

LITTLE HATCHETT CREEK GMP SUBMITTAL

CITY OF GAINESVILLE, FLORIDA
LITTLE HATCHETT CREEK BANK
STABILIZATION IMPROVEMENTS
GUARANTEED MAXIMUM PRICE SUBMITTAL

Wharton-Smith Contact:

William Marshall, PE
Senior Preconstruction Manager
407-321-8410
wmarshall@whartonsmith.com



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SECTION 1 – COVER LETTER

July 26, 2021

Ms. Alice Rankeillor, PE
Stormwater Services Supervisor
City of Gainesville
405 NW 39th Ave
Gainesville, FL 32609

Re: Little Hatchett Creek Bank Stabilization Improvements
GMP Submittal

Dear Ms. Rankeillor,

Wharton-Smith is pleased to submit the enclosed Guaranteed Maximum Price (GMP) for the Little Hatchett Creek Bank Stabilization Improvements. Construction includes a retaining wall, a new outfall weir constructed of steel sheet pile, embankment reconstruction, rip-rap installation, and general restoration of the riparian area. Our proposed GMP schedule along with a comprehensive breakdown of material, equipment, subcontractor, and labor is provided in the supporting documentation following this letter. The GMP is valued at **\$1,419,415** for this project.

Please note the following clarifications regarding this proposal:

1. The GMP includes competitively bid pricing provided by the following subcontractors:
 - a. Florida Hydroseeding & Erosion Control, Inc.
 - b. Proshot Concrete, Inc.
 - c. TSI Disaster Recovery, LLC.
2. Bids were submitted on July 1, 2021. On July 15, 2021, Wharton-Smith issued a Recommendation of Award to the City for selection of TSI Disaster Recovery, LLC. A basis for award was a value engineering proposal using the Permashield™ Guardian Wall System over a conventional gabion wall. The Permashield™ alternative is based on filling concrete into large trapezoidal, interconnected cells of woven polypropylene fabric. It is more cost effective because its quicker to install, does not require stream bypass/divergence and less excavation. TSI will provide professional engineering services for design and permitting of the wall. TSI will submit revised plans to the FDEP and SJRWMD for modifications to the Dredge & Fill and Environmental Resource Permits, respectively. Design and permitting for all other aspects of the job still remain with City of Gainesville and ECT. Neither Wharton-Smith nor TSi have design responsibility for the stormwater flows and the ability of the canal to handle the flows or any other design elements of the project.
3. For work items with undefined scopes, we have included the following allowances:
 - a. Building Permits - \$5,000
 - b. Materials Testing (soil densities, concrete testing, etc.) - \$15,000
 - c. Unsuitable Materials - \$30,000
 - d. Surveying - \$15,000

4. Development of a storm water pollution prevention plan (SWPPP), final site survey and record drawings is included
5. At the time this GMP was prepared final permits and permitting comments were not received from the permitting agency, therefore costs with permit revisions were not taken into account with this GMP and significant changes would potentially require a change order to this GMP.
6. We have included builder's risk insurance, plus performance and payment bonds.
7. We have included an appropriate level of project management and administration staff for this project.
8. The GMP is based upon the Alachua County 7% sales tax rate.
9. For project contingency, we have carried 10%, or \$117,057. Project contingency will only be utilized based upon the expressed authorization by the City.

We look forward to getting started with construction. Should you have any questions or concerns, please do not hesitate to contact us.

Thank you again for this opportunity to serve the City of Gainesville.

Very Respectfully,



William Marshall, PE
Senior Preconstruction Manager
Wharton-Smith, Inc.

SECTION 2 – BID TABULATION

CITY OF GAINESVILLE– LITTLE HATCHET CREEK BANK STABILIZATION AIRPORT NORTHEAST



BID TABULATION SHEET

PACKAGE: TURN KEY WORK PACKAGE

BID DATE / TIME: THURSDAY 07/01/21 @ 2:00PM

Contractor	Total Base Bid	Acknowledged Clarifications	Comments/Clarifications/Exclusions
TSI Disaster Recovery, LLC	\$905,100	N/A	Submitted alternative design
Proshot Concrete, Inc	\$1,480,770	N/A	None
Florida Hydroseeding and Erosion Control	\$204,870	N/A	Not submitted on bid form Incomplete bid Bid deemed non-responsive

The above are the results of the bids open and read aloud in the presence of City of Gainesville.

Gainesville Representative Name Printed

Title

Gainesville Representative Name Signature

Date

SECTION 3 – GMP



CITY OF GAINESVILLE - LITTLE HATCHETT CREEK STABILIZATION
GMP- No Final Permits
7/30/2021

COST SUMMARY

	LABOR	EQUIPMENT	MATERIALS	SUBS	TOTALS
Total Direct	\$ -	\$ -	\$ -	\$ 905,100	\$ 905,100
Total GC's	\$ 139,845	\$ 5,600	\$ 35,791	\$ 10,725	\$ 191,961
Sales Tax (7%)				\$ 2,505	\$ 2,505
Software/IT/Licensing (0.20%)				\$ 2,705	\$ 2,705
Contingency (10% of above)				\$ 117,057	\$ 117,057
Owner Allowance				\$ 65,000	\$ 65,000
Bond (0.90%)				\$ 12,080	\$ 12,080
Insurance (0.50%)				\$ 7,121	\$ 7,121
Fee (9.0%)				\$ 115,886	\$ 115,886
TOTAL	\$139,845	\$5,600	\$35,791	\$1,238,179	\$1,419,415



			COST OF WORK					
DESCRIPTION	QTY	UOM	LABOR \$ AMOUNT	EQUIPMENT \$ AMOUNT	MATERIALS \$ AMOUNT	SUBS \$ AMOUNT	\$ TOTALS	COMMENTS
PURCHASE ORDERS							\$ -	
SUBCONTRACTS							\$ 905,100	
SITework SUBCONTRACTOR	1	LS	\$ -	\$ -	\$ -	\$ -	\$ -	W/below
WALL/RIP-RAP SUBCONTRACTOR	1	LS	\$ -	\$ -	\$ -	\$ 905,100	\$ 905,100	TSI
TEMP. WORK TO CONVEY CREEK FLOW	1	LS	\$ -	\$ -	\$ -	\$ -	\$ -	W/above
ALLOWANCES							\$ 65,000	
ALLOWANCE FOR BUILDING PERMITS	1	LS	\$ -	\$ -	\$ -	\$ 5,000	\$ 5,000	
ALLOWANCE FOR INDEPENDENT TESTING	1	LS	\$ -	\$ -	\$ -	\$ 15,000	\$ 15,000	
ALLOWANCE FOR UNSUITABLE MATERIALS	1	LS	\$ -	\$ -	\$ -	\$ 30,000	\$ 30,000	
TOPO Survey	1	LS	\$ -	\$ -	\$ -	\$ 15,000	\$ 15,000	
TOTAL DIRECT COST			\$ -	\$ -	\$ -	\$ 970,100	\$ 970,100	

BID FORM

Project: CITY OF GAINESVILLE LITTLE HATCHET CREEK BANK STABILIZATION AIRPORT NORTHEAST CORNER

Bid Package: Turn Key Work Package
To: Erik L. Anderson, P.E. – Project Executive
Wharton-Smith, Inc.
eanderson@whartonsmith.com

Bidder Information:

Company: TSI Disaster Recovery, LLC

Contact Name: Robert Tyson Title: Managing Member

Address: 2323 South Babcock Street
Melbourne, FL 32901

Phone Number: 407-891-8005 Fax: 407-891-9005

Bid Proposal Documentation Checklist (check all that apply):

☒ Bid Form
☒ Sanctions and Litigation
☒ Licenses

☒ Value Engineering Proposal
☒ Certificate of Insurance
☐ Clarifications - NA

Bidder's Acknowledgements:

1. The undersigned Bidder agrees if this bid is accepted, to enter into a Purchase Order Agreement with the Construction Manager per the Purchase Order Agreement included in the Bid Documents.
2. Bidder accepts all the terms and conditions of the Bid Documents.
3. Bidder has examined copies of all the Bid Documents and the following addenda:

No. NA Dated _____ No. NA Dated _____

No. NA Dated _____ No. NA Dated _____

4. Bidder has carefully examined the site and locality where the work is to be performed and the legal requirements (federal, state and local laws, ordinances, rules and regulations) and conditions affecting cost, degree of difficulty, progress or performance of the work and has made such independent investigations as Bidder deems necessary.
5. Bidder has reviewed and understands the Project Schedule provided in the Bid Documents and commits to perform and complete the Scope of Work of this Bid Proposal within the durations indicated and shall meet all milestone dates detailed therein. Bidder understands that time is of the essence and any delays in completion of any portion of the Work may result in damages.

6. This Bid is genuine and (a) not made in the interest or on behalf of any undisclosed person, firm, or corporation (b) is not submitted in the conformity with any agreement or rules of any group, association, organization, or corporation (c) Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid (d) Bidder has not solicited or induced any person, firm or corporation to refrain from bidding (e) Bidder has not sought by collusion to obtain for himself any advantage over any other Bidder or over Owner.
7. This Bid Proposal will remain open for acceptance by the Construction Manager for a period of one hundred and eighty (180) days after the date submitted. The price is to be valid for the duration of the Project Schedule after execution of a Subcontract Agreement.
8. The total base bid includes all labor, material, equipment, taxes, overhead, profit and all other costs required to complete the scope of this Bid Package as outlined in the Bid Documents.

Item No.	Brief Description of Item	QTY	UM	Unit Price	Total Price
1.	Mobilization & SWPPP	1	LS	\$ 35,000	\$ 35,000
2.	MOT	1	LS	\$ 7,500	\$ 7,500
3.	Stabilization Work	1	LS	\$ 817,500	\$ 817,500
4.	Restoration & Demobilization	1	LS	\$ 45,000	\$ 45,000
5.	Indemnification	1	LS	\$ 100.00	\$ 100.00
TOTAL BASE BID:					\$ 905,100

(TOTAL BASE BID AMOUNT WRITTEN IN WORDS)

SCHEDULED LEAD TIMES FOR DELIVERABLES

Item No.	Brief Description of Item	Calendar Days to Complete
1.	Mobilization date or # of months required from signed contract	30 days depending upon material availability at time of construction
2.	Project Submittals	5 days
3.	Duration to complete work	135 days

If Bidder is submitting an alternative design please indicate below and provide additional details with bid

☒ Check here if submitting alternative design

The undersigned hereby certifies that Bidder has carefully reviewed the Bid Documents and with full knowledge and understanding of the requirements of the Bid Documents and that this Bid Proposal meets all specifications, terms, and conditions contained in the Bid Documents, in its entirety.

 _____ Signature	Robert Tyson / Managing Member _____ Print Name / Title	6/30/2021 _____ Date
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2323 South Babcock Street • Melbourne, FL 32901 • 407.891.8005 • www.tsidisaster.com

Bid Proposal Documentation Checklist:

☒ Bid Form – See Attached

☒ Sanctions and Litigations – TSI has not been involved in any sanctions or litigations.

☒ Licenses – See attached our FL General Contractor License and FL Professional Engineer License

☒ Value Engineering Proposal – Based upon our experience installing gabion structures, we feel that the proposed design is not the most advantageous option for stabilizing the shoreline given the existing conditions. We have chosen not to provide a quote for the gabion structure and are instead proposing an alternative utilizing the Permashield™ system filled with concrete from Guardian Retention Systems, LLC. This alternative will create a much stronger wall within a shorter installation period. It was specifically created to resist both sliding forces and rotational forces that increase as the exposed face of the structure increases. This product is designed to counteract lateral earth pressures by redirecting them into downward pressures due to its unique shape and design. The downward pressure of each layer is pressed onto the layer below it. This localizes the weight of the structure resulting in a very stable base that is centered within the footprint of the structure. To manage the hydrostatic upland pressures, the proposed alternative will also include a drainage system that runs between every other layer of the system. Additionally, decorative finishes and colors can be incorporated into the concrete that get exposed if the outer bags are removed.

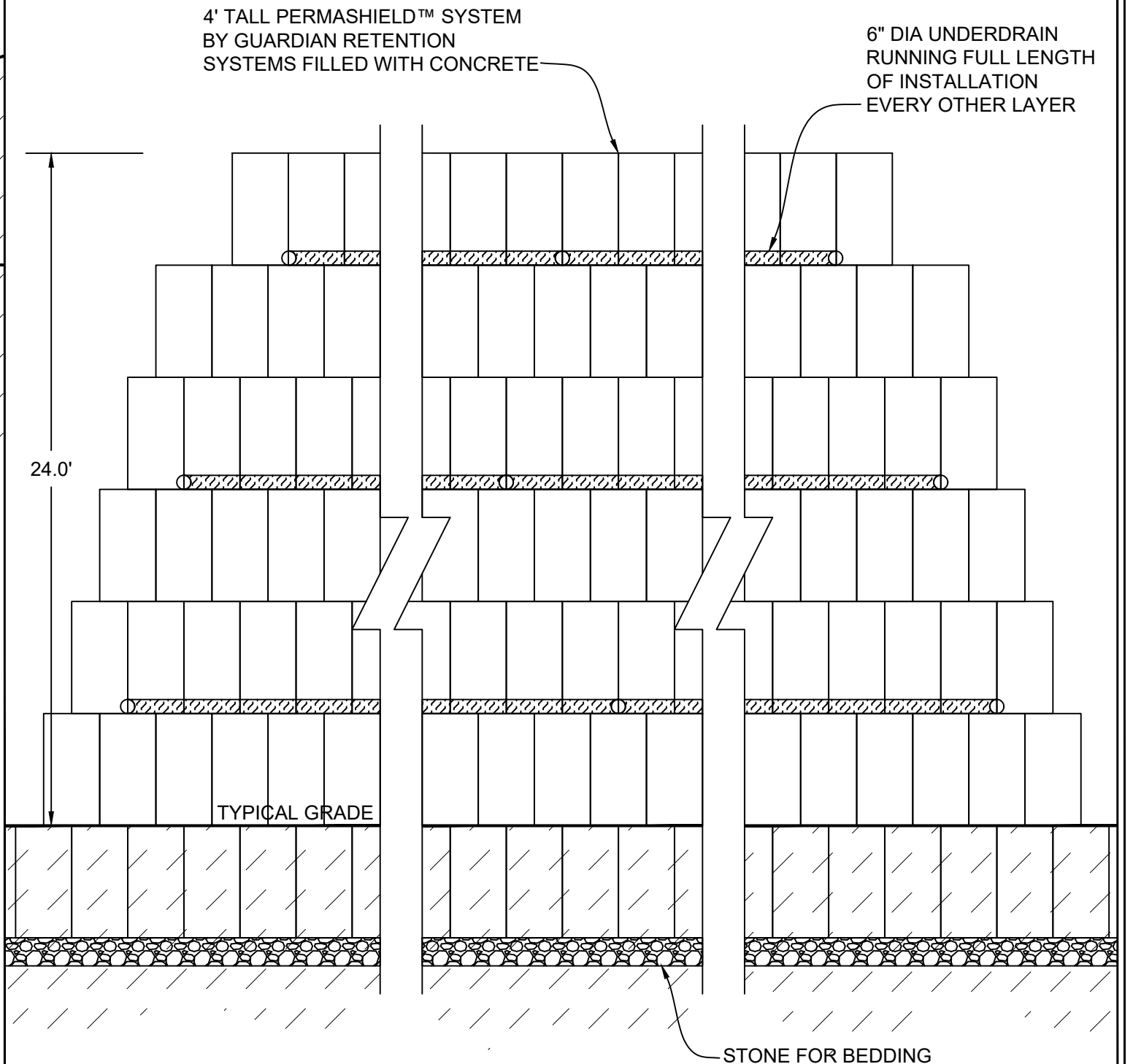
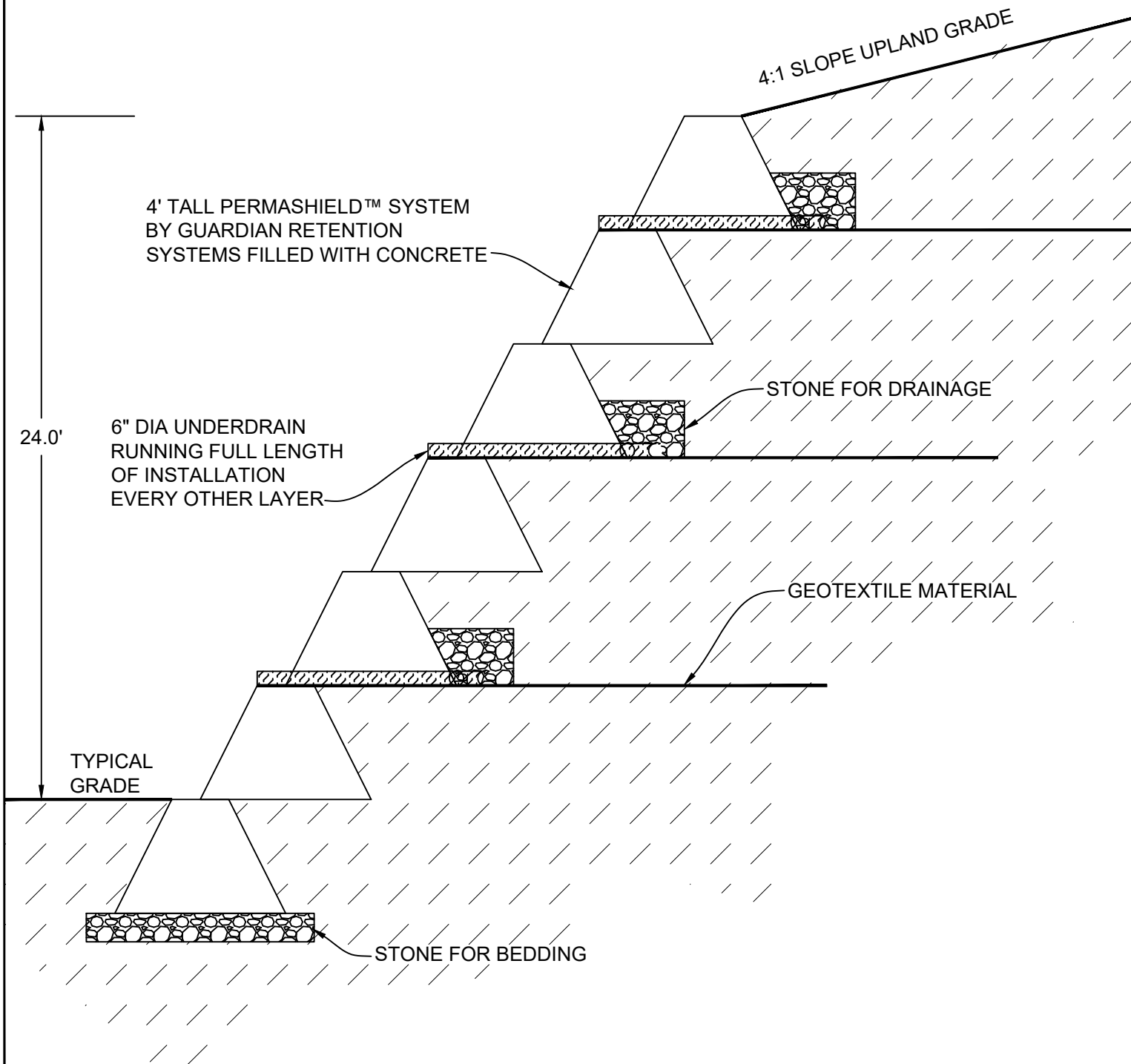
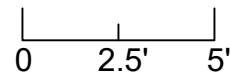
Please refer to the attached sample drawing for a visual aid as well as the included product information. This drawing is for discussion purposes only and is not based upon any engineering design.

<https://guardianretentionsystems.com/permashieldtm/>

☒ Certificate of Insurance – See Attached

☐ Clarifications – Not Applicable

SCALE: 1" = 5'



TSI Disaster Recovery, LLC
2323 South Babcock Street
Melbourne, FL 32901
www.tsidisaster.com
Main: 407-891-8005
Fax: 407-891-9005

Drawing Title:
Guardian Retention System Alternative

Project Title:
LHC Bank Stabilization

Client:
Wharton-Smith, Inc.

Location:
Gainesville, FL

Date:
June 30, 2021

Scale:
1" = 5'

Drawn By:
TFC

Notes:

*FOR DISCUSSION PURPOSES ONLY - THIS IS NOT
AN ENGINEERED DESIGN*

PERMASHIELD™



PROTECTION FROM NATURE™

Call us today to find out what Guardian Retention Systems' products can do for you.



BEAU ADAMS
OWNER
502.655.6036
beau@erosionmaster.com

JOHN GARFIELD
OPERATIONS MGR
john@erosionmaster.com
502.528.0712

DONNIE BISCHOFF
SALES MGR
502.262.8082
donnie@erosionmaster.com



Guardian Retention Systems, LLC
116 Cabin Creek Dr.
Brooks, KY 40109
502-379-4517
www.guardianretentionsystems.com

PERMASHIELD™

PROTECTION FROM NATURE™



GUARDIAN
RETENTION SYSTEMS™

RETAINING WALLS

Permashield™ system is a proven, effective solution to the toughest erosion situations. This multipurpose barrier system can be used to stabilize slides, reinforce banks/levees, provide road shoulders in areas at high erosion risk, and much more. The ONLY solution of its kind that can be filled with concrete: ANY LENGTH ANY HEIGHT



VERSATILE

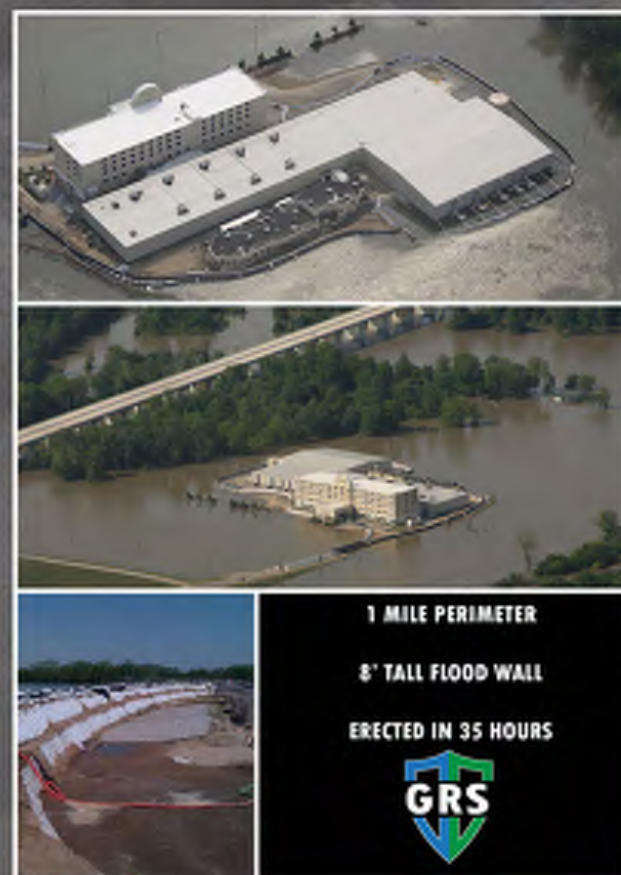
- Retaining Walls
- Permanent Barriers
- Custom Cofferdams
- Levee Reconstruction
- Shoreline Management
- Bank Stabilization
- Flood Protection
- Foundation Protection
- Pier Scour Protection

- Biodegradable Cells
- 3x Industry Avg. Safety Factor

Performance Studies By:

- Precision Engineering, LLC
- ACES, Inc
- Army Corps of Engineers

100' Poured Concrete in just
ONE HOUR

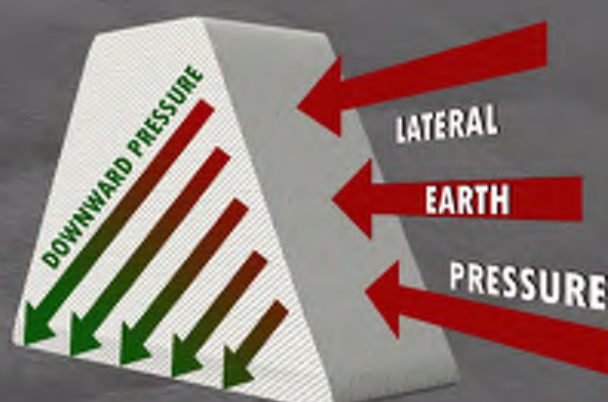
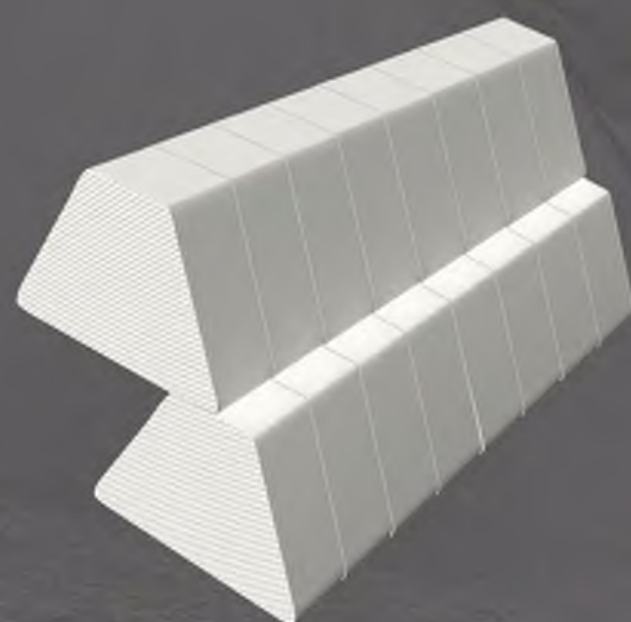


FLOOD FIGHTING

Permashield™ system is a quick and efficient solution to rising flood waters. The shape of the system allows for impenetrable protection and is specifically designed to resist overturning, and washing out.

- 6' Height x 100' Length erected in just 20 minutes
- Army Corps of Engineers tested and approved
- Steel delivery system designed for any terrain

PROTECTION FROM NATURE™



Redirects lateral earth pressure to downward pressure, stabilizing the base and reinforcing the wall



STRONG: Each cell is made from Heavy-Duty '8' ounce woven polypropylene coated fabric secures the material

WATERTIGHT: Trapezoid creates downward 'sealing' pressure

CONTINUOUS CHAIN: Permashield™ systems come in 50' sections and are joined together via 3,000 LB tensile strength nylon strapping with metal D-Rings

RAPID INSTALLATION: Permashield™ system produces the quickest custom concrete wall on the market

The Permashield™ system is the only of its kind shaped as an "Isosceles Trapezoid"

This provides symmetry about the center axis

- Stable base resists sliding
- Stable base resists rotational forces

The non-wire frame of the Permashield system allows it to take the shape of the ground, which increases the actual footprint

Permashield™ comes in a versatile range of systems. Each system is compatible with the next, allowing for a combination to reach your desired height.

- Flexible to match unlevel surfaces
- Ability to match any radius

Wharton-Smith, Inc. CONSTRUCTION GROUP																	JOB NAME:	LITTLE HATCHETT CREEK BANK STABILIZATION										July 30, 2021	
																	ESTIMATE #:	19-124											2:06 PM
GENERAL CONDITIONS		DURATION =	0 DIRECT MANHOURS				0	MANWEEKS MEN																					
				5	MONTHS, PLANNED		0																						
DESCRIPTION	QTY	UNIT	MH/ UNIT	BASE RATE	LABOR			HR/UNIT	EQUIPMENT		MATERIAL		SUBCONTRACTS		\$ TOTALS	REMARKS													
					U/P	TOTAL MH	\$ AMOUNT		RATE	\$ AMOUNT	U/P	\$ AMOUNT	U/P	\$ AMOUNT		SUB NAME													
PROJECT MANAGEMENT TEAM																													
FIELD STAFF																													
SENIOR SUPERINTENDENT		WK		\$99.00	\$0.00	0	\$0			\$0.00		\$0		\$0	\$0														
SUPERINTENDENT I	22	WK	40	\$96.95	\$3,878.00	868	\$84,153			\$0.00		\$0		\$0	\$84,153														
RATE ADJUSTMENT (FOR WORKING SUPER)	0	WK		\$58.95	\$0.00	0	\$0			\$0.00		\$0		\$0	\$0														
SUPERINTENDENT II	0	WK		\$50.00	\$0.00	0	\$0			\$0.00		\$0		\$0	\$0														
SUPERINTENDENT IV	0	WK		\$40.00	\$0.00	0	\$0			\$0.00		\$0		\$0	\$0														
FIELD ENGINEER	22	WK		\$42.00	\$0.00	0	\$0			\$0.00		\$0		\$0	\$0														
CONCRETE SR. CRAFT FOREMAN	0	WK		\$42.00	\$0.00	0	\$0			\$0.00		\$0		\$0	\$0														
MECHANICAL SR. CRAFT FOREMAN	0	WK		\$42.00	\$0.00	0	\$0			\$0.00		\$0		\$0	\$0														
OFFICE STAFF	0	WK		\$0.00	\$0.00	0	\$0			\$0.00		\$0		\$0	\$0														
SENIOR PROJECT MANAGER	22	WK		\$99.00	\$0.00	0	\$0			\$0.00		\$0		\$0	\$0														
PROJECT MANAGER	22	WK	16	\$96.95	\$1,551.20	347	\$33,661			\$0.00		\$0		\$0	\$33,661														
ASSISTANT PROJECT MANAGER	0	WK		\$53.00	\$0.00	0	\$0			\$0.00		\$0		\$0	\$0														
PROJECT ENGINEER	22	WK		\$42.00	\$0.00	0	\$0			\$0.00		\$0		\$0	\$0														
PROJECT INTERN	22	WK	8	\$28.00	\$224.00	174	\$4,861			\$0.00		\$0		\$0	\$4,861														
ADMIN ASSISTANT	22	WK	4	\$52.95	\$211.80	87	\$4,596			\$0.00		\$0		\$0	\$4,596														
OTHER STAFF		WK		\$0.00	\$0.00	0	\$0			\$0.00		\$0		\$0	\$0														
EXECUTIVE MANAGEMENT	22	WK	2	\$125.00	\$250.00	43	\$5,425			\$0.00		\$0		\$0	\$5,425														
PRECONSTRUCTION MANAGER	0	WK		\$75.00	\$0.00	0	\$0			\$0.00		\$0		\$0	\$0														
PRECONSTRUCTION ESTIMATOR	0	WK		\$45.00	\$0.00	0	\$0			\$0.00		\$0		\$0	\$0														
MECHANICAL DETAILING	0	DWGS	24	\$26.00	\$624.00	0	\$0			\$0.00		\$0		\$0	\$0														
COST ACCOUNTANT	22	WK	2	\$41.00	\$82.00	43	\$1,779			\$0.00		\$0		\$0	\$1,779														
SECURITY (NIGHTS & WEEKENDS)	0	WK		\$38.00	\$0.00	0	\$0			\$0.00		\$0		\$0	\$0														
SPECIAL QA / QC INSPECTOR FOR QUALITY CONTROL	0	MO		\$30.00	\$0.00	0	\$0			\$0.00		\$0		\$0	\$0														
SAFETY COORDINATOR	0	WK		\$35.00	\$0.00	0	\$0			\$0.00		\$0		\$0	\$0														
RELATED MANAGEMENT COSTS																													
BENEFITS & EDUCATION	0	LS		\$38.00	\$0.00	0	\$0			\$0.00		\$0		\$0	\$0														
LABOR RATE ADJUSTMENT	0	LS		\$38.00	\$0.00	0	\$0			\$0.00		\$0		\$0	\$0														
HOLIDAY & VACATION PAY	1	LS		\$38.00	\$0.00	0	\$0			\$0.00		\$0		\$0	\$0														
MANAGEMENT TRAINING	0	LS		\$38.00	\$0.00	0	\$0			\$0.00		\$0		\$0	\$0														
RECRUITING FEES	0	LS		\$38.00	\$0.00	0	\$0			\$0.00		\$0		\$0	\$0														
TRAVEL EXPENSE - WORKSHEET ON RIGHT	1	LS		\$38.00	\$0.00	0	\$0			\$0.00	\$2,432.25	\$2,432		\$0	\$2,432														
LODGING, MEALS - WORKSHEET ON RIGHT	1	LS		\$38.00	\$0.00	0	\$0			\$0.00	\$15,959.00	\$15,959		\$0	\$15,959														
TEMP.FACILITIES & UTILITIES																													
WATER, INSTALL AND REMOVE TEMPORARY SYSTEM	0	LS	40	\$38.00	\$1,520.00	0	\$0			\$0.00	\$1,000.00	\$0		\$0	\$0														
WATER, MONTHLY	5	MO		\$38.00	\$0.00	0	\$0			\$0.00	\$100.00	\$500		\$0	\$500														
ELECTRIC, INSTALL & REMOVE TEMP. SYSTEM	1	LS		\$38.00	\$0.00	0	\$0			\$0.00		\$0		\$0	\$0	W/ DIV. 16 SCOPE													
ELECTRIC, MONTHLY CHARGES	5	MO		\$38.00	\$0.00	0	\$0			\$0.00	\$0.00	\$0		\$0	\$0														
TEMPORARY LIGHTING (NIGHT LIGHTING)	0	WK		\$38.00	\$0.00	0	\$0			\$0.00		\$0		\$0	\$0														
HARD WIRE INTERNET/PHONE, INSTALL & REMOVE - W-S	0	LS		\$38.00	\$0.00	0	\$0			\$0.00		\$0	\$400.00	\$0	\$0														
HARD WIRE INTERNET/PHONE, INSTALL & REMOVE - ENGINEER	0	LS		\$38.00	\$0.00	0	\$0			\$0.00		\$0	\$300.00	\$0	\$0														
INTERNET/TELEPHONE, MONTHLY CHARGES - W-S	5	MO		\$38.00	\$0.00	0	\$0			\$0.00	\$200.00	\$1,000		\$0	\$1,000	Hotspot													
INTERNET/TELEPHONE, MONTHLY CHARGES - ENGINEER	0	MO		\$38.00	\$0.00	0	\$0			\$0.00	\$100.00	\$0		\$0	\$0														
CELLULAR TELEPHONE, MONTHLY CHARGES	5	MO		\$38.00	\$0.00	0	\$0			\$0.00	\$100.00	\$500		\$0	\$500														
FIELD OFFICE, WHARTON SMITH INC	0	MO	5	\$38.00	\$190.00	0	\$0			\$0.00	\$0.00	\$0		\$0	\$0														
FIELD OFFICE, WHARTON SMITH - DELIVERY/RETURN	0	LS		\$38.00	\$0.00	0	\$0			\$0.00	\$1,500.00	\$0	\$1,500.00	\$0	\$0														
FIELD OFFICE, ENGINEER	0	MO	5	\$38.00	\$190.00	0	\$0			\$0.00	\$550.00	\$0		\$0	\$0														
FIELD OFFICE, ENGINEER - DELIVERY/RETURN	0	LS		\$38.00	\$0.00	0	\$0			\$0.00	\$4,200.00	\$0		\$0	\$0														
FIELD OFFICE FURNISHINGS AND EQUIPMENT (PURCHASE)	0	LS		\$38.00	\$0.00	0	\$0			\$0.00	\$1,500.00	\$0		\$0	\$0														
FIELD OFFICE FURNISHINGS AND EQUIPMENT (RENTAL)	0	MO		\$38.00	\$0.00	0	\$0			\$0.00	\$250.00	\$0		\$0	\$0														
JOB OFFICE SUPPLIES	5	MO		\$38.00	\$0.00	0	\$0			\$0.00	\$250.00	\$1,250		\$0	\$1,250														
COMPUTER EQUIPMENT FOR FIELD OFFICE - W-S	5	MO		\$38.00	\$0.00	0	\$0			\$0.00	\$300.00	\$1,500		\$0	\$1,500														
COMPUTER EQUIPMENT FOR FIELD OFFICE - ENGINEER	0	LS		\$38.00	\$0.00	0	\$0			\$0.00	\$3,200.00	\$0		\$0	\$0														
TOOL TRAILERS - 1 REQUIRED	0	MO		\$38.00	\$0.00	0	\$0			\$0.00	\$100.00	\$0		\$0	\$0														
TEMPORARY TOILETS - 2 REQUIRED	5	MO		\$38.00	\$0.00	0	\$0			\$0.00	\$300.00	\$1,500		\$0	\$1,500														
TEMPORARY SEWAGE HOLDING TANKS - ENGINEER & W-S	0	MO		\$38.00	\$0.00	0	\$0			\$0.00	\$300.00	\$0		\$0	\$0														
TEMPORARY HEATING EQUIPMENT	0	MO		\$38.00	\$0.00	0	\$0			\$0.00		\$0		\$0	\$0														
FUEL FOR TEMPORARY HEATING	0	MO		\$38.00	\$0.00	0	\$0			\$0.00		\$0		\$0	\$0														
TEMPORARY PARKING	0	SY		\$38.00	\$0.00	0	\$0			\$0.00		\$0		\$0	\$0														
TEMPORARY ROADWAY	0	SY		\$38.00	\$0.00	0	\$0			\$0.00		\$0		\$0	\$0														
BARRICADES	0	EA		\$38.00	\$0.00	0	\$0			\$0.00		\$0		\$0	\$0														
TEMPORARY HANDRAIL / GUARDRAIL	0	LF		\$38.00	\$0.00	0	\$0			\$0.00		\$0		\$0	\$0														
DUST PARTITIONS	0	SF		\$38.00	\$0.00	0	\$0			\$0.00		\$0		\$0	\$0														
EXISTING SURFACES PROTECTION	0	SF		\$38.00	\$0.00	0	\$0			\$0.00		\$0		\$0	\$0														
TEMPORARY CHAIN LINK FENCE, INSTALL AND REMOVE	0	LF		\$38.00	\$0.00	0	\$0			\$0.00	\$2.50	\$0		\$0	\$0														



