatment Volume Required, TVR

TVR = 1" * (1/12")*Total Drainage Area =	0.11 Ac.-ft.
or	
TVR = 2.5" * (1/12")*Total Impervious Drainage Area =	0.23 Ac.-ft.
TVR =	0.23 Ac.-ft.

Treatment Volume Provided, TVP

TVP = Vol @ Weir - Vol @ NWL =	0.23 Ac.-ft.	OK
--------------------------------	--------------	-----------

Permanent Pool Volume Required, PPV

Drainage Area, Da =	1.32 Ac.	
Ct =	0.65	
Wet Season Rainfall Depth, R =	28 in.	
Residence Time, RT =	21 days	OK
Length of Wet Season, WS =	153 days	
PPV Required = Da*Ct*R*RT/(WS*12) =	0.28 Ac.-ft.	

Permanent Pool Volume Provided, PPV

PPV Provided = Vol @ NWL =	0.55 Ac.-ft.	OK
----------------------------	--------------	-----------

Pond Geometry Checks

Depth =	5.30 ft.	OK
Mean Depth =	4.53 ft.	OK
Average length =	175 ft.	
Average width =	25 ft.	
Ave Length to Width Ratio	7.0 :1	

Sizing Bleed-Down Orifice for Residency Time

Formulas:

$$Q = .6 * A * (2 * 32.2 * h)^{1/2}$$

$$A = D^2 * \text{Pi} / 4$$

$$t = \text{TV} / (2 * Q * 3600)$$

$$h = (h1 + h2) / 2$$

Where

Q=Rate of Discharge (cfs)

A=Orifice Area (ft^2)

D = Orifice Diameter (ft)

Pi = 3.14159

h = Depth of Water Above the Flowline of the Orifice (ft)

t = Recovery Time (hrs)

TV = Treatment Volume Required (ft^3)

h1 = elevation @ TV - NWL Elevation

h2 = elevation when 1/2 TV has been released - NWL Elevation

Treatment Volume (Ac.-ft.)	0.23	<-- TV =	
		TVP/3	
Weir Elevation (ft.)	5.75	(minimum diameter for 6 in^2 area is 2.8 inches)	
NWL Elevation (ft.)	4.50	is value < 2.8 " in diameter?	YES
Orifice Diameter (in.)	1.5	Orifice Diameter	2.8

Calculated Values:

h (ft)	0.68
A (ft^2)	0.01
Q (cfs)	0.05
t	28.70

t Should be between 24 and 30 hrs. **TRUE** (minimum diameter for 6 in^2 area is 2.8 inches)

STORMWATER PIPE CALCULATIONS

MINOR LOSSES HAVE BEEN CONSIDERED

STRUCT. NO.	STRUCT. TYPE	LINE TYPE	LINE LENGTH (FT)	DRAINAGE AREA (ACRES)		SUBTOTAL CA	TIME OF CONC. (MIN)	TIME OF FLOW IN SECTION (MIN)	i (IN/HR)	TOTAL CA	TOTAL RUNOFF (CFS)	INLET ELEV. (FT)	H.G. ELEV.			DIA. (IN.)	SLOPE (%)	V (FPS)	CAPACITY (CFS)	NOTES & REMARKS
				CROWN ELEV.																
				INVERT ELEV.																
				UPPER END	LOWER END								FALL (FT.)							
				C=	0.90															
				C=	0.90															
				C=	0.90															
				INCRMNT																
				SUBTOTAL																
S-1 S-2	C.B.	HDPE	78	0.16	0.16	0.14	10.00	0.43	7.01	0.14	1.00	9.00	6.82 7.00 5.50	6.80 6.80 5.30	0.02 0.20 0.20	18	0.01	0.6	1.0	
S-2 S-3	C.B.	HDPE	97	0.06	0.22	0.20	10.43	0.54	6.91	0.20	1.38	9.00	6.58 6.80 5.30	6.55 6.55 5.05	0.03 0.25 0.25	18	0.02	0.8	1.4	
S-3 S-4	C.B.	HDPE	99	0.06	0.34	0.31	10.97	0.55	6.78	0.31	2.09	8.50	6.37 6.55 5.05	6.30 6.30 4.80	0.07 0.25 0.25	18	0.04	1.2	2.1	
S-4 S-5	C.B.	HDPE	22	0.06	0.41	0.36	11.52	0.12	6.66	0.36	2.43	7.40	6.27 6.30 4.30	6.26 6.26 4.26	0.01 0.04 0.04	24	0.01	0.8	2.4	
S-5 S-6	C.B.	HDPE	36	0.06	0.46	0.42	11.64	0.20	6.64	0.42	2.76	7.40	6.23 6.26 4.26	6.20 6.20 4.20	0.03 0.06 0.06	24	0.01	0.9	2.8	Tailwater 6.0
S-7 S-3	C.B.	HDPE	22	0.06	0.06	0.05	10.97	0.12	6.78	0.05	0.35	8.50	6.69 6.75 5.25	6.69 6.69 5.19	0.00 0.06 0.06	18	0.00	0.2	0.3	
S-12 S-13	C.B.	HDPE	120	0.31	0.62	0.56	10.00	0.67	7.01	0.56	3.91	8.40	6.29 6.40 4.40	6.22 6.19 4.19	0.07 0.21 0.21	24	0.03	1.2	3.9	
S-13 S-14	C.B.	HDPE	13	0.05	0.72	0.64	10.67	0.07	6.85	0.64	4.41	7.20	6.22 6.19 4.19	6.17 6.17 4.17	0.05 0.02 0.02	24	0.04	1.4	4.4	Tailwater 6.0
S-11 S-12	C.B.	HDPE	24	0.31	0.31	0.28	10.67	0.13	6.85	0.28	1.91	8.40	6.90 6.90 5.65	6.82 6.82 5.57	0.08 0.08 0.08	15	0.09	1.6	1.9	
S-15 S-13	C.B.	HDPE	24	0.05	0.05	0.04	10.74	0.13	6.84	0.04	0.30	7.20	5.62 5.70 4.45	5.62 5.62 4.37	0.00 0.08 0.08	15	0.00	0.2	0.3	

ICPR STORMWATER MODEL

100-year Storm Event
25-year Storm Event
10-year Storm Event
5-year Storm Event
Mean Annual Storm Event

Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

==== Channels =====

Name:	From Node:	Length(ft):	0.00
Group: BASE	To Node:	Count:	1
UPSTREAM	DOWNSTREAM	Friction Equation:	Average Conveyance
Geometry: Trapezoidal	Trapezoidal	Solution Algorithm:	Automatic
Invert(ft): 0.000	0.000	Flow:	Both
TClpInitZ(ft): 9999.000	9999.000	Contraction Coef:	0.000
Manning's N: 0.000000	0.000000	Expansion Coef:	0.000
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 dn
Aux XSec1:		Stabilizer Option:	None
AuxElev2(ft):			
Aux XSec2:			
Top Width(ft):			
Depth(ft):			
Bot Width(ft): 0.000	0.000		
LtSdSlp(h/v): 0.00	0.00		
RtSdSlp(h/v): 0.00	0.00		

==== Drop Structures =====

Name: S-OUT-1	From Node: pond 1	Length(ft):	25.00
Group: BASE	To Node: BNDY	Count:	1
UPSTREAM	DOWNSTREAM	Friction Equation:	Automatic
Geometry: Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in): 24.00	24.00	Flow:	Both
Rise(in): 24.00	24.00	Entrance Loss Coef:	0.000
Invert(ft): 3.600	3.500	Exit Loss Coef:	1.000
Manning's N: 0.013000	0.013000	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 S-OUT-1 ***

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): 32.00	Invert(ft): 5.750	
Rise(in): 12.00	Control Elev(ft): 5.750	

*** Weir 2 of 2 for Drop Structure S-OUT-1 ***

Count: 1	Bottom Clip(in): 0.000	TABLE
Type: Vertical: Mavis	Top Clip(in): 0.000	
Flow: Both	Weir Disc Coef: 3.200	
Geometry: Circular	Orifice Disc Coef: 0.600	
Span(in): 2.80	Invert(ft): 4.500	
Rise(in): 2.80	Control Elev(ft): 4.500	

==== Weirs =====

Name:	From Node:	
Group: BASE	To Node:	
Flow: Both	Count: 1	
Type: Horizontal	Geometry: Circular	
Span(in): 0.00		
Rise(in): 0.00		
Invert(ft): 0.000		
Control Elevation(ft): 0.000		
	TABLE	
Bottom Clip(in): 0.000		
Top Clip(in): 0.000		
Weir Discharge Coef: 3.200		
Orifice Discharge Coef: 0.600		

==== Percolation Links =====

Name:	From Node:	Flow: Both
Group: BASE	To Node:	Count: 1

Surface Area Option: Use 1st Point in Stage/Area Table
 Vertical Flow Termination: Horizontal Flow Algorithm
 Aquifer Base Elev(ft): 0.000 Perimeter 1(ft): 0.000
 Water Table Elev(ft): 0.000 Perimeter 2(ft): 0.000
 Ann Recharge Rate(in/year): 0.000 Perimeter 3(ft): 0.000
 Horiz Conductivity(ft/day): 0.000 Distance 1 to 2(ft): 0.000
 Vert Conductivity(ft/day): 0.000 Distance 2 to 3(ft): 0.000
 Effective Porosity(dec): 0.000 Num Cells 1 to 2: 0
 Suction Head(in): 0.000 Num Cells 2 to 3: 0
 Layer Thickness(ft): 0.000

==== Hydrology Simulations =====

Name: 10-year
 Filename: X:\CIVIL\Butterfly\Drainage\ICPR\10year.R32

Override Defaults: Yes
 Storm Duration(hrs): 24.00
 Rainfall File: Flmod
 Rainfall Amount(in): 7.74

Time(hrs)	Print Inc(min)
30.000	5.00

Name: 100-year
 Filename: X:\CIVIL\Butterfly\Drainage\ICPR\100-year.R32

Override Defaults: Yes
 Storm Duration(hrs): 24.00
 Rainfall File: Flmod
 Rainfall Amount(in): 13.40

Time(hrs)	Print Inc(min)
30.000	5.00

Name: 25-year
 Filename: X:\CIVIL\Butterfly\Drainage\ICPR\25-year.R32

Override Defaults: Yes
 Storm Duration(hrs): 24.00
 Rainfall File: Flmod
 Rainfall Amount(in): 9.79

Time(hrs)	Print Inc(min)
30.000	5.00

Name: 5-year
 Filename: X:\CIVIL\Butterfly\Drainage\ICPR\5-year.R32

Override Defaults: Yes
 Storm Duration(hrs): 24.00
 Rainfall File: Flmod
 Rainfall Amount(in): 6.42

Time(hrs)	Print Inc(min)
30.000	5.00

Name: mean
 Filename: X:\CIVIL\Butterfly\Drainage\ICPR\mean.R32

Override Defaults: Yes
 Storm Duration(hrs): 24.00
 Rainfall File: Flmod
 Rainfall Amount(in): 5.40

Time(hrs)	Print Inc(min)
30.000	5.00

==== Routing Simulations =====

Name: 10-year Hydrology Sim: 10-year
 Filename: X:\CIVIL\Butterfly\Drainage\ICPR\10year.I32

Execute: Yes Restart: No Patch: No
 Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
 Time Step Optimizer: 0.000
 Start Time(hrs): 0.000 End Time(hrs): 30.00
 Min Calc Time(sec): 0.2500 Max Calc Time(sec): 300.0000
 Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
11.000	30.000
16.000	5.000
24.000	15.000

30.000 30.000

Group Run

BASE Yes

Name: 100-year Hydrology Sim: 100-year
Filename: X:\CIVIL\Butterfly\Drainage\ICPR\100-year.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 0.000
Start Time(hrs): 0.000 End Time(hrs): 30.00
Min Calc Time(sec): 0.2500 Max Calc Time(sec): 300.0000
Boundary Stages: Boundary Flows:

Time(hrs) Print Inc(min)

11.000 30.000
16.000 5.000
24.000 15.000
30.000 30.000

Group Run

BASE Yes

Name: 25-year Hydrology Sim: 25-year
Filename: X:\CIVIL\Butterfly\Drainage\ICPR\25-year.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 0.000
Start Time(hrs): 0.000 End Time(hrs): 30.00
Min Calc Time(sec): 0.2500 Max Calc Time(sec): 300.0000
Boundary Stages: Boundary Flows:

Time(hrs) Print Inc(min)

11.000 30.000
16.000 5.000
24.000 15.000
30.000 30.000

Group Run

BASE Yes

Name: 5-year Hydrology Sim: 5-year
Filename: X:\CIVIL\Butterfly\Drainage\ICPR\5-year.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 0.000
Start Time(hrs): 0.000 End Time(hrs): 30.00
Min Calc Time(sec): 0.2500 Max Calc Time(sec): 300.0000
Boundary Stages: Boundary Flows:

Time(hrs) Print Inc(min)

11.000 30.000
16.000 5.000
24.000 15.000
30.000 30.000

Group Run

BASE Yes

Name: mean Hydrology Sim: mean
Filename: X:\CIVIL\Butterfly\Drainage\ICPR\mean.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 0.000
Start Time(hrs): 0.000 End Time(hrs): 30.00
Min Calc Time(sec): 0.2500 Max Calc Time(sec): 300.0000
Boundary Stages: Boundary Flows:

Time(hrs) Print Inc(min)

11.000 30.000

16.000	5.000
24.000	15.000
30.000	30.000

Group	Run
-----	----
BASE	Yes

Name	Group	Simulation	Max Time Flow hrs	Max Flow cfs	Max Delta Q cfs	Max Time US Stage hrs	Max US Stage ft	Max Time DS Stage hrs	Max DS Stage ft
S-OUT-1	BASE	10-year	12.32	4.170	-0.036	12.32	6.344	29.99	5.659
S-OUT-1	BASE	100-year	12.23	9.194	-0.062	12.23	6.788	29.97	5.658
S-OUT-1	BASE	25-year	12.26	6.197	-0.053	12.26	6.535	29.98	5.659
S-OUT-1	BASE	5-year	12.41	2.779	-0.027	12.41	6.194	30.00	5.660
S-OUT-1	BASE	mean	12.51	1.713	-0.018	12.51	6.059	30.03	5.662

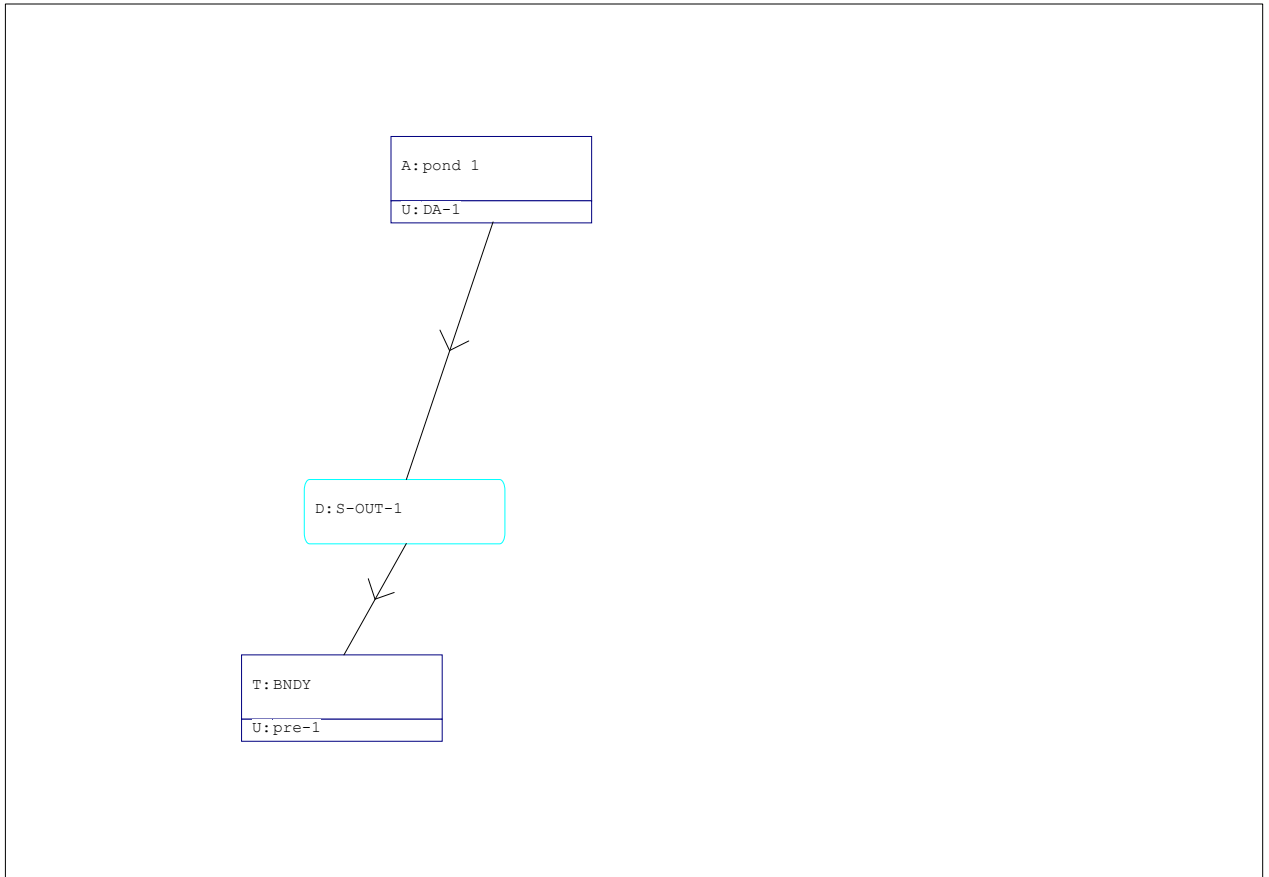
Simulation	Basin	Group	Time Max hrs	Flow Max cfs	Volume in	Volume ft3
10-year	DA-1	BASE	12.09	6.525	7.523	36047.244
10-year	pre-1	BASE	12.08	5.107	6.829	32720.393
100-year	DA-1	BASE	12.09	11.333	13.170	63107.434
100-year	pre-1	BASE	12.08	9.201	12.411	59466.261
25-year	DA-1	BASE	12.09	8.267	9.568	45845.222
25-year	pre-1	BASE	12.08	6.591	8.841	42364.223
5-year	DA-1	BASE	12.09	5.402	6.207	29741.820
5-year	pre-1	BASE	12.12	4.152	5.543	26558.607
mean	DA-1	BASE	12.09	4.534	5.191	24872.674
mean	pre-1	BASE	12.12	3.418	4.558	21838.434

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	Max Outflow cfs
BNDY	BASE	10-year	29.99	5.659	10.000	0.0052	0	12.23	8.436	0.00	0.000
pond 1	BASE	10-year	12.32	6.344	6.800	0.0050	8059	12.08	6.506	12.32	4.170
BNDY	BASE	100-year	29.97	5.658	10.000	0.0052	0	12.17	17.778	0.00	0.000
pond 1	BASE	100-year	12.23	6.788	6.800	0.0050	8059	12.08	11.296	12.23	9.194
BNDY	BASE	25-year	29.98	5.659	10.000	0.0052	0	12.18	12.126	0.00	0.000
pond 1	BASE	25-year	12.26	6.535	6.800	0.0050	8059	12.08	8.239	12.26	6.197
BNDY	BASE	5-year	30.00	5.660	10.000	0.0052	0	12.29	5.945	0.00	0.000
pond 1	BASE	5-year	12.41	6.194	6.800	0.0050	8059	12.08	5.383	12.41	2.779
BNDY	BASE	mean	30.03	5.662	10.000	0.0052	0	12.34	4.017	0.00	0.000
pond 1	BASE	mean	12.51	6.059	6.800	0.0050	8059	12.08	4.521	12.51	1.713

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



GEOTECHNICAL REPORT



ECS Florida, LLC

Geotechnical Engineering Report

Butterfly Trail

Simmons Road and Butterfly Trail
Fernandina Beach, Florida

ECS Project Number 35:35446

May 3, 2024





ECS FLORIDA, LLC

Geotechnical • Construction Materials • Environmental • Facilities

May 3, 2024

Mr. Joe Lucin
Mistral Architectural Metal + Glass Inc.
37-19 56th Street
Woodside, New York 11377

ECS Project No. 35:35446

Reference: Geotechnical Engineering Report
Butterfly Trail
Simmons Road and Butterfly Trail
Fernandina Beach, Florida

Dear Mr. Lucin:

ECS Florida, LLC. (ECS) has completed the subsurface exploration, laboratory testing, and geotechnical engineering analyses for the above-referenced project. Our services were performed in general accordance with our agreed to scope of work. This report presents our understanding of the geotechnical aspects of the project along with the results of the field exploration and laboratory testing conducted, and our design and construction recommendations.

It has been our pleasure to be of service to Mistral Architectural Metal + Glass Inc. during the design phase of this project. We would appreciate the opportunity to remain involved during the continuation of the design phase, and we would like to provide our services during construction phase operations as well to verify the assumptions of subsurface conditions made for this report. Should you have any questions concerning the information contained in this report, or if we can be of further assistance to you, please contact us.

Respectfully submitted,
ECS Florida, LLC.

Jared Pitts, P.E.
Geotechnical Department Manager
Registered, Florida No. 92090
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Jared Pitts on the date indicated here.
Printed copies of this document are not considered
signed and sealed and the signature must be
verified on any electronic copies.

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"ONE FIRM. ONE MISSION."

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APPENDICES

Appendix A – Drawings & Reports

- Figure 1 - Site Location Diagram
- Figure 2 - Field Exploration Diagram
- Subsurface Cross-Section(s)

Appendix B – Field Operations

- Reference Notes for Boring Logs
- Subsurface Exploration Procedure: Standard Penetration Testing (SPT)
- Subsurface Exploration Procedure: Hand Auger
- Boring Logs

EXECUTIVE SUMMARY

This Executive Summary is intended as a very brief overview of the primary geotechnical conditions that are expected to affect design and construction. Information gleaned from the Executive Summary should not be utilized in lieu of reading the entire geotechnical report.

- The borings encountered very soft clay and very loose clayey soils at intermittent depths. Due to the presence of these very soft/loose soils, it is our opinion that the loading imposed by placing more than four feet of fill could cause consolidation of these soils, which could result in intolerable settlements of the proposed structures. If more than four feet of fill is placed in the building areas, we recommend that a waiting period be allowed to elapse prior to the start of vertical construction.
- Based on the results of our exploration, we consider the subsurface conditions at the site adaptable for support of the proposed structures on a properly designed conventional shallow foundation system with a maximum allowable bearing pressure of 2,500 psf. Provided the site preparation and earthwork construction recommendations outlined in Section 5.0 of this report are performed, the parameters presented in Section 4.0 of this report may be used for foundation design.
- We consider the subsurface conditions at the site adaptable for support of a flexible or rigid pavement section when constructed on properly prepared subgrade soils as outlined in Section 5.0 of this report.
- The borings encountered groundwater at depths varying from 1.5 feet to 3.5 feet below the existing ground surface at the time of our exploration. Because of the need for densification of the soils within the upper 2 feet below the stripped surface, temporary groundwater control measures may be required if the groundwater level is within 2 feet below the stripped and grubbed surface at the time of construction.
- We recommend that ECS be provided the opportunity to review the foundation plans and earthwork specifications to verify that our recommendations have been properly interpreted and implemented. ECS should also be retained to perform the construction materials testing and observations required for this project, to verify that our recommendations have been implemented.

1.0 INTRODUCTION

The purpose of this study was to provide geotechnical information for the design of foundations, pavements, and stormwater management facilities for the proposed residential development. The project will include five single-family lots, paved roadways, and stormwater treatment. The recommendations developed for this report are based on project information supplied by Mr. David Brown of Portiere Services.

Our services were provided in accordance with our Proposal No. 35:21977-GP dated March 22, 2024 and Change Order No. 01 dated April 9, 2024 as authorized by Mr. Joe Lucin on March 25, 2024 and April 9, 2024, respectively, which includes our Terms and Conditions of Service.

This report contains the procedures and results of our subsurface exploration and laboratory testing programs, review of existing site conditions, engineering analyses, and recommendations for the design and construction of the project.

The report includes the following items:

- A brief review and description of our field and laboratory test procedures and the results of testing conducted.
- A review of surface topographical features and site conditions.
- A review of subsurface soil stratigraphy with pertinent available physical properties.
- Final copies of our soil boring logs.
- Recommendations for foundation design.
- General recommendations for pavement design.
- Evaluation and recommendations relative to groundwater control.
- Recommended parameters for stormwater treatment system design.
- Recommendations for site preparation and construction of compacted fills.

2.0 PROJECT INFORMATION

2.1 PROJECT LOCATION/CURRENT SITE USE

The project site is located at the northwest quadrant of the intersection of Chem Cell Road and Riverside Road in Fernandina Beach, Florida. The site is bordered by existing residential properties to the north and south, to the west by the Intracoastal Waterway, and to the east by Riverside Road. The general site location is shown on Figure 1 in Appendix A and Figure 2.1.1 following.

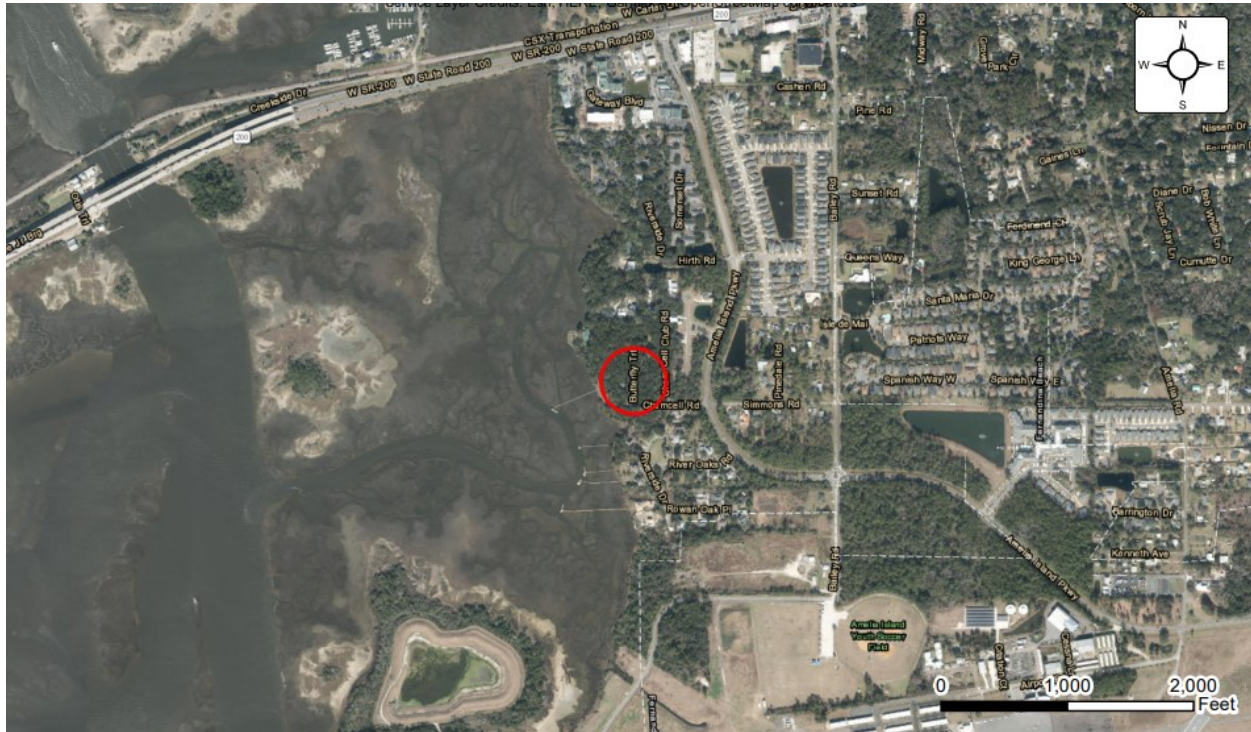


Figure 2.1.1. Site Location

At the time of our exploration, the site was partially developed, with an existing home and pool. The undeveloped portions of the site were wooded. A site survey was not available to our office at the time of this report preparation. However, based on publicly available information, we understand that the site generally slopes downward to the west. Surface water was not observed near planned structural areas at the time of our exploration.

2.2 PROPOSED CONSTRUCTION

The following information explains our understanding of the planned development including proposed buildings and related infrastructure.

SUBJECT	DESIGN INFORMATION / UNDERSTANDINGS
# of Stories	1-2 stories above grade
Usage	Residential
Framing	Timber or CMU
Column Loads ⁽¹⁾	50 kips (Full Dead and Factored Live), expected
Wall Loads ⁽¹⁾	3 kips per linear foot (klf) maximum, expected
Floor Loads ⁽¹⁾	150 pounds per square foot (psf) maximum, expected

SUBJECT	DESIGN INFORMATION / UNDERSTANDINGS
Fill and Cut Heights	Expect a maximum of 4 feet of fill and only minor cuts, from existing site grades

(1) If actual structural loads differ from these expected loads ECS must be contacted immediately in order to revise building foundation recommendations and settlement calculations, as needed.

We understand improvements will be made to the existing roadways as part of the development. A stormwater treatment system will also be required.

If actual project information varies from these conditions, then the recommendations in this report may need to be re-evaluated. We should be contacted if any of the above project information is incorrect so that we may reevaluate our recommendations.

3.0 FIELD EXPLORATION AND LABORATORY TESTING

Our exploration procedures are explained in greater detail in Appendix B including the insert titled Subsurface Exploration Procedures. Our scope of work included drilling five Standard Penetration Test (SPT) borings, four auger borings, and one Double Ring Infiltration (DRI) test. Our borings were located with a handheld GPS unit and their approximate locations are shown on the Field Exploration Diagram (Figure 2) in Appendix A.

3.1 SUBSURFACE CHARACTERIZATION

The subsurface conditions encountered were generally consistent with published geological mapping. The following sections provide generalized characterizations of the soil strata. Please refer to the boring logs in Appendix B.

Typical Depth (ft)		Stratum	Description
From	To		
Existing Ground Surface	0.5 -1	n/a	Topsoil, Gravel, or Asphalt with Limerock Base
0.5 - 1	12.5-22.5	I	Very Loose to very Dense Fine SAND (SP) and Fine SAND with Silt (SP-SM)
12.5-22.5	20-40	II	Very Loose to Medium Dense Clayey to Very Clayey Fine SAND (SC), Silty Fine SAND (SM), Fine SAND (SP), and Fine SAND with Silt (SP-SM), and Very Soft to Firm Clay (CH)

A graphical presentation of the subsurface conditions is shown on the Generalized Subsurface Profiles included in Appendix A.

3.2 GROUNDWATER OBSERVATIONS

3.2.1 Encountered Groundwater

Water levels were measured during our field exploration and are presented in our boring logs in Appendix B. Groundwater depths measured at the time of drilling ranged from 1.5 feet to 3.5 feet below the ground surface. Variations in the long-term water table may occur as a result of changes in precipitation, evaporation, surface water runoff, construction activities, and other factors.

3.2.2 Estimated Seasonal High Groundwater

The normal seasonal high groundwater level is affected by a number of factors. The drainage characteristics of the soils, land surface elevation, relief points such as drainage ditches, lakes, rivers, swamp areas, etc., and distance to relief points are some of the more important factors influencing the seasonal high groundwater level.

Based on our interpretation of the site conditions, including the boring logs and Web Soil Survey, we estimate the normal seasonal high groundwater level at the boring locations to be approximately at the depths shown on the Generalized Subsurface Profiles. It is possible that groundwater levels may exceed the estimated normal seasonal high groundwater level as a result of significant or prolonged rains.

3.3 VISUAL CLASSIFICATION

Each sample was visually classified on the basis of texture and plasticity in accordance with ASTM D2488 Standard Practice for Description and Identification of Soils (Visual-Manual Procedures) and including USCS classification symbols. After classification, the samples were grouped in the major zones noted on the boring logs in Appendix B. The group symbols for each soil type are indicated in parentheses along with the soil descriptions. The stratification lines between strata on the logs are approximate; in situ, the transitions may be gradual.

4.0 DESIGN RECOMMENDATIONS

4.1 FOUNDATIONS

The borings encountered very soft clay and very loose clayey soils at intermittent depths. Due to the presence of these loose/soft soils, we recommend a waiting period be allowed to elapse prior to the start of vertical construction if more than four feet of fill is placed. To determine when the majority of the anticipated settlement has occurred and vertical construction can continue, settlement plates should be placed within the building footprint areas. The project surveyor should monitor the plates weekly and provide us with the information. This is described in more detail in Section 5. We estimate that the waiting period will be in the range of 4 to 8 weeks from the completion of elevating fill placement.

Provided subgrades and engineered fills are prepared as recommended in this report, the proposed structure can be supported by shallow foundations including column footings and continuous wall footings. We recommend the foundation design use the following parameters:

Design Parameter	Column Footing	Wall Footing
Minimum Width	24 inches	18 inches
Minimum Footing Embedment Depth (below slab or finished grade)	12 inches	12 inches
Estimated Maximum Total Settlement ¹	1 inch	1 inch
Estimated Maximum Differential Settlement ²	Less than ½ inch between columns	Less than ½ inch over 50 feet
Maximum Net Allowable Soil Bearing Pressure ³	2,500 psf	
Acceptable Bearing Soil Material	Compacted Stratum I or Compacted Fill	

1. Based on expected structural loads. If final loads are different, ECS must be contacted to update foundation recommendations and settlement calculations.
2. Based on maximum column/wall loads and variability in borings. Differential settlement can be re-evaluated once the foundation plans are more complete.
3. Net allowable bearing pressure is the applied pressure in excess of the surrounding overburden soils above the base of the foundation.

Depending on the final floor elevations of the buildings, we anticipate that most of the soils at the foundation bearing elevation are generally anticipated to be suitable for support of the proposed structure, after prepared in accordance with Section 5.0 of this report. The bearing level soils, after compaction, should exhibit densities equivalent to at least 95 percent of the modified Proctor maximum dry density (ASTM D 1557) to a depth of at least one foot below foundation bearing levels.

For turn down slabs and interior wall footings the minimum width should also be 18 inches, however the sloped transition portion of the turn-down may be included when determining the footing width. Even though the maximum allowable soil bearing pressure may not be achieved, these width recommendations should control the size of the foundations.

4.2 SLABS ON GRADE

The floor slabs can be constructed as a slab-on-ground, provided the site is prepared as outlined in Section 5.0. It is recommended the floor slab bearing soils be covered with an impervious membrane to reduce moisture entry and floor dampness. A 6-mil thick plastic membrane is commonly used for this purpose. Care should be exercised not to tear large sections of the membrane during placement of reinforcing steel and concrete. In addition, we recommend that a minimum separation of two feet be maintained between the finished floor levels and the estimated normal seasonal high groundwater level.

Subgrade Modulus: Provided the placement of engineered fill per the recommendations discussed herein, the slab may be designed assuming a modulus of subgrade reaction, k_1 of 150 pci (lbs/cu. inch). The modulus of subgrade reaction value is based on a 1 ft by 1 ft plate load test basis.

4.3 PAVEMENTS

Based on the results of our exploration, we consider the subsurface conditions at the site favorable for support of a flexible or rigid pavement sections when constructed on properly prepared subgrade soils as outlined in Section 5.0 of this report. Typical pavement sections used in northeast Florida are presented in the following sections. If requested, we can prepare a project-specific pavement design if specific traffic data is provided.

In general, heavy duty sections are areas that will be subjected to trucks, buses, or other similar vehicles including main drive lanes of the development. Light duty sections are appropriate for vehicular traffic and parking areas.

4.3.1 Flexible Pavement Recommendations

TYPICAL PAVEMENT SECTIONS		
MATERIAL	LIGHT DUTY	HEAVY DUTY
Asphaltic Concrete Surface Course (SP-9.5 or Type S)	1.5 inches	2 inches
Limerock Base	6 inches	8 inches
Stabilized Subgrade	12 inches	12 inches

Base and Subgrade: The limerock base course should have a minimum Limerock Bearing Ratio (LBR) of 100 and should be compacted to at least 98 percent of the modified Proctor maximum dry density (ASTM D 1557) value.

The subgrade material should have a minimum LBR of 40 and be compacted to at least 98 percent of the modified Proctor maximum dry density (ASTM D 1557) value.

Underdrains: Pavement life is dependent on dry/stable pavement support provided by the base and subgrade courses. Accordingly, a minimum clearance of 18 inches must be maintained between the normal seasonal high groundwater table and the bottom of the base layer. Depending on final pavement grades, underdrains may be required to maintain a relatively dry base and subgrade materials.

4.3.2 Rigid Pavement Recommendations

Our recommendations for slab thickness for standard duty and heavy duty concrete pavements are based on a) subgrade soils densified to 98 percent of the modified Proctor maximum dry density (ASTM D 1557) b) modulus of subgrade reaction (k) equal to 200 pounds per cubic inch, c) a 20 year design life.

TYPICAL PAVEMENT SECTIONS		
	LIGHT DUTY	HEAVY DUTY
Minimum Concrete Thickness	5 inches	6 inches
Maximum Control Joint Spacing	10 feet x 10 feet	12 feet x 12 feet
Recommended Sawcut Depth	1 ¼ inches	1 ½ inches

We recommend using concrete with a minimum 28-day compressive strength of 4,000 psi and a minimum 28-day flexural strength (modulus of rupture) of at least 600 pounds per square inch, based on 3rd point loading of concrete beam test samples. Layout of the sawcut control joints should form square panels. The joints should be sawed within six hours of concrete placement or as soon as the concrete has developed sufficient strength to support workers and equipment. We recommend allowing ECS to review and comment on the final concrete pavement design, including section and joint details (type of joints, joint spacing, etc.), prior to the start of construction.

For further details on concrete pavement construction, please reference the “Guide to jointing unreinforced pavements” by William Yrjanson of the American Concrete Pavement Association, and “Building Quality Concrete Parking Areas”, published by the Portland Cement Association.

4.4 STORMWATER MANAGEMENT FACILITIES

4.4.1 Soil Infiltration Rate

The results of the infiltration test indicated the following vertical infiltration rate:

Infiltration Results			
Test Location	Groundwater Depth (feet)	Test Depth (feet)	Measured Permeability (feet/day)
DRI-01	1.5	0.5	3.2

The measured vertical infiltration rate should not be construed to represent the actual pond exfiltration rate. For pond recovery calculations, we recommend an appropriate factor of safety be applied to the above vertical infiltration rate value.

5.0 SITE CONSTRUCTION RECOMMENDATIONS

5.1 SUBGRADE PREPARATION

5.1.1 Stripping and Grubbing

Prior to construction, the location of existing underground utilities within the construction area should be established. Provisions should then be made to relocate interfering utilities to appropriate locations. Underground pipes that are not properly removed or plugged may serve as conduits for subsurface erosion, which may subsequently lead to excessive settlement of overlying structures.

The "footprint" of the proposed building plus a minimum additional horizontal margin of 5 feet, and of the hardscape areas (parking/driveway) plus a minimum additional horizontal margin of 3 feet, should be stripped of all demolition debris, surface vegetation, stumps, debris, organic topsoil, or other deleterious materials. During grubbing operations, roots with a diameter greater than 0.5-inch, stumps, or small roots in a concentrated state, should be grubbed and completely removed.

Based on the results of our field exploration, it should be anticipated that 6 inches to 12 inches of topsoil and soils containing significant amounts of organic materials may be encountered across the site. The actual depths of unsuitable soils and materials should be determined by ECS using visual observation and judgment during earthwork operations. Any topsoil removed from the building and parking/drive areas can be stockpiled and used subsequently in non-structural areas.

5.1.2 Proofrolling

After removing unsuitable surface materials, cutting to the proposed grade, and prior to the placement of any engineered fill or other construction materials, the exposed subgrade should be evaluated by an ECS authorized representative. The exposed subgrade should be proofrolled with previously approved construction equipment having a minimum axle load of 10 tons (e.g. fully loaded tandem-axle dump truck). The areas subject to proofrolling should be traversed by the equipment in two perpendicular (orthogonal) directions with overlapping passes of the vehicle under the observation of ECS' authorized representative. This procedure is intended to assist in identifying any localized yielding materials. In the event that unstable or "pumping" subgrade is identified by the proofrolling, those areas should be marked for repair prior to the placement of any subsequent engineered fill or other construction materials. Methods of repair of unstable subgrade, such as undercutting or moisture conditioning or chemical stabilization, should be discussed with ECS to determine the appropriate procedure with regard to the existing conditions causing the instability. A test pit(s) may be excavated to explore the shallow subsurface materials in the area(s) of the instability to help in determining the cause of the observed unstable materials and to assist in the evaluation of the appropriate remedial action to stabilize the subgrade.

5.1.3 Temporary Groundwater Control

Because of the need for densification of the soils within the upper 2 feet below the stripped surface, temporary groundwater control measures may be required if the groundwater level is within 2 feet below the stripped and grubbed surface at the time of construction. Should groundwater control

measures become necessary, dewatering methods should be determined by the contractor. We recommend the groundwater control measures, if necessary; remain in place until compaction of the existing soils is completed. The dewatering method should be maintained until backfilling has reached a height of 2 feet above the groundwater level at the time of construction. The site should be graded to direct surface water runoff from the construction area.

5.1.4 Subgrade Compaction

Subgrade Compaction: After completing the clearing and stripping operations and installing the temporary groundwater control measures (if required), the exposed surface should be compacted with a vibratory drum roller having a minimum static, at-drum weight, on the order of 4 tons to 6 tons. Typically, the material should exhibit moisture contents within ± 2 percentage points of the modified Proctor optimum moisture content (ASTM D 1557) during the compaction operations. Compaction should continue until densities of at least 95 percent of the modified Proctor maximum dry density (ASTM D 1557) have been achieved within the upper one foot of the compacted natural soils at the site.

Should the bearing level soils experience pumping and soil strength loss during the compaction operations, compaction work should be immediately terminated, and (1) the disturbed soils should be removed and backfilled with compacted engineered fill, or (2) the excess moisture content within the disturbed soils should be allowed to dissipate before recompacting.

Care should be exercised to avoid damaging any nearby structures while the compaction operation is underway. Prior to commencing compaction, occupants of adjacent structures should be notified, and the existing conditions of the structures should be documented with photographs and survey (if deemed necessary). Compaction should cease if deemed detrimental to adjacent structures, and ECS should be contacted immediately. We recommend the vibratory roller remain a minimum of 50 feet from existing structures. Within this zone, use of a track-mounted bulldozer, or a vibratory roller operating in the static mode, is recommended.

5.2 EARTHWORK OPERATIONS

5.2.1 Engineered Backfill and Fill Soils

Engineered fill is defined as a non-plastic, inorganic, granular soil having less than 15 percent material passing the No. 200 mesh sieve and containing less than 4 percent organic material. In landscape and lot areas, we recommend the upper 1 foot of material be engineered fill with less than 10 percent material passing the No. 200 mesh sieve to facilitate drainage. The fine sand and fine sand with silt or fine sand with clay, without roots, as encountered in the borings, are generally suitable as fill materials and, with proper moisture control, should densify using conventional compaction methods. Soils with more than 10 to 12 percent passing the No. 200 sieve will be more difficult to compact, due to their nature to retain soil moisture, and may require drying.

Engineered Fill Compaction Requirements: Materials satisfactory for use as engineered fill should consist of soils with the following compaction requirements.

ENGINEERED FILL COMPACTION REQUIREMENTS	
Subject	Requirement
Compaction Standard	Modified Proctor, ASTM D1557
Required Compaction	95% of Max. Dry Density (general engineered fill) 98% of Max. Dry Density (upper one foot below the proposed pavement base course)
Loose Thickness prior to compaction	12 inches if vibratory drum roller compaction equipment is used 8 inches if vibratory drum roller is used in static mode 8 inches if track-mounted compaction equipment is used 6 inches if hand-held compaction equipment is used

Fill materials should not be placed on excessively wet soils. Excessively wet soils should be moisture conditioned, which may include scarifying and aerating. Proper drainage should be maintained during the earthwork phases of construction in an attempt to prevent ponding of water which has a tendency to degrade subgrade soils. The contractor should minimize dusting or implement dust control measures, as required.

We recommend that the grading contractor have equipment on site during earthwork for both drying and wetting fill soils. Moisture control may be difficult during extended periods of rain. The control of moisture content of soils containing more than 10% fines may be difficult when these soils become wet. Further, such soils are easily degraded by construction traffic when the moisture content is elevated.

5.2.2 Preload if More Than Four Feet of Fill is Placed

Subsequent to achieving final grades, a waiting period of on the order of 4 to 8 weeks is anticipated to be required prior to proceeding with vertical construction. We recommend that we install at least three settlement plates (per building) prior to the fill placement to monitor the settlements resulting from the structural fill to better determine when the vertical construction can proceed. The settlement plates should be placed within the building area subsequent to completing the initial clearing/stripping operations and compaction of the existing ground surface, and prior to placement of any structural fill. Elevation readings of the settlement plates should be obtained by optical survey on the day of placement, on a weekly basis. The elevation readings should be provided to us in a timely manner so we can determine when vertical construction can proceed.

5.2.3 Foundation Areas

After satisfactory placement and compaction of the required engineered fill, the foundation areas may be excavated to the planned bearing levels. The foundation bearing level soils, after compaction, should exhibit densities equivalent to at least 95 percent of the modified Proctor maximum dry density (ASTM D 1557) to a depth of one foot below the bearing level. For confined areas, such as the footing excavations, any compactive effort should be provided by a lightweight vibratory sled or roller having a total weight on the order of 500 to 2,000 pounds.

5.2.4 Flexible Pavement Areas

After completing the clearing/stripping operations in the pavement areas, any underlying clayey sands and sandy clays that are within 2 feet of the bottom of the pavement base should be over-excavated from within the pavement areas. Structural backfill and fill required to achieve the finish pavement grades then can be placed and compacted as described in Sections 5.2.1.

5.2.4 Rigid Pavement Areas

For a concrete pavement subgrade, we recommend using clean fine sand (SP), compacted to at least 98 percent of modified Proctor test maximum dry density (ASTM D 1557) without additional stabilization, with the following stipulations:

1. Subgrade soils must be compacted to at least 98 percent of the modified Proctor test maximum dry density (ASTM D 1557) to a depth of at least 2 feet prior to placement of concrete.
2. The surface of the subgrade soils must be smooth, and any disturbances or wheel rutting corrected prior to placement of concrete.
3. The subgrade soils must be moistened prior to placement of concrete.
4. Concrete pavement thickness should be uniform throughout, with exception to thickened edges (curb or footing).

5.3 UTILITY INSTALLATIONS

Utility Subgrades: The soil borings along the proposed roadways encountered fine sands (SP), fine sand with silt (SP-SM), fine sand with clay (SP-SC), and silty fine sand (SM). It is our opinion that the fine sands and fine sand with silt (SP, SP-SM) soils will generally be suitable for bedding soils for pipelines and utility structures. The silty fine sand (SM) soils may also be adequate if they can be compacted to the required density (typically 98 percent of the soil's Modified Proctor (ASTM D 1557) maximum dry density). If the SM soils cannot be compacted to the required density, then we recommend these soils be overexcavated a minimum of 12 inches below the pipe invert elevation (24 inches below the manhole base elevation) and replaced with compacted engineered fill as described in Section 5.2.1 above.

Alternatively, a medium-duty woven geotextile, such as Mirafi 600X or equivalent, may be used as a separation barrier between the compacted backfill and the silty soils. If a woven geotextile is used, then no overexcavation is necessary for the pipeline, and the depth of overexcavation for the utility manholes may be reduced to 12 inches. The geotextile should be placed in the excavation bottom and along the sides above the silty soils creating a separation between these soils and the sand backfill to preclude contamination of the backfill.

Utility Backfilling: Backfill material should meet the recommendations as described in Section 5.2.1, except backfill placed around the pipe, and to a height of 2 feet above the top of pipe, should be placed in 6-inch lifts. Backfill placed above the 2-foot zone above the top of pipe elevation may be placed in 12-inch lifts and compacted with heavier equipment.

Backfill placed around utility structures should be placed in 6-inch thick lifts, and compacted with hand-held equipment to the same in-place soil density stated above. Heavy equipment should not be used within 5 feet of the structures to prevent overstressing of the structure walls.

Utility Excavation Dewatering: Based on the groundwater depths encountered in our borings, groundwater will likely be encountered by utility excavations which extend below existing grades. It is expected that removal of groundwater will be required, especially for deeper utility excavations. If required by the jurisdiction, the contractor should submit a dewatering plan prior to installing the site utilities.

5.4 GENERAL CONSTRUCTION CONSIDERATIONS

Moisture Conditioning: We anticipate that typical moisture conditioning for soils in this area should be anticipated. The sandy surface soils may require wetting during dry periods or periods of high heat. Drying of soils containing more than 10% fines or excavated from below the water table may be required to be within ± 2 percentage points of the modified Proctor optimum moisture content (ASTM D 1557).

