

**#11904 INTERLOCAL AGREEMENT BETWEEN CITY OF GAINESVILLE AND
ALACHUA COUNTY REGARDING MULTIUSE TRAIL IMPROVEMENTS
AT SWEETWATER PRESERVE**

This AGREEMENT is entered into this _____ day of _____, 2021 by and between the City of Gainesville, a Florida municipal corporation (“City”), and Alachua County, a charter county and a political subdivision of the State of Florida, by and through its Board of County Commissioners (hereinafter referred to as the “County”).

WITNESSETH:

WHEREAS, Chapter 163, Florida Statutes, authorizes public agencies, including cities and counties, to enter into agreements to jointly exercise the power, privilege, or authority they share in common and which each might exercise separately; and

WHEREAS, the City and County wish to coordinate the construction of recreational facilities of the City and County in order to provide more fully for the recreational needs of the citizens of the City and County at the least expense; and

WHEREAS, the County desires to make improvements to its Sweetwater Preserve Trailhead at 309 SE 16th Avenue, shown in Exhibit A, for use and benefit of the general public, while retaining control of these facilities; and

WHEREAS, the City is willing and able to reimburse the County for immediate City multiuse trail improvements at the main entrance to Sweetwater Preserve under the County’s contract with BBI Construction Management, Inc.

NOW THEREFORE, in consideration of the mutual benefits, and the covenants and agreement herein contained, the parties agree as follows:

1. **Term.** This Agreement shall take effect upon execution and shall remain in effect unless terminated in accordance with paragraph 5, below.
2. **City’s Responsibilities.** The City shall reimburse the County for the multiuse trail improvements consisting of a raised speed table crosswalk and a ten (10) foot wide sidewalk, which cross the main entrance to Sweetwater Preserve, according to Exhibit A, attached hereto and incorporated, in an amount not to exceed \$18,244.08.
3. **County’s Responsibility.** The County shall conduct procurement and oversee construction of the multiuse trail improvements described in Section 2 and as shown on Exhibit A through completion as part of the County’s Sweetwater Preserve LID Parking Area Project.

4. **Liability.** The Parties shall each be responsible for any and all risks of personal injury and property damage attributable to the acts or omissions of their own officers, employees, servants and agents. Nothing in this Agreement shall be interpreted as a waiver of either party's sovereign immunity under law. Neither Party agrees to indemnify the other.

5. **Default and Termination.** The failure of either party to comply with any provision of this Agreement shall place such party in default. Prior to terminating this agreement, the non-defaulting party shall notify the defaulting party in writing, making specific reference to the provision which gave rise to the default. The defaulting party shall then be entitled to a period of 15 calendar days in which to cure the default. In the event the default is not cured within the 15 calendar day period, this agreement may be terminated.

6. **Notices.** Except as otherwise provided herein, any notice of default or termination, from either party to the other party shall be in writing and sent by certified mail, return receipt requested or personally delivered with signed proof of delivery. The City's and County's representatives are:

City: Elizabeth D. Waite, P.E.
Director of Wild Spaces & Public Places
Parks, Recreation & Cultural Affairs Dept.
PO Box 490, Station 24
Gainesville, FL 32627

County: Evan Shane Williams, PhD, P.E.
Stormwater Engineer
Environmental Protection Department
408 W. University Ave Suite 106
Gainesville, FL 32601

7. **Amendments.** This Agreement may be amended by mutual written agreement of the parties and may be changed only by such written amendment.

8. **Laws and Regulations.** The parties will comply with all laws, ordinances, regulations, and building code requirements applicable to the work required by this agreement. The parties are presumed to be familiar with all state and local laws, ordinances, code rules and regulations that may in any way affect the work outlined in this agreement. If either party is not familiar with state and local laws, ordinances, code rules and regulations, the party remains liable for any violation and all subsequent damages or fines.

9. **Assignment.** The parties shall not assign, convey, pledge, sublet, or otherwise dispose of, any interest in this agreement and shall not transfer any interest in same, whether by assignment or notation, without the prior written consent of the other party.

10. **Third Party Beneficiaries.** This Agreement does not create any relationship with, or any rights in favor of, any third party.

11. **Severability.** If any provision of this Agreement is declared void by a court of law, all other provisions will remain in full force and effect.

12. **Non Waiver.** The failure of either party to exercise any right in this Agreement will not waive such right in the event of any further default or non-compliance.

13. **Captions and Section Headings.** Captions and section headings used herein are for convenience only and shall not be used in construing this Agreement.

14. **Construction.** This Agreement shall not be construed more strictly against one party than against the other merely by virtue of the fact that it may have been prepared by one of the parties. It is recognized that both parties have substantially contributed to the preparation of this Agreement.

15. **Governing Law and Venue.** This Agreement is governed in accordance with the laws of the State of Florida. Venue is in Alachua County.

16. **Attachments.** All exhibits attached to this Agreement are incorporated into and made part of this agreement by reference.

17. **Entire Agreement.** This Agreement constitutes the entire agreement and supersedes all prior written or oral agreements, understandings, or representations.

18. **Recording of Agreement.** The City, upon execution of this Agreement by all parties, shall record this Interlocal Agreement in the public records of Alachua County, Florida.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed for the uses and purposes expressed herein, on the day and year first above written.

ATTEST:

ALACHUA COUNTY, FLORIDA

J.K. "Jess" Irby, Esq., Clerk

Ken Cornell, Chair

Date: _____

APPROVED AS TO FORM:

Alachua County Attorney's Office

ATTEST:

CITY OF GAINESVILLE

Omichele D. Gainey
City Clerk

Lauren Poe, Mayor

Date: _____

APPROVED AS TO FORM AND LEGALITY:

City Attorney

GENERAL SCOPE OF SITE WORK FOR PERMITTING AND CONSTRUCTION OF **SWEETWATER PRESERVE LID PARKING AREA PROJECT** ALACHUA COUNTY, FLORIDA

LOCATED IN
SECTION 16, TOWNSHIP 10 SOUTH, RANGE 20 EAST
ALACHUA COUNTY, FLORIDA

SHEET INDEX

C100	COVER SHEET
C101	GENERAL NOTES
C201	EXISTING SITE PLAN
C202	DEMOLITION PLAN
C203	EROSION & SEDIMENT CONTROL PLAN
C204	PROPOSED SITE PLAN
C205	GRADING & DRAINAGE PLAN
C206	SIGNAGE & STRIPING PLAN
C300	STREET DRAINAGE DETAILS
C310	BIOFILTRATION BASIN UNDERDRAIN DETAILS
C320	BIOFILTRATION BASIN DRAINAGE DETAILS I
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C330	BIOFILTRATION ISLAND UNDERDRAIN DETAILS
C340	BIOFILTRATION ISLAND DRAINAGE DETAILS
C350	BIOFILTRATION BASIN PLANTING PLAN
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C352	LANDSCAPED AREA PLANTING PLAN
C401	TYPICAL DETAILS I
C402	TYPICAL DETAILS II
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C405	TYPICAL DETAILS V
C406	TYPICAL DETAILS VI
C407	TYPICAL DETAILS VII



VICINITY MAP

SUNSHINE 811 OF FLORIDA
CALL BEFORE YOU DIG
1-800-432-4770

1. CALL 1-800-432-4770 TWO FULL BUSINESS DAYS (BUT NOT MORE THAN FIVE) BEFORE DIGGING TO FIND OUT WHERE BURIED FACILITIES (ELECTRIC, GAS, TELECOMMUNICATIONS, CABLE WATER, SEWER) ARE LOCATED.
2. WAIT THE REQUIRED TIME FOR THE UTILITIES ON SITE TO BE LOCATED AND MARKED WITH COLOR-CODED PAINT, FLAGS OR STAKES AND CONFIRM THAT THE SITE HAS BEEN LOCATED.
3. RESPECT AND PROTECT THE MARKS DURING THE PROJECT, IF MARKS ARE DESTROYED, REQUEST A NEW LOCATE TICKET.
4. DIG SAFELY, USING EXTREME CAUTION WHEN DIGGING WITHIN 24 INCHES ON EITHER SIDE OF THE MARKS TO AVOID HITTING THE BURIED UTILITY LINES.



LEGEND

--- PROJECT AREA (APPROXIMATELY 1 ACRE)

ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN CHANGED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.

GOVERNING SPECIFICATIONS:
ALACHUA COUNTY LAND DEVELOPMENT CODE;
ST. JOHNS RIVER WATER MANAGEMENT DISTRICT (SJRWMD);
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP);
FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT);
IN THE EVENT OF A CONFLICT, THE MOST RESTRICTIVE APPLIES.

PLANS PREPARED BY:

wood.

WOOD ENVIRONMENT AND INFRASTRUCTURE SOLUTIONS, INC.
404 SW 140TH TERRACE
GAINESVILLE, FLORIDA 32669-3000
TEL: (352) 332-3318 FAX: (352) 333-6622
WEBSITE: www.woodplc.com
E-MAIL: Sean.King@woodplc.com
ENGINEER OF RECORD: SEAN KING, P.E. (FL 80372)

CLIENT



wood.

404 SW 140TH TERRACE
GAINESVILLE, FL 32669
TEL: (352) 332-3318
CERTIFICATE OF
AUTHORIZATION LICENSE
NUMBER 5392

SEAN A. KING, P.E.
FLORIDA P.E. #80372
ENGINEER OF RECORD

PROJECT:
**SWEETWATER
PRESERVE
LID PARKING AREA
PROJECT**

CLIENT:



WOOD PROJECT No.:
6063-18-0312

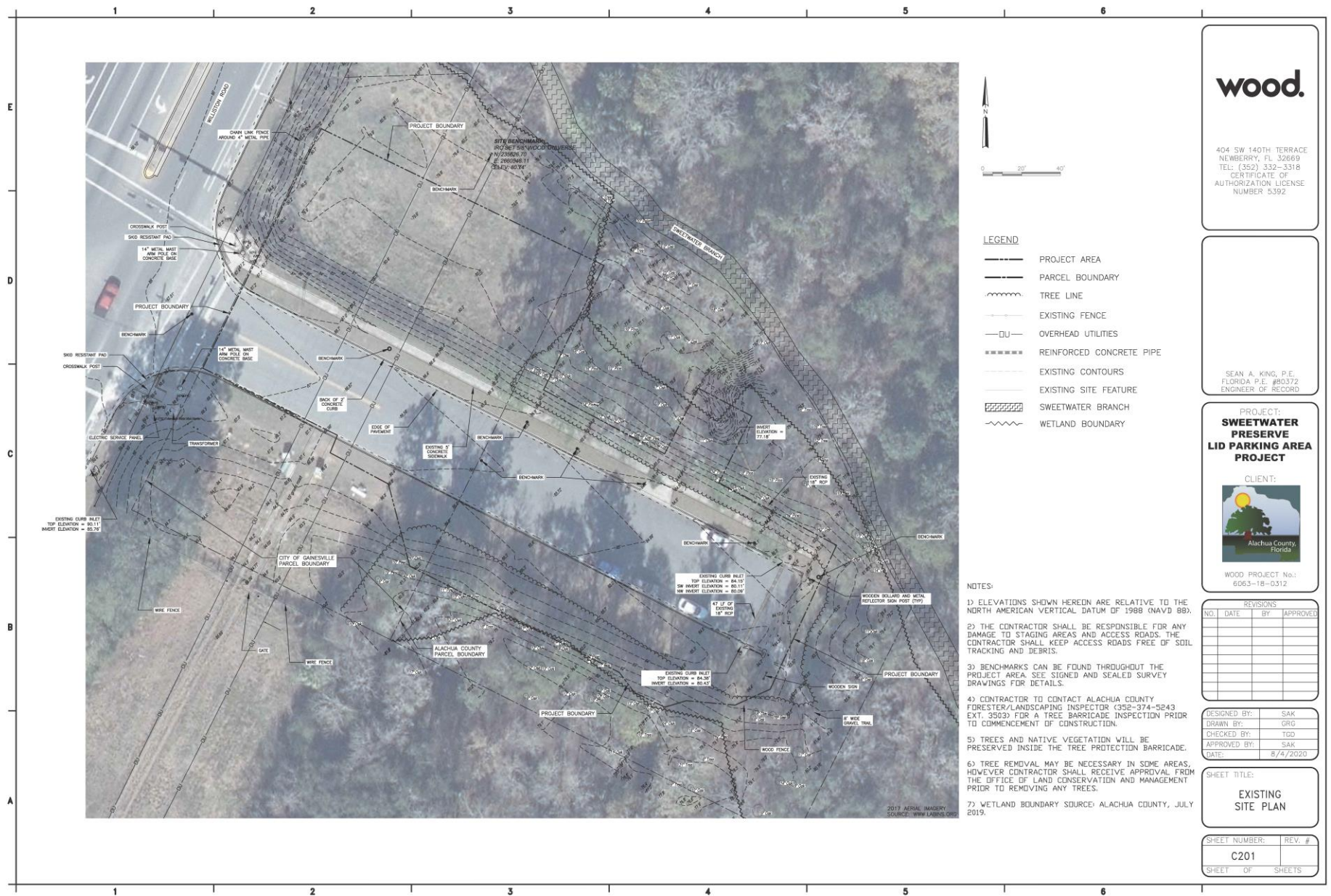
REVISIONS			
NO.	DATE	BY	APPROVED

DESIGNED BY:	SAK
DRAWN BY:	GRG
CHECKED BY:	TGD
APPROVED BY:	SAK
DATE:	8/4/2020

SHEET TITLE:

