

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

OFF SYSTEM PROJECT AGREEMENT

This Agreement is between the State of Florida Department of Transportation, "DEPARTMENT," and Leon County, Florida, a charter county and political subdivision of the State of Florida, "COUNTY."

1. Highway Bridge Replacement and Rehabilitation Program funds are available to DEPARTMENT for the costs of the replacement, rehab, or inspection of bridges located off of the Federal-aid system under 23 CFR 650.413(c); and

2. Natural Bridge Road Bridge, Bridge No. 554001, requires replacement; and

3. Natural Bridge Road Bridge is on Natural Bridge Road located in Leon County, Florida, a road not on the State Highway System; and

4. The parties acknowledge and agree that any and all real property needed to complete this project has been acquired by the DEPARTMENT as of the date of this Agreement; and

5. The parties agree that it is in the best interest of each party for the DEPARTMENT to utilize federal funds to undertake and to complete all aspects of the bridge replacement work, including but not limited to the design, construction, construction inspection, utilities, permits, and other associated tasks.

NOW THEREFORE, in consideration of the mutual benefits to be derived by the terms of this Agreement, the parties hereby agree as follows:

6. The recitals in paragraphs 1-5 above are true and correct and are made a part of this Agreement.

7. The parties agree that the DEPARTMENT shall undertake and complete Project No. 413491-1-52-01, generally described as the replacement of Bridge No. 554001 over Branch of St. Marks River (the "PROJECT"), from Beginning MP 6.288 to End MP 6.373 on CR 2192. The PROJECT is further described in the construction plans attached hereto, and incorporated herein, as Exhibit "A." The COUNTY shall cooperate with and shall support the DEPARTMENT's work efforts in these regards. The DEPARTMENT shall have final decision authority with respect to the design of the PROJECT and the design review process.

8. The COUNTY shall, by virtue of the approval of this Agreement by the Leon County Board of County Commissioners (the "Board"), consent to and authorize the DEPARTMENT, if necessary, to do all acts necessary, including securing all environmental and regulatory permits and rights of entry associated with the PROJECT. Said authority and action

shall be deemed to include the DEPARTMENT'S exercise of prudent engineering judgment in the design and construction of the PROJECT. The COUNTY, at COUNTY's expense, shall be responsible to establish, in accordance with DEPARTMENT standards, final right of way survey monumentation.

a) Upon completion of the PROJECT, the right-of-way properties acquired by the DEPARTMENT for the PROJECT shall be transferred from the DEPARTMENT to the COUNTY, and the COUNTY shall thereafter be responsible for maintaining said right-of-way acquired by the DEPARTMENT for the PROJECT.

b) The parties acknowledge and agree that one of the properties acquired by the DEPARTMENT for the PROJECT prior to the execution of this Agreement was inadvertently acquired in the COUNTY's name as grantee, as reflected in the warranty deed from St. Joe Timberland Company of Delaware, LLC to COUNTY recorded at O.R. Book 4402, Page 133, Official Records of Leon County, Florida, a copy of which is attached to this Agreement as Exhibit "B." The COUNTY shall, upon a satisfactory review of the title work completed by the DEPARTMENT for such acquisition, make an agenda request to the Board of County Commissioners recommending that said acquisition be ratified and the warranty deed be accepted.

9. The COUNTY shall provide to the DEPARTMENT all documents in its possession necessary to establish encumbrances and encroachments, if any, within the existing COUNTY right of way necessary for completion of the PROJECT. The DEPARTMENT shall be responsible for assuring that all necessary title work has been completed for the acquisition of any additional right of way that is required for the PROJECT, and that any action necessary has been taken to extinguish any interest in or encumbrance or encroachment on such acquired right of way. In the event there is any action necessary to be taken to acquire ownership or to extinguish any interest in or encumbrance or encroachment on any property within the COUNTY'S existing right of way, the COUNTY shall take all actions reasonably requested by the DEPARTMENT to accomplish the ends required. In the event title ownership issues cannot be resolved so as to allow the PROJECT to move forward, the DEPARTMENT retains the right to terminate this Agreement on that basis. Further, the COUNTY acknowledges that the right of way must be cleared of all ownership interests, encumbrances or encroachments within the limits of construction at least 90 days prior to the DEPARTMENT advertising the PROJECT for construction. The DEPARTMENT shall have the sole discretion to determine the need to clear any ownership, encroachment or encumbrance.

10. The COUNTY acknowledges that the DEPARTMENT will be utilizing federal funds on the PROJECT and as a result thereof the COUNTY agrees to maintain the PROJECT in perpetuity according to DEPARTMENT standards. The COUNTY further recognizes and acknowledges that if the DEPARTMENT will be utilizing federal funds on the PROJECT that the National Environmental Policy Act ("NEPA") process will need to be completed and the DEPARTMENT reserves the right to adjust the plans and or design of the PROJECT to meet the needs of the permits. The COUNTY agrees to fully cooperate in the provision of any and all studies and or data that may be necessary for the NEPA process and for all other permit matters.

11. The COUNTY acknowledges and agrees that the Natural Bridge Road right of way, and the improvements and structures located within said right of way, are and will remain under the ownership of the COUNTY and that the DEPARTMENT will not have any ownership interest in the Natural Bridge Road right of way, improvements or structures located thereon. Notwithstanding the requirements hereof, the DEPARTMENT is authorized to temporarily use the COUNTY's existing Natural Bridge Road right of way for construction of the PROJECT and all safety and maintenance responsibility of said right-of-way during construction shall, at the DEPARTMENT's expense, be the responsibility of the DEPARTMENT and its contractor.

12. The parties understand and agree that the DEPARTMENT and the COUNTY shall cooperate with and keep each other well informed of the work efforts and progress of the PROJECT hereunder. In the event change orders or supplemental agreements become necessary during the prosecution of the work, the COUNTY agrees that it will sign all documents necessary to allow the change order to be finalized and to allow the supplemental agreements to be fully executed.

13. All payment and performance bonds shall be issued in favor of the DEPARTMENT. All warranties shall be made in favor of the COUNTY.

14. Upon completion of the PROJECT, the DEPARTMENT shall issue a Notice of Final Acceptance to the contractor with a copy of said notice being provided to the COUNTY. The PROJECT improvements to be constructed by the DEPARTMENT and which the COUNTY agrees to maintain shall be known by the parties as the Natural Bridge Road Bridge Replacement ("IMPROVEMENT"). Except as otherwise provided herein, upon issuance of the Notice of Final Acceptance, the COUNTY shall be immediately responsible for the perpetual maintenance of the IMPROVEMENT. The COUNTY agrees to maintain the IMPROVEMENT in a reasonable manner and with due care in accordance with the Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways (the "Florida Greenbook"). The DEPARTMENT shall also have the right to assign interim maintenance responsibility to the COUNTY for specified portions of the PROJECT before the issuance of the Notice of Final Acceptance. Said assignment of maintenance responsibility shall be sent by the DEPARTMENT to the COUNTY in writing with sufficient description to place the COUNTY on notice of the interim maintenance responsibility. Notwithstanding the issuance of the Notice of Final Acceptance, the DEPARTMENT shall have the right to assure completion of any punch list by the contractor. Additionally, the COUNTY understands and agrees that the DEPARTMENT shall transfer all permits to the COUNTY as the operational maintenance entity and the COUNTY agrees to accept said transfer and to become fully responsible to comply with all operational and maintenance conditions of the permits. For purposes of this Agreement, the PROJECT shall be deemed to be complete upon satisfaction of the following conditions:

a) A joint final inspection for the IMPROVEMENT shall be conducted by the DEPARTMENT staff and the COUNTY staff.

b) All necessary permits including, but not limited to, the Stormwater Management Facility Operating Permit, shall be secured and the PROJECT shall be closed out with all permitting agencies by the DEPARTMENT.

c) All warranties on the IMPROVEMENT shall be provided by the DEPARTMENT's contractor for materials and craftsmanship according to the DEPARTMENT's specifications.

15. This Agreement shall become effective as of the date both parties hereto have executed the Agreement and shall continue in full force and effect until the PROJECT is completed by the DEPARTMENT and the IMPROVEMENT has been turned over to the COUNTY by the DEPARTMENT by formal notice from the DEPARTMENT. The DEPARTMENT agrees to complete the PROJECT fully before transferring the IMPROVEMENT to the COUNTY. The DEPARTMENT reserves the right to unilaterally cancel its performance hereunder before construction of the PROJECT begins if it determines that it is in the best interest of the public to do so. This discretion shall include, but shall not be limited to, budgetary and bid cost considerations.

16. Pursuant to Section 287.058, Florida Statutes, the DEPARTMENT may unilaterally cancel this Agreement for refusal by the COUNTY to allow public access to all documents, papers, letters or other material subject to the provisions of Chapter 119, Florida Statutes and made or received by the COUNTY in conjunction with this Agreement except for the obligation of the COUNTY to maintain the PROJECT and said Agreement shall be perpetual as to that obligation.

17. In the event that any election, referendum, approval or permit, notice or other proceeding or authorization is required to be undertaken by the COUNTY to enter into this Agreement or to undertake the PROJECT, the COUNTY will expeditiously initiate and consummate, as provided by law, all actions necessary with respect to any such matters with time being of the essence.

18. It is understood that the DEPARTMENT's participation in said PROJECT is subject to Legislative approval of the DEPARTMENT's appropriation request in the work program year that the PROJECT is scheduled;

19. The DEPARTMENT's performance and obligations to pay under this Agreement is contingent upon an annual appropriation by the Legislature. If the DEPARTMENT's funding for this PROJECT is in multiple years, funds approved from the DEPARTMENT'S Comptroller must be received every year prior to costs being incurred.

20. In the event this Agreement is in excess of \$25,000.00 and has a term for a period of more than one year, the provisions of Section 339.135(6)(a), Florida Statutes are hereby incorporated:

“The Department, during any fiscal year, shall not expend money, incur any liability, or enter into any contract which, by its terms, involves the expenditure of money in excess of the amounts budgeted as available for expenditure during such fiscal year. Any contract, verbal or written, made in violation of this subsection is null and void, and no money may be paid on such contract. The

department shall require a statement from the comptroller of the Department that funds are available prior to entering into any such contract or other binding commitment of funds. Nothing herein contained shall prevent the making of contracts for periods exceeding 1 year but any contract so made shall be executory only for the value of the services to be rendered or agreed to be paid in succeeding fiscal years, and this paragraph shall be incorporated verbatim in all contracts of the Department which are for an amount in excess of \$25,000.00 and which have a term for a period of more than 1 year.”

21. This Agreement shall be governed by the laws of the State of Florida. Any provision hereof found to be unlawful or unenforceable shall be severable and shall not affect the validity of the remaining portions hereof.

22. COUNTY:

a) Shall utilize the U.S. Department of Homeland Security’s E-Verify system to verify the employment eligibility of all new employees hired by the COUNTY during the term of the contract; and

b) Shall expressly require any subcontractors performing work or providing services pursuant to the state contract to likewise utilize the U.S. Department of Homeland Security’s E-Verify system to verify the employment eligibility of all new employees hired by the subcontractor during the contract term.

23. All notices required pursuant to the terms hereof may be sent by first class United States Mail, facsimile transmission, hand delivery or express mail and shall be deemed to have been received by the end of five business days from the proper sending thereof unless proof of prior actual receipt is provided. Each party hereto shall have the continuing obligation to notify each other of the appropriate persons for notices to be sent to pursuant to the terms of this agreement. Unless otherwise notified in writing, notices shall be sent to the following:

COUNTY:

Leon County, Director of Public Works
2280 Miccosukee Road
Tallahassee, FL 32308

DEPARTMENT:

Florida Department of Transportation
Director of Transportation Development
1074 US Highway 90 East
Chipley, FL 32428

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the dates exhibited by the signatures below.

**STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION**

**LEON COUNTY, a charter county and
political subdivision of the State
of Florida**

By: _____
(Print Name)

By: _____
(Print Name)

Title: _____
(Print Title)

Title: _____
(Print Title)

Date: _____

Date: _____

Attest: _____

Attest: _____
Clerk of Court

Legal Review:

Approved as to Form and Legality:

Office of the General Counsel

County Attorney

COMPONENTS OF CONTRACT PLANS SET
ROADWAY PLANS
STRUCTURES PLANS

A DETAILED INDEX APPEARS ON THE
KEY SHEET OF EACH COMPONENT

INDEX OF ROADWAY PLANS

SHEET NO.	SHEET DESCRIPTION
1	KEY SHEET
2	SUMMARY OF PAY ITEMS
3	DRAINAGE MAP
4 - 5	TYPICAL SECTIONS
6 - 9	SUMMARY OF QUANTITIES
10 - 11	PROJECT CONTROL
12 - 13	GENERAL NOTES
14	PLAN/PROFILE
15	DRAINAGE DETAIL
16	ROADWAY SOIL SURVEY
17 - 24	CROSS SECTIONS
25 - 26	STORMWATER POLLUTION PREVENTION PLAN
27	WETLAND IMPACTS
28 - 30	TRAFFIC CONTROL PLAN
31	SELECTIVE CLEARING
32	SIGNING & MARKING DETAILS
TR 1 - TR 22	TREE SURVEY

GOVERNING STANDARDS AND SPECIFICATIONS:
FLORIDA DEPARTMENT OF TRANSPORTATION,
DESIGN STANDARDS DATED 2009,
AND STANDARD SPECIFICATIONS FOR ROAD AND
BRIDGE CONSTRUCTION DATED 2009,
AS AMENDED BY CONTRACT DOCUMENTS.

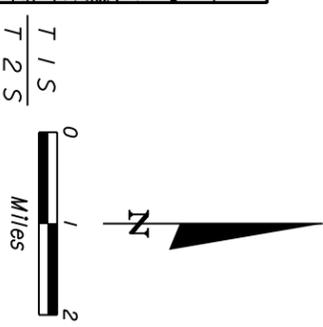
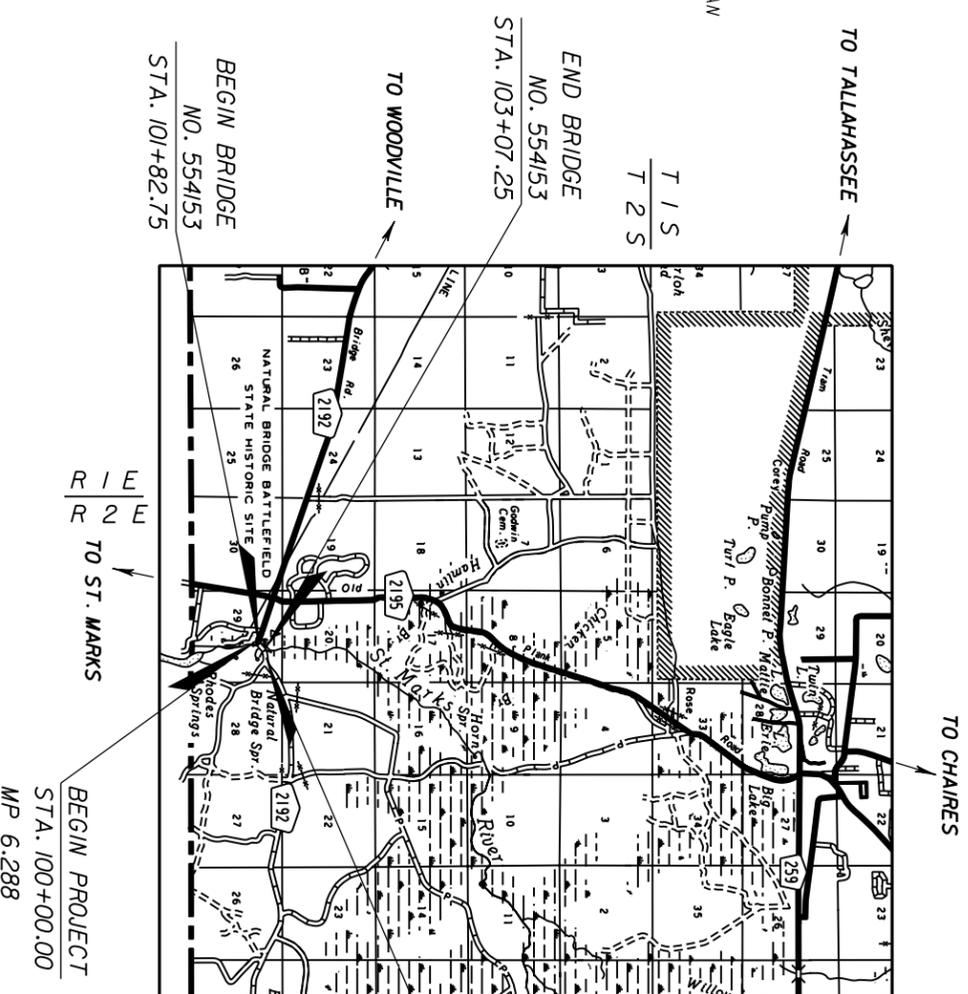
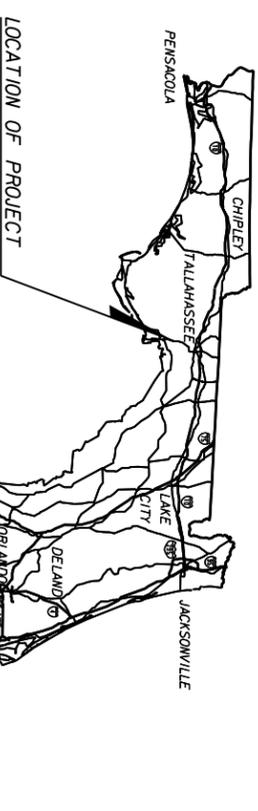
APPLICABLE DESIGN STANDARDS MODIFICATIONS: JUL 04, 2011

For Design Standards Modifications click on
"Design Standards" at the following web site:
<http://www.dot.state.fl.us/rddesign/>

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION
CONTRACT PLANS

FINANCIAL PROJECT ID 413491-1-52-01
(FEDERAL FUNDS)
LEON COUNTY (55030)
COUNTY ROAD NO. 2192

CONSTRUCTION CONTRACT NO. T3408



PROJECT LENGTH IS BASED ON $\frac{1}{4}$ OF CONSTRUCTION

LENGTH OF PROJECT		
	LINEAR FEET	MILES
ROADWAY	327.07	0.062
BRIDGES	124.50	0.023
NET LENGTH OF PROJECT	451.57	0.085
EXCEPTIONS	0.00	0.000
GROSS LENGTH OF PROJECT	451.57	0.085

KEY SHEET REVISIONS	
DATE	DESCRIPTION

ROADWAY PLANS ENGINEER OF RECORD: MICHAEL J. WOODARD, P.E.	P.E. NO. 47736	FISCAL YEAR	SHEET NO.
Project Description: Natural Bridge Road over a Branch of St. Marks River		2014	1

ROADWAY SHOP DRAWINGS
TO BE SUBMITTED TO:
MICHAEL J. WOODARD, P.E.
2940 EAST PARK AVENUE, SUITE 200
TALLAHASSEE, FL 32301

PLANS PREPARED BY:
LOCHNER
H.W. LOCHNER, INC.
CONSULTING ENGINEERS AND PLANNERS
2940 EAST PARK AVENUE, SUITE 200
TALLAHASSEE, FL 32301
TELEPHONE NO. (850) 656-9027
CONTRACT NO. C-8W16
VENDOR NO. 36-233881
FBPR CERTIFICATE OF AUTH. #894
MICHAEL J. WOODARD, P.E.
P.E. # 47736

NOTE: THE SCALE OF THESE PLANS MAY
HAVE CHANGED DUE TO REPRODUCTION.

PHASE IV PLANS
DECEMBER 2011

DATE: 12/19/11
 PROPOSAL : T3408 LEAD PROJECT : 41349115201 COUNTY : LEON
 PROJECT(S): 41349115201 COUNTY/SECTION: 55030000

FLORIDA DEPARTMENT OF TRANSPORTATION
 PROPOSAL SUMMARY OF PAY ITEMS

PAGE: 2 A0002
 MANDIST: 03

0002 SUMMARY OF ROADWAY

P	ALT	ITEM NUMBER	DESCRIPTION	UNIT	UNIT PRICE	QUANTITY	TOTAL
S		10101-1	MOBILIZATION (41349115201)	LS	1,000	1,000	1,000
C		10102-1	MAINTENANCE OF TRAFFIC (41349115201)	LS	1,293,000	1,293,000	1,293,000
		10102-60	WORK ZONE SIGN	LED	1,681,000	1,681,000	1,681,000
		10102-74	1 BARRICADE, TEMPORARY, TYPES 1, 11, D1, VP & DRUM	LED	1,558,000	1,558,000	1,558,000
		10102-77	2 BARRICADE, TEMPORARY, TYPE 111, 6"	LED	974,000	974,000	974,000
		10102-99	HIGH INTENSITY FLASHING LIGHTS, TEMP, TYPE B	LED	420,000	420,000	420,000
		10104-10	3 PORTABLE CHANGEABLE MESSAGE SIGN, TEMPORARY	LED	788,500	788,500	788,500
		10104-11	3 SEEDMENT BARRIER	LF	53,600	53,600	53,600
		10104-12	1 FLOATING TURBIDITY BARRIER	LF	280,400	280,400	280,400
		10107-1	1 STAKED TURBIDITY BARRIER-W/LOW REINFORCED PVC	LF	1,600	1,600	1,600
		10107-2	1 LITTER REMOVAL	AC	1,600	1,600	1,600
		10110-1	1 MOWING	LS	1,000	1,000	1,000
		10120-1	1 CLEARING & GRUBBING (41349115201)	LS	236,000	236,000	236,000
		10120-6	1 REGULAR EXCAVATION	CY	115,000	115,000	115,000
		10160-4	1 EMBANKMENT	SY	1,688,000	1,688,000	1,688,000
		10162-1	1 PREPARE SOIL LAYER, FINISH SOIL LAYER, 6"	SY	922,000	922,000	922,000
		10283-701	1 OPTIMAL BASE, BASE GROUP 06	SY	148,000	148,000	148,000
		10283-706	1 SUPERPAVE ASH COMB, PAF, B, PG76-22	SY	391,000	391,000	391,000
		10339-1	1 SUPERPAVE ASH COMB, PAF, B	SY	173,700	173,700	173,700
		10324-2	4 CONCRETE CURB, TYPE D	LF	58,200	58,200	58,200
		10330-3	4 CONCRETE DITCH PAVE, NON REINFORCED, 3"	LF	4,000	4,000	4,000
		10336-73	1 RIPRAP, RUBBLE, F&I, DITCH LINING	ITW	2,100	2,100	2,100
		10336-73	1 GUARDRAIL REMOVAL	LF	388,000	388,000	388,000
		10336-85	1 GUARDRAIL END ANCHORAGE ASSEMBLY - FLARED	LF	480,000	480,000	480,000
		10570-1	1 PERFORMANCE TURF, SOD	EA	4,000	4,000	4,000
		10570-2	1 PERFORMANCE TURF, SOD	EA	483,000	483,000	483,000
		10999-25	1 INITIAL CONTRACTOR AMOUNT, DO NOT BID	LSY	217,000	217,000	217,000
				LS	1,000	1,000	1,000

DATE: 12/19/11
 PROPOSAL : T3408 LEAD PROJECT : 41349115201 COUNTY : LEON
 PROJECT(S): 41349115201 COUNTY/SECTION: 55030000

FLORIDA DEPARTMENT OF TRANSPORTATION
 PROPOSAL SUMMARY OF PAY ITEMS

PAGE: 1 A0001
 MANDIST: 03

0001 SUMMARY OF STRUCTURES

P	ALT	ITEM NUMBER	DESCRIPTION	UNIT	UNIT PRICE	QUANTITY	TOTAL
S		10110-3	REMOVAL OF EXISTING STRUCTURE (41349115201)	LS	1,000	1,000	1,000
C		10400-2	CONC CLASS 11, SUPERSTRUCTURE	ICY	176,900	176,900	176,900
		10400-5	CONCRETE CLASS 11, SUBSTRUCTURE	ICY	45,300	45,300	45,300
		10415-1	4 REINFORCING STEEL - APPROACH SLABS	ICB	66,800	66,800	66,800
		10415-4	5 REINFORCING STEEL - SUPERSTRUCTURE	ICB	47,383,000	47,383,000	47,383,000
		10415-9	9 REINFORCING STEEL - APPROACH SLABS	ICB	3856,000	3856,000	3856,000
		10455-144-22	STEEL PILING, 24" DIA. PIPE	ICB	1,832,000	1,832,000	1,832,000
		10458-11	TEST PILES - STEEL, 24" DIA. PIPE	ICB	1,065,000	1,065,000	1,065,000
		10521-5	BRIDGE DECK EXPANSION JOINT, NEW CONSTRUCTION, R18	LF	430,000	430,000	430,000
		10530-1	CONCRETE JOINT WITH BACKER ROD	LF	52,000	52,000	52,000
		10530-3	CONCRETE SAND-CEMENT	LF	372,000	372,000	372,000
		10530-74	3 RIPRAP, RUBBLE, BANK AND SHORE	ICB	34,700	34,700	34,700
				ITW	181,500	181,500	181,500
				ITW	62,900	62,900	62,900

DATE: 12/19/11
 PROPOSAL : T3408 LEAD PROJECT : 41349115201 COUNTY : LEON
 PROJECT(S): 41349115201 COUNTY/SECTION: 55030000

FLORIDA DEPARTMENT OF TRANSPORTATION
 PROPOSAL SUMMARY OF PAY ITEMS

PAGE: 3 A0003
 MANDIST: 03

0003 SUMMARY OF SIGNING

P	ALT	ITEM NUMBER	DESCRIPTION	UNIT	UNIT PRICE	QUANTITY	TOTAL
S		10700-20	1 SINGLE POST SIGN, REMOVE	UN	41,349,152.01	10,000	413,491,520.10
C		10710-90	1 PAINTED PAVEMENT MARKINGS, FINAL SURFACE (41349115201)	LS	1,000	1,000	1,000

DATE: 12/20/2011
 PROPOSAL : T3408 LEAD PROJECT : 41349115201 COUNTY : LEON
 PROJECT(S): 41349115201 COUNTY/SECTION: 55030000

FLORIDA DEPARTMENT OF TRANSPORTATION
 PROPOSAL SUMMARY OF PAY ITEMS

PAGE: 1 A0001
 MANDIST: 03

0001 SUMMARY OF STRUCTURES

P	ALT	ITEM NUMBER	DESCRIPTION	UNIT	UNIT PRICE	QUANTITY	TOTAL
S		10110-3	REMOVAL OF EXISTING STRUCTURE (41349115201)	LS	1,000	1,000	1,000
C		10400-2	CONC CLASS 11, SUPERSTRUCTURE	ICY	176,900	176,900	176,900
		10400-5	CONCRETE CLASS 11, SUBSTRUCTURE	ICY	45,300	45,300	45,300
		10415-1	4 REINFORCING STEEL - APPROACH SLABS	ICB	66,800	66,800	66,800
		10415-4	5 REINFORCING STEEL - SUPERSTRUCTURE	ICB	47,383,000	47,383,000	47,383,000
		10415-9	9 REINFORCING STEEL - APPROACH SLABS	ICB	3856,000	3856,000	3856,000
		10455-144-22	STEEL PILING, 24" DIA. PIPE	ICB	1,832,000	1,832,000	1,832,000
		10458-11	TEST PILES - STEEL, 24" DIA. PIPE	ICB	1,065,000	1,065,000	1,065,000
		10521-5	BRIDGE DECK EXPANSION JOINT, NEW CONSTRUCTION, R18	LF	430,000	430,000	430,000
		10530-1	CONCRETE JOINT WITH BACKER ROD	LF	52,000	52,000	52,000
		10530-3	CONCRETE SAND-CEMENT	LF	372,000	372,000	372,000
		10530-74	3 RIPRAP, RUBBLE, BANK AND SHORE	ICB	34,700	34,700	34,700
				ITW	181,500	181,500	181,500
				ITW	62,900	62,900	62,900

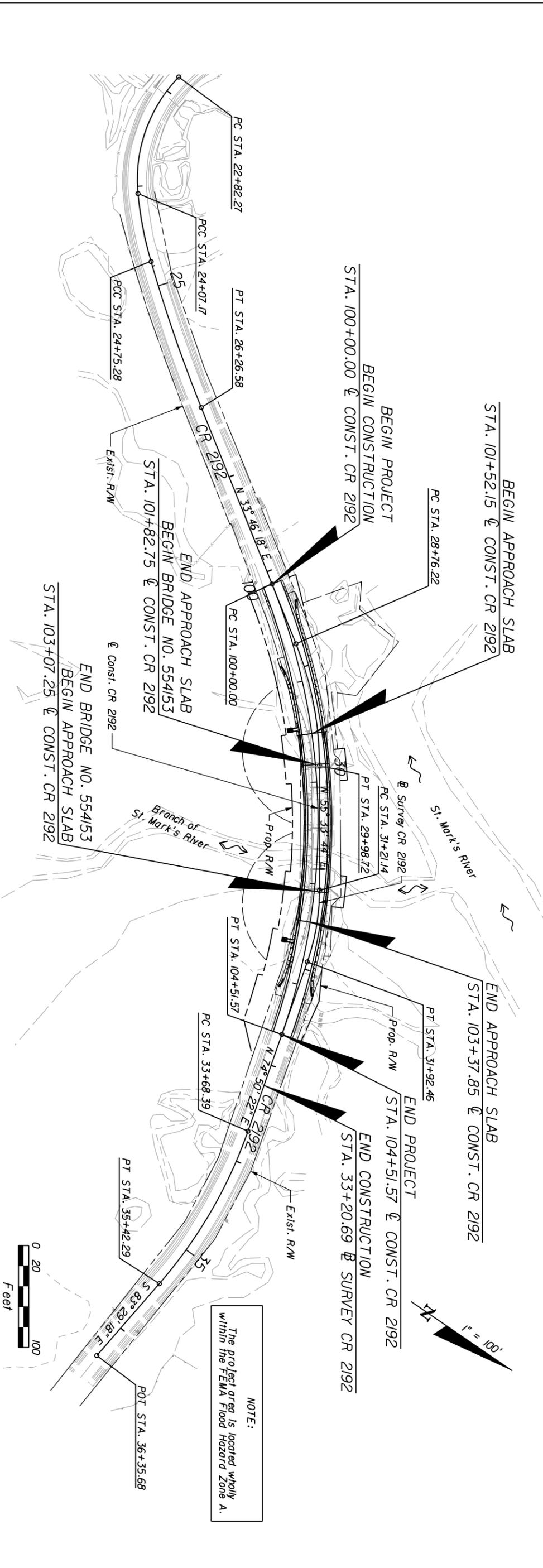
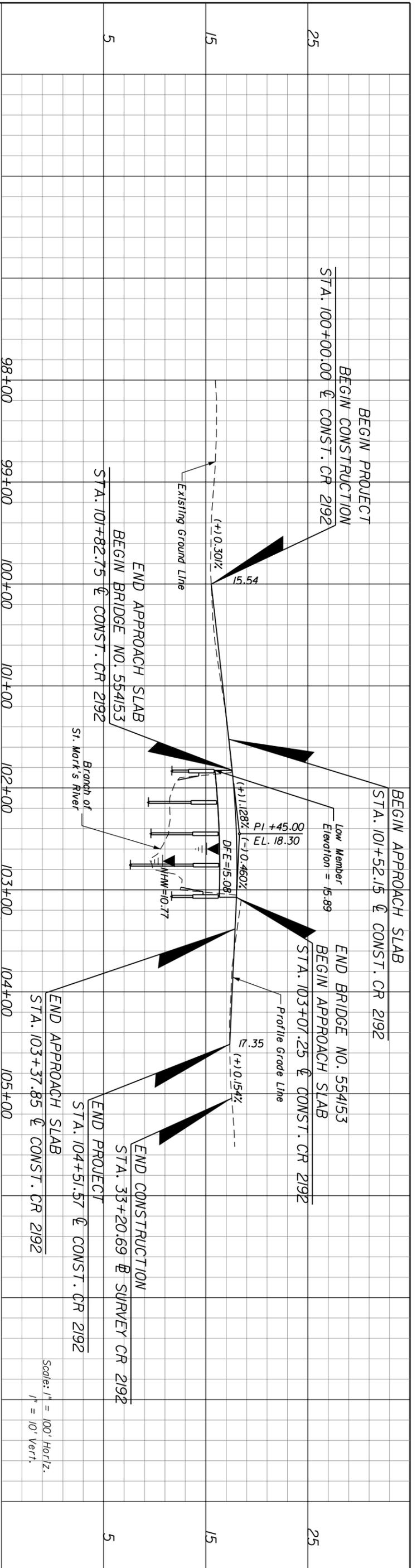
DATE	DESCRIPTION	DATE	DESCRIPTION
	REVIEWS		

LOCHNER
 2940 EAST PARK AVENUE, SUITE 300
 TALLAHASSEE, FLORIDA 32301 # 894
 FBPR CERTIFICATE OF AUTH. # 47736
 MICHAEL J. WOODARD, P.E.

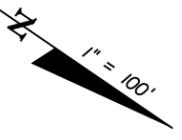
STATE OF FLORIDA
 DEPARTMENT OF TRANSPORTATION
 ROAD NO. CR 2192
 COUNTY LEON
 FINANCIAL PROJECT ID 413491-1-52-01

SUMMARY OF PAY ITEMS

SHEET NO. 2

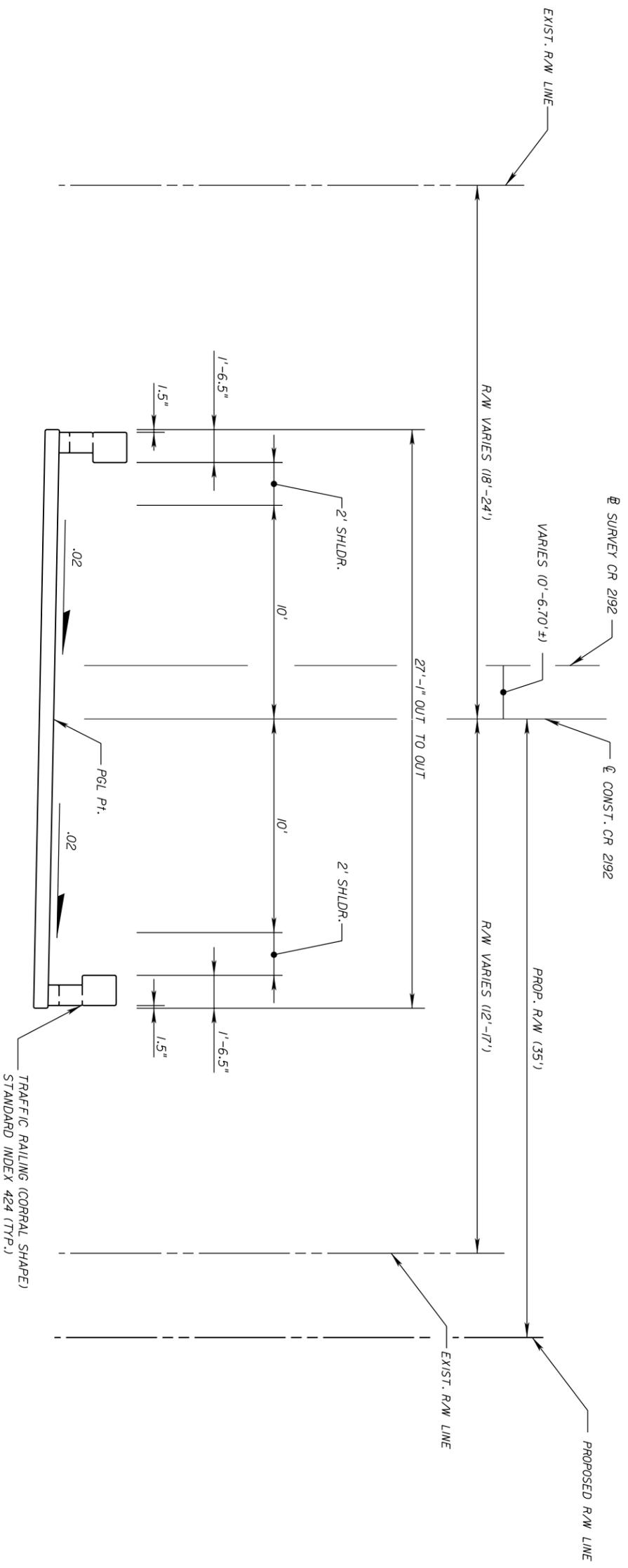


NOTE:
The Project area is located wholly within the FEMA Flood Hazard Zone A.



DATE	DESCRIPTION	REVISIONS	DATE	DESCRIPTION

LOCHNER		STATE OF FLORIDA	
2940 EAST PARK AVENUE, SUITE 300		DEPARTMENT OF TRANSPORTATION	
TALLAHASSEE, FLORIDA 32301		ROAD NO.	COUNTY
PBR CERTIFICATE OF AUTH. # 894		CR 2192	LEON
NATALIE BETZ ZIERDEN, P.E. # 56072		FINANCIAL PROJECT ID	413491-1-52-01
		DRAINAGE MAP	
		SHEET NO.	3



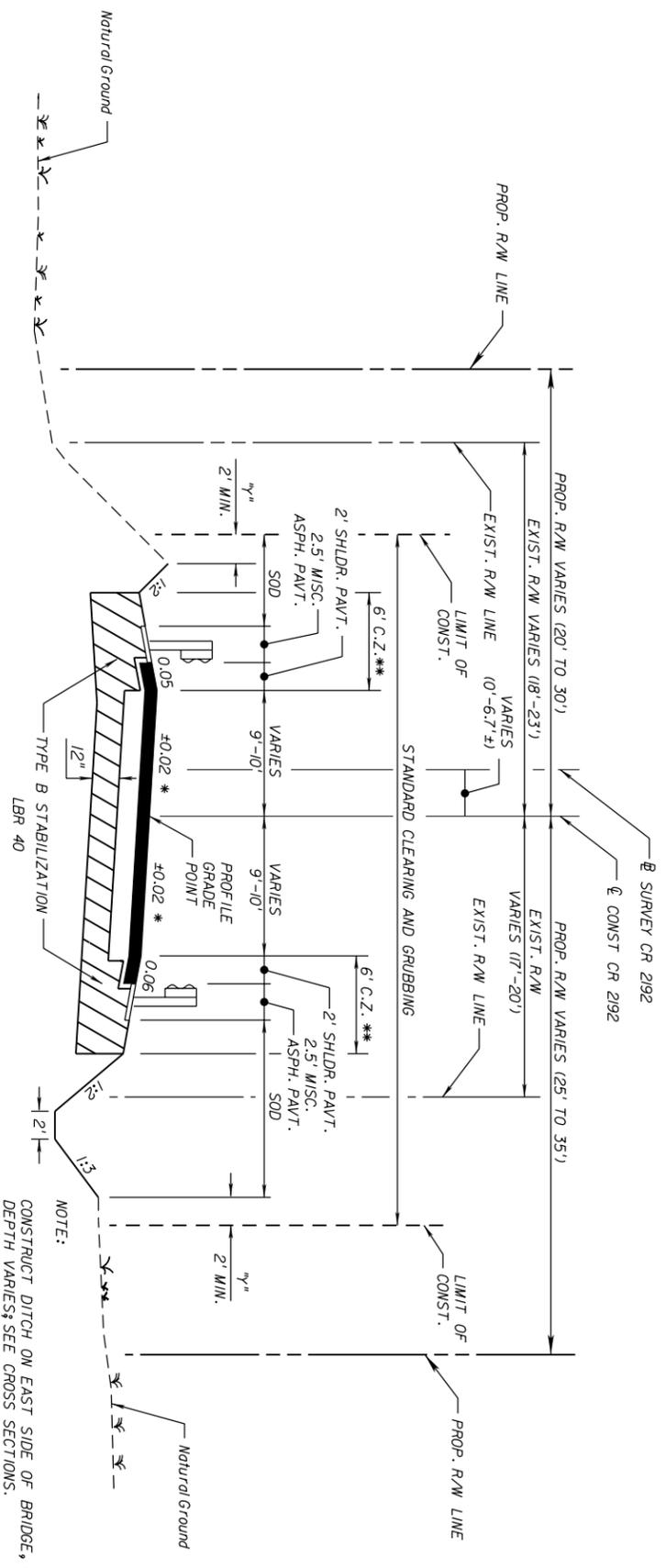
TRAFFIC DATA

NOT AVAILABLE
 DESIGN SPEED = 25 MPH

TYPICAL SECTION #1
CR 2192 (NATURAL BRIDGE ROAD)
STA. 101+52.15 TO STA. 103+37.85

Note:
 See Structure Plans for details.

REVISONS		STATE OF FLORIDA		SHEET NO.
DATE	DESCRIPTION	ROAD NO.	COUNTY	
		CR 2192	LEON	4
LOCHNER 2940 EAST PARK AVENUE, SUITE 300 TALLAHASSEE, FLORIDA 32301 PBR CERTIFICATE OF AUTH. # 894 MICHAEL J. WOODARD, P.E. # 47736		DEPARTMENT OF TRANSPORTATION FINANCIAL PROJECT ID 413491-1-52-01		
DATE DESCRIPTION		COUNTY FINANCIAL PROJECT ID		



TYPICAL SECTION #2
CR 2192 (NATURAL BRIDGE ROAD)
STA. 100+00.00 TO STA. 101+52.15
STA. 103+37.85 TO STA. 104+51.57

* PART OF ROADWAY IS SUPERELEVATED WITHIN PROJECT LIMITS.
 ** DESIGN CLEAR ZONE DOES NOT APPLY TO CLEAR ZONE WIDTHS FOR WORK ZONES.

TRAFFIC DATA

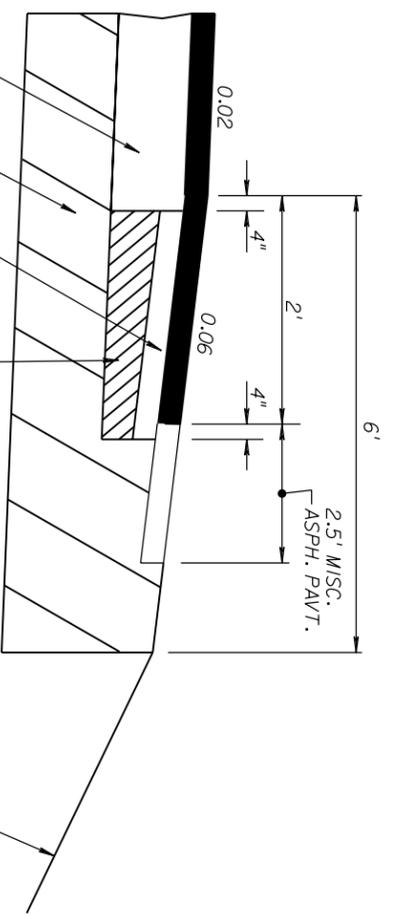
NOT AVAILABLE
 DESIGN SPEED = 25 MPH

NEW CONSTRUCTION

- OPTIONAL BASE GROUP 6 WITH TYPE SP STRUCTURAL COURSE (TRAFFIC B) (2") (PG 76-22)
- OPTIONAL BASE GROUP 1 WITH TYPE SP STRUCTURAL COURSE (TRAFFIC B) (2") (PG 76-22)

SHOULDER PAVEMENT

OPTIONAL BASE 6
 TYPE B STABILIZATION
 OPTIONAL BASE 1
 AT THE CONTRACTOR'S OPTION THIS AREA MAY BE CONSTRUCTED OF OPTIONAL BASE MATERIAL AT NO ADDITIONAL COMPENSATION.
 1:4 MIN. 1:2 BEHIND GUARDRAIL



SHOULDER PAVEMENT DETAIL

DATE	DESCRIPTION	REV	DATE	DESCRIPTION	LOCHNER	STATE OF FLORIDA	DEPARTMENT OF TRANSPORTATION	SHEET NO.
					2940 EAST PARK AVENUE, SUITE 300 TALLAHASSEE, FLORIDA 32301 PBR CERTIFICATE OF AUTH. # 894 MICHAEL J. WOODARD, P.E. # 47736	LEON	413491-1-52-01	5
						LEON	413491-1-52-01	

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PAY ITEM NOTES

110 - 1 -

Includes the following items:

- * 1,200 LF of Hog Wire and 1,200 LF of Orange Mesh for tree protection.
- * 20' of 12 gauge wire and either (A) 220 2"x4"x8' or (B) 150 2"x6"x8' wooden boards for trunk protection.
- * Selective clearing, tree trimming, and tree pruning.
- * Root pruning and related watering.
- * Weekly inspection and routine grading of 2.3 miles of unpaved sections of Natural Bridge Road and Fanlew Road in Jefferson County included within the detour, as directed by the Engineer.

The cost to furnish and install tree & trunk protection items, and to provide routine roadway inspections & re-grading is incidental to the cost of Clearing & Grubbing.

DATE	DESCRIPTION	REVISONS	DATE	DESCRIPTION

LOCHNER		STATE OF FLORIDA	
2940 EAST PARK AVENUE, SUITE 300		DEPARTMENT OF TRANSPORTATION	
TALLAHASSEE, FLORIDA 32301		ROAD NO. CR 2192	COUNTY LEON
PBPR CERTIFICATE OF AUTH. # 894		FINANCIAL PROJECT ID 413491-1-52-01	
MICHAEL J. WOODARD, P.E. # 47736			

SUMMARY OF QUANTITIES		SHEET NO. 6
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SUMMARY OF GUARDRAIL

LOCATION		GUARDRAIL (LF)										END ANCHORAGE ASSEMBLIES (EA)						REMARKS	FIELD BOOK REFERENCE	
STATION	SIDE	ROADWAY		REMOVAL		MOD. THREE BEAM DOUBLE FACE		PEDESTRIAN SAFETY TREATMENT		RUBRAIL		FLARED PARALLEL		TYPE II		TYPE CRT				
		P	F	P	F	P	F	P	F	P	F	P	F	P	F	P	F			
FROM 103+23.96	RT	81.3				FROM	FROM					1								
TO 104+06.77						TO	TO													
FROM 103+24.48	LT	81.3				FROM	FROM					1								
TO 104+04.24						TO	TO													
FROM 100+83.24	RT	81.3				FROM	FROM					1								
TO 101+66.04						TO	TO													
FROM 100+24.38	LT	143.8				FROM	FROM					1								
TO 101+65.52						TO	TO													
FROM 101+21.79	RT			240		FROM	FROM													
TO 103+62.77						TO	TO													
FROM 101+30.76	LT			240		FROM	FROM													
TO 103+64.26						TO	TO													
						FROM	FROM													
						TO	TO													
TOTAL		388		480								4								

DATE	DESCRIPTION	REVIS IONS	DATE	DESCRIPTION	LOCHNER 2940 EAST PARK AVENUE, SUITE 300 TALLAHASSEE, FLORIDA 32301 # 894 PBPR CERTIFICATE OF AUTH. # 47736 MICHAEL J. WOODARD, P.E.		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	SUMMARY OF QUANTITIES		SHEET NO.
						CR 2192	LEON	413491-1-52-01			9	

NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE SIGNED AND SEALED UNDER RULE 61G15-23.003, F.A.C.

GENERAL NOTES

1. All Exist. R/W control points shown in the plans are measured from the E Survey CR 2192.
2. All Prop. R/W and TCE control points shown in the plans are measured from the E Const. CR 2192, except where the Prop. R/W and TCEs intersect the existing maintained R/W. These points of intersection are measured from the E Survey CR 2192.
3. Any public land survey system corner or any monument that perpetuates the FDOT R/W within the project limits of construction is to be protected by the contractor. If a monument is in danger of being destroyed and has not been properly referenced, the project administrator should notify the District Surveyor, without delay, by telephone at 888-638-0250.
4. Any project control monument within the limits of construction is to be protected. If a monument is in danger of being destroyed and has not been properly referenced, the Engineer should notify the District Location Surveyor, without delay, by telephone at 850-415-9400.
5. All erosion control items and survey stakes shall be removed by the contractor at the completion of the project.
6. If the limerock base option is constructed for the widening or paved shoulder base, the excess limerock from the clipping of the limerock base shall not be spoiled on the shoulders or slopes outside the limits of the base construction. The limerock will be removed from the project site and no additional compensation will be allowed for this removal.
7. If any known or suspected hazardous material is found on the project by the Contractor, notify the DCIC and comply with Section 8-4.9 of the Standard Specifications.
8. The location(s) of the utilities shown in the plans (including those designated Vv, Vh and Vw) 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.
9. Existing utilities are to remain in place unless otherwise noted. The Contractor shall notify utility owners through Sunshine One Call of Florida, Inc. (1-800-432-4770), the Nationwide Utility Locate toll free number 811 and telephone numbers listed below, two business days in advance of beginning construction on the job site.

Utility/Agency Owner	Contact Person	Telephone Number
Talquin Electric Co-Op, Inc.	Thomas Tadlock	(850) 562-2119
Century Link (or Outsource Inc.)	Thom Duggar	(850) 599-1543
FDOT Utility Coordinator	Mark Williams	(229) 224-9380
	Traci Adkison	(850) 575-1800
		(850) 528-3400
10. Coordinate the disposal of the existing bridge concrete debris with:
 - Midway Operations Center
 - Greg Outs, P.E.
 - 17 Commerce Blvd.
 - Midway, FL 32343
 - (850) 922-7900

It is the responsibility of the Contractor to deliver the existing bridge concrete debris to the Shelter Road Pit. All other materials removed by the Contractor shall be disposed of in accordance with Section 110-8 of the Standard Specifications.

11. The Contractor is responsible for complying with all of the following permits: Leon County Environmental Management permit, FDEP NPDES permit, NWFWMD Environmental Resource permit, and ACOE Federal Dredge and Fill permit.
12. Any damage to Natural Bridge Road outside the limits of construction as a result of construction activities shall be repaired at no cost to the Department. The Contractor shall resurface any sections of Natural Bridge Road which may be damaged as a result of constructing the new bridge. To this end, pre- and post-construction surveys are to be conducted by the governing parties involved (Contractor and FDOT), along with a video tape of Natural Bridge Road which is associated with the pre- and post-construction start & finish dates. Furthermore, the Contractor shall inspect the condition of all unpaved roadway sections of the detour on a monthly basis, and re-grade any sections as determined by the Engineer.
- Any post construction repair to Natural Bridge Road outside of the project limits will require DEMO to prepare an environmental document prior to any repair work being done. The road contractor shall provide notification in writing to Mrs. Blair Martin P.E, District Environmental Management Engineer, P.O. Box 607, Chipley, FL 32428.
13. If a monitoring well is encountered within or adjacent to the project corridor, and is not shown in the plan, the Contractor shall immediately notify the DCIC or the District Environmental Manager at (850) 638-0250.
14. Eastern Indigo Snake Protection Measures and Educational Plan

Habitat for the federally protected eastern indigo snake occurs along the project. The U.S. Fish and Wildlife Service (FWS) requires that their Standard Protection Measures for the Eastern Indigo Snake be implemented during project construction. The following plan will implement the required protection measures:

The Department or its designee shall:

 - * Provide an eastern indigo snake educational packet and make an informational presentation to the Contractor's representatives of the project Pre-construction conference. The educational packet and presentation will include:
 - o an explanation of the protections afforded the eastern indigo snake under the Endangered Species Act (ESA) of 1973, as amended, including the fines and penalties associated with violations of the ESA for which the contractor could be responsible;
 - o a description of the eastern indigo snake and its habits including reproducible photographs and/or posters;
 - o direction that if an eastern indigo snake enters or is found within the project construction area, all construction activities shall cease and the snake shall be allowed to move away on its own before construction activities may resume;
 - o instruction not to injure, harm, harass, or kill any eastern indigo snake during construction activities;
 - o contact information of all pertinent agencies who shall be immediately notified if a dead eastern indigo snake is encountered, and direction to soak the specimen in water, freeze it, and provide it to the FWS contact person;
 - o instruction that no construction personnel may come in contact with a live eastern indigo snake, unless that individual possesses a FWS section 10(a)(1)(A) permit or is authorized for such activities by the State of Florida through the Florida Fish and Wildlife Conservation Commission (FWC).

DATE	DESCRIPTION	REVISED	DATE	DESCRIPTION	
	LOCHNER				
	2940 EAST PARK AVENUE, SUITE 300 TALLAHASSEE, FLORIDA 32301 PBR CERTIFICATE OF AUTH. # 894 MICHAEL J. WOODARD, P.E. # 47756				
	STATE OF FLORIDA				
	DEPARTMENT OF TRANSPORTATION				
	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
	CR 2192	LEON	413491-1-52-01		
				GENERAL NOTES	
					SHEET NO. 12

- * Provide the contractor with an example of a sign providing the above information that shall be posted within the construction area.
- * Provide the contractor with a template to use to prepare an eastern indigo snake monitoring report.
- * Transmit the eastern indigo snake monitoring report prepared by the contractor or CEI consultant, to the FWS field office in Panama City, Florida within 60 days of conclusion of construction.

The Contractor and/or Construction Engineering Inspection consultant shall:

- * Utilize the eastern indigo snake educational packet and information received from the Department or its designee at the Pre-construction conference to educate ALL construction and CEI personnel regarding the eastern indigo snake's protected status and the protection measures that must be implemented during construction, including:
 - o an explanation of the protections afforded the eastern indigo snake under the Endangered Species Act (ESA) of 1973, as amended, including the fines and penalties associated with violations of the ESA for which the contractor could be responsible;
 - o a description of the eastern indigo snake and its habits using reproducible photographs and/or posters;
 - o direction that if an eastern indigo snake enters or is found within the project construction area, all construction activities shall cease and the snake shall be allowed to move away on its own before construction activities may resume.
 - o instruction not to injure, harm, harass, or kill any eastern indigo snake during construction activities.
 - o contact information of all pertinent agencies who shall be immediately notified if a dead eastern indigo snake is encountered, and direction to soak the specimen in water, freeze it, and provide it to the FWS contact person.
 - o instruction that no construction personnel may come in contact with a live eastern indigo snake, unless that individual possesses a FWS section 10(a)(1)(A) permit or is authorized for such activities by the State of Florida through the Florida Fish and Wildlife Conservation Commission (FWC).
 - * Post signs within the construction area containing the information provided above.
 - * Prepare an eastern indigo snake monitoring report using the template provided by the Department and addressing all items listed in the template report. The monitoring report shall be submitted to the Department's District 3 Environmental Management Office within 45 days of the conclusion of construction activities. The report shall be submitted to the Department whether or not eastern indigo snakes are observed.

15. During the construction re-evaluation, DEMO will perform a pre-construction survey for eagles.
16. During the construction re-evaluation, DEMO will schedule a pre-construction survey for gopher tortoises. In accordance with FWC regulations, tortoises will be relocated prior to construction or if avoidance is possible, appropriate notes and guidance to the contractor will be included in the project design plans. DEMO will coordinate with the Florida Fish and Wildlife Conservation Commission as appropriate.
17. Per FDOT Specification 8-6.4, Suspension of Contractor's Operations Holidays and Special Events, Special Event days for this project include: Battle of Natural Bridge Re-enactment in March.
18. Pre-construction conference is required with the County Environmental Inspector prior to the initiation of construction activities.
19. Leon County will be the maintaining agency. Therefore, a final inspection by the maintaining agency's representative will be required prior to final acceptance of the contract by the Department.
20. The stormwater management control officer will be determined during the pre-construction meeting.

DATE		REVISIONS		DESCRIPTION		SHEET NO.	
						13	
LOCHNER 2940 EAST PARK AVENUE, SUITE 300 TALLAHASSEE, FLORIDA 32301 # 894 FBPR CERTIFICATE OF AUTH. # 47756 MICHAEL J. WOODARD, P.E.				STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION ROAD NO. CR 2192 COUNTY LEON FINANCIAL PROJECT ID 413491-1-52-01		GENERAL NOTES	

CURVE DATA AL4

PI STA.	= 29+38.22
DELTA	= 21° 47' 27" (RT)
D	= 17' 47' 17"
L	= 62.00
R	= 122.50
PC STA.	= 322.10
PT STA.	= 28+76.23
PC STA.	= 29+98.73

Curve	Radius	PC Sta.	PC Offset	PT Sta.	PC Offset
EOP1	640'	100+00.00	9' Lt.	101+52.15	10' Lt.
EOP2	620'	100+00.00	9' Rt.	101+52.15	10' Rt.
EOP3	640'	103+37.85	10' Lt.	104+51.57	9' Lt.
EOP4	620'	103+37.85	10' Rt.	104+51.57	9' Rt.