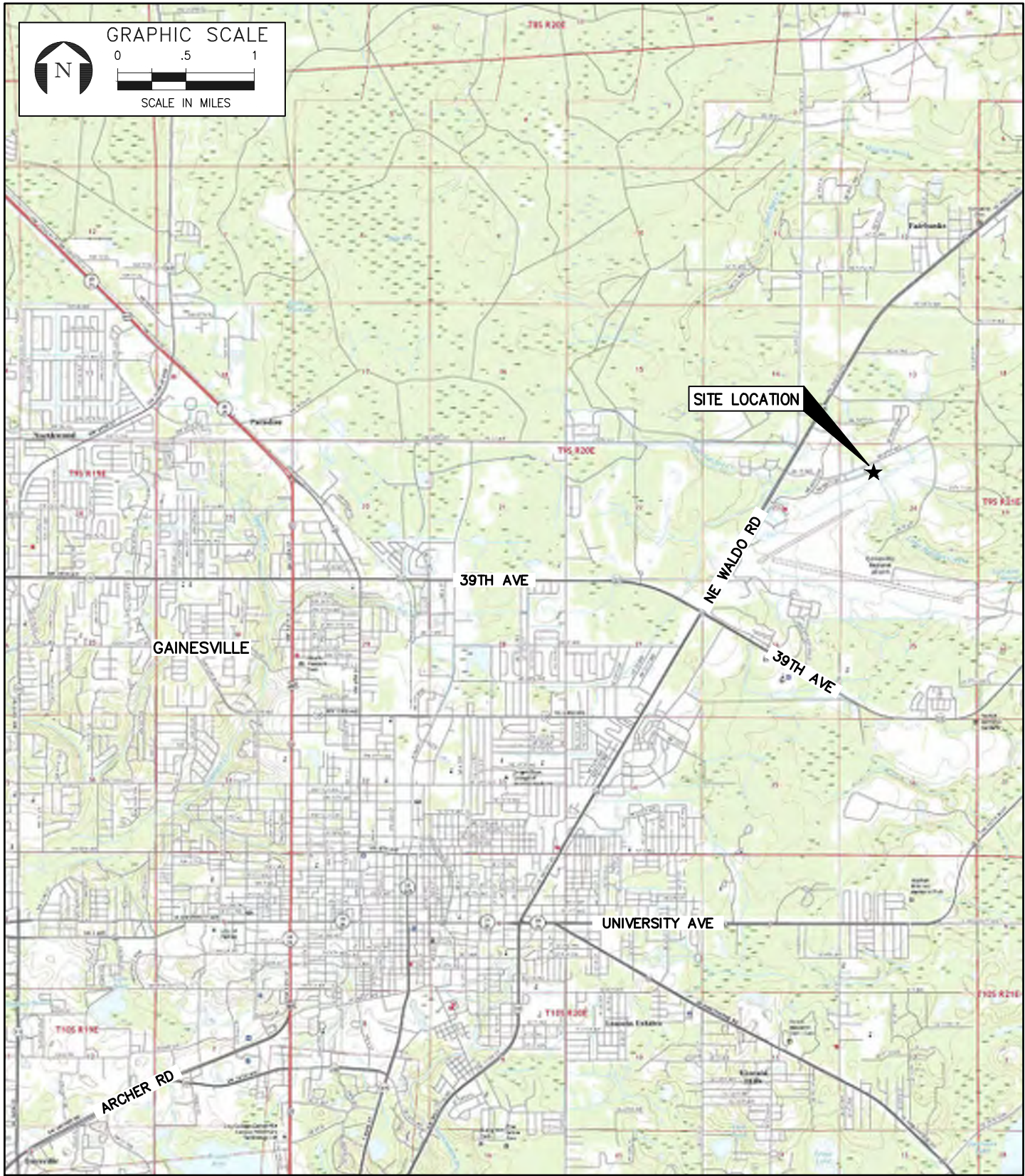
Wharton-Smith, Inc.
CONSTRUCTION GROUP

JOB NAME:	LITTLE HATCHETT CREEK BANK STABILIZATION					July 30, 2021
ESTIMATE #:	19-124					2:06 PM

CONSTRUCTION EQUIPMENT & TOOLS														
SMALL TOOLS AND SUPPLIES	1	LS		\$38.00	\$0.00	0	\$0		\$0.00	\$0	\$0	\$0	DEFAULT IS \$1.75 / DIRECT MH	
CRANE RENTAL	0	MO		\$38.00	\$0.00	0	\$0		\$0.00	\$0	\$0	\$0	W/ DIRECTS	
AIR COMPRESSORS	0	MO		\$38.00	\$0.00	0	\$0		\$0.00	\$0	\$0	\$0	W/ DIRECTS	
WELDERS & WELDING SUPPLIES	0	MO		\$38.00	\$0.00	0	\$0		\$0.00	\$0	\$0	\$0		
SPECIALTY TRUCKS	0	MO		\$38.00	\$0.00	0	\$0		\$0.00	\$0	\$0	\$0		
EMPLOYEE TRANSPORTATION (BUS)	0	WK		\$38.00	\$0.00	0	\$0		\$0.00	\$100.00	\$0	\$0	\$0	
EQUIPMENT STAND-BY	0	WK		\$38.00	\$0.00	0	\$0		\$0.00	\$0	\$0	\$0	\$0	
PM AUTOMOBILE w/ FUEL, OIL, GREASE	2	MO		\$38.00	\$0.00	0	\$0	1	\$800	\$1,600.00	\$700.00	\$1,400	\$3,000	VERIFY MONTHS
SUPT PICKUP TRUCK w/ FUEL, OIL, GREASE	5	MO		\$38.00	\$0.00	0	\$0	1	\$800	\$4,000.00	\$800.00	\$4,000	\$8,000	VERIFY MONTHS
APM & FOREMAN VEHICLE ALLOWANCE	0	MO		\$38.00	\$0.00	0	\$0	1	\$300	\$0.00	\$400.00	\$0	\$0	VERIFY MONTHS
MOVE IN/OUT EQUIPMENT	1	EA		\$38.00	\$0.00	0	\$0		\$0.00	\$0	\$0	\$0	\$0	W/ DIRECTS
MOVE IN MATERIAL	1	EA		\$38.00	\$0.00	0	\$0		\$0.00	\$0	\$0	\$0	\$0	W/ DIRECTS
SAFETY & HEALTH & HOUSEKEEPING														
SAFETY MEETINGS	22	WK	0.3	\$38.00	\$11.40	7	\$247		\$0.00	\$0	\$0	\$0	\$247	
SAFETY DEVICES	1	LS		\$38.00	\$0.00	0	\$0		\$0.00	\$0	\$0	\$0	\$0	
PREVENTATIVE MEDICINE	0	LS		\$38.00	\$0.00	0	\$0		\$0.00	\$0	\$0	\$0	\$0	
SAFETY AWARD PAY	0	LS		\$38.00	\$0.00	0	\$0		\$0.00	\$0	\$0	\$0	\$0	
WORKER'S COMP CLAIMS	0	LS		\$38.00	\$0.00	0	\$0		\$0.00	\$0	\$0	\$0	\$0	
CLEAN-UP AT END OF PROJECT	1	LS	0	\$38.00	\$0.00	0	\$0		\$0.00	\$0	\$0	\$0	\$0	
CLEAN-UP THROUGHOUT DURATION OF PROJECT	22	WK	4	\$38.00	\$152.00	87	\$3,298		\$0.00	\$0	\$0	\$0	\$3,298	
DUMPSTERS	5	MO		\$38.00	\$0.00	0	\$0		\$0.00	\$750.00	\$3,750	\$0	\$3,750	
JANITORIAL - ENGINEER'S TRAILER	0	WK	2	\$38.00	\$76.00	0	\$0		\$0.00	\$5.00	\$0	\$0	\$0	
				\$38.00	\$0.00	0	\$0		\$0.00	\$0	\$0	\$0	\$0	
TOTAL GENERAL CONDITIONS						1.656	\$138.021		\$5,600	\$33,791	\$0	\$177,412	\$177,412	
GENERAL REQUIREMENTS														
PERMITS, FEES, INSURANCE, LEGAL, ETC.														
PERMIT FEE COSTS - WORKSHEET ON RIGHT	0	LS		\$38.00	\$0.00	0	\$0		\$0.00	\$0	\$0.00	\$0	\$0	PERMIT BY OTHERS
BUSINESS LICENSE FEES	0	LS		\$38.00	\$0.00	0	\$0		\$0.00	\$0	\$0.00	\$0	\$0	
IMPACT FEES	0	LS		\$38.00	\$0.00	0	\$0		\$0.00	\$0	\$0.00	\$0	\$0	
SPECIAL OR ADDITIONAL FEES	0	LS		\$38.00	\$0.00	0	\$0		\$0.00	\$0	\$0.00	\$0	\$0	
BUILDER'S RISK INSURANCE - BARRIER ISLAND	0	LS		\$38.00	\$0.00	0	\$0		\$0.00	\$0	\$0.00	\$0	\$0	
BUILDER'S RISK INSURANCE - NON-COASTAL COUNTY	5	MO		\$38.00	\$0.00	0	\$0		\$0.00	\$0	\$125.00	\$625	\$625	\$98.28
BUILDER'S RISK INSURANCE - COASTAL COUNTY	0	MO		\$38.00	\$0.00	0	\$0		\$0.00	\$0	\$0.00	\$0	\$0	\$0.00
FLOOD INSURANCE	0	LS		\$38.00	\$0.00	0	\$0		\$0.00	\$0	\$0.00	\$0	\$0	
SUBCONTRACT GENERAL LIABILITY INSURANCE	0	LS		\$38.00	\$0.00	0	\$0		\$0.00	\$0		\$0	\$0	
GENERAL LIABILITY INSURANCE	0	LS		\$38.00	\$0.00	0	\$0		\$0.00	\$0		\$0	\$0	INCLUDED IN WAGE RATES
WORKER'S COMP WRAP UP INSURANCE	0	LS		\$38.00	\$0.00	0	\$0		\$0.00	\$0		\$0	\$0	INCLUDED IN WAGE RATES
OWNER CONTROLLED INSURANCE PROGRAM	0	LS		\$38.00	\$0.00	0	\$0		\$0.00	\$0		\$0	\$0	
OTHER INSURANCE	0	LS		\$38.00	\$0.00	0	\$0		\$0.00	\$0		\$0	\$0	
OWNER DIRECT PURCHASE ORDER PROGRAM	0	LS		\$38.00	\$0.00	0	\$0		\$0.00	\$0		\$0	\$0	
CONTINGENCY	0	LS		\$38.00	\$0.00	0	\$0		\$0.00	\$0		\$0	\$0	
CONTRACT ALLOWANCE	0	LS		\$38.00	\$0.00	0	\$0		\$0.00	\$0		\$0	\$0	W/ DIRECTS
PENALTIES & FINES	0	LS		\$38.00	\$0.00	0	\$0		\$0.00	\$0		\$0	\$0	
ACTUAL DAMAGES (SWAG)	0	LS		\$38.00	\$0.00	0	\$0		\$0.00	\$0	\$0.00	\$0	\$0	
LEGAL FEES	0	LS		\$38.00	\$0.00	0	\$0		\$0.00	\$0		\$0	\$0	
PERFORMANCE BOND	1	LS		\$38.00	\$0.00	0	\$0		\$0.00	\$0		\$0	\$0	W/ SUMMARY
SPECIAL LICENSES	0	LS		\$38.00	\$0.00	0	\$0		\$0.00	\$0	\$0.00	\$0	\$0	
EARLY COMPLETION BONUS	0	LS		\$38.00	\$0.00	0	\$0		\$0.00	\$0	\$0.00	\$0	\$0	
OVERTIME COSTS FOR ENGINEERS AND INSPECTORS	0	LS		\$38.00	\$0.00	0	\$0		\$0.00	\$0	\$0.00	\$0	\$0	
EXTENDED WARRANTY (BEYOND 12 MONTHS)	0	LS		\$38.00	\$0.00	0	\$0		\$0.00	\$0	\$0.00	\$0	\$0	Maintenance cost for 1 extra year
MAINTENANCE BOND (FOR PERCENTAGE LESS THAN 25%)	0	LS		\$38.00	\$0.00	0	\$0		\$0.00	\$0	\$0.00	\$0	\$0	\$842.40
MAINTENANCE BOND (FOR PERCENTAGE 25% OR MORE)	0	LS		\$38.00	\$0.00	0	\$0		\$0.00	\$0	\$0.00	\$0	\$0	\$2,106.01
PROJECT DOCUMENTATION AND SERVICES														
PROJECT SIGNS	1	LS	8	\$38.00	\$304.00	8	\$304		\$0.00	\$750.00	\$750	\$0	\$1,054	
INFORMATIONAL SIGNS	0	EA		\$38.00	\$0.00	0	\$0		\$0.00	\$0	\$0	\$0	\$0	
PHOTOGRAPHS	5	MO		\$38.00	\$0.00	0	\$0		\$0.00	\$100.00	\$500	\$0	\$500	
PRE-CONSTRUCTION AUDIO-VIDEO DOCUMENTATION	1	LS		\$38.00	\$0.00	0	\$0		\$0.00	\$0	\$600.00	\$600	\$600	
INDEPENDENT CPM SCHEDULING SERVICES	0	MO		\$38.00	\$0.00	0	\$0		\$0.00	\$0	\$250.00	\$0	\$0	
INDEPENDENT TESTING SERVICES	0	LS		\$38.00	\$0.00	0	\$0		\$0.00	\$0	\$2,500.00	\$0	\$0	SEE TABLE ABOVE RIGHT
DESIGN SERVICES (CADD) - AS-BUILTS	1	LS	40	\$38.00	\$1,520.00	40	\$1,520		\$0.00	\$0	\$0	\$0	\$1,520	
PLANS & SPECIFICATIONS REPRODUCTION COSTS	1	LS		\$38.00	\$0.00	0	\$0		\$0.00	\$750.00	\$750	\$0	\$750	
REGISTERED SURVEYOR SERVICES	5	MO		\$38.00	\$0.00	0	\$0		\$0.00	\$0	\$1,500.00	\$7,500	\$7,500	
LAYOUT BY WHARTON-SMITH	1	LS		\$38.00	\$0.00	0	\$0		\$0.00	\$0	\$0	\$0	\$0	
PROJECT START-UP & CLOSEOUT														
START-UP CHEMICALS	1	LS		\$38.00	\$0.00	0	\$0		\$0.00	\$0.00	\$0	\$0	\$0	W/EQUIPMENT SUMMARY
START-UP ELECTRIC CONSUMPTION COSTS	1	LS		\$38.00	\$0.00	0	\$0		\$0.00	\$0.00	\$0	\$0	\$0	SEE BELOW
ADDITIONAL LABOR FOR 24/7 START-UP	0	LS		\$38.00	\$0.00	0	\$0		\$0.00	\$0	\$0	\$0	\$0	

	Wharton-Smith, Inc. CONSTRUCTION GROUP										JOB NAME:		LITTLE HATCHETT CREEK BANK STABILIZATION				July 30, 2021			
											ESTIMATE #:		19-124						2:06 PM	
AS-BUILT DRAWINGS	1	LS		\$38.00	\$0.00	0	\$0		\$0.00		\$0		\$0							
OPERATION & MAINTENANCE MANUALS	1	LS		\$38.00	\$0.00	0	\$0		\$0.00		\$0		\$0							
FINAL SITE SURVEY	1	EA		\$38.00	\$0.00	0	\$0		\$0.00		\$0	\$2,000.00	\$2,000	\$2,000						
MISCELLANEOUS REQUIREMENTS																				
	1	LS		\$38.00	\$0.00	0	\$0		\$0.00		\$0		\$0							
	1	LS		\$38.00	\$0.00	0	\$0		\$0.00		\$0		\$0							
	1	LS		\$38.00	\$0.00	0	\$0		\$0.00		\$0		\$0							
	1	LS		\$38.00	\$0.00	0	\$0		\$0.00		\$0		\$0							
	1	LS		\$38.00	\$0.00	0	\$0		\$0.00		\$0		\$0							
	1	LS		\$38.00	\$0.00	0	\$0		\$0.00		\$0		\$0							
	1	LS		\$38.00	\$0.00	0	\$0		\$0.00		\$0		\$0							
	1	LS		\$38.00	\$0.00	0	\$0		\$0.00		\$0		\$0							
TOTAL GENERAL REQUIREMENTS						48	\$1,824		\$0		\$2,000		\$10,725	\$14,549						

SECTION 4 – CONTRACT DOCUMENTS



Source: USGS Quad: Gainesville East, FL, 2018.

PERMIT PLANS

CONSTRUCTION DRAWINGS
FOR
LITTLE HATCHET CREEK BANK STABILIZATION
AIRPORT NORTHEAST CORNER
PREPARED FOR:
CITY OF GAINESVILLE



GAINESVILLE, ALACHUA COUNTY, FLORIDA

BY:

ECT Environmental
Consulting &
Technology, Inc.
3701 NW 98th Street
Gainesville, FL 32606

Certificate of Authorization No. 5520
P.M. DEREK M. WAINSCOTT P.E. 386.427.0694 EXT. 307

APRIL 2021

SHEET NO.	TITLE
1 OF 30	COVER/SITE LOCATION MAP
2 OF 30	GENERAL NOTES
4 OF 30	ABBREVIATIONS
5 OF 30	PROJECT VICINITY & ACCESS MAP
6 OF 30	PROJECT AREA
7 OF 30	SUMMARY OF PAY ITEMS
8 OF 30	CRANE/AIRPORT PROXIMITY EXHIBIT
9 OF 30	ROAD CLOSURE & DETOUR PLAN
10 OF 30	EXISTING TOPOGRAPHIC SURVEY
11 OF 30	GEOTECHNICAL SOIL BORING LOCATIONS
12 OF 30	SOIL BORING LOGS
13 OF 30	RIVER DIV., STAGING, FENCING & DEMO PLAN
14 OF 30	FENCING DETAILS
15 OF 30	EROSION CONTROL NOTES
16 OF 30	EROSION CONTROL AND PROTECTION PLAN
17 OF 30	EROSION CONTROL DETAILS
18 OF 30	SITE LAYOUT PLAN
19 OF 30	TYPICAL GABION SECTION & RIP RAP SPECS
20 OF 30	SITE GRADING PLAN
21 OF 30	FENCING & CROSS SECTION LOCATIONS
22 OF 30	CREEK BED CROSS SECTIONS
26 OF 30	CONSTRUCTION DETAILS
29 OF 30	STREAM BANK RESTORATION NOTES
30 OF 30	STREAM BANK RESTORATION

CONSULTANTS

SURVEYOR:
ATLANTIC GULF SURVEYING CO. INC.
5736 TIMUQUANA RD
JAX, FL 32210

GEOTECHNICAL:
GSE ENGINEERING & CONSULTING INC.
5590 SW 64TH ST. SUITE B
GAINESVILLE, FL 32608

CMAR:
WHARTON SMITH
750 MONROE ROAD
SANFORD, FL 32771
407-321-8410 EXT. 3683

AIRPORT CONTACT
AARON A. CARVER
AIRPORT FACILITIES MANAGER
3880 NE 39TH AVE., SUITE A
GAINESVILLE, FL 32609
PHONE: 352.373.0249 EXT.116
CELL: 352.494.2261
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ANDREW ROBERTS, P.E.
SUPERVISING UTILITY ENGINEER
P.O. BOX 147117, STATION E-3F
GAINESVILLE, FL 32614-7117

ECT Environmental
Consulting &
Technology, Inc.
Certificate of Authorization No. 5520
3701 NW 98th Street, Gainesville, FL 32606

City of Gainesville

DEREK M. WAINSCOTT P.E., FL, LIC. 58205

FILE: PERMIT BASE	DESIGNED BY: DMW	PROJECT NO. 200310
DATE: 04/2021	DRAWN BY: JAK	CHECKED BY: DMW

NO.	DATE	REVISION
01		
02		
03		

COVER/SITE LOCATION

LITTLE HATCHET CREEK BANK STABILIZATION
GAINESVILLE, ALACHUA COUNTY, FLORIDA

SHEET NUMBER
1 OF 30

GENERAL NOTES

1. TOPOGRAPHIC SURVEY PROVIDED BY ATLANTIC GULF SURVEYING CO. INC. IN SURVEY DATED 9/25/2018, BASED ON THE STATE PLANE COORDINATE SYSTEM, FLORIDA NORTH GRID, NAD-83; BASED ON TRIMBLE VIRTUAL REFERENCE STATION NETWORK.

2. THE BENCHMARK VERTICAL DATUM USED FOR THESE PLANS IS BASED ON NAVD 88.

3. THE CONTRACTOR SHALL FURNISH LABOR, EQUIPMENT, FUEL, AND MATERIALS TO PERFORM ALL OPERATIONS NECESSARY TO COMPLETE THIS WORK IN ACCORDANCE WITH PROVISIONS OF THIS CONTRACT. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH AND CONFORM TO THE APPROVED CONSTRUCTION PLANS, THE PROJECT SPECIFICATIONS, THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (FDOT), 2018, THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD PLANS FOR ROAD CONSTRUCTION - FY 2018-2019, AND SUPPLEMENTS THERETO. IN CASE OF A DISCREPANCY OR CONFLICT, THE SPECIFICATION TO FOLLOW WILL BE THE MOST STRINGENT AS DETERMINED BY THE CITY ENGINEER OR HIS DESIGNEE.

4. ALL MATERIALS AND METHODS SHALL MEET FDOT SPECIFICATIONS AND SHALL BE PRODUCED OR OBTAINED FROM AN FDOT APPROVED SOURCE.

5. THE CONTRACTOR SHALL PERFORM WORK IN ACCORDANCE WITH THE REGULATIONS AND ORDINANCES OF THE VARIOUS GOVERNMENTAL AGENCIES HAVING JURISDICTION OF THE WORK.

6. NO CHANGES TO THE WORK AS SHOWN ON THESE PLANS SHALL BE MADE WITHOUT PRIOR WRITTEN APPROVAL BY THE ENGINEER OF RECORD.

7. CONTRACTOR SHALL ENSURE USING PROPER SCALED DRAWINGS.

8. CONTRACTOR SHALL CHECK ACTUAL SITE CONDITIONS PRIOR TO CONSTRUCTION. ANY NEED FOR CLARIFICATION OF PROPOSED IMPROVEMENTS OR FOR RESOLUTION OF DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD.

9. A PRE-CONSTRUCTION CONFERENCE SHALL BE REQUIRED. THE CONTRACTOR, ENGINEER OF RECORD, CITY PROJECT MANAGER, AND THE CITY INSPECTOR SHALL MEET PRIOR TO COMMENCEMENT OF SITE CONSTRUCTION.

10. THE LOCATION OF ALL EXISTING UTILITIES SHOWN ON THE PLANS HAS BEEN DETERMINED FROM THE BEST AVAILABLE INFORMATION AND IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE VARIOUS UTILITIES AND TO MAKE NECESSARY ARRANGEMENTS FOR ANY RELOCATION OF THESE UTILITIES WITH THE OWNER OF THE UTILITY. THE LOCATION OF THE UTILITIES SHOWN IN THE PLANS (INCLUDING THOSE DESIGNATED Vv, Vh, AND Vvh) ARE BASED ON LIMITED INVESTIGATION TECHNIQUES AND SHOULD BE CONSIDERED APPROXIMATE ONLY. THE VERIFIED LOCATIONS/ELEVATIONS APPLY ONLY AT THE POINTS SHOWN. INTERPOLATIONS BETWEEN THESE POINTS HAVE NOT BEEN VERIFIED.

11. THE CONTRACTOR SHALL NOTIFY UTILITY OWNERS LISTED BELOW THROUGH SUNSHINE ONE CALL OF FLORIDA, INC (1-800-432-4770) TWO BUSINESS DAYS IN ADVANCE OF BEGINNING CONSTRUCTION ON THE JOB SITE.

12. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN CROSSING ANY UNDERGROUND UTILITY, WHETHER SHOWN ON THE PLANS OR LOCATED BY THE UTILITY COMPANY.THE CONTRACTOR SHALL FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES WITHIN THE LIMITS OF THE PROJECT.

13. CONTRACTOR SHALL HAND EXCAVATE WHEN CONSTRUCTION IS WITHIN 2 FEET OF EXISTING UTILITIES.

14. THE RESPECTIVE UTILITY COMPANIES SHALL RELOCATE ALL UTILITIES THAT INTERFERE WITH THE PROPOSED CONSTRUCTION. THE CONTRACTOR SHALL COOPERATE WITH THE UTILITY COMPANIES DURING THE RELOCATION OPERATIONS. ANY DELAY OR INCONVENIENCE CAUSED TO THE CONTRACTOR BY THE VARIOUS UTILITIES SHALL BE INCIDENTAL TO THE CONTRACT AND NO EXTRA COMPENSATION WILL BE ALLOWED. INFORMATION ON CONFLICTS IS TO BE SUBMITTED TO THE ENGINEER AS SOON AS POSSIBLE AFTER DISCOVERY FOR RESOLUTION.

15. CONTRACTOR SHALL REMOVE BURIED OUT OF SERVICE UTILITY FACILITIES WITHIN THE LIMITS OF ALL EXCAVATION. THE COST OF THIS WORK SHALL BE INCIDENTAL TO AND INCLUDED IN THE COST OF THE WORK BEING PERFORMED WHEN THE LINES ARE ENCOUNTERED.

16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING TEMPORARY TRAFFIC CONTROL MEASURES IN ACCORDANCE WITH FDOT STANDARDS FOR THE SAFE MAINTENANCE OF PEDESTRIAN AND VEHICULAR TRAFFIC AT ALL TIMES DURING THE DURATION OF THE PROJECT.

17. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL RESIDENCES AND BUSINESS ENTRANCES DURING CONSTRUCTION OPERATIONS.

18. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY WITH AND ENFORCE ALL APPLICABLE SAFETY REGULATIONS.

19. ALL EXCAVATIONS SHALL BE REQUIRED TO CONFORM TO THE PROVISION AS PART III OF CHAPTER 553.60, F.S., AKA THE "TRENCH SAFETY ACT" TO PROTECT EXISTING PAVEMENT, STRUCTURES, FOUNDATIONS, AND CONSTRUCTION PERSONNEL DURING CONSTRUCTION OF THE PROJECT.
20. WORK BEING PERFORMED UNDER THIS CONTRACT SHALL INTERFACE SMOOTHLY WITH OTHER WORK BEING PERFORMED ON THE SITE BY OTHER CONTRACTORS AND/OR UTILITY COMPANIES. IT WILL BE NECESSARY FOR THE CONTRACTOR TO COORDINATE AND SCHEDULE THEIR ACTIVITIES, WHERE NECESSARY, WITH OTHER CONTRACTORS AND UTILITY COMPANIES.

21. ALL PERSONAL PROPERTY, WITHIN THE RIGHT-OF-WAY NOT RELOCATED BY THE PROPERTY OWNER SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AS NECESSARY TO CONSTRUCT THE PROJECT IN ACCORDANCE WITH THE PLANS.

22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO UTILITIES, STRUCTURES, AND PROPERTY ON AND ADJACENT TO THE PROJECT AS A RESULT OF OR CAUSED BY CONSTRUCTION ACTIVITIES.

23. ALL WORK WITHIN THE CITY OF GAINESVILLE RIGHT-OF-WAY (ROW), SHALL COMPLY WITH THE FOLLOWING:

a. ANY CONSTRUCTION IN THE CITY PUBLIC ROW WILL REQUIRE PERMITS FROM THE PUBLIC WORKS DEPARTMENT PRIOR TO BEGINNING WORK. A MOT PERMIT IS REQUIRED FOR ANY ACTIVITY IN THE ROW THAT EITHER DIRECTLY OR INDIRECTLY AFFECTS VEHICULAR OR PEDESTRIAN TRAFFIC.

b. THE METHOD AND MANNER OF PERFORMING THE WORK AND THE QUALITIES OF MATERIAL FOR CONSTRUCTION WITHIN THE ROW SHALL CONFORM TO THE REQUIREMENTS SPECIFIED BY THE CITY.

c. NO WORK SHALL BE DONE NOR MATERIALS USED IN THE ROW WITHOUT INSPECTION BY THE PUBLIC WORKS DEPARTMENT (352-334-5070). THE CONTRACTOR/DEVELOPER SHALL FURNISH SAID DEPARTMENT WITH EVERY REASONABLE FACILITY FOR ASCERTAINING WHETHER THE WORK PERFORMED AND MATERIALS USED ARE IN ACCORDANCE WITH THE REQUIREMENTS AND INTENT OF THE PLANS AND SPECIFICATIONS.

d. ALL REQUIRED BACKFILL WITHIN THE ROW SHALL BE DOCUMENTED WITHIN AN FDOT TYPE DENSITY LOG BOOK, COMPILED AND MAINTAINED BY THE CONTRACTOR AND AVAILABLE FOR REVIEW BY THE PUBLIC WORKS INSPECTOR UPON REQUEST. THIS LOG BOOK SHALL BE SIGNED AND SEALED BY THE ENGINEER OF RECORD AND TURNED OVER TO THE PUBLIC WORKS DEPARTMENT FOR REVIEW AND ACCEPTANCE AS PART OF THE CLOSEOUT DOCUMENTS.

e. THE PUBLIC WORKS DEPARTMENT RESERVES THE RIGHT TO MODIFY THE PROPOSED WORK WITHIN THE ROW TO ENSURE COMPATIBILITY WITH EXISTING IMPROVEMENT. SUCH MODIFICATION COSTS SHALL BE BORNE BY THE DEVELOPER.

24. THE CONTRACTOR SHALL REMOVE ANY EXISTING IRRIGATION PIPES ENCOUNTERED DURING CONSTRUCTION WITHIN THE RIGHT OF WAY. THE PIPES SHALL BE CUT AT THE RIGHT OF WAY LINE AND CAPPED. CONTRACTOR SHALL NOTIFY PROPERTY OWNERS AND COORDINATE PRIOR TO PERFORMING THIS WORK.