Subgrade Protection: Measures should also be taken to limit site disturbance, especially from rubber-tired heavy construction equipment, and to control and remove surface water from development areas, including structural and pavement areas. It would be advisable to designate a haul road and construction staging area to limit the areas of disturbance and to prevent construction traffic from excessively degrading sensitive subgrade soils and existing pavement areas. Haul roads and construction staging areas could be covered with excess depths of aggregate to protect those subgrades. The aggregate can later be removed and can likely be used in pavement areas.

Surface Drainage: Surface drainage conditions should be properly maintained. Surface water should be directed away from the construction area, and the work area should be sloped away from the construction area at a gradient of at least 1 percent or greater to reduce the potential of ponding water and the subsequent saturation of the surface soils. At the end of each work day, the subgrade soils should be sealed by rolling the surface with a smooth drum roller to limit infiltration of surface water.

Excavation Safety: All excavations and slopes should be made and maintained in accordance with OSHA excavation safety standards. The contractor is solely responsible for designing and constructing stable, temporary excavations and slopes and should shore, slope, or bench the sides of the excavations and slopes as required to maintain stability of both the excavation sides and bottom. The contractor's responsible person, as defined in 29 CFR Part 1926, should evaluate the soil exposed in the excavations as part of the contractor's safety procedures. In no case should slope height, slope inclination, or excavation depth, including utility trench excavation depth, exceed those specified in local, state, and federal safety regulations. ECS is providing this information solely as a service to our client. ECS is not assuming responsibility for construction site safety or the contractor's activities; such responsibility is not being implied and should not be inferred.

Erosion Control: The surface soils may be erodible. Therefore, the Contractor should provide and maintain good site drainage during earthwork operations to maintain the integrity of the surface soils.

All erosion and sedimentation controls should be in accordance with sound engineering practices and local requirements.

6.0 CLOSING

Our geotechnical exploration has been performed, our findings presented, and our recommendations prepared, in accordance with generally accepted geotechnical engineering principles and practices. ECS is not responsible for any independent conclusions, interpretation, opinions, or recommendations made by others based on the data contained in this report.

Our scope of services was intended to evaluate the soil conditions within the zone of soil influenced by the foundation system. Our scope of services does not address geologic conditions, such as sinkholes or soil conditions existing below the depth of the soil borings.

If any of the project description information discussed in this report is inaccurate, either due to our interpretation of the documents provided or site or design changes that may occur later, ECS should be contacted immediately in order that we can review the report in light of the changes and provide additional or alternate recommendations as may be required to reflect the proposed construction.

We recommend that ECS be retained to review the project's plans and specifications pertaining to our work so that we may ascertain consistency of those plans/specifications with the intent of the geotechnical report.

Field observations, monitoring, and quality assurance testing during earthwork and foundation installation are an extension of and integral to the geotechnical design recommendation. We recommend that the owner retain these quality assurance services and that ECS be retained to continue our involvement throughout these critical phases of construction to provide general consultation as issues arise.

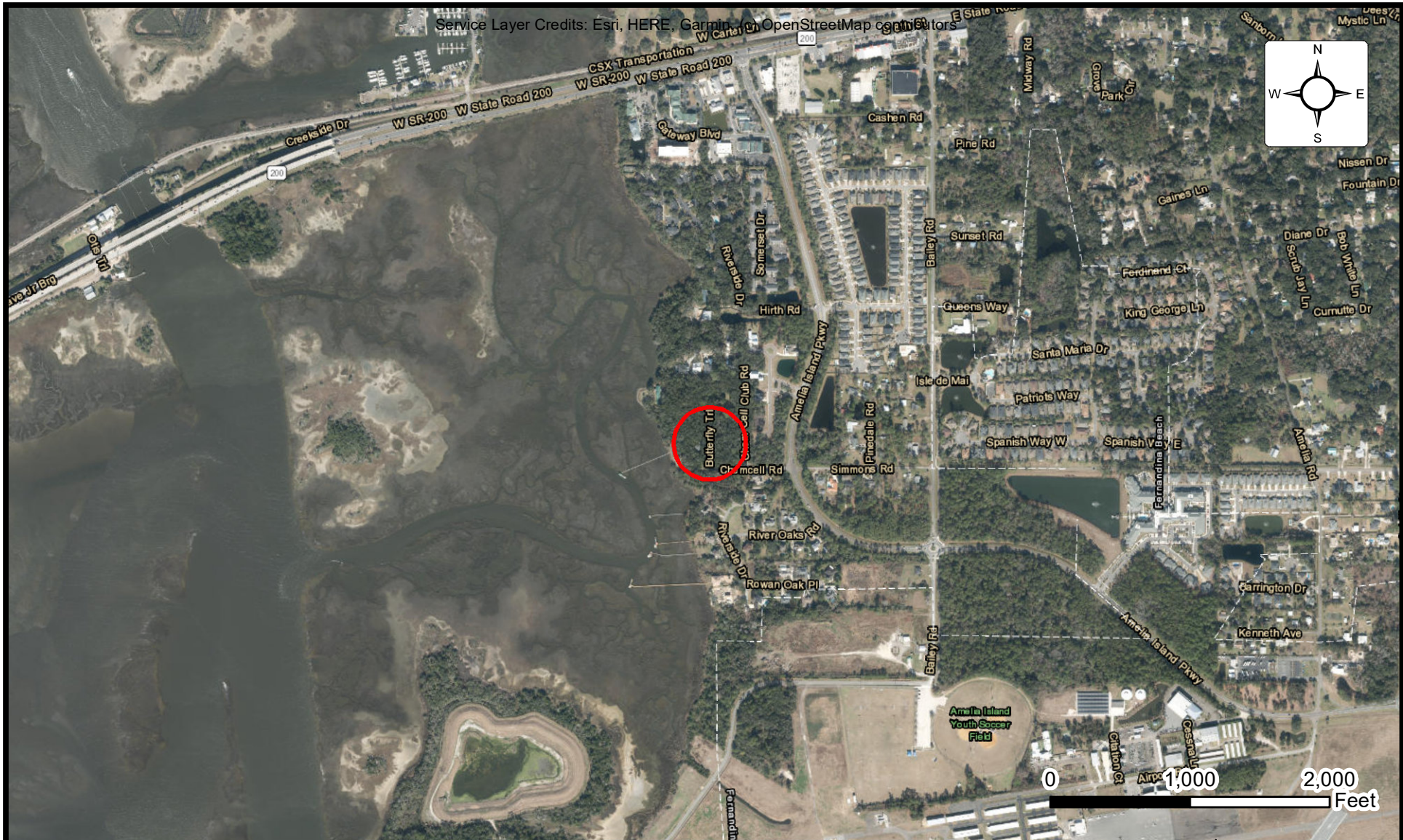
ECS is not responsible for the conclusions, opinions, or recommendations of others based on the data in this report.

Appendix A - Drawings and Reports

Site Location Diagram

Exploration Location Diagram(s)

Subsurface Cross-Section(s)



SITE LOCATION DIAGRAM BUTTERFLY TRAIL

SIMMONS ROAD, FERNANDINA BEACH, FLORIDA
MISTRAL ARCHITECTURAL METAL + GLASS INC.





ENGINEER JP18
SCALE AS NOTED
PROJECT NO. 35:35446
FIGURE 1
DATE 5/2/2024

Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors



Legend

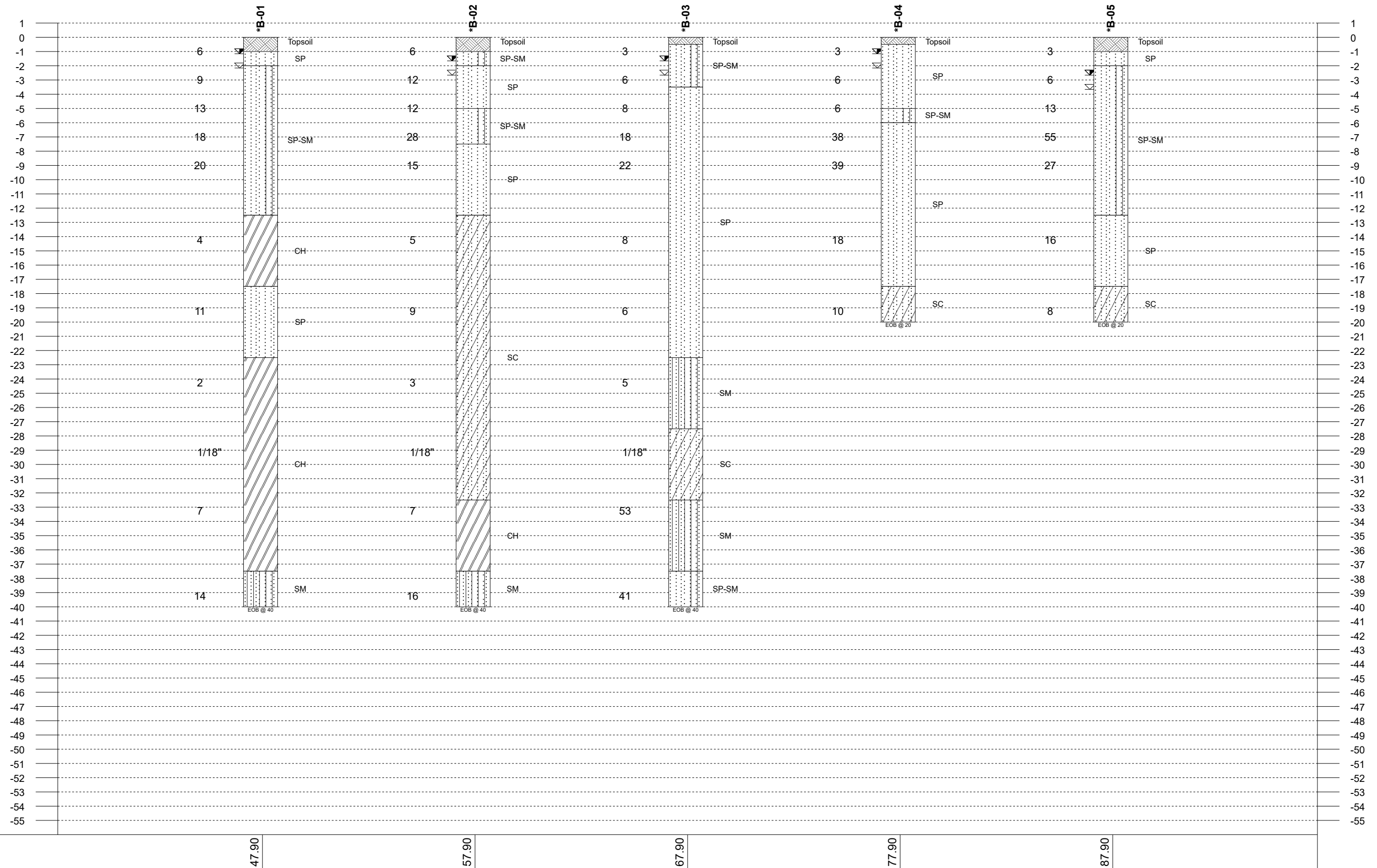
-  Approximate Road Auger Boring Locations
-  Approximate SPT Boring Locations

BORING LOCATION DIAGRAM BUTTERFLY TRAIL


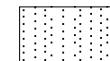
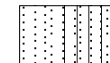

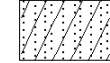

SIMMONS ROAD, FERNANDINA BEACH, FLORIDA









ENGINEER JP18
SCALE AS NOTED
PROJECT NO. 35:35446
FIGURE 2
DATE 3/22/2024



Legend Key

-  Topsoil
-  SP
-  SP-SM
-  CH
-  SC
-  SM

Notes:
 1- EOB: END OF BORING AR: AUGER REFUSAL SR: SAMPLER REFUSAL.
 2- THE NUMBER BELOW THE STRIPS IS THE DISTANCE ALONG THE BASELINE.
 3- SEE INDIVIDUAL BORING LOG AND GEOTECHNICAL INFORMATION.
 4- STANDARD PENETRATION TEST RESISTANCE (LEFT OF BORING) IN BLOWS PER FOOT (ASTM D1586).

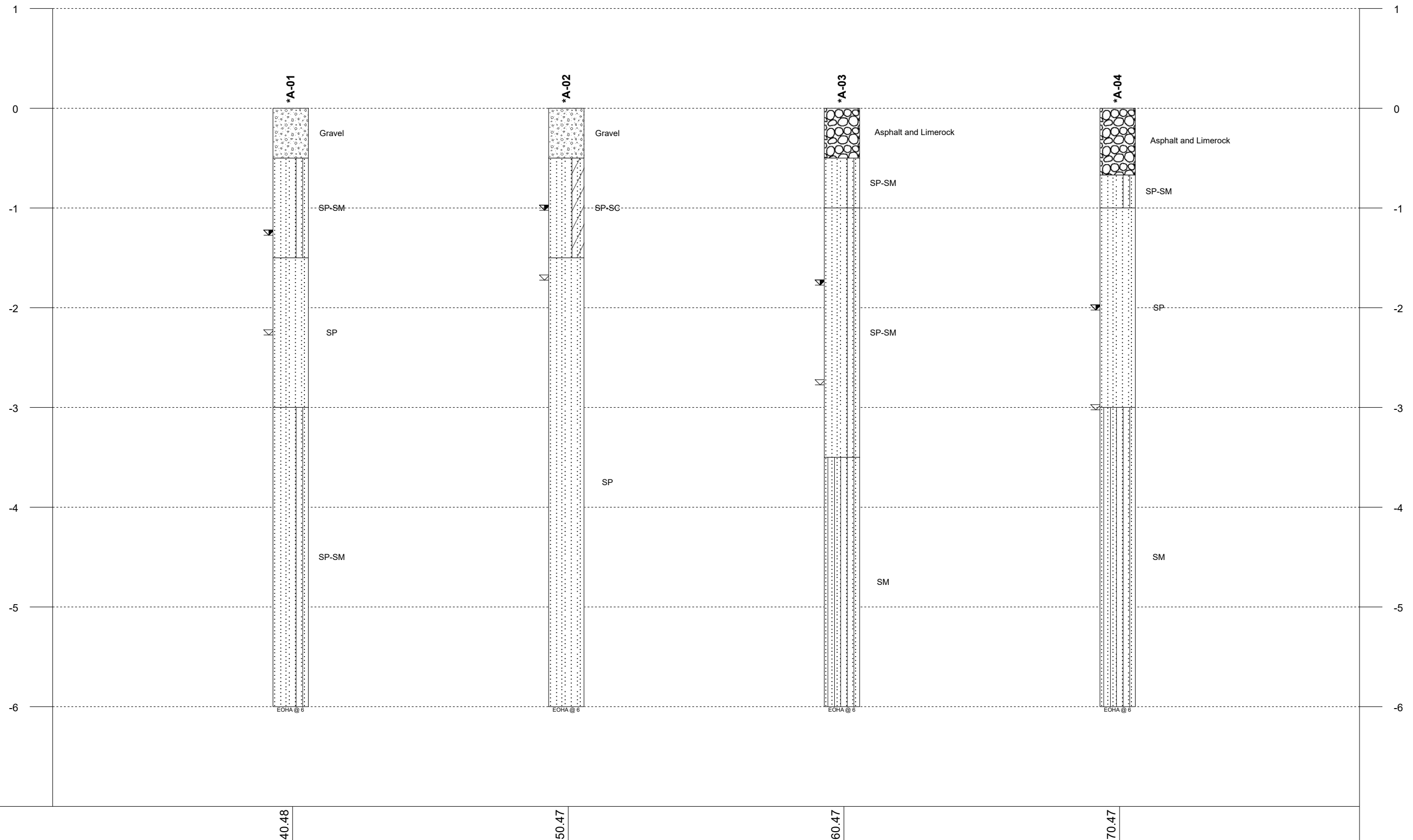
Plastic Limit	Water Content	Liquid Limit	▽ WL (First Encountered)	 Fill
X	●	△	▽ WL (Completion)	 Possible Fill
[FINES CONTENT %]			▽ WL (Seasonal High Water)	 Probable Fill
 BOTTOM OF CASING			▽ WL (Stabilized)	 Rock
 LOSS OF CIRCULATION				



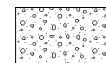
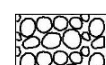
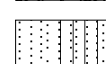
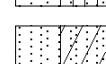
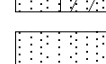

GENERALIZED SUBSURFACE PROFILE Figure 3

Butterfly Trail
Mistral Architectural Metal + Glass Inc.
Simmons Road, Fernandina Beach, Florida, 32034

Project No: 35:35446 Date: 05/02/2024



Legend Key

-  Gravel
-  Asphalt and Limerock
-  SP-SM
-  SP-SC
-  SP
-  SM

-7.00

Notes:
 1- EOB: END OF BORING AR: AUGER REFUSAL SR: SAMPLER REFUSAL.
 2- THE NUMBER BELOW THE STRIPS IS THE DISTANCE ALONG THE BASELINE.
 3- SEE INDIVIDUAL BORING LOG AND GEOTECHNICAL INFORMATION.
 4- STANDARD PENETRATION TEST RESISTANCE (LEFT OF BORING) IN BLOWS PER FOOT (ASTM D1586).

Plastic Limit	Water Content	Liquid Limit	▽	WL (First Encountered)		Fill
X	●	△	▽	WL (Completion)		Possible Fill
[FINES CONTENT %]			▽	WL (Seasonal High Water)		Probable Fill
	BOTTOM OF CASING		▽	WL (Stabilized)		Rock
	LOSS OF CIRCULATION					



GENERALIZED SUBSURFACE PROFILE Figure 4

Butterfly Trail
Mistral Architectural Metal + Glass Inc.
Simmons Road, Fernandina Beach, Florida, 32034

Project No: 35:35446 Date: 05/02/2024

Appendix B – Field Operations

Reference Notes

Exploration Procedures

Boring Logs

REFERENCE NOTES FOR BORING LOGS

MATERIAL ^{1,2}	
	ASPHALT
	CONCRETE
	GRAVEL
	TOPSOIL
	VOID
	BRICK
	AGGREGATE BASE COURSE
	GW WELL-GRADED GRAVEL gravel-sand mixtures, little or no fines
	GP POORLY-GRADED GRAVEL gravel-sand mixtures, little or no fines
	GM SILTY GRAVEL gravel-sand-silt mixtures
	GC CLAYEY GRAVEL gravel-sand-clay mixtures
	SW WELL-GRADED SAND gravelly sand, little or no fines
	SP POORLY-GRADED SAND gravelly sand, little or no fines
	SM SILTY SAND sand-silt mixtures
	SC CLAYEY SAND sand-clay mixtures
	ML SILT non-plastic to medium plasticity
	MH ELASTIC SILT high plasticity
	CL LEAN CLAY low to medium plasticity
	CH FAT CLAY high plasticity
	OL ORGANIC SILT or CLAY non-plastic to low plasticity
	OH ORGANIC SILT or CLAY high plasticity
	PT PEAT highly organic soils

DRILLING SAMPLING SYMBOLS & ABBREVIATIONS			
SS	Split Spoon Sampler	PM	Pressuremeter Test
ST	Shelby Tube Sampler	RD	Rock Bit Drilling
WS	Wash Sample	RC	Rock Core, NX, BX, AX
BS	Bulk Sample of Cuttings	REC	Rock Sample Recovery %
PA	Power Auger (no sample)	RQD	Rock Quality Designation %
HSA	Hollow Stem Auger		

PARTICLE SIZE IDENTIFICATION		
DESIGNATION	PARTICLE SIZES	
Boulders	12 inches (300 mm) or larger	
Cobbles	3 inches to 12 inches (75 mm to 300 mm)	
Gravel:	Coarse	¾ inch to 3 inches (19 mm to 75 mm)
	Fine	4.75 mm to 19 mm (No. 4 sieve to ¾ inch)
Sand:	Coarse	2.00 mm to 4.75 mm (No. 10 to No. 4 sieve)
	Medium	0.425 mm to 2.00 mm (No. 40 to No. 10 sieve)
	Fine	0.074 mm to 0.425 mm (No. 200 to No. 40 sieve)
Silt & Clay ("Fines")	<0.074 mm (smaller than a No. 200 sieve)	

COHESIVE SILTS & CLAYS		
UNCONFINED COMPRESSIVE STRENGTH, QP ⁴	SPT ⁵ (BPF)	CONSISTENCY ⁷ (COHESIVE)
<0.25	<2	Very Soft
0.25 - <0.50	2 - 4	Soft
0.50 - <1.00	5 - 8	Firm
1.00 - <2.00	9 - 15	Stiff
2.00 - <4.00	16 - 30	Very Stiff
4.00 - 8.00	31 - 50	Hard
>8.00	>50	Very Hard

RELATIVE AMOUNT ⁷	COARSE GRAINED (%) ⁸	FINE GRAINED (%) ⁸
Trace	≤5	≤5
With	10 - 20	10 - 25
Adjective (ex: "Silty")	25 - 45	30 - 45

GRAVELS, SANDS & NON-COHESIVE SILTS	
SPT ⁵	DENSITY
<5	Very Loose
5 - 10	Loose
11 - 30	Medium Dense
31 - 50	Dense
>50	Very Dense

WATER LEVELS ⁶	
	WL (First Encountered)
	WL (Completion)
	WL (Seasonal High Water)
	WL (Stabilized)

FILL AND ROCK			
FILL	POSSIBLE FILL	PROBABLE FILL	ROCK

¹Classifications and symbols per ASTM D 2488-17 (Visual-Manual Procedure) unless noted otherwise.

²To be consistent with general practice, "POORLY GRADED" has been removed from GP, GP-GM, GP-GC, SP, SP-SM, SP-SC soil types on the boring logs.

³Non-ASTM designations are included in soil descriptions and symbols along with ASTM symbol [Ex: (SM-FILL)].

⁴Typically estimated via pocket penetrometer or Torvane shear test and expressed in tons per square foot (tsf).

⁵Standard Penetration Test (SPT) refers to the number of hammer blows (blow count) of a 140 lb. hammer falling 30 inches on a 2 inch OD split spoon sampler required to drive the sampler 12 inches (ASTM D 1586). "N-value" is another term for "blow count" and is expressed in blows per foot (bpf). SPT correlations per 7.4.2 Method B and need to be corrected if using an auto hammer.

⁶The water levels are those levels actually measured in the borehole at the times indicated by the symbol. The measurements are relatively reliable when augering, without adding fluids, in granular soils. In clay and cohesive silts, the determination of water levels may require several days for the water level to stabilize. In such cases, additional methods of measurement are generally employed.

⁷Minor deviation from ASTM D 2488-17 Note 14.

⁸Percentages are estimated to the nearest 5% per ASTM D 2488-17.



SUBSURFACE EXPLORATION PROCEDURE: STANDARD PENETRATION TESTING (SPT) ASTM D 1586 Split-Barrel Sampling

Standard Penetration Testing, or **SPT**, is the most frequently used subsurface exploration test performed worldwide. This test provides samples for identification purposes, as well as a measure of penetration resistance, or N-value. The N-Value, or blow counts, when corrected and correlated, can approximate engineering properties of soils used for geotechnical design and engineering purposes.

SPT Procedure:

- Involves driving a hollow tube (split-spoon) into the ground by dropping a 140-lb hammer a height of 30-inches at desired depth
- Recording the number of hammer blows required to drive split-spoon a distance of 18-24 inches (in 3 or 4 Increments of 6 inches each)
- Auger is advanced* and an additional SPT is performed
- One SPT typically performed for every two to five feet. An approximate 1.5 inch diameter soil sample is recovered.



**Drilling Methods May Vary*— The predominant drilling methods used for SPT are open hole fluid rotary drilling and hollow-stem auger drilling.



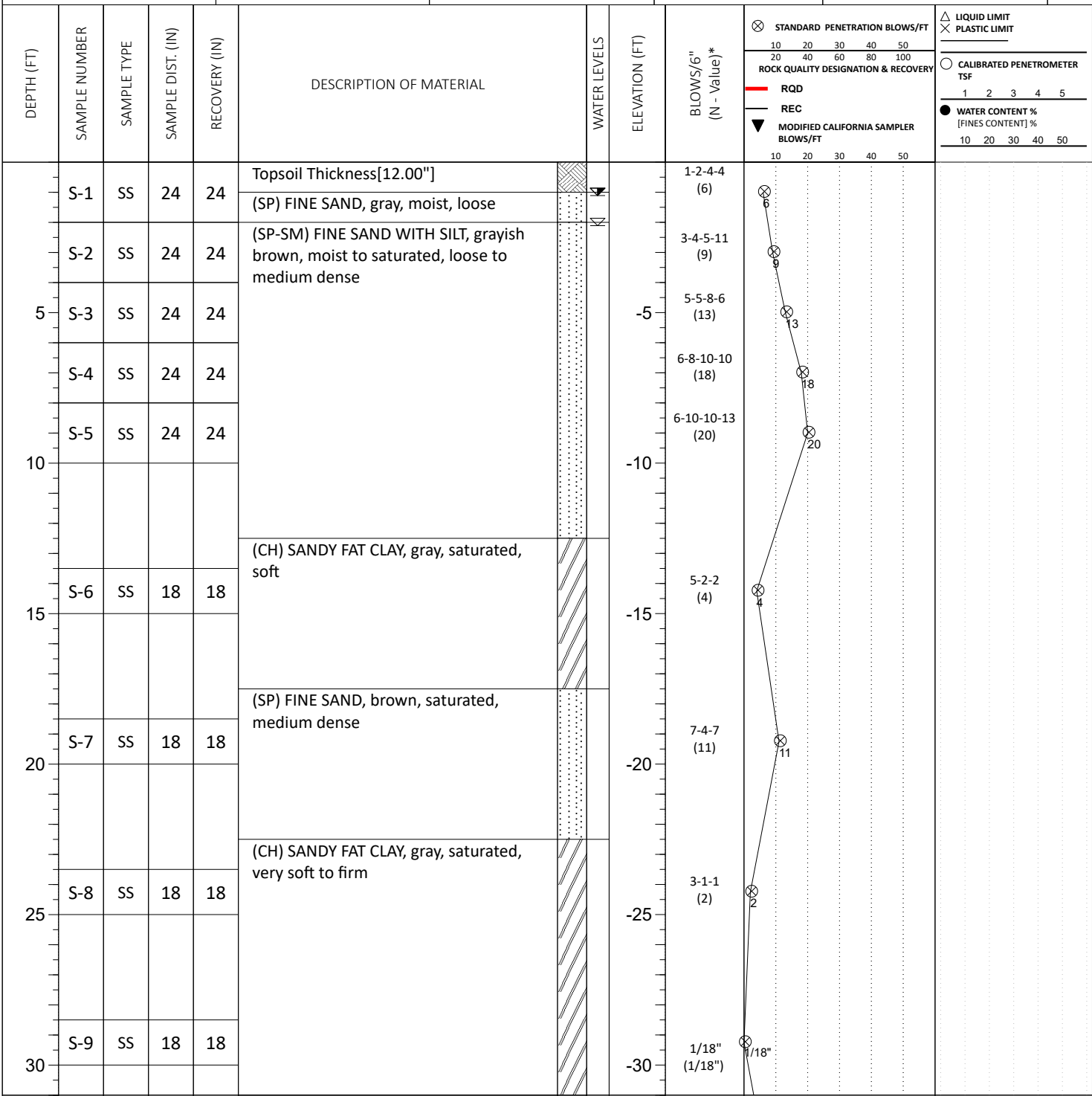
SUBSURFACE EXPLORATION PROCEDURE: Hand Auger Borings ASTM D1452

In this procedure, a shallow depth boring is made by manually rotating and advancing an auger to the desired depths while periodically removing the auger from the hole to clear and examine the auger cuttings. The auger cuttings are visually classified in the field in accordance with ASTM D2488. Disturbed samples are collected in each soil stratum and sealed in an airtight container and labeled appropriately.

Hand Auger Procedure:

- Involves manually rotating a tube or barrel type auger to the desired sample depth
- Recording the depth of changes in strata
- Describing soil in each major stratum in accordance with ASTM D2488
- Recording groundwater depth and location of seepage zones, when/if found
- Describing condition of augered hole (i.e. whether the hole remains open or the sides cave)

SITE LOCATION: Simmons Road, Fernandina Beach, Florida, 32034			LOSS OF CIRCULATION
LATITUDE:	LONGITUDE:	STATION:	BOTTOM OF CASING



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THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>∇ WL (First Encountered)</td> <td style="text-align: center;">2.00</td> </tr> <tr> <td>▼ WL (Completion)</td> <td></td> </tr> <tr> <td>∇ WL (Seasonal High Water)</td> <td style="text-align: center;">1.00</td> </tr> <tr> <td>∇ WL (Stabilized)</td> <td></td> </tr> </table>	∇ WL (First Encountered)	2.00	▼ WL (Completion)		∇ WL (Seasonal High Water)	1.00	∇ WL (Stabilized)		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>BORING STARTED:</td> <td style="text-align: center;">Apr 22 2024</td> <td rowspan="2">CAVE IN DEPTH:</td> </tr> <tr> <td>BORING COMPLETED:</td> <td style="text-align: center;">Apr 23 2024</td> </tr> <tr> <td>EQUIPMENT:</td> <td>ATV</td> <td>LOGGED BY:</td> </tr> </table>	BORING STARTED:	Apr 22 2024	CAVE IN DEPTH:	BORING COMPLETED:	Apr 23 2024	EQUIPMENT:	ATV	LOGGED BY:	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td colspan="2">HAMMER TYPE: Auto</td> </tr> <tr> <td colspan="2">DRILLING METHOD: Mud rotary</td> </tr> </table>	HAMMER TYPE: Auto		DRILLING METHOD: Mud rotary	
∇ WL (First Encountered)	2.00																					
▼ WL (Completion)																						
∇ WL (Seasonal High Water)	1.00																					
∇ WL (Stabilized)																						
BORING STARTED:	Apr 22 2024	CAVE IN DEPTH:																				
BORING COMPLETED:	Apr 23 2024																					
EQUIPMENT:	ATV	LOGGED BY:																				
HAMMER TYPE: Auto																						
DRILLING METHOD: Mud rotary																						

GEOTECHNICAL BOREHOLE LOG

CLIENT: Mistral Architectural Metal + Glass Inc.	PROJECT NO.: 35:35446	BORING NO.: B-01	SHEET: 2 of 2	
PROJECT NAME: Butterfly Trail	DRILLER/CONTRACTOR: ECS			

SITE LOCATION: Simmons Road, Fernandina Beach, Florida, 32034			LOSS OF CIRCULATION	
LATITUDE:	LONGITUDE:	STATION:	SURFACE ELEVATION:	BOTTOM OF CASING

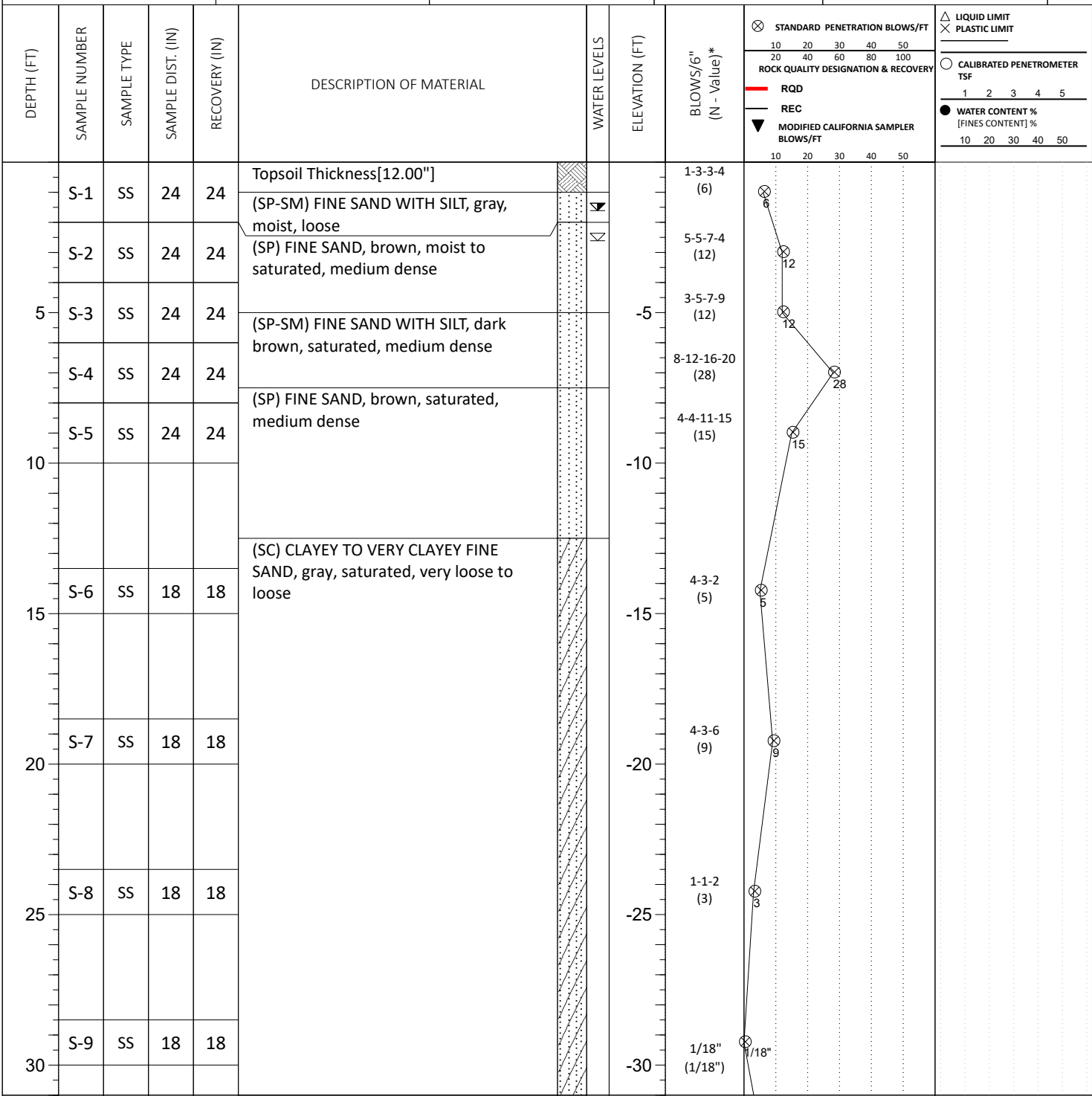
DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6" (N - Value)*	STANDARD PENETRATION BLOWS/FT		ROCK QUALITY DESIGNATION & RECOVERY		LIQUID LIMIT / PLASTIC LIMIT		CALIBRATED PENETROMETER TSF		WATER CONTENT % [FINES CONTENT] %		
									10	20	30	40	50	10	20	30	40	50	1
35	S-10	SS	18	18	(CH) SANDY FAT CLAY, gray, saturated, very soft to firm		-35	2-3-4 (7)											
40	S-11	SS	18	18	(SM) SILTY FINE SAND, gray, saturated, medium dense		-40	3-4-10 (14)											
END OF BORING AT 40 FT																			

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

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<input checked="" type="checkbox"/> WL (Completion)	BORING COMPLETED: Apr 23 2024	HAMMER TYPE: Auto
<input checked="" type="checkbox"/> WL (Seasonal High Water) 1.00	EQUIPMENT: ATV	LOGGED BY:
<input checked="" type="checkbox"/> WL (Stabilized)		DRILLING METHOD: Mud rotary

GEOTECHNICAL BOREHOLE LOG

SITE LOCATION: Simmons Road, Fernandina Beach, Florida, 32034			LOSS OF CIRCULATION
LATITUDE:	LONGITUDE:	STATION:	BOTTOM OF CASING



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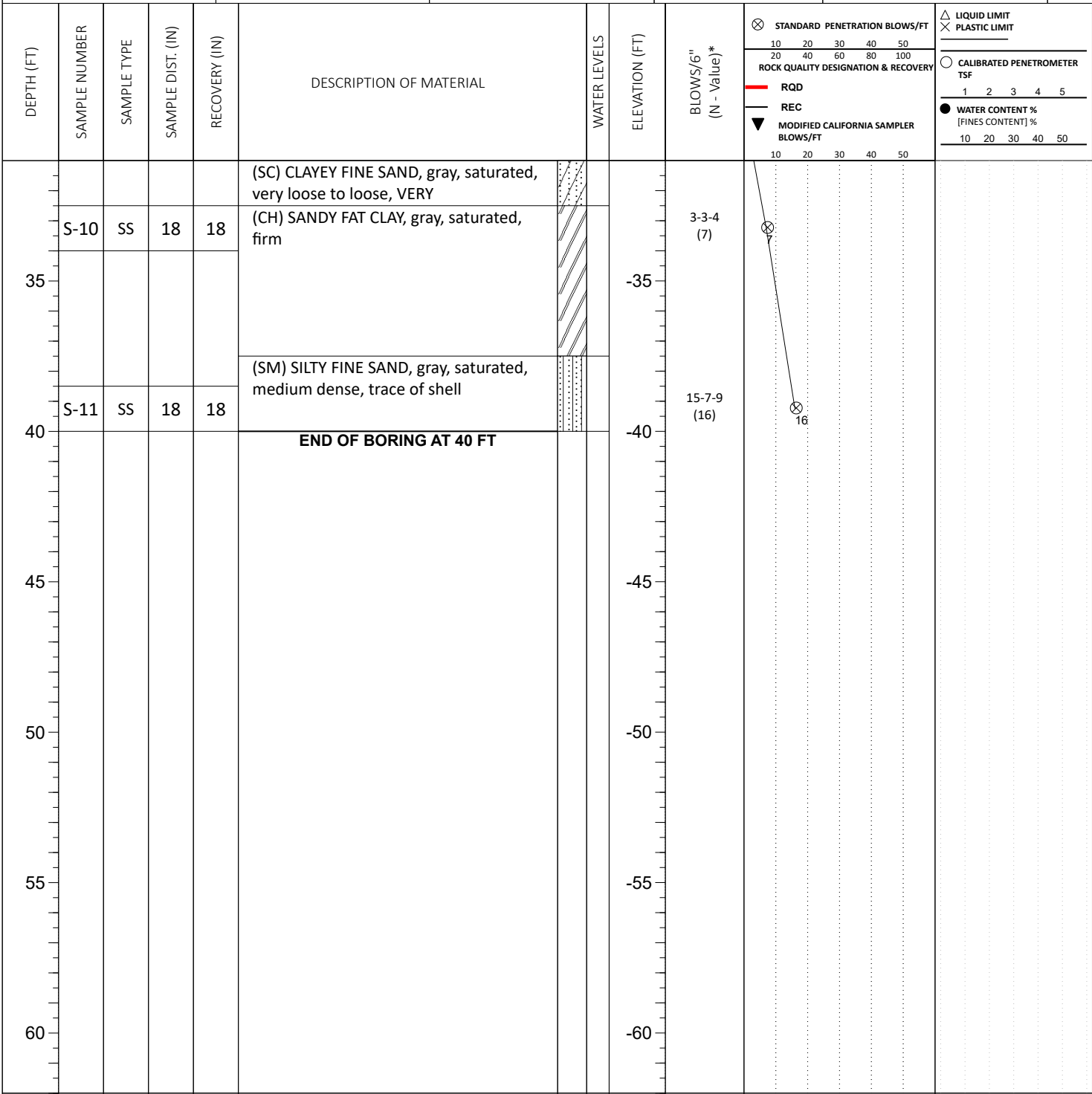
THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

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▼ WL (Completion)	BORING COMPLETED: Apr 22 2024	HAMMER TYPE: Auto
▼ WL (Seasonal High Water) 1.50	EQUIPMENT: ATV	LOGGED BY:
▼ WL (Stabilized)		DRILLING METHOD: Mud rotary

GEOTECHNICAL BOREHOLE LOG

CLIENT: Mistral Architectural Metal + Glass Inc.	PROJECT NO.: 35:35446	BORING NO.: B-02	SHEET: 2 of 2	
PROJECT NAME: Butterfly Trail	DRILLER/CONTRACTOR: ECS			

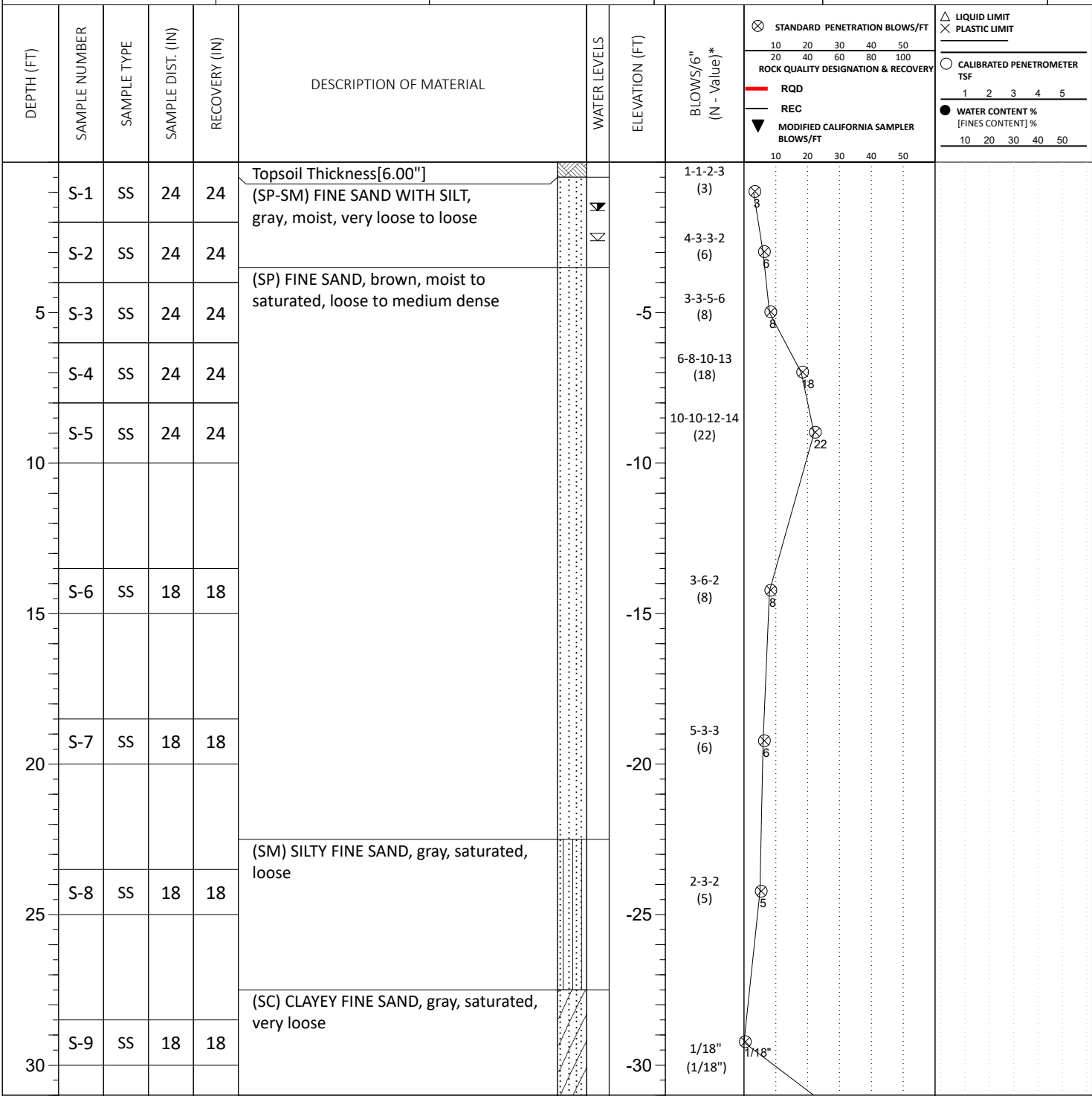
SITE LOCATION: Simmons Road, Fernandina Beach, Florida, 32034			LOSS OF CIRCULATION	
LATITUDE:	LONGITUDE:	STATION:	SURFACE ELEVATION:	BOTTOM OF CASING



THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

∇ WL (First Encountered) 2.50	BORING STARTED: Apr 22 2024	CAVE IN DEPTH:
▼ WL (Completion)	BORING COMPLETED: Apr 22 2024	HAMMER TYPE: Auto
∇ WL (Seasonal High Water) 1.50	EQUIPMENT: ATV	LOGGED BY:
∇ WL (Stabilized)		DRILLING METHOD: Mud rotary

GEOTECHNICAL BOREHOLE LOG



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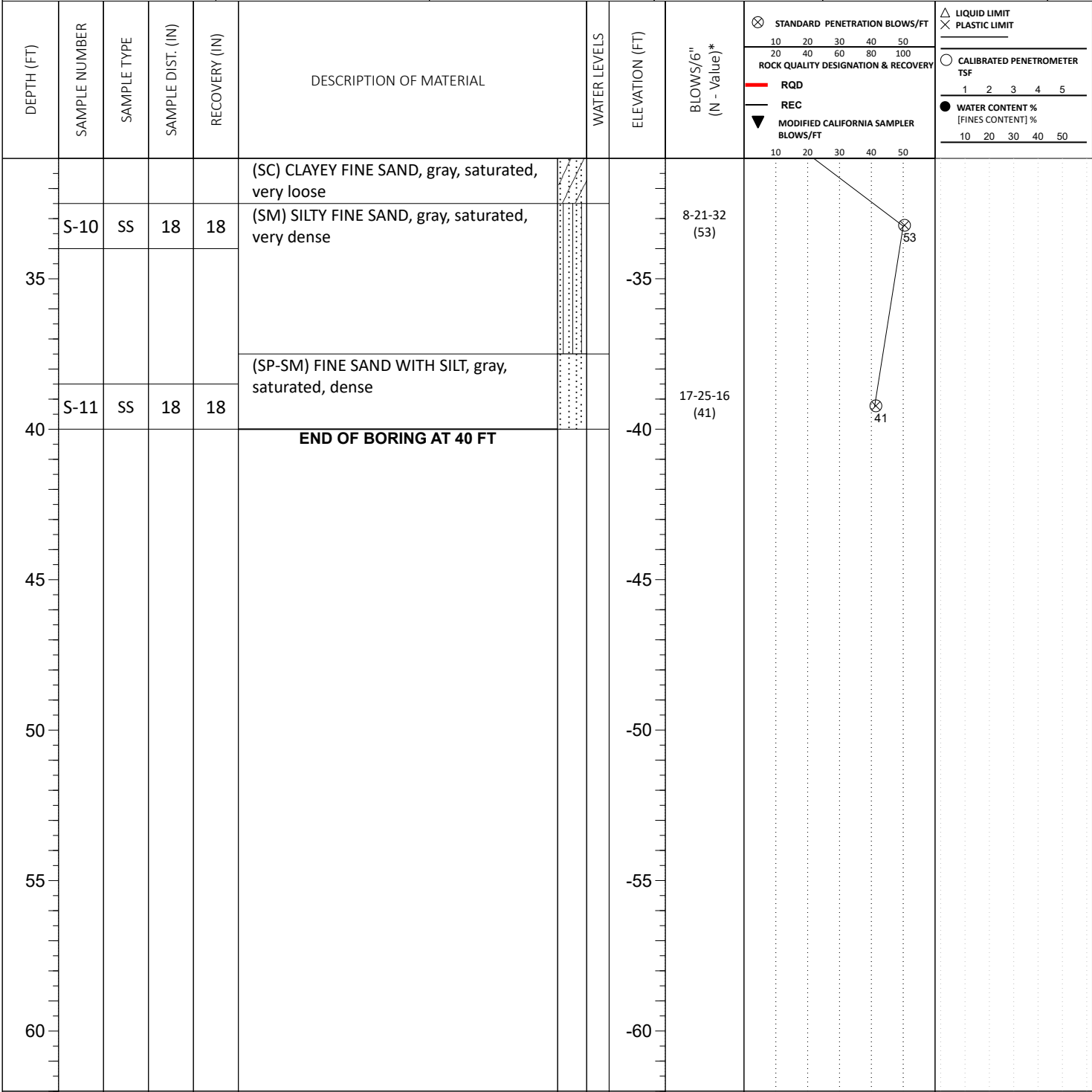
THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

∇ WL (First Encountered) 2.50	BORING STARTED: Apr 22 2024	CAVE IN DEPTH:
▼ WL (Completion)	BORING COMPLETED: Apr 22 2024	HAMMER TYPE: Auto
∇ WL (Seasonal High Water) 1.50	EQUIPMENT: ATV	LOGGED BY:
∇ WL (Stabilized)		DRILLING METHOD: Mud rotary

GEOTECHNICAL BOREHOLE LOG

CLIENT: Mistral Architectural Metal + Glass Inc.	PROJECT NO.: 35:35446	BORING NO.: B-03	SHEET: 2 of 2	
PROJECT NAME: Butterfly Trail	DRILLER/CONTRACTOR: ECS			

SITE LOCATION: Simmons Road, Fernandina Beach, Florida, 32034			LOSS OF CIRCULATION
LATITUDE:	LONGITUDE:	STATION:	BOTTOM OF CASING