COVER SHEET

SHEET NUMBER:	REV. #
C100	
SHEET OF SHEETS	



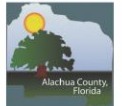
wood.

404 SW 140TH TERRACE
NEWMARKET, FL 32669
TEL: (352) 332-3318
CERTIFICATE OF
AUTHORIZATION LICENSE
NUMBER 5392

SEAN A. KING, P.E.
FLORIDA P.E. #80372
ENGINEER OF RECORD

**PROJECT:
SWEETWATER
PRESERVE
LID PARKING AREA
PROJECT**

CLIENT:



WOOD PROJECT No.:
6063-18-0312

REVISIONS

NO.	DATE	BY	APPROVED

DESIGNED BY:	SAK
DRAWN BY:	GRG
CHECKED BY:	TGO
APPROVED BY:	SAK
DATE:	8/4/2020

SHEET TITLE:
**EXISTING
SITE PLAN**

SHEET NUMBER:	REV. #
C201	
SHEET OF SHEETS	

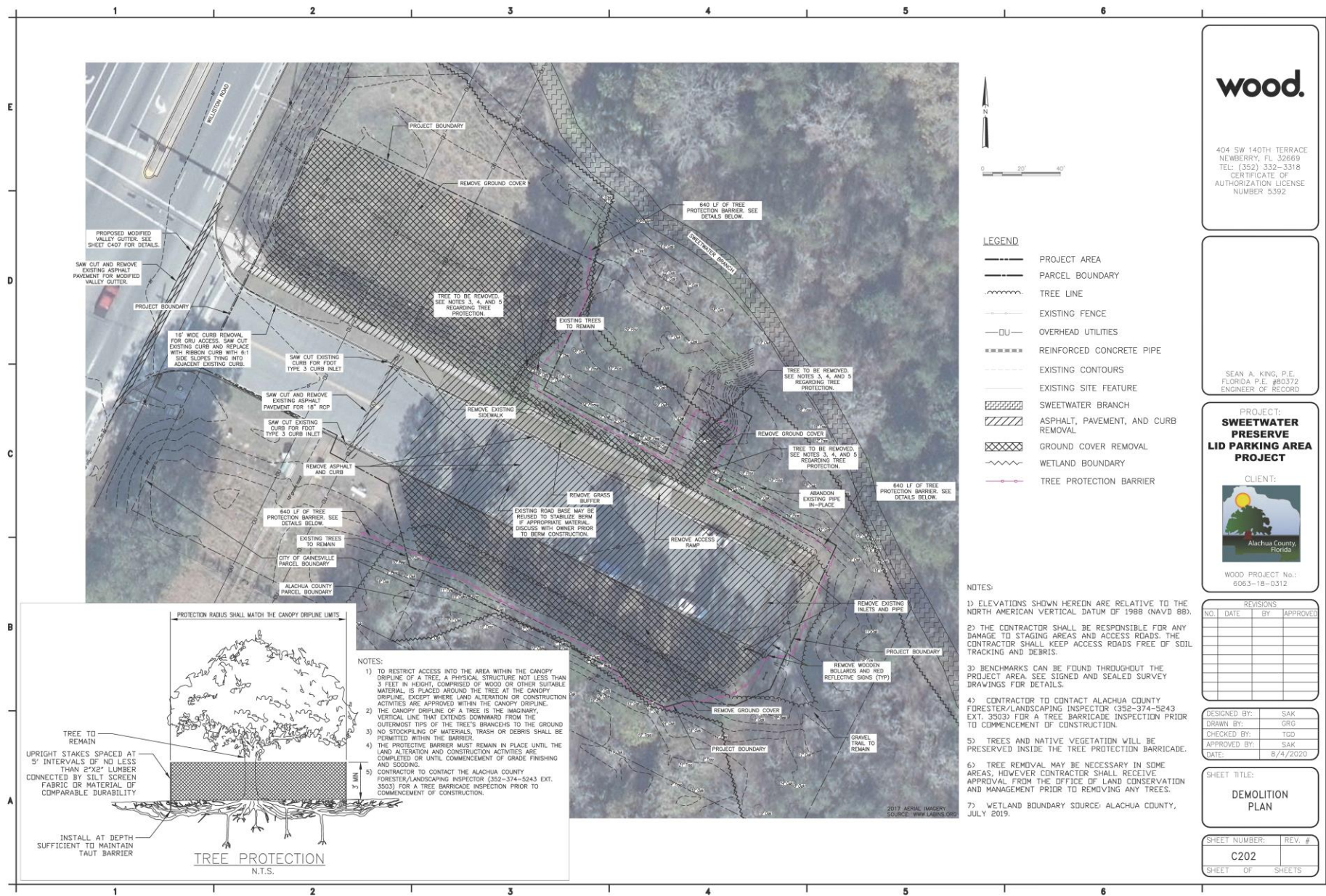


LEGEND

- PROJECT AREA
- PARCEL BOUNDARY
- TREE LINE
- EXISTING FENCE
- OVERHEAD UTILITIES
- REINFORCED CONCRETE PIPE
- EXISTING CONTOURS
- EXISTING SITE FEATURE
- SWEETWATER BRANCH
- WETLAND BOUNDARY

NOTES:

- 1) ELEVATIONS SHOWN HEREON ARE RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
- 2) THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO STAGING AREAS AND ACCESS ROADS. THE CONTRACTOR SHALL KEEP ACCESS ROADS FREE OF SOIL TRACKING AND DEBRIS.
- 3) BENCHMARKS CAN BE FOUND THROUGHOUT THE PROJECT AREA. SEE SIGNED AND SEALED SURVEY DRAWINGS FOR DETAILS.
- 4) CONTRACTOR TO CONTACT ALACHUA COUNTY FORESTER/LANDSCAPING INSPECTOR (352-374-5243 EXT. 3500) FOR A TREE BARRICADE INSPECTION PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- 5) TREES AND NATIVE VEGETATION WILL BE PRESERVED INSIDE THE TREE PROTECTION BARRICADE.
- 6) TREE REMOVAL MAY BE NECESSARY IN SOME AREAS, HOWEVER CONTRACTOR SHALL RECEIVE APPROVAL FROM THE OFFICE OF LAND CONSERVATION AND MANAGEMENT PRIOR TO REMOVING ANY TREES.
- 7) WETLAND BOUNDARY SOURCE: ALACHUA COUNTY, JULY 2019.



wood.

404 SW 140TH TERRACE
NEWMARKET, FL 32669
TEL: (352) 332-3318
CERTIFICATE OF
AUTHORIZATION LICENSE
NUMBER 5392

SEAN A. KING, P.E.
FLORIDA P.E. #80372
ENGINEER OF RECORD

PROJECT:
**SWEETWATER
PRESERVE
LID PARKING AREA
PROJECT**



WOOD PROJECT No.:
6063-18-0312

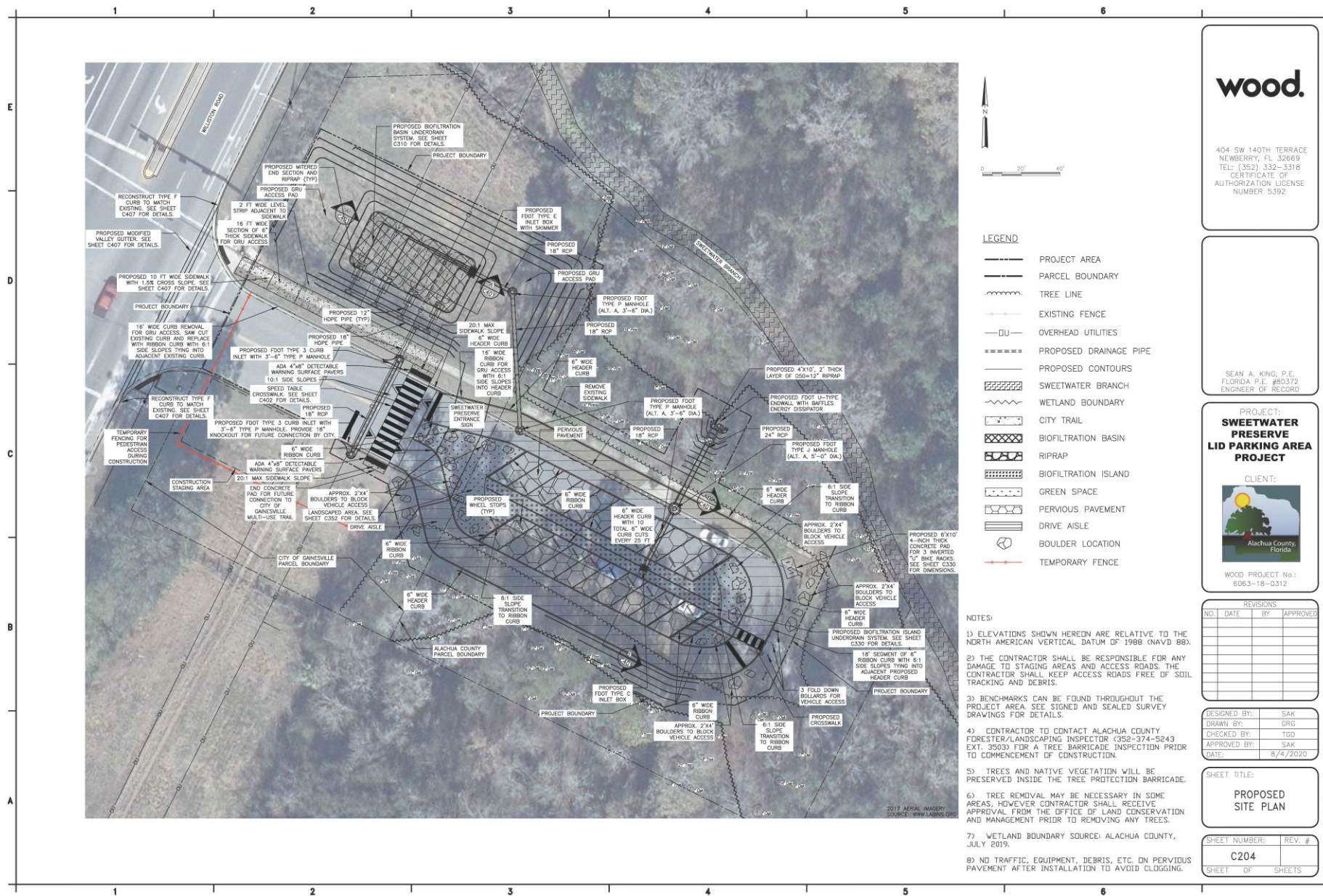
REVISIONS			
NO.	DATE	BY	APPROVED

DESIGNED BY:	SAK
DRAWN BY:	GRG
CHECKED BY:	TGO
APPROVED BY:	SAK
DATE:	8/4/2020

SHEET TITLE:
**DEMOLITION
PLAN**

SHEET NUMBER:	REV. #
C202	
SHEET OF	SHEETS





wood.