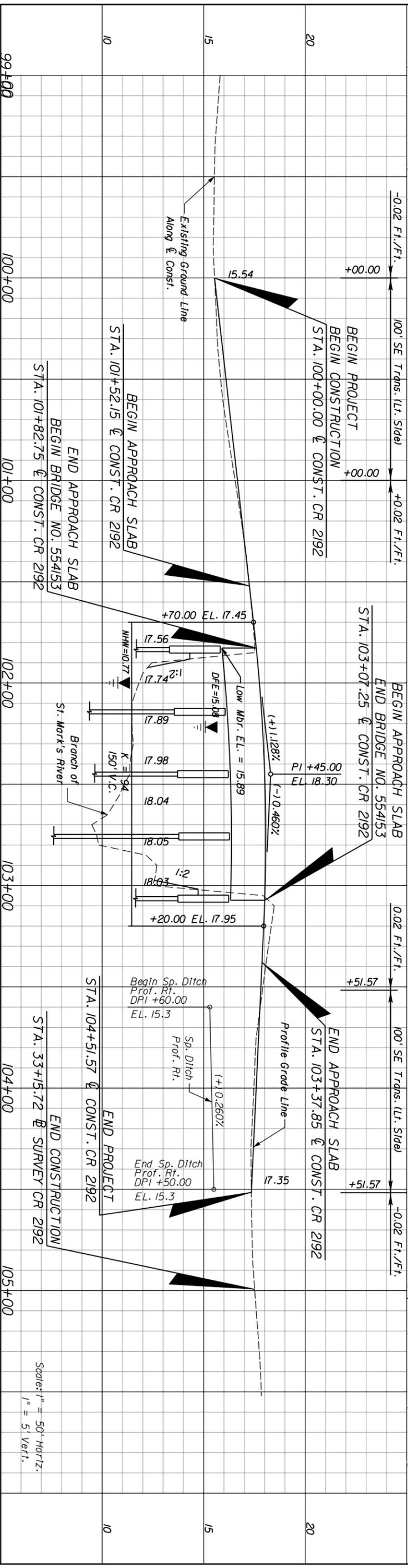
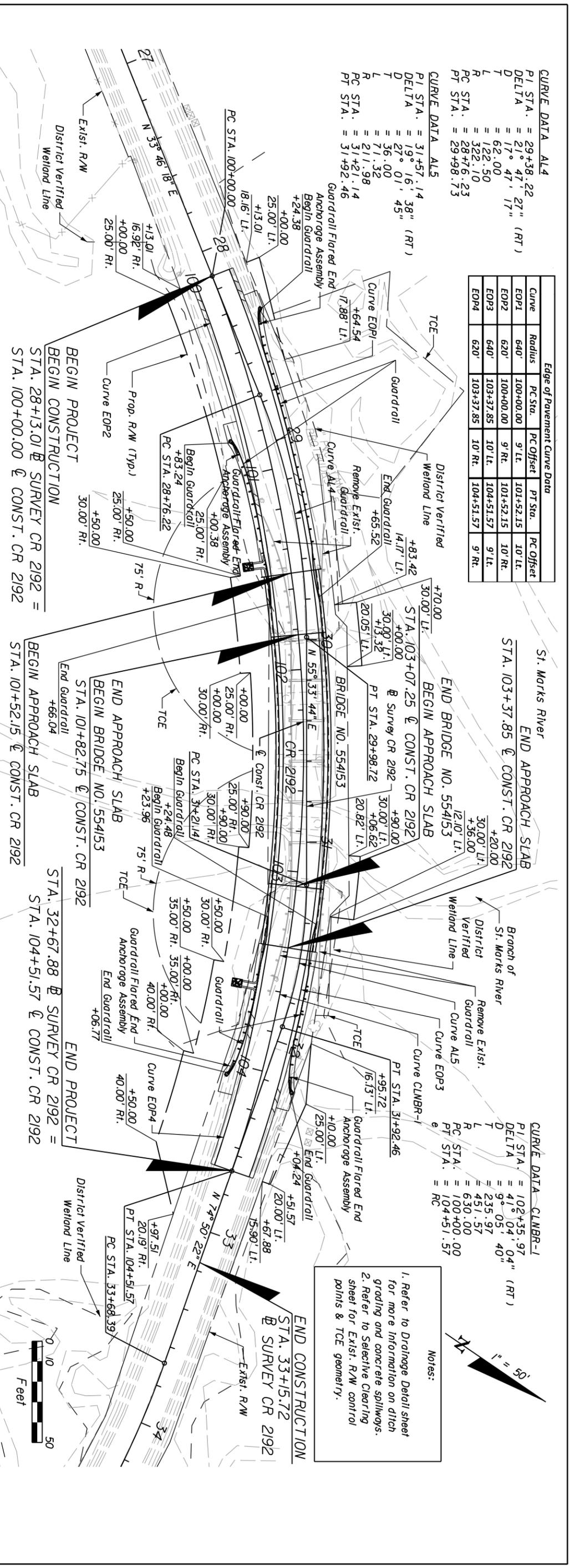
Edge of Pavement Curve Data

Curve	Radius	PC Sta.	PC Offset	PT Sta.	PC Offset
EOP1	640'	100+00.00	9' Lt.	101+52.15	10' Lt.
EOP2	620'	100+00.00	9' Rt.	101+52.15	10' Rt.
EOP3	640'	103+37.85	10' Lt.	104+51.57	9' Lt.
EOP4	620'	103+37.85	10' Rt.	104+51.57	9' Rt.

CURVE DATA CLNBR-1

PI STA.	= 102+35.97
DELTA	= 41° 104' 04" (RT)
D	= 9' 05"
L	= 235.97
R	= 451.57
PC STA.	= 630.00
PT STA.	= 100+00.00
PC STA.	= 104+51.57

- Notes:**
1. Refer to Drainage Detail sheet for more information on ditch grading and concrete spillways.
 2. Refer to Selective Clearing sheet for Exist. R.W. control points & TCE geometry.

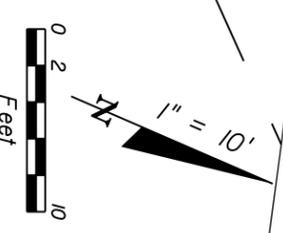
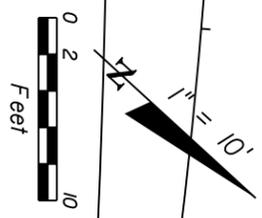
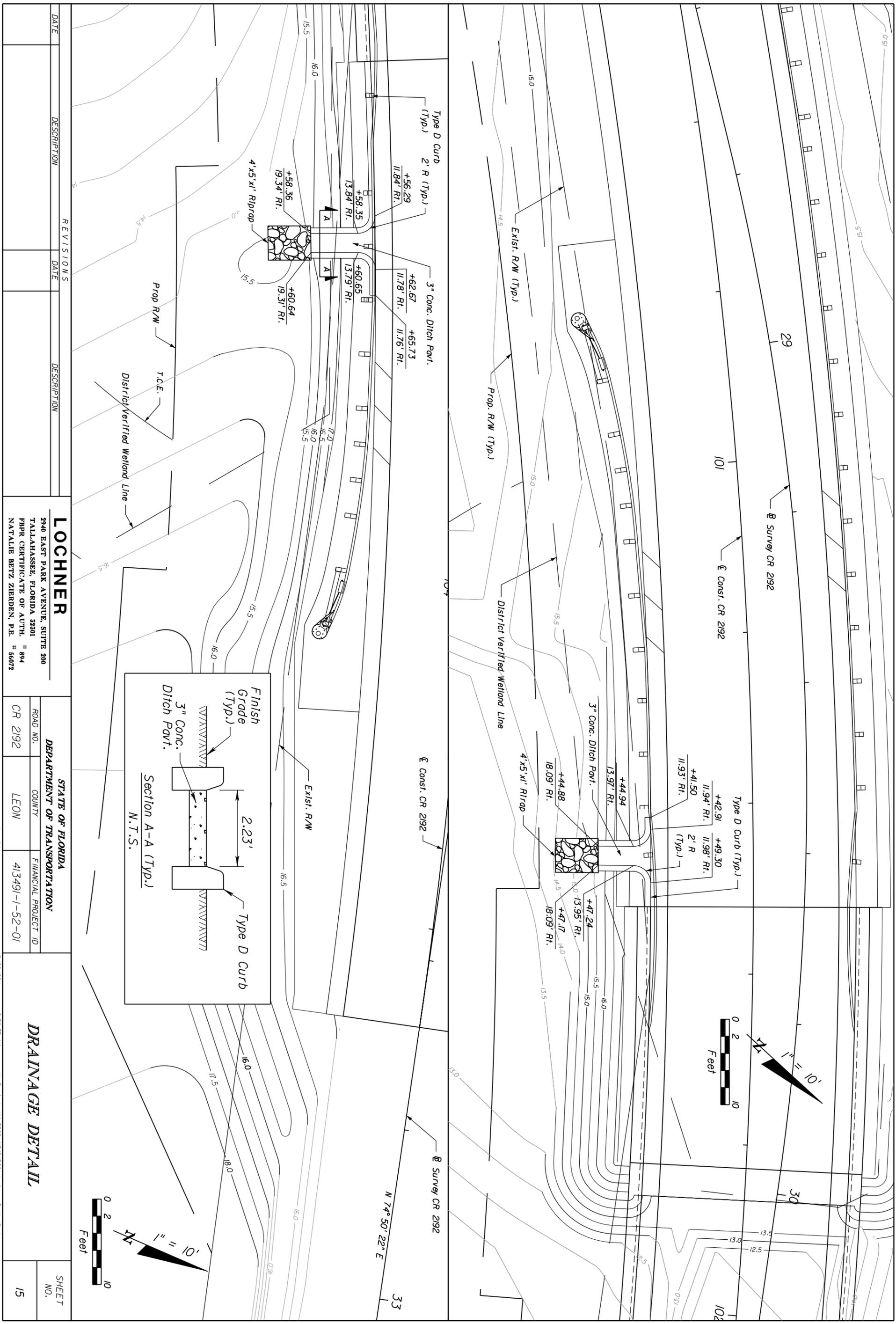


DATE	DESCRIPTION	DATE	DESCRIPTION

LOCHNER		STATE OF FLORIDA	
2940 EAST PARK AVENUE, SUITE 300		DEPARTMENT OF TRANSPORTATION	
TALLAHASSEE, FLORIDA 32301		ROAD NO.	COUNTY
PBPR CERTIFICATE OF AUTH. # 894		CR 2192	LEON
MICHAEL J. WOODARD, P.E.		FINANCIAL PROJECT ID	413491-1-52-01

PLAN/PROFILE	SHEET NO.
	14

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DATE	DESCRIPTION	REVISIONS	DATE	DESCRIPTION

LOCHNER
 2940 EAST PARK AVENUE, SUITE 300
 TALLAHASSEE, FLORIDA 32301
 PBR CERTIFICATE OF AUTH. # 894
 NATALIE BETZ ZIERDEN, P.E. # 56072

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			
ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
CR 2192	LEON	413491-1-52-01	

DRAINAGE DETAIL

SHEET NO. 15

NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE SIGNED AND SEALED UNDER RULE 61G15-23.003, F.A.C.

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION
MATERIALS AND RESEARCH

DATE OF SURVEY: DECEMBER 2011
SURVEY MADE BY: ENVIRONMENTAL AND GEOTECHNICAL SPECIALIST, INC.
SUBMITTED BY: THOMAS H. HAYDEN, P.E.

BRIDGE REPLACEMENT - NATURAL BRIDGE OVER ST. MARKS BRANCH
FINANCIAL PROJECT ID : 413491-1-52-01

DISTRICT: 3
ROAD NO.: NATURAL BRIDGE
COUNTY: LEON

CROSS SECTION SOIL SURVEY FOR THE DESIGN OF ROADS

SURVEY BEGINS STA. : 100+00.00 SURVEY ENDS STA. : 104+51.57
REFERENCE : CONSTRUCTION & SURVEY

STRATUM NO.	NO. OF TESTS	MOISTURE CONTENT	% ORGANIC	LBR VALUE			SIEVE ANALYSIS RESULTS						ATTURBERG LIMITS (%)	COLOR	DESCRIPTION	NO. OF TESTS	CORROSION TEST RESULTS				
				MAX LBR	NO. OF TESTS	ID MESH	40 MESH	60 MESH	100 MESH	200 MESH	NO. OF TESTS	LIQUID LIMIT					PLASTIC INDEX	AASHTO GROUP	RESISTIVITY ohm-cm	CHLORIDE ppm	SULFATES ppm
1	--	--	--	2	48-60	5	100	74-98	48-95	31-87	6-9	-	-	-	GRAY	FINE SAND	2	34,000-57,000	25-27	1-6	5.2-5.5
2	--	--	--	2	56-61	2	100	88-97	66-92	42-83	13-16	-	-	-	BROWN AND GRAY	SILTY FINE SAND	2	32,000-36,000	25-30	4	5.9-7.1
3	2	35-72	2.5-4.8	--	--	1	100	97	94	81	9	-	-	-	DARK GRAY	FINE SAND WITH ORGANICS	1	34,000	25	4	7.0
4	--	--	--	--	--	4	100	90-100	78-98	48-96	25-35	4	21-35	11	GRAY	CLAYEY FINE SAND	2	4,200-4,300	26	14-24	5.3-6.8
5	--	--	--	--	--	1	100	94	92	89	52	1	44	15	GRAY	SANDY CLAY	1	4,100	26	44	6.6
6	3	34-76	10.1-32.9	--	--	1	100	99	97	93	20	-	-	-	BLACK	ORGANIC SILT	1	5,800	25	18	5.6
7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	GRAY	WEATHERED LIMESTONE	-	-	-	-	-

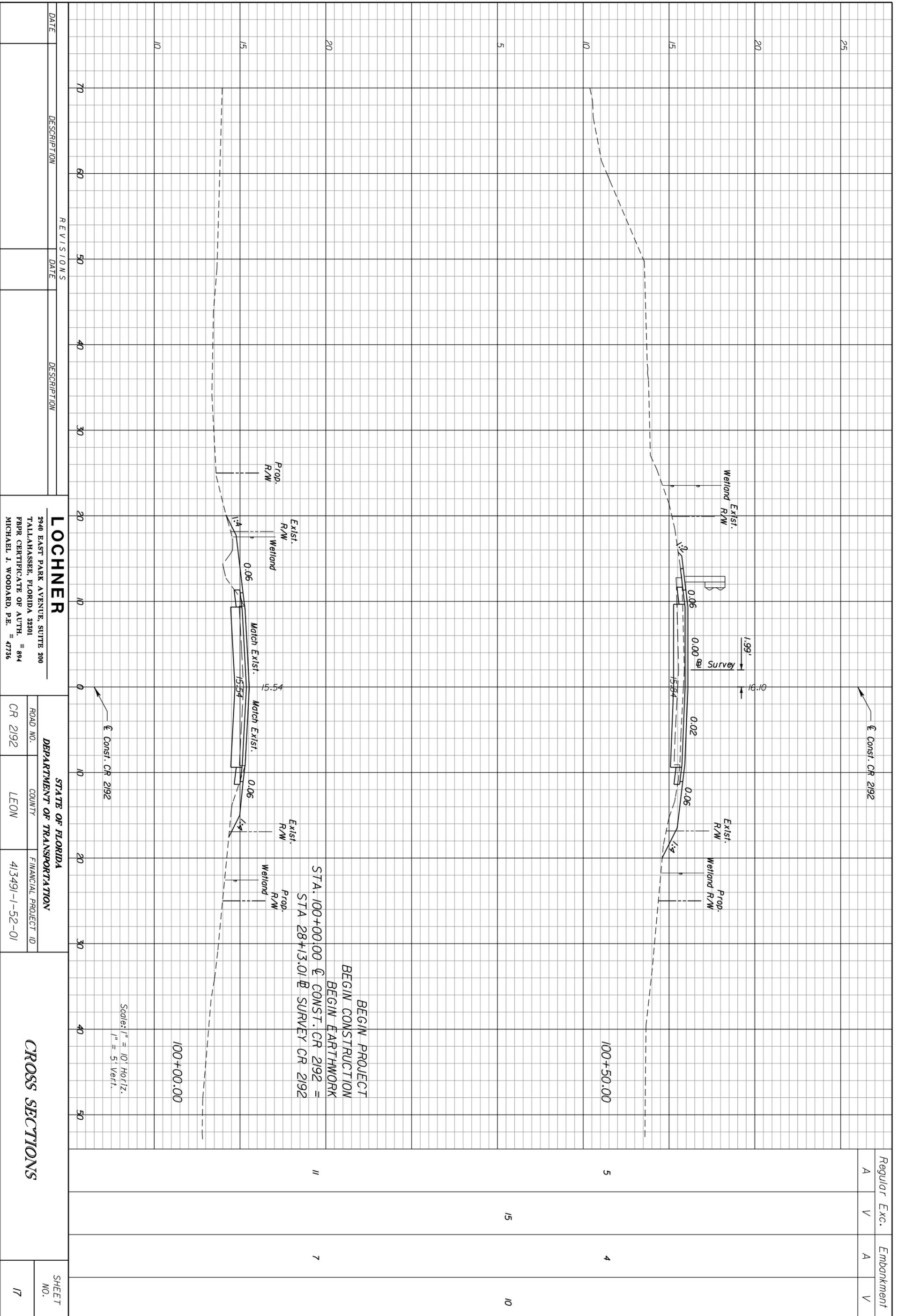
STRATUM NOTES
1. STRATA 1 AND 2 ARE "SELECT" SOILS.

EMBANKMENT AND SUBGRADE MATERIAL
STRATA BOUNDARIES ARE APPROXIMATE
∇ - WATER TABLE ENCOUNTERED
GNE - GROUNDWATER NOT ENCOUNTERED

ADDITIONAL NOTES
1. SOIL DESCRIPTIONS AND TEST DATA SHOWN ARE FOR THE SOIL BORING ONLY AND MAY NOT APPLY TO ANY OTHER LOCATION. EXTRAPOLATION IS THE RESPONSIBILITY OF THE PERSON PERFORMING THE EXTRAPOLATION.
2. WATER LEVELS SHOWN REPRESENT THE WATER ENCOUNTERED AT THE TIME THE SOIL BORING WAS INSTALLED. FLUCTUATIONS IN THE WATER LEVELS SHOULD BE EXPECTED.

2. STRATUM 3 IS A "SELECT" SOIL; HOWEVER, THE ORGANIC CONTENT IS BETWEEN 2.5 AND 5.0 PERCENT.
3. STRATA 4 AND 5 ARE "PLASTIC" SOILS.
4. STRATUM 6 IS A "HIGHLY ORGANIC" SOIL AS DEFINED BY THE FOOT STANDARD DESIGN INDEX 505.
5. REUSE OF THESE STRATA SHALL BE IN ACCORDANCE WITH DESIGN STANDARD INDEX 505, UNLESS OTHERWISE NOTED IN THE PLANS.
6. REMOVAL OF THESE STRATA SHALL BE PERFORMED IN ACCORDANCE WITH DESIGN STANDARD INDEX 500, UNLESS OTHERWISE NOTED IN THE PLANS.

DATE		REVISIONS			
DESCRIPTION		DESCRIPTION		DESCRIPTION	
THOMAS H. HAYDEN, P.E. P.E. NO.: 67492 Environmental & Geotechnical Specialists, Inc. EGS 3154 Eliza Road Tallahassee, Florida 32308 Office: (850) 386-1253 Fax: (850) 386-8050 Certificate of Authorization: 6222					
ROAD NO.		COUNTY		STATE OF FLORIDA	
CR 2192		LEON		DEPARTMENT OF TRANSPORTATION	
				FINANCIAL PROJECT ID	
				413491-1-52-01	
ROADWAY SOIL SURVEY					
SHEET NO.					16

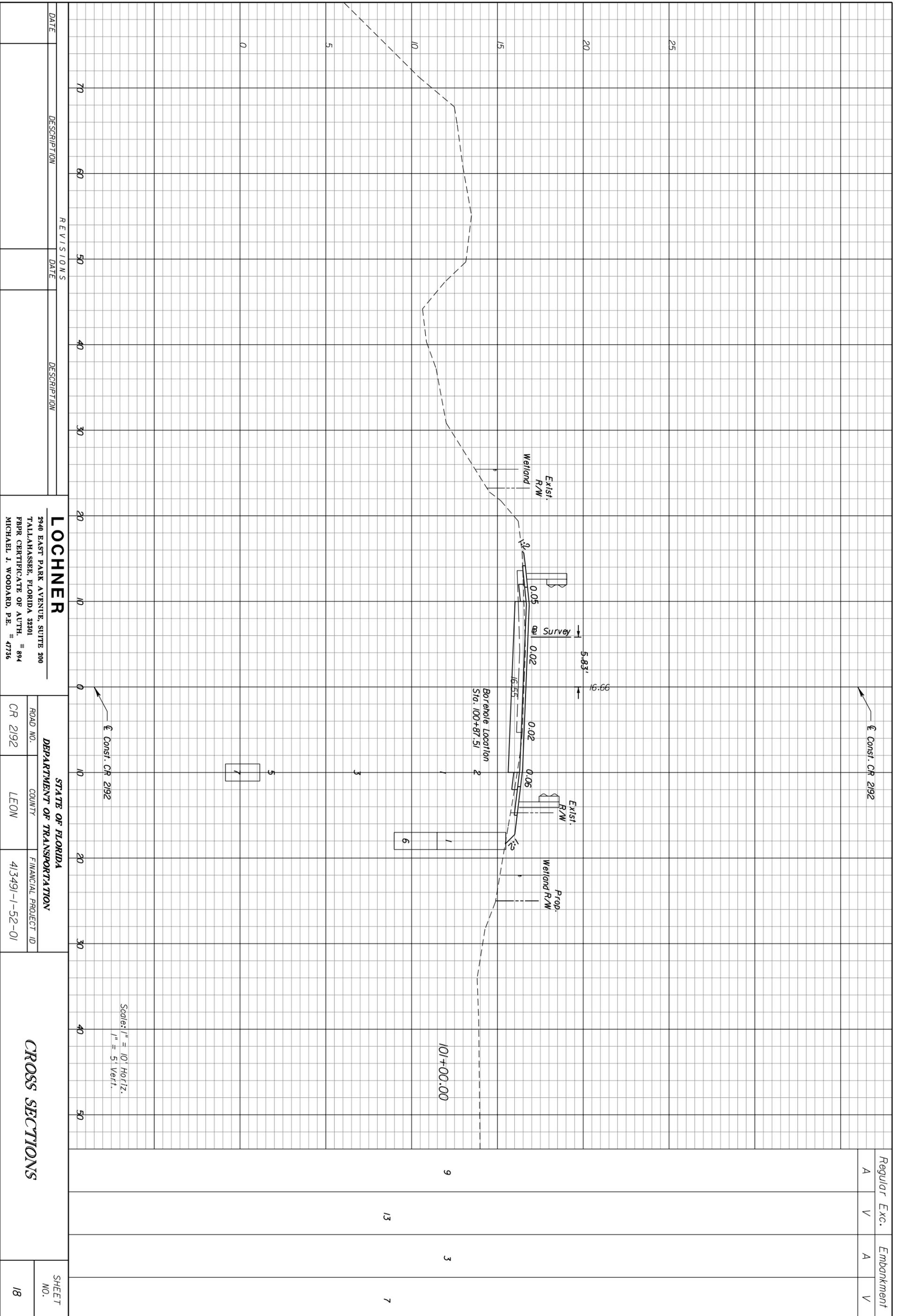


DATE	DESCRIPTION	REV	STATION	DATE	DESCRIPTION

LOCHNER		2940 EAST PARK AVENUE, SUITE 300 TALLAHASSEE, FLORIDA 32301 PBR CERTIFICATE OF AUTH. # 894 MICHAEL J. WOODARD, P.E. # 47756	
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		ROAD NO.	CR 2192
		COUNTY	LEON
		FINANCIAL PROJECT ID	413491-1-52-01

CROSS SECTIONS		SHEET NO.	17
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Regular Exc. A V Embankment A V

9 3

13 7

Scale: 1" = 10' Horiz.
1" = 5' Vert.

DATE	DESCRIPTION	REV'S	DATE	DESCRIPTION

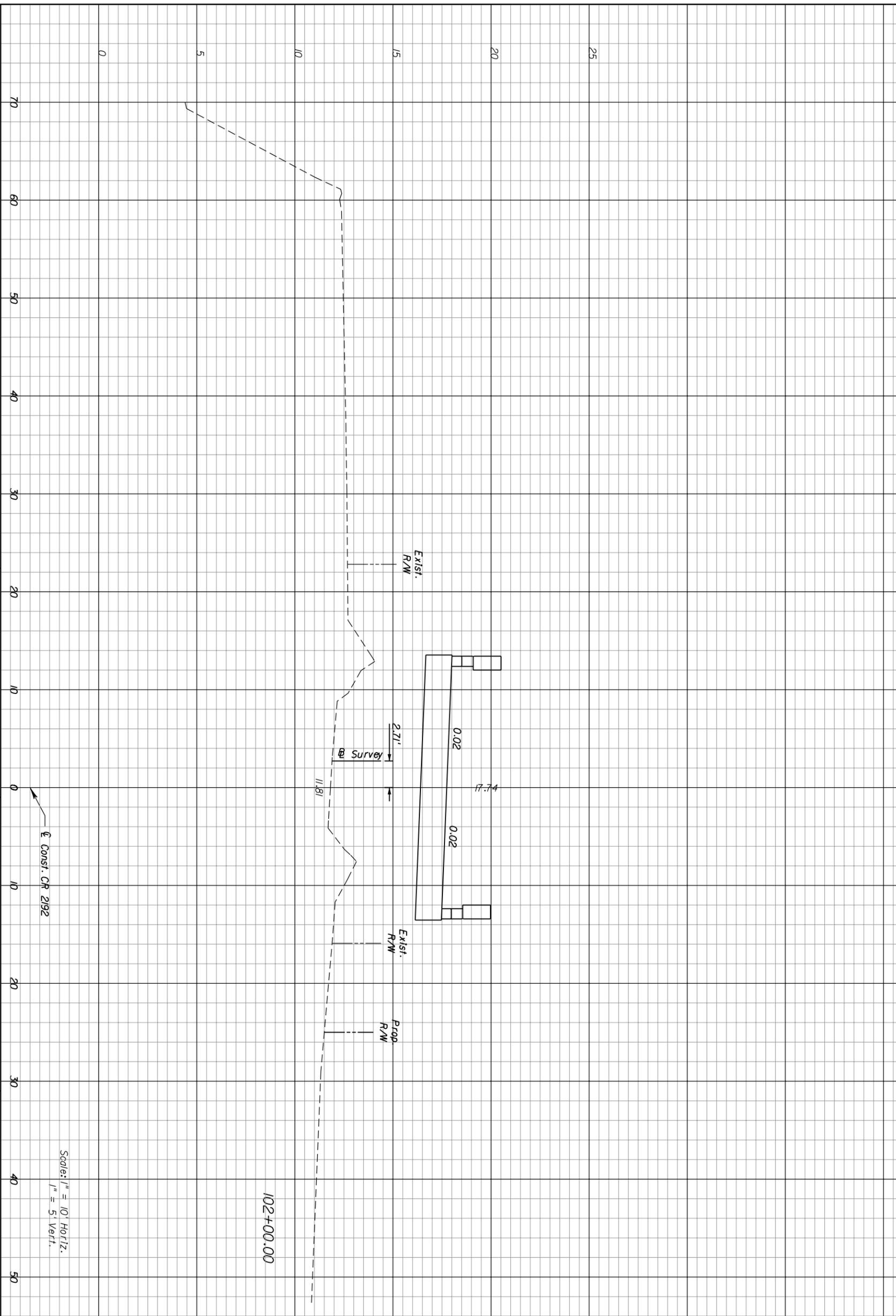
LOCHNER
 2940 EAST PARK AVENUE, SUITE 300
 TALLAHASSEE, FLORIDA 32301 # 894
 PBR CERTIFICATE OF AUTH. # 47756
 MICHAEL J. WOODARD, P.E.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION	
ROAD NO. CR 2192	COUNTY LEON
FINANCIAL PROJECT ID 413491-1-52-01	

CROSS SECTIONS
 SHEET NO. 18

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Regular Exc. A V Embankment A V



Scale: 1" = 10' Horiz.
1" = 5' Vert.

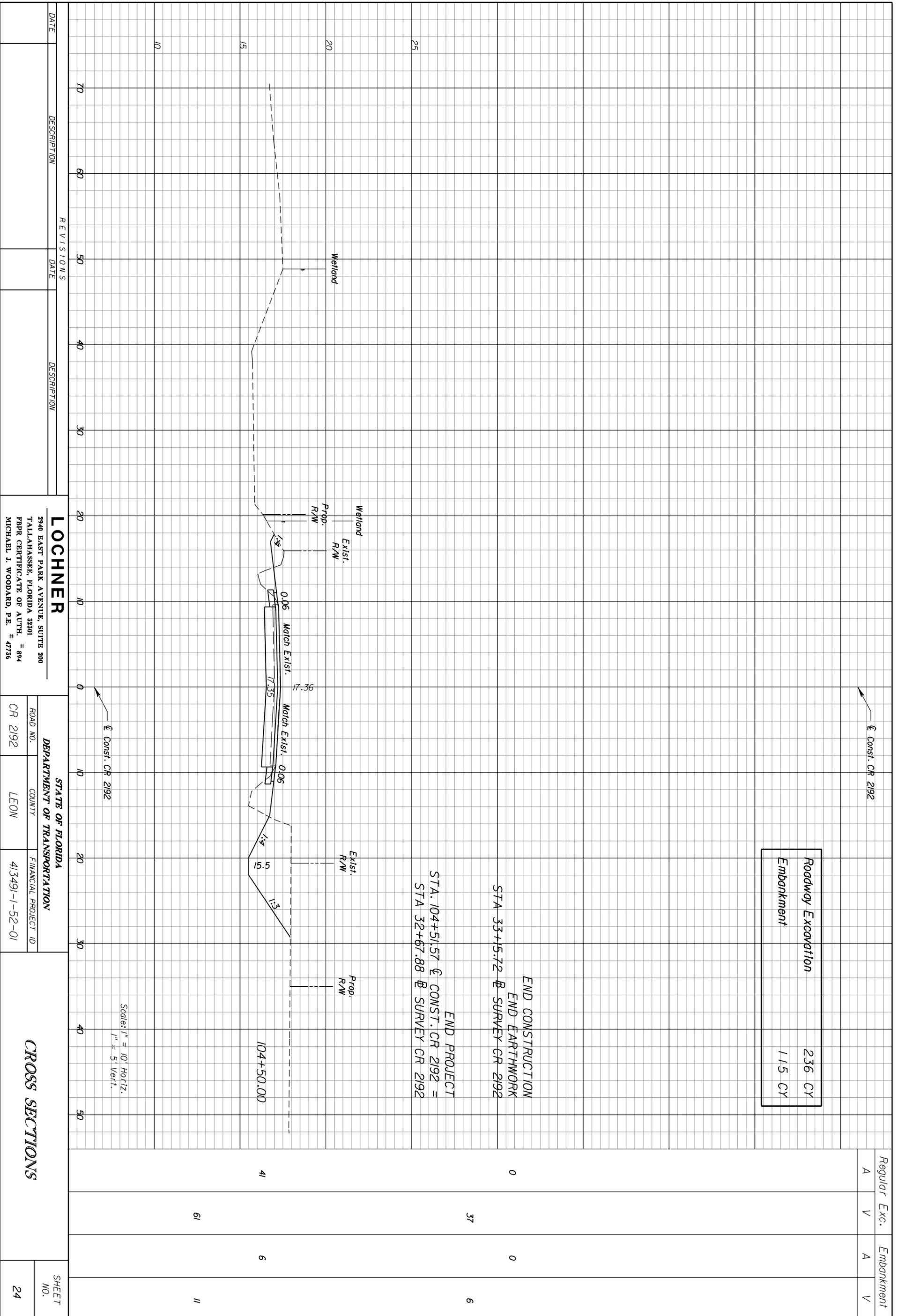
102+00.00

DATE	DESCRIPTION	REV'S	DATE	DESCRIPTION

LOCHNER	
2940 EAST PARK AVENUE, SUITE 300 TALLAHASSEE, FLORIDA 32301 PBR CERTIFICATE OF AUTH. # 894 MICHAEL J. WOODARD, P.E. # 47756	
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION	
ROAD NO. CR 2192	COUNTY LEON
FINANCIAL PROJECT ID 413491-1-52-01	

CROSS SECTIONS	
SHEET NO.	20

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DATE	DESCRIPTION	REVISIONS	DATE	DESCRIPTION

STATION	ROADWAY EXCAVATION (CY)	EMBANKMENT (CY)	SHEET NO.
104+50.00	41	6	11
104+51.57	0	37	6
104+57.88	0	0	

NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE SIGNED AND SEALED UNDER RULE 61G15-23.003, F.A.C.

1. SITE DESCRIPTION

A. CONSTRUCTION ACTIVITY:

THE PROJECT CONSISTS OF REPLACING THE BRIDGE ON NATURAL BRIDGE ROAD OVER A BRANCH OF ST. MARKS RIVER. THE PROJECT WILL BEGIN APPROXIMATELY 200 FT WEST OF THE EXISTING BRIDGE AND END APPROXIMATELY 200 FT EAST OF THE BRIDGE.

B. MAJOR SOIL DISTURBING ACTIVITIES:

CLEARING AND GRUBBING
REMOVAL OF EXISTING BRIDGE
CONSTRUCTION OF NEW BRIDGE

C. AREA ESTIMATES:

TOTAL PROJECT AREA: 0.76 ACRES
TOTAL AREA TO BE DISTURBED: 0.76 ACRES

D. RUNOFF DATA:

RUNOFF COEFFICIENT (BEFORE CONSTRUCTION): 0.64
RUNOFF COEFFICIENT (DURING CONSTRUCTION): 0.67
RUNOFF COEFFICIENT (AFTER CONSTRUCTION): 0.67
OUTFALL LOCATIONS:
1) LATITUDE 30°17'8" N, LONGITUDE 84°8'56" W

2. CONTROLS

SEQUENCE OF SOIL DISTURBING ACTIVITIES AND IMPLEMENTATION OF CONTROLS:

CONTROLS TO BE IMPLEMENTED THROUGHOUT THE DURATION OF THE PROJECT

A. EROSION AND SEDIMENT CONTROLS

- (1) STABILIZATION PRACTICES:
 - TEMPORARY SODDING
 - TEMPORARY GRASSING
 - X PERMANENT SODDING OR SEEDING
 - TEMPORARY MULCHING
 - ARTIFICIAL COVERING
 - X PRESERVATION OF NATURAL AREAS
- (2) STRUCTURAL PRACTICES BASED ON ESTIMATES
 - BULLETIN 09-02 DATED JULY 9, 2009:
 - X SEDIMENT BARRIER
 - INLET PROTECTION SYSTEM
 - BERMS
 - DIVERSION, INTERCEPTOR OR PERIMETER DITCHES
 - PIPE SLOPE DRAINS
 - FLUMES
 - ROCK BEDDING AT CONSTRUCTION EXIT
 - TIMBER BEDDING AT CONSTRUCTION EXIT
 - DITCH LINER
 - SEDIMENT TRAPS/BASINS
 - STORM INLET SEDIMENT TRAP NOTE: THE CONTRACTOR IS RESPONSIBLE FOR DOCUMENTING THIS PORTION OF THE SWPPP PER STORM SEWERS
 - X VELOCITY CONTROL DEVICES SECTION 104 OF THE FDOT STANDARD TURBIDITY BARRIER SPECIFICATIONS.
 - RIP RAP

PROTECT EXISTING WETLANDS WITH SEDIMENT BARRIER AND PLACE SEDIMENT BARRIER AT ALL LOCATIONS WHERE RUNOFF CAN LEAVE THE PROJECT SITE.

B. STORMWATER MANAGEMENT
STORMWATER TREATMENT WILL NOT BE PROVIDED.
ATTENUATION IS NOT REQUIRED.

C. OTHER CONTROLS

- (1) WASTE DISPOSAL:
THE CONTRACTOR IS RESPONSIBLE FOR DOCUMENTING THIS PORTION OF THE SWPPP PER SECTION 104 OF THE FDOT STANDARD SPECIFICATIONS.
- (2) OFFSITE VEHICLE TRACKING AND GENERATION OF DUST:
HAUL ROADS DAMPENED FOR DUST CONTROL
X LOADED HAUL TRUCKS TO BE COVERED WITH TARP
X EXCESS DIRT ON ROADWAY REMOVED DAILY
STABILIZED CONSTRUCTION ENTRANCE
- (3) SANITARY OR SEPTIC WASTE:
ALL SANITARY WASTE WILL BE COLLECTED AS NECESSARY OR AS REQUIRED BY LOCAL REGULATION BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR DOCUMENTING THIS PORTION OF THE SWPPP PER SECTION 104 OF THE FDOT STANDARD SPECIFICATIONS.
- (4) FERTILIZER:
FERTILIZER SHALL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS BY A LICENSED OR CERTIFIED APPLICATOR AS DIRECTED BY THE PROJECT ENGINEER.
- (5) PESTICIDES:
THE CONTRACTOR IS RESPONSIBLE FOR DOCUMENTING THIS PORTION OF THE SWPPP PER SECTION 104 OF THE FDOT STANDARD SPECIFICATIONS.
- (6) NON-STORM WATER DISCHARGE INCLUDING SPILL REPORTING:
NO NON-STORM WATER DISCHARGES ARE ANTICIPATED.
- (7) IF CONTAMINATED SOIL OR GROUNDWATER IS ENCOUNTERED, THE DISTRICT HAZARDOUS MATERIALS COORDINATOR SHALL BE CONTACTED.

3. PERMITS

MFWMD ENVIRONMENTAL RESOURCE PERMIT
LEON COUNTY ENVIRONMENTAL MANAGEMENT PERMIT
ACOE DREDGE & FILL PERMIT
FDEP NPDES

4. MAINTENANCE

DISCHARGES INTO OFFSITE OUTFALLS SHALL BE INSPECTED DAILY FOR POSSIBLE SEDIMENT BUILDUP OR TRANSPORT. ALL EROSION AND SEDIMENT CONTROLS SHALL BE INSPECTED FOLLOWING EACH RAINFALL EVENT. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY. SEDIMENT DEPOSITS AT THE CONTROLS SHOULD BE REMOVED AFTER EACH STORM EVENT.

THE CONTRACTOR IS RESPONSIBLE FOR DOCUMENTING THIS PORTION OF THE SWPPP PER SECTION 104 OF THE FDOT STANDARD SPECIFICATIONS.

5. INSPECTION

ALL CONTROLS SHALL BE INSPECTED WEEKLY BY THE CONTRACTOR AS WELL AS AFTER A STORM EVENT WITH 0.50" OR MORE OF RAIN. AN INSPECTION AND MAINTENANCE REPORT WILL BE MADE PER EACH INSPECTION BASED UPON INSPECTION RESULTS. THE CONTROLS SHALL BE REVISED PER THE INSPECTION RESULTS.

DATE	DESCRIPTION	DATE	DESCRIPTION

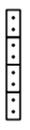
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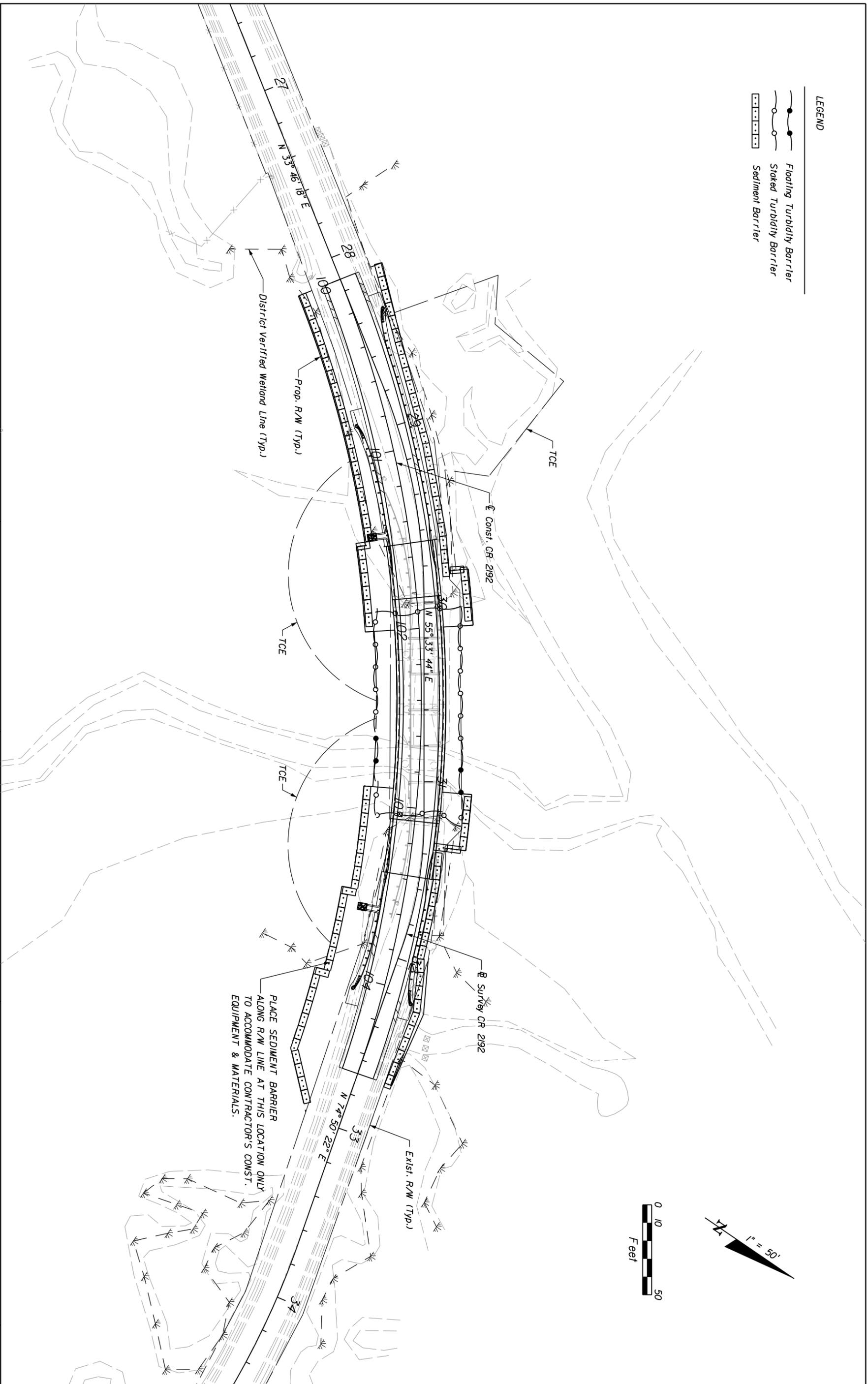
LOCHNER
2940 EAST PARK AVENUE, SUITE 300
TALLAHASSEE, FLORIDA 32301 # 894
PBR CERTIFICATE OF AUTH. # 56072
NATALIE BETZ ZIERDEN, P.E.

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 2192	LEON	413491-1-52-01

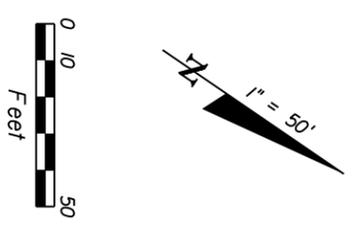
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION
STORMWATER POLLUTION
PREVENTION PLAN

SHEET NO.	25
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- LEGEND**
-  Floating Turbidity Barrier
 -  Staked Turbidity Barrier
 -  Sediment Barrier



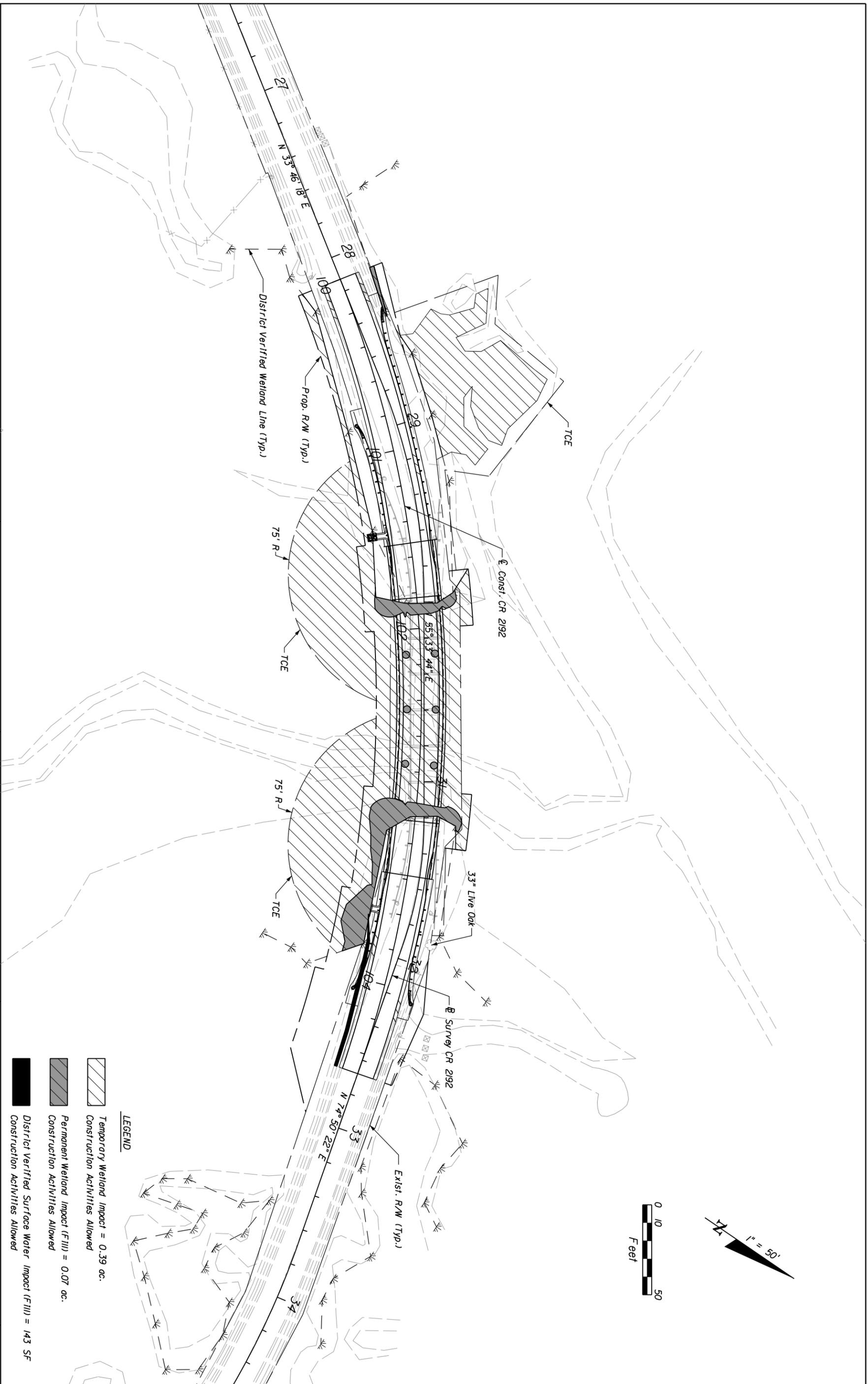
PLACE SEDIMENT BARRIER
ALONG R/W LINE AT THIS LOCATION ONLY
TO ACCOMMODATE CONTRACTOR'S CONST.
EQUIPMENT & MATERIALS.



DATE	DESCRIPTION	REVISIONS	DATE	DESCRIPTION

LOCHNER		STATE OF FLORIDA	
2940 EAST PARK AVENUE, SUITE 200		DEPARTMENT OF TRANSPORTATION	
TALLAHASSEE, FLORIDA 32301		ROAD NO. CR 2192	
PBPR CERTIFICATE OF AUTH. # 894		COUNTY LEON	
NATALIE BETZ ZIERDEN, P.E. # 56072		FINANCIAL PROJECT ID 413491-1-52-01	
STORMWATER POLLUTION PREVENTION PLAN			
SHEET NO. 26			

NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE SIGNED AND SEALED UNDER RULE 61G15-23.003, F.A.C.



LEGEND

	Temporary Wetland Impact = 0.39 ac.
	Construction Activities Allowed
	Permanent Wetland Impact (F III) = 0.07 ac.
	Construction Activities Allowed
	District Verified Surface Water Impact (F III) = 143 SF
	Construction Activities Allowed

DATE	DESCRIPTION	DATE	DESCRIPTION

LOCHNER
 2940 EAST PARK AVENUE, SUITE 200
 TALLAHASSEE, FLORIDA 32301
 FBPR CERTIFICATE OF AUTH. # 894
 MICHAEL J. WOODARD, P.E. # 47756

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 2192	LEON	413491-1-52-01

12/20/2011 10:30:09 AM H:\V\10\brts_jam\3509\413491\5201\0004\WET\LR001.DGN

WETLAND IMPACTS

SHEET NO. 27

NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE SIGNED AND SEALED UNDER RULE 61G15-23.003, F.A.C.

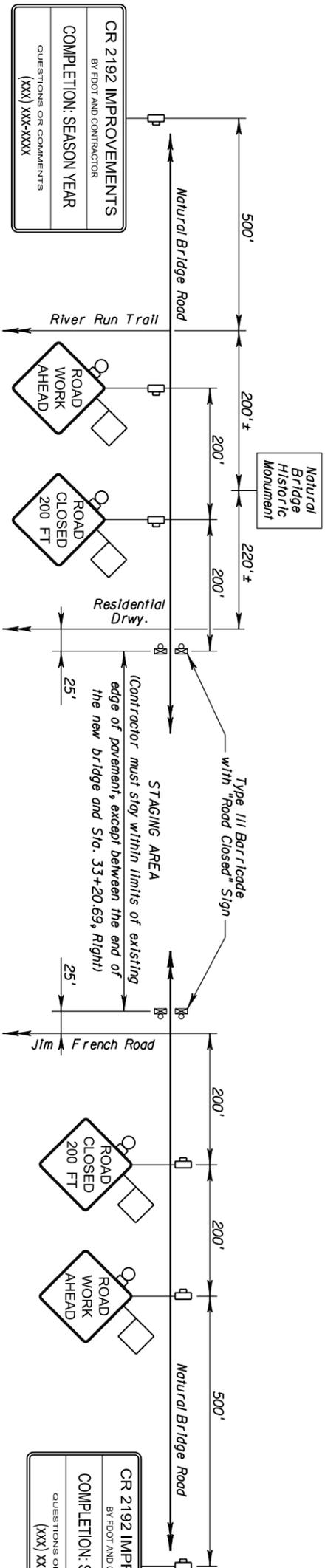
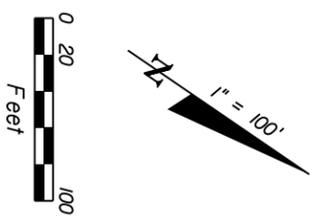
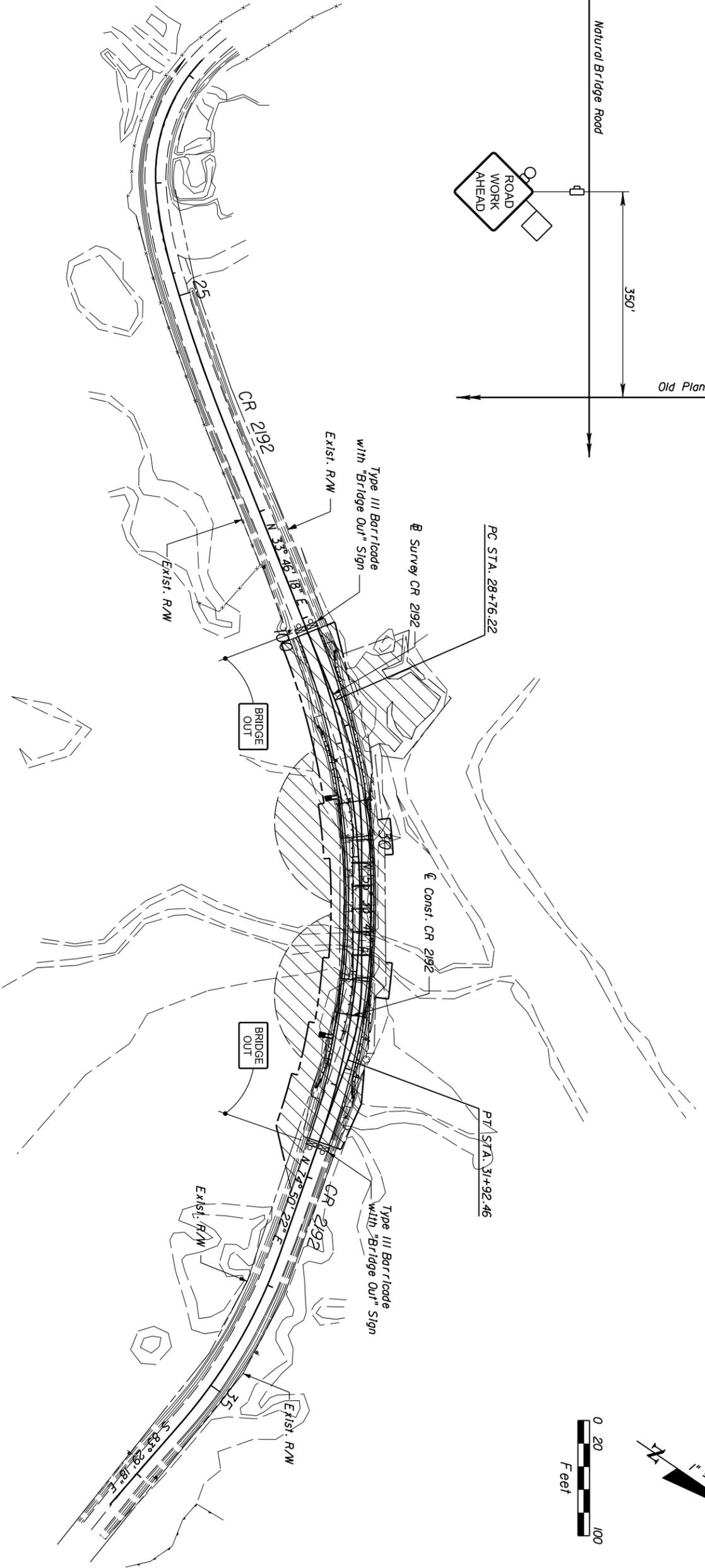
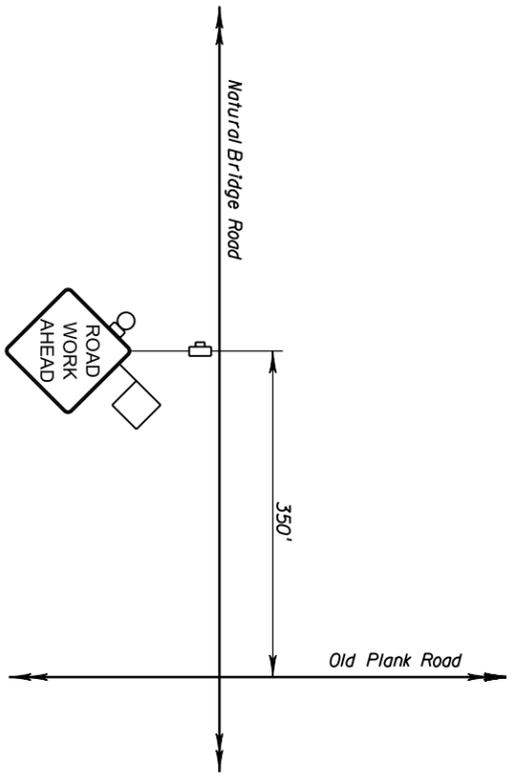
GENERAL NOTES

1. The contractor shall adhere to the requirements set forth in the current edition of "The Manual on Uniform Traffic Control Devices (MUTCD)" and applicable "Design Standards".
2. All traffic control devices required during construction shall be installed and approved by the Engineer prior to commencement of work and shall be maintained in accordance with Index No. 600.
3. All existing signs that conflict with the traffic control plan shall be covered or removed as necessary prior to commencement of construction. All existing signs that are removed because of construction shall be replaced upon completion of the project. All costs are to be included under Pay Item No. 102-1.
4. Contractor shall provide access to and from side streets/ driveways during construction unless otherwise noted.
5. Existing Road and Street name signs on the project area, if needed, to be temporarily relocated during construction and kept visible at all times for the facilitation of emergency vehicle traffic.
6. Any roadway, & drainage structures within the project limits, damaged by the contractor's operations shall be restored in kind. All disturbed areas within the limits of construction that are not paved or landscaped shall be restored and sodded to a condition equal to or superior to that existing prior to commencement of work. All costs shall be included in Pay Item No. 102-1.
7. Contractor shall formally request a road closure from Leon County. The request should include certified maintenance of traffic (MOT/Detour) plan and a cover letter which includes (1) purpose of road closure, (2) a brief scope of work, (3) road closure begin date & time, and (4) road closure end date & time. Contractor shall submit MOT plan to Leon County 14 days Prior to road closure.
8. Contractor shall report a road closure at least 14 days in advance. The list of organizations to be notified shall include, but is not limited to: local emergency agencies, the media, Leon County, Jefferson County, Wakulla County, Wakulla Correctional Facility, and Natural Bridge State Park. Local residents shall also be notified.
9. The advanced notification PCMS shall be installed and agencies and citizens notified on a Friday, and the road can be closed fourteen days later to complete the proposed work.
10. This project is located in an environmentally-sensitive area. The Contractor shall use only the existing paved road within the limits shown in this TCP as the staging area for his vehicles, equipment and materials. Stockpiling vehicles, equipment and materials may require the Contractor to obtain a permit from Leon County. The only exception to this is between the end of the new bridge and Sta. 33+20.69 Right (as shown on the Selective Clearing sheet). At this location the Contractor may construct a temporary work pad for material storage and vehicle & equipment access. Refer to Tree Survey sheets at the end of this plan set for information about specific trees which will need to be trimmed before commencing crane operations.
11. The Contractor shall inspect the condition of all unpaved roadway sections of the detour on a weekly basis, and re-grade any sections as directed by the Engineer. See pay item note 110-1 for method of payment.
12. Contractor shall place Barricade Types I, II, DI, or VP & DRUM around four corners of PCMS at two locations, on the east and west ends of the project.