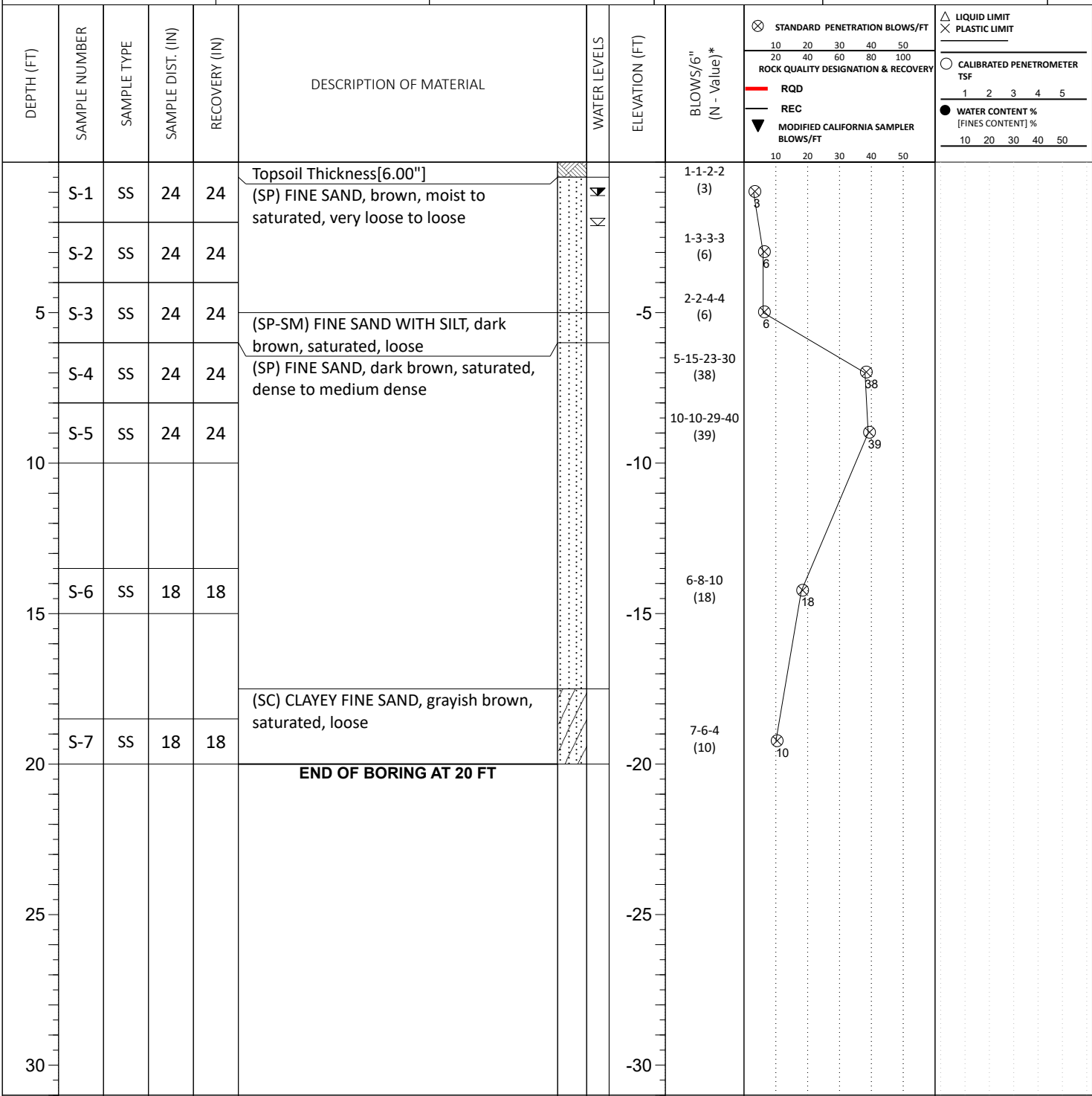


THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

∇ WL (First Encountered) 2.50	BORING STARTED: Apr 22 2024	CAVE IN DEPTH:
▼ WL (Completion)	BORING COMPLETED: Apr 22 2024	HAMMER TYPE: Auto
∇ WL (Seasonal High Water) 1.50	EQUIPMENT: ATV	LOGGED BY:
∇ WL (Stabilized)		DRILLING METHOD: Mud rotary

GEOTECHNICAL BOREHOLE LOG

SITE LOCATION: Simmons Road, Fernandina Beach, Florida, 32034			LOSS OF CIRCULATION
LATITUDE:	LONGITUDE:	STATION:	SURFACE ELEVATION: BOTTOM OF CASING

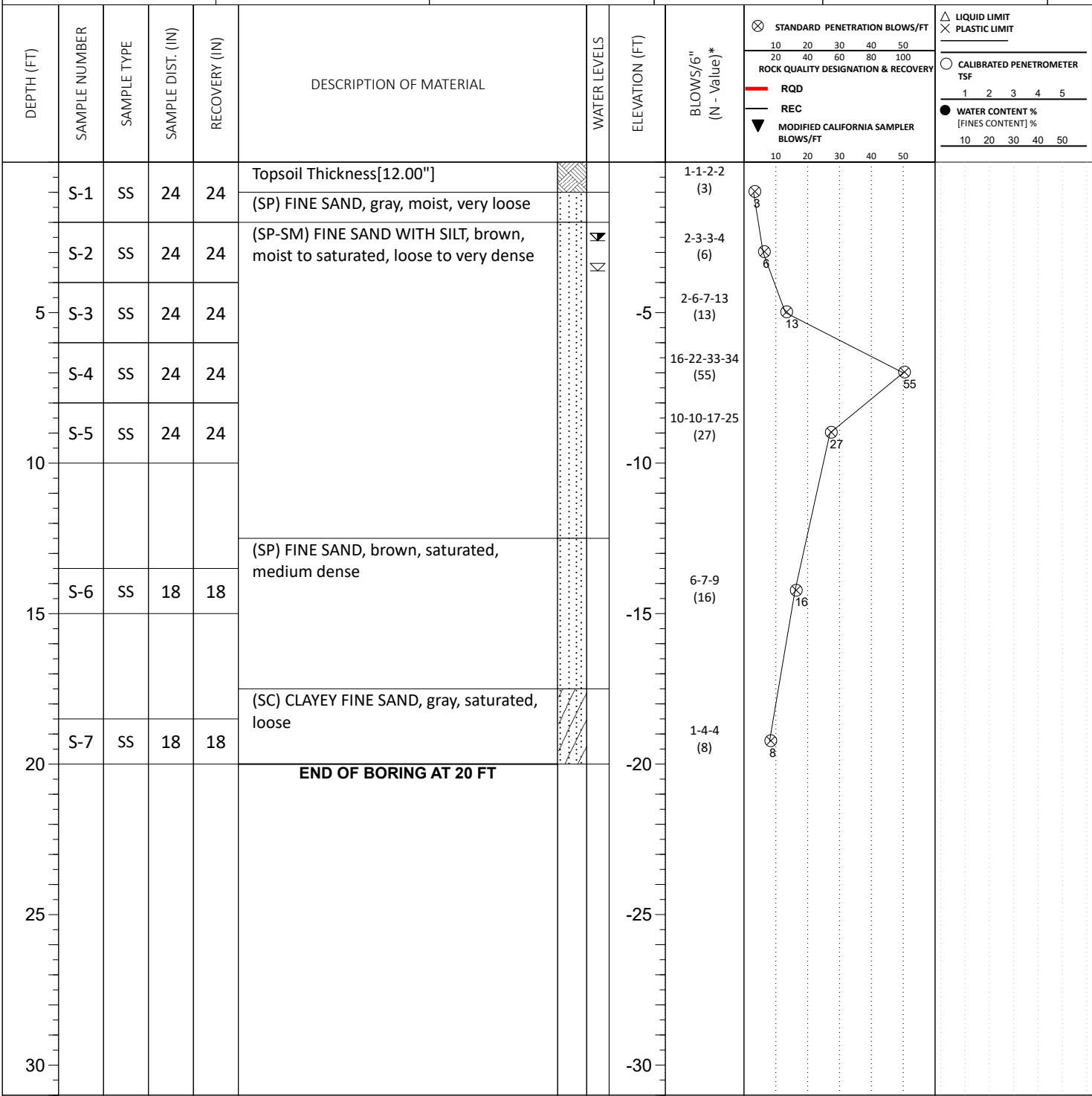


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GEOTECHNICAL BOREHOLE LOG


SITE LOCATION: Simmons Road, Fernandina Beach, Florida, 32034			LOSS OF CIRCULATION
LATITUDE:	LONGITUDE:	STATION:	BOTTOM OF CASING






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GEOTECHNICAL BOREHOLE LOG




CLIENT: Mistral Architectural Metal + Glass Inc.	PROJECT NO.: 35:35446	SHEET: 1 of 1	
PROJECT NAME: Butterfly Trail	HAND AUGER NO.: A-01	SURFACE ELEVATION:	
SITE LOCATION: Simmons Road, Fernandina Beach, Florida, 32034		STATION:	
LATITUDE:	LONGITUDE:		

DEPTH (FT)	WATER LEVELS	ELEVATION (FT)	DESCRIPTION OF MATERIAL	EXCAVATION EFFORT	DCP	SAMPLE NUMBER	FINES CONTENT (%)	MOISTURE CONTENT (%)	
5	 	-5	Gravel Thickness[6.00"]						
			(SP-SM) FINE SAND WITH SILT, dark gray, moist, some shell fragments						S-1
			(SP) FINE SAND, gray, moist to saturated						S-2
			(SP-SM) FINE SAND WITH SILT, dark brown, saturated						S-3
			END OF HAND AUGER AT 6 FT						
10		-10							
15									


REMARKS:



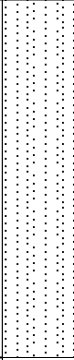
THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDRY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

EXCAVATION EFFORT: E - EASY M - MEDIUM D - DIFFICULT VD - VERY DIFFICULT

 WL (First Encountered) 2.25	 WL (Seasonal High) 1.25	ECS REP:	DATE COMPLETED:	UNITS:	CAVE-IN-DEPTH:
 WL (Completion)			Apr 23 2024	English	

HAND AUGER LOG

CLIENT: Mistral Architectural Metal + Glass Inc.	PROJECT NO.: 35:35446	SHEET: 1 of 1	
PROJECT NAME: Butterfly Trail	HAND AUGER NO.: A-02	SURFACE ELEVATION:	
SITE LOCATION: Simmons Road, Fernandina Beach, Florida, 32034		STATION:	
LATITUDE:	LONGITUDE:		

DEPTH (FT)	WATER LEVELS	ELEVATION (FT)	DESCRIPTION OF MATERIAL	EXCAVATION EFFORT	DCP	SAMPLE NUMBER	FINES CONTENT (%)	MOISTURE CONTENT (%)
			Gravel Thickness[6.00"]					
	▼		(SP-SC) FINE SAND WITH CLAY, dark gray, moist, trace gravel			S-1		
	⊗		(SP) FINE SAND, grayish brown, moist to saturated			S-2		
5		-5				S-3		
			END OF HAND AUGER AT 6 FT					
10		-10						
15								


REMARKS:




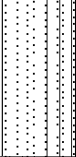
THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDRY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

EXCAVATION EFFORT: E - EASY M - MEDIUM D - DIFFICULT VD - VERY DIFFICULT

⊗ WL (First Encountered) 1.70	▼ WL (Seasonal High) 1.00	ECS REP:	DATE COMPLETED:	UNITS:	CAVE-IN-DEPTH:
▼ WL (Completion)			Apr 23 2024	English	

HAND AUGER LOG

CLIENT: Mistral Architectural Metal + Glass Inc.	PROJECT NO.: 35:35446	SHEET: 1 of 1	
PROJECT NAME: Butterfly Trail	HAND AUGER NO.: A-03	SURFACE ELEVATION:	
SITE LOCATION: Simmons Road, Fernandina Beach, Florida, 32034		STATION:	
LATITUDE:	LONGITUDE:		


DEPTH (FT)	WATER LEVELS	ELEVATION (FT)	DESCRIPTION OF MATERIAL	EXCAVATION EFFORT	DCP	SAMPLE NUMBER	FINES CONTENT (%)	MOISTURE CONTENT (%)
			1/2" ASPHALT WITH 6" LIMEROCK BASE					
			(SP-SM) FINE SAND WITH SILT, gray, moist, trace limerock			S-1		
	▼		(SP-SM) FINE SAND WITH SILT, dark brown, moist to saturated			S-2		
	▽		(SM) SILTY FINE SAND, dark brown, saturated			S-3		
5		-5	END OF HAND AUGER AT 6 FT					
10		-10						
15								



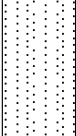
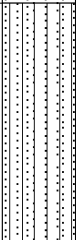
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EXCAVATION EFFORT: E - EASY M - MEDIUM D - DIFFICULT VD - VERY DIFFICULT							
▽ WL (First Encountered) 2.75	▼ WL (Seasonal High) 1.75	ECS REP:	DATE COMPLETED:	UNITS:	CAVE-IN-DEPTH:		
▼ WL (Completion)			Apr 23 2024	English			

HAND AUGER LOG

CLIENT: Mistral Architectural Metal + Glass Inc.	PROJECT NO.: 35:35446	SHEET: 1 of 1	
PROJECT NAME: Butterfly Trail	HAND AUGER NO.: A-04	SURFACE ELEVATION:	
SITE LOCATION: Simmons Road, Fernandina Beach, Florida, 32034		STATION:	
LATITUDE:	LONGITUDE:		

DEPTH (FT)	WATER LEVELS	ELEVATION (FT)	DESCRIPTION OF MATERIAL	EXCAVATION EFFORT	DCP	SAMPLE NUMBER	FINES CONTENT (%)	MOISTURE CONTENT (%)
			1/2" ASPHALT WITH 8" LIMEROCK BASE					
			(SP-SM) FINE SAND WITH SILT, gray, moist, trace limerock			S-1		
			(SP) FINE SAND, gray, moist to saturated			S-2		
	▼							
	▽		(SM) SILTY FINE SAND, dark brown, saturated			S-3		
5		-5						
			END OF HAND AUGER AT 6 FT					
10		-10						
15								

REMARKS:

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDRY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

EXCAVATION EFFORT: E - EASY M - MEDIUM D - DIFFICULT VD - VERY DIFFICULT							
▽ WL (First Encountered) 3.00	▼ WL (Seasonal High) 2.00	ECS REP:	DATE COMPLETED:	UNITS:	CAVE-IN-DEPTH:		
▼ WL (Completion)			Apr 23 2024	English			

HAND AUGER LOG

ENGINEERING PLANS

FOR

**BUTTERFLY TRAIL
SUBDIVISION**

FOR

BUTTERFLY PROJEKT, LLC

BUTTERFLY TRAIL SUBDIVISION

FOR

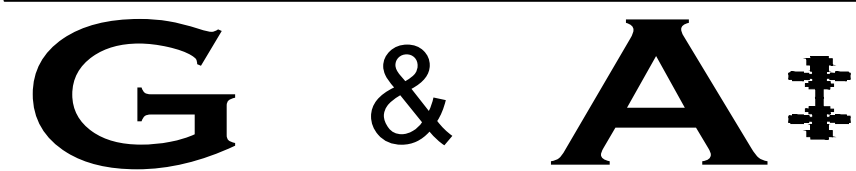
BUTTERFLY PROJEKT, LLC

RELEASED FOR CONSTRUCTION BY

GILLETTE & ASSOCIATES, INC.

CIVIL & ENVIRONMENTAL ENGINEERING
MECHANICAL & STRUCTURAL ENGINEERING
PERMITTING & CONSTRUCTION MANAGEMENT

31 SOUTH 4TH STREET AMELIA ISLAND, FLORIDA 32034
PHONE: 904/261-8819

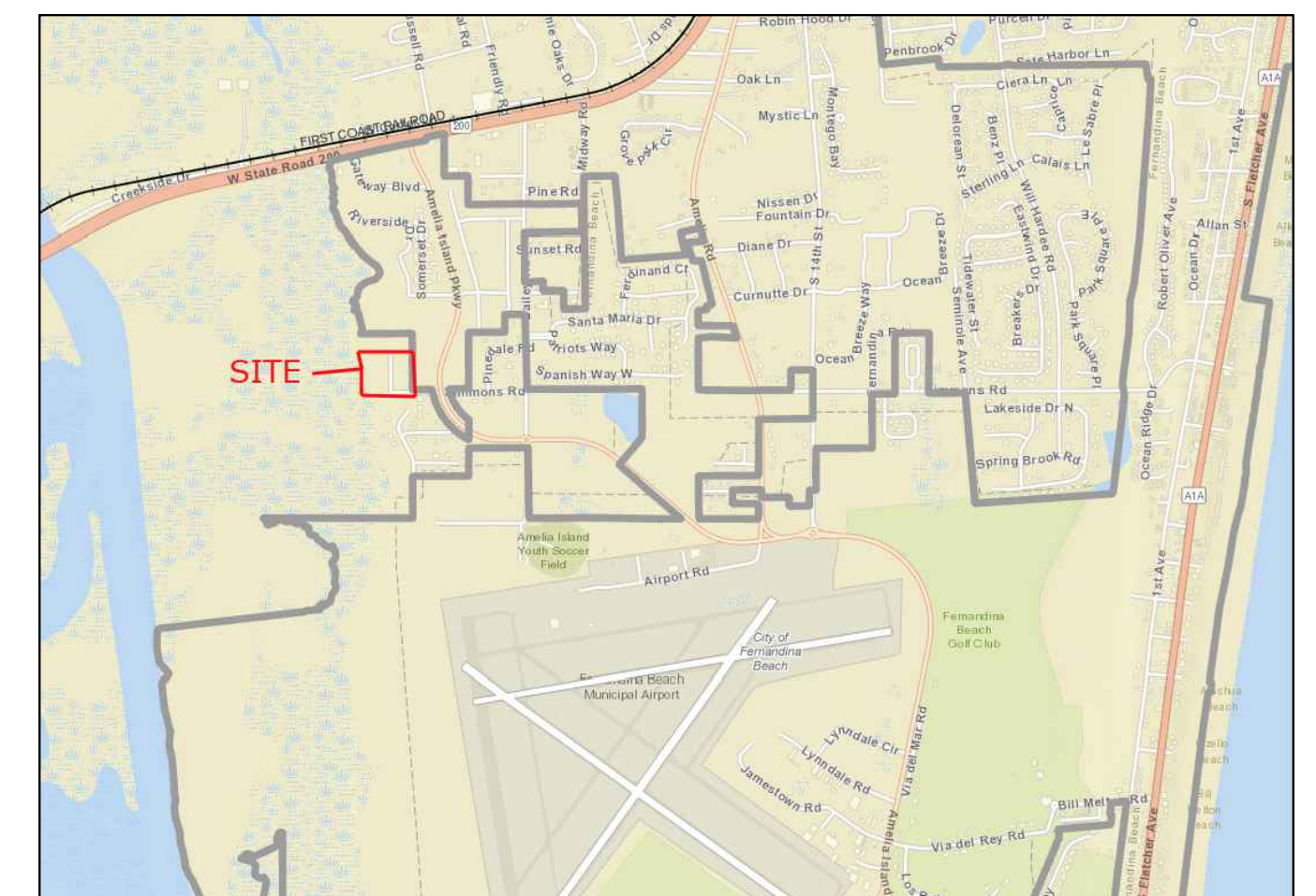


ISSUE DATE: OCTOBER 8, 2025

PERMITTING AGENCIES

CITY OF FERNANDINA BEACH
NASSAU COUNTY, FLORIDA
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
ST. JOHN'S RIVER WATER MANAGEMENT

SITE LOCATION MAP



L				Scale: NONE	Gillette & Associates, Inc. 31 South 4th Street Fernandina Beach, FL 32034	G & A [®]	BUTTERFLY PROJEKT	BUTTERFLY PROJEKT, LLC		REGISTERED DESIGN PROFESSIONAL	ISSUE DATE: 12/8/25
K				Project Mgr: AG	Certificate of Authorization No. 9332	GILLETTE & ASSOCIATES, INC. 31 SOUTH 4TH STREET FERNANDINA BEACH, FL 32034 PHONE: (904) 261-8819	BUTTERFLY TRAIL ROAD FERNANDINA BEACH, FLORIDA	COVER SHEET	Sheet CVR	ASA R. GILLETTE, P.E. FLORIDA P.E. NO. 56177	Page 1 of X
J				Designed by: AG							DO NOT SCALE THIS DRAWING – DIMENSIONS AND NOTES TAKE PREFERENCE. DRAWING IS REDUCED IF LESS THAN 22" x 34"
H				Drawn by: AB/BS							
G				QA/QC: NG							
F											
E											
D											
C											
B	AB	12/8/25	C.O.F.B. TRC – FIRST SUBMITTAL								
A	AB	10/8/25	C.O.F.B. FIRST STEP MEETING								
No.	By	Date	Revision								

SITE / GEOMETRY NOTES	SITE / GEOMETRY NOTES CONT.	SEWER NOTES	INDEX																																																						
<p>1. ALL WORK SHALL BE PERFORMED IN A SAFE MANNER. ALL SAFETY RULES AND GUIDELINES OF O.S.H.A. SHALL BE FOLLOWED. THE CONTRACTOR SHALL BE WHOLLY RESPONSIBLE FOR ANY INJURIES OF HIS EMPLOYEES, AND ANY DAMAGE TO PRIVATE PROPERTY OR PERSONS DURING THE COURSE OF THIS PROJECT. ALL COSTS ASSOCIATED WITH COMPLYING WITH REGULATIONS AND THE FLORIDA TRENCH SAFETY ACT MUST BE INCLUDED IN THE CONTRACTOR'S PRICE FOR PERFORMING THE WORK.</p> <p>2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE JOB SITE PRIOR TO PREPARING THE BID FOR THE PURPOSE OF FAMILIARIZING HIMSELF WITH THE NATURE AND THE EXTENT OF THE WORK AND LOCAL CONDITIONS, EITHER SURFACE OR SUBSURFACE, WHICH MAY AFFECT THE WORK TO BE PERFORMED, AND THE EQUIPMENT, LABOR AND MATERIALS REQUIRED. FAILURE TO DO SO WILL NOT RELIEVE THE CONTRACTOR OF COMPLETE PERFORMANCE UNDER THIS CONTRACT. THE CONTRACTOR IS URGED TO TAKE COLOR PHOTOGRAPHS ALONG THE ROUTE OF THIS PROJECT TO RECORD EXISTING CONDITIONS PRIOR TO CONSTRUCTION, AND TO AID IN RESOLVING POSSIBLE FUTURE COMPLAINTS THAT MAY OCCUR DUE TO CONSTRUCTION OF THE PROJECT. ALL COSTS ASSOCIATED WITH PRELIMINARY INVESTIGATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.</p> <p>3. ALL IMPROVEMENTS SHOWN ARE TO BE WARRANTED BY THE CONTRACTOR TO THE DEVELOPER.</p> <p>4. ELEVATIONS ARE BASED ON NAVD DATUM OF 1988.</p> <p>5. TOPOGRAPHIC AND BOUNDARY INFORMATION WAS PROVIDED BY: MANZIE & DRAKE (902-491-4700)</p> <p>6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY BUILDING, RIGHT-OF-WAY PERMITS NOT PROVIDED AND INSURANCE REQUIRED FOR THE PROJECT.</p> <p>7. THE CONTRACTOR SHALL COORDINATE THE WORK WITHIN COUNTY OR STATE RIGHT-OF-WAY WITH THE PROPER AGENCIES FOR MAINTENANCE OF TRAFFIC AND METHOD OF CONSTRUCTION & REPAIR.</p> <p>8. THE CONTRACTOR SHALL ADVISE THE OWNER'S AUTHORIZED REPRESENTATIVE OF PLANNED WORK SCHEDULE. THE CONTRACTOR SHALL COORDINATE THEIR CONSTRUCTION WITH ALL OTHER CONTRACTORS. IN THE EVENT OF ANY CONFLICT WHATSOEVER, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD, AND THE OWNER PRIOR TO PROCEEDING WITH CONSTRUCTION.</p> <p>9. "AS-BUILT" DRAWINGS - AS-BUILTS ARE REQUIRED TO BE SIGNED AND SEALED BY A FLORIDA REGISTERED LAND SURVEYOR. THEREFORE, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTRACT WITH A LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA FOR THE PREPARATION, FIELD LOCATIONS, CERTIFICATION, AND SUBMITTAL OF AS-BUILT DRAWINGS.</p> <p>10. "AS-BUILT" RECORD DATA AND INFORMATION SHALL BE MAINTAINED BY THE CONTRACTOR. RECORD DRAWINGS SHALL BE SUPPLIED TO THE ENGINEER.</p> <p>11. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF ALL SURVEY AND PROPERTY MONUMENTS. IF A MONUMENT IS DISTURBED, THE CONTRACTOR SHALL CONTRACT WITH THE SURVEYOR OF RECORD FOR REINSTALLATION OF THE MONUMENT.</p> <p>12. ALL DEBRIS RESULTING FROM ALL ACTIVITIES SHALL BE DISPOSED OF OFF-SITE BY CONTRACTOR ON A DAILY BASIS.</p> <p>13. ALL EXCESS SUITABLE AND UNSUITABLE MATERIALS SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR UNLESS DIRECTED OTHERWISE BY THE ENGINEER.</p> <p>14. ALL EXISTING TREES LISTED TO REMAIN SHALL BE PRESERVED AND PROTECTED.</p> <p>15. THE LOCATION OF ALL EXISTING UTILITIES, STRUCTURES, AND IMPROVEMENTS ON THE DRAWINGS ARE BASED ON LIMITED INFORMATION AND MAY NOT HAVE BEEN FIELD VERIFIED. THE LOCATIONS ARE APPROXIMATE. THE CONTRACTOR SHALL NOTIFY RESPECTIVE UTILITY OWNERS AND FIELD VERIFY LOCATIONS OF EXISTING UTILITIES AND</p>	<p>OTHER IMPROVEMENTS PRIOR TO COMMENCING ANY CONSTRUCTION. IF THE LOCATIONS SHOWN ARE CONTRARY TO ACTUAL FIELD LOCATIONS, THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER OF THE DISCREPANCY. THE DISCREPANCY SHOULD BE RESOLVED PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN WORKING IN AREAS NEAR EXISTING UTILITY IMPROVEMENTS AND SHALL BE RESPONSIBLE FOR REPAIRS OR PAYMENTS FOR ALL DAMAGE MADE TO EXISTING UTILITIES OR OTHER IMPROVEMENTS. PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL GRADES, INVERTS, AND TYPE OF MATERIAL OF EXISTING UTILITIES TO WHICH THEY SHALL CONNECT.</p> <p>16. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER ON ALL MATERIALS, FOR REVIEW AND APPROVAL, PRIOR TO PURCHASE OR CONSTRUCTION OF ANY UTILITY OR STRUCTURE.</p> <p>17A. UNSUITABLE MATERIALS UNDER WATER, SEWER, OR STORM PIPE AND/OR STRUCTURES SHALL BE REMOVED AND REPLACED WITH SELECTED BACKFILL COMPACTED TO 98% OF ITS MAXIMUM DENSITY AS DETERMINED BY THE MODIFIED PROCTOR TEST (ASTM D1557).</p> <p>17B. ALL FINISH FLOORS SHOWN ON THE PLANS ARE MINIMUM ELEVATIONS</p> <p>18. GRADES SHOWN ON PLANS ARE EDGE OF PAVEMENT FINISHED GRADES UNLESS OTHERWISE NOTED.</p> <p>19. SHOULD THE SURFACE OR SUBSURFACE CONDITIONS VARY FROM WHAT IS SHOWN ON THE PLANS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER.</p> <p>20. ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE SEEDED AND MULCHED UNLESS OTHERWISE SPECIFICALLY STATED. ALL DISTURBED AREAS WITHIN THE NASSAU COUNTY RIGHT OF WAY SHALL BE COVERED WITH BERMUDA SOD.</p> <p>21. THE CONTRACTOR IS RESPONSIBLE FOR THE CONTROL OF SEDIMENT-LADEN RUNOFF RESULTING FROM STORM EVENTS DURING THE CONSTRUCTION PHASE. EROSION CONTROL FACILITIES SHOULD BE INSTALLED EARLY DURING THE CONSTRUCTION PERIOD SO AS TO PREVENT THE TRANSPORT OF SEDIMENT INTO SURFACE WATERS. RE-VEGETATION AND STABILIZATION OF DISTURBED AREAS SHOULD BE ACCOMPLISHED IMMEDIATELY TO REDUCE THE POTENTIAL FOR FURTHER SOIL EROSION.</p> <p>22. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND COUNTY BEFORE COMMENCING WORK.</p> <p>23. MINIMUM COVER OVER PIPES SHALL BE 36" UNLESS OTHERWISE INDICATED.</p> <p>24. ALL UNDERGROUND UTILITY COMPANIES SHALL BE CONTACTED AT LEAST 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.</p> <p>25. IN ADDITION TO THE SPECIFICATIONS AND DETAILS PROVIDED FOR THIS CONTRACT, THE NASSAU COUNTY STANDARD DETAILS AND SPECIFICATIONS (LATEST REVISION) SHALL ALSO BE USED FOR ANY ITEMS NOT COVERED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN A SET OF STANDARD DETAILS AND SPECIFICATIONS FROM NASSAU COUNTY.</p> <p>26. BACKFILL MATERIAL SHALL BE COMPACTED TO 100% (2%) UNDER EXISTING AND PROPOSED ROADWAYS.</p> <p>27. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN TO BE MADE WITHOUT PRIOR APPROVAL OF THE ENGINEER.</p> <p>28. STATIONING REFERS TO THE CENTERLINE OF THE ROADWAY EXCEPT AS NOTED ON PLANS. WHERE PAVEMENT SPLITS, THE STATIONING FOLLOWS THE INSIDE EDGE OF PAVEMENT UNTIL ROADWAY TRANSITIONS BACK TO THE TYPICAL ROADWAY SECTION</p> <p>29. ALL CONSTRUCTION, MATERIAL, AND WORKMANSHIP ARE TO BE IN ACCORDANCE WITH COUNTY STANDARDS.</p> <p>30. A PRECONSTRUCTION MEETING WITH NASSAU COUNTY ENGINEERING SERVICES CONSTRUCTION INSPECTOR IS REQUIRED (904-530-6225).</p>	<p>1. THE CONTRACTOR SHALL PROVIDE, TO THE ENGINEER OF RECORD, A SCHEDULE OF INVERT ELEVATIONS OF ALL SANITARY MANHOLES PRIOR TO THE PLACEMENT OF THE LIME ROCK BASE COURSE. THIS SCHEDULE TO BE PROVIDED BY THE REGISTERED LAND SURVEYOR SUBMITTING THE "AS-BUILT" DRAWINGS FOR THIS PROJECT.</p> <p>2. SANITARY SEWER SERVICES SHALL BE 6" PVC WITH A MINIMUM SLOPE OF 0.006 FEET PER FOOT AND SHALL BE TERMINATED AT THE RIGHT-OF-WAY LINE WITH A DEPTH OF 24" TO 48" FROM THE FINAL FINISHED GRADE OF THE DEVELOPED LOTS. DEPTHS GREATER THAN 48" FROM FINAL FINISHED GRADE SHALL BE READJUSTED BY THE DEVELOPER AT HIS COST.</p> <p>3. GRAVITY SEWER TO BE CLEANED & TV TESTED BY DEVELOPER AT DEVELOPER'S EXPENSE</p> <p>4. ALL MANHOLE FRAMES AND COVERS TO BE ADJUSTED TO FINAL FINISHED GRADE.</p> <p>5. A SEPARATE SEWER SERVICE (6" MIN.) SHALL BE PROVIDED TO THE RIGHT-OF-WAY FOR EACH LOT BEING SERVED. AN "S" SHALL BE ETCHED INTO THE CURB DIRECTLY OVER EACH SERVICE LINE OR IN THE STREET SIDE OF A SIDEWALK IN LINE WITH THE CLEANOUT.</p> <p>6. GRAVITY SEWER TO BE GREEN IN COLOR</p> <p>7. NEW GRAVITY SEWER SYSTEM SHALL BE PLUGGED AT NEAREST EXISTING DOWNSTREAM MANHOLE AND SHALL NOT BE REMOVED WITHOUT AUTHORIZATION FROM THE UTILITY COMPANY. EXISTING MANHOLES TO BE COREBORED AND ARRANGEMENTS MADE TO BE REFURBISHED WITH COMPATIBLE MATERIALS IF THE EXISTING MANHOLE IS ALLOWED TO BE USED.</p> <p>8. FINISHED FLOOR ELEVATIONS SHALL BE GREATER (HIGHER) THAN THE ELEVATION OF THE MANHOLE NEAREST THE SERVICE LATERAL IN ORDER TO AVOID A POTENTIAL BACKUP OF SEWERAGE IN THE HOUSE OR BUILDING.</p> <p>9. ALL GRAVITY SEWER PIPE TO A 10 FOOT DEPTH OF COVER SHALL BE SDR-26 PVC PIPE (MINIMUM). GRAVITY SEWER PIPE WITH COVER OF 15 FEET (AND IN EASEMENTS) AND GREATER SHALL BE C900 - DR18. JOINT SHALL BE OF THE BELL AND SPIGOT TYPE AND MEET THE REQUIREMENTS OF THE PIPE REFERRED BEING USED.</p> <p>10. WHEN A PROPERTY LINE CAN NOT BE DEFINED, THE SEWER CLEANOUT SHALL BE PLACED IN AN UNPAVED AREA AT A DISTANCE NO GREATER THAN 30 FEET FROM THE SEWER MAIN.</p> <p>13. SEWER PLUGS USED DURING THE CONSTRUCTION OR CONNECTION TO A SYSTEM SHALL HAVE THE CONTRACTOR'S NAME PERMANENTLY STAMPED.</p> <p>14. THE MANHOLE LINER SHALL BE SPECTRA SHIELD OR APPROVED EQUIVALENT.</p> <p>15. IN ACCORDANCE WITH THE DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) REQUIREMENTS, LEAKAGE TESTING SHALL BE PERFORMED ON ALL SEGMENTS OF THE SEWER SYSTEM. TESTING MAY INCLUDE APPROPRIATE WATER OR LOW PRESSURE AIR TESTING. TEST METHODS SHALL TAKE INTO CONSIDERATION THE RANGE IN GROUNDWATER ELEVATIONS DURING THE TEST AND ANTICIPATED DURING THE DESIGNED LIFE OF THE SEWER. NO LEAKAGE ALLOWED IN SYSTEM.</p> <p>16. COORDINATE ALL UTILITY WORK W/THE CITY OF FERNANDINA BEACH, ANDRE DESILET, UTILITY DIRECTOR</p>	<table border="1"> <thead> <tr> <th>SHEET</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr><td>CVR</td><td>COVER SHEET</td></tr> <tr><td>IN-1</td><td>INDEX SHEET</td></tr> <tr><td>IN-2</td><td>NASSAU COUNTY STANDARD NOTES</td></tr> <tr><td>PRE-1</td><td>PREDEVELOPED ON-SITE PLAN</td></tr> <tr><td>PRE-2</td><td>PREDEVELOPED OFF-SITE PLAN</td></tr> <tr><td>GE-1</td><td>GEOMETRY PLAN</td></tr> <tr><td>GE-2</td><td>GEOMETRY PLAN</td></tr> <tr><td>DR-1</td><td>DRAINAGE PLAN</td></tr> <tr><td>DR-2</td><td>DRAINAGE PLAN</td></tr> <tr><td>UT-1</td><td>UTILITY PLAN</td></tr> <tr><td>UT-2</td><td>UTILITY PLAN</td></tr> <tr><td>UT-3</td><td>OFFSITE UTILITY PLAN</td></tr> <tr><td>PP-1</td><td>PLAN AND PROFILE</td></tr> <tr><td>PP-2</td><td>PLAN AND PROFILE</td></tr> <tr><td>LS-1</td><td>ONSITE TREE REMOVAL PLAN</td></tr> <tr><td>LS-2</td><td>ONSITE TREE REMOVAL PLAN</td></tr> <tr><td>LS-3</td><td>ONSITE TREE REMOVAL PLAN</td></tr> <tr><td>TM-1</td><td>TREE MITIGATION TABLES</td></tr> <tr><td>TM-2</td><td>ONSITE TREE MITIGATION PLANS</td></tr> <tr><td>TM-3</td><td>WT TREE MITIGATION PLANS</td></tr> <tr><td>TM-4</td><td>WT TREE MITIGATION PLANS</td></tr> <tr><td>TM-5</td><td>OFFSITE TREE MITIGATION PLANS</td></tr> <tr><td>DT-1</td><td>MISCELLANEOUS DETAILS</td></tr> <tr><td>DT-2</td><td>MISCELLANEOUS DETAILS</td></tr> <tr><td>DT-3</td><td>MISCELLANEOUS DETAILS</td></tr> <tr><td>DT-4</td><td>MISCELLANEOUS DETAILS</td></tr> </tbody> </table>	SHEET	DESCRIPTION	CVR	COVER SHEET	IN-1	INDEX SHEET	IN-2	NASSAU COUNTY STANDARD NOTES	PRE-1	PREDEVELOPED ON-SITE PLAN	PRE-2	PREDEVELOPED OFF-SITE PLAN	GE-1	GEOMETRY PLAN	GE-2	GEOMETRY PLAN	DR-1	DRAINAGE PLAN	DR-2	DRAINAGE PLAN	UT-1	UTILITY PLAN	UT-2	UTILITY PLAN	UT-3	OFFSITE UTILITY PLAN	PP-1	PLAN AND PROFILE	PP-2	PLAN AND PROFILE	LS-1	ONSITE TREE REMOVAL PLAN	LS-2	ONSITE TREE REMOVAL PLAN	LS-3	ONSITE TREE REMOVAL PLAN	TM-1	TREE MITIGATION TABLES	TM-2	ONSITE TREE MITIGATION PLANS	TM-3	WT TREE MITIGATION PLANS	TM-4	WT TREE MITIGATION PLANS	TM-5	OFFSITE TREE MITIGATION PLANS	DT-1	MISCELLANEOUS DETAILS	DT-2	MISCELLANEOUS DETAILS	DT-3	MISCELLANEOUS DETAILS	DT-4	MISCELLANEOUS DETAILS
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<p style="text-align: center;">WATER NOTES</p> <p>1. ALL WATER & SEWER CONSTRUCTION SHALL BE ACCOMPLISHED BY AN UNDERGROUND UTILITY CONTRACTOR LICENSED UNDER THE PROVISIONS OF CHAPTER 489 FLORIDA STATUTES.</p> <p>2. WHEN DEWATERING CAPACITY REQUIRES A PERMIT (CUP), IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THE PERMIT THROUGH THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT.</p> <p>3. WATER MAINS SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED SANITARY HAZARD. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE. WHERE PARALLEL WATER AND SEWER MAINS HAVE LESS THAN 10 FOOT HORIZONTAL SEPARATION, 20 FOOT LENGTHS OF C900 (DR18) WATER QUALITY PIPE SHALL BE USED WITH THE JOINTS STAGGERED AT 10 FOOT INTERVALS. THE PIPES SHALL BE PLACED IN SEPARATE TRENCHES WITH THE WATER MAIN AT LEAST 18 INCHES ABOVE THE SEWER.</p> <p>4. WATER MAINS CROSSING SANITARY HAZARDS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE SEWER MAIN. WHERE WATER AND SEWER MAINS CROSS WITH BETWEEN 18 INCHES AND 6 INCHES OF VERTICAL CLEARANCE, A 20 FOOT SECTION OF C900 (DR18) WATER QUALITY PIPE SHALL BE CENTERED ON THE POINT OF THE CROSSING. THE CONTRACTOR SHALL FIELD VERIFY THE VERTICAL SEPARATION. THE MINIMUM SEPARATION BETWEEN WATER AND SEWER PIPES IS TO BE 6 INCHES OUTSIDE DIAMETER TO OUTSIDE DIAMETER.</p> <p>5. NO WATER MAIN PIPE SHALL PASS THROUGH OR COME IN CONTACT WITH ANY PART OF A SEWER MANHOLE.</p> <p>6. TRACER WIRE SHALL BE PROVIDED ON ALL WATER MAINS AND FORCE MAINS. TRACER WIRE SHALL BE #10 UF SOLID COPPER WIRE, COATED, AND SUITABLE FOR BURIAL. COATING SHALL BE BLUE FOR WATER AND GREEN FOR SEWER MAIN CONNECTIONS. WIRE SHALL BE ATTACHED DIRECTLY TO TOP OF PIPE AND BROUGHT INTO EACH VALVE BOX AND COILED TO ALLOW FOR EASY ACCESS AND EXTENSION ABOVE FINISHED GRADE FOR ATTACHMENT OF LOCATING EQUIPMENT.</p> <p>7. ALL PIPE LENGTHS ARE APPROXIMATE DIMENSIONS, ALL DRAINAGE STRUCTURES SHALL BE CONSTRUCTED TO CONFORM WITH TYPICAL SECTIONS AND DETAILS AS SHOWN ON THE MISCELLANEOUS DETAILS SHEET AND IN ACCORDANCE WITH THE SPECIFICATIONS.</p> <p>8. WATER MAINS TO HAVE AT MINIMUM 12" OF VERTICAL CLEARANCE FROM FORCE MAINS.</p> <p>9. ALL UNDERGROUND UTILITIES MUST BE INSTALLED PRIOR TO PREPARATION OF SUBGRADE FOR PAVEMENT.</p> <p>10. COORDINATE ALL UTILITY WORK W/THE CITY OF FERNANDINA BEACH, ANDRE DESILET, UTILITY DIRECTOR</p>		<p style="text-align: center;">LEGEND</p> <table border="0"> <tr> <td></td> <td>EXISTING VALVE</td> <td></td> <td>PROPOSED SPOT ELEVATION</td> </tr> <tr> <td></td> <td>EXISTING WATER LINE</td> <td></td> <td>PROPOSED WATER LINE</td> </tr> <tr> <td></td> <td>EXISTING FIRE HYDRANT</td> <td></td> <td>PROPOSED SANITARY SEWER</td> </tr> <tr> <td></td> <td>EXISTING PROPERTY LINE</td> <td></td> <td>PROPOSED FIRE HYDRANT</td> </tr> <tr> <td></td> <td></td> <td></td> <td>PROPOSED LOT LINE</td> </tr> </table>		EXISTING VALVE		PROPOSED SPOT ELEVATION		EXISTING WATER LINE		PROPOSED WATER LINE		EXISTING FIRE HYDRANT		PROPOSED SANITARY SEWER		EXISTING PROPERTY LINE		PROPOSED FIRE HYDRANT				PROPOSED LOT LINE	<p style="text-align: center;">FIRE NOTES</p> <p>1. WHERE UNDERGROUND WATER MAINS AND HYDRANTS ARE TO BE PROVIDED, THEY SHALL BE INSTALLED, COMPLETED, AND IN SERVICE PRIOR TO COMMENCING CONSTRUCTION WORK ON ANY STRUCTURE. (NFPA 1, 16.4.3.1.3, 2021 EDITION)</p> <p>2. CLEARANCES OF SEVEN AND ONE HALF FEET (7 FT-6 IN.) IN FRONT OF AND TO THE SIDES OF THE FIRE HYDRANT, WITH A FOUR FOOT CLEARANCE TO THE REAR OF THE HYDRANT. (NFPA 1, 18.3.4.1, 2021)</p> <p>3. NEW FIRE HYDRANT(S) SHALL BE INSTALLED SO THAT POSITIONED NOT MORE THAN 7 FEET 6 INCHES AWAY FROM CURB OR BERM OF THE ROADWAY.</p>																																		
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ALL PERMITTING ENTITIES

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No.	By	Date	Revision

Scale:	NONE
Project Mgr:	AG
Designed by:	AG
Drawn by:	AB/BS
QA/QC:	NG

Gillette & Associates, Inc.
31 South 4th Street
Fernandina Beach, FL 32034

Certificate of Authorization No. 9332

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GILLETTE & ASSOCIATES, INC
31 SOUTH 4TH STREET
FERNANDINA BEACH, FL 32034
PHONE: (904) 261-8819

BUTTERFLY PROJEKT

BUTTERFLY TRAIL ROAD
FERNANDINA BEACH, FLORIDA

BUTTERFLY PROJEKT, LLC

INDEX SHEET

REGISTERED DESIGN PROFESSIONAL	ISSUE DATE: 12/8/25
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ASA R. GILLETTE, P.E. FLORIDA P.E. NO. 56177	Project No. XX-XX-XX

Nassau County Development Review General Notes:

1. Engineering Plans approval does not constitute permission to violate any adopted Federal, State, or Local law, code, or ordinance.
2. All work within the public streets and right-of-ways shall conform to Nassau County Land Development Codes (LDC), FDOT Standard Indices, Florida Greenbook, Nassau County Roadway and Drainage Standards, and Nassau County Standard Details as necessary. For any discrepancy between standards, the most stringent shall prevail.
3. Per Nassau County Roadway and Drainage Standards, Ordinance 99-17 Section 6.2.4, site shall be constructed per approved construction drawings. Any substantial deviation shall be concurrently reviewed by Engineer of Record and Nassau County Development Review Committee prior to field changes.
4. A pre-construction meeting with Nassau County Engineering Services Construction Inspector is required. Attendees shall be Nassau County, Engineer of Record, Contractor, Testing firm, Paving firm, and utility companies per Nassau County Ordinance 99-17 Section 7.2.3. Nassau County may cancel pre-construction meeting if attendee list is inadequate. Nassau County Engineering Services can be reached at 904-530-6225.
5. The contractor shall schedule and coordinate all work with the appropriate Nassau County Construction Inspector assigned to the project per Nassau County Ordinance 99-17 Section 7.2.
6. All work shall be performed in a safe manner. All safety rules and guidelines of O.S.H.A. shall be followed. The contractor shall be wholly responsible for any injuries to his employees and any damage to private property or persons during the course of this project.
7. Per Nassau County Roadway and Drainage Standards, Ordinance 99-17 Section 11.8.1, any disturbed areas within Nassau County Right-of-Way shall be sodded.
8. Per Nassau County Roadway and Drainage Standards, Ordinance 99-17 Section 7.4.1, at the time of final inspection, grassing shall be a minimum of seventy percent coverage and fully established and/or sodding to be one hundred percent coverage and stabilized.
9. Engineer of Record approved shop drawings shall be provided to Nassau County Construction Inspector a minimum of one week before beginning structure installation.
10. Parking at mail kiosks is required per Nassau County Roadway and Drainage Standards, Ordinance 99-17 Section 8.4. Mail kiosk locations are subject to USPS Postmaster approval.
11. The developer's contractor is the single responsible party for the proper implementation of an Erosion Protection Sediment Control (EPSC) within each lot or construction site. This includes the responsibility for the actions/inactions of employees, subcontractors, and/or suppliers.
12. Sidewalks to be provided and built in accordance Florida Building Code. All proposed sidewalks shall meet ADA requirements.
13. The Contractor shall comply with current Florida accessibility standards for all work on this project.
14. Per Ordinance 99-17 Section 8.5.1, minimum cover for water lines and force mains under pavement shall 42" and 36" in green areas.
15. All water, sewer, and storm water construction within Nassau County ROW shall be accomplished by an underground utility contractor licensed under the provisions of Chapter 409 of the Florida Statutes.
16. No work shall be permitted between the hours of 7:00 PM - 7:00AM without prior approval from Nassau County Engineering Services.
17. All trees required to be protected shall be flagged for protection prior to clearing.
18. All grading and placement of compacted fill shall be in accordance with the latest Nassau County Specifications.
19. Any damages (sidewalk, curb, asphalt, ditch grading, et cetera) within Public Right-of-Way shall be repaired or replaced in accordance with Nassau County Specifications. Proposed repair method shall be approved by Nassau County Engineering Services.
20. Any asphalt millings from Nassau County ROW shall be delivered to the Road Department Laydown yard located on Gene Lasserre Boulevard or Pea Farm Road. Please contact the Road Department at (904) 530-6175.
21. Per Nassau County Ordinance 99-17 Section 7.4.2 and 7.4.4, as-built drawings shall be submitted to Nassau County before a final inspection can be scheduled. As-builts submittals will be in accordance with Nassau County as-built requirement checklist. As-built drawings shall be certified by required licensed surveyor and approved by Engineer of Record.