404 SW 140TH TERRACE
NEBERRY, FL 32609
TEL: (352) 332-3318
CERTIFICATE OF
AUTHORIZATION LICENSE
NUMBER 5392

SEAN A. KING, P.E.
FLORIDA P.E. #80372
ENGINEER OF RECORD

**PROJECT:
SWEETWATER
PRESERVE
LID PARKING AREA
PROJECT**



WOOD PROJECT No.:
6063-18-0312

REVISIONS			
NO.	DATE	BY	APPROVED

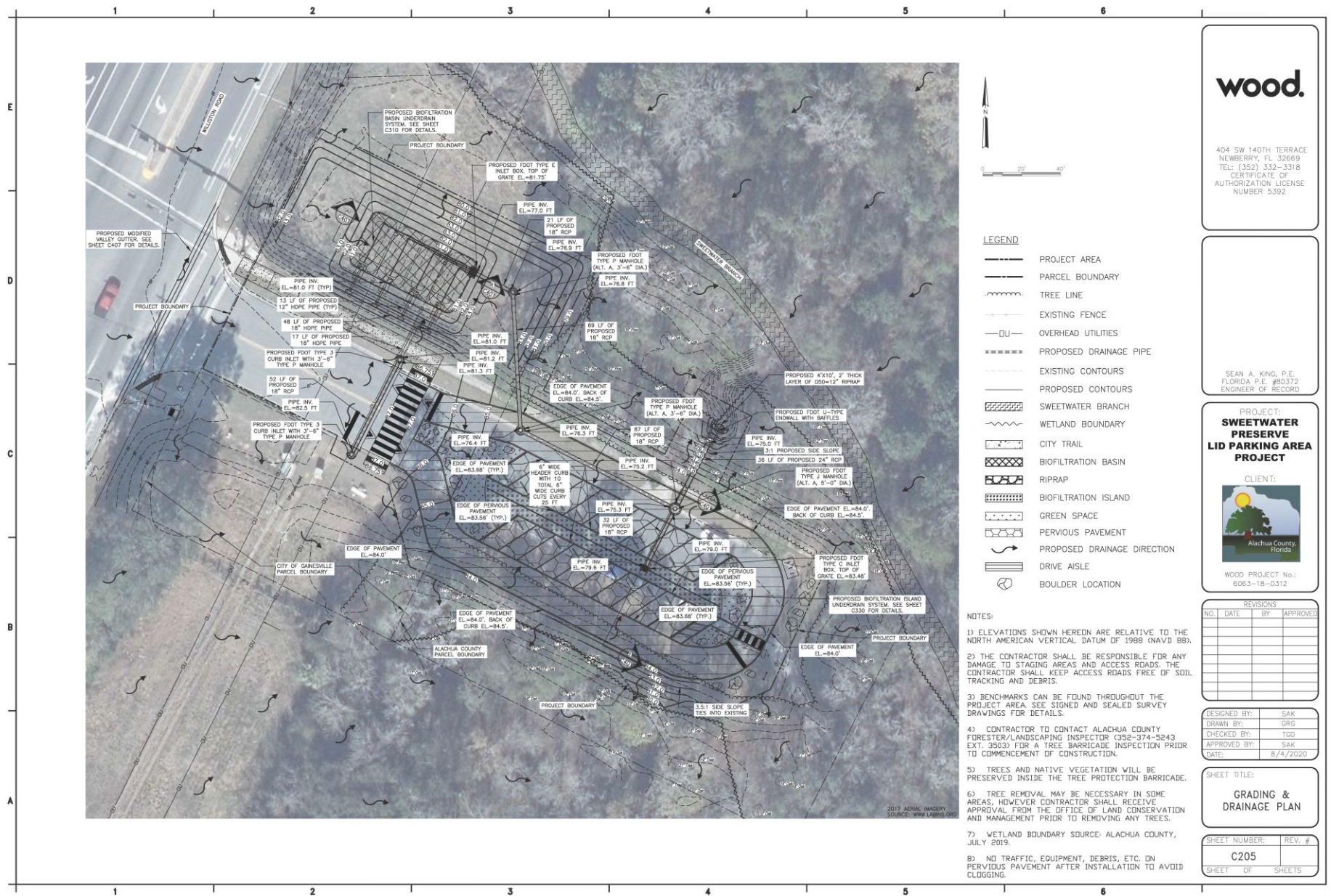
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APPROVED BY:	SAK
DATE:	8/4/2020

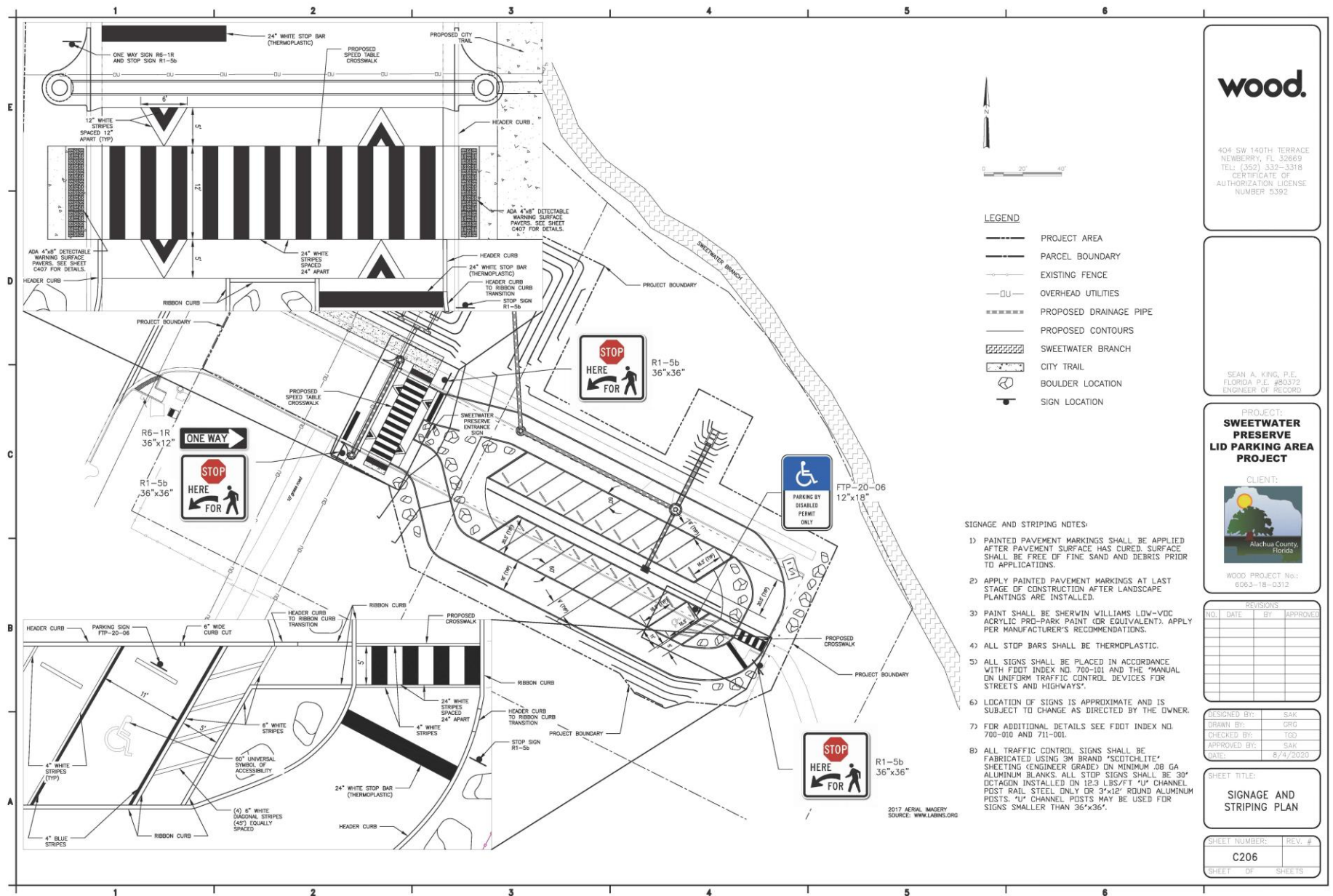
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**PROPOSED
SITE PLAN**

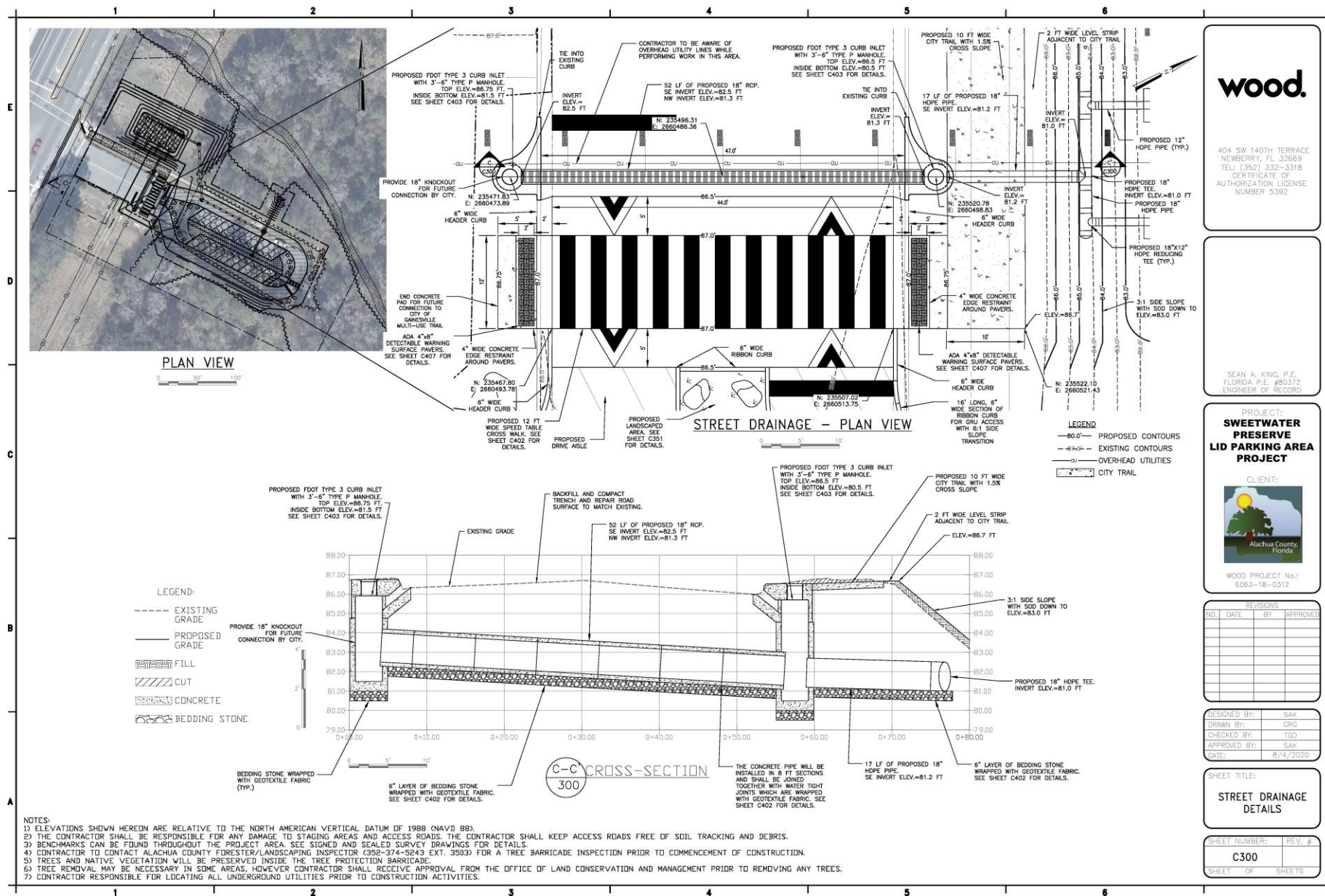
SHEET NUMBER:	REV. #
C204	
SHEET OF SHEETS	