PHASE NOTES

1. Install advance warning signs and detour signs as per TCP plans.
2. Close Natural Bridge Road between residential driveway located approximately 220' east of historic battle monument and Jim French Road. Detour the traffic along Fanlew Road, SR 59, Tram Road and Old Plank Road.
3. Open Natural Bridge Road to traffic as soon as construction is complete.

DATE	DESCRIPTION	REVISED	DATE	DESCRIPTION	
	LOCHNER				
	2940 EAST PARK AVENUE, SUITE 300 TALLAHASSEE, FLORIDA 32301 PBR CERTIFICATE OF AUTH. # 894 MICHAEL J. WOODARD, P.E. # 47736				
	STATE OF FLORIDA				
	DEPARTMENT OF TRANSPORTATION				
	ROAD NO. CR 2192	COUNTY LEON	FINANCIAL PROJECT ID 413491-1-52-01		
	TRAFFIC CONTROL PLAN				
					SHEET NO. 28



CR 2192 IMPROVEMENTS
BY FOOT AND CONTRACTOR
COMPLETION: SEASON YEAR
QUESTIONS OR COMMENTS
(XXX) XXX-XXXX

CR 2192 IMPROVEMENTS
BY FOOT AND CONTRACTOR
COMPLETION: SEASON YEAR
QUESTIONS OR COMMENTS
(XXX) XXX-XXXX

- LEGEND**
- Type III Barricade with Sign
 - Advanced Warning Sign
 - Work Zone

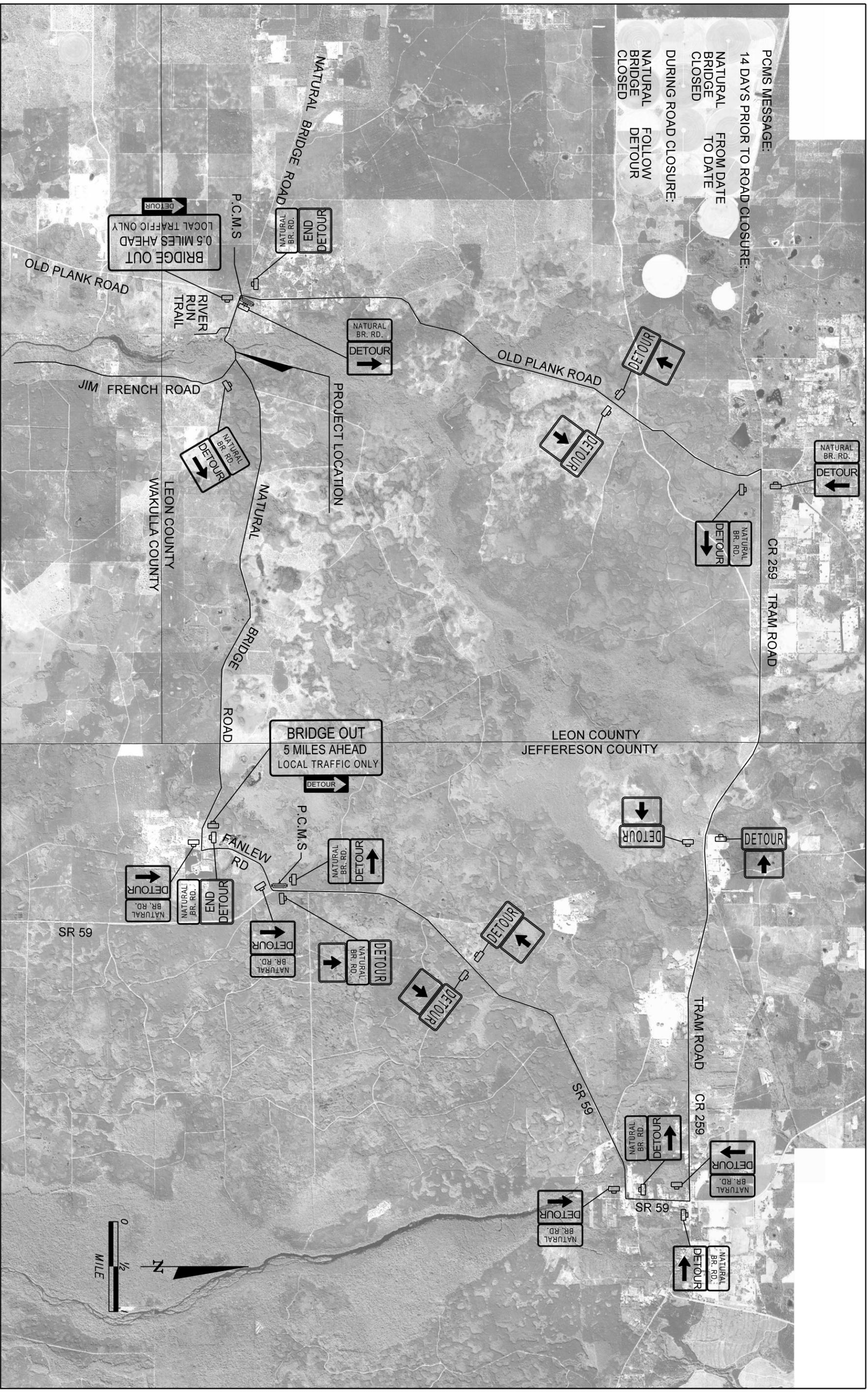
DATE	DESCRIPTION	REVISIONS	DATE	DESCRIPTION

LOCHNER		STATE OF FLORIDA	
2940 EAST PARK AVENUE, SUITE 300		DEPARTMENT OF TRANSPORTATION	
TALLAHASSEE, FLORIDA 32301		COUNTY	
PBR CERTIFICATE OF AUTH. # 894		LEON	
MICHAEL J. WOODARD, P.E.		FINANCIAL PROJECT ID	
		413491-1-52-01	

TRAFFIC CONTROL PLAN		SHEET NO.
		29

NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE SIGNED AND SEALED UNDER RULE 61G15-23.003, F.A.C.

PCMS MESSAGE:
 14 DAYS PRIOR TO ROAD CLOSURE:
 NATURAL BRIDGE CLOSED
 FROM DATE TO DATE
 DURING ROAD CLOSURE:
 NATURAL BRIDGE CLOSED
 FOLLOW DETOUR



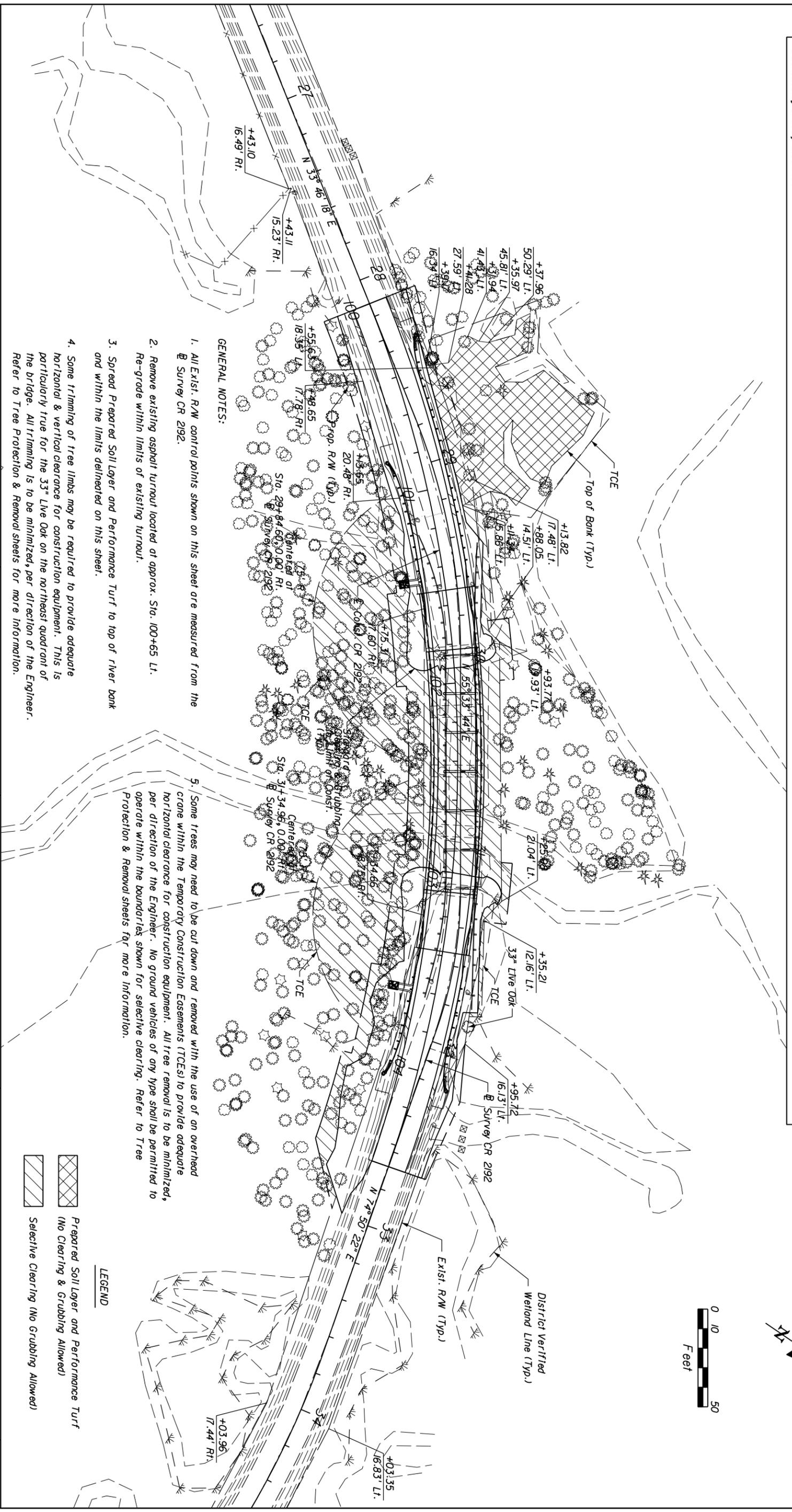
DATE	DESCRIPTION	REV'S	DATE	DESCRIPTION

LOCHNER	
2940 EAST PARK AVENUE, SUITE 300 TALLAHASSEE, FLORIDA 32301 # 894 PBR CERTIFICATE OF AUTH. # 47756 MICHAEL J. WOODARD, P.E.	
ROAD NO.	COUNTY
CR 2192	LEON
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION	
FINANCIAL PROJECT ID	
413491-1-52-01	
TRAFFIC CONTROL PLAN	
SHEET NO.	30

NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE SIGNED AND SEALED UNDER RULE 61G15-23.003, F.A.C.

Temporary Construction Easement Control Points*											
Point	Sta.	Offset	Side	Point	Sta.	Offset	Side	Point	Sta.	Offset	Side
TCE01	100+27.44	21.08	Lt.	TCE04	100+85.37	100.73	Lt.	TCE07	101+00.38	25.00	Rt.
TCE02	100+26.87	82.83	Lt.	TCE05	101+23.58	48.94	Lt.	TCE08	102+40.19	25.00	Rt.
TCE03	100+49.39	72.57	Lt.	TCE06	101+15.95	25.62	Lt.	TCE09	102+50.34	25.00	Rt.
								TCE10	103+83.91	35.00	Rt.
								TCE11	101+70.00	23.21	Lt.
								TCE12	103+20.00	18.83	Lt.
								TCE13	103+66.70	25.47	Lt.
								TCE14	31+82.42	13.71	Lt.

* All TCE control points are measured from the Centerline of Const. CR 2192, except where the TCEs intersect the existing maintained R/W. These points of intersection are measured from the Baseline of Survey CR 2192.

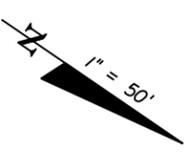


GENERAL NOTES:

- All Exist. R/W control points shown on this sheet are measured from the @ Survey CR 2192.
- Remove existing asphalt turnout located at approx. Sta. 100+65 Lt. Re-grade within limits of existing turnout.
- Spread Prepared Soil Layer and Performance Turf to top of river bank and within the limits delineated on this sheet.
- Some trimming of tree limbs may be required to provide adequate horizontal & vertical clearance for construction equipment. This is particularly true for the 33' Live Oak on the northeast quadrant of the bridge. All trimming is to be minimized, per direction of the Engineer. Refer to Tree Protection & Removal sheets for more information.
- Some trees may need to be cut down and removed with the use of an overhead crane within the Temporary Construction Easement's (TCEs) to provide adequate horizontal clearance for construction equipment. All tree removal is to be minimized, per direction of the Engineer. No ground vehicles of any type shall be permitted to operate within the boundaries shown for selective clearing. Refer to Tree Protection & Removal sheets for more information.

LEGEND

- Prepared Soil Layer and Performance Turf (No Clearing & Grubbing Allowed)
- Selective Clearing (No Grubbing Allowed)



DATE	DESCRIPTION	DATE	DESCRIPTION
	REVIEWS		

LOCHNER		STATE OF FLORIDA	
2940 EAST PARK AVENUE, SUITE 300		DEPARTMENT OF TRANSPORTATION	
TALLAHASSEE, FLORIDA 32301		COUNTY	
PBR CERTIFICATE OF AUTH. # 894		LEON	
MICHAEL J. WOODARD, P.E.		413491-1-52-01	
		FINANCIAL PROJECT ID	
		SELECTIVE CLEARING	
		SHEET NO. 31	

TREE PROTECTION GENERAL NOTES

IT IS IMPORTANT FOR THE EQUIPMENT OPERATORS, CONTRACTOR'S PERSONNEL, AND SUBCONTRACTORS TO UNDERSTAND THAT DAMAGE TO TREES WILL NOT BE TOLERATED. EXTREME CARE MUST BE TAKEN TO PROTECT THE EXPOSED ROOT COLLARS FROM VEHICULAR DAMAGE AND FALLING DEBRIS. CONTRACTOR SHALL CONTACT LEON COUNTY ENVIRONMENTAL DEPARTMENT PRIOR TO THE START OF CONSTRUCTION.

TREES LOCATED WITHIN SWING OF CRANE WITHIN TEMPORARY CONSTRUCTION EASEMENT TO BE CUT OFF A MINIMUM OF TWO FEET ABOVE MUDLINE, LEAVING ROOT SYSTEM INTACT. SOME TREES MAY NEED TO BE CUT DOWN AND REMOVED WITH THE USE OF AN OVERHEAD CRANE WITHIN THE TEMPORARY CONSTRUCTION EASEMENTS (TCEs) TO PROVIDE ADEQUATE HORIZONTAL CLEARANCE FOR CONSTRUCTION EQUIPMENT. ALL TREE REMOVAL IS TO BE MINIMIZED, PER DIRECTION OF THE ENGINEER. NO GROUND VEHICLES OF ANY TYPE SHALL BE PERMITTED TO OPERATE WITHIN THE BOUNDARIES SHOWN FOR SELECTIVE CLEARING.

TREE PROTECTION:
ALL TREES NOT INDICATED FOR REMOVAL IN THE PLANS OR AS DIRECTED BY THE ENGINEER SHALL BE PROTECTED BY A TREE PROTECTION BARRICADE, USING HOGWIRE AND ORANGE MESH INSTALLED ALONG LIMITS OF CONSTRUCTION.

THE BARRICADE SHALL BE CONSTRUCTED TO PROTECT "60% OF THE CRITICAL PROTECTION ZONE" TO THE GREATEST EXTENT POSSIBLE (SEE DETAIL). THE BARRICADE SHALL BE CONSTRUCTED TO PREVENT THE ENCRoACHMENT OF EQUIPMENT OR VEHICLES, THE REMOVAL OF EXISTING GROUND COVER, THE DISTURBANCE OR COMPACTION OF SOIL, OR THE SCARRING OF ROOTS WITHIN "60% OF THE CRITICAL PROTECTION ZONE." THERE SHALL BE NO STORAGE OF MATERIALS OR EQUIPMENT OF ANY KIND WITHIN THIS ZONE.

WHERE TREE REMOVAL IS INDICATED BEYOND LIMITS OF CONSTRUCTION, TEMPORARY REMOVAL OF THE BARRICADE AS DIRECTED BY THE ENGINEER SHALL BE CONDUCTED.

CRITICAL PROTECTION ZONE: (CPZ) MEANS THAT AREA SURROUNDING A TREE WITHIN A CIRCLE DESCRIBED BY A RADIUS OF ONE FOOT FOR EACH INCH OF THE TREE'S DIAMETER AT BREAST HEIGHT (DBH).

TRUNK PROTECTION: A CONTINUOUS BAND OF 2" X 4" WOOD BOARDS SHALL BE ATTACHED TO THE TRUNK AS INDICATED IN THE DETAIL TO GUARD AGAINST ACCIDENTAL DAMAGE BY ANY CONSTRUCTION EQUIPMENT FOR TREE TAG No. 690. THE WOODEN BAND SHALL EXTEND FROM GROUND LEVEL TO A HEIGHT OF 4.5'.

ROOT PRUNING:
CONTRACTOR SHALL CONTACT LEON COUNTY ENVIRONMENTAL DEPARTMENT PRIOR TO ANY ROOT PRUNING. ROOT PRUNING SHALL OCCUR PRIOR TO SITE CLEARING OR EXCAVATION IN ALL AREAS WHERE DEMOLITION OR NEW CONSTRUCTION REQUIRES REMOVAL OF EXISTING ROOTS. ALL ROOT REMOVAL SHALL BE LIMITED TO THE EXTENT POSSIBLE AS DIRECTED ON-SITE BY THE LEON COUNTY ENVIRONMENTAL DEPARTMENT. ROOTS SHALL BE CUT CLEANLY WITH A MECHANICAL TRENCHING DEVICE SIMILAR TO A "ROOT SAW" TO A MINIMUM DEPTH OF 24" FOLLOWED IMMEDIATELY BY A CLEAN-CUT HAND PRUNING OF ALL ROOTS GREATER THAN .5" IN DIAMETER. ALL PRUNED/CUT ROOTS SHALL BE TREATED IMMEDIATELY WITH A FULL-SPECTRUM FUNGICIDE BY SPRAY APPLICATION AT THE MANUFACTURER'S RECOMMENDED RATE. ROOT PRUNING SHALL OCCUR AS FAR IN ADVANCE OF EXCAVATION/CONSTRUCTION AS POSSIBLE. ALL EXPOSED PRUNED/CUT ROOTS SHALL BE COVERED AS SOON AS POSSIBLE WITH TOPSOIL, MULCH OR OTHER ORGANIC MEDIUM. ANY ROOT PRUNED AREAS WHICH CANNOT BE PROTECTED BY IMMEDIATE BACKFILL REPLACEMENT SHALL BE COVERED TO THE EXTENT POSSIBLE WITH 6 MIL PLASTIC TO RETARD SOIL/ROOT DEHYDRATION.

WATERING:
BEGINNING TWO WEEKS PRIOR TO ROOT PRUNING AND THROUGH SUBSTANTIAL COMPLETION OF THE PROJECT, ALL IMPACTED TREES SHALL BE WATERED BY MECHANICAL IRRIGATION OR MANUALLY AT A RATE EQUIVALENT TO 1" OF WATER PER WEEK. WATERING SHALL BE ADJUSTED AS REQUIRED BY LOCAL WEATHER CONDITIONS. PROVIDE APPROVED RAIN GAUGES ON SITE AS REQUIRED FOR VERIFICATION OF APPLICATION RATES.

PRUNING:
PERFORM A CLASS II MEDIUM PRUNING AS DEFINED BY THE NATIONAL ARBORIST ASSOCIATION FOR IMPACTED TREES AS DIRECTED ONSITE BY THE ENGINEER. PRUNING SHALL BE PERFORMED BY A CERTIFIED ARBORIST IN ACCORDANCE WITH THE NATIONAL ARBORIST ASSOCIATION STANDARDS AND AS DIRECTED ON SITE BY THE ENGINEER OR OWNER.

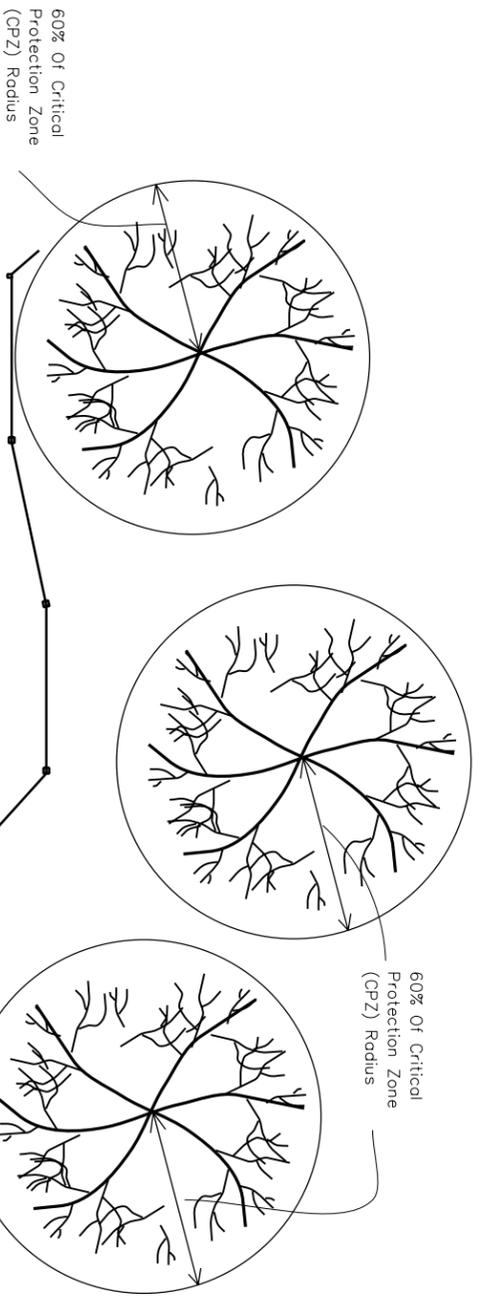
MEDIUM PRUNING SHALL CONSIST OF THE REMOVAL OF DEAD, DYING, DISEASED, INTERFERING, OR OBJECTIONABLE AND WEAK BRANCHES OF THE MAIN TRUNKS, AS WELL AS THOSE WITHIN THE LEAF AREA. REMOVE SPANISH MOSS AND VINES TO THE EXTENT POSSIBLE.

TRENCHING:
TRENCHING SHALL BE PERFORMED IN ORDER TO PROVIDE A CLEAN CUT OF ROOTS FOR THOSE TREES TO BE PRESERVED WHICH WILL BE IMPACTED BY ADJACENT CONSTRUCTION OR THE REMOVAL OF OTHER TREES. TRENCHING SHALL BE DONE ADJACENT TO ALL TREES (TO BE PRESERVED) WHERE THE CONSTRUCTION ACTIVITY OCCURS AT, OR WITHIN, THE DRIPLINE OF THE TREE. TRENCHES SHALL BE DUG TO A MINIMUM DEPTH OF 13" WITH A MAXIMUM WIDTH OF 18". CUT ROOTS WHICH HAVE A DIAMETER OF 2" OR GREATER SHALL BE PAINTED WITH AN APPROVED TREE PRUNING PAINT. ROOT TREATING AND THE REFILLING OF TRENCHES SHALL BE ACCOMPLISHED WITHIN 24 HOURS AFTER DIGGING OF THE TRENCH. TRENCHES SHALL BE DUG WITHIN 12" OF THE RIGHT OF WAY LIMITS WHERE SHOWN IN PLANS AND/OR AS DIRECTED BY THE ENGINEER.

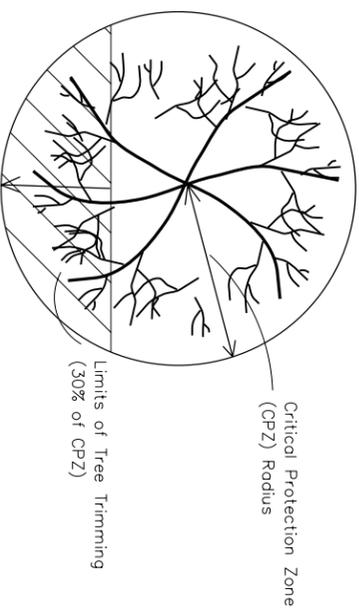
PENALTIES FOR VIOLATION OF REQUIREMENTS:
ALL FINES AND MITIGATION ASSOCIATED WITH ANY VIOLATION NOT ADHERING TO THE TREE PROTECTION AND TREE MITIGATION PLAN AS INDICATED IN THE ENVIRONMENTAL PERMIT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

DATE		REVISIONS		DESCRIPTION		DESCRIPTION		SHEET NO.					
						<p>JUDITH M. HAYDEN, P.E. P.E. NO.: 43976 Environmental & Geotechnical Specialists, Inc. 3154 Eliza Road Tallahassee, Florida 32308 Office: (850) 386-1233 Fax: (850) 386-0050 Certificate of Authorization: 6222</p>		<p>STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION ROAD NO. COUNTY FINANCIAL PROJECT ID CR 2192 LEON 413491-1-52-01</p>		<p>TREE SURVEY</p>		<p>TR-1</p>	

CRITICAL PROTECTION ZONE: (CPZ) MEANS THAT AREA SURROUNDING A TREE WITHIN A CIRCLE DESCRIBED BY A RADIUS OF ONE FOOT FOR EACH INCH OF THE TREE'S DIAMETER AT BREAST HEIGHT (DBH).



HOGWIRE AND ORANGE MESH ACTING AS TREE PROTECTION
PLACED ALONG LIMITS OF CONSTRUCTION
TREES PARTIALLY ON RIGHT OF WAY



TREES WHERE BRANCHES OVERHANG
LIMITS OF CLEARING

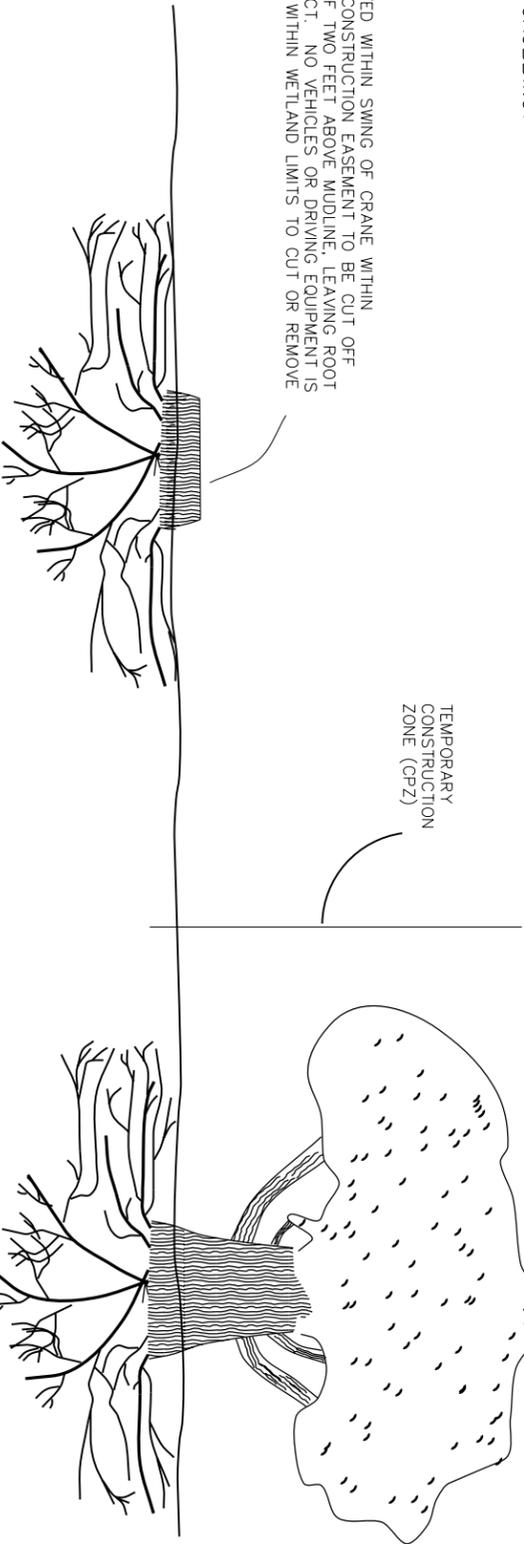
TREE PROTECTION GENERAL NOTES

-  LAUREL OAK, WATER OAK
LIVE OAK
-  LOBLOLLY PINE
-  PALM
-  SWEETGUM, CHERRY, MAPLE
MAGNOLIA, TALLOW
-  CYPRESS

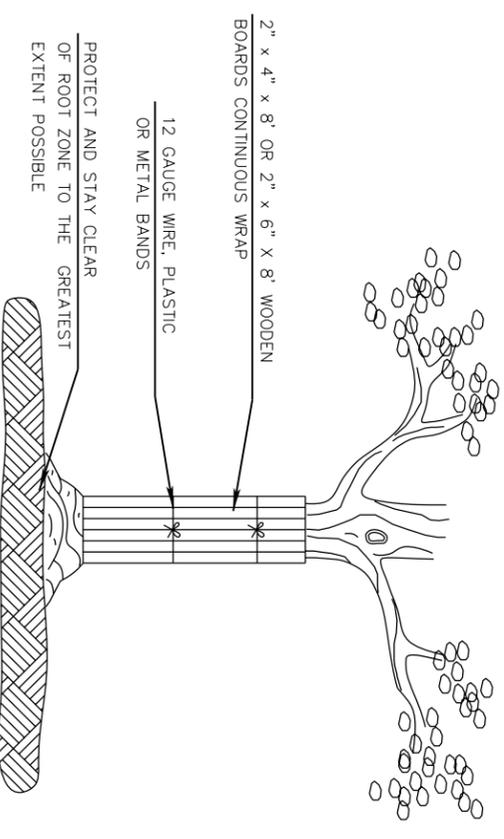
BARRIER FOR PROTECTED TREE PROTECTION & TRUNK PROTECTION

INCLUDES 1,200 L.F. OF HOGWIRE AND 1,200 L.F. OF ORANGE MESH.
INCLUDES 220 OF 2" X 4" X 8' WOODEN BOARDS OR 150 OF 2" X 6" X 8' WOODEN BOARDS, AND 20 OF 12 GAUGE WIRE.
THE COST TO FURNISH AND INSTALL THE HOG WIRE WITH ORANGE MESH FOR TREE PROTECTION AND THE TRUNK PROTECTION IS INCIDENTAL TO THE COST OF CLEARING AND GRUBBING.

TREES LOCATED WITHIN SWING OF CRANE WITHIN TEMPORARY CONSTRUCTION EASEMENT TO BE CUT OFF A MINIMUM OF TWO FEET ABOVE MUDLINE, LEAVING ROOT SYSTEM INTACT. NO VEHICLES OR DRIVING EQUIPMENT IS TO BE USED WITHIN WETLAND LIMITS TO CUT OR REMOVE TREES.



TREES LOCATED WITHIN THE SWING OF CRANE WITHIN TEMPORARY CONSTRUCTION ZONE (CPZ)



TRUNK PROTECTION DETAIL FOR TREE TAG No. 690

DATE	DESCRIPTION	REVISIONS	DATE	DESCRIPTION	DATE	DESCRIPTION
<p>JUDITH M. HAYDEN, P.E. P.E. NO.: 43976 Environmental & Geotechnical Specialists, Inc. 3154 Eliza Road Tallahassee, Florida 32308 Office: (904) 386-1233 Fax: (904) 385-8050</p> <p>EGS Certificate of Authorization: 8222</p>						
<p>STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION FINANCIAL PROJECT ID: 413491-1-52-01</p>						
<p>ROAD NO.: CR 2192 COUNTY: LEON</p>						
<p>12/20/2011 5:11:08 PM H:\V-Proj\ects\AM\3509\413491\5201\Permits\000\01.dgn</p>						
<p>TREE SURVEY</p>						<p>SHEET NO. TR-2</p>

**TABLE 1
TREE INDEX CHART**

TREE TAG NO.	COMMON NAME	BOTANICAL NAME	DBH (INCHES)	CANOPY AREA * (SQ. FT.) (CPZ)	SURVEY BASELINE STATION	OFFSET (FEET)	PROTECTED TREE **	TREE TRIMMING ***	CUT AT BASE	REMOVED	DEBIT	TREES TO BE PROTECTED
151	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	14	616	31+04.21	93.2 LT	YES					YES
152	CYPRESS	TAXODIUM SPP.	8	201	31+13.50	93.6 LT	YES					YES
153	CYPRESS	TAXODIUM SPP.	6	113	31+15.23	100.5 LT	YES					YES
154	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	9	254	31+10.07	111.4 LT	YES					YES
155	BLACKGUM	NYSSA SYLVATICA var	5	79	31+07.89	111.9 LT	YES					YES
156	LAUREL OAK	QUERCUS LAURIFOLIA	5	79	31+03.20	108.3 LT	YES					YES
157	HACKBERRY	CELTIS OCCIDENTALIS	5	79	30+94.51	95.8 LT	YES					YES
158	WATER OAK	QUERCUS NIGRA	18	1018	30+90.92	100.2 LT	YES					YES
159	LAUREL OAK	QUERCUS LAURIFOLIA	3	28	30+85.60	98.2 LT	YES					YES
160	LAUREL OAK	QUERCUS LAURIFOLIA	7	154	30+92.22	86.1 LT	YES					YES
161	LAUREL OAK	QUERCUS LAURIFOLIA	4	50	30+91.81	74.6 LT	YES					YES
162	WATER OAK	QUERCUS NIGRA	5	79	30+85.91	68.8 LT	YES					YES
163	LAUREL OAK	QUERCUS LAURIFOLIA	6	113	30+79.78	66.8 LT	YES					YES
164	WATER OAK	QUERCUS NIGRA	5	79	30+78.39	70.9 LT	YES					YES
165	LAUREL OAK	QUERCUS LAURIFOLIA	4	50	30+80.55	95.2 LT	YES					YES
166	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	12	452	30+79.74	90.6 LT	YES					YES
167	HACKBERRY	CELTIS OCCIDENTALIS	6	113	30+74.46	85.5 LT	YES					YES
168	HACKBERRY	CELTIS OCCIDENTALIS	3	28	30+75.90	96.3 LT	YES					YES
169	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	17	908	30+71.38	96.1 LT	YES					YES
170	HACKBERRY	CELTIS OCCIDENTALIS	4	50	30+70.85	92.5 LT	YES					YES
171	HACKBERRY	CELTIS OCCIDENTALIS	4	50	30+69.50	92.6 LT	YES					YES
172	HACKBERRY	CELTIS OCCIDENTALIS	5	79	30+69.81	92.6 LT	YES					YES
173	HACKBERRY	CELTIS OCCIDENTALIS	6	113	30+70.12	94.2 LT	YES					YES
174	HACKBERRY	CELTIS OCCIDENTALIS	5	79	30+61.70	91.8 LT	YES					YES
175	HACKBERRY	CELTIS OCCIDENTALIS	3	28	30+62.26	92.0 LT	YES					YES
176	WATER OAK	QUERCUS NIGRA	12	452	30+60.63	87.0 LT	YES					YES
177	HACKBERRY	CELTIS OCCIDENTALIS	3	28	30+58.06	87.1 LT	YES					YES
178	PERSIMMON	DIOSPYROS VIRGINIANA	4	50	30+57.15	85.9 LT	YES					YES
179	HACKBERRY	CELTIS OCCIDENTALIS	4	50	30+58.90	81.2 LT	YES					YES
180	BAY	QUERCUS LAURIFOLIA	18	1018	30+56.79	82.2 LT	YES					YES
181	LAUREL OAK	QUERCUS LAURIFOLIA	7	154	30+54.69	78.8 LT	YES					YES
182	HACKBERRY	CELTIS OCCIDENTALIS	6	113	28+00.83	26.4 RT	YES					YES
183	LAUREL OAK	QUERCUS LAURIFOLIA	9	254	28+02.91	30.3 RT	YES					YES
184	LAUREL OAK	QUERCUS LAURIFOLIA	10	314	28+04.77	36.0 RT	YES					YES
185	LAUREL OAK	QUERCUS LAURIFOLIA	4	50	28+00.26	37.6 RT	YES					YES
186	LAUREL OAK	QUERCUS LAURIFOLIA	7	154	28+07.30	48.9 RT	YES					YES
187	LAUREL OAK	QUERCUS LAURIFOLIA	5	79	28+11.89	54.2 RT	YES					YES
188	HACKBERRY	CELTIS OCCIDENTALIS	2	13	28+12.77	58.9 RT	YES					YES
189	LAUREL OAK	QUERCUS LAURIFOLIA	6	113	28+19.53	61.0 RT	YES					YES
190	LAUREL OAK	QUERCUS LAURIFOLIA	7	154	28+27.10	65.8 RT	YES					YES
191	BAY	QUERCUS LAURIFOLIA	4	50	28+27.47	61.1 RT	YES					YES
192	LAUREL OAK	QUERCUS LAURIFOLIA	6	113	28+31.04	56.6 RT	YES					YES
193	HACKBERRY	CELTIS OCCIDENTALIS	3	28	28+28.41	49.4 RT	YES					YES
194	WATER OAK	QUERCUS NIGRA	7	154	28+28.13	47.7 RT	YES					YES
195	LAUREL OAK	QUERCUS LAURIFOLIA	6	113	28+18.70	38.7 RT	YES					YES
196	LAUREL OAK	QUERCUS LAURIFOLIA	7	154	28+20.84	38.7 RT	YES					YES
197	LAUREL OAK	QUERCUS LAURIFOLIA	4	50	28+25.68	34.9 RT	YES					YES
198	SPRUCE PINE	PINUS GLABRA	9	254	28+16.53	22.2 RT	YES					4
199	PARSLEY HAWTHORNE	CRATAEGUS MARSHALLI	5	79	28+25.15	19.5 RT	YES					2
200	HACKBERRY	CELTIS OCCIDENTALIS	6	113	28+34.81	23.0 RT	YES	YES				2

NOTES:
 * 1 INCH OF TREE DIAMETER AT 5 FEET ABOVE GROUND (DBH) IS EQUAL TO 1 FOOT OF CANOPY RADIUS FOR THE CALCULATION OF CANOPY AREA (PI *RADIUS SQUARED). THIS NUMBER IS NOT PHYSICALLY MEASURED.
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 *** TREES WHERE BRANCHES OVERHANG LIMITS OF CLEARING.

DATE	DESCRIPTION	DATE	DESCRIPTION	JUDITH M. HAYDEN, P.E.	P.E. NO.: 43976	3154 Eliza Road Tallahassee, Florida 32308 Office: (904) 386-1233 Fax: (904) 386-0050 Certificate of Authorization: 8222	ROAD NO.	COUNTY	FINANCIAL PROJECT ID	SHEET NO.
	REVIEWS			Environmental & Geotechnical Specialists, Inc.		EGS	CR 2192	LEON	413491-1-52-01	TR-6
							DEPARTMENT OF TRANSPORTATION	STATE OF FLORIDA		TREE SURVEY
							CR 2192	LEON	413491-1-52-01	TR-6

**TABLE 1
TREE INDEX CHART**

TREE TAG NO.	COMMON NAME	BOTANICAL NAME	DBH (INCHES)	CANOPY AREA * (SQ. FT.) (CPZ)	SURVEY BASELINE STATION	OFFSET (FEET)	PROTECTED TREE **	TREE TRIMMING ***	CUT AT BASE	REMOVED	DEBIT	TREES TO BE PROTECTED
201	HACKBERRY	CELTIS OCCIDENTALIS	3	28	28+35.23	22.9 RT	YES			YES	0	
202	LAUREL OAK	QUERCUS LAURIFOLIA	2	13	28+37.82	22.9 RT	YES			YES	0	
203	WATER OAK	QUERCUS NIGRA	10	314	28+45.68	22.6 RT	YES			YES	4	
204	WATER OAK	QUERCUS NIGRA	7	154	28+48.53	25.5 RT	YES			YES	4	
205	WATER OAK	QUERCUS NIGRA	8	201	28+51.11	25.0 RT	YES			YES	4	
206	WATER OAK	QUERCUS NIGRA	8	201	28+51.88	33.8 RT	YES					YES
207	HACKBERRY	CELTIS OCCIDENTALIS	4	50	28+44.37	27.8 RT	YES					YES
208	LAUREL OAK	QUERCUS LAURIFOLIA	10	314	28+43.82	30.8 RT	YES					YES
209	PERSIMMON	DIOSPYROS VIRGINIANA	3	28	28+42.64	31.0 RT	YES					YES
210	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	5	79	28+40.73	34.1 RT	YES					YES
211	HACKBERRY	CELTIS OCCIDENTALIS	3	28	28+42.00	38.1 RT	YES					YES
212	LAUREL OAK	QUERCUS LAURIFOLIA	6	113	28+42.66	39.4 RT	YES					YES
213	HACKBERRY	CELTIS OCCIDENTALIS	8	201	28+45.04	45.6 RT	YES					YES
214	HACKBERRY	CELTIS OCCIDENTALIS	3	28	28+37.86	38.6 RT	YES					YES
215	HACKBERRY	CELTIS OCCIDENTALIS	3	28	28+35.03	36.1 RT	YES					YES
216	BLACKGUM	NYSSA SYLVATICA var	8	201	28+32.37	36.2 RT	YES					YES
217	MAPLE	ACER spp.	14	616	28+30.87	37.1 RT	YES					YES
218	LAUREL OAK	QUERCUS LAURIFOLIA	13	531	28+38.01	63.7 RT	YES					YES
219	HACKBERRY	CELTIS OCCIDENTALIS	4	50	28+33.95	69.4 RT	YES					YES
220	WATER OAK	QUERCUS NIGRA	10	314	28+35.38	79.2 RT	YES					YES
221	WATER OAK	QUERCUS NIGRA	15	707	28+37.87	78.9 RT	YES					YES
222	LAUREL OAK	QUERCUS LAURIFOLIA	3	28	28+51.78	74.1 RT	YES					YES
223	HACKBERRY	CELTIS OCCIDENTALIS	3	28	28+59.50	82.6 RT	YES					YES
224	HACKBERRY	CELTIS OCCIDENTALIS	2	13	28+61.69	77.5 RT	YES					YES
225	WATER OAK	QUERCUS NIGRA	7	154	28+67.35	69.8 RT	YES					YES
226	WATER OAK	QUERCUS NIGRA	4	50	28+69.56	68.6 RT	YES					YES
227	HOLLY	LLEX spp.	4	50	28+61.18	61.2 RT	YES					YES
228	WATER OAK	QUERCUS NIGRA	3	28	28+50.15	57.1 RT	YES					YES
229	HACKBERRY	CELTIS OCCIDENTALIS	2	13	28+46.35	58.0 RT	YES					YES
230	HACKBERRY	CELTIS OCCIDENTALIS	4	50	28+59.73	39.2 RT	YES					YES
231	HACKBERRY	CELTIS OCCIDENTALIS	3	28	28+59.74	38.9 RT	YES					YES
232	LAUREL OAK	QUERCUS LAURIFOLIA	3	28	28+65.32	45.0 RT	YES					YES
233	WATER OAK	QUERCUS NIGRA	12	452	28+65.01	56.3 RT	YES					YES
234	HACKBERRY	CELTIS OCCIDENTALIS	3	28	28+80.20	57.4 RT	YES					YES
235	HACKBERRY	CELTIS OCCIDENTALIS	4	50	28+73.30	32.6 RT	YES			YES	2	
236	SPRUCE PINE	PINUS GLABERA	9	254	28+70.50	25.3 RT	YES			YES	4	
237	WATER OAK	QUERCUS NIGRA	23	1662	28+79.08	29.9 RT	YES			YES	8	
238	HACKBERRY	CELTIS OCCIDENTALIS	5	79	28+88.00	32.2 RT	YES					YES
239	HACKBERRY	CELTIS OCCIDENTALIS	4	50	28+92.43	33.2 RT	YES					YES
240	HACKBERRY	CELTIS OCCIDENTALIS	7	154	28+96.04	40.0 RT	YES			YES	2	
241	HACKBERRY	CELTIS OCCIDENTALIS	6	113	28+97.70	30.6 RT	YES					YES
242	PARSLEY HAWTHORNE	CRATAEGUS MARSHALLI	3	28	28+95.16	27.2 RT	YES			YES	0	
243	HACKBERRY	CELTIS OCCIDENTALIS	4	50	29+04.15	32.8 RT	YES	YES				2
244	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	19	1134	29+07.94	28.8 RT	YES			YES	8	
245	WATER OAK	QUERCUS NIGRA	7	154	29+19.57	27.4 RT	YES			YES	4	
246	HACKBERRY	CELTIS OCCIDENTALIS	7	154	29+25.67	29.6 RT	YES			YES	4	
247	HACKBERRY	CELTIS OCCIDENTALIS	5	79	29+26.52	30.1 RT	YES			YES	2	
248	WATER OAK	QUERCUS NIGRA	4	50	29+26.05	37.9 RT	YES			YES	2	
249	HACKBERRY	CELTIS OCCIDENTALIS	4	50	29+20.91	41.1 RT	YES			YES	2	
250	OAK (DEAD)	QUERCUS ALBA	8	201	29+15.47	47.6 RT	DEAD					DEAD

NOTES:
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 *** TREES WHERE BRANCHES OVERHANG LIMITS OF CLEARING.

DATE	DESCRIPTION	DATE	DESCRIPTION
	REVISI ONS		
JUDITH M. HAYDEN, P.E. P.E. NO.: 43976 Environmental & Geotechnical Specialists, Inc. 3154 Eliza Road Tallahassee, Florida 32308 EGS Office: (904) 386-1233 Fax: (904) 386-8050 Certificate of Authorization: 8222			
DEPARTMENT OF TRANSPORTATION ROAD NO. CR 2192		STATE OF FLORIDA COUNTY LEON FINANCIAL PROJECT ID 413491-1-52-01	
TREE SURVEY		SHEET NO. TR-7	

**TABLE 1
TREE INDEX CHART**

TREE TAG NO.	COMMON NAME	BOTANICAL NAME	DBH (INCHES)	CANOPY AREA * (SQ. FT.) (CPZ)	SURVEY BASELINE STATION	OFFSET (FEET)	PROTECTED TREE **	TREE TRIMMING ***	CUT AT BASE	REMOVED	DEBIT	TREES TO BE PROTECTED
251	HACKBERRY	CELTIS OCCIDENTALIS	3	28	29+11.94	45.0 RT	YES					YES
252	HACKBERRY	CELTIS OCCIDENTALIS	4	50	28+96.75	51.8 RT	YES					YES
253	LAUREL OAK	QUERCUS LAURIFOLIA	7	154	29+00.86	60.0 RT	YES					YES
254	WATER OAK	QUERCUS NIGRA	12	452	29+05.99	65.2 RT	YES					YES
255	WATER OAK	QUERCUS NIGRA	5	79	28+89.70	63.7 RT	YES					YES
256	HACKBERRY	CELTIS OCCIDENTALIS	2	13	28+91.91	69.9 RT	YES					YES
257	HACKBERRY	CELTIS OCCIDENTALIS	6	113	28+90.97	70.4 RT	YES					DEAD
258	OAK (DEAD)	QUERCUS LAURIFOLIA	7	154	28+67.05	91.9 RT	DEAD					DEAD
259	HACKBERRY	CELTIS OCCIDENTALIS	2	13	28+70.35	88.9 RT	YES					YES
260	HACKBERRY	CELTIS OCCIDENTALIS	5	79	28+69.53	88.0 RT	YES					YES
261	HACKBERRY	CELTIS OCCIDENTALIS	5	79	28+71.62	94.5 RT	YES					YES
262	PARSLEY HAWTHORNE	CRATAGEUS MARSHALLI	5	79	28+74.75	92.6 RT	YES					YES
263	HAWTHORNE (DEAD)	CRATAGEUS MARSHALLI	3	28	28+75.67	92.8 RT	DEAD					DEAD
264	PARSLEY HAWTHORNE	CRATAGEUS MARSHALLI	3	28	28+82.38	95.1 RT	YES					YES
265	LAUREL OAK	QUERCUS LAURIFOLIA	7	154	28+85.23	100.3 R	YES					YES
266	OAK (DEAD)	QUERCUS LAURIFOLIA	11	380	28+88.49	95.7 RT	DEAD					DEAD
267	LAUREL OAK	QUERCUS LAURIFOLIA	7	154	29+00.94	103.0 R	YES					YES
268	HACKBERRY	CELTIS OCCIDENTALIS	3	28	29+01.80	96.1 RT	YES					YES
269	PARSLEY HAWTHORNE	CRATAGEUS MARSHALLI	3	28	29+08.37	89.8 RT	YES					YES
270	WATER OAK	QUERCUS NIGRA	11	380	28+95.83	82.9 RT	YES					YES
271	HACKBERRY	CELTIS OCCIDENTALIS	3	28	28+76.98	86.4 RT	YES					YES
272	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	8	201	28+83.01	83.5 RT	YES					YES
273	OAK (DEAD)	QUERCUS LAURIFOLIA	12	452	28+77.46	82.6 RT	DEAD					DEAD
274	BAY	PERSEA SPP.	6	113	29+23.35	95.5 RT	YES					YES
275	BAY	PERSEA SPP.	9	254	29+31.72	101.0 R	YES					YES
276	HOLLY	LLEX SPP.	2	13	29+28.48	94.3 RT	YES					YES
277	HACKBERRY	CELTIS OCCIDENTALIS	9	254	29+35.11	91.3 RT	YES					YES
278	HACKBERRY	CELTIS OCCIDENTALIS	5	79	29+21.03	86.6 RT	YES					YES
279	BAY	PERSEA SPP.	7	154	29+20.71	79.6 RT	YES					YES
280	CYPRESS (DEAD)	TAXODIUM SPP.	2	13	29+20.08	77.4 RT	DEAD					DEAD
281	LAUREL OAK	QUERCUS LAURIFOLIA	3	28	29+19.38	74.4 RT	YES					YES
282	LAUREL OAK	QUERCUS LAURIFOLIA	3	28	29+28.61	68.4 RT	YES					YES
283	LAUREL OAK	QUERCUS LAURIFOLIA	5	79	29+29.21	68.5 RT	YES					YES
284	LAUREL OAK	QUERCUS LAURIFOLIA	4	50	29+36.31	64.1 RT	YES					YES
285	WATER OAK	QUERCUS NIGRA	6	113	29+36.72	59.0 RT	YES					2
286	CYPRESS	TAXODIUM SPP.	20	1257	29+42.49	59.1 RT	YES					8
287	LAUREL OAK	QUERCUS LAURIFOLIA	4	50	29+36.98	54.5 RT	YES					2
288	HACKBERRY	CELTIS OCCIDENTALIS	3	28	29+27.55	56.9 RT	YES					YES
289	HACKBERRY	CELTIS OCCIDENTALIS	6	113	29+42.30	47.3 RT	YES					2
290	HACKBERRY	CELTIS OCCIDENTALIS	2	13	29+42.73	47.0 RT	YES					0
291	HACKBERRY	CELTIS OCCIDENTALIS	7	154	29+46.51	51.8 RT	YES					4
292	HACKBERRY	CELTIS OCCIDENTALIS	3	28	29+52.31	51.7 RT	YES					0
293	MAGNOLIA	MAGNOLIA SPP.	2	13	29+54.71	45.6 RT	YES					0
294	HACKBERRY	CELTIS OCCIDENTALIS	6	113	29+37.64	34.9 RT	YES					2
295	HACKBERRY	CELTIS OCCIDENTALIS	6	113	29+36.50	31.0 RT	YES					2
296	HACKBERRY	CELTIS OCCIDENTALIS	2	13	29+56.68	28.0 RT	YES					0
297	HACKBERRY	CELTIS OCCIDENTALIS	2	13	29+58.00	27.8 RT	YES					0
298	HACKBERRY	CELTIS OCCIDENTALIS	6	113	29+57.04	27.6 RT	YES					2
299	WATER OAK	QUERCUS NIGRA	16	804	29+55.32	32.7 RT	YES					6
300	CHESTNUT OAK	CASTANEA DENTATA	3	28	29+57.35	42.3 RT	YES					0

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DATE	DESCRIPTION	DATE	DESCRIPTION	JUDITH M. HAYDEN, P.E.	P.E. NO.: 43976	STATE OF FLORIDA	DEPARTMENT OF TRANSPORTATION	ROAD NO.	COUNTY	FINANCIAL PROJECT ID	TREE SURVEY	SHEET NO.
	REVISIONS			Environmental & Geotechnical Specialists, Inc.	3154 Eliza Road	CR 2192	LEON	413491-1-52-01			TR-8	
				Environmental & Geotechnical Specialists, Inc.	Tallahassee, Florida 32308							
				Office: (850) 385-1233	Fax: (850) 385-8050							
				Certificate of Authorization: 8222								

**TABLE 1
TREE INDEX CHART**

TREE TAG NO.	COMMON NAME	BOTANICAL NAME	DBH (INCHES)	CANOPY AREA * (SQ. FT.) (CPZ)	SURVEY BASELINE STATION	OFFSET (FEET)	PROTECTED TREE **	TREE TRIMMING ***	CUT AT BASE	REMOVED	DEBIT	TREES TO BE PROTECTED
301	CHESNUT OAK	CASTANEA DENTATA	5	79	29+64.74	29.5 RT	YES			YES	2	
302	HACKBERRY	CELTIS OCCIDENTALIS	2	13	29+78.91	25.6 RT	YES			YES	0	
303	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	18	1018	29+77.44	38.0 RT	YES			YES	6	
304	HACKBERRY	CELTIS OCCIDENTALIS	2	13	29+79.83	41.8 RT	YES			YES	0	
305	BLACKGUM	NYSSA SYLVATICA vdr	11	380	29+78.63	45.3 RT	YES			YES	4	
306	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	15	707	29+69.44	52.5 RT	YES			YES	6	
307	HACKBERRY	CELTIS OCCIDENTALIS	5	79	29+65.09	57.5 RT	YES			YES	2	
308	PARSLEY HAWTHORNE	CRATAEGUS MARSHALLI	2	13	29+62.79	58.3 RT	YES			YES	0	
309	WATER OAK	QUERCUS NIGRA	3	28	29+56.19	65.4 RT	YES			YES	0	
310	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	19	1134	29+69.85	71.0 RT	YES			YES	8	
311	HACKBERRY	CELTIS OCCIDENTALIS	4	50	29+72.72	71.6 RT	YES			YES	2	
312	HACKBERRY	CELTIS OCCIDENTALIS	3	28	29+63.77	76.4 RT	YES					YES
313	HACK	CELTIS OCCIDENTALIS	4	50	29+57.23	80.0 RT	YES					YES
314	HACKBERRY	CELTIS OCCIDENTALIS	4	50	29+50.18	76.6 RT	YES					YES
315	LAUREL OAK	QUERCUS LAURIFOLIA	5	79	29+41.39	78.0 RT	YES					YES
316	MAPLE	ACER SPP.	4	50	29+40.12	82.5 RT	YES					YES
317	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	24	1810	29+42.57	99.3 RT	YES					YES
318	LAUREL OAK	QUERCUS LAURIFOLIA	2	13	29+41.01	101.8 RT	YES					YES
319	LAUREL OAK	QUERCUS LAURIFOLIA	3	28	29+53.31	96.4 RT	YES					YES
320	BLACKGUM	NYSSA SYLVATICA vdr	18	1018	29+63.19	92.5 RT	YES					YES
321	CHESNUT OAK	CASTANEA DENTATA	2	13	29+69.80	97.7 RT	YES					YES
322	WATER OAK	QUERCUS NIGRA	7	154	29+76.42	96.0 RT	YES					YES
323	LAUREL OAK	QUERCUS LAURIFOLIA	5	79	29+70.42	93.5 RT	YES					YES
324	HACKBERRY	CELTIS OCCIDENTALIS	6	113	29+72.56	81.4 RT	YES					YES
325	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	18	1018	29+79.00	81.1 RT	YES	YES				YES
326	CHESNUT OAK	CASTANEA DENTATA	2	13	29+86.58	86.3 RT	YES					YES
327	WATER OAK	QUERCUS NIGRA	16	804	29+90.88	89.8 RT	YES					YES
328	LAUREL OAK	QUERCUS LAURIFOLIA	6	113	29+98.93	93.5 RT	YES					YES
329	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	3	28	29+99.56	97.6 RT	YES					YES
330	CHESNUT OAK	CASTANEA DENTATA	3	28	29+97.66	100.5 RT	YES					YES
331	CHERRY	PRUNUS CAROLINIANA	4	50	30+02.43	95.6 RT	YES					YES
332	BLACKGUM	NYSSA SYLVATICA vdr	5	79	30+02.95	93.0 RT	YES					YES
333	BLACKGUM	NYSSA SYLVATICA vdr	3	28	30+06.77	91.4 RT	YES					YES
334	BLACKGUM	NYSSA SYLVATICA vdr	2	13	30+07.12	91.2 RT	YES					YES
335	LAUREL OAK	QUERCUS LAURIFOLIA	4	50	30+11.09	80.6 RT	YES					YES
336	BLACKGUM	NYSSA SYLVATICA vdr	10	314	30+13.85	79.8 RT	YES					YES
337	CYPRESS	TAXODIUM SPP.	11	380	30+15.60	83.9 RT	YES					YES
338	MAPLE	ACER SPP.	11	380	30+18.43	73.8 RT	YES	YES				YES
339	BLACKGUM	NYSSA SYLVATICA vdr	6	113	30+19.37	72.3 RT	YES					YES
340	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	5	79	30+15.12	69.1 RT	YES					2
341	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	2	13	30+13.87	69.9 RT	YES					0
342	CHESNUT OAK	CASTANEA DENTATA	4	50	30+10.88	70.3 RT	YES					0
343	MAPLE	ACER SPP.	2	13	30+04.37	70.7 RT	YES					2
344	LAUREL OAK	QUERCUS LAURIFOLIA	4	50	29+98.92	67.4 RT	YES					2
345	LAUREL OAK	QUERCUS LAURIFOLIA	3	28	29+96.81	64.1 RT	YES					0
346	BLACKGUM	NYSSA SYLVATICA vdr	5	79	30+00.98	60.9 RT	YES					2
347	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	9	254	29+94.38	59.7 RT	YES					4
348	HACKBERRY	CELTIS OCCIDENTALIS	5	79	29+85.16	51.3 RT	YES					2
349	HACKBERRY	CELTIS OCCIDENTALIS	4	50	29+85.22	50.7 RT	YES					2
350	HACKBERRY	CELTIS OCCIDENTALIS	9	254	29+87.56	28.8 RT	YES					4

NOTES:
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 ** PROTECTED TREES INCLUDE ALL TREES WITHIN A WETLAND AND ALL TREES WITH A DBH OF 18 INCHES OR GREATER.
 *** TREES WHERE BRANCHES OVERHANG LIMITS OF CLEARING.