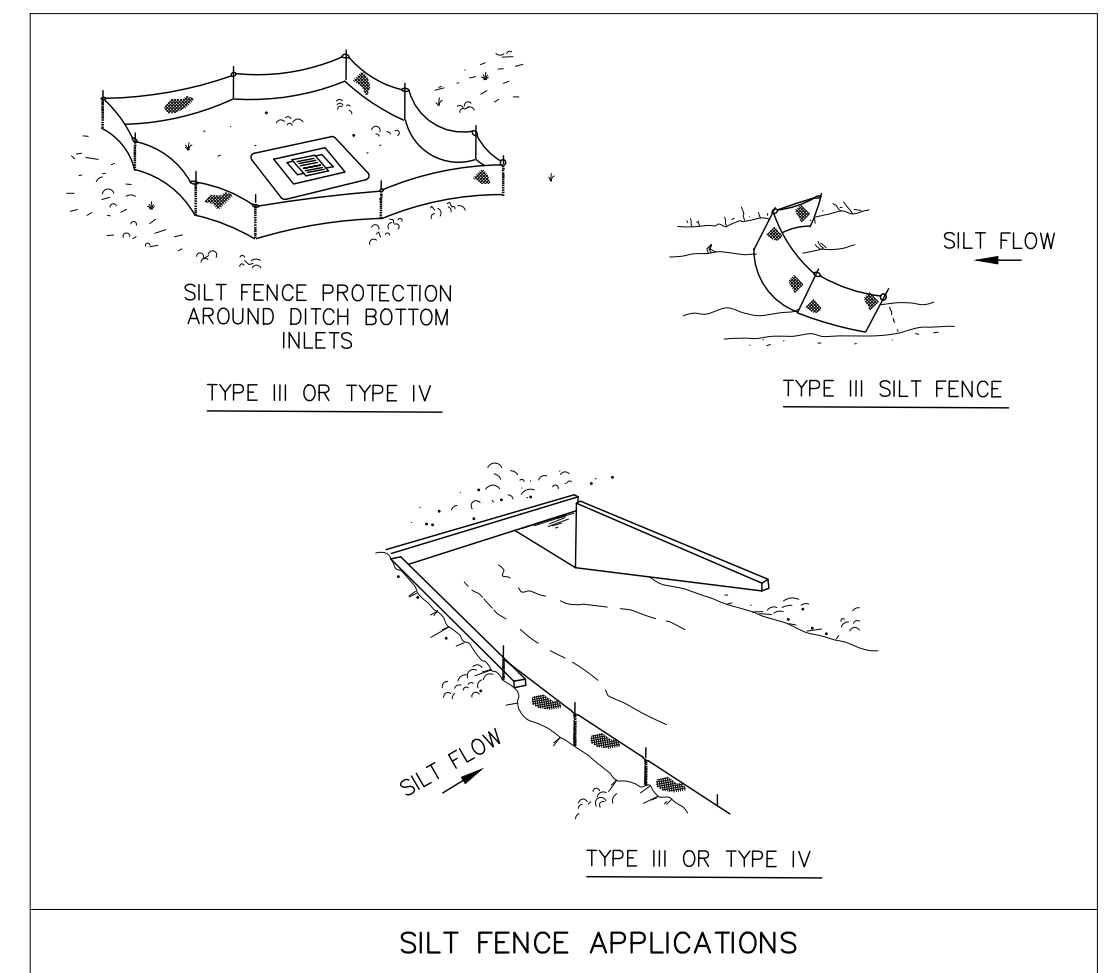
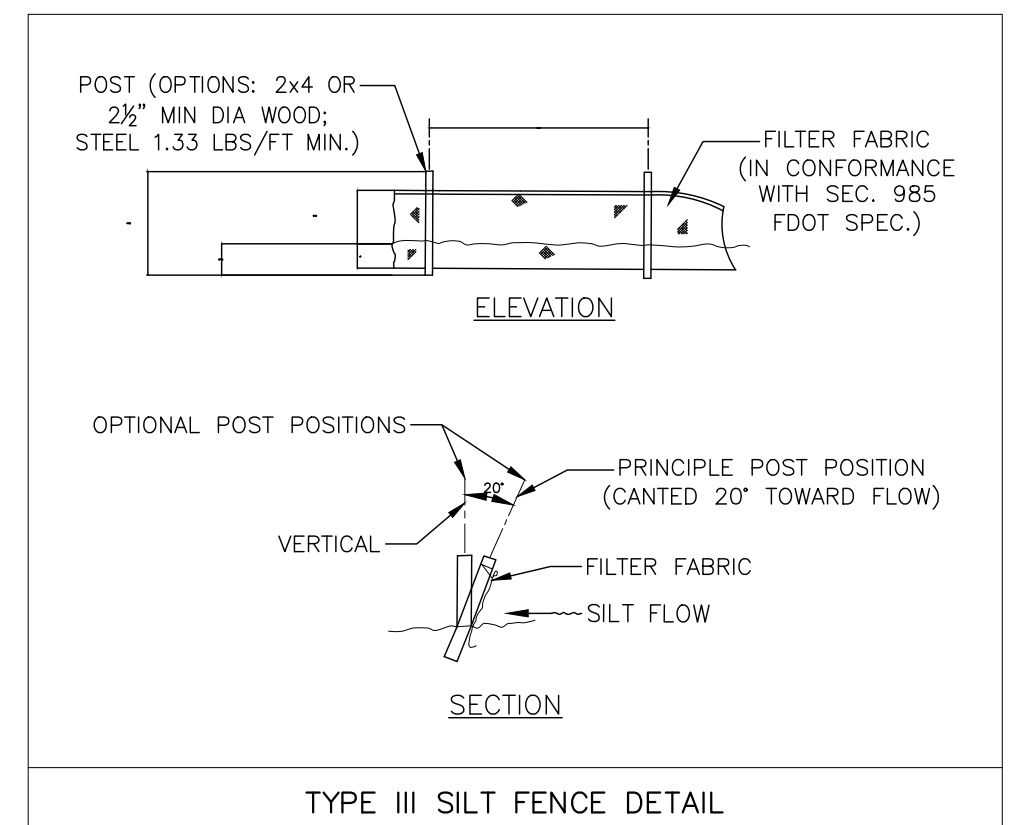
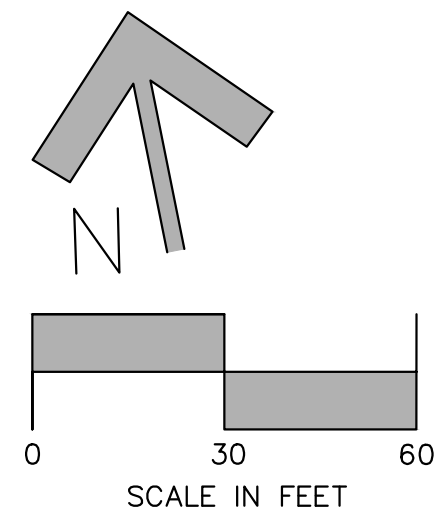
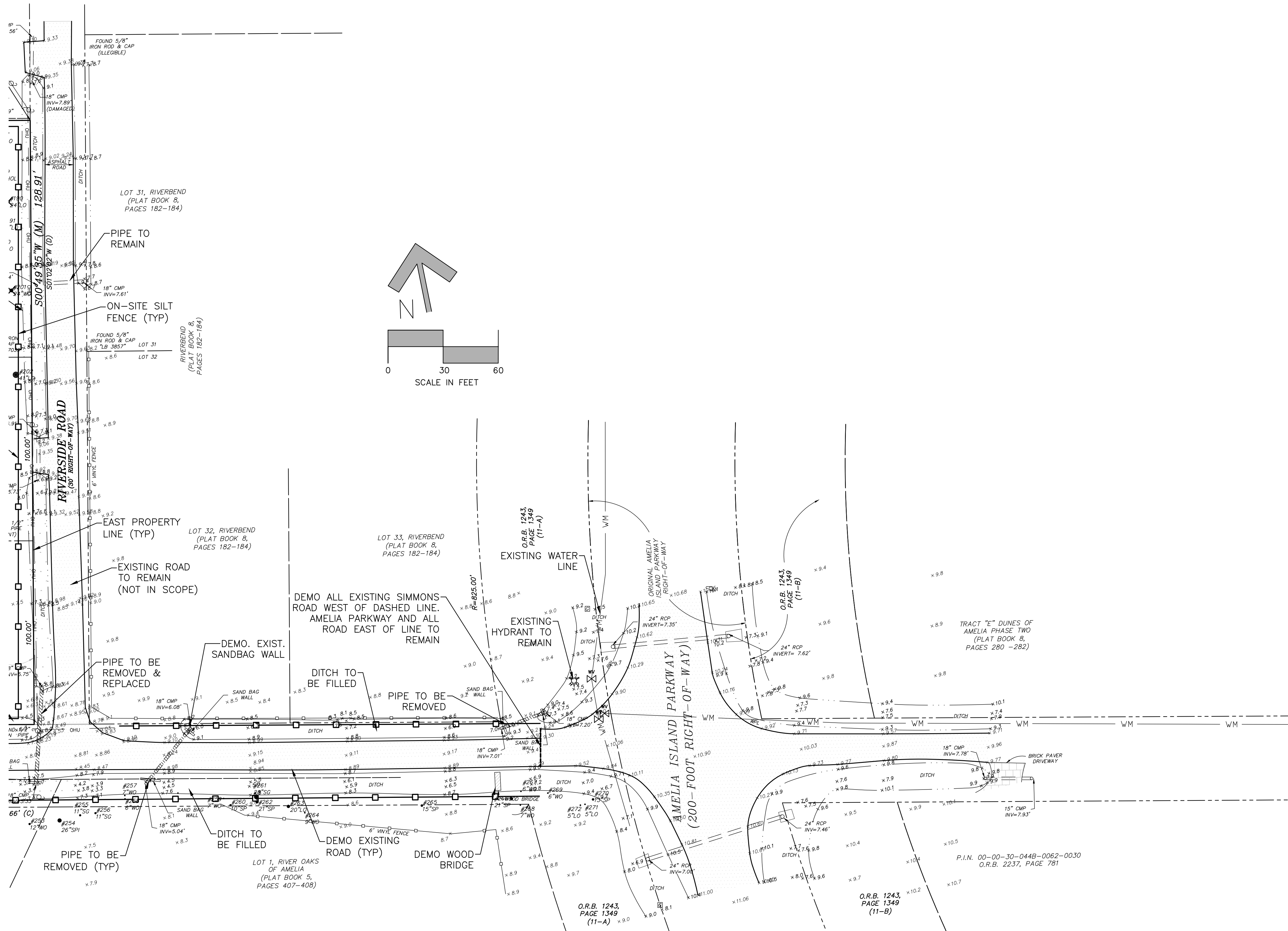
Nassau County Stormwater Drainage Notes:

1. All stormwater drainage facilities within Public Right-of-Way and paved areas, including Nassau County Right-of-Way, turn lanes, residential roadways, drive aisles for multi-family developments, and major drive aisles for commercial developments shall be laser profiled per FDOT Section 430.
2. A builder cannot modify the County's storm water management system including the pipes, inlets, area drains, ditches and related elements typically within the street or within a drainage easement without the prior written approval of the County Engineer or designee.
3. Drainage easements and ditches should remain free of stockpiled soil, sediment, mud, construction materials/waste, et cetera at all times. Positive stormwater flow must be maintained throughout construction.
4. The contractor shall temporarily or permanently stabilize bare soil areas and soil stockpiles when the area is inactive for fourteen days or more or has reached finished grade.
5. Per Ordinance 99-17 Section 11.11.5.4, all gravity flow pipe installations shall have a soil tight joint performance unless specific site factors warrant watertight joint performance.
6. Per Ordinance 99-17 Section 10.6.5.1, immediately install additional Erosion Protection Sediment Control measures if sediment is leaving your site. Failure to contain sediment to your site may result in delayed inspections, notices of violation, citations, fines, penalties, and/or stop work orders.
7. Per 99-17 Section 10.1.2.a-e, stormwater management for a project shall not have adverse effects on adjacent properties, downstream structures, or rights of other landowners.

Nassau County Paving Notes:

1. Per Nassau County Roadway and Drainage Standards, Ordinance 99-17 Section 12.2 and 12.4, a construction bond and 26-month maintenance bond will be required for all work within Nassau County Right-of-Way.
2. A pre-pave meeting is required prior to any paving operations within Nassau County ROW, residential subdivisions, or multi-family developments.
3. Approved mix designs shall be provided to Nassau County Construction Inspector 48 hours prior to pre-pave meeting or placement of concrete.
4. Contractor is required to have a Certified QC Asphalt Level II Technician during any asphalt operations within Nassau County ROW, residential subdivision, or multi-family developments.
5. All bases shall be primed in accordance with Ordinance 99-17 Section 11.5.2.3, Nassau County Standard Details, and FDOT Standard Specifications.
6. Signage and pavement markings shall be in compliance with Nassau County Standards, Manual on Uniform Traffic Control Devices (MUTCD), and FDOT Standard Plans.
7. Maintenance of Traffic (MOT) shall be in compliance with FDOT Standard Index 600 Series.
8. All work, materials, and testing performed within Nassau County right-of-way and single-family/multi-family developments shall be in accordance with the current revision of Nassau County's Ordinance 99-17 and all current Nassau County Standard Details.
9. Per Ordinance 99-17 Section 11.9.2, all pavement markings within Nassau County ROW shall be lead free thermoplastic meeting Nassau County and FDOT Standard Specification Latest Edition.
10. Removing pavement markings within Nassau County ROW shall be:
 - a. Grinding or hydro-blasting on weathered asphalt surfaces.
 - b. Hydro-blasting only on new asphalt surfaces.
 - c. Paint Blackout is prohibited.
11. Per Ordinance 99-17 Section 8.5.5, any damage to pavement resulting from construction or pavement marking removal within Public ROW not planned as part of the project shall be milled and overlaid for entire width of roadway and length of damage plus 50' in each direction.
12. All underground utilities, or appropriate conduit sleeves, that are to be installed under pavement must be installed prior to preparation of the subgrade for pavement.
13. Single Vertical Joints in roadway construction shall be avoided in Nassau County Right-of-Way using Nassau County Standard Detail #26.
14. All drainage structures shall have traffic bearing grates that meet or exceed the rating for the facilities expected traffic.
15. All concrete shall be a minimum of 3000 psi within Public Right-of-Way.

L				Scale: NONE	Gillette & Associates, Inc. 31 South 4th Street Fernandina Beach, FL 32034	 GILLETTE & ASSOCIATES, INC. 31 SOUTH 4TH STREET FERNANDINA BEACH, FL 32034 PHONE: (904) 261-8819	BUTTERFLY PROJEKT BUTTERFLY TRAIL ROAD FERNANDINA BEACH, FLORIDA	BUTTERFLY PROJEKT, LLC	NASSAU COUNTY OFFSITE NOTES	REGISTERED DESIGN PROFESSIONAL	ISSUE DATE: 12/8/25
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J				Designed by: AG	DO NOT SCALE THIS DRAWING - DIMENSIONS AND NOTES TAKE PREFERENCE. DRAWING IS REDUCED IF LESS THAN 22" x 34"						Page 3 of X
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FERNANDINA BEACH, FLORIDA

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PREDEVELOPED
OFF-SITE PLAN

REGISTERED DESIGN PROFESSIONAL	ISSUE DATE: 12/8/25
ASA R. GILLETTE, P.E. FLORIDA P.E. NO. 56177	Sheet PRE-2
	Page 5 of X
	Project No. XX-XX-XX

PROPERTY INFORMATION:

- PID#: 00-00-30-044B-0068-0010
00-00-30-044B-0068-0020
00-00-30-044B-0068-0030
00-00-30-044B-0068-0040
00-00-30-0560-00RW-0010
- TOTAL PARCEL(S) ACREAGE: 4.37 AC. (190,358 SF)
- LOCATION: FERNANDINA BEACH, FL
- FLOOD ZONE: AE-8, X-SHADED
- ZONING: R-1
- FUTURE LAND USE: LOW DENSITY RESIDENTIAL
- PROPOSED USE: SINGLE-FAMILY RESIDENTIAL

DEVELOPMENT REQUIREMENTS:

- MAX IMPERVIOUS AREA: 60%
- MAX F.A.R.: 50%
- MAX BUILDING HEIGHT: 35-FT
- DENSITY ALLOWED: 4 UNITS/ACRE
- OFFSITE R.O.W. FOR DENSITY: ____
- CALC. DENSITY: (4.37AC+____AC)*(4D.U./AC.)=____D.U.

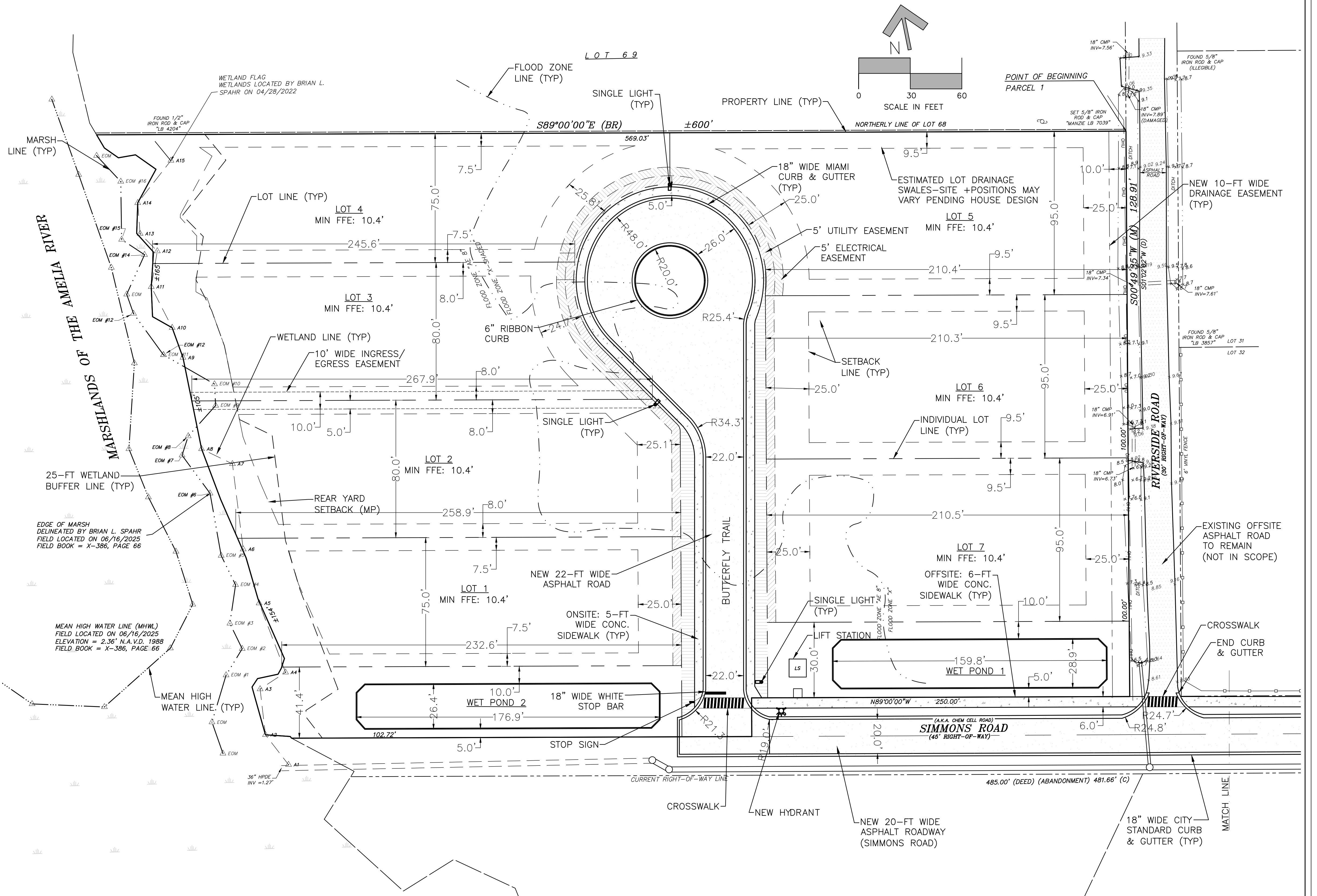
SETBACK REQUIREMENTS:

- FRONT: 25 FEET
- REAR: 25 FEET
- SIDES: 10% OF LOT WIDTH

UTILITIES:

- WATER: CITY OF FERNANDINA BEACH
- SEWER: CITY OF FERNANDINA BEACH
- POWER: F.P.U.

NOTE: SEE GE-2 FOR LOT TABLE.



HATCH LEGEND	
HATCH	DESCRIPTION
[Hatch Pattern]	SIDEWALK
[Hatch Pattern]	ELECTRICAL EASEMENT
[Hatch Pattern]	ROADWAY
[Hatch Pattern]	UTILITY EASEMENT
[Hatch Pattern]	EXISTING OFFSITE ROAD

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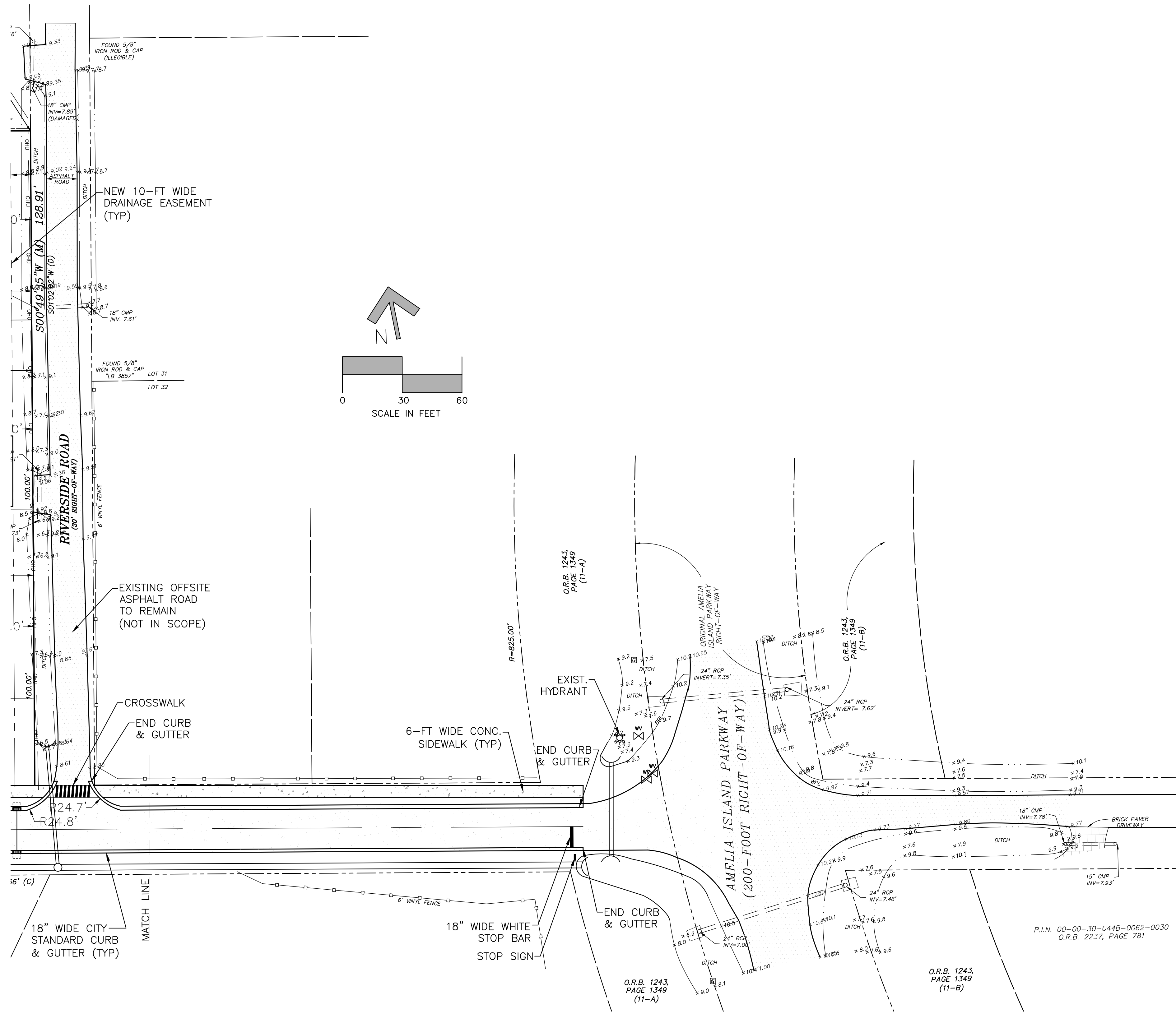
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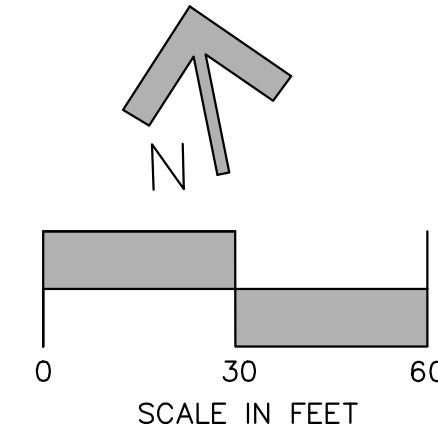
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GEOMETRY PLAN

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	Project No. XX-XX-XX



LOT TABLE									
LOT #	LOT WIDTH	LOT LENGTH	LOT AREA (SF)	MAX IMPERVIOUS AREA (%)	MAX IMPERVIOUS AREA (SF)	EST. IMP. AREA (SF)	EST. IMP. AREA (%)	MAX FLOOR AREA RATIO (%)	MAX ALLOWABLE FLOOR AREA (SF)
1	77.5'	232.6'	18,981	60.0%	11,389	6,000	31.6%	50.0%	9,491
2	77.5'	258.9'	20,979	60.0%	12,587	6,000	28.6%	50.0%	10,490
3	77.5'	267.9'	19,308	60.0%	11,585	6,000	31.1%	50.0%	9,654
4	77.5'	245.6'	21,937	60.0%	13,162	6,000	27.4%	50.0%	10,969
5	99.6'	210.4'	23,184	60.0%	13,910	6,000	25.9%	50.0%	11,592
6	99.6'	210.5'	21,016	60.0%	12,610	6,000	28.5%	50.0%	10,508
7	99.6'	210.5'	21,026	60.0%	12,616	6,000	28.5%	50.0%	10,513



L			
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C			
B	AB	12/8/25	C.O.F.B. TRC - FIRST SUBMITTAL
A	AB	10/8/25	C.O.F.B. FIRST STEP MEETING.
No.	By	Date	Revision

Scale: 1:30
 Project Mgr: AG
 Designed by: AG
 Drawn by: AB/BS
 QA/QC: NG

Gillette & Associates, Inc.
 31 South 4th Street
 Fernandina Beach, FL 32034
 Certificate of Authorization No. 9332
 DO NOT SCALE THIS DRAWING - DIMENSIONS AND NOTES TAKE PREFERENCE. DRAWING IS REDUCED IF LESS THAN 22" x 34"

G & A
 GILLETTE & ASSOCIATES, INC.
 31 SOUTH 4TH STREET
 FERNANDINA BEACH, FL 32034
 PHONE: (904) 261-8819

BUTTERFLY PROJEKT
 BUTTERFLY TRAIL ROAD
 FERNANDINA BEACH, FLORIDA

BUTTERFLY PROJEKT, LLC

GEOMETRY PLAN

REGISTERED DESIGN PROFESSIONAL
 ISSUE DATE: 12/8/25
 Sheet
GE-2
 Page 7 of X
 Project No. XX-XX-XX
 ASA R. GILLETTE, P.E.
 FLORIDA P.E. NO. 56177

PROPERTY INFORMATION:

- PID#: 00-00-30-044B-0068-0010
00-00-30-044B-0068-0020
00-00-30-044B-0068-0030
00-00-30-044B-0068-0040
00-00-30-0560-00RW-0010
- TOTAL PARCEL(S) ACREAGE: 4.37 AC. (190,358 SF)
- LOCATION: FERNANDINA BEACH, FL
- FLOOD ZONE: AE-8, X-SHADED
- ZONING: R-1
- FUTURE LAND USE: LOW DENSITY RESIDENTIAL
- PROPOSED USE: SINGLE-FAMILY RESIDENTIAL

DEVELOPMENT REQUIREMENTS:

- MAX IMPERVIOUS AREA: 60%
- MAX F.A.R.: 50%
- MAX BUILDING HEIGHT: 35-FT
- DENSITY ALLOWED: 4 UNITS/ACRE
- OFFSITE R.O.W. FOR DENSITY: _____
- CALC. DENSITY: (4.37AC + ____AC) * (40.U./AC.) = ____D.U.

SETBACK REQUIREMENTS:

- FRONT: 25 FEET
- REAR: 25 FEET
- SIDES: 10% OF LOT WIDTH

UTILITIES:

- WATER: CITY OF FERNANDINA BEACH
- SEWER: CITY OF FERNANDINA BEACH
- POWER: F.P.U.

DRAINAGE NOTES:

- WET POND 1 & WET POND 2 DESIGNED TO FACILITATE DRAINAGE FOR THE NEW ROAD "BUTTERFLY TRAIL" AND NEW SECTION OF ROAD NOTED "SIMMONS ROAD".

- WET POND 1 & WET POND 2 ARE DESIGNED TO BE HYDRAULICALLY CONNECTED

DRAINAGE CALCULATIONS:

DRAINAGE AREA: SEE LOT DRAINAGE TABLE
IMPERVIOUS AREA: *SEE LOT DRAINAGE TABLE

TOTAL LOT RUNOFF:
(X SF)*(0.5")*(1/12 FT/IN) = *SEE LOT TABLE

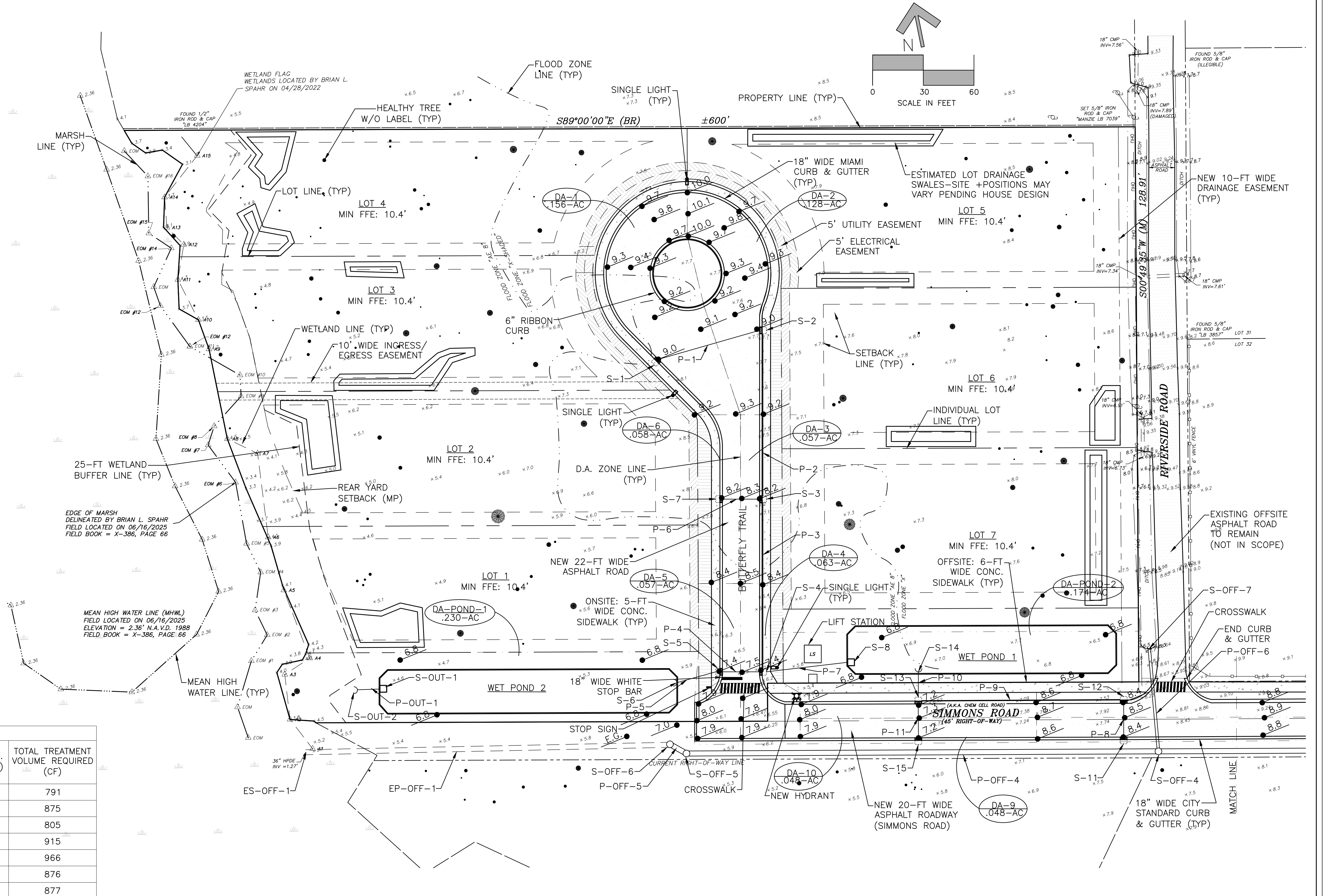
TOTAL IMPERVIOUS AREA RUNOFF:
(X SF)*(1.0")*(1/12 FT/IN) = *SEE LOT TABLE

*NOTE: EACH LOT TO BE DESIGNED ACCORDING TO FINAL FOOTPRINT LAYOUT

WET POND NOTES:

WET POND 1:
T.O.B. EL. 6.80'
25-YEAR EL. 6.54'
WEIR EL. 5.25'
NWL EL. 4.50'
B.O.P. EL. 1.50'

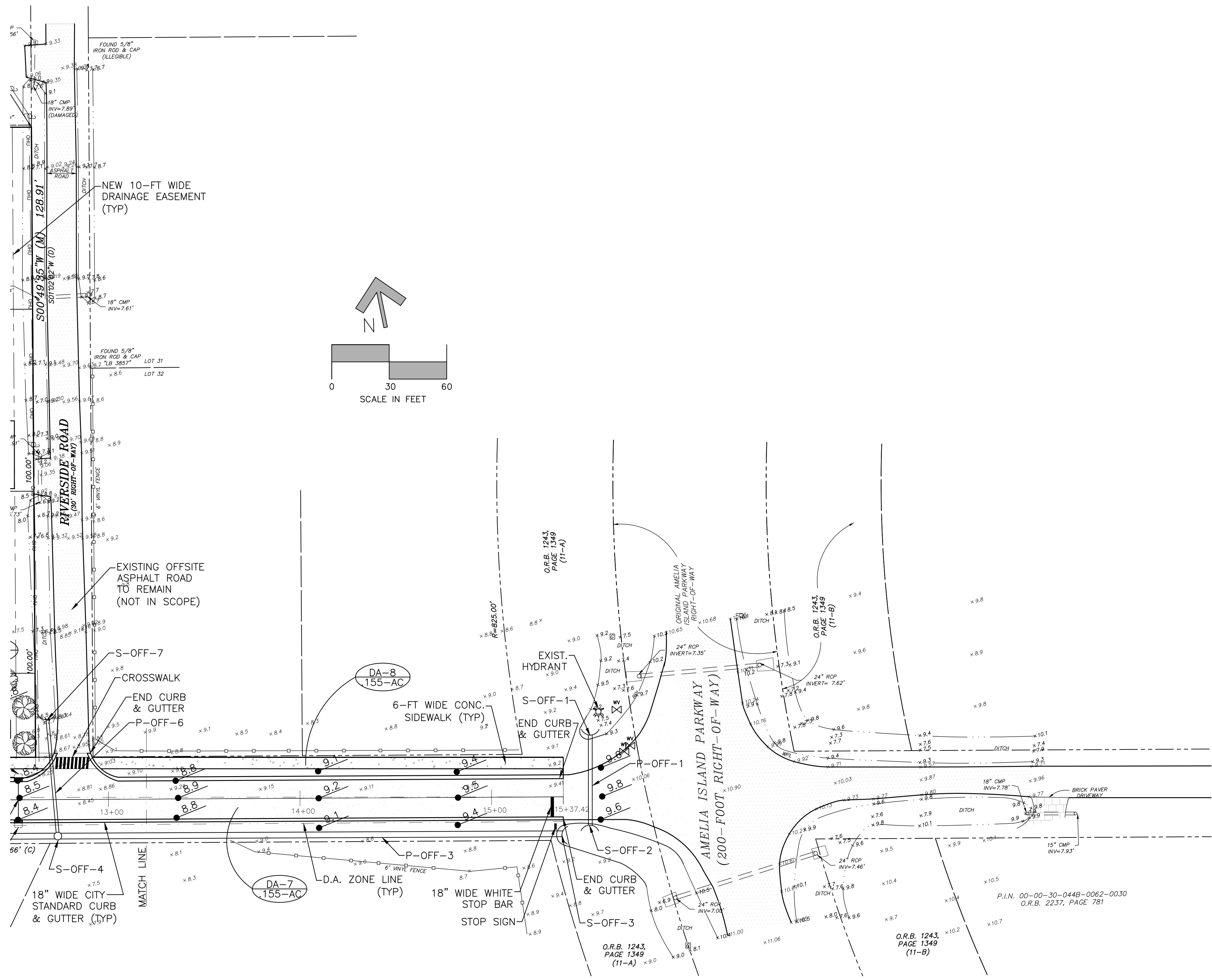
WET POND 2:
T.O.B. EL. 6.80'
25-YEAR EL. 6.54'
WEIR EL. 5.25'
NWL EL. 4.50'
B.O.P. EL. 1.50'



LOT TABLE

LOT #	LOT AREA (SF)	MAX IMPERVIOUS AREA (%)	MAX IMPERVIOUS AREA (SF)	EST. IMP. AREA (SF)	EST. IMP. AREA (%)	TOTAL TREATMENT VOLUME REQUIRED (CF)
1	18,981	60.0%	11,389	6,000	31.6%	791
2	20,979	60.0%	12,587	6,000	28.6%	875
3	19,308	60.0%	11,585	6,000	31.1%	805
4	21,937	60.0%	13,162	6,000	27.4%	915
5	23,184	60.0%	13,910	6,000	25.9%	966
6	21,016	60.0%	12,610	6,000	28.5%	876
7	21,026	60.0%	12,616	6,000	28.5%	877

L K J H G F E D C B A No.	AB AB Date	12/8/25 10/8/25	C.O.F.B. TRC - FIRST SUBMITTAL C.O.F.B. FIRST STEP MEETING.	Revision	Scale: 1:30	Gillette & Associates, Inc. 31 South 4th Street Fernandina Beach, FL 32034 Certificate of Authorization No. 9332 DO NOT SCALE THIS DRAWING - DIMENSIONS AND NOTES TAKE PREFFERENCE. DRAWING IS REDUCED IF LESS THAN 22" x 34"	GILLETTE & ASSOCIATES, INC. 31 SOUTH 4TH STREET FERNANDINA BEACH, FL 32034 PHONE: (904) 261-8819	BUTTERFLY PROJEKT BUTTERFLY TRAIL ROAD FERNANDINA BEACH, FLORIDA	BUTTERFLY PROJEKT, LLC	ONSITE & OFF-SITE DRAINAGE PLAN	REGISTERED DESIGN PROFESSIONAL ASA R. GILLETTE, P.E. FLORIDA P.E. NO. 56177	ISSUE DATE: 12/8/25
					Project Mgr: AG							Sheet DR-1
					Designed by: AG							Page 8 of X
					Drawn by: AB/BS							Project No. XX-XX-XX
					QA/QC: NG							



STRUCTURE TABLE							
NAME	TYPE	TOP/INLET ELEV.	INVERT ELEVATION			DRAINAGE AREA (AC)	
			N	S	E		W
S-1	CURB INLET	9.00	-	-	5.50	-	0.156
S-2	CURB INLET	9.00	-	5.30	-	5.30	0.128
S-3	CURB INLET	8.20	5.05	5.05	-	5.19	0.057
S-4	CURB INLET	7.40	4.80	-	-	4.80	0.063
S-5	CURB INLET	7.40	-	-	4.30	4.26	0.057
S-6	CURB INLET	7.40	-	-	4.20	-	0.058
S-7	CURB INLET	8.20	-	-	5.25	-	0.031
S-8	CURB INLET	6.80	-	-	-	3.60	0.155
S-11	CURB INLET	8.40	5.65	-	-	-	0.155
S-12	CURB INLET	8.40	-	8.40	-	4.40	0.049
S-13	CURB INLET	7.20	4.19	4.37	4.19	-	0.048
S-14	CURB INLET	7.20	-	4.17	-	-	0.048
S-15	CURB INLET	7.20	4.45	-	-	-	-
S-OUT-1*	MOD. TYPE E	6.80	-	-	3.60	-	-
S-OUT-2	MES	-	-	-	-	3.50	-
S-OFF-1	MES	-	7.40	-	-	-	-
S-OFF-2	MES	-	-	-	-	7.40	-
S-OFF-3	MES	-	-	-	7.20	-	-
S-OFF-4	M/H	5.10	4.99	-	5.83	2.92	-
S-OFF-5	M/H	5.00	-	-	1.83	1.83	-
S-OFF-6	M/H	-	-	-	1.82	1.81	-
S-OFF-7	MES	-	6.50	-	-	-	-
ES-OFF-1	MES	-	-	-	-	1.77	-

* SEE OUTFALL STRUCTURE DETAIL, SHEET DT-1

PIPE TABLE						
NAME	FROM	TO	SIZE	LENGTH	MATERIAL	
P-1	S-1	S-2	18"	63'	HP	
P-2	S-2	S-3	18"	175'	HP	
P-3	S-3	S-4	18"	99'	HP	
P-4	S-4	S-5	24"	22'	HP	
P-5	S-5	S-6	24"	36'	HP	
P-6	S-7	S-3	18"	22'	HP	
P-7	S-4	S-8	18"	49'	HP	
P-8	S-11	S-12	15"	20'	HP	
P-9	S-12	S-13	24"	118'	HP	
P-10	S-13	S-14	25"	15'	HP	
P-11	S-15	S-13	15"	20'	HP	
P-OUT-1	S-OUT-1	S-OUT-2	24"	13'	HP	
P-OFF-1	S-OFF-1	S-OFF-2	36"	48'	HP	
P-OFF-3	S-OFF-3	S-OFF-4	36"	263'	HP	
P-OFF-4	S-OFF-4	S-OFF-5	36"	277'	HP	
P-OFF-5	S-OFF-5	S-OFF-6	36"	9'	HP	
EP-OFF-1	S-OFF-6	ES-OFF-1	36"	215'	HP	
P-OFF-6	S-OFF-7	S-OFF-4	36"	60'	HP	

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B	AB	12/8/25	C.O.F.B. TRC - FIRST SUBMITTAL
A	AB	10/8/25	C.O.F.B. FIRST STEP MEETING
No.	By	Date	Revision

Scale: 1:30
 Project Mgr: AG
 Designed by: AG
 Drawn by: AB/BS
 QA/QC: NG

Gillette & Associates, Inc.
 31 South 4th Street
 Fernandina Beach, FL 32034
 Certificate of Authorization No. 9332
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G & A
 GILLETTE & ASSOCIATES, INC.
 31 SOUTH 4TH STREET
 FERNANDINA BEACH, FL 32034
 PHONE: (904) 261-8819

BUTTERFLY PROJEKT
 BUTTERFLY TRAIL ROAD
 FERNANDINA BEACH, FLORIDA

BUTTERFLY PROJEKT, LLC

OFFSITE DRAINAGE PLAN

REGISTERED DESIGN PROFESSIONAL
 ASA R. GILLETTE, P.E.
 FLORIDA P.E. NO. 56177

ISSUE DATE: 12/8/25
 Sheet DR-2
 Page 9 of X
 Project No. XX-XX-XX

PROPERTY INFORMATION:

- PID#: 00-00-30-044B-0068-0010
00-00-30-044B-0068-0020
00-00-30-044B-0068-0030
00-00-30-044B-0068-0040
00-00-30-0560-00RW-0010
- TOTAL PARCEL(S) ACREAGE: 4.37 AC. (190,358 SF)
- LOCATION: FERNANDINA BEACH, FL
- FLOOD ZONE: AE-8, X-SHADED
- ZONING: R-1
- FUTURE LAND USE: LOW DENSITY RESIDENTIAL
- PROPOSED USE: SINGLE-FAMILY RESIDENTIAL

DEVELOPMENT REQUIREMENTS:

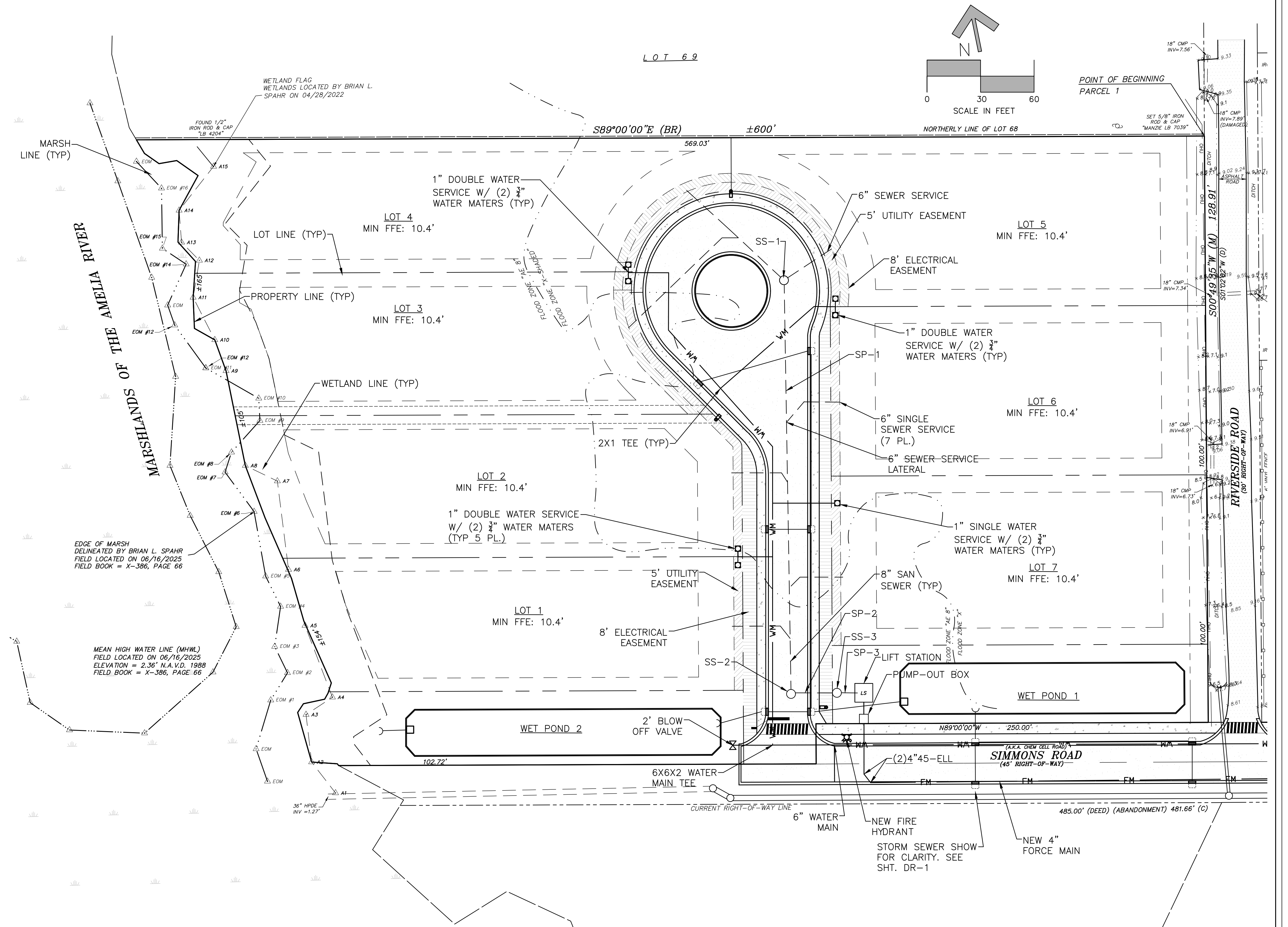
- MAX IMPERVIOUS AREA: 60%
- MAX F.A.R.: 50%
- MAX BUILDING HEIGHT: 35-FT
- DENSITY ALLOWED: 4 UNITS/ACRE
- OFFSITE R.O.W. FOR DENSITY: _____
- CALC. DENSITY: (4.37AC+___AC)*(4D.U./AC.)=___D.U.

SETBACK REQUIREMENTS:

- FRONT: 25 FEET
- REAR: 25 FEET
- SIDES: 10% OF LOT WIDTH

UTILITIES:

- WATER: CITY OF FERNANDINA BEACH
- SEWER: CITY OF FERNANDINA BEACH
- POWER: F.P.U.