- LEGEND**
- PROJECT AREA
 - PARCEL BOUNDARY
 - TREE LINE
 - EXISTING FENCE
 - OVERHEAD UTILITIES
 - PROPOSED DRAINAGE PIPE
 - PROPOSED CONTOURS
 - SWEETWATER BRANCH
 - WETLAND BOUNDARY
 - CITY TRAIL
 - BIOFILTRATION BASIN
 - RIPRAP
 - BIOFILTRATION ISLAND
 - GREEN SPACE
 - PERVIOUS PAVEMENT
 - DRIVE AISLE
 - BOULDER LOCATION
 - TEMPORARY FENCE

- NOTES:**
- ELEVATIONS SHOWN HEREON ARE RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO STAGING AREAS AND ACCESS ROADS. THE CONTRACTOR SHALL KEEP ACCESS ROADS FREE OF SOIL TRACKING AND DEBRIS.
 - BENCHMARKS CAN BE FOUND THROUGHOUT THE PROJECT AREA. SEE SIGNED AND SEALED SURVEY DRAWINGS FOR DETAILS.
 - CONTRACTOR TO CONTACT ALACHUA COUNTY FORESTER/LANDSCAPING INSPECTOR (352-374-5243 EXT. 3503) FOR A TREE BARRICADE INSPECTION PRIOR TO COMMENCEMENT OF CONSTRUCTION.
 - TREES AND NATIVE VEGETATION WILL BE PRESERVED INSIDE THE TREE PROTECTION BARRICADE.
 - TREE REMOVAL MAY BE NECESSARY IN SOME AREAS, HOWEVER CONTRACTOR SHALL RECEIVE APPROVAL FROM THE OFFICE OF LAND CONSERVATION AND MANAGEMENT PRIOR TO REMOVING ANY TREES.
 - WETLAND BOUNDARY SOURCE: ALACHUA COUNTY, JULY 2019.
 - NO TRAFFIC, EQUIPMENT, DEBRIS, ETC. ON PERVIOUS PAVEMENT AFTER INSTALLATION TO AVOID CLOGGING.







wood.

404 SW 140TH TERRACE
NEWMERRY, FL 32669
TEL: (352) 332-3318
CERTIFICATE OF
AUTHORIZATION LICENSE
NUMBER 5392

SEAN A. KING, P.E.
FLORIDA P.E. #80372
ENGINEER OF RECORD

PROJECT:
**SWEETWATER
PRESERVE
LID PARKING AREA
PROJECT**

CLIENT:



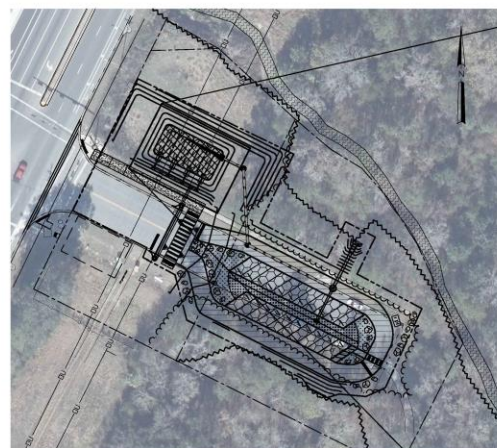
WOOD PROJECT No.:
6063-18-0312

REVISIONS			
NO.	DATE	BY	APPROVED

DESIGNED BY:	SAK
DRAWN BY:	GRG
CHECKED BY:	TGD
APPROVED BY:	SAK
DATE:	8/4/2020

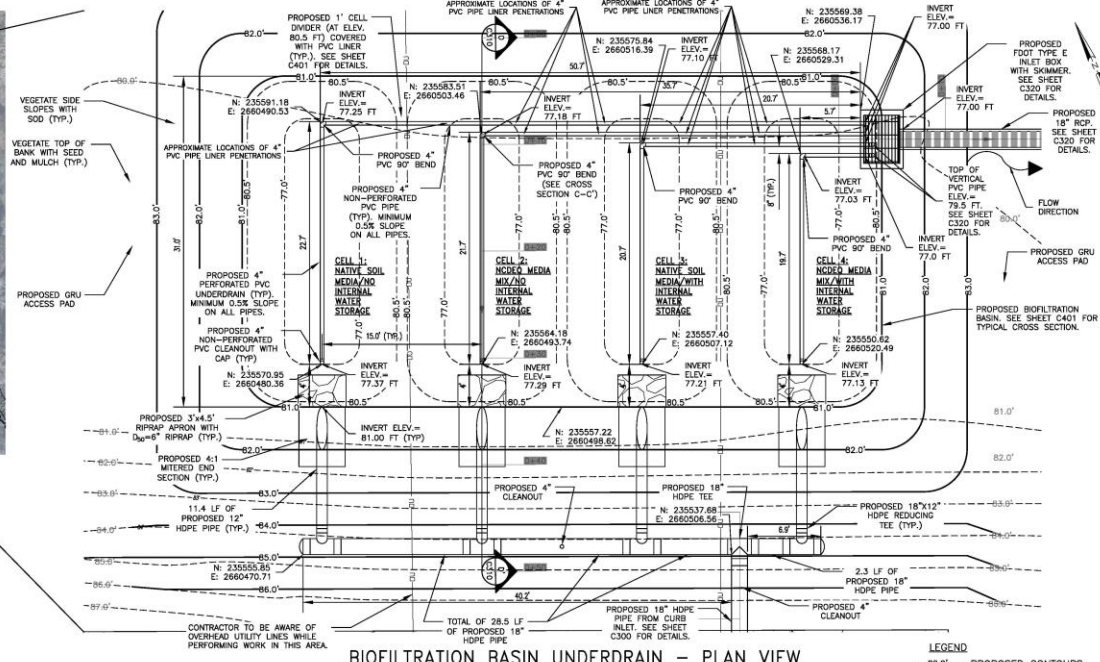
SHEET TITLE:
**BIOFILTRATION
BASIN UNDERDRAIN
DETAILS**

SHEET NUMBER:	REV. #
C310	
SHEET: OF	SHEETS



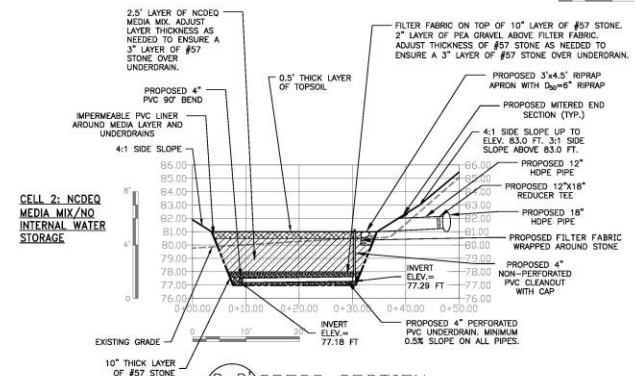
PLAN VIEW

0 50' 100'



BIOFILTRATION BASIN UNDERDRAIN - PLAN VIEW

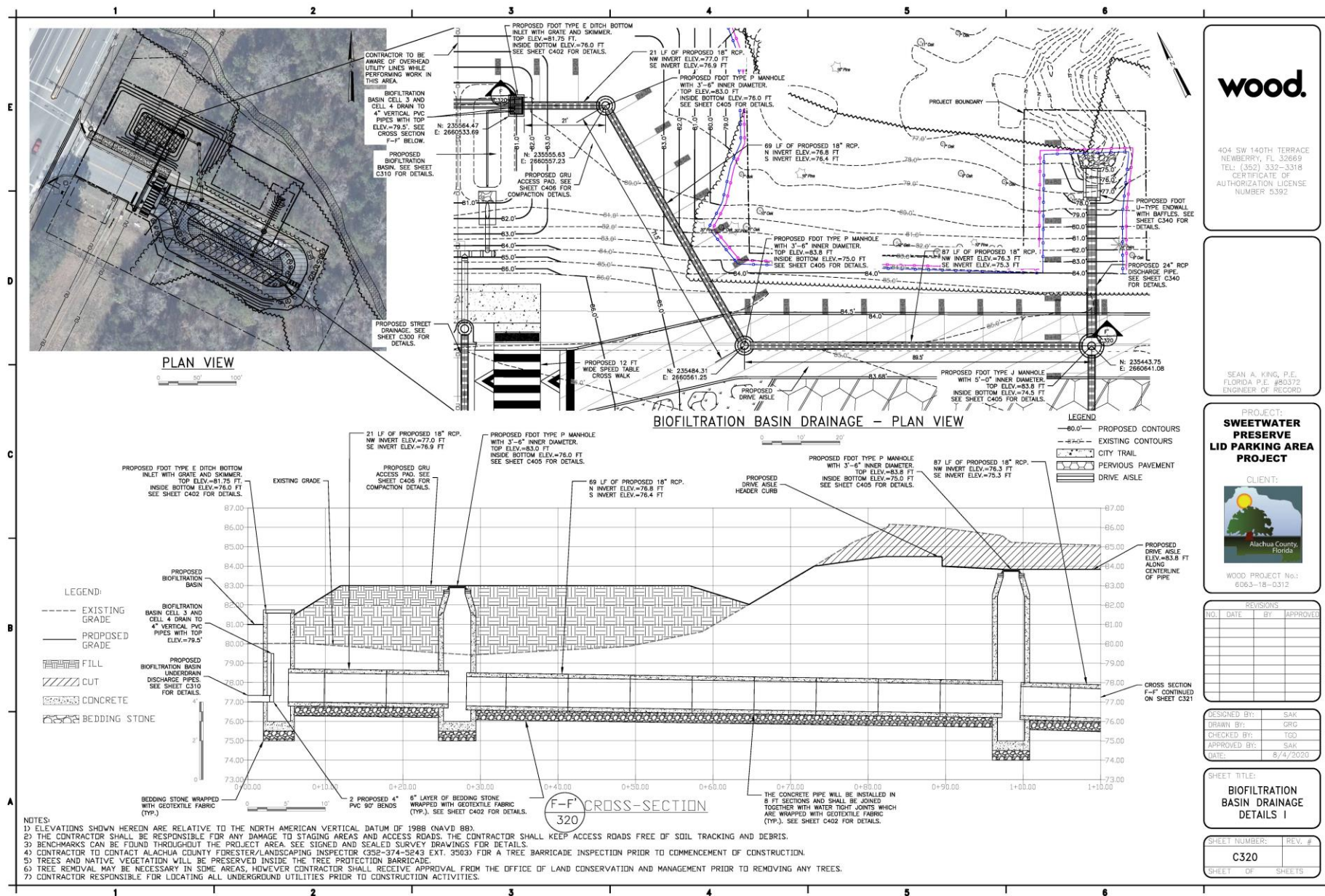
- LEGEND**
- 80.0' — PROPOSED CONTOURS
 - - - - - EXISTING CONTOURS
 - — — — — OVERHEAD UTILITIES
 - — — — — CITY TRAIL
 - — — — — RIPRAP