25. ALL GEOTECHNICAL INFORMATION IS AVAILABLE TO THE CONTRACTOR UPON REQUEST TO THE CITY. ADDITIONAL TEST BORINGS AND EXPLORATORY INVESTIGATIONS MAY BE MADE BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.

26. THE CONTRACTOR IS RESPONSIBLE FOR ALL DEWATERING AS NEEDED THROUGHOUT ALL CONSTRUCTION ACTIVITIES COVERED BY THE DESIGN DOCUMENTS. DEWATERING SHALL BE PERFORMED IN ACCORDANCE WITH FDOT STANDARD SPECIFICATIONS SECTION 120.

27. THE CONTRACTOR SHALL PREVENT THE DISCHARGE OF SEDIMENT INTO EXISTING OR NEW STORMWATER FACILITIES DUE TO CONSTRUCTION OPERATIONS. APPROVED EROSION CONTROL MEASURES SHALL BE INSTALLED TO PREVENT DISCHARGE OF SEDIMENT INTO WETLANDS, WATERBODIES, AND ADJACENT PROPERTIES. ALL NEW AND EXISTING DRAIN PIPES SHALL BE FLUSHED CLEAN PRIOR TO FINAL PAYMENT.

28. THE CONTRACTOR SHALL COMPLY WITH TURBIDITY CONTROL REQUIREMENTS OF PERMITS AS APPLICABLE TO PREVENT INCREASES IN TURBIDITY IN EXCESS OF WATER QUALITY STANDARDS.

29. THE CONTRACTOR SHALL BE RESPONSIBLE FOR A STAGING AREA TO STORE EQUIPMENT, SUPPLIES, & MATERIALS, PROVIDE EMPLOYEE PARKING, AND ETC. FOR THE DURATION OF CONSTRUCTION OR AS APPROVED BY THE ENGINEER. ANY PROPOSED STAGING AREAS WITHIN CITY ROW OR ON CITY PROPERTY WILL REQUIRE APPROVAL FROM THE CITY. THE CONTRACTOR SHALL DELINEATE THE LOCATION OF THE STAGING AREA ON THE SWPPP MAPS. CONTRACTOR SHALL IDENTIFY SAFETY, SECURITY AND RESTORATION MEASURES FOR ALL PROPOSED AREAS. COSTS ASSOCIATED WITH THE USE OF THESE AREAS WILL BE INCLUDED UNDER MOBILIZATION.

30. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING PROPER BENCHMARKS ON-SITE. EXISTING BENCH MARKS SCHEDULED FOR REMOVAL SHALL BE RELOCATED AT CONTRACTORS EXPENSE AND RE-ESTABLISHED BY A LICENSED SURVEYOR.

31. ANY PUBLIC LAND CORNER WITHIN THE LIMITS OF CONSTRUCTION IS TO BE PROTECTED. IF A CORNER MONUMENT IS IN DANGER OF BEING DESTROYED AND HAS NOT BEEN PROPERLY REFERENCED, THE CONTRACTOR SHOULD NOTIFY THE CITY SURVEYOR, PAT DURBIN, WITHOUT DELAY AT (352) 334-5072.

32. ALL WORK WITHIN OR ON CITY-OWNED OR MAINTAINED FACILITIES, ROW OR EASEMENT WILL REQUIRE AS-BUILT PLANS. AS-BUILT PLANS SHALL SHOW THE CONSTRUCTED CONDITIONS OF THE CITY-OWNED OR MAINTAINED AREA WITH SUFFICIENT DETAIL TO BE

COMPARED TO THE CONSTRUCTION PLANS FOR ACCURACY OF THE CONSTRUCTED FACILITIES, TO INCLUDE DRAINAGE SYSTEM AND ASSOCIATED STRUCTURES, AS WELL AS, SITE HORIZONTAL CONTROL AND BENCHMARKS AND BE PERFORMED BY A FLORIDA LICENSED PROFESSIONAL SURVEYOR AND MAPPER. REQUIREMENTS FURTHER DESCRIBED IN THE CITY OF GAINESVILLE DESIGN AND CONSTRUCTION MANUAL (CURRENT EDITION) SECTIONS 8.3 AND 10.8.7.

33. THE CONTRACTOR SHALL PROVIDE THE CITY WITH AS-BUILT PLANS OR RECORD DRAWINGS OF THE DRAINAGE SYSTEM AND ASSOCIATED STRUCTURES, MEETING THE MINIMUM TECHNICAL STANDARDS PERFORMED AND PREPARED BY A FLORIDA LICENSED PROFESSIONAL LAND SURVEYOR AND MAPPER PURSUANT TO CHAPTER 5-J17.052, FLORIDA ADMINISTRATIVE CODE. REQUIREMENTS FURTHER DESCRIBED IN THE CITY OF GAINESVILLE DESIGN AND CONSTRUCTION MANUAL (CURRENT EDITION) SECTIONS 8.3 AND 10.8.7.

34. AS-BUILT PLANS SHALL BE CONSISTENT WITH THE REQUIREMENTS OF CHAPTER 5J-17.051 AND 5J-17.052 OF THE FLORIDA ADMINISTRATIVE CODE AND BE SUBMITTED TO THE PUBLIC WORKS DEPARTMENT AS SIGNED AND SEALED PLANS AND AN ELECTRONIC DRAWING FILE. GUIDANCE ON PREPARATION OF AS-BUILT PLANS CAN BE FOUND IN CHAPTER 5.12, FINAL AS-BUILT PLANS PROCESS OF THE FDOT CONSTRUCTION PROJECT ADMINISTRATION MANUAL. AS-BUILT PLANS FOR DRIVEWAY PERMITS MAY BE REQUIRED ON A CASE BY CASE BASIS.

35. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING RECORD DRAWINGS FOR CHANGES MADE DURING CONSTRUCTION. THE CONTRACTOR SHALL FILE AS-BUILT PLANS OR RECORD DRAWINGS WITH THE PUBLIC WORKS DEPARTMENT UPON COMPLETION OF ANY IMPROVEMENTS FOR WHICH CHANGES HAVE BEEN APPROVED DURING THE CONSTRUCTION PROCESS. THE REQUIREMENT FOR AN AS-BUILT PLAN OR RECORD DRAWING WILL BE DETERMINED ON A CASE BY CASE BASIS, DEPENDING ON THE SCOPE OF THE CHANGES.

36. THE AS-BUILT SURVEY SHALL BE SUBMITTED ON PAPER COPY AND PROVIDED DIGITALLY ON DISC (OR USB) TO THE CITY SAVED IN AN AUTODESK TRUSTED DWG FORMAT COMPATIBLE WITH AUTODESK CIVIL 3D 2013 (INCLUDING PREVIOUS VERSIONS). ADOBE PDF VERSIONS OF EACH DRAWING SHEET SHALL ALSO BE SUBMITTED DIGITALLY. THE COORDINATE SYSTEM FOR ALL RECORD DRAWINGS SHALL BE FLORIDA STATE PLANE COORDINATES, NAD 83 ZONE NORTH US SURVEY FEET. VERTICAL COORDINATES SHALL BE REFERENCED TO THE NAVD 88 DATUM WITH ELEVATIONS GIVEN IN US SURVEY FEET. IF THE PROJECT WAS BEGUN USING NGVD 29 IT SHALL BE CONVERTED USING THE NOAH, NATIONAL GEODETIC SURVEY VERTCON DATA CONVERSION WEBSITE. THE COSTS FOR THE AS-BUILT SURVEY SHALL BE INCLUDED UNDER MOBILIZATION.

37. UNLESS SPECIFICALLY IDENTIFIED WITHIN THESE PLANS, ALL REFERENCES TO "RIP RAP" OR ANY VARIATION THEREOF SHALL MEAN BANK AND SHORE RIP RAP PER FDOT SPEC 530-2.1.3.1 RUBBLE (BANK AND SHORE PROTECTION). GABION FILL STONE DOES NOT APPLY.

38. CONSTRUCTION RELATED VIBRATIONS SHOULD BE LIMITED TO PREVENT SLOPE FAILURE AND POTENTIAL TO DAMAGE THE EXISTING STRUCTURES. BACKFILLED MATERIALS SHOULD BE WORKED TO A FIRM CONDITION AND PROBED FOR EACH LIFT IN LIEU OF FIELD COMPACTION TESTING. THIS COULD LIKELY BE ACCOMPLISHED WITH A WALK BEHIND MECHANICAL TYPE OR MANUAL PLATE COMPACTOR, TAKING CARE NOT TO CAUSE ADDITIONAL SLOPE FAILURE "UPHILL". USE OF WALK-BEHIND SLED TYPE COMPACTION EQUIPMENT CAN TYPICALLY BE USED IN CLOSE PROXIMITY TO EXISTING STRUCTURE. WE RECOMMEND EXISTING STRUCTURES BE MONITORED FOR UNWANTED MOVEMENT DURING CONSTRUCTION.

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Environmental Consulting & Technology, Inc.

Certificate of Authorization No. 5520

3701 NW 98th Street, Gainesville, FL 32606

City of Gainesville

FILE: PERMIT BASE	DESIGNED BY: DMW	PROJECT NO. 200310
DATE: 04/2021	DRAWN BY: JAK	CHECKED BY: DMW

DEREK M. WAINSCOTT P.E., FL, LIC. 58205

NO.	DATE	REVISION
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GENERAL NOTES

LITTLE HATCHET CREEK BANK STABILIZATION GAINESVILLE, ALACHUA COUNTY, FLORIDA	SHEET NUMBER 2 OF 30
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DEMOLITION

- ENVIRONMENTAL CONTROLS SHALL BE USED AT LOCATIONS DESIGNATED IN THE PLANS, AND/OR DESIGNATED BY THE PUBLIC WORKS DEPARTMENT.
- INSTALL SILT FENCE PRIOR TO SITE DEMOLITION OR CONSTRUCTION. INSTALL SILT FENCE PER PLANS AND PROVIDE TOE-IN. THE CONTRACTOR SHALL MAINTAIN THE SILT FENCE IN WORKING ORDER THROUGHOUT THE CONSTRUCTION PHASE. ALL SILT FENCING SHALL BE INSTALLED AND INSPECTED BY THE CITY INSPECTOR PRIOR TO COMMENCEMENT OF ANY DEMOLITION OR CONSTRUCTION ACTIVITIES.
- THE PROJECT SILT FENCE SHALL BE INSPECTED DAILY AND ANY CORRECTIVE MEASURES SHALL BE COMPLETED WITHIN 24 HOURS. ALL INLET STRUCTURES AND PIPE SHALL BE PROTECTED FROM SILTATION BY CONSTRUCTION INLET PROTECTION AS DEFINED BY THESE PLANS OR IN THE FDOT STANDARDS. IF SILTATION OCCURS, THE CONTRACTOR IS RESPONSIBLE TO REMOVE IT AS PART OF THE BASE CONTRACT AT NO ADDITIONAL COST TO THE CITY.
- ALL EROSION CONTROL MEASURES SHALL BE REMOVED AT THE COMPLETION OF THE PROJECT.
- WHEN EXISTING TREES WITHIN THE RIGHT-OF-WAY CONFLICT WITH THE PROPOSED IMPROVEMENTS, THE CONTRACTOR SHALL NOTIFY CITY PROJECT MANAGER BEFORE REMOVAL. ALL OTHER TREES SHALL BE PROTECTED DURING CONSTRUCTION UNLESS OTHERWISE NOTED ON THE PLANS OR DIRECTED BY THE CITY PROJECT MANAGER.
- ALL EXISTING TREES ARE TO REMAIN UNLESS OTHERWISE NOTED.
- REMOVE ALL IMPROVEMENTS DEFINED ON THE DEMOLITION PLAN. SALVAGE ITEMS TO OWNER AS DEFINED BY THE PLANS AND CONSTRUCTION DOCUMENT SPECIFICATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO DISPOSE OF ALL DEMOLITION MATERIALS IN A SAFE AND LAWFUL MANNER AS DETERMINED BY THE OWNER. ONCE DEMOLISHED, MATERIAL SHALL BE DISPOSED OF PROPERLY AND IMMEDIATELY.
- EXISTING PAVEMENT AND SIDEWALK EDGES THAT BORDER NEW CONSTRUCTION OR DEMOLITION ARE TO BE SAW-CUT TO PROVIDE A SMOOTH TRANSITION.

PAVING, GRADING, AND DRAINAGE GENERAL NOTES

- CONTRACTOR SHALL CLEAR AND GRUB ONLY THOSE PORTIONS OF THE SITE NECESSARY FOR CONSTRUCTION. DISTURBED AREAS SHALL BE SODDED, SEEDED, MULCHED, OR PLANTED WITH OTHER APPROVED LANDSCAPE MATERIAL AS DIRECTED BY THESE PLANS IMMEDIATELY FOLLOWING CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR THE PERFORMANCE AND COSTS ASSOCIATED WITH ALL CLEARING AND GRUBBING, AND ALL WORK OF REMOVAL, DISPOSAL, AND REPAIR OR REPLACEMENT OF EXISTING IMPROVEMENTS WHERE SHOWN IN THE PLANS OR WHERE REQUIRED BECAUSE OF CONSTRUCTION OPERATIONS, IN ORDER TO CONSTRUCT THE PROPOSED IMPROVEMENTS. THIS INCLUDES BUT IS NOT LIMITED TO PROPOSED PIPING, STRUCTURES, UTILITIES, PAVING, CURBING, FOOTERS, PILES, ETC.
- THE DISPOSAL OF EXCESS EARTHWORK MATERIALS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. APPROVALS OF DISPOSAL SITES SHALL BE OBTAINED FROM THE CITY OF GAINESVILLE PRIOR TO DISPOSAL.
- ALL DELETERIOUS MATERIAL (I.E. MUCK, PEAT, BURIED DEBRIS) IS TO BE EXCAVATED IN ACCORDANCE WITH THESE PLANS OR AS DIRECTED BY THE CITY INSPECTOR AND/OR ENGINEER. DELETERIOUS MATERIAL IS TO BE REMOVED FROM THE SITE. EXCAVATED AREAS ARE TO BE BACKFILLED WITH APPROVED MATERIALS AND COMPACTED AS SHOWN IN THESE AREAS.
- CONTAMINATED MATERIALS INCLUDING SOIL AND GROUNDWATER MAY BE ENCOUNTERED WITHIN THE LIMITS OF THE PROJECT. ALL CONSTRUCTION OPERATIONS WHICH ENCOUNTER ABNORMAL CONDITIONS INDICATING THE POSSIBLE PRESENCE OF CONTAMINATED MATERIALS, SHALL BE ADDRESSED IN ACCORDANCE WITH FDOT SPECIFICATION 120-1.2.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING TEMPORARY DRAINAGE AND MAINTENANCE OF ALL EXISTING RUNOFF DISCHARGES DURING CONSTRUCTION TO AVOID THE TRANSPORT OF SEDIMENT AND ERODIBLE SOILS UNTIL THE WORK HAS BEEN ACCEPTED BY THE CITY OF GAINESVILLE.
- THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE DURING CONSTRUCTION.
- EXISTING DRAINAGE STRUCTURES AND PIPES WITHIN CONSTRUCTION LIMITS SHALL REMAIN UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL SUBMIT FOR REVIEW TO THE ENGINEER OF RECORD SHOP DRAWINGS ON ALL PRECAST AND MANUFACTURED ITEMS TO BE USED ON THE SITE. FAILURE TO OBTAIN APPROVAL BEFORE INSTALLATION MAY RESULT IN REMOVAL AND REPLACEMENT AT CONTRACTOR'S EXPENSE. APPROVAL OF A SHOP DRAWING DOES NOT RELIEVE THE CONTRACTOR'S RESPONSIBILITY FOR THE PERFORMANCE OF THE ITEM.
- THE COST OF ALL TESTING OF COMPACTION AND OTHER REQUIRED TESTS SHALL BE PAID BY THE CONTRACTOR AND TESTING INFORMATION AND DENSITY LOG BOOKS MADE

AVAILABLE TO THE CITY INSPECTOR DURING SITE INSPECTIONS.

- GENERAL CONTRACTOR TO CONTACT CITY INSPECTOR 48 HOURS IN ADVANCE PRIOR TO BACKFILLING TRENCHES FOR FIELD INSPECTION AND PRIOR TO LAYING ASPHALT FOR FIELD INSPECTION.
- CONTRACTOR IS TO SUBMIT FDOT APPROVED CONCRETE DESIGN MIXES FOR REVIEW AND APPROVAL TO THE CITY INSPECTOR AND ENGINEER OF RECORD BEFORE ANY CONCRETE WORK IS TO COMMENCE ON THE PROJECT.
- AS DETERMINED NECESSARY AND DIRECTED BY CITY INSPECTOR AND/OR ENGINEER OF RECORD, THE CONTRACTOR SHALL UNDERCUT ALL UNSUITABLE MATERIAL 24 INCHES BELOW THE BOTTOM OF ANY PROPOSED PAVEMENT BASE AND SHALL BACKFILL WITH FILL MATERIAL MEETING FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. SEE FDOT INDICES 120-002 AND 120-001 (FORMERLY 500 AND 505).
- ALL CONCRETE USED SHALL BE 3,000 PSI MINIMUM MEETING FDOT STANDARD SPECIFICATIONS SECTION 346 FOR CLASS I PORTLAND CEMENT CONCRETE.
- ALL WELLS, CLEANOUTS, MANHOLE TOPS, PULL BOX COVERS AND OTHER UTILITY APPURTENANCES IN THE AREA OF CONSTRUCTION SHALL BE PROTECTED AND TOPS ADJUSTED TO MATCH PROPOSED GRADES. CONTRACTOR SHALL SAW CUT, TACK AND MATCH EXISTING PAVEMENT AT LOCATIONS WHERE NEW PAVEMENT MEETS ANDY EXISTING PAVEMENT.
- OPEN CUT RESTORATION SHALL BE PERFORMED IN ACCORDANCE WITH FDOT INDEX 307, USING THE FLOWABLE FILL OPTION.
- FLEXIBLE PAVEMENTS ARE TO BE EVALUATED AND DESIGNED IN ACCORDANCE WITH THE FDOT FLEXIBLE PAVEMENT DESIGN MANUAL AND FDOT STANDARDS INDEX 514. ADDITIONAL PROVISIONS ARE FURTHER DESCRIBED IN THE CITY OF GAINESVILLE'S ENGINEERING DESIGN AND CONSTRUCTION MANUAL (CURRENT EDITION), SECTION 10.8.7.
- CONTRACTOR SHALL RESTORE ANY GRADES INSIDE OR OUTSIDE THE LIMITS OF CONSTRUCTION DISTURBED DURING CONSTRUCTION.
- SOD SHALL BE PLACED AROUND ALL STRUCTURES AS DIRECTED BY FDOT INDEX 281.
- ALL STORM SEWER, CURB, AND DITCH BOTTOM INLETS SHALL CONFORM TO THE APPLICABLE FDOT INDEX. ALL DRAINAGE STRUCTURES WITH GRATES THAT ARE LOCATED IN GRASSED AREAS SHALL HAVE THE GRATE CHAINED TO THE STRUCTURE USING AN EYE BOLT AND CHAIN. ALL CONCRETE STRUCTURES SHALL HAVE ALL EXPOSED EDGES CHAMFERED $\frac{3}{4}$ "AND CLASS I SURFACE FINISH.

UTILITY GENERAL NOTES

- THE CONTRACTOR SHALL NOTIFY UTILITY OWNERS LISTED BELOW THROUGH SUNSHINE ONE CALL OF FLORIDA, INC (1-800-432-4770) TWO BUSINESS DAYS IN ADVANCE OF BEGINNING CONSTRUCTION ON THE JOB SITE AS REQUIRED BY CHAPTER 556 OF THE FLORIDA STATUTES.

COMPANY NAME	TELEPHONE
CITY OF GAINESVILLE PUBLIC WORKS	352-334-5070
GAINESVILLE REGIONAL UTILITIES (GRU WATER/WASTEWATER)	352-393-1664 (Mr. John Griffis)
GAINESVILLE REGIONAL UTILITIES (GRU ELECTRIC)	352-393-1853 (Mr. Eugene Greene)
GAINESVILLE REGIONAL UTILITIES (GRU COMMUNICATIONS)	352-393-6928 (Mr. Mike Chappell)
GAINESVILLE REGIONAL UTILITIES (GRU GAS)	352-393-6022 (Wesley Lester)
AT&T CONSTRUCTION / ENGINEERING	904-727-1534
COX COMMUNICATIONS	352-491-9099 (Kevin Monroe)
LEVEL 3 COMMUNICATIONS	720-888-6461 (Daneh Kennedy)
- NOTIFY GRU ELECTRIC INSPECTIONS 48 HOURS PRIOR TO CONSTRUCTION AT (352) 393-1575. IF PROPER NOTIFICATION IS NOT MADE, CONTRACTOR IS SUBJECT TO SHUTDOWN.
- LOCATE AND PROTECT GAS DURING ALL PHASES OF CONSTRUCTION. CONTACT GRU GAS, PHILIP LANCASTER, AT (352) 334-6078.
- EXISTING UTILITIES ARE TO REMAIN IN PLACE AND BE PROTECTED UNLESS NOTED OTHERWISE.
- OVERHEAD POWER LINES ARE LOCATED WITHIN THE WORK AREA AND POSE AN ELECTROCUTION OVERHEAD POWER LINE HAZARD WARNING SIGNS SHALL BE POSTED BY THE CONTRACTOR AND REMAIN IN PLACE AT ALL TIMES DURING CONSTRUCTION OPERATIONS. ALL GRU ELECTRIC STRUCTURES AND ALL GUY WIRES AND ANCHORS WITHIN THE WORK AREA SHALL BE FLAGGED AND PROTECTED AT ALL TIMES DURING DEMOLITION AND CONSTRUCTION OPERATIONS.
- OSHA REQUIRES THAT EQUIPMENT BE KEPT AT LEAST 10 FEET AWAY FROM POWER LINES FROM --50 KV. FOR 138KV LINES, OSHA MINIMUM APPROACH DISTANCE (OSHA

1926.1408 TABLE A) IS 15 FEET. CRANES AND DERRICKS ARE REQUIRED TO TAKE ADDITIONAL STEPS BEFORE BEGINNING SEE OSHA STANDARDS 29 CFR 1926.1400 EFFECTIVE NOV. 8, 2010. IF IN DOUBT AND A LINE OUTAGE IS REQUIRED DURING CONSTRUCTION, PLEASE FORWARD REQUESTS IN WRITING WITH AT LEAST 30 DAYS NOTICE.

- ALL NEW PUBLIC UTILITY INFRASTRUCTURE SHALL MEET APPLICABLE GRU DESIGN, MATERIALS, AND CONSTRUCTION STANDARDS. VISIT [HTTPS://WWW.GRU.COM/WORKWITHGRU/CONSTRUCTIONDEVELOPMENT/STANDARDSMANUAL.ASPX](https://www.gru.com/workwithgru/constructiondevelopment/standardsmanual.aspx) FOR THE LATEST STANDARDS.

TRAFFIC CONTROL NOTES

- ALL NEW TRAFFIC CONTROL DEVICES (SIGNS AND PAVEMENT MARKINGS) SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) , FDOT STANDARDS, AND CITY STANDARDS.
- A MAINTENANCE OF TRAFFIC PLAN SHALL BE PROVIDED TO THE CITY OF GAINESVILLE TWO (2) WEEKS PRIOR TO MOBILIZATION FOR REVIEW AND APPROVAL. THE MAINTENANCE OF TRAFFIC PLAN SHALL INCLUDE A SCHEDULE FOR ANY FULL OR PARTIAL RESIDENTIAL LANE CLOSURES.

LANDSCAPING NOTES

- THE CONTRACTOR SHALL SOD ALL DISTURBED AREAS THAT ARE TO BE VEGETATED AS PER FDOT 2018 STANDARD SPECIFICATION SECTION 570 PERFORMANCE TURF. PRIOR TO PLACEMENT OF SOD, THE CONTRACTOR SHALL AMEND THE TOP 4 INCHES OF SOIL WITH COMPOST. THE CONTRACTOR SHALL WATER THE SODDED AREA UNTIL THE VEGETATION IS ESTABLISHED. REFER TO SPECIFICATION 02900 FOR DETAILS.
- ALL SLOPES STEEPER THAN 4:1 ARE REQUIRED TO BE PINNED.
- SOD SHALL BE INSTALLED PER FDOT SPECIFICATION SECTION 570.

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Certificate of Authorization No. 5520
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City of Gainesville

DEREK M. WAINSCOTT P.E., FL, LIC. 58205

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DATE: 04/2021	DRAWN BY: JAK	CHECKED BY: DMW

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GENERAL NOTES

LITTLE HATCHET CREEK BANK STABILIZATION
GAINESVILLE, ALACHUA COUNTY, FLORIDA

SHEET NUMBER
3 OF 30

ABBREVIATIONS

SYMBOLS		F		O	
'	FEET (WHEN USED WITH LENGTHS)	FAC	FLORIDA ADMINISTRATIVE CODE	OC	ON CENTER
°	DEGREES	FBR	FLORIDA BEARING RATIO	OHW	OVERHEAD WIRE
'	MINUTES (WHEN USED WITH ANGLES)	FC	FRICTION COURSE	ORB	OFFICIAL RECORDS BOOK
"	SECONDS	FDEP	FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION	OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
%	PERCENT				
@	AT				
A		P			
AASHTO	ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS	PAVT	PAVEMENT		
AC	ACRES	PC	POINT OF CURVATURE		
ADA	AMERICAN WITH DISABILITIES ACT	PCC	POINT OF COMPOUND CURVE		
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	PERF	PERFORATED		
ARCH	ARCHITECT	PROP	PROPOSED		
ARV	AIR RELEASE VALVE	PT	POINT OF TANGENCY		
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	PVC	POLYVINYL CHLORIDE		
AWWA	AMERICAN WATER WORKS ASSOCIATION	PVI	POINT OF VERTICAL INTERSECTION		
B		G			
BC	BACK OF CURB	GALV	GALVANIZED		
BFP	BACKFLOW PREVENTER	GM	GAS MAIN		
BLDG	BUILDING	GV	GATE VALVE		
BM	BENCHMARK				
BMP	BEST MANAGEMENT PRACTICE				
BOC	BACK OF CURB				
BVCS	BEGIN VERTICAL CURVE STATION				
BVCE	BEGIN VERTICAL CURVE ELEVATION				
BW	BOTTOM OF WALL				
C		H			
CATV	CABLE TELEVISION	HDPE	HIGH DENSITY POLYETHYLENE		
CI	CURB INLET	HP	HIGH POINT		
CIP	CAST IRON PIPE				
CMAR	CONSTRUCTION MANAGER AT RISK				
CMP	CORRUGATED METAL PIPE				
CO	CLEANOUT				
COG	CITY OF GAINESVILLE				
CONC	CONCRETE				
COORD	COORDINATE				
CR	COUNTY ROAD				
C/O	CLEANOUT				
D		I			
DBH	DIAMETER AT BREAST HEIGHT	ID	IDENTIFICATION		
DE	DRAINAGE EASEMENT	INV	INVERT		
DEG	DEGREE	INV EL	INVERT ELEVATION		
DIA	DIAMETER	IP	IRON PIPE		
DIP	DUCTILE IRON PIPE				
DWG	DRAWING				
E		K			
e	RATE OF ELEVATION	K	VERTICAL CURVE RATE OF CHANGE		
E	EAST				
EA	EACH				
EL	ELEVATION				
ELEV	ELEVATION				
EOP	EDGE OF PAVEMENT				
EOR	ENGINEER OF RECORD				
ERCP	ELLIPTICAL REINFORCED CONCRETE PIPE				
ESMT	EASEMENT				
EVCS	END VERTICAL CURVE STATION				
EVCE	END VERTICAL CURVE ELEVATION				
EX	EXISTING				
		L			
		LA	LANDSCAPE ARCHITECT		
		LBR	LIMEROCK BEARING RATIO		
		LDR	LAND DEVELOPMENT REGULATION		
		LF	LINEAR FEET		
		LP	LOW POINT		
		LT	LEFT		
		M			
		MAX	MAXIMUM		
		MH	MANHOLE		
		MIN	MINIMUM		
		MISC	MISCELLANEOUS		
		MUTCD	MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES		
		N			
		N	NORTH		
		N-E	NORTHING – EASTING		
		N/A	NOT APPLICABLE		
		NAVD	NORTH AMERICAN VERTICAL DATUM OF 1988		
		NGVD	NATIONAL GEODETIC VERTICAL DATUM OF 1929		
		NO	NUMBER		
		NPDES	NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM		
		NTS	NOT TO SCALE		
		R			
		R	RADIUS		
		RCP	REINFORCED CONCRETE PIPE		
		RPM	RAISED REFLECTIVE PAVEMENT MARKER		
		RPZ	REDUCED PRESSURE ZONE		
		RT	RIGHT		
		RWM	RECLAIMED WATER MAIN		
		R/W	RIGHT-OF-WAY		
		S			
		S	SOUTH		
		SAN	SANITARY		
		SHWE	SEASONAL HIGH WATER ELEVATION		
		SL	SLOPE		
		SP	SUPERPAVE		
		SR	STATE ROAD		
		SS	SANITARY SEWER		
		STA	STATION		
		STD	STANDARD		
		T			
		TCE	TEMPORARY CONSTRUCTION EASEMENT		
		TEMP	TEMPORARY		
		TOB	TOP OF BANK		
		TV	TELEVISION		
		TW	TOP OF WALL		
		TYP	TYPICAL		
		U			
		USF	UNITED STATES FOUNDRY		
		USGS	UNITED STATES GEOLOGICAL SURVEY		
		UTIL	UTILITY		
		V			
		V	VERTICAL		
		VC	VERTICAL CURVE		
		VCP	VITRIFIED CLAY PIPE		
		W			
		W	WEST		
		W	WATER		
		W/	WITH		
		WM	WATER MAIN		
		WW	WASTEWATER		
		WWF	WELDED WIRE FABRIC		

MODEL PEAK STAGE & PEAK FLOW

LOCATION	PEAK STAGE (FT NAVD)					
	EXISTING CONDITION					
	2.3 YEAR EVENT	MEAN ANNUAL	10 YR 24 HR	25 YR 24 HR	100 YR 24 HR	NODE NAME
1A (CULVERT)	120.58	120.58	121.71	122.51	123.97	LHC_430
1B (WEIR)	119.88	119.88	121.09	121.94	123.46	LHC_440

LOCATION	PEAK STAGE (FT NAVD)					
	PROPOSED CONDITION					
	2.3 YEAR EVENT	MEAN ANNUAL	10 YR 24 HR	25 YR 24 HR	100 YR 24 HR	NODE NAME
1A (CULVERT)	120.68	120.68	121.86	122.69	124.20	LHC_430
1B (WEIR)	119.88	119.88	121.09	121.94	123.45	LHC_440

LOCATION	PEAK FLOW (CFS)					
	EXISTING CONDITION					
	2.3 YEAR EVENT	MEAN ANNUAL	10 YR 24 HR	25 YR 24 HR	100 YR 24 HR	NODE NAME
1A (CULVERT)	256.60	256.60	391.15	499.58	735.11	LHC_430
1B (WEIR)	268.78	268.78	408.63	520.55	759.52	LHC_440

LOCATION	PEAK FLOW (CFS)					
	PROPOSED CONDITION					
	2.3 YEAR EVENT	MEAN ANNUAL	10 YR 24 HR	25 YR 24 HR	100 YR 24 HR	NODE NAME
1A (CULVERT)	256.63	256.63	391.47	499.46	734.74	LHC_430
1B (WEIR)	268.71	268.71	408.45	520.25	758.92	LHC_440

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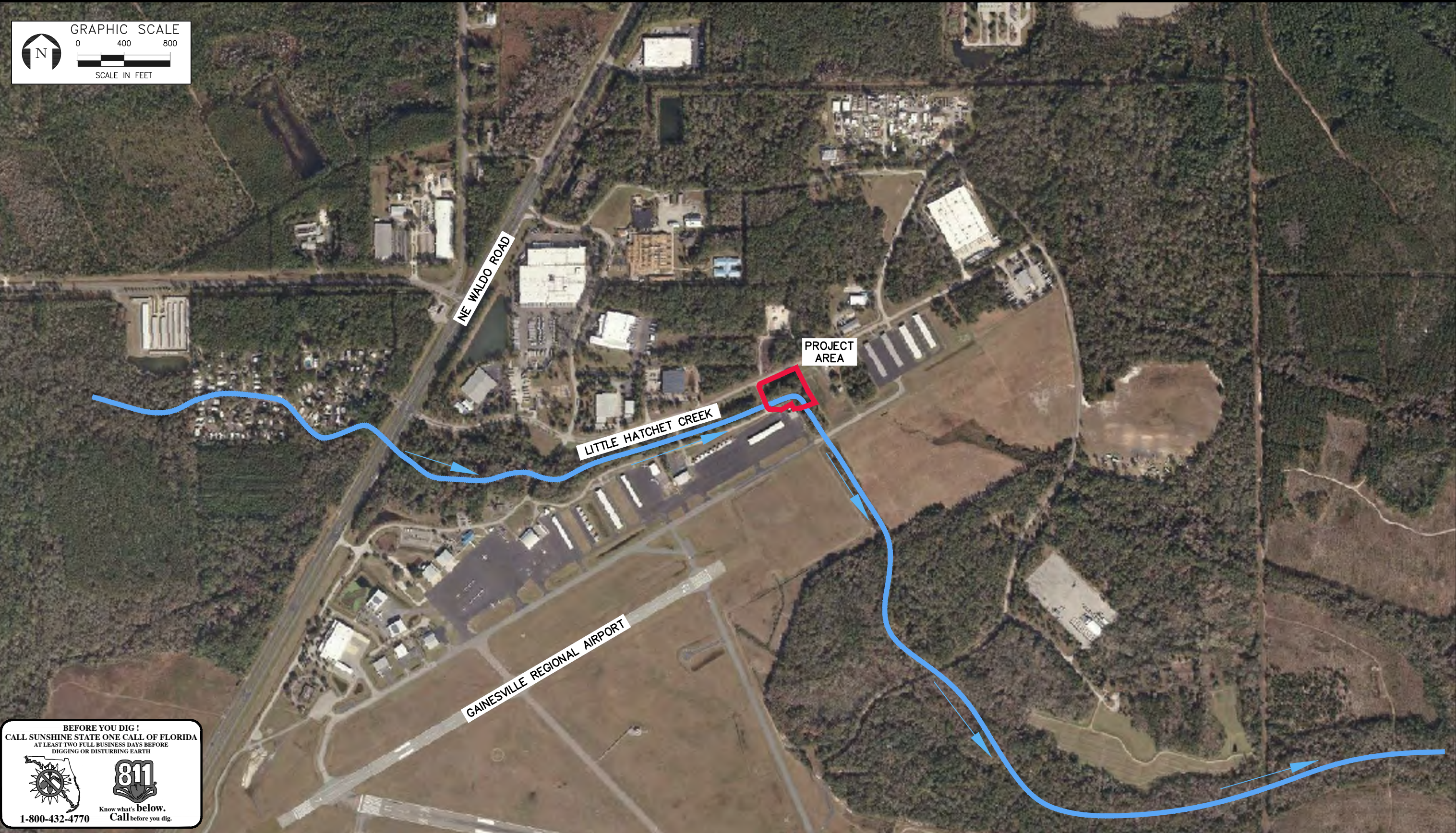
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ABBREVIATIONS