NAME	TYPE	TOP ELEV.	INVERT ELEVATION			
			N	S	E	W
SS-1	M/H	9.50	4.32	4.32	4.32	-
SS-2	M/H	7.60	3.40	-	3.40	-
SS-3	M/H	5.80	-	-	3.31	3.31

NAME	SIZE	TYPE	LENGTH	FROM	TO
SP-1	8"	PVC	228'	SS-1	SS-2
SP-2	8"	PVC	21'	SS-2	SS-3
SP-3	8"	PVC	9'	SS-3	LS

L					
K					
J					
H					
G					
F					
E					
D					
C					
B	AB	12/8/25	C.O.F.B. TRC - FIRST SUBMITTAL		
A	AB	10/8/25	C.O.F.B. FIRST STEP MEETING		
No.	By	Date	Revision		

Scale: 1:30

Project Mgr: AG

Designed by: AG

Drawn by: AB/BS

QA/QC: NG

Gillette & Associates, Inc.
31 South 4th Street
Fernandina Beach, FL 32034

Certificate of Authorization No. 9332

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G & A

GILLETTE & ASSOCIATES, INC

31 SOUTH 4TH STREET
FERNANDINA BEACH, FL 32034

PHONE: (904) 261-8819

BUTTERFLY PROJEKT

BUTTERFLY TRAIL ROAD
FERNANDINA BEACH, FLORIDA

BUTTERFLY PROJEKT, LLC

UTILITY PLAN

REGISTERED DESIGN PROFESSIONAL

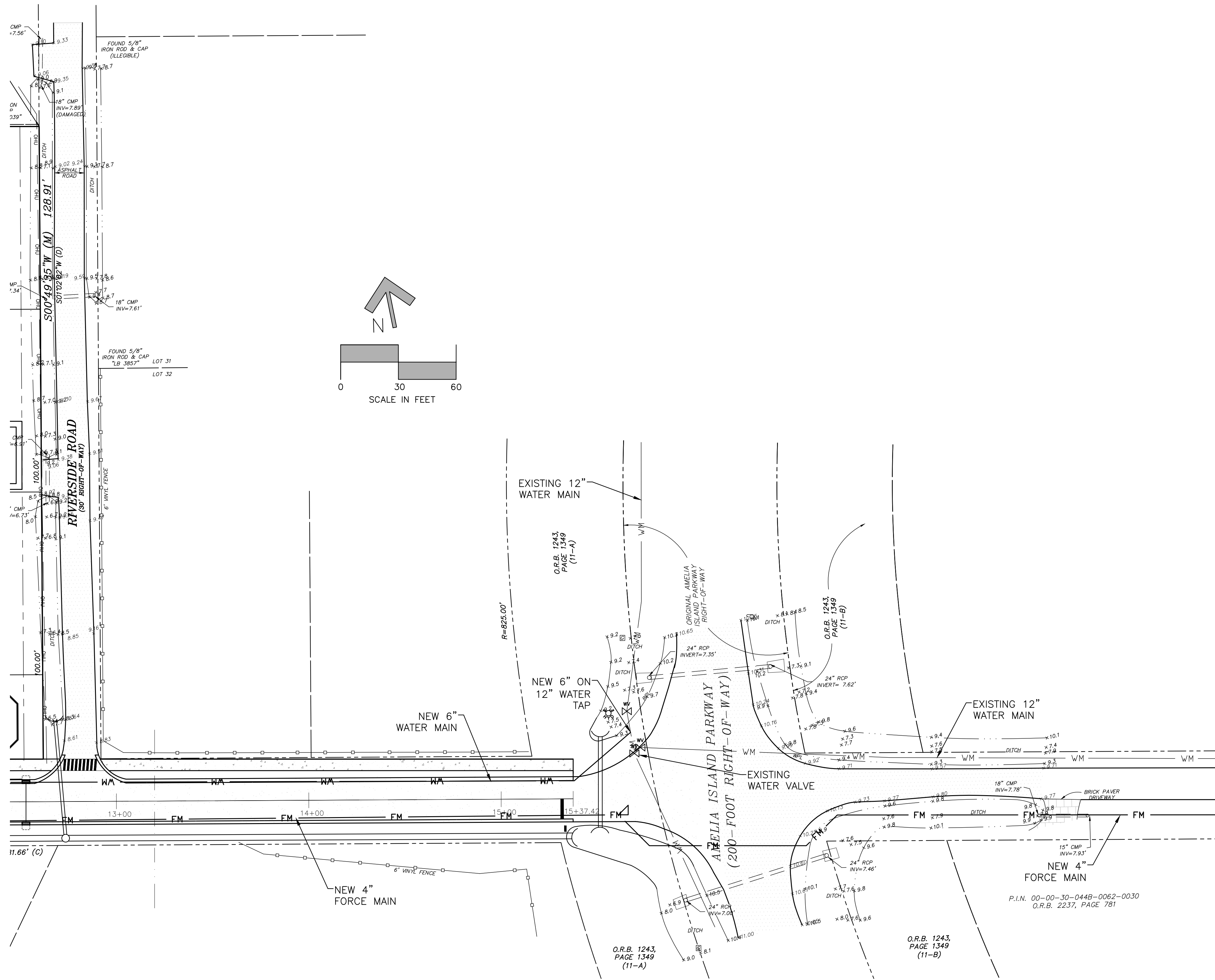
ISSUE DATE: 12/8/25

Sheet
UT-1

Page 10 of X

Project No. XX-XX-XX

ASA R. GILLETTE, P.E.
FLORIDA P.E. NO. 56177



L			
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B	AB	12/8/25	C.O.F.B. TRC - FIRST SUBMITTAL
A	AB	10/8/25	C.O.F.B. FIRST STEP MEETING.
No.	By	Date	Revision

Scale: 1:30
 Project Mgr: AG
 Designed by: AG
 Drawn by: AB/BS
 QA/QC: NG

Gillette & Associates, Inc.
 31 South 4th Street
 Fernandina Beach, FL 32034
 Certificate of Authorization No. 9332
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 31 SOUTH 4TH STREET
 FERNANDINA BEACH, FL 32034
 PHONE: (904) 261-8819

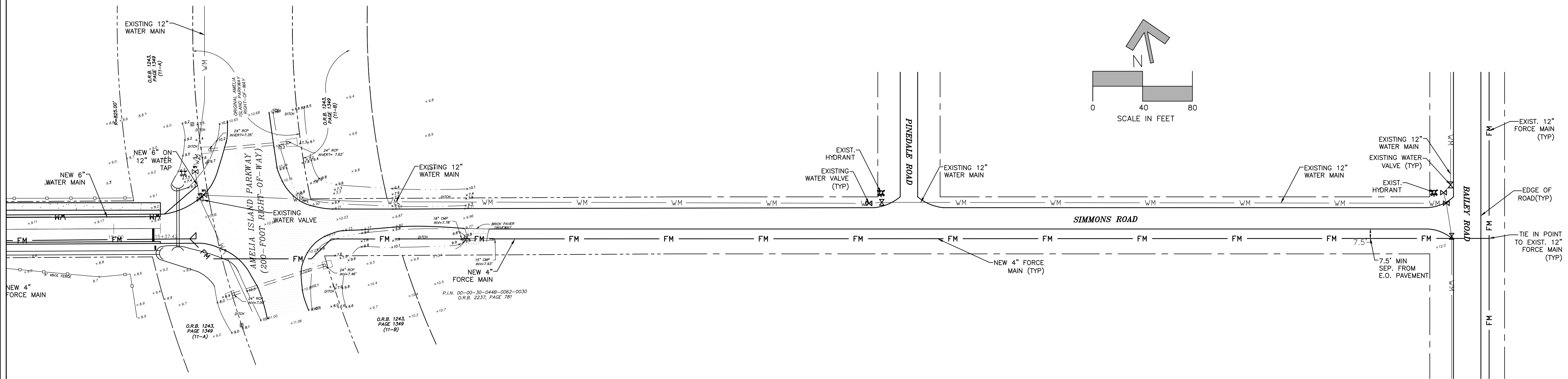
BUTTERFLY PROJEKT
 BUTTERFLY TRAIL ROAD
 FERNANDINA BEACH, FLORIDA

BUTTERFLY PROJEKT, LLC

UTILITY PLAN

REGISTERED DESIGN PROFESSIONAL
 ASA R. GILLETTE, P.E.
 FLORIDA P.E. NO. 56177

ISSUE DATE: 12/8/25
 Sheet
 UT-2
 Page 11 of X
 Project No. XX-XX-XX



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B	AB	12/8/25	C.O.F.B. TRC - FIRST SUBMITTAL
A	AB	10/8/25	C.O.F.B. FIRST STEP MEETING
No.	By	Date	Revision

Scale: 1:40
 Project Mgr: AG
 Designed by: AG
 Drawn by: AB/BS
 QA/QC: NG

Gillette & Associates, Inc.
 31 South 4th Street
 Fernandina Beach, FL 32034
 Certificate of Authorization No. 9332
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 31 SOUTH 4TH STREET
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 PHONE: (904) 261-8819

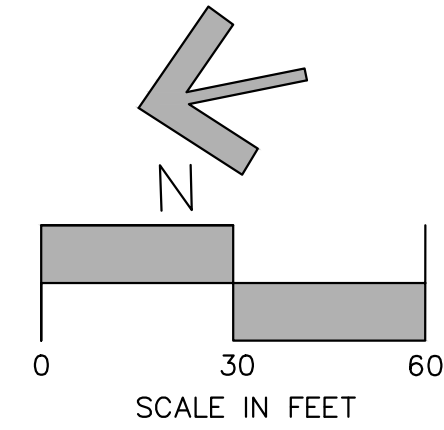
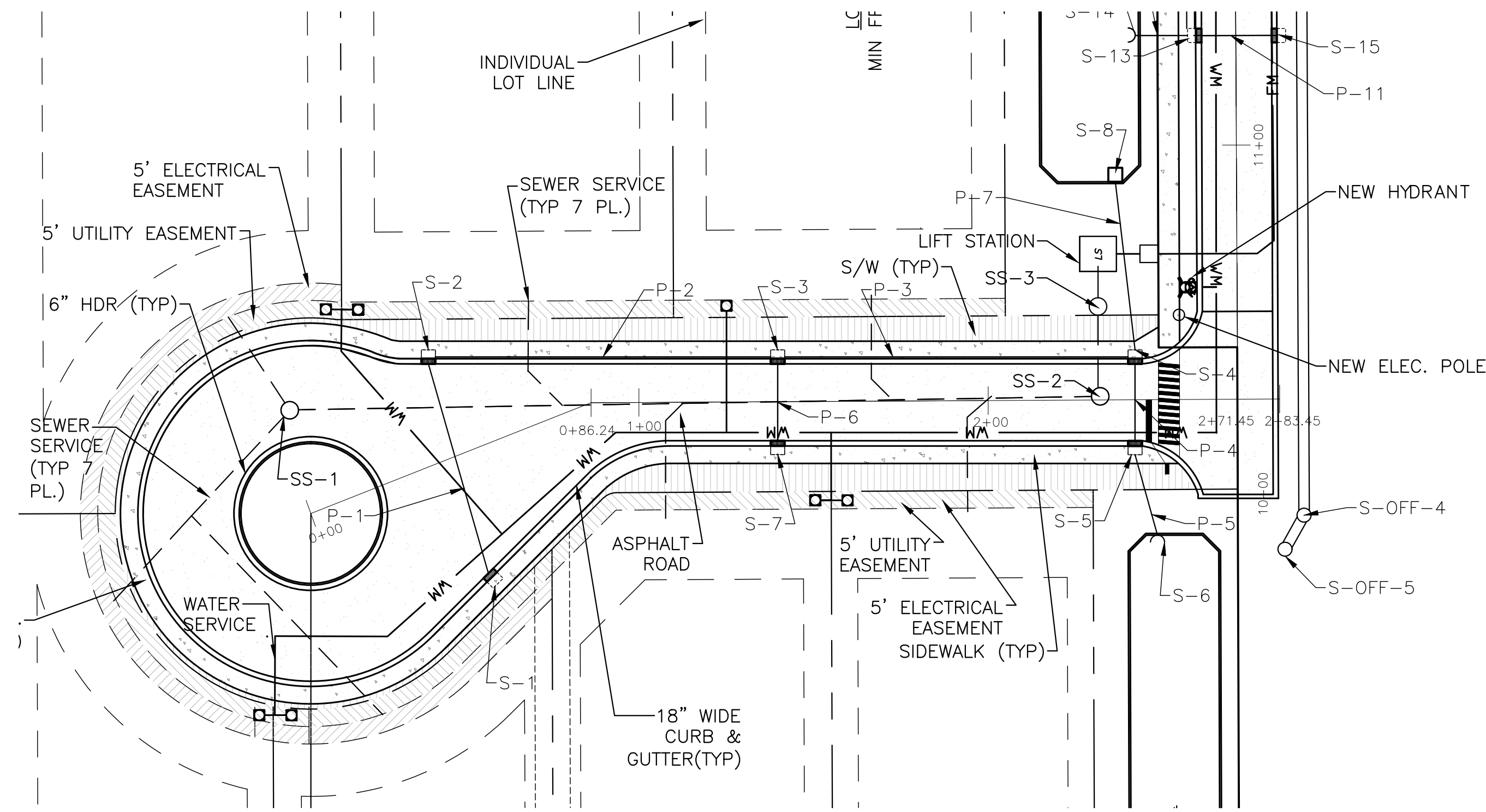
BUTTERFLY PROJEKT
 BUTTERFLY TRAIL ROAD
 FERNANDINA BEACH, FLORIDA

BUTTERFLY PROJEKT, LLC

UTILITY PLAN
 OFFSITE EXTENSION

REGISTERED DESIGN PROFESSIONAL
 ASA R. GILLETTE, P.E.
 FLORIDA P.E. NO. 56177

ISSUE DATE: 12/8/25
 Sheet
 UT-3
 Page 12 of X
 Project No. XX-XX-XX



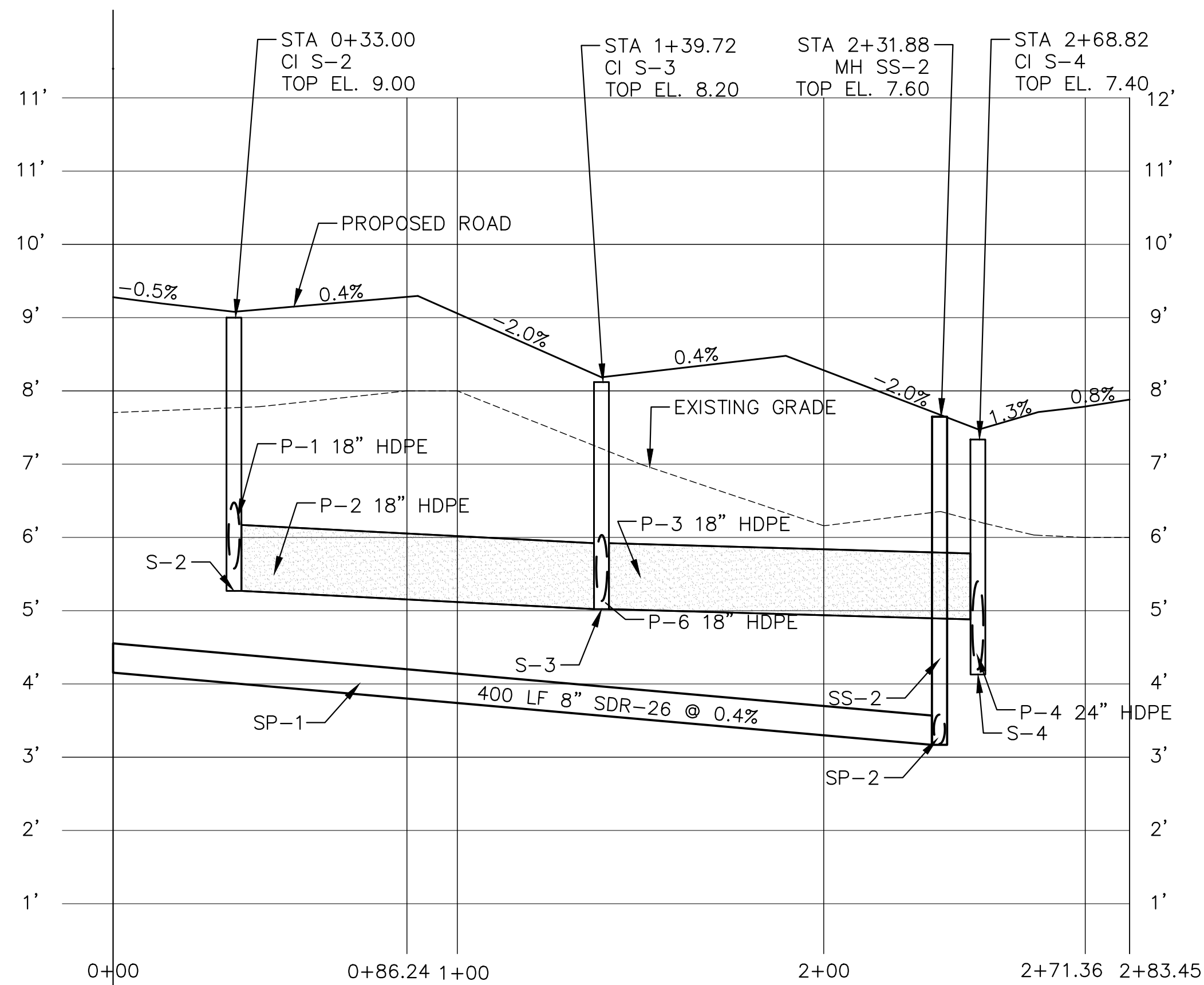
NAME	TYPE	TOP/INLET ELEV.	INVERT ELEVATION				DRAINAGE AREA (AC)
			N	S	E	W	
S-1	CURB INLET	9.00	-	-	5.50	-	0.156
S-2	CURB INLET	9.00	-	5.30	-	5.30	0.128
S-3	CURB INLET	8.20	5.05	5.05	-	5.19	0.057
S-4	CURB INLET	7.40	4.80	-	-	4.80	0.063
S-5	CURB INLET	7.40	-	-	4.30	4.26	0.057
S-6	CURB INLET	7.40	-	-	4.20	-	0.058
S-7	CURB INLET	8.20	-	-	5.25	-	0.031
S-8	TYPE "C"	6.80	-	-	-	3.60	0.155
S-11	CURB INLET	8.40	5.65	-	-	-	0.155
S-12	CURB INLET	8.40	-	8.40	-	4.40	0.049
S-13	CURB INLET	7.20	4.19	4.37	4.19	-	0.048
S-14	CURB INLET	7.20	-	4.17	-	-	0.048
S-15	CURB INLET	7.20	4.45	-	-	-	-
S-OUT-1*	MOD. TYPE E	6.80	-	-	3.60	-	-
S-OUT-2	MES	-	-	-	-	3.50	-
S-OFF-1	MES	-	7.40	-	-	-	-
S-OFF-2	MES	-	-	-	-	7.40	-
S-OFF-3	MES	-	-	-	7.20	-	-
S-OFF-4	M/H	5.10	4.99	-	5.83	2.92	-
S-OFF-5	M/H	5.00	-	-	1.83	1.83	-
S-OFF-6	M/H	-	-	-	1.82	1.81	-
S-OFF-7	MES	-	6.50	-	-	-	-
ES-OFF-1	MES	-	-	-	-	1.77	-

* SEE OUTFALL STRUCTURE DETAIL, SHEET DT-1

NAME	FROM	TO	SIZE	LENGTH	MATERIAL
P-1	S-1	S-2	18"	63'	HP
P-2	S-2	S-3	18"	175'	HP
P-3	S-3	S-4	18"	99'	HP
P-4	S-4	S-5	24"	22'	HP
P-5	S-5	S-6	24"	36'	HP
P-6	S-7	S-3	18"	22'	HP
P-7	S-4	S-8	18"	49'	HP
P-8	S-11	S-12	15"	20'	HP
P-9	S-12	S-13	24"	118'	HP
P-10	S-13	S-14	25"	15'	HP
P-11	S-15	S-13	15"	20'	HP
P-OUT-1	S-OUT-1	S-OUT-2	24"	13'	HP
P-OFF-1	S-OFF-1	S-OFF-2	36"	48'	HP
P-OFF-3	S-OFF-3	S-OFF-4	36"	263'	HP
P-OFF-4	S-OFF-4	S-OFF-5	36"	277'	HP
P-OFF-5	S-OFF-5	S-OFF-6	36"	9'	HP
EP-OFF-1	S-OFF-6	ES-OFF-1	36"	215'	HP
P-OFF-6	S-OFF-7	S-OFF-4	36"	60'	HP

NAME	TYPE	TOP ELEV.	INVERT ELEVATION			
			N	S	E	W
SS-1	M/H	9.50	4.32	4.32	4.32	-
SS-2	M/H	7.60	3.40	-	3.40	-
SS-3	M/H	5.80	-	-	3.31	3.31

NAME	SIZE	TYPE	LENGTH	FROM	TO
SP-1	8"	PVC	228'	SS-1	SS-2
SP-2	8"	PVC	21'	SS-2	SS-3
SP-3	8"	PVC	9'	SS-3	LS



NORTH SOUTH PROFILE

L			
K			
J			
H			
G			
F			
E			
D			
C			
B	AB	12/8/25	C.O.F.B. TRC - FIRST SUBMITTAL
A	AB	10/8/25	C.O.F.B. FIRST STEP MEETING
No.	By	Date	Revision

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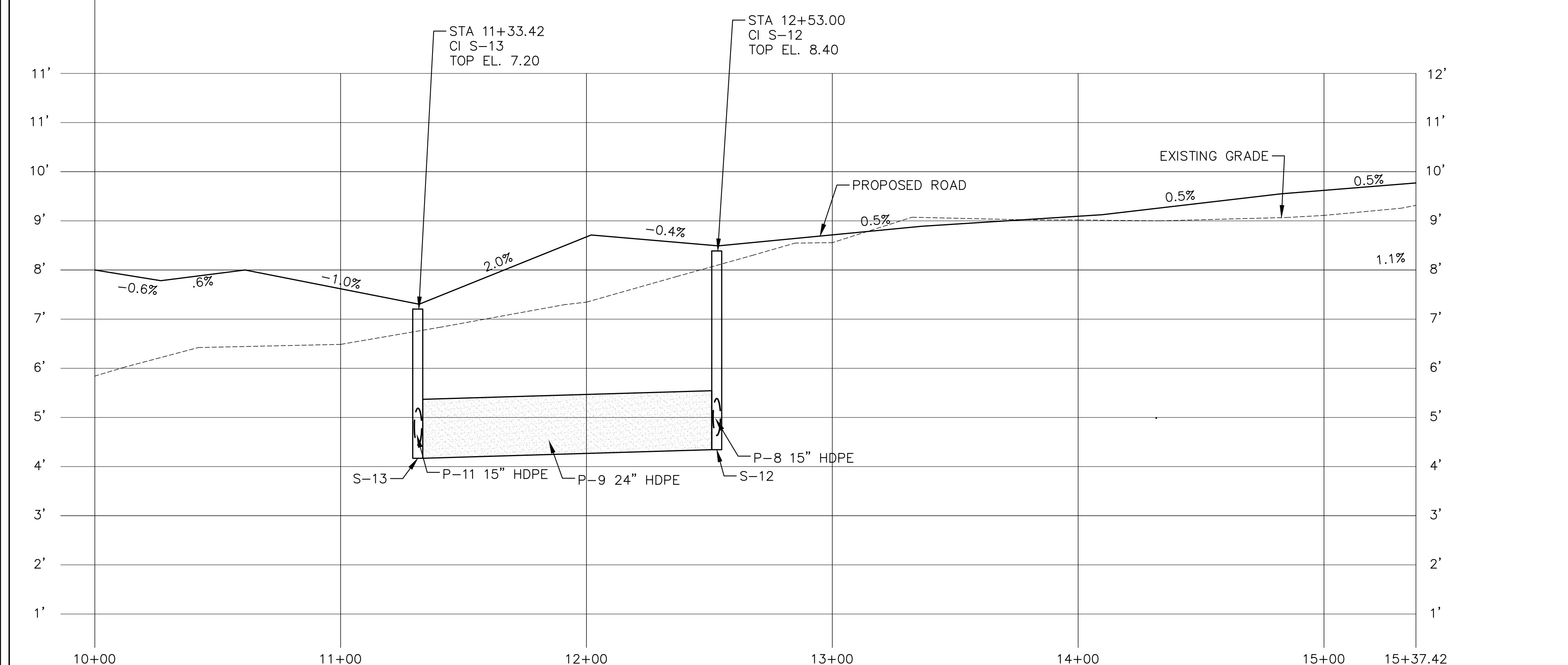
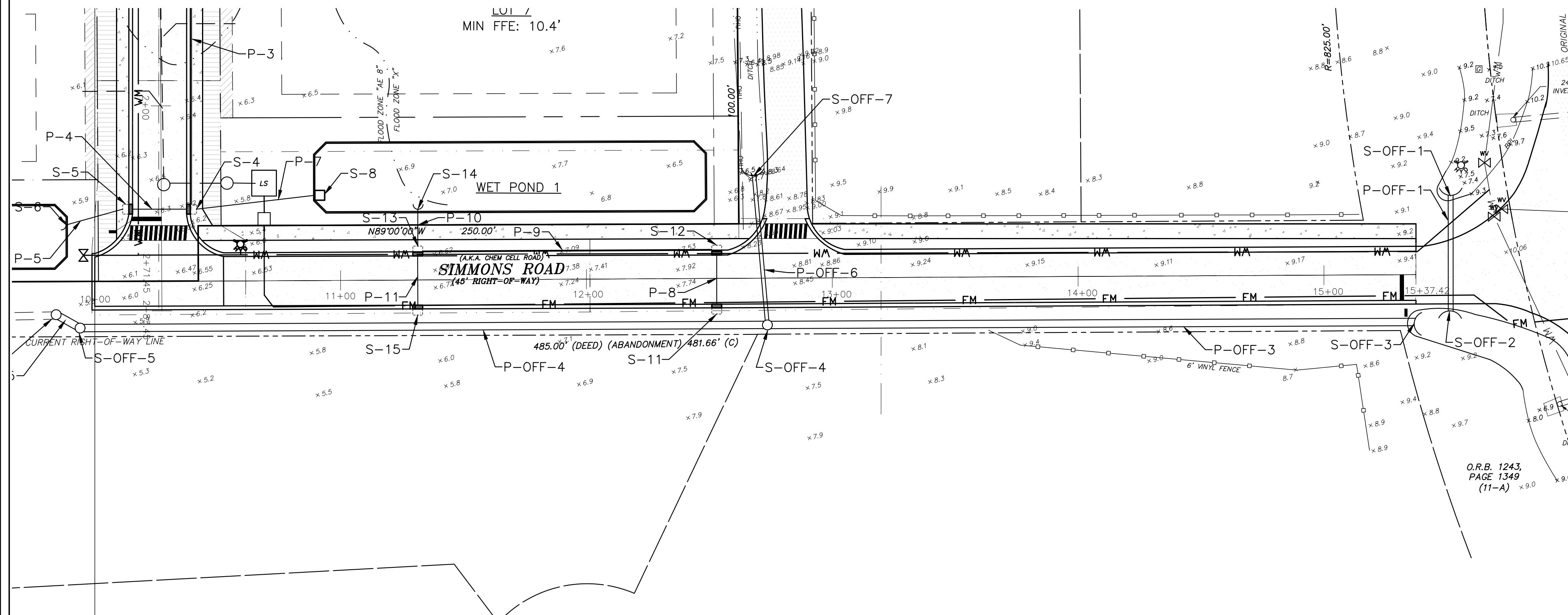
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BUTTERFLY PROJEKT
 BUTTERFLY TRAIL ROAD
 FERNANDINA BEACH, FLORIDA

BUTTERFLY PROJEKT, LLC

ON SITE
 ROAD PLAN
 & PROFILE

REGISTERED DESIGN PROFESSIONAL
 ISSUE DATE: 12/8/25
 Sheet
 PP-1
 Page 13 of X
 Project No. XX-XX-XX
 ASA R. GILLETTE, P.E.
 FLORIDA P.E. NO. 56177



STRUCTURE TABLE							
NAME	TYPE	TOP/INLET ELEV.	INVERT ELEVATION			DRAINAGE AREA (AC)	
			N	S	E		W
S-1	CURB INLET	9.00	-	-	5.50	-	0.156
S-2	CURB INLET	9.00	-	5.30	-	5.30	0.128
S-3	CURB INLET	8.20	5.05	5.05	-	5.19	0.057
S-4	CURB INLET	7.40	4.80	-	-	4.80	0.063
S-5	CURB INLET	7.40	-	-	4.30	4.26	0.057
S-6	CURB INLET	7.40	-	-	4.20	-	0.058
S-7	CURB INLET	8.20	-	-	5.25	-	0.031
S-8	TYPE "C"	6.80	-	-	-	3.60	0.155
S-11	CURB INLET	8.40	5.65	-	-	-	0.155
S-12	CURB INLET	8.40	-	8.40	-	4.40	0.049
S-13	CURB INLET	7.20	4.19	4.37	4.19	-	0.048
S-14	CURB INLET	7.20	-	4.17	-	-	0.048
S-15	CURB INLET	7.20	4.45	-	-	-	-
S-OUT-1*	MOD. TYPE E	6.80	-	-	3.60	-	-
S-OUT-2	MES	-	-	-	-	3.50	-
S-OFF-1	MES	-	7.40	-	-	-	-
S-OFF-2	MES	-	-	-	-	7.40	-
S-OFF-3	MES	-	-	-	7.20	-	-
S-OFF-4	M/H	5.10	4.99	-	5.83	2.92	-
S-OFF-5	M/H	5.00	-	-	1.83	1.83	-
S-OFF-6	M/H	-	-	-	1.82	1.81	-
S-OFF-7	MES	-	6.50	-	-	-	-
ES-OFF-1	MES	-	-	-	-	1.77	-

* SEE OUTFALL STRUCTURE DETAIL, SHEET DT-1

PIPE TABLE					
NAME	FROM	TO	SIZE	LENGTH	MATERIAL
P-1	S-1	S-2	18"	63'	HP
P-2	S-2	S-3	18"	175'	HP
P-3	S-3	S-4	18"	99'	HP
P-4	S-4	S-5	24"	22'	HP
P-5	S-5	S-6	24"	36'	HP
P-6	S-7	S-3	18"	22'	HP
P-7	S-4	S-8	18"	49'	HP
P-8	S-11	S-12	15"	20'	HP
P-9	S-12	S-13	24"	118'	HP
P-10	S-13	S-14	25"	15'	HP
P-11	S-15	S-13	15"	20'	HP
P-OUT-1	S-OUT-1	S-OUT-2	24"	13'	HP
P-OFF-1	S-OFF-1	S-OFF-2	36"	48'	HP
P-OFF-3	S-OFF-3	S-OFF-4	36"	263'	HP
P-OFF-4	S-OFF-4	S-OFF-5	36"	277'	HP
P-OFF-5	S-OFF-5	S-OFF-6	36"	9'	HP
EP-OFF-1	S-OFF-6	ES-OFF-1	36"	215'	HP
P-OFF-6	S-OFF-7	S-OFF-4	36"	60'	HP

SANITARY STRUCTURE TABLE						
NAME	TYPE	TOP ELEV.	INVERT ELEVATION			
			N	S	E	
SS-1	M/H	9.50	4.32	4.32	4.32	-
SS-2	M/H	7.60	3.40	-	3.40	-
SS-3	M/H	5.80	-	-	3.31	3.31

SANITARY PIPE TABLE					
NAME	SIZE	TYPE	LENGTH	FROM	TO
SP-1	8"	PVC	228'	SS-1	SS-2
SP-2	8"	PVC	21'	SS-2	SS-3
SP-3	8"	PVC	9'	SS-3	LS

L			
K			
J			
H			
F			
E			
D			
C			
B	AB	12/8/25	C.O.F.B. TRC - FIRST SUBMITTAL
A	AB	10/8/25	C.O.F.B. FIRST STEP MEETING
No.	By	Date	Revision

Scale: 1:30
 Project Mgr: AG
 Designed by: AG
 Drawn by: AB/BS
 QA/QC: NG

DO NOT SCALE THIS DRAWING - DIMENSIONS AND NOTES TAKE PREFERENCE. DRAWING IS REDUCED IF LESS THAN 22" x 34"

G & A
 GILLETTE & ASSOCIATES, INC.
 31 SOUTH 4TH STREET
 FERNANDINA BEACH, FL 32034
 PHONE: (904) 261-8819

BUTTERFLY PROJECT
 BUTTERFLY TRAIL ROAD
 FERNANDINA BEACH, FLORIDA

BUTTERFLY PROJECT, LLC

OFF SITE
 ROAD PLAN
 & PROFILE

REGISTERED DESIGN PROFESSIONAL
 ISSUE DATE: 12/8/25
 Sheet
 PP-2
 Page 14 of X
 Project No. XX-XX-XX
 ASA R. GILLETTE, P.E.
 FLORIDA P.E. NO. 56177

PROPERTY INFORMATION:

- PID#: 00-00-30-044B-0068-0010
00-00-30-044B-0068-0020
00-00-30-044B-0068-0030
00-00-30-044B-0068-0040
00-00-30-0560-00RW-0010
- TOTAL PARCEL(S) ACREAGE: 4.37 AC. (190,358 SF)
- LOCATION: FERNANDINA BEACH, FL
- FLOOD ZONE: AE-8, X-SHADED
- ZONING: R-1
- FUTURE LAND USE: LOW DENSITY RESIDENTIAL
- PROPOSED USE: SINGLE-FAMILY RESIDENTIAL

DEVELOPMENT REQUIREMENTS:

- MAX IMPERVIOUS AREA: 60%
- MAX F.A.R.: 50%
- MAX BUILDING HEIGHT: 35-FT
- DENSITY ALLOWED: 4 UNITS/ACRE
- OFFSITE R.O.W. FOR DENSITY: _____
- CALC. DENSITY: (4.37AC+___AC)*(40.U./AC.)=___D.U.

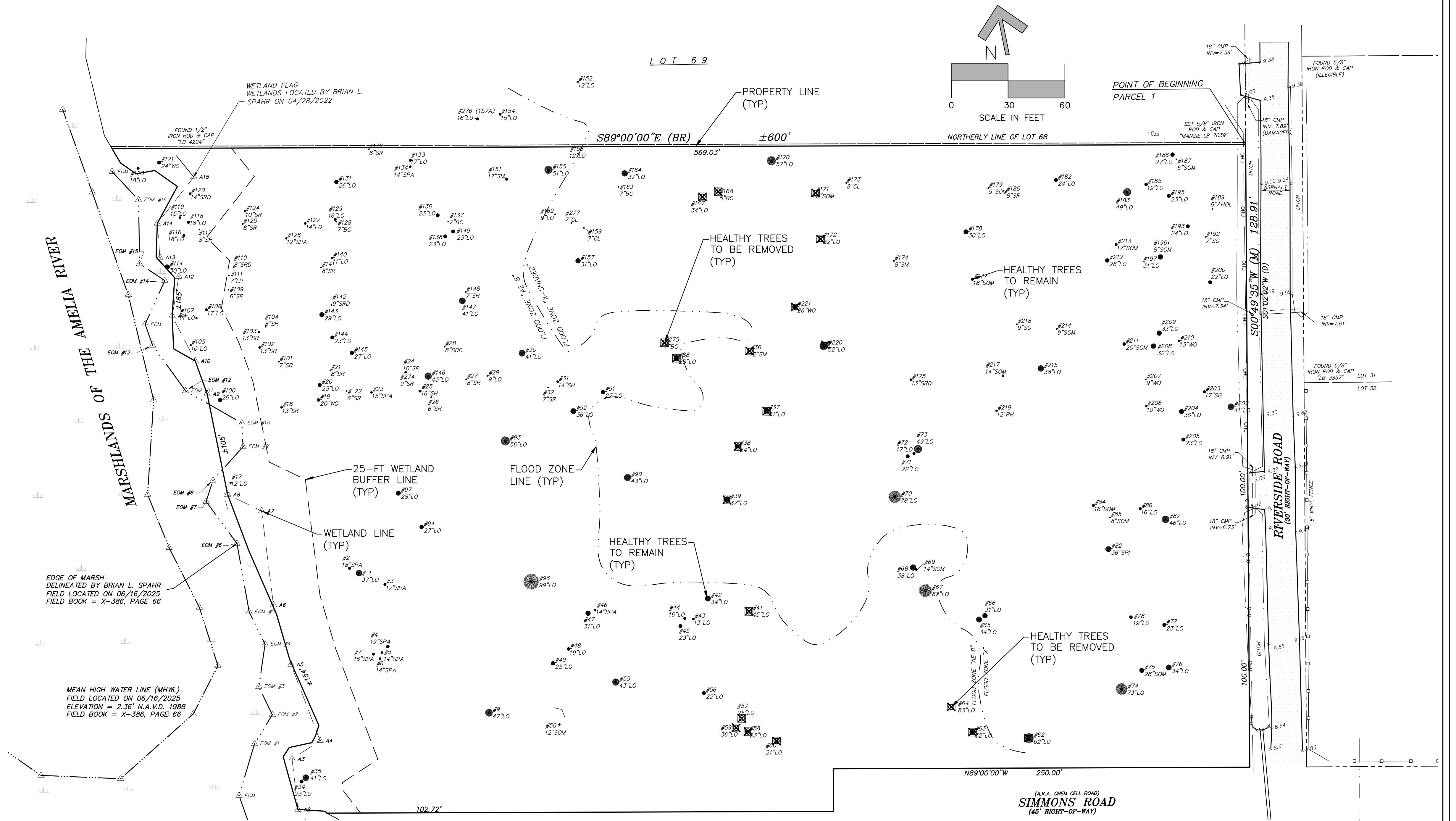
SETBACK REQUIREMENTS:

- FRONT: 25 FEET
- REAR: 25 FEET
- SIDES: 10% OF LOT WIDTH

UTILITIES:

- WATER: CITY OF FERNANDINA BEACH
- SEWER: CITY OF FERNANDINA BEACH
- POWER: F.P.U.

SURVEY TREE LEGEND	
SYMBOL	DESCRIPTION
LO	Live Oak (Quercus virginiana)
SOM	Southern Magnolia (Magnolia grandiflora)
SR	Southern Red Cedar (Juniperus silicicola)
WO	Water Oak (Quercus nigra)
SPA	Sabal palm (sabal palmetto)
SH	Southern Hackberry (Celtis laevigata)
BC	Black Cherry (Prunus serotina)
AHOL	American Holly (Ilex opaca)
SG	Sweetgum (Liquidambar styraciflua)
PH	Pignut Hickory (Carya glabra)
SPI	Slash Pine (Pinus elliottii)
AHOR	American Hornbeam (Carpinus caroliniana)
SWM	Sweetbay Magnolia (Magnolia virginiana)
LP	Longleaf Pine (Pinus palustris)
CL	Cherry Laurel (Prunus caroliniana)
☒	HEALTHY TREE TO BE REMOVED
×	POOR HEALTH TREE TO BE REMOVED



I, _____, am a certified arborist through the International Society of Arboriculture and my certification number is _____. I hereby attest that I have approved this tree protection and/or replacement plan. This includes not only the evaluation of individual trees, but also review of the complete construction plan set and the techniques that will be utilized to mitigate impacts to protected trees. Further, I attest that best practices, as supported by the International Society of Arboriculture, are being implemented to avoid and mitigate impacts to protected trees.

Signed,

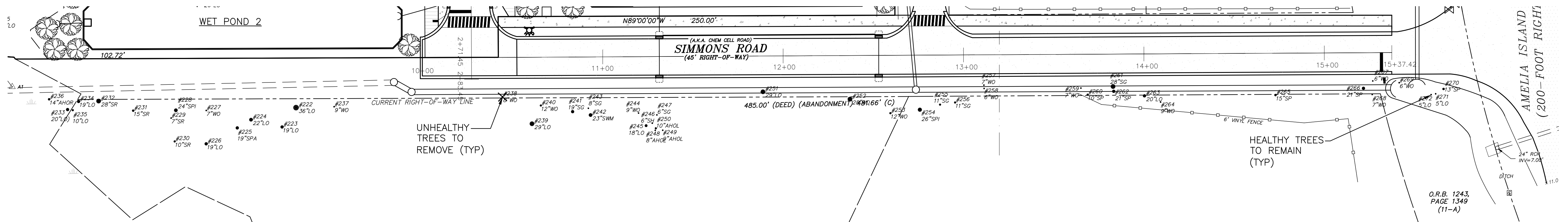
L				Scale: 1:30	Gillette & Associates, Inc. 31 South 4th Street Fernandina Beach, FL 32034	 GILLETTE & ASSOCIATES, INC. 31 SOUTH 4TH STREET FERNANDINA BEACH, FL 32034 PHONE: (904) 261-8819	BUTTERFLY PROJEKT BUTTERFLY TRAIL ROAD FERNANDINA BEACH, FLORIDA	BUTTERFLY PROJEKT, LLC	ONSITE HEALTHY TREE REMOVAL PLAN	REGISTERED DESIGN PROFESSIONAL	ISSUE DATE: 12/8/25
K			Project Mgr: AG	Certificate of Authorization No. 9332	Sheet LS-2						
J			Designed by: AG	DO NOT SCALE THIS DRAWING - DIMENSIONS AND NOTES TAKE PRECEDENCE. DRAWING IS REDUCED IF LESS THAN 22" x 34"	Page 16 of X						
H			Drawn by: AB/BS		Project No. XX-XX-XX						
F			QA/QC: NG								
E											
D											
C											
B	AB	12/8/25	C.O.F.B. TRC - FIRST SUBMITTAL								
A	AB	10/8/25	C.O.F.B. FIRST STEP MEETING								
No.	By	Date	Revision								

ASA R. GILLETTE, P.E.
FLORIDA P.E. NO. 56177

I, _____, am a certified arborist through the International Society of Arboriculture and my certification number is _____. I hereby attest that I have approved this tree protection and/or replacement plan. This includes not only the evaluation of individual trees, but also review of the complete construction plan set and the techniques that will be utilized to mitigate impacts to protected trees. Further, I attest that best practices, as supported by the International Society of Arboriculture, are being implemented to avoid and mitigate impacts to protected trees.

Signed, _____

SURVEY TREE LEGEND	
SYMBOL	DESCRIPTION
LO	Live Oak (<i>Quercus virginiana</i>)
SOM	Southern Magnolia (<i>Magnolia grandiflora</i>)
SR	Southern Red Cedar (<i>Juniperus silicicola</i>)
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☒	HEALTHY TREE TO BE REMOVED
X	POOR HEALTH TREE TO BE REMOVED



L			
K			
J			
H			
G			
F			
E			
D			
C			
B	AB	12/8/25	C.O.F.B. TRC - FIRST SUBMITTAL
A	AB	10/8/25	C.O.F.B. FIRST STEP MEETING.
No.	By	Date	Revision

Scale: 1:30
 Project Mgr: AG
 Designed by: AG
 Drawn by: AB/BS
 QA/QC: NG

Gillette & Associates, Inc.
 31 South 4th Street
 Fernandina Beach, FL 32034
 Certificate of Authorization No. 9332
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 PHONE: (904) 261-8819

BUTTERFLY PROJEKT
 BUTTERFLY TRAIL ROAD
 FERNANDINA BEACH, FLORIDA

BUTTERFLY PROJEKT, LLC

OFFSITE
 TREE REMOVAL PLAN

REGISTERED DESIGN PROFESSIONAL
 ASA R. GILLETTE, P.E.
 FLORIDA P.E. NO. 56177

ISSUE DATE: 12/8/25
 Sheet
 LS-3
 Page 17 of X
 Project No. XX-XX-XX

TREE NO.	ACTUAL SPECIES	DBH	HEALTH STATUS	PROTECT. DBH	PRESERVED (Y/N)	PRESERVED DBH	ARBORIST COMMENT
1	Live Oak (Quercus virginiana)	37	3	37	Y	37	
2	Sabal palm (Sabal palmetto)	18	3	18	Y	18	
3	Sabal palm (Sabal palmetto)	17	3	17	Y	17	
4	Sabal palm (Sabal palmetto)	19	3	19	Y	19	
5	Sabal palm (Sabal palmetto)	14	3	14	Y	14	
6	Sabal palm (Sabal palmetto)	14	3	14	Y	14	
7	Sabal palm (Sabal palmetto)	16	3	16	Y	16	
8	Live Oak (Quercus virginiana)	58	4	0	0	0	Major rot in bole / Excessive Sap Flow or Bleeding from the Trunk / Cavities or Decay in the Trunk or Branches
9	Live Oak (Quercus virginiana)	47	2	47	N	47	
10	Live Oak (Quercus virginiana)	26	4	0	0	0	Excessive Sap Flow or Bleeding from the Trunk / Codominate Branching with Included Bark / Excessive Leaning / Weak Branch Unions / Branches forming at sharp angles
11	Live Oak (Quercus virginiana)	18	4	0	0	0	Dead or Dying Branches / Excessive Leaning / Canopy Dieback / Cavities or Decay in the Trunk or Branches / Root Damage or Exposed Roots / Unbalanced Canopy (One side significantly heavier than the other)
13	Live Oak (Quercus virginiana)	16	4	0	0	0	Dead or Dying Branches / Excessive Storm/Wind Damage / Excessive Leaning / Canopy Dieback / Cavities or Decay in the Trunk or Branches
14	Live Oak (Quercus virginiana)	13	4	0	0	0	Dead or Dying Branches / Excessive Storm/Wind Damage / Canopy Dieback / Peel or Missing Bark
15	Live Oak (Quercus virginiana)	19	5	0	0	0	Rot in major limbs / Cracks or Splits in the Trunk / Dead or Dying Branches / Excessive Leaning
16	Live Oak (Quercus virginiana)	19	4	0	0	0	Dead or Dying Branches / Canopy Dieback / Cavities or Decay in the Trunk or Branches / Peeling or Missing Bark
17	Live Oak (Quercus virginiana)	12	3	12	Y	12	
18	Southern Red Cedar (Juniperus silicicola)	12	3	12	Y	12	
19	Water Oak (Quercus nigra)	20	3	20	Y	20	
20	Live Oak (Quercus virginiana)	23	3	23	Y	23	
21	Southern Red Cedar (Juniperus silicicola)	8	2	8	Y	8	
22	Southern Red Cedar (Juniperus silicicola)	6	3	6	Y	6	
23	Sabal palm (Sabal palmetto)	12	3	12	Y	12	
24	Southern Red Cedar (Juniperus silicicola)	10	2	10	Y	10	
24A	Southern Red Cedar (Juniperus silicicola)	9	2	9	Y	9	
25	Southern Magnolia (Magnolia grandiflora)	16	3	16	Y	16	
26	Southern Red Cedar (Juniperus silicicola)	6	2	6	Y	6	
27	Southern Red Cedar (Juniperus silicicola)	6	2	6	Y	6	
28	Southern Red Cedar (Juniperus silicicola)	8	2	8	Y	8	
29	Live Oak (Quercus virginiana)	9	3	9	Y	9	
30	Live Oak (Quercus virginiana)	41	2	41	Y	41	
31	Southern Magnolia (Magnolia grandiflora)	14	2	14	Y	14	
32	Southern Red Cedar (Juniperus silicicola)	7	2	7	Y	7	
32A	Black Cherry (Prunus serotina)	7	3	7	Y	7	
33	Water Oak (Quercus nigra)	13	4	0	N	0	Major rot in bole
34	Live Oak (Quercus virginiana)	23	3	23	Y	23	
35	Live Oak (Quercus virginiana)	41	3	41	Y	41	
36	Southern Magnolia (Magnolia grandiflora)	12	3	12	N	0	
37	Live Oak (Quercus virginiana)	31	2	31	N	0	
38	Live Oak (Quercus virginiana)	24	3	24	N	0	
39	Live Oak (Quercus virginiana)	37	3	37	N	0	
40	Live Oak (Quercus virginiana)	46	4	0	0	0	Codominate Branching with Included Bark / Epicormic Shoots (Sprouts from the Trunk or Base) / Mechanical Damage (From mowers, vehicles, or improper pruning)
41	Live Oak (Quercus virginiana)	42	3	42	N	0	
42	Live Oak (Quercus virginiana)	34	3	34	Y	34	
43	Live Oak (Quercus virginiana)	19	3	19	Y	19	
44	Live Oak (Quercus virginiana)	16	3	16	Y	16	
45	Live Oak (Quercus virginiana)	23	2	23	Y	23	
46	Sabal palm (Sabal palmetto)	14	2	14	Y	14	
47	Live Oak (Quercus virginiana)	31	2	31	Y	31	
48	Live Oak (Quercus virginiana)	19	2	19	Y	19	
49	Live Oak (Quercus virginiana)	25	3	25	Y	25	
50	Southern Magnolia (Magnolia grandiflora)	12	2	12	Y	12	
51	Live Oak (Quercus virginiana)	12	4	0	N	0	Excessive Leaning
52	Live Oak (Quercus virginiana)	15	4	0	N	0	Excessive Leaning
53	Live Oak (Quercus virginiana)	18	4	0	N	0	Excessive Leaning
54	Live Oak (Quercus virginiana)	15	4	0	N	0	Excessive Leaning
55	Live Oak (Quercus virginiana)	43	2	43	Y	43	
56	Live Oak (Quercus virginiana)	22	3	22	Y	22	
57	Live Oak (Quercus virginiana)	25	3	25	N	0	
58	Live Oak (Quercus virginiana)	23	2	23	N	0	
59	Live Oak (Quercus virginiana)	36	3	36	N	0	
60	Live Oak (Quercus virginiana)	21	3	21	N	0	
61	Live Oak (Quercus virginiana)	29	4	0	N	0	Excessive Leaning
62	Live Oak (Quercus virginiana)	62	2	62	N	0	
63	Live Oak (Quercus virginiana)	32	3	32	N	0	
64	Live Oak (Quercus virginiana)	83	2	83	N	0	
65	Live Oak (Quercus virginiana)	34	3	34	Y	34	
66	Live Oak (Quercus virginiana)	22	3	22	Y	22	
67	Live Oak (Quercus virginiana)	82	2	82	Y	82	
68	Live Oak (Quercus virginiana)	38	3	38	Y	38	
69	Southern Magnolia (Magnolia grandiflora)	14	2	14	Y	14	
70	Live Oak (Quercus virginiana)	78	3	78	Y	78	
71	Live Oak (Quercus virginiana)	22	3	22	Y	22	
72	Live Oak (Quercus virginiana)	17	3	17	Y	17	
73	Live Oak (Quercus virginiana)	49	3	49	Y	49	
74	Live Oak (Quercus virginiana)	73	2	73	Y	73	
75	Southern Magnolia (Magnolia grandiflora)	28	2	28	Y	28	
76	Live Oak (Quercus virginiana)	44	2	44	Y	44	
77	Live Oak (Quercus virginiana)	23	3	23	Y	23	