DATE	DESCRIPTION	DATE	DESCRIPTION	JUDITH M. HAYDEN, P.E.	P.E. NO.: 43976	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION	SHEET NO.
				Environmental & Geotechnical Specialists, Inc.	3154 Eliza Road Tallahassee, Florida 32308 Office: (904) 386-1233 Fax: (904) 386-8050 Certificate of Authorization: 8222	ROAD NO. CR 2192 COUNTY LEON FINANCIAL PROJECT ID 413491-1-52-01	TR-9

**TABLE 1
TREE INDEX CHART**

TREE TAG NO.	COMMON NAME	BOTANICAL NAME	DBH (INCHES)	CANOPY AREA * (SQ. FT.) (CPZ)	SURVEY BASELINE STATION	OFFSET (FEET)	PROTECTED TREE **	TREE TRIMMING ***	CUT AT BASE	REMOVED	DEBIT	TREES TO BE PROTECTED
351	HACKBERRY	CELTIS OCCIDENTALIS	8	201	29+96.17	28.0 RT	YES			YES	4	
352	HACKBERRY	CELTIS OCCIDENTALIS	3	28	30+03.47	29.2 RT	YES			YES	0	
353	TALLOW	SAPIUM SEBIFERUM	8	201	30+06.16	34.9 RT	YES		YES		4	
354	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	5	79	30+00.79	38.7 RT	YES		YES		2	
355	CYPRESS	TAXODIUM SPP.	21	1385	30+05.46	41.2 RT	YES		YES		8	
356	LAUREL	QUERCUS LAURIFOLIA	3	28	30+07.67	46.6 RT	YES		YES		0	
357	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	7	154	30+07.42	61.3 RT	YES		YES		4	
358	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	6	113	30+10.76	65.4 RT	YES		YES		2	
359	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	7	154	30+10.62	69.2 RT	YES		YES		4	
360	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	9	254	30+14.58	60.5 RT	YES		YES		4	
361	LAUREL OAK	QUERCUS LAURIFOLIA	16	804	30+16.56	57.4 RT	YES		YES		6	
362	LAUREL OAK	QUERCUS LAURIFOLIA	3	28	30+17.19	56.9 RT	YES		YES		0	
363	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	1	3	30+18.15	48.7 RT	YES		YES		0	
364	SWEETGUM (DEAD)	LIQUIDAMBAR STYRACIFLUA	2	13	30+21.18	49.8 RT	DEAD				DEAD	DEAD
365	CHESNUT OAK	CASTANEA DENTATA	2	13	30+14.38	48.8 RT	YES		YES		0	
366	CHESNUT OAK	CASTANEA DENTATA	3	28	30+14.80	44.0 RT	YES		YES		0	
367	HACKBERRY	CELTIS OCCIDENTALIS	6	113	30+17.45	40.8 RT	YES		YES		2	
368	MAPLE	ACER SPP.	8	201	30+23.89	35.7 RT	YES		YES		4	
369	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	12	452	30+28.35	36.1 RT	YES		YES		4	
370	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	12	452	30+30.08	36.0 RT	YES		YES		4	
371	LAUREL OAK	QUERCUS LAURIFOLIA	2	13	30+33.37	33.6 RT	YES		YES		0	
372	MAPLE	ACER SPP.	16	804	30+32.52	26.3 RT	YES		YES		6	
373	HACKBERRY	CELTIS OCCIDENTALIS	9	254	30+28.21	24.5 RT	YES		YES		4	
374	HACKBERRY	CELTIS OCCIDENTALIS	3	28	30+29.22	23.4 RT	YES		YES		0	
375	HACKBERRY	CELTIS OCCIDENTALIS	3	28	30+27.06	24.3 RT	YES		YES		0	
376	PERSIMMON	DIOSPYROS VIRGINIANA	3	28	30+22.07	24.6 RT	YES		YES		0	
377	HICKORY	CARYA SPP.	7	154	30+39.97	23.6 RT	YES		YES		4	
378	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	19	1134	30+42.75	25.8 RT	YES		YES		8	
379	BLACKGUM	NYSSA SYLVATICA var	4	50	30+40.76	29.2 RT	YES		YES		2	
380	CHESNUT OAK	CASTANEA DENTATA	2	13	30+46.34	37.2 RT	YES		YES		0	
381	HICKORY	CARYA SPP.	5	79	30+48.53	35.7 RT	YES		YES		2	
382	MAPLE	ACER SPP.	6	113	30+49.34	34.6 RT	YES		YES		2	
383	HACKBERRY	CELTIS OCCIDENTALIS	5	79	30+51.55	31.5 RT	YES		YES		2	
384	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	5	79	30+52.22	32.7 RT	YES		YES		2	
385	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	9	254	30+57.16	27.5 RT	YES		YES		4	
386	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	7	154	30+54.96	25.0 RT	YES		YES		4	
387	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	6	113	30+55.84	22.2 RT	YES		YES		2	
388	PERSIMMON	DIOSPYROS VIRGINIANA	5	79	30+51.26	20.0 RT	YES		YES		2	
389	PERSIMMON	DIOSPYROS VIRGINIANA	3	28	30+48.72	19.6 RT	YES		YES		0	
390	PERSIMMON	DIOSPYROS VIRGINIANA	3	28	30+48.51	21.3 RT	YES		YES		0	
391	GUM (DEAD)	LIQUIDAMBAR STYRACIFLUA	7	154	30+59.05	23.5 RT	DEAD				DEAD	DEAD
392	CYPRESS	TAXODIUM SPP.	5	79	30+66.42	20.6 RT	YES		YES		2	
393	BLACKGUM	NYSSA SYLVATICA var	4	50	30+70.66	24.0 RT	YES		YES		2	
394	PERSIMMON	DIOSPYROS VIRGINIANA	4	50	30+74.62	21.1 RT	YES		YES		2	
395	CHESNUT OAK (DEAD)	CASTANEA DENTATA	2	13	30+73.89	30.8 RT	DEAD				DEAD	DEAD
396	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	9	254	30+69.07	35.6 RT	YES		YES		4	
397	LAUREL OAK	QUERCUS LAURIFOLIA	2	13	30+67.71	36.6 RT	YES		YES		0	
398	CYPRESS	TAXODIUM SPP.	9	254	30+66.75	37.5 RT	YES		YES		4	
399	PERSIMMON	DIOSPYROS VIRGINIANA	3	28	30+68.32	40.8 RT	YES		YES		0	
400	HACKBERRY	CELTIS OCCIDENTALIS	5	79	30+71.74	40.5 RT	YES		YES		2	

NOTES:
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 ** PROTECTED TREES INCLUDE ALL TREES WITHIN A WETLAND AND ALL TREES WITH A DBH OF 18 INCHES OR GREATER.
 *** TREES WHERE BRANCHES OVERHANG LIMITS OF CLEARING.

DATE	DESCRIPTION	DATE	DESCRIPTION	JUDITH M. HAYDEN, P.E.	P.E. NO.: 43976	3154 Eliza Road Tallahassee, Florida 32308 Office: (904) 386-1233 Fax: (904) 386-8050	Environmental & Geotechnical Specialists, Inc.	Certificate of Authorization: 6222	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION	ROAD NO. CR 2192	COUNTY LEON	FINANCIAL PROJECT ID 413491-1-52-01	TREE SURVEY	SHEET NO. TR-10
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**TABLE 1
TREE INDEX CHART**

TREE TAG NO.	COMMON NAME	BOTANICAL NAME	DBH (INCHES)	CANOPY AREA * (SQ. FT.) (CPZ)	SURVEY BASELINE STATION	OFFSET (FEET)	PROTECTED TREE **	TREE TRIMMING ***	CUT AT BASE	REMOVED	DEBIT	TREES TO BE PROTECTED
401	HACKBERRY	CELTIS OCCIDENTALIS	5	79	30+65.23	45.6 RT	YES					YES
402	CYPRESS	TAXODIUM SPP.	15	707	30+59.46	41.5 RT	YES					YES
403	BLACKGUM	NYSSA SYLVATICA var	13	531	30+59.65	47.4 RT	YES					YES
404	CYPRESS	TAXODIUM SPP.	2	13	30+61.03	48.2 RT	YES					YES
405	CYPRESS	TAXODIUM SPP.	3	28	30+55.73	48.3 RT	YES					YES
406	CYPRESS	TAXODIUM SPP.	6	113	30+52.14	54.1 RT	YES					YES
407	PERSIMMON	DIOSPYROS VIRGINIANA	2	13	30+49.66	51.2 RT	YES					YES
408	CHESNUT OAK	CASTANEA DEUTATA	3	28	30+47.32	46.2 RT	YES					YES
409	BLACKGUM	NYSSA SYLVATICA var	8	201	30+44.82	53.5 RT	YES	YES				YES
410	BLACKGUM	NYSSA SYLVATICA var	3	28	30+43.48	53.0 RT	YES					YES
411	BLACKGUM	NYSSA SYLVATICA var	8	201	30+41.52	52.3 RT	YES	YES				YES
412	BLACKGUM	NYSSA SYLVATICA var	5	79	30+40.84	54.9 RT	YES					YES
413	WHITE OAK	QUERCUS ALBA	2	13	30+38.12	55.2 RT	YES					YES
414	PERSIMMON	DIOSPYROS VIRGINIANA	4	50	30+34.54	53.2 RT	YES		YES		2	
415	PERSIMMON	DIOSPYROS VIRGINIANA	2	13	30+33.58	44.6 RT	YES		YES		0	
416	CHERRY	PRUNUS CAROLINIANA	6	113	30+30.22	46.2 RT	YES		YES		2	
417	PERSIMMON	DIOSPYROS VIRGINIANA	7	154	30+29.81	49.2 RT	YES		YES		4	
418	PERSIMMON	DIOSPYROS VIRGINIANA	6	113	30+27.04	47.7 RT	YES		YES		2	
419	PERSIMMON	DIOSPYROS VIRGINIANA	6	113	30+27.59	53.5 RT	YES		YES		2	
420	BLACKGUM	NYSSA SYLVATICA var	5	79	30+24.22	57.1 RT	YES		YES		2	
421	BLACKGUM	NYSSA SYLVATICA var	6	113	30+24.81	59.4 RT	YES		YES		2	
422	BLACKGUM	NYSSA SYLVATICA var	3	28	30+25.89	59.5 RT	YES		YES		0	
423	PARSLEY HAWTHORNE	CRATAEGUS MARSHALLI	4	50	30+20.46	62.1 RT	YES		YES		2	
424	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	4	50	30+22.83	66.1 RT	YES		YES		2	
425	BLACKGUM	NYSSA SYLVATICA var	5	79	30+29.26	68.2 RT	YES					YES
426	BLACKGUM	NYSSA SYLVATICA var	4	50	30+31.59	71.0 RT	YES					YES
427	BLACKGUM	NYSSA SYLVATICA var	2	13	30+32.11	71.2 RT	YES					YES
428	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	4	50	30+35.39	66.2 RT	YES					YES
429	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	7	154	30+34.49	64.7 RT	YES					YES
430	BLACKGUM	NYSSA SYLVATICA var	3	28	30+35.20	63.1 RT	YES					YES
431	LAUREL OAK	QUERCUS LAURIFOLIA	3	28	30+38.25	65.6 RT	YES					YES
432	BLACKGUM	NYSSA SYLVATICA var	5	79	30+43.06	65.7 RT	YES					YES
433	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	10	314	30+42.73	63.8 RT	YES					YES
434	CYPRESS	TAXODIUM SPP.	14	616	30+43.36	70.7 RT	YES					YES
435	UNKNOWN		4	50	30+46.31	70.6 RT	YES					YES
436	LAUREL OAK	QUERCUS LAURIFOLIA	5	79	30+43.25	79.8 RT	YES					YES
437	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	13	531	30+41.11	79.4 RT	YES					YES
438	LAUREL OAK	QUERCUS LAURIFOLIA	5	79	30+39.38	81.1 RT	YES					YES
439	LAUREL OAK	QUERCUS LAURIFOLIA	2	13	30+37.38	83.3 RT	YES					YES
440	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	8	201	30+35.68	84.4 RT	YES					YES
441	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	5	79	30+36.05	88.3 RT	YES					YES
442	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	7	154	30+40.11	89.3 RT	YES					YES
443	BLACKGUM	NYSSA SYLVATICA var	9	254	30+28.52	83.7 RT	YES					YES
444	BLACKGUM	NYSSA SYLVATICA var	4	50	30+24.49	80.3 RT	YES					YES
445	LAUREL OAK	QUERCUS LAURIFOLIA	2	13	30+23.30	88.0 RT	YES					YES
446	LAUREL OAK	QUERCUS LAURIFOLIA	4	50	30+23.24	88.4 RT	YES					YES
447	LAUREL OAK	QUERCUS LAURIFOLIA	2	13	30+28.95	90.7 RT	YES					YES
448	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	6	113	30+27.50	91.8 RT	YES					YES
449	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	10	314	30+27.74	93.0 RT	YES					YES
450	CYPRESS	TAXODIUM SPP.	3	28	30+28.45	94.8 RT	YES					YES

NOTES:
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DATE	DESCRIPTION	DATE	DESCRIPTION	JUDITH M. HAYDEN, P.E.	P.E. NO.: 43976	STATE OF FLORIDA	DEPARTMENT OF TRANSPORTATION	ROAD NO.	COUNTY	FINANCIAL PROJECT ID	SHEET NO.
	REVIEWS			Environmental & Geotechnical Specialists, Inc.	3154 Eliza Road	CR 2192	LEON	413491-52-01	LEON	413491-52-01	TR-11
				EGS	Tallahassee, Florida 32308					TREE SURVEY	
				Office: (904) 386-1233	3154 Eliza Road						
				Fax: (904) 386-8050	Environmental & Geotechnical Specialists, Inc.						
				Certificate of Authorization: 8222	3154 Eliza Road						
					Tallahassee, Florida 32308						
					Office: (904) 386-1233						
					Fax: (904) 386-8050						
					Certificate of Authorization: 8222						

**TABLE 1
TREE INDEX CHART**

TREE TAG NO.	COMMON NAME	BOTANICAL NAME	DBH (INCHES)	CANOPY AREA * (SQ. FT.) (CPZ)	SURVEY BASELINE STATION	OFFSET (FEET)	PROTECTED TREE **	TREE TRIMMING ***	CUT AT BASE	REMOVED	DEBIT	TREES TO BE PROTECTED
451	CYPRESS	TAXODIUM SPP.	11	380	30+32.33	94.7 RT	YES					YES
452	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	4	50	30+36.71	96.9 RT	YES					YES
453	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	10	314	30+33.91	104.1 RT	YES					YES
454	HACKBERRY	CELTIS OCCIDENTALIS	2	13	30+26.94	101.1 RT	YES					YES
455	PERSIMMON	DIOSPYROS VIRGINIANA	3	28	30+23.62	101.6 RT	YES					YES
456	CYPRESS	TAXODIUM SPP.	21	1385	30+18.24	99.9 RT	YES					YES
457	CYPRESS	TAXODIUM SPP.	15	707	30+20.03	93.7 RT	YES					YES
458	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	4	50	30+41.69	96.5 RT	YES					YES
459	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	6	113	30+43.29	98.9 RT	YES					YES
460	HACKBERRY	CELTIS OCCIDENTALIS	5	79	30+53.26	104.8 RT	YES					YES
461	HACKBERRY	CELTIS OCCIDENTALIS	6	113	30+53.08	104.2 RT	YES					YES
462	PERSIMMON	DIOSPYROS VIRGINIANA	3	28	30+57.81	95.9 RT	YES					YES
463	SWEETGUM (DEAD)	LIQUIDAMBAR STYRACIFLUA	9	254	30+62.38	85.8 RT	DEAD					DEAD
464	OAK (DEAD)	QUERCUS LAURIFOLIA	20	1257	30+57.59	82.1 RT	DEAD					DEAD
465	DOGWOOD	CORNUS SPP.	5	79	30+64.01	84.6 RT	YES					YES
466	PERSIMMON	DIOSPYROS VIRGINIANA	3	28	30+63.08	79.9 RT	YES					YES
467	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	11	380	30+68.29	74.0 RT	YES					YES
468	LAUREL OAK	QUERCUS LAURIFOLIA	4	50	30+60.24	74.3 RT	YES					YES
469	PERSIMMON	DIOSPYROS VIRGINIANA	2	13	30+63.19	68.9 RT	YES					YES
470	HACKBERRY	CELTIS OCCIDENTALIS	8	201	30+66.85	66.5 RT	YES					YES
471	BLACKGUM	NYSSA SYLVATICA VDR	3	28	30+66.92	60.1 RT	YES					YES
472	LAUREL OAK	QUERCUS LAURIFOLIA	6	113	30+65.16	59.9 RT	YES					YES
473	BLACKGUM	NYSSA SYLVATICA VDR	3	28	30+63.51	61.2 RT	YES					YES
474	BLACKGUM	NYSSA SYLVATICA VDR	4	50	30+60.68	59.5 RT	YES					YES
475	HACKBERRY	CELTIS OCCIDENTALIS	2	13	30+55.33	64.3 RT	YES					YES
476	CHESNUT OAK	CASTANEA DENTATA	2	13	30+50.83	61.9 RT	YES					YES
477	PARSLEY HAWTHORNE	CRATAGEUS MARSHALLI	2	13	30+48.00	65.4 RT	YES					YES
478	PARSLEY HAWTHORNE	CRATAGEUS MARSHALLI	2	13	30+47.80	61.1 RT	YES					YES
479	CHESNUT OAK	CASTANEA DENTATA	2	13	30+46.17	61.0 RT	YES					YES
480	BLACKGUM	NYSSA SYLVATICA VDR	7	154	30+48.04	59.0 RT	YES					YES
481	WAX MYRTLE	MYRICA CERIFERA	3	28	30+70.36	58.6 RT	YES					YES
482	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	21	1385	30+72.45	51.7 RT	YES					YES
483	BLACKGUM	NYSSA SYLVATICA VDR	15	707	30+79.28	52.6 RT	YES					YES
484	HACKBERRY	CELTIS OCCIDENTALIS	7	154	30+71.46	49.2 RT	YES					YES
485	BLACKGUM	NYSSA SYLVATICA VDR	12	452	30+74.05	48.1 RT	YES					YES
486	BLACKGUM	NYSSA SYLVATICA VDR	3	28	30+64.56	33.9 RT	YES					YES
487	LAUREL OAK	QUERCUS LAURIFOLIA	3	28	29+83.55	60.8 RT	YES					YES
488	LAUREL OAK	QUERCUS LAURIFOLIA	2	13	29+82.14	78.5 RT	YES					YES
489	CHESNUT OAK	CASTANEA DENTATA	3	28	29+17.65	58.7 RT	YES					YES
490	HACKBERRY	CELTIS OCCIDENTALIS	2	13	29+10.92	59.7 RT	YES					YES
491	PARSLEY HAWTHORNE	CRATAGEUS MARSHALLI	7	154	30+96.63	23.1 RT	YES					YES
492	BLACKGUM	NYSSA SYLVATICA VDR	5	79	30+97.32	23.2 RT	YES					YES
493	LAUREL OAK	QUERCUS LAURIFOLIA	17	908	30+96.15	24.4 RT	YES					YES
494	HACKBERRY	CELTIS OCCIDENTALIS	3	28	31+02.62	24.9 RT	YES					YES
495	HACKBERRY	CELTIS OCCIDENTALIS	5	79	31+02.46	24.0 RT	YES					YES
496	BLACKGUM	NYSSA SYLVATICA VDR	6	113	30+95.50	30.7 RT	YES					YES
497	LAUREL OAK	QUERCUS LAURIFOLIA	2	13	30+95.13	30.2 RT	YES					YES
498	BLACKGUM	NYSSA SYLVATICA VDR	3	28	30+92.78	26.2 RT	YES					YES
499	LAUREL OAK	QUERCUS LAURIFOLIA	2	13	30+92.27	25.7 RT	YES					YES
500	CYPRESS	TAXODIUM SPP.	2	13	30+91.05	26.5 RT	YES					YES

NOTES:
 * 1 INCH OF TREE DIAMETER AT 5 FEET ABOVE GROUND (DBH) IS EQUAL TO 1 FOOT OF CANOPY RADIUS FOR THE CALCULATION OF CANOPY AREA (PI *RADIUS SQUARED). THIS NUMBER IS NOT PHYSICALLY MEASURED.
 ** PROTECTED TREES INCLUDE ALL TREES WITHIN A WETLAND AND ALL TREES WITH A DBH OF 18 INCHES OR GREATER.
 *** TREES WHERE BRANCHES OVERHANG LIMITS OF CLEARING.

DATE	DESCRIPTION	DATE	DESCRIPTION	JUDITH M. HAYDEN, P.E.	P.E. NO.: 43976	STATE OF FLORIDA	DEPARTMENT OF TRANSPORTATION	ROAD NO.	COUNTY	FINANCIAL PROJECT ID	TREE SURVEY	SHEET NO.
	REVIEWS			Environmental & Geotechnical Specialists, Inc.	3154 Eliza Road	CR 2192	LEON	413491-1-52-01			TR-12	
				Environmental & Geotechnical Specialists, Inc.	3154 Eliza Road							
				Environmental & Geotechnical Specialists, Inc.	Tallahassee, Florida 32308							
				Environmental & Geotechnical Specialists, Inc.	Office: (904) 386-1233							
				Environmental & Geotechnical Specialists, Inc.	Fax: (904) 386-8050							
				Environmental & Geotechnical Specialists, Inc.	Certificate of Authorization: 6222							

**TABLE 1
TREE INDEX CHART**

TREE TAG NO.	COMMON NAME	BOTANICAL NAME	DBH (INCHES)	CANOPY AREA * (SQ. FT.) (CPZ)	SURVEY BASELINE STATION	OFFSET (FEET)	PROTECTED TREE **	TREE TRIMMING ***	CUT AT BASE	REMOVED	DEBIT	TREES TO BE PROTECTED
501	CYPRESS	TAXODIUM SPP.	6	113	30+86.81	26.4 RT	YES			YES	2	
502	BLACKGUM	NYSSA SYLVATICA vdr	4	50	30+92.52	36.9 RT	YES				2	
503	BLACKGUM	NYSSA SYLVATICA vdr	2	13	30+99.52	44.9 RT	YES		YES		0	
504	BLACKGUM	NYSSA SYLVATICA vdr	8	201	30+96.22	42.9 RT	YES		YES		4	
505	BLACKGUM	NYSSA SYLVATICA vdr	2	13	30+94.99	44.7 RT	YES		YES		0	
506	CHERRY	PRUNUS CAROLINIANA	2	13	31+03.46	45.4 RT	YES		YES		0	
507	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	11	380	31+03.49	43.8 RT	YES		YES		4	
508	HACKBERRY	CELTIS OCCIDENTALIS	4	50	31+05.88	49.8 RT	YES		YES		2	
509	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	14	616	31+01.73	52.5 RT	YES		YES		6	
510	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	15	707	31+03.24	34.1 RT	YES		YES		6	
511	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	7	154	31+06.26	29.5 RT	YES		YES		4	
512	HACKBERRY	CELTIS OCCIDENTALIS	5	79	31+14.33	36.1 RT	YES		YES		2	
513	HACKBERRY	CELTIS OCCIDENTALIS	8	201	31+14.83	35.2 RT	YES		YES		4	
514	BLACKGUM (DEAD)	NYSSA SYLVATICA vdr	18	1018	31+18.86	38.9 RT	DEAD			YES	0	DEAD
515	BAY	PERSEA SPP.	3	28	31+18.62	27.4 RT	YES			YES	0	
516	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	7	154	31+13.56	52.3 RT	YES		YES		4	
517	HACKBERRY	CELTIS OCCIDENTALIS	2	13	31+15.72	53.8 RT	YES		YES		0	
518	HACKBERRY	CELTIS OCCIDENTALIS	4	50	31+16.36	53.6 RT	YES		YES		2	
519	HACKBERRY	CELTIS OCCIDENTALIS	2	13	31+14.12	63.4 RT	YES		YES		0	
520	HACKBERRY	CELTIS OCCIDENTALIS	4	50	31+04.26	71.5 RT	YES	YES			2	
521	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	12	452	31+01.30	68.9 RT	YES	YES			4	
522	HACKBERRY	CELTIS OCCIDENTALIS	3	28	30+99.40	69.7 RT	YES	YES			0	
523	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	5	79	31+00.59	68.0 RT	YES	YES			2	
524	PARSLEY HAWTHORNE	CRATAGEUS MARSHALLI	2	13	30+89.99	65.6 RT	YES					YES
525	PARSLEY HAWTHORNE	CRATAGEUS MARSHALLI	5	79	30+91.09	65.3 RT	YES					YES
526	PARSLEY HAWTHORNE	CRATAGEUS MARSHALLI	3	28	30+93.24	53.1 RT	YES		YES		0	
527	HACKBERRY (DEAD)	CELTIS OCCIDENTALIS	10	314	31+00.25	53.3 RT	DEAD				0	DEAD
528	CHERRY	PRUNUS CAROLINIANA	5	79	31+00.73	52.8 RT	YES		YES		2	
529	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	16	804	30+98.58	81.3 RT	YES					YES
530	HACKBERRY	CELTIS OCCIDENTALIS	2	13	31+06.02	79.2 RT	YES					YES
531	LAUREL OAK	QUERCUS LAURIFOLIA	2	13	31+06.20	79.5 RT	YES					YES
532	HACKBERRY	CELTIS OCCIDENTALIS	2	13	30+97.74	80.9 RT	YES					YES
533	WAX MYRTLE	MYRICA CERIFERA	3	28	30+89.22	77.9 RT	YES					YES
534	WATER OAK	QUERCUS NIGRA	4	50	30+99.35	89.3 RT	YES					YES
535	HACKBERRY	CELTIS OCCIDENTALIS	2	13	31+03.12	86.5 RT	YES					YES
536	HACKBERRY	CELTIS OCCIDENTALIS	2	13	31+04.93	88.2 RT	YES					YES
537	HACKBERRY	CELTIS OCCIDENTALIS	3	28	31+05.47	86.2 RT	YES					YES
538	HACKBERRY	CELTIS OCCIDENTALIS	3	28	31+06.12	85.9 RT	YES					YES
539	BLACKGUM	NYSSA SYLVATICA vdr	8	201	31+09.56	86.4 RT	YES					YES
540	LAUREL OAK	QUERCUS LAURIFOLIA	6	113	31+13.63	83.9 RT	YES					YES
541	BAY	PERSEA SPP.	16	804	31+12.54	80.8 RT	YES					YES
542	PARSLEY HAWTHORNE	CRATAGEUS MARSHALLI	5	79	31+13.87	77.9 RT	YES					YES
543	HACKBERRY	CELTIS OCCIDENTALIS	5	79	31+14.27	90.4 RT	YES					YES
544	HACKBERRY	CELTIS OCCIDENTALIS	2	13	31+13.61	91.5 RT	YES					YES
545	BLACKGUM	NYSSA SYLVATICA vdr	5	79	31+01.97	94.9 RT	YES					YES
546	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	21	1385	30+81.56	102.2 RT	YES					YES
547	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	8	201	30+79.47	100.3 RT	YES					YES
548	BLACKGUM	NYSSA SYLVATICA vdr	19	1134	30+95.32	107.4 RT	YES					YES
549	HACKBERRY	CELTIS OCCIDENTALIS	2	13	31+20.85	103.5 RT	YES					YES
550	HACKBERRY	CELTIS OCCIDENTALIS	2	13	31+20.38	103.5 RT	YES					YES

NOTES:
 * 1 INCH OF TREE DIAMETER AT 5 FEET ABOVE GROUND (DBH) IS EQUAL TO 1 FOOT OF CANOPY RADIUS FOR THE CALCULATION OF CANOPY AREA (PI *RADIUS SQUARED). THIS NUMBER IS NOT PHYSICALLY MEASURED.
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 *** TREES WHERE BRANCHES OVERHANG LIMITS OF CLEARING.

DATE	DESCRIPTION	DATE	DESCRIPTION	JUDITH M. HAYDEN, P.E.	P.E. NO.: 43976	STATE OF FLORIDA	DEPARTMENT OF TRANSPORTATION	SHEET NO.
	REVISI ONS			Environmental & Geotechnical Specialists, Inc.	3154 Eliza Road	COUNTY	FINANCIAL PROJECT ID	TR-13
				EGS	Tallahassee, Florida 32308	LEON	413491-1-52-01	
				Office: (904) 386-1233	3154 Eliza Road			
				Fax: (904) 386-8050	3154 Eliza Road			
				Certificate of Authorization: 8222	3154 Eliza Road			
					12/20/2011			
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**TABLE 1
TREE INDEX CHART**

TREE TAG NO.	COMMON NAME	BOTANICAL NAME	DBH (INCHES)	CANOPY AREA * (SQ. FT.) (CPZ)	SURVEY BASELINE STATION	OFFSET (FEET)	PROTECTED TREE **	TREE TRIMMING ***	CUT AT BASE	REMOVED	DEBIT	TREES TO BE PROTECTED
551	HACKBERRY	CELTIS OCCIDENTALIS	4	50	31+20.06	103.1 RT	YES					YES
552	CHINA BERRY		5	79	31+56.77	88.8 RT	YES					YES
553	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	2	13	31+52.26	91.3 RT	YES					YES
554	HACKBERRY	CELTIS OCCIDENTALIS	5	79	31+50.15	94.9 RT	YES					YES
555	WAX MYRTLE	MIRICA CERIFERA	2	13	31+63.08	84.9 RT	YES					YES
556	WAX MYRTLE	MIRICA CERIFERA	2	13	31+51.13	84.7 RT	YES					YES
557	PARSLEY HAWTHORNE	CRATAGEUS MARSHALLI	2	13	31+48.72	83.6 RT	YES					YES
558	BAY	PERSEA SPP.	2	13	31+41.54	79.7 RT	YES					YES
559	HACKBERRY	CELTIS OCCIDENTALIS	6	113	31+32.43	79.8 RT	YES					YES
560	HACKBERRY	CELTIS OCCIDENTALIS	4	50	31+32.30	79.1 RT	YES					YES
561	HACKBERRY	CELTIS OCCIDENTALIS	5	79	31+22.73	73.6 RT	YES		YES		2	
562	WATER OAK	QUERCUS NIGRA	7	154	31+32.20	72.3 RT	YES		YES		4	
563	HACKBERRY	CELTIS OCCIDENTALIS	3	28	31+44.37	71.0 RT	YES		YES		0	
564	HACKBERRY	CELTIS OCCIDENTALIS	5	79	31+31.19	64.2 RT	YES		YES		2	
565	WATER OAK	QUERCUS NIGRA	13	531	31+33.67	60.4 RT	YES		YES		6	
566	HACKBERRY	CELTIS OCCIDENTALIS	5	79	31+43.10	58.9 RT	YES		YES		2	
567	MAPLE	ACER SPP.	8	201	31+53.88	47.7 RT	YES		YES		4	
568	HACKBERRY	CELTIS OCCIDENTALIS	2	13	31+41.29	45.7 RT	YES		YES		0	
569	WATER OAK	QUERCUS NIGRA	10	314	31+38.15	47.3 RT	YES		YES		4	
570	HACKBERRY	CELTIS OCCIDENTALIS	3	28	31+26.83	47.2 RT	YES		YES		0	
571	WATER OAK	QUERCUS NIGRA	4	50	31+31.27	34.6 RT	YES		YES		2	
572	LAUREL OAK	QUERCUS LAURIFOLIA	5	79	31+28.04	29.8 RT	YES		YES		2	
573	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	3	28	31+42.51	34.7 RT	YES		YES		0	
574	WATER OAK	QUERCUS NIGRA	4	50	31+45.76	31.1 RT	YES		YES		2	
575	HACKBERRY	CELTIS OCCIDENTALIS	4	50	31+51.30	28.9 RT	YES		YES		2	
576	HACKBERRY	CELTIS OCCIDENTALIS	6	113	31+48.90	26.9 RT	YES		YES		2	
577	HACKBERRY	CELTIS OCCIDENTALIS	2	13	31+53.41	29.9 RT	YES		YES		0	
578	HACKBERRY	CELTIS OCCIDENTALIS	4	50	31+53.96	33.8 RT	YES		YES		2	
579	SWEETGUM (DEAD)	LIQUIDAMBAR STYRACIFLUA	15	707	31+57.05	31.8 RT	DEAD		YES		DEAD	DEAD
580	HACKBERRY	CELTIS OCCIDENTALIS	3	28	31+61.87	56.2 RT	YES		YES		0	
581	HACKBERRY	CELTIS OCCIDENTALIS	2	13	31+78.93	47.6 RT	YES		YES		0	
582	HACKBERRY	CELTIS OCCIDENTALIS	5	79	31+78.21	47.4 RT	YES		YES		2	
583	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	12	452	31+82.21	43.4 RT	YES		YES		4	
584	HACKBERRY	CELTIS OCCIDENTALIS	7	154	31+76.54	33.2 RT	YES		YES		4	
585	HACKBERRY	CELTIS OCCIDENTALIS	3	28	31+69.40	34.2 RT	YES		YES		0	
586	HACKBERRY	CELTIS OCCIDENTALIS	4	50	31+63.80	35.7 RT	YES		YES		2	
587	HACKBERRY	CELTIS OCCIDENTALIS	3	28	31+59.36	36.2 RT	YES		YES		0	
588	HACKBERRY	CELTIS OCCIDENTALIS	6	113	31+65.15	31.5 RT	YES		YES		2	
589	HACKBERRY	CELTIS OCCIDENTALIS	4	50	31+85.26	33.5 RT	YES		YES		2	
590	HACKBERRY	CELTIS OCCIDENTALIS	5	79	31+84.58	31.5 RT	YES		YES		2	
591	HACKBERRY	CELTIS OCCIDENTALIS	2	13	31+89.59	30.8 RT	YES		YES		0	
592	HACKBERRY	CELTIS OCCIDENTALIS	3	28	31+92.54	31.1 RT	YES		YES		0	
593	HACKBERRY	CELTIS OCCIDENTALIS	3	28	31+97.68	43.8 RT	YES		YES		0	
594	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	14	616	31+99.51	29.5 RT	YES		YES		6	
595	WATER OAK	QUERCUS NIGRA	2	13	32+01.00	26.7 RT	YES		YES		0	
596	HACKBERRY	CELTIS OCCIDENTALIS	4	50	31+97.04	24.2 RT	YES		YES		0	
597	MAGNOLIA	MAGNOLIA SPP.	23	1662	32+09.23	28.3 RT	YES		YES		8	
598	WATER OAK	QUERCUS NIGRA	4	50	32+05.11	24.1 RT	YES		YES		2	
599	BLACKGUM	NYSSA SYLVATICA var	2	13	32+05.39	27.4 RT	YES		YES		0	
600	HACKBERRY	CELTIS OCCIDENTALIS	2	13	31+89.53	34.2 RT	YES		YES		0	

NOTES:
 * 1 INCH OF TREE DIAMETER AT 5 FEET ABOVE GROUND (DBH) IS EQUAL TO 1 FOOT OF CANOPY RADIUS FOR THE CALCULATION OF CANOPY AREA (PI *RADIUS SQUARED). THIS NUMBER IS NOT PHYSICALLY MEASURED.
 ** PROTECTED TREES INCLUDE ALL TREES WITHIN A WETLAND AND ALL TREES WITH A DBH OF 18 INCHES OR GREATER.
 *** TREES WHERE BRANCHES OVERHANG LIMITS OF CLEARING.

DATE	DESCRIPTION	DATE	DESCRIPTION	JUDITH M. HAYDEN, P.E.	P.E. NO.: 43976	3154 Eliza Road Tallahassee, Florida 32308 Office: (904) 386-1233 Fax: (904) 386-8050 Certificate of Authorization: 8222	DEPARTMENT OF TRANSPORTATION	STATE OF FLORIDA	ROAD NO. CR 2192	COUNTY LEON	FINANCIAL PROJECT ID 413491-1-52-01	TREE SURVEY	SHEET NO. TR-14
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**TABLE 1
TREE INDEX CHART**

TREE TAG NO.	COMMON NAME	BOTANICAL NAME	DBH (INCHES)	CANOPY AREA * (SQ. FT.) (CPZ)	SURVEY BASELINE STATION	OFFSET (FEET)	PROTECTED TREE **	TREE TRIMMING ***	CUT AT BASE	REMOVED	DEBIT	TREES TO BE PROTECTED
601	BLACKGUM	NYSSA SYLVATICA var	12	452	31+81.37	58.4 RT	YES		YES		4	
602	HACKBERRY	CELTIS OCCIDENTALIS	5	79	31+79.08	63.8 RT	YES		YES		2	
603	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	7	154	31+88.48	67.6 RT	YES					YES
604	SPRUCE PINE	PINUS GLABERA	9	254	31+79.73	75.0 RT	YES					YES
605	WATER OAK	QUERCUS NIGRA	10	314	31+63.65	72.1 RT	YES		YES		4	
606	WATER OAK	QUERCUS NIGRA	3	28	31+65.20	75.6 RT	YES	YES			0	
607	HACKBERRY	CELTIS OCCIDENTALIS	5	79	31+64.43	82.7 RT	YES					YES
608	HOLLY	LLEX SPP.	3	28	31+67.36	98.7 RT	YES					YES
609	OAK <DEAD>	QUERCUS ALBA	27	2290	31+96.26	93.2 RT	DEAD				DEAD	DEAD
610	HICKORY	CARYA SPP.	2	13	32+01.70	92.2 RT	YES					YES
611	HICKORY	CARYA SPP.	5	79	32+01.23	80.5 RT	YES					YES
612	HICKORY	CARYA SPP.	5	79	32+11.26	76.2 RT	YES					YES
613	SPRUCE PINE	PINUS GLABERA	4	50	31+95.81	83.7 RT	YES					YES
614	HACKBERRY	CELTIS OCCIDENTALIS	2	13	31+81.72	79.8 RT	YES					YES
615	BLACKGUM	NYSSA SYLVATICA var	15	707	32+06.94	56.6 RT	YES					YES
616	SPRUCE PINE	PINUS GLABERA	2	13	32+03.53	52.1 RT	YES					YES
617	HACKBERRY	CELTIS OCCIDENTALIS	6	113	32+15.54	52.7 RT				YES		YES
618	HICKORY	CARYA SPP.	5	79	32+12.98	44.5 RT				YES		
619	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	6	113	32+19.64	28.7 RT				YES		2
620	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	8	201	32+19.83	29.6 RT				YES		4
621	LAUREL	QUERCUS LAURIFOLIA	8	201	32+20.80	23.7 RT				YES		4
622	HICKORY	CARYA SPP.	11	380	32+28.10	35.7 RT				YES		4
623	HICKORY	CARYA SPP.	6	113	32+28.75	25.3 RT				YES		2
624	SPRUCE PINE	PINUS GLABERA	4	50	32+35.36	26.9 RT				YES		2
625	BAY	PERSEA SPP.	3	28	32+41.13	27.2 RT				YES		0
626	BAY	PERSEA SPP.	2	13	32+39.49	31.0 RT				YES		0
627	BAY	PERSEA SPP.	3	28	32+38.79	34.4 RT				YES		0
628	HICKORY	CARYA SPP.	2	13	32+45.03	34.4 RT				YES		0
629	LIVE OAK	QUERCUS VIRGINIANA	23	1662	32+45.52	23.0 RT	YES			YES		8
630	BLACKGUM	NYSSA SYLVATICA var	14	616	32+55.63	24.9 RT				YES		6
631	LIVE OAK	QUERCUS VIRGINIANA	18	1018	32+54.77	30.0 RT	YES			YES		4
632	HICKORY	CARYA SPP.	4	50	32+51.86	36.5 RT				YES		2
633	HICKORY	CARYA SPP.	14	616	32+52.62	45.4 RT				YES		
634	HICKORY	CARYA SPP.	5	79	32+51.93	48.9 RT				YES		YES
635	HICKORY	CARYA SPP.	4	50	32+40.67	52.5 RT				YES		YES
636	HICKORY	CARYA SPP.	4	50	32+37.92	45.8 RT				YES		YES
637	LAUREL	QUERCUS LAURIFOLIA	21	1385	32+36.54	56.5 RT	YES					YES
638	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	8	201	32+29.98	63.9 RT				YES		YES
639	CHESNUT OAK	CASTANEA DENTATA	18	1018	32+24.03	67.1 RT	YES					YES
640	HOLLY	LLEX SPP.	6	113	32+27.40	76.0 RT				YES		YES
641	HOLLY	LLEX SPP.	4	50	32+26.67	75.5 RT				YES		YES
642	SPRUCE PINE	PINUS GLABERA	3	28	32+25.28	82.2 RT				YES		YES
643	HACKBERRY	CELTIS OCCIDENTALIS	3	28	32+15.78	78.4 RT				YES		YES
644	WATER OAK	QUERCUS NIGRA	4	50	32+15.29	79.5 RT				YES		YES
645	HICKORY	CARYA SPP.	5	79	32+26.53	99.0 RT				YES		YES
646	BLACKGUM	NYSSA SYLVATICA var	9	254	32+31.24	97.7 RT				YES		YES
647	HICKORY	CARYA SPP.	4	50	32+30.12	92.9 RT				YES		YES
648	HICKORY	CARYA SPP.	2	13	32+35.03	101.3 RT				YES		YES
649	HOLLY	LLEX SPP.	3	28	32+38.79	98.0 RT				YES		YES
650	HOLLY	LLEX SPP.	5	79	32+39.07	97.4 RT				YES		YES

NOTES:
 * 1 INCH OF TREE DIAMETER AT 5 FEET ABOVE GROUND (DBH) IS EQUAL TO 1 FOOT OF CANOPY RADIUS FOR THE CALCULATION OF CANOPY AREA (PI *RADIUS SQUARED). THIS NUMBER IS NOT PHYSICALLY MEASURED.
 ** PROTECTED TREES INCLUDE ALL TREES WITHIN A WETLAND AND ALL TREES WITH A DBH OF 18 INCHES OR GREATER.
 *** TREES WHERE BRANCHES OVERHANG LIMITS OF CLEARING.

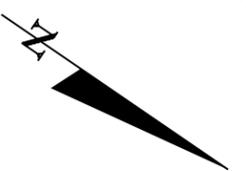
DATE	DESCRIPTION	DATE	DESCRIPTION	JUDITH M. HAYDEN, P.E.	P.E. NO.: 43976	3154 Eliza Road Tallahassee, Florida 32308 Office: (850) 385-1233 Fax: (850) 385-8050 Certificate of Authorization: 8222	CR 2192	LEON	413491-1-52-01	12/20/2011	5:11:55 PM	TR-15
REVISIONS				DEPARTMENT OF TRANSPORTATION		STATE OF FLORIDA	COUNTY		FINANCIAL PROJECT ID	TREE SURVEY		
				ROAD NO.		COUNTY		FINANCIAL PROJECT ID		SHEET NO.		
				CR 2192		LEON		413491-1-52-01		TR-15		

**TABLE 1
TREE INDEX CHART**

TREE TAG NO.	COMMON NAME	BOTANICAL NAME	DBH (INCHES)	CANOPY AREA * (SQ. FT.) (CPZ)	SURVEY BASELINE STATION	OFFSET (FEET)	PROTECTED TREE **	TREE TRIMMING ***	CUT AT BASE	REMOVED	DEBIT	TREES TO BE PROTECTED
651	HICKORY	CARYA SPP.	5	79	32+51.86	88.5 RT						YES
652	HICKORY	CARYA SPP.	6	113	32+35.08	74.2 RT						YES
653	LVE OAK	QUERCUS VIRGINIANA	32	3217	32+68.16	88.6 RT	YES					YES
654	HOLLY	LLEX SPP.	4	50	32+63.12	84.1 RT						YES
655	HOLLY	LLEX SPP.	2	13	32+63.66	84.0 RT						YES
656	HICKORY	CARYA SPP.	4	50	32+56.94	95.2 RT						YES
657	HOLLY	LLEX SPP.	2	13	32+58.38	81.3 RT						YES
658	HOLLY	LLEX SPP.	4	50	32+79.90	73.9 RT						YES
659	HICKORY	CARYA SPP.	14	616	32+78.71	73.4 RT						YES
660	HOLLY	LLEX SPP.	6	113	32+81.54	68.6 RT						YES
661	HICKORY	CARYA SPP.	4	50	33+00.24	56.4 RT						YES
662	LAUREL	QUERCUS LAURIFOLIA	2	13	33+04.11	56.1 RT						YES
663	HICKORY	CARYA SPP.	4	50	33+04.87	53.6 RT						YES
664	HICKORY	CARYA SPP.	4	50	33+02.02	43.5 RT						YES
665	HICKORY	CARYA SPP.	3	28	32+94.66	51.6 RT						YES
666	HICKORY	CARYA SPP.	5	79	32+89.37	50.1 RT						YES
667	HICKORY	CARYA SPP.	24	1810	32+75.35	51.1 RT	YES					YES
668	WATER OAK	QUERCUS NIGRA	4	50	32+73.07	44.8 RT						YES
669	WATER OAK	QUERCUS NIGRA	5	79	32+81.19	41.3 RT						YES
670	WATER OAK	QUERCUS NIGRA	3	28	32+84.76	35.3 RT						YES
671	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	12	452	32+84.49	29.6 RT	YES				4	
672	HICKORY	CARYA SPP.	7	154	32+86.87	29.0 RT	YES				4	
673	HICKORY	CARYA SPP.	3	28	32+87.61	26.4 RT	YES				0	
674	HICKORY	CARYA SPP.	2	13	32+78.16	34.5 RT						YES
675	HICKORY	CARYA SPP.	5	79	32+95.75	28.2 RT						YES
676	HOLLY	LLEX SPP.	2	13	33+06.02	32.4 RT						YES
677	SPARKLEBERRY	VACCINIUM ARBOREUM	3	28	33+03.55	33.8 RT						YES
678	SPARKLEBERRY	VACCINIUM ARBOREUM	2	13	33+13.14	33.5 RT						YES
679	SPRUCE PINE	PINUS GLABERA	11	380	33+15.58	29.9 RT						YES
680	SPARKLEBERRY	VACCINIUM ARBOREUM	2	13	33+18.20	27.7 RT						YES
681	HOLLY	LLEX SPP.	3	28	33+15.44	23.9 RT						YES
682	LAUREL	QUERCUS LAURIFOLIA	6	113	33+15.39	15.1 RT	YES				2	
683	LAUREL	QUERCUS LAURIFOLIA	3	28	33+21.64	16.0 RT	YES				0	
684	SPARKLEBERRY	VACCINIUM ARBOREUM	2	13	32+81.85	20.9 RT	YES				0	
685	HICKORY	CARYA SPP.	2	13	32+62.90	57.5 RT						YES
686	HICKORY	CARYA SPP.	2	13	32+59.56	50.0 RT						YES
687	WAX MYRTLE	MYRTICA CERIFERA	2	13	32+51.39	62.6 RT						YES
688	SHORTLEAF PINE	PINUS ECHINATA	11	380	32+48.50	66.9 RT						YES
689	SWEETGUM (DEAD)	LIQUIDAMBAR STYRACIFLUA	12	452	32+40.66	81.1 RT	DEAD					DEAD
690	LIVE OAK	QUERCUS VIRGINIANA	33	3421	31+87.27	14.9 LT	YES	YES			16*****	DEAD
TOTAL NUMBER OF TREES									93	244	--	--
TOTAL POINTS									852			N/A

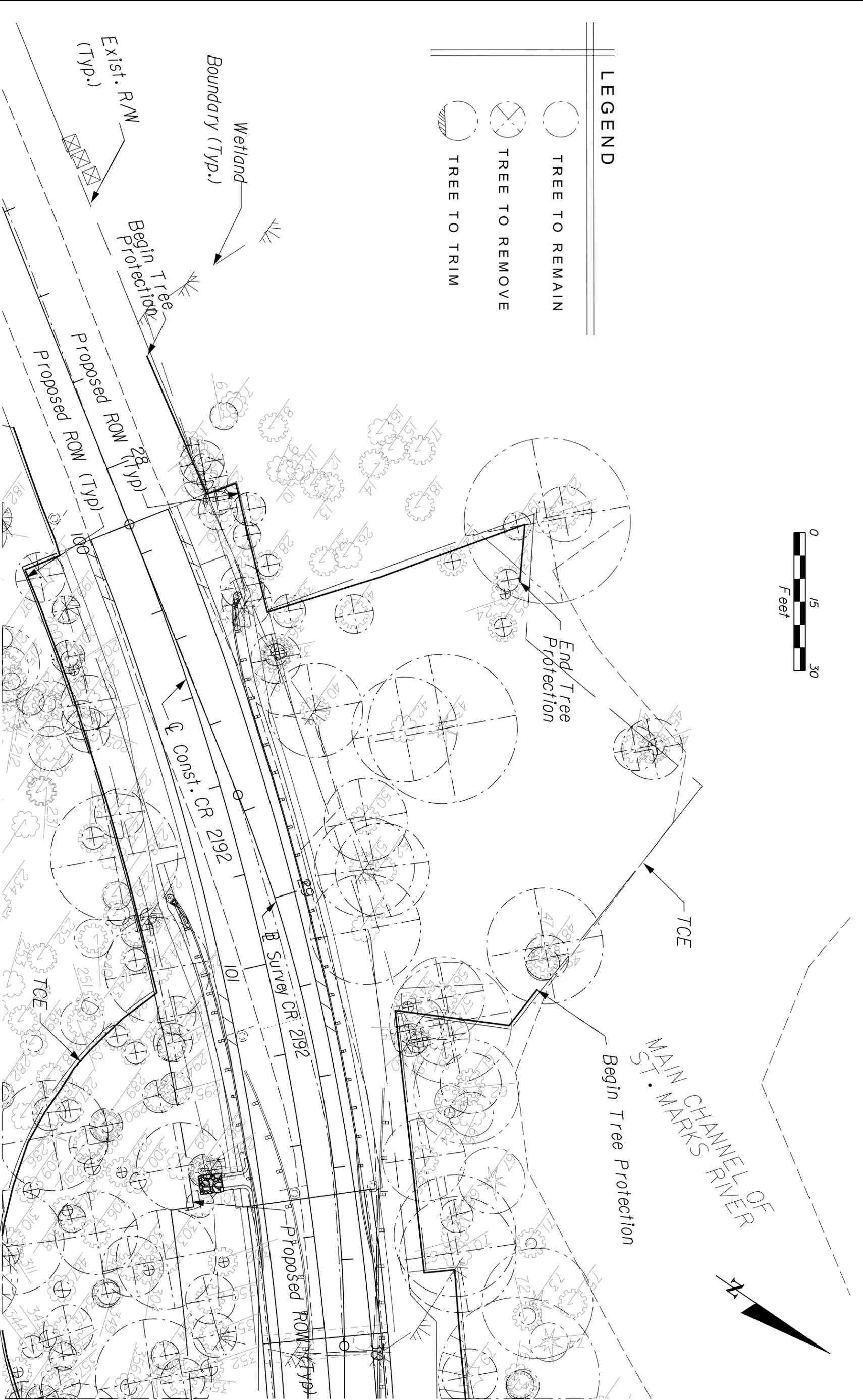
NOTES:
 * 1 INCH OF TREE DIAMETER AT 5 FEET ABOVE GROUND (DBH) IS EQUAL TO 1 FOOT OF CANOPY RADIUS FOR THE CALCULATION OF CANOPY AREA (PI *RADIUS SQUARED). THIS NUMBER IS NOT PHYSICALLY MEASURED.
 ** PROTECTED TREES INCLUDE ALL TREES WITHIN A WETLAND AND ALL TREES WITH A DBH OF 18 INCHES OR GREATER.
 *** TREES WHERE BRANCHES OVERHANG LIMITS OF CLEARING.
 **** TREE IS BEING TRIMMED AND RECEIVING TRUNK PROTECTION AND CONSIDERED A 'TECHNICAL DEBIT' BUT IS NOT BEING REMOVED.