LITTLE HATCHET CREEK BANK STABILIZATION GAINESVILLE, ALACHUA COUNTY, FLORIDA	SHEET NUMBER 4 OF 30
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	FILE: PERMIT BASE	DESIGNED BY: DMW	PROJECT NO. 200310	NO. 01	DATE	REVISION	LITTLE HATCHET CREEK BANK STABILIZATION GAINESVILLE, ALACHUA COUNTY, FLORIDA	SHEET NUMBER 5 OF 30
	DATE: 04/2021	DRAWN BY: JAK	CHECKED BY: DMW	02				
				03				



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PROJECT AREA	
LITTLE HATCHET CREEK BANK STABILIZATION GAINESVILLE, ALACHUA COUNTY, FLORIDA	SHEET NUMBER 6 OF 30

SUMMARY OF PAY ITEMS		
BID ITEM NO.	ITEM DESCRIPTION	UNIT APPROX. QUANTITY
101-1	MOBILIZATION (10%)	LS
102-1	MAINTENANCE OF TRAFFIC (1%)	LS
400-95-3	COFFERDAM & DEWATERING	LS
104-10-3	STAKED SILT FENCE, TYPE III	LS
104-15	SOIL TRACKING PREVENTION DEVICE	LS
104-18	INLET PROTECTION SYSTEM	LS
0110 1 1	CLEARING & GRUBBING	LS
120-5	CHANNEL EXCAVATION	LS
120-6	EMBANKMENT	LS
400-4-8	CONCRETE, CLASS IV, BULKHEAD	LS
530-5-13	GABION BASKET	LS
550-10220	FENCING TYPE B, 0-6 FT, STANDARD	LS
550-60222	FENCING GATE, TYPE B, DOUBLE, 6-12 FT OPENING	LS
570-1-2	PERFORMANCE TURF, SOD	LS
999-1	PROPERTY RESTORATION	LS
999-2	OUT OF SCOPE WORK	LS

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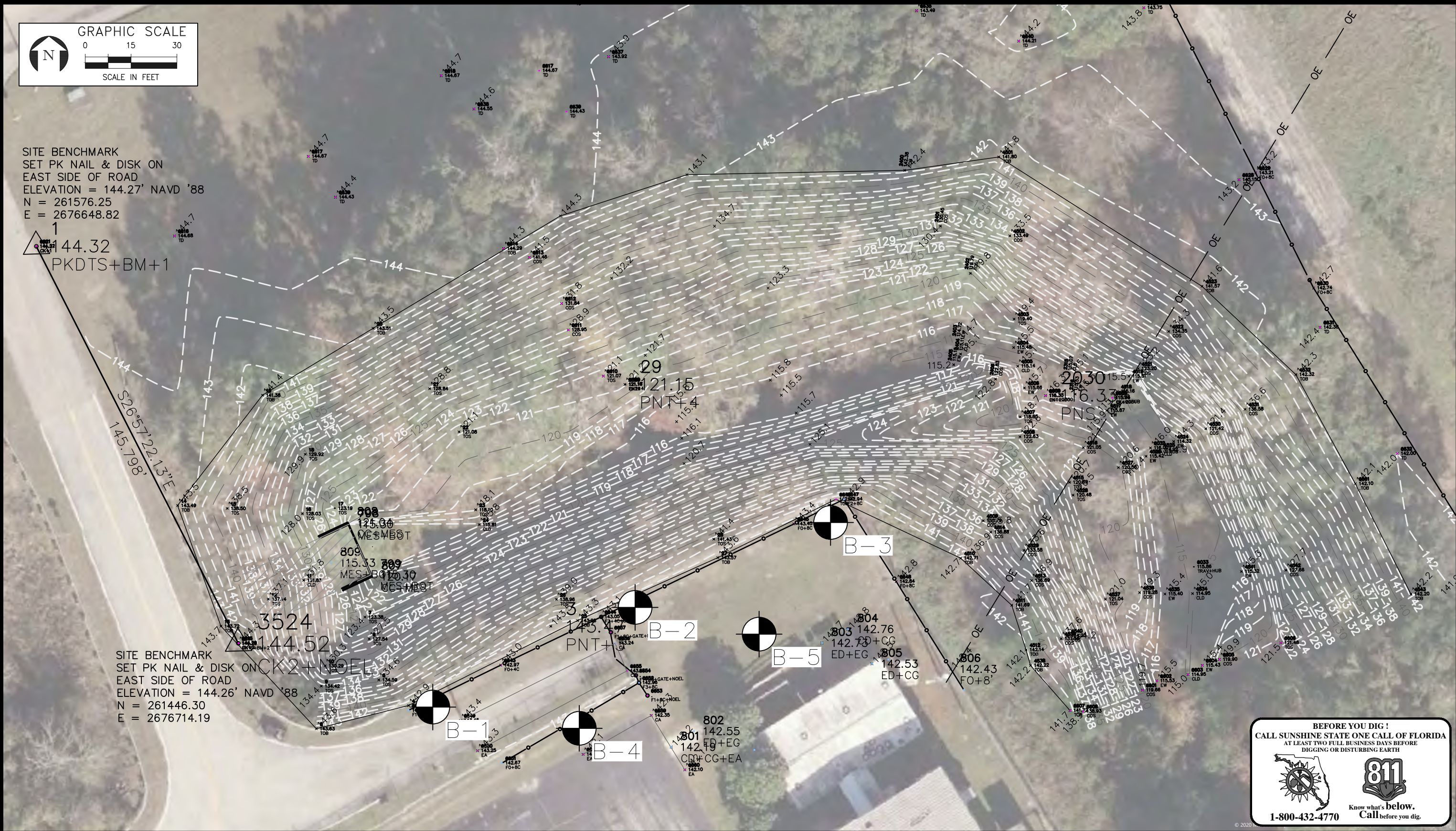
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SUMMARY OF PAY ITEMS	
LITTLE HATCHET CREEK BANK STABILIZATION GAINESVILLE, ALACHUA COUNTY, FLORIDA	SHEET NUMBER 7 OF 30





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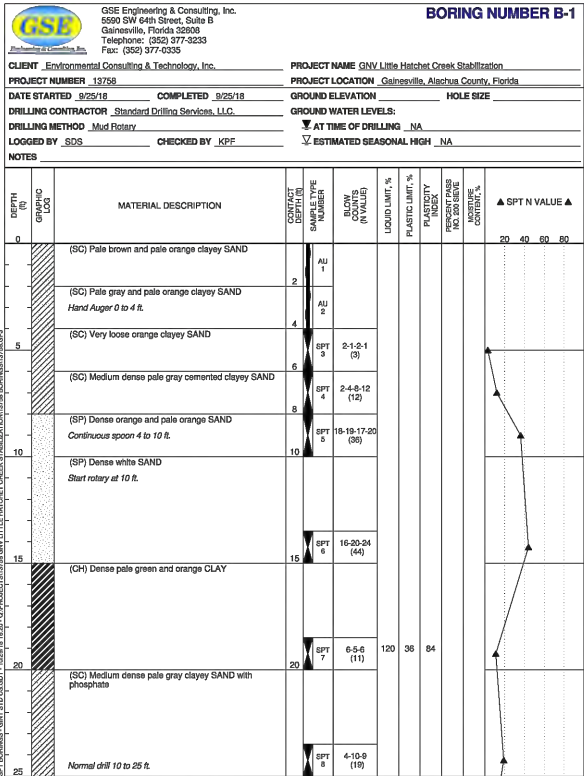
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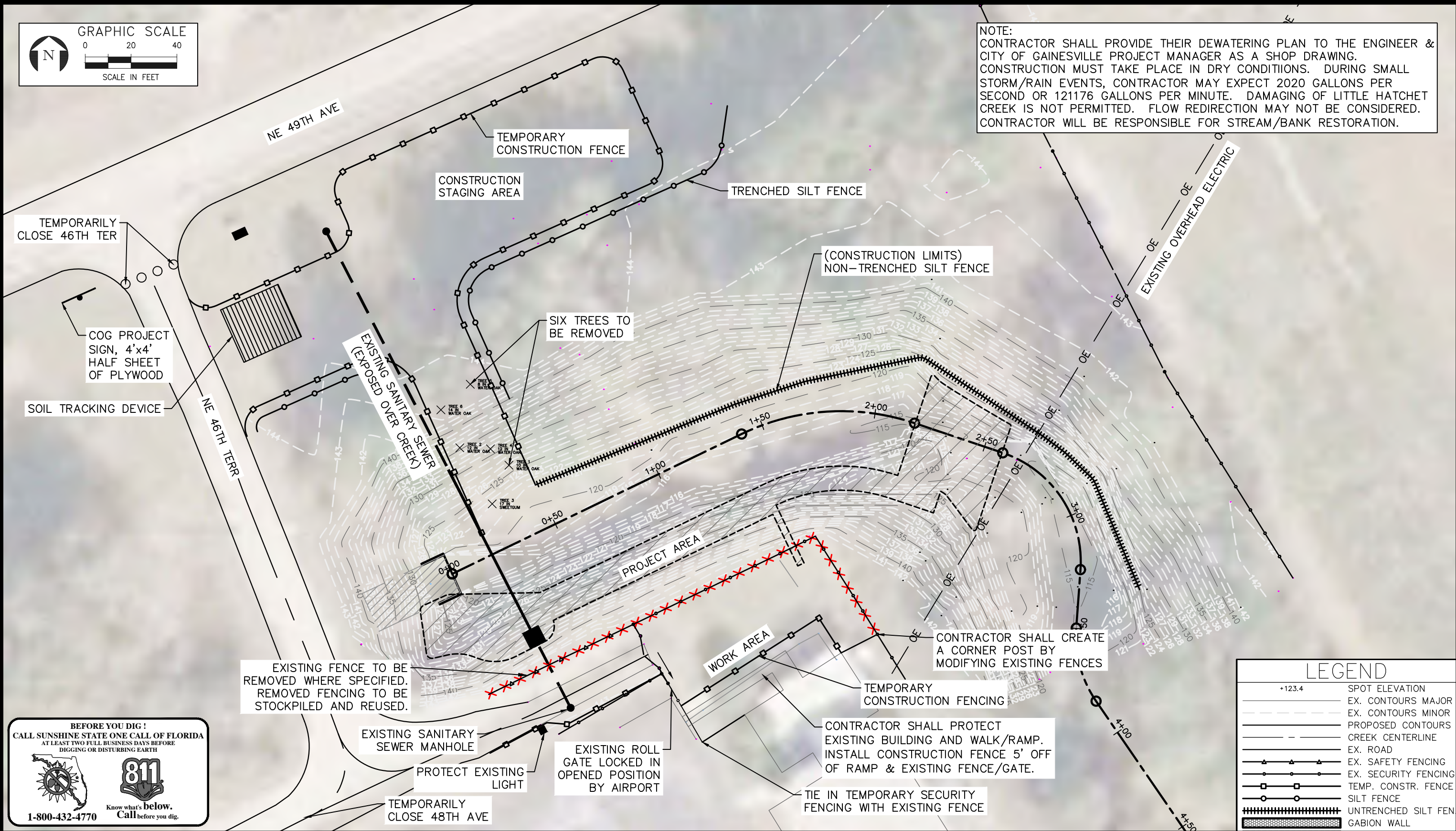
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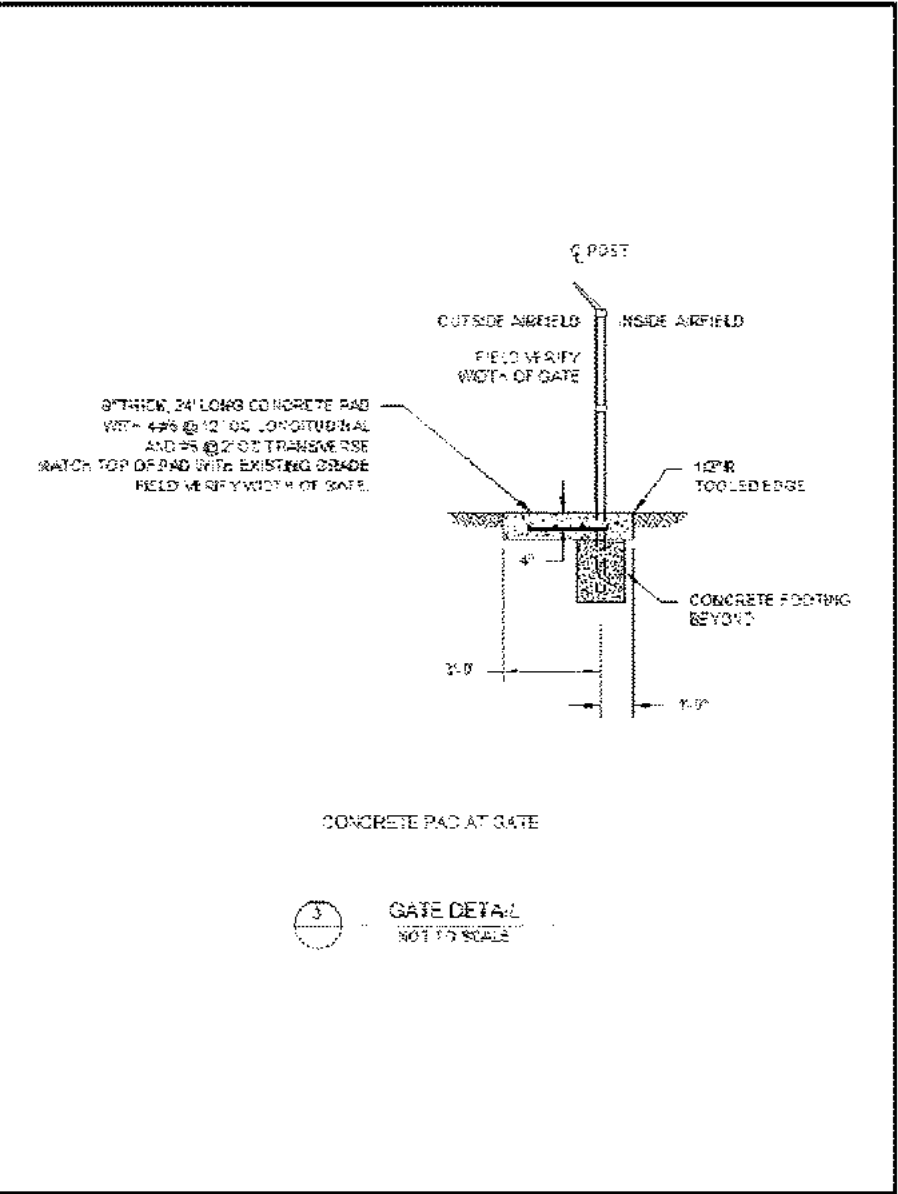
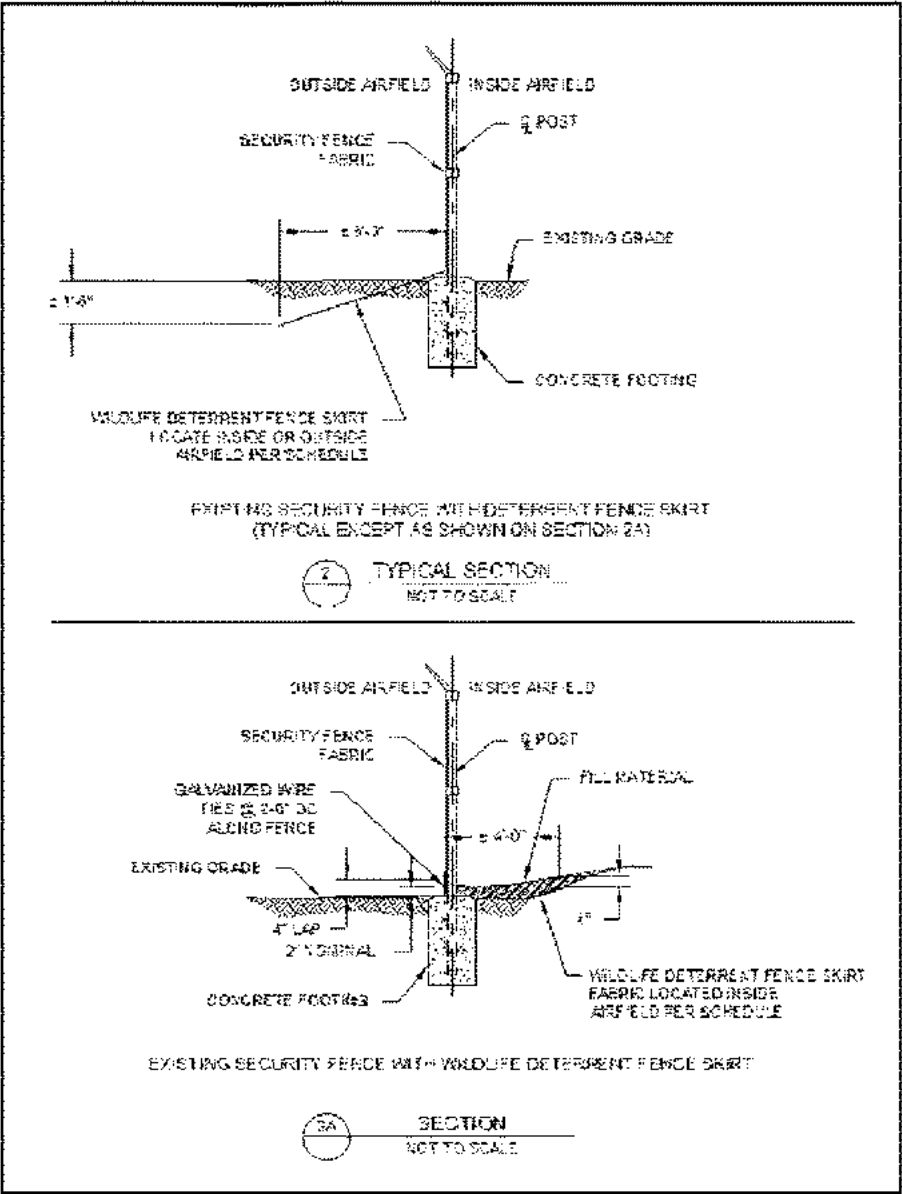
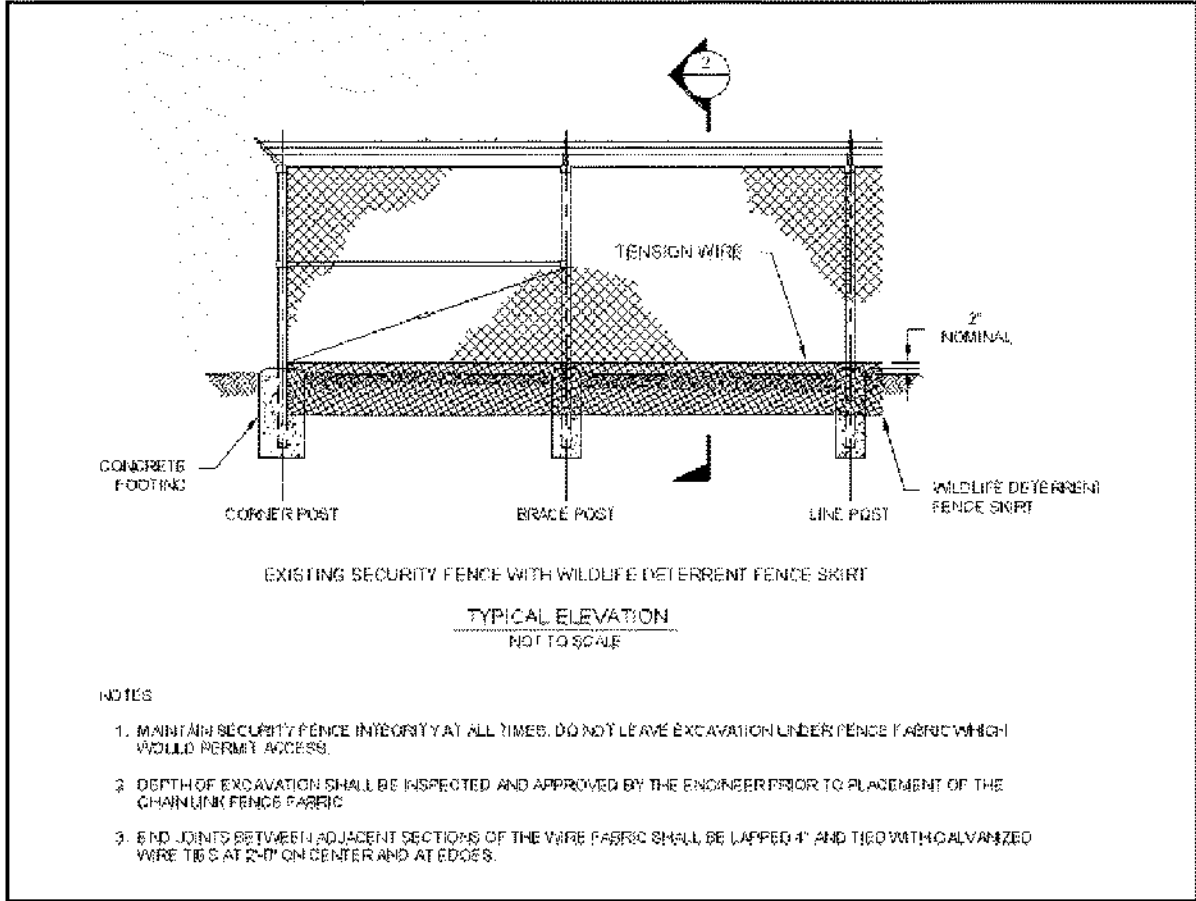
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GEOTECHNICAL BORING LOCATIONS

LITTLE HATCHET CREEK BANK STABILIZATION GAINESVILLE, ALACHUA COUNTY, FLORIDA	SHEET NUMBER 11 OF 30
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GENERAL NOTES

- LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES ARE BASED ON AVAILABLE INFORMATION REVIEWED AT THE TIME OF DOCUMENT PREPARATION. THIS INFORMATION MAY NOT BE OF SUITABLE ACCURACY OR CORRECTNESS FOR THE CONTRACTOR'S CONSTRUCTION NEEDS. THEREFORE, THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS, AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES, PROPERTY LINES, R/W LINES AND EASEMENTS AND OTHER FEATURES AFFECTING THE WORK PRIOR TO CONSTRUCTION.
- CONSTRUCTION STAKING IS THE RESPONSIBILITY OF THE CONTRACTOR. COSTS FOR ANY RESETTING OF MASTER CONTROL POINTS MADE NECESSARY AS A RESULT OF CONSTRUCTION DISTURBANCE SHALL BE PAID FOR BY THE CONTRACTOR.
- THE OWNER MAY ENGAGE THE SERVICES OF A RECOGNIZED SOILS AND MATERIALS TESTING LABORATORY FOR COMPLIANCE TESTING, INSPECTION, OR OTHER SERVICES DEEMED NECESSARY OR DESIRABLE BY THE OWNER AND WILL BE PAID FOR BY THE OWNER. THE COST OF ANY RETESTING REQUIRED, OR IMPACTS OF TIME DELAYS CAUSED BY WORK OR MATERIALS NOT MEETING THE STATED CONTRACT REQUIREMENTS SHALL BE PAID FOR BY THE CONTRACTOR. THE CONTRACTOR SHALL SCHEDULE TESTING SO THAT CONSTRUCTION ACTIVITIES ARE NOT DISRUPTED. MISCELLANEOUS TESTING ABOVE AND BEYOND NORMALLY SCHEDULED TESTING MAY BE REQUESTED BY THE OWNER AT ANY TIME AND THE CONTRACTOR SHALL COOPERATE WITH ANY SUCH ACTIVITIES.
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH ALL AFFECTED FEDERAL, STATE, LOCAL, AND PRIVATE ENTITIES POTENTIALLY AFFECTED BY THE CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 48 HOURS NOTICE OF WHEN CONSTRUCTION WILL COMMENCE IN ALL AREAS, IN ORDER TO PERMIT FIELD LOCATION OF UTILITY LINES PRIOR TO CONSTRUCTION. A TOLL FREE NUMBER 1-800-432-4770 IS AVAILABLE TO ASSIST IN SUCH COORDINATION EFFORTS. THIS NUMBER IS PART OF THE UTILITY NOTIFICATION PROGRAM COMMONLY REFERRED TO AS "ONE-CALL", BUT DOES NOT TOTALLY REPRESENT ALL UTILITIES POTENTIALLY AFFECTED. ALL UTILITIES SHALL BE KEPT IN OPERATION EXCEPT WITH THE EXPRESS WRITTEN CONSENT OF THE UTILITY OWNER. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO PRESERVE EXISTING UTILITIES. ANY AND ALL DAMAGE TO EXISTING UTILITIES, AS A RESULT OF THE CONTRACTOR'S ACTIVITIES, SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE A REVIEW OF THE SITE TO DETERMINE EXISTING CONDITIONS AND ANYTHING NOT COVERED IN THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE OWNER'S REPRESENTATIVE AND SHALL NOT CONSTITUTE AN EXTRA, UNLESS APPROVED IN WRITING.
- THE CONTRACTOR SHALL REPLACE, INCLUDED BUT NOT LIMITED TO, ALL PAVING, STABILIZED EARTH, DRIVEWAYS, SIDEWALKS, CURBS, FENCES, LAWNS, SHRUBS, ETC., THAT ARE DAMAGED AS A RESULT OF CONSTRUCTION, WITH THE SAME TYPE, SIZE AND QUALITY OF MATERIALS AND WORKMANSHIP AS EXISTED PREVIOUSLY AT NO ADDITIONAL COST TO OWNER.
- THE CONTRACTOR SHALL IMMEDIATELY CONTACT THE OWNER'S REPRESENTATIVE UPON DISCOVERY OF CONFLICTS BETWEEN THE CONTRACT REQUIREMENTS AND ACTUAL CONSTRUCTION CONDITIONS.
- ALL BURIED PIPELINES, CONDUITS, CABLES, ETC. SHALL HAVE A MINIMUM COVER OF 36 INCHES BELOW FINAL GRADE UNLESS OTHERWISE CALLED FOR. ALL FACILITIES AND ACCESSORIES SHALL BE INSTALLED IN CONFORMANCE WITH APPLICABLE LOCAL CODES AND REQUIREMENTS PLUS THESE CONTRACT DOCUMENTS.
- CONTRACTOR SHALL MAINTAIN CONTINUOUS RECORD DATA FOR THE PROJECT, INCLUDING ACCURATE RECORDS OF LOCATION, LENGTH AND ELEVATIONS OF ALL UNDERGROUND UTILITIES, INLETS/MAHOLE STRUCTURES, ROAD PAVEMENT, CURBING SIDEWALKS, LANDSCAPING, ETC. ANY CHANGES TO THE PLANS MUST BE APPROVED BY THE OWNER'S REPRESENTATIVE AND THE CONTRACTOR SHALL IDENTIFY ALL REVISIONS PROMPTLY ON THE JOB SET PLANS IN RED. RECORD DRAWINGS SHALL BE PREPARED BY A REGISTERED FLORIDA LAND SURVEYOR. THE CONTRACTOR IS RESPONSIBLE FOR THE ACCURACY OF SUCH DATA AND SHALL BEAR ALL COST. THE CONTRACTOR SHALL SUBMIT THREE HARD COPIES OF RECORD DRAWINGS (BLUE PRINT) AND ONE ELECTRONIC COPY ON A COMPACT DISK-CD (JPG FORMAT AND CAD FORMAT)
- CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF TRAFFIC, IN ACCORDANCE WITH ALACHUA COUNTY AND CITY OF GAINESVILLE STANDARDS, WHILE WORKING IN THE ROAD RIGHT-OF-WAYS. CONTRACTOR SHALL SUBMIT MAINTENANCE OF TRAFFIC PLANS TO ENGINEER FOR APPROVAL.
- UNLESS SPECIFICALLY IDENTIFIED WITHIN THESE PLANS, ALL REFERENCES TO "RIP RAP" OR ANY VARIATION THEREOF SHALL MEAN BANK AND SHORE SIZE RIP RAP PER FDOT SPEC 530-2.1.3.1 RUBBLE (BANK AND SHORE PROTECTION). GABION FILL STONE DOES NOT APPLY.

ENVIRONMENTAL PROTECTION NOTES

- CONSTRUCTION EQUIPMENT SHALL NOT BE OPERATED IN WETLAND AREAS UNLESS SUCH CONSTRUCTION PRACTICES ARE APPROVED IN A PLAN OF OPERATION SUBMITTED IN ACCORDANCE WITH APPLICABLE SPECIFICATION SECTIONS.
- PRIOR TO COMMENCING CONSTRUCTION ACROSS, OR ADJACENT TO, WETLAND JURISDICTIONAL AREAS, SILT BARRIERS SHALL BE INSTALLED AND MAINTAINED AS SHOWN ON THE DRAWINGS, OR AS REQUIRED, TO PROTECT WETLAND AREAS FROM SEDIMENTATION ASSOCIATED WITH CONSTRUCTION ACTIVITIES. SILT BARRIERS SHALL BE CONSIDERED AS THE LIMITS OF CONSTRUCTION WITHIN OR ADJACENT TO JURISDICTIONAL AREAS. WETLAND JURISDICTIONAL AREAS SHOWN ON THE PLANS WHICH ARE ADJACENT TO THE WORK AND NOT PROTECTED BY SILT BARRIERS SHALL BE CLEARLY DELINEATED AS SUCH THROUGHOUT CONSTRUCTION, AND BE READILY IDENTIFIED AS PROTECTED AREAS TO CONSTRUCTION PERSONNEL.
- STAKED OR FLOATING SILT SCREENS OR HAY BALES SHALL BE UTILIZED AS SILT BARRIERS AND PLACED IN LOCATIONS SHOWN ON THE DRAWINGS AND AT OTHER LOCATIONS AS REQUIRED TO KEEP SEDIMENT FROM REACHING WATER BODIES OR WETLAND AREAS. THESE BARRIERS SHALL BE INSTALLED PRIOR TO COMMENCING WITH ANY CONSTRUCTION WITHIN OR ADJACENT TO JURISDICTIONAL AREAS. THE CONTRACTOR SHALL MONITOR AND MAINTAIN ALL SILT BARRIERS, INCLUDING DAILY INSPECTIONS, TO CHECK THEIR INTEGRITY. ANY LOOSE OR DAMAGED SILT BARRIERS SHALL BE IMMEDIATELY REPAIRED OR REPLACED, AS NECESSARY. ONCE CONSTRUCTION IS COMPLETED AND FINISH GRADING AND STABILIZATION HAS BEEN ACHIEVED, SILT BARRIERS SHALL BE COMPLETELY REMOVED TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE PRIOR TO FINAL ACCEPTANCE.
- TEMPORARY STOCKPILES SHALL NOT BE LOCATED ADJACENT TO WETLANDS WHERE SEDIMENTATION FROM STOCKPILES MAY CAUSE DAMAGE TO WETLANDS. ADDITIONALLY, SILT BARRIERS SHALL CONTINUOUSLY AND FULLY ENIRCLE ALL STOCKPILES WHICH WILL REMAIN FOR LONGER THAN 24 HOURS, TO CONTAIN MATERIALS WITHIN A REASONABLY CONFINED AREA.
- BANKS SHALL BE PROTECTED FROM EROSION OR COLLAPSE BOTH DURING AND AFTER CONSTRUCTION. RIP RAP AND GABION FILL STONE MATERIAL SHALL BE CAREFULLY PLACED FROM THE BANK AND NOT DUMPED FROM ABOVE IN AN UNCONTROLLED MANNER.
- THE CONTRACTOR SHALL CONDUCT A TREE SURVEY TO DETERMINE WHICH TREES, IF ANY, WILL NEED TO BE REMOVED FOR ACCESS PURPOSES. THE CONTRACTOR SHALL NOT REMOVE ANY TREES WITHOUT COORDINATING SUCH REMOVAL WITH THE OWNER'S REPRESENTATIVE. IF ANY TREES ARE REMOVED IN WETLAND JURISDICTIONAL AREAS WITHOUT PROPER AUTHORIZATION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING, AND OBTAINING APPROVAL OF A DETAILED RESTORATION AND/OR MITIGATION PLAN, FROM THE APPROPRIATE REGULATORY AGENCIES. REPLANTING APPROVED TREE SPECIES IS REQUIRED TO MAINTAIN BANK STABILITY WITHIN ALL ACCESS POINTS. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR COMPLETING ALL MONITORING AND MAINTENANCE ACTIVITIES IMPOSED AS A RESULT OF UNAUTHORIZED TREE REMOVAL.
- THE STREAM BANK RESTORATION PLAN SHALL BE IMPLEMENTED IN ALL STREAM BANK AREAS ADVERSELY IMPACTED BY CONSTRUCTION ACTIVITIES THAT ARE NOT PROTECTED BY GABION BASKETS OR RIP RAP (BANK AND SHORE) AS SHOWN ON THE PLANS.
- THE CONTRACTOR SHALL PREPARE A DEWATERING PLAN AND FILE THE APPROPRIATE DEWATERING PERMITS.
- STREAM WATER FLOWS & LEVELS RISE AND FALL AND SHOULD NOT BE ASSUMED TO ALWAYS BE THE SAME AS SUGGESTED IN THE DRAWINGS. (SHEET 4)
- THE CONTRACTOR IS RESPONSIBLE FOR DEVELOPING AND SUBMITTING A SWPPP TO SJRWMD. THE SWPPP MUST BE APPROVED PRIOR TO THE WORK.
- THE PROJECT CANNOT CAUSE A VIOLATION OF STATE WATER QUALITY STANDARDS. CONTRACTOR SHALL REVIEW & UNDERSTAND F.A.C. RULE 62-302 AND 62.302.530 WHICH CAN BE FOUND AT WWW.FLORIDADEP.GOV/DEAR/WATER-QUALITY-STANDARDS. FOR THIS PROJECT, THE UPSTREAM CONDITION FOR TN, TP NTU AND pH WILL BE MEASURED UPSTREAM AND DOWNSTREAM OF CULVERT. DOWNSTREAM WILL BE 100 FT BEYOND WEIR.
- SANDBAGS SHALL BE USED FOR EROSION CONTROL WHERE SOD WILL NOT HOLD OR BECOME ESTABLISHED IN TIME TO PROTECT THE BANKS. UPON COMPLETION OF CONSTRUCTION, BANKS AND WATERWAYS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AND CONFIGURATION AND PROTECTED FROM EROSION.