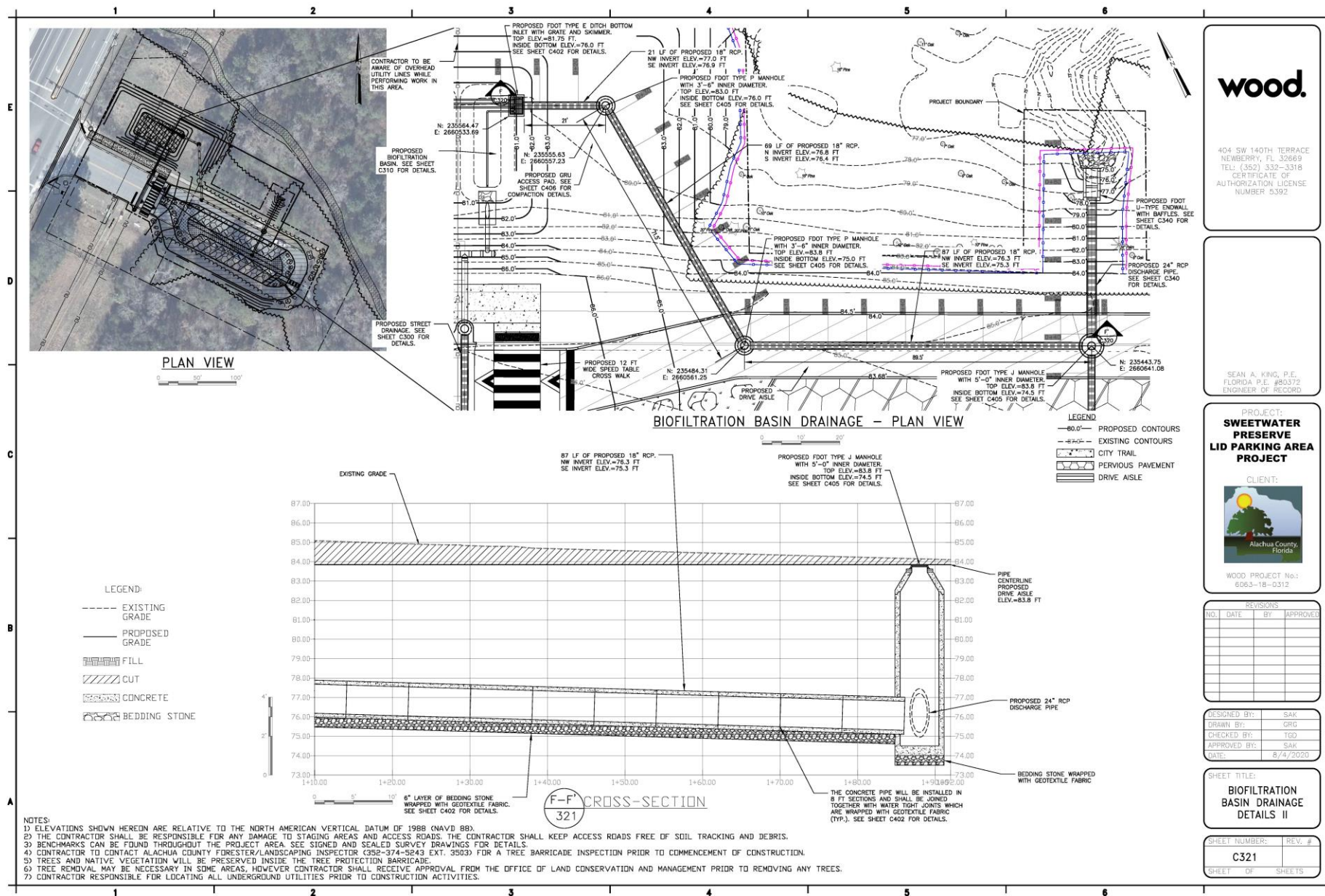


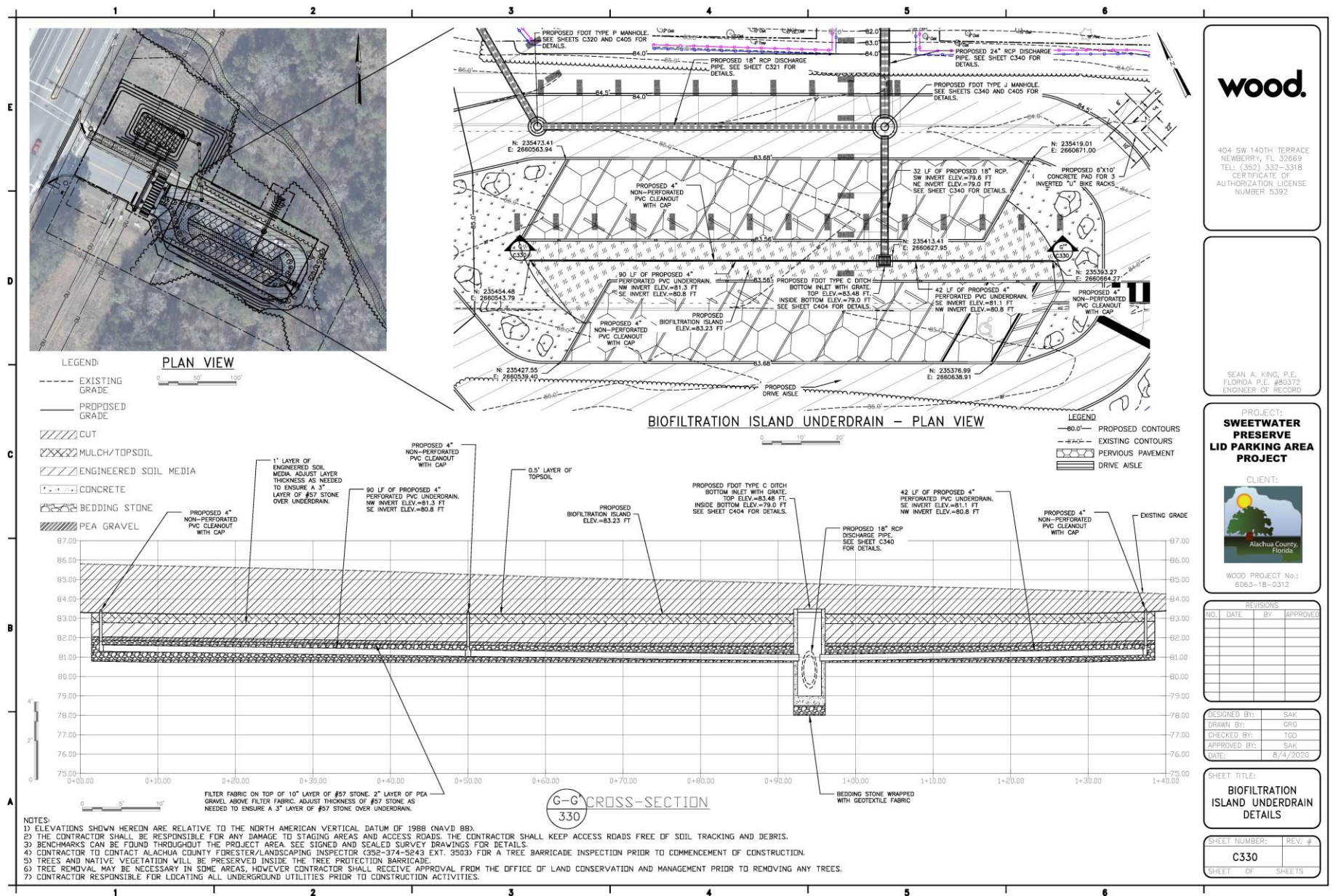
D-D' CROSS-SECTION
310

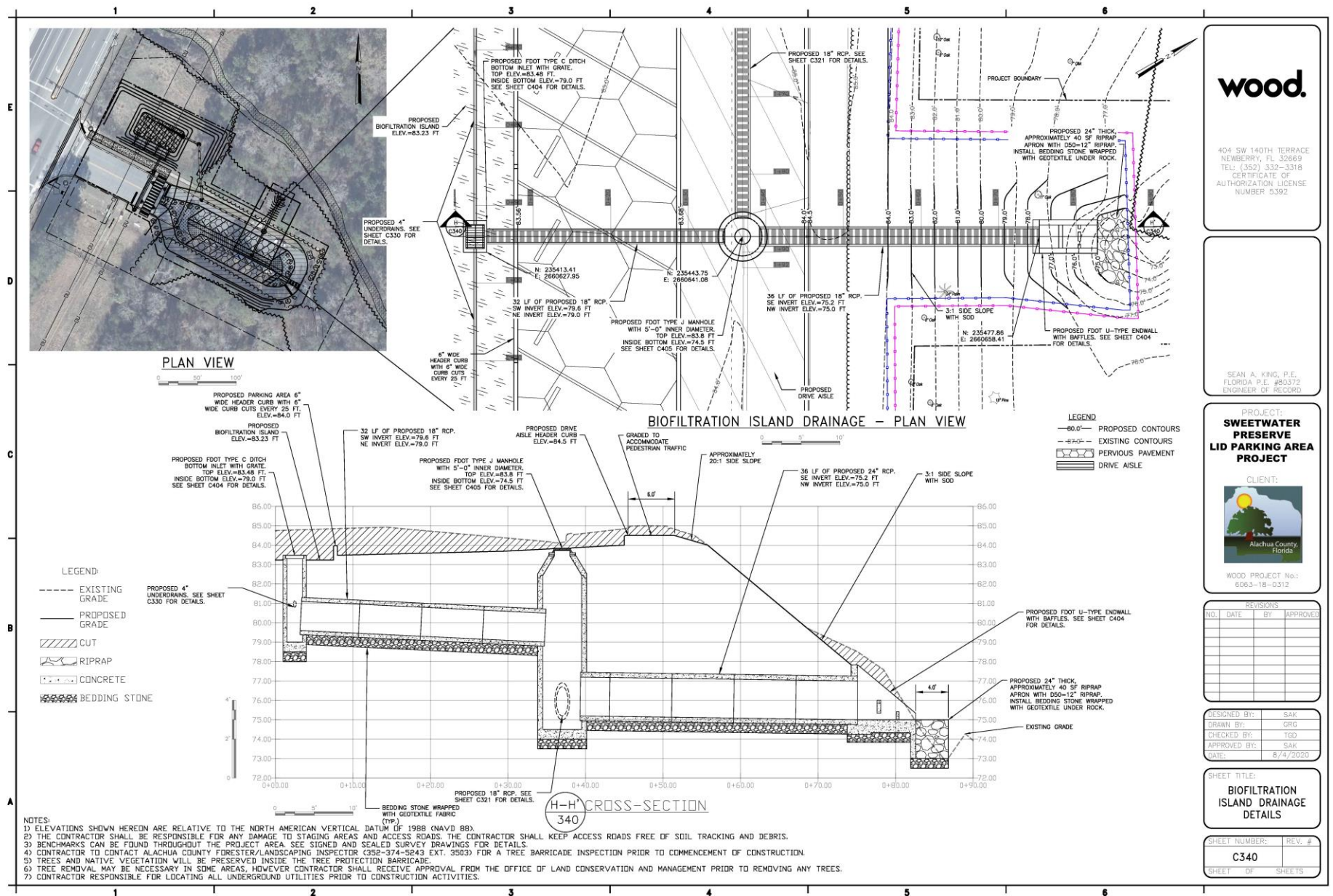
- LEGEND:**
- — — — — EXISTING GRADE
 - — — — — PROPOSED GRADE
 - — — — — IMPERMEABLE PVC LINER
 - — — — — MULCH/TOPSOIL
 - — — — — ENGINEERED SOIL MEDIA
 - — — — — PEA GRAVEL
 - — — — — #57 STONE