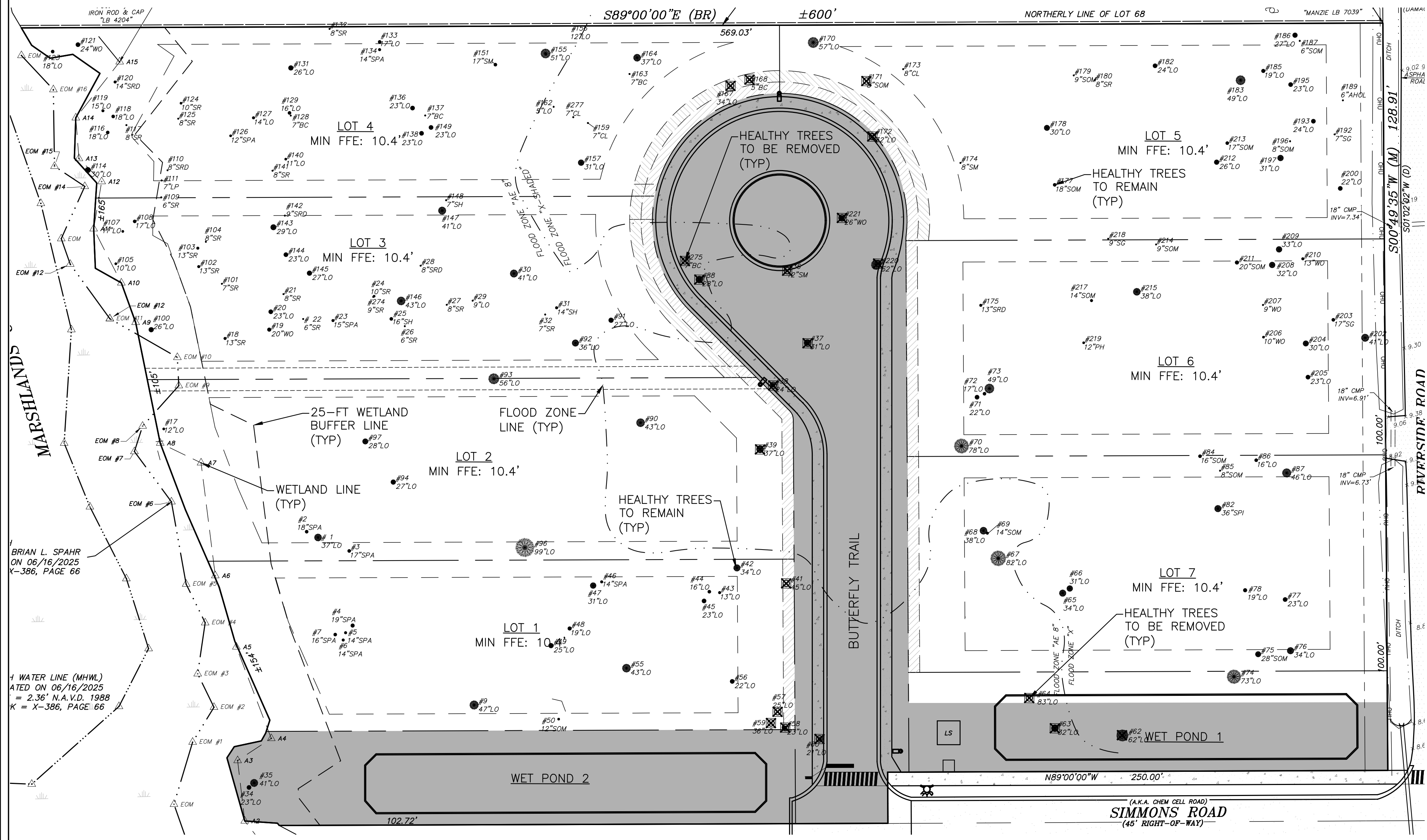
78	Live Oak (Quercus virginiana)	19	3	19	Y	19	
79	Live Oak (Quercus virginiana)	16	4	0	N	0	Excessive Leaning
80	Live Oak (Quercus virginiana)	23	4	0	N	0	Excessive Leaning / Mechanical Damage (From mowers, vehicles, or improper pruning)
81	Live Oak (Quercus virginiana)	17	4	0	N	0	Excessive Leaning
82	Slash Pine (Pinus elliotii)	16	2	16	Y	16	
83	Live Oak (Quercus virginiana)	43	4	0	N	0	Dead or Dying Branches / Peeling or Missing Bark / Mechanical Damage (From mowers, vehicles, or improper pruning)
84	Southern Magnolia (Magnolia grandiflora)	16	3	16	Y	16	
85	Southern Magnolia (Magnolia grandiflora)	8	3	8	N	0	
86	Live Oak (Quercus virginiana)	16	3	16	Y	16	
87	Live Oak (Quercus virginiana)	46	3	46	Y	46	
88	Live Oak (Quercus virginiana)	39	3	39	Y	39	
89	Live Oak (Quercus virginiana)	26	4	0	N	0	Excessive Leaning / Mechanical Damage (From mowers, vehicles, or improper pruning)
90	Live Oak (Quercus virginiana)	43	3	43	Y	43	
91	Live Oak (Quercus virginiana)	27	3	27	Y	27	
92	Live Oak (Quercus virginiana)	36	3	36	Y	36	
93	Live Oak (Quercus virginiana)	56	2	56	Y	56	
94	Live Oak (Quercus virginiana)	27	3	27	Y	27	
95	Live Oak (Quercus virginiana)	17	4	0	N	0	Dead or Dying Branches / Excessive Leaning
96	Live Oak (Quercus virginiana)	99	2	99	Y	99	
97	Live Oak (Quercus virginiana)	28	3	28	Y	28	
98	Live Oak (Quercus virginiana)	26	4	0	N	0	Excessive Leaning / Mechanical Damage (From mowers, vehicles, or improper pruning)
99	Live Oak (Quercus virginiana)	23	4	0	N	0	Mechanical Damage (From mowers, vehicles, or improper pruning)
100	Live Oak (Quercus virginiana)	26	3	26	Y	26	
101	Southern Red Cedar (Juniperus silicicola)	7	2	7	Y	7	
102	Southern Red Cedar (Juniperus silicicola)	13	3	13	Y	13	
103	Southern Red Cedar (Juniperus silicicola)	13	3	13	Y	13	
104	Southern Red Cedar (Juniperus silicicola)	8	3	8	Y	8	
105	Live Oak (Quercus virginiana)	30	3	30	Y	30	
106	Live Oak (Quercus virginiana)	1	4	0	N	0	Canopy Dieback, Shaded
107	Live Oak (Quercus virginiana)	11	3	11	Y	11	
108	Live Oak (Quercus virginiana)	17	3	17	Y	17	
109	Southern Red Cedar (Juniperus silicicola)	6	2	6	Y	6	
110	Southern Red Cedar (Juniperus silicicola)	8	3	8	Y	8	
111	Longleaf Pine (Pinus palustris)	7	2	7	Y	7	
112	Live Oak (Quercus virginiana)	12	4	0	N	0	Dead or Dying Branches / Excessive Leaning / Unbalanced Canopy (One side significantly heavier than the other)
113	Slash Pine (Pinus elliotii)	7	4	0	N	0	Unbalanced Canopy (One side significantly heavier than the other)
114	Live Oak (Quercus virginiana)	30	2	30	Y	30	
115	Live Oak (Quercus virginiana)	13	4	0	N	0	Excessive Leaning
116	Live Oak (Quercus virginiana)	13	3	13	Y	13	
117	Southern Red Cedar (Juniperus silicicola)	8	2	8	Y	8	
118	Live Oak (Quercus virginiana)	18	3	18	Y	18	
119	Live Oak (Quercus virginiana)	15	3	15	Y	15	
120	Southern Red Cedar (Juniperus silicicola)	14	2	14	N	0	
121	Water Oak (Quercus nigra)	24	3	24	Y	24	
122	Live Oak (Quercus virginiana)	25	4	0	N	0	Decay, with Dead and Dying Branches
123	Live Oak (Quercus virginiana)	11	3	11	Y	11	
124	Southern Red Cedar (Juniperus silicicola)	10	3	10	Y	10	
125	Southern Red Cedar (Juniperus silicicola)	8	2	8	Y	8	
126	Sabal palmetto (Sabal palmetto)	13	3	13	Y	13	
127	Live Oak (Quercus virginiana)	14	3	14	N	0	
128	Black Cherry (Prunus serotina)	7	2	7	Y	7	
129	Live Oak (Quercus virginiana)	16	2	16	Y	16	
130	Water Oak (Quercus nigra)	21	4	0	N	0	Excessive Leaning / Epicormic Shoots (Sprouts from the Trunk or Base, in decline)
131	Live Oak (Quercus virginiana)	26	3	26	Y	26	
132	Southern Red Cedar (Juniperus silicicola)	8	3	8	Y	8	
133	Live Oak (Quercus virginiana)	17	2	17	Y	17	
134	Sabal palmetto (Sabal palmetto)	14	2	14	Y	14	
135	Live Oak (Quercus virginiana)	30	4	0	N	0	Cracks or Splits in the Trunk / Dead and Dying Branches
136	Live Oak (Quercus virginiana)	23	3	23	Y	23	
137	Black Cherry (Prunus serotina)	7	3	7	Y	7	
138	Live Oak (Quercus virginiana)	23	3	23	Y	23	
139	Live Oak (Quercus virginiana)	15	4	0	N	0	Dead or Dying Branches / Cavities and Decay in the Trunk or Branches
140	Live Oak (Quercus virginiana)	11	3	11	Y	11	
141	Southern Red Cedar (Juniperus silicicola)	8	2	8	Y	8	
142	Southern Red Cedar (Juniperus silicicola)	9	3	9	Y	9	
143	Live Oak (Quercus virginiana)	29	2	29	Y	29	
144	Live Oak (Quercus virginiana)	21	2	21	Y	21	
145	Live Oak (Quercus virginiana)	27	3	27	Y	27	
146	Live Oak (Quercus virginiana)	41	2	41	N	0	
147	Live Oak (Quercus virginiana)	42	3	42	Y	42	
148	Southern Hackberry (Celtis laevigata)	7	2	7	Y	7	
149	Live Oak (Quercus virginiana)	23	3	23	Y	23	
150	Live Oak (Quercus virginiana)	23	4	0	N	0	Dead or Dying Branches / Excessive Leaning / Canopy Dieback / Unbalanced Canopy (One side significantly heavier than the other) / Moss
151	Southern Magnolia (Magnolia grandiflora)	17	3	17	Y	17	
152	Live Oak (Quercus virginiana)	12	3	12	Y	12	
153	Live Oak (Quercus virginiana)	13	4	0	N	0	Dead or Dying Branches / Excessive Leaning / Canopy Dieback / Cavities or Decay in the Trunk or Branches
154	Live Oak (Quercus virginiana)	15	3	15	Y	15	
155	Live Oak (Quercus virginiana)	51	3	51	Y	51	
156	Live Oak (Quercus virginiana)	12	3	12	Y	12	
157	Live Oak (Quercus virginiana)	31	3	31	Y	31	
158	Live Oak (Quercus virginiana)	16	3	16	Y	16	
159	Cherry Laurel (Prunus caroliniana)	7	5	0	N	0	Major rot in bole / Excessive Sap Flow or Bleeding from the Trunk / Excessive Leaning / Unbalanced Canopy (One side significantly heavier than the other)
160	Cherry Laurel (Prunus caroliniana)	7	3	7	N	0	
161	Live Oak (Quercus virginiana)	27	4	0	N	0	Rot in major limbs / Major rot in bole / Excessive Sap Flow or Bleeding from the Trunk
162	Live Oak (Quercus virginiana)	5	2	5	Y	5	
163	Black Cherry (Prunus serotina)	7	2	7	Y	7	
164	Live Oak (Quercus virginiana)	17	2	17	Y	17	

165	Southern Red Cedar (Juniperus silicicola)	10	4	0	N	0	Cracks or Splits in the Trunk / Dead or Dying Branches / Peeling or Missing Bark / Shaded
166	Black Cherry (Prunus serotina)	7	4	0	N	0	Major rot in bole / Excessive Leaning / Unbalanced Canopy (One side significantly heavier than the other)
167	Live Oak (Quercus virginiana)	34	3	34	N	0	
168	Black Cherry (Prunus serotina)	5	3	5	N	0	
169	Live Oak (Quercus virginiana)	32	4	0	N	0	Rot in major limbs / Major rot in bole / Cracks or Splits in the Trunk / Dead or Dying Branches / Unbalanced Canopy (One side significantly heavier than the other) / Water-soaked or Decaying Wood
170	Live Oak (Quercus virginiana)	57	3	57	N	0	
171	Southern Magnolia (Magnolia grandiflora)	8	2	8	N	0	
172	Live Oak (Quercus virginiana)	32	2	32	N	0	
173	Cherry Laurel (Prunus caroliniana)	8	3	8	Y	8	
174	Southern Magnolia (Magnolia grandiflora)	8	3	8	Y	8	
175	Southern Red Cedar (Juniperus silicicola)	13	3	13	Y	13	
176	Live Oak (Quercus virginiana)	41	4	0	N	0	Rot in major limbs / Major rot in bole / Dead or Dying Branches / Cavities or Decay in the Trunk or Branches / Water-soaked or Decaying Wood
177	Southern Magnolia (Magnolia grandiflora)	18	3	18	N	0	
178	Live Oak (Quercus virginiana)	30	3	30	Y	30	
179	Southern Magnolia (Magnolia grandiflora)	9	2	9	Y	9	
180	Southern Red Cedar (Juniperus silicicola)	8	2	8	Y	8	
181	Live Oak (Quercus virginiana)	73	4	0	N	0	Dead or Dying Branches / Excessive Leaning / Cavities or Decay in the Trunk or Branches / Unbalanced Canopy (One side significantly heavier than the other)
182	Live Oak (Quercus virginiana)	24	3	24	Y		

I, _____, am a certified arborist through the International Society of Arboriculture and my certification number is _____ I hereby attest that I have approved this tree protection and/or replacement plan. This includes not only the evaluation of individual trees, but also review of the complete construction plan set and the techniques that will be utilized to mitigate impacts to protected trees. Further, I attest that best practices, as supported by the International Society of Arboriculture, are being implemented to avoid and mitigate impacts to protected trees.

Signed,

ON SITE



TREE NO.	ACTUAL SPECIES	DBH	HEALTH STATUS	PROTECTED DBH	PRESERVED? (Y/N)	PRESERVED DBH
34	Live Oak (Quercus virginiana)	23	3	23	Y	23
35	Live Oak (Quercus virginiana)	41	3	41	Y	41
36	Southern Magnolia (Magnolia grandiflora)	12	2	12	N	0
37	Live Oak (Quercus virginiana)	31	2	31	N	0
38	Live Oak (Quercus virginiana)	24	3	24	N	0
60	Live Oak (Quercus virginiana)	21	3	21	N	0
62	Live Oak (Quercus virginiana)	62	2	62	N	0
63	Live Oak (Quercus virginiana)	32	3	32	N	0
88	Live Oak (Quercus virginiana)	28	3	28	N	0
172	Live Oak (Quercus virginiana)	32	2	32	N	0
220	Live Oak (Quercus virginiana)	52	3	52	N	0
221	Water Oak (Quercus nigra)	26	2	26	N	0
272	Live Oak (Quercus virginiana)	5	3	5	Y	0
TOTAL VALUES:				389		64
PREDEVELOPMENT PROTECTED DBH						389
REQUIRED PRESERVATION (50% DBH)						194.5
PRESERVED TOTAL (DBH)						64
DEFICIT (DBH)						130.5
PROPOSED # OF PLANTINGS (3.0" TREES)						0
PROPOSED PLANTINGS (DBH)						0
DBH MITIGATED THRU CITY TREE FUND						130.5
PROPOSED MITIGATION (DBH)						130.5

HEALTH STATUS CODES		
STATUS CODE	MITIGABLE? (Y/N)	HEALTH STATUS
1	Y	NO APPARENT DEFECT
2	Y	MINOR DEFECT
3	Y	COULD KEEP TREE BUT HAS DEFECTS
4	N	POOR HEALTH AND SUGGEST REMOVAL
5	N	SEVERE DEFECT AND SHOULD BE REMOVED

NC. EXISTING TREE LEGEND	
SYMBOL	DESCRIPTION
LO	Live Oak (Quercus virginiana)
SR	Southern Red Cedar (Juniperus Siliciola)
WO	Water Oak (Quercus nigra)
SPA	Sabal palm (sabal palmetto)
AHOL	American Holly (Ilex opaca)
SWG	Sweetgum (Liquidambar styraciflua)
SPI	Slash Pine (Pinus elliottii)
AHOR	American Hornbeam (Carpinus caroliniana)
SWM	Sweetbay Magnolia (Magnolia virginiana)
☒	HEALTHY TREE TO BE REMOVED

L			
K			
J			
H			
G			
F			
E			
D			
C			
B	AB	12/8/25	C.O.F.B. TRC - FIRST SUBMITTAL
A	AB	10/8/25	C.O.F.B. FIRST STEP MEETING
No.	By	Date	Revision

Scale: 1:30
 Project Mgr: AG
 Designed by: AG
 Drawn by: AB/BS
 QA/QC: NG

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 31 South 4th Street
 Fernandina Beach, FL 32034
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 FERNANDINA BEACH, FLORIDA

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ONSITE COMMON AREA/R.O.W. TREE MITIGATION DATA

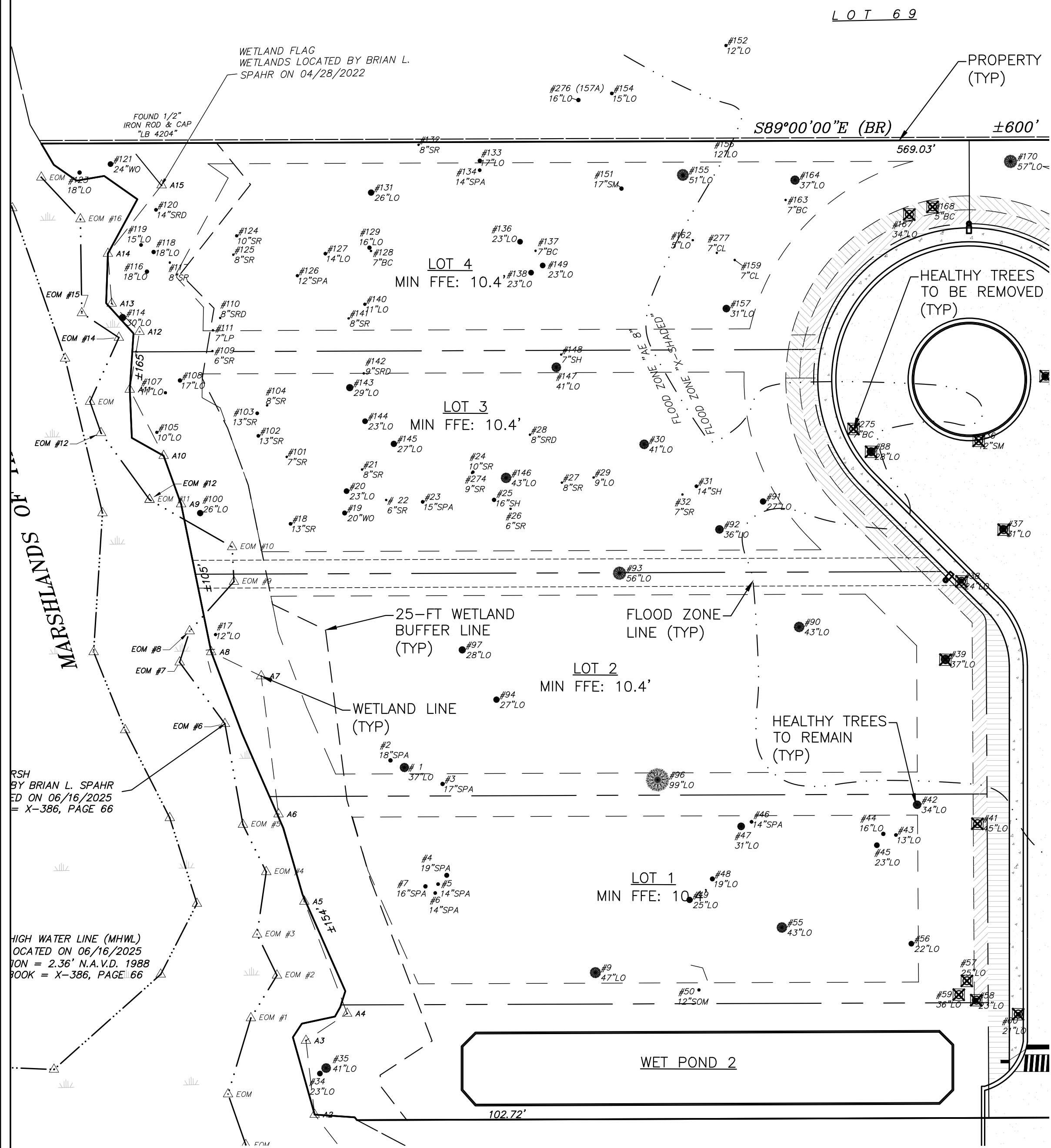
REGISTERED DESIGN PROFESSIONAL
 ASA R. GILLETTE, P.E.
 FLORIDA P.E. NO. 56177

ISSUE DATE: 12/8/25
 Sheet TM-2
 Page 19 of X
 Project No. XX-XX-XX

HEALTH STATUS CODES		
STATUS CODE	MITIGABLE? (Y/N)	HEALTH STATUS
1	Y	NO APPARENT DEFECT
2	Y	MINOR DEFECT
3	Y	COULD KEEP TREE BUT HAS DEFECTS
4	N	POOR HEALTH AND SUGGEST REMOVAL
5	N	SEVERE DEFECT AND SHOULD BE REMOVED

I, _____, am a certified arborist through the International Society of Arboriculture and my certification number is _____. I hereby attest that I have approved this tree protection and/or replacement plan. This includes not only the evaluation of individual trees, but also review of the complete construction plan set and the techniques that will be utilized to mitigate impacts to protected trees. Further, I attest that best practices, as supported by the International Society of Arboriculture, are being implemented to avoid and mitigate impacts to protected trees.

Signed, _____



LOT 1

TREE NO.	ACTUAL SPECIES	DBH	HEALTH STATUS	PROTECTED DBH	PRESERVED (Y/N)	PRESERVED DBH
4	Sabal palm(Sabal palmetto)	19	3	19	Y	19
5	Sabal palm(Sabal palmetto)	14	3	14	Y	14
6	Sabal palm(Sabal palmetto)	14	3	14	Y	14
7	Sabal palm(Sabal palmetto)	16	3	16	Y	16
9	Live Oak (Quercus virginiana)	47	2	47	Y	47
41	Live Oak (Quercus virginiana)	45	3	45	N	0
42	Live Oak (Quercus virginiana)	34	3	34	Y	34
43	Live Oak (Quercus virginiana)	13	3	13	Y	13
44	Live Oak (Quercus virginiana)	16	3	16	Y	16
45	Live Oak (Quercus virginiana)	23	2	23	Y	23
46	Sabal palm(Sabal palmetto)	14	2	14	Y	14
47	Live Oak (Quercus virginiana)	31	2	31	Y	31
48	Live Oak (Quercus virginiana)	19	2	19	Y	19
49	Live Oak (Quercus virginiana)	25	3	25	Y	25
50	Southern Magnolia (Magnolia grandiflora)	12	2	12	Y	12
55	Live Oak (Quercus virginiana)	43	2	43	Y	43
56	Live Oak (Quercus virginiana)	22	3	22	Y	22
57	Live Oak (Quercus virginiana)	25	3	0	N	0
58	Live Oak (Quercus virginiana)	23	2	23	N	0
59	Live Oak (Quercus virginiana)	36	3	36	N	0
TOTAL VALUES:				466		362
PREDEVELOPMENT PROTECTED DBH						466
REQUIRED PRESERVATION (50% DBH)						233
PRESERVED TOTAL (DBH)						362
DEFICIT (DBH)						-129
PROPOSED # OF PLANTINGS (3.0" TREES)						0
PROPOSED PLANTINGS (DBH)						-129
DBH MITIGATED THRU CITY TREE FUND						-129
PROPOSED MITIGATION (DBH)						-129

LOT1 EXISTING TREE LEGEND	
SYMBOL	DESCRIPTION
LO	Live Oak (Quercus virginiana)
SOM	Southern Magnolia (Magnolia grandiflora)
SPA	Sabal palm (sabal palmetto)
☒	HEALTHY TREE TO BE REMOVED

LOT 3

TREE NO.	ACTUAL SPECIES	DBH	HEALTH STATUS	PROTECTED DBH	PRESERVED (Y/N)	PRESERVED DBH
18	Southern Red Cedar (Juniperus silicicola)	13	3	13	Y	13
19	Water Oak (Quercus nigra)	20	3	20	Y	20
20	Live Oak (Quercus virginiana)	23	3	23	Y	23
21	Southern Red Cedar (Juniperus silicicola)	8	2	8	Y	8
22	Southern Red Cedar (Juniperus silicicola)	6	3	6	Y	6
23	Sabal palm(Sabal palmetto)	15	3	15	Y	15
24	Southern Red Cedar (Juniperus silicicola)	10	2	10	Y	10
24A	Southern Red Cedar (Juniperus silicicola)	9	2	9	Y	9
25	Southern Hackberry (Celtis laevigata)	16	3	16	Y	16
26	Southern Red Cedar (Juniperus silicicola)	6	2	6	Y	6
27	Southern Red Cedar (Juniperus silicicola)	8	2	8	Y	8
28	Southern Red Cedar (Juniperus silicicola)	8	2	8	Y	8
29	Live Oak (Quercus virginiana)	9	3	9	Y	9
30	Live Oak (Quercus virginiana)	41	2	41	Y	41
31	Southern Hackberry (Celtis laevigata)	14	2	14	Y	14
32	Southern Red Cedar (Juniperus silicicola)	7	2	7	Y	7
32A	Black Cherry (Prunus serotina)	7	3	7	Y	7
31	Live Oak (Quercus virginiana)	27	3	27	Y	27
32	Live Oak (Quercus virginiana)	36	2	36	Y	36
33	Live Oak (Quercus virginiana)	56	2	56	Y	56
100	Live Oak (Quercus virginiana)	26	3	26	Y	26
101	Southern Red Cedar (Juniperus silicicola)	7	2	7	Y	7
102	Southern Red Cedar (Juniperus silicicola)	13	3	13	Y	13
103	Southern Red Cedar (Juniperus silicicola)	13	3	13	Y	13
104	Southern Red Cedar (Juniperus silicicola)	8	3	8	Y	8
105	Live Oak (Quercus virginiana)	10	3	10	Y	10
107	Live Oak (Quercus virginiana)	11	3	11	Y	11
108	Live Oak (Quercus virginiana)	17	3	17	Y	17
142	Southern Red Cedar (Juniperus silicicola)	9	3	9	Y	9
143	Live Oak (Quercus virginiana)	29	2	29	Y	29
144	Live Oak (Quercus virginiana)	23	2	23	Y	23
145	Live Oak (Quercus virginiana)	27	3	27	Y	27
147	Live Oak (Quercus virginiana)	41	3	41	Y	41
TOTAL VALUES:				573		573
PREDEVELOPMENT PROTECTED DBH						573
REQUIRED PRESERVATION (50% DBH)						286.5
PRESERVED TOTAL (DBH)						573
DEFICIT (DBH)						-286.5
PROPOSED # OF PLANTINGS (3.0" TREES)						0
PROPOSED PLANTINGS (DBH)						-286.5
DBH MITIGATED THRU CITY TREE FUND						-286.5
PROPOSED MITIGATION (DBH)						-286.5

LOT 3 EXISTING TREE LEGEND	
SYMBOL	DESCRIPTION
LO	Live Oak (Quercus virginiana)
SR	Southern Red Cedar (Juniperus silicicola)
WO	Water Oak (Quercus nigra)
SPA	Sabal palm (sabal palmetto)
SH	Southern Hackberry (Celtis laevigata)
BC	Black Cherry (Prunus serotina)
☒	HEALTHY TREE TO BE REMOVED

LOT 2

TREE NO.	ACTUAL SPECIES	DBH	HEALTH STATUS	PROTECTED DBH	PRESERVED (Y/N)	PRESERVED DBH
1	Live Oak (Quercus virginiana)	37	3	37	Y	37
2	Sabal palm(Sabal palmetto)	18	3	18	Y	18
3	Sabal palm(Sabal palmetto)	17	3	17	Y	17
17	Live Oak (Quercus virginiana)	12	3	12	Y	12
39	Live Oak (Quercus virginiana)	37	3	37	N	0
90	Live Oak (Quercus virginiana)	43	3	43	Y	43
91	Live Oak (Quercus virginiana)	27	3	27	Y	27
92	Live Oak (Quercus virginiana)	36	2	36	Y	36
93	Live Oak (Quercus virginiana)	56	2	56	Y	56
94	Live Oak (Quercus virginiana)	27	3	27	Y	27
96	Live Oak (Quercus virginiana)	99	2	99	Y	99
97	Live Oak (Quercus virginiana)	28	3	28	Y	28
TOTAL VALUES:				437		400
PREDEVELOPMENT PROTECTED DBH						437
REQUIRED PRESERVATION (50% DBH)						218.5
PRESERVED TOTAL (DBH)						400
DEFICIT (DBH)						-181.5
PROPOSED # OF PLANTINGS (3.0" TREES)						0
PROPOSED PLANTINGS (DBH)						-181.5
DBH MITIGATED THRU CITY TREE FUND						-181.5
PROPOSED MITIGATION (DBH)						-181.5

LOT2 EXISTING TREE LEGEND	
SYMBOL	DESCRIPTION
LO	Live Oak (Quercus virginiana)
SPA	Sabal palm (sabal palmetto)
☒	HEALTHY TREE TO BE REMOVED

LOT 4

TREE NO.	ACTUAL SPECIES	DBH	HEALTH STATUS	PROTECTED DBH	PRESERVED (Y/N)	PRESERVED DBH
109	Southern Red Cedar (Juniperus silicicola)	6	2	6	Y	6
110	Southern Red Cedar (Juniperus silicicola)	8	3	8	Y	8
111	Longleaf Pine (Pinus palustris)	7	2	7	Y	7
114	Live Oak (Quercus virginiana)	30	2	30	Y	30
116	Live Oak (Quercus virginiana)	18	3	18	Y	18
117	Southern Red Cedar (Juniperus silicicola)	8	2	8	Y	8
118	Live Oak (Quercus virginiana)	18	3	18	Y	18
119	Live Oak (Quercus virginiana)	15	3	15	Y	15
120	Southern Red Cedar (Juniperus silicicola)	14	2	14	Y	14
121	Water Oak (Quercus nigra)	24	3	24	Y	24
123	Live Oak (Quercus virginiana)	18	3	18	Y	18
124	Southern Red Cedar (Juniperus silicicola)	10	3	10	Y	10
125	Southern Red Cedar (Juniperus silicicola)	8	2	8	Y	8
126	Sabal palm(Sabal palmetto)	12	3	12	Y	12
127	Live Oak (Quercus virginiana)	14	3	14	Y	14
128	Black Cherry (Prunus serotina)	7	2	7	Y	7
129	Live Oak (Quercus virginiana)	16	2	16	Y	16
131	Live Oak (Quercus virginiana)	26	3	26	Y	26
132	Southern Red Cedar (Juniperus silicicola)	8	3	8	Y	8
133	Live Oak (Quercus virginiana)	17	2	17	Y	17
134	Sabal palm(Sabal palmetto)	14	2	14	Y	14
136	Live Oak (Quercus virginiana)	23	3	23	Y	23
137	Black Cherry (Prunus serotina)	7	3	7	Y	7
138	Live Oak (Quercus virginiana)	23	3	23	Y	23
140	Live Oak (Quercus virginiana)	11	3	11	Y	11
141	Southern Red Cedar (Juniperus silicicola)	8	2	8	Y	8
148	Southern Hackberry (Celtis laevigata)	7	2	7	Y	7
149	Live Oak (Quercus virginiana)	23	3	23	Y	23
151	Southern Magnolia (Magnolia grandiflora)	17	3	17	Y	17
152	Live Oak (Quercus virginiana)	12	3	12	Y	12
155	Live Oak (Quercus virginiana)	51	3	51	Y	51
156	Live Oak (Quercus virginiana)	12	3	12	Y	12
157	Live Oak (Quercus virginiana)	31	3	31	Y	31
157A	Live Oak (Quercus virginiana)	16	3	16	Y	16
159	Cherry Laurel (Prunus caroliniana)	7	3	7	Y	7
162	Live Oak (Quercus virginiana)	5	2	5	Y	5
163	Black Cherry (Prunus serotina)	7	2	7	Y	7
164	Live Oak (Quercus virginiana)	37	2	37	Y	37
167	Live Oak (Quercus virginiana)	34	3	34	N	0
168	Black Cherry (Prunus serotina)	5	3	5	N	0
TOTAL VALUES:				634		595
PREDEVELOPMENT PROTECTED DBH						634
REQUIRED PRESERVATION (50% DBH)						317
PRESERVED TOTAL (DBH)						595
DEFICIT (DBH)						-278
PROPOSED # OF PLANTINGS (3.0" TREES)						0
PROPOSED PLANTINGS (DBH)						-278
DBH MITIGATED THRU CITY TREE FUND						-278
PROPOSED MITIGATION (DBH)						-278

LOT 4 EXISTING TREE LEGEND	
SYMBOL	DESCRIPTION
LO	Live Oak (Quercus virginiana)
SOM	Southern Magnolia (Magnolia grandiflora)
SR	Southern Red Cedar (Juniperus silicicola)
WO	Water Oak (Quercus nigra)
SPA	Sabal palm (sabal palmetto)
SH	Southern Hackberry (Celtis laevigata)
BC	Black Cherry (Prunus serotina)
SPI	Slash Pine (Pinus elliotii)
LP	Longleaf Pine (Pinus palustris)
CL	Cherry Laurel (Prunus caroliniana)
☒	HEALTHY TREE TO BE REMOVED

L			
K			
J			
H			
F			
E			
D			
C			
B	AB	12/8/25	C.O.F.B. TRC - FIRST SUBMITTAL
A	AB	10/8/25	C.O.F.B. FIRST STEP MEETING
No.	By	Date	Revision

Scale: 1:30
 Project Mgr: AG
 Designed by: AG
 Drawn by: AB/BS
 QA/QC: NG

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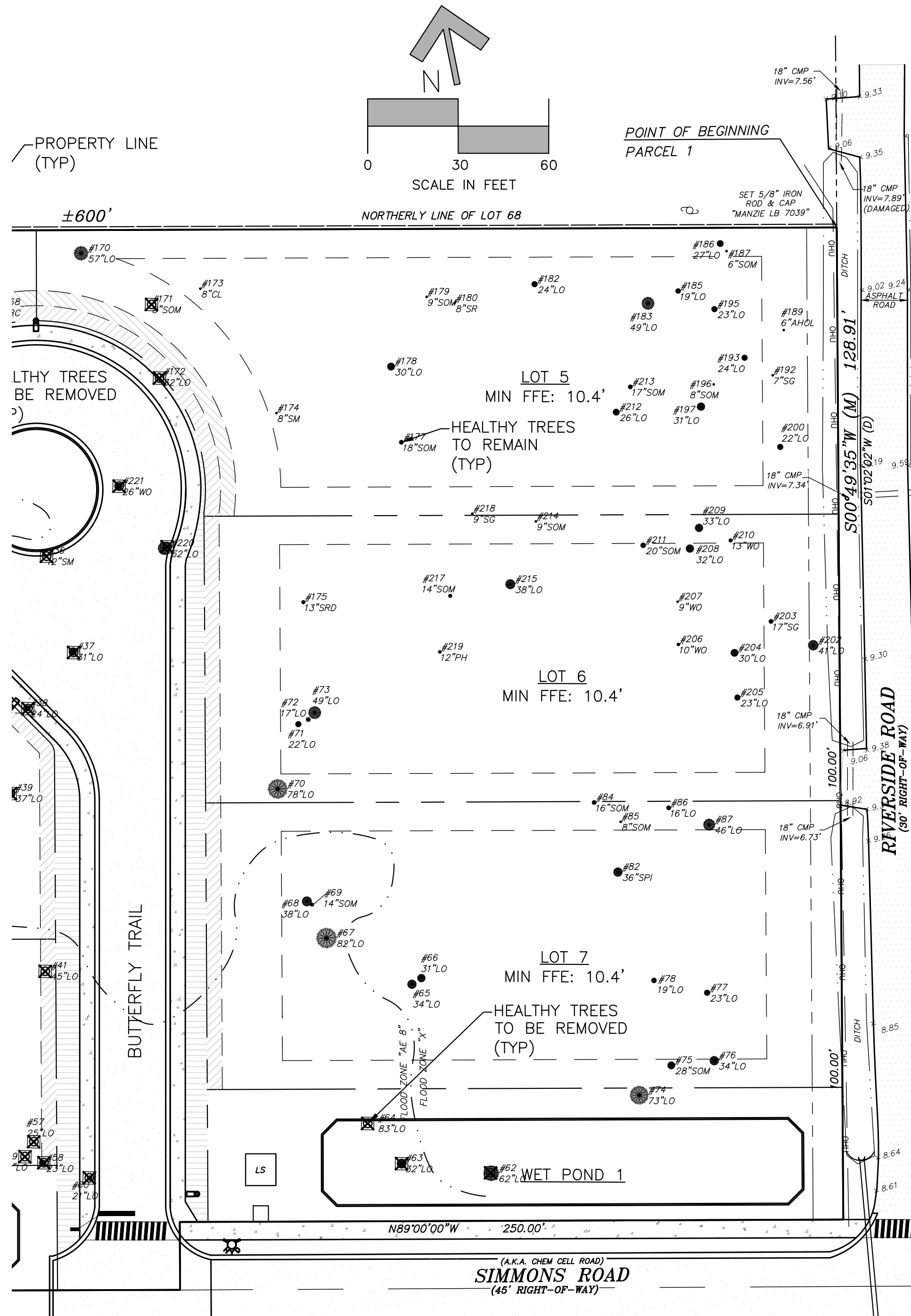
LOTS 1, 2, 3, & 4
 TREE MITIGATION DATA

REGISTERED DESIGN PROFESSIONAL
 ISSUE DATE: 12/8/25
 Sheet
 TM-3
 Page 20 of X
 Project No. XX-XX-XX
 ASA R. GILLETTE, P.E.
 FLORIDA P.E. NO. 56177

HEALTH STATUS CODES		
STATUS CODE	MITIGABLE? (Y/N)	HEALTH STATUS
1	Y	NO APPARENT DEFECT
2	Y	MINOR DEFECT
3	Y	COULD KEEP TREE BUT HAS DEFECTS
4	N	POOR HEALTH AND SUGGEST REMOVAL
5	N	SEVERE DEFECT AND SHOULD BE REMOVED

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Signed, _____



LOT 5

TREE NO.	ACTUAL SPECIES	DBH	HEALTH STATUS	PROTECTED DBH	PRESERVED (Y/N)	PRESERVED DBH
170	Live Oak (Quercus virginiana)	57	3	57	Y	57
171	Southern Magnolia (Magnolia grandiflora)	8	2	8	N	0
172	Live Oak (Quercus virginiana)	32	2	32	N	0
173	Cherry Laurel (Prunus caroliniana)	8	3	8	Y	8
174	Southern Magnolia (Magnolia grandiflora)	8	2	8	Y	8
177	Southern Magnolia (Magnolia grandiflora)	18	3	18	Y	18
178	Live Oak (Quercus virginiana)	30	3	30	Y	30
179	Southern Magnolia (Magnolia grandiflora)	9	2	9	Y	9
180	Southern Red Cedar (Juniperus silicicola)	8	2	8	Y	8
182	Live Oak (Quercus virginiana)	24	3	24	Y	24
183	Live Oak (Quercus virginiana)	49	3	49	Y	49
185	Live Oak (Quercus virginiana)	19	3	19	Y	19
186	Live Oak (Quercus virginiana)	27	2	27	Y	27
187	Southern Magnolia (Magnolia grandiflora)	6	2	6	Y	6
189	American Holly (Ilex opaca)	6	2	6	Y	6
192	Sweetgum (Liquidambar styraciflua)	7	3	7	Y	7
193	Live Oak (Quercus virginiana)	24	3	24	Y	24
195	Live Oak (Quercus virginiana)	23	3	23	Y	23
196	Southern Magnolia (Magnolia grandiflora)	8	2	8	Y	8
197	Live Oak (Quercus virginiana)	31	2	31	Y	31
200	Live Oak (Quercus virginiana)	22	3	22	Y	22
212	Live Oak (Quercus virginiana)	26	2	26	Y	26
213	Southern Magnolia (Magnolia grandiflora)	17	2	17	Y	17
214	Southern Magnolia (Magnolia grandiflora)	9	2	9	Y	9
218	Sweetgum (Liquidambar styraciflua)	9	3	9	Y	9
TOTAL VALUES:				485		445
PREDEVELOPMENT PROTECTED DBH						485
REQUIRED PRESERVATION (50% DBH)						242.5
PRESERVED TOTAL (DBH)						445
DEFICIT (DBH)						-202.5
PROPOSED # OF PLANTINGS (3.0" TREES)						0
PROPOSED PLANTINGS (DBH)						-202.5
DBH MITIGATED THRU CITY TREE FUND						-202.5
PROPOSED MITIGATION (DBH)						-202.5

LOT 5 EXISTING TREE LEGEND

SYMBOL	DESCRIPTION
LO	Live Oak (Quercus virginiana)
SOM	Southern Magnolia (Magnolia grandiflora)
SR	Southern Red Cedar (Juniperus silicicola)
WO	Water Oak (Quercus nigra)
AHOL	American Holly (Ilex opaca)
SWG	Sweetgum (Liquidambar styraciflua)
CL	Cherry Laurel (Prunus caroliniana)
☒	HEALTHY TREE TO BE REMOVED

LOT 6

TREE NO.	ACTUAL SPECIES	DBH	HEALTH STATUS	PROTECTED DBH	PRESERVED (Y/N)	PRESERVED DBH
70	Live Oak (Quercus virginiana)	78	3	78	Y	78
71	Live Oak (Quercus virginiana)	22	3	22	Y	22
72	Live Oak (Quercus virginiana)	17	3	17	Y	17
73	Live Oak (Quercus virginiana)	49	3	49	Y	49
84	Southern Magnolia (Magnolia grandiflora)	16	3	16	Y	16
85	Southern Magnolia (Magnolia grandiflora)	8	3	8	Y	8
86	Live Oak (Quercus virginiana)	16	3	16	Y	16
87	Live Oak (Quercus virginiana)	46	3	46	Y	46
175	Southern Red Cedar (Juniperus silicicola)	13	3	13	Y	13
202	Live Oak (Quercus virginiana)	41	2	41	Y	41
203	Sweetgum (Liquidambar styraciflua)	17	3	17	Y	17
204	Live Oak (Quercus virginiana)	30	2	30	Y	30
205	Live Oak (Quercus virginiana)	23	2	23	Y	23
206	Water Oak (Quercus nigra)	10	3	10	Y	10
207	Water Oak (Quercus nigra)	9	3	9	Y	9
208	Live Oak (Quercus virginiana)	32	2	32	Y	32
209	Live Oak (Quercus virginiana)	33	2	33	Y	33
210	Water Oak (Quercus nigra)	13	3	13	Y	13
211	Southern Magnolia (Magnolia grandiflora)	20	3	20	Y	20
212	Live Oak (Quercus virginiana)	26	2	26	Y	26
213	Southern Magnolia (Magnolia grandiflora)	17	2	17	Y	17
214	Southern Magnolia (Magnolia grandiflora)	9	2	9	Y	9
215	Live Oak (Quercus virginiana)	38	2	38	Y	38
217	Southern Magnolia (Magnolia grandiflora)	14	2	14	Y	14
218	Sweetgum (Liquidambar styraciflua)	9	3	9	Y	9
219	Pignut Hickory (Carya glabra)	12	2	12	Y	12
TOTAL VALUES:				618		618
PREDEVELOPMENT PROTECTED DBH						618
REQUIRED PRESERVATION (50% DBH)						309
PRESERVED TOTAL (DBH)						618
DEFICIT (DBH)						-309
PROPOSED # OF PLANTINGS (3.0" TREES)						0
PROPOSED PLANTINGS (DBH)						-309
DBH MITIGATED THRU CITY TREE FUND						-309
PROPOSED MITIGATION (DBH)						-309

LOT 6 EXISTING TREE LEGEND

SYMBOL	DESCRIPTION
LO	Live Oak (Quercus virginiana)
SOM	Southern Magnolia (Magnolia grandiflora)
SR	Southern Red Cedar (Juniperus silicicola)
WO	Water Oak (Quercus nigra)
SWG	Sweetgum (Liquidambar styraciflua)
PH	Pignut Hickory (Carya glabra)
☒	HEALTHY TREE TO BE REMOVED

LOT 7

TREE NO.	ACTUAL SPECIES	DBH	HEALTH STATUS	PROTECTED DBH	PRESERVED (Y/N)	PRESERVED DBH
64	Live Oak (Quercus virginiana)	83	2	83	N	0
65	Live Oak (Quercus virginiana)	34	3	34	Y	34
66	Live Oak (Quercus virginiana)	31	3	31	Y	31
67	Live Oak (Quercus virginiana)	82	2	82	Y	82
68	Live Oak (Quercus virginiana)	38	3	38	Y	38
69	Southern Magnolia (Magnolia grandiflora)	14	2	14	Y	14
74	Live Oak (Quercus virginiana)	73	2	73	Y	73
75	Southern Magnolia (Magnolia grandiflora)	28	2	28	Y	28
76	Live Oak (Quercus virginiana)	34	2	34	Y	34
77	Live Oak (Quercus virginiana)	23	3	23	Y	23
78	Live Oak (Quercus virginiana)	19	3	19	Y	19
82	Slash Pine (Pinus elliotii)	36	2	36	Y	36
TOTAL VALUES:				495		412
PREDEVELOPMENT PROTECTED DBH						495
REQUIRED PRESERVATION (50% DBH)						247.5
PRESERVED TOTAL (DBH)						412
DEFICIT (DBH)						-164.5
PROPOSED # OF PLANTINGS (3.0" TREES)						0
PROPOSED PLANTINGS (DBH)						-164.5
DBH MITIGATED THRU CITY TREE FUND						-164.5
PROPOSED MITIGATION (DBH)						-164.5

LOT 7 EXISTING TREE LEGEND

SYMBOL	DESCRIPTION
LO	Live Oak (Quercus virginiana)
SOM	Southern Magnolia (Magnolia grandiflora)
SPI	Slash Pine (Pinus elliotii)
☒	HEALTHY TREE TO BE REMOVED

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B	AB	12/8/25	C.O.F.B. TRC - FIRST SUBMITTAL
A	AB	10/8/25	C.O.F.B. FIRST STEP MEETING
No.	By	Date	Revision

Scale: 1:30

Project Mgr: AG

Designed by: AG

Drawn by: AB/BS

QA/QC: NG

Gillette & Associates, Inc.
31 South 4th Street
Fernandina Beach, FL 32034

Certificate of Authorization No. 9332

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GILLETTE & ASSOCIATES, INC.
31 SOUTH 4TH STREET
FERNANDINA BEACH, FL 32034
PHONE: (904) 261-8819

BUTTERFLY PROJEKT
BUTTERFLY TRAIL ROAD
FERNANDINA BEACH, FLORIDA

BUTTERFLY PROJEKT, LLC

LOTS 5, 6 & 7
TREE MITIGATION DATA

REGISTERED DESIGN PROFESSIONAL

ISSUE DATE: 12/8/25

Sheet
TM-4

Page 21 of X

Project No. XX-XX-XX

ASA R. GILLETTE, P.E.
FLORIDA P.E. NO. 56177

I, _____, am a certified arborist through the International Society of Arboriculture and my certification number is _____. I hereby attest that I have approved this tree protection and/or replacement plan. This includes not only the evaluation of individual trees, but also review of the complete construction plan set and the techniques that will be utilized to mitigate impacts to protected trees. Further, I attest that best practices, as supported by the International Society of Arboriculture, are being implemented to avoid and mitigate impacts to protected trees.