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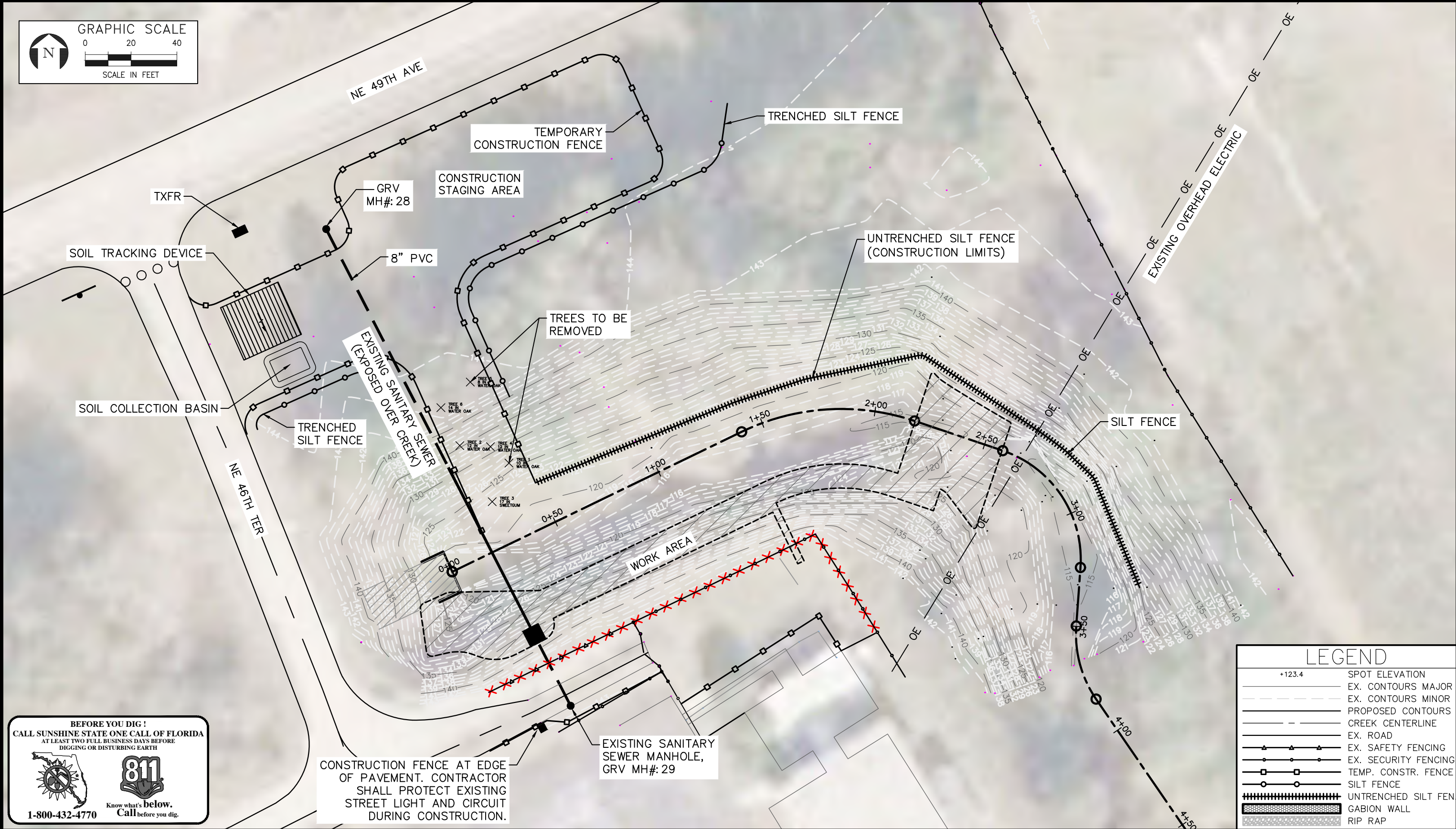
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EROSION CONTROL
NOTES

LITTLE HATCHET CREEK BANK STABILIZATION
GAINESVILLE, ALACHUA COUNTY, FLORIDA

SHEET NUMBER
15 OF 30



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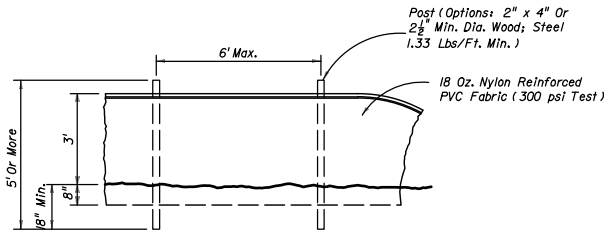
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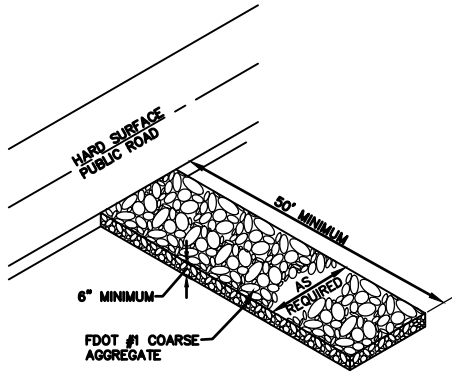
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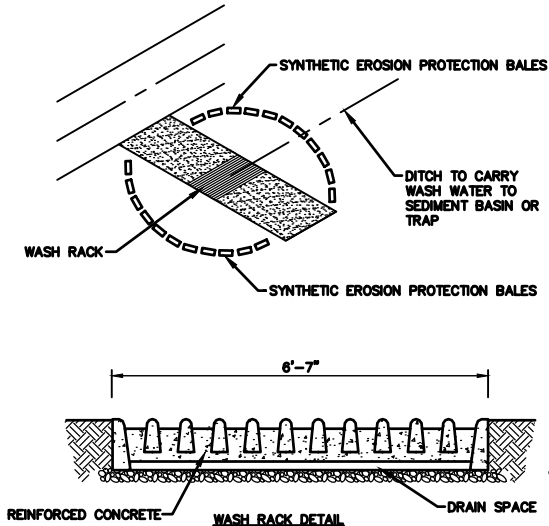
EROSION CONTROL AND PROTECTION PLAN	
LITTLE HATCHET CREEK BANK STABILIZATION GAINESVILLE, ALACHUA COUNTY, FLORIDA	SHEET NUMBER 16 OF 30



STAKED TURBIDITY BARRIER
N.T.S.



GRAVEL CONSTRUCTION ENTRANCE
N.T.S.

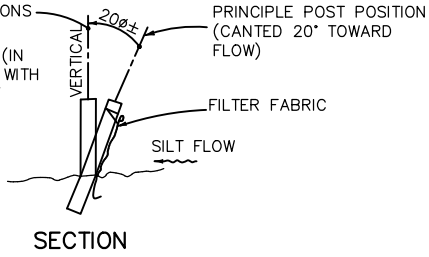
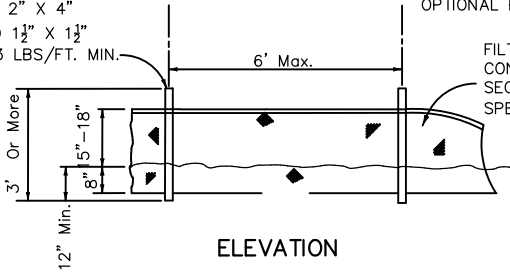


**GRAVEL CONSTRUCTION ENTRANCE
W/ WASH RACK (IF REQUIRED)**

STANDARD CONSTRUCTION DETAIL
TEMPORARY GRAVEL CONSTRUCTION ENTRANCE

POST OPTIONS:

SOFTWOOD 2 1/2"Ø
SOFTWOOD 2" X 4"
HARDWOOD 1 1/2" X 1 1/2"
STEEL 1.33 LBS/FT. MIN.



TYPE III SILT FENCE

DEFINITION

A STONE STABILIZED PAD LOCATED AT POINTS OF VEHICULAR INGRESS AND EGRESS ON A CONSTRUCTION SITE.

PURPOSE

TO REDUCE THE AMOUNT OF SEDIMENT TRANSPORTED ONTO PUBLIC ROADS BY MOTOR VEHICLES OR RUNOFF.

CONDITIONS WHERE PRACTICE APPLIES

WHEREVER TRAFFIC WILL BE LEAVING A CONSTRUCTION SITE AND MOVES DIRECTLY ONTO A PUBLIC ROAD OR OTHER PAVED AREA.

PLANNING CONSIDERATIONS

CONSTRUCTION ENTRANCES PROVIDE AN AREA WHERE MUD CAN BE REMOVED FROM CONSTRUCTION VEHICLE TIRES BEFORE THE ENTER A PUBLIC ROAD. IF THE ACTION OF THE VEHICLE TRAVELING OVER THE GRAVEL PAD IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF THE MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLE ENTERS A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF-SITE. CONSTRUCTION ENTRANCES SHOULD BE USED IN CONJUNCTION WITH THE STABILIZATION OF CONSTRUCTION ROADS TO REDUCE THE AMOUNT OF MUD PICKED UP BY CONSTRUCTION VEHICLES.

DESIGN CRITERIA

AGGREGATE SIZE

FDOT AGGREGATE NO. 1 (1.5 - 3.5 INCH STONE) SHOULD BE USED.

ENTRANCE DIMENSIONS

AGGREGATE LAYER MUST BE AT LEAST 6 INCHES THICK. IT MUST EXTEND THE FULL WIDTH OF THE VEHICULAR INGRESS AND EGRESS AREA. THE LENGTH OF THE ENTRANCE MUST BE AT LEAST 50 FEET. (SEE DETAIL).

WASHING

IF CONDITIONS OF THE SITE ARE SUCH THAT THE MAJORITY OF THE MUD IS NOT REMOVED BY THE VEHICLES TRAVELING OVER THE GRAVEL, THEN THE TIRES OF THE VEHICLES MUST BE WASHED BEFORE ENTERING A PUBLIC ROAD. WASH WATER MUST BE CARRIED AWAY FROM THE ENTRANCE TO A SETTLING AREA TO REMOVE SEDIMENT. A WASH RACK MAY ALSO BE USED TO MAKE WASHING MORE CONVENIENT AND EFFECTIVE. SEE DETAIL.

LOCATION

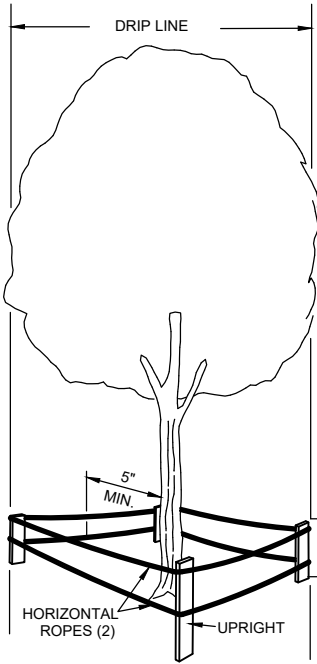
THE ENTRANCE SHOULD BE LOCATED TO PROVIDE FOR MAXIMUM UTILITY BY ALL CONSTRUCTION VEHICLES.

CONSTRUCTION SPECIFICATIONS

THE AREA OF THE ENTRANCE SHOULD BE CLEARED OF ALL VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL. THE GRAVEL SHALL BE PLACED TO THE SPECIFIED DIMENSIONS. ANY DRAINAGE FACILITIES REQUIRED BECAUSE OF WASHING SHOULD BE CONSTRUCTED ACCORDING TO SPECIFICATIONS. IF WASH RACKS ARE USED, THEY SHOULD BE CONSTRUCTED ACCORDING TO SPECIFICATIONS. IF WASH RACKS ARE TO MANUFACTURER'S SPECIFICATIONS.

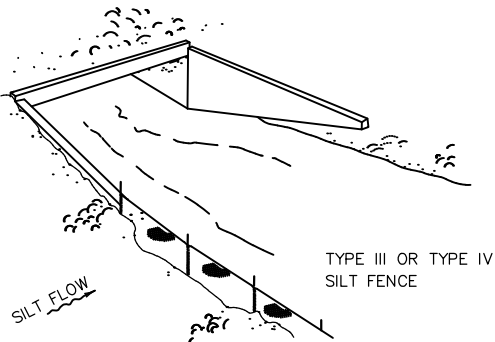
MAINTENANCE

THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 2-INCH STONE, AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY STRUCTURES USED TO TRAP SEDIMENT. ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.

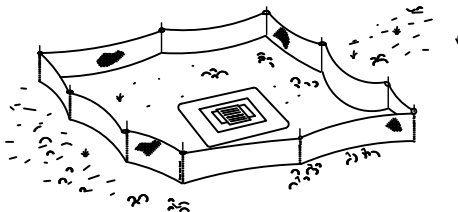


NOTE:
BARRIER MUST BE ERECTED PRIOR TO CONSTRUCTION

TREE PROTECTION



**TYPE III OR TYPE IV
SILT FENCE**



**TYPE III OR TYPE IV
SILT FENCE PROTECTION
AROUND DITCH BOTTOM INLETS.**

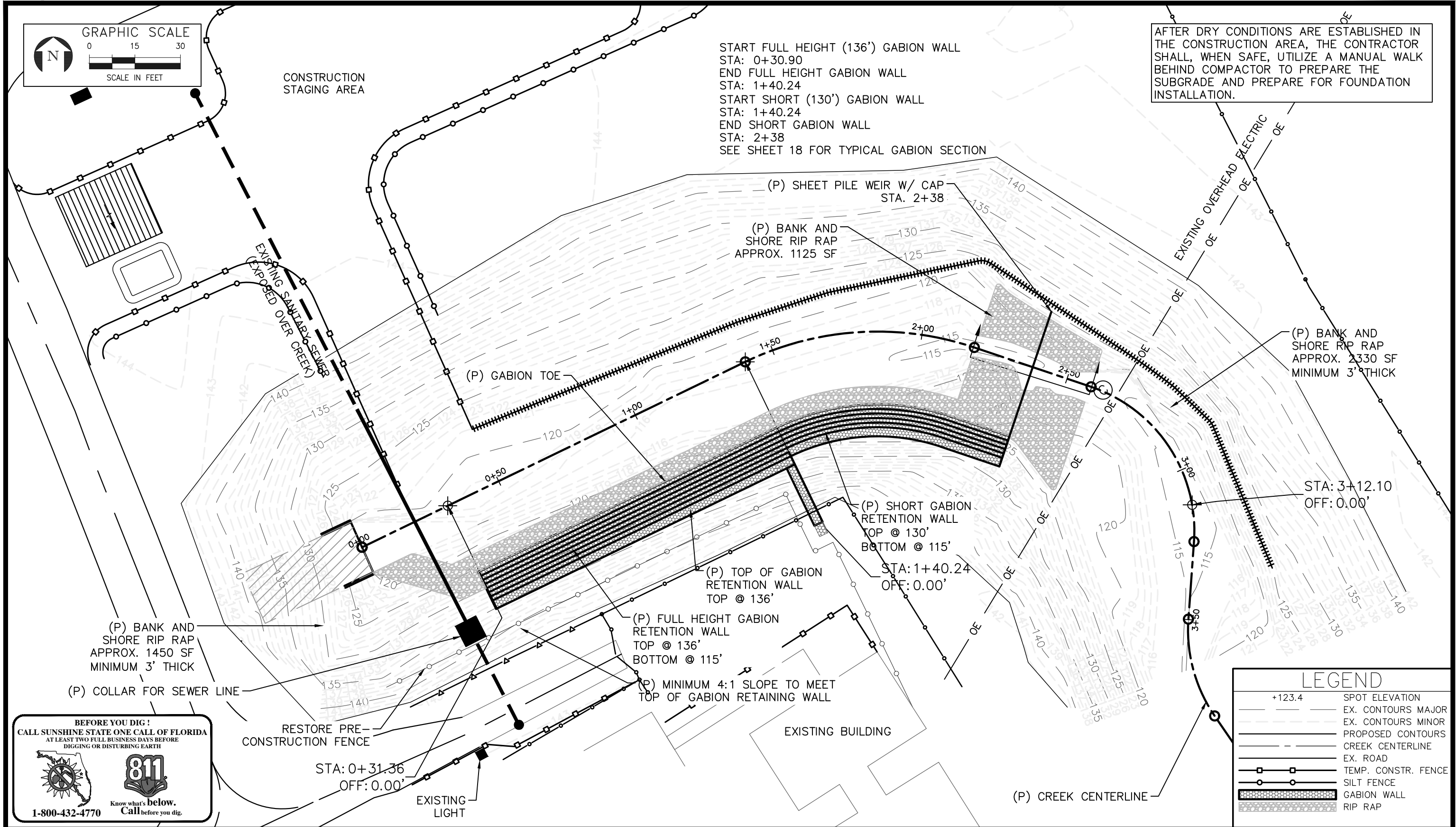
DO NOT DEPLOY IN A MANNER THAT SILT FENCES WILL ACT AS A DAM ACROSS PERMANENT FLOWING WATERCOURSES. SILT FENCES ARE TO BE USED AT UPLAND LOCATIONS AND TURBIDITY BARRIERS USED AT PERMANENT BODIES OF WATER.

SILT FENCE APPLICATIONS

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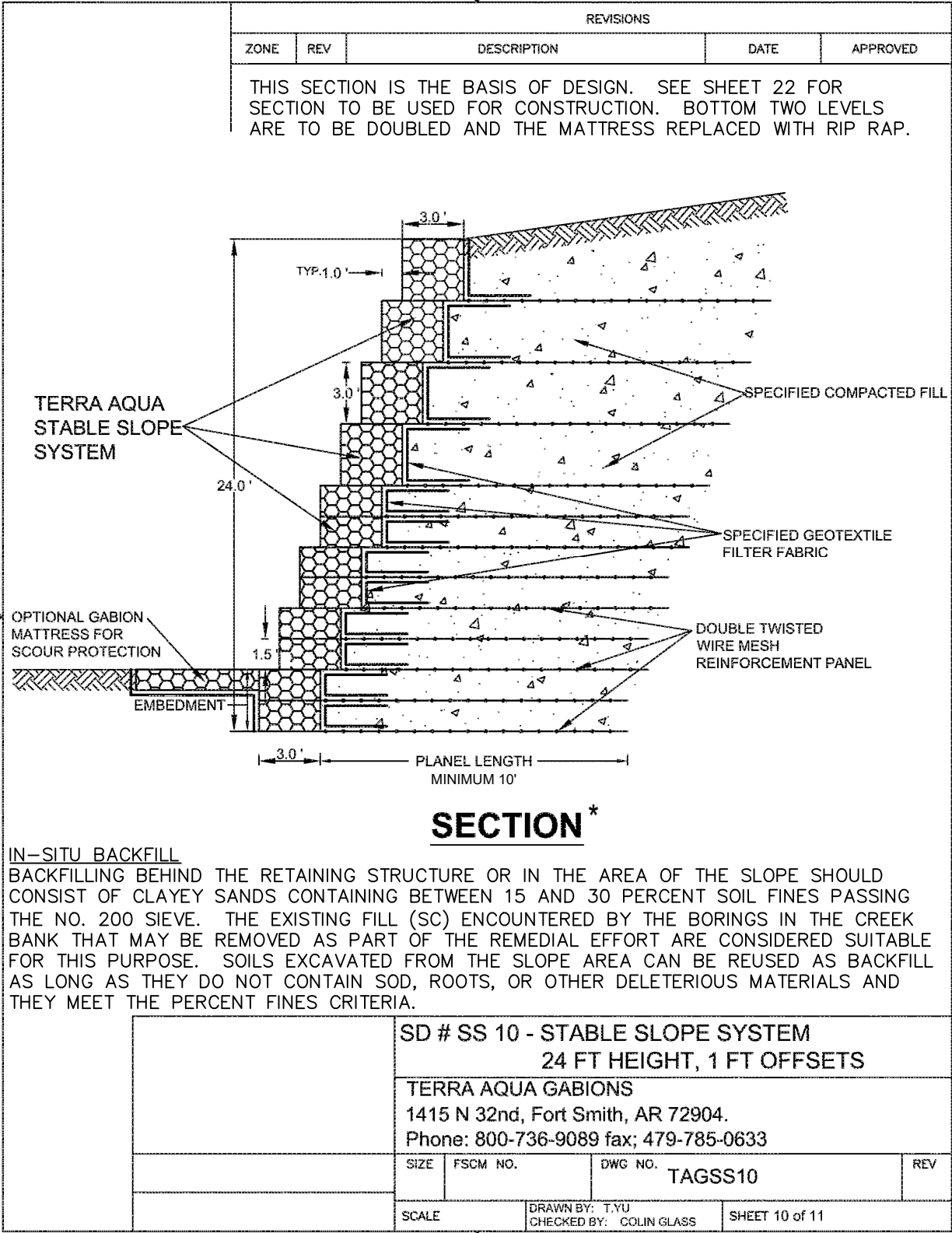
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SITE LAYOUT PLAN	
LITTLE HATCHET CREEK BANK STABILIZATION GAINESVILLE, ALACHUA COUNTY, FLORIDA	SHEET NUMBER 18 OF 30



TYPICAL SECTION VARIATION:
THE DESIGN REQUIRES LEVEL 1 & LEVEL 2 TO BE 6’ WIDE, IN LIEU OF THE 3’ SHOWN.

GABION WALL STRUCTURAL DESIGN:
ENGINEER HAS UTILIZED AN ON-LINE MANUFACTURER CALCULATOR FOR THE DESIGN. THE CONTRACTOR SHALL AT THEIR EXPENSE SUBMIT THEIR OWN DESIGN CALCULATIONS SIGNED & SUBMITTED BY A LICENSED STRUCTURAL OR GEOTECHNICAL FLORIDA ENGINEER AS PART OF THE SHOP DRAWING APPROVAL PROCESS.

GABION SELECTION OPTION:

NOTE: ALL GABIONS SHALL BE PVC COATED REGARDLESS OF CHOICE: INSTALLATION SHALL MEET ASTM D-7014

- 1) MACCAFERRI – JUMBO GABION – PROTECTIVE POLYMERIC
- 2) ELITE EROSION SUPPLY – GABION (GALVANIZED & PVC)
- 3) TERRA AQUA, INC. – GABION RETAINING WALL

GABION BASKET STONE FILL:
4 INCH TO 8 INCH, D50 6” – EQUALLY GRADED, ANGULAR IN SHAPE, NOT LESS THAN 4”, NOT GREATER THAN 8”.

BACKFILL MATERIAL:
BACKFILL MATERIAL BEHIND THE RETAINING WALL SHALL CONSIST OF GRAVEL OR SAND (GP, GW, GM, GC, SW, SP). BACKFILL SHALL BE PLACED IN LIFTS NOT EXCEEDING 9” AND COMPACTED TO 95% OF THE MAXIMUM DENSITY, AS PER THE MODIFIED PROCTOR COMPACTION TEST (ASTM D1557/AASHTO T180).

REINFORCEMENT PANEL:
MIRAGRID 2XT

BEDDING MATERIAL:
1’ THICK #57 STONE (FDOT)

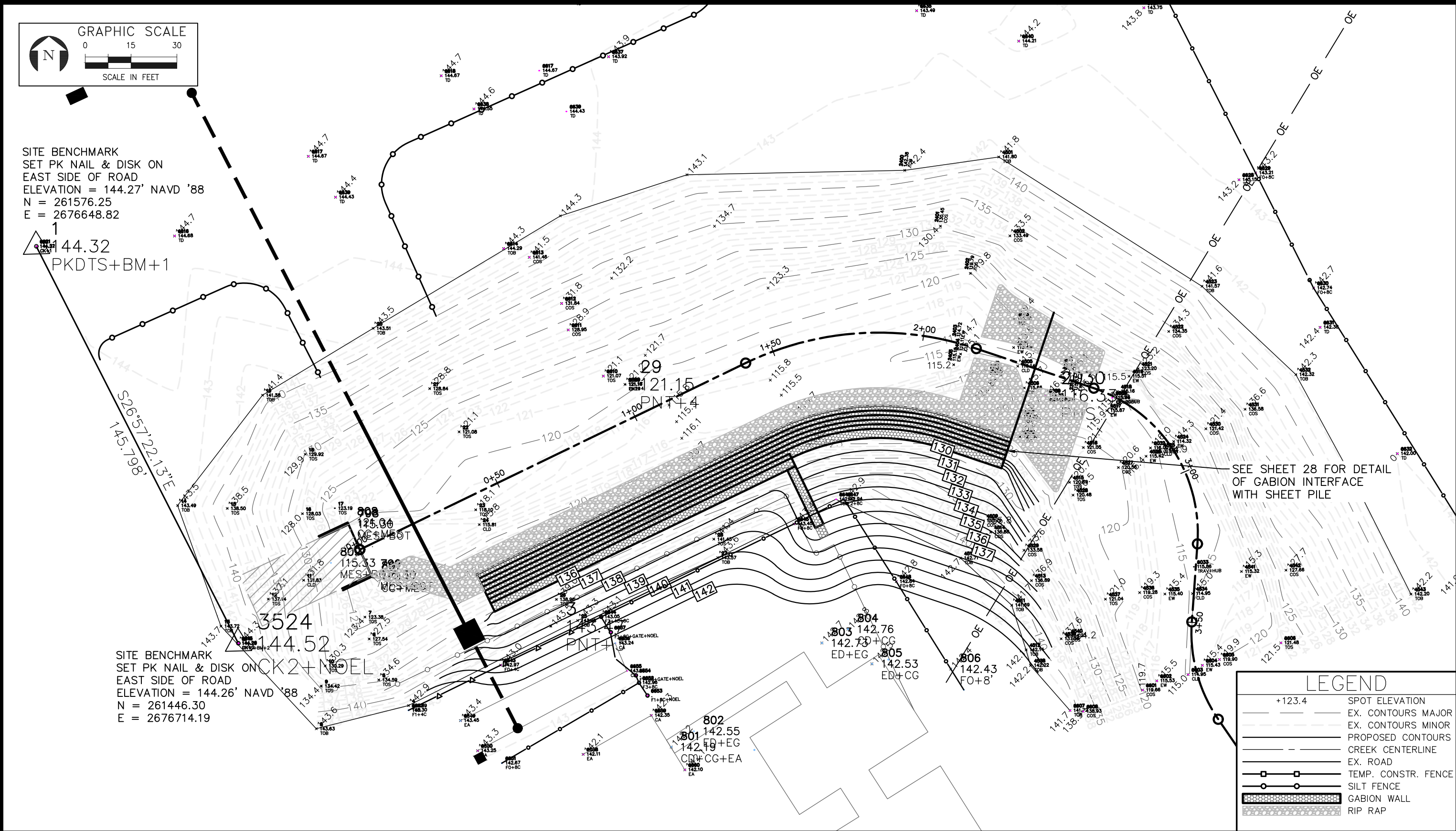
PANEL LENGTH:
10’ MINIMUM

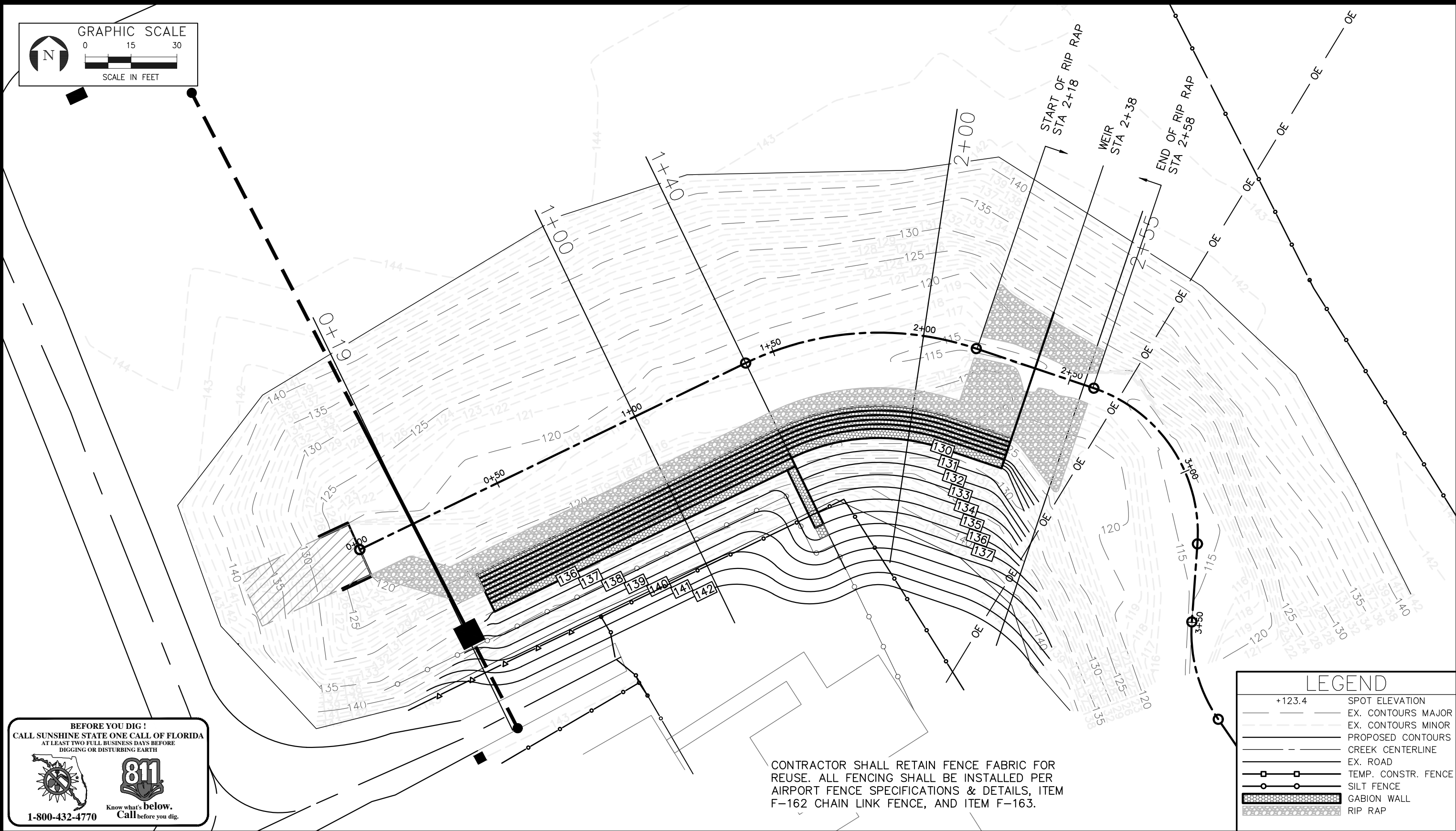
GEOTEXTILE FILTER FABRIC:
MIRAFI RS380I

RIP RAP NOTE:
RIP RAP SHALL MEET FDOT SPECS FOR 530-2.1.3.1 RUBBLE (BANK AND SHORE PROTECTION). PROVIDE SOUND, HARD, DURABLE RUBBLE, FREE OF OPEN OR INCIPIENT CRACKS, SOFT SEAMS OR OTHER STRUCTURAL DEFECTS, CONSISTING OF BROKEN STONE WITH A BULK SPECIFIC DENSITY OF AT LEAST 2.20. ENSURE THAT STONES ARE ROUGH AND ANGULAR. FOR THIS APPLICATION, USE BROKEN STONE MEETING THE FOLLOWING GRADATION AND THICKNESS REQUIREMENTS

WEIGHT MAXIMUM POUNDS	WEIGHT 50% POUNDS	WEIGHT MINIMUM POUNDS	MINIMUM BLANKET THICKNESS IN FEET
670	290	60	2.5000

ENSURE THAT AT LEAST 97% OF THE MATERIAL BY WEIGHT IS SMALLER THAN WEIGHT MAXIMUM POUNDS.
ENSURE THAT AT LEAST 50% OF THE MATERIAL BY WEIGHT IS GREATER THAN WEIGHT 50% POUNDS.
ENSURE THAT AT LEAST 85% OF THE MATERIAL BY WEIGHT IS GREATER THAN WEIGHT MINIMUM POUNDS.