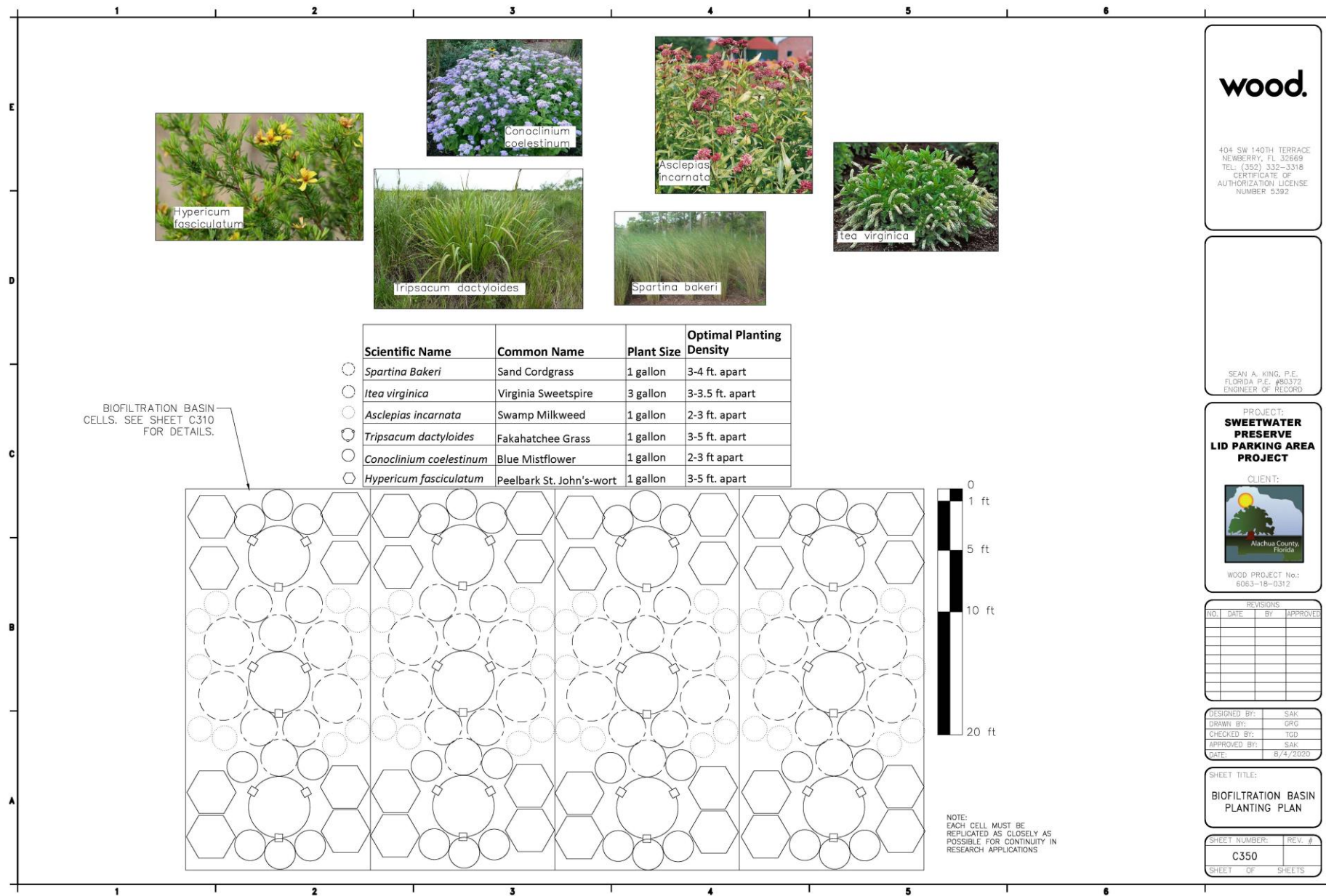
- NOTES:**
- 1) ELEVATIONS SHOWN HEREON ARE RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
 - 2) THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO STAGING AREAS AND ACCESS ROADS. THE CONTRACTOR SHALL KEEP ACCESS ROADS FREE OF SOIL TRACKING AND DEBRIS.
 - 3) BENCHMARKS CAN BE FOUND THROUGHOUT THE PROJECT AREA. SEE SIGNED AND SEALED SURVEY DRAWINGS FOR DETAILS.
 - 4) CONTRACTOR TO CONTACT ALACHUA COUNTY FORESTER/LANDSCAPING INSPECTOR (352-374-5243 EXT. 3503) FOR A TREE BARRICADE INSPECTION PRIOR TO COMMENCEMENT OF CONSTRUCTION.
 - 5) TREES AND NATIVE VEGETATION WILL BE PRESERVED INSIDE THE TREE PROTECTION BARRICADE.
 - 6) TREE REMOVAL MAY BE NECESSARY IN SOME AREAS; HOWEVER CONTRACTOR SHALL RECEIVE APPROVAL FROM THE OFFICE OF LAND CONSERVATION AND MANAGEMENT PRIOR TO REMOVING ANY TREES.
 - 7) CONTRACTOR RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION ACTIVITIES.

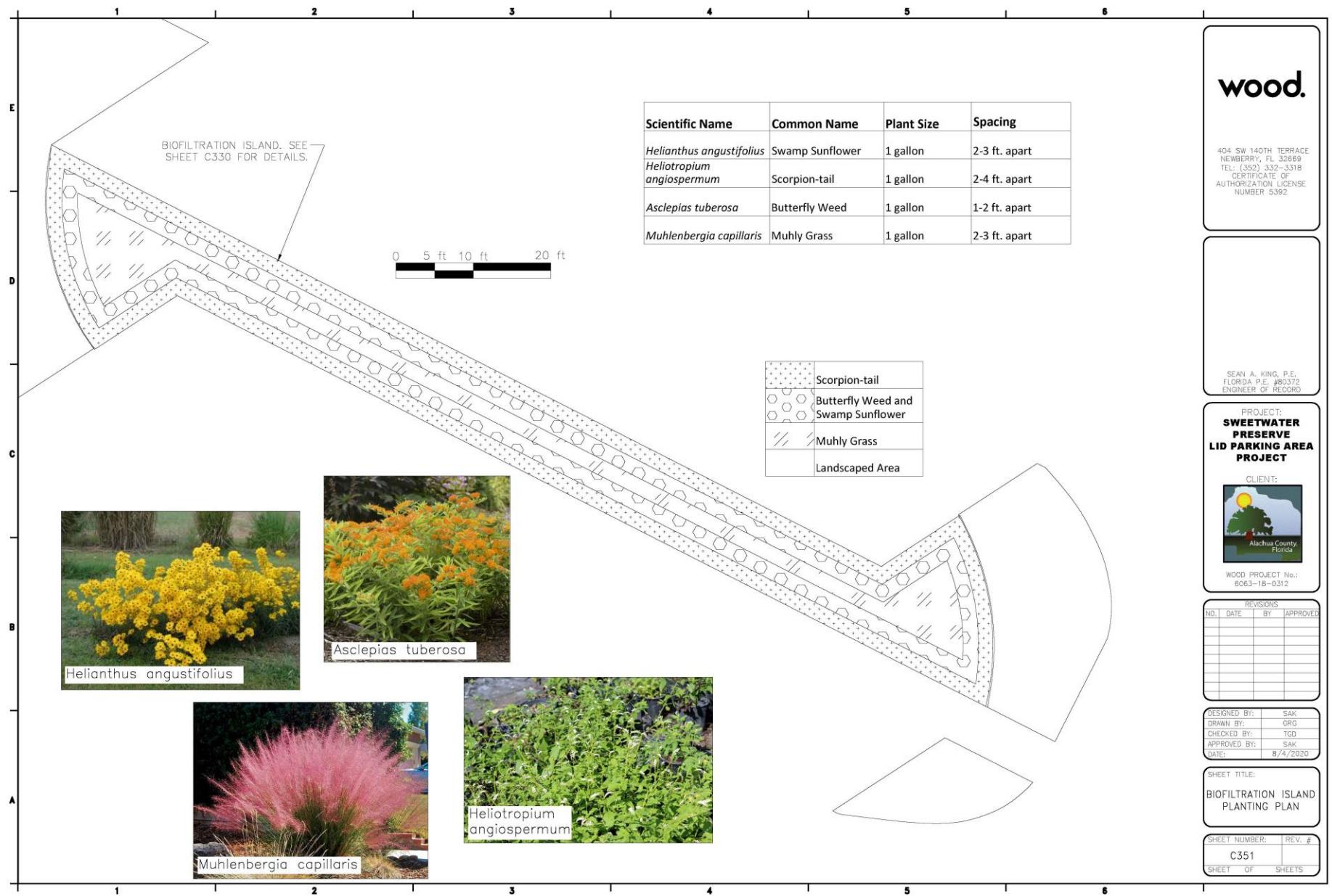












wood.