DATE	DESCRIPTION	DATE	DESCRIPTION	JUDITH M. HAYDEN, P.E.	P.E. NO.: 43976	3154 Eliza Road Tallahassee, Florida 32308 Office: (904) 386-1233 Fax: (904) 386-0050 Certificate of Authorization: 8222	DEPARTMENT OF TRANSPORTATION	STATE OF FLORIDA	ROAD NO. CR 2192	COUNTY LEON	FINANCIAL PROJECT ID 413491-1-52-01	TREE SURVEY	SHEET NO. TR-16
------	-------------	------	-------------	------------------------	-----------------	--	------------------------------	------------------	------------------	-------------	-------------------------------------	-------------	-----------------



LEGEND

-  TREE TO REMAIN
-  TREE TO REMOVE
-  TREE TO TRIM



DATE	DESCRIPTION	REVISIONS	DATE	DESCRIPTION

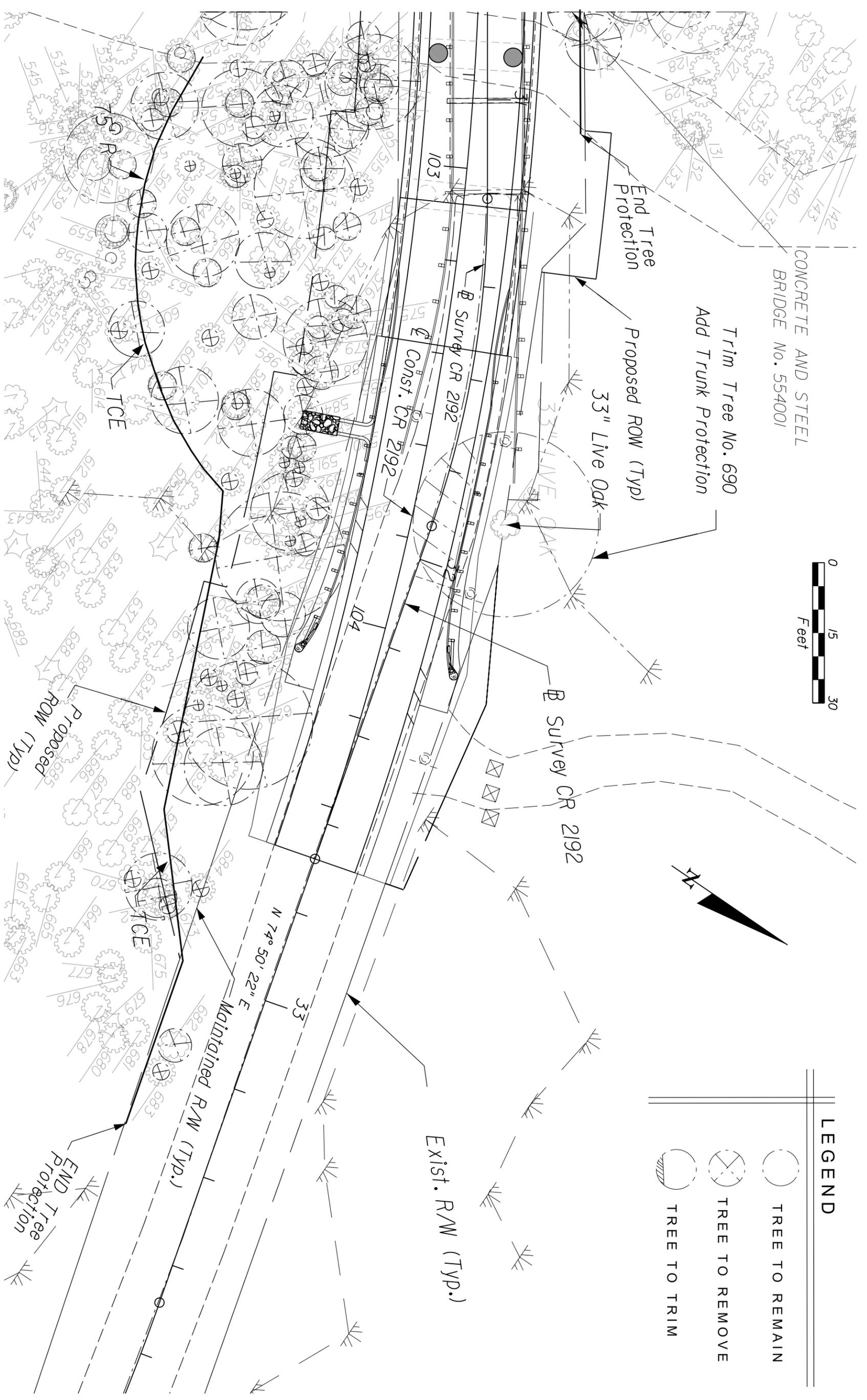
JUDITH M. HAYDEN, P.E. P.E. NO. : 43976 Environmental & Geotechnical Specialists, Inc. EGS 3154 Eliza Road Tallahassee, Florida 32308 Office : (904) 386-1233 Fax : (904) 385-8050 Certificate of Authorization: 6222		STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION ROAD NO. COUNTY FINANCIAL PROJECT ID CR 2192 LEON 413491-1-52-01		SHEET NO. TR-17
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NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE SIGNED AND SEALED UNDER RULE 6I05-23.003, F.A.C.



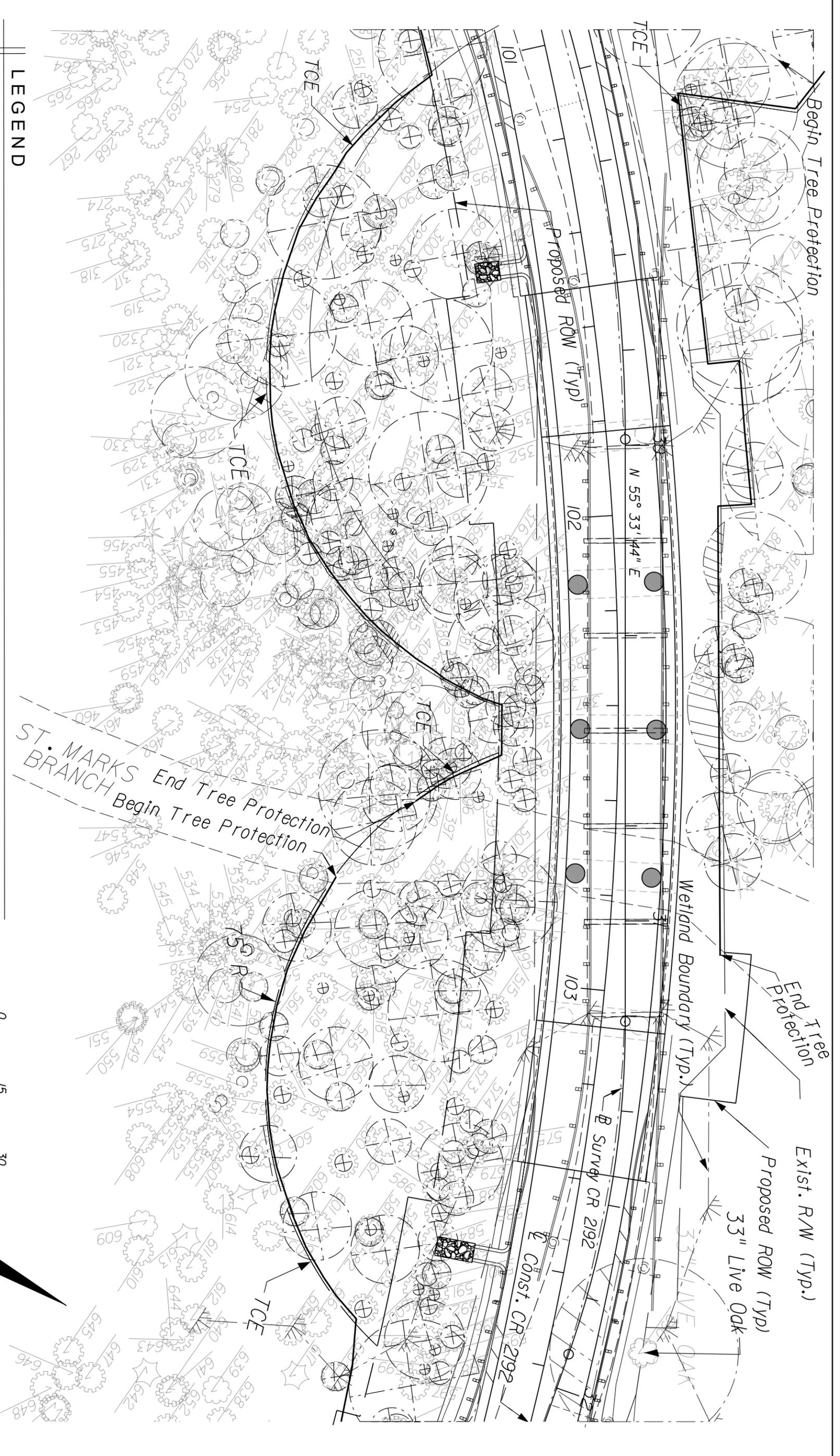
LEGEND

	TREE TO REMAIN
	TREE TO REMOVE
	TREE TO TRIM

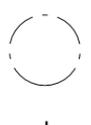


DATE	DESCRIPTION	DATE	DESCRIPTION
REVISED			
<p>JUDITH M. HAYDEN, P.E. P.E. NO.: 43976 Environmental & Geotechnical Specialists, Inc. EGGS Tallahassee, Florida 32308 Office: (904) 386-1233 Fax: (904) 386-0050 Certificate of Authorization: 6222</p>			
STATE OF FLORIDA			
DEPARTMENT OF TRANSPORTATION			
ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
CR-2192	LEON	413491-1-52-01	
TREE SURVEY			SHEET NO.
			TR-19

NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE SIGNED AND SEALED UNDER RULE 61G15-23.003, F.A.C.



LEGEND



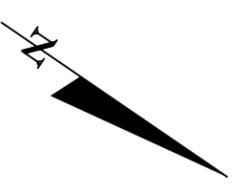
TREE TO REMAIN



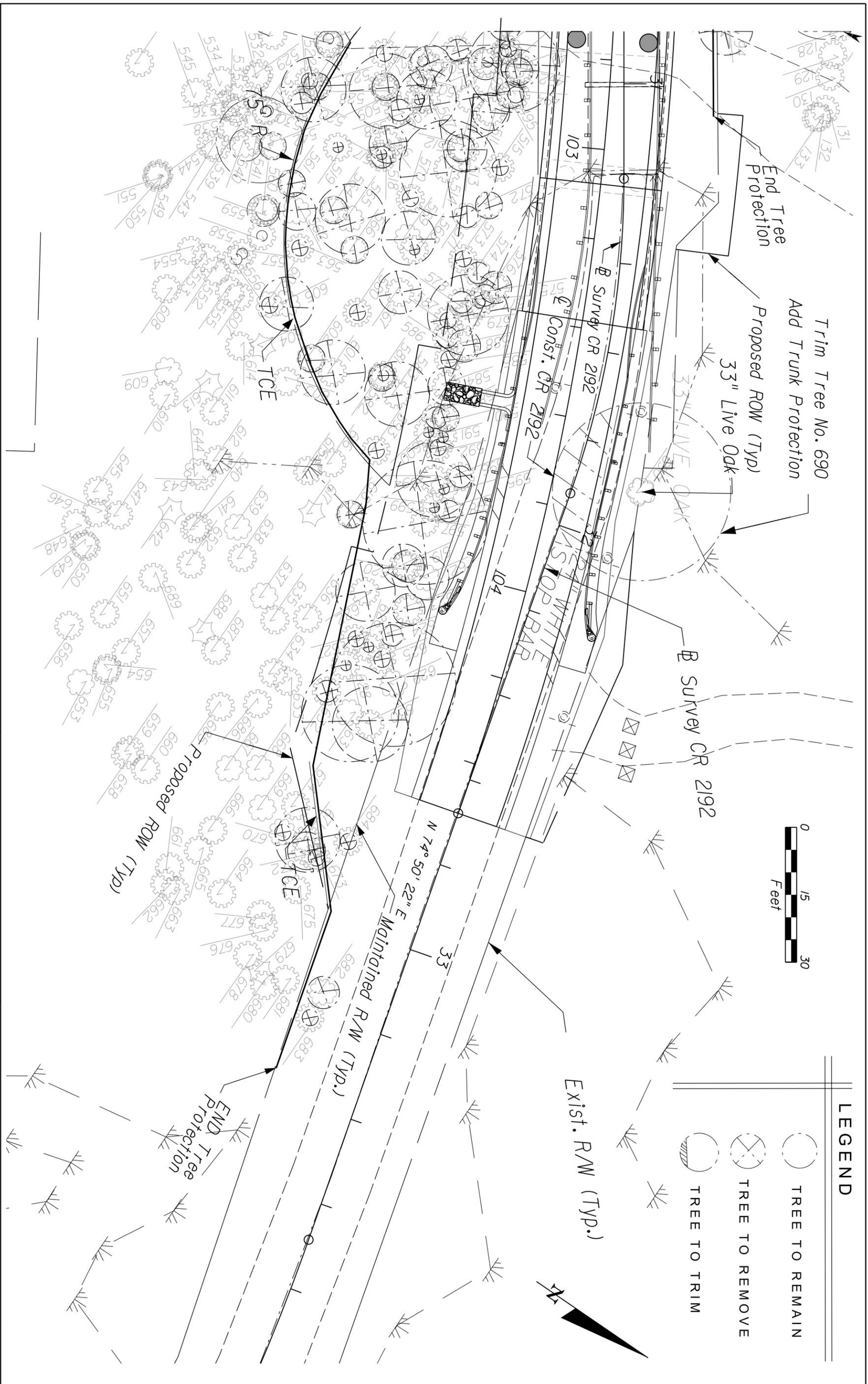
TREE TO REMOVE



TREE TO TRIM

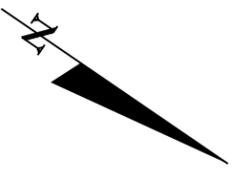


DATE		DESCRIPTION		REVISITONS		DATE		DESCRIPTION		SHEET NO.	
										TR-21	
<p>JUDITH M. HAYDEN, P.E. P.E. NO.: 43976 Environmental & Geotechnical Specialists, Inc. EGS Tallahassee, Florida 32308 Office: (904) 386-1233 Fax: (904) 386-8050 Certificate of Authorization: 9222</p>											
<p>STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION</p>				<p>ROAD NO. CR 2192</p>				<p>COUNTY LEON</p>			
<p>FINANCIAL PROJECT ID 413491-1-52-01</p>				<p>DATE 12/20/2011</p>				<p>5:15:48 PM</p>			
<p>NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE SIGNED AND SEALED UNDER RULE 61G15-23.003, F.A.C.</p>											



LEGEND

	TREE TO REMAIN
	TREE TO REMOVE
	TREE TO TRIM



DATE	DESCRIPTION	REVISIONS	DATE	DESCRIPTION	DATE	DESCRIPTION	SHEET NO.
							TR-22
<p>JUDITH M. HAYDEN, P.E. P.E. NO.: 43976 Environmental & Geotechnical Specialists, Inc. EGGS Tallahassee, Florida 32308 Office: (904) 386-1233 Fax: (904) 385-8050 Certificate of Authorization: 6222</p>							
<p>STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION ROAD NO. COUNTY FINANCIAL PROJECT ID CR 2192 LEON 413491-1-52-01</p>							
<p>TREE SURVEY</p>							

NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE SIGNED AND SEALED UNDER RULE 61G15-23.003, F.A.C.

INDEX OF STRUCTURE PLANS

SHEET NO.	SHEET DESCRIPTION
B- 1	BRIDGE KEY SHEET
B1- 1	GENERAL NOTES (1 OF 2)
B1- 2	GENERAL NOTES (2 OF 2)
B1- 3	PLAN AND ELEVATION
B1- 4	BRIDGE HYDRAULIC RECOMMENDATIONS
B1- 5	REPORT OF CORE BORINGS (1 OF 8)
B1- 6	REPORT OF CORE BORINGS (2 OF 8)
B1- 7	REPORT OF CORE BORINGS (3 OF 8)
B1- 7	REPORT OF CORE BORINGS (4 OF 8)
B1- 8	REPORT OF CORE BORINGS (5 OF 8)
B1- 9	REPORT OF CORE BORINGS (6 OF 8)
B1- 10	REPORT OF CORE BORINGS (7 OF 8)
B1- 11	REPORT OF CORE BORINGS (8 OF 8)
B1- 12	FOUNDATION LAYOUT
B1- 13	PIPE PILE DATA TABLE AND NOTES
B1- 14	END BENT 1
B1- 15	END BENT 5
B1- 16	END BENT DETAILS (1 OF 2)
B1- 17	END BENT DETAILS (2 OF 2)
B1- 18	INTERMEDIATE BENTS 2, 3, & 4
B1- 19	INTERMEDIATE BENT DETAILS
B1- 20	TYPICAL SECTION
B1- 21	FINISH GRADE ELEVATIONS
B1- 22	SUPERSTRUCTURE PLAN
B1- 23	SUPERSTRUCTURE DETAILS
B1- 24	EXPANSION JOINT DETAILS
B1- 25	APPROACH SLAB
B1- 26	RUBBLE RIPRAP (1 OF 2)
B1- 27	RUBBLE RIPRAP (2 OF 2)
B1- 28	REINFORCING BAR LIST
B1- 29	LOAD RATING SUMMARY
B1- 30	

REVISIONS:

STATE OF FLORIDA

DEPARTMENT OF TRANSPORTATION

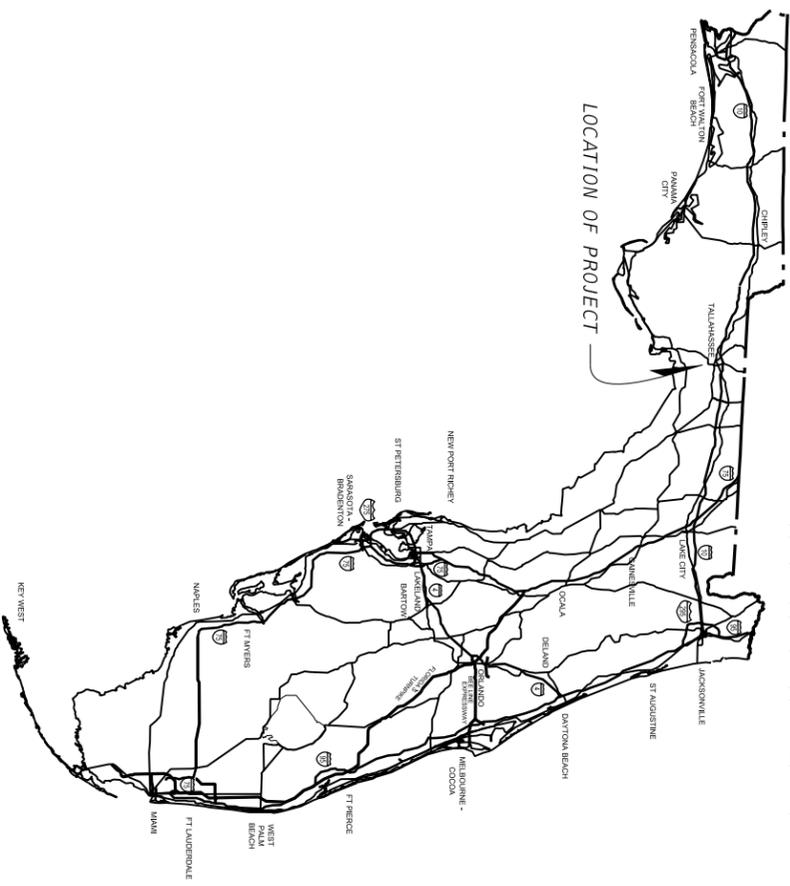
CONTRACT PLANS

FINANCIAL PROJECT ID 413491-1-52-01

LEON COUNTY (55030)

ROAD NO. 2192

STRUCTURE PLANS



CONSTRUCTION CONTRACT NO. E

LOCATION OF PROJECT

STRUCTURE SHOP DRAWINGS
TO BE SUBMITTED TO:

CHARLES F. CRAYCRAFT
F.L. P.E. NO. 32131
H.W. LOCHNER, INC.
2940 EAST PARK AVENUE,
SUITE 200
TALLAHASSEE, FL 32301
TELEPHONE: (850) 656-9027

PLANS PREPARED BY:
H.W. LOCHNER, INC.
2940 EAST PARK AVENUE,
SUITE 200
TALLAHASSEE, FL 32301
TELEPHONE: (850) 656-9027
CONTRACT NUMBER C-8R81
VENDOR NUMBER VF 36233681101
FBPR CERTIFICATE OF
AUTHORIZATION NO. 894

NOTE: THE SCALE OF THESE PLANS MAY
HAVE CHANGED DUE TO REPRODUCTION.

KEY SHEET REVISIONS	
DATE	BY

STRUCTURE PLANS
ENGINEER OF RECORD: CHARLES F. CRAYCRAFT
P.E. NO.: 32131

Replace bridge on Natural Bridge Road
over Branch of St. Marks River

FDOT PROJECT MANAGER: DONALD ROGERS, P.E.

12/20/2011

10:04:01 AM

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FISCAL YEAR	SHEET NO.
14	B-1

GENERAL NOTES

GENERAL SPECIFICATIONS:

FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2011 EDITION AND SUPPLEMENTS THERETO, AS AMENDED BY CONTRACT DOCUMENTS.

DESIGN SPECIFICATIONS:

FDOT STRUCTURES MANUAL DATED JANUARY 2011 AND SUBSEQUENT STRUCTURE DESIGN BULLETINS.
 AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) LOAD AND RESISTANCE FACTOR (LRFD) BRIDGE DESIGN SPECIFICATIONS, 5TH EDITION AND ALL SUBSEQUENT INTERIMS.
 FDOT PLANS PREPARATION MANUAL DATED JANUARY 2011.

DESIGN METHOD:

ALL ELEMENTS ARE DESIGNED USING THE LOAD RESISTANCE FACTOR DESIGN METHOD (LRFD).

UTILITIES:

NO ALLOWANCE FOR ADDITIONAL UTILITY LOADS HAS BEEN INCLUDED IN THE DESIGN.

DESIGN LOADS:

DEAD LOADS:
 UNIT WEIGHT OF REINFORCED CONCRETE: 150 PCF
 UNIT WEIGHT OF SOIL: 115 PCF
 TRAFFIC RAILING BARRIERS (CORRAL-SHAPE): 460 PLF
 FUTURE WEARING SURFACE: 0 PSF

LIVE LOADS:
 HL-93

EARTHQUAKE:
 NO DETAILED SEISMIC ANALYSIS IS REQUIRED FOR THIS TYPE OF BRIDGE IN FLORIDA ACCORDING TO STRUCTURES DESIGN GUIDELINES SECTION 2.3.1.

TEMPERATURE RANGE BY SUPERSTRUCTURE MATERIAL:

SUPERSTRUCTURE MATERIAL	TEMPERATURE RANGE (DEGREES FAHRENHEIT)		
	MEAN	HIGH	LOW
CONCRETE	70	105	35
			RANGE 70

PLAN DIMENSIONS:

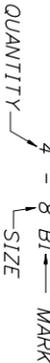
ALL DIMENSIONS IN THESE PLANS ARE MEASURED IN FEET EITHER HORIZONTALLY OR VERTICALLY UNLESS OTHERWISE NOTED. DECK JOINT OPENINGS ARE GIVEN FOR A MEAN TEMPERATURE OF 70°F.

REINFORCING STEEL:

ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60.

ALL DIMENSIONS PERTAINING TO LOCATION OF REINFORCING ARE TO CENTERLINE OF BARS EXCEPT WHERE CLEAR DIMENSION IS SHOWN TO FACE OF THE CONCRETE.

TYPICAL REINFORCING BARS ARE DESIGNATED THUS:



FOR STANDARD BAR BENDING DETAILS, SEE INDEX 21300.

CONCRETE:

CLASS	MINIMUM 28 DAY COMPRESSIVE STRENGTH (PSI)	LOCATION OF CONCRETE
II	f _c = 3400	CAST-IN-PLACE TRAFFIC RAILING BARRIER
II (BRIDGE DECK)	f _c = 4500	CAST-IN-PLACE SUPERSTRUCTURE (BRIDGE DECK AND APPROACH SLAB)
II	f _c = 3400	CAST-IN-PLACE SUBSTRUCTURE
IV (DRILLED SHAFT)	f _c = 4000	PIPE PILES (FILLED WITH CONCRETE)

ALL CONCRETE SHALL CONFORM WITH SECTION 346 OF THE STANDARD SPECIFICATIONS.

ALL EXPOSED EDGES AND CORNERS SHALL BE CHAMFERED IN ACCORDANCE WITH FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.

CONSTRUCTION JOINTS WILL BE PERMITTED ONLY AT LOCATIONS INDICATED ON THE PLANS. ADDITIONAL CONSTRUCTION JOINTS OR ALTERATIONS TO THOSE SHOWN SHALL REQUIRE WRITTEN APPROVAL OF THE ENGINEER.

CONCRETE COVERS SHOWN IN THE PLANS DO NOT INCLUDE REINFORCEMENT PLACEMENT AND FABRICATION TOLERANCES UNLESS SHOWN AS "MINIMUM COVER". SEE FDOT STANDARD SPECIFICATIONS FOR ALLOWABLE REINFORCEMENT PLACEMENT TOLERANCES.

SUPERSTRUCTURE (CAST-IN-PLACE):

ALL TOP RIDING SURFACES WITH FORM LINERS

INCLUDING APPROACH SLABS ----- 3/2"

ALL EXTERNAL AND INTERNAL SURFACES

(EXCEPT RIDING SURFACE) ----- 2"

SUBSTRUCTURE (CAST-IN-PLACE):

EXTERNAL SURFACES CAST AGAINST EARTH

AND SURFACES IN WATER ----- 4"

EXTERNAL SURFACES (FORMED) ----- 3"

INTERNAL SURFACES (FORMED) ----- 3"

STEEL PILING

ENSURE STEEL PILING CONFORMS TO SECTIONS 455 AND 962 OF THE STANDARD SPECIFICATIONS.

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE = SLIGHTLY AGGRESSIVE FOR CONCRETE
 SUBSTRUCTURE = MODERATELY AGGRESSIVE FOR STEEL
 SUPERSTRUCTURE = SLIGHTLY AGGRESSIVE FOR CONCRETE/STEEL

SCREEDING DECK SLAB:

SCREEDING THE RIDING SURFACE OF THE BRIDGE DECK AND APPROACH SLABS IS NOT ALLOWED TO ACHIEVE THE FINISH GRADE ELEVATIONS DUE TO THE USE OF AESTHETIC DECK FORMLINERS. ACCOUNT FOR THEORETICAL DEFLECTIONS DUE TO DECK SELF WEIGHT, DECK CASTING SEQUENCE, DECK FORMING SYSTEMS, CONSTRUCTION LOADS, OVERLAYS AND TEMPORARY SHORING, ETC. AS REQUIRED.

JOINTS:

SEE STANDARD INDEX 21110 FOR DETAILS.

MAINTENANCE OF TRAFFIC:

SEE THE ROADWAY PLANS FOR MAINTENANCE OF TRAFFIC.

TRAFFIC RAILING BARRIER

SEE STANDARD INDEX 424 FOR DETAILS.

AESTHETIC DECK FORMLINERS

AESTHETIC FORMLINERS WITH A MAXIMUM DEPTH OF 1" SHALL BE USED TO FORM THE TOP SURFACE OF THE DECK AND APPROACH SLABS TO MIMIC A WOODEN DECK. THE WIDTH OF THE "WOODEN" PLANK PATTERN SHALL BE 2 1/2" MINIMUM TO 6" MAXIMUM. CONTRACTOR SHALL SUBMIT FORMLINER SHOP DRAWINGS IN ACCORDANCE WITH THE SPECIFICATIONS.

SIGNING AND SIGNALIZATION:

SEE THE SIGNING AND SIGNALIZATION PLANS FOR DETAILS.

PHASING OF WORK:

CONSTRUCTION PHASING AND PROGRESSION OF WORK SHALL CONFORM WITH THE MOT PLANS LOCATED IN THE ROADWAY PLANS SET.

ELEVATIONS:

ELEVATIONS ARE IN ACCORDANCE TO THE NATIONAL GEODETIC VERTICAL DATUM NAVD 88.

BRIDGE NAME / NUMBER:

THE BRIDGE NAME ON THE TRAFFIC RAILING IS NOT REQUIRED. THE CONTRACTOR SHALL PLACE ONLY THE BRIDGE NUMBER AND DATE IN ACCORDANCE WITH THE TRAFFIC RAILING DESIGN STANDARDS.

UTILITY CONDUIT:

SEE STANDARD INDEX 21210. USE ONE 4-INCH PVC CONDUIT PER RAILING INSTEAD OF TWO 2" PVC CONDUITS. USE EXPANSION FITTINGS AT THE BRIDGE RAILING JOINTS. USE TYPE B PULL BOXES. SEE SHEET B1-21 FOR CONDUIT LOCATIONS.

REVISIONS		STATE OF FLORIDA		DEPARTMENT OF TRANSPORTATION		SHEET TITLE	
DATE	BY	DESCRIPTION	ROAD NO.	COUNTY	FINANCIAL PROJECT ID	PROJECT NAME	GENERAL NOTES
			CR 2192	LEON	413491-1-52-01	NATURAL BRIDGE ROAD OVER BRANCH OF ST. MARKS RIVER	(1 OF 2)

DATE: _____ BY: _____ DESCRIPTION: _____ DATE: _____ BY: _____ DESCRIPTION: _____

LOCHNER
 2940 EAST PARK AVENUE, SUITE 300
 TALLAHASSEE, FLORIDA 32301 # 894
 PBPR CERTIFICATE OF AUTH. # 32131
 CHARLES F. CRAVORANT, P.E. # 32131

DRAWN BY: BCR 05-11
 CHECKED BY: WDB 05-11
 DESIGNED BY: BCR 05-11
 CHECKED BY: JTF 05-11

STATE OF FLORIDA
 DEPARTMENT OF TRANSPORTATION
 COUNTY: LEON
 FINANCIAL PROJECT ID: 413491-1-52-01

SHEET TITLE: GENERAL NOTES (1 OF 2)

PROJECT NAME: NATURAL BRIDGE ROAD OVER BRANCH OF ST. MARKS RIVER

REF. DWG. NO.: _____ SHEET NO.: B1-1

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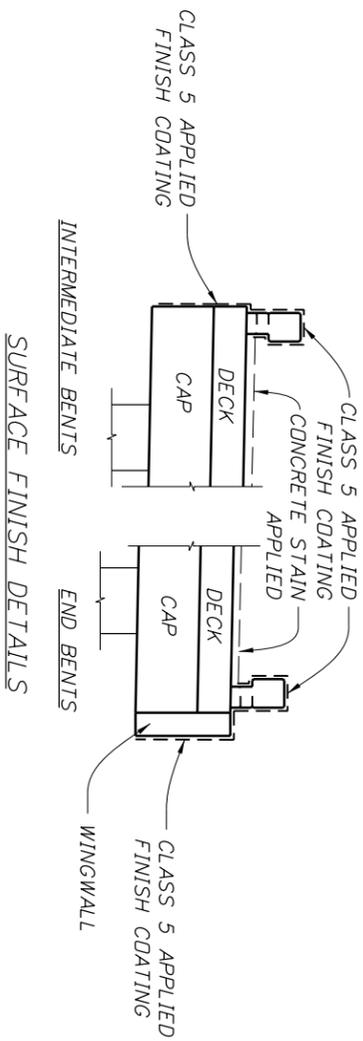
GENERAL NOTES

APPLIED FINISH COATING:

APPLY A CLASS 5 FINISH COATING TO ALL EXPOSED SURFACES (TOP, INSIDE, AND OUTSIDE) OF END BENT WING WALLS, TRAFFIC BARRIERS, DECK SLAB COPING. APPLY A CONCRETE STAIN TO THE DECK SURFACE AND APPROACH SLABS.

THE FINISH AND STAIN COLORS WILL BE AS FOLLOWS:

- DECK FEDERAL COLOR STANDARD NO. 5958, SHADE NO.30219
- RAILING FEDERAL COLOR STANDARD NO. 5958, SHADE NO.30070



BID ITEM NOTES:

FOR SUMMARY OF BRIDGE PAY ITEMS SEE ROADWAY PLANS.
FOR TRAFFIC CONTROL BID ITEM NOTES, SEE ROADWAY PLANS.
PAYMENT FOR INCIDENTAL ITEMS NOT SPECIFICALLY COVERED IN THE INDIVIDUAL BID ITEMS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE BID ITEMS.

THE COST OF ALL LABOR AND MATERIAL REQUIRED FOR THE INSTALLATION OF ROOFING PAPER AND PREMOULDED EXPANSION MATERIAL SHALL BE INCLUDED IN THE UNIT PRICE FOR PAY ITEM NO. 400-2-4, CLASS II CONCRETE (SUPERSTRUCTURE).

PAYMENT FOR REMOVAL AND DISPOSAL OF EXISTING BRIDGE NO. 554001 (1927 SF) SHALL BE PAID FOR UNDER ITEM NO.110-3. BID ITEM NO. 110-3 SHALL INCLUDE REMOVAL OF THE ENTIRE SUPERSTRUCTURE, END BENTS, WINGWALLS, INTERMEDIATE BENTS AND APPROACH SLABS AND DELIVERY OF THE EXISTING BRIDGE CONCRETE DEBRIS TO THE SHELFLER ROAD PIT.

COORDINATE THE DISPOSAL OF THE EXISTING BRIDGE CONCRETE DEBRIS WITH:

- MIDWAY OPERATIONS CENTER
- GREG DUZTS, PE
- 17 COMMERCE BLVD.
- MIDWAY, FL 32343
- (850) 922-7900

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DELIVER THE EXISTING BRIDGE CONCRETE DEBRIS TO THE SHELFLER ROAD PIT.

THE COST OF ALL WORK ASSOCIATED WITH THE AESTHETIC DECK FORMLINERS, CONCRETE FINISH, AND STAIN IS TO BE INCLUDED IN PAY ITEM 0400-2-4, CONCRETE CLASS II, SUPERSTRUCTURE AND PAY ITEM 0400-2-10 CONCRETE CLASS II, APPROACH SLABS.

THE COST OF ALL WORK ASSOCIATED WITH THE 4-INCH PVC CONDUIT IS TO BE INCLUDED IN PAY ITEM 0521-5-6, CONCRETE TRAFFIC RAILING-BRIDGE, CORRAL W/CURB.

THE COST OF ALL WORK ASSOCIATED WITH THE CONCRETE, FLOWABLE FILL, AND TIP PROTECTION USED IN THE STEEL PIPE PILES IS TO BE INCLUDED IN PAY ITEMS 0455-35-22, STEEL PILING, 24-INCH DIAMETER PIPE AND 0455-144-22, TEST PILES-STEEL, 24-INCH DIAMETER PIPE.

THE COST OF ALL WORK ASSOCIATED WITH COATING THE STEEL PIPE PILES IS TO BE INCLUDED IN PAY ITEMS 0455-35-22, STEEL PILING, 24-INCH DIAMETER PIPE AND 0455-144-22, TEST PILES-STEEL, 24-INCH DIAMETER PIPE.

UTILITY/AGENCY OWNERS		CONTACT	TELEPHONE NUMBER
COMPANY		CENTRAL LOCATING SERVICE	(800) 778-9140
EMBARQ (PHONE AND FIBER OPTIC)		THOMAS TADLOCK	(850) 562-2119
TALQUIN ELECTRIC CO-OP, INC.		TRACI ADKISON	(850) 575-1800
FDOT UTILITY COORDINATOR			

UTILITIES:

THE LOCATIONS OF THE UTILITIES SHOWN IN THE PLANS ARE APPROXIMATE. SEE UTILITY PLANS FOR THE LOCATION OF EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO EXCAVATION OR CONSTRUCTION. SEE UTILITY PLANS TO DETERMINE IF UTILITY IS TO REMAIN OR BE REMOVED.

ABBREVIATIONS

BOTT	BOTTOM
CJ	CONSTRUCTION JOINT
CLR	CLEARANCE
CW	CHEEK WALL
CZ	CLEAR ZONE
EF	EACH FACE
FF	FAR FACE
FFBW	FRONT FACE BACKWALL
NF	NEAR FACE
UND	UNLESS NOTED OTHERWISE
W/	WITH

REMOVAL OF EXISTING STRUCTURE

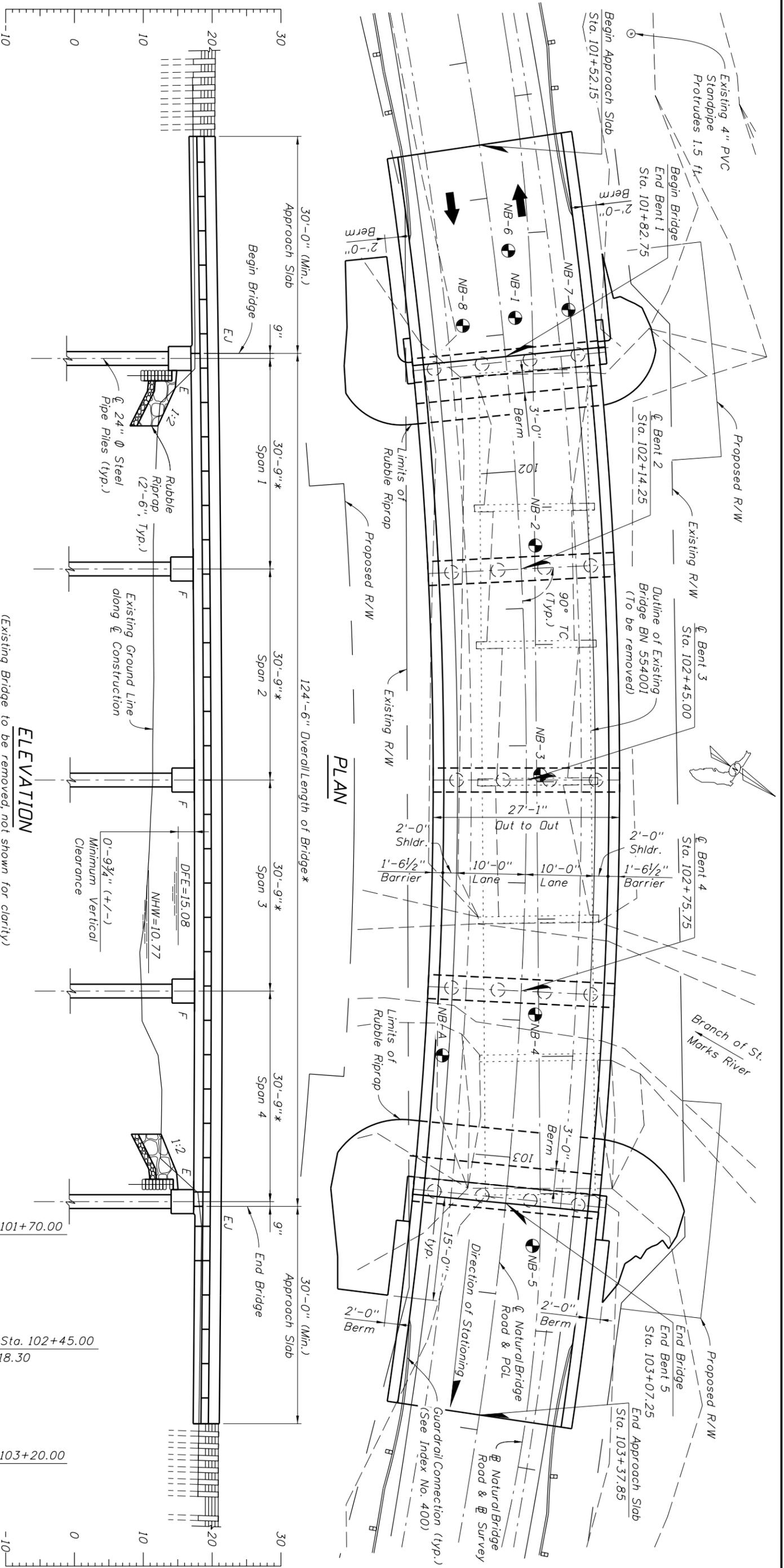
SEE INDIVIDUAL BRIDGE PLAN SHEETS FOR LIMITS. EXISTING BRIDGE NO. 554001 CONTAINS LEAD BASED PAINT. TCLP TESTING OF THE EXISTING PAINT FOUND THAT THE LEAD LEVELS TO BE ABOVE 5 mg/L. AS A RESULT, THE PAINT AND ASSOCIATED MATERIALS MUST BE DISPOSED OF AS HAZARDOUS WASTE. A COPY OF THE TCLP TESTING FINDINGS CAN BE OBTAINED FROM DISTRICT CONTAMINATION IMPACTS COORDINATOR (DCIC) ALAN HAGANS (850) 415-9511. AT LEAST 30 DAYS PRIOR TO THE REMOVAL OF THE STRUCTURE, THE CONTRACTOR SHALL SUBMIT NESHAP (NATIONAL EMISSION STANDARD FOR HAZARDOUS AIR POLLUTANTS) NOTIFICATION TO THE APPROPRIATE REGULATORY AUTHORITY ACCOMPANIED BY ANY NECESSARY FORMS, REPORTS AND FEES. THE CONTRACTOR SHALL COMPLY WITH THE REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), THE ENVIRONMENTAL PROTECTION AGENCY (EPA) AND OTHER GOVERNING AUTHORITIES WHEN HANDLING, REMOVING AND DISPOSING OF HAZARDOUS MATERIALS. SEE THE SPECIFICATIONS FOR ADDITIONAL INFORMATION. ALL COSTS ASSOCIATED WITH THIS WORK SHALL BE INCLUDED WITH ITEM NO. 110-3.

REVISIONS		DESCRIPTION
DATE	BY	DESCRIPTION

LOCHNER
2940 EAST PARK AVENUE, SUITE 300
TALLAHASSEE, FLORIDA 32301
PBRP CERTIFICATE OF AUTH. # 894
CHARLES F. CRAVORAF, P.E. # 32131

DRAWN BY BCR 05-11	CHECKED BY WDB 05-11	DESIGNED BY BCR 05-11	CHECKED BY JTE 05-11
ROAD NO. CR 2192	COUNTY LEON	FINANCIAL PROJECT ID 413491-1-52-01	

SHEET TITLE PROJECT NAME NATURAL BRIDGE ROAD OVER BRANCH OF ST. MARKS RIVER	GENERAL NOTES (2 OF 2)	REF. DWG. NO. SHEET NO. B1-2
---	---------------------------	------------------------------------



TRAFFIC DATA

CURRENT YEAR = 2010 AADT = n/a
 ESTIMATED OPENING YEAR = 2012 AADT = n/a
 ESTIMATED DESIGN YEAR = 2032 AADT = n/a
 K = 0.0 % D = 0.0 % T = 0.0 % (24 HOUR)
 DESIGN HOUR T = 0.0 %
 DESIGN SPEED = 25 MPH

CURVE DATA CLNBR-1

P.I. Sta 102+35.97
 $\Delta = 41^\circ 04' 04''$ (RT)
 $D = 9^\circ 05' 40''$
 $T = 235.97'$
 $L = 451.57'$
 $R = 630.00'$
 PC Sta. = 100+00.00
 PT Sta. = 104+51.57
 $e = RC$

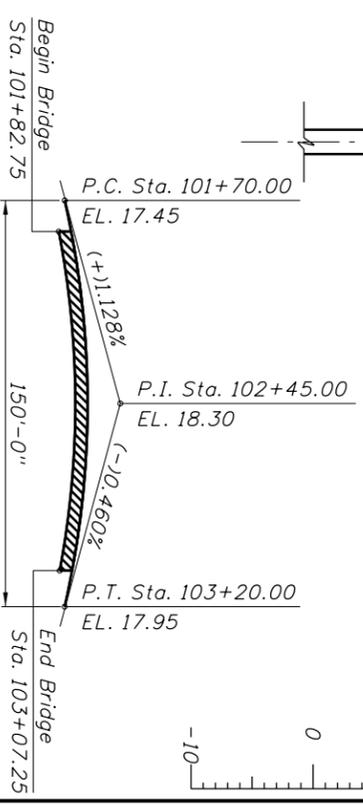
ELEVATION

(Existing Bridge to be removed, not shown for clarity)
 * Measured radially along ϕ Natural Bridge Road.

LEGEND

Boring Location

VERTICAL CURVE DATA



Bridge No. 554153

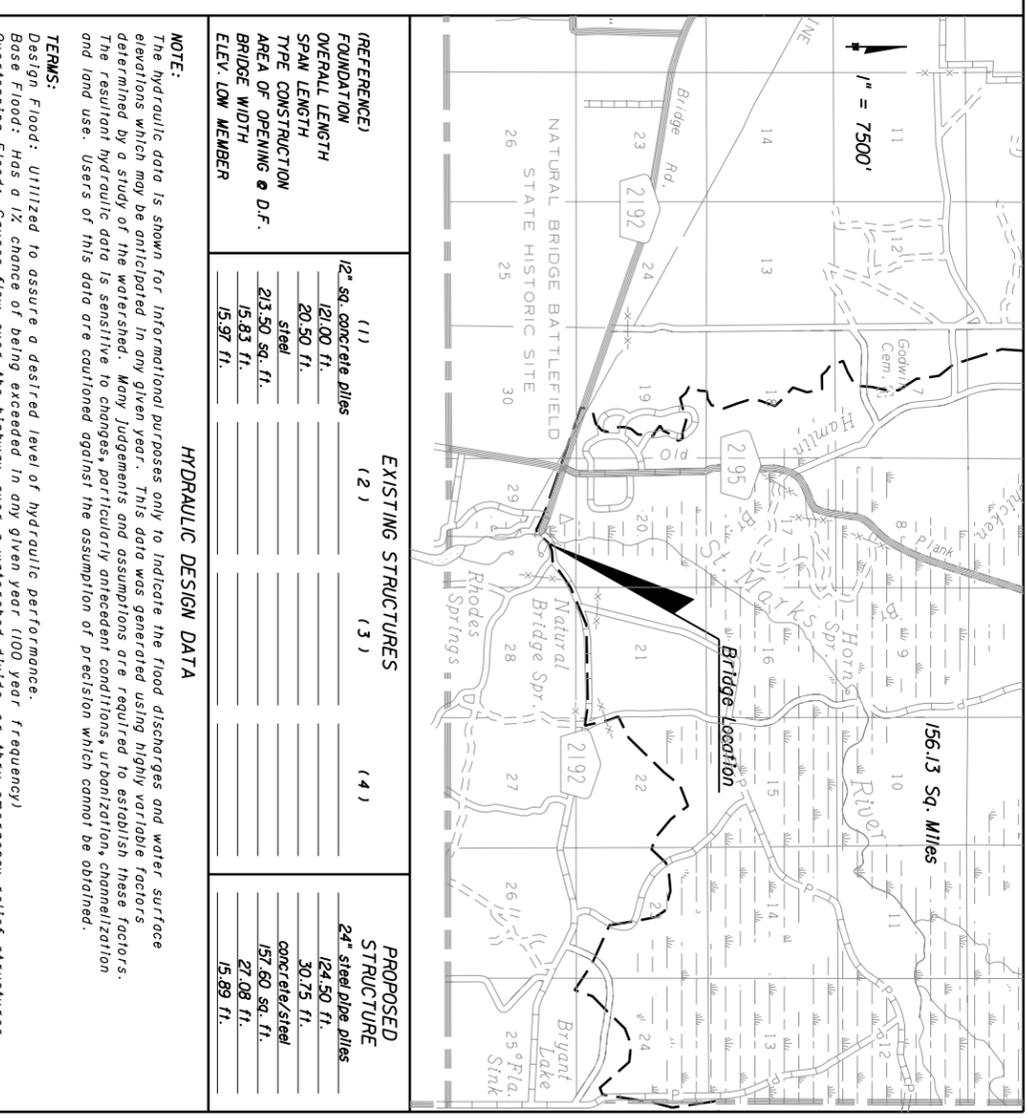
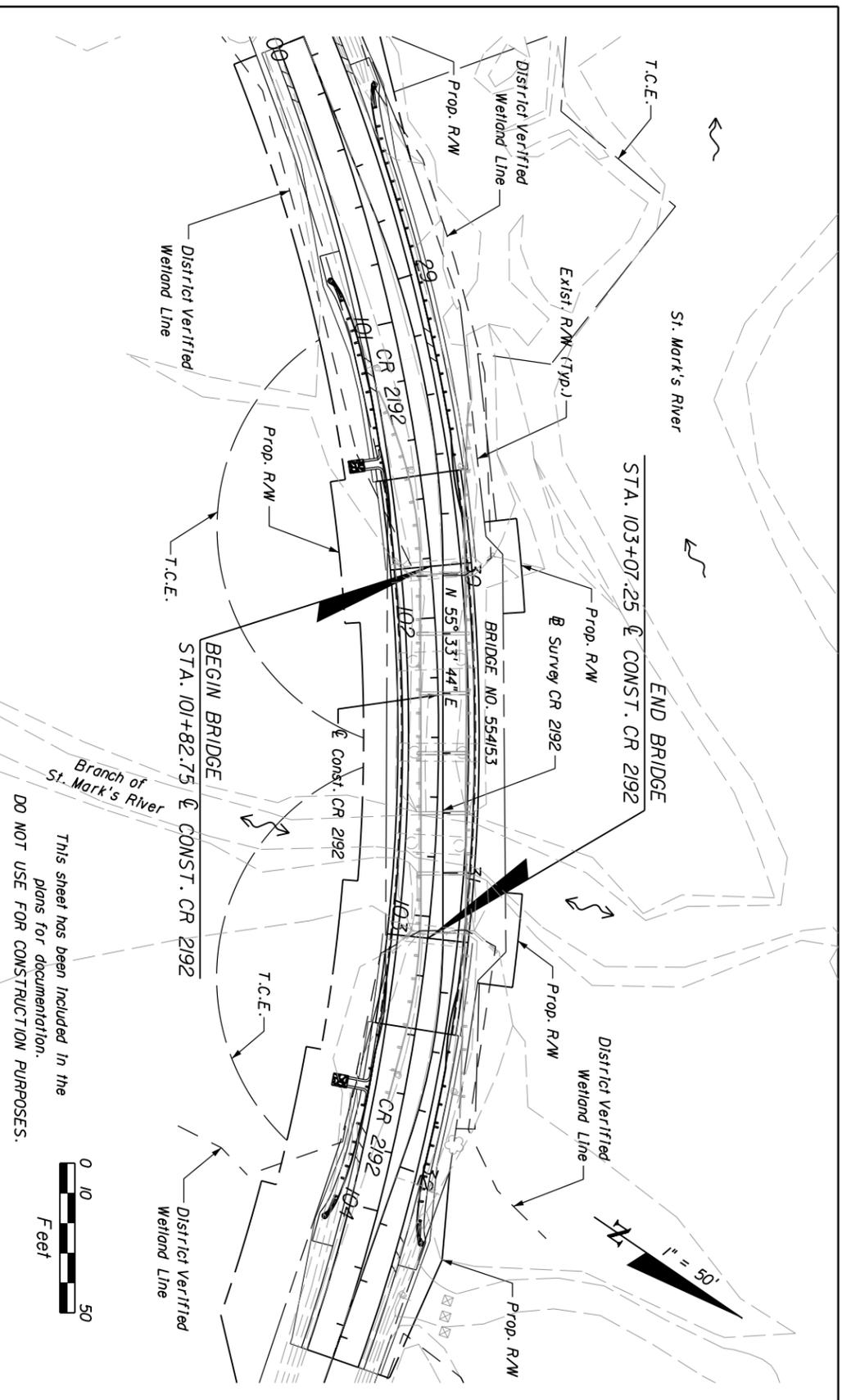
REVISIONS		DESCRIPTION	
DATE	BY	DATE	DESCRIPTION

LOCHNER		STATE OF FLORIDA	
2940 EAST PARK AVENUE, SUITE 300		DEPARTMENT OF TRANSPORTATION	
TALLAHASSEE, FLORIDA 32301		ROAD NO. CR 2192	
PBR CERTIFICATE OF AUTH. # 894		COUNTY LEON	
CHARLES F. CRAWCRAFT, P.E. # 32131		FINANCIAL PROJECT ID 413491-1-52-01	

DATE	BY	DESCRIPTION

REF. DWG. NO.	SHEET NO.
	BI-3

NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE SIGNED AND SEALED UNDER RULE 61G15-23.003, F.A.C.



REFERENCE)	EXISTING STRUCTURES	PROPOSED STRUCTURE
FOUNDATION	(1) 12" sq. concrete piles	(2) 24" steel pipe piles
OVERALL LENGTH	(2) 121.00 ft.	(3) 124.50 ft.
SPAN LENGTH	(3) 20.50 ft.	(4) 30.75 ft.
TYPE CONSTRUCTION	steel	concrete/steel
AREA OF OPENING @ D.F.	213.50 sq. ft.	157.60 sq. ft.
BRIDGE WIDTH	15.83 ft.	21.08 ft.
ELEV. LOW MEMBER	15.97 ft.	15.89 ft.

HYDRAULIC DESIGN DATA

NOTE: The hydraulic data is shown for informational purposes only to indicate the flood discharges and water surface elevations which may be anticipated in any given year. This data was generated using highly variable factors determined by a study of the watershed. Many judgements and assumptions are required to establish these factors. The resultant hydraulic data is sensitive to changes, particularly antecedent conditions, urbanization, channelization and land use. Users of this data are cautioned against the assumption of precision which cannot be obtained.

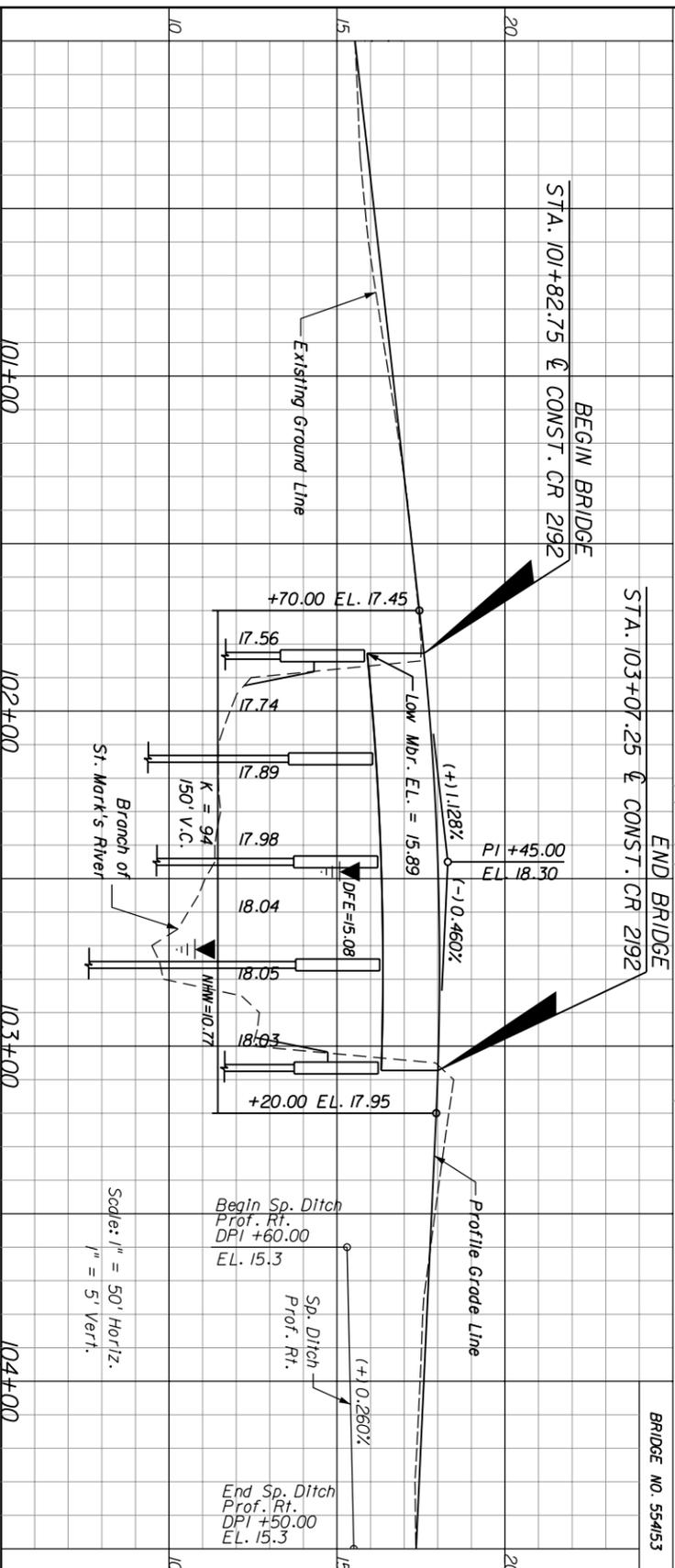
TERMS:
 Design Flood: Utilized to assure a desired level of hydraulic performance.
 Base Flood: Has a 1% chance of being exceeded in any given year (100 year frequency).
 Overlapping Flood: Causes flow over the highway, over a watershed divide, or thru emergency relief structures.
 Greatest Flood: The most severe that can be predicted where overlapping is not practicable.