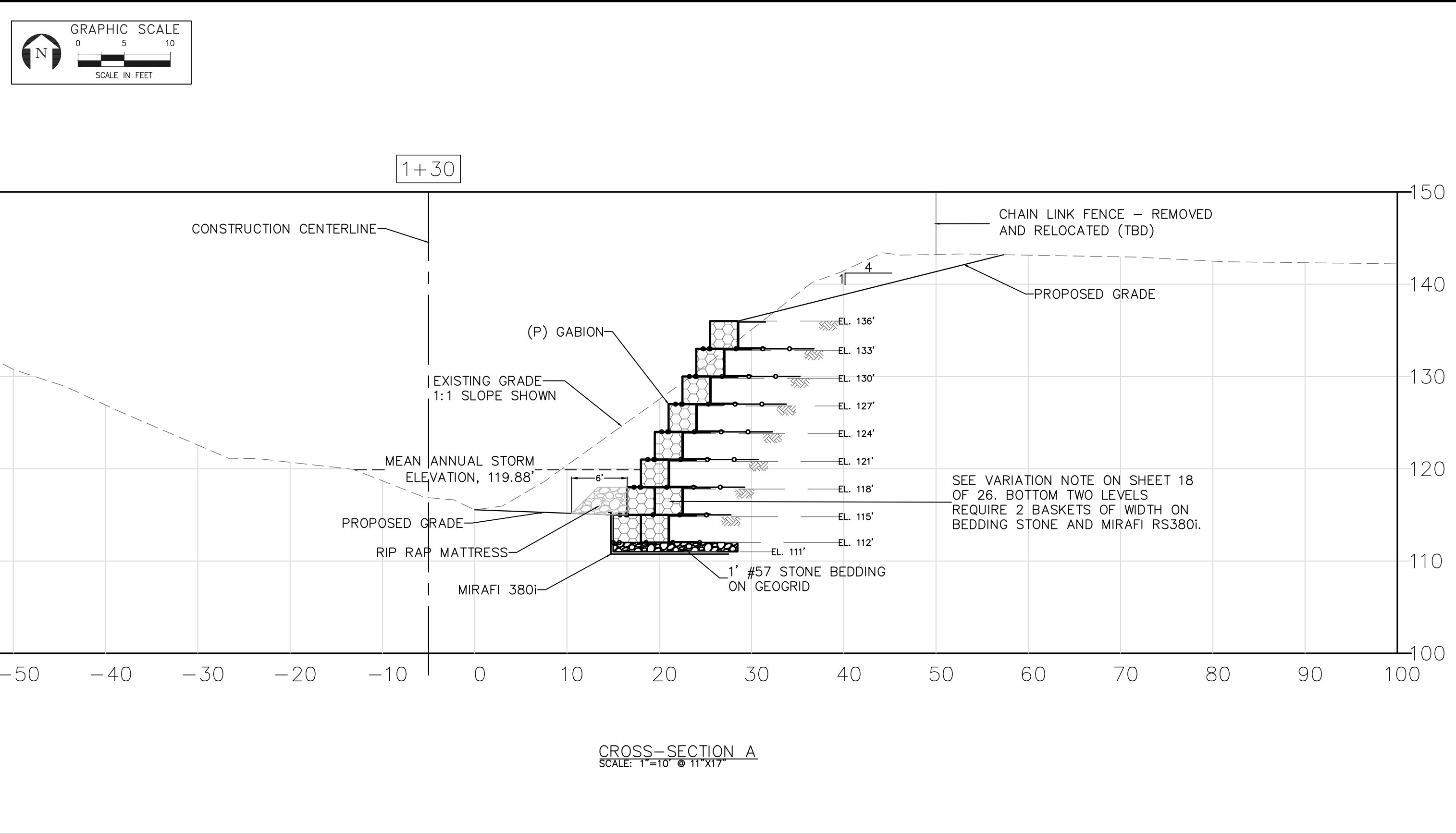


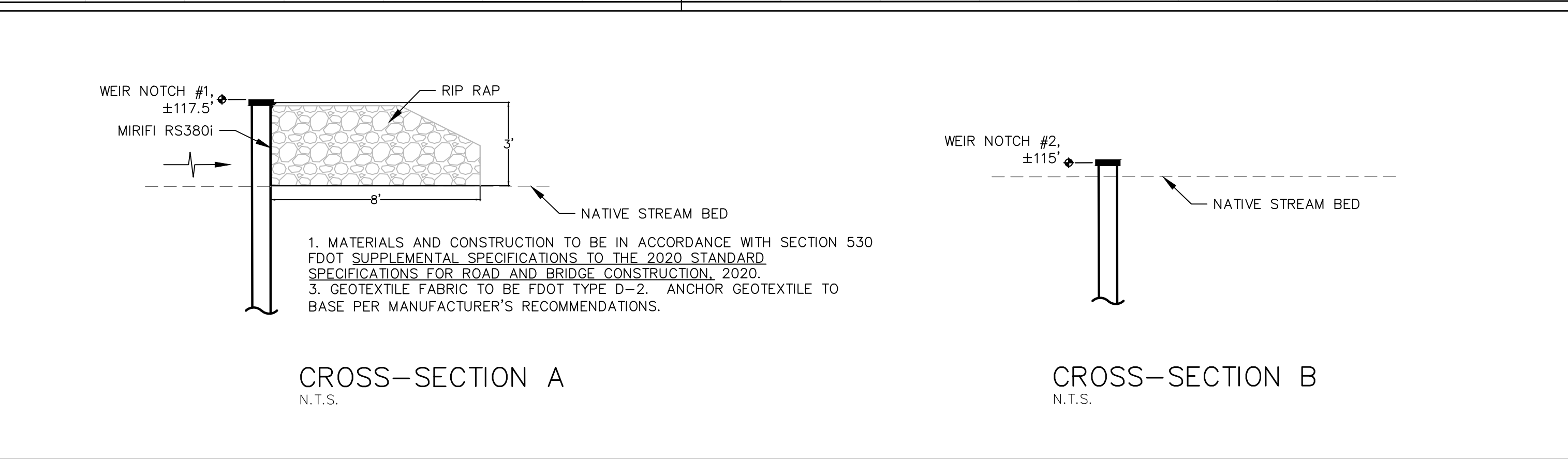
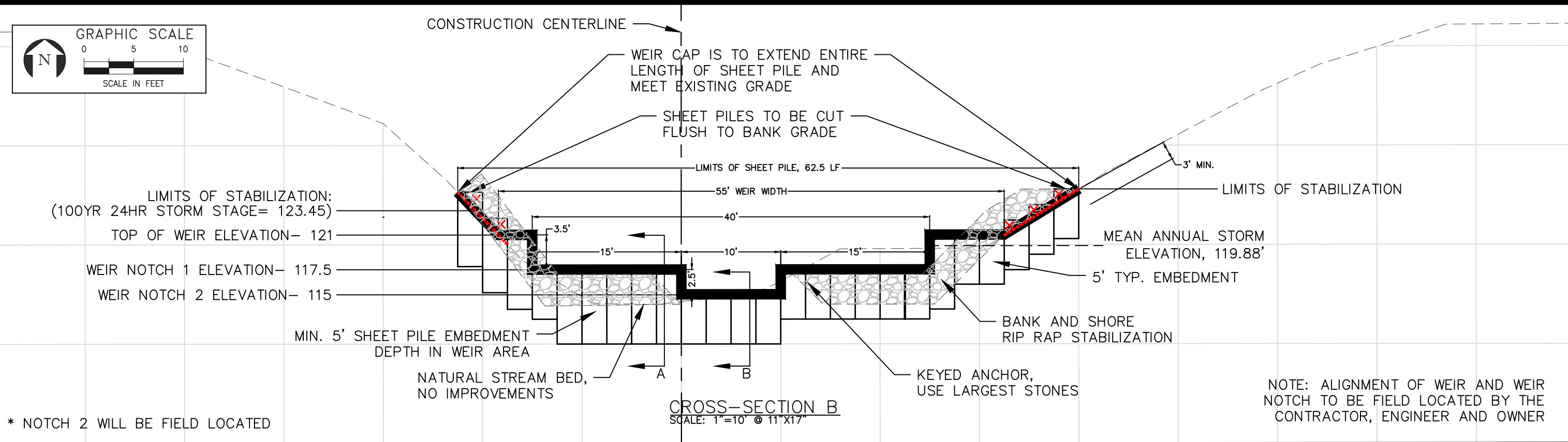


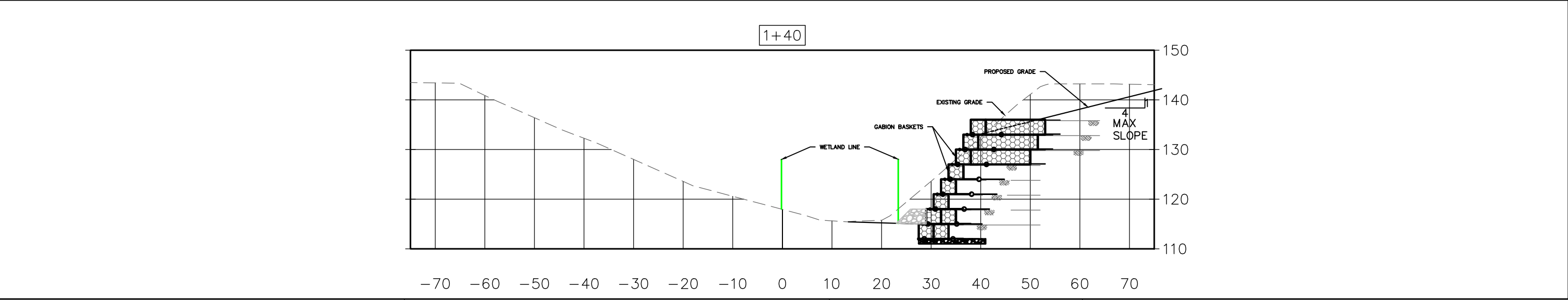
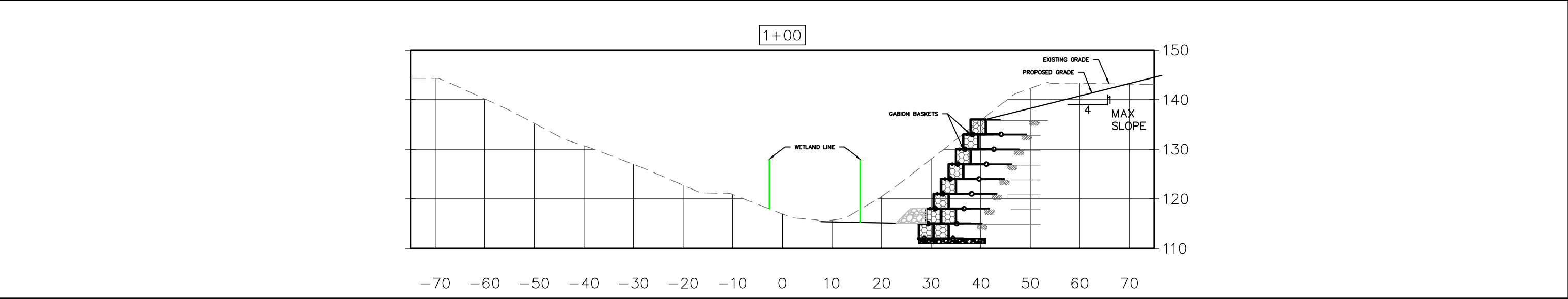
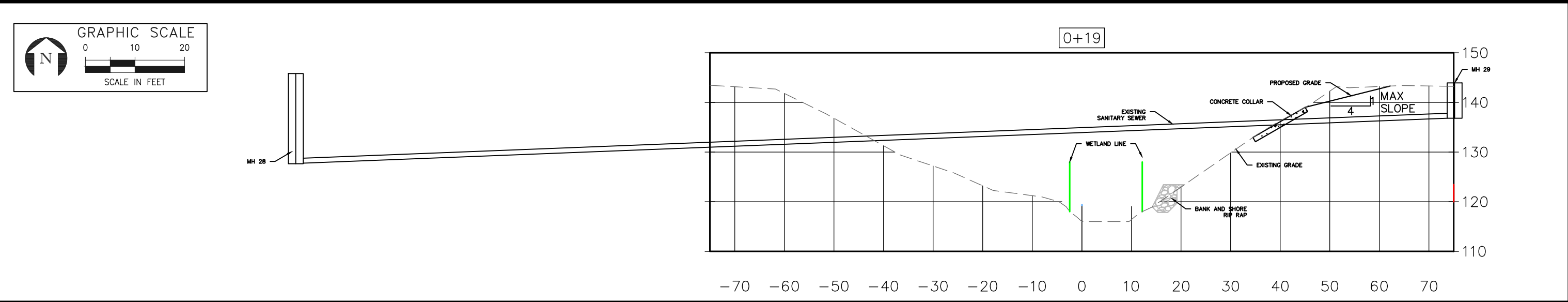
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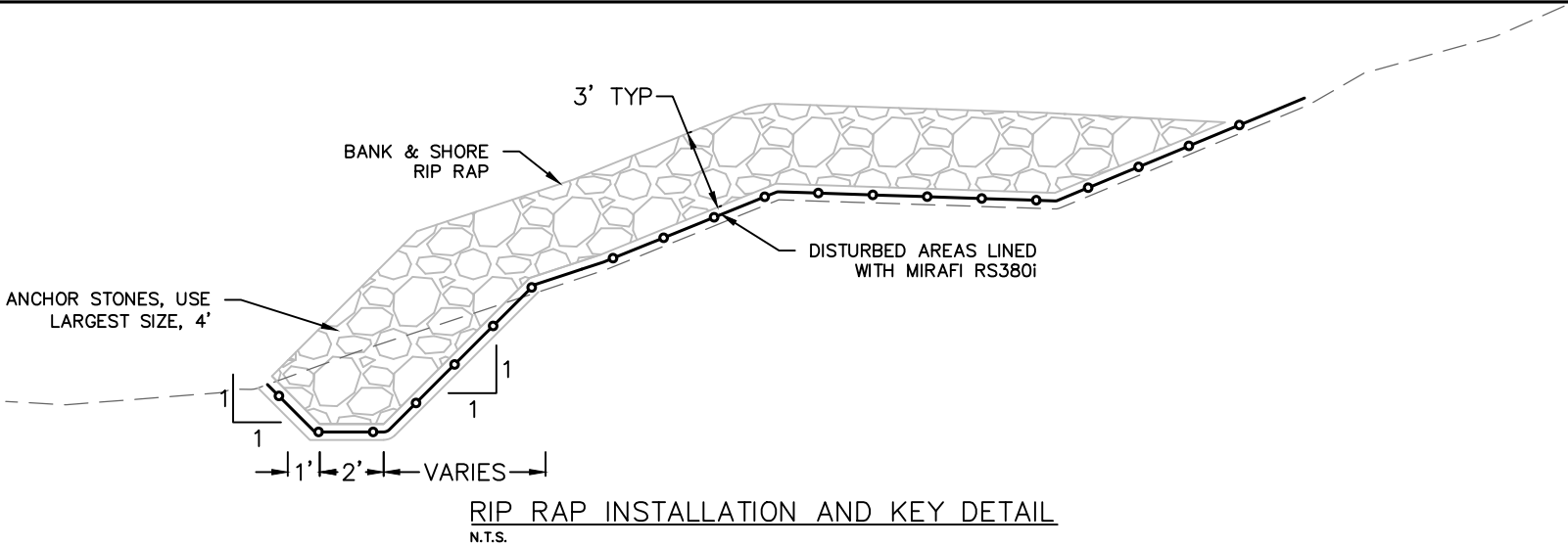
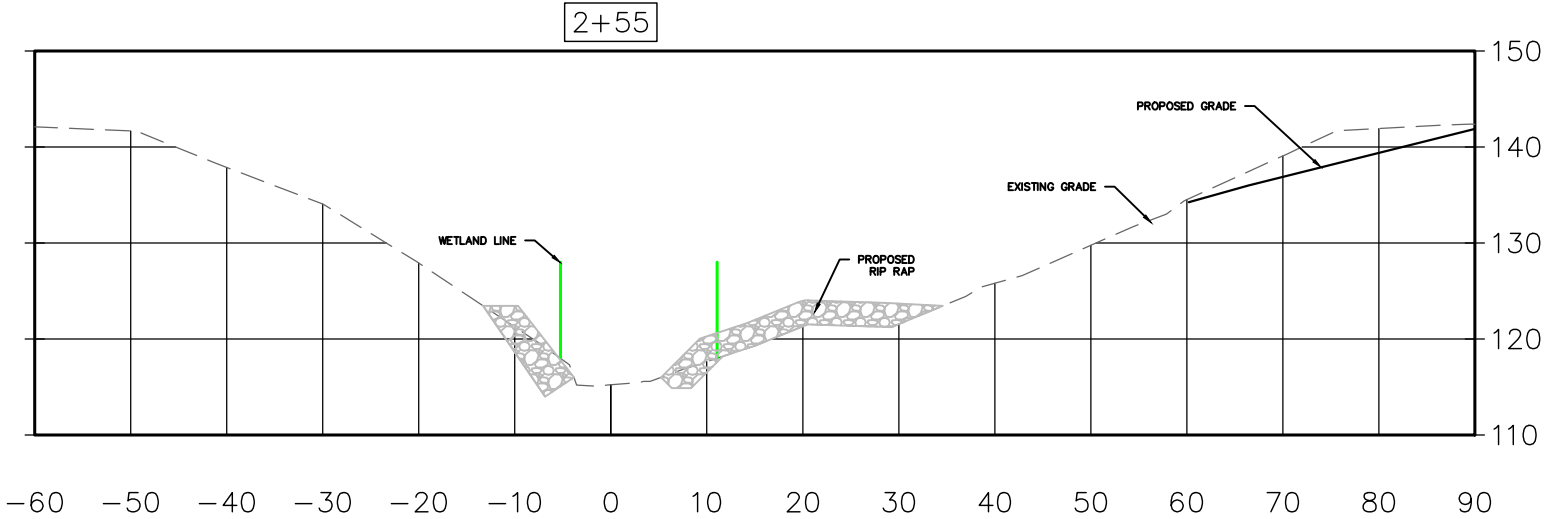
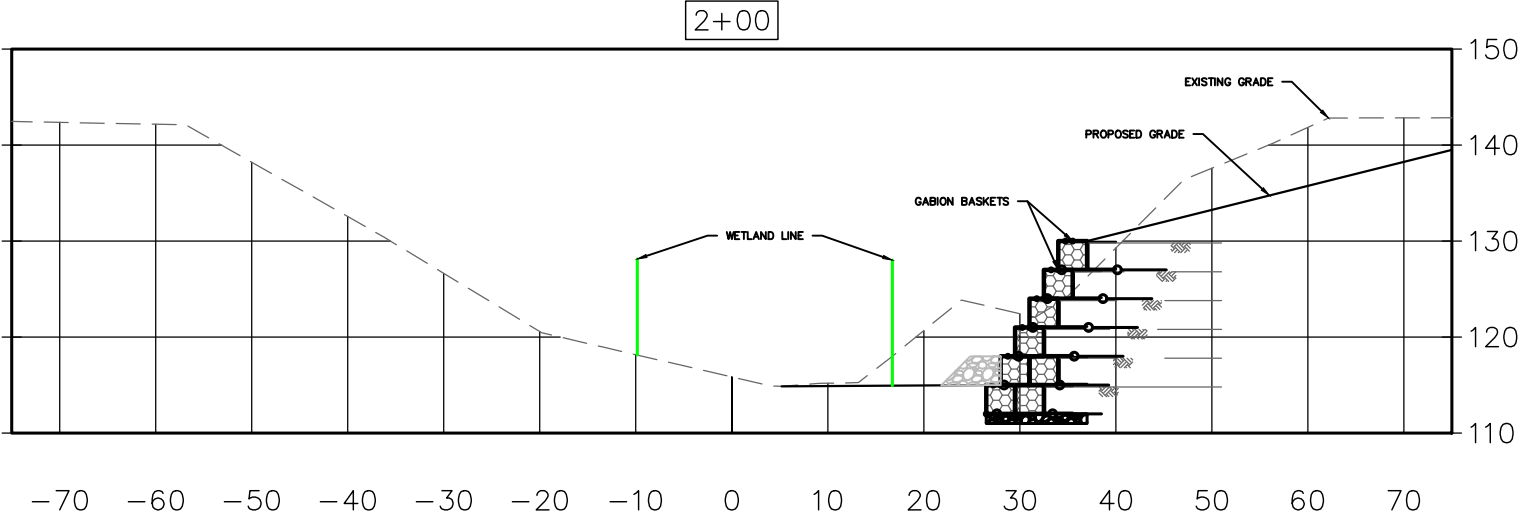
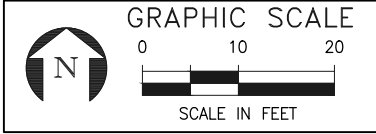
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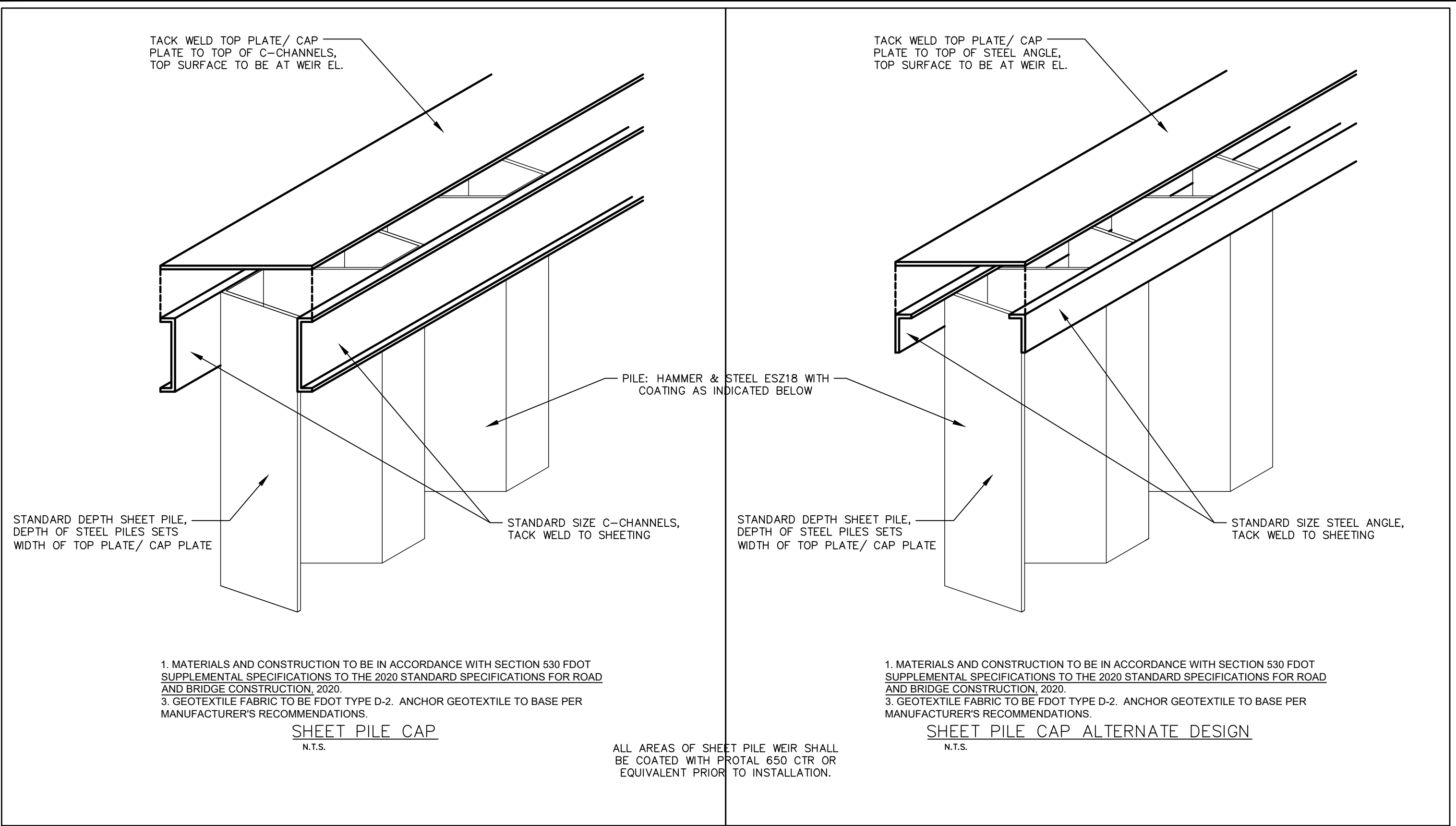
FENCING AND CROSS SECTION LOCATIONS	
LITTLE HATCHET CREEK BANK STABILIZATION GAINESVILLE, ALACHUA COUNTY, FLORIDA	SHEET NUMBER 21 OF 30



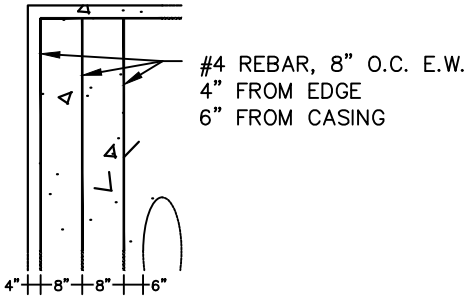




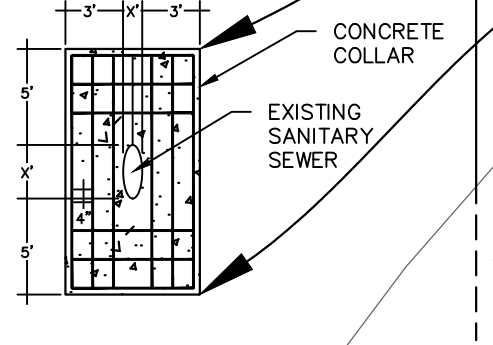




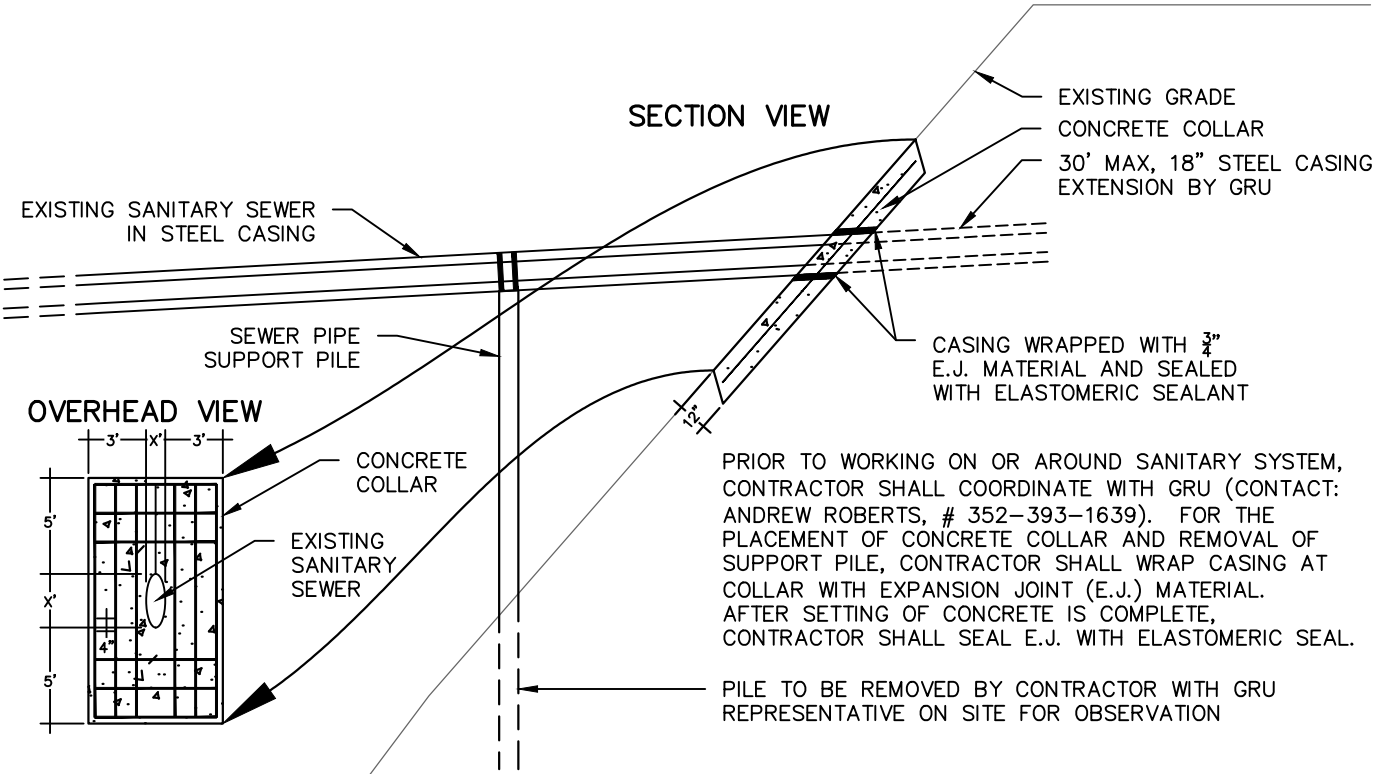
COLLAR REBAR PLACEMENT



OVERHEAD VIEW



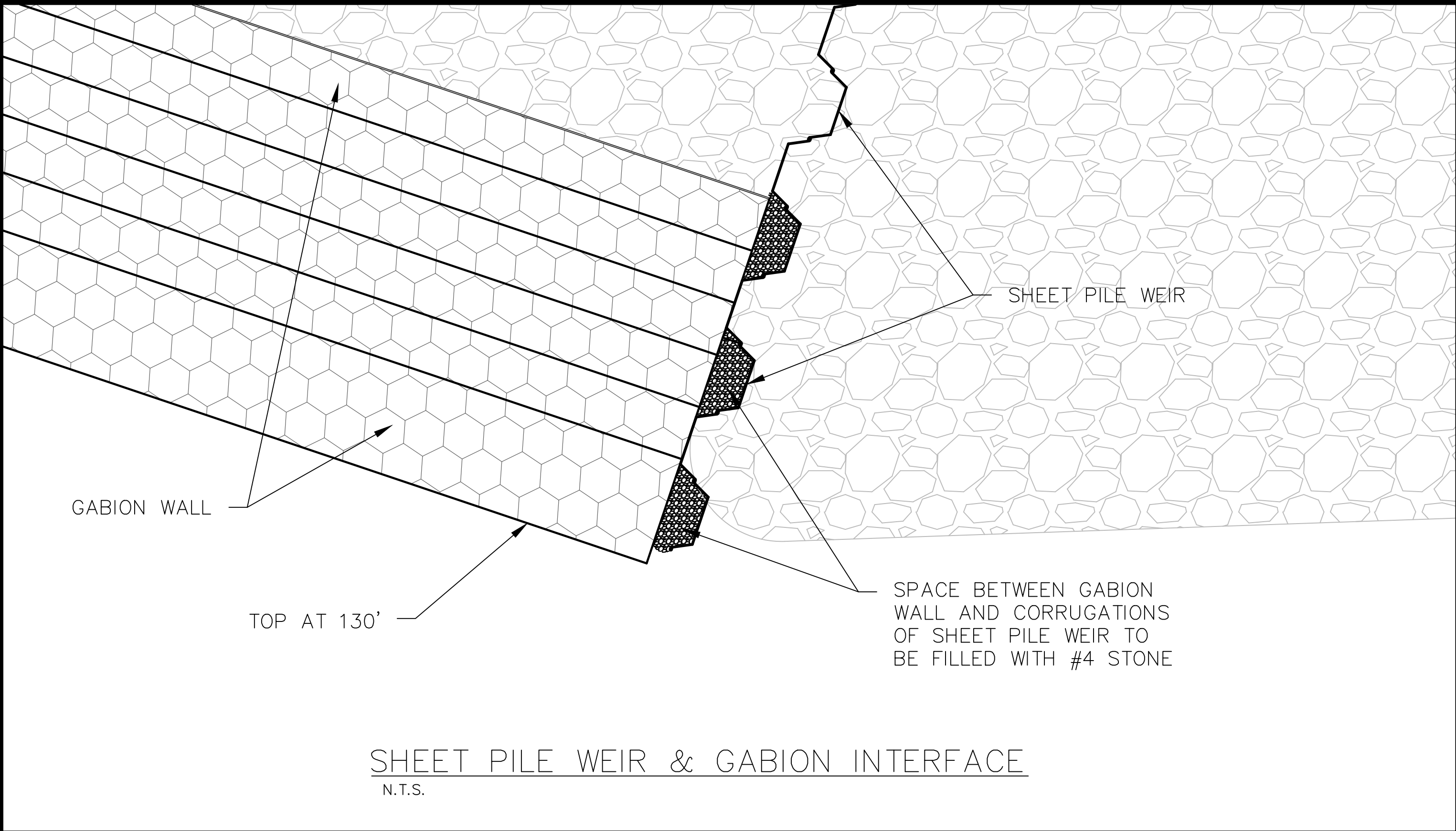
SECTION VIEW



CONCRETE COLLAR DETAIL
N.T.S.