404 SW 140TH TERRACE
NEWBERRY, FL 32669
TEL: (352) 332-3318
CERTIFICATE OF
AUTHORIZATION LICENSE
NUMBER 5392

SEAN A. KING, P.E.
FLORIDA P.E. #00373
ENGINEER OF RECORD

PROJECT:
**SWEETWATER
PRESERVE
LID PARKING AREA
PROJECT**



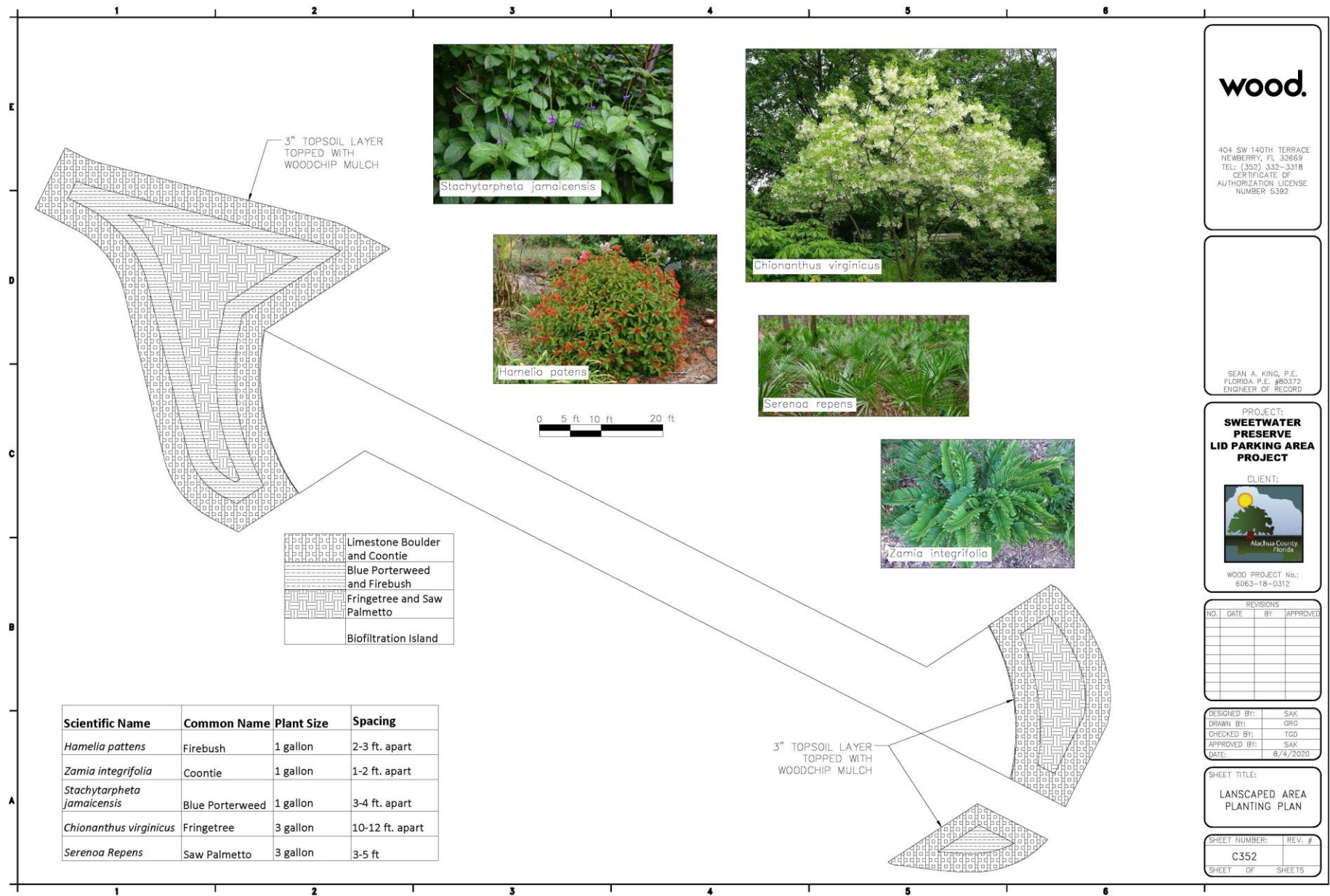
WOOD PROJECT No.:
6063-18-0312

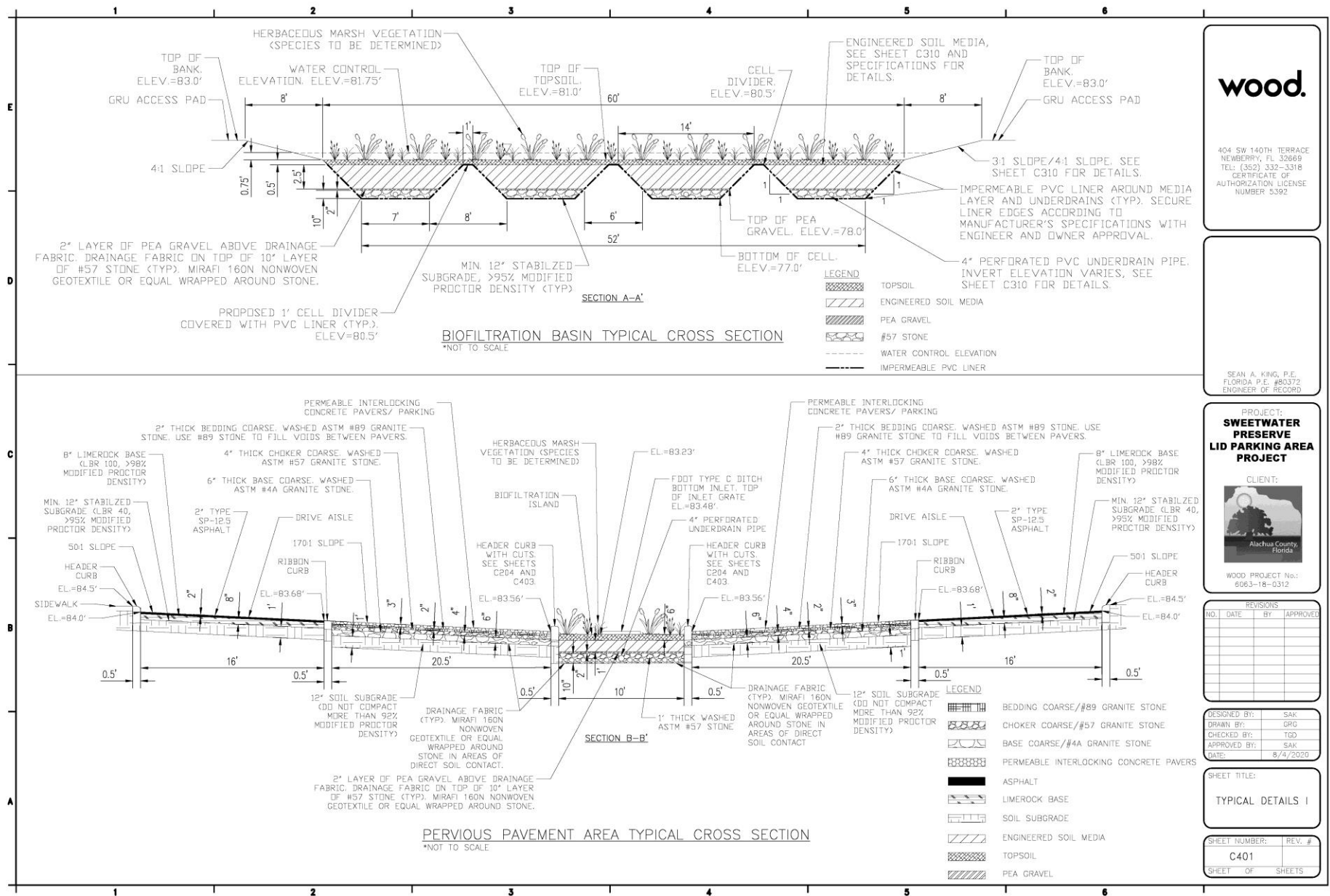
REVISIONS			
NO.	DATE	BY	APPROVED

DESIGNED BY:	SAK
DRAWN BY:	GRG
CHECKED BY:	TGD
APPROVED BY:	SAK
DATE:	8/4/2020

SHEET TITLE:
**BIOFILTRATION ISLAND
PLANTING PLAN**

SHEET NUMBER:	REV. #
C351	
SHEET OF	SHEETS





wood.

404 SW 140TH TERRACE
NEWBERRY, FL 32669
TEL: (352) 332-3318
CERTIFICATE OF
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NUMBER 5392

SEAN A. KING, P.E.
FLORIDA P.E. #80372
ENGINEER OF RECORD

PROJECT:
**SWEETWATER
PRESERVE
LID PARKING AREA
PROJECT**



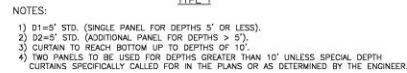
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6063-18-0312

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NO.	DATE	BY	APPROVED

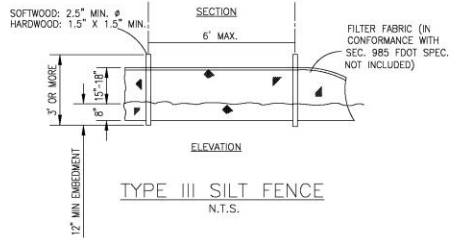
DESIGNED BY:	SAK
DRAWN BY:	GRG
CHECKED BY:	TGO
APPROVED BY:	SAK
DATE:	8/4/2020

SHEET TITLE:
TYPICAL DETAILS I

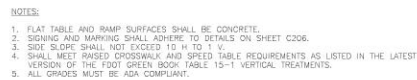
SHEET NUMBER:	REV. #
C401	
SHEET OF	SHEETS



N.T.S.



N.T.S.



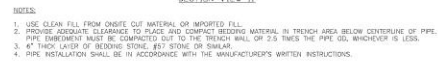
TYPICAL SPEED TABLE



N.T.S.



N.T.S.



N.T.S.



- NOTES:
- 1) FILTER FABRIC NOT REQUIRED WHEN AN O-RING GASKET IS USED.
 - 2) FILTER FABRIC MATERIAL MUST MEET THE FOLLOWING ASTM REQUIREMENTS:
 - ASTM D 4595
 - ASTM D 4632
 - ASTM D 4533
 - ASTM D 4833
 - ASTM D 4491

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PROJECT:
**SWEETWATER
PRESERVE
LID PARKING AREA
PROJECT**

CLIENT:



Alachua County,
Florida

WOOD PROJECT No.:
6063-18-0312

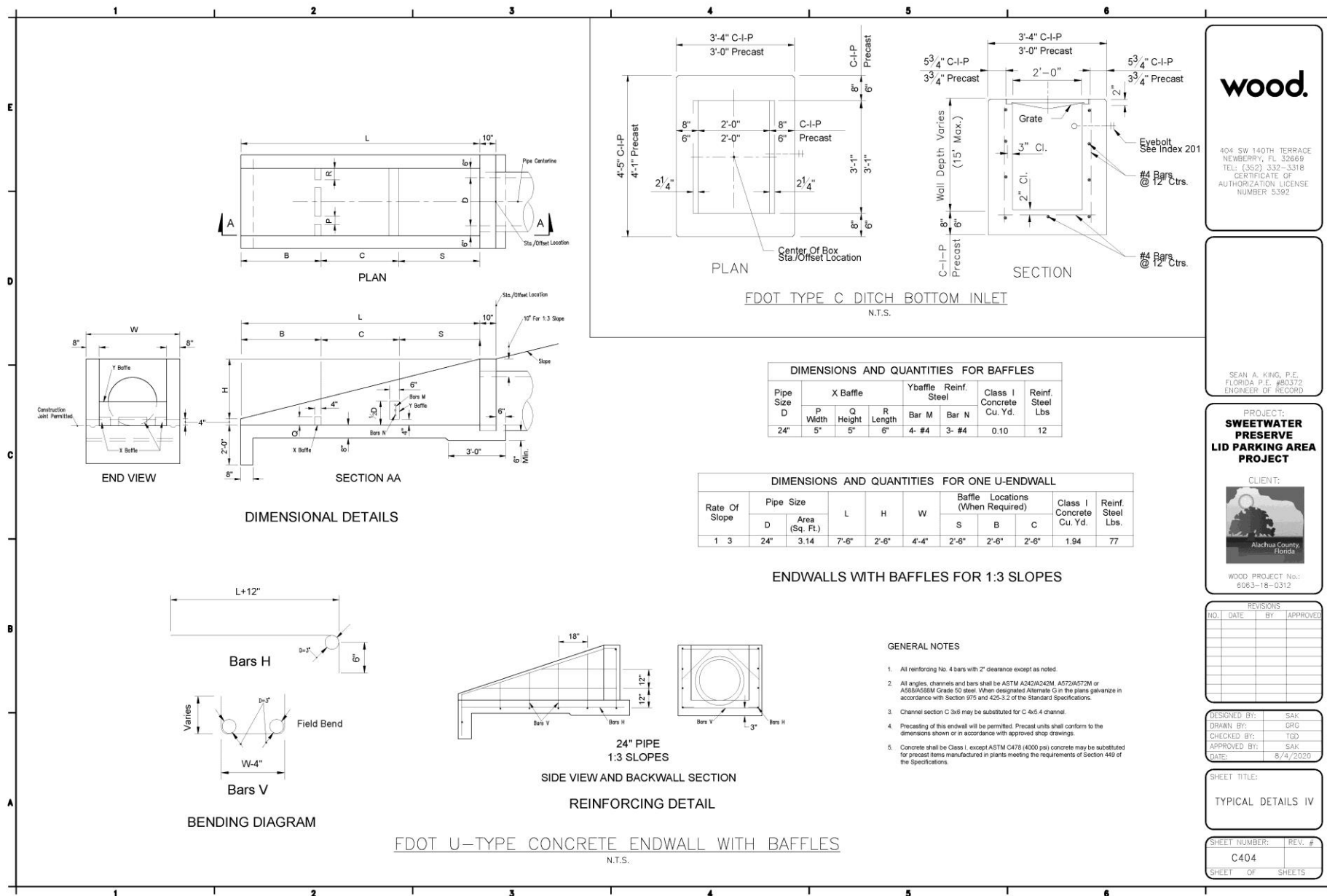
[illegible]

DESIGNED BY:	SAK
DRAWN BY:	CRG
CHECKED BY:	TGD
APPROVED BY:	SAK
DATE:	8/4/2020

SHEET TITLE:

TYPICAL DETAILS II

SHEET NUMBER:	REV. #:
C402	
SHEET OF	SHEETS



wood.