WATER SURFACE ELEVATIONS: N.H.W. (Non-Tidal) 10.77 M.H.W. (Tidal) _____
 CONTROL (Non-Tidal) _____ M.L.W. (Tidal) _____

FLOOD DATA:	MAX. EVENT OF RECORD	DESIGN FLOOD	BASE FLOOD	OVERTOPPING or GREATEST FLOOD
STAGE ELEV. NGVD (ft)	16.39	15.08	15.67	
DISCHARGE (cfs)	3500	2300	3050	
AVERAGE VELOCITY (ft/s)	1.70	1.07	1.13	
EXCEEDANCE PROB. (%)	0.50	2	1	
FREQUENCY (yr.)	200	50	100	

SCOUR PREDICTIONS FOR PROPOSED STRUCTURE DESCRIBED ABOVE:

PIER INFORMATION	LONG TERM SCOUR ELEV.	WORST CASE < 100 YR. FREQ. (yr.)	WORST CASE < 500 YR. FREQ. (yr.)
NUMBERS 3	SIZE AND TYPE 24" steel pipe pile	7.5	7.0



HYDRAULIC RECOMMENDATIONS

	BEGIN BRIDGE STATION	END BRIDGE STATION	SKREW ANGLE
1. BEGIN BRIDGE STATION	101+82.75	103+07.25	_____
2. CLEARANCE PROVIDED:	NAV: HORIZ. N/A	VERT. N/A	ABOVE EL. _____
3. MINIMUM CLEARANCE:	NAV: HORIZ. N/A	VERT. N/A	ABOVE EL. _____
4. ABUTMENTS:	BEGIN BRIDGE	END BRIDGE	_____
	Standard	Standard	_____
	SLOPE: 1-2	SLOPE: 1-2	_____
	BURIED OR NON-BURIED HORIZ. TOE: N/A	BURIED OR NON-BURIED HORIZ. TOE: N/A	_____
	TOE HORIZ. DISTANCE: 0	TOE HORIZ. DISTANCE: 0	_____
	LIMIT OF PROTECTION: _____	LIMIT OF PROTECTION: _____	_____

REMARKS: Scour is contained in shoulder. Ruroft captured off bridge ends.

DATE	DESCRIPTION	DATE	DESCRIPTION

LOCHNER
 2940 EAST PARK AVENUE, SUITE 300
 TALLAHASSEE, FLORIDA 32301 # 894
 PBRP CERTIFICATE OF AUTH. # 56072
 NATALIE BETZ ZIERDEN, P.E.

STATE OF FLORIDA
 DEPARTMENT OF TRANSPORTATION
 COUNTY: LEON
 ROAD NO.: CR 2192
 FINANCIAL PROJECT ID: 413491-1-52-01

BRIDGE HYDRAULIC RECOMMENDATIONS

SHEET NO. BI-4

LEGEND

LEVEL OF WATER AT TIME OF DRILLING	▽		
LABORATORY TESTING RESULTS	□		
CASING	□		
WATER CONTENT	Wc =		
-200 SIEVE	-200 =		
PLASTICITY INDEX	PI =		
LIQUID LIMIT	LL =		
ORGANIC CONTENT	OC % =		
FLUID LOSS (PERCENT LOSS)	↑ (X)		
RECOVERY IS THE PERCENT OF CORE RECOVERED BASED ON TOTAL CORE RUN			
ROD IS THE ROCK QUALITY DESIGNATION			
CORING PRESSURE IS THE HYDRAULIC DRILLING PRESSURE APPLIED TO THE CORE BIT			
CORING TIME IS THE TIME REQUIRED TO CORE 5 FEET AT THE GIVEN CORING PRESSURE			
(SP-SM) UNIFIED SOIL CLASSIFICATION GROUP SYMBOL			
		FINE SAND (SP-SM)	
		SILTY FINE SAND (SM)	
		CLAYEY FINE TO CLAYEY SAND (SC)	
		SANDY SILT (ML)	
		HIGHLY ORGANIC SILT/CLAY (OL/OH)	
		HIGHLY WEATHERED TO WEATHERED LIMESTONE	
		LIMESTONE	

ENVIRONMENTAL CLASSIFICATION

SUBSTRUCTURE: MODERATELY AGGRESSIVE (pH 6.1)
 SUPERSTRUCTURE: SLIGHTLY AGGRESSIVE

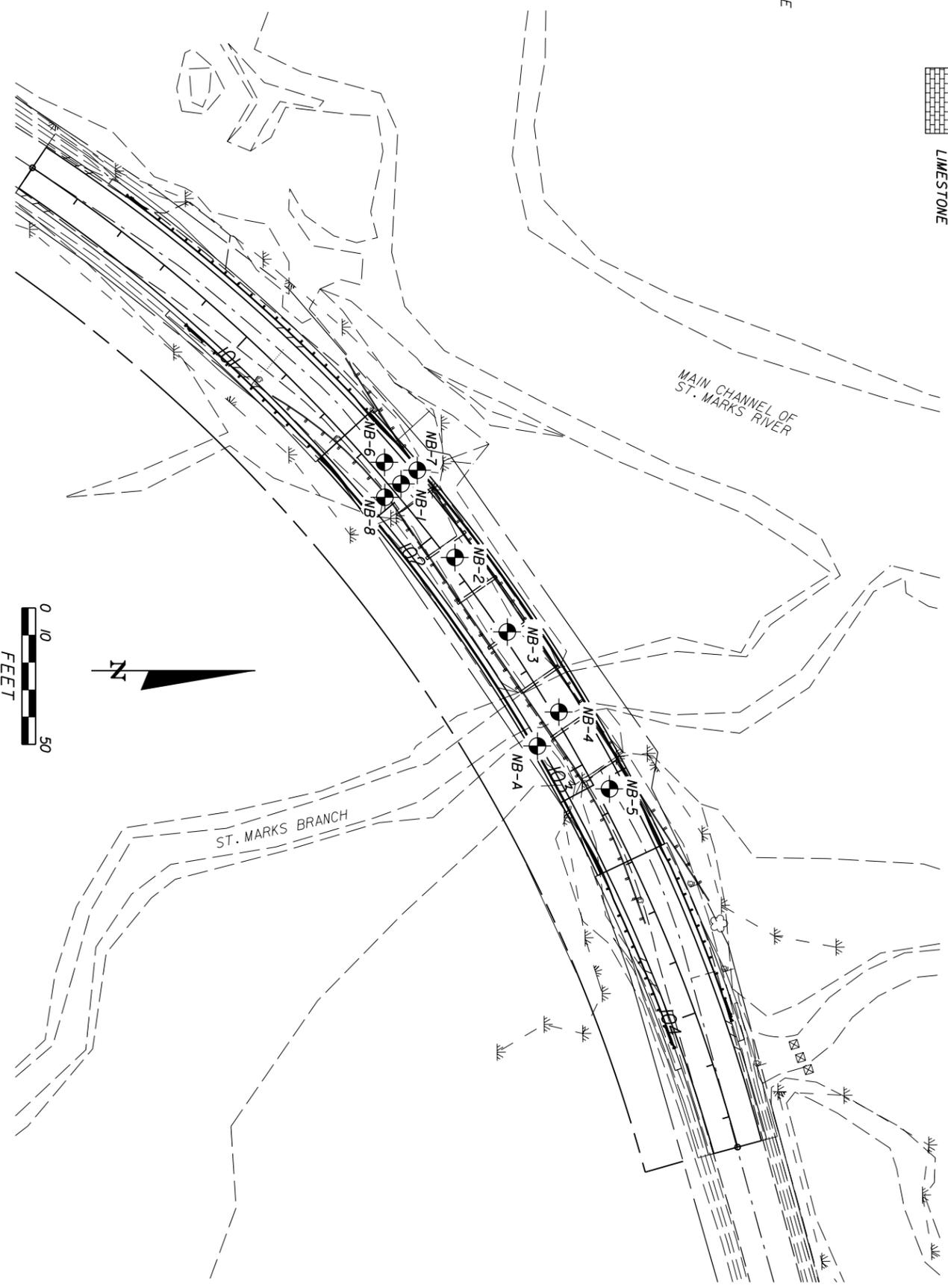
NOTES

1. Numbers left of borings indicate standard penetration test (SPT) N-values for 12 in. penetration (Unless otherwise noted). Fluctuations in the elevation of water should be expected.
2. Water elevations shown are the water elevations encountered.
3. Soil descriptions, test data, and standard penetration values shown are for the soil borings only and may not apply to any other locations except at the location of the soil borings. Extrapolation of the soil boring data to other locations is the sole responsibility of the person performing the extrapolation.

SPLIT-SPOON: INSIDE DIAMETER: 1.375 in.
 OUTSIDE DIAMETER: 2.0 in.
 AVG. HAMMER DROP: 30.0 in.
 HAMMER WEIGHT: 140 lbs.

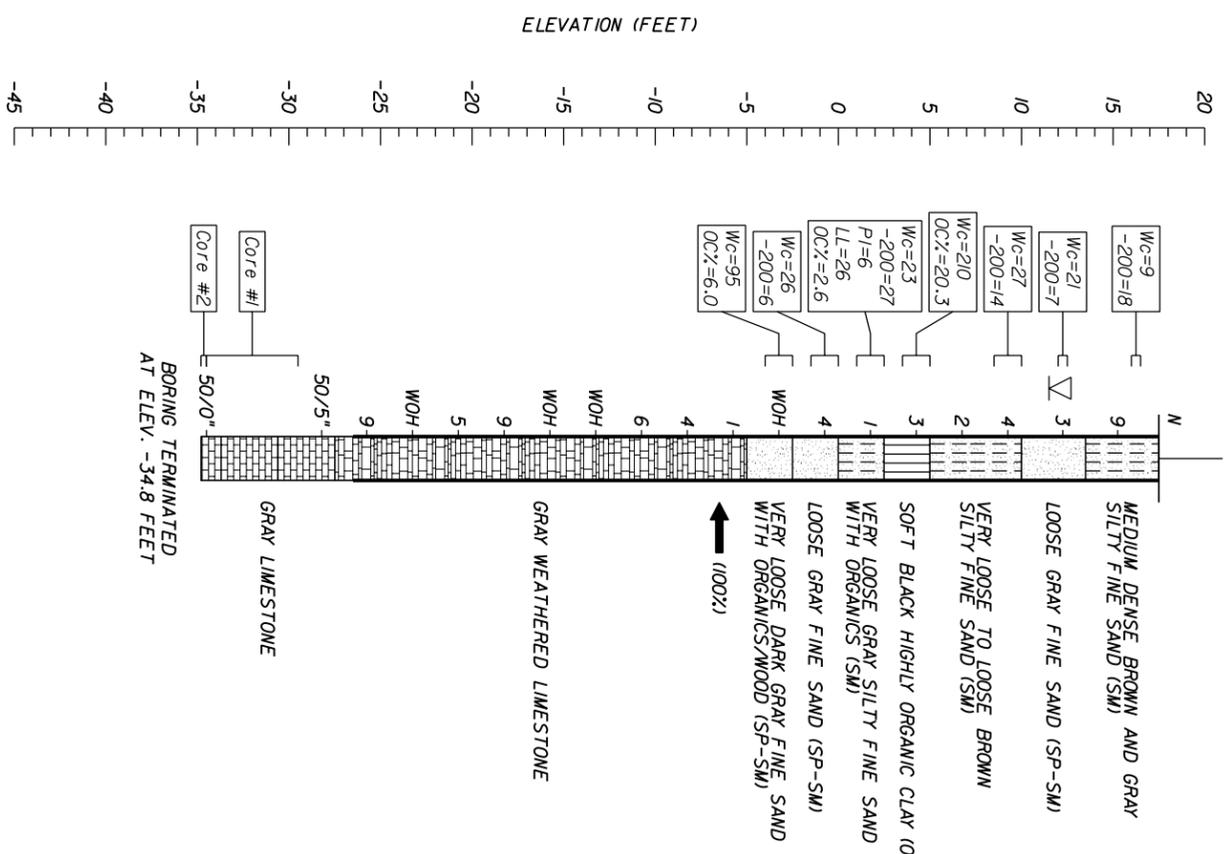
AUTOMATIC HAMMER

Granular Materials	SPT (blows/12 in.)	Silts and Clays	SPT (blows/12 in.)
Relative Density	Less than 3	Very Soft	Less than 1
Very Loose	3 - 8	Soft	1 - 3
Loose	8 - 24	Firm	3 - 6
Medium Dense	24 - 40	Stiff	6 - 12
Dense	Greater than 40	Very Stiff	12 - 24
Very Dense		Hard	Greater than 24

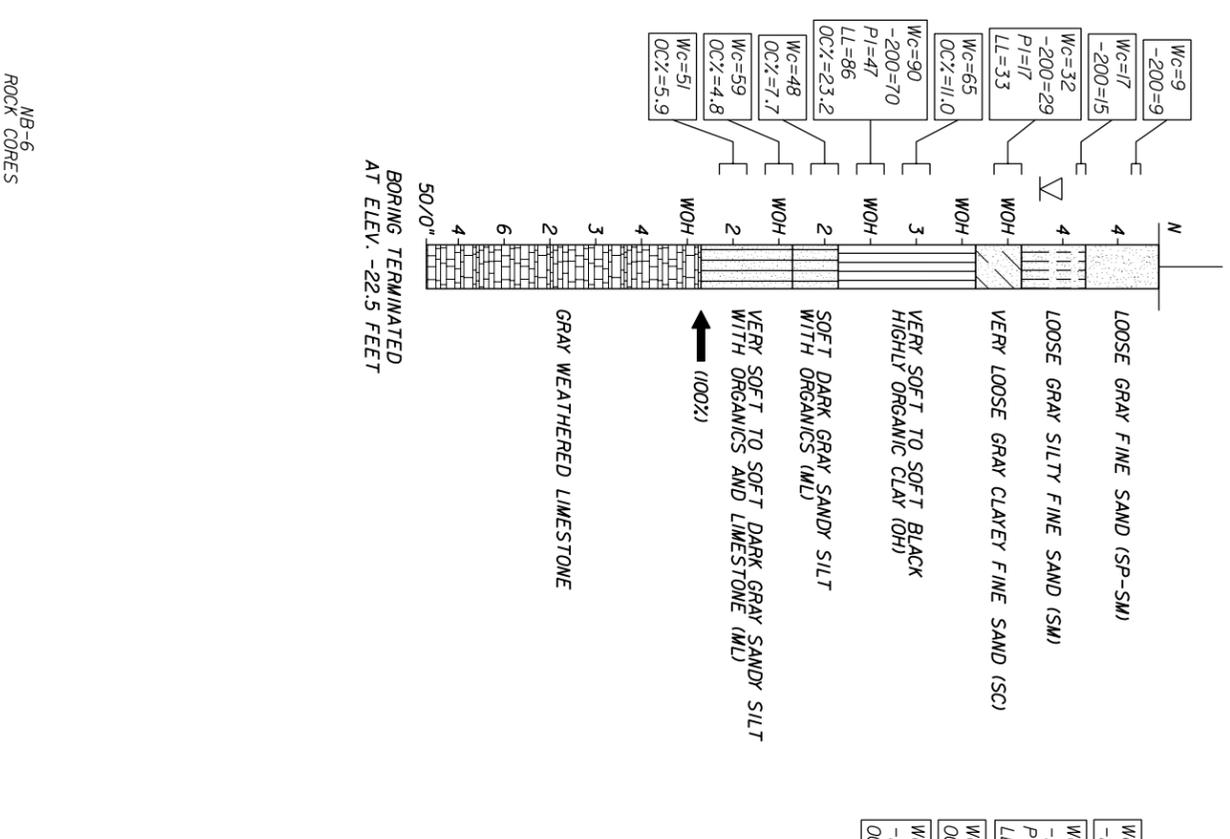


DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
REVISIONS					
DEFWOOD SHEPPARD, P.E. P.E. NO.: 69228 Environmental & Geotechnical Specialists, Inc. EGS Tallahassee, Florida 32308 Office: (850) 385-1233 Fax: (850) 385-8050 Certificate of Authorization: 8222					
DRAMA BY	JML 05-11	DESIGNED BY	DCS 05-11	CHECKED BY	MAL 05-11
STATE OF FLORIDA		DEPARTMENT OF TRANSPORTATION		ROAD NO.	
LEON		COUNTY		FINANCIAL PROJECT ID	
413491-1-52-01				PROJECT NAME	
NATURAL BRIDGE ROAD OVER ST. MARKS BRANCH				SHEET TITLE	
REPORT OF CORE BORINGS				SHEET NO.	
				BI-5	

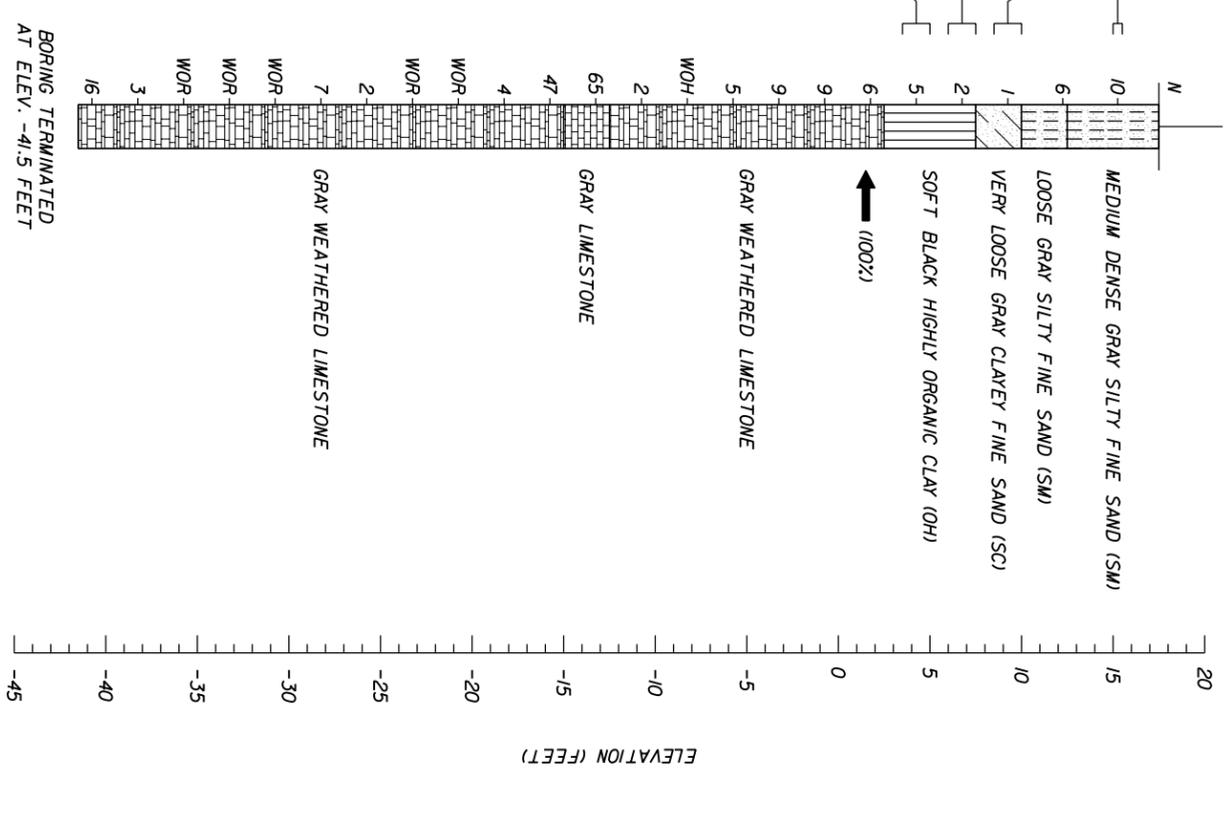
BOR # NB-6
 STA. 101+68
 REF. CONSTRUCTION
 OFF. 4.0 LEFT
 ELEV. 17.5
 DATE 2/17/2011
 DRILLER B. GUERRA
 HAMMER AUTOMATIC
 RIG CME 550X



BOR # B-7
 STA. 101+78
 REF. CONSTRUCTION
 OFF. 11.0 LEFT
 ELEV. 17.5
 DATE 2/18/2011
 DRILLER B. GUERRA
 HAMMER AUTOMATIC
 RIG CME 550X



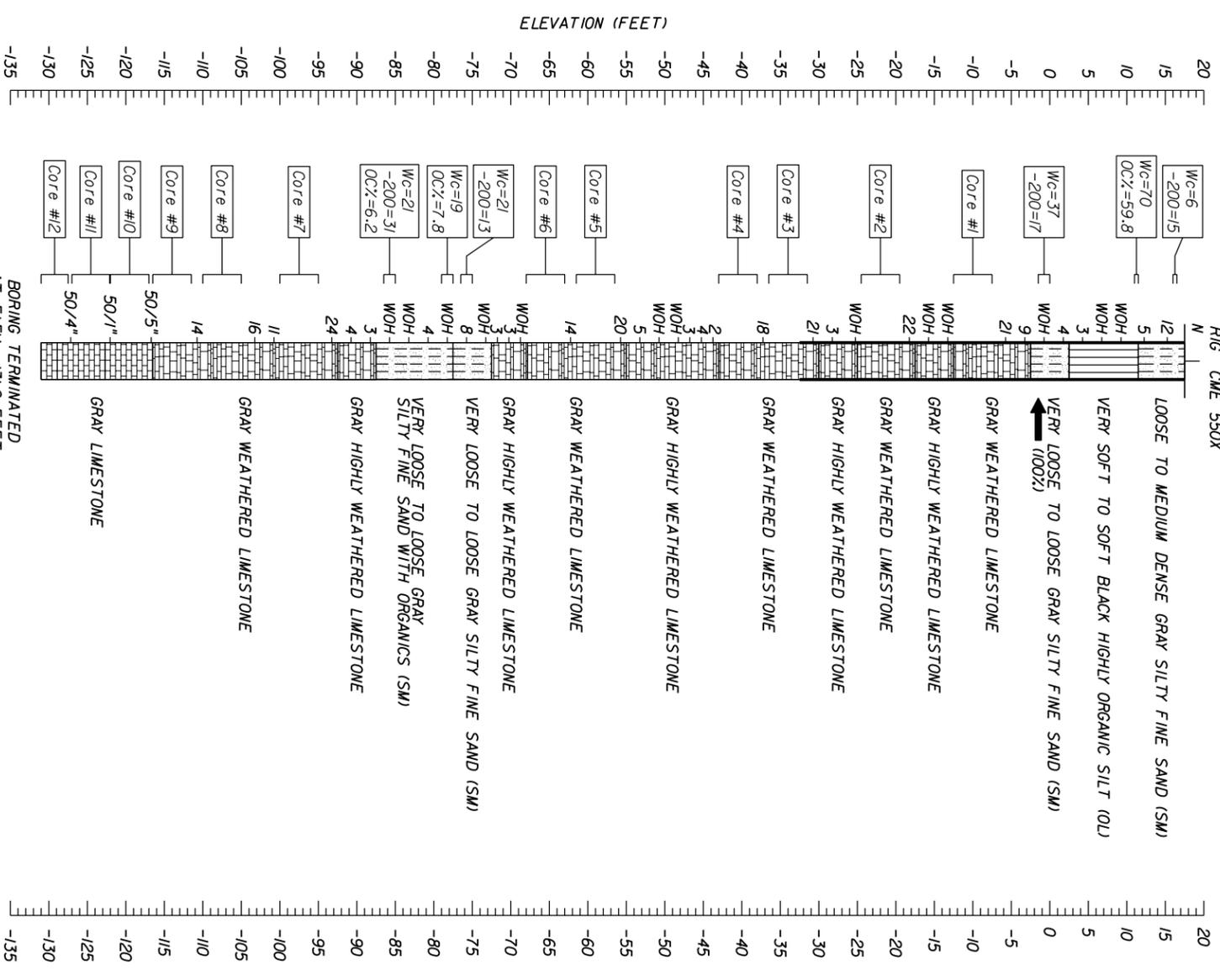
BOR # NB-8
 STA. 101+78
 REF. CONSTRUCTION
 OFF. 4.0 RIGHT
 ELEV. 17.5
 DATE 2/18/2011
 DRILLER B. GUERRA
 HAMMER AUTOMATIC
 RIG CME 550X



CORE	ELEVATION (FEET)	CORING PRESSURE (LB/IN ²)	CORING TIME (HR:MIN:SEC)	RECOVERY (%)	RQD (%)	UNCONFINED COMPRESSION (LB/IN ²)	SPLITTING TENSILE (LB/IN ²)
1	-29.5 - -34.5	400	01:51:38	62	55	472.668 - 2,217.668	3,282 - 15,401
2	-34.5 - -34.2	400	02:26:02	0	0	--	--

DATE		BY		DESCRIPTION	
DATE		BY		DESCRIPTION	
REVISIONS					
EGGS Environmental & Geotechnical Specialists, Inc. 3164 Eliza Road Tallahassee, Florida 32308 Office: (850) 386-1233 Fax: (850) 386-8050 Certificate of Authorization: 8222					
DRAWN BY		CHECKED BY		DESIGNED BY	
M.H. 05-11		DCS 05-11		DCS 05-11	
STATE OF FLORIDA		COUNTY		FINANCIAL PROJECT ID	
DEPARTMENT OF TRANSPORTATION		LEON		413491-1-52-01	
SHEET TITLE		PROJECT NAME		PROJECT NO.	
REPORT OF CORE BORINGS		NATURAL BRIDGE ROAD OVER ST. MARKS BRANCH		12/20/2011	
REF. DWG. NO.		SHEET NO.		DATE	
		B1-6		10:35:05 AM	

BOR # NB-1
 STA. 101+78
 REF. CONSTRUCTION &
 OFF. 2.0 FEET LEFT
 ELEV. 17.5
 DATE 10/5/2010
 DRILLER B. GUERRA
 HAMMER AUTOMATIC
 RIG CME 550X



BORING TERMINATED
 AT ELEV. -131.0 FEET
 CASING LENGTH 50.0 FEET

CORE	ELEVATION (FEET)	CORING PRESSURE (LB/IN ²)	CORING TIME (HR:MIN:SEC)	RECOVERY (%)	ROD (%)	NB-1 ROCK CORES		UNCONFINED COMPRESSION (LB/IN ²)		SPLITTING TENSILE (LB/IN ²)	
						UNIT WEIGHT (LB/FT ³)	UNIT WEIGHT (LB/FT ³)	UNIT WEIGHT (LB/FT ³)	UNIT WEIGHT (LB/FT ³)		
1	-7.5 - -12.5	400	00:02:09	22	13	--	--	--	3.074	21	--
2	-19.5 - -24.5	400	00:02:07	38	12	--	--	--	3.595	25	--
3	-31.5 - -36.5	400	00:02:22	15	0	--	--	--	--	--	--
4	-38.0 - -43.0	350	00:01:42	30	8	--	--	--	2.429 - 13.902	17 - 97	--
5	-56.5 - -61.5	350	00:03:03	58	37	19.181 - 21.446	133 - 149	1.814 - 2.195	--	13 - 15	--
6	-63.0 - -68.0	350	00:00:55	15	7	--	--	--	5.178	36	--
7	-95.0 - -100.0	350	00:06:24	15	15	2.154,925	14,965	127.741	887	887	--
8	-105.0 - -110.0	350	00:15:36	48	37	293.034	2.035	29.646 - 87.910	206 - 610	206 - 610	--
9	-111.5 - -116.5	350	00:14:10	80	80	106.986 - 3.302,486	743 - 22,934	10.977 - 634,270	76 - 4,405	76 - 4,405	--
10	-117.0 - -122.0	350	00:07:15	93	90	108.274 - 1,574,938	752 - 10,937	13.066 - 16,887	91 - 117	91 - 117	--
11	-122.1 - -127.1	350	00:07:10	88	88	34.201 - 1,963,454	238 - 13,635	6.344 - 474,513	44 - 3,295	44 - 3,295	--
12	-127.5 - -131.0	350	00:17:10	95	76	222,580 - 260,743	1,546 - 1,811	4,912 - 106,815	34 - 742	34 - 742	--

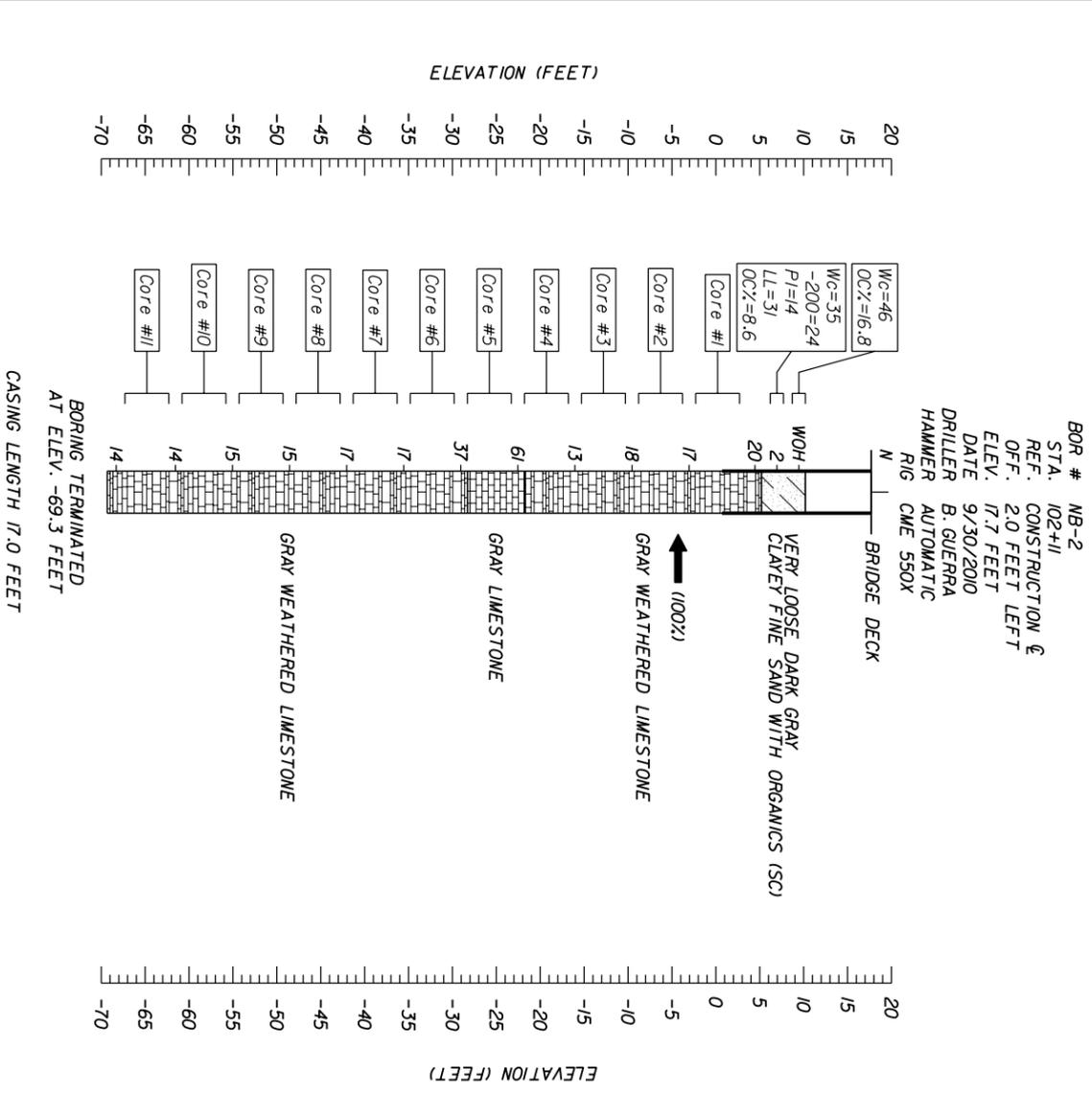
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
REVISIONS					
DEFWOOD SHEPPARD, P.E., P.E. NO.: 69228 Environmental & Geotechnical Specialists, Inc. EGS Tallahassee, Florida 32308 Office: (850) 386-1233 Fax: (850) 385-8050 Certificate of Authorization: 6222					
DRAWN BY: JMD 05-11		CHECKED BY: DCS 05-11		DESIGNED BY: DCS 05-11	
CHECKED BY: MLL 05-11		STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		COUNTY: LEON	
ROAD NO.:		FINANCIAL PROJECT ID: 413491-1-52-01		PROJECT NAME: NATURAL BRIDGE ROAD OVER ST. MARKS BRANCH	
SHEET NO.:		SHEET TITLE: REPORT OF CORE BORINGS		REF. DWG. NO.:	
BI-7					

DATE	BY	DESCRIPTION
REVISIONS		
DATE	BY	DESCRIPTION

DEFWOOD SHEPPARD, P.E. P.E. NO.: 69228
 Environmental & Geotechnical Specialists, Inc.
EGS
 Tallahassee, Florida 32308
 Office: (850) 386-1233
 Fax: (850) 385-8050
 Certificate of Authorization: 6222

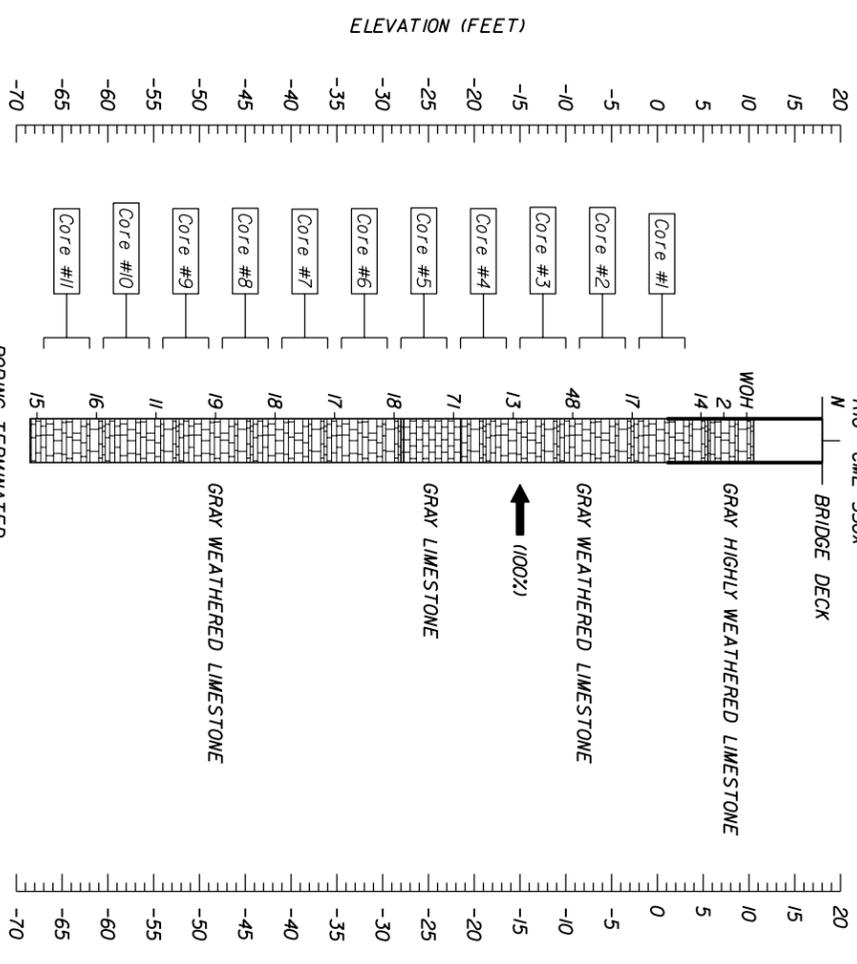
DRAWN BY: JMD 05-11	CHECKED BY: DCS 05-11	DESIGNED BY: DCS 05-11	CHECKED BY: MHL 05-11
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			
ROAD NO.	COUNTY	FINANCIAL PROJECT ID	PROJECT NAME
	LEON	413491-1-52-01	NATURAL BRIDGE ROAD OVER ST. MARKS BRANCH

SHEET TITLE: REPORT OF CORE BORINGS	REF. DWG. NO. BI-8
--	-----------------------



CORE	ELEVATION (FEET)	CORING PRESSURE (LB/IN ²)	CORING TIME (HR:MIN:SEC)	RECOVERY (%)	ROD (%)	ROCK CORES		SPLITTING TENSILE (LB/IN ²)	
						UNCONFINED COMPRESSION (LB/FT ²)	(LB/IN ²)		
1	2.7 - -2.3	400	00:04:02	55	42	18.841 - 81.309	131 - 565	1,544 - 2,293	11 - 16
2	-3.8 - -8.8	400	00:04:09	87	78	22.261 - 41.755	155 - 290	1,105 - 4,263	8 - 30
3	-10.3 - -15.3	400	00:06:57	25	0	--	--	--	--
4	-16.8 - -21.8	400	00:04:56	100	100	13.432 - 25.856	93 - 180	2,485 - 3,173	17 - 22
5	-23.3 - -28.3	400	00:03:36	48	42	36.855 - 83.422	256 - 579	7,468 - 21,024	52 - 146
6	-29.8 - -34.8	400	00:03:26	73	70	10.915 - 22.277	76 - 155	1,136 - 1,531	8 - 11
7	-36.3 - -41.3	400	00:04:40	50	38	13.980	97	1,598 - 2,504	11 - 17
8	-42.8 - -47.8	400	00:03:00	80	62	23.157 - 24.869	161 - 173	1,573	11
9	-49.3 - -54.3	400	00:03:22	80	58	--	--	1,802 - 25,570	13 - 178
10	-55.8 - -60.8	400	00:03:37	95	95	38.414 - 42.835	267 - 297	3,083 - 3,361	21 - 23
11	-62.3 - -67.3	400	00:02:50	68	68	40.152 - 43.539	279 - 302	3,299 - 3,368	23

BOR # NB-3
 STA. 102+44
 REF. CONSTRUCTION ϵ
 OFF. 2.0 FEET
 ELEV. 18.0 FEET
 DATE 10/1/2010
 DRILLER B. GUERRA
 HAMMER AUTOMATIC
 RIG CME 550X



BORING TERMINATED
 AT ELEV. -68.5 FEET
 CASING LENGTH 17.0 FEET

NB-3
ROCK CORES

CORE	ELEVATION (FEET)	CORING PRESSURE (LB/IN ²)	CORING TIME (HR:MIN:SEC)	RECOVERY (%)	ROD (%)	UNCONFINED COMPRESSION (LB/IN ²)	SPLITTING TENSILE (LB/IN ²)
1	3.0 - -2.0	400	00:03:59	95	83	21,529 - 29,779	150 - 207
2	-3.5 - -8.5	400	00:04:00	95	93	19,712 - 54,694	137 - 380
3	-10.0 - -15.0	400	00:04:42	88	75	30,903 - 30,994	215
4	-16.5 - -21.5	400	00:04:20	65	53	10,535 - 24,409	73 - 170
5	-23.0 - -28.0	400	00:03:51	100	77	19,340	134
6	-29.5 - -34.5	400	00:01:45	85	77	11,370 - 15,276	79 - 106
7	-36.0 - -41.0	400	00:02:05	72	65	12,773 - 24,877	89 - 173
8	-42.5 - -47.5	450	00:01:33	92	85	13,922 - 14,008	97
9	-49.0 - -54.0	400	00:03:02	93	93	48,976 - 58,438	340 - 406
10	-55.5 - -60.5	450	00:02:30	95	93	35,265 - 36,617	245 - 254
11	-62.0 - -67.0	350	00:02:16	98	97	38,064 - 39,904	264 - 277

DATE	BY	DESCRIPTION

REVISIONS
 DATE BY DESCRIPTION

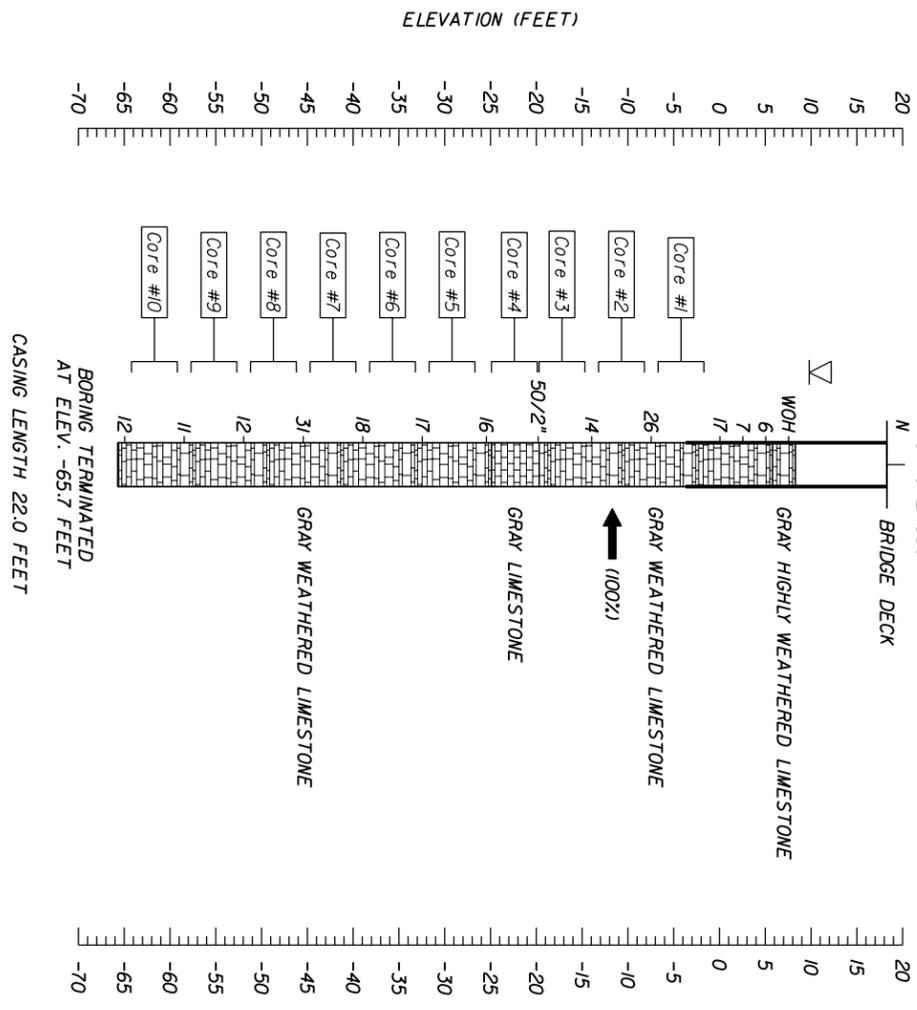
DEFWOOD SHEPPARD, P.E. P.E. NO.: 69228
 Environmental & Geotechnical Specialists, Inc.
EGS
 Tallahassee, Florida 32308
 Office: (850) 386-1233
 Fax: (850) 385-8050
 Certificate of Authorization: 6222

DRAWN BY	JMJ 05-11
CHECKED BY	DCS 05-11
DESIGNED BY	DCS 05-11
CHECKED BY	MAL 05-11

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION	ROAD NO.	COUNTY	FINANCIAL PROJECT ID	PROJECT NAME
	LEOW		413491-1-52-01	NATURAL BRIDGE ROAD OVER ST. MARKS BRANCH

SHEET TITLE: REPORT OF CORE BORINGS
 SHEET NO. B1-9

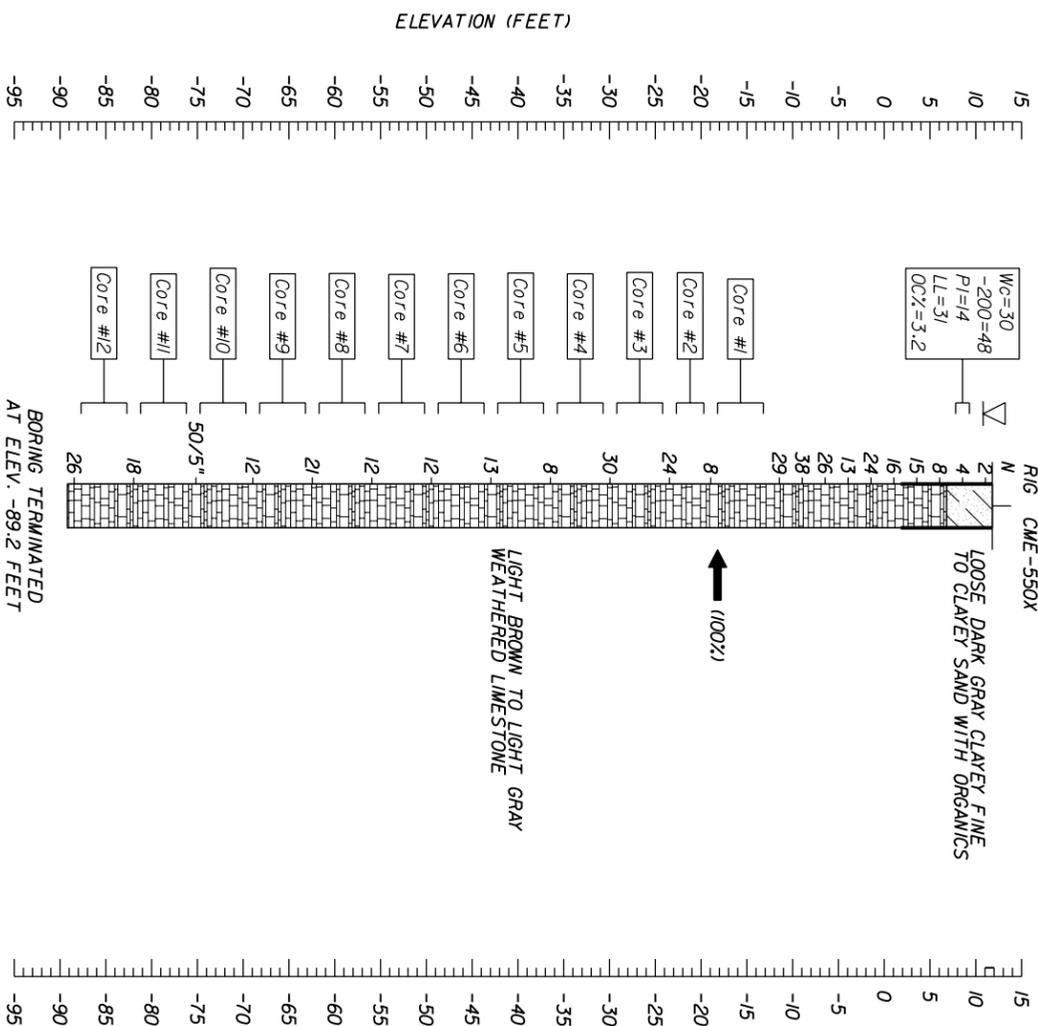
BOR # NB-4
 STA. 102+79
 REF. CONSTRUCTION E
 OFF. 2.2 FEET
 ELEV. 18.3 FEET
 DATE 9/29/2010
 DRILLER M. MCCONNELL
 HAMMER AUTOMATIC
 RIG CME 550X



CORE	ELEVATION (FEET)	CORING PRESSURE (LB/IN ²)	CORING TIME (HR:MIN:SEC)	RECOVERY (%)	ROD (%)	NB-4 ROCK CORES		UNCONFINED COMPRESSION		SPLITTING TENSILE	
						(LB/FT ²)	(LB/FT ²)	(LB/IN ²)	(LB/IN ²)	(LB/IN ²)	(LB/IN ²)
1	-1.7 - -6.7	400	00:04:22	80	75	31,624 - 37,699	220 - 262	3,950 - 8,553	27 - 59		
2	-8.2 - -13.2	400	00:07:10	22	8	--	--	--	--		
3	-14.7 - -19.7	400	00:04:55	83	75	11,545 - 114,363	80 - 794	1,510 - 9,302	10 - 65		
4	-19.9 - -24.9	400	00:04:01	100	82	61,080 - 156,519	424 - 1,087	6,634 - 9,391	46 - 65		
5	-26.7 - -31.7	400	00:04:35	83	57	10,014 - 10,317	70 - 72	1,543 - 3,212	11 - 22		
6	-33.2 - -38.2	400	00:02:30	25	18	16,622	115	1,766	12		
7	-39.7 - -44.7	400	00:03:51	75	72	18,304 - 18,693	127 - 130	1,578 - 2,496	11 - 17		
8	-46.2 - -51.2	400	00:04:21	85	85	22,880 - 23,696	159 - 165	1,110 - 2,247	8 - 16		
9	-52.7 - -57.7	400	00:01:38	100	100	30,944 - 36,206	215 - 251	2,272 - 2,293	16		
10	-59.2 - -64.2	400	00:01:27	98	98	33,622 - 43,485	233 - 302	2,682 - 2,926	19 - 20		

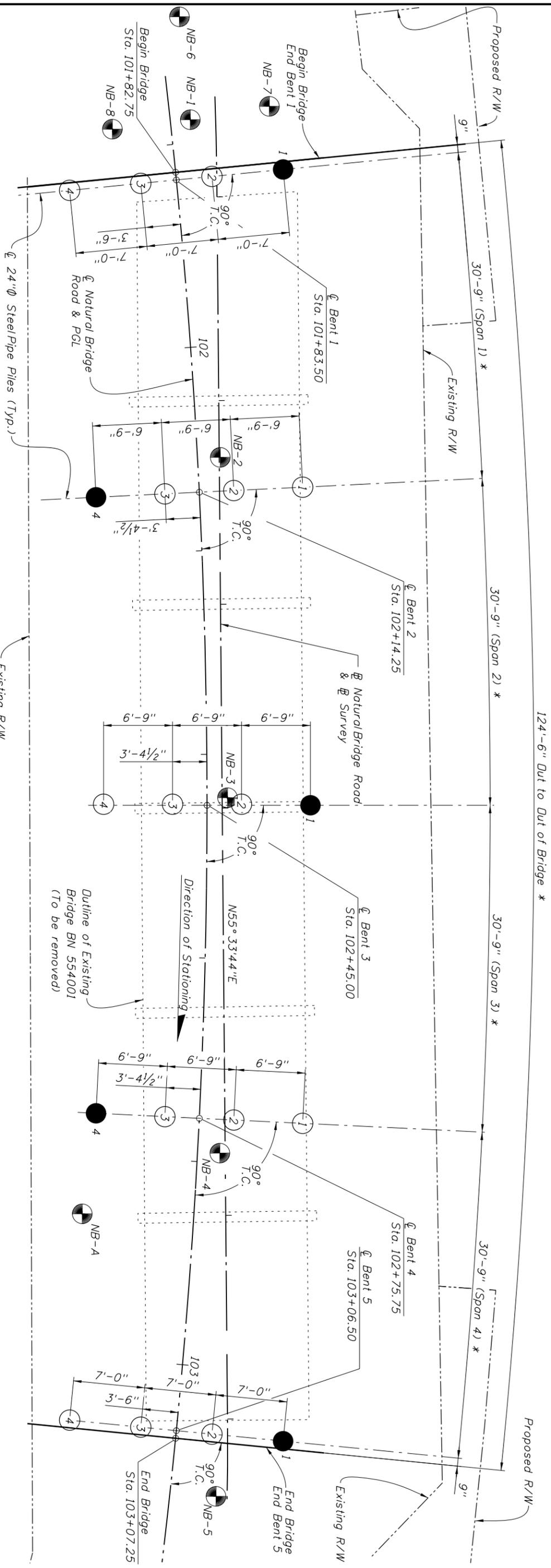
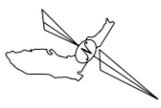
DATE		BY		DESCRIPTION		REVISIONS		DATE		BY		DESCRIPTION	
<p>DEFWOOD SHEPPARD, P.E., P.E. NO.: 69228 Environmental & Geotechnical Specialists, Inc. EGS Tallahassee, Florida 32308 Office: (850) 386-1233 Fax: (850) 385-8050 Certificate of Authorization: 6222</p>													
DRAWN BY: JMD 05-11				CHECKED BY: DCS 05-11				DESIGNED BY: DCS 05-11				CHECKED BY: MHL 05-11	
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION						ROAD NO. LEON		COUNTY LEON		FINANCIAL PROJECT ID 413491-1-52-01		PROJECT NAME: NATURAL BRIDGE ROAD OVER ST. MARKS BRANCH	
REPORT OF CORE BORINGS												SHEET NO. B1-10	

BOR # NB-A
 STA. 102+85
 REF. CONSTRUCTION E
 OFF. 10.9 FEET RIGHT
 ELEV. 11.8 FEET
 DATE 3/8/2010
 DRILLER M. MCCONNELL
 HAMMER AUTOMATIC
 RIG CME-550X



CORE	ELEVATION (FEET)	CORING PRESSURE (LB/IN ²)	CORING TIME (HR:MIN:SEC)	RECOVERY (%)	RQD (%)	UNCONFINED COMPRESSION (LB/IN ²)	SPLITTING TENSILE (LB/IN ²)
1	-13.2 - -15.2	600	00:04:51	40	15	--	--
2	-19.7 - -22.7	700	00:04:23	100	78	158,189	1,098
3	-24.2 - -28.8	700	00:07:14	92	87	23,472 - 82,051	163 - 570
4	-30.7 - -35.2	650	00:04:11	90	90	6,431 - 9,562	45 - 66
5	-37.2 - -40.9	650	00:03:06	73	57	8,413 - 17,106	58 - 119
6	-43.7 - -47.5	650	00:03:18	77	70	8,901 - 17,302	62 - 120
7	-50.2 - -55.0	650	00:02:59	95	90	25,868 - 33,680	180 - 234
8	-56.7 - -61.5	650	00:02:34	97	97	31,060 - 36,867	216 - 256
9	-63.2 - -68.0	650	00:03:07	97	93	20,893 - 51,105	145 - 355
10	-69.7 - -74.7	650	00:03:27	100	100	22,190	154
11	-76.2 - -80.0	650	00:04:50	77	50	28,896 - 31,270	201 - 217
12	-82.7 - -86.0	600	00:04:39	67	63	38,403 - 42,341	266 - 294

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
REVISIONS					
DEFWOOD SHEPPARD, P.E. P.E. NO.: 69228 Environmental & Geotechnical Specialists, Inc. EGS Tallahassee, Florida 32308 Office: (850) 386-1233 Fax: (850) 385-8050 Certificate of Authorization: 8222					
DRAWN BY: JMD 05-11		CHECKED BY: DCS 05-11		DESIGNED BY: DCS 05-11	
STATE OF FLORIDA		DEPARTMENT OF TRANSPORTATION		PROJECT TITLE:	
ROAD NO.	COUNTY	FINANCIAL PROJECT ID	PROJECT NAME:		
LEON		413491-1-52-01	NATURAL BRIDGE ROAD OVER ST. MARKS BRANCH		
REPORT OF CORE BORINGS					REF. DWG. NO.
					B1-11



LEGEND

- -- 24" Ø Steel Pipe Pile
- -- 24" Ø Test Pile
- ⊙ -- Boring Location
- * Measured Radially along Natural Bridge Road

NOTE:

For Pipe Pile Data Table and Notes, See Sheet BI-14.