FDOT GEOTEXTILE STANDARD CRITERIA

TYPE (1)	APPLICATION DESCRIPTION	INDEX NO.	PERMITTIVITY SEC ⁻¹	AOS SIEVE#	MIN. GRAB TENSILE STRENGTH lb.	MIN. SEWN STRENGTH lb./in.	MIN. PUNCTURE lb.	MIN. TRAPEZOIDAL TEAR lb.	MIN. WIDE WIDTH TENSILE STRENGTH lb./in.	UV RESISTANCE (Min. Allowed)		COMMENTS
										%	Time (Hrs.)	
D-2	Revetment (Standard)		% SOIL PASSING No. 200 SIEVE <15% 0.7 15% to 50% 0.2 >50% 0.1	% SOIL PASSING No. 200 SIEVE <15% 40 15% to 50% 60 >50% 70*	Woven Monofilament 248 Other Geotextiles: Elongation <50% 315 ≥50% 203	Woven Monofilament 5.7 Other Geotextiles: Elongation <50% 6.9 ≥50% 4.7	Woven Monofilament 90 Other Geotextiles: Elongation <50% 113 ≥50% 79	Woven Monofilament 57 Other Geotextiles: Elongation <50% 113 ≥50% 79		50	500	Woven Geotextiles only. No Slit Film Geotextiles allowed. Provide 12" thick bedding stone layer for revetment (standard). The bedding layer may be omitted if a D-1 fabric is used with revetment (standard). ***Bedding Stone not required for Articulating Block. *For cohesive soils with a plasticity index >7, maximum average role value for AOS is number 50 sieve.
	Articulating Block****											
	Gabions	281										
	Rock, Rubble, Broken Concrete											



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	FILE: PERMIT BASE	DESIGNED BY: DMW	PROJECT NO. 200310	NO. 01	DATE	REVISION	LITTLE HATCHET CREEK BANK STABILIZATION GAINESVILLE, ALACHUA COUNTY, FLORIDA	SHEET NUMBER 28 OF 30
	DATE: 04/2021	DRAWN BY: JAK	CHECKED BY: DMW	02				
				03				

CREEK BANK RESTORATION NOTES – ELEVATIONS TOE TO 124'

LIVE STAKING:

LIVE STAKING IS A SIMPLE TECHNIQUE THAT INSTALLS A DORMANT CUTTING (SEE DORMANT CUTTINGS UNDER PLANT CARE AND PREPARATION SECTION) DIRECTLY INTO THE GROUND. THIS TECHNIQUE IS OFTEN UTILIZED WHERE SINGLE STEM PLANTINGS WILL PROVIDE ADEQUATE PLANT COVER, SLOPE STABILITY AND FISH HABITAT. LIVE STAKING SHOULD BE COMBINED WITH OTHER REVEGETATION TECHNIQUES; THESE MAY INCLUDE ANCHORING BUNDLES, BRUSH MATS AND EROSION CONTROL FABRIC.

COLLECTION, STORAGE AND PLANTING INFORMATION ARE DESCRIBED UNDER DORMANT CUTTINGS.

PREPARE SEVERAL LIVE STAKES FROM ONE DORMANT CUTTING. CUT STAKES 10 TO 18 INCHES LONG, 1/2 TO 2 INCHES IN DIAMETER (SLIGHTLY LARGER DIAMETER CUTTINGS WILL ALSO WORK). DISCARD FLOWER BUDS (“PUSSY WILLOWS”). FLOWER BUDS TYPICALLY OCCUR AT THE TOP 2/3 OF A BRANCH THAT WAS PRODUCED DURING THE PAST GROWING SEASON. AT LEAST ONE OR TWO LEAF BUDS THAT ARE SMALLER THAN FLOWER BUDS MUST BE PRESENT NEAR THE TOP OF EACH LIVE STAKE.

SPECIES, USE CAROLINA WILLOW, COASTALPLAIN WILLOW (SALICACEAE)

SELECT PLANTING SITES CAREFULLY SINCE LIVE STAKES REQUIRE MOIST SOILS. THE BOTTOM 6 INCHES NEEDS TO BE IN PERMANENTLY MOIST SOILS. IF PLANTED ON DRIER SLOPES, SURVIVABILITY WILL DECREASE. WATERING COULD INCREASE SURVIVAL AND PROMOTE PLANT GROWTH. OCCASIONAL DEEP WATERING IS MORE EFFECTIVE AND ENCOURAGES DEEPER ROOTING THAN FREQUENT LIGHT WATERING. WATER DURING THE FIRST 6 WEEKS AFTER PLANTING IF IN NON-PERMANENTLY MOIST SOIL.

USE REBAR, 3/4 INCH OR LESS IN DIAMETER, TO CREATE A PLANTING HOLE FOR LONGER STAKES, PARTICULARLY WHEN PLANTING IN COMPACT AND GRAVELLY SOILS. A SHOVEL OR HYDRAULIC DRILL MAY ALSO BE USED. TIGHTLY PACK THE SOIL AROUND THE STAKE SO THAT NO AIR POCKETS REMAIN. PLANT STAKES UPRIGHT 1 TO 3 FEET ON CENTER. STAKES SHOULD BE PLANTED AS VERTICALLY AS POSSIBLE, PLACING AT LEAST 3/4 OF THE STAKE BELOW GROUND SO THAT ONLY ONE OR TWO LEAF BUDS ARE LEFT EXPOSED ABOVE THE GROUND. THE INTENT IS TO MAXIMIZE THE SURFACE AREA FOR ROOTING SO A GOOD ROOT SYSTEM CAN DEVELOP AND SUPPORT A HEALTHY SHOOT SYSTEM. IF MORE THAN ONE OR TWO BUDS, 1/4 OF THE STAKE, OR 4 INCHES OF THE LIVE STAKE IS EXTENDING ABOVE THE SOIL SURFACE, TRIM THE STAKE.

WATER TO HELP REMOVE AIR POCKETS AND INCREASE CONTACT BETWEEN THE SOIL AND SURFACE OF THE LIVE STAKE. MOIST SOIL IS NEEDED DURING THE PERIOD THE LIVE STAKE IS ROOTING AND BECOMING ESTABLISHED, AT LEAST 4 TO 6 WEEKS AFTER PLANTING. TOPSOIL IS NOT REQUIRED. SURVIVAL RATES FOR DRIER SITES MAY BE INCREASED IF LARGER CUTTINGS ARE USED ALONG WITH INCREASED WATERING.

TREES

TREE PLANTING NOTES (CITY OF GAINESVILLE?)

INSTALL BALD CYPRESS (TAXODIUM DISTICHUM) AS SHOWN ON PLANS AND PER CITY OF GAINESVILLE DETAILS FOR TREE PLANTING AND WATERING.

PLANTS

PLANTING SCHEDULE:

INSTALL 1 GAL SPIKERUSH (ELEOCHARIS INTERSTINCTA) AT 2 FOOT ON-CENTER IN A ZIG ZAG PATTERN

CREEK BANK RESTORATION NOTES – ELEVATIONS 124' TO 142'

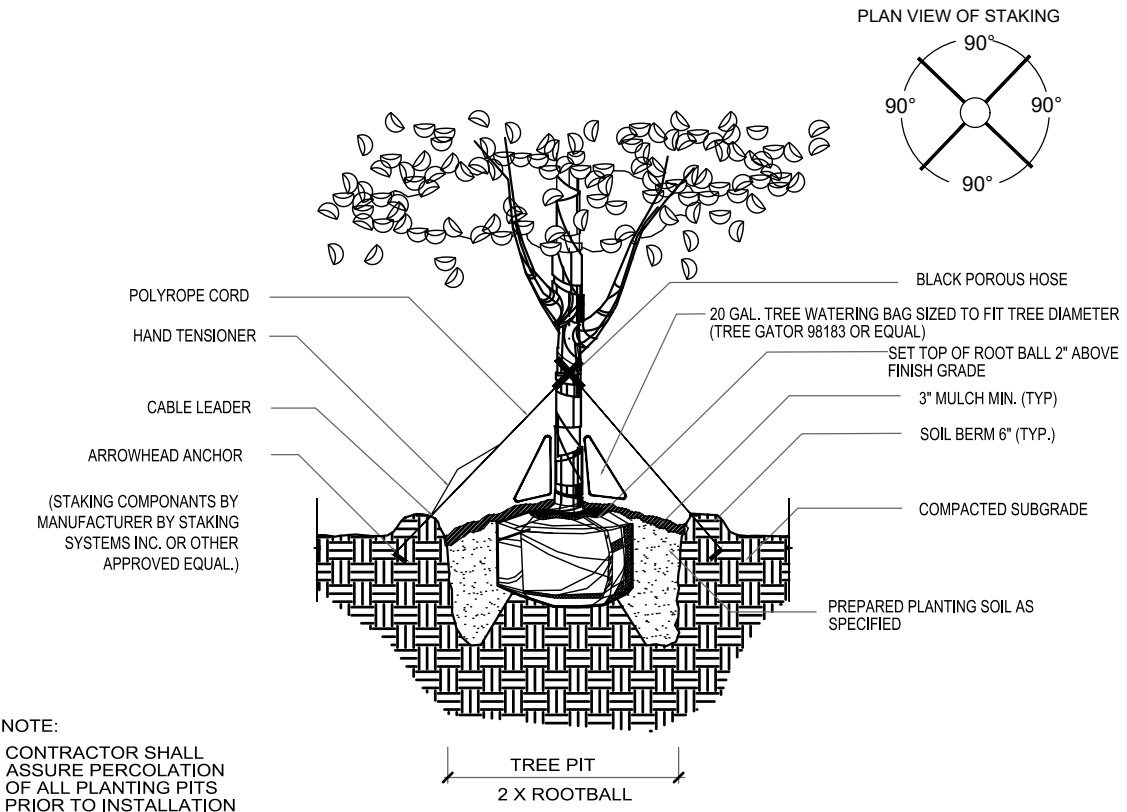
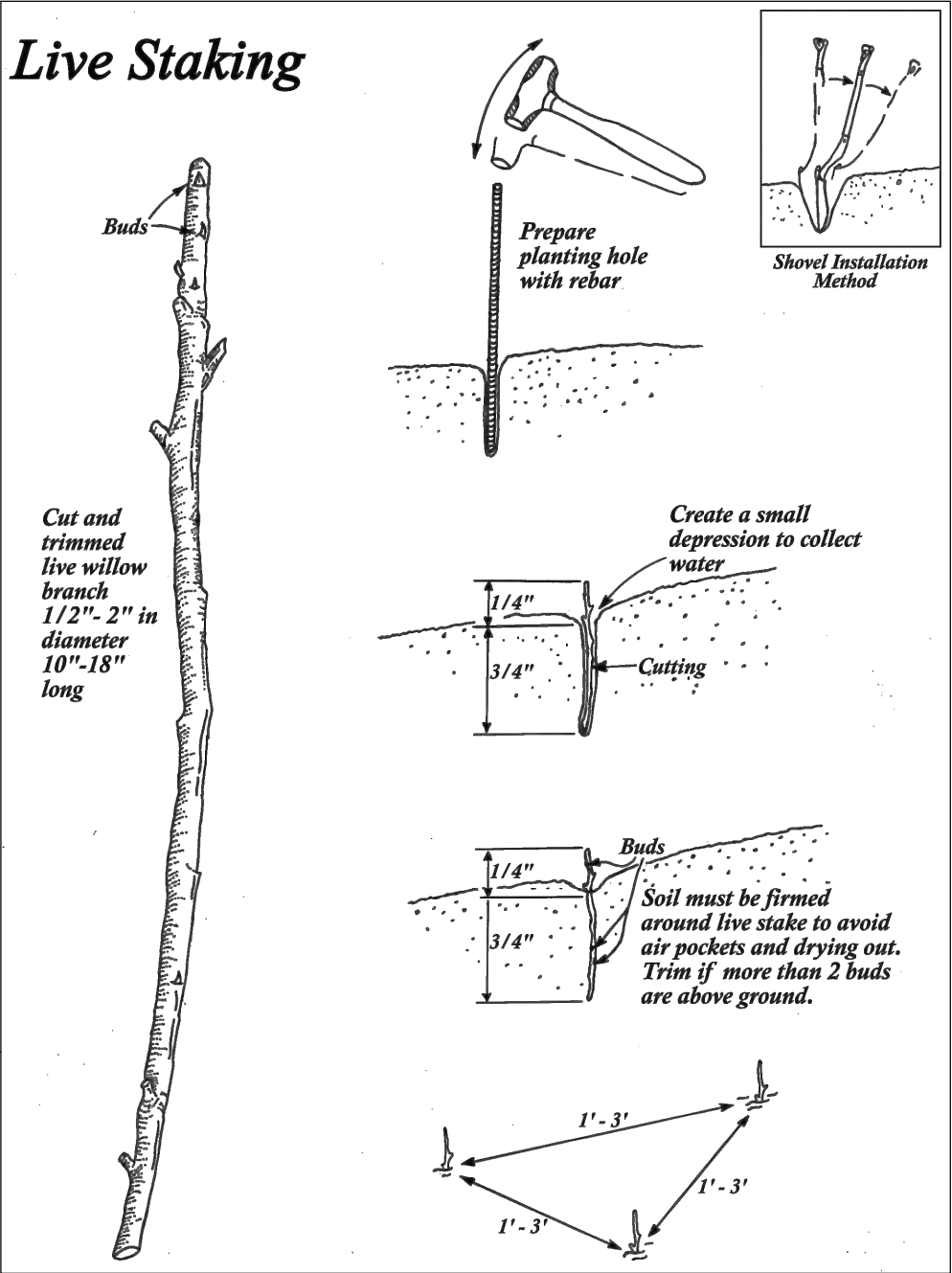
TREE PLANTING NOTES (CITY OF GAINESVILLE?)

INSTALL RED MAPLE (ACER RUBRUM) AS SHOWN ON PLANS AND PER CITY OF GAINESVILLE DETAILS FOR TREE PLANTING AND WATERING.

PLANT SCHEDULE:

INSTALL 3 GAL FAKAHATCHEE GRASS (TRIPSACUM DACTYLOIDES)) AT 4 FOOT ON-CENTER IN A ZIG ZAG PATTERN AROUND LIVE OAK TREES.

ALL PLANTING IS TO CONFORM WITH CITY OF GAINESVILLE ORDINANCES CONTAINED IN ARTICLE VIII - PROTECTION OF RESOURCES, DIVISION 2. - TREES AND LANDSCAPE.



CONTRACTOR SHALL IRRIGATE NEWLY PLANTED TREES EVERY DAY FOR A MONTH; EVERY OTHER DAY FOR THREE MONTHS; AND THEN WEEKLY UNTIL ESTABLISHED. APPLY 2-3 GALLONS OF WATER PER INCH OF TRUNK DIAMETER OF THE TREE (MEASURED AT ONE FOOT ABOVE THE SOIL) TO THE ROOT BALL AT EACH WATERING. TREES THAT DO NOT ROOT OR ESTABLISH SHALL BE REPLACED AT CONTRACTOR'S EXPENSE

TREE PLANTING DETAIL (TYP.)

N.T.S.

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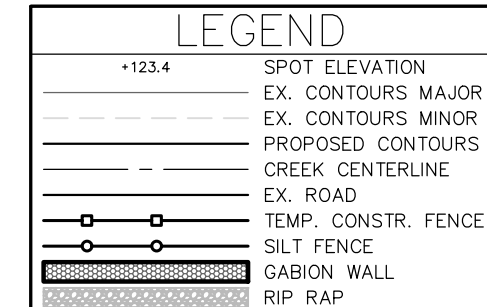
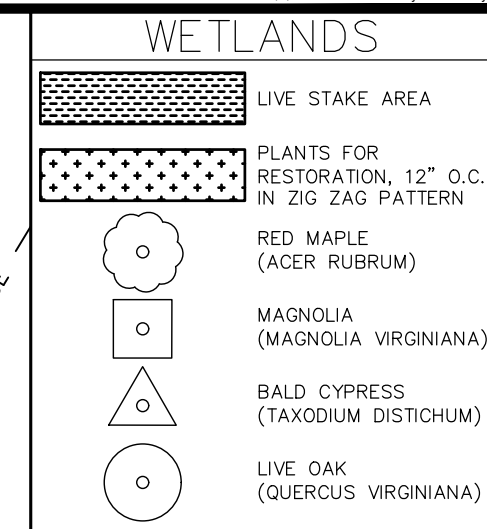
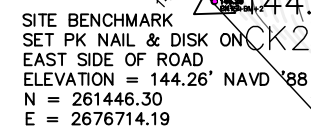
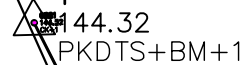
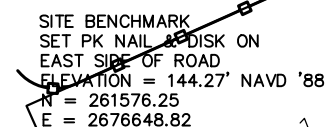
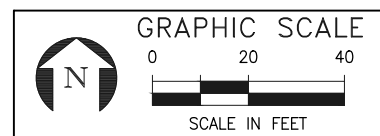
 

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STREAM BANK RESTORATION NOTES	
LITTLE HATCHET CREEK BANK STABILIZATION GAINESVILLE, ALACHUA COUNTY, FLORIDA	SHEET NUMBER 29 OF 30



City of Gainesville

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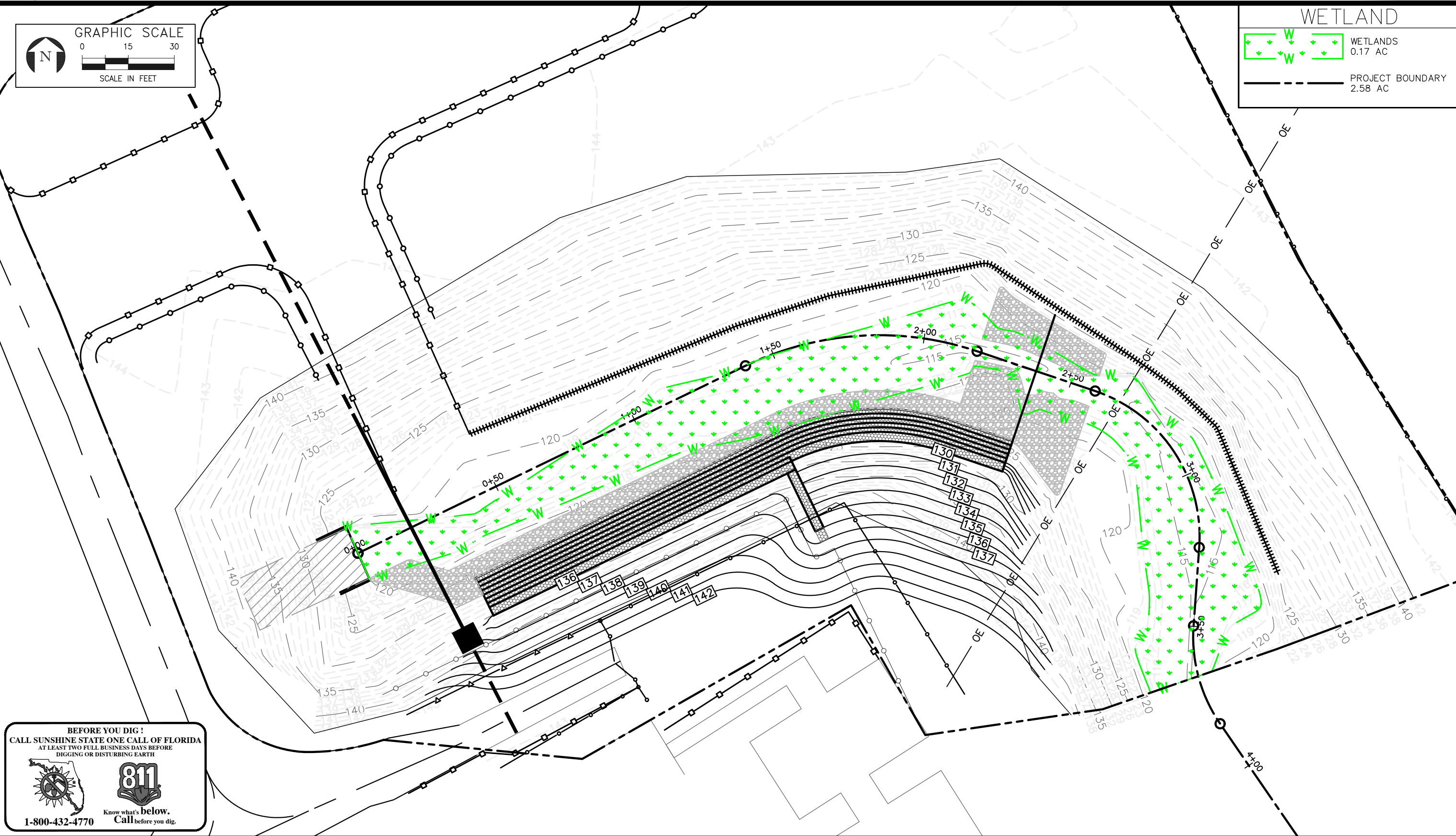
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STREAM BANK RESTORATION

LITTLE HATCHET CREEK BANK STABILIZATION
GAINESVILLE, ALACHUA COUNTY, FLORIDA

SHEET NUMBER
30 OF 30



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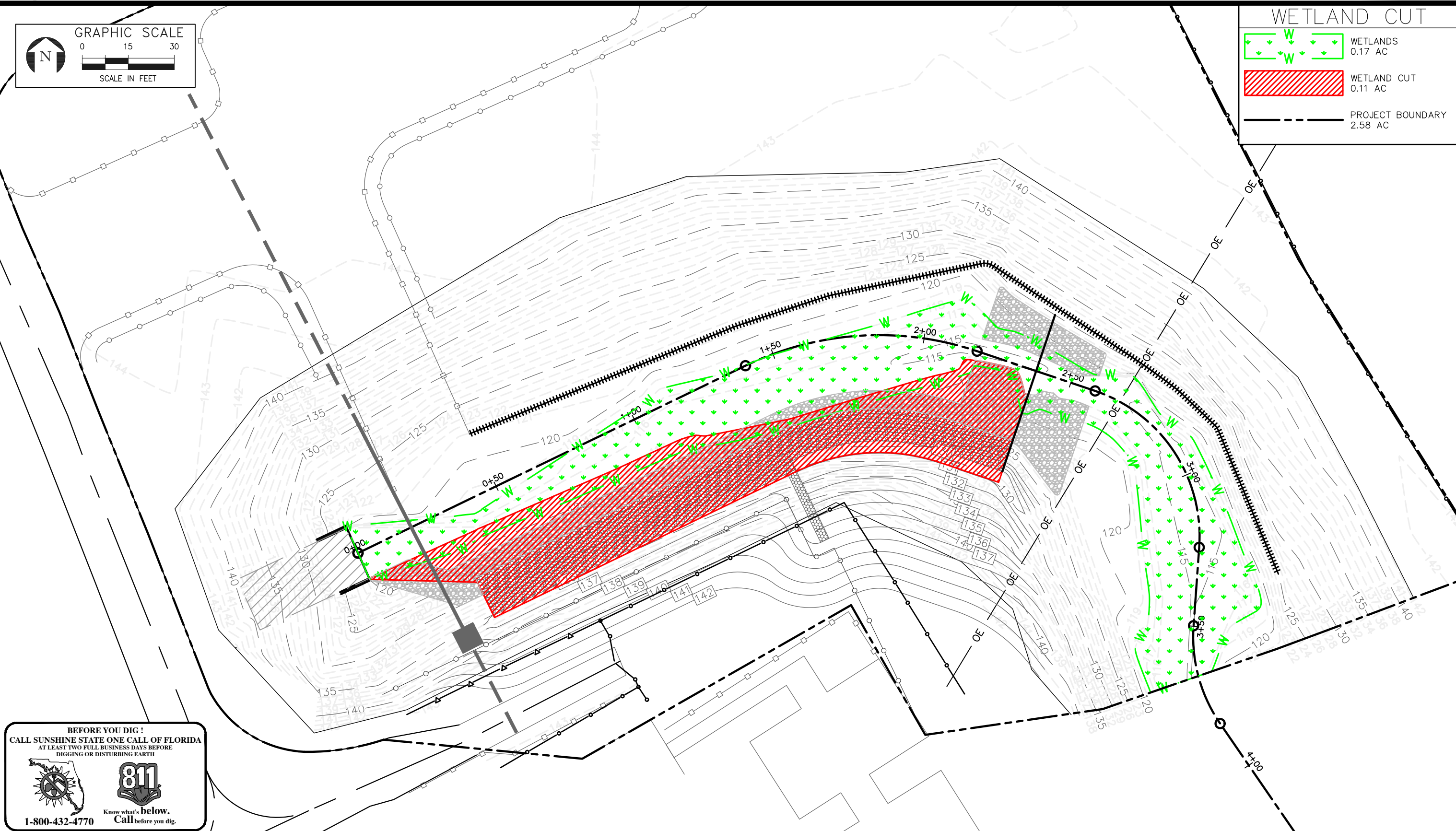
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OVERALL WETLAND AREA

LITTLE HATCHET CREEK BANK STABILIZATION
GAINESVILLE, ALACHUA COUNTY, FLORIDA

SHEET NUMBER
1 OF 9



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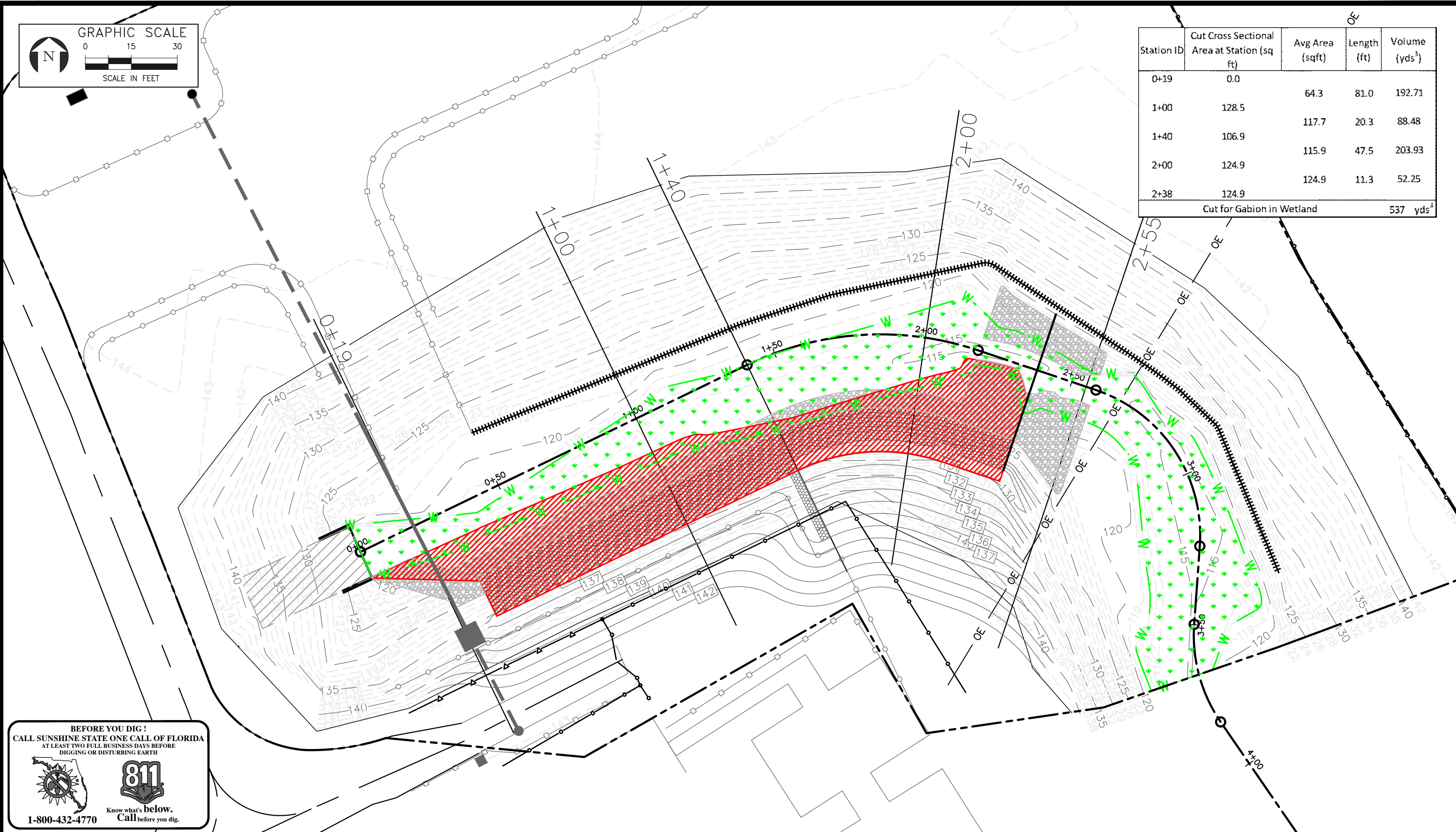
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WETLAND CUT AREA	
LITTLE HATCHET CREEK BANK STABILIZATION GAINESVILLE, ALACHUA COUNTY, FLORIDA	SHEET NUMBER 2 OF 9



Station ID	Cut Cross Sectional Area at Station (sq ft)	Avg Area (sqft)	Length (ft)	Volume (yds ³)
0+19	0.0			
		64.3	81.0	192.71
1+00	128.5			
		117.7	20.3	88.48
1+40	106.9			
		115.9	47.5	203.93
2+00	124.9			
		124.9	11.3	52.25
2+38	124.9			
Cut for Gabion in Wetland				537 yds ³



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WETLAND CUT
VOLUME

LITTLE HATCHET CREEK BANK STABILIZATION
GAINESVILLE, ALACHUA COUNTY, FLORIDA

SHEET NUMBER
3 OF 9



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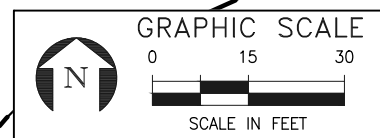
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WETLAND FILL AREA	
LITTLE HATCHET CREEK BANK STABILIZATION GAINESVILLE, ALACHUA COUNTY, FLORIDA	SHEET NUMBER 4 OF 9



Gabion Fill Volume				
Gabion Wall Cross Sectional Area (ft ²)	x	Gabion Length (ft)	=	Volume
83	x	183	=	15169 (ft ³)
			=	562 (yd ³)

Rip Rap Fill Volume				
Rip Rap Area (ft ²)	x	Rip Rap Thickness (ft)	=	Volume
1865	x	2	=	3731 (ft ³)
			=	138 (yd ³)

Total Fill				
Rip Rap Fill	+	Gabion Fill	=	Total Fill
(ft ³)		(ft ³)		(ft ³)
3731	+	15169	=	18899 (ft ³)
			=	700 (yd ³)



City of Gainesville

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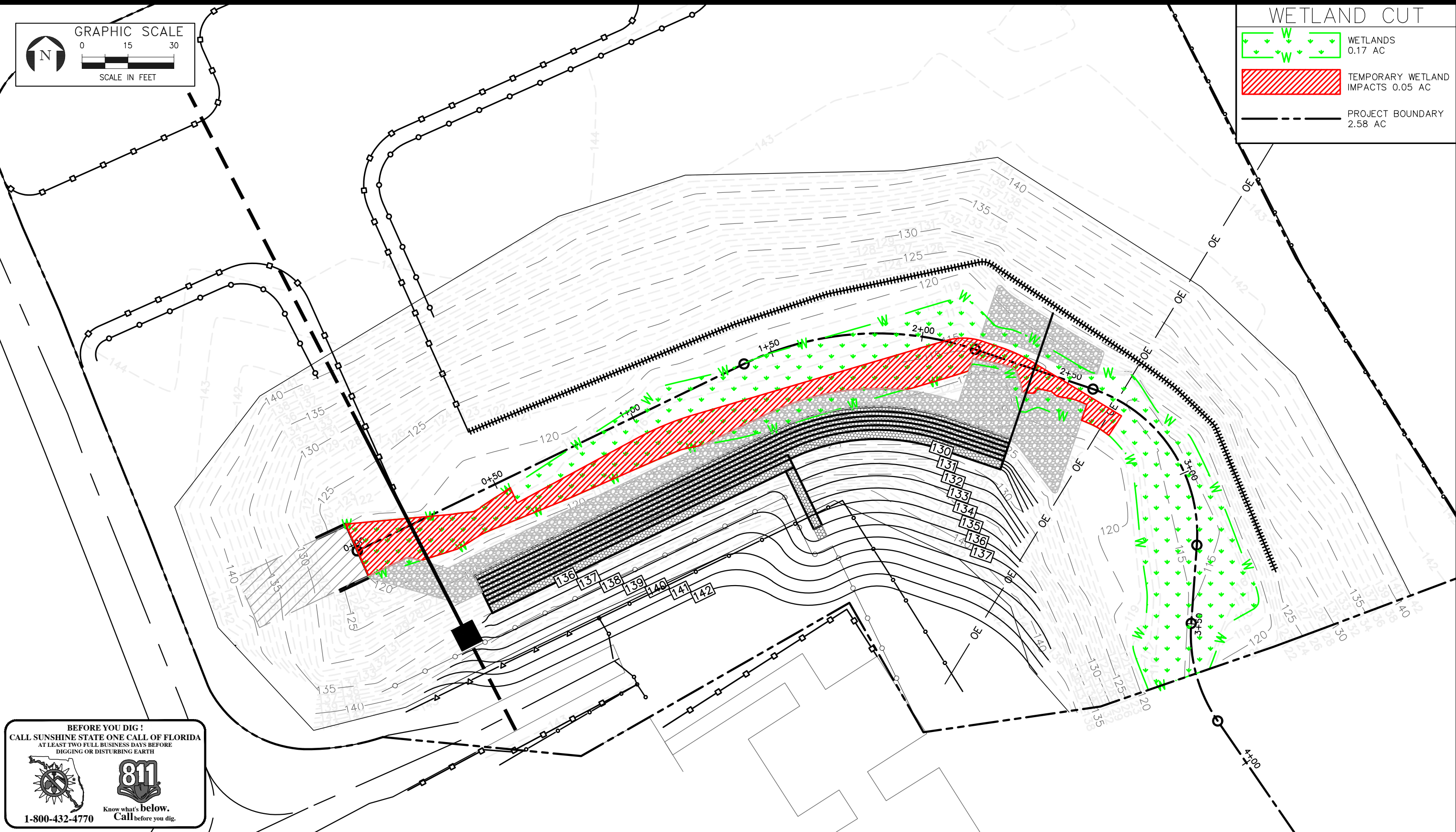
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WETLAND FILL
VOLUME

LITTLE HATCHET CREEK BANK STABILIZATION
GAINESVILLE, ALACHUA COUNTY, FLORIDA

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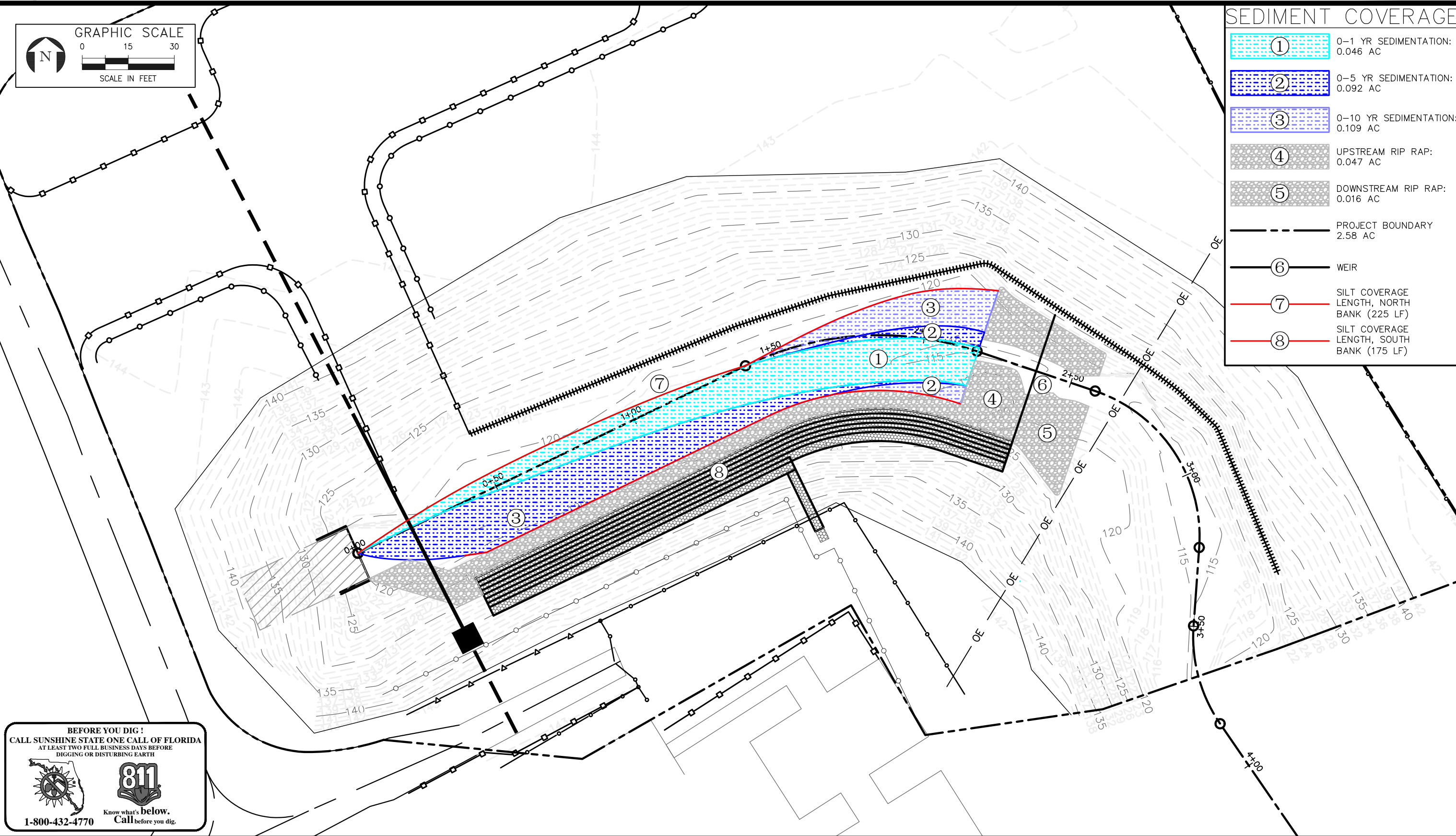
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TEMPORARY WETLAND IMPACTS

LITTLE HATCHET CREEK BANK STABILIZATION
GAINESVILLE, ALACHUA COUNTY, FLORIDA

SHEET NUMBER
6 OF 9



SEDIMENT COVERAGE

- ① 0-1 YR SEDIMENTATION: 0.046 AC
- ② 0-5 YR SEDIMENTATION: 0.092 AC
- ③ 0-10 YR SEDIMENTATION: 0.109 AC
- ④ UPSTREAM RIP RAP: 0.047 AC
- ⑤ DOWNSTREAM RIP RAP: 0.016 AC
- PROJECT BOUNDARY 2.58 AC
- ⑥ WEIR
- ⑦ SILT COVERAGE LENGTH, NORTH BANK (225 LF)
- ⑧ SILT COVERAGE LENGTH, SOUTH BANK (175 LF)

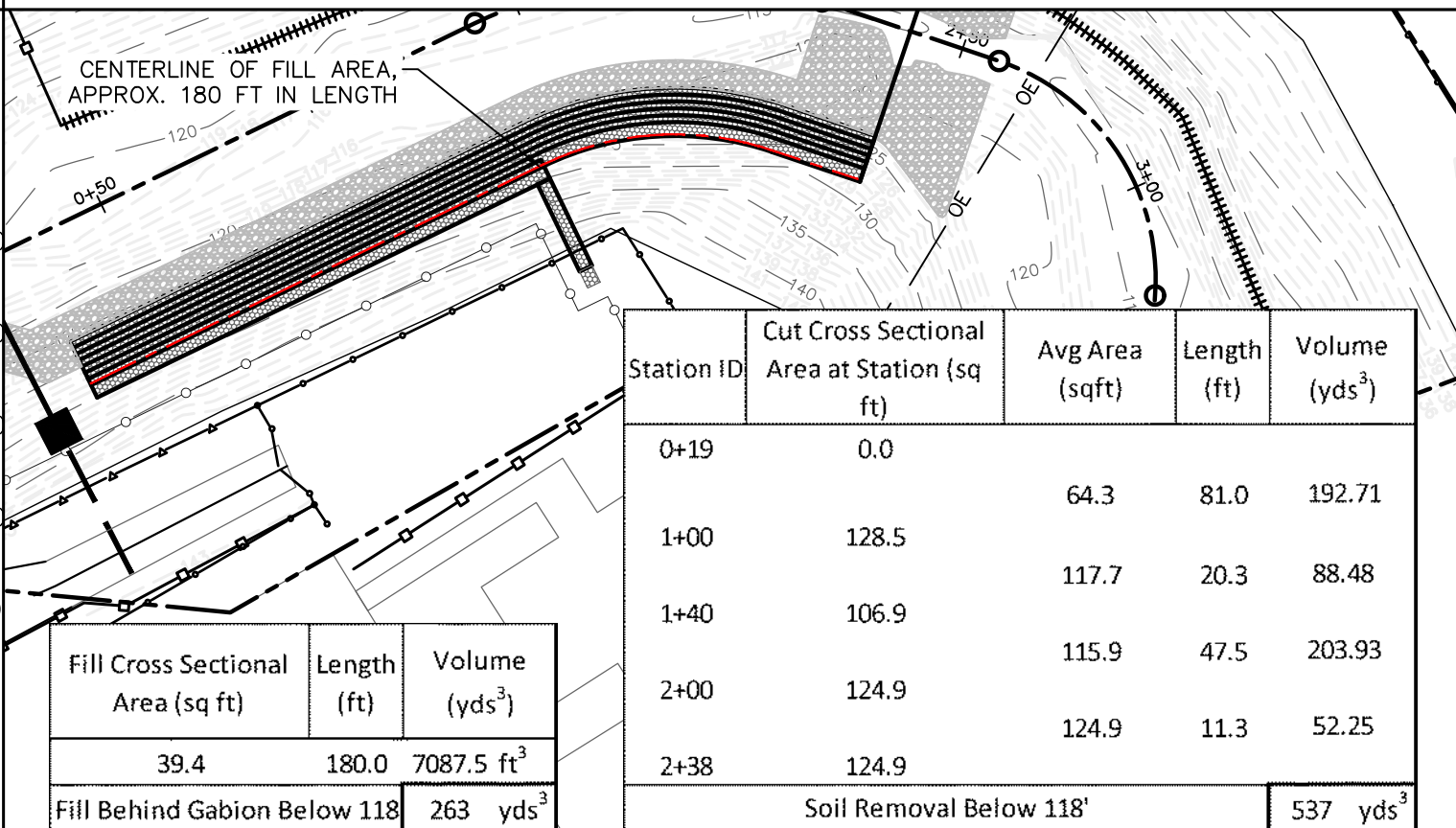
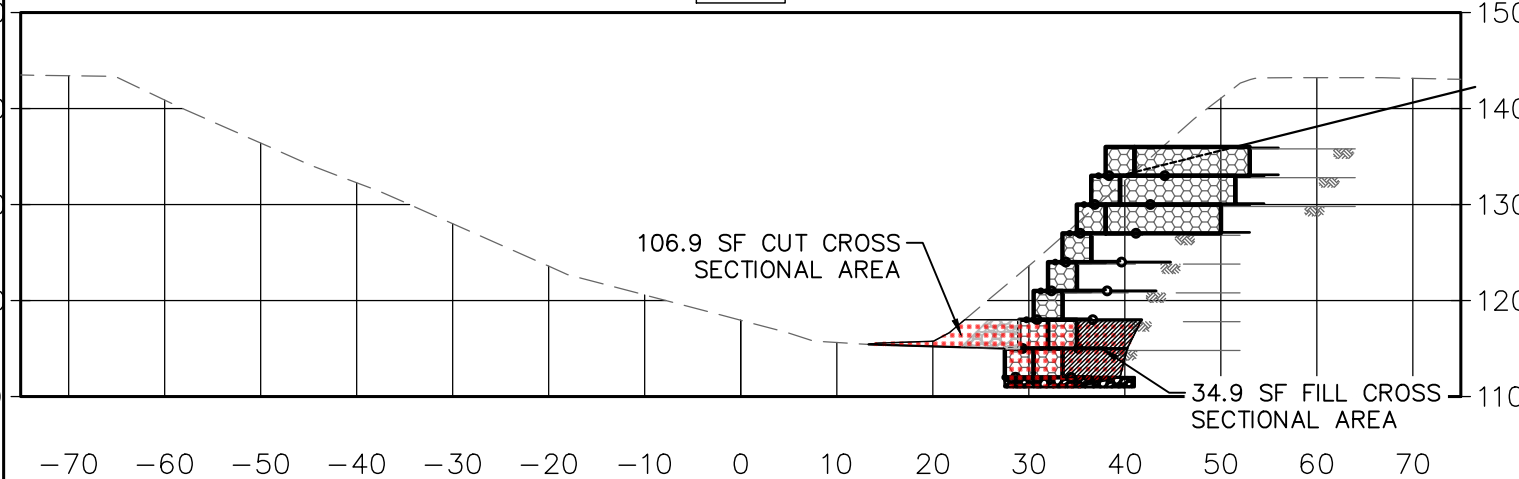
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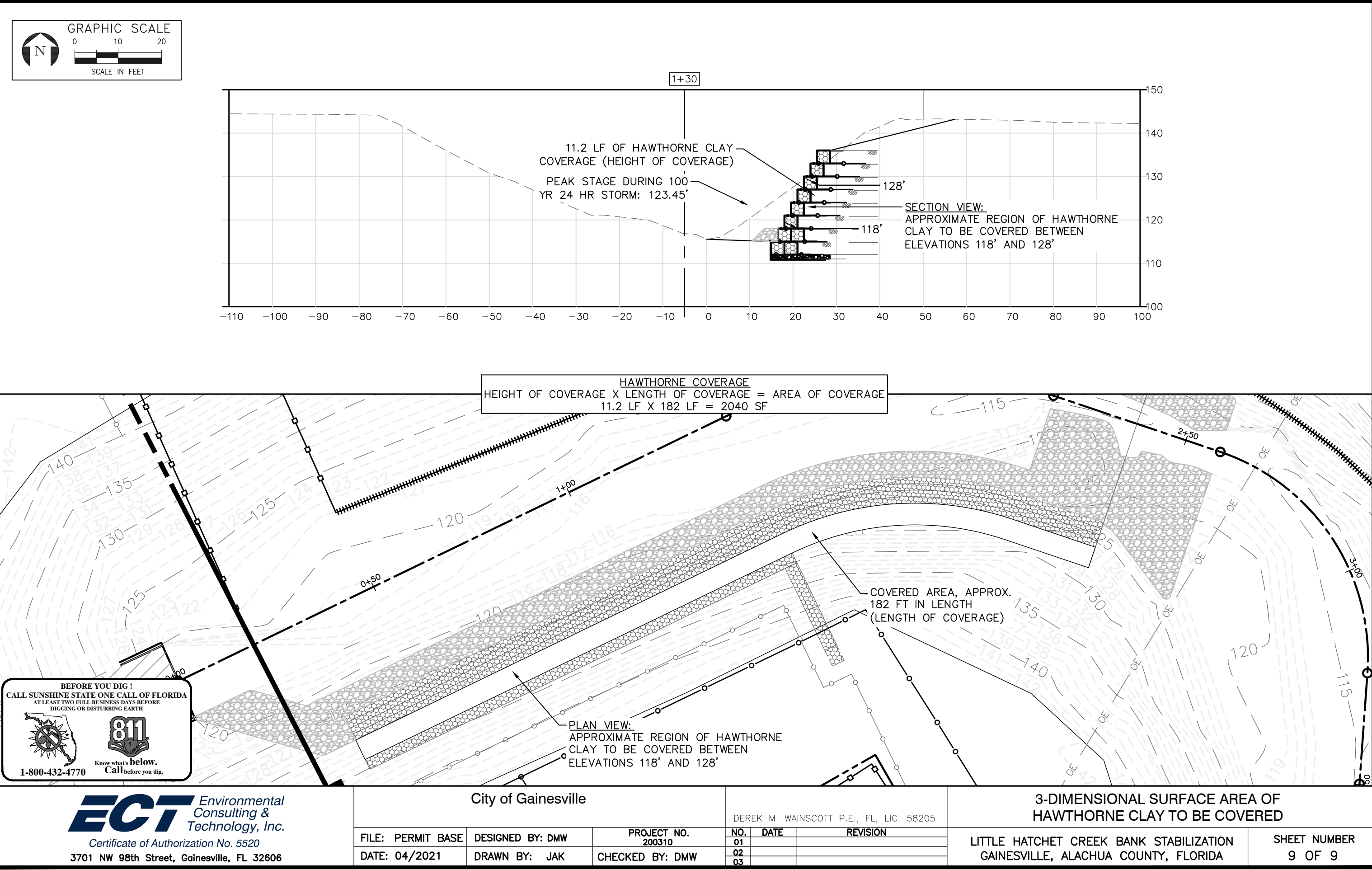
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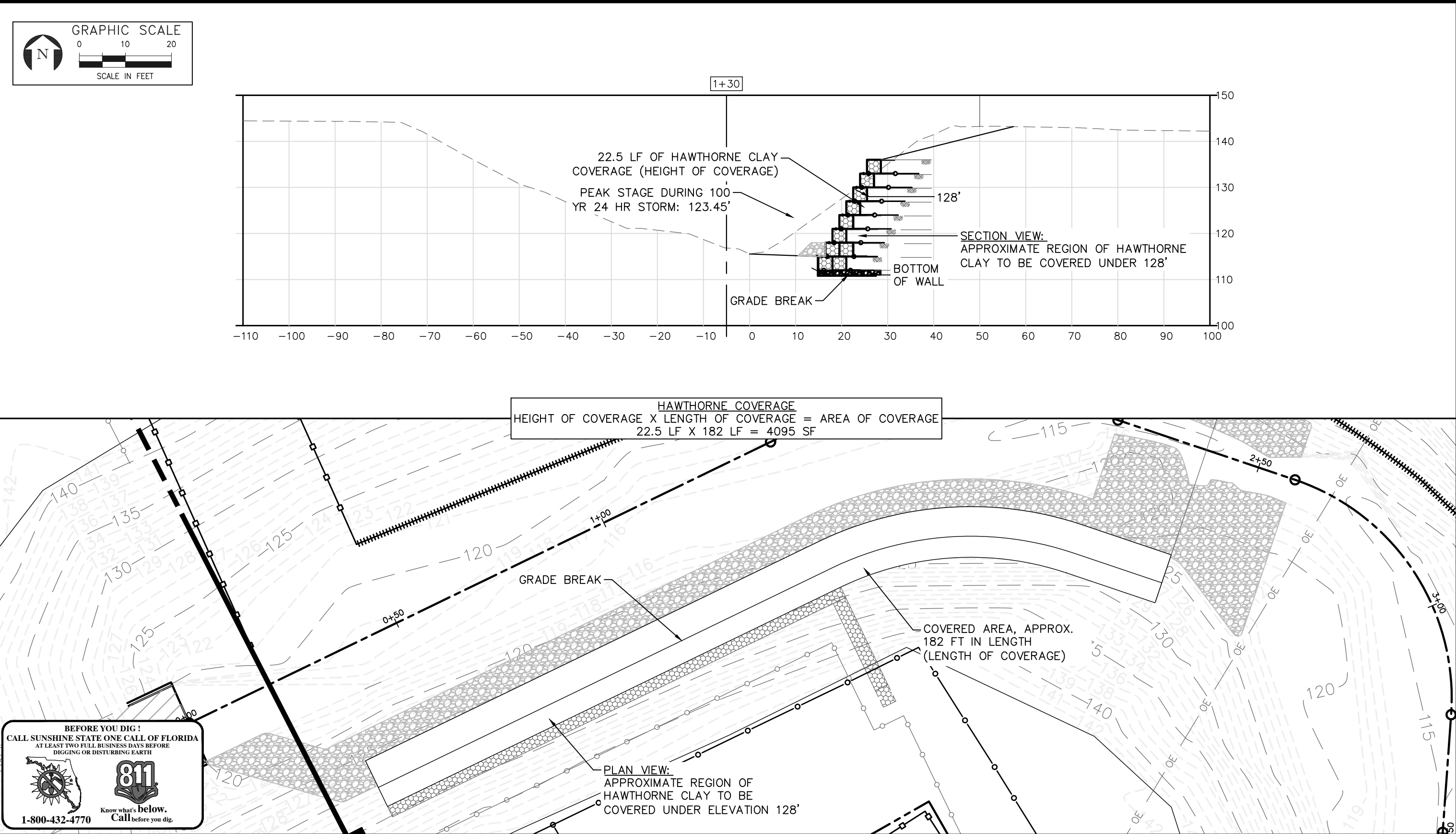
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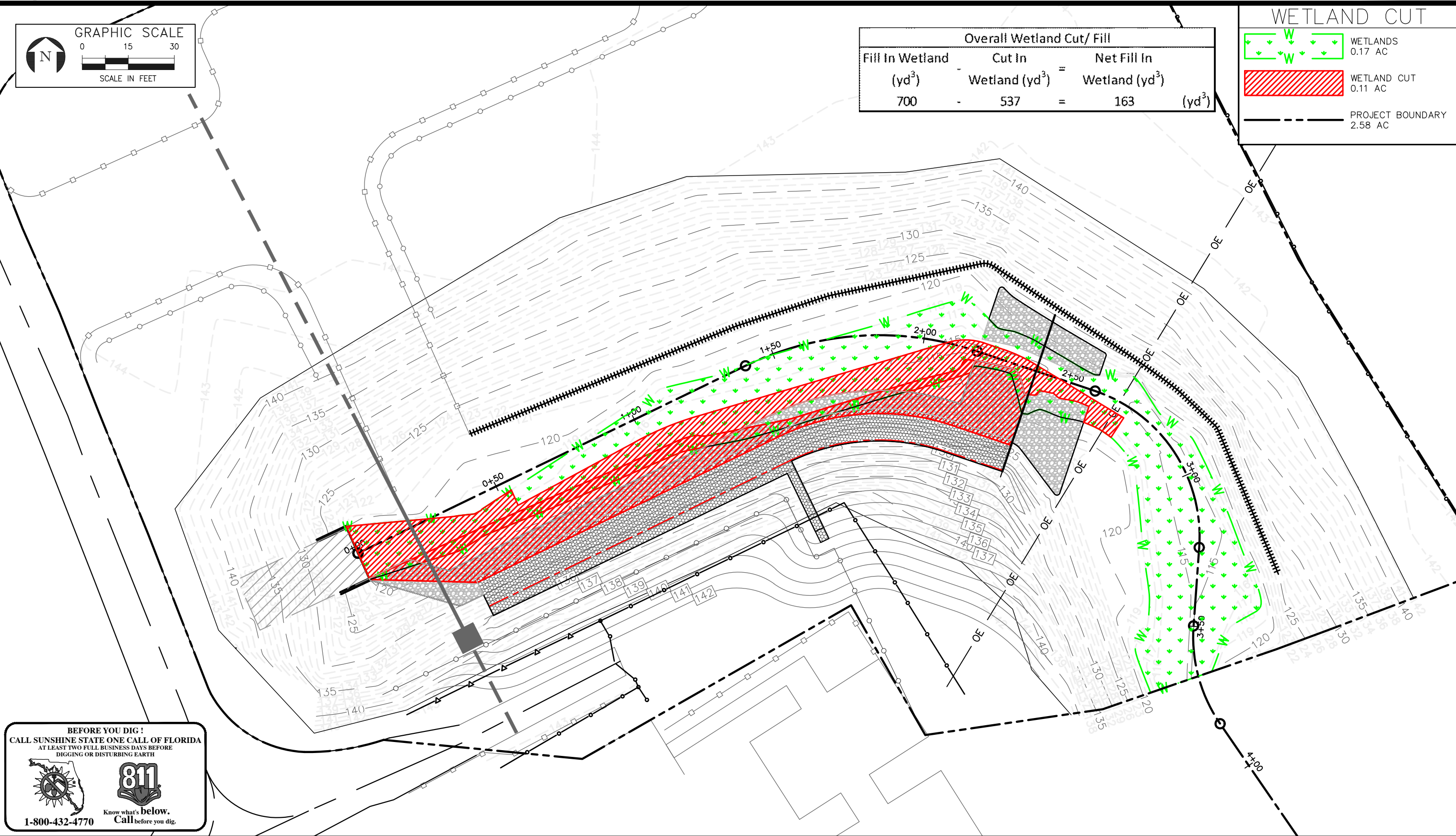
City of Gainesville			DEREK M. WAINSCOTT P.E., FL, LIC. 58205			SOIL COVERAGE AREAS	
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DATE: 04/2021	DRAWN BY: JAK	CHECKED BY: DMW	02				
			03				



SHEET NUMBER
8 OF 9







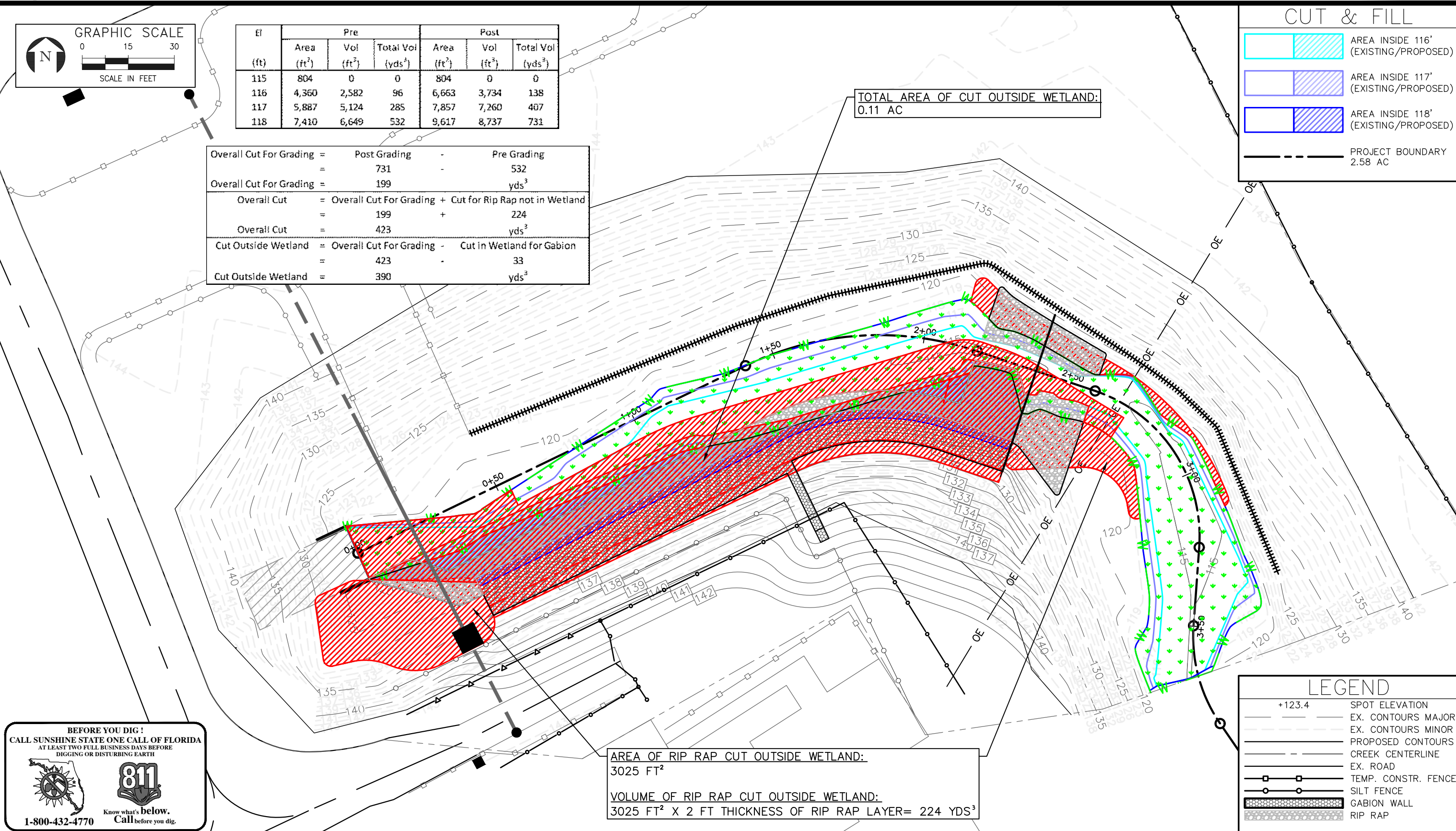
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CALL SUNSHINE STATE ONE CALL OF FLORIDA
AT LEAST TWO FULL BUSINESS DAYS BEFORE
DIGGING OR DISTURBING EARTH

811
Know what's below.
Call before you dig.

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City of Gainesville			DEREK M. WAINSCOTT P.E., FL, LIC. 58205			WETLAND CUT AREA	
FILE: PERMIT BASE	DESIGNED BY: DMW	PROJECT NO. 200310	NO. 01	DATE	REVISION	LITTLE HATCHET CREEK BANK STABILIZATION GAINESVILLE, ALACHUA COUNTY, FLORIDA	SHEET NUMBER 3 OF 6
DATE: 04/2021	DRAWN BY: JAK	CHECKED BY: DMW	02				
			03				



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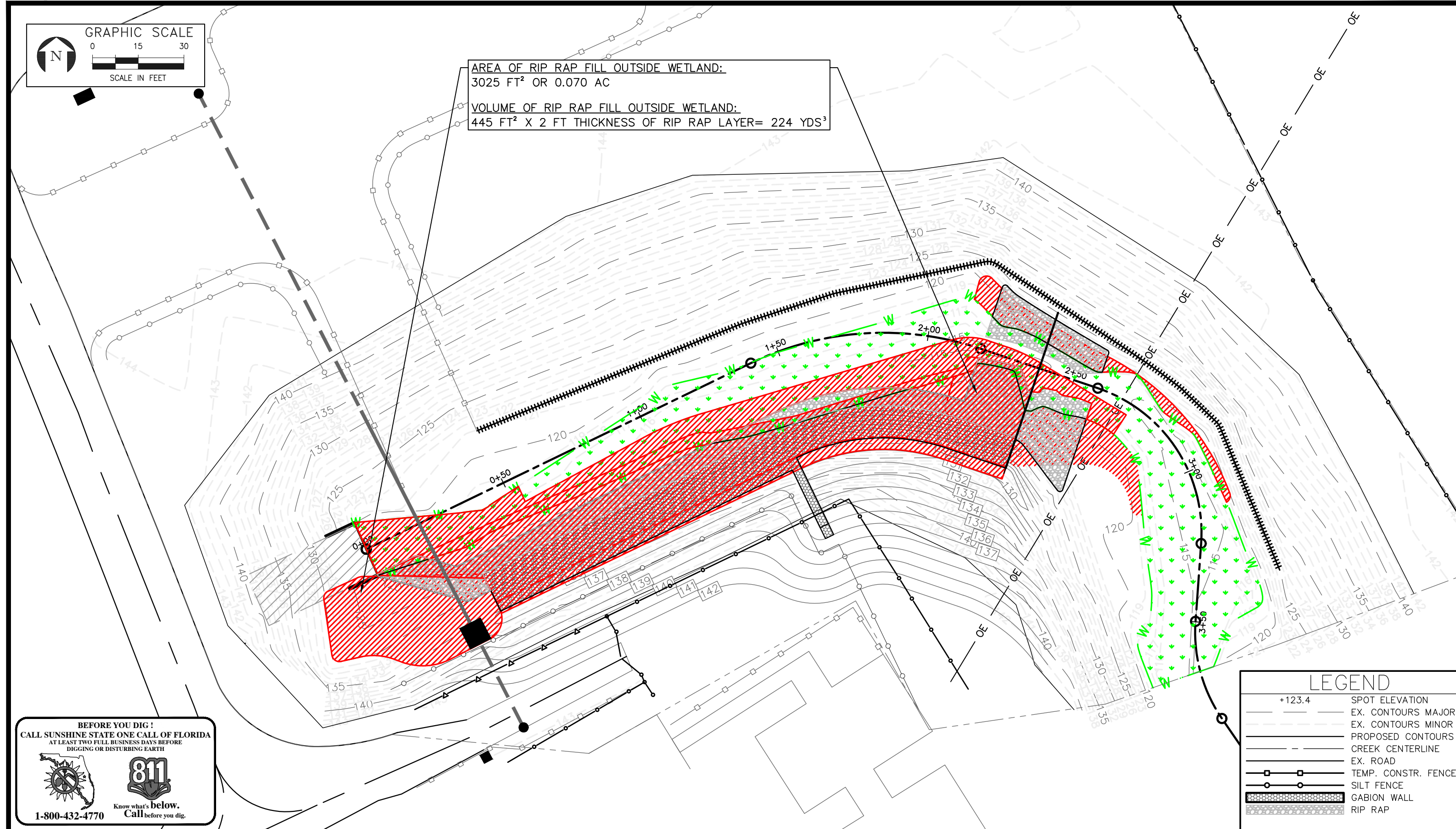
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			03		

CUT AREA & VOLUME OUTSIDE WETLAND	
LITTLE HATCHET CREEK BANK STABILIZATION GAINESVILLE, ALACHUA COUNTY, FLORIDA	SHEET NUMBER 4 OF 5



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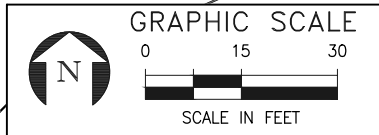
FILE: PERMIT BASE	DESIGNED BY: DMW	PROJECT NO. 200310
DATE: 04/2021	DRAWN BY: JAK	CHECKED BY: DMW

NO.	DATE	REVISION
01		
02		
03		

FILL AREA & VOLUME
OUTSIDE WETLAND

LITTLE HATCHET CREEK BANK STABILIZATION
GAINESVILLE, ALACHUA COUNTY, FLORIDA

SHEET NUMBER
5 OF 5



Elevation (ft)	Pre			Post		
	Area (ft ²)	Vol (ft ³)	Total Vol (ft ³)	Area (ft ²)	Vol (ft ³)	Total Vol (ft ³)
115	804.3612	0	0	804.3612	0	0
116	4360.02	2582.19	2582.19	6663.08	3733.72	3733.72
117	5887.36	5123.69	7705.88	7856.90	7259.99	10993.71
118	7410.45	6648.90	14354.78	9616.66	8736.78	19730.49

Cut	=	Post	-	Pre
	=	19730.49	-	14354.78
Cut	=	5375.71		(ft ³)

CUT & FILL

AREA INSIDE 116' (EXISTING/PROPOSED)

AREA INSIDE 117' (EXISTING/PROPOSED)

AREA INSIDE 118' (EXISTING/PROPOSED)

PROJECT BOUNDARY 2.58 AC

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LEGEND

+123.4 SPOT ELEVATION

EX. CONTOURS MAJOR

EX. CONTOURS MINOR

PROPOSED CONTOURS

CREEK CENTERLINE

EX. ROAD

TEMP. CONSTR. FENCE

SILT FENCE

GABION WALL

RIP RAP

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DATE: 04/2021	DRAWN BY: JAK	CHECKED BY: DMW	02		
			03		

CUT & FILL VOLUMES

LITTLE HATCHET CREEK BANK STABILIZATION
GAINESVILLE, ALACHUA COUNTY, FLORIDA

SHEET NUMBER
1 OF 1