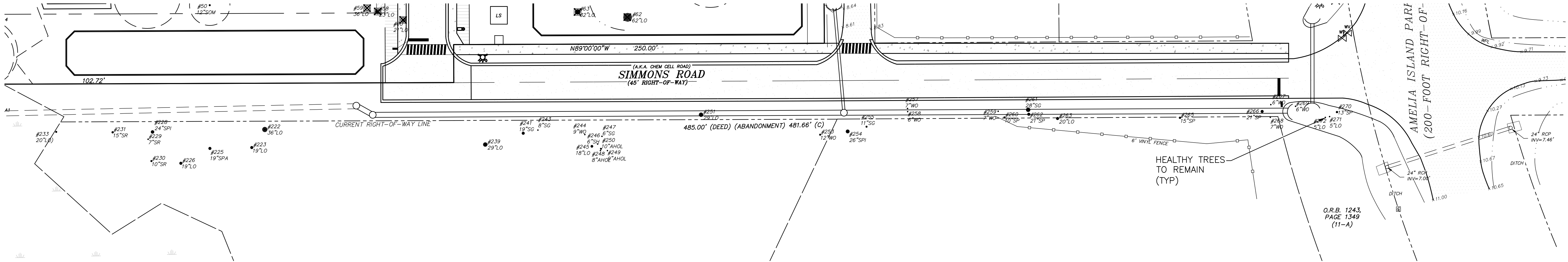
Signed, _____

HEALTH STATUS CODES		
STATUS CODE	MITIGABLE? (Y/N)	HEALTH STATUS
1	Y	NO APPARENT DEFECT
2	Y	MINOR DEFECT
3	Y	COULD KEEP TREE BUT HAS DEFECTS
4	N	POOR HEALTH AND SUGGEST REMOVAL
5	N	SEVERE DEFECT AND SHOULD BE REMOVED

NC EXISTING TREE LEGEND	
SYMBOL	DESCRIPTION
LO	Live Oak (Quercus virginiana)
SR	Southern Red Cedar (Juniperus Siliciola)
WO	Water Oak (Quercus nigra)
SPA	Sabal palm (sabal palmetto)
AHOL	American Holly (Ilex opaca)
SWG	Sweetgum (Liquidambar styraciflua)
SPI	Slash Pine (Pinus elliotii)
AHOR	American Hornbeam (Carpinus caroliniana)
SWM	Sweetbay Magnolia (Magnolia virginiana)
☒	HEALTHY TREE TO BE REMOVED

OFF SITE

TREE NO.	ACTUAL SPECIES	DBH	HEALTH STATUS	PROTECTED DBH	PRESERVED? (Y/N)	PRESERVED DBH	ARBORIST COMMENT
251	Live Oak (Quercus virginiana)	29	2	29	Y	29	
257	Water Oak (Quercus nigra)	7	2	7	Y	7	
258	Water Oak (Quercus nigra)	6	3	6	Y	6	
259	Water Oak (Quercus nigra)	7	3	7	Y	7	
260	Slash Pine (Pinus elliotii)	10	2	10	Y	10	
261	Sweetgum (Liquidambar styraciflua)	28	2	28	Y	28	
262	Slash Pine (Pinus elliotii)	21	2	21	Y	21	
263	Live Oak (Quercus virginiana)	20	2	20	Y	20	
265	Slash Pine (Pinus elliotii)	15	2	15	Y	15	
266	Slash Pine (Pinus elliotii)	21	2	21	Y	21	
267	Water Oak (Quercus nigra)	6	2	6	Y	6	
269	Water Oak (Quercus nigra)	6	3	6	Y	6	
270	Slash Pine (Pinus elliotii)	13	2	13	Y	13	
271	Live Oak (Quercus virginiana)	5	3	5	Y	5	
272	Live Oak (Quercus virginiana)	5	3	5	Y	5	
TOTAL VALUES:		199				199	
TOTAL PRESERVED:		199				199	
TOTAL REMOVED:						199	
PREDEVELOPMENT PROTECTED DBH						199	
REQUIRED PRESERVATION (50% DBH)						49.75	
PRESERVED TOTAL (DBH)						199	
DEFICIT (DBH)						-149.25	
PROPOSED # OF PLANTINGS (3"Ø TREES)						0	
PROPOSED PLANTINGS (DBH)						0	
DBH MITIGATED THRU CITY TREE FUND						-149.25	
PROPOSED MITIGATION (DBH)						-149.25	



L			
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B	AB	12/8/25	C.O.F.B. TRC - FIRST SUBMITTAL
A	AB	10/8/25	C.O.F.B. FIRST STEP MEETING
No.	By	Date	Revision

Scale: 1:30
 Project Mgr: AG
 Designed by: AG
 Drawn by: AB/BS
 QA/QC: NG

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 Fernandina Beach, FL 32034
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 FERNANDINA BEACH, FL 32034
 PHONE: (904) 261-8819

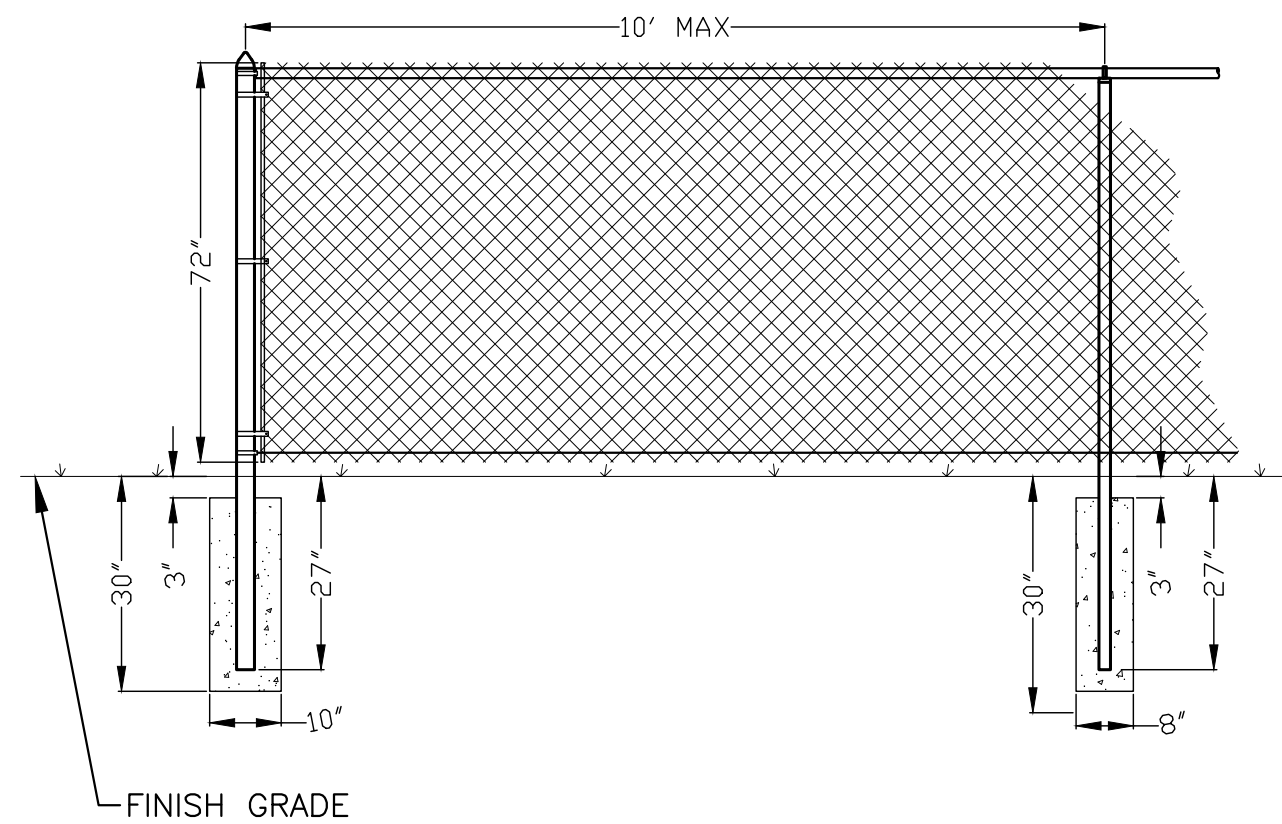
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 BUTTERFLY TRAIL ROAD
 FERNANDINA BEACH, FLORIDA

BUTTERFLY PROJEKT, LLC

NASSAU COUNTY
 RIGHT OF WAY
 TREE MITIGATION DATA

REGISTERED DESIGN PROFESSIONAL
 ASA R. GILLETTE, P.E.
 FLORIDA P.E. NO. 56177

ISSUE DATE: 12/8/25
 Sheet
 TM-5
 Page 22 of X
 Project No. XX-XX-XX

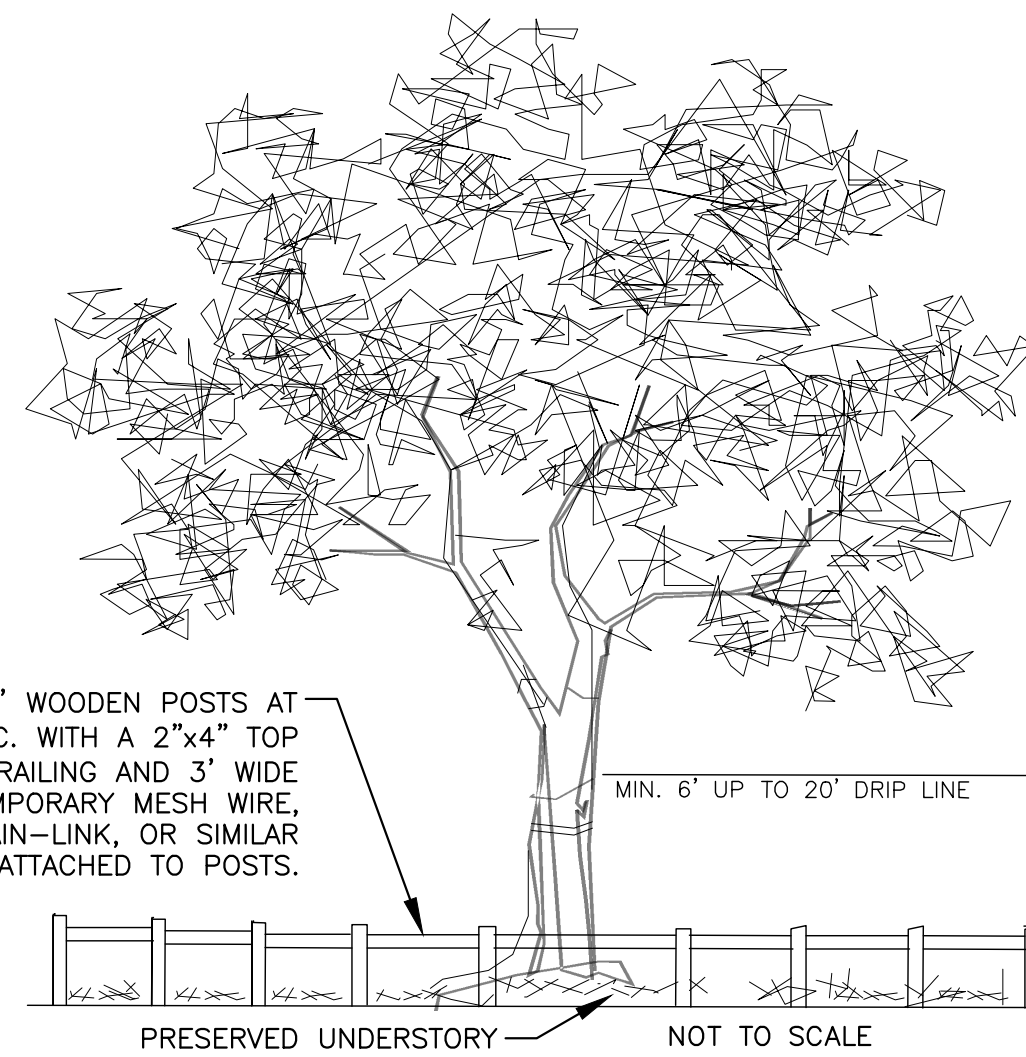


BARRIER TO BE PLACED AROUND TREE SHALL BE PLACED AROUND TREE PROTECTION ZONE AND BE CONSISTENT WITH SPECIFICATIONS DEFINED IN SECTION 4.05.14(E) OF THE CITY OF FERNANDINA BEACH LAND DEVELOPMENT CODE.

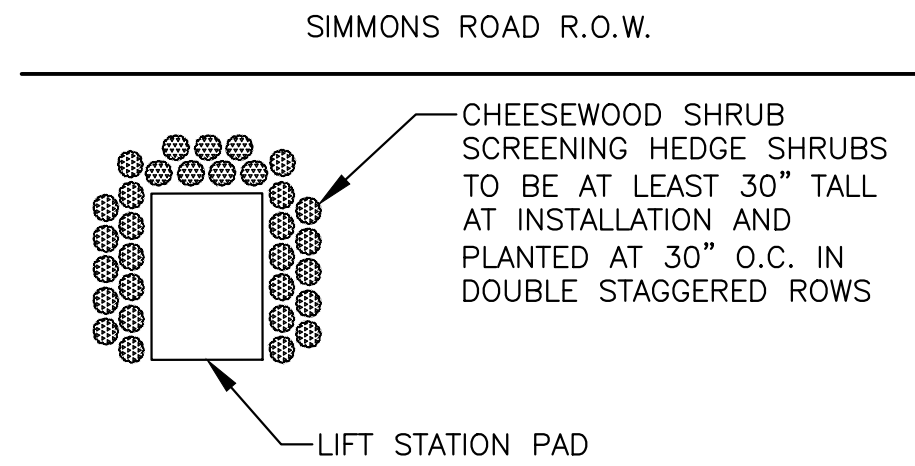
UNLESS NOTED OTHERWISE, THE TREE PROTECTION ZONE IS AT MINIMUM A CIRCULAR ZONE AROUND THE TREE TRUNK OF A RADIUS:

- 6 FEET, IF THE DRIP LINE OF THE TREE IS LESS THAN 6 FEET FROM THE TRUNK OF THE TREE.
- 6-20 FEET ENCOMPASSING THE FULL DRIP LINE OF THE TREE, IF THE DRIP LINE OF THE TREE IS BETWEEN 6 AND 20 FEET FROM THE TRUNK OF THE TREE.
- 20 FEET, IF THE DRIP LINE OF THE TREE IS GREATER THAN 20 FEET FROM THE TRUNK OF THE TREE. 3" MULCH LAYER SHALL BE APPLIED TO THE REMAINING AREA BETWEEN THE TREE PROTECTION ZONE AND DRIP LINE.

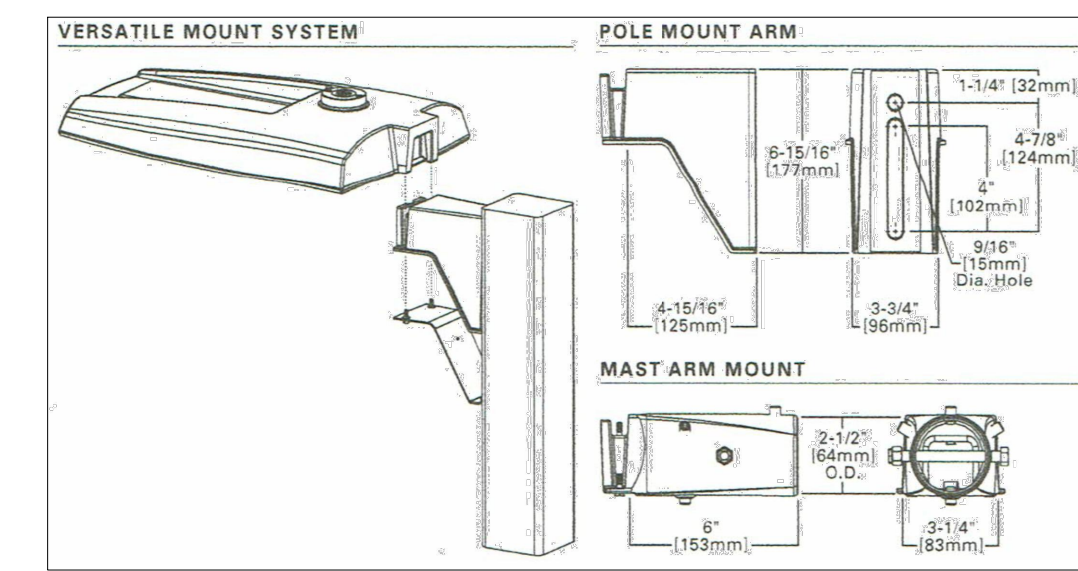
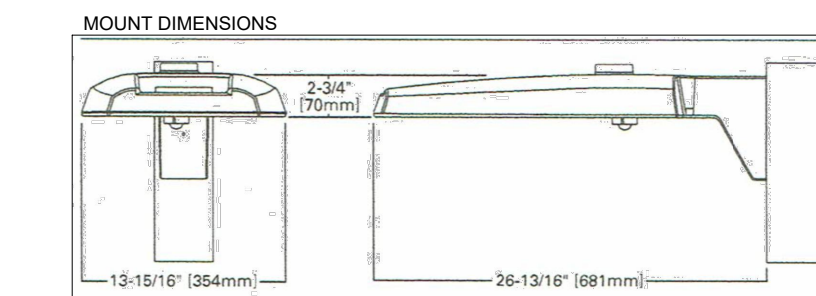
SEE SHEET TM-1 FOR ISA-CERTIFIED ARBORIST APPROVED TREE PROTECTION ZONES.



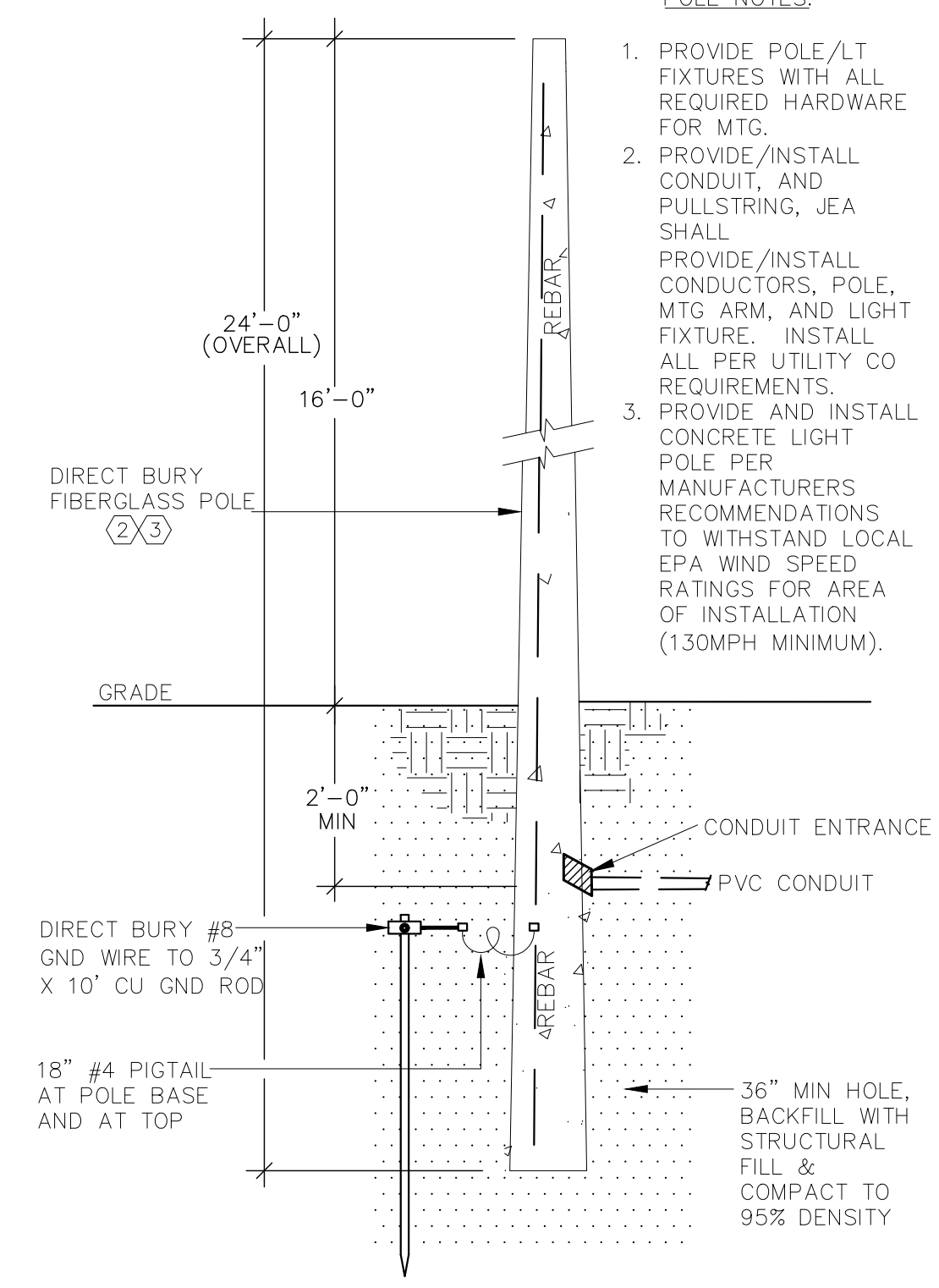
ALL DEVELOPMENT ACTIVITIES, EXCEPT THOSE SPECIFICALLY PERMITTED BY SECTION 4.05.14(F)(4) OF THE CITY OF FERNANDINA BEACH LAND DEVELOPMENT CODE, SHALL BE PROHIBITED WITHIN THE TREE PROTECTION ZONE, INCLUDING ANY CONSTRUCTION OF BUILDINGS, STRUCTURES, PAVING SURFACES, STORMWATER RETENTION OR DETENTION PONDS, AND TEMPORARY CONSTRUCTION ACTIVITIES, INCLUDING ALL DIGGING, STORAGE OF CONSTRUCTION MATERIAL, AND PARKING OF CONSTRUCTION VEHICLES.



LIFT STATION SCREENING

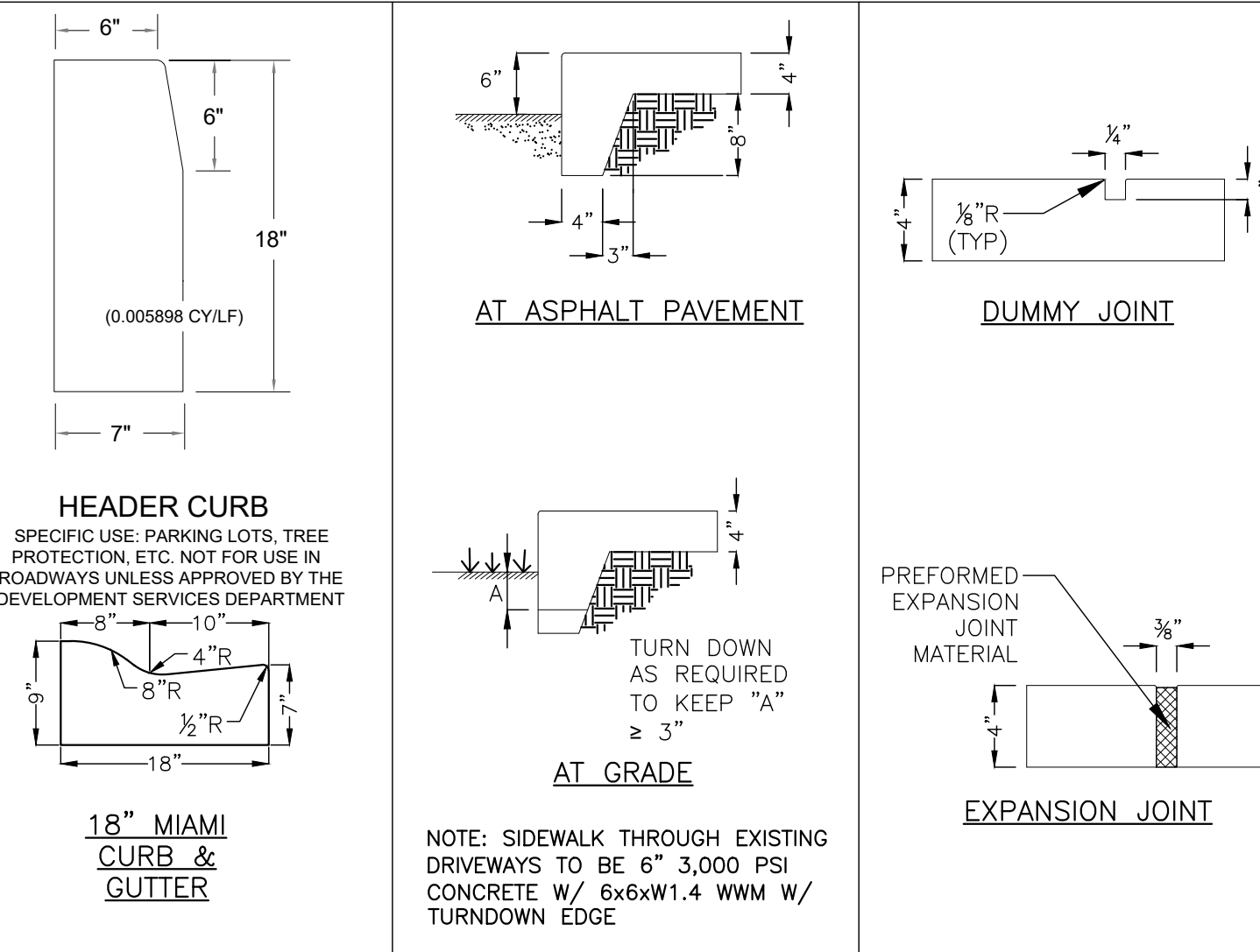


- POLE NOTES:
- PROVIDE POLE/LT FIXTURES WITH ALL REQUIRED HARDWARE FOR MTG.
 - PROVIDE/INSTALL CONDUIT, AND PULLSTRING, JEA SHALL PROVIDE/INSTALL CONDUCTORS, POLE, MTG ARM, AND LIGHT FIXTURE. INSTALL ALL PER UTILITY CO REQUIREMENTS.
 - PROVIDE AND INSTALL CONCRETE LIGHT POLE PER MANUFACTURERS RECOMMENDATIONS TO WITHSTAND LOCAL EPA WIND SPEED RATINGS FOR AREA OF INSTALLATION (130MPH MINIMUM).

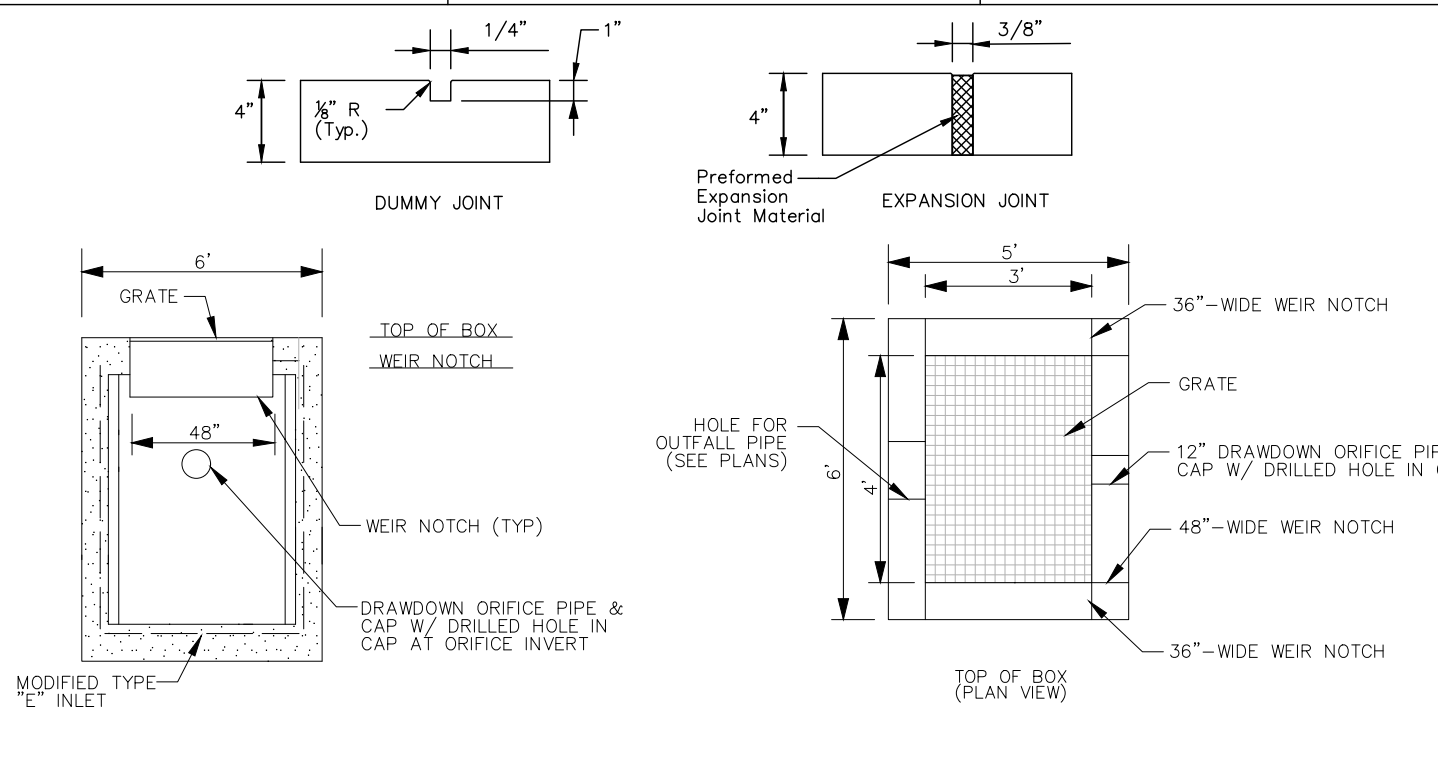


SITE LIGHTING DETAIL

FENCE DETAIL

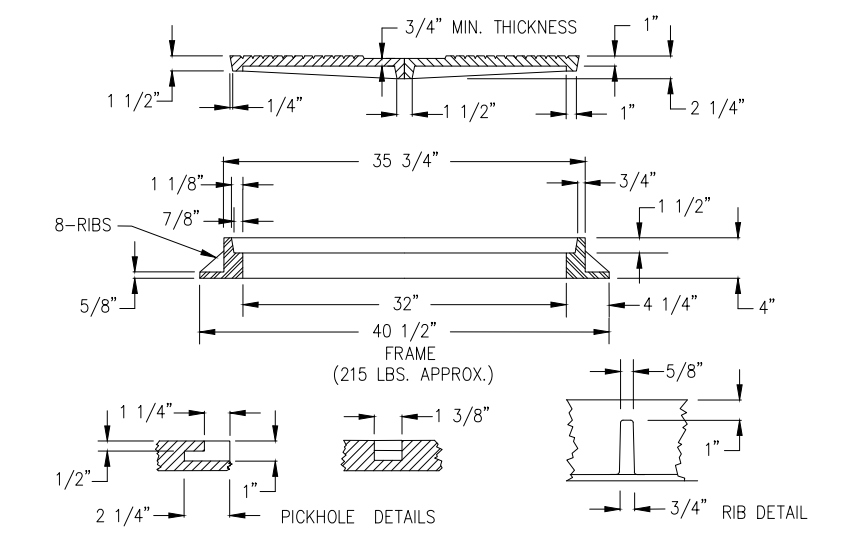
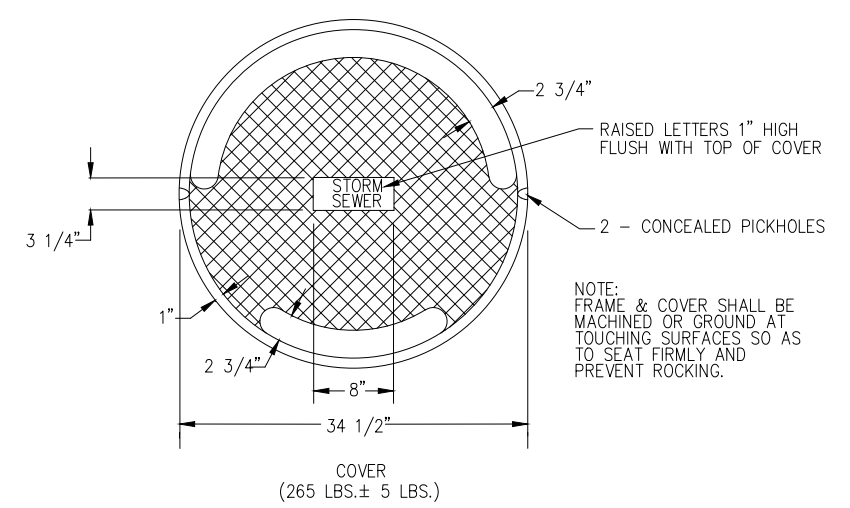
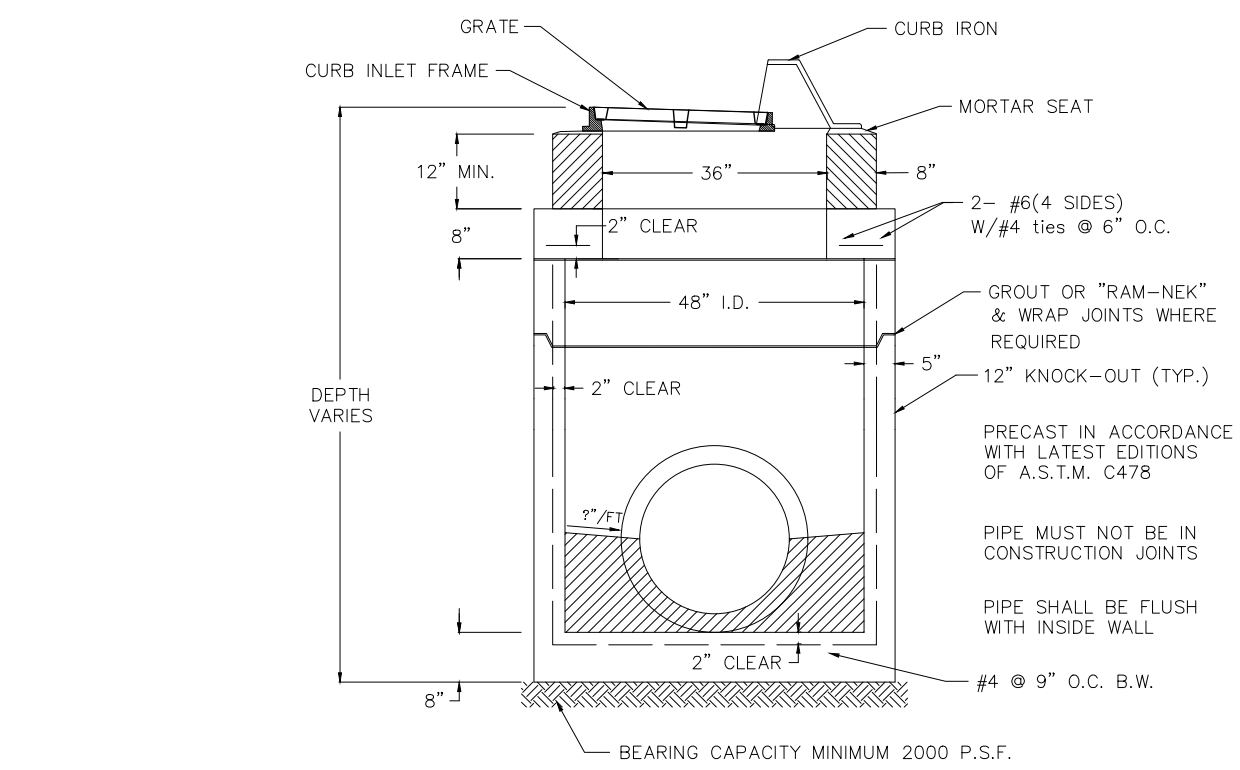
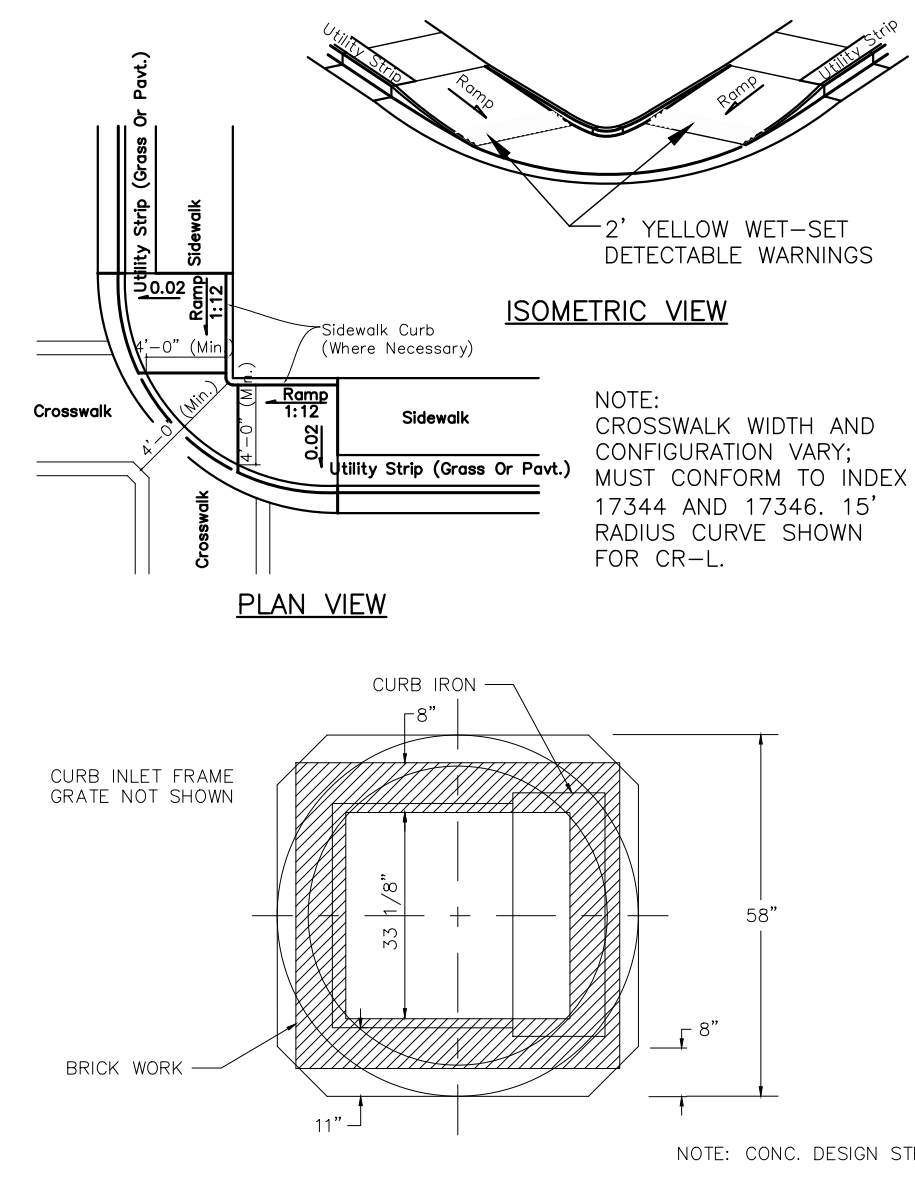


CURB AND GUTTER DETAILS SIDEWALK TURNDOWN DETAILS SIDEWALK JOINT DETAILS



TREE WELL RETAINING WALL PLAN

TREE PROTECTION DETAIL



L					
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B	AB	12/8/25	C.O.F.B. TRC - FIRST SUBMITTAL	Scale: 1:30	Gillette & Associates, Inc. 31 South 4th Street Fernandina Beach, FL 32034 Certificate of Authorization No. 9332 DO NOT SCALE THIS DRAWING - DIMENSIONS AND NOTES TAKE PREFERENCE. DRAWING IS REDUCED IF LESS THAN 22" x 34"
A	AB	10/8/25	C.O.F.B. FIRST STEP MEETING.	Project Mgr: AG	
				Designed by: AG	
				Drawn by: AB/BS	
No.	By	Date	Revision	QA/QC: NG	

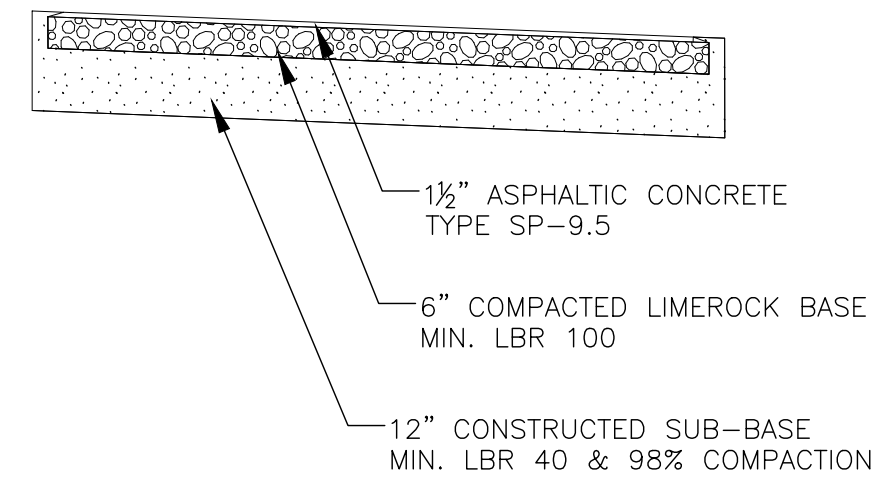
Scale: 1:30
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 BUTTERFLY TRAIL ROAD
 FERNANDINA BEACH, FLORIDA

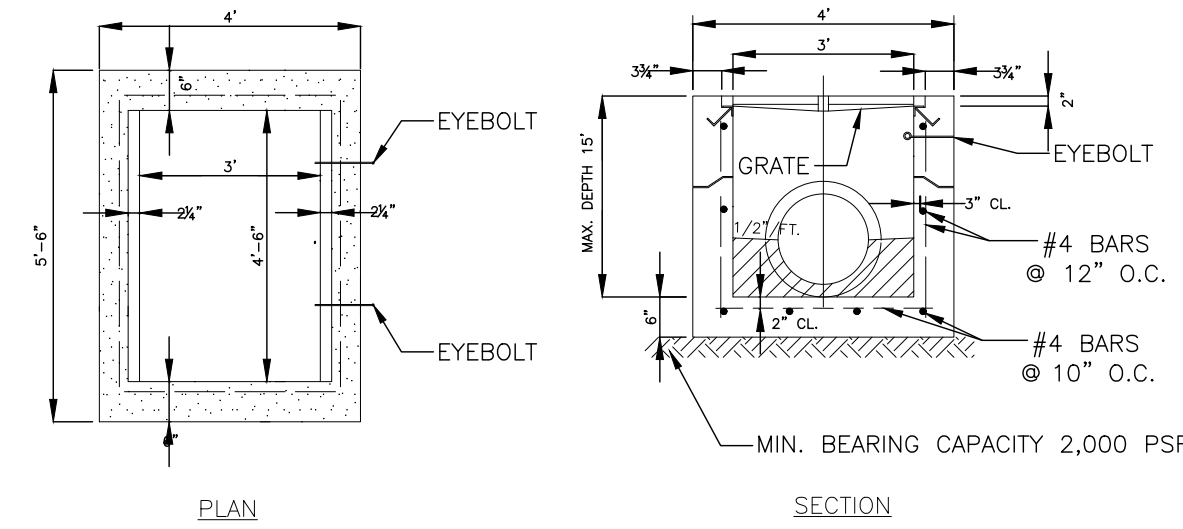
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MISCELLANEOUS DETAILS



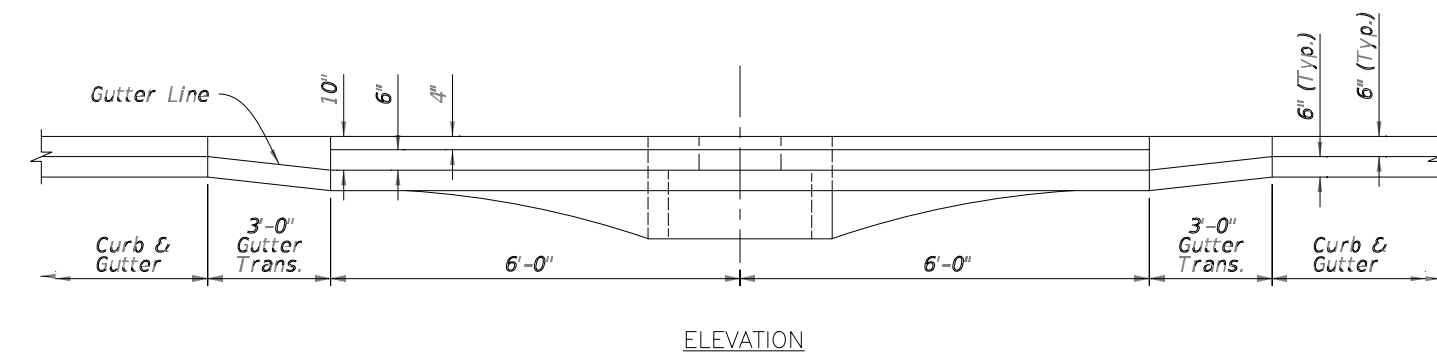
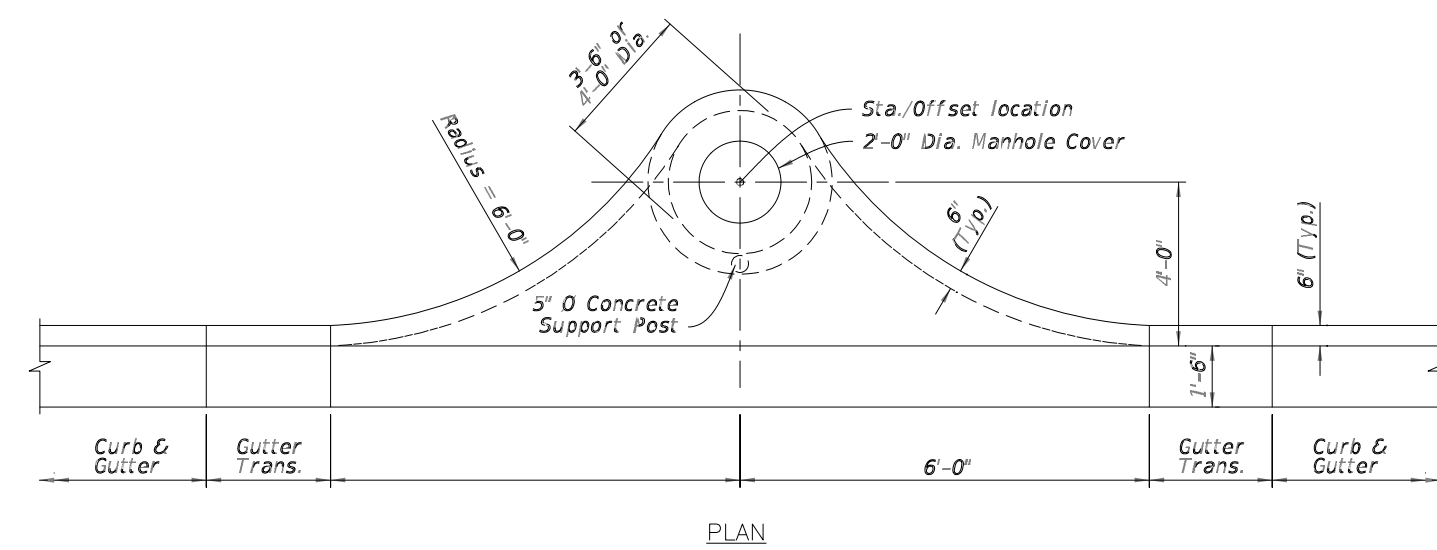
NOTE:
SOIL ANALYSIS MAY INDICATE THE NEED FOR A THICKER BASE COURSE THAN SHOWN HEREIN. THE PAVEMENT THICKNESSES SHOWN HEREIN ARE NOT INTENDED TO BE ABSOLUTE, BUT ARE PRELIMINARY CRITERIA AND MAY BE MODIFIED TO ACCOMMODATE THE BEARING CAPACITIES OF VARIOUS SUBGRADES.