FOUNDATION LAYOUT

CURVE DATA CLNBR-1

P.I. Sta. 102+35.97
 $\Delta = 41^\circ 04' 05''$ (RT)
 $D = 9^\circ 05' 40''$
 $T = 235.97'$
 $L = 451.57'$
 $R = 630.00'$
 PC Sta. = 100+00.00
 PT Sta. = 104+51.57
 $e = RC$

REVISIONS		DESCRIPTION	
DATE	BY	DATE	DESCRIPTION

LOCHNER		2940 EAST PARK AVENUE, SUITE 200 TALLAHASSEE, FLORIDA 32301
FBRP CERTIFICATE OF AUTH. # 894		CHARLES F. CRAWCRAFT, P.E. # 32151
DRAWN BY:	LIG 05-11	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION ROAD NO. COUNTY FINANCIAL PROJECT ID CR 2192 LEON 413491-1-52-01
CHECKED BY:	WDB 05-11	
DESIGNED BY:	BCR 05-11	
CHECKED BY:	WDB 05-11	
PROJECT TITLE:		FOUNDATION LAYOUT
SHEET NO.		BI-13

Bridge Nos. 554153

PILE DATA TABLE

Table Date 7-01-09

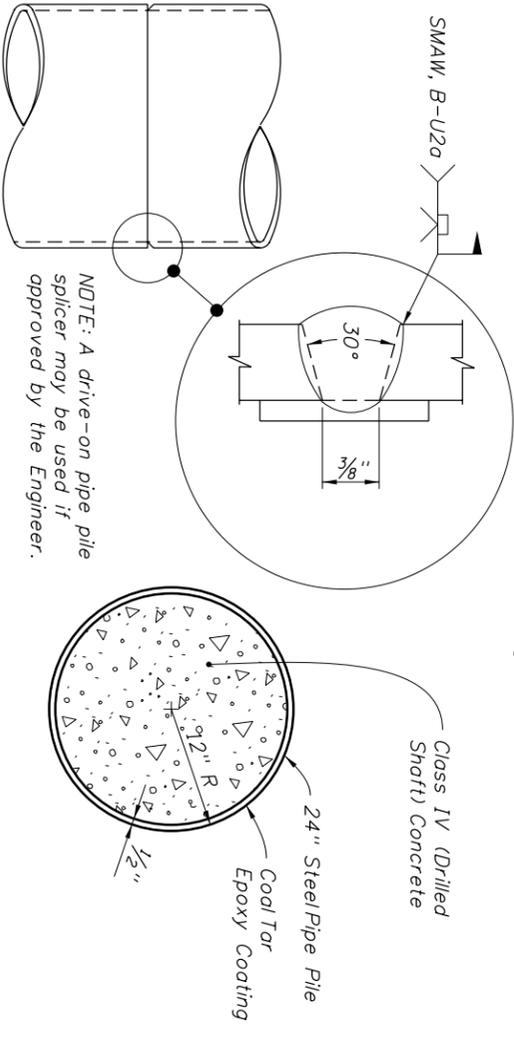
INSTALLATION CRITERIA				DESIGN CRITERIA				PILE CUT-OFF ELEVATIONS										
PIER OR BENT NUMBER	PILE SIZE (in.)	NOMINAL BEARING RESISTANCE (tons)	TENSION RESISTANCE (tons)	MINIMUM TIP ELEVATION (ft.)	TEST PILE LENGTH (ft.)	REQUIRED JET ELEVATION (ft.)	REQUIRED PREFORM ELEVATION (ft.)	FACTORED DESIGN LOAD (tons)	DOWN DRAG (tons)	TOTAL SCOUR RESISTANCE (tons)	NET SCOUR RESISTANCE (tons)	100-YEAR SCOUR ELEVATION (ft.)	LONG TERM SCOUR ELEVATION (ft.)	RESISTANCE FACTOR- ϕ	PILE 1	PILE 2	PILE 3	PILE 4
1	24	124	0	N/A	130	N/A	N/A	93	0	N/A	N/A	N/A	N/A	0.75	14.9	14.8	14.7	14.5
2	24	153	0	-7	75	N/A	N/A	113	0	2	2	7.5	7	0.75	15.2	15.0	14.9	14.8
3	24	151	0	-7	75	N/A	N/A	113	0	1	1	7.5	7	0.75	15.3	15.2	15.1	14.9
4	24	151	0	-13	80	N/A	N/A	113	0	1	1	7.5	7	0.75	15.4	15.3	15.1	15.0
5	24	124	0	N/A	70	N/A	N/A	93	0	N/A	N/A	N/A	N/A	0.75	15.4	15.2	15.1	14.9

Factored Design Load + Net Scour Resistance + Down Drag \leq Nominal Bearing Resistance

PILE INSTALLATION NOTES:

PILE INSTALLATION NOTES (CONT'D):

- Pipe piles shall be driven plumb. Provide pipe piles in accordance with FDDT Specification 962-8.8. Pipe wall thickness to be 1/2".
- The ends of all pile sections to be spliced shall be beveled and full butt-welded as shown on the plans. All splices shall be watertight.
- The Contractor shall have available at all times a suitable drop light for inspecting the entire length of the driven pipe pile before placing reinforcing steel and concrete. Cost of this work is incidental to cost of steel pipe pile.
- Steel pipe pile shall be cut off at the required elevations along a plane normal to the axis of the pile. Methods used in cutting off piles shall be submitted for approval of the Engineer.
- All welding shall conform to AMERICAN WELDING SOCIETY (AWS) Bridge Welding Code.
- N/A means values do not apply.
- All piles shall be driven to the Nominal Bearing Resistance indicated in the Plans and driving terminated. Additional driving shall not be permitted to reach the required cut-off elevation.
- Notarized mill test report shall be required for all steel pipe pile.
- Concrete for piles shall be Class IV (Drilled Shaft), $f'c = 4,000$ psi, and shall conform to Section 346 of the Specifications. The final installed pipe piles shall be clean and free of water before placing concrete. Concrete is to extend 5 ft. below the 100-year scour elevation.
- Place Cool Tar Epoxy Coating from the top of the pile to 5 ft. below the 100-year scour elevation, per Specification 560. On the outside surfaces of the steel pipe pile, use a three-coat system comprised of an inorganic zinc primer and two coats of cool tar-epoxy in accordance with Specification Section 560.
- Contractor to verify location of all utilities prior to any pile driving.
- Minimum Tip Elevation is required for lateral stability.
- No jetting will be allowed without the approval of the Engineer.
- The Contractor should not anticipate being allowed to jet piles below the minimum tip elevation.
- At each Bent, pile driving is to commence at the center of the Bent and proceed outward.
- All piles are to be dynamically load tested per Specification Section 455 during driving and on all test piles during restriking.
- The Contractor shall drive the piles open-ended, then clean out to an elevation five feet below the 100-year scour elevation. Piles shall then be restruck to check for possible loss of capacity after cleaning. Reinforced concrete shall be placed after all driving and restriking operations are complete.
- Tip protection shall be provided by the Contractor.
- The Contractor shall fill voids resulting from soil plugs with flowable fill up to 5 ft. below the 100-year scour elevation.

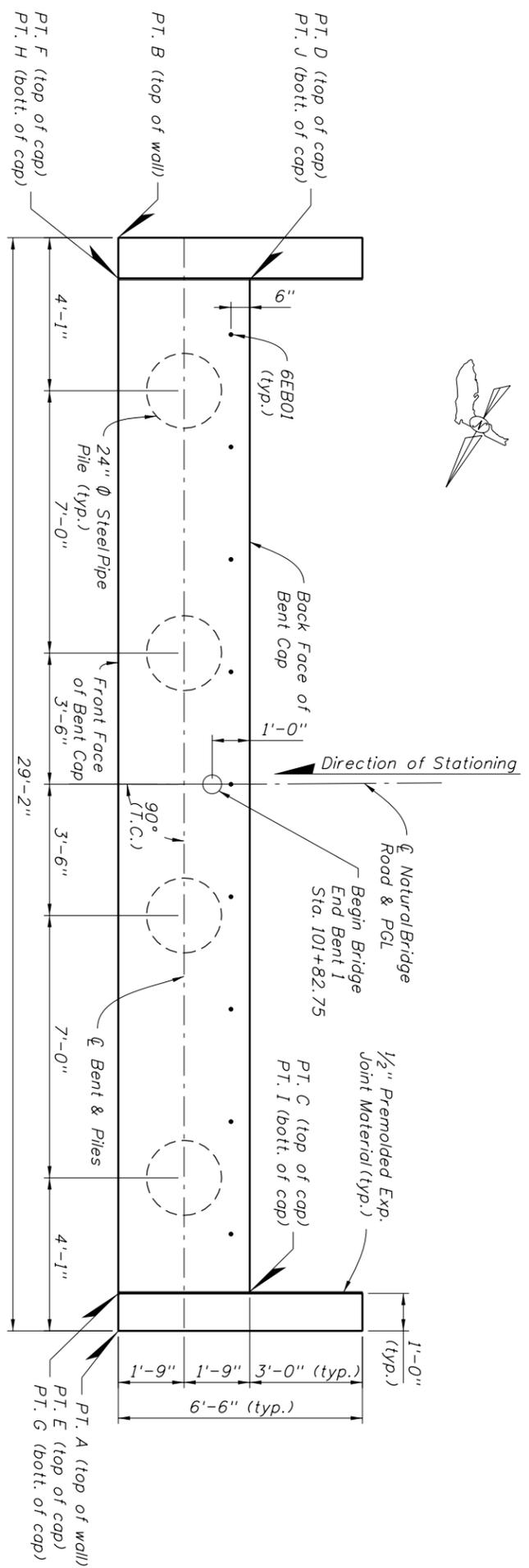
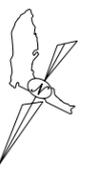


PIPE PILE SPLICE DETAIL

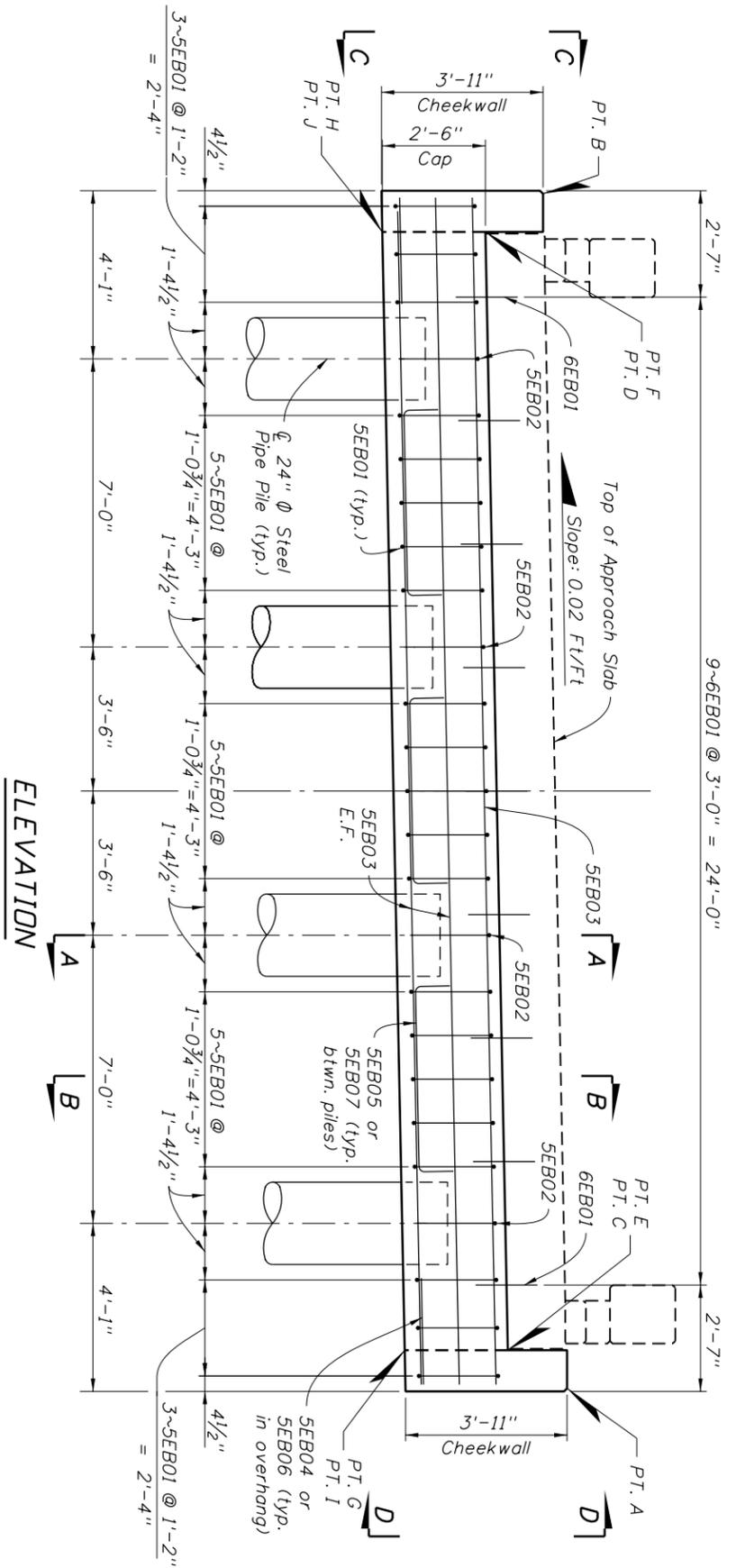
TYPICAL PILE SECTION

Bridge Nos. 554153

DATE		BY		DESCRIPTION		REVISIONS		DATE		BY		DESCRIPTION			
<p>LOCHNER</p> <p>2940 EAST PARK AVENUE, SUITE 200 TALLAHASSEE, FLORIDA 32301 FBR CERTIFICATE OF AUTH. # 894 CHARLES F. CRAVCRRAFT, P.E. # 32151</p>															
DRAWN BY: LIG 05-11				CHECKED BY: WDR 05-11				DESIGNED BY: BCR 05-11				CHECKED BY: WDR 05-11			
ROAD NO. CR 2192				COUNTY LEON				FINANCIAL PROJECT ID 413491-1-52-01				PROJECT NAME: NATURAL BRIDGE ROAD OVER BRANCH OF ST. MARKS RIVER			
SHEET TITLE: PIPE PILE DATA TABLE AND NOTES												SHEET NO. B1-14			



PLAN



ELEVATION

ESTIMATED QUANTITIES		
ITEM	UNIT	QUANTITY
Class II Concrete (Substructure)	CY	10.2
Reinforcing Steel (Substructure)	LB	926
24" Ø Steel Pipe Piling	LF	**

** See Summary of Bridge Pay Items.

ELEVATIONS	
POINT	ELEVATION
A	17.885
B	17.343
C	16.433
D	15.892
E	16.468
F	15.926
G	13.968
H	13.426
I	13.933
J	13.392

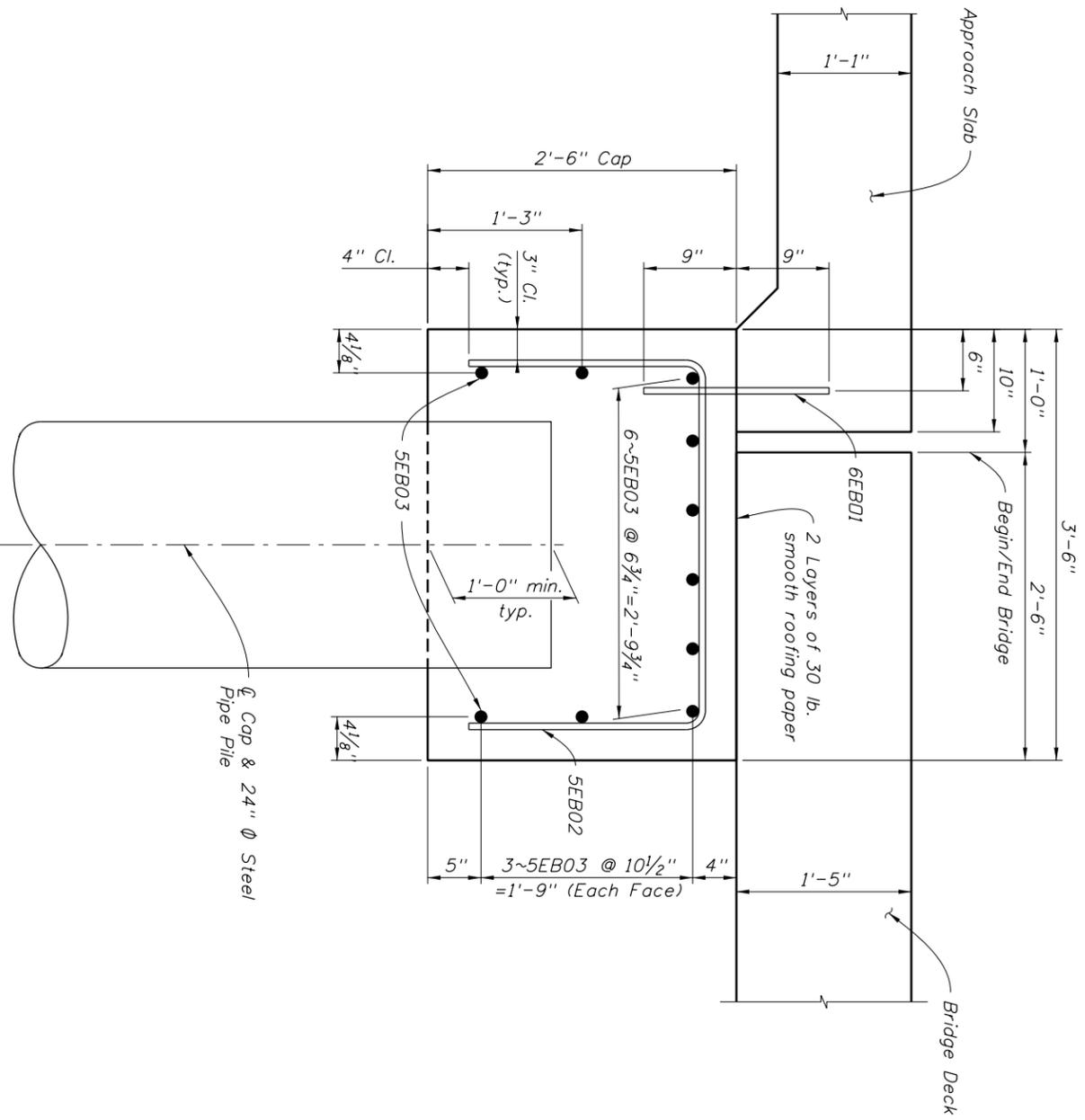
NOTES:

1. For Sections A-A and B-B, see Sheet B1-17.
2. For Views C-C and D-D, see Sheet B1-18.
3. For Reinforcing Bar List, see Sheet B1-29.
4. Environmental Classification (Substructure)
-Slightly Aggressive for Concrete
-Moderately Aggressive for Steel

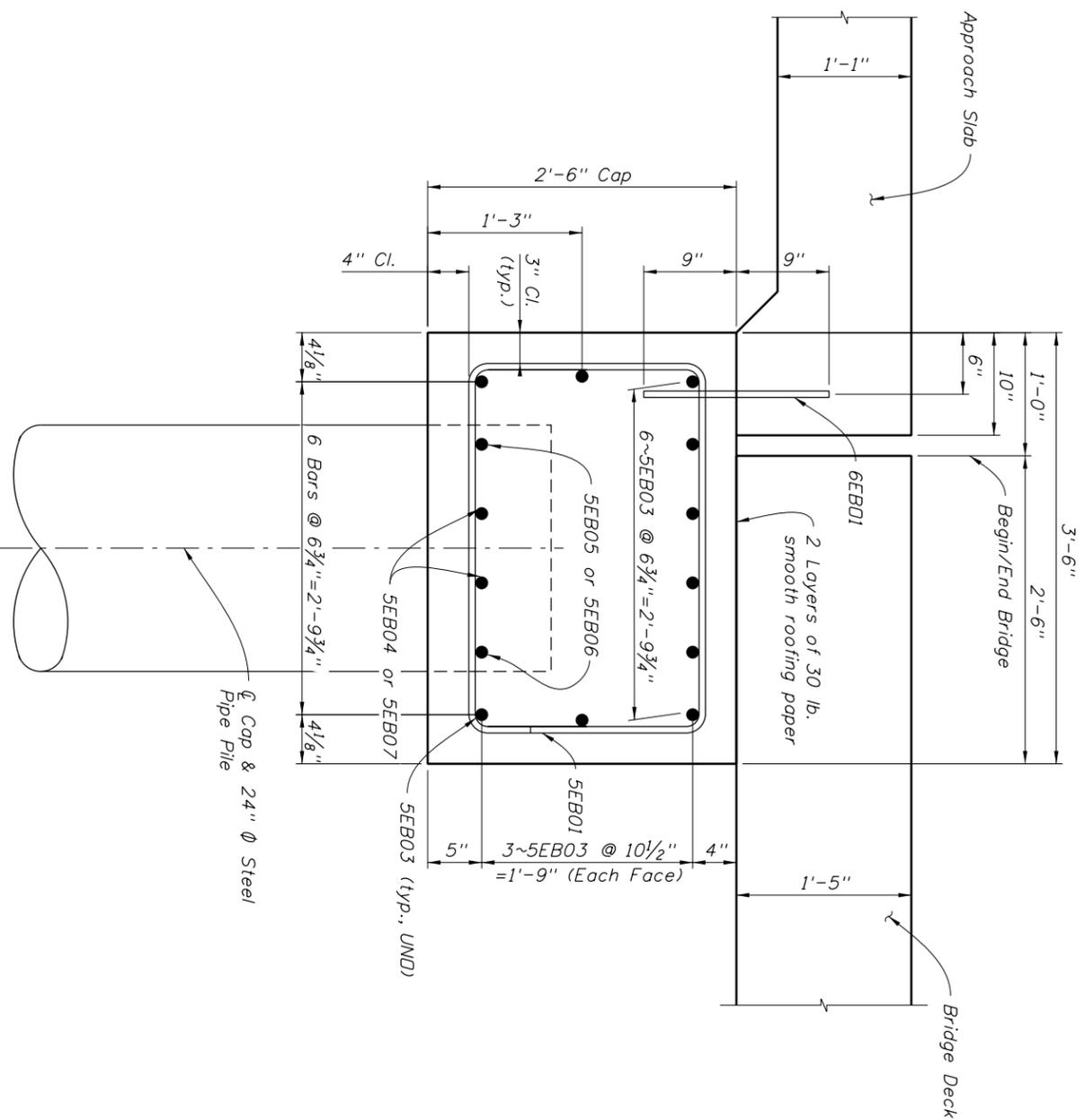
Bridge No. 554153

DATE		BY		DESCRIPTION	
DATE		BY		DESCRIPTION	
LOCHNER					
2940 EAST PARK AVENUE, SUITE 200 TALLAHASSEE, FLORIDA 32301 FBPR CERTIFICATE OF AUTH. # 894 CHARLES F. CRAVCRAPT, P.E. # 32131					
DRAWN BY:	LIG 05-11	STATE OF FLORIDA	DEPARTMENT OF TRANSPORTATION	ROAD NO.	CR 2192
CHECKED BY:	WDB 05-11	COUNTY	LEON	FINANCIAL PROJECT ID	413491-1-52-01
DESIGNED BY:	BCR 05-11	PROJECT NAME:	NATURAL BRIDGE ROAD OVER BRANCH OF ST. MARKS RIVER		
CHECKED BY:	WDB 05-11	SHEET TITLE:	END BENT 1		
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
REF. Dwg. No.	SHEET NO.				B1-15

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SECTION A-A



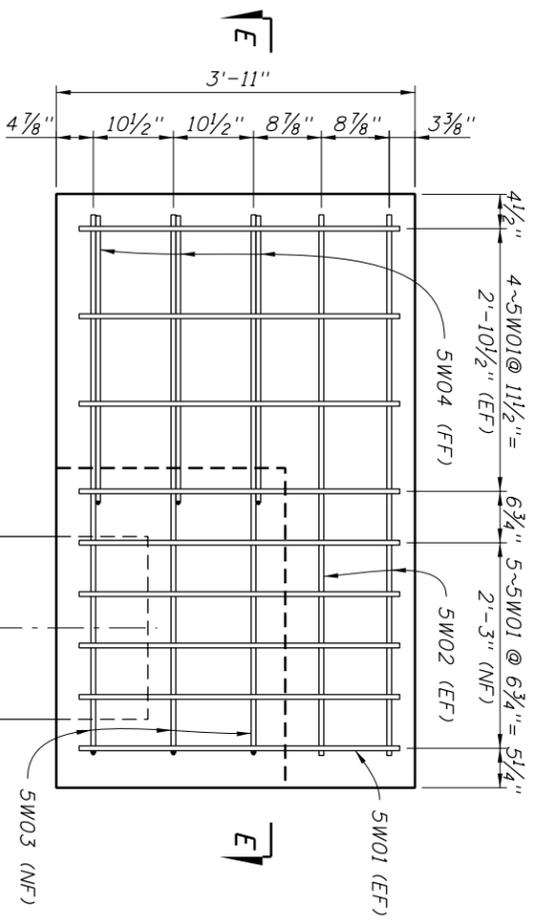
SECTION B-B

- NOTES:**
1. For location of Sections A-A and B-B see Sheet B1-15 & B1-16.
 2. For Estimate of Quantities, see Sheet B1-15 & B1-16.
 3. For Reinforcing Bar List see Sheet B1-29.

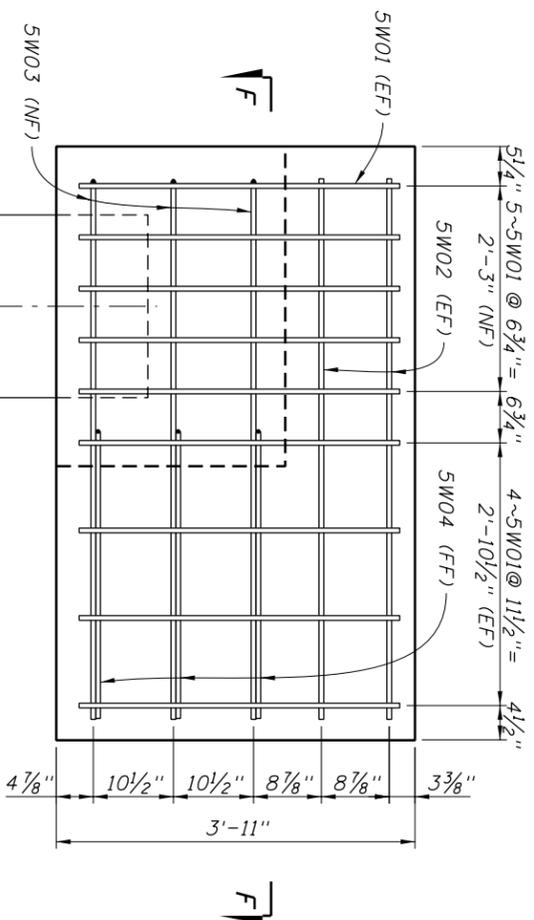
REVISIONS		DESCRIPTION	
DATE	BY	DATE	BY

LOCHNER 2940 EAST PARK AVENUE, SUITE 200 TALLAHASSEE, FLORIDA 32301 PBRP CERTIFICATE OF AUTH. # 894 CHARLES F. CRAYCRAFT, P.E. # 32131		DRAWN BY: LTB 05-11 CHECKED BY: WDB 05-11 DESIGNED BY: BCR 05-11 CHECKED BY: WDB 05-11	DEPARTMENT OF TRANSPORTATION ROAD NO. CR 2192 COUNTY LEON FINANCIAL PROJECT ID 413491-1-52-01	SHEET TITLE: END BENT DETAILS (1 OF 2) PROJECT NAME: NATURAL BRIDGE ROAD OVER BRANCH OF ST. MARKS RIVER	REF. DWG. NO. SHEET NO. B1-17
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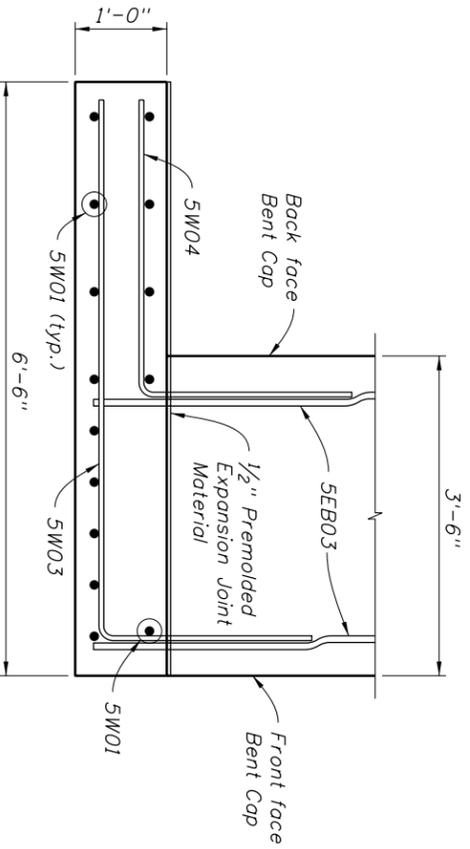
Bridge No. 554153



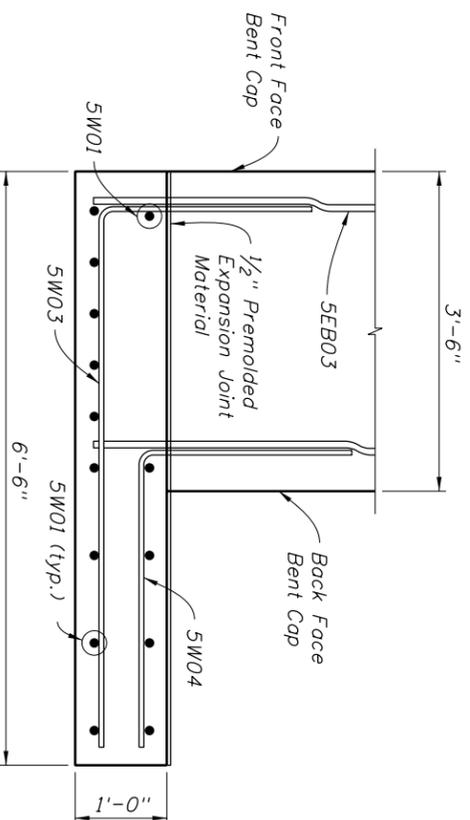
VIEW C-C



VIEW D-D



SECTION E-E



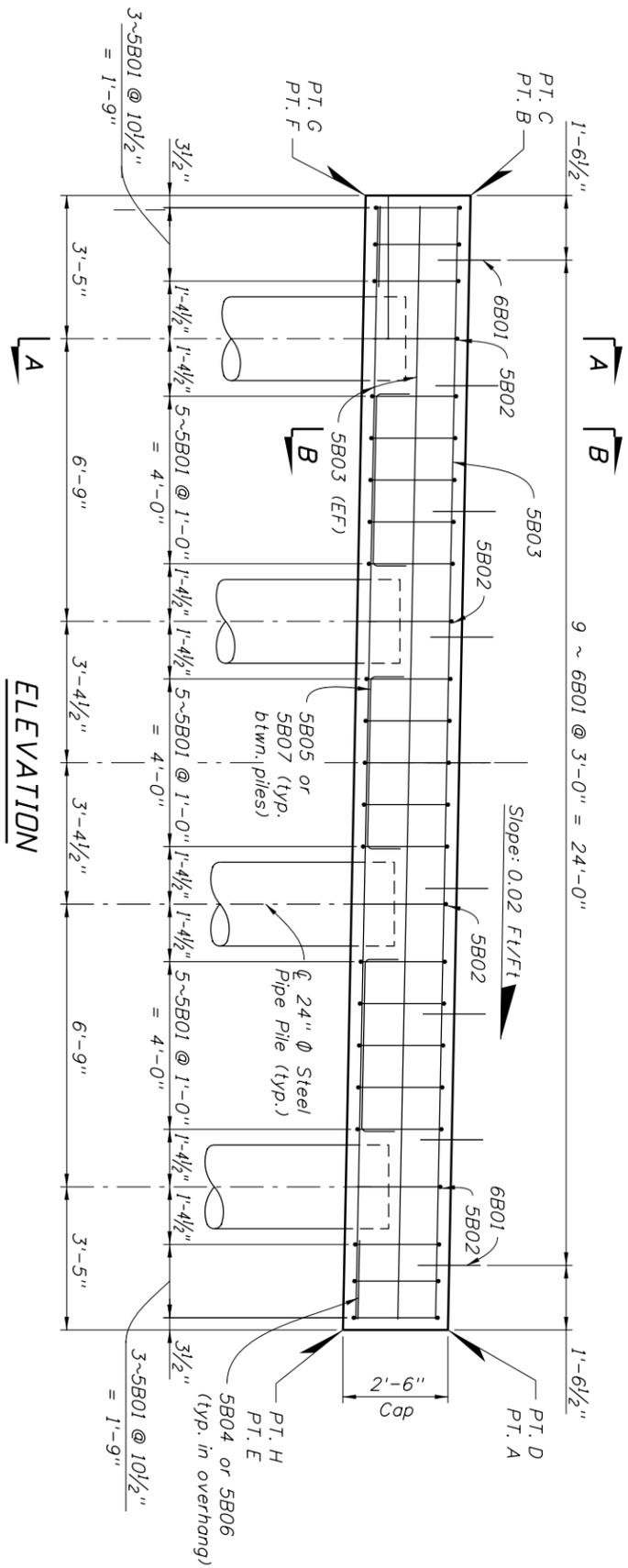
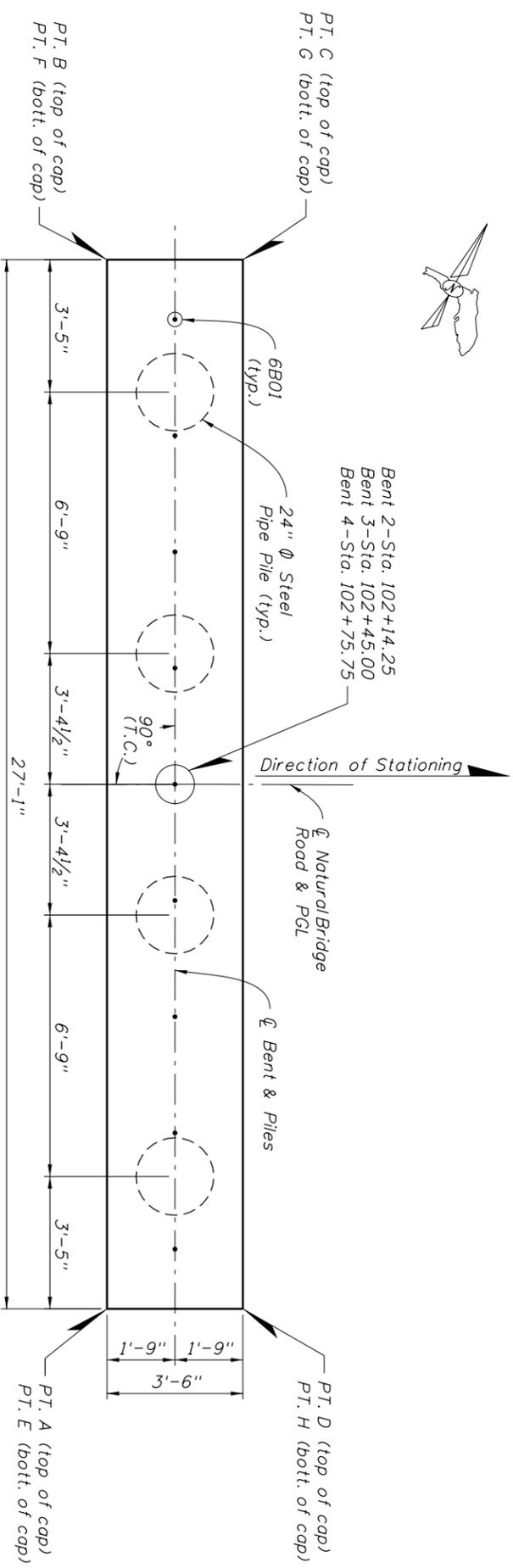
SECTION F-F

- NOTES:**
1. For location of Views B-B and C-C, see Sheets B1-15 & B1-16.
 2. For Estimate of Quantities, see Sheet B1-15 & B1-16.
 3. For Reinforcing Bar List, see Sheet B1-29.

REVISIONS		DESCRIPTION	
DATE	BY	DATE	BY

LOCHNER		2940 EAST PARK AVENUE, SUITE 200 TALLAHASSEE, FLORIDA 32301 PBRP CERTIFICATE OF AUTH. # 894 CHARLES F. CRAYCRAFT, P.E. # 32131
DRAWN BY: LIT 05-11	CHECKED BY: WDB 09-10	DESIGNED BY: BCR 05-11
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		FINANCIAL PROJECT ID: 413491-1-52-01
ROAD NO. CR 2192	COUNTY LEON	PROJECT NAME: NATURAL BRIDGE ROAD OVER BRANCH OF ST. MARKS RIVER
SHEET TITLE: END BENT DETAILS (2 OF 2)		REF. DWG. NO. B1-18

Bridge No. 554153



POINT	BENT 2 ELEVATION	BENT 3 ELEVATION	BENT 4 ELEVATION
A	16.150	16.309	16.367
B	16.692	16.850	16.909
C	16.715	16.862	16.909
D	16.173	16.320	16.367
E	13.650	13.809	13.867
F	14.192	14.350	14.409
G	14.215	14.362	14.409
H	13.673	13.820	13.867

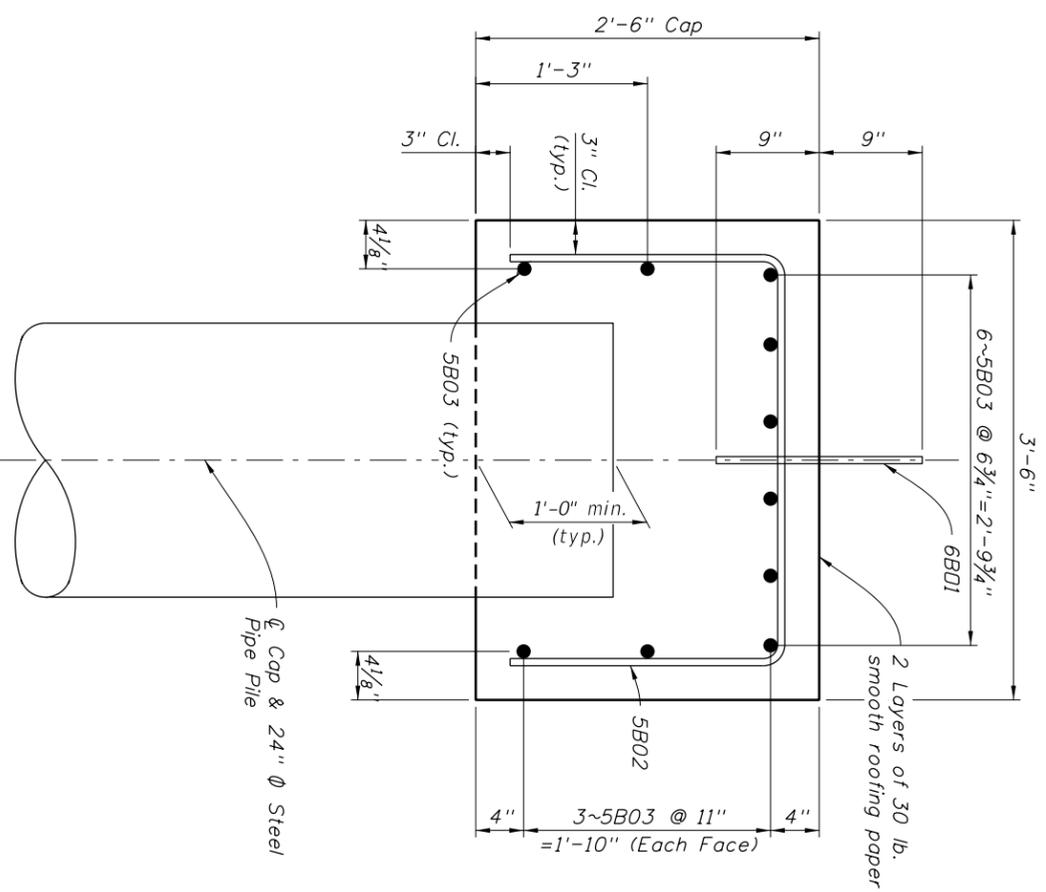
ITEM	UNIT	QUANTITY
Class II Concrete (Substructure)	CY	8.3
Reinforcing Steel (Substructure)	LB	668
24" Ø Steel/Pipe Piling	LF	**

* Quantities are for One Intermediate Bent only
 ** See Summary of Bridge Pay Items

- NOTE:**
1. For Reinforcing Bar List see Sheet B1-29.
 2. For Sections A-A and B-B see Sheet B1-20.
 3. Environmental Classification (Substructure)
 -Slightly Aggressive for Concrete
 -Moderately Aggressive for Steel

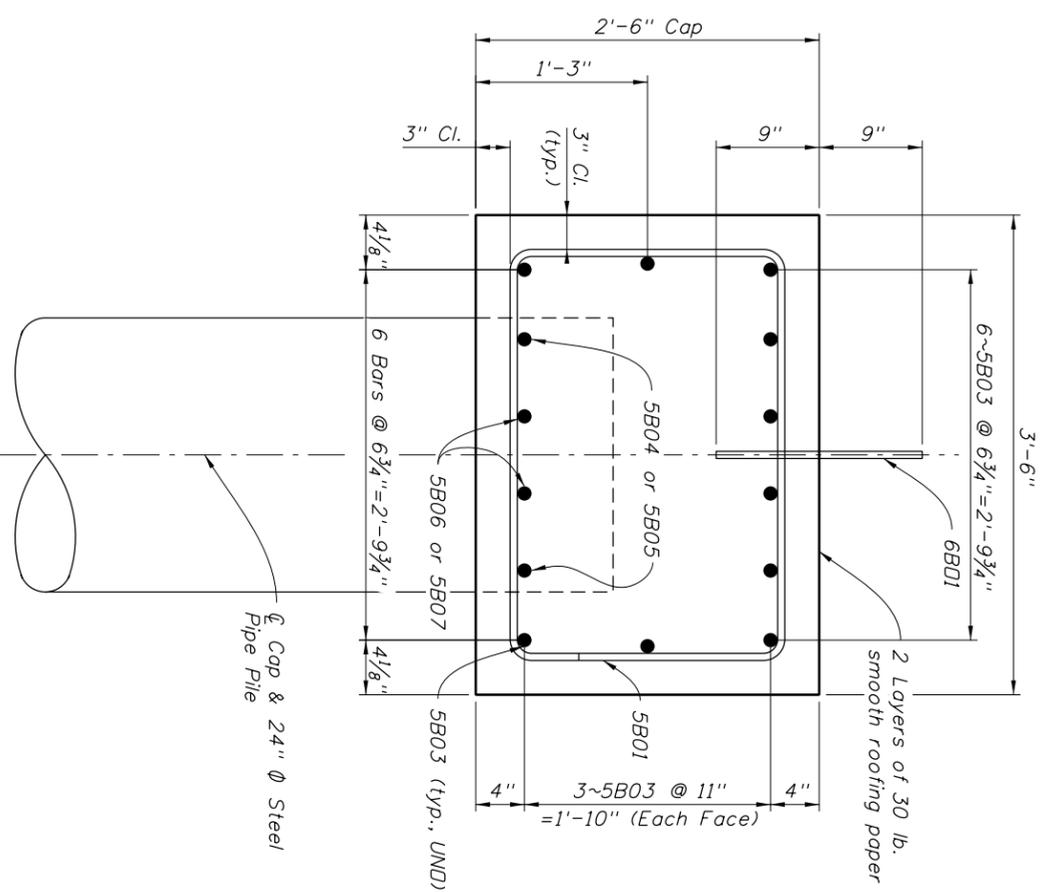
DATE		BY		DESCRIPTION	
DATE		BY		DESCRIPTION	
LOCHNER					
2940 EAST PARK AVENUE, SUITE 200 TALLAHASSEE, FLORIDA 32301					
FBPR CERTIFICATE OF AUTH. # 894 CHARLES F. CRAYCRAFT, P.E. # 32151					
DRAWN BY: LIG 05-11		CHECKED BY: WDB 05-11		DESIGNED BY: BCR 05-11	
CHECKED BY: WDB 05-11		STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		COUNTY: LEON	
ROAD NO. CR 2192		FINANCIAL PROJECT ID 413491-1-52-01		PROJECT NAME: NATURAL BRIDGE ROAD OVER BRANCH OF ST. MARKS RIVER	
SHEET NO. B1-19		SHEET TITLE: INTERMEDIATE BENTS 2, 3, & 4		REF. DWG. NO.	

Bridge No. 554153



SECTION A-A

- NOTES:**
1. For Reinforcing Bar List see Sheet B1-29.
 2. Environmental Classification (Substructure)
 - Slightly Aggressive for Concrete
 - Moderately Aggressive for Steel

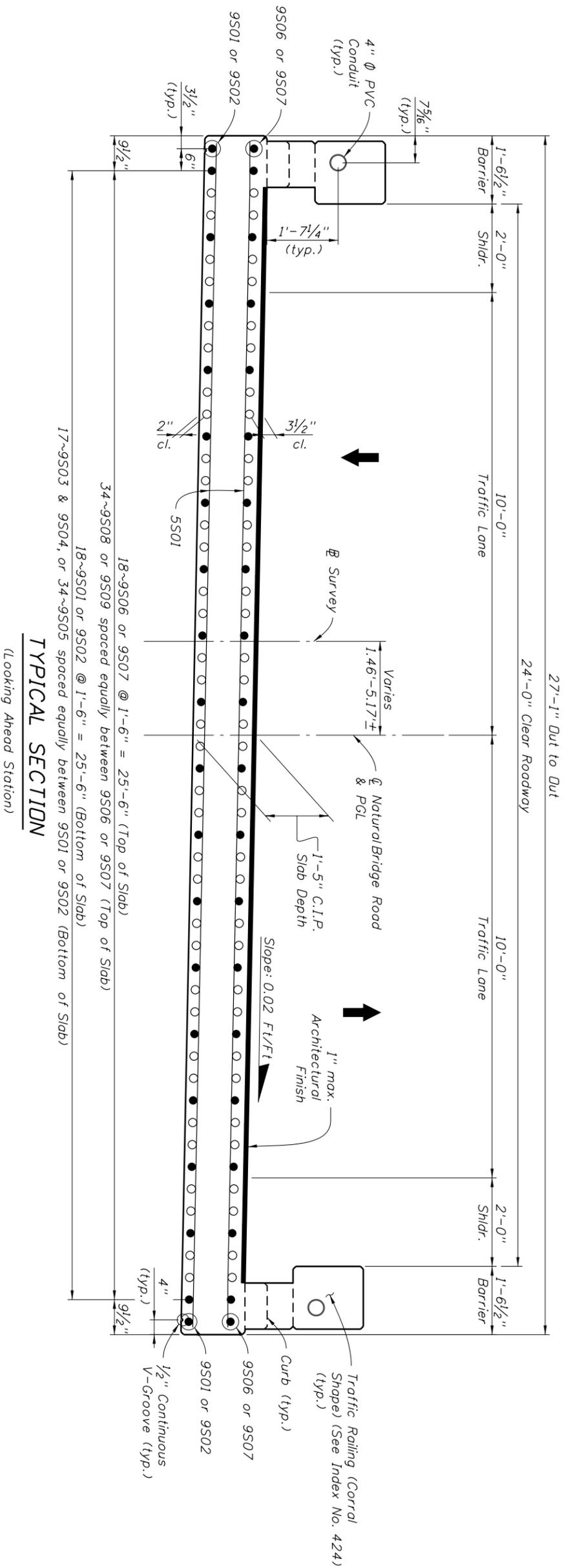


SECTION B-B

Bridge No. 554153

REVISIONS		DESCRIPTION	
DATE	BY	DATE	BY

LOCHNER		2940 EAST PARK AVENUE, SUITE 300 TALLAHASSEE, FLORIDA 32301 PBRP CERTIFICATE OF AUTH. # 894 CHARLES F. CRAYCRAFT, P.E. # 32131
DRAWN BY: LTC 05-11	CHECKED BY: WDB 05-11	DESIGNED BY: BCR 05-11
CHECKED BY: WDB 05-11	ROAD NO. CR 2192	COUNTY LEON
FINANCIAL PROJECT ID 413491-1-52-01	PROJECT NAME NATURAL BRIDGE ROAD OVER BRANCH OF ST. MARKS RIVER	
SHEET NO. B1-20	REF. DWG. NO.	



TYPICAL SECTION

(Looking Ahead Station)

ESTIMATED QUANTITIES		
ITEM	UNIT	QUANTITY
Class II Concrete (Superstructure)	CY	176.9
Reinforcing Steel (Superstructure)	LB	47383
Concrete Traffic Railing, Bridge (Corral Shape) with curb	LF	372

Bridge No. 554153

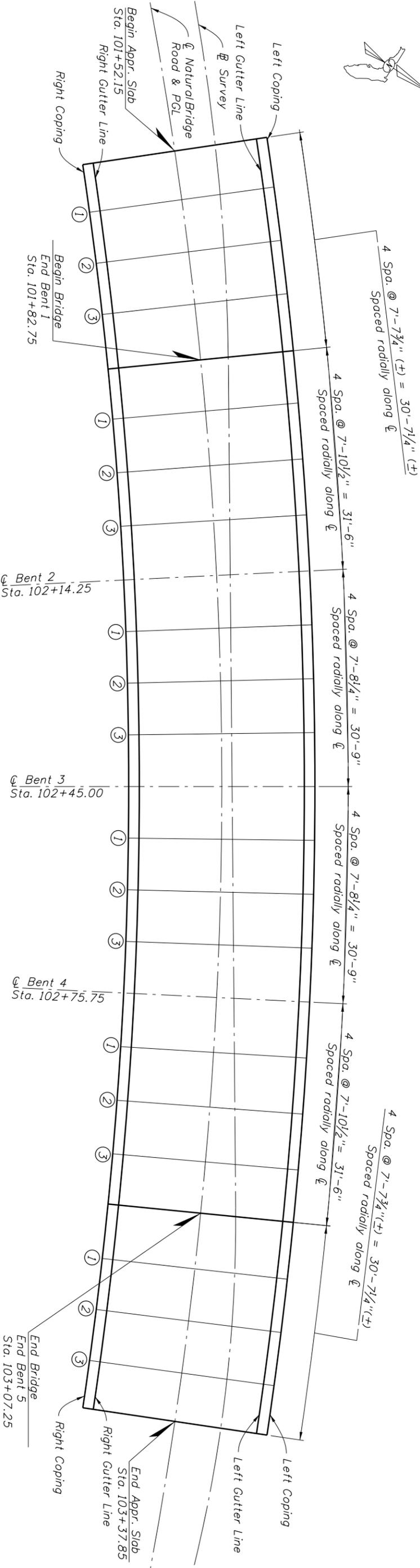
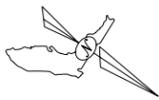
REVISIONS		DESCRIPTION		DATE		BY	

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

LOCHNER		2940 EAST PARK AVENUE, SUITE 300	
		TALLAHASSEE, FLORIDA 32301	
		FBPR CERTIFICATE OF AUTH. # 894	
		CHARLES F. CRAWCRAFT, P.E. # 32131	

DRAWN BY	LIG 08-10	STATE OF FLORIDA	
CHECKED BY	WDB 09-10	DEPARTMENT OF TRANSPORTATION	
DESIGNED BY	BCR 10-10	ROAD NO.	CR 2192
CHECKED BY	JTF 10-10	COUNTY	LEON
		FINANCIAL PROJECT ID	413491-1-52-01

SHEET TITLE	TYPICAL SECTION	PROJECT NAME	NATURAL BRIDGE ROAD OVER BRANCH OF ST. MARKS RIVER
REF. DWG. NO.		SHEET NO.	B1-21



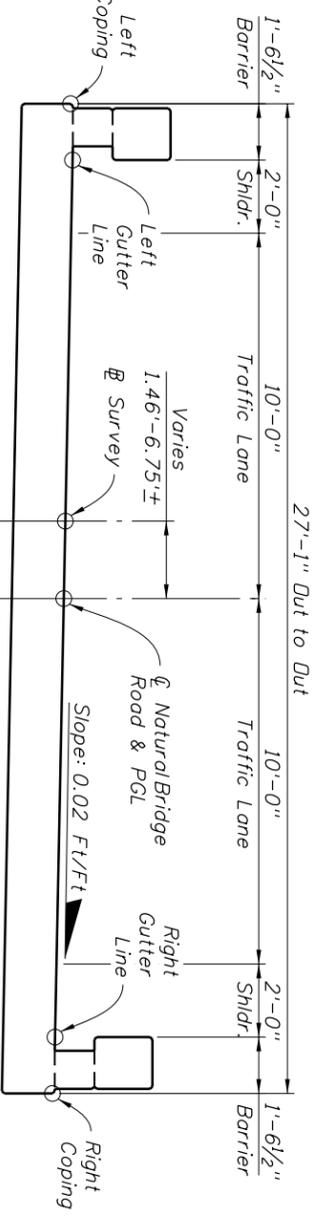
FINISH GRADE ELEVATIONS

LOCATION	BRIDGE	SPAN 1	SPAN 2	SPAN 3
LEFT COPING	17.860	17.935	18.003	18.065
LEFT GUTTER	17.829	17.904	17.972	18.034
BASELINE SURVEY	17.671	17.732	17.789	17.841
CENTERLINE BRIDGE	17.589	17.664	17.732	17.794
RIGHT GUTTER	17.349	17.424	17.492	17.554
RIGHT COPING	17.318	17.393	17.462	17.523

LOCATION	BENT 2	SPAN 2	SPAN 3
LEFT COPING	18.120	18.168	18.209
LEFT GUTTER	18.089	18.137	18.178
BASELINE SURVEY	17.889	17.931	17.969
CENTERLINE BRIDGE	17.849	17.897	17.938
RIGHT GUTTER	17.609	17.657	17.698
RIGHT COPING	17.579	17.626	17.668

LOCATION	BENT 3	SPAN 3
LEFT COPING	18.273	18.296
LEFT GUTTER	18.242	18.265
BASELINE SURVEY	18.032	18.057
CENTERLINE BRIDGE	18.002	18.025
RIGHT GUTTER	17.762	17.785
RIGHT COPING	17.731	17.754

LOCATION	BENT 4	SPAN 4
LEFT COPING	18.326	18.323
LEFT GUTTER	18.295	18.292
BASELINE SURVEY	18.105	18.113
CENTERLINE BRIDGE	18.055	18.052
RIGHT GUTTER	17.815	17.812
RIGHT COPING	17.784	17.781



NOTE:
Elevations given are top of slab elevations at copings, gutters, baseline, and centerline.

LOCATION	BENT 1	SPAN 1	SPAN 2	SPAN 3
LEFT COPING	17.829	17.904	17.972	18.034
LEFT GUTTER	17.789	17.841	17.894	17.944
BASELINE SURVEY	17.589	17.664	17.732	17.794
CENTERLINE BRIDGE	17.424	17.492	17.554	17.614
RIGHT GUTTER	17.318	17.393	17.462	17.523
RIGHT COPING	17.273	17.348	17.417	17.486

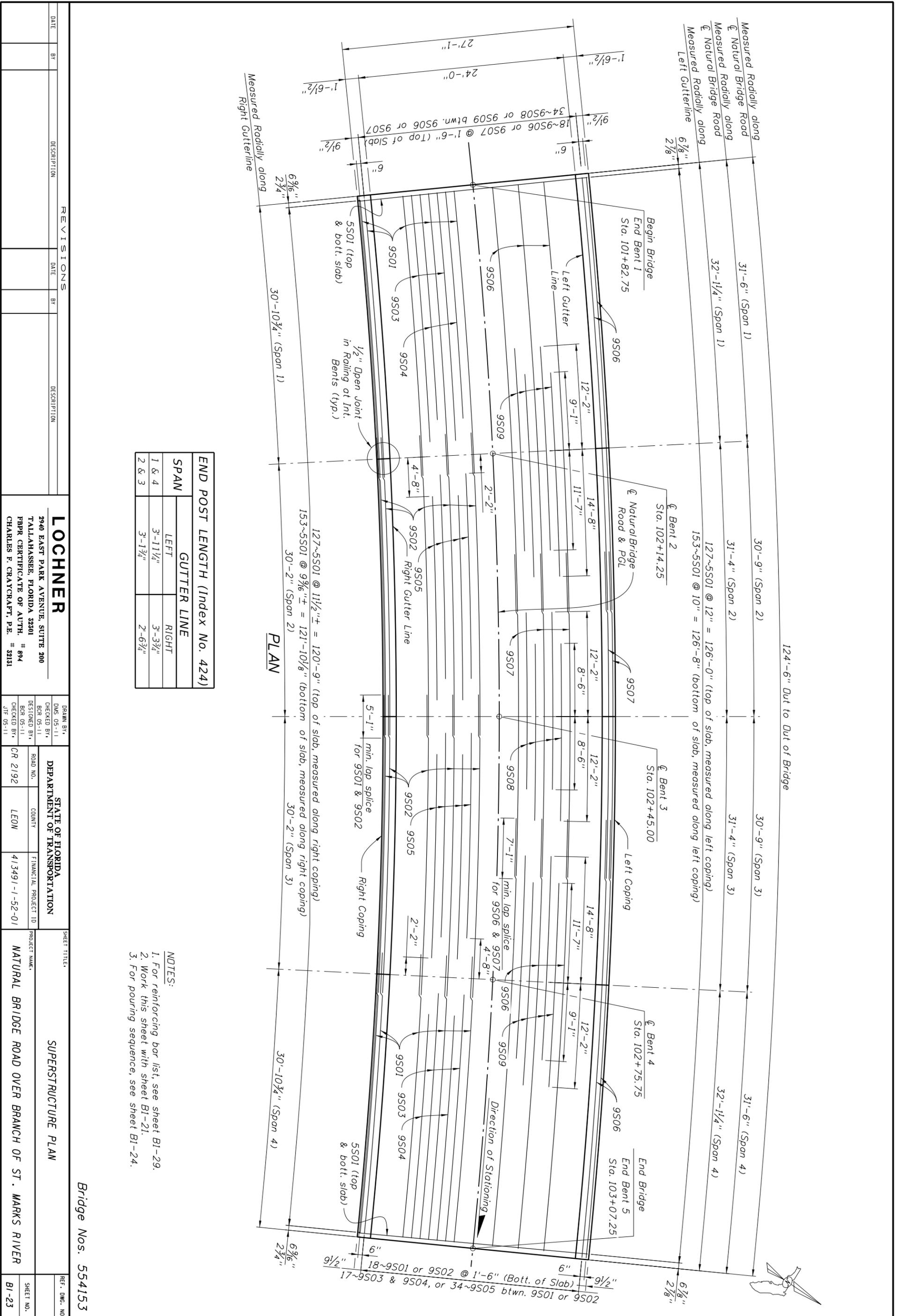
LOCATION	BENT 2	SPAN 2	SPAN 3
LEFT COPING	18.120	18.168	18.209
LEFT GUTTER	18.089	18.137	18.178
BASELINE SURVEY	17.889	17.931	17.969
CENTERLINE BRIDGE	17.849	17.897	17.938
RIGHT GUTTER	17.609	17.657	17.698
RIGHT COPING	17.579	17.626	17.668

LOCATION	BENT 3	SPAN 3
LEFT COPING	18.273	18.296
LEFT GUTTER	18.242	18.265
BASELINE SURVEY	18.032	18.057
CENTERLINE BRIDGE	18.002	18.025
RIGHT GUTTER	17.762	17.785
RIGHT COPING	17.731	17.754

LOCATION	BENT 4	SPAN 4
LEFT COPING	18.326	18.323
LEFT GUTTER	18.295	18.292
BASELINE SURVEY	18.105	18.113
CENTERLINE BRIDGE	18.055	18.052
RIGHT GUTTER	17.815	17.812
RIGHT COPING	17.784	17.781

Bridge No. 554153

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
REVISIONS					
LOCHNER					
2940 EAST PARK AVENUE, SUITE 300 TALLAHASSEE, FLORIDA 32301 PBR CERTIFICATE OF AUTH. # 894 CHARLES F. CRAVORAKT, P.E. # 32131					
DRAWN BY	DMS 05-11	CHECKED BY	BCR 05-11	DESIGNED BY	BCR 05-11
CHECKED BY	JTF 05-11	STATE OF FLORIDA	DEPARTMENT OF TRANSPORTATION	FINANCIAL PROJECT ID	413491-1-52-01
ROAD NO.	CR 2192	COUNTY	LEON	PROJECT NAME	NATURAL BRIDGE ROAD OVER BRANCH OF ST. MARKS RIVER
SHEET NO.	BI-22	SHEET TITLE	FINISH GRADE ELEVATIONS		
DATE	12/20/2011	DWG. NO.	100344 AW		
BY		FILE NAME	H:\V-Proj\05-11\3509\413491\5201\Struct\BIF\10344\BI-22.dgn		



END POST LENGTH (Index No. 424)		
SPAN	GUTTER LINE	
1 & 4	LEFT	RIGHT
2 & 3	3'-11 1/4"	3'-3 3/4"
	3'-1 3/4"	2'-6 3/4"

- NOTES:
1. For reinforcing bar list, see sheet BI-29.
 2. Work this sheet with sheet BI-21.
 3. For pouring sequence, see sheet BI-24.

Bridge Nos. 554153

REVISIONS		DESCRIPTION	
DATE	BY	DATE	BY

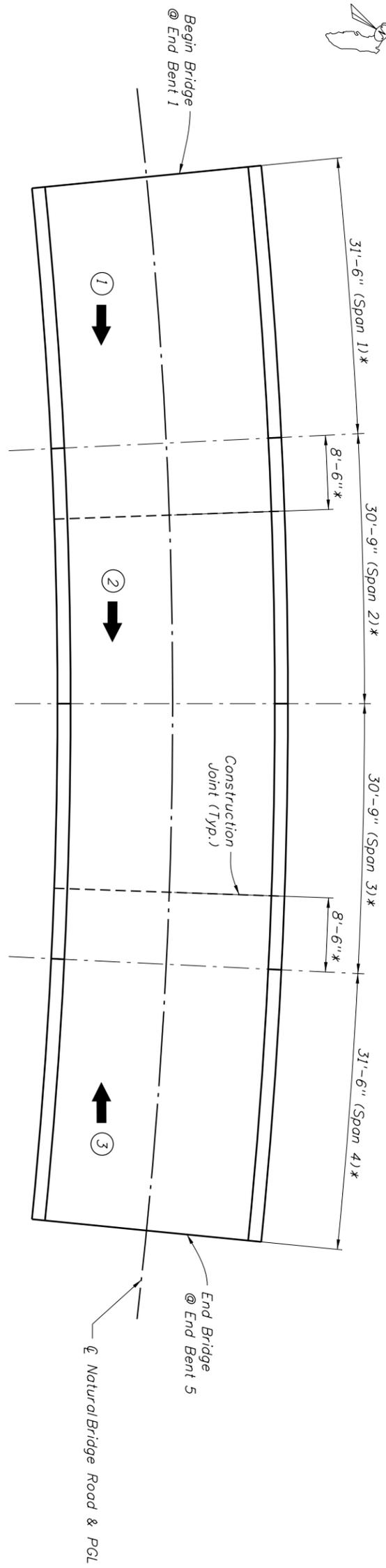
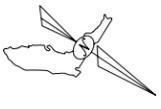
DATE	BY	DESCRIPTION

DATE	BY	DESCRIPTION

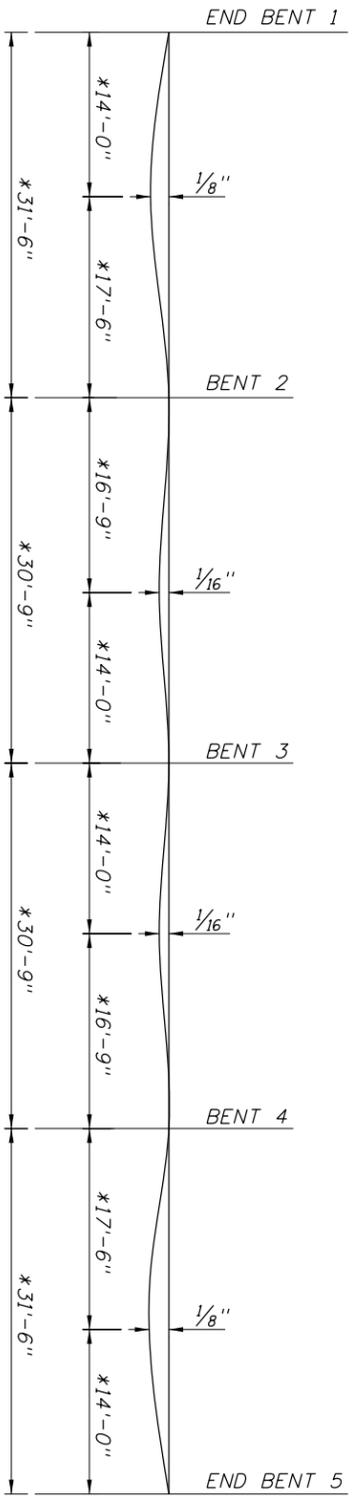
LOCHNER
 2940 EAST PARK AVENUE, SUITE 200
 TALLAHASSEE, FLORIDA 32301
 FBPR CERTIFICATE OF AUTH. # 894
 CHARLES F. CRAYCRAFT, P.E. # 32151

STATE OF FLORIDA
 DEPARTMENT OF TRANSPORTATION
 ROAD NO. CR 2192
 COUNTY LEON
 FINANCIAL PROJECT ID 413491-1-52-01

SHEET TITLE: SUPERSTRUCTURE PLAN
 PROJECT NAME: NATURAL BRIDGE ROAD OVER BRANCH OF ST. MARKS RIVER
 PROJECT NO. 12/20/2011 10:34:22 AM H:\V\proj\etc\JM\3509\413491\5201\struct\Superstr01.dgn



CASTING SEQUENCE
* MEASURED ALONG CL NATURAL BRIDGE ROAD



DEAD LOAD DEFLECTION DIAGRAM - 4 SPAN CONTINUOUS SUPERSTRUCTURE

CAMBER NOTES:

THE CONTRACTOR SHALL CAMBER THE FORMWORK BY THE AMOUNT SHOWN ABOVE TO COMPENSATE FOR THE DEAD LOAD DEFLECTION OF THE SLAB.
THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE ADDITIONAL CAMBER TO COMPENSATE FOR THE DEFLECTION OF THE FORMWORK DUE TO THE WEIGHT OF THE WET SLAB CONCRETE, SCREED AND OTHER CONSTRUCTION LOADS.

SLAB CASTING NOTES:

1. THE SEQUENCE AND DIRECTION OF THE SLAB POUR IS INDICATED BY: (X) →
2. NO UNIT SHALL BE POURED ADJACENT TO A PREVIOUSLY POURED UNIT THAT IS NOT A MINIMUM OF 72 HOURS OLD.
3. THE CASTING SEQUENCE MAY BE MIRRORED TO ALLOW POURING TO BEGIN AT END BENT 5.
4. THE CONTRACTOR MAY SUBMIT, FOR APPROVAL, A REVISED CASTING SEQUENCE. THE SUBMITTAL SHALL INCLUDE STRUCTURAL ANALYSIS BY THE CONTRACTOR'S SPECIALTY ENGINEER REFLECTING THE NEW CASTING SEQUENCE AND ITS EFFECT ON THE CAMBER DIAGRAM. THE REVISION SHALL BE IN CONFORMANCE WITH CHAPTER 28 OF THE PLANS PREPARATION MANUAL - VOLUME I.

Bridge No. 554153

REVISIONS		DESCRIPTION		DATE		BY	

LOCHNER		2940 EAST PARK AVENUE, SUITE 200 TALLAHASSEE, FLORIDA 32301		DRAWN BY: BCR 05-11		CHECKED BY: WDB 05-11	
FBRP CERTIFICATE OF AUTH. # 894 CHARLES F. CRAWCRAFT, P.E. # 32151				DESIGNED BY: BCR 05-11		CHECKED BY: WDB 05-11	

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		FINANCIAL PROJECT ID		PROJECT NAME	
ROAD NO. CR 2192	COUNTY LEON	413491-1-52-01	NATURAL BRIDGE ROAD OVER BRANCH OF ST. MARK'S RIVER		

REF. DWG. NO.	SHEET NO.
	B1-24

POURED EXPANSION JOINT DATA TABLE				Table Date 1-01-09
INDEX NO. 21110				
LOCATION	DIM. "A" @ 70°	TOTAL DESIGN MOVEMENT	DIM. "A" ADJUSTMENT PER 10°F	
End Bent 1	2.0"	0.52"	0.044"	
End Bent 5	2.0"	0.52"	0.044"	

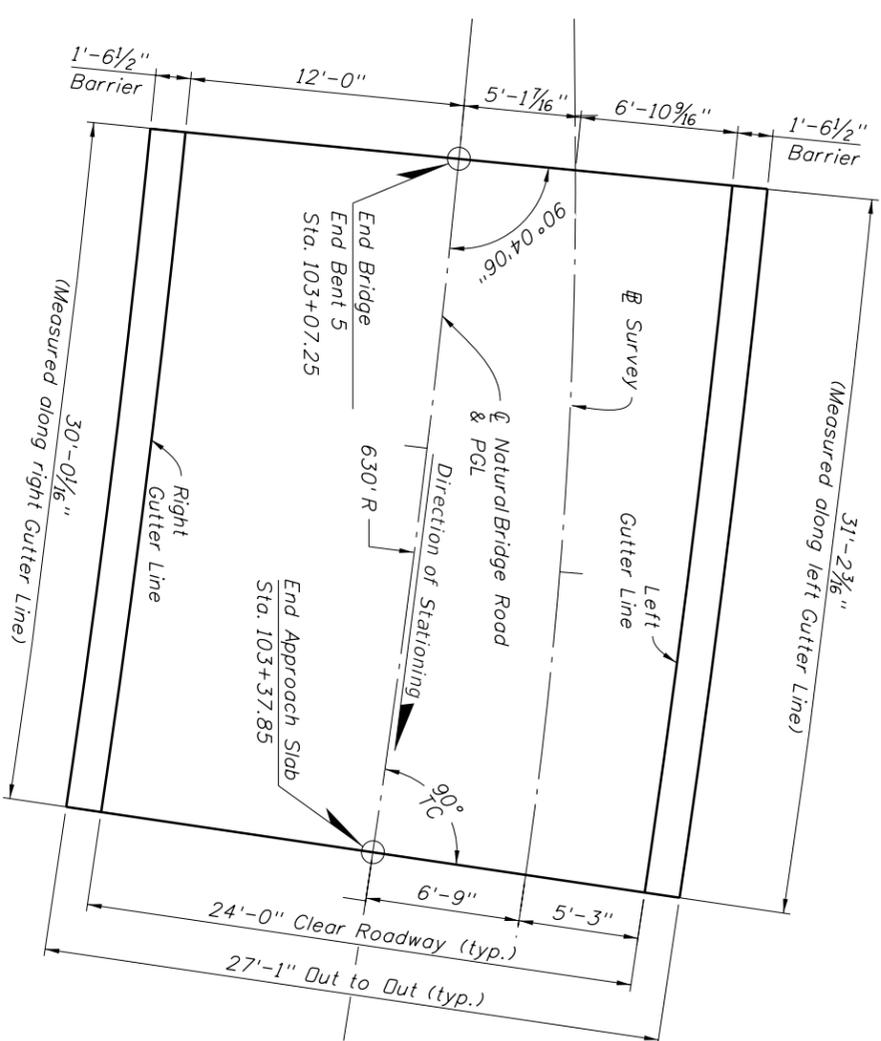
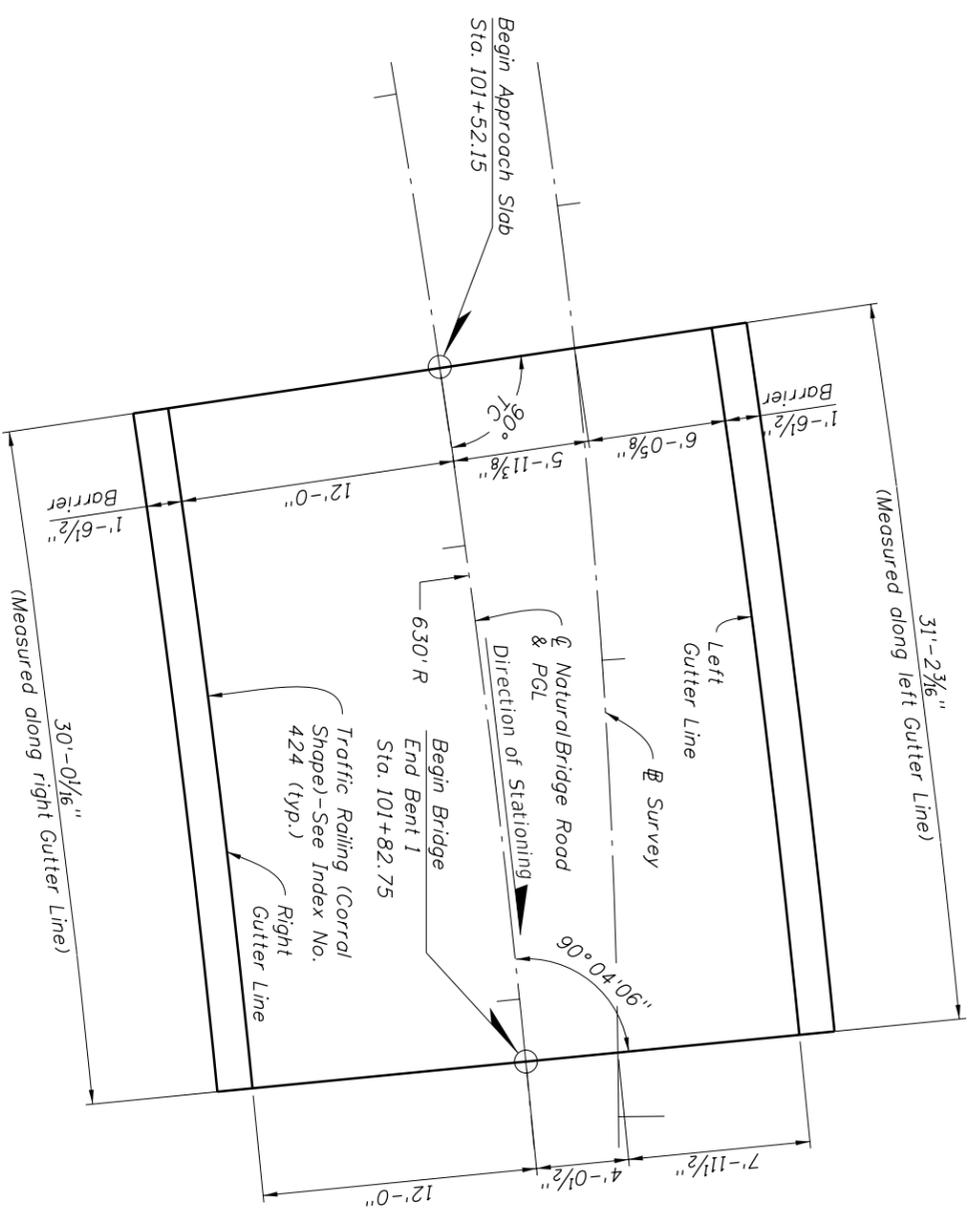
NOTE:
 Dim. "A" adjustment per 10°F shown is measured perpendicular to \bar{C}
 Expansion Joint. Work this table with Design Standards Index No. 21110.

Bridge No. 554153

REVISIONS		REVISIONS	
DATE	BY	DATE	BY

LOCHNER 2940 EAST PARK AVENUE, SUITE 200 TALLAHASSEE, FLORIDA 32301 PBR CERTIFICATE OF AUTH. # 894 CHARLES F. CRAWCRAFT, P.E. # 32131		DRAWN BY: BCR 05-11	CHECKED BY: WDS 05-11	DESIGNED BY: BCR 05-11	CHECKED BY: JTF 05-11
DEPARTMENT OF TRANSPORTATION STATE OF FLORIDA		ROAD NO. CR 2192	COUNTY LEON	FINANCIAL PROJECT ID 413491-1-52-01	PROJECT NAME NATURAL BRIDGE ROAD OVER BRANCH OF ST. MARKS RIVER
REF. DWG. NO.					SHEET NO. B1-25

12/20/2011 10:03:42 AM H:\V-Proj\6763-XM\3509\413491\5201\STRUCT\BIE\K201\B1D1.dgn



APPROACH SLAB INDEX 20910 TABLE OF DIMENSIONS AND ESTIMATED QUANTITIES

LOCATION	DIMENSIONS				ANGLE ϕ	REINFORCING STEEL (LBS.)	CLASS II CONCRETE (C.Y.)
	L 1	L 2	M1	M2			
Approach Slab @ EB1	31'-2 3/16"	30'-0 1/16"	1'-6 1/2"	1'-6 1/2"	90° 04'06"	5916	33.4
Approach Slab @ EB5	31'-2 3/16"	30'-0 1/16"	1'-6 1/2"	1'-6 1/2"	90° 04'06"	5916	33.4

Dimension and Quantity Notes:

Dimensions 'L 1' & 'L 2' are measured along gutter line, inside face of parapet or inside face of railing on raised sidewalks.

Dimensions 'L 1' & 'L 2' are arc dimensions within curved alignments.

Quantities shown are for one Approach Slab and where applicable, raised sidewalks. Quantities do not include items placed on the slab such as Traffic Railing, Pedestrian/Bicycle Railings or Traffic Separators.

For Traffic Railing, Pedestrian/Bicycle Railing and Traffic Separator Quantities see Bid Item List.

NOTE:

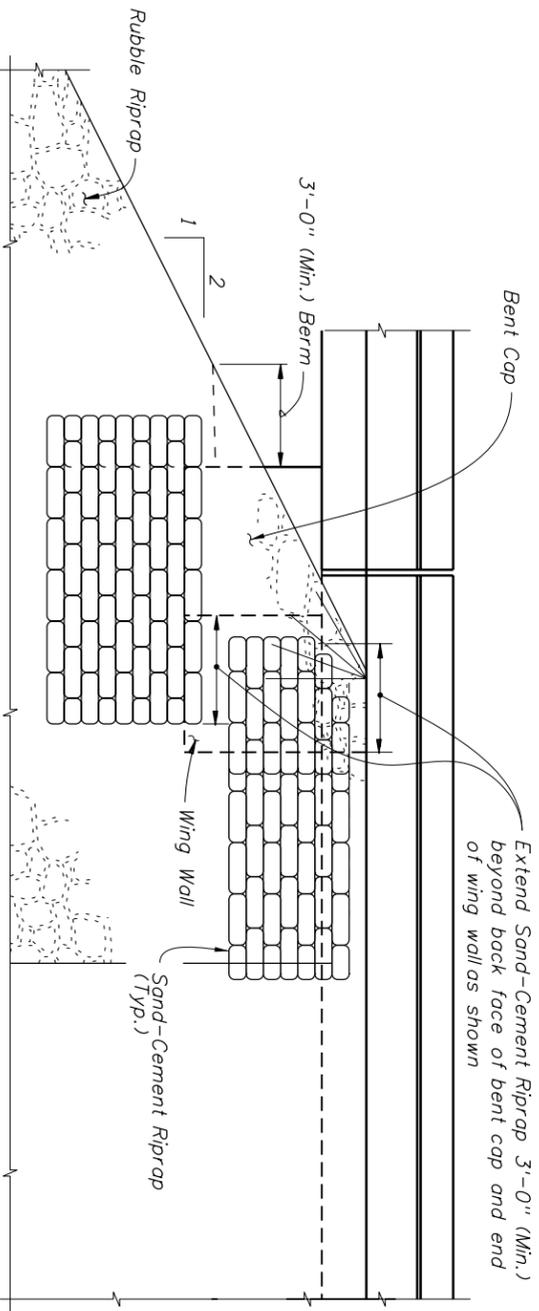
1. Approach slab thickness shall be increased from 1'-0" (as shown on Std. Index 20910) to 1'-1" to account for the aesthetic form liners.
2. Concrete cover for top riding surfaces shall be increased from 2 1/2" (as shown on Std. Index 20910) to 3 1/2" to account for the aesthetic form liners.

Bridge No. 554153

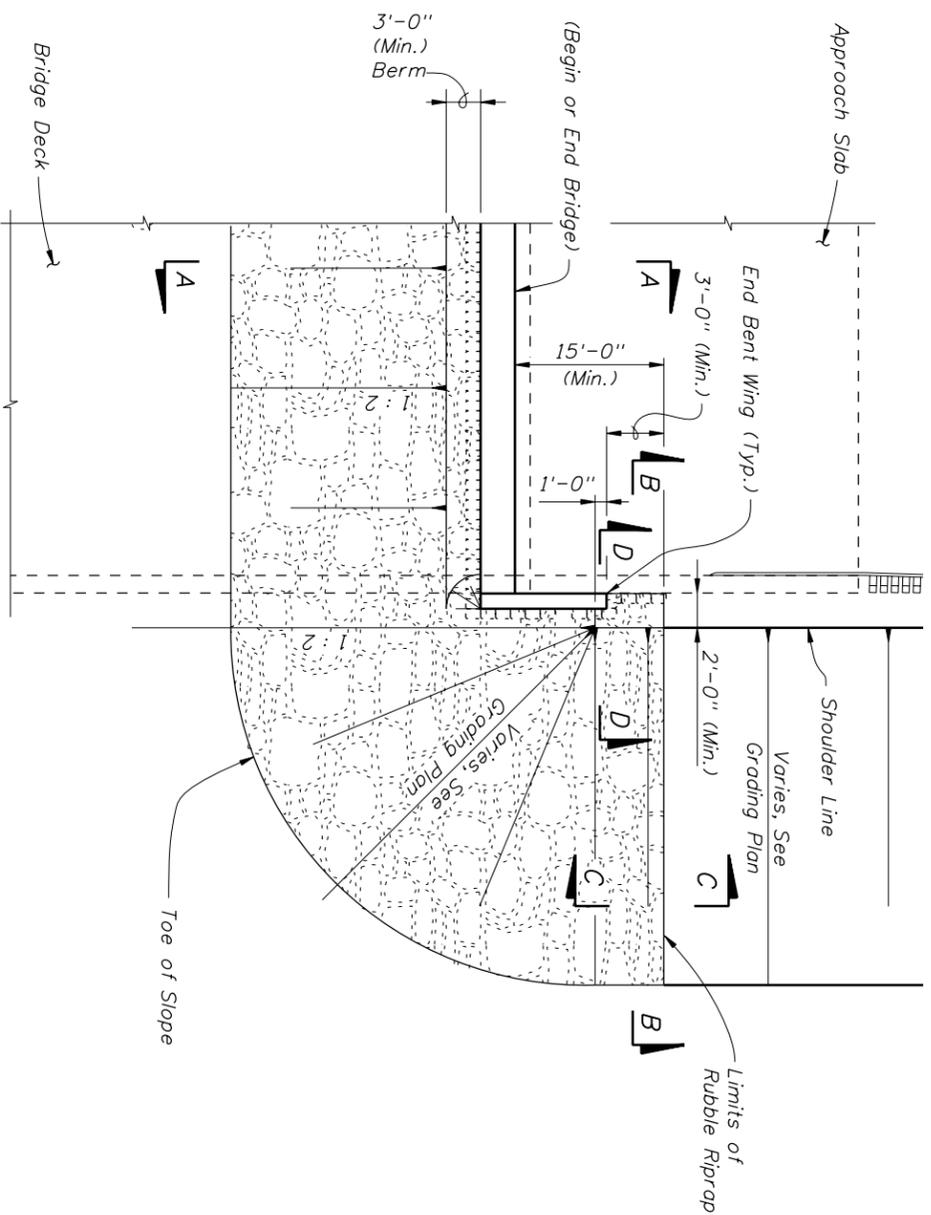
REVISIONS		DESCRIPTION		DATE		BY	

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

LOCHNER 2940 EAST PARK AVENUE, SUITE 200 TALLAHASSEE, FLORIDA 32301 PBR CERTIFICATE OF AUTH. # 894 CHARLES F. CRAVCRRAFT, P.E. # 32151	DRAWN BY: LTB 05-11 CHECKED BY: WDB 05-11 DESIGNED BY: BCR 05-11 CHECKED BY: JTF 05-11	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION ROAD NO. COUNTY FINANCIAL PROJECT ID CR 2192 LEON 413491-1-52-01	SHEET TITLE: APPROACH SLAB	REF. DWG. NO. BI-26
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PARTIAL SIDE ELEVATION



PARTIAL PLAN VIEW
(Bridge Deck and Approach Slab shown Dashed)

NOTE:
For Sections A-A, B-B, C-C &
D-D see Sheet B1-28.

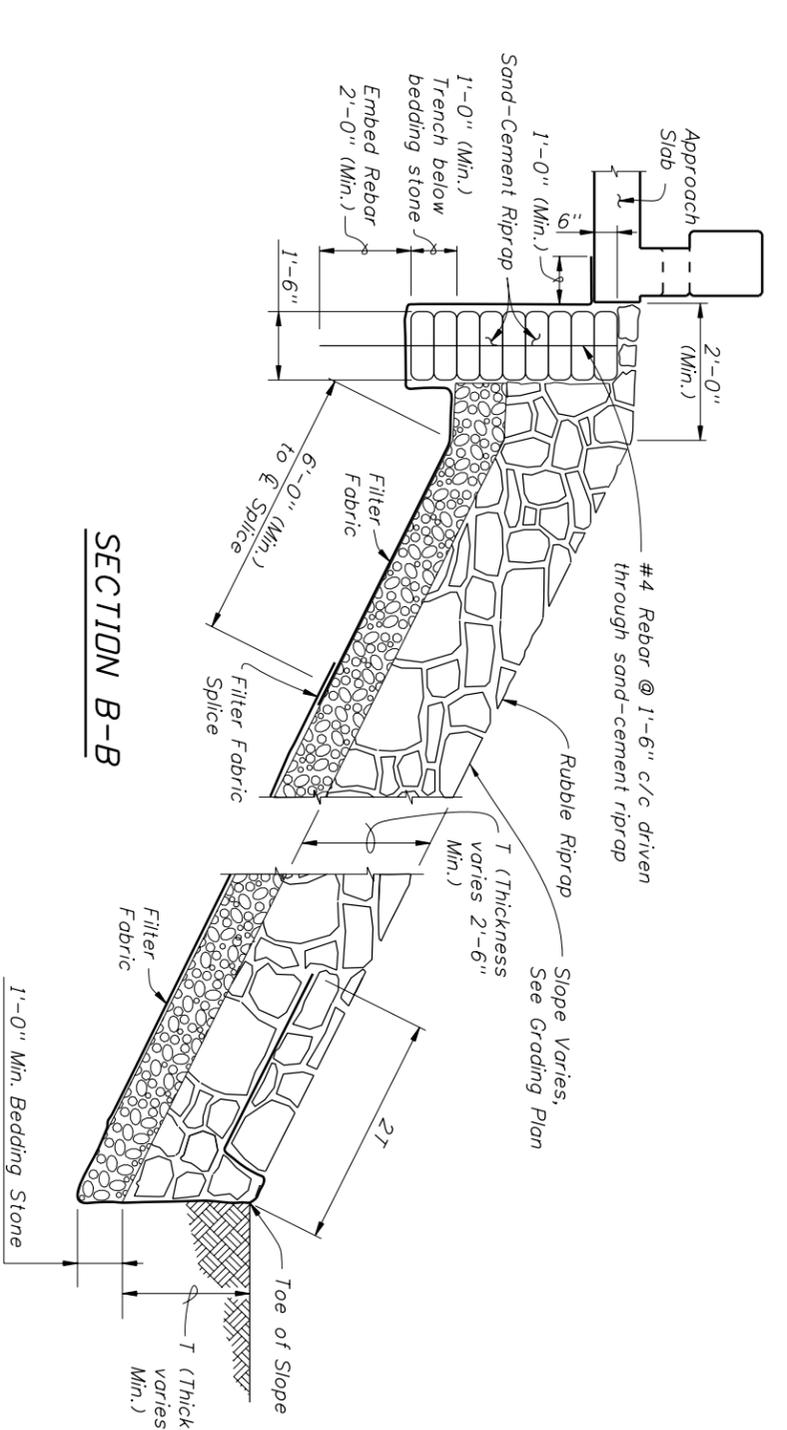
ESTIMATED QUANTITIES		
ITEM	UNIT	QUANTITY
Riprap (Sand-Cement)	CY	34.7
Riprap (Rubble)	TN	181.5
Bedding Stone	TN	62.9

REVISIONS	
DATE	DESCRIPTION

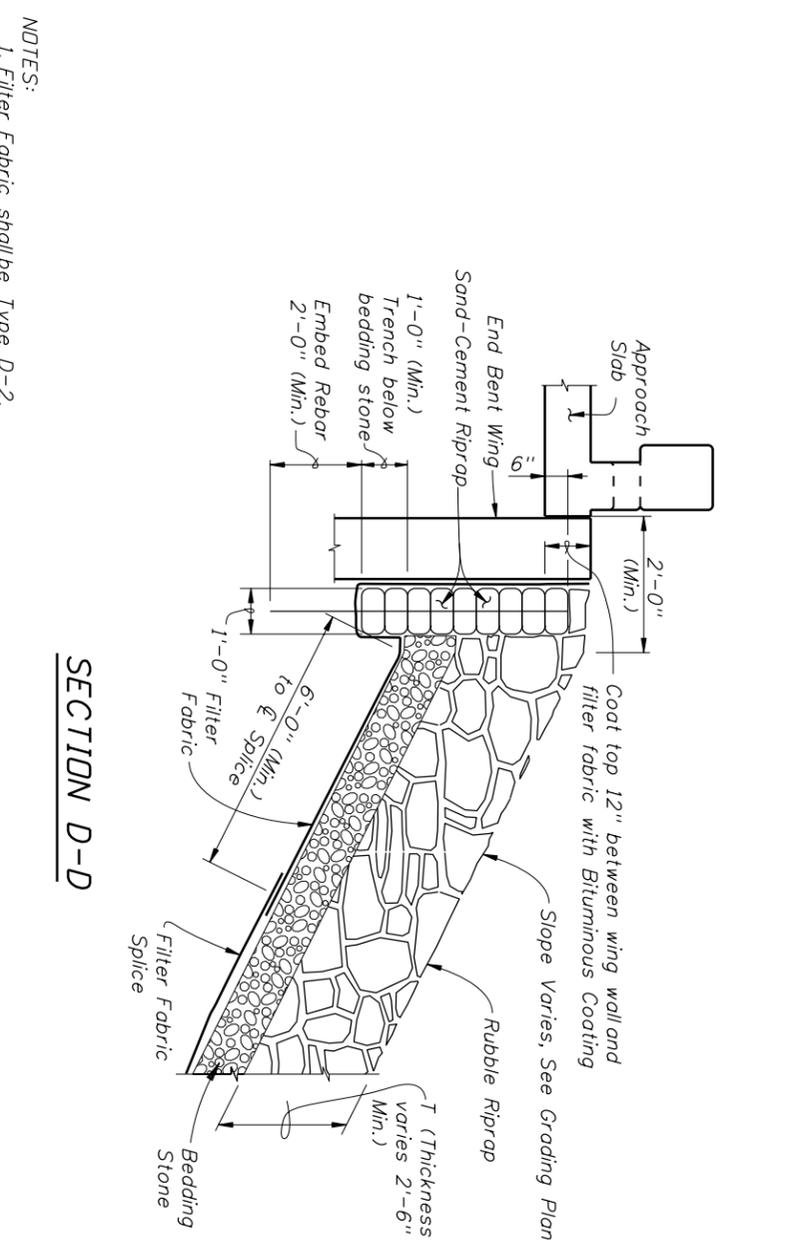
LOCHNER
2940 EAST PARK AVENUE, SUITE 200
TALLAHASSEE, FLORIDA 32301
PBRP CERTIFICATE OF AUTH. # 894
CHARLES F. CRAWCRAFT, P.E. # 32131

DRAWN BY: WRA 12-10	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
CHECKED BY: WDB 12-10	ROAD NO. CR 2192
DESIGNED BY: NL 12-10	COUNTY LEON
CHECKED BY: NZ 12-10	FINANCIAL PROJECT ID 413491-1-52-01

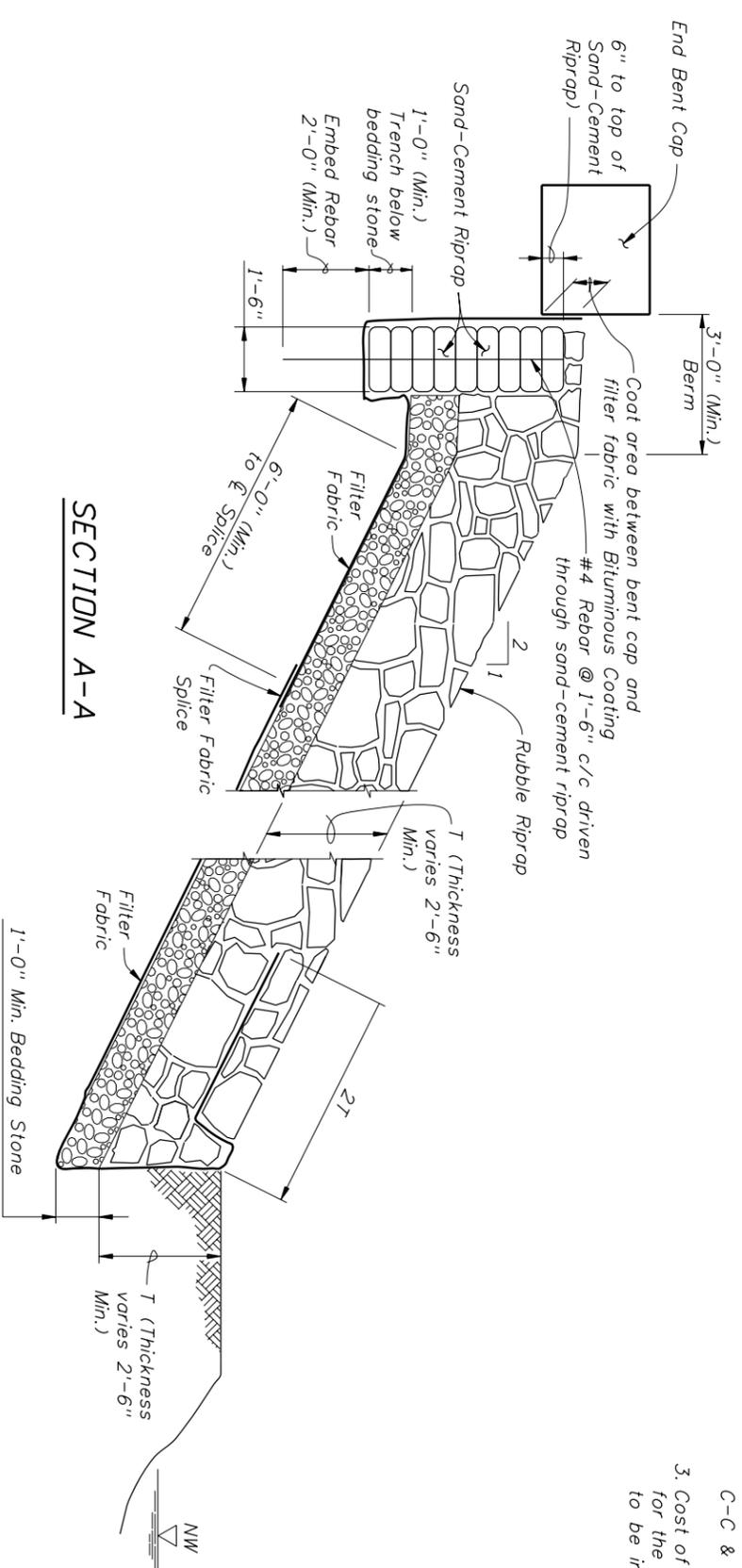
SHEET TITLE: RUBBLE RIPRAP (1 OF 2)	PROJECT NAME: NATURAL BRIDGE ROAD OVER BRANCH OF ST. MARKS RIVER
BRIDGE NO. 554153	SHEET NO. B1-27



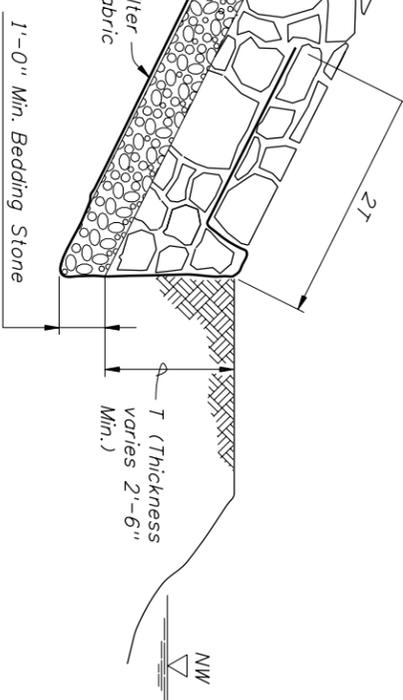
SECTION B-B



SECTION D-D



SECTION A-A



SECTION C-C

- NOTES:**
1. Filter Fabric shall be Type D-2, see Design Standard Index 199. Splice length shall be 6".
 2. For location of Sections A-A, B-B, C-C & D-D see Sheet B1-27.
 3. Cost of material and labor required for the placement of the #4 rebar to be incidental to Pay Item 0530-1.

Bridge No. 554153

REVISIONS		DESCRIPTION	
DATE	BY	DATE	BY

LOCHNER		2940 EAST PARK AVENUE, SUITE 200 TALLAHASSEE, FLORIDA 32301 PBR CERTIFICATE OF AUTH. # 894 CHARLES F. CRAVCRRAFT, P.E. # 32151
DRAWN BY: LIG 08-11	CHECKED BY: WDB 08-11	DESIGNED BY: NL 08-11
CHECKED BY: NZ 08-11	ROAD NO. CR 2192	COUNTY LEON
FINANCIAL PROJECT ID 413491-1-52-01	PROJECT NAME: NATURAL BRIDGE ROAD OVER BRANCH OF ST. MARKS RIVER	
SHEET TITLE: RUBBLE RIPRAP (2 OF 2)		REF. Dwg. NO. B1-28

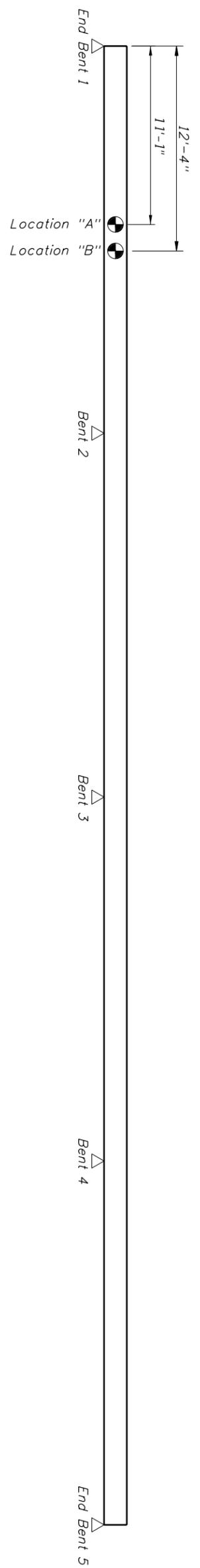
Load Rating Summary Details for Reinforced Concrete Bridges

Table 2 - LRFR using Part A

Level	Limit State	Vehicle	Weight (tons)	Load Factors			Distribution Factor (DF)	Rating Factor	Moment (Strength)			Shear (Strength)			Comments:
				LL	DC	DW			Tons	Location	Dimension	Distribution Factor (DF)	Rating Factor	Tons	
Design Load Rating	Strength I (Inv)	HL-93	N/A	1.75	1.25	1.50	0.096	1.24	N/A	B	12'-4"	N/A	N/A	N/A	Interior/exterior beam Df method if other than LRFD. Other appropriate comments
	Strength I (Op)	HL-93	N/A	1.35	1.25	1.50	0.096	1.61	N/A	B	12'-4"	N/A	N/A	N/A	
	Strength I	SU4	35.0	1.35	1.25	1.50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Legal Load Rating	Strength I	C5	40.0	1.35	1.25	1.50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	Strength I	ST5	40.0	1.35	1.25	1.50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Permit Load Rating	Strength II	FL120	60.0	1.35	1.25	1.50	0.096	1.27	76.2	A	11'-1"	N/A	N/A	N/A	

General Notes:
 1. This table is based on the requirements established in the January 2011 "Structures Manual".
Table 2 Notes:
 1. Permit capacity is determined by using the permit vehicle in all lanes.
 2. If the Design Operating Load Rating is greater than 1.4, Load Rating using Legal Vehicles SU4, C5, and ST5 is not required.
 3. Has the AASHTO LRFD Specifications Article 5.8.3.5 longitudinal reinforcement been satisfied? Yes No

Abbreviations:
 Inv - Inventory
 Op - Operating



RATING LOCATIONS

Controlling Load Rating			
Limit State	Vehicle	Weight (Tons)	Rating Factor
Strength I	HL-93	N/A	1.24

Bridge No. 554153

DATE		BY		DESCRIPTION		REVISIONS		DATE		BY		DESCRIPTION	
<p align="center">LOCHNER 2940 EAST PARK AVENUE, SUITE 200 TALLAHASSEE, FLORIDA 32301 # 894 FBPR CERTIFICATE OF AUTH. # 32131 CHARLES F. CRAYCRAFT, P.E. # 32131</p>													
DRAWN BY:				STATE OF FLORIDA				SHEET TITLE:					
CHECKED BY:				DEPARTMENT OF TRANSPORTATION				LOAD RATING SUMMARY					
DESIGNED BY:				ROAD NO.				PROJECT NAME:					
CHECKED BY:				COUNTY				NATURAL BRIDGE ROAD OVER BRANCH OF ST. MARKS RIVER					
DATE:				FINANCIAL PROJECT ID				SHEET NO.					
BY:				LEON				B1-30					

Exhibit "B"

701-GWD.01-11/00

March 22, 2012

This instrument prepared by,
or under the direction of,
Timothy H. Wells

Department of Transportation
P. O. Box 607
Chipley, FL 32428

Legal description approved by:
Shannon Riley

Parcel	1100.1
Item/Segment No.	4134911
Managing District	3
C.R.	Natural Bridge Road
County	Leon

WARRANTY DEED

THIS WARRANTY DEED Made the 22nd day of July, 2012 by ST. JOE TIMBERLAND COMPANY OF DELAWARE, LLC, a Delaware Limited Liability Company, grantor, to LEON COUNTY, FLORIDA, whose address is 301 S. Monroe Street, Tallahassee, Florida 32301, grantee: (wherever used herein the terms "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives and assigns of individuals and the successors, and assigns of organizations).

WITNESSETH: That the grantor, for and in consideration of the sum of \$1.00 and other valuable considerations, receipt and sufficiency being hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys and confirms unto the grantee, all that certain land situate in Leon County, Florida, viz:

A. A parcel of land being in Section 29, Township 2 South, Range 2 East, Leon County, Florida, described as follows: Commence at a 1 inch pinched iron pipe (no ID) marking the southwest corner of the Northwest ¼ of the Northeast ¼ of said Section 29; thence North 89°54'15" East 614.59 feet along the south line of said Northwest ¼ of Northeast ¼ to the centerline of survey of Natural Bridge Road (county maintained), as shown on Florida Department of Transportation (F.D.O.T.) Right of Way Map F.P. No. 4134911 (said map being on file at F.D.O.T. District 3 Office, Chipley, Florida); thence North 33°46'18" East 69.81 feet along said centerline of survey; thence departing said centerline, run North 56°13'42" West 18.16 feet to the existing northwesterly right of way line of said Natural Bridge Road, as shown on said Right of Way Map and POINT OF BEGINNING; thence North 33°30'19" East 42.62 feet along said northwesterly right of way line; thence North 36°48'23" East 8.92 feet along said right of way line; thence departing said right of way line, run South 41°38'07" West 52.02 feet; thence South 56°13'42" East 6.84 feet to POINT OF BEGINNING;

Containing 165 square feet, more or less.

ALSO:

B. A parcel of land being in Section 29, Township 2 South, Range 2 East, Leon County, Florida, described as follows: Commence at a 1 inch pinched iron pipe (no ID) marking the southwest corner of the Northwest ¼ of the Northeast ¼ of said Section 29; thence North 89°54'15" East 614.59 feet along the south line of said Northwest ¼ of Northeast ¼ to the centerline of survey of Natural Bridge Road (county maintained), as shown on Florida Department of Transportation (F.D.O.T.) Right of Way Map F.P. No. 4134911 (said map being on file at F.D.O.T. District 3 Office, Chipley, Florida); thence North 33°46'18" East 133.03 feet along said centerline of survey to a point on a tangent curve to the right (concave southeasterly); thence northeasterly along said centerline and said

curve, having a radius of 322.10 feet, for a distance of 122.50 feet, through a central angle of 21°47'26" to end of curve; thence North 55°33'44" East 14.59 feet along said centerline of survey; thence departing said centerline, run North 34°26'16" West 20.05 feet to the existing northwesterly right of way line of said Natural Bridge Road, as shown on said Right of Way Map and POINT OF BEGINNING; thence South 55°05'28" West 19.85 feet along said right of way line; thence South 12°15'29" West 8.10 feet; thence South 49°13'53" West 4.85 feet along said northwesterly right of way line; thence departing said right of way line, run North 40°46'03" West 10.78 feet to a point on a non-tangent curve to the right (concave southeasterly); thence (from a tangent bearing of North 49°13'57" East) northeasterly along said curve, having a radius of 660.00 feet, for a distance of 31.43 feet, through a central angle of 02°43'42" to end of curve; thence South 38°02'21" East 7.20 feet to POINT OF BEGINNING;

Containing 237 square feet, more or less.

ALSO:

- C. A parcel of land being in Section 29, Township 2 South, Range 2 East, Leon County, Florida, described as follows: Commence at a 1 inch pinched iron pipe (no ID) marking the southwest corner of the Northwest ¼ of the Northeast ¼ of said Section 29; thence North 89°54'15" East 614.59 feet along the south line of said Northwest ¼ of Northeast ¼ to the centerline of survey of Natural Bridge Road (county maintained), as shown on Florida Department of Transportation (F.D.O.T.) Right of Way Map F.P. No. 4134911 (said map being on file at F.D.O.T. District 3 Office, Chipley, Florida); thence North 33°46'18" East 133.03 feet along said centerline of survey to a point on a tangent curve to the right (concave southeasterly); thence northeasterly along said centerline and said curve, having a radius of 322.10 feet, for a distance of 122.50 feet, through a central angle of 21°47'26" to end of curve; thence North 55°33'44" East 107.89 feet along said centerline of survey; thence departing said centerline, run North 34°26'16" West 20.82 feet to the existing northwesterly right of way line of said Natural Bridge Road, as shown on said Right of Way Map and POINT OF BEGINNING; thence North 55°05'28" East 19.85 feet along said right of way line; thence South 80°08'19" East 13.33 feet; thence North 63°58'56" East 0.84 feet along said northwesterly right of way line; thence departing said right of way line, run North 27°07'33" West 11.72 feet to a point on a non-tangent curve to the left (concave southeasterly); thence (from a tangent bearing of South 62°52'27" West) southwesterly along said curve, having a radius of 660.00 feet, for a distance of 31.43 feet, through a central angle of 02°43'42" to end of curve; thence South 29°51'15" East 5.62 feet to POINT OF BEGINNING;

Containing 184 square feet, more or less.

ALSO:

- D. A parcel of land being in Section 29, Township 2 South, Range 2 East, Leon County, Florida, described as follows: Commence at a 1 inch pinched iron pipe (no ID) marking the southwest corner of the Northwest ¼ of the Northeast ¼ of said Section 29; thence North 89°54'15" East 614.59 feet along the south line of said Northwest ¼ of Northeast ¼ to the centerline of survey of Natural Bridge Road (county maintained), as shown on Florida Department of Transportation (F.D.O.T.) Right of Way Map F.P. No. 4134911 (said map being on file at F.D.O.T. District 3 Office, Chipley, Florida); thence North 33°46'18" East 133.03 feet along said centerline of survey to a point on a tangent curve to the right (concave southeasterly); thence northeasterly along said centerline and said curve, having a radius of 322.10 feet, for a distance of 122.50 feet, through a central angle of 21°47'26" to end of curve; thence North 55°33'44" East 122.41 feet to a point on a tangent curve to right (concave southeasterly); thence northeasterly along said curve, having a radius of 211.98 feet, for a distance of 71.32 feet, through a central angle of 19°16'38" to end of curve; thence North 74°50'22" East 75.42 feet along said centerline of survey; thence departing said centerline, run North 15°09'38" West 15.90 feet to the existing northerly right of way line of said Natural Bridge Road, as shown on said Right of Way Map and POINT OF BEGINNING; thence South 75°01'33" West 72.16 feet along said northerly right of way line; thence departing said right of way line, run North 60°26'42" East 29.92 feet; thence North 79°34'20" East 43.33 feet; thence South 15°09'38" East 4.10 feet to POINT OF BEGINNING;

Containing 360 square feet, more or less.

ALSO:

- E. A parcel of land being in Section 29, Township 2 South, Range 2 East, Leon County, Florida, described as follows: Commence at a 1 inch pinched iron pipe (no ID) marking the southwest corner of the Northwest ¼ of the Northeast ¼ of said Section 29; thence North 89°54'15" East 614.59 feet along the south line of said Northwest ¼ of Northeast ¼ to the centerline of survey of Natural Bridge Road (county maintained), as shown on Florida Department of Transportation (F.D.O.T.) Right of Way Map F.P. No. 4134911 (said map being on file at F.D.O.T. District 3 Office, Chipley, Florida); thence North 33°46'18" East 69.81 feet along said centerline of survey; thence departing said centerline, run South 56°13'42" East 16.92 feet to the existing southeasterly right of way line of said Natural Bridge Road, as shown on said Right of Way Map and POINT OF BEGINNING; thence North 35°09'12" East 35.65 feet along said right of way line; thence North 38°05'44" East 62.72 feet; thence North 43°05'07" East 58.00 feet; thence North 55°49'57" East 156.84 feet; thence North 70°28'41" East 57.23 feet; thence North 74°03'54" East 100.04 feet along said southeasterly right of way line; thence departing said right of way line, run South 42°19'37" West 36.87 feet to a point on a non-tangent curve to the left (concave southeasterly); thence (from a tangent bearing of South 74°41'50" West) southwesterly along said curve, having a radius of 590.00 feet, for a distance of 46.83 feet, through a central angle of 04°32'50" to end of curve; thence North 19°51'00" West 5.00 feet to a point on a non-tangent curve to the left (concave southeasterly); thence (from a tangent bearing of South 70°09'00" West) southwesterly along said curve, having a radius of 595.00 feet, for a distance of 47.22 feet, through a central angle of 04°32'50" to end of curve; thence North 24°23'50" West 5.00 feet to a point on a non-tangent curve to the left (concave southeasterly); thence (from a tangent bearing of South 65°36'10" West) southwesterly along said curve, having a radius of 600.00 feet, for a distance of 57.14 feet, through a central angle of 05°27'25" to end of curve; thence North 29°51'15" West 5.00 feet to a point on a non-tangent curve to the left (concave southeasterly); thence (from a tangent bearing of South 60°08'45" West) southwesterly along said curve, having a radius of 605.00 feet, for a distance of 86.43 feet, through a central angle of 08°11'06" to end of curve; thence South 38°02'21" East 5.00 feet to a point on a non-tangent curve to the left (concave southeasterly); thence (from a tangent bearing of South 51°57'39" West) southwesterly along said curve, having a radius of 600.00 feet, for a distance of 47.62 feet, through a central angle of 04°32'50" to end of curve; thence North 42°35'11" West 5.00 feet to a point on a non-tangent curve to the left (concave southeasterly); thence (from a tangent bearing of South 47°24'49" West) southwesterly along said curve, having a radius of 605.00 feet, for a distance of 144.05 feet, through a central angle of 13°38'31" to end of curve; thence North 56°13'42" West 8.08 feet to POINT OF BEGINNING;

Containing 5,843 square feet, more or less.

TOGETHER with all tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

TO HAVE AND TO HOLD, the same in fee simple forever.

AND the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land; that the grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever; and that said land is free of all encumbrances.

IN WITNESS WHEREOF, the said grantor has signed and sealed these presents the day and year first above written.

Signed, sealed and delivered in the presence of:
(Two witnesses required by Florida Law)

St. Joe Timberland Company of Delaware, LLC

Janet P. Greeno
Print Name: Janet P. Greeno

By: Patrick Bienvenue

Its: Executive Vice President

Jeff Stauffer
Print Name: Jeff Stauffer

Address of grantor:
133 S. Watersound Parkway
Watersound, FL 32413

STATE OF Florida

COUNTY OF Walton

The foregoing instrument was acknowledged before me this day 23rd of July, 2012 by Patrick Bienvenue, who is personally known to me or who has produced _____ as identification.

Sherry L. Johnson
(Type/print or stamp name under signature)
Title or rank (Serial No., if any) EE 202470

Affix Seal