404 SW 140TH TERRACE
NEWBERRY, FL 32669
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FLORIDA P.E. #60372
ENGINEER OF RECORD

PROJECT:
**SWEETWATER
PRESERVE
LID PARKING AREA
PROJECT**



WOOD PROJECT No.:
6063-18-0312

REVISIONS			
NO.	DATE	BY	APPROVED

DESIGNED BY:	SAK
DRAWN BY:	GRG
CHECKED BY:	TGO
APPROVED BY:	SAK
DATE:	8/4/2020

SHEET TITLE:
TYPICAL DETAILS IV

SHEET NUMBER:	REV. #
C404	
SHEET OF	SHEETS

wood.

404 SW 140TH TERRACE
NEWBERRY, FL 32669
TEL: (352) 332-3318
CERTIFICATE OF
AUTHORIZATION LICENSE
NUMBER 5392

PROJECT:
**SWEETWATER
PRESERVE
LID PARKING AREA
PROJECT**



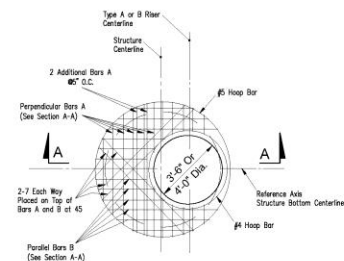
WOOD PROJECT No.:
6063-18-0312

REVISIONS			
NO.	DATE	BY	APPROVED

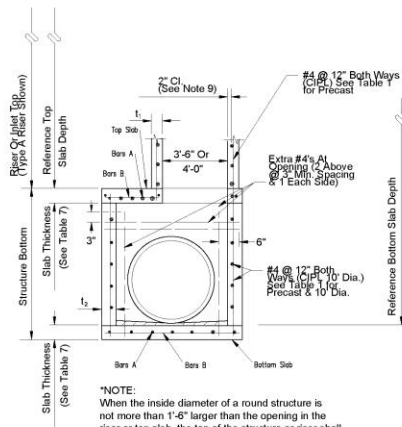
DESIGNED BY: SAK
DRAWN BY: GRG
CHECKED BY: TGD
APPROVED BY: SAK
DATE: 8/4/2020

SHEET TITLE:
TYPICAL DETAILS V

SHEET NUMBER: C405
SHEET OF SHEETS



**TOP SLAB REINFORCING STEEL DIAGRAM
(ALTERNATE A)**

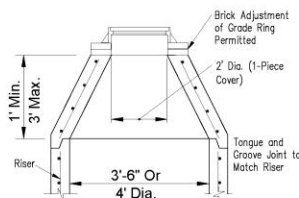


*NOTE:
When the inside diameter of a round structure is not more than 1'-6" larger than the opening in the riser or top slab, the top of the structure or riser shall be constructed according to the "Special Top Slab" details on this sheet.

**SECTION A-A
(ALTERNATE A)**

**SLAB DESIGNS - ROUND
STRUCTURES (TABLE 7)**

SLAB DEPTH	SLAB THICKNESS	REINF. (2-WAY) SCHEDULE
SIZE: 3'-6" DIAMETER		
2'-15"	6" Precast	CS 5
0'-5" to 3'-0"	6"	AS
3'-0" to 3'-6"	6"	BS 5
SIZE: 5'-0" DIAMETER		
3'-0" to 3'-6"	6"	BS 5
3'-6" to 3'-0"	6"	CS 5
3'-0" to 3'-6"	6"	BS 5
3'-6" to 3'-0"	6"	CS 5



PRECAST CONCENTRIC CONE

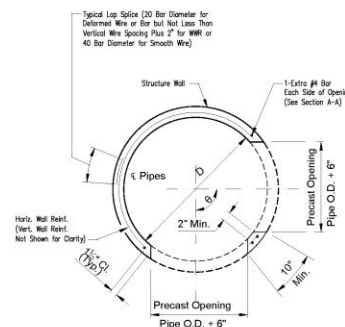
SLAB AND WALL DESIGN TABLE NOTES

- Size is the inside dimension(s) of a structure.
- Slab reinforcement is appropriate for top, intermediate, and bottom slabs.
- Bottom Slabs for precast 3'-6" x 3'-6" rectangular structures at 15' depth or less, may be 6" thick.
- Slab depth is measured from finished grade to top of slab.
- Wall depth is measured to the top of the bottom slab for boxes and to the top of the intermediate slab for risers.
- Wall height is the distance between top of lower slab to bottom of upper slab. Maximum wall height is 12' for wall lengths exceeding 5' or 10' for wall lengths exceeding 12'.
- Wall lengths exceeding 8'-0" require two layers of reinforcing (See Table 8) with 2" of cover from the horizontal bars to the inside and outside faces for each layer.
- Wall lengths exceeding the dimensions or depths shown in Table 8, or 12'-0" diameter require a special design.
- Wall thickness and reinforcing for rectangular structures is based on the longer wall length.
- Reinforcing schedules with larger areas of steel may be substituted for schedules with smaller bar or wire spacing, except that Schedule B10 may not be substituted for Schedule A6. See Index 425-001 for allowable bar spacing adjustments when larger areas of reinforcing are substituted.

FDOT STRUCTURE BOTTOMS TYPE J AND P

N.T.S.

**PRECAST ROUND STRUCTURES WITH
MULTIPLE PIPE CONNECTIONS**



GENERAL NOTES

- Standard structure bottoms 4'-0" diameter and smaller (Alt. A) and 3'-6" square (Alt. B) are designated Type P. Larger standard structure bottoms are designated Type J. Risers are permitted for all structures. Round risers are designated Type A, square risers are designated Type B.
- Walls of circular structures (Alt. A) constructed in place may be of brick or reinforced concrete. Precast and rectangular structures (Alt. B) shall be constructed of reinforced concrete only.
- Wall thickness and reinforcement are for either reinforced cast-in-place or precast concrete units except that precast circular units may be furnished with walls in accordance with ASTM C478 (see modified wall thicknesses in Table 1).
- Top and bottom slab thickness and reinforcement are for precast and cast-in-place construction. All concrete shall be of Class II concrete, except use Class IV concrete when shown in the Plans, for special applications of structures located in extremely aggressive environments. Concrete as specified in ASTM C478 (4000 psi) may be used in lieu of Class II concrete for precast items manufactured in accordance with Specifications Section 449.
- All reinforcement shown is Grade 60 steel, deformed bar. Equivalent area Grade 40 steel or equivalent area smooth or deformed welded wire reinforcement in accordance with Specification Section 931 may be substituted according to Index 425-001, unless otherwise noted.
- Alt. A or Alt. B structure bottoms may be used in conjunction with curb inlet tops Types 1, 2, 3, 4, 5, 6, 9, and 10, and any manhole or junction box unless otherwise shown in the plans or other standard drawings. Alt. B structure bottoms may be used in conjunction with curb inlet Types 7 & 8, or any ditch bottom inlet unless otherwise shown in the plans or other standard drawings.
- Rectangular structures may be rotated as directed by the Engineer in order to facilitate connections between the structure walls and storm sewer pipes.
- Except when ACI hooks are specifically required, reinforcement in top and bottom slab shall be straight embedment.
- All reinforcement must have 2" minimum cover except for 3'-6" diameter precast circular units manufactured under ASTM C478. Keyed construction otherwise shown. Additional bars used to restrain hole formers for precast structures with gouted pipe connections may be left flush with the hole surface. Cut or bend reinforcement at pipe openings to maintain cover. Exposed ends of reinforcing at precast pipe openings and gouted joints must be removed to 1" below the concrete surface and sealed with a Type F epoxy in accordance with Specification Section 926. Horizontal steel in rectangular structures shall be lapped a minimum of 30 bar diameters or by standard hooks at corners.
- The corner fillets shown are necessary for rectangular structures with circular risers and inlet throats and when used on skew with rectangular risers, inlets and inlet throats. Fillets will be required in the top slab of the Alt. A structure bottoms when used with the Alt. B risers. Each fillet shall be reinforced with two #5 bars.
- Inlet walls, throats, risers or manhole tops shall be secured to structures as shown on Index 425-001 Optional Construction Joints.
- Structures with depths over 14' below the mean high water table are to be checked for flotation by the designer of the drainage project.
- Units larger than specified standards may be substituted at the contractor's option when these units will not cause or increase the severity of utility conflicts. Such larger units shall be furnished at no additional cost to the Department. Larger Alt. A units cannot replace Alt. B units without approval of the Engineer. This note applies to this index only.
- For manhole and junction box tops, for frames and covers, and for supplementary details and notes see Index 425-001.
- Type J structure bottoms must have a minimum 6'-0" wall height when possible, for maintenance access.

ROUND STRUCTURE BOTTOMS (ALTERNATE A) & ROUND RISERS- TABLE 1									
Wall Thickness (t ₁ & t ₂) and Vertical & Horizontal Areas of Reinforcement (A _v)									
Type	Structure/Riser Diameter (ft)	Cast-In-Place Items Class II Concrete				Class II Concrete			
		Riser (in.)	Bottom (in.)	A _v (in. ² /ft.)	t ₁ (in.)	Riser (in.)	Bottom (in.)	A _v (in. ² /ft.)	t ₁ or t ₂ (in.)
P	3'-6"	6	8	0.20	6	8	0.20	4**	0.105
P	4'-0"	6	8	0.20	6	8	0.20	5**	0.120
J	5'-0"	-	8	0.20	-	8	0.20	6**	0.150

TABLE 1 NOTES:

#6 Provide 0.20 sq. in./ft. at each face, 12" max. bar spacing

**Modified minimum wall thickness

***Min. total circumferential reinforcement for continuous steel hoops:

A_v = 0.40 sq. in. for riser section height equal or less than 2'-0" (2 hoop min.)

A_v = 0.60 sq. in. for riser section height more than 2'-0" up to 4'-0" (3 hoop min.)

Areas of reinforcing for precast items are based on Grade 60 reinforcing.

No reduction in the area of reinforcement is allowed for welded wire fabric in Table 1.

Area of vertical reinforcing may be reduced in accordance with ASTM C478.

**TABLE 3-MINIMUM STRUCTURE
SIZES FOR SINGLE PIPE CONNECTION
PER SIDE**

PIPE SIZE	RECTANGULAR		ROUND	
	Side Dimension (L)	Note	Diameter (D)	2 to 4 Pipes
18"	3'-6"		3'-6"	4'-0"
24"	3'-6"		3'-6"	5'-0"
30"	3'-6" 1/4"-0"	2	4'-0"	6'-0"

TABLE 3 NOTES:

- For 3'-6" Round Structure sizes with variable angles between pipes and variable pipe sizes, refer to the FDOT Storm Drain Handbook.
- For 3'-6" Precast Square Structure Bottoms, 30" Pipes with similar invert elevations are not permitted in adjacent walls. Use 4'-0" Side Dimensions when 30" pipe openings are required on adjacent walls and the difference in flow lines is less than 3'-0".
- For 4'-0" Precast Square Structure Bottoms, 36" Pipes with similar invert elevations are not permitted in adjacent walls. Use 5'-0" Side Dimensions when 36" pipe openings are required on adjacent walls and the difference in flow lines is less than 3'-0".
- For 7'-0" Precast Square Structure Bottoms, 66" Pipes with similar invert elevations are not permitted in adjacent walls. Use 8'-0" Side Dimensions when 66" pipe openings are required on adjacent walls and the difference in flow lines is less than 4'-0".