TYPICAL PAVEMENT DETAIL

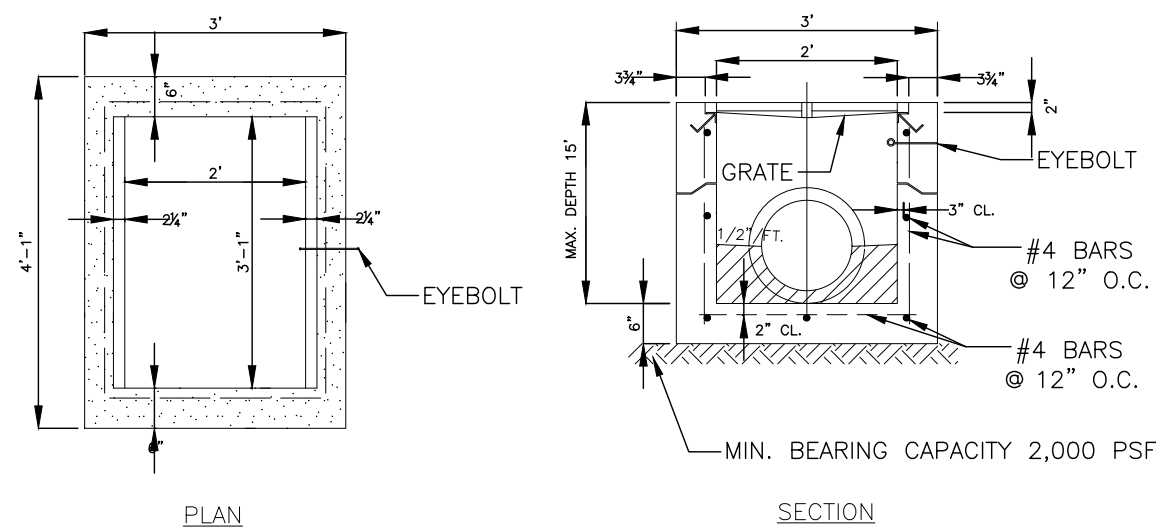


NOTES:
1. CONCRETE DESIGN STRENGTH 4,000 PSI
2. PIPES SHALL BE FLUSH WITH INSIDE WALL
3. SLOT OPENING SHALL NOT BE IN WALLS WITH RATE SEAT

TYPE E INLET DETAIL

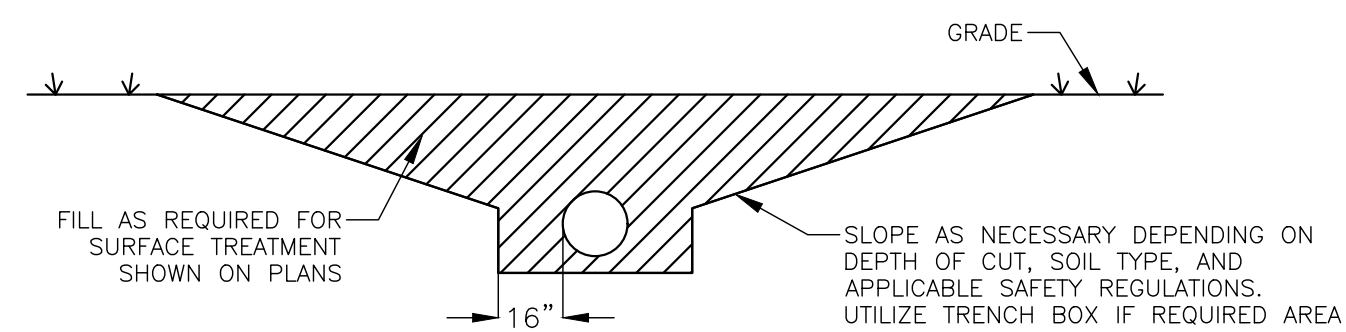


FDOT TYPE 4 CURB INLET DETAIL

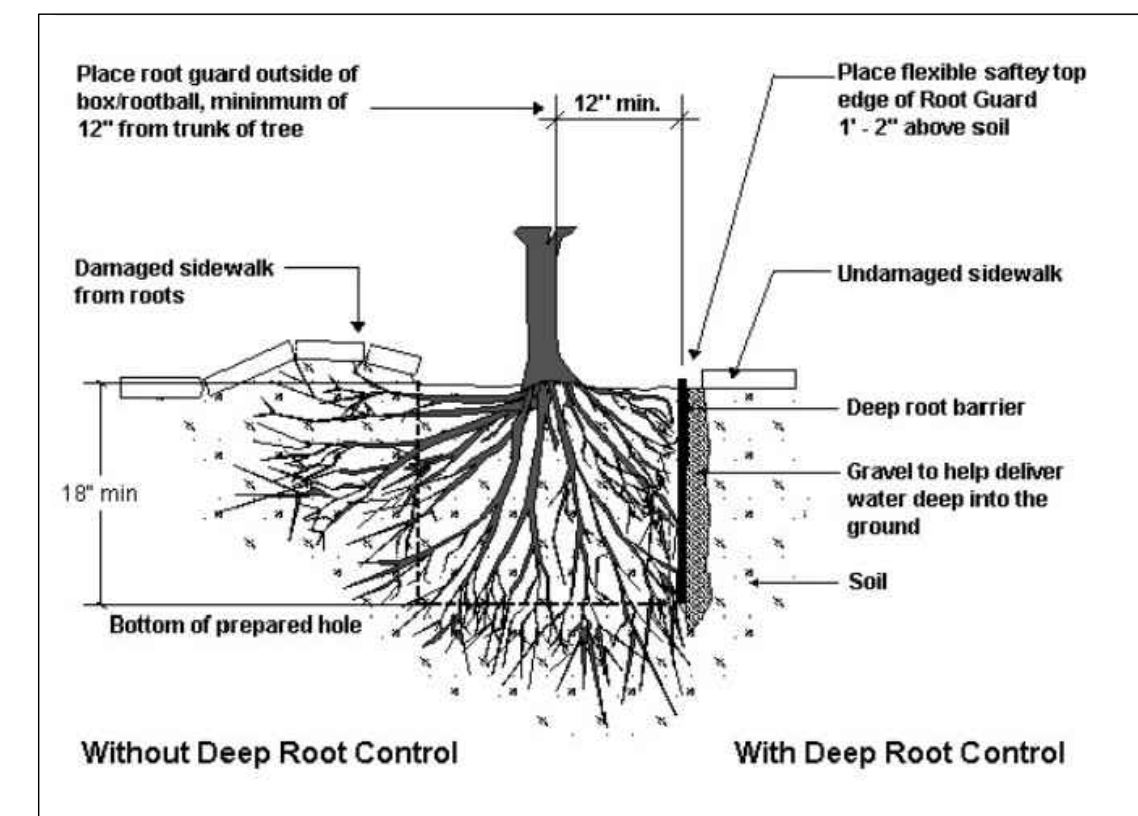


NOTES:
1. CONCRETE DESIGN STRENGTH 4,000 PSI
2. PIPES SHALL BE FLUSH WITH INSIDE WALL
3. SLOT OPENING SHALL NOT BE IN WALLS WITH RATE SEAT

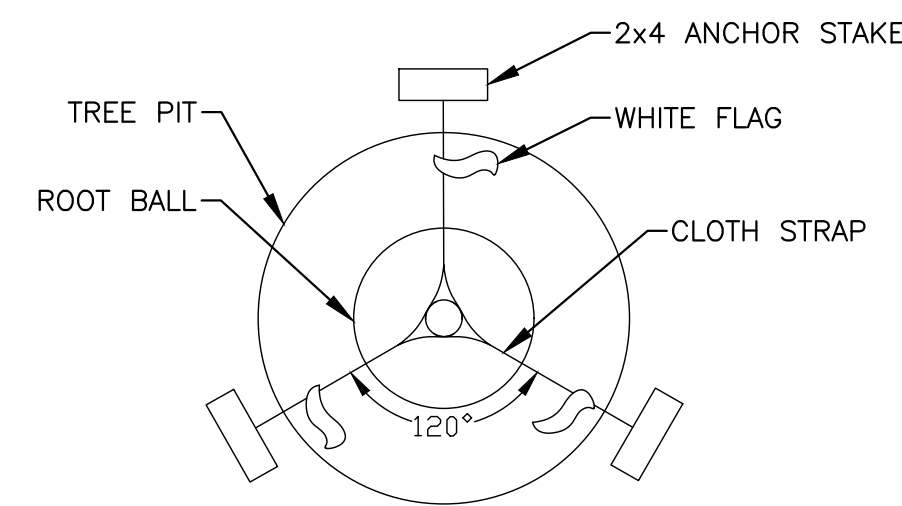
FDOT TYPE C INLET DETAIL



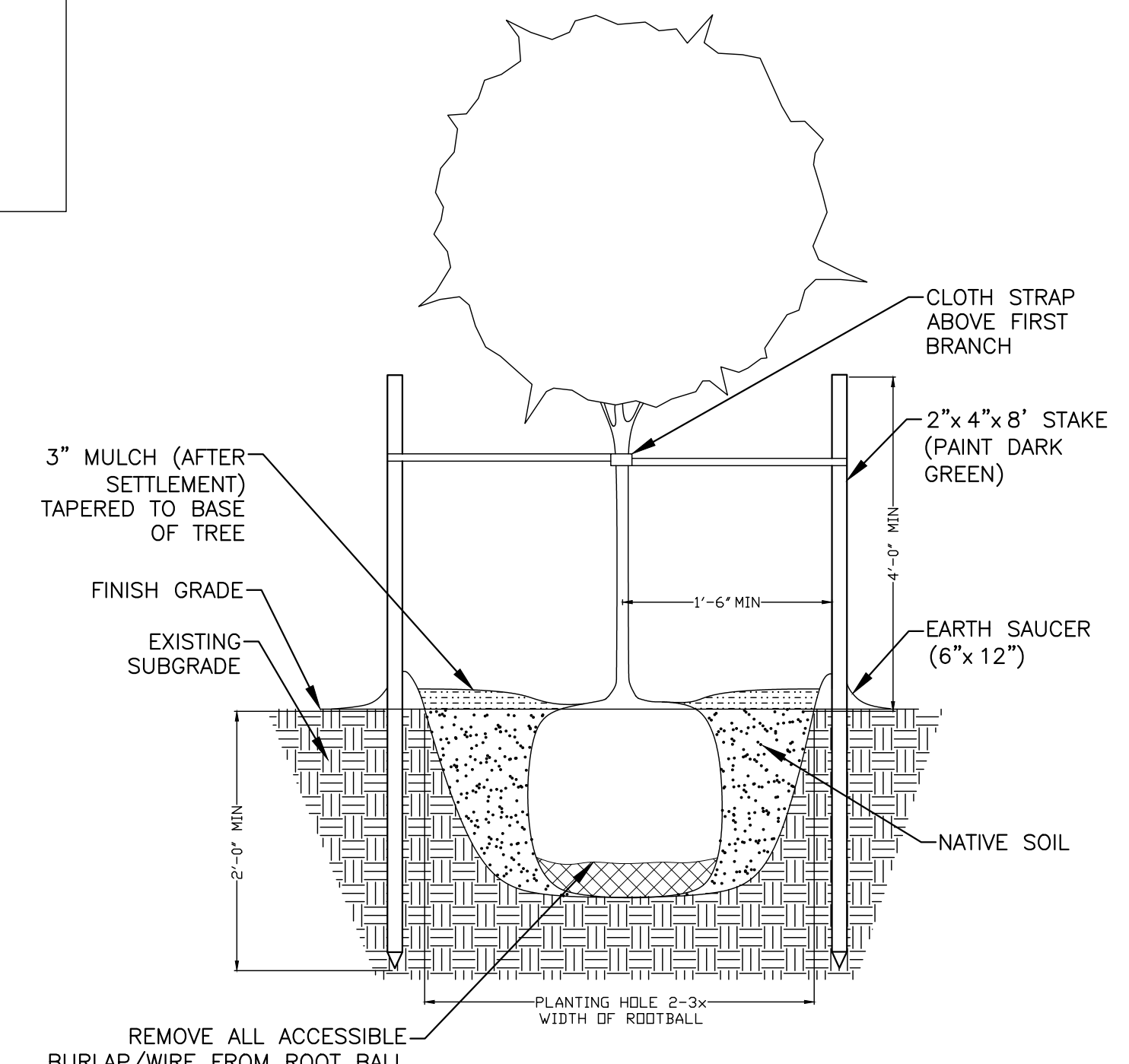
PIPE TRENCH INSTALLATION DETAIL



ROOT BARRIER DETAIL



DETAIL 2 TREE STAKING PLAN



DETAIL 3 TREE PLANTING ELEVATION

L			
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E			
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C			
B	AB	12/8/25	C.O.F.B. TRC - FIRST SUBMITTAL
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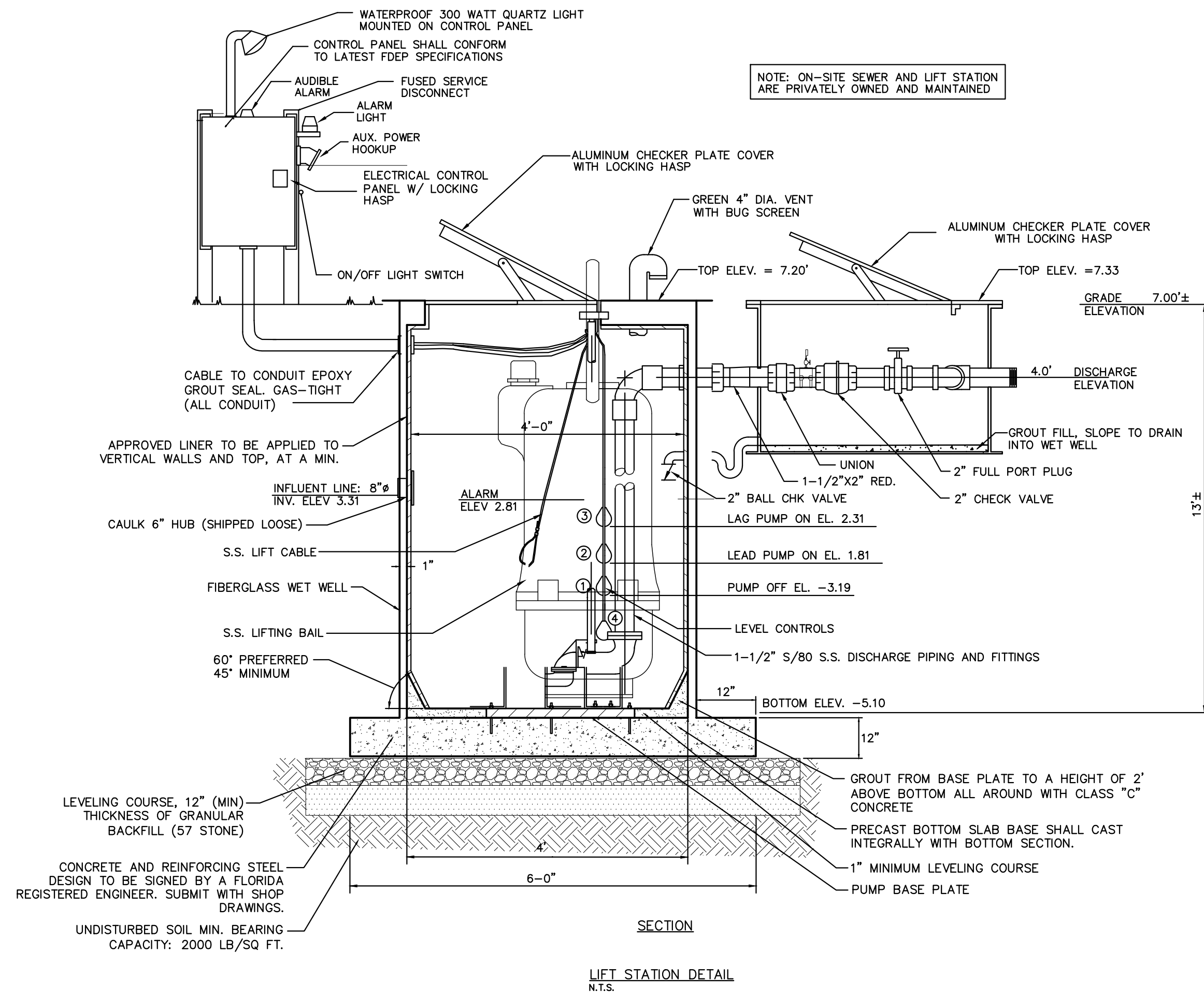
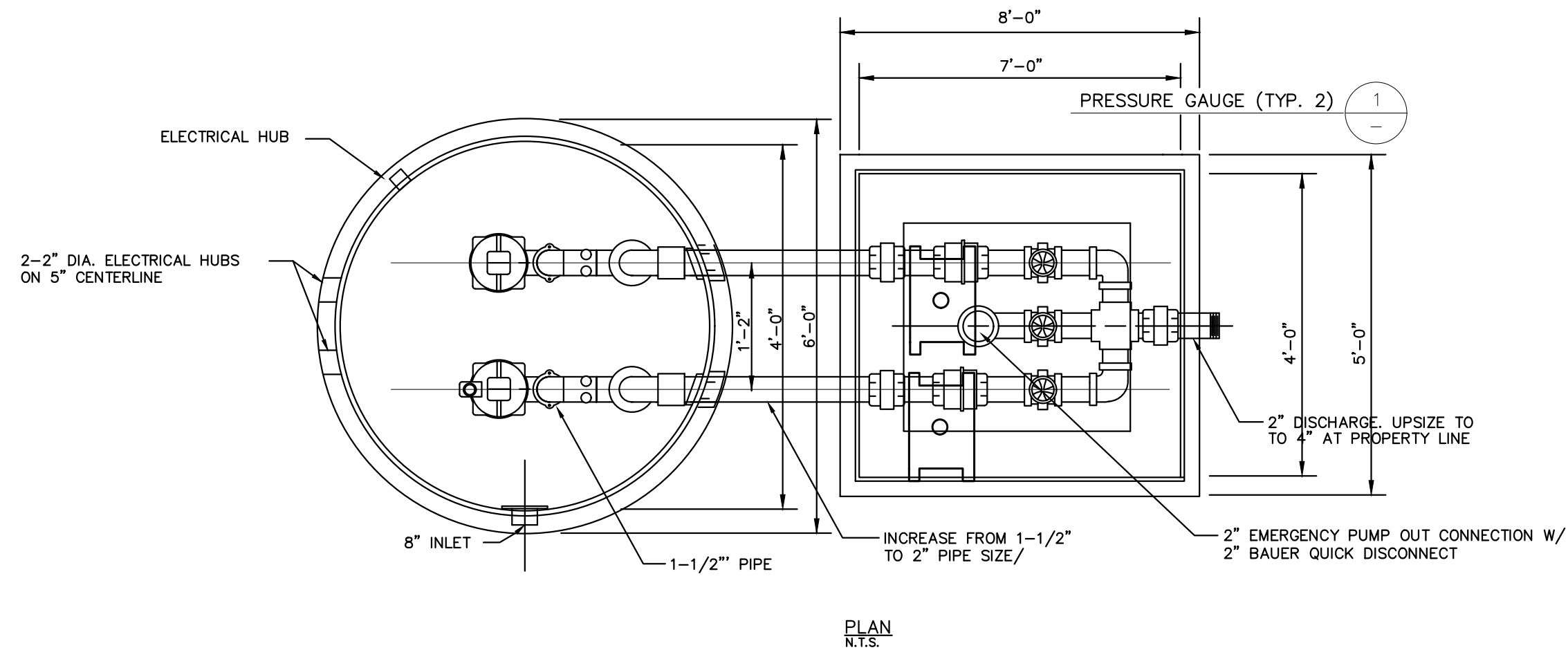
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BUTTERFLY TRAIL ROAD
FERNANDINA BEACH, FLORIDA

BUTTERFLY PROJEKT, LLC

MISCELLANEOUS DETAILS

REGISTERED DESIGN PROFESSIONAL
ASA R. GILLETTE, P.E.
FLORIDA P.E. NO. 56177

ISSUE DATE: 12/8/25
Sheet DT-3
Page 25 of X
Project No. XX-XX-XX



SPECIFICATIONS:

PUMPS REQUIRED: 2
TYPE: T.B.D.
POWER: T.B.D.
ELECTRICAL: T.B.D.
DESIGN POINT: 15 gpm @ 47' TDH

WET WELL
 CONCRETE WET WELL SHALL BE PROVIDED BY THE PUMP SUPPLIER. THE BASIN SHALL INCLUDE AN ANTI-FLOTATION RING WITH A MINIMUM DIAMETER OF THREE INCHES LARGER THAN THE BASIN DIAMETER. THE RAIL SYSTEM, INTERNAL PIPING AND DISCHARGE CONNECTIONS SHALL BE PRE INSTALLED BY THE PUMP SUPPLIER.

HATCH COVER
 THE HATCH COVER SHALL BE 2/3 HINGED TO ALLOW FOR MAXIMUM ACCESS TO THE WET WELL. THE HATCH COVER SHALL BE ALUMINUM WITH S.S. FASTENERS AND SHALL BE MANUFACTURED BY HALLIDAY, OR EQUAL.

VALVE BOX
 FIBERGLASS VALVE BOX SHALL BE PROVIDED BY PUMP SUPPLIER. THE VALVE BOX SHALL INCLUDE ANTI-FLOTATION RING OF 3 INCHES LARGER THAN THE VALVE BOX DIMENSION. THE INTERNAL PIPING SHALL INCLUDE 2 CHECK VALVES, 3 GATE VALVES AND 1 PUMP OUT CONNECTION.

VALVE BOX
 THE VALVE BOX SHALL BE DIAMOND PLATE ALUMINUM WITH APPROPRIATE SIZED CENTER HATCH FOR EASY ACCESS.

FLOATS
 FLOATS SHALL BE ANCHOR SCIENTIFIC S30NO ROTO-FLOATS.

CONTROLS
 THE CONTROL PANEL SHALL BE U.L. LISTED AND MEET DEP REQUIREMENTS. A NEMA 3R/12 STAINLESS STEEL ENCLOSURE SHALL BE PROVIDED. THE PANEL SHALL INCLUDE A DUPLEX, ALTERNATING CONTROL SCHEME, GENERATOR RECEPTACLE, GF, ELAPSED TIME METERS, SEAL FAILURE AND OVERLOAD SENSORS, 24V CONTROL, AND AN INTERNALLY MOUNTED SURGE CAPACITOR AND LIGHTNING ARRESTOR.

PUMP TYPE
 PUMPS SHALL BE OF THE SUBMERSIBLE, NON-CLOG TYPE. EACH PUMP SHALL BE MOUNTED ON A 2" METAL-TO-METAL RAIL SYSTEM. THE RAIL SYSTEM SHALL INCLUDE THE BASE ELBOW, DISCHARGE FLANGE ASSEMBLY, 1" S.S. GUIDE RAILS, S.S. UPPER GUIDE BRACKET, S.S. LIFTING BAIL AND CABLE, AND A FOUR HOOK, S.S. CABLE HOLDER. THE RAIL SYSTEM SHALL BE MOUNTED AND PRE-PIPED BY THE PUMP SUPPLIER.

PUMP CONSTRUCTION
 THE PUMP VOLUTE, MOTOR AND SEAL HOUSING SHALL BE CONSTRUCTED OF CAST IRON, ASTM A-48, CLASS 30. ALL EXTERNAL FASTENERS SHALL BE SERIES 300 S.S.. THE PUMP SHAFT SHALL BE CONSTRUCTED OF SERIES 416 S.S..

IMPELLER
 THE IMPELLER SHALL BE OF MULTI-VANE, SEMI-OPEN BRONZE CONSTRUCTION. THE IMPELLER SHALL INCLUDE PUMP-OUT VANES ON THE BACK OF THE IMPELLER AND SHALL BE STATICALLY AND HYDRAULICALLY BALANCED.

MOTOR
 THE MOTOR SHALL BE A X-HORSEPOWER, 3-POLE DESIGN WITH AN OPERATING SPEED OF XXXX RPM. THE MOTOR SHALL BE MOUNTED IN A SEALED, SUBMERSIBLE TYPE HOUSING AND FILLED WITH DIELECTRIC OIL. THE STATOR SHALL BE SECURELY HELD IN PLACE WITH A REMOVABLE END RING AND THREADED FASTENERS FOR EASE OF REMOVABLE WITHOUT THE USE OF HEAT OR A PRESS. THE MOTOR SHALL BE EQUIPPED WITH A WINDING THERMOSTAT THAT AUTOMATICALLY SHUTS THE MOTOR OFF IN THE EVENT OF MOTOR OVERHEATING.

SEAL CHAMBER
 THE PUMP SHALL HAVE 2-MECHANICAL SEALS, MOUNTED IN TANDEM WITH AN OIL CHAMBER BETWEEN THE SEALS. JOHN CRANE TYPE SEALS WITH CARBON VERSUS CERAMIC SEAL FACES SHALL BE USED. THE PUMP SHALL BE EQUIPPED WITH A SEAL LEAK DETECTION PROBE AND WARNING SYSTEM THROUGH THE USE OF A SEAL FAILURE INSTALLED IN THE SEAL CHAMBER.

SUPPLIER
 PUMP PACKAGE SHALL BE SUPPLIED BY BARNEY'S PUMPS, JACKSONVILLE, FL. SHALL CONFORM TO LATEST FDEP SPECIFICATIONS.

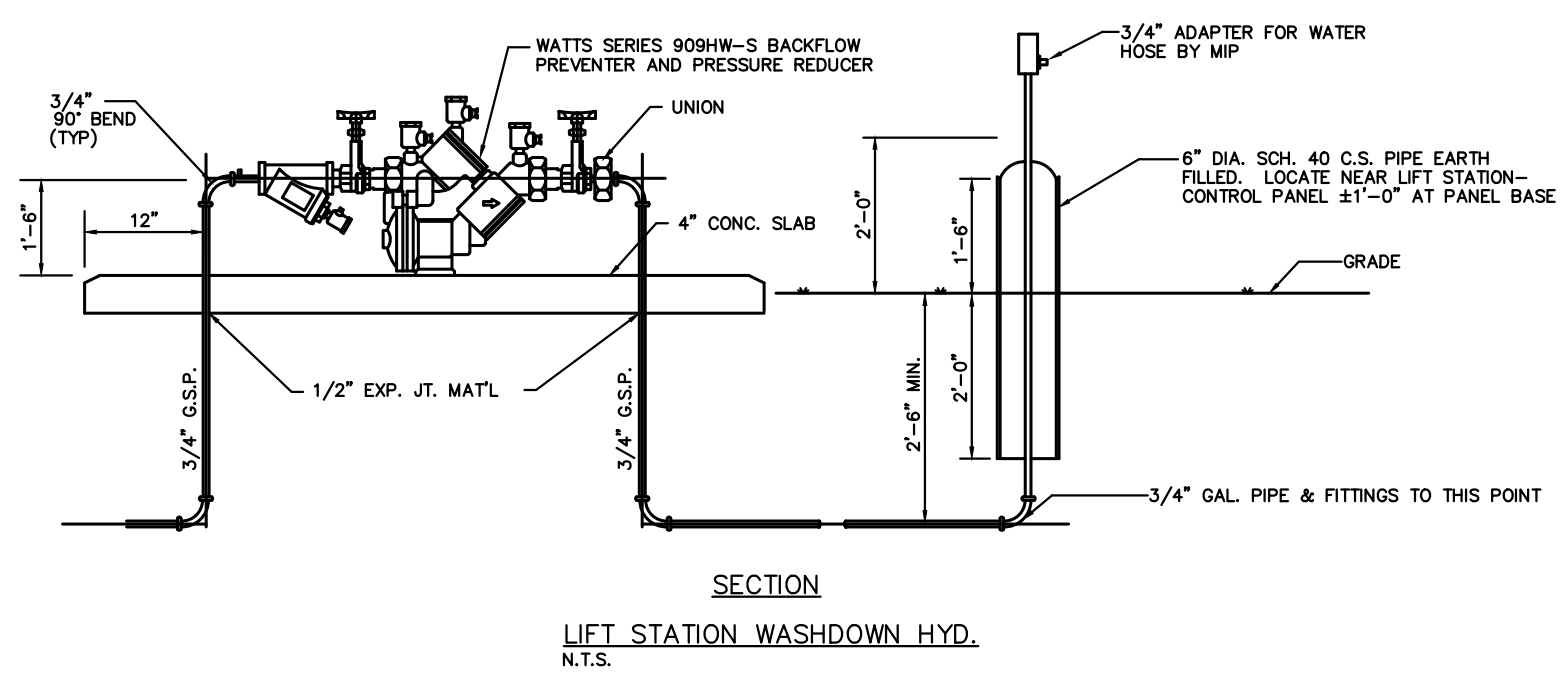
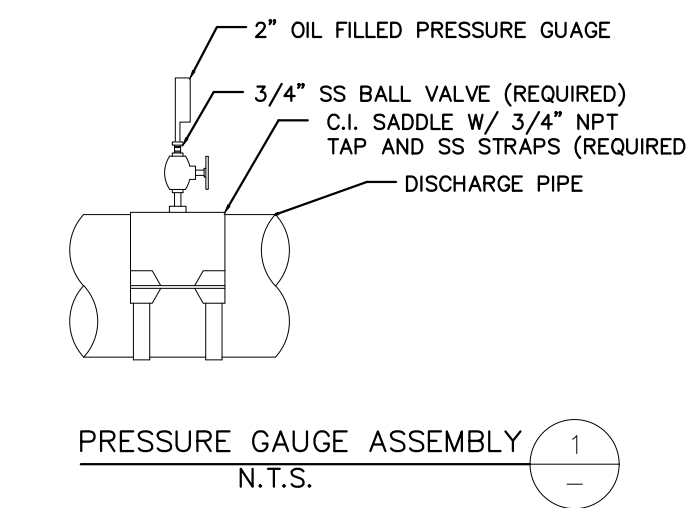
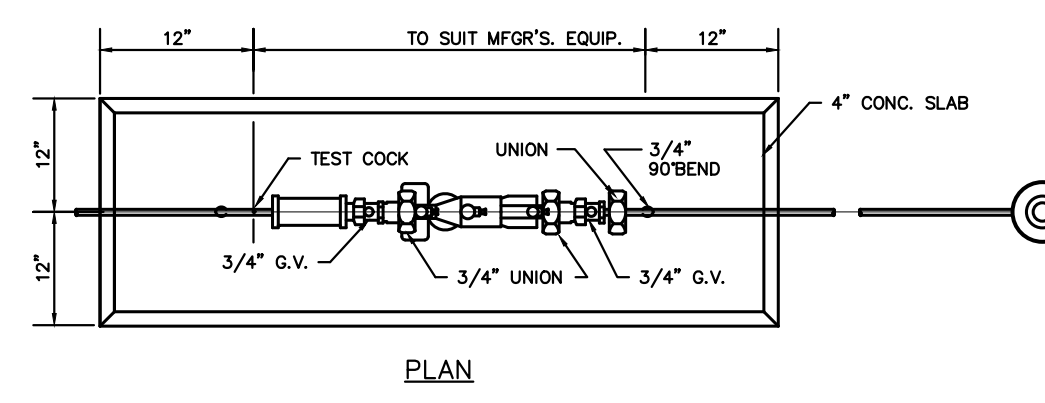
TELEMETRY
 TOU TO BE SUPPLIED BY DATA FLOW, INC. OF MELBOURNE FLORIDA. CONTROL PANEL TO CONFORM TO LATEST FDEP REQUIREMENTS

DESIGN DATA	
OPERATING CONDITIONS	CONTROL ELEVATION
CAPACITY (GPM) :15	① LEAD PUMP ON-EL. :1.81
T.D.H. IN FEET :47	② LAG PUMP ON-EL. :2.31
HORSEPOWER :T.B.D.	③ HWL ALARM ON-EL. :2.61
SPEED (RPM) :T.B.D.	④ PUMP OFF-EL. :-3.19
POWER V-PH-HZ :T.B.D.	
MANUFACTURER :T.B.D.	
MODEL :T.B.D.	

WETWELL STABILITY

DOWNFORCE	20,641 lb
UPLIFT	9,496 lb
FS	2.17

PUMP STATION NOTES:
 1.0) THE PROPOSED PUMP STATION TOP SLAB ELEV. OF 7.33±. ELECTRICAL PANEL TO BE MOUNTED OUTSIDE THE 100-YEAR FLOOD PLAIN
 2.0) CONTRACTOR TO PROVIDE (5) SPARE SETS OF FUSES/BULBS AT START/UP



PUMP STATION WASHDOWN NOTES:
 1.0) ALL PIPING APPURTENANCES SHALL BE 3/4" ALL PIPE ABOVE GROUND SHALL BE GALVANIZED IRON PIPE. ACCEPTABLE BRANDS OF BACKFLOW PREVENTORS ARE:
 "HERSEY" - FRP II (WITH REMOVABLE SEATS)
 "WATTS" - #009 (WITH REMOVABLE SEATS)
 "WATTS" - #909
 "FEBCO" - #825Y
 OR APPROVED EQUAL
 2.0) ALL R.P.B.F.P.'S SHALL MEET AWWA C506-78 STANDARD 1013. U.S.C. FOUNDATION OF CROSS CONNECTION CONTROL AND HYDRAULIC RESEARCH, SIXTH EDITION SPECIFICATIONS.
 3.0) UNDERGROUND PIPING SHALL CONFORM TO POTABLE WATER SERVICE LATERAL SPECIFICATIONS.

L			
K			
J			
H			
G			
F			
E			
D			
C			
B	AB	12/8/25	C.O.F.B. TRC - FIRST SUBMITTAL
A	AB	10/8/25	C.O.F.B. FIRST STEP MEETING.
No.	By	Date	Revision

Scale: 1:30
 Project Mgr: AG
 Designed by: AG
 Drawn by: AB/BS
 QA/QC: NG

Gillette & Associates, Inc.
 31 South 4th Street
 Fernandina Beach, FL 32034
 Certificate of Authorization No. 9332
 DO NOT SCALE THIS DRAWING - DIMENSIONS AND NOTES TAKE PREFERENCE. DRAWING IS REDUCED IF LESS THAN 22" x 34"

G & A
 GILLETTE & ASSOCIATES, INC.
 31 SOUTH 4TH STREET
 FERNANDINA BEACH, FL 32034
 PHONE: (904) 261-8819

BUTTERFLY PROJECT
 BUTTERFLY TRAIL ROAD
 FERNANDINA BEACH, FLORIDA

BUTTERFLY PROJEKT, LLC

LIFT STATION DETAILS

REGISTERED DESIGN PROFESSIONAL
 ISSUE DATE: 12/8/25
 Sheet DT-4
 Page 25 of X
 Project No. XX-XX-XX
 ASA R. GILLETTE, P.E.
 FLORIDA P.E. NO. 56177



SCHOOL IMPACT ANALYSIS FORM
Revised 12/15/19

INTRODUCTION

New residential development is required to demonstrate compliance with school concurrency as regulated in the City of Fernandina Beach through the City of Fernandina Beach's Comprehensive Plan Intergovernmental Coordination Element and the Interlocal Agreement Amendment for Public School Facility Planning adopted by the City on May 21, 2019. No new residential rezoning, preliminary plat, site plan or functional equivalent may be approved by the City unless the residential development is exempt from requirements outlined in Section 9.13 of the Amended Interlocal Agreement OR a School Concurrency Reservation Letter has been issued by the School Board indicating that adequate school facilities exist.

Application Process for School Concurrency:

1. Submittal of Development Application, including this School Impact Analysis (SIA) Form.
2. The City of Fernandina Beach Staff transmits the SIA to Nassau County School Board.
3. The Nassau County School Board reviews the SIA Form per requirements in the Interlocal Agreement and makes a determination of capacity.
4. If sufficient capacity is available, the School Board will issue a School Concurrency Reservation Letter. This letter indicates only that school facilities are currently available, and capacity is not reserved until Nassau County issues a Certificate of Concurrency.
5. Upon receipt of a School Concurrency Reservation Letter, The City of Fernandina Beach Planning Staff will issue a Certificate of Concurrency for the development. Certificates are valid for a two (2) year period. Approved construction plans or building permits extend the life of the certificate concurrent with the expiration of the applicable plan or permit.
6. If sufficient capacity is not available, the School Board will issue a Concurrency Deficiency Letter, at which time the applicant will be offered the opportunity to enter into a negotiation period to allow time for the mitigation process as outlined in the Interlocal Agreement. As the end of the negotiation period, the School Board will issue a School Concurrency Reservation Letter where mitigation has been mutually agreed upon; or if mitigation has not been agreed upon, a School Concurrency Deficiency Letter. If a Reservation Letter is drafted, The City of Fernandina Beach will issue a subsequent Certificate of Concurrency.

KEY CONTACTS

The City of Fernandina Beach staff will guide your SIA form through the process. planninginfo@fbfl.city or 904.310.3480.

Owner of Record	As recorded with the Nassau County Property Appraiser
Owner(s) Name	David Brown
Company (if applicable)	Butterfly Projekt, LLC
Street Address	106 SE 3rd Ave #1000
City, State, Zip	Ft. Lauderdale, FL 33394
Telephone Number	917-692-0073
Email Address	dbrown@partierservices.com

Applicant or Agent	If an agent will be representing the owner, an Owner's Authorization for Agent form must be included
Applicant or Agent Name	ASA R. Gillette
Company (if applicable)	Gillette & Associates, Inc
Mailing Address	31 South 4th St, Ste 1
City, State, Zip	Fernandina Bch FL 32034
Telephone Number	904-261-8819
Email Address	asa@gilletteassociates.com tricia@gilletteassociates.com



00-00-30-044B-0068-0040
 00-00-30-044B-0068-0030

Project Information 00-00-30-044B-0068-0020					
PIN: 00 - 00 - 30 - 044B - 0068 - 0010 00-00-30-0560-00RW-0010					
Project Address		2959 Butterfly Trail, 2975 Butterfly Trail, 2991 Butterfly Trail			
Access Road		Name: Butterfly Trail 2831 Butterfly Trail <input type="checkbox"/> County-Maintained <input type="checkbox"/> Unpaved Private Easement			
Size of Property		4.37		Present Property Use	
Zoning District		Future Land Use Map		Overlay District	
R-1		LDR		N/A	
Wetlands		Flood Zone		Water & Sewer	
yes		AES, X shaded		COFB	
Project Description (use separate sheet if necessary): 7 lot single family residential subdivision (2 existing homes will be demolished)					
Number of Dwelling Units Proposed (Total): 7					
Number of Dwelling Units Proposed (By Type):					
Single-Family Detached:					
Single-Family Attached:		7			
Multi-Family:					
List any applications under review or approved which may assist in the review of this application:					

I HEREBY CERTIFY THAT ALL INFORMATION IS TRUE AND CORRECT		
<small>I understand that reasonable inspections of the project may be made as part of the application review process. I understand that I will incur any costs associated with third-party review fees. I also understand that any material misrepresentations or errors contained in this application or supporting documents may void an approved application, at the reasonable determination of the County considering the Land Development Code, Comprehensive Plan, and other applicable regulations.</small>		
ASA Gillette <small>PRINT</small>	 <small>SIGNATURE</small>	10/21/25 <small>DATE</small>

The City of Fernandina recognizes that some content on this page may not be accessible. If you need assistance completing this form, please call our office and we will assist you (904)310-3480, or email PlanningInfo@fbfl.city.

Print

Technical Review Committee: Formal Review Request - Submission #17763

Date Submitted: 12/11/2025

Technical Review Committee: Formal Review

USE THIS FORM TO To apply for review of site plans, preliminary subdivision plats, final subdivision plats, minor subdivisions, and amendments to previously issued local development orders, change of use, and nonresidential building expansions.

Fees

Initial submittal + two resubmittals of full site plans. \$400 + 2% of the project construction cost (whichever is greater) for up to a maximum of \$4,400.

3rd and subsequent resubmittals. 1/2 of original application fees

Engineering Review (Consultant Hourly Rate)

** Administrative Plat Review (including CRA) **

Re-Plat/Preliminary Plat (Less than 20 Units) \$3,000

Re-Plat/Preliminary Plat (20+ units) \$5,000

Re-Plat/Final Plat \$1,500

Plat Amendment \$400

2026 Meeting Calendar



In observance of the Thanksgiving and Christmas Holidays scheduled office closures, the November 26, 2026 and December 24, 2026 Regular TRC meetings have been re-scheduled November 19 and December 17, 2026 respectively.

IMPORTANT NOTES

This application will be routed to the various departments for review of the applicable codes and design standards.

****Please note that, unless otherwise indicated, TRC meetings are scheduled as follows:**

The 2nd and 4th Thursday of each month at 10:00 AM in the City Hall Chambers located at 204 Ash Street.

Agenda order includes First Step Reviews followed by Formal Reviews.**

Please see the Land Development Code (LDC) for detailed information:



Requirements for All Site Plans – see LDC section 11.01.04



Requirements for Subdivision Plats – see LDC section 11.01.05



Determination for Completeness & sufficiency – see LDC section 11.03.01



Review and Compliance Report by the Technical Review Committee – see LDC Section 11.03.02



Construction and Improvements – see LDC section 11.05.00



Amendments to Local Development Orders – see LDC section 11.06.00

The LDC is available for review at

www.fbf1.us/LDC

Application Requirements



See Development Plan Submittal Checklist



All applications are subject to a determination of completeness as required by Land Development Code section 11.03.01.




A determination of completeness is a determination that all required documents and plans have been submitted, and whether all fees have been paid.



A determination of completeness is not a determination of compliance with substantive standards and criteria.

Key Contacts

 TRC Departments
Graphic

TRC will guide your application from start to finish, engaging other City departments as needed.

PROJECT INFORMATION

Submission Type*

Initial Submittal ▼

NOTICE

3rd and all subsequent resubmittals will be charged a fee of 1/2 the original application fees.

DATE OF YOUR FIRST STEP REVIEW (if you have not attended a First Step Review, return to the application page and choose the TRC First Step Review application)*

11/13/2025

Case Number (if applicable)*

PROPERTY INFORMATION

[Property information can be found at the Nassau County Property Appraiser's Website → Map Search](#)

Site Address*

2959 Butterfly Trail

City*

Fernandina Beach

State*

FL

Zip*

32034

Parcel ID #(s)

00-00-30-044B-0068-0010;00-00-30-044B-0068-0020;00-00-30-044B-0068-0030;00-00-30-044B-0068-0040;00-00-30-0560-00RW-0010

Lot

Block

Subdivision

Zoning District

R-1 ▼

Future Land Use Designation*

Low Density Residential ▼

Overlay District*

None ▼

Size of Property (acres)*

4.37

Present Property Use*

vacant (existing home to be demolished)

Wetlands*

No

Flood Zone*

AE

Coastal Construction Control Line (CCCL)*

No

OWNER OF RECORD

As recorded with the Nassau County Property Appraiser

First Name*

David

Last Name*

Brown

Company (if applicable)

Butterfly Projekt, LLC

Mailing Address*

313 Datura Street, Ste. 2

City*

West Palm Beach

State*

FL

Zip*

33401

Telephone Number*

917-692-0073

Email Address*

dbrown@portierservices.com

OWNER'S AGENT

If other than owner. If an agent will be representing the owner, an Owner's Authorization For Agent Representation form must be included.

First Name

Asa

Last Name

Gillette

Company (if applicable)

Gillette & Associates, Inc.

Mailing Address

31 South 4th Street

City

Fernandina Beach

State

FL

Zip

32034

Telephone Number

9042618819

Email Address

asa@gilletteassociates.com

PROJECT INFORMATION

Project Type*

Site Plan Review ▼

Project Name

Proposed Access Road*

Butterfly Trail

Rd Maintenance Jurisdiction*

Unimproved ROW ▼

Project Estimated Cost*

2,000,000.00

Description of Request*

Single family residential subdivision

Site Plan Review Checklist

The names, address, telephone number, and email address of the person preparing the plan.

The date of preparation and date(s) of any modifications, a north arrow, and a written and graphic scale.

The legal description of the property, consistent with the required survey.

A vicinity map showing the location of the property.

The location of streams, bodies of water, natural features, roads, rights-of-way, street intersections, and paved areas within the boundaries of the property.

The location of streams, bodies of water, dunes and dune systems, and other natural features within 250 feet of the boundaries of the property.



The location of the mean high-water line, if such line is within the boundaries of the property.



A topographic survey, soils report, grading plan, and an erosion control plan.



A general floodplain map indicating areas subject to inundation and high groundwater levels up to a 100-year flood classification.



A statement indicating the distances to schools and public safety facilities intended to serve the proposed development.



The name, plat book, and page number of any recorded subdivision comprising all or part of the site.



The location and use of any existing and proposed principal or accessory buildings and structures, showing proposed setbacks, building heights, and other dimensional requirements of the zoning district.



Elevations of all proposed structures.



The access points, driveway design, on-site parking, including required parking lot landscaping, internal circulation, sidewalks, and bicycle facilities



The location of existing and proposed utilities, utility services, and easements.



A tree survey showing protected trees, proposed replacement trees, if required, and landscaping and buffering. (See Section 4.05.00.)



A soil erosion and sediment control plan compliant with Section 3.01.04.



For a PUD site plan, a detailed, written list and explanation of how the proposed PUD differs from any provision of this LDC applicable to the underlying zoning district.



For site plans and PUD site plans where development is proposed in phases, the plans shall include

For site plans and FUD site plans where development is proposed in phases, the plans shall include phase lines and the following supporting information:



o Timeline for the development; and



o Benchmarks for monitoring the progress of construction of each phase regarding land clearing, soil stabilization and erosion control, installation of infrastructure, and installation of landscaping.



A summary block containing:



o Land use category from the Future Land Use Map in the comprehensive plan;



o Zoning district;



o Total acreage;



o Total square footage for non-residential uses;



o Total density and number of units, proposed and permissible for residential uses;



o Impervious surface ratio calculation, proposed and permissible;



o Floor area ratio calculation, proposed and permissible;



o Total number of parking spaces, required and provided; and



o Number of trees required to be protected, number of trees remaining on the site, and number of trees to be planted.



Additional plans, documents, or reports that are necessary to support the application shall be submitted. Such plans, documents, or reports may include, but are not limited to:



o Subdivision Plats (subdivision plats shall contain the information set forth in Section 11.01.05.)



o Concurrency analysis (concurrency analysis reports shall contain the information set forth in Section 7.04.00.)



o Traffic analysis reports (requirements for traffic analysis reports are set forth in Section 11.01.06.)



o Parking studies (requirements for parking studies are set forth in Section 7.01.04.)



o Stormwater management plans (requirements for stormwater management plans are set forth in Section 7.03.00.)



o Environmental Impact Study (requirements for environmental impact studies are set forth by regional, State, and federal agencies with jurisdiction and in Chapter 3 of the LDC.)



o Tree Protection Plan (Section 4.05.09.)



o Landscape Plan (Section 4.05.00.)



o Lighting Plan (Section 3.05.00.), Section 7.01.04.B)



o Signage Plan (Section 5.03.00.)



o Proof of Ownership – provide a legal description, Property Identification Number (PIN) and a copy of the warranty deed.



Concurrency analysis reports shall contain the information set forth in Section 7.04.00. Requirements for traffic analysis reports are set forth in Section 11.01.06. Requirements for parking studies



• Any development application for development proposed within the Airport Overlay Zone established for the Fernandina Beach Municipal Airport shall provide confirmation of notification to the FAA as r

School Concurrency

New residential development is required to demonstrate compliance with school concurrency as regulated in the City of Fernandina Beach through the City of Fernandina Beach's Comprehensive Plan Intergovernmental Coordination Element and the Interlocal Agreement Amendment for Public School Facility Planning adopted by the City on May 21, 2019. No new residential rezoning, preliminary plat, site plan or functional equivalent may be approved by the City unless the residential development is exempt from requirements outlined in Section 9.13 of the Amended Interlocal Agreement OR a School Concurrency Reservation Letter has been issued by the School Board indicating that adequate school facilities exist.

Certification*



By signing below, I certify that the information contained in this application is true and correct to the best of my knowledge at the time of the application.



I acknowledge that I understand and have complied with all of the submittal requirements and procedures.

Applicant First Name*

Applicant Last Name*

Today's Date*

Upload Supporting Documentation*

Butterfly_site_TRC_12-8-25.pdf

Upload 2

butterfly_drainage report_101025.pdf

Upload 3

agent authorization butterfly.pdf

Upload 4

School Impact Analysis.pdf

Upload 5

No file chosen

Upload 6

Choose File

No file chosen

Upload 7

Choose File

No file chosen

 City of FB logo
NEW Reflex

DEPARTMENT OF PLANNING & CONSERVATION

204 Ash Street | Fernandina Beach, FL 32034 | 904 310-3480 |
www.fbfl.us/planning



Civil & Environmental Engineering • Mechanical & Structural Engineering • Construction Management

AGENT AUTHORIZATION

I, David Brown of Butterfly Projekt, LLC the owner the following property(s) do hereby authorize, Gillette & Associates, Inc. to act as my Agent in conjunction with all site plan applications and any other Local, State and/or Federal development permits necessary for development of the following property, without any further notice.

Property Id Number(s): 00-00-30-044B-0068-0010; 00-00-30-044B-0020
00-00-30-044B-0068-0030; 00-00-30-044B-0040

Location: 2959 Butterfly Trail, 2975 Butterfly Trail,
2991 Butterfly Trail, 2831 Butterfly Trail, Fernandina Beach

Signature [Handwritten Signature]

Date 7/28/25

Telephone Number 917 692 0073

STATE OF FLORIDA
COUNTY OF Broward

Subscribed and sworn to before me this 28 day of July, 2025.

Who is personally known to me X or has produced identification
David Brown

Notary Public: Signature [Handwritten Signature]

Printed Name Kerstin Gladstone

My Commission Expires:

